

# **Macroeconomic Forecast of the Czech Republic**

**July 2019**

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ISSN 2533-5588 (on-line)

Issued quarterly, free distribution

Electronic archive:

<http://www.mfcz.cz/macroforecast>

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## **of the Czech Republic**

**July 2019**

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The Macroeconomic Forecast is prepared by the Economic Policy Department of the Czech Ministry of Finance. It contains a forecast for the current and the following year (i.e. until 2020) and for certain indicators an outlook for the two following years (i.e. until 2022). It is published on a quarterly basis (usually in January, April, July and November) and is also available on the website of the Ministry of Finance at:

***[www.mfcr.cz/macroforecast](http://www.mfcr.cz/macroforecast)***

Any comments or suggestions that would help us improve the quality of our publication and closer satisfy the needs of its users are welcome. Please send any comments to the following email address:

***[macroeconomic.forecast@mfcr.cz](mailto:macroeconomic.forecast@mfcr.cz)***

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## List of Abbreviations

|               |   |
|---------------|---|
| BoP.....      | balance of payments                       |
| const.pr..... | constant prices                           |
| CNB.....      | Czech National Bank                       |
| CPI.....      | consumer price index                      |
| CR.....       | Czech Republic                            |
| curr.pr.....  | current prices                            |
| CZSO.....     | Czech Statistical Office                  |
| EA19.....     | euro zone consisting of 19 countries      |
| EC.....       | European Commission                       |
| ECB.....      | European Central Bank                     |
| EU28.....     | European Union consisting of 28 countries |
| Fed.....      | Federal Reserve System                    |
| GDP.....      | gross domestic product                    |
| GFCF.....     | gross fixed capital formation             |
| GVA.....      | gross value added                         |
| IMF.....      | International Monetary Fund               |
| LFS.....      | Labour Force Survey                       |
| MoF.....      | Ministry of Finance                       |
| MoLSA.....    | Ministry of Labour and Social Affairs     |
| pp.....       | percentage points                         |
| TFP.....      | total factor productivity                 |

## Basic Terms

|                            |  |
|----------------------------|--|
| Prelim. (preliminary data) | data from quarterly national accounts, released by the CZSO, as yet unverified by annual national accounts |
| Estimate                   | data for past period that were unavailable as of the cut-off date  |
| Forecast                   | forecast of future numbers, using expert and mathematical methods  |
| Outlook                    | projection of more distant future numbers, using mainly extrapolation methods                              |

## Symbols Used in Tables

|            |   |
|------------|---|
| -          | A dash in place of a number indicates that the phenomenon did not occur.  |
| .          | A dot in place of a number indicates that we do not forecast that variable, or the figure is unavailable or unreliable. |
| x, (space) | A cross or space in place of a number indicates that no entry is possible for logical reasons.                          |

## Cut-off Date for Data Sources

The forecast was made on the basis of data known as of **12 July 2019**, the cut-off date for selected forecast assumptions was 27 June 2019.

## Notes

All data in the Macroeconomic Forecast are unadjusted for seasonal and calendar effects, unless stated otherwise. Published aggregate data may not match sums of individual items to the last decimal place due to rounding.

Data from the previous forecast (April 2019) are indicated by italics. Data relating to the years 2021 and 2022 are an extrapolation scenario that indicates only the direction of possible developments, and as such are not commented upon in the following text.

# Introduction and Summary

Global economic expansion started to lose momentum in 2018 and has continued to weaken this year. This reflects primarily increased protectionism and escalating tensions in international trade relations and associated uncertainty among businesses and consumers alike about future economic developments. The situation has been exacerbated by downside risks, which continue to expand at a rapid pace.

The European Union's economy is fuelled by strong domestic demand and conditions in the labour market but export oriented activity does not fare so well. Economic growth in Q1 2019 exceeded expectations. However, much of this can be attributed to temporary factors, such as stockpiling in the United Kingdom ahead of the original Brexit deadline and the warm winter. The outlook for the remainder of this year is less favourable.

A major cause for concern has been Brexit, as the United Kingdom's withdrawal from the European Union comes to the final stage. As things stand, the deadline has been postponed to 31 October 2019, in line with conclusions of the European Council. The question is whether a universally acceptable solution can be found by then. This forecast presupposes that the UK does not withdraw without a deal, i.e. that a "hard Brexit" will be avoided.

The Czech economy progressed along relatively positive lines in Q1 2019. As expected, **real gross domestic product** adjusted for seasonal and calendar effects **rose** 0.6% QoQ and 2.8% YoY.

In the year-on-year perspective and in terms of components of domestic use, the most dynamic growth was posted by **investments in fixed capital**, which rose 3.0% despite an expected marked slowdown triggered in particular by lower private-sector investments co-financed by European Union funds. The momentum of general government investments remained high at more than 10%. Household investments, predominantly into housing construction, recorded a similar growth rate.

**Household consumption** went up by 2.9% on the back of the still high growth momentum of wages and salaries. General government sector consumption increased by 2.8%, underpinned by rising employment and intermediate consumption.

The contribution made by **external trade** was only marginally negative. Export performance was down and import growth was inhibited by slowing domestic demand, primarily of highly import-intensive investments.

In the Czech Republic, as in a number of other countries, there was a disconnection between business cycle indicators and "hard" data. Statistical data on e.g. industrial production, external trade or retail sales continue to report sound results. By contrast, since October 2018 the composite sentiment indicator has been hinting that economic activity would slow down significantly, probably under the heavy influence of growing risks. As this has not happened yet, we keep our forecast for real GDP growth almost unchanged. **The economy could grow by 2.5% in 2019** and – reflecting lower consumption momentum – **by 2.3% in 2020**.

Economic growth should continue to be driven by consumption of households, echoing ongoing strength of wage momentum in combination with extremely low unemployment rate and a major hike in pensions. Fixed-capital investments and general government sector consumption should also contribute to growth, albeit on

a lesser scale than in 2018. External trade is also on track to make a moderately positive contribution.

Since the beginning of 2017, year-on-year growth in **consumer prices** has tended to hover in the upper half of the tolerance band of the Czech National Bank's 2% inflation target. It should remain there also in 2019 and 2020, when pro-inflationary effects of rising unit labour costs and positive output gap are expected to be compounded by administrative measures. We are nudging up our forecast for the average **inflation rate** in 2019 from 2.3% to 2.5%. The revision in the forecast for 2020 from 1.6% to 2.2% is caused by government-approved changes in excise duty on tobacco products and alcohol.

In Q1 2019, **employment** went up by almost 1%. However, this momentum appears to be unsustainable in the future given how extremely low the unemployment rate is and what demographic factors are in play. The shortage of labour has been the main barrier to further extensive growth in production. This has motivated larger companies in particular to invest with a view to boosting productivity. We believe there is no room for unemployment to decline further. Growth in the demand for labour should weaken in relation to the gradual slowdown of the economy. Labour supply, however, should keep increasing at more or less stable pace, due mainly to demographic and structural factors. The **unemployment rate** could thus reach 2.2% in 2019 and 2.3% in 2020.

On the **current account of the balance of payments**, we expect the surplus on the balance of goods to increase in 2019 due to a one-time slump in motor vehicle exports in mid-2018, which dragged down the base for comparison. Other components of the current account should more or less stagnate or report a faint improvement. The upshot of this should be a moderate surplus amounting to 0.6% of GDP in 2019 and 0.8% of GDP in 2020.

The **general government balance** ended up with a surplus equivalent to **0.9% of GDP in 2018**. The structural balance amounted to 0.4% of GDP. Despite the faster growth of capital expenditure and final consumption ex-

penditure of the general government, especially of intermediate consumption and social benefits in kind, we keep our current forecast of the general government surplus in 2019 unchanged at **0.3% of GDP** in 2019. The

revenue side of public budgets should compensate for higher expenditures. Indebtedness is expected to continue along its downward trajectory, reaching 31.3% of GDP.

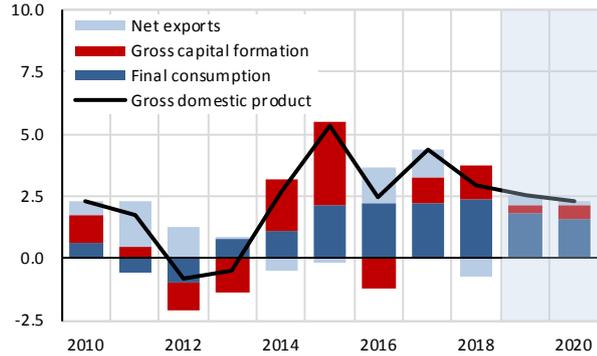
**Table: Main Macroeconomic Indicators**

|                                      |                                 | 2014             | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2018              | 2019  | 2020  |
|--------------------------------------|---------------------------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------|-------|-------|
|                                      |                                 | Current forecast |              |              |              |              |              |              | Previous forecast |       |       |
| <b>Nominal GDP</b>                   | <i>bill. CZK</i>                | <b>4 314</b>     | <b>4 596</b> | <b>4 768</b> | <b>5 047</b> | <b>5 329</b> | <b>5 627</b> | <b>5 880</b> | 5 304             | 5 595 | 5 839 |
| <b>Gross domestic product</b>        | <i>real growth in %</i>         | <b>2.7</b>       | <b>5.3</b>   | <b>2.5</b>   | <b>4.4</b>   | <b>3.0</b>   | <b>2.5</b>   | <b>2.3</b>   | 2.9               | 2.4   | 2.4   |
| <b>Consumption of households</b>     | <i>real growth in %</i>         | <b>1.8</b>       | <b>3.7</b>   | <b>3.6</b>   | <b>4.3</b>   | <b>3.4</b>   | <b>2.8</b>   | <b>2.6</b>   | 3.2               | 2.9   | 2.8   |
| <b>Consumption of government</b>     | <i>real growth in %</i>         | <b>1.1</b>       | <b>1.9</b>   | <b>2.7</b>   | <b>1.3</b>   | <b>3.9</b>   | <b>2.4</b>   | <b>1.9</b>   | 3.7               | 2.2   | 1.9   |
| <b>Gross fixed capital formation</b> | <i>real growth in %</i>         | <b>3.9</b>       | <b>10.2</b>  | <b>-3.1</b>  | <b>3.7</b>   | <b>7.2</b>   | <b>2.5</b>   | <b>2.4</b>   | 10.5              | 3.1   | 2.7   |
| <b>Net exports</b>                   | <i>contr. to GDP growth, pp</i> | <b>-0.5</b>      | <b>-0.2</b>  | <b>1.4</b>   | <b>1.1</b>   | <b>-0.8</b>  | <b>0.4</b>   | <b>0.2</b>   | -0.7              | -0.3  | 0.0   |
| <b>Change in inventories</b>         | <i>contr. to GDP growth, pp</i> | <b>1.1</b>       | <b>0.8</b>   | <b>-0.4</b>  | <b>0.1</b>   | <b>-0.4</b>  | <b>-0.3</b>  | <b>0.0</b>   | -1.2              | 0.0   | 0.0   |
| <b>GDP deflator</b>                  | <i>growth in %</i>              | <b>2.5</b>       | <b>1.2</b>   | <b>1.3</b>   | <b>1.4</b>   | <b>2.5</b>   | <b>3.0</b>   | <b>2.1</b>   | 2.1               | 3.0   | 1.9   |
| <b>Average inflation rate</b>        | <i>%</i>                        | <b>0.4</b>       | <b>0.3</b>   | <b>0.7</b>   | <b>2.5</b>   | <b>2.1</b>   | <b>2.5</b>   | <b>2.2</b>   | 2.1               | 2.3   | 1.6   |
| <b>Employment (LFS)</b>              | <i>growth in %</i>              | <b>0.8</b>       | <b>1.4</b>   | <b>1.9</b>   | <b>1.6</b>   | <b>1.4</b>   | <b>0.7</b>   | <b>0.3</b>   | 1.4               | 0.4   | 0.2   |
| <b>Unemployment rate (LFS)</b>       | <i>average in %</i>             | <b>6.1</b>       | <b>5.1</b>   | <b>4.0</b>   | <b>2.9</b>   | <b>2.2</b>   | <b>2.2</b>   | <b>2.3</b>   | 2.2               | 2.2   | 2.2   |
| <b>Wage bill (domestic concept)</b>  | <i>growth in %</i>              | <b>3.6</b>       | <b>4.8</b>   | <b>5.7</b>   | <b>8.3</b>   | <b>9.5</b>   | <b>7.4</b>   | <b>5.9</b>   | 9.3               | 7.5   | 5.9   |
| <b>Current account balance</b>       | <i>% of GDP</i>                 | <b>0.2</b>       | <b>0.2</b>   | <b>1.6</b>   | <b>1.7</b>   | <b>0.3</b>   | <b>0.6</b>   | <b>0.8</b>   | 0.3               | 0.2   | 0.3   |
| <b>General government balance</b>    | <i>% of GDP</i>                 | <b>-2.1</b>      | <b>-0.6</b>  | <b>0.7</b>   | <b>1.6</b>   | <b>0.9</b>   | <b>0.3</b>   | <b>.</b>     | 0.9               | 0.3   | .     |
| <b>Assumptions:</b>                  |                                 |                  |              |              |              |              |              |              |                   |       |       |
| <b>Exchange rate CZK/EUR</b>         |                                 | <b>27.5</b>      | <b>27.3</b>  | <b>27.0</b>  | <b>26.3</b>  | <b>25.6</b>  | <b>25.6</b>  | <b>25.2</b>  | 25.6              | 25.5  | 25.1  |
| <b>Long-term interest rates</b>      | <i>% p.a.</i>                   | <b>1.6</b>       | <b>0.6</b>   | <b>0.4</b>   | <b>1.0</b>   | <b>2.0</b>   | <b>2.0</b>   | <b>2.4</b>   | 2.0               | 2.2   | 2.4   |
| <b>Crude oil Brent</b>               | <i>USD/barrel</i>               | <b>99</b>        | <b>52</b>    | <b>44</b>    | <b>54</b>    | <b>71</b>    | <b>64</b>    | <b>60</b>    | 71                | 66    | 65    |
| <b>GDP in Eurozone</b>               | <i>real growth in %</i>         | <b>1.4</b>       | <b>2.1</b>   | <b>1.9</b>   | <b>2.4</b>   | <b>1.9</b>   | <b>1.1</b>   | <b>1.4</b>   | 1.8               | 1.0   | 1.4   |

Source: CNB, CZSO, Eurostat, U. S. Energy Information Administration. Calculations and forecast of the MoF.

### Domestic demand should be the main driver of growth

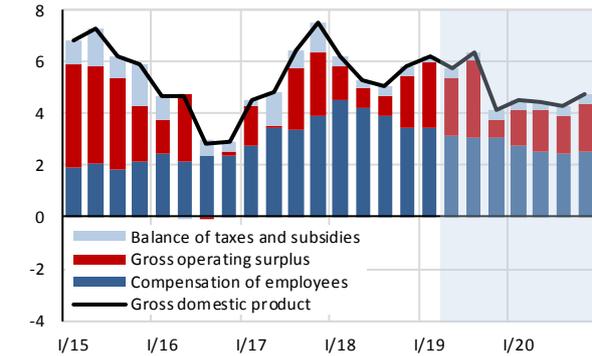
growth rate of real GDP in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

### Rising earnings should weigh on the growth in profits

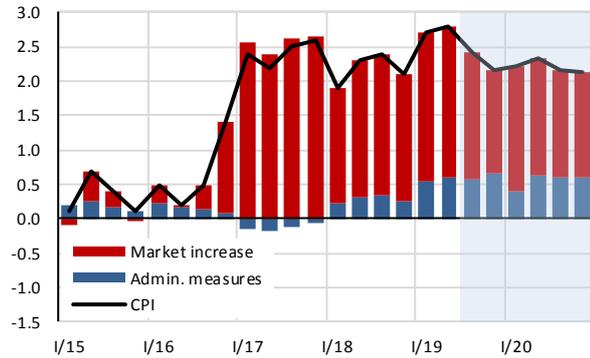
YoY growth of nominal GDP in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

### Inflation within the tolerance band of the CNB's target

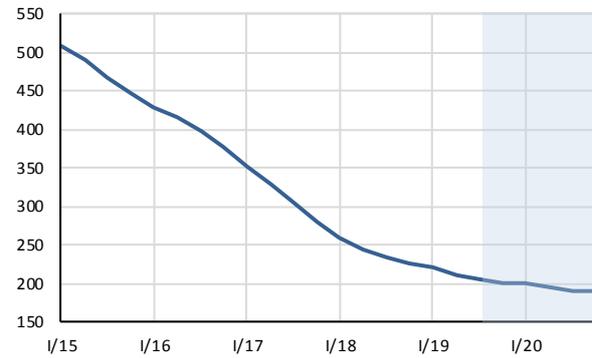
YoY growth rate of CPI in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

### Unemployment should decline only moderately

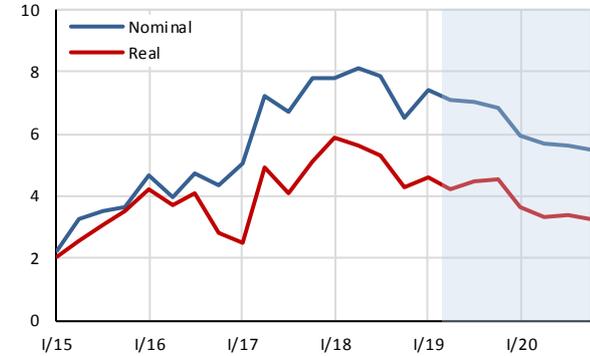
registered unemployment, in thous. of persons, seasonally adjusted



Source: MoLSA. Calc. and forecast of the MoF.

### Growth of wages should gradually decelerate

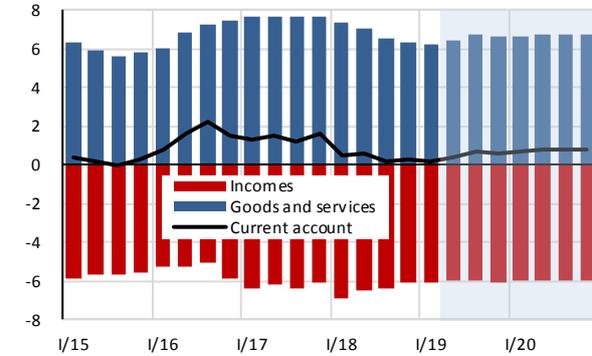
average gross monthly wage, YoY growth rate, in %



Source: CZSO. Calculations and forecast of the MoF.

### Current account should remain in a moderate surplus

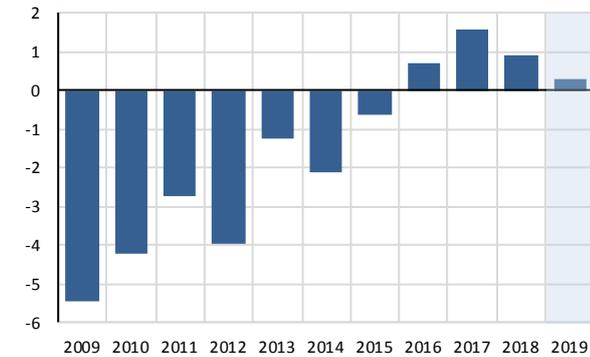
in % of GDP (yearly moving sums)



Source: CNB, CZSO. Calculations and forecast of the MoF.

### General government balance should stay positive

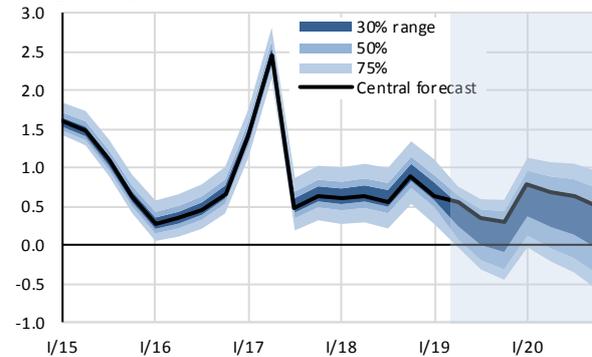
in % of GDP



Source: CZSO. Calculations and forecast of the MoF.

### Risks to the forecast are skewed to the downside

QoQ growth of real GDP in %



Note: Past probability distribution determined by data revisions.

Source: CZSO. Calculations and forecast of the MoF.

# Forecast Risks and Uncertainty

The macroeconomic forecast is saddled with numerous risks that we consider, on balance, to be **significantly tilted to the downside**.

The main downside risk currently faced by the heavily export-oriented Czech economy is the uncertainty about **United Kingdom's withdrawal from the European Union**. The Brexit date has been postponed to 31 October, but the withdrawal agreement has still not been approved. Taking into account domestic politics in the UK (Prime Minister May's resignation and the election of her successor), further developments are extremely uncertain, but the risk of a "hard Brexit" is high. Nevertheless, this macroeconomic forecast is based on the assumption that the UK will not leave the EU without a deal.

Another significant external risk is the **tension in trade relations** between the United States and China, though protectionist measures could also impact mutual trade between the US and the European Union. If existing import duties are raised or if new ones are imposed on additional types of goods, there could be repercussions for external trade and the resulting benefits, triggering a further decline in confidence among economic agents. Higher levels of uncertainty could lead to shelving of certain investment decisions. The prices of imported goods and the purchasing power of consumers could also be affected by customs duties. In addition, the highly complex nature of international supply chains leads us to believe that import duties would have numerous unintended consequences, such as the switch of production to other countries. While the Czech Republic trades predominantly with other EU Member States, its indirect exposure to certain third countries is hardly negligible. In our opinion, it is greater than the direct effect.

**Sentiment indicators**, especially in industry, in a number of euro area countries also pose a risk to the Czech economy. Although economic growth in Q1 was stronger than those indicators would have suggested, it is not inconceivable that the growth momentum will trail off in the future. Germany acts as a cautionary example in this respect, as industrial production there has been contracting since November 2018. This is all the more significant as Germany is the Czech Republic's biggest trading partner (with 31% of exports of goods headed for Germany in 2018).

Indirectly, the Czech economy could be dented by escalating problems in the Italian banking sector or by a sharper slowdown in economic growth in China. Uncertainty in the global economy continues to be fuelled by instability of certain emerging economies (Turkey, Argentina and Brazil).

In some areas – most obviously in the labour and property markets – the Czech economy is showing signs of

overheating. Bearing in mind **cyclical trends**, if some of the risks discussed here were to materialise over the forecast horizon, the economy could enter a downward stage of the business cycle. In business cycle surveys, a fair proportion of companies are pointing to the scarcity of labour as the main barrier impeding an increase in their output. With this in mind, and taking into account the current situation in the labour market and projected demographic trends, increases in **labour productivity** will be crucial in the medium and longer term. In the short term, labour market imbalances create strong pressure on wage growth, which leads to higher unit labour costs. If this trend were to continue over an extended period, it could impinge on competitiveness. On the other hand, this factor provides a major boost to the disposable income of households and productivity enhancing investments. It also provides an impetus to focus on producing goods and services with higher value added.

The cyclical development of the economy, combined with low interest rates, led to higher momentum of mortgage lending. Together with factors limiting housing supply (some of which are specific to Prague), this situation has contributed to a surge in property prices. Continuation of the **rapid growth in housing loans and property prices** constitutes a macroeconomic risk because deterioration in the economic situation or a hike in market rates could topple certain households into insolvency, which would also erode financial stability. Nevertheless, the rise in interest rates, the tightening of lending conditions and high property prices have gradually dampened the momentum of housing loans since around mid-2017. Towards the end of last year, the volume of new mortgage lending started to slump after the CNB tightened its regulatory recommendations. Housing construction figures indicate that supply is set to rise, which could alleviate some of the pressure on price growth.

Given the importance of **automotive industry** for the Czech economy (see Chapter 5), the highly cyclical nature of this sector poses a risk. In the medium to long term, the risks are compounded by structural changes that the automotive industry will go through as emission standards are progressively tightened. Manufacturers who fail to comply with those standards will face huge fines. However, the switch to alternative drives requires enormous investments in technological development, in machinery and equipment, and in infrastructure. Effects on employment, customer-supplier relations, and energy prices can also be anticipated.

The planned procurement of military machinery worth more than CZK 80 billion, which would have a significant impact on **investment momentum** (albeit more over the medium term), is an **upside risk**.

# 1 Forecast Assumptions

## 1.1 External Environment

Global growth has continued to ease as global trade weakens in the face of rising obstacles to international trade, enduring uncertainty associated with the United Kingdom's withdrawal from the EU, and further deterioration in business confidence.

GDP growth in the **United States** accelerated to 0.8% QoQ (*versus 0.4%*) in Q1, with all components making a positive contribution to the economic growth. Net exports made the most relevant contribution; exports went up against the backdrop of persistent tension and negotiations with China, while imports of goods posted a moderate downturn. The federal government shutdown at the beginning of the year slowed down the momentum of consumer expenditures and also accounted for stagnating general government consumption. Gross fixed capital formation was driven primarily by investments in intellectual property products.

As trade relations between the United States and China deteriorated further, the Fed decided to keep interest rates unchanged (2.25–2.50%) at its June meeting. No further rises in interest rates are expected this year. In fact, if uncertainty intensifies and inflationary pressures weaken, the Fed plans to take steps necessary to boost economic growth. In mid-2018, the inflation rate started falling slowly and stood at 1.8% in May 2019. Over the medium term, the Fed expects the inflation rate to stabilize near its 2% objective. Following a strong correction in Q4 2018, stock markets returned to growth and, at the beginning of July, reached their all-time highs.

Although dynamics of household consumption has been decreasing, we expect that it will remain the key driver of economic growth in the coming years. The federal government shutdown at the beginning of the year seems to have had only a short-term impact. On the contrary, the labour market situation should have a positive and longer-lasting effect. In May, the unemployment rate remained at 3.6%, but job creation slowed down. The lack of appropriately skilled labour has been reflected in gradual acceleration of the average wage growth. Investment and export activity – in the short term, at least – should be significantly influenced by the escalating tension in trade relations with China. In May, the United States increased tariffs on Chinese imports worth USD 200 billion from 10% to 25%. China responded by introducing further tariffs on imports of US goods worth USD 60 billion. Although negotiations remain ongoing between these two countries, it cannot be entirely excluded that more protectionist actions will be taken. Eventual imposition of customs duties on imports of automobiles made in the EU was postponed until November.

The escalating tension and uncertainty concerning future developments have been reflected in falling growth rate of industrial production or worsening leading indicators, especially business confidence and purchasing managers' index in manufacturing. During Q2, the situation in the service sector started to worsen, although here the PMIs continue to indicate very moderate growth. Only consumer confidence remains well above the long-term average, despite taking a dip on account of concerns associated with the introduction of further customs duties and slowing employment growth. We forecast that, as the impacts of the fiscal stimulus are fading, economic growth will gradually slow down to 2.5% (*versus 2.3%*) in 2019 and then to 2.0% (*unchanged*) in the following year.

**China's** GDP increased by 1.4% QoQ in Q1. In spite of gradual and persistent slowdown of the economy, China remains the engine of global economic growth. Services are the dominant sector. However, the falling share of industry in gross value added has now come to a halt. The core of economic growth is very slowly shifting towards household consumption, while the ratio of exports to GDP gradually fell to 20% in 2018. However, investments amounted to 43% of GDP in 2018 and remain a dominant factor as the government struggles to maintain economic growth above 6% by numerous stimuli.

We expect the rate of economic growth to continue moderately slowing down further, mainly on account of numerous measures adopted by the government as it seeks to restrict growing housing prices, shadow banking and high-risk loans, and to reduce the excessive capacity in some industrial sectors. In the immediate future, economic activity seems to be adversely affected by the ongoing trade disputes with the United States. Trends in leading indicators, especially the business confidence indicator and the manufacturing purchasing managers' index, are hinting at a slowdown in economic performance. On the contrary, consumer confidence is now at its highest ever levels since surveying began in 1991. Retail sales continue to grow at a year-on-year rate of more than 8%, even though momentum here is on a downward trend. A fiscal stimulus equivalent to 2–3% of GDP should help to achieve the GDP growth target. In this respect, value added tax rates have already been cut and lending quotas for local governments have been increased.

In the **European Union**, GDP rose by 0.5% QoQ (*versus 0.3%*) in Q1 2019. In the EA19, it was up by 0.4% (*versus 0.2%*). In year-on-year terms, GDP increased by 1.5% (*versus 1.3%*) in the EU28 and by 1.2% (*versus 1.0%*) in the EA19. Economic growth was fuelled by all components of domestic demand, with household consumption expenditures and gross fixed capital formation once again leading the way. On top of that, economic performance also benefited from a number of one-off factors. The construction sector took advantage of the mild winter, fiscal measures in some countries had a positive impact on household consumption, and increased imports of United Kingdom, triggered by its expected withdrawal from the EU on 29 March, supported exports in many other economies. The pace of economic growth varied considerably in individual economies. While Latvia recorded a small 0.1% quarter-on-quarter decline in GDP, Croatia reported a 1.8% rise. In some countries, stronger recovery is being hampered not only by external factors, but also by structural issues, low labour productivity growth, loss of competitiveness, and high indebtedness of the government and private sector.

Since December 2018, the inflation rate in the euro area has fluctuated around 1.5%; in May, it dropped to 1.2%. Rising prices of energy (oil and gas) and tobacco were the key contributors to the increase in consumer prices. Since March 2016, the European Central Bank has kept the main refinancing rate at 0.00% and the deposit rate at -0.40%. At the same time, it expects key rates to remain at their current levels at least until the first half of 2020. If the outlook deteriorates, it has indicated that it may cut the deposit rate or make new purchases of assets. From September 2019 until March 2021, there will also be another series of targeted longer-term refinancing operations with a two-year maturity.

The slowing economic activity has also been reflected on the labour market. The unemployment rate in numerous countries is stagnating falling only fractionally. In the EU28, it was 6.4% in May (a year-on-year decline by 0.6 pp), the lowest level since records began in 2000. However, there are huge differences from one economy to another.

Many leading indicators in the euro area reported their highest ever levels at the turn of 2017 and 2018, before embarking on a persistently downward path. Business sentiment continued to worsen also in May 2019 and descended towards a level suggesting a decline in economic output. The manufacturing purchasing managers' index started contracting in February and in March it fell to its lowest level since April 2013, where it remained in the following three months. This trend can be attributed primarily to a fall in production prompted by the slowing rate of global trade growth, tensions in global trade relations, and deterioration in the automotive industry. In contrast, the service purchasing managers' index has continued to show signs of modest expansion, while

consumer confidence remains above the long-term average.

We expect that GDP growth will continue to be driven by domestic demand in the years to come. The key factor should remain household consumption, underpinned in the short term by low interest rates, favourable financial conditions, and expansive fiscal policy in certain countries. On the other hand, it is wage growth that will have a positive effect in the longer run. This is linked to the tight labour market, where the lack of skilled workers is a significant obstacle to economic growth in the short and medium term. The labour market situation, combined with above-average capacity utilisation and loose monetary policy, should fuel investment growth, though this will be tempered by the cooling global economy and persisting uncertainties. Taking into account the strong domestic demand and unfavourable developments in industry, the external balance is likely to moderate economic growth in the short term.

We continue to believe that the factors behind the relatively robust GDP growth in Q1 were largely one-off. In the short term, the EU28's economic performance will be relatively weak and insignificant on account of weakening global demand, persistent uncertainties linked to the withdrawal of the United Kingdom from the EU, the potential escalation of trade relations with the United States, or a sharper slowdown in the Chinese economy. However, we expect the situation to largely become clear in the short run and uncertainties to be significantly reduced. We also suppose that, in the end, there will be no further escalation in barriers to mutual trade between the United States on the one side, and China and the EU on the other, so economic growth should pick up a little in the medium term. The EU28's economic growth could reach 1.5% in 2019 (*versus 1.3%*) and slightly accelerate to 1.7% in 2020 (*versus 1.6%*).

After stagnating at the end of 2018, the German economic growth accelerated to 0.4% QoQ (*versus 0.1%*) in Q1 2019. This can be attributed equally to domestic and foreign demand. However, the contribution made by household consumption – which was supported by high consumer confidence, growing wages reflecting the tight labour market situation, and falling contributions to health insurance – was offset by the negative contribution of change in inventories. Investments in machinery and in the construction sector played a key role in expansion of gross fixed capital formation. Domestic demand was also fuelled by one-off factors, with the favourable weather conditions having a positive impact on construction activity, and by the fact consumer car-buying compensated for the outage at the end of 2018. This time, net exports had a positive impact on economic performance. The import growth rate remained stable, but exports were largely affected by the United Kingdom's efforts to stockpile prior to the date anticipated for its withdrawal.

A number of leading indicators that had reached record highs at the turn of 2017 and 2018 are now experiencing strong adjustment. In January, the manufacturing purchasing managers' index contracted and, in March, there was a further decline taking it to its lowest level since July 2012. Despite a slight improvement, the index continued to contract in the following months. This downturn can be attributed to weaker demand from Asia and ongoing difficulties in the automotive industry. A similar slump was recorded by business confidence as measured by the Ifo indicator. Conversely, the service purchasing managers' index remains high. The share of market services in total gross value added is twice as large as the share of industry. Likewise, the GfK consumer confidence index, despite declining moderately in recent months, remains high above the long-term average.

We believe that the German economy will continue to be driven by domestic demand. Household consumption expenditures will be boosted by an increase in pensions and child allowance, a reduction in health insurance contributions, a hike in the minimum wage and, most of all, by the further growth of real wages (associated with the lack of suitably skilled workers). The German economy is approaching full employment. In May, the unemployment rate remained at 3.1% and employment was at its highest level since German unification. These factors should stimulate further growth in the service sector. Industry, however, has been hit hard by falling demand for German products as global trade weakens, and the adverse trend here is set to continue in the short term. The automotive industry, facing structural issues and severe uncertainty surrounding the heading of the sector as a whole, has been negatively affected by new emission regulations and dwindling demand in China. Even so, we take the view that, over the medium term, manufacturing will probably develop along positive lines. Finally, economic momentum in 2020 should benefit from a higher number of working days. In view of the above, we estimate that economic growth in 2019 will slow to 0.9% (*versus 0.8%*). In the following year, economic performance could accelerate to 1.5% (*versus 1.4%*).

