

**Ministry of Finance**  
of the Czech Republic

# **Macroeconomic Forecast of the Czech Republic**

**November 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**

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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 **10 October 2019**, the cut-off date for selected forecast assumptions was 2 October 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 (July 2019) are indicated by italics. In Chapter 1.1, annual GDP growth rates are now seasonally and working-day adjusted and as such cannot be compared to the previous forecast. 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 continues to flag, with the growth of the world economy expected to be at its weakest since the Great Recession in 2009. This has been caused primarily by increased protectionism and escalating tension in international trade relations, spawning uncertainty among businesses and consumers alike as to what the economic future holds. This significantly increases the downside risks.

Nor have the European Union's economies avoided the slowdown. Relatively strong domestic demand and the labour market situation remain positive factors, export-oriented activities less so. In Q2 2019, developments in individual member states varied – the economies of the UK, Germany and Sweden declined slightly quarter on quarter, whereas the Italian economy has long been stagnant, and the economies of the Visegrad Group countries are in good shape.

As for the United Kingdom's withdrawal from the European Union, the withdrawal date has again been postponed, this time to 31 January 2020. If, however, the British parliament approved the amended withdrawal agreement before this date, the United Kingdom could leave the EU sooner. Therefore, uncertainty that has unfavourable economic consequences prevails also in this area, magnified by the fact that early parliamentary elections will be held in the United Kingdom in December.

The Czech economy progressed along rather more positive lines than expected in Q2 2019. **Real gross domestic product**, adjusted for seasonal and calendar effects, **climbed** by 0.7% QoQ and 2.8% YoY.

**Household consumption** went up by 2.6% on the back of the still high growth momentum of wages, salaries and social benefits. Consumption of the general government sector increased by 3.4%, underpinned by rising employment and intermediate consumption.

**Fixed capital investment** growth slowed to 0.2%, mainly because of a downturn in investment by private firms. The momentum of general government investment remained high at roughly 10%. In the breakdown by type of expenditure, investment in housing construction and intellectual property products rose, while investment in vehicles and machinery and equipment declined.

On the other hand, the highly positive contribution of **foreign trade** came as a welcome surprise. On the export side there was a positive base effect in exports of cars, and the growth in imports was inhibited by slowing domestic demand, primarily in relation to highly import-intensive investment.

Economic developments in the first half of 2019 confirmed the disconnection between “hard” data and business cycle indicators. Statistical data covering areas such as construction, external trade and retail sales continue to post decent results. By contrast, the composite confidence indicator, clearly heavily influenced by mounting risks, has been hinting since October 2018 that economic activity will slow down significantly. Though this has yet to happen, the increasing risks urge caution. **The economy could grow by 2.5% in 2019**, and then – reflecting the momentum of domestic demand – by **2.0% in 2020**.

Economic growth should continue to be driven by consumption of households that should reflect the ongoing strength of wage momentum in combination with extremely low unemployment rate and a major hike in pensions. Fixed capital investment and general govern-

ment sector consumption should also make a moderate contribution to growth. Foreign trade is also on track to make a somewhat positive contribution.

Since the beginning of 2017, the year-on-year growth in **consumer prices** has mostly hovered in the upper half of the tolerance band of the Czech National Bank's 2% inflation target. Bar the odd exception, it should remain there also in 2019 and 2020, when pro-inflationary effects of growing unit labour costs and the positive output gap are expected to be compounded by administrative measures. We revise our forecast for the average **inflation rate** up to 2.8% in 2019 and 2.6% in 2020.

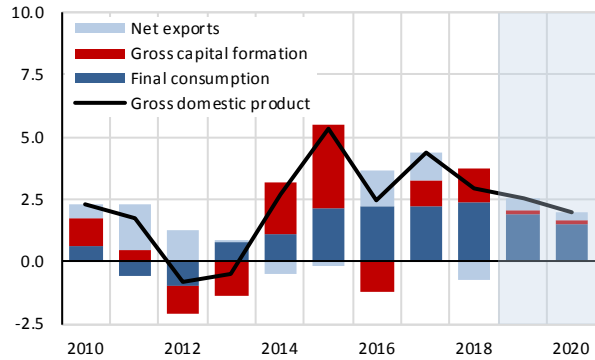
In Q2 2019, **employment** went up by just 0.1%. The scarcity of labour is the primary barrier to further extensive growth in production. We feel that there is no further room for another drop in unemployment. Growth in labour demand should weaken as the economy slows down. By contrast, labour supply – driven by demographic and structural factors – should increase faster than demand. Consequently, the **unemployment rate** could reach 2.0% in 2019 and 2.2% in the following year.

Within the **current account of the balance of payments** one can expect the surplus on the balance of goods to increase in 2019 due to a one-time slump in motor vehicles exports in mid-2018, which sharply lowered the base for comparison. In 2020, the forecast investment momentum should pave the way for a slowdown in import growth. Other components of the current account should more or less stagnate or improve marginally. As a result, the surplus on the current account should amount to 0.9% of GDP in 2019 and 1.4% of GDP in 2020.

The growth of the Czech economy is also reflected in the **general government balance**, which should end up with a **surplus equivalent to 0.3% of GDP in 2019**. In 2020, we expect a **surplus of 0.1% of GDP**, resulting from the slowing pace of revenue and increased spending, especially in the social area. The relative level of general government debt is forecasted to decline further to 30.6% of GDP by the end of 2020.

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

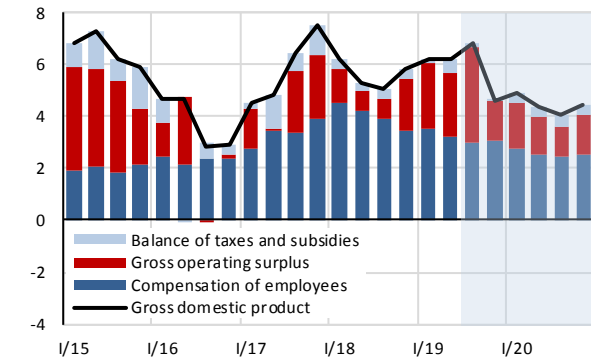
growth rate of real GDP in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

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

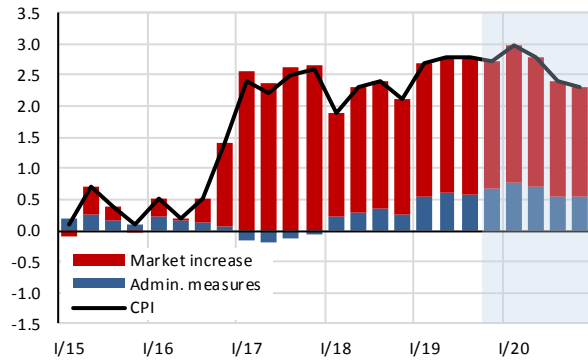
YoY growth of nominal GDP in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

### The rise in inflation to 3% should be only temporary

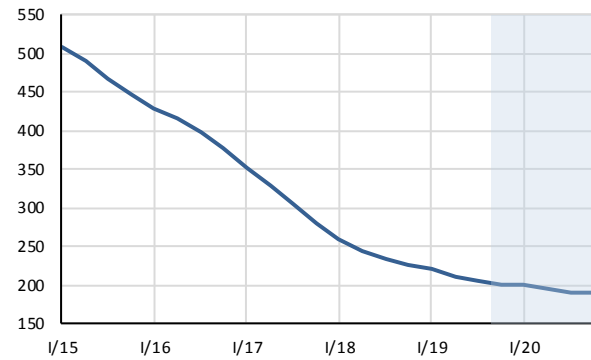
YoY growth rate of CPI in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

### Unemployment should decline only moderately

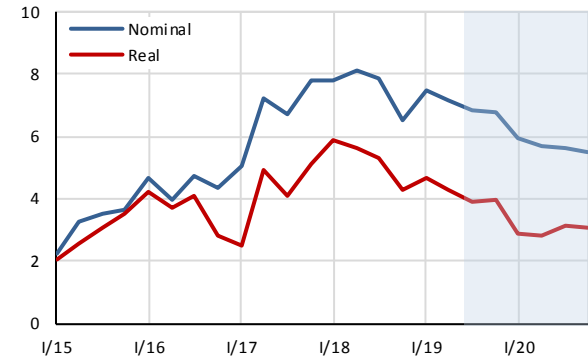
registered unemployment, in thous. of persons, seasonally adjusted



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

### Growth of wages should gradually decelerate

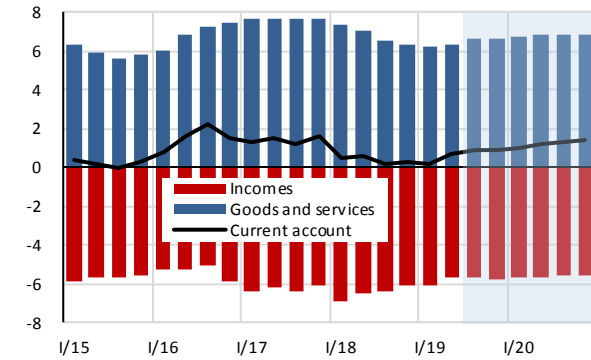
average gross monthly wage, YoY growth rate, in %



Source: CZSO. Calculations and forecast of the MoF.

### Current account should remain in surplus

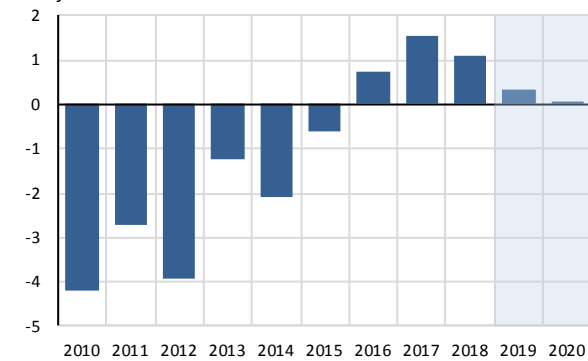
in % of GDP (yearly moving sums)



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

### General government balance should stay positive

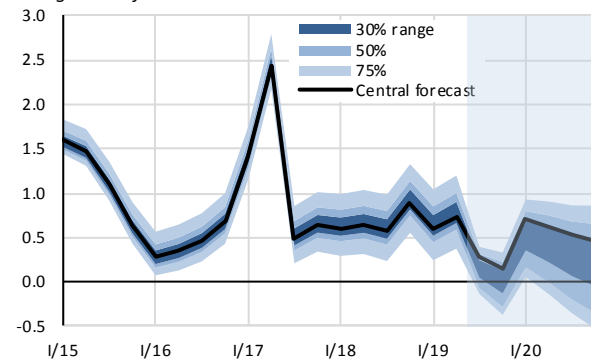
in % of GDP



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.

**Table: Main Macroeconomic Indicators**

		2014	2015	2016	2017	2018	2019	2020	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>5 645</b>	<b>5 894</b>	5 627	5 880
	<i>nominal growth in %</i>	5.3	6.5	3.7	5.9	5.6	5.9	4.4	5.6	4.5
<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>2.0</b>	2.5	2.3
Consumption of households	<i>real growth in %</i>	1.8	3.7	3.6	4.3	3.4	2.7	2.4	2.8	2.6
Consumption of government	<i>real growth in %</i>	1.1	1.9	2.7	1.3	3.9	3.0	1.8	2.4	1.9
Gross fixed capital formation	<i>real growth in %</i>	3.9	10.2	-3.1	3.7	7.2	0.9	0.7	2.5	2.4
Contribution of net exports	<i>pp</i>	-0.5	-0.2	1.4	1.1	-0.8	0.4	0.3	0.4	0.2
Contrib. of change in inventories	<i>pp</i>	1.1	0.8	-0.4	0.1	-0.4	0.0	0.0	-0.3	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>3.3</b>	<b>2.4</b>	3.0	2.1
<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>2.8</b>	<b>2.6</b>	2.5	2.2
<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>0.3</b>	<b>0.1</b>	0.7	0.3
<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>2.0</b>	<b>2.2</b>	2.2	2.3
<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>	7.4	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>0.9</b>	<b>1.4</b>	0.6	0.8
<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>1.1</b>	<b>0.3</b>	<b>0.1</b>	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>25.7</b>	<b>25.5</b>	25.6	25.2
<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>1.5</b>	<b>1.2</b>	2.0	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>59</b>	64	60
<b>GDP in the euro area</b>	<i>real growth in %</i>	<b>1.4</b>	<b>2.0</b>	<b>1.9</b>	<b>2.7</b>	<b>1.9</b>	<b>1.0</b>	<b>0.7</b>	.	.

Source: CNB, CZSO, Eurostat, U. S. Energy Information Administration. 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**.

Despite another postponement in the date of the **United Kingdom's withdrawal from the European Union**, this time to 31 January 2020, there is still no guarantee that amended withdrawal agreement will be approved by this date. Early parliamentary elections that will be held in the United Kingdom in December add to the uncertainty. All scenarios (Brexit with or without a deal, another postponement of the withdrawal date or even cancellation of Brexit) thus remain a possibility. In any case the ongoing uncertainty is a deeply negative factor for the Czech economy. The Macroeconomic Forecast assumes that the United Kingdom will leave the EU with a withdrawal agreement.

Another significant external risk is the **tension in trade relations** between the United States and China. However, protectionist measures could also have a marked effect on mutual trade between the US and the European Union (see Section 5). If existing import duties were put up by the US, or if new ones were imposed on additional types of goods, harsh repercussions for external trade and associated benefits would be accompanied by a further decline in confidence among economic entities. Higher uncertainty could then lead to shelving of certain investment decisions. The prices of imported goods and the purchasing power of consumers would 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 relocation of production to other countries. While the Czech Republic trades predominantly with EU member states, its indirect exposure to certain third countries is hardly negligible. In terms of its consequences for the Czech economy, we consider the impact of such indirect exposure to be greater than the direct effect.

**Sentiment indicators** in a string of euro area countries, especially in industry, also pose a risk to the Czech economy. Germany acts 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, potential escalation of problems in the Italian banking sector or a sharp growth slowdown in China could weigh on the Czech economy. Uncertainty in the global economy continues to be fuelled by instability of certain emerging economies (Turkey, Argentina and Brazil) and by geopolitical tensions in the Middle East.

In some areas – most obviously in the labour and real estate markets – the Czech economy is showing palpable signs of overheating. With regard to **cyclical trends**, if some of the aforementioned risks materialised, the economy could enter a downward stage of the business cycle in the forecast horizon. 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, the labour market imbalances create strong pressure on wage growth, which then raises 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 creates an impetus to focus on producing goods and services with higher value added.

Cyclical developments of the economy, combined with low interest rates, led to higher momentum of mortgage lending. This, together with factors limiting housing supply (some of which are specific to Prague), has contributed to a surge in offering prices of flats. 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 standards 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, 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.

# 1 Forecast Assumptions

## 1.1 External Environment

The GDP growth rates for individual years, as presented in the text and in Table 1.1.1, now relate to seasonally and calendar adjusted data and are thus incomparable with the previous forecast.

Global economic growth is slowing in an environment of increasing international trade barriers and spiralling uncertainties.

In the **United States**, GDP growth slowed to 0.5% QoQ in Q2 2019 (*as estimated*). While the import momentum had a neutral effect, the slowdown in growth was driven by a downturn in exports of goods and services and a decline in inventories. Conversely, household consumption expenditures, growing at their fastest rate since Q4 2017, made a solid contribution. Following the government shutdown at the start of the year, general government consumption also had a positive impact.

In response to slackening global economic growth and trade disputes with China, the Fed lowered interest rates to the target band of 1.75-2.00% at its September meeting. In the case of greater uncertainty associated with weaker inflationary pressures, it stands ready to support economic growth by easing monetary policy further.

Manufacturing output fell by 0.4% YoY in August, with leading indicators showing no signs of any significant improvement in the short term. The CEO sentiment plunged deeper than expected into the contraction band, indicating a steep decline in export orders. The escalation of the trade dispute with China remains the dominant risk.

The labour market situation remains the main source of optimism. Despite the slowing momentum of new job creation, the unemployment rate fell further to 3.5%, the lowest level in 50 years, with a slight increase in participation in September. The labour shortage is also reflected in the average wage growth of around 3%. Despite fluctuations, consumer confidence has remained high from the long run perspective and consumer expectations remain optimistic. Positive sentiment is reflected in accelerating retail sales. In the forecast horizon, growth in domestic demand should more than make up for the ebbing fiscal stimulus and the negative impacts of trade tensions. We expect economic growth to slow to 2.2% in 2019 and then to 2.0% in 2020.

**China's** GDP growth picked up slightly to 1.6% QoQ in Q2 2019 (*as estimated*). The growth rate of 6.2% YoY has been the lowest in the last 27 years, but it is still within the Chinese government's target band for 2019 (6.0% to 6.5%). Economic growth was driven by consumption of households and of the government sector. However, the contribution made by gross capital formation increased considerably. Rebalancing the economy towards a higher share of domestic consumption could have negative re-

percussions for global economic growth by lowering imports.

The short-term effects of escalating trade disputes should be dampened by lowering the value added tax rate and increasing the quota for local government borrowing. This fiscal impulse is estimated in the range of 1-3% of GDP. Increased uncertainties and trade barriers should inhibit economic growth slightly, taking it to 6.1% in 2019 and then to 5.8% in the following year.

In Q2 2019, the quarter-on-quarter GDP growth slowed to 0.2% (*versus 0.3%*) in the **European Union**, just as it did in the EA19 (*as forecast*). Apart from the persistently positive contribution made by household and general government consumption, developments in the EU28 were heavily influenced by one-off factors. Stockpiling by British firms and households in Q1 2019 in anticipation of the originally expected date for the United Kingdom to withdraw from the EU (29 March) saw foreign trade make a positive contribution in Q2 due to the base effect. However, this was more than offset by the negative contribution made by the change in inventories. In the face of heightened uncertainty and trade tension, gross fixed capital formation recorded only a slight increase. In addition, structural problems persist in many countries as they grapple with the slow pace of labour productivity growth and high government and private debt.

The euro area inflation rate has fallen to 1.0% in recent months. The unemployment rate in the EU28 dipped to 6.2% in August and is essentially stagnant for most EU countries. However, considerable differences – predominantly structural in nature – continue to exist between countries.