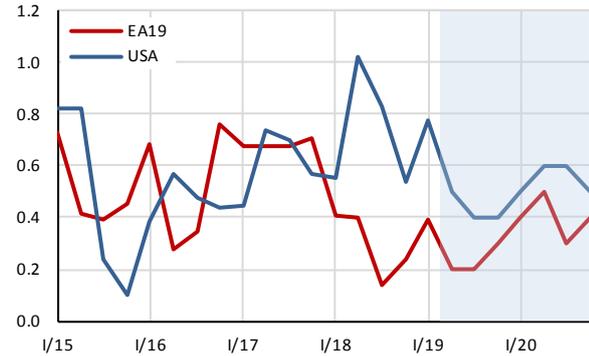
The **Slovak** economy accelerated slightly in Q1 2019, with GDP growing by 0.9% QoQ (*versus 0.8%*). Foreign trade balance had the most dominant impact on economic dynamics. Although the rate of export growth slowed, imports almost stalled due to weak domestic demand. The weakening growth in household consumption is rooted in accelerating inflation and, probably, also in an increase in propensity to save as a result of worsening consumer confidence. The stagnation of investments is caused by deterioration in business confidence.

Over the forecast horizon, GDP growth should be driven by both domestic and external demand. Household consumption expenditures will be stimulated by a number of fiscal measures, persistently above-average consumer confidence, low interest rates and the tight labour market situation. In May, the unemployment rate decreased further to 5.4% (a year-on-year decline by 1.4 pp), the lowest level since records began in 1998. The mismatch in the labour market between supply and demand is putting pressure on a rise of the average wage, which accelerated to 7.1% YoY in Q1. The 8.3% increase in the minimum wage in 2019 and the rise in salaries in the government sector in 2019 and 2020 will help to sustain the high wage momentum.

The lack of workers with appropriate qualification will also be reflected in rising corporate investments in machinery and equipment to increase labour productivity. The growth of gross fixed capital formation in both the private and public sector will also be boosted by the utilisation of European Structural and Investment Funds. The base effect of the completion of the construction of the Jaguar Land Rover plant in 2018 will have the opposite impact. Nevertheless, the gradual start of production at this plant in 2019 will help to maintain export growth in conditions where both global trade and the EU28's economic performance are slowing (in 2018, 84% of all exports were headed for the EU28, accounting for 81% of GDP). We estimate that economic growth will gradually slow down to 3.6% (*versus 3.8%*) in 2019 and 3.4% (*versus 3.7%*) in the following year.

**Graph 1.1.1: GDP Developments in the EA19 and USA**

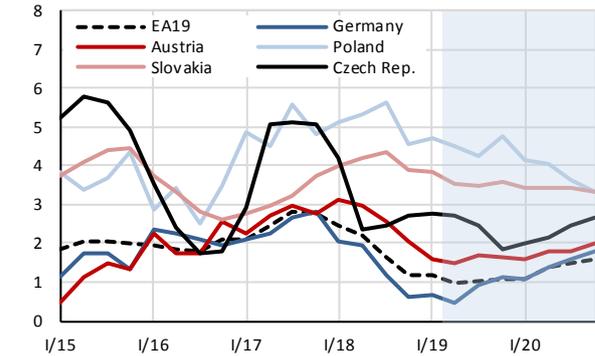
QoQ growth rate of real GDP in%, seasonally adjusted



Source: Eurostat. Calculations and forecast of the MoF.

**Graph 1.1.2: Real Gross Domestic Product**

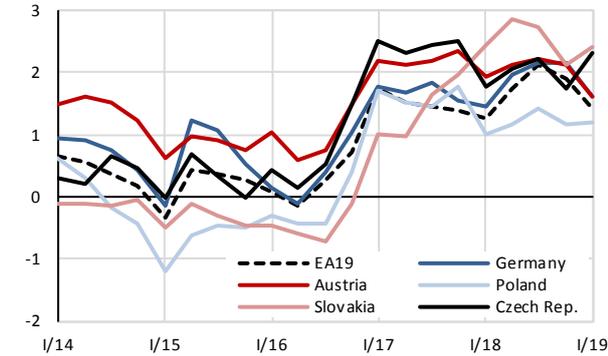
YoY growth in %, seasonally adjusted



Source: CZSO, Eurostat. Calculations and forecast of the MoF.

**Graph 1.1.3: HICP**

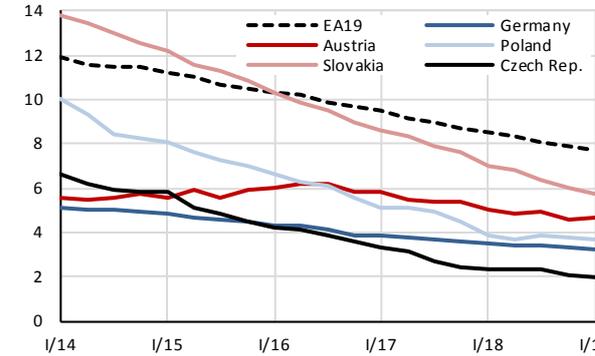
quarterly averages, YoY growth in %



Source: Eurostat. Calculations of the MoF.

**Graph 1.1.4: Unemployment Rate**

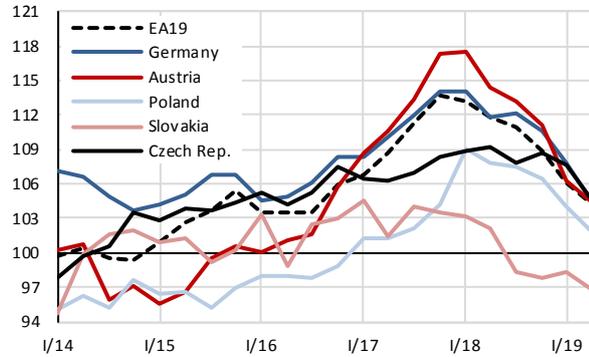
in %, LFS methodology, seasonally adjusted



Source: Eurostat.

**Graph 1.1.5: Economic Sentiment Indicator**

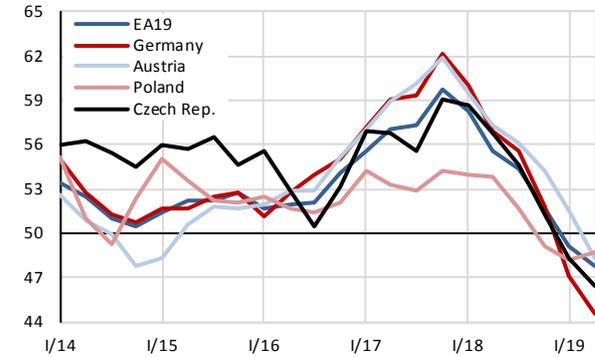
quarterly averages, long-run average = 100



Source: Eurostat. Calculations of the MoF.

**Graph 1.1.6: Purchasing Managers' Index**

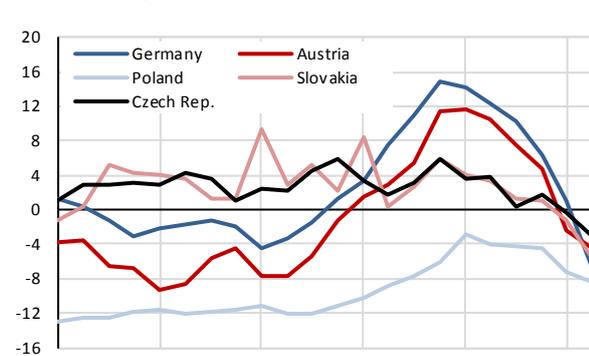
manufacturing, quarterly averages



Source: Markit. Calculations of the MoF.

**Graph 1.1.7: Business Tendency in Manufacturing**

quarterly averages



Source: OECD. Calculations of the MoF.

**Graph 1.1.8: Ifo and Czech manufacturing production**

balances (Ifo); seasonally adjusted index of industrial production in Czech manufacturing, YoY growth in% (three-month moving avg.)



Source: CESifo, CZSO. Calculations of the MoF.

**Table 1.1.1: Gross Domestic Product – yearly***growth rate of real GDP in %*

|                       | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019            | 2020            |
|-----------------------|------|------|------|------|------|------|------|------|-----------------|-----------------|
|                       |      |      |      |      |      |      |      |      | <i>Forecast</i> | <i>Forecast</i> |
| <b>World</b>          | 4.3  | 3.5  | 3.5  | 3.6  | 3.4  | 3.4  | 3.8  | 3.6  | 3.3             | 3.6             |
| <b>USA</b>            | 1.6  | 2.2  | 1.8  | 2.5  | 2.9  | 1.6  | 2.2  | 2.9  | 2.5             | 2.0             |
| <b>China</b>          | 9.5  | 7.9  | 7.8  | 7.3  | 6.9  | 6.7  | 6.8  | 6.6  | 6.2             | 6.1             |
| <b>EU28</b>           | 1.8  | -0.4 | 0.3  | 1.8  | 2.3  | 2.0  | 2.5  | 2.0  | 1.5             | 1.7             |
| <b>EA19</b>           | 1.6  | -0.9 | -0.2 | 1.4  | 2.1  | 1.9  | 2.4  | 1.9  | 1.1             | 1.4             |
| <b>Germany</b>        | 3.7  | 0.5  | 0.5  | 2.2  | 1.7  | 2.2  | 2.2  | 1.4  | 0.9             | 1.5             |
| <b>France</b>         | 2.2  | 0.3  | 0.6  | 1.0  | 1.1  | 1.1  | 2.3  | 1.7  | 1.5             | 1.6             |
| <b>Italy</b>          | 0.6  | -2.8 | -1.7 | 0.1  | 0.9  | 1.1  | 1.7  | 0.9  | 0.1             | 0.4             |
| <b>United Kingdom</b> | 1.6  | 1.4  | 2.0  | 2.9  | 2.3  | 1.8  | 1.8  | 1.4  | 1.4             | 1.1             |
| <b>Austria</b>        | 2.9  | 0.7  | 0.0  | 0.7  | 1.1  | 2.0  | 2.6  | 2.7  | 1.7             | 1.8             |
| <b>Hungary</b>        | 1.7  | -1.6 | 2.1  | 4.2  | 3.5  | 2.3  | 4.1  | 4.9  | 4.7             | 3.0             |
| <b>Poland</b>         | 5.0  | 1.6  | 1.4  | 3.3  | 3.8  | 3.1  | 4.9  | 5.1  | 4.5             | 3.8             |
| <b>Slovakia</b>       | 2.8  | 1.7  | 1.5  | 2.8  | 4.2  | 3.1  | 3.2  | 4.1  | 3.6             | 3.4             |
| <b>Czech Republic</b> | 1.8  | -0.8 | -0.5 | 2.7  | 5.3  | 2.5  | 4.4  | 3.0  | 2.5             | 2.3             |

*Source: CZSO, Eurostat, NBS China, OECD. Calculations of the MoF.***Table 1.1.2: Gross Domestic Product – quarterly***growth rate of real GDP in %, seasonally adjusted data*

|                       |            | 2018 |     |      |      | Q1   | 2019 |                 |                 |                 |
|-----------------------|------------|------|-----|------|------|------|------|-----------------|-----------------|-----------------|
|                       |            | Q1   | Q2  | Q3   | Q4   |      | Q1   | Q2              | Q3              | Q4              |
|                       |            |      |     |      |      |      |      | <i>Estimate</i> | <i>Forecast</i> | <i>Forecast</i> |
| <b>USA</b>            | <i>QoQ</i> | 0.5  | 1.0 | 0.8  | 0.5  | 0.8  | 0.5  | 0.4             | 0.4             |                 |
|                       | <i>YoY</i> | 2.6  | 2.9 | 3.0  | 3.0  | 3.2  | 2.7  | 2.2             | 2.1             |                 |
| <b>China</b>          | <i>QoQ</i> | 1.5  | 1.7 | 1.6  | 1.5  | 1.4  | 1.6  | 1.4             | 1.5             |                 |
|                       | <i>YoY</i> | 6.8  | 6.7 | 6.5  | 6.4  | 6.4  | 6.2  | 6.0             | 6.0             |                 |
| <b>EU28</b>           | <i>QoQ</i> | 0.4  | 0.4 | 0.3  | 0.3  | 0.5  | 0.3  | 0.3             | 0.4             |                 |
|                       | <i>YoY</i> | 2.4  | 2.2 | 1.9  | 1.5  | 1.5  | 1.4  | 1.4             | 1.5             |                 |
| <b>EA19</b>           | <i>QoQ</i> | 0.4  | 0.4 | 0.1  | 0.2  | 0.4  | 0.2  | 0.2             | 0.3             |                 |
|                       | <i>YoY</i> | 2.5  | 2.2 | 1.7  | 1.2  | 1.2  | 1.0  | 1.0             | 1.1             |                 |
| <b>Germany</b>        | <i>QoQ</i> | 0.4  | 0.5 | -0.2 | 0.0  | 0.4  | 0.2  | 0.3             | 0.2             |                 |
|                       | <i>YoY</i> | 2.1  | 2.0 | 1.2  | 0.6  | 0.7  | 0.4  | 0.9             | 1.1             |                 |
| <b>France</b>         | <i>QoQ</i> | 0.3  | 0.2 | 0.3  | 0.4  | 0.3  | 0.4  | 0.4             | 0.3             |                 |
|                       | <i>YoY</i> | 2.4  | 1.9 | 1.5  | 1.2  | 1.2  | 1.4  | 1.6             | 1.4             |                 |
| <b>Italy</b>          | <i>QoQ</i> | 0.2  | 0.0 | -0.1 | -0.1 | 0.1  | 0.1  | 0.0             | 0.1             |                 |
|                       | <i>YoY</i> | 1.4  | 1.0 | 0.5  | 0.0  | -0.1 | 0.0  | 0.1             | 0.3             |                 |
| <b>United Kingdom</b> | <i>QoQ</i> | 0.1  | 0.4 | 0.7  | 0.2  | 0.5  | 0.2  | 0.2             | 0.1             |                 |
|                       | <i>YoY</i> | 1.2  | 1.4 | 1.6  | 1.4  | 1.8  | 1.6  | 1.1             | 1.0             |                 |
| <b>Austria</b>        | <i>QoQ</i> | 0.9  | 0.5 | 0.3  | 0.3  | 0.4  | 0.4  | 0.5             | 0.3             |                 |
|                       | <i>YoY</i> | 3.1  | 3.0 | 2.6  | 2.0  | 1.6  | 1.5  | 1.7             | 1.6             |                 |
| <b>Hungary</b>        | <i>QoQ</i> | 1.2  | 1.1 | 1.5  | 1.1  | 1.5  | 0.9  | 0.6             | 0.5             |                 |
|                       | <i>YoY</i> | 4.9  | 4.8 | 5.3  | 5.0  | 5.2  | 5.0  | 4.1             | 3.5             |                 |
| <b>Poland</b>         | <i>QoQ</i> | 1.4  | 1.2 | 1.5  | 0.5  | 1.5  | 1.0  | 1.2             | 1.0             |                 |
|                       | <i>YoY</i> | 5.1  | 5.3 | 5.6  | 4.6  | 4.7  | 4.5  | 4.2             | 4.8             |                 |
| <b>Slovakia</b>       | <i>QoQ</i> | 1.0  | 1.1 | 1.0  | 0.8  | 0.9  | 0.8  | 0.9             | 0.9             |                 |
|                       | <i>YoY</i> | 4.0  | 4.2 | 4.3  | 3.9  | 3.8  | 3.6  | 3.5             | 3.6             |                 |
| <b>Czech Republic</b> | <i>QoQ</i> | 0.6  | 0.6 | 0.6  | 0.9  | 0.6  | 0.6  | 0.4             | 0.3             |                 |
|                       | <i>YoY</i> | 4.2  | 2.4 | 2.5  | 2.7  | 2.8  | 2.7  | 2.5             | 1.9             |                 |

*Source: CZSO, Eurostat, NBS China, OECD. Calculations and forecast of the MoF.*

## 1.2 Commodity Prices

The price of Brent crude oil averaged USD 69.0/barrel (vs USD 66/barrel) in Q2 2019. This was a drop by approximately 7% YoY, though in CZK terms the price virtually stagnated. An agreement between members of the OPEC and other stakeholder countries to reduce oil production was effective also in Q2. The decision to extend this agreement until the end of Q1 2020, made in early July, is of fundamental importance to further developments in oil prices. The US Energy Information Administration estimates there will be no significant changes in oil stocks in 2019 and 2020. The situation prevailing on the futures market is that oil supplied later is traded more cheaply than oil supplied earlier.

The Brent crude oil price outlook reflects the gently descending curve of futures prices. The price should average USD 64/barrel (vs USD 66/barrel) in 2019, while in 2020 we expect to see a price of USD 60 per barrel (vs USD 65/barrel). The forecast has been reduced because of a downward shift in the curve of futures prices throughout the relevant period.

Compared to the previous forecast the koruna price of Brent crude oil has been reduced less than the USD price because we expect the koruna to be weaker against the USD. According to our assumptions, the CZK price should drop by approximately 6% and 7% YoY in 2019 and 2020, respectively.

**Graph 1.2.1: Dollar Price of Brent Crude Oil**

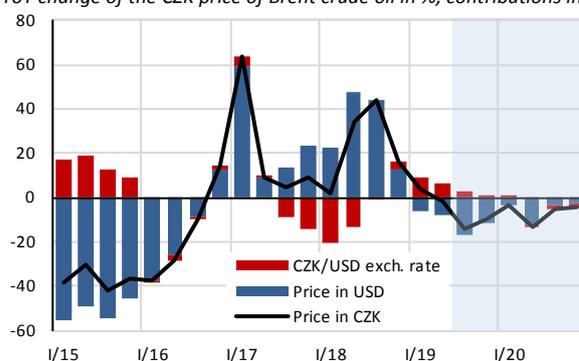
USD/barrel



Source: U. S. EIA. Calculations and forecast of the MoF.

**Graph 1.2.2: Koruna Price of Brent Crude Oil**

YoY change of the CZK price of Brent crude oil in %, contributions in pp



Source: CNB, U. S. EIA. Calculations and forecast of the MoF.

**Table 1.2.1: Prices of Selected Commodities – yearly**

spot prices

|  |             | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017 | 2018  | 2019  | 2020     |          |
|--|-------------|-------|-------|-------|-------|-------|-------|------|-------|-------|----------|----------|
|  |             |       |       |       |       |       |       |      |       |       | Forecast | Forecast |
| <b>Crude oil Brent</b>                     | USD/barrel  | 111.3 | 111.5 | 108.6 | 99.0  | 52.4  | 43.6  | 54.2 | 71.4  | 64    | 60       |          |
|  | growth in % | 39.8  | 0.2   | -2.6  | -8.8  | -47.1 | -16.9 | 24.3 | 31.7  | -10.4 | -5.9     |          |
| <b>Crude oil Brent index (in CZK)</b>      | 2010=100    | 129.5 | 143.8 | 139.9 | 134.6 | 85.0  | 70.1  | 83.1 | 102.1 | 96    | 89       |          |
|  | growth in % | 29.5  | 11.0  | -2.7  | -3.8  | -36.9 | -17.4 | 18.5 | 22.9  | -5.9  | -7.0     |          |
| <b>Natural gas (Europe)</b>                | USD/MMBtu   | 10.5  | 11.5  | 11.8  | 10.1  | 6.8   | 4.6   | 5.7  | 7.7   | .     | .        |          |
|  | growth in % | 26.9  | 9.1   | 2.7   | -14.7 | -32.1 | -33.1 | 25.3 | 34.4  | .     | .        |          |
| <b>Natural gas (Europe) index (in CZK)</b> | 2010=100    | 117.9 | 142.2 | 145.9 | 131.7 | 106.2 | 70.7  | 84.2 | 105.9 | .     | .        |          |
|  | growth in % | 17.9  | 20.6  | 2.6   | -9.8  | -19.4 | -33.4 | 19.2 | 25.7  | .     | .        |          |

Source: CNB, U. S. Energy Information Administration, World Bank. Calculations and forecast of the MoF.

**Table 1.2.2: Prices of Selected Commodities – quarterly**

spot prices

|  |             | 2018 |       |       |       | 2019 |       |       |       |          |          |
|--|-------------|------|-------|-------|-------|------|-------|-------|-------|----------|----------|
|  |             | Q1   | Q2    | Q3    | Q4    | Q1   | Q2    | Q3    | Q4    |          |          |
|  |             |      |       |       |       |      |       |       |       | Forecast | Forecast |
| <b>Crude oil Brent</b>                     | USD/barrel  | 66.9 | 74.5  | 75.1  | 69.0  | 63.1 | 69.0  | 62    | 61    |          |          |
|  | growth in % | 24.8 | 50.2  | 44.1  | 12.4  | -5.7 | -7.4  | -16.9 | -11.2 |          |          |
| <b>Crude oil Brent index (in CZK)</b>      | 2010=100    | 91.0 | 105.6 | 109.7 | 102.2 | 94.0 | 104.1 | 94    | 92    |          |          |
|  | growth in % | 1.6  | 34.2  | 44.1  | 16.0  | 3.2  | -1.4  | -14.1 | -9.9  |          |          |
| <b>Natural gas (Europe)</b>                | USD/MMBtu   | 6.7  | 7.3   | 8.4   | 8.3   | 6.1  | 4.3   | .     | .     |          |          |
|  | growth in % | 16.8 | 46.2  | 53.3  | 25.1  | -8.1 | -41.2 | .     | .     |          |          |
| <b>Natural gas (Europe) index (in CZK)</b> | 2010=100    | 87.5 | 99.2  | 117.9 | 118.8 | 88.0 | 62.1  | .     | .     |          |          |
|  | growth in % | -4.9 | 30.6  | 53.3  | 29.2  | 0.5  | -37.4 | .     | .     |          |          |

Source: CNB, U. S. Energy Information Administration, World Bank. Calculations and forecast of the MoF.

### 1.3 Fiscal Policy

In **2018**, the general government balance posted a surplus of CZK 47.4 billion, corresponding to 0.9% of GDP. This was the third time in a row that a surplus was achieved, and all sub-sectors contributed to it. The structural balance reached 0.4% of GDP, with the primary structural balance standing at 1.2% of GDP (*versus 1.1% of GDP*).

The lower surplus of the general government sector can be attributed largely to expenditures, which increased by 10.1%, thus outpacing the growth in revenues by two percentage points. Tax revenues, including social security contributions, were up by almost CZK 132 billion (7.4%). The high dynamism relative to the economy's position in the business cycle was preserved primarily by personal income tax (13.8%) and social security contributions (9.8%), i.e. by revenues dependent in particular on the development of wages and salaries in the economy. On the expenditure side, the fastest-growing item was gross fixed capital formation (27.7%); almost 70% of its growth was financed from national sources. The momentum of nominal final consumption expenditures of the general government accelerated to 8.9%, driven by compensation of employees (12.7%) and intermediate consumption (9.7%).

The forecast for the general government balance in 2019 remains at the same level as in the April forecast, i.e. we continue to expect a surplus equivalent to 0.3% of GDP. Negative fiscal effort, which is indicative of a moderately expansive fiscal policy, should lead to almost zero structural balance.

When the forecast was updated, minor changes were made on the basis of new information to the revenue and expenditure structure. Under the updated scenario, general government's final consumption expenditures will grow by 6.9% (*versus 6.6%*). This revision was prompted by data from national accounts for Q1 2019 that suggest a higher growth rate of expenditures on intermediate consumption and social transfers in kind.

Nominal investments (gross fixed capital formation) in the general government sector went up by 15.7% YoY in Q1 2019. Local government made a particular contribution to this development by posting a rise of almost 27%. Cash collection in the first half of the year also suggests faster implementation of investments. In the light of these circumstances, we estimate that there will be

a full-year nominal rise in general government investment by 9.7% (*versus 5.5%*). However, the impact on the overall balance is much smaller when we consider the high degree to which such investments are co-financed by European resources.

The rise in capital expenditures beyond EU projects, expenditures on government consumption and social transfers to households should be financed by higher tax revenues, including social security contributions. The faster growth here compared to the previously projected increase is borne out by accrual data on quarterly national accounts and the cash data pertaining to cash collection.

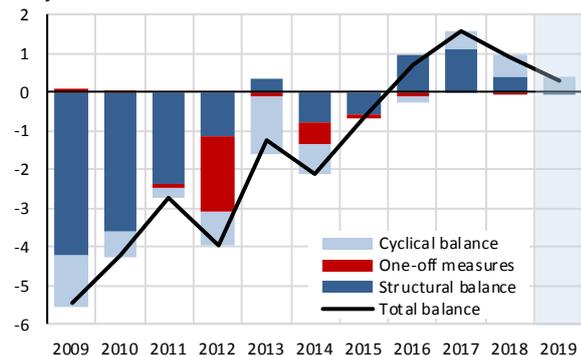
According to data on cash collection, the state budget posted a deficit of CZK 20.7 billion at the end of June 2019. This was CZK 14.8 billion worse than in the same period of 2018. However, adjusting revenues and expenditures for revenue and expenditure transfers associated with EU funds and financial mechanisms, there was a CZK 5.6 billion year-on-year improvement in the balance. The cash performance of the state budget adjusted in this way is closer to the ESA 2010 accrual methodology than the balance encumbered by flows of funds associated with EU projects. The main reason for the improvement is that, during the first half of last year, the state budget received CZK 20.4 billion more from the EU within the scope of final payments relating to the 2007-2013 programming period. In addition, there has been progress in implementing joint EU programmes, with the associated expenditures amounting to CZK 57.7 billion, i.e. year-on-year growth by CZK 13.7 billion, or 31.2%. Besides this impact, the state budget has been affected thus far by the pre-financing, in the first half of the year, of a range of expenditures planned for the whole of 2019.

Conversely, local budgets have long been posting very high surpluses. In the first five months of this year, they reported a cash surplus of almost CZK 20 billion, up by CZK 5.8 billion YoY. In the same period, health insurance companies ended up with a surplus, in cash terms, of CZK 8 billion, a year-on-year rise by CZK 3.2 billion.

The general government debt in 2018 came in at 32.6% of GDP (*versus 32.7% of GDP*). The forecast surplus of the general government sector and the rise in GDP are accompanied by the expectation of a further decline in the debt-to-GDP ratio to 31.3% (*versus 31.5%*) at the end of 2019.

**Graph 1.3.1: General Government Balance**

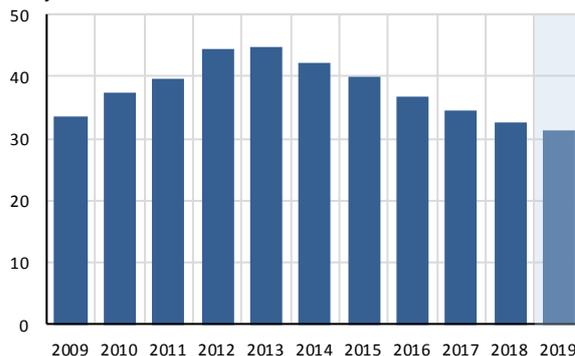
in % of GDP



Source: CZSO. Calculations and forecast of the MoF.

**Graph 1.3.2: General Government Debt**

in % of GDP



Source: CZSO. Calculations and forecast of the MoF.

**Table 1.3.1: Net Lending/Borrowing and Debt**

|  |           | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019            |
|--|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
|  |           |       |       |       |       |       |       |       |       |       | <i>Forecast</i> |
| <b>General government balance</b>          | % GDP     | -4.2  | -2.7  | -3.9  | -1.2  | -2.1  | -0.6  | 0.7   | 1.6   | 0.9   | 0.3             |
|  | bill. CZK | -166  | -110  | -160  | -51   | -91   | -28   | 34    | 79    | 47    | 18              |
| <b>Cyclical balance</b>                    | % GDP     | -0.7  | -0.2  | -0.8  | -1.5  | -0.8  | 0.0   | -0.1  | 0.5   | 0.6   | 0.4             |
| <b>Cyclically adjusted balance</b>         | % GDP     | -3.5  | -2.5  | -3.1  | 0.2   | -1.3  | -0.7  | 0.8   | 1.1   | 0.3   | -0.1            |
| <b>One-off measures <sup>1)</sup></b>      | % GDP     | 0.1   | -0.1  | -1.9  | -0.1  | -0.5  | -0.1  | -0.1  | 0.0   | -0.1  | 0.0             |
| <b>Structural balance</b>                  | % GDP     | -3.6  | -2.3  | -1.2  | 0.4   | -0.8  | -0.6  | 1.0   | 1.1   | 0.4   | -0.1            |
| <b>Fiscal effort <sup>2)</sup></b>         | pp        | 0.6   | 1.2   | 1.2   | 1.5   | -1.1  | 0.2   | 1.6   | 0.1   | -0.7  | -0.5            |
| <b>Interest expenditure</b>                | % GDP     | 1.3   | 1.3   | 1.4   | 1.3   | 1.3   | 1.1   | 0.9   | 0.7   | 0.8   | 0.8             |
| <b>Primary balance</b>                     | % GDP     | -2.9  | -1.4  | -2.5  | 0.1   | -0.8  | 0.5   | 1.6   | 2.3   | 1.6   | 1.1             |
| <b>Cyclically adjusted primary balance</b> | % GDP     | -2.2  | -1.2  | -1.7  | 1.6   | 0.0   | 0.4   | 1.8   | 1.9   | 1.1   | 0.7             |
| <b>General government debt</b>             | % GDP     | 37.4  | 39.8  | 44.5  | 44.9  | 42.2  | 40.0  | 36.8  | 34.7  | 32.6  | 31.3            |
|  | bill. CZK | 1 480 | 1 606 | 1 805 | 1 840 | 1 819 | 1 836 | 1 755 | 1 750 | 1 735 | 1 763           |
| <b>Change in debt-to-GDP ratio</b>         | pp        | 3.8   | 2.5   | 4.6   | 0.4   | -2.7  | -2.2  | -3.1  | -2.1  | -2.1  | -1.2            |

<sup>1)</sup> One-off and temporary measures are such measures that have only a temporary impact on public budgets. Besides their temporary impact on overall balance, these measures are usually of non-recurring nature and very often result from the events that are beyond the direct power of the government.

<sup>2)</sup> Change in structural balance.

Source: CZSO. Calculations and forecast of the MoF.

## 1.4 Monetary Policy, Financial Sector and Exchange Rates

### 1.4.1 Monetary Policy

In Q2 2019, the CNB raised the **two-week repo rate** by 0.25 pp to 2.00%. The arguments in favour of an interest rate hike (domestic inflationary pressures stemming from rising wages and salaries and the labour market situation) eclipsed the arguments in favour of keeping rates unchanged (the risk of slower growth among European economies and the widening interest rate differential relative to the euro area).

Bearing in mind the projected monetary policy and the expected appreciation of the CZK (see Chapter 1.4.3) we anticipate tighter monetary conditions, mainly in the exchange rate component, in 2019 and 2020.

### 1.4.2 Financial Sector and Interest Rates

In line with the development of CNB's monetary-policy rates, the **three-month PRIBOR** rose to 2.1% (*versus* 2.0%) in Q2. As primary rates were raised earlier than expected, and taking into account their outlook, the PRIBOR rate should reach 2.2% (*unchanged*) in Q3, which should also be the average in 2019 as a whole (*versus* 2.1%). In 2020, we expect to see only very modest growth to 2.3% (*unchanged*).

Despite expectations, the **yield to maturity on 10-year government bonds** for convergence purposes stagnated at 1.8% (*versus* 2.2%) in Q2 2019. The curve of government bonds' yields to maturity remains flat for shorter maturities; yields on two-year government bonds are higher than yields on five-year bonds and are close to yields on 10-year bonds. The shape of the yield curve could be explained by the market's expectations that interest rates will not be raised. Taking into account expected monetary policy of the CNB and the ECB, inflation developments, and the persisting yield curve inversion we believe that long-term interest rates will increase slowly. In Q3, they could stand at 2.0% (*versus* 2.3%). They could average 2.0% (*versus* 2.2%) in 2019 as a whole, and reach 2.4% (*unchanged*) in 2020.

Total **loans to households** grew 7.2% YoY in Q1, tantamount to a dip in momentum by 0.5 percentage points. A similar trend then continued in April and May. Household lending remains driven in particular by housing loans, which account for approximately 75% of the total volume of loans to households. Average client interest rates on the total volume of loans to households continued along their gentle downward trajectory.

In connection with the CNB's recommendation on the management of risks associated with the granting of retail loans secured with residential property, effective as of 1 October 2018, we have seen new mortgages for the purchase of property plummet year-on-year since December 2018. In Q1 the decline was 22.4%. Nevertheless, that fall slowed considerably in April and May, to 11.7% and 0.7%, respectively. The effect of "frontloading" and of the subsequent ebbing of demand, which

reduced the volume of new mortgages, is gradually trailing off. In recent months, demand for mortgages has also been boosted by client interest rates, which have been decreasing since March 2019 (evidently on account of competition between banks or their expectations about the trajectory of CNB's rates).

The growth in **loans to non-financial corporations** slowed to 6.1% YoY in Q1 2019. It continued to be driven primarily by loans with maturity of between one and five years. Significant contributions to the momentum of overall lending were made by both foreign-currency and CZK loans.

The **non-performing loans ratio** again contracted among households in Q1, this time to a level as low as 2.0%. Among non-financial corporations, this ratio went up by 0.1 pp to 3.7% and hovered around 3.5% in both April and May, meaning that it has essentially stagnated since September 2018. In international comparison, the overall non-performing loans ratio is just a little higher than the EU average (looking at the figures for 2017).

The growth in **deposits** of non-financial corporations slowed slightly to 2.9% YoY in Q1, though their momentum increased in May. There was a slowdown in households' deposits in Q1 to 7.6%, but in April and May their growth was still above 7%. This solid growth in deposits paves the way for the financing of future consumption and investments.

### 1.4.3 Exchange Rates

During Q2 the exchange rate of the koruna to the euro was in the range from CZK 25.4 to CZK 25.9/EUR, with the koruna trading at an average of CZK 25.7/EUR (*versus* CZK 25.6 EUR). Compared to the previous quarter, the exchange rate remained unchanged and was actually 0.3% weaker in year-on-year terms, despite the further widening in the interest rate differential relative to the euro area.