In September, the European Central Bank decided to boost the economy by cutting its base deposit rate to -0.50% (part of commercial banks' reserves will now be excluded from the negative rate). In addition, from 1 November it will resume its EUR 20 billion asset purchase programme, which should end just before the future start of key interest rate hikes.

Leading indicators in the euro area have continued their downtrend since early 2018. Business sentiment in September was at its lowest point in six years, pointing to a decline in economic output. The purchasing managers' index in manufacturing suggests that there has been an unmistakable drop in production and new orders, a situation compounded by heightened trade tension and uncertainty about the direction being taken by the auto-

motive sector. The purchasing managers' index in services indicates a slight improvement. Conversely, consumer expectations about the overall economic situation are deteriorating.

With world trade slowing and uncertainties persisting, we expect weak momentum in private investment this year. However, the Brexit situation could be clarified at the start of 2020, which would support investment activity. The contribution of foreign trade to economic growth could gradually increase over the forecast horizon. The main driver of growth next year should continue to be household consumption, underpinned by generally low unemployment rate and growth in real disposable income. Modestly expansionary fiscal policy should have a positive effect. Economic growth in the EU28 could come to 1.3% in 2019 and 0.9% in 2020.

The **German** economy recorded a quarter-on-quarter decline of 0.1% (*versus growth of 0.2%*) in Q2 2019. The positive effect of the change in inventories was outweighed by a negative contribution of foreign trade. The contributions of both household consumption and gross fixed capital formation were virtually neutral.

After climbing to their multi-year highs in 2017 and 2018, leading indicators are experiencing a sharp correction. The negative development reflects increasing barriers to international trade and uncertainty surrounding the UK's exit from the EU. The manufacturing purchasing managers' index continues to decline. In September, it stood at its lowest level since June 2009. Alongside the volume of output, the rate of decline is particularly striking in the case of new orders. Employment in the sector has been slipping for seven straight months. Many companies are seeing orders cancelled or cut (mainly from abroad) due to uncertainties about what the future will bring. The situation is worst in capital goods, though a fall was also recorded in consumer goods, which suggests that other sectors of the economy are also starting to feel the pinch. Business confidence measured by the Ifo indicator is close to its lowest levels since November 2012. Business activity in services is clearly slackening. This is reflected in the slowing momentum of retail sales, although the number of employees in this sector continues to grow. New export orders suffered their steepest decline in five years and the services purchasing managers' index came close to contraction in September. Consumer confidence has stabilised in recent months, but pessimistic expectations remain.

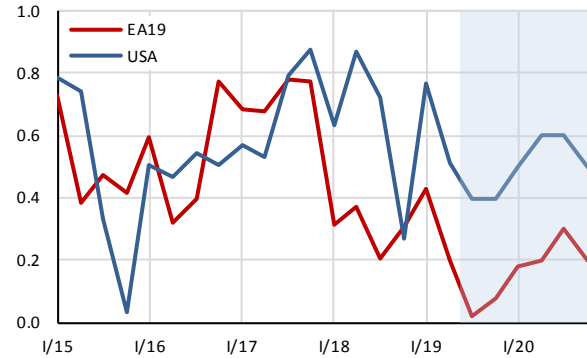
In August, the unemployment rate stagnated at 3.1% for the fourth month in a row. The labour shortage and low inflation rate are reflected in real wage growth. Considering the labour market's inertia and its delayed reaction to business performance, consumer demand could boost economic growth this year. In addition to external risks, there is considerable uncertainty about the situation in the automotive industry, which has been knocked by emission regulations and weakening demand in China. Another significant risk is that the US is contemplating the introduction of tariffs on cars. With the numbers of new orders plunging across the economy, accompanied by converging development in services and industry, economic growth could be inhibited next year. In the light of the factors outlined above, we forecast that economic growth will slow to 0.5% in 2019 and will remain at that level in 2020.

The **Slovak** economy's growth slowed to 0.5% QoQ (*versus 0.8%*) in Q2 2019. The slowdown was driven solely by the external trade balance, which suffered on account of its strong focus on the automotive industry. The household consumption growth rate picked up little speed as it was hampered by accelerating consumer prices and the highest savings rate since 2001.

The shortage of skilled workers in the labour market is reflected in strong earnings growth. A one-off impulse was the tax concession granted for the "thirteenth salaries" that had been paid in Q2 2019. This was one of the reasons why the average nominal wage increased by 9.7%. In August, the unemployment rate fell further to 5.5%, with demand for labour shifting from industry to services and construction. However, wage momentum should gradually decelerate as a result of the expected slowdown in external demand. By contrast, administrative measures to reduce taxes and increase the parental allowance (estimated at 0.5% of GDP) will boost households' disposable income and encourage their consumption next year. Corporate investments are being put off by the heightened uncertainty. However, this gap could be filled by higher government investment owing to accelerating utilisation of European Structural and Investment Funds as the end of the programming period approaches. The gradual start-up of production at the Jaguar Land Rover plant could prompt a moderate recovery in exports next year. Economic growth could slow to 2.4% in 2019 and further to 2.2% in the following year.

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

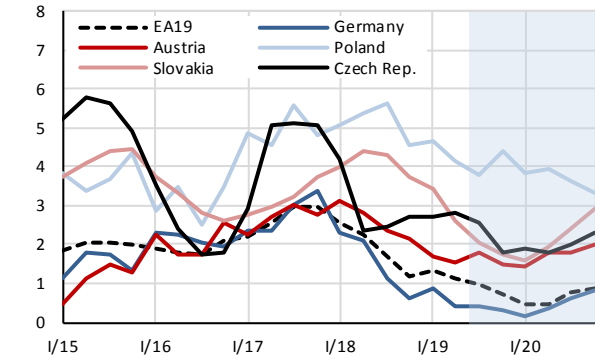
QoQ growth rate of real GDP in%, seasonally adjusted



Source: Eurostat. Calculations and forecast of the MoF.

**Graph 1.1.2: Real Gross Domestic Product**

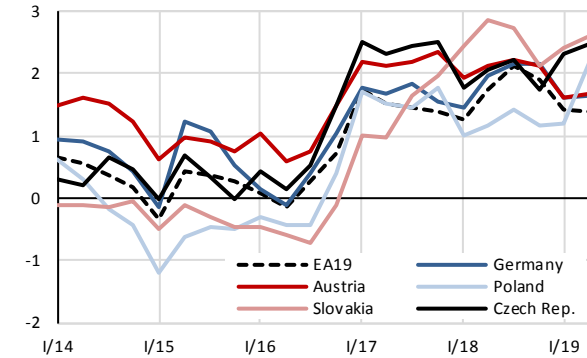
YoY growth in %, seasonally adjusted



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

**Graph 1.1.3: HICP**

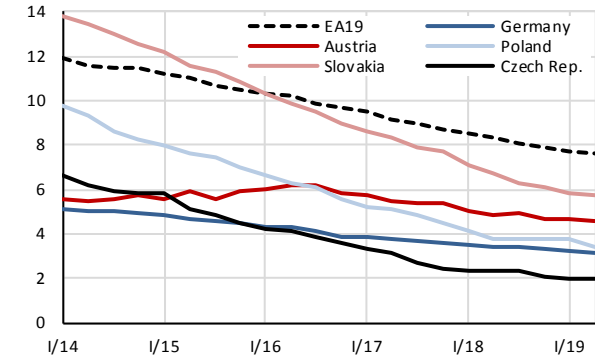
quarterly averages, YoY growth in %



Source: Eurostat. Calculations of the MoF.

**Graph 1.1.4: Unemployment Rate**

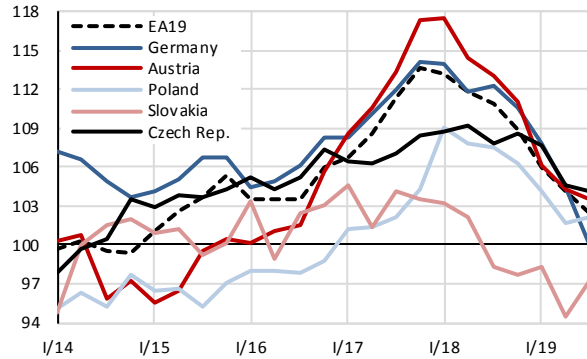
in %, LFS methodology, seasonally adjusted



Source: Eurostat.

**Graph 1.1.5: Economic Sentiment Indicator**

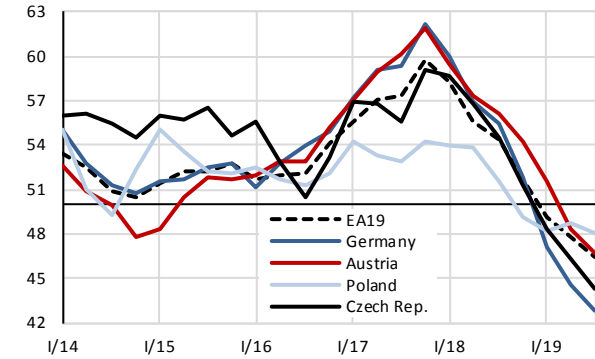
quarterly averages, long-run average = 100



Source: Eurostat. Calculations of the MoF.