Taking into account the ongoing real convergence and the positive interest rate differential between the Czech Republic and the euro area, the koruna should appreciate over the forecast horizon. In Q3 2019, the exchange rate could be CZK 25.6/EUR (*vs* CZK 25.5/EUR), and this should also be the average in 2019 as a whole. This would mean that koruna would appreciate against the euro by just 0.1%, which is consistent with econometric estimates of strengthening of the real exchange rate. The koruna should appreciate by 1.8% to CZK 25.2/EUR (*versus* CZK 25.1/EUR) in 2020.

The expected development of the koruna exchange rate against the U.S. dollar is implied by the USD/EUR exchange rate, for which a technical assumption of stability at USD 1.12/EUR (*versus* USD 1.14/EUR), i.e. the average of 10 days preceding the cut-off date for forecast assumptions) was adopted.

### Graph 1.4.1: Interest Rates

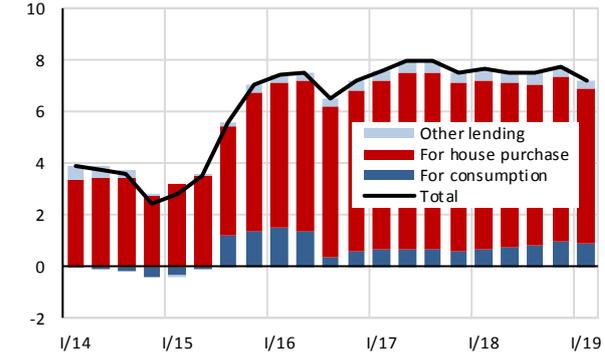
in % p.a.



Source: CNB. Calculations and forecast of the MoF.

### Graph 1.4.2: Loans to Households

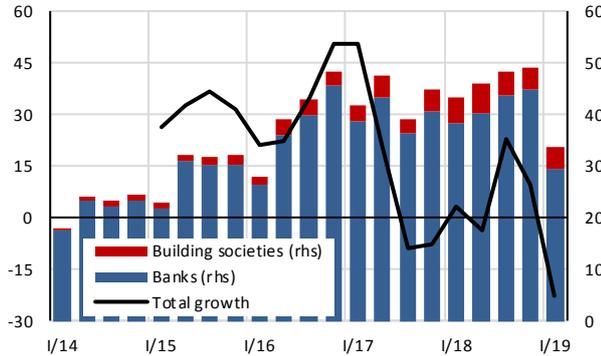
YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

### Graph 1.4.3: New Mortgage Loans

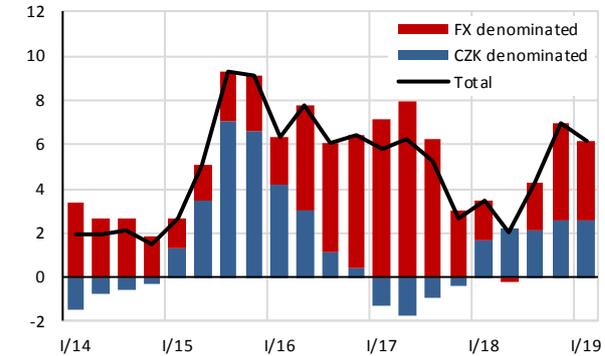
for purchase of residential property, YoY growth in %, CZK billion (rhs)



Source: CNB. Calculations of the MoF.

### Graph 1.4.4: Loans to Non-financial Corporations

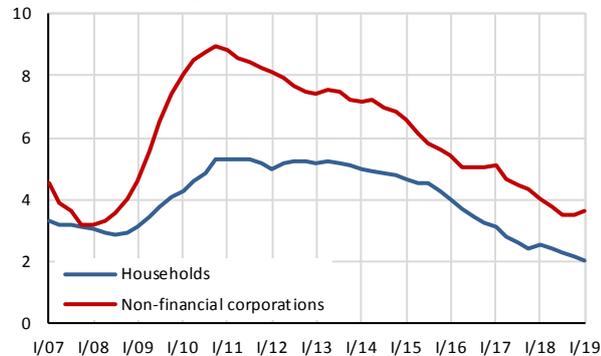
YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

### Graph 1.4.5: Non-performing Loans

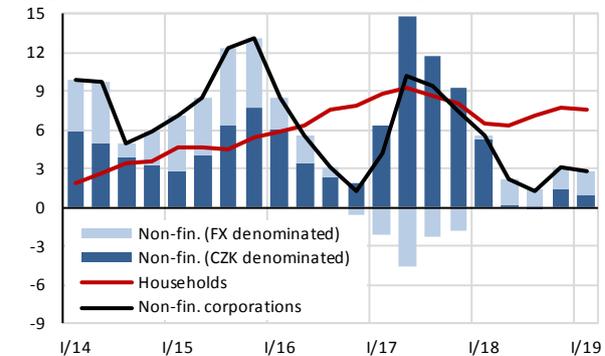
ratio of non-performing to total loans, in%



Source: CNB. Calculations of the MoF.

### Graph 1.4.6: Deposits

YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

### Graph 1.4.7: Nominal Exchange Rates

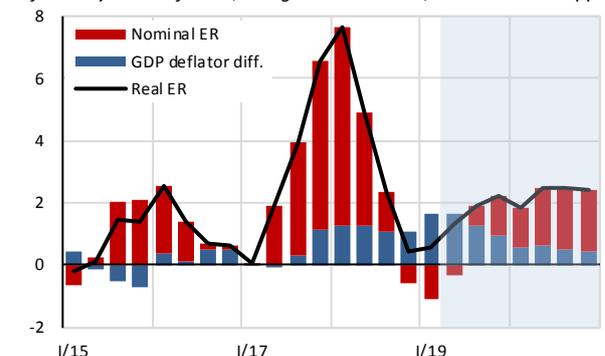
quarterly averages, average 2015=100 (rhs)



Source: CNB. Calculations and forecast of the MoF.

### Graph 1.4.8: Real Exchange Rate to the EA19

deflated by GDP deflators, YoY growth rate in %, contributions in pp



Source: CNB, CZSO, Eurostat. Calculations and forecast of the MoF.

**Table 1.4.1: Interest Rates – yearly**  
average of period, unless stated otherwise

|  |                  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020     |          |
|--|------------------|------|------|------|------|------|------|------|------|------|----------|----------|
|  |                  |      |      |      |      |      |      |      |      |      | Forecast | Forecast |
| <b>Repo 2W rate CNB</b> (end of period)          | <i>in % p.a.</i> | 0.75 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.50 | 1.75 | .    | .        |          |
| <b>Main refinancing rate ECB</b> (end of period) | <i>in % p.a.</i> | 1.00 | 0.75 | 0.25 | 0.05 | 0.05 | 0.05 | 0.00 | 0.00 | .    | .        |          |
| <b>Federal funds rate</b> (end of period)        | <i>in % p.a.</i> | 0.25 | 0.25 | 0.25 | 0.25 | 0.50 | 0.75 | 1.50 | 2.50 | .    | .        |          |
| <b>PRIBOR 3M</b>                                 | <i>in % p.a.</i> | 1.19 | 1.00 | 0.46 | 0.36 | 0.31 | 0.29 | 0.41 | 1.23 | 2.2  | 2.3      |          |
| <b>YTM of 10Y government bonds</b>               | <i>in % p.a.</i> | 3.71 | 2.78 | 2.11 | 1.58 | 0.58 | 0.43 | 0.98 | 1.98 | 2.0  | 2.4      |          |
| <b>Client interest rates</b>                     |                  |      |      |      |      |      |      |      |      |      |          |          |
| <b>Loans to households</b>                       | <i>in % p.a.</i> | 6.84 | 6.47 | 6.05 | 5.59 | 5.15 | 4.65 | 4.10 | 3.76 | .    | .        |          |
| <b>Loans to non-financial corporations</b>       | <i>in % p.a.</i> | 3.94 | 3.72 | 3.20 | 3.01 | 2.78 | 2.59 | 2.57 | 3.05 | .    | .        |          |
| <b>Deposits of households</b>                    | <i>in % p.a.</i> | 1.20 | 1.18 | 1.02 | 0.85 | 0.65 | 0.47 | 0.36 | 0.33 | .    | .        |          |
| <b>Deposits of non-financial corporations</b>    | <i>in % p.a.</i> | 0.51 | 0.56 | 0.41 | 0.29 | 0.19 | 0.10 | 0.05 | 0.11 | .    | .        |          |

Source: CNB, ECB, Fed. Calculations and forecast of the MoF.

**Table 1.4.2: Interest Rates – quarterly**  
average of period, unless stated otherwise

|  |                  | 2018 |      |      |      | 2019 |          |          |          |
|--|------------------|------|------|------|------|------|----------|----------|----------|
|  |                  | Q1   | Q2   | Q3   | Q4   | Q1   | Q2       | Q3       | Q4       |
|  |                  |      |      |      |      |      | Estimate | Forecast | Forecast |
| <b>Repo 2W rate CNB</b> (end of period)          | <i>in % p.a.</i> | 0.75 | 1.00 | 1.50 | 1.75 | 1.75 | 2.00     | .        | .        |
| <b>Main refinancing rate ECB</b> (end of period) | <i>in % p.a.</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00     | .        | .        |
| <b>Federal funds rate</b> (end of period)        | <i>in % p.a.</i> | 1.75 | 2.00 | 2.00 | 2.50 | 2.50 | 2.50     | .        | .        |
| <b>PRIBOR 3M</b>                                 | <i>in % p.a.</i> | 0.86 | 0.92 | 1.33 | 1.83 | 2.01 | 2.13     | 2.2      | 2.2      |
| <b>YTM of 10Y government bonds</b>               | <i>in % p.a.</i> | 1.80 | 1.92 | 2.13 | 2.07 | 1.81 | 1.75     | 2.0      | 2.2      |
| <b>Client interest rates</b>                     |                  |      |      |      |      |      |          |          |          |
| <b>Loans to households</b>                       | <i>in % p.a.</i> | 3.85 | 3.78 | 3.73 | 3.70 | 3.67 | .        | .        | .        |
| <b>Loans to non-financial corporations</b>       | <i>in % p.a.</i> | 2.81 | 2.88 | 3.06 | 3.46 | 3.67 | .        | .        | .        |
| <b>Deposits of households</b>                    | <i>in % p.a.</i> | 0.33 | 0.32 | 0.32 | 0.33 | 0.36 | .        | .        | .        |
| <b>Deposits of non-financial corporations</b>    | <i>in % p.a.</i> | 0.05 | 0.09 | 0.13 | 0.19 | 0.27 | .        | .        | .        |

Source: CNB, ECB, Fed. Calculations and forecast of the MoF.

**Table 1.4.3: Loans and Deposits – yearly averages**

|  |                    | 2009        | 2010        | 2011       | 2012       | 2013       | 2014       | 2015        | 2016       | 2017       | 2018       |
|--|--------------------|-------------|-------------|------------|------------|------------|------------|-------------|------------|------------|------------|
| <b>Households</b>                                |                    |             |             |            |            |            |            |             |            |            |            |
| <b>Loans</b>                                     | <i>growth in %</i> | <b>16.5</b> | <b>8.9</b>  | <b>6.6</b> | <b>5.0</b> | <b>4.0</b> | <b>3.4</b> | <b>4.8</b>  | <b>7.2</b> | <b>7.8</b> | <b>7.6</b> |
| For consumption                                  | <i>growth in %</i> | 16.4        | 7.3         | 4.2        | -1.0       | -0.1       | -0.9       | 3.4         | 6.0        | 4.3        | 5.4        |
| For house purchase                               | <i>growth in %</i> | 15.5        | 8.9         | 6.5        | 6.4        | 5.5        | 4.5        | 5.6         | 8.1        | 9.0        | 8.5        |
| Other lending                                    | <i>growth in %</i> | 23.9        | 11.6        | 11.1       | 6.0        | 1.2        | 2.9        | 1.0         | 3.0        | 4.2        | 4.3        |
| CZK denominated                                  | <i>growth in %</i> | 16.5        | 8.8         | 6.6        | 4.9        | 4.0        | 3.4        | 4.7         | 7.2        | 7.7        | 7.6        |
| FX denominated                                   | <i>growth in %</i> | 0.1         | 31.0        | 2.4        | 30.8       | -1.3       | 0.0        | 12.7        | 8.5        | 36.3       | 1.7        |
| <b>Deposits</b>                                  | <i>growth in %</i> | <b>10.2</b> | <b>5.1</b>  | <b>5.0</b> | <b>4.5</b> | <b>3.3</b> | <b>2.9</b> | <b>4.8</b>  | <b>7.0</b> | <b>8.7</b> | <b>7.0</b> |
| CZK denominated                                  | <i>growth in %</i> | 10.1        | 5.6         | 5.4        | 4.7        | 3.3        | 2.7        | 4.1         | 6.9        | 9.7        | 7.1        |
| FX denominated                                   | <i>growth in %</i> | 13.1        | -6.8        | -4.0       | -2.1       | 2.3        | 8.5        | 22.5        | 7.3        | -13.9      | 3.5        |
| <b>Non-performing loans (banking statistics)</b> | <i>share, in %</i> | <b>3.6</b>  | <b>4.8</b>  | <b>5.3</b> | <b>5.2</b> | <b>5.2</b> | <b>4.9</b> | <b>4.5</b>  | <b>3.6</b> | <b>2.7</b> | <b>2.4</b> |
| <b>Loans to deposits ratio</b>                   | <i>in %</i>        | <b>59</b>   | <b>61</b>   | <b>62</b>  | <b>63</b>  | <b>63</b>  | <b>63</b>  | <b>63</b>   | <b>63</b>  | <b>63</b>  | <b>63</b>  |
| <b>Non-financial corporations</b>                |                    |             |             |            |            |            |            |             |            |            |            |
| <b>Loans</b>                                     | <i>growth in %</i> | <b>1.9</b>  | <b>-5.2</b> | <b>4.7</b> | <b>3.5</b> | <b>1.3</b> | <b>1.9</b> | <b>6.5</b>  | <b>6.6</b> | <b>5.0</b> | <b>4.2</b> |
| CZK denominated                                  | <i>growth in %</i> | 0.5         | -5.2        | 4.9        | 2.6        | 0.3        | -1.0       | 5.9         | 2.8        | -1.4       | 3.0        |
| FX denominated                                   | <i>growth in %</i> | 9.1         | -5.4        | 3.7        | 7.8        | 5.7        | 13.7       | 9.0         | 20.5       | 24.4       | 6.9        |
| <b>Deposits</b>                                  | <i>growth in %</i> | <b>-2.2</b> | <b>5.5</b>  | <b>0.4</b> | <b>8.9</b> | <b>4.9</b> | <b>7.6</b> | <b>10.3</b> | <b>4.6</b> | <b>7.8</b> | <b>3.0</b> |
| CZK denominated                                  | <i>growth in %</i> | -3.2        | 6.9         | 2.0        | 8.2        | 4.2        | 5.6        | 6.7         | 4.5        | 13.9       | 2.1        |
| FX denominated                                   | <i>growth in %</i> | 1.6         | 0.2         | -6.1       | 11.8       | 8.0        | 15.2       | 23.2        | 4.8        | -11.1      | 6.6        |
| <b>Non-performing loans (banking statistics)</b> | <i>share, in %</i> | <b>6.0</b>  | <b>8.6</b>  | <b>8.5</b> | <b>7.8</b> | <b>7.4</b> | <b>7.0</b> | <b>6.0</b>  | <b>5.2</b> | <b>4.7</b> | <b>3.7</b> |
| <b>Loans to deposits ratio</b>                   | <i>in %</i>        | <b>135</b>  | <b>121</b>  | <b>126</b> | <b>120</b> | <b>116</b> | <b>110</b> | <b>106</b>  | <b>108</b> | <b>105</b> | <b>106</b> |

Note: All indicators, except for the share of non-performing loans, are from the monetary statistics.

Source: CNB, ECB. Calculations of the MoF.

**Table 1.4.4: Loans and Deposits – quarterly averages**

|  |                    | 2017        |            |            | 2018       |            |            |            | 2019       |
|--|--------------------|-------------|------------|------------|------------|------------|------------|------------|------------|
|  |                    | Q2          | Q3         | Q4         | Q1         | Q2         | Q3         | Q4         | Q1         |
| <b>Households</b>                                |                    |             |            |            |            |            |            |            |            |
| <b>Loans</b>                                     | <i>growth in %</i> | <b>8.0</b>  | <b>8.0</b> | <b>7.6</b> | <b>7.7</b> | <b>7.6</b> | <b>7.5</b> | <b>7.7</b> | <b>7.2</b> |
| For consumption                                  | <i>growth in %</i> | 4.6         | 4.5        | 3.9        | 4.2        | 5.2        | 5.8        | 6.5        | 6.0        |
| For house purchase                               | <i>growth in %</i> | 9.2         | 9.2        | 8.8        | 8.8        | 8.5        | 8.3        | 8.5        | 8.0        |
| Other lending                                    | <i>growth in %</i> | 4.7         | 4.4        | 4.1        | 4.7        | 4.4        | 4.3        | 3.7        | 2.7        |
| CZK denominated                                  | <i>growth in %</i> | 7.9         | 7.9        | 7.5        | 7.7        | 7.6        | 7.5        | 7.7        | 7.2        |
| FX denominated                                   | <i>growth in %</i> | 48.5        | 49.4       | 35.8       | 11.1       | -10.8      | -0.9       | 10.9       | 23.2       |
| <b>Deposits</b>                                  | <i>growth in %</i> | <b>9.3</b>  | <b>8.6</b> | <b>8.0</b> | <b>6.6</b> | <b>6.4</b> | <b>7.2</b> | <b>7.7</b> | <b>7.6</b> |
| CZK denominated                                  | <i>growth in %</i> | 10.6        | 9.8        | 8.9        | 7.1        | 6.4        | 7.2        | 7.7        | 7.5        |
| FX denominated                                   | <i>growth in %</i> | -18.7       | -17.3      | -13.7      | -7.3       | 7.8        | 6.9        | 7.5        | 11.3       |
| <b>Non-performing loans (banking statistics)</b> | <i>share, in %</i> | <b>2.8</b>  | <b>2.6</b> | <b>2.4</b> | <b>2.6</b> | <b>2.4</b> | <b>2.3</b> | <b>2.2</b> | <b>2.0</b> |
| <b>Loans to deposits ratio</b>                   | <i>in %</i>        | <b>62</b>   | <b>63</b>  | <b>64</b>  | <b>63</b>  | <b>63</b>  | <b>63</b>  | <b>64</b>  | <b>63</b>  |
| <b>Non-financial corporations</b>                |                    |             |            |            |            |            |            |            |            |
| <b>Loans</b>                                     | <i>growth in %</i> | <b>6.3</b>  | <b>5.3</b> | <b>2.6</b> | <b>3.5</b> | <b>2.0</b> | <b>4.2</b> | <b>7.0</b> | <b>6.1</b> |
| CZK denominated                                  | <i>growth in %</i> | -2.3        | -1.2       | -0.5       | 2.3        | 3.2        | 3.0        | 3.6        | 3.7        |
| FX denominated                                   | <i>growth in %</i> | 32.6        | 24.8       | 11.5       | 6.3        | -0.7       | 7.2        | 15.3       | 12.1       |
| <b>Deposits</b>                                  | <i>growth in %</i> | <b>10.2</b> | <b>9.5</b> | <b>7.4</b> | <b>5.6</b> | <b>2.2</b> | <b>1.3</b> | <b>3.1</b> | <b>2.9</b> |
| CZK denominated                                  | <i>growth in %</i> | 19.8        | 15.6       | 12.0       | 6.8        | 0.2        | -0.1       | 1.8        | 1.1        |
| FX denominated                                   | <i>growth in %</i> | -18.0       | -9.4       | -7.8       | 1.0        | 10.7       | 6.9        | 8.3        | 9.7        |
| <b>Non-performing loans (banking statistics)</b> | <i>share, in %</i> | <b>4.7</b>  | <b>4.5</b> | <b>4.3</b> | <b>4.0</b> | <b>3.8</b> | <b>3.5</b> | <b>3.5</b> | <b>3.7</b> |
| <b>Loans to deposits ratio</b>                   | <i>in %</i>        | <b>104</b>  | <b>106</b> | <b>104</b> | <b>103</b> | <b>104</b> | <b>109</b> | <b>108</b> | <b>107</b> |

Note: All indicators, except for the share of non-performing loans, are from the monetary statistics.

Source: CNB, ECB. Calculations of the MoF.

**Table 1.4.5: Exchange Rates – yearly**

|  |                     | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019     | 2020     | 2021    | 2022    |
|--|---------------------|-------|-------|-------|-------|-------|-------|----------|----------|---------|---------|
|  |                     |       |       |       |       |       |       | Forecast | Forecast | Outlook | Outlook |
| <b>Nominal exchange rates</b>                  |                     |       |       |       |       |       |       |          |          |         |         |
| <b>CZK / EUR</b>                               | average             | 25.97 | 27.53 | 27.28 | 27.03 | 26.33 | 25.65 | 25.6     | 25.2     | 24.7    | 24.2    |
|  | appreciation in %   | -3.2  | -5.7  | 0.9   | 0.9   | 2.7   | 2.7   | 0.1      | 1.8      | 2.0     | 2.0     |
| <b>CZK / USD</b>                               | average             | 19.56 | 20.75 | 24.60 | 24.43 | 23.39 | 21.74 | 22.8     | 22.6     | 22.1    | 21.7    |
|  | appreciation in %   | 0.1   | -5.7  | -15.7 | 0.7   | 4.5   | 7.6   | -4.8     | 1.2      | 2.0     | 2.0     |
| <b>NEER</b>                                    | average of 2015=100 | 106.4 | 100.8 | 100.0 | 102.4 | 105.4 | 109.3 | 109      | 111      | 113     | 116     |
|  | appreciation in %   | -2.3  | -5.2  | -0.8  | 2.4   | 2.9   | 3.7   | -0.2     | 1.7      | 2.0     | 2.0     |
| <b>Real exchange rate to EA19<sup>1)</sup></b> | average of 2010=100 | 103.7 | 99.3  | 100.0 | 101.3 | 104.4 | 108.4 | 110      | 113      | 115     | 118     |
|  | appreciation in %   | -3.0  | -4.2  | 0.7   | 1.3   | 3.0   | 3.9   | 1.5      | 2.3      | 2.3     | 2.4     |
| <b>REER<sup>2)</sup></b>                       | average of 2010=100 | 106.4 | 100.9 | 100.0 | 102.6 | 106.5 | 111.1 | .        | .        | .       | .       |
|  | appreciation in %   | -2.3  | -5.2  | -0.9  | 2.6   | 3.8   | 4.3   | .        | .        | .       | .       |

<sup>1)</sup> Deflated by GDP deflators.

<sup>2)</sup> Eurostat calculations, deflated by CPI, versus 42 countries.

Source: CNB, Eurostat. Calculations and forecast of the MoF.

**Table 1.4.6: Exchange Rates – quarterly**

|  |                     | 2018  |       |       |       | 2019  |          |          |          |
|--|---------------------|-------|-------|-------|-------|-------|----------|----------|----------|
|  |                     | Q1    | Q2    | Q3    | Q4    | Q1    | Q2       | Q3       | Q4       |
|  |                     |       |       |       |       |       | Estimate | Forecast | Forecast |
| <b>Nominal exchange rates</b>                  |                     |       |       |       |       |       |          |          |          |
| <b>CZK / EUR</b>                               | average             | 25.40 | 25.60 | 25.76 | 25.81 | 25.68 | 25.68    | 25.6     | 25.5     |
|  | appreciation in %   | 6.4   | 3.6   | 1.3   | -0.6  | -1.1  | -0.3     | 0.6      | 1.3      |
| <b>CZK / USD</b>                               | average             | 20.66 | 21.51 | 22.19 | 22.50 | 22.61 | 22.91    | 22.9     | 22.8     |
|  | appreciation in %   | 22.8  | 12.0  | 0.0   | -3.1  | -8.6  | -6.1     | -3.3     | -1.5     |
| <b>NEER</b>                                    | average of 2015=100 | 110.1 | 109.3 | 109.4 | 108.5 | 108.8 | 108.8    | 109      | 110      |
|  | appreciation in %   | 8.0   | 5.1   | 2.1   | -0.3  | -1.1  | -0.4     | -0.2     | 1.0      |
| <b>Real exchange rate to EA19<sup>1)</sup></b> | average of 2010=100 | 109.1 | 108.3 | 108.2 | 108.0 | 109.8 | 110      | 110      | 110      |
|  | appreciation in %   | 7.7   | 4.9   | 2.4   | 0.4   | 0.6   | 1.3      | 1.9      | 2.3      |
| <b>REER<sup>2)</sup></b>                       | average of 2010=100 | 112.4 | 111.1 | 111.2 | 109.9 | 111.8 | .        | .        | .        |
|  | appreciation in %   | 9.0   | 6.1   | 2.8   | -0.4  | -0.5  | .        | .        | .        |

<sup>1)</sup> Deflated by GDP deflators.

<sup>2)</sup> Eurostat calculations, deflated by CPI, versus 42 countries.

Source: CNB, Eurostat. Calculations and forecast of the MoF.

## 1.5 Structural Policies

On 1 June 2019, an **amendment to the Insolvency Act** making the institution of debt relief available to more debtors by softening debt relief conditions took effect. Debtors can now enter the debt relief process if they repay creditors at least 60% of their debts over a three-year period or at least 30% of their debts over a five-year period. If they repay a lower amount, the decision on their debt relief is taken by a court. The amount of the monthly instalment must equal at least the insolvency administrator's fee, which is currently CZK 1,089.

On 7 June 2019, the Chamber of Deputies approved an **amendment to the Investment Incentives Bill** in order to increase the transparency and effectiveness of investment incentives. State incentives should now be provided to projects with higher value added and projects in economically challenged regions. At the same time, emphasis is put on improving the availability of incentives to small and medium-sized enterprises and on making the system flexible enough to respond to current

economic situation. Finally, the amendment transfers decision-making on investment incentives to the government.

With the aim to speed up and simplify the process of granting building permissions, the government approved an **explanatory memorandum on the Building Act** on 24 June 2019. Zoning decision procedure, building permit procedure, and environmental impact assessments will be merged into a single permit procedure, a Supreme Building Authority will be established and, last but not least, building permit procedure will be completely computerised. The legislative act itself should enter into force as of 2021.

The **amendment to the Sales Registration Bill** approved by the Chamber of Deputies on 7 June 2019 expands the group of business entities that are subject to the obligation to register sales through a permanent electronic connection. Entrepreneurs who are not liable to pay val-

ue added tax, have a maximum of two employees, and their income from registered sales does not exceed CZK 200,000 in the preceding 12 calendar months will be able to use paper receipts provided by the Ministry of Finance. In this situation, information on sales is sent to the Tax Authority quarterly. The amendment also transfers selected services (water supply and sewerage, catering services, draught beer as part of a catering service, cleaning work, home care services, minor repairs, hair-dressing services, etc.) from the base rate (21%) and the first reduced rate (15%) of value added tax to the second reduced rate (10%). The special sales registration permit will take effect on the first day of the fourth calendar month following promulgation of the amendment. As far as tax changes are concerned, we expect them to take effect from 1 January 2020.

In response to the increasing accessibility of addictive substances, on 27 May 2019 the government **passed a bill amending certain tax-related laws**. The new legislation increases excise duty on cigarettes and tobacco by approximately 10% and the excise duty on alcohol by roughly 13%. Finally, the sub-tax on selected areas of gambling will be raised (by 2 pp to 25% for odds betting, raffles, small-scale tournaments and totalisator gambling, and by 7 pp to 30% for lotteries, bingo and live games). Income from gambling and other betting in excess of CZK 100,000 should be subject to 15% withholding tax. The bill should take effect on 1 January 2020.

In order to mitigate risks in the financial market and enable the Czech National Bank to be more responsive to unforeseeable events requiring a change in monetary policy settings, the government approved an **amendment to the Czech National Bank Bill** on 10 June 2019. As part of the framework for maintenance of financial stability, this amendment explicitly extends the task to the reduction of a rise in systemic risks. It also supplements the task of monetary policy-making by integrating the use of monetary policy operations in the form of financial market trading. Not least, it embeds the Czech National Bank's power to set an upper limit for selected

indicators associated with mortgages – if those thresholds are not met, the mortgage cannot be granted (the threshold for applicants up to 36 years are less stringent). This amendment should take effect on the first day of the second calendar month following its promulgation.

The **amendment to the Social Assistance Bill**, approved by the government on 20 May 2019, increases the parental allowance for the care of the youngest child in the family to CZK 300,000 or, in cases where such children are twins or come from other multiple births, to CZK 450,000. It also doubles the time that, from the age of two years, a child may attend a preschool facility to 92 hours per month. The amendment should take effect on 1 January 2020.

On 1 July 2019, an **amendment to the Labour Code** abolishing the concept of the “waiting period” took effect. Under the revised legislation, employers will provide employees with wage or pay compensation amounting to 60% of their pay assessment base during the first three days of illness. In addition, the sickness insurance contributions paid by employers or self-employed persons were reduced by 0.2 pp. This will also be reflected in revenue from personal income tax due to the way the tax base is structured for employment.

The **amendment to the Pension Insurance Act** approved by the Chamber of Deputies on 10 June 2019 will raise the average pension by CZK 900 per month as of 2020. This amendment will take effect on 30 September 2019.

On 3 June 2019, the government approved an **increase in the acceptance of employment card applications** from 20,000 to 40,000 applications annually under the scheme for the special treatment of skilled workers from Ukraine. This increased quota will be introduced in stages between September and November 2019. A wage criterion has also been established for candidates to be classified under the Ukraine Scheme that requires 1.2 times the guaranteed wage for the relevant class of work under Government Regulation No 567/2006.

## 1.6 Demographic Trends

Over the longer term, the population of the Czech Republic has been slowly, but steadily, rising. At the end of March 2019, there were 10.653 million people living in the Czech Republic. The number of inhabitants went up by 39.6 thous. persons, i.e. 0.4% YoY, and by 3.0 thous. persons in Q1.

This small increase in the population can be attributed to positive net migration of 6.6 thous. persons, a drop by 1.2 thous. YoY. In Q1 16.7 thous. people moved to the Czech Republic from abroad, while 10.1 thous. left; both of these flows of foreign migration went up YoY. The highest positive inflow was recorded with citizens of Ukraine (2.7 thous.) and Slovakia (1.1 thous.).

Conversely, as in 2018 the difference between the number of births and deaths resulted in shrinking of the population, this time by 3.6 thous. persons. There was a modest year-on-year drop in both the number of live births (26.4 thous.) and number of deaths (30.0 thous.).

Within the estimated age structure of the population (based on Labour Force Survey data, see Graph 1.6.2), there was a significant slowdown in the year-on-year decline in the number of working age (20–64 years) inhabitants to 27.9 thous. persons in Q1, most likely on account of the favourable age structure of immigrants.

In addition, the Czech Statistical Office published a **detailed age structure** of the population at the beginning of 2019. In 2018, the Czech population rose by 40 thous. people. Population ageing was reflected in a rise in the number of seniors (65+) by 47 thous. people. The number of females born in the late 1970s and in the 1980s and the rising birth-rate resulted in an increase in the number of children and young people up to 19 years by 27 thous. On the other hand, the population aged 20–64 plummeted by 34 thous.

Nevertheless, developments in this category are not homogeneous on account of how the birth rate fluctuated in the past. The decline was concentrated in the 20–43 age group, where the number of people went down by 76 thous. In contrast, there was a marked increase in the population aged 44–58 by 71 thous. People of this age have high employment and participation rates, which has so far helped to eliminate the impacts of the population ageing on the supply side of the economy. The drop in the number of people aged 59–64 by

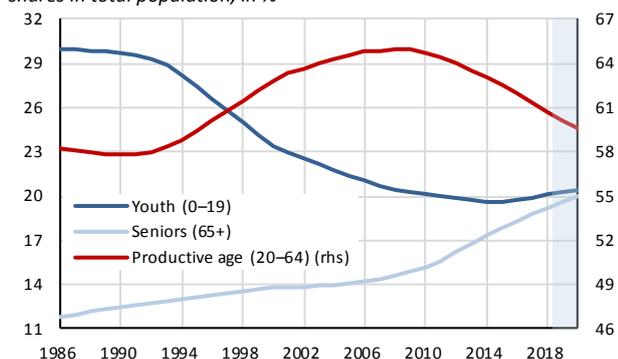
29 thous. has temporarily slowed down the strain on the pension system.

In addition, the economic boom has meant that the number of **old-age pensioners** is not as high as one would have expected after demographic trends and the gradual increase in the statutory retirement age were factored in. In Q1 2019, there was a slight year-on-year decline (by 1 thous.). The previous year-on-year decline was recorded in Q4 2013, but that was because of parametric changes made to the system in 2011.

At the end of March 2019, there were 2,404 thous. old-age pensioners (22.6% of the Czech population) in the pension system. As the growth in their numbers is lower than the rise in employment, there was a palpable reduction in the effective dependency ratio by 2.7 pp between 2012 and 2019. This is one of the factors improving the pension account balance.

**Graph 1.6.1: Age Groups**

shares in total population, in %



Source: CZSO. Calculations of the MoF.

**Graph 1.6.2: Population Aged 20–64**

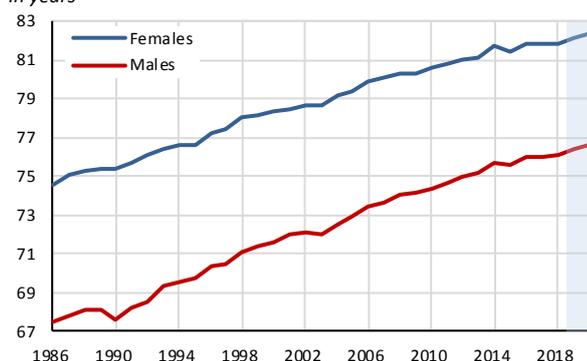
based on LFS, YoY increases of quarterly averages, in thousands



Source: CZSO. Calculations and forecast of the MoF.

**Graph 1.6.3: Life Expectancy at Birth**

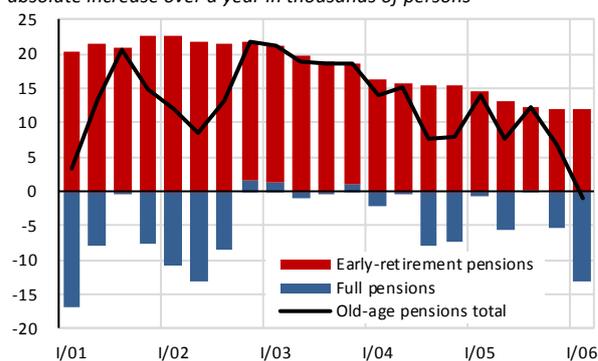
in years



Source: CZSO.

**Graph 1.6.4: Old-Age Pensioners**

absolute increase over a year in thousands of persons



Source: Czech Social Security Administration, CZSO. Calculations of the MoF.

**Table 1.6.1: Demographics***in thousands of persons (unless stated otherwise)*

|   | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          | 2020          | 2021          | 2022          |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|   |               |               |               |               |               |               | Forecast      | Forecast      | Outlook       | Outlook       |
| <b>Population (as of 1 January)</b>                       | <b>10 516</b> | <b>10 512</b> | <b>10 538</b> | <b>10 554</b> | <b>10 579</b> | <b>10 610</b> | <b>10 650</b> | <b>10 674</b> | <b>10 697</b> | <b>10 717</b> |
| growth in %   | 0.1           | 0.0           | 0.2           | 0.1           | 0.2           | 0.3           | 0.4           | 0.2           | 0.2           | 0.2           |
| 0–19 years  | 2 071         | 2 057         | 2 064         | 2 082         | 2 106         | 2 133         | 2 160         | 2 185         | 2 206         | 2 224         |
| growth in %   | -0.6          | -0.6          | 0.3           | 0.9           | 1.2           | 1.3           | 1.3           | 1.1           | 1.0           | 0.9           |
| 20–64 years   | 6 678         | 6 630         | 6 594         | 6 540         | 6 484         | 6 437         | 6 403         | 6 356         | 6 313         | 6 274         |
| growth in %   | -0.7          | -0.7          | -0.5          | -0.8          | -0.9          | -0.7          | -0.5          | -0.7          | -0.7          | -0.6          |
| 65 and more years   | 1 768         | 1 826         | 1 880         | 1 932         | 1 989         | 2 040         | 2 087         | 2 134         | 2 178         | 2 219         |
| growth in %   | 3.9           | 3.3           | 3.0           | 2.8           | 2.9           | 2.6           | 2.3           | 2.3           | 2.1           | 1.9           |
| <b>Old-age pensioners (as of 1 January) <sup>1)</sup></b> | <b>2 341</b>  | <b>2 340</b>  | <b>2 355</b>  | <b>2 377</b>  | <b>2 395</b>  | <b>2 403</b>  | <b>2 410</b>  | <b>2 414</b>  | <b>2 416</b>  | <b>2 415</b>  |
| growth in %   | 0.0           | 0.0           | 0.6           | 0.9           | 0.8           | 0.3           | 0.3           | 0.1           | 0.1           | 0.0           |
| <b>Old-age dependency ratios (as of 1 January, in %)</b>  |               |               |               |               |               |               |               |               |               |               |
| Demographic <sup>2)</sup>                                 | 26.5          | 27.5          | 28.5          | 29.5          | 30.7          | 31.7          | 32.6          | 33.6          | 34.5          | 35.4          |
| Under current legislation <sup>3)</sup>                   | 38.3          | 38.8          | 39.3          | 39.8          | 40.1          | 40.4          | 40.4          | 40.6          | 40.7          | 40.7          |
| Effective <sup>4)</sup>                                   | 47.6          | 47.2          | 46.9          | 46.8          | 46.2          | 45.7          | 45.2          | 45.1          | 45.1          | 45.0          |
| <b>Fertility rate (number of children)</b>                | <b>1.456</b>  | <b>1.528</b>  | <b>1.570</b>  | <b>1.630</b>  | <b>1.687</b>  | <b>1.708</b>  | <b>1.69</b>   | <b>1.70</b>   | <b>1.70</b>   | <b>1.70</b>   |
| <b>Population increase</b>                                | <b>-4</b>     | <b>26</b>     | <b>16</b>     | <b>25</b>     | <b>31</b>     | <b>40</b>     | <b>25</b>     | <b>23</b>     | <b>20</b>     | <b>17</b>     |
| <b>Natural increase</b>                                   | <b>-2</b>     | <b>4</b>      | <b>0</b>      | <b>5</b>      | <b>3</b>      | <b>1</b>      | <b>-1</b>     | <b>-3</b>     | <b>-6</b>     | <b>-9</b>     |
| Live births   | 107           | 110           | 111           | 113           | 114           | 114           | 111           | 109           | 107           | 105           |
| Deaths  | 109           | 106           | 111           | 108           | 111           | 113           | 112           | 112           | 113           | 114           |
| <b>Net migration</b>                                      | <b>-1</b>     | <b>22</b>     | <b>16</b>     | <b>20</b>     | <b>28</b>     | <b>39</b>     | <b>26</b>     | <b>26</b>     | <b>26</b>     | <b>26</b>     |
| Immigration   | 30            | 42            | 35            | 38            | 46            | 58            | .             | .             | .             | .             |
| Emigration  | 31            | 20            | 19            | 17            | 18            | 20            | .             | .             | .             | .             |

<sup>1)</sup> In 2010 disability pensions of pensioners over 64 were transferred into old-age pensions.<sup>2)</sup> Demographic dependency: ratio of people in senior ages (65 and more) to people in productive age (20–64).<sup>3)</sup> Dependency under current legislation: ratio of people above the official retirement age to the people over 19 below the official retirement age.<sup>4)</sup> Effective dependency: ratio of old-age pensioners to working people (LFS methodology).

Source: Czech Social Security Administration, CZSO. Calculations and forecast of the MoF.

## 2 Economic Cycle

### 2.1 Position within the Economic Cycle

The Czech economy is likely hovering at the peak of the business cycle. The **positive output gap** in 2018 and in Q1 2019 was 1.6% of potential output (see Graph 2.1.1). Taking into account the forecast slowdown in economic growth and the projected trend in potential output, the output gap should start to narrow gradually in the future and should close in the outlook horizon.

The positive output gap is most apparent in the **labour market** (see Chapter 3.3). In Q1 the unemployment rate remained at 2.0%, which is the lowest level ever recorded in the history of the independent Czech Republic. The number of vacancies in June 2019 was three quarters higher than the number of registered unemployed. The scarcity of labour is a major barrier to the economy's extensive growth. The positive output gap is also reflected in core inflation.

We estimate that the year-on-year growth in **potential output** has remained at a level of 2.8% since 2016, exceeding the post-1995 average growth rate of gross value added by 0.2 percentage points.

The main driver of potential growth is **total factor productivity**. The contribution of its trend component

reached 1.8 pp in Q1, a slight reduction compared to the previous period.

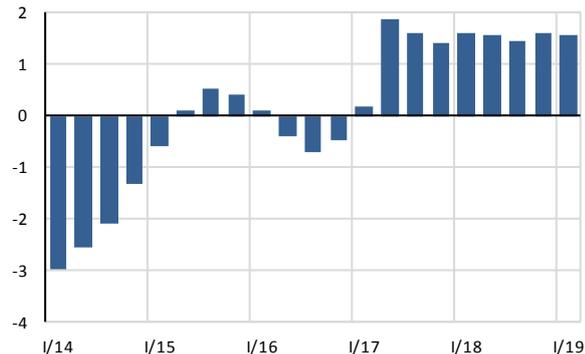
**Labour supply** is affected by population ageing (see Chapter 1.6), a process that is being expressed, among other things, by a long-term decline in the working age (20–64) population, which shaved 0.3 percentage points from the year-on-year growth in potential output in Q1 as well as in the last year.

However, the negative impact that demographic trends are having on the labour supply is entirely outweighed by a dynamic **increase in the participation rate**, which has swelled the size of the workforce in the economy. Structural factors (population growth in age brackets with a naturally high participation rate, accompanied by increases in the statutory and effective retirement age), on the one hand, and high labour demand, on the other, have come to the fore here. The participation rate contributed 0.6 pp to potential output growth in Q1.

The contribution of **capital stock** reached 0.6 pp in Q1 on the back of strong growth in gross fixed capital formation in 2018.

**Graph 2.1.1: Output Gap**

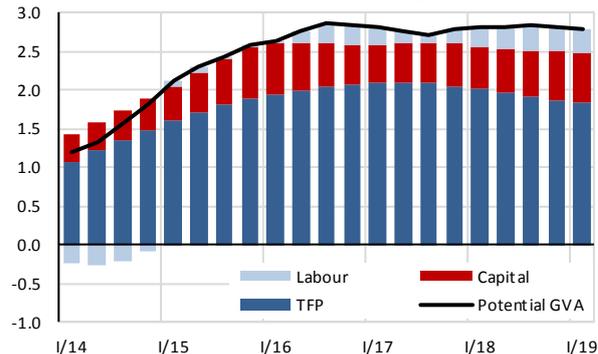
*in % of potential product*



Source: CZSO. Calculations of the MoF.

**Graph 2.1.2: Potential Product**

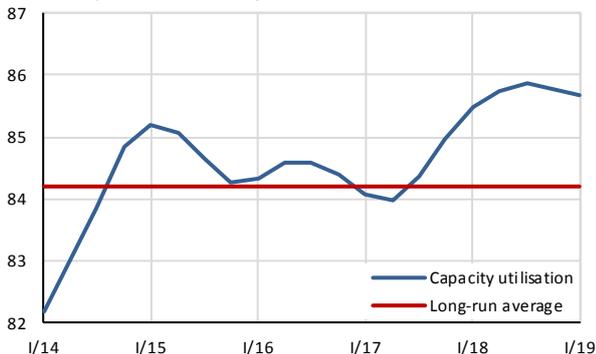
*YoY growth rate in %, contributions in percentage points*



Source: CZSO. Calculations of the MoF.

**Graph 2.1.3: Capacity Utilisation in Industry**

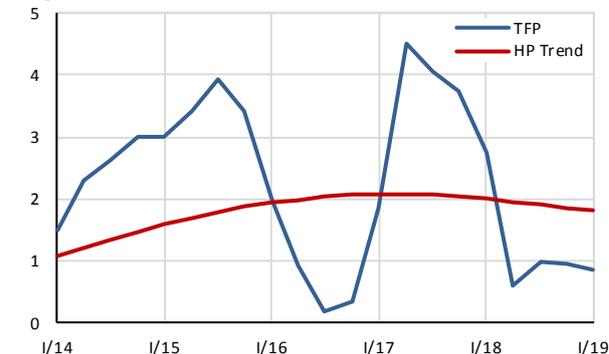
*smoothed by Hodrick-Prescott filter, in %*



Source: CZSO.

**Graph 2.1.4: Total Factor Productivity**

*YoY growth rate in %*



Source: CZSO. Calculations of the MoF.

**Table 2.1.1: Output Gap and Potential Product**

|  |             | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--|-------------|------|------|------|------|------|------|------|------|------|------|
| <b>Output gap</b>                      | %           | -1.9 | -0.7 | -2.4 | -4.0 | -2.2 | 0.1  | -0.4 | 1.3  | 1.6  | 1.6  |
| <b>Potential product <sup>1)</sup></b> | growth in % | 0.8  | 0.7  | 1.0  | 1.2  | 1.5  | 2.4  | 2.8  | 2.8  | 2.8  | 2.8  |
| <b>Contributions</b>                   |             |      |      |      |      |      |      |      |      |      |      |
| Trend total factor productivity        | pp          | 0.6  | 0.4  | 0.4  | 0.8  | 1.3  | 1.8  | 2.0  | 2.1  | 1.9  | 1.8  |
| Fixed assets                           | pp          | 0.6  | 0.6  | 0.5  | 0.4  | 0.4  | 0.6  | 0.6  | 0.5  | 0.6  | 0.6  |
| Demography <sup>2)</sup>               | pp          | -0.1 | -0.1 | -0.3 | -0.3 | -0.4 | -0.3 | -0.4 | -0.4 | -0.3 | -0.3 |
| Participation rate                     | pp          | -0.1 | 0.0  | 0.6  | 0.8  | 0.3  | 0.5  | 0.7  | 0.7  | 0.7  | 0.6  |
| Usually worked hours                   | pp          | -0.3 | -0.2 | -0.3 | -0.3 | -0.2 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |

<sup>1)</sup> Based on gross value added.

<sup>2)</sup> Contribution of growth of working-age population (20–64 years).

Source: CZSO. Calculations of the MoF.

## 2.2 Business Cycle Indicators

Developments in confidence indicators in Q2 2019 signalled a marked slowdown in the year-on-year growth of gross value added in industry and in trade and services. The construction confidence indicator declined slightly, but remained high, which indicates a steady momentum of gross value added in this sector.

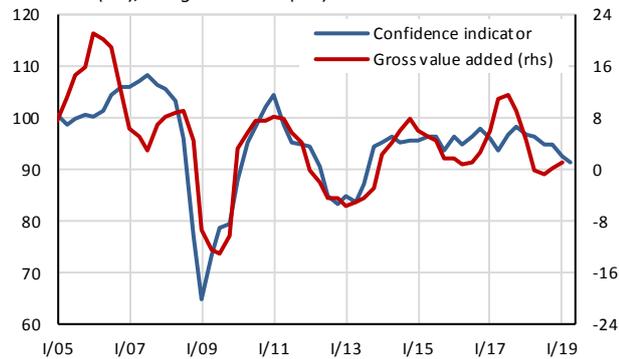
The consumer confidence indicator continued to slump in Q2. This trend suggests that household final consumption expenditures will slow down in the second half of 2019 because the confidence indicator leads consumption by 1–2 quarters.

With all of its components slackening, the composite confidence indicator signals a slowdown in the year-on-year growth of gross value added in Q2. On the other hand, business cycle indicators diverge from trends in industrial output, retail sales or external trade, which we ascribe to the heavier stress that respondents' replies place on the risks to future developments.

The composite leading indicator for both Q2 and Q3 points to a clear narrowing of the output gap, which might be a sign that we are entering a downward stage of the business cycle.

**Graph 2.2.1: Confidence and GVA in Industry**

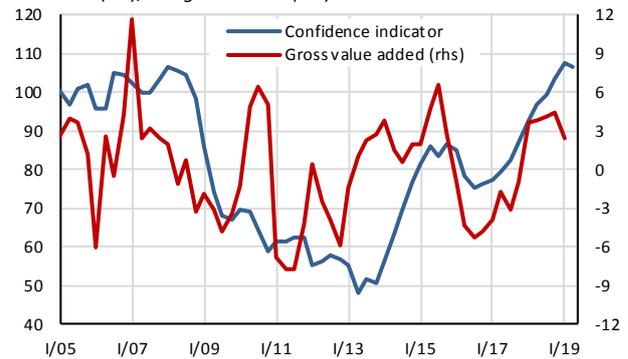
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

**Graph 2.2.2: Confidence and GVA in Construction**

2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

**Graph 2.2.3: Confidence and GVA in Trade and Services**

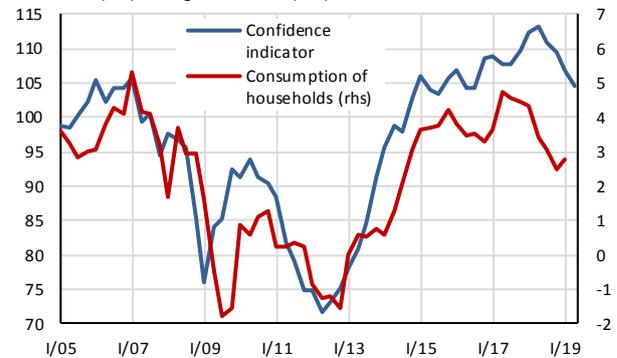
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO. Calculations of the MoF.

**Graph 2.2.4: Consumer Confidence and Consumption**

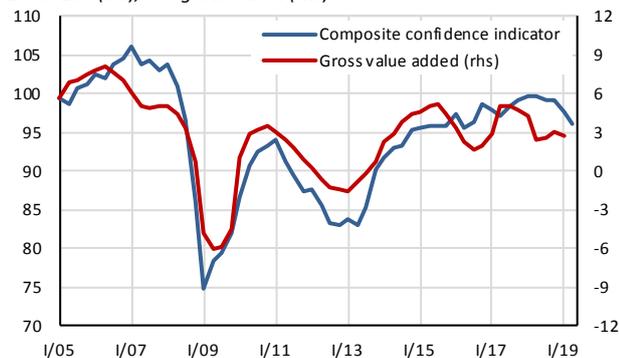
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

**Graph 2.2.5: Composite Confidence Indicator and GVA**

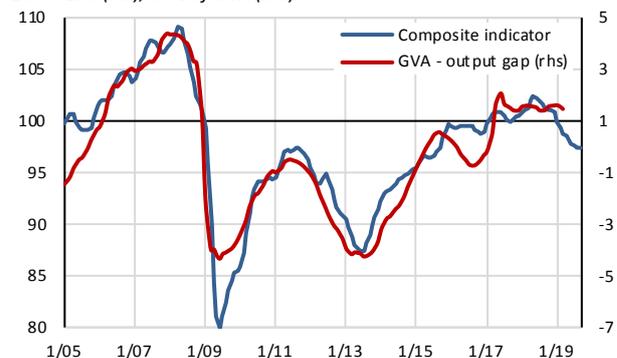
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

**Graph 2.2.6: Composite Leading Indicator**

2005=100 (lhs), in % of GVA (rhs)



Source: CZSO. Calculations of the MoF.

## 3 Forecast of Macroeconomic Developments in the CR

### 3.1 Economic Output

#### 3.1.1 GDP in the First Quarter of 2019

Economic output measured by real GDP rose 2.8% YoY in Q1 (*versus 2.7%*); seasonally adjusted GDP increased 0.6% QoQ (*as estimated*). All sectors except agriculture contributed to the quarter-on-quarter growth in GDP, most notably industry.

Together with the release of annual national accounts the Czech Statistical Office revised real GDP growth in 2018 up by 0.1 percentage point to 3.0%. There were more significant revisions in GDP structure, though. The momentum of gross fixed capital formation was lowered by 3.3 pp, which was largely offset by an improvement in the negative contribution of the change in inventories. Conversely, the growth in final consumption expenditures of households and the general government was revised up.

Year-on-year GDP growth in Q1 was driven purely by domestic demand, with all its components contributing positively. The contribution of external balance of goods and services was only marginally negative.

Household consumption rose on the back of growth in disposable income, with consumer confidence running high. By contrast, the year-on-year increase in the savings rate stifled the momentum of household final consumption expenditures. Expenditures on semi-durables and durables and on services were the most dynamic component of household consumption, attesting to households' optimism regarding their future financial situation and developments in the economy. Expenditures on non-durables also went up. In real terms, household final consumption expenditures increased by 2.9% (*versus 2.7%*). General government consumption went up by 2.8% (*versus 2.3%*), mainly on account of the momentum exhibited by employment and intermediate consumption.

Gross fixed capital formation rose by 3.0% (*versus 5.7%*), largely thanks to investments in dwellings and intellectual property products. The dynamism of investments in non-residential buildings, transport equipment and machinery slowed down significantly compared to the previous quarter. From the sectoral perspective, investing activity was driven by investments of the general government sector, underpinned by co-financing from EU funds. Private investments growth slowed significantly, while household investments climbed at its fastest rate since Q4 2016. Business investments, on the other hand, declined YoY (see Graph 3.1.7). In view of the positive

year-on-year contribution made by the change in inventories, gross fixed capital formation grew more than fixed capital investment, rising by 4.0% (*versus 8.2%*).

With export performance appreciably falling, there was a reduction in the year-on-year growth of exports of goods and services compared to the same quarter of the previous year. As a result, overall exports rose 1.9% (*versus 2.6%*) in Q1. Following the weaker growth of exports and import-intensive investment demand, growth in imports of goods and services slowed down to 2.2% (*versus 4.2%*).

As increases in prices of exports of goods and services and imports were almost the same, the terms of trade remained unchanged (*as estimated*). Consequently, real gross domestic income rose 2.7% YoY (*unchanged*).

Gross operating surplus increased by 5.4% (*versus 5.3%*), compensation of employees rose 7.8% (*versus 7.7%*), and net taxes on production were up by 2.3% YoY (*versus 2.9%*). As a result, nominal GDP posted growth of 6.2% (*as estimated*).

#### 3.1.2 Estimate for the Second Quarter of 2019

We estimate that real GDP increased by 2.4% YoY (*versus 2.3%*) and 0.6% QoQ (*versus 0.4%*) in Q2. The estimated maintenance of the quarter-on-quarter momentum of GDP reflects data on economic developments in Q2 available as of the forecast cut-off date (confidence indicators, output in industry and construction, sales in retail and services, and external trade).

We believe that GDP increased on account of rising external and, in particular, domestic demand. Growing household disposable income and continued relatively solid consumer confidence made it possible for private final consumption expenditures to grow by 2.6% (*versus 2.7%*), while general government consumption was up by 2.4% (*versus 2.3%*). We estimate that gross capital formation rose 0.2% (*versus 4.6%*) solely as a result of higher fixed capital investments. The change in stocks probably inhibited overall investments.

External trade had a positive effect on GDP momentum. Export dynamism was fuelled by external demand. However, imports – due to the slowdown in import-intensive investment demand – clearly picked up a lot less than exports. We estimate that exports of goods and services went up by 3.5% (*versus 2.7%*), while imports increased by 2.9% (*versus 3.8%*).

### 3.1.3 Forecast for the Years 2019 and 2020

In 2019, economic growth should be driven primarily by domestic demand, headed by strong household final consumption expenditures and investment activity of business and the general government sector. GDP growth should also be boosted by government consumption. The external balance should have a positive effect on GDP momentum. We forecast that real GDP will grow by 2.5% (*versus 2.4%*) in 2019 and by 2.3% (*versus 2.4%*) in 2020.

Household consumption will continue to benefit from rising real disposable income, although its growth is set to be a lot slower than in 2018 (due to lower growth in earnings and business income and higher inflation), despite the fact that numerous socially-related discretionary changes will be positively reflected in its dynamism in both this and the next year. In the short term, household consumption should also be reinforced by the dynamism of consumer lending. By contrast, the increased taxation of cigarettes, tobacco and alcohol should have a slightly negative effect in the next year. The growth of household final consumption expenditures should also be curbed by the continuing rise in the savings rate, although this should not be as distinctive as in 2018. In this respect, real household consumption is expected to slow less than the dynamism of disposable income, falling to 2.8% in 2019 (*versus 2.9%*) and 2.6% in 2020 (*versus 2.8%*).

We forecast that general government final consumption expenditures will climb by 2.4% (*versus 2.2%*) in 2019 and by 1.9% (*unchanged*) in 2020. The key factor underpinning the rise in general government consumption in 2019 will be an increase in employment. The momentum here will also benefit from the growth of social benefits in kind, deriving primarily from health insurance plans and the medium-term outlook of health insurance companies, along with an increase in expenditures on the purchase of goods and services, with contribution of current subsidies from EU funds.

Private-sector and general government investing activity should make a positive contribution to the growth of gross fixed capital formation in 2019. Private investments are stimulated by the rise in gross operating surplus, the slightly above-average rate of capacity utilisation in manufacturing, and the continued, albeit slower,

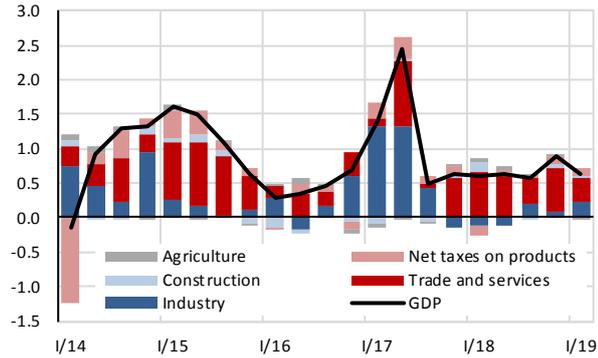
economic growth abroad. In addition, the increasingly acute scarcity of workers is motivating companies to invest with a view to boosting labour productivity. Monetary conditions should have a more or less neutral impact on the momentum of investing activity. Private investments, on the other hand, could be hobbled if certain particularly significant downside risks in the external environment materialized. In the case of investments of the general government sector, we expect that investment expenditures financed from national resources will grow in both these years. Planned acquisitions of military machinery in excess of CZK 80 billion pose a significant upside risk (no details are available yet). Investments are also expected to be underpinned by the ongoing implementation of projects co-financed by EU funds. Consequently, gross fixed capital formation should grow by 2.5% (*versus 3.1%*) in 2019 and by 2.4% (*versus 2.7%*) in 2020, with positive contributions from government and private investments. The significant scaling-down of investing activity momentum in 2019 reflects tighter monetary conditions, slower economic growth of main trading partners, and a slowdown in general government investments. The level of general government investments in 2018 has resulted in a high basis for comparison, not only as a result of budgeted amounts, but also in view of the fact that EU resources allocated for 2014 and 2015 could only have been utilised by the end of the last year, following which we expect to see a normal level of investment co-financed by the EU.

We forecast that the rise in inventories will be lower in 2019 than in 2018; according to the technical assumption adopted, the change in stocks in 2020 should be neutral in relation to the rise in GDP. This year, we expect to see a rise in gross capital formation by 1.2% (*versus 3.2%*), followed by growth accelerating to 2.2% (*versus 2.6%*) in 2020.

We forecast that exports of goods and services will grow by 3.6% (*versus 3.4%*) in 2019 and by 3.3% (*versus 3.5%*) in 2020. Export momentum in 2019 should be lower than in the previous year due to the decline in export performance (see Chapter 3.4). The slowdown in exports and import-intensive investment demand will then be reflected in a lower growth rate of imports, which should grow by 3.4% in both 2019 and 2020 (*versus 4.0% and 3.7%, respectively*).

**Graph 3.1.1: Resources of Gross Domestic Product**

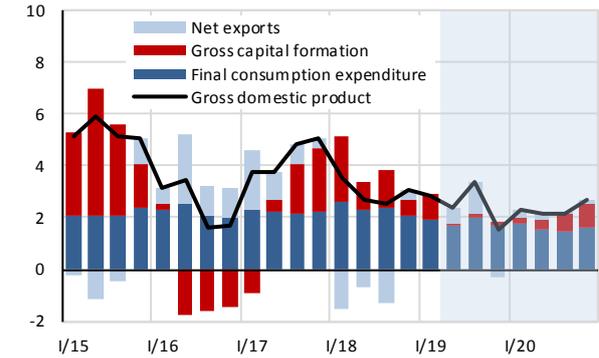
QoQ growth rate of real GDP in %, contrib. in pp, season. adjusted



Source: CZSO. Calculations of the MoF.

**Graph 3.1.2: GDP by Type of Expenditure**

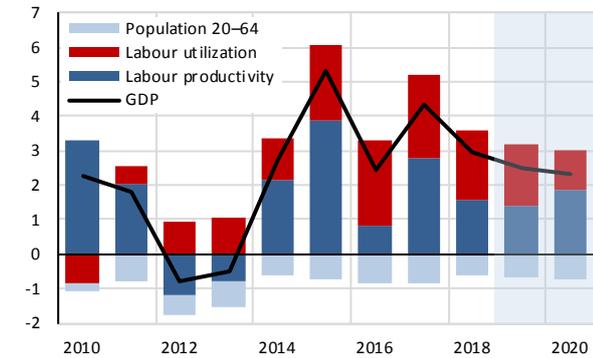
YoY growth rate of real GDP in %, contributions in pp



Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.1.3: Real Gross Domestic Product**

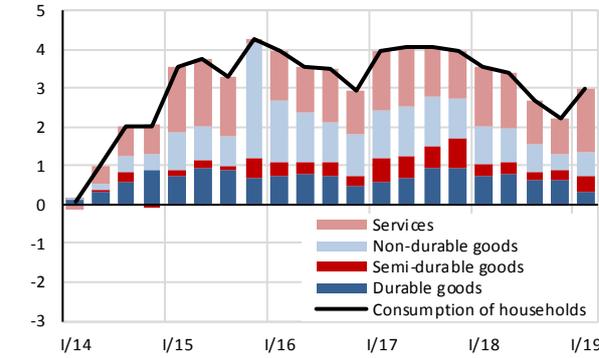
growth in %, contributions in percentage points



Note: Labour utilization is the ratio of employment to population 20–64.  
Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.1.4: Real Consumption of Households**

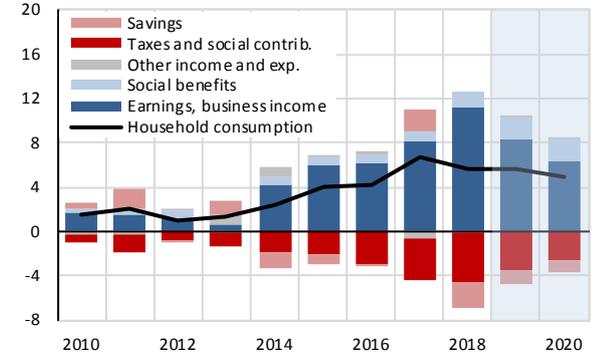
domestic concept, YoY growth rate in %, contributions in pp



Source: CZSO. Calculations of the MoF.

**Graph 3.1.5: Nominal Consumption of Households**

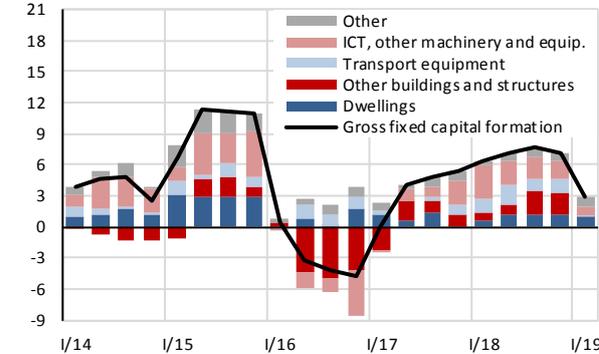
national concept, YoY growth rate in %, contributions in pp



Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.1.6: Investment by Type of Expenditure**

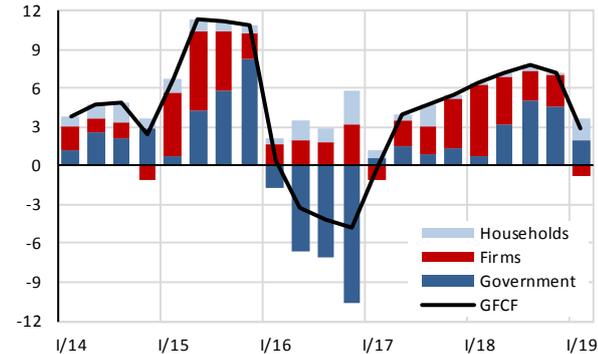
YoY growth rate of real GFCF in %, contributions in pp



Source: CZSO. Calculations of the MoF.

**Graph 3.1.7: Investment by Sector**

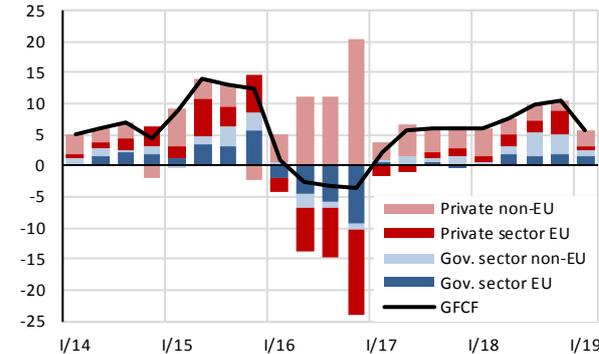
YoY growth rate of real GFCF in %, contributions in percentage points



Source: CZSO. Calculations of the MoF.

**Graph 3.1.8: Investment Co-financing from EU Funds**

YoY growth rate of nominal GFCF in %, contributions in pp



Source: CZSO. Calculations of the MoF.