**Graph 1.1.6: Purchasing Managers' Index**

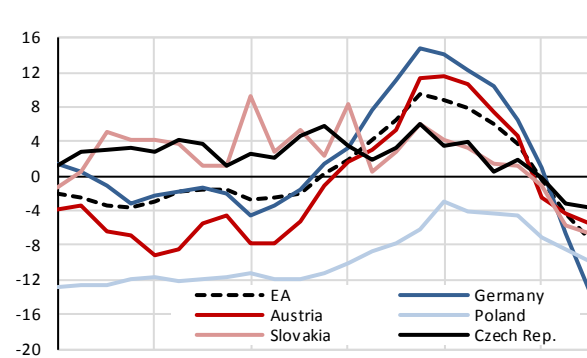
manufacturing, quarterly averages



Source: Markit. Calculations of the MoF.

**Graph 1.1.7: Business Tendency in Manufacturing**

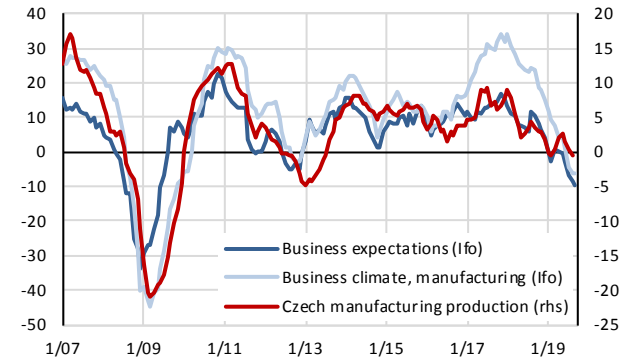
quarterly averages



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 %, seasonally adjusted data*

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
									Forecast	Forecast
<b>World</b>	<b>4.3</b>	<b>3.5</b>	<b>3.5</b>	<b>3.6</b>	<b>3.4</b>	<b>3.4</b>	<b>3.8</b>	<b>3.6</b>	<b>3.0</b>	<b>3.1</b>
<b>USA</b>	<b>1.6</b>	<b>2.2</b>	<b>1.8</b>	<b>2.5</b>	<b>2.9</b>	<b>1.6</b>	<b>2.4</b>	<b>2.9</b>	<b>2.2</b>	<b>2.0</b>
<b>China</b>	<b>9.5</b>	<b>7.9</b>	<b>7.8</b>	<b>7.3</b>	<b>6.9</b>	<b>6.7</b>	<b>6.8</b>	<b>6.6</b>	<b>6.1</b>	<b>5.8</b>
<b>EU28</b>	<b>1.8</b>	<b>-0.4</b>	<b>0.3</b>	<b>1.8</b>	<b>2.2</b>	<b>2.0</b>	<b>2.7</b>	<b>2.0</b>	<b>1.3</b>	<b>0.9</b>
<b>EA19</b>	<b>1.7</b>	<b>-0.8</b>	<b>-0.2</b>	<b>1.4</b>	<b>2.0</b>	<b>1.9</b>	<b>2.7</b>	<b>1.9</b>	<b>1.0</b>	<b>0.7</b>
<b>Germany</b>	<b>4.0</b>	<b>0.6</b>	<b>0.5</b>	<b>2.2</b>	<b>1.5</b>	<b>2.1</b>	<b>2.8</b>	<b>1.5</b>	<b>0.5</b>	<b>0.5</b>
<b>France</b>	<b>2.2</b>	<b>0.4</b>	<b>0.6</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>2.4</b>	<b>1.7</b>	<b>1.3</b>	<b>1.1</b>
<b>Italy</b>	<b>0.7</b>	<b>-2.9</b>	<b>-1.7</b>	<b>0.2</b>	<b>0.8</b>	<b>1.2</b>	<b>1.8</b>	<b>0.7</b>	<b>0.0</b>	<b>0.3</b>
<b>United Kingdom</b>	<b>1.6</b>	<b>1.4</b>	<b>2.0</b>	<b>2.9</b>	<b>2.3</b>	<b>1.8</b>	<b>1.8</b>	<b>1.4</b>	<b>1.1</b>	<b>0.7</b>
<b>Austria</b>	<b>3.1</b>	<b>0.6</b>	<b>0.0</b>	<b>0.8</b>	<b>1.1</b>	<b>2.1</b>	<b>2.7</b>	<b>2.6</b>	<b>1.6</b>	<b>1.8</b>
<b>Hungary</b>	<b>1.7</b>	<b>-1.5</b>	<b>2.2</b>	<b>4.1</b>	<b>3.5</b>	<b>2.2</b>	<b>4.4</b>	<b>5.0</b>	<b>4.6</b>	<b>3.1</b>
<b>Poland</b>	<b>5.0</b>	<b>1.7</b>	<b>1.3</b>	<b>3.3</b>	<b>3.8</b>	<b>3.1</b>	<b>4.9</b>	<b>5.2</b>	<b>4.2</b>	<b>3.7</b>
<b>Slovakia</b>	<b>2.8</b>	<b>1.7</b>	<b>1.5</b>	<b>2.8</b>	<b>4.2</b>	<b>3.1</b>	<b>3.2</b>	<b>4.1</b>	<b>2.4</b>	<b>2.2</b>
<b>Czech Republic</b>	<b>1.8</b>	<b>-0.7</b>	<b>-0.5</b>	<b>2.7</b>	<b>5.4</b>	<b>2.4</b>	<b>4.5</b>	<b>2.9</b>	<b>2.5</b>	<b>2.0</b>

*Note: Data are also adjusted for calendar effects (except for Slovakia).**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				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast	
<b>USA</b>	QoQ	<b>0.6</b>	<b>0.9</b>	<b>0.7</b>	<b>0.3</b>	<b>0.8</b>	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>
	YoY	2.9	3.2	3.1	2.5	2.7	2.3	2.0	2.1
<b>China</b>	QoQ	<b>1.5</b>	<b>1.7</b>	<b>1.6</b>	<b>1.5</b>	<b>1.4</b>	<b>1.6</b>	<b>1.3</b>	<b>1.5</b>
	YoY	6.8	6.7	6.5	6.4	6.4	6.2	5.9	5.9
<b>EU28</b>	QoQ	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>
	YoY	2.5	2.3	1.9	1.5	1.6	1.4	1.1	0.9
<b>EA19</b>	QoQ	<b>0.3</b>	<b>0.4</b>	<b>0.2</b>	<b>0.3</b>	<b>0.4</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>
	YoY	2.6	2.3	1.7	1.2	1.3	1.2	1.0	0.7
<b>Germany</b>	QoQ	<b>0.1</b>	<b>0.4</b>	<b>-0.1</b>	<b>0.2</b>	<b>0.4</b>	<b>-0.1</b>	<b>-0.1</b>	<b>0.1</b>
	YoY	2.3	2.1	1.1	0.6	0.9	0.4	0.4	0.3
<b>France</b>	QoQ	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>
	YoY	2.4	1.9	1.5	1.2	1.3	1.4	1.3	1.1
<b>Italy</b>	QoQ	<b>0.2</b>	<b>0.0</b>	<b>-0.1</b>	<b>-0.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>
	YoY	1.4	1.0	0.5	0.0	-0.1	-0.1	0.1	0.2
<b>United Kingdom</b>	QoQ	<b>0.1</b>	<b>0.4</b>	<b>0.7</b>	<b>0.2</b>	<b>0.5</b>	<b>-0.2</b>	<b>0.2</b>	<b>0.1</b>
	YoY	1.2	1.4	1.6	1.4	1.8	1.2	0.7	0.6
<b>Austria</b>	QoQ	<b>0.9</b>	<b>0.4</b>	<b>0.2</b>	<b>0.6</b>	<b>0.4</b>	<b>0.2</b>	<b>0.5</b>	<b>0.3</b>
	YoY	3.1	2.8	2.3	2.2	1.7	1.6	1.8	1.5
<b>Hungary</b>	QoQ	<b>1.2</b>	<b>1.1</b>	<b>1.5</b>	<b>1.1</b>	<b>1.4</b>	<b>1.1</b>	<b>0.6</b>	<b>0.5</b>
	YoY	4.8	4.8	5.3	5.0	5.2	5.2	4.3	3.7
<b>Poland</b>	QoQ	<b>1.4</b>	<b>1.3</b>	<b>1.4</b>	<b>0.4</b>	<b>1.4</b>	<b>0.8</b>	<b>1.1</b>	<b>1.0</b>
	YoY	5.1	5.4	5.6	4.6	4.6	4.2	3.8	4.4
<b>Slovakia</b>	QoQ	<b>1.0</b>	<b>1.3</b>	<b>0.8</b>	<b>0.6</b>	<b>0.7</b>	<b>0.5</b>	<b>0.2</b>	<b>0.3</b>
	YoY	4.0	4.4	4.3	3.7	3.4	2.6	2.1	1.7
<b>Czech Republic</b>	QoQ	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.9</b>	<b>0.6</b>	<b>0.7</b>	<b>0.3</b>	<b>0.2</b>
	YoY	4.2	2.4	2.5	2.7	2.7	2.8	2.5	1.8

*Note: Data are also adjusted for calendar effects (except for Slovakia).**Source: CZSO, Eurostat, NBS China, OECD. Calculations and forecast of the MoF.*



## 1.2 Commodity Prices

The price of Brent crude oil averaged USD 61.9 per barrel (*as forecasted*) in Q3 2019. This was a drop by approximately 18% YoY (15% when expressed in CZK).