**Table 3.1.1: Real GDP by Type of Expenditure – yearly***chained volumes, reference year 2010*

|   |                                 | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019            | 2020            | 2021           | 2022           |
|---|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------|-----------------|----------------|----------------|
|   |                                 |              |              |              |              |              |              | <i>Forecast</i> | <i>Forecast</i> | <i>Outlook</i> | <i>Outlook</i> |
| <b>Gross domestic product</b>                       | <i>bill. CZK 2010</i>           | <b>3 981</b> | <b>4 089</b> | <b>4 307</b> | <b>4 412</b> | <b>4 604</b> | <b>4 740</b> | <b>4 860</b>    | <b>4 973</b>    | <b>5 085</b>   | <b>5 195</b>   |
|   | <i>growth in %</i>              | -0.5         | 2.7          | 5.3          | 2.5          | 4.4          | 3.0          | 2.5             | 2.3             | 2.3            | 2.2            |
|   | <i>growth in %<sup>1)</sup></i> | -0.5         | 2.7          | 5.4          | 2.4          | 4.5          | 2.9          | 2.4             | 2.3             | 2.2            | 2.2            |
| <b>Private consumption expenditure<sup>2)</sup></b> | <i>bill. CZK 2010</i>           | <b>1 931</b> | <b>1 966</b> | <b>2 038</b> | <b>2 113</b> | <b>2 202</b> | <b>2 276</b> | <b>2 341</b>    | <b>2 401</b>    | <b>2 462</b>   | <b>2 515</b>   |
|   | <i>growth in %</i>              | 0.5          | 1.8          | 3.7          | 3.6          | 4.3          | 3.4          | 2.8             | 2.6             | 2.5            | 2.1            |
| <b>Government consumption exp.</b>                  | <i>bill. CZK 2010</i>           | <b>803</b>   | <b>812</b>   | <b>827</b>   | <b>849</b>   | <b>860</b>   | <b>894</b>   | <b>916</b>      | <b>934</b>      | <b>952</b>     | <b>970</b>     |
|   | <i>growth in %</i>              | 2.5          | 1.1          | 1.9          | 2.7          | 1.3          | 3.9          | 2.4             | 1.9             | 1.9            | 1.9            |
| <b>Gross capital formation</b>                      | <i>bill. CZK 2010</i>           | <b>997</b>   | <b>1 083</b> | <b>1 223</b> | <b>1 171</b> | <b>1 217</b> | <b>1 282</b> | <b>1 297</b>    | <b>1 325</b>    | <b>1 354</b>   | <b>1 391</b>   |
|   | <i>growth in %</i>              | -5.1         | 8.6          | 13.0         | -4.3         | 4.0          | 5.3          | 1.2             | 2.2             | 2.2            | 2.8            |
| Gross fixed capital formation                       | <i>bill. CZK 2010</i>           | 1 016        | 1 056        | 1 164        | 1 127        | 1 169        | 1 253        | 1 285           | 1 315           | 1 346          | 1 381          |
|   | <i>growth in %</i>              | -2.5         | 3.9          | 10.2         | -3.1         | 3.7          | 7.2          | 2.5             | 2.4             | 2.3            | 2.6            |
| Change in stocks and valuables                      | <i>bill. CZK 2010</i>           | -19          | 26           | 59           | 43           | 48           | 29           | 13              | 10              | 8              | 10             |
| <b>Exports of goods and services</b>                | <i>bill. CZK 2010</i>           | <b>2 984</b> | <b>3 242</b> | <b>3 437</b> | <b>3 586</b> | <b>3 828</b> | <b>3 996</b> | <b>4 140</b>    | <b>4 278</b>    | <b>4 428</b>   | <b>4 587</b>   |
|   | <i>growth in %</i>              | 0.2          | 8.7          | 6.0          | 4.3          | 6.7          | 4.4          | 3.6             | 3.3             | 3.5            | 3.6            |
| <b>Imports of goods and services</b>                | <i>bill. CZK 2010</i>           | <b>2 734</b> | <b>3 008</b> | <b>3 212</b> | <b>3 302</b> | <b>3 498</b> | <b>3 706</b> | <b>3 832</b>    | <b>3 962</b>    | <b>4 108</b>   | <b>4 267</b>   |
|   | <i>growth in %</i>              | 0.1          | 10.1         | 6.8          | 2.8          | 5.9          | 5.9          | 3.4             | 3.4             | 3.7            | 3.9            |
| <b>Gross domestic expenditure</b>                   | <i>bill. CZK 2010</i>           | <b>3 733</b> | <b>3 860</b> | <b>4 087</b> | <b>4 132</b> | <b>4 279</b> | <b>4 451</b> | <b>4 553</b>    | <b>4 658</b>    | <b>4 766</b>   | <b>4 873</b>   |
|   | <i>growth in %</i>              | -0.6         | 3.4          | 5.9          | 1.1          | 3.5          | 4.0          | 2.3             | 2.3             | 2.3            | 2.3            |
| <b>Methodological discrepancy<sup>3)</sup></b>      | <i>bill. CZK 2010</i>           | <b>-1</b>    | <b>-4</b>    | <b>-7</b>    | <b>-5</b>    | <b>-5</b>    | <b>-3</b>    | <b>-3</b>       | <b>-3</b>       | <b>-2</b>      | <b>-1</b>      |
| <b>Real gross domestic income</b>                   | <i>bill. CZK 2010</i>           | <b>3 956</b> | <b>4 112</b> | <b>4 344</b> | <b>4 486</b> | <b>4 644</b> | <b>4 783</b> | <b>4 912</b>    | <b>5 038</b>    | <b>5 162</b>   | <b>5 284</b>   |
|   | <i>growth in %</i>              | 0.4          | 3.9          | 5.6          | 3.3          | 3.5          | 3.0          | 2.7             | 2.6             | 2.5            | 2.4            |
| <b>Contributions to GDP growth<sup>4)</sup></b>     |                                 |              |              |              |              |              |              |                 |                 |                |                |
| <b>Gross domestic expenditure</b>                   | <i>pp</i>                       | <b>-0.6</b>  | <b>3.2</b>   | <b>5.5</b>   | <b>1.0</b>   | <b>3.3</b>   | <b>3.7</b>   | <b>2.1</b>      | <b>2.2</b>      | <b>2.1</b>     | <b>2.1</b>     |
| <b>Consumption</b>                                  | <i>pp</i>                       | <b>0.8</b>   | <b>1.1</b>   | <b>2.2</b>   | <b>2.2</b>   | <b>2.2</b>   | <b>2.4</b>   | <b>1.8</b>      | <b>1.6</b>      | <b>1.6</b>     | <b>1.4</b>     |
| Household expenditure                               | <i>pp</i>                       | 0.3          | 0.9          | 1.8          | 1.7          | 2.0          | 1.6          | 1.3             | 1.2             | 1.2            | 1.0            |
| Government expenditure                              | <i>pp</i>                       | 0.5          | 0.2          | 0.4          | 0.5          | 0.2          | 0.8          | 0.5             | 0.4             | 0.4            | 0.4            |
| <b>Gross capital formation</b>                      | <i>pp</i>                       | <b>-1.3</b>  | <b>2.1</b>   | <b>3.4</b>   | <b>-1.2</b>  | <b>1.0</b>   | <b>1.4</b>   | <b>0.3</b>      | <b>0.6</b>      | <b>0.6</b>     | <b>0.7</b>     |
| Gross fixed capital formation                       | <i>pp</i>                       | -0.6         | 1.0          | 2.6          | -0.8         | 0.9          | 1.8          | 0.6             | 0.6             | 0.6            | 0.7            |
| Change in stocks                                    | <i>pp</i>                       | -0.7         | 1.1          | 0.8          | -0.4         | 0.1          | -0.4         | -0.3            | 0.0             | 0.0            | 0.0            |
| <b>Foreign balance</b>                              | <i>pp</i>                       | <b>0.1</b>   | <b>-0.5</b>  | <b>-0.2</b>  | <b>1.4</b>   | <b>1.1</b>   | <b>-0.8</b>  | <b>0.4</b>      | <b>0.2</b>      | <b>0.1</b>     | <b>0.1</b>     |
| External balance of goods                           | <i>pp</i>                       | 0.1          | -0.1         | -1.1         | 1.0          | 0.8          | -0.5         | 0.1             | 0.0             | 0.0            | -0.1           |
| External balance of services                        | <i>pp</i>                       | 0.0          | -0.4         | 0.9          | 0.4          | 0.3          | -0.3         | 0.2             | 0.1             | 0.1            | 0.1            |
| <b>Gross value added</b>                            | <i>bill. CZK 2010</i>           | <b>3 606</b> | <b>3 729</b> | <b>3 905</b> | <b>3 999</b> | <b>4 168</b> | <b>4 298</b> | .               | .               | .              | .              |
|   | <i>growth in %</i>              | -0.5         | 3.4          | 4.7          | 2.4          | 4.2          | 3.1          | .               | .               | .              | .              |
| <b>Net taxes and subsidies on products</b>          | <i>bill. CZK 2010</i>           | <b>375</b>   | <b>363</b>   | <b>402</b>   | <b>414</b>   | <b>437</b>   | <b>443</b>   | .               | .               | .              | .              |

<sup>1)</sup> From working day adjusted data.<sup>2)</sup> Including consumption of non-profit institutions serving households (NPISH).<sup>3)</sup> Deterministic impact of using prices and structure of the previous year for calculation of y-o-y growth.<sup>4)</sup> Calculated on the basis of prices and structure of the previous year with perfectly additive contributions.

Source: CZSO. Calculations and forecast of the MoF.

**Table 3.1.2: Real GDP by Type of Expenditure – quarterly**

chained volumes, reference year 2010

|   |                                 | 2018         |              |              |              | 2019           |                 |                 |                 |
|---|---------------------------------|--------------|--------------|--------------|--------------|----------------|-----------------|-----------------|-----------------|
|   |                                 | Q1           | Q2           | Q3           | Q4           | Q1             | Q2              | Q3              | Q4              |
|   |                                 |              |              |              |              | <i>Prelim.</i> | <i>Estimate</i> | <i>Forecast</i> | <i>Forecast</i> |
| <b>Gross domestic product</b>                       | <i>bill. CZK 2010</i>           | <b>1 108</b> | <b>1 195</b> | <b>1 202</b> | <b>1 235</b> | <b>1 139</b>   | <b>1 223</b>    | <b>1 243</b>    | <b>1 254</b>    |
|   | <i>growth in %</i>              | 3.6          | 2.7          | 2.5          | 3.1          | 2.8            | 2.4             | 3.4             | 1.6             |
|   | <i>growth in %<sup>1)</sup></i> | 4.2          | 2.4          | 2.5          | 2.7          | 2.8            | 2.7             | 2.5             | 1.9             |
|   | <i>QoQ in %<sup>1)</sup></i>    | 0.6          | 0.6          | 0.6          | 0.9          | 0.6            | 0.6             | 0.4             | 0.3             |
| <b>Private consumption expenditure<sup>2)</sup></b> | <i>bill. CZK 2010</i>           | <b>542</b>   | <b>569</b>   | <b>575</b>   | <b>590</b>   | <b>558</b>     | <b>584</b>      | <b>594</b>      | <b>605</b>      |
|   | <i>growth in %</i>              | 4.1          | 3.7          | 3.1          | 2.7          | 2.9            | 2.6             | 3.3             | 2.5             |
| <b>Government consumption exp.</b>                  | <i>bill. CZK 2010</i>           | <b>208</b>   | <b>218</b>   | <b>219</b>   | <b>249</b>   | <b>214</b>     | <b>224</b>      | <b>224</b>      | <b>255</b>      |
|   | <i>growth in %</i>              | 3.5          | 3.4          | 5.1          | 3.8          | 2.8            | 2.4             | 2.4             | 2.2             |
| <b>Gross capital formation</b>                      | <i>bill. CZK 2010</i>           | <b>266</b>   | <b>320</b>   | <b>363</b>   | <b>332</b>   | <b>277</b>     | <b>321</b>      | <b>366</b>      | <b>334</b>      |
|   | <i>growth in %</i>              | 11.2         | 4.1          | 5.1          | 2.3          | 4.0            | 0.2             | 0.7             | 0.5             |
| Gross fixed capital formation                       | <i>bill. CZK 2010</i>           | 271          | 303          | 326          | 353          | 279            | 309             | 338             | 359             |
|   | <i>growth in %</i>              | 6.4          | 7.2          | 7.7          | 7.2          | 3.0            | 1.9             | 3.6             | 1.7             |
| Change in stocks and valuables                      | <i>bill. CZK 2010</i>           | -5           | 17           | 37           | -21          | -2             | 12              | 28              | -25             |
| <b>Exports of goods and services</b>                | <i>bill. CZK 2010</i>           | <b>993</b>   | <b>1 013</b> | <b>948</b>   | <b>1 043</b> | <b>1 012</b>   | <b>1 049</b>    | <b>1 009</b>    | <b>1 070</b>    |
|   | <i>growth in %</i>              | 3.6          | 4.2          | 4.2          | 5.6          | 1.9            | 3.5             | 6.5             | 2.6             |
| <b>Imports of goods and services</b>                | <i>bill. CZK 2010</i>           | <b>900</b>   | <b>924</b>   | <b>901</b>   | <b>980</b>   | <b>920</b>     | <b>951</b>      | <b>949</b>      | <b>1 012</b>    |
|   | <i>growth in %</i>              | 6.1          | 5.6          | 6.6          | 5.5          | 2.2            | 2.9             | 5.3             | 3.3             |
| <b>Gross domestic expenditure</b>                   | <i>bill. CZK 2010</i>           | <b>1 016</b> | <b>1 107</b> | <b>1 156</b> | <b>1 172</b> | <b>1 049</b>   | <b>1 128</b>    | <b>1 182</b>    | <b>1 194</b>    |
|   | <i>growth in %</i>              | 5.7          | 3.7          | 4.0          | 2.8          | 3.2            | 1.9             | 2.2             | 1.9             |
| <b>Methodological discrepancy<sup>3)</sup></b>      | <i>bill. CZK 2010</i>           | <b>-1</b>    | <b>-1</b>    | <b>-1</b>    | <b>0</b>     | <b>-1</b>      | <b>-2</b>       | <b>-1</b>       | <b>2</b>        |
| <b>Real gross domestic income</b>                   | <i>bill. CZK 2010</i>           | <b>1 124</b> | <b>1 206</b> | <b>1 207</b> | <b>1 245</b> | <b>1 155</b>   | <b>1 238</b>    | <b>1 251</b>    | <b>1 268</b>    |
|   | <i>growth in %</i>              | 4.6          | 3.1          | 1.7          | 2.8          | 2.7            | 2.6             | 3.7             | 1.8             |
| <b>Gross value added</b>                            | <i>bill. CZK 2010</i>           | <b>1 010</b> | <b>1 083</b> | <b>1 089</b> | <b>1 115</b> | <b>1 039</b>   | .               | .               | .               |
|   | <i>growth in %</i>              | 3.5          | 2.8          | 2.7          | 3.4          | 2.8            | .               | .               | .               |
|   | <i>growth in %<sup>1)</sup></i> | 4.2          | 2.5          | 2.7          | 3.0          | 2.8            | .               | .               | .               |
|   | <i>QoQ in %<sup>1)</sup></i>    | 0.8          | 0.7          | 0.6          | 0.9          | 0.6            | .               | .               | .               |
| <b>Net taxes and subsidies on products</b>          | <i>bill. CZK 2010</i>           | <b>99</b>    | <b>112</b>   | <b>114</b>   | <b>120</b>   | <b>101</b>     | .               | .               | .               |

<sup>1)</sup> From seasonally and working day adjusted data<sup>2)</sup> Including consumption of non-profit institutions serving households (NPISH).<sup>3)</sup> Deterministic impact of using prices and structure of the previous year for calculation of y-o-y growth.

Source: CZSO. Calculations and forecast of the MoF.

**Table 3.1.3: Nominal GDP by Type of Expenditure – yearly**

|  |                    | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         |
|--|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  |                    |              |              |              |              |              |              | Forecast     | Forecast     | Outlook      | Outlook      |
| <b>Gross domestic product</b>                        | <i>bill. CZK</i>   | <b>4 098</b> | <b>4 314</b> | <b>4 596</b> | <b>4 768</b> | <b>5 047</b> | <b>5 329</b> | <b>5 627</b> | <b>5 880</b> | <b>6 128</b> | <b>6 382</b> |
|  | <i>growth in %</i> | 0.9          | 5.3          | 6.5          | 3.7          | 5.9          | 5.6          | 5.6          | 4.5          | 4.2          | 4.1          |
| <b>Private consumption expenditure <sup>1)</sup></b> | <i>bill. CZK</i>   | <b>2 025</b> | <b>2 074</b> | <b>2 152</b> | <b>2 243</b> | <b>2 393</b> | <b>2 530</b> | <b>2 671</b> | <b>2 802</b> | <b>2 924</b> | <b>3 041</b> |
|  | <i>growth in %</i> | 1.4          | 2.4          | 3.8          | 4.2          | 6.7          | 5.7          | 5.6          | 4.9          | 4.4          | 4.0          |
| <b>Government consumption exp.</b>                   | <i>bill. CZK</i>   | <b>826</b>   | <b>849</b>   | <b>883</b>   | <b>919</b>   | <b>968</b>   | <b>1 064</b> | <b>1 138</b> | <b>1 187</b> | <b>1 238</b> | <b>1 291</b> |
|  | <i>growth in %</i> | 2.7          | 2.8          | 4.0          | 4.0          | 5.4          | 9.9          | 6.9          | 4.3          | 4.3          | 4.3          |
| <b>Gross capital formation</b>                       | <i>bill. CZK</i>   | <b>1 011</b> | <b>1 116</b> | <b>1 285</b> | <b>1 239</b> | <b>1 306</b> | <b>1 394</b> | <b>1 441</b> | <b>1 491</b> | <b>1 546</b> | <b>1 614</b> |
|  | <i>growth in %</i> | -4.9         | 10.4         | 15.1         | -3.6         | 5.4          | 6.8          | 3.3          | 3.5          | 3.7          | 4.4          |
| Gross fixed capital formation                        | <i>bill. CZK</i>   | 1 027        | 1 084        | 1 216        | 1 189        | 1 250        | 1 358        | 1 422        | 1 474        | 1 530        | 1 595        |
|  | <i>growth in %</i> | -2.4         | 5.5          | 12.2         | -2.3         | 5.2          | 8.6          | 4.7          | 3.7          | 3.8          | 4.3          |
| Change in stocks and valuables                       | <i>bill. CZK</i>   | -16          | 32           | 68           | 50           | 56           | 36           | 19           | 17           | 16           | 19           |
| <b>External balance</b>                              | <i>bill. CZK</i>   | <b>236</b>   | <b>275</b>   | <b>276</b>   | <b>368</b>   | <b>380</b>   | <b>340</b>   | <b>377</b>   | <b>401</b>   | <b>420</b>   | <b>436</b>   |
| Exports of goods and services                        | <i>bill. CZK</i>   | 3 150        | 3 561        | 3 725        | 3 793        | 4 024        | 4 177        | 4 412        | 4 562        | 4 724        | 4 903        |
|  | <i>growth in %</i> | 1.9          | 13.0         | 4.6          | 1.8          | 6.1          | 3.8          | 5.6          | 3.4          | 3.6          | 3.8          |
| Imports of goods and services                        | <i>bill. CZK</i>   | 2 914        | 3 286        | 3 449        | 3 425        | 3 644        | 3 837        | 4 035        | 4 161        | 4 304        | 4 467        |
|  | <i>growth in %</i> | 0.6          | 12.8         | 5.0          | -0.7         | 6.4          | 5.3          | 5.2          | 3.1          | 3.4          | 3.8          |
| <b>Gross national income</b>                         | <i>bill. CZK</i>   | <b>3 854</b> | <b>4 023</b> | <b>4 286</b> | <b>4 459</b> | <b>4 737</b> | <b>5 032</b> | <b>5 346</b> | <b>5 588</b> | <b>5 823</b> | <b>6 068</b> |
|  | <i>growth in %</i> | 1.2          | 4.4          | 6.5          | 4.0          | 6.2          | 6.2          | 6.2          | 4.5          | 4.2          | 4.2          |
| <b>Primary income balance</b>                        | <i>bill. CZK</i>   | <b>-245</b>  | <b>-291</b>  | <b>-310</b>  | <b>-309</b>  | <b>-310</b>  | <b>-297</b>  | <b>-281</b>  | <b>-292</b>  | <b>-304</b>  | <b>-314</b>  |

<sup>1)</sup> Including consumption of non-profit institutions serving households (NPISH).

Source: CZSO. Calculations and forecast of the MoF.

**Table 3.1.4: Nominal GDP by Type of Expenditure – quarterly**

|  |                    | 2018         |              |              |              | Q1           | 2019         |              |              |          |
|--|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------|
|  |                    | Q1           | Q2           | Q3           | Q4           |              | Q1           | Q2           | Q3           | Q4       |
|  |                    |              |              |              |              |              | Prelim.      | Estimate     | Forecast     | Forecast |
| <b>Gross domestic product</b>                        | <i>bill. CZK</i>   | <b>1 230</b> | <b>1 334</b> | <b>1 352</b> | <b>1 412</b> | <b>1 306</b> | <b>1 411</b> | <b>1 438</b> | <b>1 471</b> |          |
|  | <i>growth in %</i> | 6.2          | 5.3          | 5.0          | 5.8          | 6.2          | 5.8          | 6.4          | 4.2          |          |
| <b>Private consumption expenditure <sup>1)</sup></b> | <i>bill. CZK</i>   | <b>595</b>   | <b>630</b>   | <b>644</b>   | <b>661</b>   | <b>630</b>   | <b>666</b>   | <b>682</b>   | <b>693</b>   |          |
|  | <i>growth in %</i> | 5.9          | 6.1          | 6.0          | 5.0          | 5.9          | 5.7          | 5.9          | 4.9          |          |
| <b>Government consumption exp.</b>                   | <i>bill. CZK</i>   | <b>239</b>   | <b>255</b>   | <b>261</b>   | <b>309</b>   | <b>258</b>   | <b>273</b>   | <b>278</b>   | <b>329</b>   |          |
|  | <i>growth in %</i> | 10.2         | 9.2          | 11.9         | 8.5          | 7.8          | 7.0          | 6.8          | 6.3          |          |
| <b>Gross capital formation</b>                       | <i>bill. CZK</i>   | <b>285</b>   | <b>346</b>   | <b>397</b>   | <b>366</b>   | <b>305</b>   | <b>355</b>   | <b>407</b>   | <b>374</b>   |          |
|  | <i>growth in %</i> | 10.8         | 4.6          | 7.2          | 5.4          | 7.0          | 2.6          | 2.5          | 2.0          |          |
| Gross fixed capital formation                        | <i>bill. CZK</i>   | 289          | 326          | 355          | 388          | 306          | 341          | 375          | 400          |          |
|  | <i>growth in %</i> | 6.0          | 7.7          | 9.8          | 10.4         | 5.8          | 4.4          | 5.6          | 3.2          |          |
| Change in stocks and valuables                       | <i>bill. CZK</i>   | -4           | 20           | 42           | -22          | -1           | 15           | 32           | -27          |          |
| <b>External balance</b>                              | <i>bill. CZK</i>   | <b>111</b>   | <b>103</b>   | <b>51</b>    | <b>75</b>    | <b>113</b>   | <b>117</b>   | <b>71</b>    | <b>75</b>    |          |
| Exports of goods and services                        | <i>bill. CZK</i>   | 1 023        | 1 055        | 996          | 1 103        | 1 070        | 1 118        | 1 082        | 1 142        |          |
|  | <i>growth in %</i> | -0.5         | 2.3          | 5.3          | 8.3          | 4.7          | 6.0          | 8.6          | 3.5          |          |
| Imports of goods and services                        | <i>bill. CZK</i>   | 912          | 953          | 945          | 1 028        | 957          | 1 001        | 1 010        | 1 067        |          |
|  | <i>growth in %</i> | 0.6          | 3.2          | 8.8          | 8.6          | 5.0          | 5.1          | 6.9          | 3.8          |          |

<sup>1)</sup> Including consumption of non-profit institutions serving households (NPISH).

Source: CZSO. Calculations and forecast of the MoF.

**Table 3.1.5: GDP by Type of Income – yearly**

|   |                    | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         |
|---|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|   |                    |              |              |              |              |              |              | Forecast     | Forecast     | Outlook      | Outlook      |
| <b>GDP</b>  | <i>bill. CZK</i>   | <b>4 098</b> | <b>4 314</b> | <b>4 596</b> | <b>4 768</b> | <b>5 047</b> | <b>5 329</b> | <b>5 627</b> | <b>5 880</b> | <b>6 128</b> | <b>6 382</b> |
|   | <i>growth in %</i> | 0.9          | 5.3          | 6.5          | 3.7          | 5.9          | 5.6          | 5.6          | 4.5          | 4.2          | 4.1          |
| <b>Balance of taxes and subsidies</b>                         | <i>bill. CZK</i>   | <b>402</b>   | <b>381</b>   | <b>434</b>   | <b>454</b>   | <b>495</b>   | <b>514</b>   | <b>531</b>   | <b>551</b>   | <b>574</b>   | <b>595</b>   |
|   | <i>% of GDP</i>    | 9.8          | 8.8          | 9.4          | 9.5          | 9.8          | 9.6          | 9.4          | 9.4          | 9.4          | 9.3          |
|   | <i>growth in %</i> | 4.2          | -5.1         | 13.8         | 4.7          | 9.0          | 3.7          | 3.3          | 3.7          | 4.2          | 3.7          |
| Taxes on production and imports                               | <i>bill. CZK</i>   | 528          | 518          | 571          | 595          | 637          | 667          | .            | .            | .            | .            |
|   | <i>growth in %</i> | 3.9          | -1.8         | 10.1         | 4.3          | 7.0          | 4.7          | .            | .            | .            | .            |
| Subsidies on production                                       | <i>bill. CZK</i>   | 126          | 137          | 137          | 141          | 142          | 153          | .            | .            | .            | .            |
|   | <i>growth in %</i> | 2.7          | 8.5          | -0.1         | 3.3          | 0.4          | 8.1          | .            | .            | .            | .            |
| <b>Compensation of employees</b><br><i>(domestic concept)</i> | <i>bill. CZK</i>   | <b>1 676</b> | <b>1 735</b> | <b>1 821</b> | <b>1 928</b> | <b>2 089</b> | <b>2 291</b> | <b>2 460</b> | <b>2 605</b> | <b>2 748</b> | <b>2 885</b> |
|   | <i>% of GDP</i>    | 40.9         | 40.2         | 39.6         | 40.4         | 41.4         | 43.0         | 43.7         | 44.3         | 44.8         | 45.2         |
|   | <i>growth in %</i> | 0.7          | 3.5          | 5.0          | 5.9          | 8.4          | 9.7          | 7.4          | 5.9          | 5.5          | 5.0          |
| Wages and salaries  | <i>bill. CZK</i>   | 1 275        | 1 321        | 1 384        | 1 464        | 1 585        | 1 735        | 1 863        | 1 972        | 2 080        | 2 184        |
|   | <i>growth in %</i> | 0.5          | 3.6          | 4.8          | 5.7          | 8.3          | 9.5          | 7.4          | 5.9          | 5.5          | 5.0          |
| Social security contributions                                 | <i>bill. CZK</i>   | 402          | 414          | 437          | 464          | 504          | 556          | 598          | 633          | 668          | 701          |
|   | <i>growth in %</i> | 1.4          | 3.1          | 5.5          | 6.4          | 8.6          | 10.2         | 7.5          | 5.9          | 5.5          | 5.0          |
| <b>Gross operating surplus</b>                                | <i>bill. CZK</i>   | <b>2 020</b> | <b>2 198</b> | <b>2 341</b> | <b>2 386</b> | <b>2 463</b> | <b>2 524</b> | <b>2 636</b> | <b>2 724</b> | <b>2 806</b> | <b>2 902</b> |
|   | <i>% of GDP</i>    | 49.3         | 50.9         | 50.9         | 50.0         | 48.8         | 47.4         | 46.8         | 46.3         | 45.8         | 45.5         |
|   | <i>growth in %</i> | 0.5          | 8.8          | 6.5          | 1.9          | 3.2          | 2.5          | 4.4          | 3.4          | 3.0          | 3.4          |
| Consumption of capital  | <i>bill. CZK</i>   | 906          | 939          | 969          | 998          | 1 026        | 1 065        | 1 129        | 1 198        | 1 268        | 1 327        |
|   | <i>growth in %</i> | 3.0          | 3.6          | 3.2          | 3.0          | 2.9          | 3.8          | 6.0          | 6.1          | 5.8          | 4.7          |
| Net operating surplus   | <i>bill. CZK</i>   | 1 114        | 1 259        | 1 372        | 1 388        | 1 436        | 1 459        | 1 507        | 1 526        | 1 539        | 1 575        |
|   | <i>growth in %</i> | -1.4         | 13.0         | 9.0          | 1.2          | 3.5          | 1.5          | 3.3          | 1.3          | 0.8          | 2.3          |

Source: CZSO. Calculations and forecast of the MoF.

**Table 3.1.6: GDP by Type of Income – quarterly**

|   |                    | 2018             |              |              |              | 2019           |                 |                 |                 |
|---|--------------------|------------------|--------------|--------------|--------------|----------------|-----------------|-----------------|-----------------|
|   |                    | Q1               | Q2           | Q3           | Q4           | Q1             | Q2              | Q3              | Q4              |
|   |                    |                  |              |              |              | <i>Prelim.</i> | <i>Estimate</i> | <i>Forecast</i> | <i>Forecast</i> |
| <b>GDP</b>  | <i>bill. CZK</i>   | <b>1 230</b>     | <b>1 334</b> | <b>1 352</b> | <b>1 412</b> | <b>1 306</b>   | <b>1 411</b>    | <b>1 438</b>    | <b>1 471</b>    |
|   | <i>growth in %</i> | 6.2              | 5.3          | 5.0          | 5.8          | 6.2            | 5.8             | 6.4             | 4.2             |
| <b>Balance of taxes and subsidies</b>                         | <i>bill. CZK</i>   | <b>108</b>       | <b>132</b>   | <b>140</b>   | <b>134</b>   | <b>110</b>     | <b>137</b>      | <b>143</b>      | <b>140</b>      |
|   | <i>growth in %</i> | 4.8              | 2.9          | 3.5          | 4.0          | 2.3            | 3.7             | 2.8             | 4.1             |
| <b>Compensation of employees</b><br><i>(domestic concept)</i> | <i>bill. CZK</i>   | <b>545</b>       | <b>571</b>   | <b>567</b>   | <b>608</b>   | <b>587</b>     | <b>613</b>      | <b>608</b>      | <b>652</b>      |
|   | <i>growth in %</i> | 10.7             | 10.3         | 9.7          | 8.1          | 7.8            | 7.4             | 7.2             | 7.1             |
|   | Wages and salaries | <i>bill. CZK</i> | 411          | 431          | 430          | 462            | 443             | 463             | 462             |
|   | <i>growth in %</i> | 10.5             | 10.4         | 9.8          | 7.4          | 7.7            | 7.4             | 7.2             | 7.1             |
| Social security contributions                                 | <i>bill. CZK</i>   | 133              | 140          | 137          | 147          | 144            | 150             | 147             | 157             |
|   | <i>growth in %</i> | 11.3             | 10.0         | 9.4          | 10.3         | 8.1            | 7.4             | 7.2             | 7.1             |
| <b>Gross operating surplus</b>                                | <i>bill. CZK</i>   | <b>578</b>       | <b>631</b>   | <b>645</b>   | <b>669</b>   | <b>609</b>     | <b>661</b>      | <b>687</b>      | <b>680</b>      |
|   | <i>growth in %</i> | 2.6              | 1.6          | 1.6          | 4.1          | 5.4            | 4.7             | 6.4             | 1.5             |

Source: CZSO. Calculations and forecast of the MoF.

## 3.2 Prices

The year-on-year growth in **consumer prices** in June 2019 was 2.7% (*versus* 2.3%). The difference of the actual outcome from the forecast can be attributed in particular to the higher-than-expected rise in regulated prices and food prices. Administrative measures contributed 0.6 percentage points, of which only –0.1 pp was related to the change in indirect taxes (a reduction in value added tax in public transport). The largest slice of the contribution of regulated prices was taken up by the hike in the electricity price (0.5 pp). Out of the divisions of the consumer basket the largest contribution was made by housing (1.4 pp), where prices also rose at the fastest rate of all divisions (by 5.5% YoY).

In price-determining areas, assumptions of this macroeconomic forecast differ from those of the previous forecast considerably only in the case of changes in indirect taxes in 2020. We raise the assumptions in response to the government-approved rates for excise duty applied to tobacco products and alcohol (see Chapter 1.5). The inflation forecast for 2019 and 2020 also reflects the higher-than-predicted year-on-year inflation in June 2019. Price impacts of these factors are barely cushioned by the slightly lower projected crude oil price or by the small reduction in the forecast for the growth rate of household consumption and, in 2019, also of unit labour costs.

We expect inflation to be a little higher **in 2019** than it was in the previous year. This is because administrative measures are highly likely to impinge on inflation more than last year. The growth of regulated prices has accelerated. Of these, the rise in the electricity price should have the most substantial impact (0.4 pp) on the increase in consumer prices this year. We expect administrative measures to contribute 0.7 percentage points (*versus* 0.5 pp) to the year-on-year growth of consumer prices in December 2019. Nevertheless, this year's inflation will be determined primarily by market factors.

We expect to see the continuing strong pro-inflationary effects of the robust rise in unit labour costs, combined with inflationary pressures stemming from rising household consumption against the backdrop of a positive output gap. The oil price should have a moderate counter-inflationary effect, while the exchange rate will be more or less neutral.

Despite the predicted slowdown, the year-on-year inflation will probably be in the upper half of the tolerance band of the CNB's target in the second half of 2019. **In 2019**, the **average inflation rate** should reach 2.5% (*versus* 2.3%).

**In 2020**, the rise in unit labour costs should slow down. In addition, demand-pull inflationary pressures should be a little weaker than in 2019 as we take into account the trends expected in household consumption and the output gap. Nevertheless, these factors should be deci-

sive in determining the market component underpinning developments in consumer prices. Moderately counter-inflationary pressures are expected to stem from the appreciation of the Czech koruna relative to both major world currencies, and from the projected decrease in oil prices.

In 2020, consumer prices will be affected by the following changes in indirect taxes, all of which are projected to take effect from 1 January 2020 (see also Chapter 1.5):

- the reclassification of selected price representatives under the second reduced VAT rate in connection with the expansion of electronic registration of sales;
- the reclassification of heat under the second reduced VAT rate;
- an increase in excise duty applied to tobacco products and alcohol.

None of these upcoming changes to indirect taxes have passed all the way through the legislative process, so there is a risk that they may take effect later or that additional changes and modifications will be made. Taken as a whole, the aforementioned measures should have a technical<sup>1</sup> impact that will push up consumer prices by 0.2 pp during 2020. Bearing in mind that cigarettes subject to the original lower excise duty are still expected to be on sale in Q1 2020, a technical impact on the average inflation rate of approximately 0.1 pp can be expected. However, we assume that, in both cases, the effective impact<sup>2</sup> will be roughly 0.2 percentage points higher, particularly bearing in mind the downward price inflexibility.

In 2020, regulated prices should grow at a slower rate than this year. Nevertheless, taking into account the changes in indirect taxes, administrative measures are expected to have more or less the same effect on inflation in 2020 as in 2019. In view of the above, we forecast that the **average inflation rate in 2020** will slow down only modestly to 2.2% (*versus* 1.6%).

In Q1 2019, the GDP deflator rose 3.3% (*versus* 3.4%), with the gross domestic expenditure deflator having increased by 3.3% (*versus* 3.4%) and the terms of trade stagnating (*as estimated*). Developments in the gross domestic expenditure deflator reflected the growth in deflators of the general government and household consumption as well as of gross fixed capital formation.

In 2019 the GDP deflator should grow by 3.0% (*unchanged*) on the back of a rise in the gross domestic expenditure deflator and an improvement in the terms of trade. In 2020, lower momentum of deflators of all com-

<sup>1</sup> Technical impact reflects a price change in which a change in the tax rate is fully projected.

<sup>2</sup> Effective impact reflects the actual price change, which may be higher or lower compared to the full projection of the change in the tax rate.

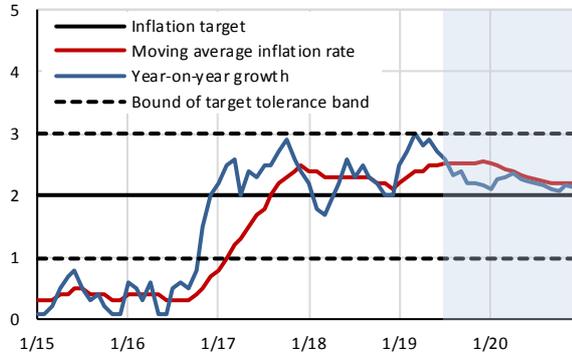
ponents of domestic demand could slow down GDP deflator growth to 2.1% (*versus 1.9%*). The situation is set out in Graph 3.2.3.

The forecast appreciation of the koruna and the oil price momentum should affect the developments expected in

both export and import prices. As a result, the terms of trade could improve by 0.2% (*versus 0.3%*) in 2019 and then grow by 0.3% (*versus 0.4%*) in 2020.

**Graph 3.2.1: Consumer Prices**

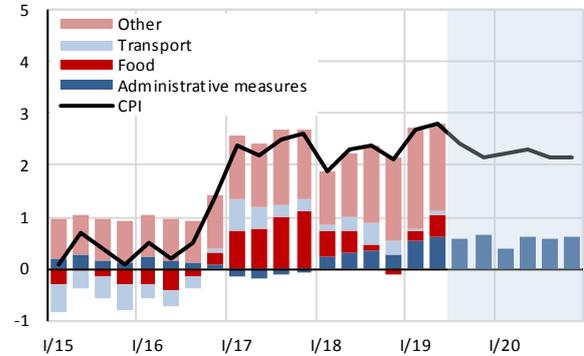
YoY growth rate in %



Source: CNB, CZSO. Calculations and forecast of the MoF.

**Graph 3.2.2: Consumer Prices in Main Divisions**

YoY growth of consumer price index in %, contributions in pp

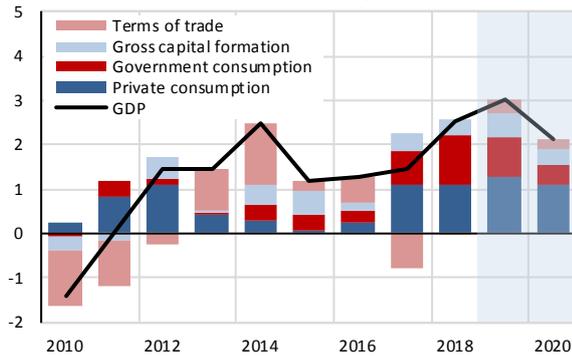


Note: Transport excluding administrative measures and excises. Food excluding value-added tax.

Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.2.3: Gross Domestic Product Deflator**

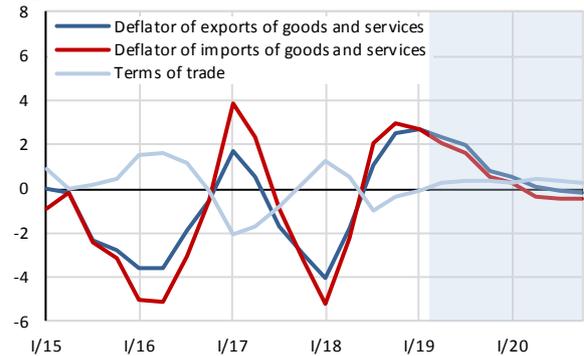
growth rate in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.2.4: Terms of Trade**

YoY growth rate in %



Source: CZSO. Calculations and forecast of the MoF.

**Table 3.2.1: Prices – yearly**

|  |                          | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         |
|--|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  |                          |              |              |              |              |              |              | Forecast     | Forecast     | Outlook      | Outlook      |
| <b>Consumer Price Index</b>                |                          |              |              |              |              |              |              |              |              |              |              |
| <b>Average of a year</b>                   | <i>average 2015=100</i>  | <b>99.3</b>  | <b>99.7</b>  | <b>100.0</b> | <b>100.7</b> | <b>103.1</b> | <b>105.3</b> | <b>108.0</b> | <b>110.4</b> | <b>112.4</b> | <b>114.4</b> |
|  | <i>growth in %</i>       | 1.4          | 0.4          | 0.3          | 0.7          | 2.5          | 2.1          | 2.5          | 2.2          | 1.8          | 1.8          |
| <b>December</b>                            | <i>average 2015=100</i>  | <b>99.4</b>  | <b>99.5</b>  | <b>99.5</b>  | <b>101.5</b> | <b>103.9</b> | <b>106.0</b> | <b>108.3</b> | <b>110.6</b> | <b>112.7</b> | <b>114.7</b> |
|  | <i>growth in %</i>       | 1.4          | 0.1          | 0.1          | 2.0          | 2.4          | 2.0          | 2.2          | 2.2          | 1.8          | 1.8          |
| <b>Of which the contribution of:</b>       |                          |              |              |              |              |              |              |              |              |              |              |
| Administrative measures <sup>1)</sup>      | <i>percentage points</i> | 1.0          | -0.2         | 0.1          | 0.0          | 0.1          | 0.3          | 0.7          | 0.6          | 0.3          | 0.3          |
| Market increase                            | <i>percentage points</i> | 0.4          | 0.3          | 0.0          | 2.0          | 2.3          | 1.7          | 1.5          | 1.5          | 1.6          | 1.6          |
| <b>Harmonized index of consumer prices</b> | <i>average 2015=100</i>  | <b>99.3</b>  | <b>99.8</b>  | <b>100.0</b> | <b>100.7</b> | <b>103.1</b> | <b>105.1</b> | <b>107.5</b> | <b>109.7</b> | <b>111.6</b> | <b>113.5</b> |
|  | <i>growth in %</i>       | 1.4          | 0.4          | 0.3          | 0.6          | 2.4          | 2.0          | 2.3          | 2.1          | 1.7          | 1.7          |
| <b>Offering prices of flats</b>            |                          |              |              |              |              |              |              |              |              |              |              |
| <b>Czech Republic</b>                      | <i>average 2010=100</i>  | <b>97.2</b>  | <b>100.7</b> | <b>106.9</b> | <b>117.6</b> | <b>130.7</b> | <b>144.6</b> | .            | .            | .            | .            |
|  | <i>growth in %</i>       | 1.1          | 3.6          | 6.2          | 10.0         | 11.1         | 10.6         | .            | .            | .            | .            |
| <b>Czech Republic excluding Prague</b>     | <i>average 2010=100</i>  | <b>91.3</b>  | <b>93.0</b>  | <b>97.7</b>  | <b>107.1</b> | <b>112.1</b> | <b>121.9</b> | .            | .            | .            | .            |
|  | <i>growth in %</i>       | -1.3         | 1.9          | 5.1          | 9.6          | 4.7          | 8.7          | .            | .            | .            | .            |
| <b>Prague</b>                              | <i>average 2010=100</i>  | <b>103.1</b> | <b>108.5</b> | <b>116.1</b> | <b>128.2</b> | <b>149.2</b> | <b>167.2</b> | .            | .            | .            | .            |
|  | <i>growth in %</i>       | 3.5          | 5.2          | 7.0          | 10.4         | 16.4         | 12.1         | .            | .            | .            | .            |
| <b>Deflators</b>                           |                          |              |              |              |              |              |              |              |              |              |              |
| <b>GDP</b>                                 | <i>average 2010=100</i>  | <b>102.9</b> | <b>105.5</b> | <b>106.7</b> | <b>108.1</b> | <b>109.6</b> | <b>112.4</b> | <b>115.8</b> | <b>118.3</b> | <b>120.5</b> | <b>122.8</b> |
|  | <i>growth in %</i>       | 1.4          | 2.5          | 1.2          | 1.3          | 1.4          | 2.5          | 3.0          | 2.1          | 1.9          | 2.0          |
| <b>Domestic final use</b>                  | <i>average 2010=100</i>  | <b>103.5</b> | <b>104.6</b> | <b>105.7</b> | <b>106.5</b> | <b>109.1</b> | <b>112.1</b> | <b>115.3</b> | <b>117.6</b> | <b>119.8</b> | <b>122.0</b> |
|  | <i>growth in %</i>       | 0.5          | 1.1          | 1.0          | 0.7          | 2.4          | 2.7          | 2.9          | 2.0          | 1.8          | 1.9          |
| <b>Consumption of households</b>           | <i>average 2010=100</i>  | <b>104.9</b> | <b>105.5</b> | <b>105.6</b> | <b>106.2</b> | <b>108.7</b> | <b>111.1</b> | <b>114.1</b> | <b>116.7</b> | <b>118.8</b> | <b>120.9</b> |
|  | <i>growth in %</i>       | 0.8          | 0.6          | 0.1          | 0.5          | 2.4          | 2.3          | 2.7          | 2.3          | 1.8          | 1.8          |
| <b>Consumption of government</b>           | <i>average 2010=100</i>  | <b>102.8</b> | <b>104.6</b> | <b>106.7</b> | <b>108.1</b> | <b>112.6</b> | <b>119.0</b> | <b>124.2</b> | <b>127.1</b> | <b>130.1</b> | <b>133.1</b> |
|  | <i>growth in %</i>       | 0.2          | 1.7          | 2.0          | 1.3          | 4.1          | 5.7          | 4.4          | 2.4          | 2.3          | 2.3          |
| <b>Fixed capital formation</b>             | <i>average 2010=100</i>  | <b>101.1</b> | <b>102.7</b> | <b>104.5</b> | <b>105.4</b> | <b>106.9</b> | <b>108.4</b> | <b>110.7</b> | <b>112.1</b> | <b>113.7</b> | <b>115.4</b> |
|  | <i>growth in %</i>       | 0.1          | 1.6          | 1.8          | 0.9          | 1.4          | 1.4          | 2.1          | 1.3          | 1.4          | 1.6          |
| <b>Exports of goods and services</b>       | <i>average 2010=100</i>  | <b>105.6</b> | <b>109.8</b> | <b>108.4</b> | <b>105.8</b> | <b>105.1</b> | <b>104.5</b> | <b>106.6</b> | <b>106.6</b> | <b>106.7</b> | <b>106.9</b> |
|  | <i>growth in %</i>       | 1.7          | 4.0          | -1.3         | -2.4         | -0.6         | -0.6         | 1.9          | 0.1          | 0.0          | 0.2          |
| <b>Imports of goods and services</b>       | <i>average 2010=100</i>  | <b>106.6</b> | <b>109.2</b> | <b>107.4</b> | <b>103.7</b> | <b>104.2</b> | <b>103.5</b> | <b>105.3</b> | <b>105.0</b> | <b>104.8</b> | <b>104.7</b> |
|  | <i>growth in %</i>       | 0.5          | 2.5          | -1.7         | -3.4         | 0.4          | -0.6         | 1.7          | -0.3         | -0.2         | -0.1         |
| <b>Terms of trade</b>                      | <i>average 2010=100</i>  | <b>99.0</b>  | <b>100.5</b> | <b>100.9</b> | <b>102.0</b> | <b>100.9</b> | <b>101.0</b> | <b>101.2</b> | <b>101.5</b> | <b>101.8</b> | <b>102.1</b> |
|  | <i>growth in %</i>       | 1.2          | 1.5          | 0.4          | 1.0          | -1.0         | 0.0          | 0.2          | 0.3          | 0.3          | 0.3          |

<sup>1)</sup> The contribution of increase in regulated prices and in indirect taxes to increase of December YoY consumer price inflation.

Source: CZSO, Eurostat. Calculations and forecast of the MoF.

**Table 3.2.2: Prices – quarterly**

|  |                          | 2018         |              |              |              | 2019         |                 |                 |                 |
|--|--------------------------|--------------|--------------|--------------|--------------|--------------|-----------------|-----------------|-----------------|
|  |                          | Q1           | Q2           | Q3           | Q4           | Q1           | Q2              | Q3              | Q4              |
|  |                          |              |              |              |              |              | <i>Estimate</i> | <i>Forecast</i> | <i>Forecast</i> |
| <b>Consumer Price Index</b>                | <i>average 2015=100</i>  | <b>104.5</b> | <b>105.2</b> | <b>105.8</b> | <b>106.0</b> | <b>107.3</b> | <b>108.1</b>    | <b>108.4</b>    | <b>108.3</b>    |
|  | <i>growth in %</i>       | 1.9          | 2.3          | 2.4          | 2.1          | 2.7          | 2.8             | 2.4             | 2.2             |
| <b>Of which the contribution of:</b>       |                          |              |              |              |              |              |                 |                 |                 |
| Administrative measures <sup>1)</sup>      | <i>percentage points</i> | 0.2          | 0.3          | 0.3          | 0.3          | 0.5          | 0.6             | 0.6             | 0.7             |
| Market increase                            | <i>percentage points</i> | 1.7          | 2.0          | 2.1          | 1.8          | 2.2          | 2.2             | 1.8             | 1.5             |
| <b>Harmonized index of consumer prices</b> | <i>average 2015=100</i>  | <b>104.3</b> | <b>105.1</b> | <b>105.6</b> | <b>105.5</b> | <b>106.8</b> | <b>107.7</b>    | <b>107.9</b>    | <b>107.6</b>    |
|  | <i>growth in %</i>       | 1.7          | 2.1          | 2.3          | 1.8          | 2.3          | 2.5             | 2.2             | 2.0             |
| <b>Offering prices of flats</b>            |                          |              |              |              |              |              |                 |                 |                 |
| <b>Czech Republic</b>                      | <i>average 2010=100</i>  | <b>140.1</b> | <b>143.2</b> | <b>146.4</b> | <b>148.7</b> | <b>150.5</b> | <b>151.4</b>    | .               | .               |
|  | <i>growth in %</i>       | 12.8         | 12.2         | 9.5          | 8.5          | 7.4          | 5.7             | .               | .               |
| <b>Czech Republic excluding Prague</b>     | <i>average 2010=100</i>  | <b>119.1</b> | <b>120.3</b> | <b>123.5</b> | <b>124.8</b> | <b>126.5</b> | <b>128.6</b>    | .               | .               |
|  | <i>growth in %</i>       | 10.0         | 9.5          | 7.8          | 8.1          | 6.2          | 6.9             | .               | .               |
| <b>Prague</b>                              | <i>average 2010=100</i>  | <b>161.1</b> | <b>166.0</b> | <b>169.2</b> | <b>172.7</b> | <b>174.5</b> | <b>174.2</b>    | .               | .               |
|  | <i>growth in %</i>       | 15.1         | 14.2         | 10.7         | 8.8          | 8.3          | 4.9             | .               | .               |
| <b>Deflators</b>                           |                          |              |              |              |              |              |                 |                 |                 |
| <b>GDP</b>                                 | <i>average 2010=100</i>  | <b>111.0</b> | <b>111.7</b> | <b>112.5</b> | <b>114.3</b> | <b>114.6</b> | <b>115.4</b>    | <b>115.7</b>    | <b>117.3</b>    |
|  | <i>growth in %</i>       | 2.6          | 2.5          | 2.5          | 2.6          | 3.3          | 3.3             | 2.9             | 2.6             |
| <b>Domestic final use</b>                  | <i>average 2010=100</i>  | <b>110.1</b> | <b>111.3</b> | <b>112.6</b> | <b>114.1</b> | <b>113.8</b> | <b>114.7</b>    | <b>115.7</b>    | <b>116.8</b>    |
|  | <i>growth in %</i>       | 2.1          | 2.5          | 3.3          | 3.0          | 3.3          | 3.1             | 2.7             | 2.4             |
| <b>Consumption of households</b>           | <i>average 2010=100</i>  | <b>109.7</b> | <b>110.7</b> | <b>112.0</b> | <b>112.1</b> | <b>112.9</b> | <b>114.0</b>    | <b>114.8</b>    | <b>114.6</b>    |
|  | <i>growth in %</i>       | 1.7          | 2.3          | 2.8          | 2.2          | 2.9          | 3.0             | 2.5             | 2.3             |
| <b>Consumption of government</b>           | <i>average 2010=100</i>  | <b>115.2</b> | <b>116.9</b> | <b>119.1</b> | <b>123.9</b> | <b>120.8</b> | <b>122.1</b>    | <b>124.3</b>    | <b>128.9</b>    |
|  | <i>growth in %</i>       | 6.5          | 5.7          | 6.5          | 4.5          | 4.9          | 4.5             | 4.3             | 4.0             |
| <b>Fixed capital formation</b>             | <i>average 2010=100</i>  | <b>106.8</b> | <b>107.8</b> | <b>108.8</b> | <b>109.8</b> | <b>109.7</b> | <b>110.4</b>    | <b>110.9</b>    | <b>111.4</b>    |
|  | <i>growth in %</i>       | -0.4         | 0.5          | 1.9          | 3.0          | 2.7          | 2.5             | 1.9             | 1.4             |
| <b>Exports of goods and services</b>       | <i>average 2010=100</i>  | <b>103.0</b> | <b>104.2</b> | <b>105.1</b> | <b>105.8</b> | <b>105.7</b> | <b>106.6</b>    | <b>107.2</b>    | <b>106.7</b>    |
|  | <i>growth in %</i>       | -4.0         | -1.8         | 1.1          | 2.5          | 2.7          | 2.3             | 2.0             | 0.8             |
| <b>Imports of goods and services</b>       | <i>average 2010=100</i>  | <b>101.3</b> | <b>103.0</b> | <b>104.8</b> | <b>104.9</b> | <b>104.0</b> | <b>105.2</b>    | <b>106.5</b>    | <b>105.4</b>    |
|  | <i>growth in %</i>       | -5.2         | -2.3         | 2.1          | 3.0          | 2.7          | 2.1             | 1.6             | 0.5             |
| <b>Terms of trade</b>                      | <i>average 2010=100</i>  | <b>101.7</b> | <b>101.1</b> | <b>100.3</b> | <b>100.9</b> | <b>101.6</b> | <b>101.4</b>    | <b>100.6</b>    | <b>101.2</b>    |
|  | <i>growth in %</i>       | 1.2          | 0.5          | -1.0         | -0.4         | 0.0          | 0.2             | 0.4             | 0.3             |

<sup>1)</sup> The contribution of increase in regulated prices and in indirect taxes to increase of December YoY consumer price inflation.

Source: CZSO, Eurostat. Calculations and forecast of the MoF.

### 3.3 Labour Market

The labour market has been exhibiting signs of overheating for several years. All available statistics show that employment growth is continuing. While the internationally comparable unemployment rate evidently bottomed out at around 2%, registered unemployment continues to fall, although the decline is slowing down. There have been more than 300,000 vacancies for over a year now; this is more than double the previous highs reported in 2008. Continued robust increases in wages and salaries reflect this situation.

According to the Labour Force Survey, **employment** grew by 0.9% YoY (*versus 0.7%*) in Q1 2019. The number of employees went up by 1.0% (*versus 0.7%*) and the number of entrepreneurs climbed by 0.3% (*as estimated*). While the number of entrepreneurs without employees dipped by 0.3%, the number of entrepreneurs with employees rose by 2.6%. Broken down by age structure, the growth was driven by the 45–49 and 50–59 brackets.

From a sectoral perspective, the biggest contributors to employment growth (business statistics, FTE) in absolute terms were the wholesale and retail trade, professional, scientific and technical activities, and sectors in which the general government is dominant (education; health care and social work activities). By contrast, there was a significant decline in the sector of administrative and support service activities (recruitment agencies), though falling numbers of workers (an aggregate of 4,000) were also reported in four other sectors.

The scarcity of workers has been evident in virtually all sectors of the economy and in almost all regions for some time now (in June, the number of vacancies surpassed the number of unemployed in 11 regions). This factor severely impedes economic growth (in April 2019, the lack of employees was singled out as the main barrier to production growth by more than a quarter of industrial enterprises and by a third of construction companies).

Considering how extremely low unemployment rate is, further increases in employment via this channel are virtually impossible. Consequently, companies and institutions are increasingly frequently recruiting people who would otherwise be economically inactive, predominantly seniors. The recruitment of foreign workers, especially from Ukraine, is continuing apace. In the medium and long term, the current labour market situation is paving the way for advances in automation and robotics and the economy's stronger focus on less labour-intensive sectors with higher value added.

Taking into account the higher than estimated growth at the beginning of the year, we raise our forecast for this year's employment growth to 0.7% (*versus 0.4%*); in 2020, we expect growth of just 0.3% (*versus 0.2%*) as a result of the aforementioned factors.

The **unemployment rate** (Labour Force Survey) was 2.0% (*versus 2.1%*) in Q1 and has, in our opinion, reached the bottom. Monthly data on seasonally adjusted unemployment (15–64), which show a marginal increase since March, seem to confirm this assertion. In our view, however, this increase is only frictional. Growth in the demand for labour should weaken in relation to the gradual slowdown of the economy and partially as a result of previous productivity enhancing investments. Labour supply, though, should grow faster than demand due to demographic and structural (rising statutory retirement age) factors. We keep the forecast for unemployment rate in 2019 unchanged at 2.2% and we expect it to rise very slightly to 2.3% (*versus 2.2%*) in 2020. A more significant rise in unemployment should be prevented by the high number of vacancies and a significant number of foreign nationals with fixed-term contracts, who may be laid off first if business were to flag. We expect unemployment to remain very low in the outlook horizon and to approach its equilibrium level only very gradually.

The year-on-year decline in the **share of unemployed persons** (Ministry of Labour and Social Affairs) is continuing to slow down, but we still assume that there is some (though very limited) room for a further reduction in registered unemployment. This can be explained, for example, by the fact that some job-seekers are engaging in non-colliding part-time employment (i.e. they still qualify to be classified as registered unemployed), which means they are probably capable of deregistration and taking on an official job. Another factor is that some people that have had writs of seizure issued against them and that are working in the informal economy may be motivated – by continuing robust wage growth and the wide range of vacancies on offer (revised legislation on seizures could also play a positive role) – to find an official job. We anticipate a decline in the share of unemployed persons to 2.8% in 2019 and 2.6% in 2020 (*unchanged in both years*).

In Q1 the **participation rate** (20–64) went up by 0.7 percentage points YoY to 81.8% (*as estimated*). Combination of the extremely high number of vacancies and surging wages has resulted in a situation where individuals who would otherwise be economically inactive participate in the labour market.

We believe there is still some room for the participation rate to grow further. The main role will be played by demographic aspects, specifically the share of age brackets with a naturally high rate of economic activity (especially those in the 40–49 category). The rise in the statutory retirement age will also have a certain effect. We expect the participation rate to average 82.5% (*versus 82.4%*) in 2019, rising to 83.2% (*versus 83.0%*) in 2020 on account of the factors outlined above.

**Wages and salaries** maintained high growth momentum in Q1, posting an increase of 7.7% (*as estimated*). Wages rose fastest in the sectors of other activities (by 11.1%) and real estate activities (by 10.7%). As expected, the earnings momentum was primarily driven by non-market sectors. Wages and salaries in public administration, defence, education, health care and social work activities went up by 9.9%. In manufacturing, there was a further slowdown in the growth rate to 6.2%. Construction recorded a greater loss of dynamism, slipping to 5.5%.

Developments in monthly data on the cash collection of social security contributions suggest that earnings momentum is slowly petering out. In Q2 2019, wages and salaries could have grown by 7.4% (*versus 7.6%*).

The tightness in the labour market is expected to ease only gradually over the course of this year, and consequently there should still be plenty of impetus for wages to grow. The earnings momentum is also being fuelled by an increase in the minimum and guaranteed wages (up by 9.4% YoY). The general government sector is likely to stay ahead of the earnings growth rate reported by market sectors thanks to a hike in salary scales (especial-

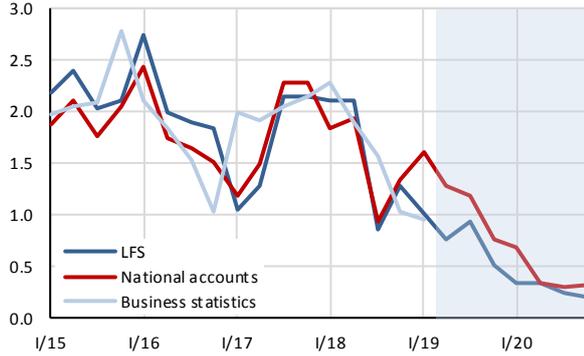
ly in education). On the other hand, we believe that, little by little, wages will slow down in industrial sectors as the demand for labour slackens. This year, wages and salaries could therefore grow by 7.4% (*versus 7.5%*).

The slowing economic output and previous investments by companies to increase labour productivity could trigger a marked slowdown in the growth of numbers of employees and their average wages next year. Consequently, wages and salaries could increase by 5.9% (*unchanged*) in 2020.

In Q1 the **average wage** (business statistics, FTE) grew by 7.4% (*versus 7.6%*); adjusted for inflation, the increase was 4.6%. The biggest contributors to the growth were manufacturing, wholesale and retail trade, and sectors dominated by the general government. Wage growth was recorded primarily in low- and medium-income professions, with the wage median also climbing by 7.4% in Q1. There may have been an increase in the average nominal wage by 7.1% (*versus 7.3%*) in Q2 2019, and the same figure is projected for the year 2019 as a whole (*versus 7.3%*). In 2020, the growth rate of the average wage could slow to 5.7% (*unchanged*).

**Graph 3.3.1: Employees in Different Statistics**

YoY growth rate in%



Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.3.2: Indicators of Unemployment**

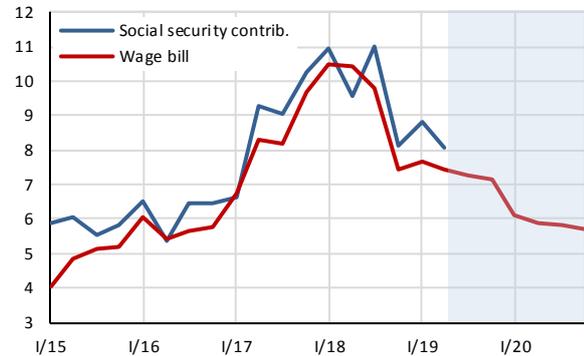
seasonally adjusted data, in%



Source: CZSO, MoLSA. Calculations and forecast of the MoF.

**Graph 3.3.3: Collection of Social Security Contributions and the Wage Bill**

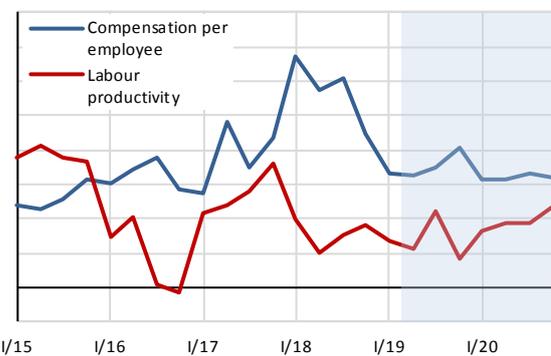
YoY growth rate in%



Source: CZSO, MoF. Calculations and forecast of the MoF.

**Graph 3.3.4: Compensation per Employee and Real Productivity of Labour**

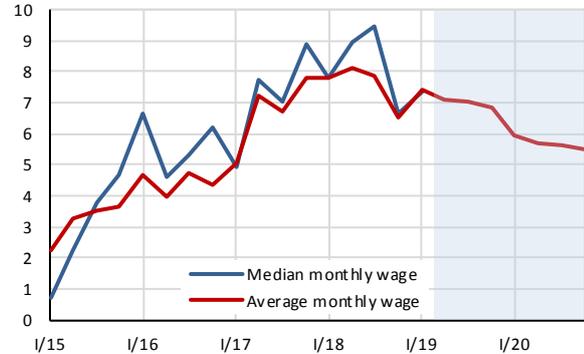
YoY growth rate in%



Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.3.5: Nominal Monthly Wage**

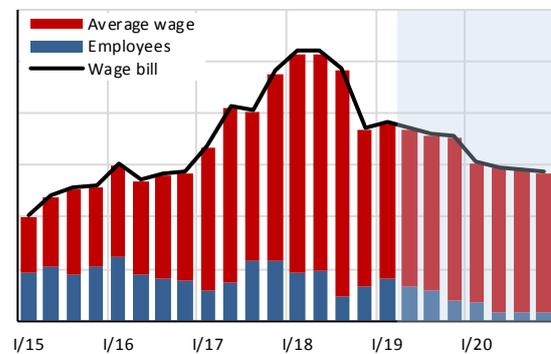
YoY growth rate in%



Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.3.6: Nominal Wage Bill**

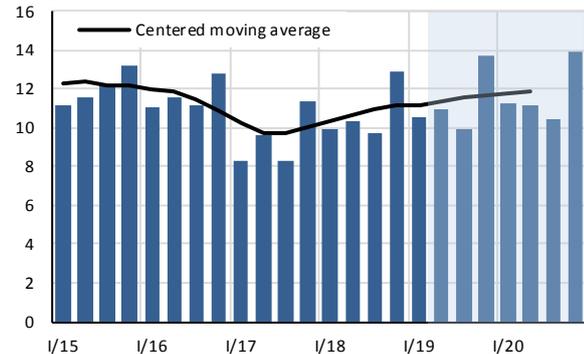
YoY growth rate in %, domestic concept of the wage bill



Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.3.7: Gross Savings Rate of Households**

in % of disposable income



Source: CZSO. Calculations and forecast of the MoF.

**Table 3.3.1: Labour Market – yearly**

|  |                             | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019         | 2020         | 2021         | 2022         |
|--|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|
|  |                             |               |               |               |               |               |               | Forecast     | Forecast     | Outlook      | Outlook      |
| <b>Labour Force Survey</b>                   |                             |               |               |               |               |               |               |              |              |              |              |
| <b>Employment</b>                            | <i>av. in thous.persons</i> | <b>4 937</b>  | <b>4 974</b>  | <b>5 042</b>  | <b>5 139</b>  | <b>5 222</b>  | <b>5 294</b>  | <b>5 333</b> | <b>5 346</b> | <b>5 352</b> | <b>5 354</b> |
|  | <i>growth in %</i>          | 1.0           | 0.8           | 1.4           | 1.9           | 1.6           | 1.4           | 0.7          | 0.3          | 0.1          | 0.0          |
| Employees                                    | <i>av. in thous.persons</i> | 4 055         | 4 079         | 4 168         | 4 257         | 4 327         | 4 396         | 4 432        | 4 445        | 4 450        | 4 452        |
|  | <i>growth in %</i>          | 1.5           | 0.6           | 2.2           | 2.1           | 1.7           | 1.6           | 0.8          | 0.3          | 0.1          | 0.0          |
| Entrepreneurs and self-employed              | <i>av. in thous.persons</i> | 882           | 895           | 874           | 882           | 894           | 897           | 901          | 902          | 902          | 902          |
|  | <i>growth in %</i>          | -1.3          | 1.5           | -2.4          | 1.0           | 1.4           | 0.4           | 0.4          | 0.1          | 0.0          | 0.0          |
| <b>Unemployment</b>                          | <i>av. in thous.persons</i> | <b>369</b>    | <b>324</b>    | <b>268</b>    | <b>211</b>    | <b>156</b>    | <b>122</b>    | <b>120</b>   | <b>126</b>   | <b>131</b>   | <b>136</b>   |
| <b>Unemployment rate</b>                     | <i>average in %</i>         | <b>7.0</b>    | <b>6.1</b>    | <b>5.1</b>    | <b>4.0</b>    | <b>2.9</b>    | <b>2.2</b>    | <b>2.2</b>   | <b>2.3</b>   | <b>2.4</b>   | <b>2.5</b>   |
| <b>Long-term unemployment<sup>1)</sup></b>   | <i>av. in thous.persons</i> | <b>163</b>    | <b>141</b>    | <b>127</b>    | <b>89</b>     | <b>54</b>     | <b>48</b>     | .            | .            | .            | .            |
| <b>Labour force</b>                          | <i>av. in thous.persons</i> | <b>5 306</b>  | <b>5 298</b>  | <b>5 310</b>  | <b>5 350</b>  | <b>5 377</b>  | <b>5 415</b>  | <b>5 453</b> | <b>5 472</b> | <b>5 484</b> | <b>5 490</b> |
|  | <i>growth in %</i>          | 0.9           | -0.2          | 0.2           | 0.8           | 0.5           | 0.7           | 0.7          | 0.4          | 0.2          | 0.1          |
| <b>Population aged 20–64</b>                 | <i>av. in thous.persons</i> | <b>6 659</b>  | <b>6 610</b>  | <b>6 566</b>  | <b>6 510</b>  | <b>6 456</b>  | <b>6 414</b>  | <b>6 385</b> | <b>6 341</b> | <b>6 300</b> | <b>6 265</b> |
|  | <i>growth in %</i>          | -0.6          | -0.7          | -0.7          | -0.9          | -0.8          | -0.7          | -0.4         | -0.7         | -0.6         | -0.6         |
| <b>Employment/Pop. 20–64</b>                 | <i>average in %</i>         | <b>74.1</b>   | <b>75.3</b>   | <b>76.8</b>   | <b>78.9</b>   | <b>80.9</b>   | <b>82.5</b>   | <b>83.5</b>  | <b>84.3</b>  | <b>85.0</b>  | <b>85.5</b>  |
| <b>Employment rate 20–64<sup>2)</sup></b>    | <i>average in %</i>         | <b>72.5</b>   | <b>73.6</b>   | <b>74.8</b>   | <b>76.7</b>   | <b>78.5</b>   | <b>79.9</b>   | <b>80.7</b>  | <b>81.3</b>  | <b>81.9</b>  | <b>82.4</b>  |
| <b>Labour force/Pop. 20–64</b>               | <i>average in %</i>         | <b>79.7</b>   | <b>80.1</b>   | <b>80.9</b>   | <b>82.2</b>   | <b>83.3</b>   | <b>84.4</b>   | <b>85.4</b>  | <b>86.3</b>  | <b>87.0</b>  | <b>87.6</b>  |
| <b>Participation rate 20–64<sup>3)</sup></b> | <i>average in %</i>         | <b>77.9</b>   | <b>78.2</b>   | <b>78.7</b>   | <b>79.9</b>   | <b>80.9</b>   | <b>81.7</b>   | <b>82.5</b>  | <b>83.2</b>  | <b>83.8</b>  | <b>84.3</b>  |
| <b>Participation rate 15–64<sup>3)</sup></b> | <i>average in %</i>         | <b>72.9</b>   | <b>73.5</b>   | <b>74.0</b>   | <b>75.0</b>   | <b>75.9</b>   | <b>76.4</b>   | <b>77.4</b>  | <b>77.9</b>  | <b>78.3</b>  | <b>78.4</b>  |
| <b>Registered unemployment</b>               |                             |               |               |               |               |               |               |              |              |              |              |
| <b>Unemployment</b>                          | <i>av. in thous.persons</i> | <b>564</b>    | <b>561</b>    | <b>479</b>    | <b>406</b>    | <b>318</b>    | <b>242</b>    | <b>210</b>   | <b>194</b>   | <b>189</b>   | <b>194</b>   |
| <b>Share of unemployed<sup>4)</sup></b>      | <i>average in %</i>         | <b>7.7</b>    | <b>7.7</b>    | <b>6.6</b>    | <b>5.6</b>    | <b>4.3</b>    | <b>3.2</b>    | <b>2.8</b>   | <b>2.6</b>   | <b>2.5</b>   | <b>2.6</b>   |
| <b>Wages and salaries</b>                    |                             |               |               |               |               |               |               |              |              |              |              |
| <b>Average monthly wage<sup>5)</sup></b>     |                             |               |               |               |               |               |               |              |              |              |              |
| Nominal                                      | CZK                         | 25 035        | 25 768        | 26 591        | 27 764        | 29 638        | 31 868        | 34 120       | 36 060       | 38 005       | 39 893       |
|  | <i>growth in %</i>          | -0.1          | 2.9           | 3.2           | 4.4           | 6.7           | 7.5           | 7.1          | 5.7          | 5.4          | 5.0          |
| Real   | CZK 2005                    | 23 447        | 24 036        | 24 730        | 25 641        | 26 735        | 28 146        | 29 378       | 30 378       | 31 456       | 32 427       |
|  | <i>growth in %</i>          | -1.5          | 2.5           | 2.9           | 3.7           | 4.3           | 5.3           | 4.4          | 3.4          | 3.5          | 3.1          |
| <b>Median monthly wage</b>                   | CZK                         | <b>21 110</b> | <b>21 786</b> | <b>22 414</b> | <b>23 692</b> | <b>25 398</b> | <b>27 476</b> | .            | .            | .            | .            |
|  | <i>growth in %</i>          | 1.4           | 3.2           | 2.9           | 5.7           | 7.2           | 8.2           | .            | .            | .            | .            |
| <b>Wage bill</b>                             | <i>growth in %</i>          | <b>0.5</b>    | <b>3.6</b>    | <b>4.8</b>    | <b>5.7</b>    | <b>8.3</b>    | <b>9.5</b>    | <b>7.4</b>   | <b>5.9</b>   | <b>5.5</b>   | <b>5.0</b>   |
| <b>Labour productivity</b>                   | <i>growth in %</i>          | <b>-0.8</b>   | <b>2.2</b>    | <b>3.8</b>    | <b>0.8</b>    | <b>2.8</b>    | <b>1.6</b>    | <b>1.4</b>   | <b>1.9</b>   | <b>2.1</b>   | <b>2.2</b>   |
| <b>Unit labour costs<sup>6)</sup></b>        | <i>growth in %</i>          | <b>0.5</b>    | <b>0.4</b>    | <b>-0.8</b>   | <b>3.1</b>    | <b>3.6</b>    | <b>6.3</b>    | <b>4.7</b>   | <b>3.5</b>   | <b>3.1</b>   | <b>2.8</b>   |
| <b>Compens. of employees / GDP</b>           | %                           | <b>40.9</b>   | <b>40.2</b>   | <b>39.6</b>   | <b>40.4</b>   | <b>41.4</b>   | <b>43.0</b>   | <b>43.7</b>  | <b>44.3</b>  | <b>44.8</b>  | <b>45.2</b>  |

<sup>1)</sup> Persons in unemployment for longer than 12 months.