An agreement between members of the Organisation of the Petroleum Exporting Countries and other stakeholder countries to reduce oil production was effective also in Q3 2019. The restriction on production actually went further than the agreement, which will remain in force until the end of Q1 2020. The September attack on oil facilities in Saudi Arabia had only a short-lived effect on the price of oil. The US Energy Information Administration estimates that reserves of oil will increase in 2020.

This is consistent with the situation prevailing on the futures market, where oil supplied later is traded more cheaply than oil supplied earlier.

The outlook for the price of Brent crude oil reflects the slightly declining curve of futures prices. The price should average USD 64 per barrel in 2019 (*unchanged*) and USD 59 per barrel in 2020 (*versus USD 60 per barrel*). The projected price of Brent crude oil remains more or less unchanged compared to the previous forecast also when expressed in CZK. It should fall by around 5% in 2019 and by almost 7% in 2020.

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

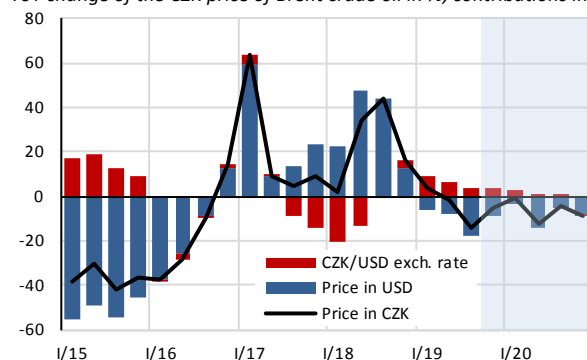
USD/barrel



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	59	
	growth in %	39.8	0.2	-2.6	-8.8	-47.1	-16.9	24.3	31.7	-10.0	-7.8	
<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	97	90	
	growth in %	29.5	11.0	-2.7	-3.8	-36.9	-17.4	18.5	22.9	-4.9	-6.9	
<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
<b>Crude oil Brent</b>	USD/barrel	66.9	74.5	75.1	69.0	63.1	69.0	61.9	63	
	growth in %	24.8	50.2	44.1	12.4	-5.7	-7.4	-17.6	-8.9	
<b>Crude oil Brent index (in CZK)</b>	2010=100	91.0	105.6	109.7	102.2	94.0	104.1	93.7	97	
	growth in %	1.6	34.2	44.1	16.0	3.2	-1.4	-14.6	-5.4	
<b>Natural gas (Europe)</b>	USD/MMBtu	6.7	7.3	8.4	8.3	6.1	4.3	3.8	.	
	growth in %	16.8	46.2	53.3	25.1	-8.1	-41.2	-54.4	.	
<b>Natural gas (Europe) index (in CZK)</b>	2010=100	87.5	99.2	117.9	118.8	88.0	62.1	55.8	.	
	growth in %	-4.9	30.6	53.3	29.2	0.5	-37.4	-52.7	.	

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 58.4 billion, corresponding to 1.1% of GDP. This was the third year in a row that a surplus had been made, and all sub-sectors had contributed to it. Adjusted for the impact of the business cycle and one-off or other temporary measures, the surplus was 0.6% of GDP. By revising the data for 2018, the CZSO improved the overall balance by CZK 11.0 billion (by 0.2 pp). It did this by adjusting both the revenue (+ CZK 13.8 billion) and the expenditure side (+ CZK 2.8 billion). On the revenue side, a key factor was higher revenue from corporate income tax (+ CZK 10.8 billion). The largest changes in spending could be found in capital expenditure (+ CZK 5.8 billion), the growth of which was offset by lower social transfers in kind (– CZK 3.1 billion).

In relative terms the forecast for the general government balance in **2019** remains unchanged at 0.3% of GDP. However, new information resulted in changes to the structure of revenue and expenditure. The new forecast envisages higher momentum of final consumption expenditure of the general government, especially intermediate consumption and social transfers in kind. Compared to the July Macroeconomic Forecast, the projected growth rate of capital expenditure has been revised down. On the revenue side, we forecast lower growth rate for income taxes. Conversely, we forecast greater momentum of capital transfers. The estimate of accrual-based results this year is also supported by developments in cash receipts of the state budget, local government budgets and health insurance companies. Large surpluses of local government budgets (CZK 41.9 billion) and health insurance companies (CZK 11.9 billion) at the end of August stand in contrast to the state budget's year-on-year lower cash receipts in the first nine months of the year (– CZK 21 billion). From the perspective of the structural balance, we estimate that the negative fiscal effort should result in a slight deficit of 0.3% of GDP.

Dynamics of the revenue side of the general government are determined by tax revenue, including social security contributions, with growth estimated at 5.9%. In the year-on-year comparison, labour income – and specifically personal income tax – should develop most quickly. Our forecast of more than 10% growth is based, in part, on the cash performance of this tax since the beginning of the year, which is growing at a double-digit rate (13.4%). Strong growth in average wages in the economy, a fractional increase in employment and a rise in guaranteed wages should be positively reflected here. These factors, together with a more than 5% increase in the assessment base for payments made on behalf of state-insured persons, also determine social security contributions. The 7.2% forecast here is also supported by the existing cash receipts, with health and social insurance contributions rising by around 8% YoY, similar to the accrual yield for the first three quarters of the year. Higher

share taken up by compensation of employees in gross domestic product is negatively reflected in companies' profitability. Corporate income tax should therefore lose momentum and slow to 4.4% YoY. Considering slower growth in nominal household consumption and the relevant part of government consumption, we also forecast lower growth rate for value added tax revenues (4.8%). With regard to the projected course taken by the use of EU funds, the forecast envisages more than 14% growth in capital transfers.

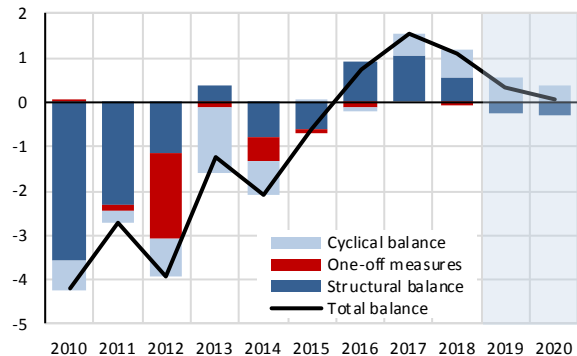
On the expenditure side, general government final consumption expenditure should keep its high momentum (8.1%); like last year, we expect the fastest growth to be in the compensation of employees (10.0%). The growth in salaries encompasses virtually all employees in the general government sector, especially teachers – the higher volume of salaries in education is the result of pay-grade increases as well as of regional education financing reform. Besides the compensation of employees, final consumption expenditure should also be driven by social transfers in kind (9.1%). Conversely, we forecast a year-on-year slowdown in intermediate consumption to 4.3%. This is linked in part to the projection of a lower proportion of purchases co-financed by EU funds. However, its year-on-year growth is still considerable when we take into account the previous year's very high base. The 7.3% increase in cash social benefits should reflect approved measures (especially in the area of pensions) as well as economic developments. Furthermore, the forecast assumes there will be lower year-on-year momentum in capital expenditure (8.1%), driven by investments financed purely from national sources. The year-on-year slower growth in interest payments should result in a decline, relative to GDP, to the 2017 level.

**For 2020**, we forecast that the general government surplus will fall to 0.1% of GDP. Revenue should grow by 4.7%, primarily driven by personal income tax (7.3%) and social security contributions (5.7%) on the back of growth in wages and salaries in the economy. In 2020, discretionary measures on the revenue side will focus primarily on raising excise tax rates and adjusting the method for, and tax deductibility of, insurance companies' technical provisions. Expenditure, on the other hand, should rise by 5.4% and be driven mainly by pensions and state social welfare benefits. The structural balance should remain at the 2019 level.

The general government debt was CZK 1,734.7 billion in 2018, corresponding to 32.6% of GDP. In 2019, the relative level of debt should decrease by 1.3 pp, bearing in mind that nominal GDP is forecasted to grow by almost 6%. In line with the expected general government surplus, this trend should continue in 2020, when we forecast a further reduction in the relative level of debt to 30.6% of GDP. The November Fiscal Outlook of the Czech Republic discusses fiscal policy issues in more detail.