<sup>2)</sup> The indicator does not include employment over 64 years.

<sup>3)</sup> The indicator does not include labour force over 64 years.

<sup>4)</sup> Share of available job seekers aged 15 to 64 years in the population of the same age.

<sup>5)</sup> Derived from full-time-equivalent employers in the entire economy.

<sup>6)</sup> Ratio of nominal compensation per employee to real productivity of labour.

Source: CZSO, Ministry of Labour and Social Affairs. Calculations and forecast of the MoF.

**Table 3.3.2: Labour Market – quarterly**

|   |                              | 2018          |               |               |               | Q1            | 2019         |              |              |
|---|------------------------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|
|   |                              | Q1            | Q2            | Q3            | Q4            |               | Q1           | Q2           | Q3           |
|   |                              |               |               |               |               |               | Estimate     | Forecast     | Forecast     |
| <b>Labour Force Survey</b>                    |                              |               |               |               |               |               |              |              |              |
| <b>Employment</b>                             | <i>av. in thous. persons</i> | <b>5 258</b>  | <b>5 289</b>  | <b>5 301</b>  | <b>5 326</b>  | <b>5 306</b>  | <b>5 327</b> | <b>5 348</b> | <b>5 351</b> |
|   | <i>YoY growth in %</i>       | 1.7           | 1.8           | 0.8           | 1.2           | 0.9           | 0.7          | 0.9          | 0.5          |
|   | <i>QoQ growth in %</i>       | 0.6           | 0.2           | 0.0           | 0.5           | 0.2           | 0.1          | 0.1          | 0.1          |
| Employees                                     | <i>av. in thous. persons</i> | 4 367         | 4 389         | 4 398         | 4 431         | 4 411         | 4 423        | 4 439        | 4 454        |
|   | <i>growth in %</i>           | 2.1           | 2.1           | 0.9           | 1.3           | 1.0           | 0.8          | 0.9          | 0.5          |
| Entrepreneurs and self-employed               | <i>av. in thous. persons</i> | 891           | 900           | 903           | 895           | 894           | 904          | 909          | 897          |
|   | <i>growth in %</i>           | -0.2          | 0.2           | 0.7           | 0.8           | 0.3           | 0.5          | 0.6          | 0.2          |
| <b>Unemployment</b>                           | <i>av. in thous. persons</i> | <b>130</b>    | <b>118</b>    | <b>127</b>    | <b>111</b>    | <b>110</b>    | <b>119</b>   | <b>125</b>   | <b>124</b>   |
| <b>Unemployment rate</b>                      | <i>average in %</i>          | <b>2.4</b>    | <b>2.2</b>    | <b>2.3</b>    | <b>2.0</b>    | <b>2.0</b>    | <b>2.2</b>   | <b>2.3</b>   | <b>2.3</b>   |
| <b>Long-term unemployment <sup>1)</sup></b>   | <i>av. in thous. persons</i> | <b>41</b>     | <b>36</b>     | <b>37</b>     | <b>35</b>     | <b>36</b>     | .            | .            | .            |
| <b>Labour force</b>                           | <i>av. in thous. persons</i> | <b>5 388</b>  | <b>5 407</b>  | <b>5 429</b>  | <b>5 437</b>  | <b>5 415</b>  | <b>5 447</b> | <b>5 474</b> | <b>5 475</b> |
|   | <i>growth in %</i>           | 0.6           | 1.0           | 0.4           | 0.9           | 0.5           | 0.7          | 0.8          | 0.7          |
| <b>Population aged 20–64</b>                  | <i>av. in thous. persons</i> | <b>6 431</b>  | <b>6 418</b>  | <b>6 407</b>  | <b>6 398</b>  | <b>6 403</b>  | <b>6 391</b> | <b>6 379</b> | <b>6 367</b> |
|   | <i>growth in %</i>           | -0.7          | -0.7          | -0.7          | -0.6          | -0.4          | -0.4         | -0.4         | -0.5         |
| <b>Employment/Pop. 20–64</b>                  | <i>average in %</i>          | <b>81.8</b>   | <b>82.4</b>   | <b>82.7</b>   | <b>83.2</b>   | <b>82.9</b>   | <b>83.4</b>  | <b>83.8</b>  | <b>84.0</b>  |
|   | <i>increase over a year</i>  | 2.0           | 2.0           | 1.2           | 1.5           | 1.1           | 1.0          | 1.1          | 0.8          |
| <b>Employment rate 20–64 <sup>2)</sup></b>    | <i>average in %</i>          | <b>79.2</b>   | <b>79.8</b>   | <b>80.1</b>   | <b>80.5</b>   | <b>80.1</b>   | <b>80.5</b>  | <b>81.0</b>  | <b>81.1</b>  |
|   | <i>increase over a year</i>  | 1.6           | 1.6           | 1.1           | 1.2           | 0.9           | 0.7          | 0.9          | 0.6          |
| <b>Labour force/Pop. 20–64</b>                | <i>average in %</i>          | <b>83.8</b>   | <b>84.3</b>   | <b>84.7</b>   | <b>85.0</b>   | <b>84.6</b>   | <b>85.2</b>  | <b>85.8</b>  | <b>86.0</b>  |
|   | <i>increase over a year</i>  | 1.1           | 1.4           | 0.9           | 1.2           | 0.8           | 1.0          | 1.1          | 1.0          |
| <b>Participation rate 20–64 <sup>3)</sup></b> | <i>average in %</i>          | <b>81.1</b>   | <b>81.6</b>   | <b>81.9</b>   | <b>82.1</b>   | <b>81.8</b>   | <b>82.3</b>  | <b>82.8</b>  | <b>83.0</b>  |
|   | <i>increase over a year</i>  | 0.7           | 1.0           | 0.8           | 0.8           | 0.7           | 0.7          | 0.9          | 0.9          |
| <b>Participation rate 15–64 <sup>3)</sup></b> | <i>average in %</i>          | <b>76.1</b>   | <b>76.4</b>   | <b>76.8</b>   | <b>77.0</b>   | <b>76.8</b>   | <b>77.2</b>  | <b>77.7</b>  | <b>77.8</b>  |
|   | <i>increase over a year</i>  | 0.6           | 0.8           | 0.6           | 0.8           | 0.7           | 0.8          | 0.8          | 0.8          |
| <b>Registered unemployment</b>                |                              |               |               |               |               |               |              |              |              |
| <b>Unemployment</b>                           | <i>av. in thous. persons</i> | <b>280.7</b>  | <b>238.7</b>  | <b>228.7</b>  | <b>219.5</b>  | <b>238.6</b>  | <b>207.3</b> | <b>202</b>   | <b>194</b>   |
| <b>Share of unemployed <sup>4)</sup></b>      | <i>average in %</i>          | <b>3.8</b>    | <b>3.1</b>    | <b>3.0</b>    | <b>2.9</b>    | <b>3.2</b>    | <b>2.7</b>   | <b>2.6</b>   | <b>2.5</b>   |
| <b>Wages and salaries</b>                     |                              |               |               |               |               |               |              |              |              |
| <b>Average monthly wage <sup>5)</sup></b>     |                              |               |               |               |               |               |              |              |              |
| Nominal                                       | CZK                          | 30 230        | 31 815        | 31 533        | 33 871        | 32 466        | 34 084       | 33 747       | 36 182       |
|   | <i>growth in %</i>           | 7.8           | 8.1           | 7.9           | 6.5           | 7.4           | 7.1          | 7.0          | 6.8          |
| Real  | CZK 2005                     | 26 910        | 28 133        | 27 725        | 29 725        | 28 147        | 29 330       | 28 974       | 31 081       |
|   | <i>growth in %</i>           | 5.9           | 5.6           | 5.3           | 4.3           | 4.6           | 4.3          | 4.5          | 4.6          |
| <b>Median monthly wage</b>                    | CZK                          | <b>25 690</b> | <b>27 205</b> | <b>27 734</b> | <b>29 274</b> | <b>27 582</b> | .            | .            | .            |
|   | <i>growth in %</i>           | 7.8           | 9.0           | 9.4           | 6.6           | 7.4           | .            | .            | .            |
| <b>Wage bill</b>                              | <i>growth in %</i>           | <b>10.5</b>   | <b>10.4</b>   | <b>9.8</b>    | <b>7.4</b>    | <b>7.7</b>    | <b>7.4</b>   | <b>7.2</b>   | <b>7.1</b>   |

<sup>1)</sup> Persons in unemployment for longer than 12 months.

<sup>2)</sup> The indicator does not include employment over 64 years.

<sup>3)</sup> The indicator does not include labour force over 64 years.

<sup>4)</sup> Share of available job seekers aged 15 to 64 years in the population of the same age.

<sup>5)</sup> Derived from full-time-equivalent employers in the entire economy.

Source: CZSO, Ministry of Labour and Social Affairs. Calculations and forecast of the MoF.

**Table 3.3.3: Income and Expenditures of Households – yearly**

|   |             | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         |
|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|   |             |              |              |              |              |              |              |              |              | Forecast     | Forecast     |
| <b>Current income</b>                           |             |              |              |              |              |              |              |              |              |              |              |
| <b>Compensation of employees</b>                | bill.CZK    | <b>1 627</b> | <b>1 669</b> | <b>1 692</b> | <b>1 760</b> | <b>1 852</b> | <b>1 964</b> | <b>2 127</b> | <b>2 322</b> | <b>2 482</b> | <b>2 631</b> |
|   | growth in % | 2.5          | 2.6          | 1.3          | 4.0          | 5.3          | 6.0          | 8.3          | 9.2          | 6.9          | 6.0          |
| <b>Gross operating surplus and mixed income</b> | bill.CZK    | <b>674</b>   | <b>654</b>   | <b>645</b>   | <b>662</b>   | <b>691</b>   | <b>711</b>   | <b>728</b>   | <b>799</b>   | <b>846</b>   | <b>867</b>   |
|   | growth in % | -1.7         | -2.9         | -1.3         | 2.6          | 4.3          | 2.9          | 2.5          | 9.7          | 5.9          | 2.4          |
| <b>Property income received</b>                 | bill.CZK    | <b>153</b>   | <b>147</b>   | <b>158</b>   | <b>166</b>   | <b>166</b>   | <b>175</b>   | <b>165</b>   | <b>172</b>   | <b>181</b>   | <b>191</b>   |
|   | growth in % | -0.6         | -4.0         | 7.8          | 5.1          | -0.4         | 5.7          | -5.8         | 3.9          | 5.6          | 5.2          |
| <b>Social benefits not-in-kind</b>              | bill.CZK    | <b>553</b>   | <b>566</b>   | <b>563</b>   | <b>576</b>   | <b>591</b>   | <b>606</b>   | <b>623</b>   | <b>655</b>   | <b>702</b>   | <b>750</b>   |
|   | growth in % | 2.1          | 2.4          | -0.6         | 2.2          | 2.6          | 2.6          | 2.8          | 5.1          | 7.3          | 6.8          |
| <b>Other current transfers received</b>         | bill.CZK    | <b>139</b>   | <b>151</b>   | <b>146</b>   | <b>160</b>   | <b>181</b>   | <b>217</b>   | <b>244</b>   | <b>280</b>   | <b>300</b>   | <b>318</b>   |
|   | growth in % | -0.5         | 8.6          | -3.1         | 9.2          | 13.3         | 19.4         | 12.8         | 14.6         | 7.1          | 6.0          |
| <b>Current expenditure</b>                      |             |              |              |              |              |              |              |              |              |              |              |
| <b>Property income paid</b>                     | bill.CZK    | <b>21</b>    | <b>15</b>    | <b>21</b>    | <b>16</b>    | <b>14</b>    | <b>14</b>    | <b>16</b>    | <b>23</b>    | <b>29</b>    | <b>32</b>    |
|   | growth in % | -8.5         | -27.2        | 40.5         | -24.3        | -10.7        | 0.2          | 8.3          | 44.4         | 28.7         | 8.7          |
| <b>Curr. taxes on income and property</b>       | bill.CZK    | <b>156</b>   | <b>158</b>   | <b>166</b>   | <b>177</b>   | <b>183</b>   | <b>203</b>   | <b>226</b>   | <b>258</b>   | <b>284</b>   | <b>304</b>   |
|   | growth in % | 8.1          | 1.6          | 4.9          | 6.9          | 3.2          | 11.1         | 11.0         | 14.4         | 10.2         | 6.9          |
| <b>Social contributions</b>                     | bill.CZK    | <b>640</b>   | <b>654</b>   | <b>670</b>   | <b>696</b>   | <b>732</b>   | <b>775</b>   | <b>836</b>   | <b>910</b>   | <b>971</b>   | <b>1021</b>  |
|   | growth in % | 3.1          | 2.3          | 2.4          | 3.8          | 5.3          | 5.8          | 7.8          | 8.9          | 6.7          | 5.1          |
| <b>Other current transfers paid</b>             | bill.CZK    | <b>145</b>   | <b>154</b>   | <b>140</b>   | <b>150</b>   | <b>168</b>   | <b>205</b>   | <b>235</b>   | <b>273</b>   | <b>293</b>   | <b>310</b>   |
|   | growth in % | 3.2          | 6.2          | -9.3         | 6.9          | 11.9         | 22.5         | 14.7         | 16.3         | 7.2          | 5.8          |
| <b>Gross disposable income</b>                  | bill.CZK    | <b>2 184</b> | <b>2 206</b> | <b>2 208</b> | <b>2 285</b> | <b>2 383</b> | <b>2 474</b> | <b>2 576</b> | <b>2 763</b> | <b>2 934</b> | <b>3 089</b> |
|   | growth in % | 0.2          | 1.0          | 0.1          | 3.5          | 4.3          | 3.8          | 4.1          | 7.3          | 6.2          | 5.3          |
| <b>Final consumption</b>                        | bill.CZK    | <b>1 952</b> | <b>1 970</b> | <b>1 997</b> | <b>2 044</b> | <b>2 125</b> | <b>2 213</b> | <b>2 361</b> | <b>2 495</b> | <b>2 634</b> | <b>2 763</b> |
|   | growth in % | 2.0          | 0.9          | 1.3          | 2.4          | 3.9          | 4.1          | 6.7          | 5.7          | 5.6          | 4.9          |
| <b>Change in share in pension funds</b>         | bill.CZK    | <b>16</b>    | <b>15</b>    | <b>35</b>    | <b>35</b>    | <b>33</b>    | <b>31</b>    | <b>32</b>    | <b>33</b>    | <b>37</b>    | <b>40</b>    |
| <b>Gross savings</b>                            | bill.CZK    | <b>248</b>   | <b>250</b>   | <b>246</b>   | <b>276</b>   | <b>291</b>   | <b>292</b>   | <b>247</b>   | <b>301</b>   | <b>337</b>   | <b>367</b>   |
| <b>Capital transfers</b>                        |             |              |              |              |              |              |              |              |              |              |              |
| (income (-) / expenditure (+))                  | bill.CZK    | <b>-25</b>   | <b>-21</b>   | <b>-13</b>   | <b>-32</b>   | <b>-12</b>   | <b>-14</b>   | <b>-11</b>   | <b>-13</b>   | <b>-20</b>   | <b>-24</b>   |
| <b>Gross capital formation</b>                  | bill.CZK    | <b>198</b>   | <b>183</b>   | <b>181</b>   | <b>195</b>   | <b>208</b>   | <b>228</b>   | <b>242</b>   | <b>245</b>   | <b>259</b>   | <b>267</b>   |
|   | growth in % | -13.9        | -7.8         | -1.3         | 8.3          | 6.6          | 9.6          | 5.9          | 1.5          | 5.5          | 3.1          |
| <b>Change in financial assets and liab.</b>     | bill.CZK    | <b>73</b>    | <b>87</b>    | <b>77</b>    | <b>110</b>   | <b>93</b>    | <b>76</b>    | <b>15</b>    | <b>73</b>    | <b>102</b>   | <b>127</b>   |
| <b>Real disposable income</b>                   | growth in % | <b>-1.5</b>  | <b>-1.2</b>  | <b>-0.8</b>  | <b>2.9</b>   | <b>4.2</b>   | <b>3.3</b>   | <b>1.7</b>   | <b>4.9</b>   | <b>3.4</b>   | <b>3.0</b>   |
| <b>Gross savings rate</b>                       | %           | <b>11.3</b>  | <b>11.3</b>  | <b>11.0</b>  | <b>11.9</b>  | <b>12.1</b>  | <b>11.6</b>  | <b>9.5</b>   | <b>10.8</b>  | <b>11.3</b>  | <b>11.7</b>  |

Source: CZSO. Calculations of the MoF.

### 3.4 External Relations

The **current account balance to GDP ratio**<sup>3</sup> was 0.2% (*versus 0.3%*) in Q1 2019, meaning that it had diminished by 0.1% of GDP QoQ.

**Export market growth**<sup>4</sup> of 4.5% (*versus 3.2%*) in Q1 2019 strongly exceeded expectations. The root cause was the extraordinarily strong growth in imports to the United Kingdom by 14.3% QoQ as the country stockpiled ahead of its then-planned date of withdrawal from the EU (29 March). Considering how strong Q1 was we expect to see export market growth accelerate this year to 4.1% (*versus 2.9%*). Next year, as the import intensity diminishes (as the effect of the robust imports to the United Kingdom ebbs way) we forecast growth of 3.4% (*versus 3.0%*).

**Export performance** posted a marked drop by 3.1% (*versus 0.8%*) in Q1 2019. The reduction in passenger car production fuelled the year-on-year deterioration in performance. Rising prices of final products may also have played a negative role in export performance. We forecast a decline in export performance by 0.8% (*versus 0.1% growth*) this year. In 2020, we expect this drop to soften to 0.4% (*versus 0.2% growth*). This reflects growing unit labour costs, the predicted appreciation of the koruna, and the scarcity of suitable workforce.

In external trade (balance of payments methodology), there has been a gradual and steady decline in the surplus on the **balance of goods** since Q1 2017. Current figures place the surplus at 3.9% of GDP (*as estimated*) in Q1 2019. Import-side factors, especially strong demand for investment goods on account of the economy's position in the business cycle, contributed to the falling balance.

Nominal volume of exports (national concept of external trade) increased for all commodity classes of importance to the Czech economy in Q1 2019. Within the most significant class in terms of volume, i.e. machinery and transport equipment (accounting for more than half of all exports of goods), exports of machinery and electronic devices were the most successful.

Prices of mineral fuels remain an important factor affecting **terms of trade** in external trade with goods. In Q1 the deficit on the fuel part of the goods balance was 3.0% of GDP (*as estimated*). Taking into account developments in crude oil prices, we expect the deficit to contract to 2.7% of GDP (*unchanged*) this year. We forecast further narrowing of the deficit to 2.4% of GDP (*versus 2.5% of GDP*) in 2020.

<sup>3</sup>All *quarterly* figures relative to GDP are reported as annual rolling totals.

<sup>4</sup> In 2018, the most significant trading partners (national concept of external trade in goods) included Germany, accounting for 31.3% of Czech exports, Slovakia (8.8%), Poland (6.3%), France (5.0%), and the United Kingdom and Austria (both 4.4%).

We estimate that the surplus on the balance of goods will start to increase and will come to 4.2% of GDP (*versus 3.8% of GDP*) this year. We expect the surplus to rise further in 2020 to 4.3% of GDP (*versus 3.8% of GDP*). The improved forecast reflects positive developments in external trade in the first two months of Q2 2019. This can be attributed to strong exports of motor vehicles (after one-off factors – problems faced by carmakers in the implementation of the new emission standard – which reduced the 2018 basis for comparison had faded), an increase in the predicted growth of main trading partners, and a slowdown in domestic (especially investment) demand. Conversely, concerns about an increase in customs barriers following the United Kingdom's withdrawal from the EU and a possible deepening of trade disputes between the United States and the EU could have a negative impact on external trade.

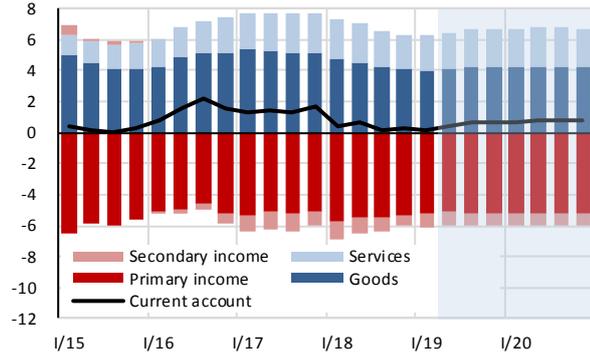
After two quarters of moderate decline, the surplus on the **balance of services** returned to growth and reached 2.3% of GDP (*versus 2.2% of GDP*) in Q1. In the year-on-year comparison, an increase in exports of transport services and the rise in income from telecommunications services contributed to the improvement in balance. Taking into account the abatement of one-off factors in the form of a surge in imports of research and consulting services in Q3 2018 and the anticipated acceleration in economic growth abroad, we expect to see a moderate rise in the balance of services surplus. In relative terms, this year's surplus should come to 2.4% of GDP (*unchanged*). Next year, we expect the balance to rise to 2.5% of GDP (*versus 2.4% of GDP*).

The lower (in a year-on-year comparison) surplus on the current account in Q1 can be attributed to the 1.0% of GDP reduction in the surplus on the balance of goods and services. Conversely, the **primary income balance** improved by 0.6% of GDP, reporting a deficit of 5.2% of GDP (*as estimated*) in Q1 2019. This improvement was due to lower outflow of income from direct investments, reflecting a reduction in the growth of profitability of foreign-owned companies. Primary income is exhibiting high volatility over time, which is associated with the cyclical development of the economy. In view of the labour market and the persistent pressure on wage growth, and hence a shift in GDP distribution from corporate net profits to the compensation of employees, we expect the profitability of foreign-controlled companies to be affected also in the future. In this light, we believe that the deficit of primary income relative to GDP will dip to 5.2% this year and will then remain at that level in 2020 (*unchanged in both years*).

In this context, we estimate that the **current account of the balance of payments** will report a surplus amounting to 0.6% of GDP (*versus 0.2% of GDP*) in 2019. We forecast a further rise in the surplus to 0.8% of GDP (*versus 0.3% of GDP*) in 2020.

### Graph 3.4.1: Current Account

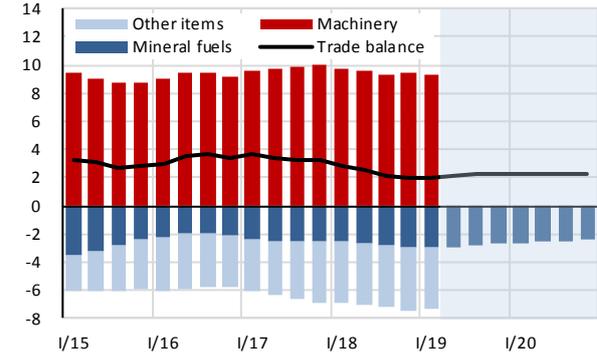
four-quarter moving totals, in % of GDP, BoP methodology



Source: CNB, CZSO. Calculations and forecast of the MoF.

### Graph 3.4.2: Balance of Trade

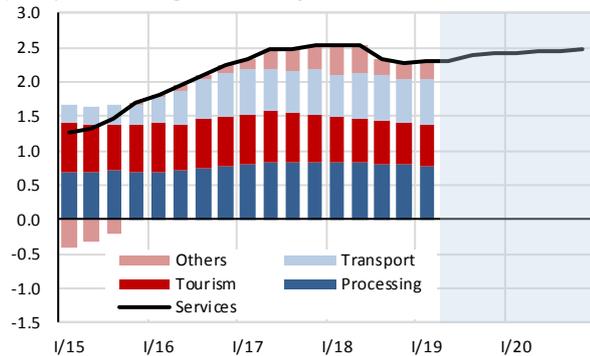
four-quarter moving totals, in % of GDP, national concept



Source: CZSO. Calculations and forecast of the MoF.

### Graph 3.4.3: Balance of Services

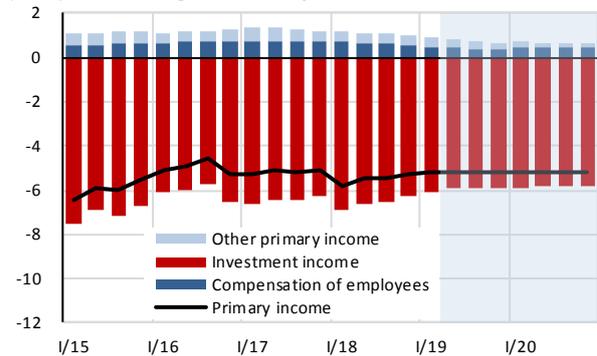
four-quarter moving totals, in % of GDP



Source: CNB, CZSO. Calculations and forecast of the MoF.

### Graph 3.4.4: Balance of Primary Income

four-quarter moving totals, in % of GDP



Source: CNB, CZSO. Calculations and forecast of the MoF.

### Graph 3.4.5: GDP and Goods Imports of Partner Countries

YoY growth rate in %, seasonally adjusted



Source: Eurostat. Calculations and forecast of the MoF.

### Graph 3.4.6: Real Exports of Goods

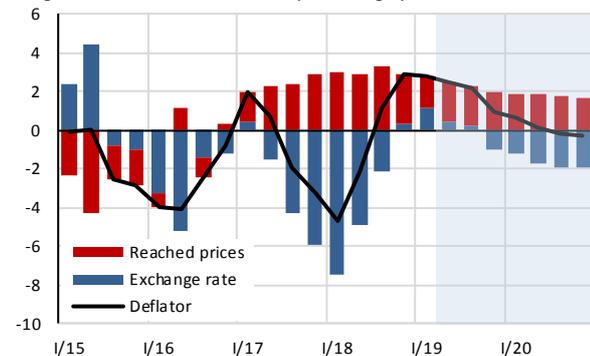
YoY growth in %, contributions in pp, seasonally adjusted



Source: CZSO, Eurostat. Calculations and forecast of the MoF.

### Graph 3.4.7: Deflator of Exports of Goods

YoY growth in %, contributions in percentage points



Source: CNB, CZSO. Calculations and forecast of the MoF.

**Table 3.4.1: Balance of Payments – yearly**  
*international investment position and gross external debt – end of period*

|  |                 | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019        | 2020        |          |
|--|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|-------------|----------|
|  |                 |               |               |               |               |               |               |               |               |             | Forecast    | Forecast |
| <b>Goods and services</b>                | <i>bill.CZK</i> | <b>157</b>    | <b>201</b>    | <b>237</b>    | <b>276</b>    | <b>266</b>    | <b>353</b>    | <b>387</b>    | <b>338</b>    | <b>373</b>  | <b>397</b>  |          |
|  | <i>% GDP</i>    | 3.9           | 5.0           | 5.8           | 6.4           | 5.8           | 7.4           | 7.7           | 6.3           | 6.6         | 6.7         |          |
| Goods                                    | <i>bill.CZK</i> | 75            | 124           | 167           | 220           | 188           | 246           | 259           | 217           | 237         | 252         |          |
|  | <i>% GDP</i>    | 1.9           | 3.0           | 4.1           | 5.1           | 4.1           | 5.2           | 5.1           | 4.1           | 4.2         | 4.3         |          |
| Services                                 | <i>bill.CZK</i> | 81            | 78            | 70            | 56            | 78            | 108           | 128           | 121           | 135         | 145         |          |
|  | <i>% GDP</i>    | 2.0           | 1.9           | 1.7           | 1.3           | 1.7           | 2.3           | 2.5           | 2.3           | 2.4         | 2.5         |          |
| <b>Primary income</b>                    | <i>bill.CZK</i> | <b>-223</b>   | <b>-238</b>   | <b>-249</b>   | <b>-261</b>   | <b>-255</b>   | <b>-252</b>   | <b>-255</b>   | <b>-282</b>   | <b>-294</b> | <b>-305</b> |          |
|  | <i>% GDP</i>    | -5.5          | -5.9          | -6.1          | -6.0          | -5.5          | -5.3          | -5.1          | -5.3          | -5.2        | -5.2        |          |
| <b>Secondary income</b>                  | <i>bill.CZK</i> | <b>-18</b>    | <b>-27</b>    | <b>-10</b>    | <b>-7</b>     | <b>0</b>      | <b>-27</b>    | <b>-48</b>    | <b>-40</b>    | <b>-45</b>  | <b>-45</b>  |          |
|  | <i>% GDP</i>    | -0.5          | -0.7          | -0.2          | -0.2          | 0.0           | -0.6          | -1.0          | -0.7          | -0.8        | -0.8        |          |
| <b>Current account</b>                   | <i>bill.CZK</i> | <b>-85</b>    | <b>-63</b>    | <b>-22</b>    | <b>8</b>      | <b>11</b>     | <b>74</b>     | <b>83</b>     | <b>16</b>     | <b>34</b>   | <b>46</b>   |          |
|  | <i>% GDP</i>    | -2.1          | -1.6          | -0.5          | 0.2           | 0.2           | 1.6           | 1.7           | 0.3           | 0.6         | 0.8         |          |
| <b>Capital account</b>                   | <i>bill.CZK</i> | <b>13</b>     | <b>53</b>     | <b>82</b>     | <b>32</b>     | <b>102</b>    | <b>54</b>     | <b>41</b>     | <b>14</b>     | <b>12</b>   | <b>20</b>   |          |
|  | <i>% GDP</i>    | 0.3           | 1.3           | 2.0           | 0.7           | 2.2           | 1.1           | 0.8           | 0.3           | 0.2         | 0.3         |          |
| <b>Net lending/borrowing</b>             | <i>bill.CZK</i> | <b>-72</b>    | <b>-10</b>    | <b>61</b>     | <b>40</b>     | <b>113</b>    | <b>128</b>    | <b>124</b>    | <b>30</b>     | <b>47</b>   | <b>67</b>   |          |
|  | <i>% GDP</i>    | -1.8          | -0.3          | 1.5           | 0.9           | 2.5           | 2.7           | 2.5           | 0.6           | 0.8         | 1.1         |          |
| <b>Financial account</b>                 | <i>bill.CZK</i> | <b>-75</b>    | <b>12</b>     | <b>68</b>     | <b>64</b>     | <b>175</b>    | <b>117</b>    | <b>121</b>    | <b>12</b>     | .           | .           |          |
| Direct investments                       | <i>bill.CZK</i> | -47           | -121          | 7             | -80           | 50            | -187          | -46           | -91           | .           | .           |          |
| Portfolio investments                    | <i>bill.CZK</i> | -6            | -55           | -93           | 90            | -164          | -170          | -268          | 23            | .           | .           |          |
| Financial derivatives                    | <i>bill.CZK</i> | 4             | -9            | -5            | -6            | -5            | 11            | -14           | -15           | .           | .           |          |
| Other investments                        | <i>bill.CZK</i> | -9            | 116           | -30           | -13           | -57           | -102          | -798          | 46            | .           | .           |          |
| Reserve assets                           | <i>bill.CZK</i> | -17           | 80            | 188           | 73            | 351           | 564           | 1 246         | 50            | .           | .           |          |
| <b>International investment position</b> | <i>bill.CZK</i> | <b>-1 823</b> | <b>-1 864</b> | <b>-1 695</b> | <b>-1 577</b> | <b>-1 513</b> | <b>-1 283</b> | <b>-1 264</b> | <b>-1 251</b> | .           | .           |          |
|  | <i>% GDP</i>    | -45.2         | -45.9         | -41.4         | -36.6         | -32.9         | -26.9         | -25.0         | -23.5         | .           | .           |          |
| <b>Gross external debt</b>               | <i>bill.CZK</i> | <b>2 312</b>  | <b>2 434</b>  | <b>2 733</b>  | <b>2 947</b>  | <b>3 119</b>  | <b>3 498</b>  | <b>4 370</b>  | <b>4 355</b>  | .           | .           |          |
|  | <i>% GDP</i>    | 57.3          | 60.0          | 66.7          | 68.3          | 67.9          | 73.4          | 86.6          | 81.7          | .           | .           |          |

Source: CNB, CZSO. Calculations and forecast of the MoF.