**Graph 1.3.1: General Government Balance**

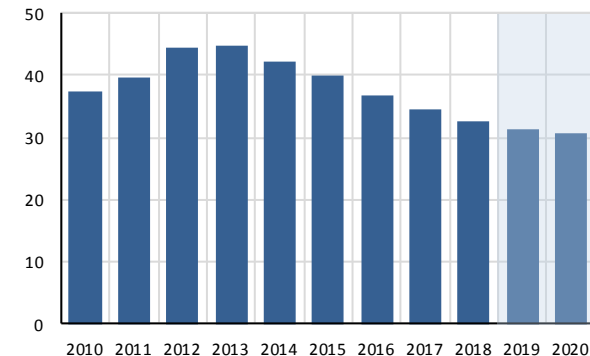
in % of GDP



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**

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
								Forecast	Forecast	Outlook	Outlook
<b>General government balance</b>	% GDP	-1.2	-2.1	-0.6	0.7	1.6	1.1	0.3	0.1	-0.1	-0.4
	bill. CZK	-51	-91	-28	34	79	58	18	3	-5	-27
<b>Cyclical balance</b>	% GDP	-1.5	-0.8	0.1	-0.1	0.5	0.6	0.6	0.4	0.2	0.1
<b>Cyclically adjusted balance</b>	% GDP	0.2	-1.3	-0.7	0.8	1.0	0.5	-0.3	-0.3	-0.3	-0.5
<b>One-off measures<sup>1)</sup></b>	% GDP	-0.1	-0.5	-0.1	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0
<b>Structural balance</b>	% GDP	0.4	-0.8	-0.6	0.9	1.0	0.6	-0.3	-0.3	-0.3	-0.5
<b>Fiscal effort<sup>2)</sup></b>	pp	1.5	-1.2	0.2	1.5	0.1	-0.5	-0.8	0.0	0.0	-0.2
<b>Interest expenditure</b>	% GDP	1.3	1.3	1.1	0.9	0.7	0.8	0.7	0.7	0.7	0.7
<b>Primary balance</b>	% GDP	0.1	-0.8	0.5	1.6	2.3	1.8	1.1	0.8	0.6	0.3
<b>Cyclically adjusted primary balance</b>	% GDP	1.6	0.0	0.4	1.7	1.8	1.2	0.5	0.4	0.4	0.2
<b>General government debt</b>	% GDP	44.9	42.2	40.0	36.8	34.7	32.6	31.2	30.6	30.0	29.5
	bill. CZK	1 840	1 819	1 836	1 755	1 750	1 735	1 763	1 803	1 847	1 890
<b>Change in debt-to-GDP ratio</b>	pp	0.4	-2.7	-2.2	-3.1	-2.1	-2.1	-1.3	-0.6	-0.5	-0.5

<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 Q3 2019, the CNB left its two-week repo rate at 2.0% after taking into account expected future inflation and the risks of slower growth in European economies.

Given the assumptions about the monetary policy stance and forecast appreciation of the CZK (see section 1.4.3) we expect that monetary conditions will tighten slightly in the exchange rate component in 2019 and 2020.

### 1.4.2 Financial Sector and Interest Rates

In line with the development in monetary-policy rates of the CNB, the **three-month PRIBOR** was 2.1% (*as forecast*) in Q3. As the gap against the two-week repo rate is narrowing a little, the three-month PRIBOR should reach 2.2% (*versus 2.3%*) in Q4, or 2.1% (*versus 2.2%*) on average in 2019 as a whole. In 2020, it could nudge to 2.2% (*versus 2.3%*).

Despite expectations, the **yield to maturity on 10-year government bonds** for convergence purposes fell to 1.2% (*versus 2.0%*) in Q3 2019. Since the beginning of 2019, it has therefore hovered below the three-month PRIBOR rate, something that has never been recorded before (since 2000). Moreover, this difference is widening. The yield curve of government bonds remains flat at 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 can be explained by the market's expectations that interest rates will be cut. Taking into account the assumed monetary policy stance of the CNB and the ECB, developments in inflation, and persisting flatness of the yield curve, we believe that long-term interest rates will stagnate at current levels. In Q4, they should therefore stand at 1.2% (*versus 2.2%*), as in subsequent quarters. They should average 1.5% (*versus 2.0%*) in 2019 as a whole, and come to 1.2% (*versus 2.4%*) in 2020.

Total **lending to households** grew 6.8% YoY, tantamount to a 0.4 pp dip in momentum. A similar trend then continued in July and August. Lending to households remains driven in particular by housing loans, which account for approximately 75% of the total volume of households' loans. Average client interest rates on the overall volume of household lending continued along their gentle downward trajectory.

In connection with the CNB's recommendation for the management of risks associated with the granting of retail loans secured with residential property, effective as of 1 October 2018, since December 2018 we have seen new mortgages drop by 20% YoY on average. Even after the exhaustion of the "frontloading" effect and the subsequent decline in demand for new mortgages, the average monthly volume of new mortgages is lower than

before the CNB's recommendation was introduced. Client interest rates on loans for property purchases have been decreasing since March 2019, probably due to banks' expectations about the future path of the CNB rate and competition among banks.

The growth in **lending to non-financial corporations** slowed to 5.0% YoY in Q2 2019, driven primarily by loans with maturity of between one and five years. In July and August, loans with maturity of over five years grew the most, while loans under one year declined year on year. This may indicate that non-financial corporations are increasingly financing their working capital out of their own resources. Contributions to the lending momentum were made by both foreign-currency and CZK loans.

The **share of non-performing loans** in total loans fell again in Q2 to 1.8% among households and to 3.3% among non-financial corporations.

In Q2, the growth in **deposits** of non-financial corporations accelerated to 3.9% YoY, but slowed slightly to 7.3% in the case of households. This solid growth in deposits paves the way for the financing of future consumption and investments.

### 1.4.3 Exchange Rates

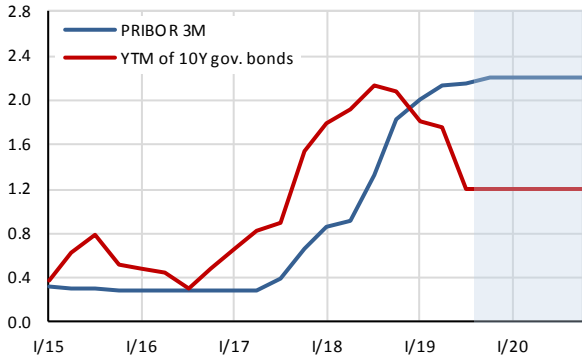
During Q3, the exchange rate of the koruna to the euro steadfastly weakened from CZK 25.4/EUR at the beginning of June to CZK 25.7/EUR in September. The koruna therefore traded at an average of CZK 25.7/EUR (*versus CZK 25.6/EUR*). Compared to the previous quarter, the average exchange rate thus remained unchanged, and was 0.3% stronger YoY.

The real convergence of the Czech economy and the Czech Republic's positive interest rate differential against the euro area will continue to push towards the appreciation of the koruna. Compared with the July Macroeconomic Forecast, however, we believe that the effect of these factors will be weaker. In Q4 2019, the exchange rate could average CZK 25.7/EUR (*versus CZK 25.5/EUR*), the same level as in 2019 as a whole (*vs. CZK 25.6/EUR*). This would mean depreciation of the koruna by 0.1%, which is in line with model estimates of developments in the equilibrium real exchange rate. The koruna should then appreciate by 0.8% YoY to CZK 25.5/EUR (*versus CZK 25.2/EUR*) on average in 2020, i.e. it should stick to the appreciation trajectory.

The trend expected in the exchange rate of the koruna to the US dollar is implied by the USD/EUR exchange rate, for which an assumption of stability at USD 1.10/EUR (*versus USD 1.12/EUR*), i.e. the average of 10 trading days preceding the cut-off date for selected forecast assumptions, was adopted.

### Graph 1.4.1: Interest Rates

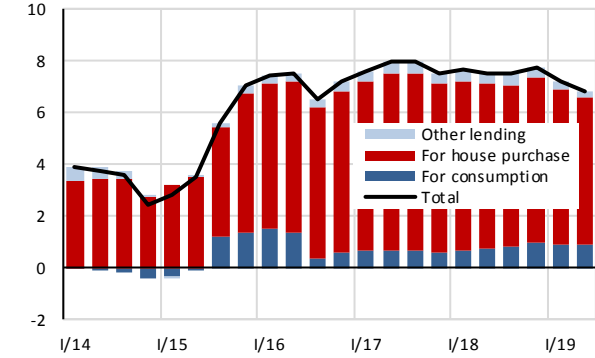
in % p.a.



Source: CNB. Calculations and forecast of the MoF.

### Graph 1.4.2: Loans to Households

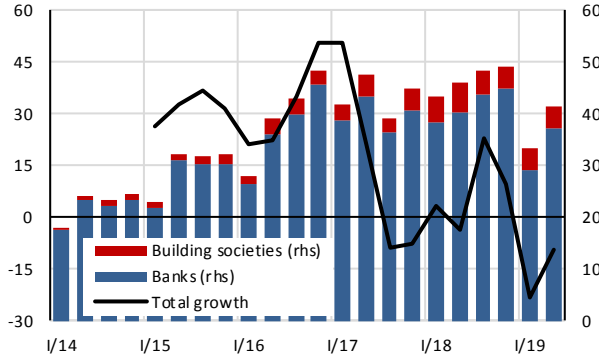
YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

### Graph 1.4.3: New Mortgage Loans

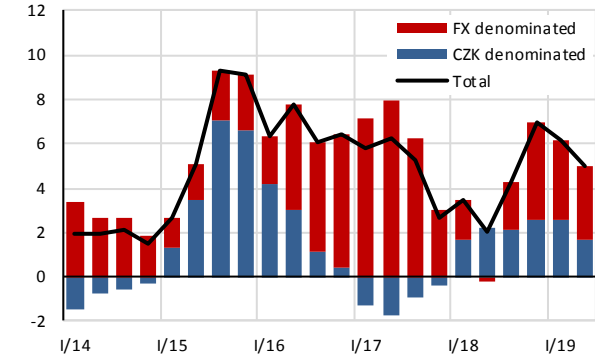
for purchase of residential property, YoY growth in %, CZK billion (rhs)



Source: CNB. Calculations of the MoF.

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

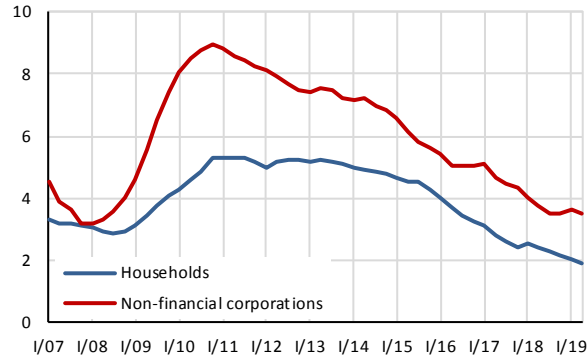
YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

### Graph 1.4.5: Non-performing Loans

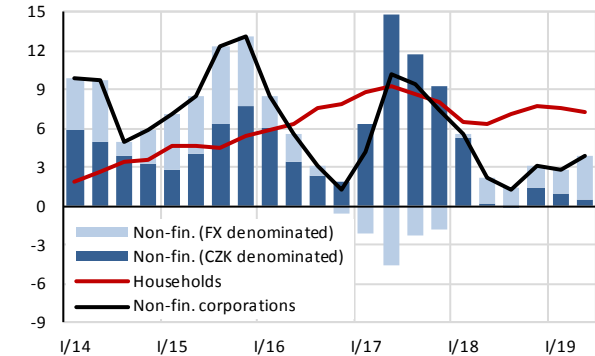
ratio of non-performing to total loans, in%



Source: CNB. Calculations of the MoF.

### Graph 1.4.6: Deposits

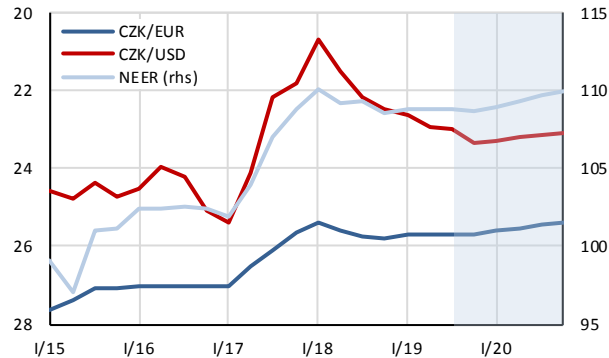
YoY growth rate in%, contributions in percentage points



Source: CNB. Calculations of the MoF.

### Graph 1.4.7: Nominal Exchange Rates

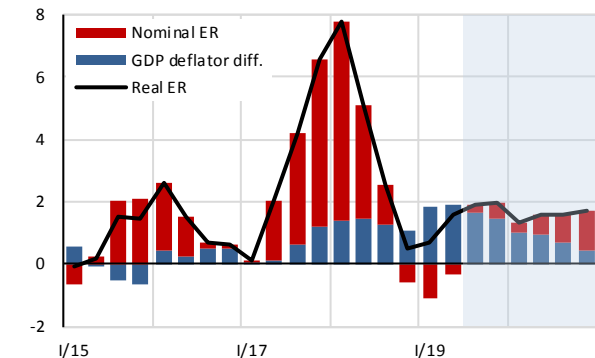
quarterly averages, average 2015=100 (rhs)



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	2.1	2.2	
<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	1.5	1.2	
<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	
										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	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	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	2.00	.	
<b>PRIBOR 3M</b>	<i>in % p.a.</i>	0.86	0.92	1.33	1.83	2.01	2.13	2.15	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	1.20	1.2	
<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	3.66	.	.	
<b>Loans to non-financial corporations</b>	<i>in % p.a.</i>	2.81	2.88	3.06	3.46	3.67	3.74	.	.	
<b>Deposits of households</b>	<i>in % p.a.</i>	0.33	0.32	0.32	0.33	0.36	0.37	.	.	
<b>Deposits of non-financial corporations</b>	<i>in % p.a.</i>	0.05	0.09	0.13	0.19	0.27	0.35	.	.	

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	
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Households</b>									
<b>Loans</b>	<i>growth in %</i>	<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>	<b>6.8</b>
For consumption	<i>growth in %</i>	4.5	3.9	4.2	5.2	5.8	6.5	6.0	6.1
For house purchase	<i>growth in %</i>	9.2	8.8	8.8	8.5	8.3	8.5	8.0	7.6
Other lending	<i>growth in %</i>	4.4	4.1	4.7	4.4	4.3	3.7	2.7	2.1
CZK denominated	<i>growth in %</i>	7.9	7.5	7.7	7.6	7.5	7.7	7.2	6.8
FX denominated	<i>growth in %</i>	49.4	35.8	11.1	-10.8	-0.9	10.9	23.2	13.3
<b>Deposits</b>	<i>growth in %</i>	<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>	<b>7.3</b>
CZK denominated	<i>growth in %</i>	9.8	8.9	7.1	6.4	7.2	7.7	7.5	7.0
FX denominated	<i>growth in %</i>	-17.3	-13.7	-7.3	7.8	6.9	7.5	11.3	13.6
<b>Non-performing loans (banking statistics)</b>	<i>share, in %</i>	<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>1.9</b>
<b>Loans to deposits ratio</b>	<i>in %</i>	<b>63</b>	<b>64</b>	<b>63</b>	<b>63</b>	<b>63</b>	<b>64</b>	<b>63</b>	<b>63</b>
<b>Non-financial corporations</b>									
<b>Loans</b>	<i>growth in %</i>	<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>	<b>5.0</b>
CZK denominated	<i>growth in %</i>	-1.2	-0.5	2.3	3.2	3.0	3.6	3.7	2.4
FX denominated	<i>growth in %</i>	24.8	11.5	6.3	-0.7	7.2	15.3	12.1	11.1
<b>Deposits</b>	<i>growth in %</i>	<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>	<b>3.9</b>
CZK denominated	<i>growth in %</i>	15.6	12.0	6.8	0.2	-0.1	1.8	1.1	0.6
FX denominated	<i>growth in %</i>	-9.4	-7.8	1.0	10.7	6.9	8.3	9.7	16.9
<b>Non-performing loans (banking statistics)</b>	<i>share, in %</i>	<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>3.5</b>
<b>Loans to deposits ratio</b>	<i>in %</i>	<b>106</b>	<b>104</b>	<b>103</b>	<b>104</b>	<b>109</b>	<b>108</b>	<b>107</b>	<b>105</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	<b>25.97</b>	<b>27.53</b>	<b>27.28</b>	<b>27.03</b>	<b>26.33</b>	<b>25.65</b>	<b>25.7</b>	<b>25.5</b>	<b>25.2</b>	<b>24.9</b>
	appreciation in %	-3.2	-5.7	0.9	0.9	2.7	2.7	-0.1	0.8	1.2	1.2
<b>CZK / USD</b>	average	<b>19.56</b>	<b>20.75</b>	<b>24.60</b>	<b>24.43</b>	<b>23.39</b>	<b>21.74</b>	<b>23.0</b>	<b>23.2</b>	<b>22.9</b>	<b>22.6</b>
	appreciation in %	0.1	-5.7	-15.7	0.7	4.5	7.6	-5.3	-0.9	1.2	1.2
<b>NEER</b>	average of 2015=100	<b>106.4</b>	<b>100.8</b>	<b>100.0</b>	<b>102.4</b>	<b>105.4</b>	<b>109.3</b>	<b>109</b>	<b>110</b>	<b>111</b>	<b>112</b>
	appreciation in %	-2.3	-5.2	-0.8	2.4	2.9	3.7	-0.5	0.7	1.2	1.2
<b>Real exchange rate to EA19<sup>1)</sup></b>	average of 2015=100	<b>103.6</b>	<b>99.3</b>	<b>100.0</b>	<b>101.4</b>	<b>104.6</b>	<b>108.7</b>	<b>110</b>	<b>112</b>	<b>114</b>	<b>116</b>
	appreciation in %	-3.0	-4.2	0.8	1.4	3.2	4.0	1.6	1.6	1.6	1.7
<b>REER<sup>2)</sup></b>	average of 2015=100	<b>106.4</b>	<b>100.9</b>	<b>100.0</b>	<b>102.6</b>	<b>106.5</b>	<b>111.1</b>	.	.	.	.
	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
<b>Nominal exchange rates</b>									
<b>CZK / EUR</b>	average	<b>25.40</b>	<b>25.60</b>	<b>25.76</b>	<b>25.81</b>	<b>25.68</b>	<b>25.68</b>	<b>25.68</b>	<b>25.7</b>
	appreciation in %	6.4	3.6	1.3	-0.6	-1.1	-0.3	0.3	0.5
<b>CZK / USD</b>	average	<b>20.66</b>	<b>21.51</b>	<b>22.19</b>	<b>22.50</b>	<b>22.61</b>	<b>22.91</b>	<b>22.99</b>	<b>23.3</b>
	appreciation in %	22.8	12.0	0.0	-3.1	-8.6	-6.1	-3.5	-3.6
<b>NEER</b>	average of 2015=100	<b>110.1</b>	<b>109.3</b>	<b>109.4</b>	<b>108.5</b>	<b>108.8</b>	<b>108.8</b>	<b>108.9</b>	<b>109</b>
	appreciation in %	8.0	5.1	2.1	-0.3	-1.1	-0.4	-0.5	0.1
<b>Real exchange rate to EA19<sup>1)</sup></b>	average of 2015=100	<b>109.2</b>	<b>108.7</b>	<b>108.6</b>	<b>108.4</b>	<b>110.0</b>	<b>110.4</b>	<b>111</b>	<b>111</b>
	appreciation in %	7.8	5.1	2.5	0.5	0.7	1.6	1.9	2.0
<b>REER<sup>2)</sup></b>	average of 2015=100	<b>112.4</b>	<b>111.1</b>	<b>111.2</b>	<b>109.9</b>	<b>111.8</b>	<b>111.1</b>	.	.
	appreciation in %	9.0	6.1	2.8	-0.4	-0.5	0.0	.	.