**Table 3.4.2: Balance of Payments – quarterly***four-quarter moving totals, international investment position and gross external debt – end of period*

|  |                          | 2018          |               |               |               | Q1            | 2019        |             |             |
|--|--------------------------|---------------|---------------|---------------|---------------|---------------|-------------|-------------|-------------|
|  |                          | Q1            | Q2            | Q3            | Q4            |               | Q1          | Q2          | Q3          |
|  |                          |               |               |               |               | Estimate      | Forecast    | Forecast    |             |
| <b>Goods and services</b>                | <i>bill.CZK</i>          | <b>374</b>    | <b>368</b>    | <b>344</b>    | <b>338</b>    | <b>338</b>    | <b>353</b>  | <b>373</b>  | <b>373</b>  |
|  | <i>% GDP</i>             | 7.3           | 7.1           | 6.6           | 6.3           | 6.3           | 6.4         | 6.7         | 6.6         |
| Goods                                    | <i>bill.CZK</i>          | 245           | 237           | 221           | 217           | 213           | 226         | 240         | 237         |
|  | <i>% GDP</i>             | 4.8           | 4.6           | 4.2           | 4.1           | 3.9           | 4.1         | 4.3         | 4.2         |
| Services                                 | <i>bill.CZK</i>          | 129           | 131           | 123           | 121           | 125           | 126         | 133         | 135         |
|  | <i>% GDP</i>             | 2.5           | 2.5           | 2.3           | 2.3           | 2.3           | 2.3         | 2.4         | 2.4         |
| <b>Primary income</b>                    | <i>bill.CZK</i>          | <b>-297</b>   | <b>-286</b>   | <b>-288</b>   | <b>-282</b>   | <b>-283</b>   | <b>-282</b> | <b>-288</b> | <b>-294</b> |
|  | <i>% GDP</i>             | -5.8          | -5.5          | -5.5          | -5.3          | -5.2          | -5.2        | -5.2        | -5.2        |
| <b>Secondary income</b>                  | <i>bill.CZK</i>          | <b>-54</b>    | <b>-51</b>    | <b>-47</b>    | <b>-40</b>    | <b>-47</b>    | <b>-46</b>  | <b>-45</b>  | <b>-45</b>  |
|  | <i>% GDP</i>             | -1.0          | -1.0          | -0.9          | -0.7          | -0.9          | -0.8        | -0.8        | -0.8        |
| <b>Current account</b>                   | <i>bill.CZK</i>          | <b>24</b>     | <b>32</b>     | <b>10</b>     | <b>16</b>     | <b>9</b>      | <b>24</b>   | <b>40</b>   | <b>34</b>   |
|  | <i>% GDP</i>             | 0.5           | 0.6           | 0.2           | 0.3           | 0.2           | 0.4         | 0.7         | 0.6         |
| <b>Capital account</b>                   | <i>bill.CZK</i>          | <b>42</b>     | <b>34</b>     | <b>31</b>     | <b>14</b>     | <b>6</b>      | <b>8</b>    | <b>10</b>   | <b>12</b>   |
|  | <i>% GDP</i>             | 0.8           | 0.7           | 0.6           | 0.3           | 0.1           | 0.2         | 0.2         | 0.2         |
| <b>Net lending/borrowing</b>             | <i>bill.CZK</i>          | <b>67</b>     | <b>66</b>     | <b>41</b>     | <b>30</b>     | <b>15</b>     | <b>33</b>   | <b>50</b>   | <b>47</b>   |
|  | <i>% GDP</i>             | 1.3           | 1.3           | 0.8           | 0.6           | 0.3           | 0.6         | 0.9         | 0.8         |
| <b>Financial account</b>                 | <i>bill.CZK</i>          | <b>91</b>     | <b>71</b>     | <b>14</b>     | <b>12</b>     | <b>-6</b>     | .           | .           | .           |
| Direct investments                       | <i>bill.CZK</i>          | 2             | -20           | -68           | -91           | -94           | .           | .           | .           |
| Portfolio investments                    | <i>bill.CZK</i>          | 36            | 178           | 23            | 23            | -76           | .           | .           | .           |
| Financial derivatives                    | <i>bill.CZK</i>          | -15           | -16           | -9            | -15           | -18           | .           | .           | .           |
| Other investments                        | <i>bill.CZK</i>          | -55           | -88           | 71            | 46            | 129           | .           | .           | .           |
| Reserve assets                           | <i>bill.CZK</i>          | 123           | 17            | -3            | 50            | 54            | .           | .           | .           |
| <b>International investment position</b> | <i>stock in bill.CZK</i> | <b>-1 234</b> | <b>-1 158</b> | <b>-1 247</b> | <b>-1 251</b> | <b>-1 123</b> | .           | .           | .           |
|  | <i>% GDP</i>             | -24.1         | -22.3         | -23.8         | -23.5         | -20.8         | .           | .           | .           |
| <b>Gross external debt</b>               | <i>stock in bill.CZK</i> | <b>4 300</b>  | <b>4 331</b>  | <b>4 339</b>  | <b>4 355</b>  | <b>4 367</b>  | .           | .           | .           |
|  | <i>% GDP</i>             | 84.0          | 83.5          | 82.6          | 81.7          | 80.8          | .           | .           | .           |

Source: CNB, CZSO. Calculations and forecast of the MoF.

**Table 3.4.3: Decomposition of Exports of Goods (National Accounts Methodology) – yearly**  
seasonally adjusted

|                                       |                     | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019       | 2020       |
|---------------------------------------|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|------------|
|                                       |                     |              |              |              |              |              |              |              |              | Forecast   | Forecast   |
| <b>GDP</b> <sup>1)</sup>              | average of 2005=100 | <b>103.4</b> | <b>104.4</b> | <b>105.3</b> | <b>107.7</b> | <b>110.0</b> | <b>112.5</b> | <b>115.7</b> | <b>118.3</b> | <b>120</b> | <b>123</b> |
|                                       | growth in %         | 3.4          | 1.0          | 0.9          | 2.2          | 2.2          | 2.3          | 2.8          | 2.3          | 1.8        | 2.0        |
| <b>Import intensity</b> <sup>2)</sup> | average of 2005=100 | <b>104.0</b> | <b>103.1</b> | <b>104.6</b> | <b>107.2</b> | <b>110.7</b> | <b>112.9</b> | <b>116.3</b> | <b>118.3</b> | <b>121</b> | <b>123</b> |
|                                       | growth in %         | 4.0          | -0.8         | 1.4          | 2.5          | 3.3          | 2.0          | 3.0          | 1.7          | 2.3        | 1.4        |
| <b>Export markets</b> <sup>3)</sup>   | average of 2005=100 | <b>107.5</b> | <b>107.7</b> | <b>110.2</b> | <b>115.5</b> | <b>121.8</b> | <b>127.1</b> | <b>134.5</b> | <b>140.0</b> | <b>146</b> | <b>151</b> |
|                                       | growth in %         | 7.5          | 0.1          | 2.3          | 4.8          | 5.5          | 4.3          | 5.8          | 4.1          | 4.1        | 3.4        |
| <b>Export performance</b>             | average of 2005=100 | <b>102.4</b> | <b>106.7</b> | <b>105.0</b> | <b>109.4</b> | <b>109.3</b> | <b>109.1</b> | <b>110.5</b> | <b>110.8</b> | <b>110</b> | <b>109</b> |
|                                       | growth in %         | 2.4          | 4.2          | -1.6         | 4.2          | -0.1         | -0.2         | 1.2          | 0.3          | -0.8       | -0.4       |
| <b>Real exports</b>                   | average of 2005=100 | <b>110.2</b> | <b>114.9</b> | <b>115.7</b> | <b>126.3</b> | <b>133.2</b> | <b>138.7</b> | <b>148.5</b> | <b>155.1</b> | <b>160</b> | <b>165</b> |
|                                       | growth in %         | 10.2         | 4.4          | 0.6          | 9.2          | 5.4          | 4.2          | 7.1          | 4.4          | 3.3        | 3.0        |
| <b>1 / NEER</b>                       | average of 2005=100 | <b>97.0</b>  | <b>101.2</b> | <b>103.0</b> | <b>108.6</b> | <b>109.9</b> | <b>106.9</b> | <b>103.9</b> | <b>100.2</b> | <b>100</b> | <b>99</b>  |
|                                       | growth in %         | -3.0         | 4.4          | 1.7          | 5.5          | 1.2          | -2.8         | -2.8         | -3.6         | 0.2        | -1.7       |
| <b>Prices on foreign markets</b>      | average of 2005=100 | <b>103.9</b> | <b>102.8</b> | <b>102.6</b> | <b>101.0</b> | <b>98.4</b>  | <b>98.3</b>  | <b>100.5</b> | <b>103.5</b> | <b>105</b> | <b>107</b> |
|                                       | growth in %         | 3.9          | -1.1         | -0.1         | -1.6         | -2.6         | -0.1         | 2.2          | 3.0          | 1.9        | 1.8        |
| <b>Exports deflator</b>               | average of 2005=100 | <b>100.8</b> | <b>104.1</b> | <b>105.7</b> | <b>109.7</b> | <b>108.2</b> | <b>105.1</b> | <b>104.4</b> | <b>103.7</b> | <b>106</b> | <b>106</b> |
|                                       | growth in %         | 0.8          | 3.2          | 1.5          | 3.8          | -1.4         | -2.8         | -0.6         | -0.7         | 2.1        | 0.1        |
| <b>Nominal exports</b>                | average of 2005=100 | <b>111.0</b> | <b>119.6</b> | <b>122.2</b> | <b>138.5</b> | <b>144.0</b> | <b>145.7</b> | <b>155.1</b> | <b>160.8</b> | <b>169</b> | <b>175</b> |
|                                       | growth in %         | 11.0         | 7.7          | 2.2          | 13.4         | 3.9          | 1.2          | 6.4          | 3.7          | 5.4        | 3.1        |

<sup>1)</sup> Weighted average of GDP of the seven most important partners – Germany, Slovakia, Austria, the United Kingdom, Poland, France and Italy.

<sup>2)</sup> Index of ratio of real imports of goods to real GDP.

<sup>3)</sup> Weighted average of imports of goods of main partners.

Source: CNB, CZSO, Eurostat. Calculations and forecast of the MoF.

**Table 3.4.4: Decomposition of Exports of Goods (National Accounts Methodology) – quarterly**  
seasonally adjusted

|                                       |                     | 2018         |              |              |              | 2019       |            |            |            |
|---------------------------------------|---------------------|--------------|--------------|--------------|--------------|------------|------------|------------|------------|
|                                       |                     | Q1           | Q2           | Q3           | Q4           | Q1         | Q2         | Q3         | Q4         |
|                                       |                     |              |              |              |              |            | Estimate   | Forecast   | Forecast   |
| <b>GDP</b> <sup>1)</sup>              | average of 2010=100 | <b>117.6</b> | <b>118.3</b> | <b>118.6</b> | <b>118.9</b> | <b>120</b> | <b>120</b> | <b>121</b> | <b>121</b> |
|                                       | growth in %         | 2.7          | 2.7          | 2.2          | 1.7          | 1.8        | 1.6        | 1.8        | 1.9        |
| <b>Import intensity</b> <sup>2)</sup> | average of 2010=100 | <b>117.3</b> | <b>117.6</b> | <b>118.5</b> | <b>119.7</b> | <b>120</b> | <b>121</b> | <b>121</b> | <b>122</b> |
|                                       | growth in %         | 1.9          | 1.4          | 1.5          | 2.1          | 2.7        | 2.6        | 2.3        | 1.8        |
| <b>Export markets</b> <sup>3)</sup>   | average of 2010=100 | <b>137.9</b> | <b>139.1</b> | <b>140.6</b> | <b>142.4</b> | <b>144</b> | <b>145</b> | <b>146</b> | <b>148</b> |
|                                       | growth in %         | 4.6          | 4.1          | 3.8          | 3.9          | 4.5        | 4.2        | 4.1        | 3.7        |
| <b>Export performance</b>             | average of 2010=100 | <b>111.3</b> | <b>111.0</b> | <b>109.9</b> | <b>110.8</b> | <b>108</b> | <b>111</b> | <b>110</b> | <b>110</b> |
|                                       | growth in %         | 0.9          | -0.9         | 0.4          | 0.8          | -3.1       | 0.1        | 0.2        | -0.6       |
| <b>Real exports</b>                   | average of 2010=100 | <b>153.5</b> | <b>154.5</b> | <b>154.6</b> | <b>157.8</b> | <b>156</b> | <b>161</b> | <b>161</b> | <b>163</b> |
|                                       | growth in %         | 5.6          | 3.2          | 4.1          | 4.7          | 1.3        | 4.3        | 4.3        | 3.1        |
| <b>1 / NEER</b>                       | average of 2010=100 | <b>99.5</b>  | <b>100.2</b> | <b>100.1</b> | <b>100.9</b> | <b>101</b> | <b>101</b> | <b>100</b> | <b>100</b> |
|                                       | growth in %         | -7.4         | -4.8         | -2.1         | 0.3          | 1.1        | 0.4        | 0.2        | -1.0       |
| <b>Prices on foreign markets</b>      | average of 2010=100 | <b>102.7</b> | <b>103.0</b> | <b>104.1</b> | <b>104.1</b> | <b>104</b> | <b>105</b> | <b>106</b> | <b>106</b> |
|                                       | growth in %         | 3.0          | 2.9          | 3.3          | 2.6          | 1.7        | 2.1        | 2.0        | 2.0        |
| <b>Exports deflator</b>               | average of 2010=100 | <b>102.2</b> | <b>103.2</b> | <b>104.2</b> | <b>105.1</b> | <b>105</b> | <b>106</b> | <b>107</b> | <b>106</b> |
|                                       | growth in %         | -4.6         | -2.1         | 1.1          | 2.9          | 2.8        | 2.5        | 2.2        | 0.9        |
| <b>Nominal exports</b>                | average of 2010=100 | <b>156.9</b> | <b>159.3</b> | <b>161.0</b> | <b>165.8</b> | <b>163</b> | <b>170</b> | <b>172</b> | <b>173</b> |
|                                       | growth in %         | 0.7          | 1.1          | 5.3          | 7.7          | 4.2        | 6.9        | 6.6        | 4.1        |

<sup>1)</sup> Weighted average of GDP of the seven most important partners – Germany, Slovakia, Austria, the United Kingdom, Poland, France and Italy.

<sup>2)</sup> Index of ratio of real imports of goods to real GDP.

<sup>3)</sup> Weighted average of imports of goods of main partners.

Source: CNB, CZSO, Eurostat. Calculations and forecast of the MoF.

## 4 Monitoring of Other Institutions' Forecasts

The Ministry of Finance of the Czech Republic monitors macroeconomic forecasts of other institutions engaged in forecasting future developments of the Czech economy. Publicly available forecasts of 16 institutions are monitored. Out of these, 11 institutions are domestic (CNB, Ministry of Labour and Social Affairs, Chamber of Commerce, domestic banks and investment companies) and the others are foreign entities (European Commission, OECD, IMF etc.). The forecasts are summarised in Table 4.1.

**Table 4.1: Summary of the Monitored Forecasts**

|                               |                        | July 2019 |      |         | July 2019    |
|-------------------------------|------------------------|-----------|------|---------|--------------|
|                               |                        | min.      | max. | average | MoF forecast |
| Gross domestic product (2019) | growth in %, const.pr. | 2.3       | 3.1  | 2.6     | 2.5          |
| Gross domestic product (2020) | growth in %, const.pr. | 2.0       | 3.0  | 2.5     | 2.3          |
| Average inflation rate (2019) | %                      | 2.1       | 2.7  | 2.5     | 2.5          |
| Average inflation rate (2020) | %                      | 1.7       | 2.2  | 2.0     | 2.2          |
| Average monthly wage (2019)   | growth in %            | 6.0       | 8.6  | 6.9     | 7.1          |
| Average monthly wage (2020)   | growth in %            | 4.9       | 7.6  | 5.5     | 5.7          |
| Current account / GDP (2019)  | %                      | -0.6      | 0.7  | 0.3     | 0.6          |
| Current account / GDP (2020)  | %                      | -0.9      | 0.9  | 0.2     | 0.8          |

Note: In the case of GDP, no difference is being made between working-day adjusted and unadjusted forecasts.

Source: Forecasts of individual institutions. Calculations of the MoF.

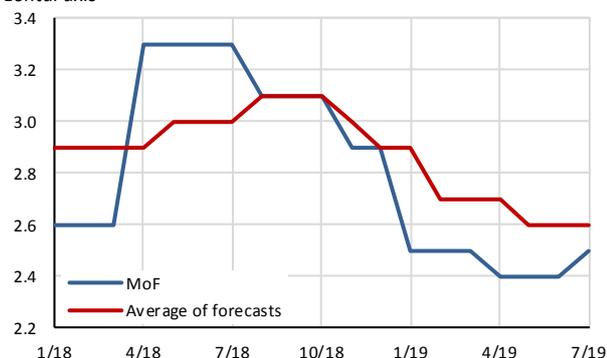
The averaged forecasts of monitored institutions indicate that real GDP should rise by 2.6% in 2019 and by 2.5% in the year after. In 2019, consumer prices should grow by 2.5% before slowing to 2.0% in 2020 in keeping with the CNB's inflation target. The dynamic growth of the average wage by 6.9% in 2019 should cool slightly to 5.5% in the following year. In 2019 and 2020, the current account of the balance of payments should post a modest surplus.

With most of the aforementioned macroeconomic quantities, the forecast by the Ministry of Finance of the Czech Republic is consistent with the average of the monitored institutions' estimates, the sole exception being the current account of the balance of payments. Ac-

ording to the Ministry of Finance, the momentum of economic activity should be slightly lower, with real GDP expected to grow by 2.5% in 2019 and then decelerate modestly to 2.3% in the following year. Next year, consumer price growth will be affected by a hike in excise duty on alcohol and tobacco products and, consequently, the inflation rate could come to 2.2%. In both years, the Ministry's estimate of the rise in the average wage is just a little higher than the average forecasts of the institutions monitored. However, in both years the Ministry anticipates a current account surplus of around 0.7% of GDP, mainly due to an increase in the surplus on the balance of goods.

**Graph 4.1: Forecasts for Real GDP Growth in 2019**

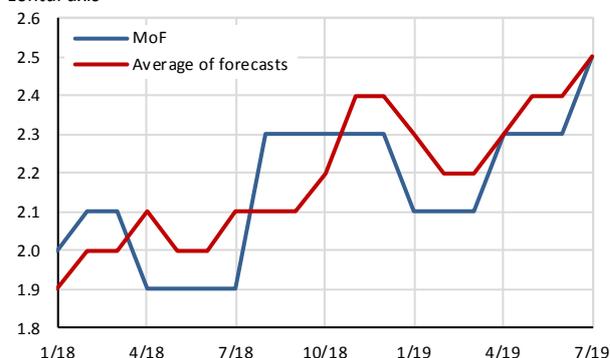
in %; the month, in which the monitoring was conducted on the horizontal axis



Source: Forecasts of individual institutions. Calculations of the MoF.

**Graph 4.2: Forecasts for Average Inflation Rate in 2019**

in %; the month, in which the monitoring was conducted on the horizontal axis



Source: Forecasts of individual institutions. Calculations of the MoF.

## 5 The role of car industry in the Czech economy

In the Czech economy, the manufacture of motor vehicles plays an important role which, in view of its share in gross value added, is more significant than in any other EU Member State. The automotive industry is subject not only to powerful cyclical fluctuations, but is also exposed to fundamental structural changes. The gradual tightening of emission standards in the EU will evidently result in profound transformation of this sector in the medium to long run. In the short term, risks are exacerbated by a no-deal Brexit, tensions in trade relations with the United States, and a sharp slowdown in the Chinese economy (or more generally a reduction in demand for cars).

In 2018, manufacture of motor vehicles<sup>5</sup> in the Czech Republic accounted for 5.2% of gross value added and 3.7% of employment (Graph 5.1). The share of motor vehicles in total exports of goods and services was 23%. Compared to 1993, this was a significant increase; more than threefold in the case of gross value added and exports and more than twofold in the case of employment. The share of the automotive industry in the economy is even higher if we take into account production in sectors supplying to the automotive industry. In this case, the share was 9.2% of gross value added and 8.3% of employment in 2018.

The automotive industry's importance for the Czech economy is also borne out by other results of input-output analysis. A decrease in final demand (both domestic and external) for motor vehicles by 1% (i.e. by CZK 12.1 billion) would result in a reduction in economy-wide output by 0.13% (CZK 16.4 billion). Gross value added in the economy as a whole would be down by 0.09% (CZK 4.1 billion), while wages and salaries would decrease by 0.08% (CZK 1.4 billion) and employment would fall by 0.07% (4,000 individuals). As for output and employment, elasticities here are the highest of all sectors; in the case of gross value added, the automotive industry has the second-highest elasticity to changes in final demand.

Within the EU, the highest share of the automotive industry in gross value added in 2016 was clearly in the

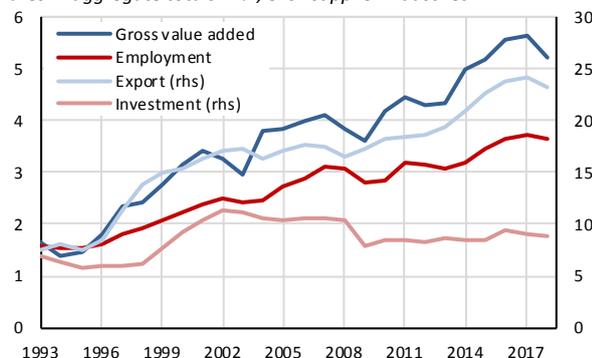
Czech Republic. The only other countries where there was a strong above-average focus on the automotive industry were Hungary, Germany and Slovakia (Graph 5.2). Czech manufacturing is very closely interconnected with those countries.

Considering the above-mentioned rise in the significance of the automotive industry to the Czech economy, it is hardly surprising that this sector has become the main driver of economic growth. Real gross value added between 1994 and 2018 went up by an average of 2.7% per year; the automotive industry's average contribution (less supply sectors) was 0.4 pp (Graph 5.3). Total real exports of goods and services increased by an average of 7.9% per year between 1994 and 2016, with motor vehicles exports contributing 2.2 pp (Graph 5.4).

In 2018, investments in motor vehicles in the Czech Republic reached CZK 121 billion, amounting to 8.9% of total gross fixed capital formation. This share increased significantly at the turn of the millennium (Graph 5.1) in connection with the completion of the privatisation process, which was associated with a strong inflow of foreign investment prior to the Czech Republic's accession into the EU, and culminated in 2002. In 2009, motor vehicle investments were hit hard by the economic recession and their share fell to around 8%; they then hovered around this level in subsequent years. In terms of dynamism, high degree of pro-cyclicality is typical for motor vehicle investments (Graph 5.6).

**Graph 5.1: The Role of Car Industry in the Economy**

shares in aggregate totals in %, excl. supplier industries

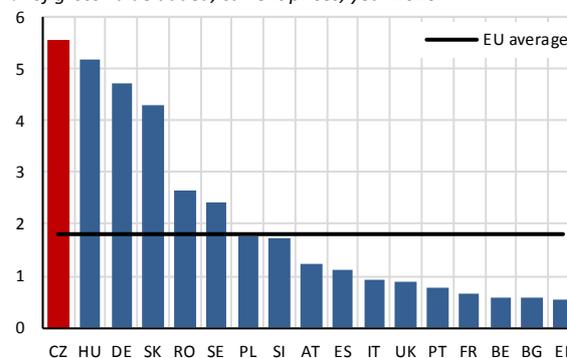


Note: In the case of exports and investments, it is the share of commodity group Motor vehicles, trailers and semi-trailers (CPA 29) in total exports and gross fixed capital formation, respectively.

Source: CZSO. Calculations of the MoF.

**Graph 5.2: Share of the Car Industry in Countries of the EU**

in % of gross value added, current prices, year 2016



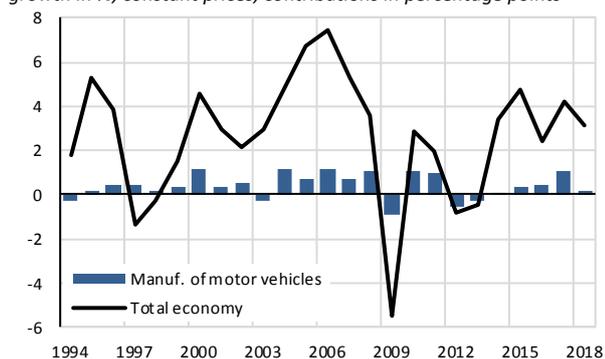
Note: The graph shows only those states of the EU where automotive industry accounts for more than 0.5% of the economy.

Source: Eurostat. Calculations of the MoF.

<sup>5</sup> Manufacture of motor vehicles, trailers and semi-trailers (CZ-NACE 29).

**Graph 5.3: Gross Value Added**

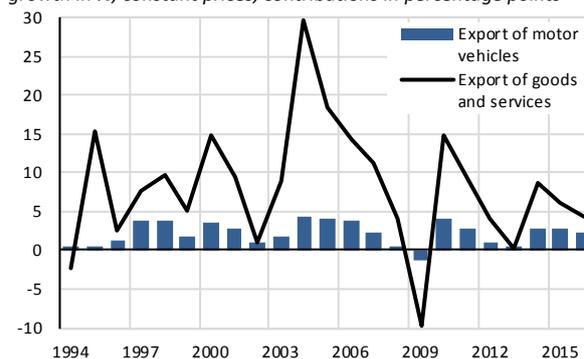
growth in %, constant prices, contributions in percentage points



Source: CZSO. Calculations of the MoF.

**Graph 5.4: Export**

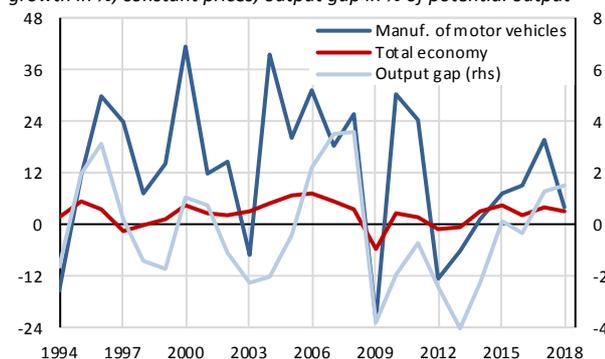
growth in %, constant prices, contributions in percentage points



Source: CZSO. Calculations of the MoF.

**Graph 5.5: Gross Value Added and the Output Gap**

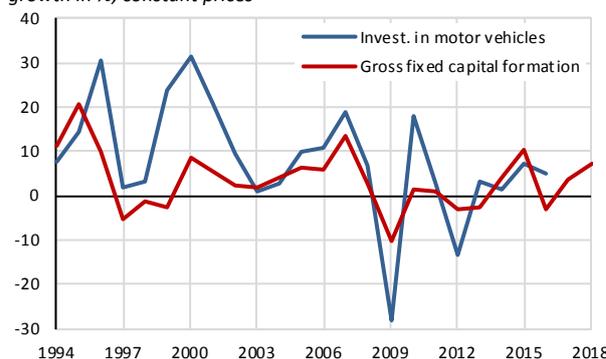
growth in %, constant prices, output gap in % of potential output



Source: CZSO. Calculations of the MoF.

**Graph 5.6: Invest. in Motor Vehicles and Total GFCF**

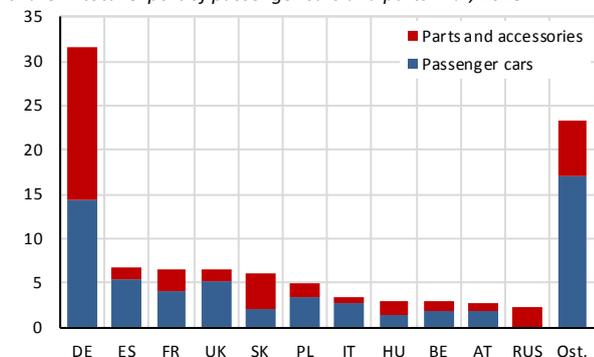
growth in %, constant prices



Source: CZSO. Calculations of the MoF.

**Graph 5.7: Export of Passenger Cars and Parts**

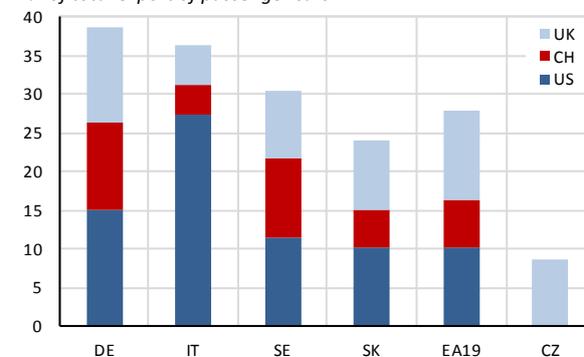
share in total export of passenger cars and parts in %, 2018



Source: CZSO (merchandise concept of foreign trade). Calculations of the MoF.

**Graph 5.8: Export of Passenger Cars to Selected States**

in % of total export of passenger cars



Source: Eurostat. Calculations of the MoF.

The automotive industry plays a key role in the Czech Republic's external trade. According to cross-border statistics on external trade, the commodity class of road vehicles (including parts and accessories, SITC 78 – Road Vehicles) contributed 20.1% to Czech exports in 2018 (Table 5.1). This ranked the Czech Republic second in the EU, with only Slovakia recording a higher share in exports (29.6%). Road vehicles and components also account for a significant proportion of the exports of Germany (16.8%), Hungary (13.9%) and the UK (10.9%).

**Table 5.1: Export of Vehicles in 2018**

shares in export of vehicles and total export of goods in %

|  | Road vehicles | Total exports |
|--|---------------|---------------|
| Passenger cars                           | 56.1          | 11.2          |
| Parts and accessories of motor vehicles  | 39.1          | 7.8           |
| Other motor vehicles, trailers and other | 4.8           | 1.1           |

Source: CZSO (merchandise concept of foreign trade). Calculations of the MoF.

More than four fifths of passenger cars exported from the Czech Republic (84.3%) are headed for EU Member States. Germany remains the main market for Czech carmakers, with every fourth exported car (24.3%) making its way to this market in 2018. Other significant trading partners are Spain (9.1%) and the United Kingdom (8.6%).

Exports of parts and accessories also account for a significant proportion of the road vehicles commodity class. They account for 7.8% of all exports. A large share of components (42.0%) is headed for Germany and countries with a strong automotive industry (Slovakia, France and Russia).

The future of the automotive industry is heavily influenced by the EU Council's regulation tightening the emission standards for passenger cars. For 2021, the emission target is 95 g of CO<sub>2</sub> per kilometre, calculated as the average for the fleet of new cars. Manufacturers who do not meet this target will have to pay a fine of EUR 95 per gram exceeding the prescribed limit per vehicle sold.<sup>6</sup> While it is possible, even with internal combustion engines, to achieve the target with current technology, the modification costs are very high and, particularly in the case of smaller and cheaper cars, financially unviable.<sup>7</sup>

In December 2018, the EU agreed on further cuts in CO<sub>2</sub> emissions of 15% by 2025 and 37.5% by 2030 for passenger cars (taking 2021 as the baseline for the calculation of this emission abatement). However, such stringent targets can be achieved only by making the gradual

transition to the manufacture of the alternative-drive vehicles,<sup>8</sup> which will require huge investment in the development of new technologies, machinery and equipment, human capital and infrastructure, despite the uncertainty surrounding which of the technologies will ultimately prevail and become the standard. A significant impact on employment can also be expected because electric vehicles will not require many of the components that are labour-intensive to produce (e.g. internal combustion engines, transmissions, cooling units, etc.). Ultimately, these changes will work their way into supply-and-demand relations and energy prices.

The domestic automotive industry is also affected by developments abroad because of its export-heavy focus. At present, major negative risks prevail. While a no-deal Brexit constitutes a risk to exports of road vehicles, other global risks in the form of higher import duties imposed on European vehicles by the US and a drop in demand for cars in China would hit Czech subcontractors in particular. Although exports from the Czech Republic to the world's major economies are marginal, we believe that Germany in particular (and perhaps Slovakia), in relation to which the Czech Republic figures as a major subcontracting exporter, are a high-risk channel. In 2018, the share of Germany's exports of passenger cars to the US, China and the UK, relative to total vehicle exports, was 38.8%. For Slovakia, the figure was 23.9%. Bearing in mind the sector's high share in gross value added and employment, any mishandling of structural challenges the automotive industry faces would have serious macroeconomic repercussions.

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<sup>6</sup> European Commission (2019): Reducing CO<sub>2</sub> emissions from passenger cars. Brussels, European Commission. [accessed on 12 July 2019]. <[https://ec.europa.eu/clima/policies/transport/vehicles/cars\\_en](https://ec.europa.eu/clima/policies/transport/vehicles/cars_en)>.

<sup>7</sup> Gibbs, Nick (2019): Europe's small cars an endangered species. Automotive News, 22 June 2019 [accessed on 12 July 2019], <<https://www.autonews.com/automakers-suppliers/europes-small-cars-endangered-species>>.

<sup>8</sup> Gibbs (2019).