<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 6 September 2019, an amendment to the **Investment Incentives Act** came into effect. It should increase the transparency and effectiveness of investment incentives while strengthening competitiveness of the Czech economy. State incentives should focus on projects with higher value added and projects in economically challenged regions. However, an emphasis is also placed on improving the availability of incentives for small and medium-sized enterprises and on making the system flexible enough to respond to the current economic situation. Finally, the amendment transferred decision-making on investment incentives to the government.

An amendment to the **Sales Registration Act** was published in the Collection of Legislative Acts on 9 October 2019. It expands the range of business entities that are subject to the obligation to record sales via a permanent electronic connection. Businesses that are not liable to pay value added tax, have a maximum of two employ-

ees, and report income from registered sales of not more than CZK 200,000 in the preceding 12 calendar months will be able to use paper receipts provided by the Ministry of Finance. The amendment also moves selected services (water supply and sewerage, catering services, draught beer as part of catering services, cleaning, domestic care services, minor repairs, hairdressing services, etc.) from the standard rate (21%) and the first reduced value added tax rate (15%) to the second reduced rate (10%). The special sales registration permit will take effect on 1 February 2020. As far as tax changes and the expansion of the group of liable entities are concerned, it will be effective on 1 May 2020.

In order to simplify and digitalise the tax administration system, on 26 August 2019 the Government approved an amendment to the **Tax Code** that establishes an online portal (MOJE daně<sup>1)</sup> for the handling of tax matters.

<sup>1)</sup> MOderní a JEdnoduché daně, i.e. Modern and Simple Taxes



A system similar to internet banking will give users a better overview of their tax liabilities. On the basis of the data available to the tax office, it will offer taxpayers a pre-filled tax return, provide information on their history, and extend the possibility of filing tax returns via the internet. Taxpayers submitting their tax return electronically will be granted an extension of one month to file their income tax return. If applications are submitted electronically, taxpayers will have the benefit of having any overpayment refunded more quickly. The amendment also simplifies checking procedures, revises the sanction system and regulates the refund of tax deduc-

tions. Preliminary estimates indicate that the portal could be launched in Q4 2020.

On 30 July 2019, the Government approved an amendment to the **Budgetary Rules Act** which provided that any central government budget surpluses may be used exclusively to reduce the sovereign debt. The amendment should take effect on 1 January 2021.

An amendment to the **Pension Insurance Act**, which took effect on 30 September 2019, raises the average pension by CZK 900 per month as of 2020.

## 1.6 Demographic Trends

Over the long term, the population of the Czech Republic has been slowly, but steadily, rising, reaching 10.669 million people at the end of June 2019. The number of inhabitants was up 42,200 persons YoY, i.e. by 0.4%, and by 18,800 persons in the first half-year. A moderate increase roughly in line with the medium variant of the CZSO's population projection can be envisaged in the forecast horizon.

The population rise can be attributed solely to **positive net migration** of 20,900 persons, an increase by 2,700 year on year. In the first half-year, 34,100 people moved to the Czech Republic from abroad, while 13,200 left; both of these flows of foreign migration went up year on year. The positive net migration was dominated by citizens of Ukraine (8,600) and Slovakia (2,100).

Conversely, in H1 2019 – as a year beforehand – the difference between the number of **births and deaths** resulted in a decline by 2,100 persons. There was a modest year-on-year drop in both the number of live births (54,700) and the number of deaths (56,800).

**Population ageing** was reflected in a year-on-year rise in the number of seniors (65+) by more than 45,000 people in Q2 2019 (according to figures collated in the Labour Force Survey). The high number of females born in the late 1970s and in the 1980s and the gradually rising fertility rate resulted in an increase in the number of young people up to 19 years by 27,000.

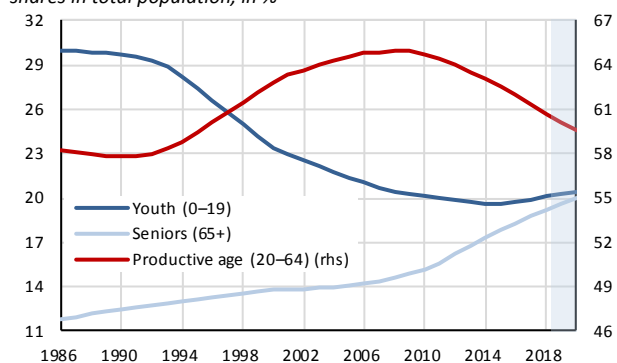
On the other hand, the population aged 20–64 shrank markedly by 34,000. Nevertheless, developments in this category are far from homogeneous on account of how the birth rate fluctuated in the past. The decline was concentrated in the 20–44 age group, where the number of people went down by 68,000. In contrast, there was a strong increase in the population aged 44–49 by 48,000. The highest employment and participation rate can be found among people of this age, which so far has helped to eliminate the impacts of the ageing population on the supply side of the labour market. Population aged 20–64 should decrease roughly by 45,000 per year in the forecast horizon, i.e. by 0.7%.

The economic boom has meant that the number of **old-age pensioners** is not as much as we would have expected when we factor in demographic trends and the gradual hike in the statutory retirement age. In Q2 2019, there was therefore just a slight year-on-year rise by 2,300. The number of old-age pensioners could keep increasing at a similar rate also in the next few years.

At the end of June 2019, there were 2.406 million old-age pensioners (22.6% of the Czech population) in the pension system. As the growth in their number is not as high as the rise in employment, there was a palpable reduction in the effective dependency ratio by 2.7 pp between the beginnings of 2012 and 2019. This is one of the factors improving the pension account balance.

**Graph 1.6.1: Age Groups**

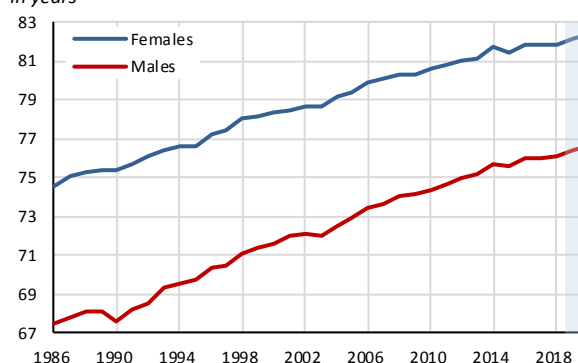
shares in total population, in %



Source: CZSO. Calculations of the MoF.

**Graph 1.6.2: Life Expectancy at Birth**

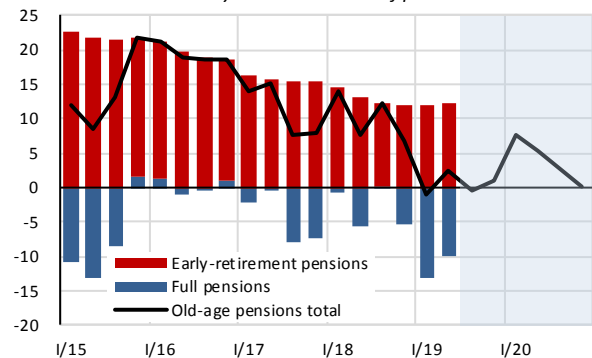
in years



Source: CZSO.

### Graph 1.6.3: 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

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
								Forecast	Forecast	Outlook	Outlook
<b>Population (as of 1 January)</b>	<i>thous. persons</i>	<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>
	<i>growth in %</i>	0.1	0.0	0.2	0.1	0.2	0.3	0.4	0.2	0.2	0.2
0–19 years	<i>thous. persons</i>	2 071	2 057	2 064	2 082	2 106	2 133	2 160	2 185	2 206	2 224
	<i>growth in %</i>	-0.6	-0.6	0.3	0.9	1.2	1.3	1.3	1.1	1.0	0.9
20–64 years	<i>thous. persons</i>	6 678	6 630	6 594	6 540	6 484	6 437	6 403	6 356	6 313	6 274
	<i>growth in %</i>	-0.7	-0.7	-0.5	-0.8	-0.9	-0.7	-0.5	-0.7	-0.7	-0.6
65 and more years	<i>thous. persons</i>	1 768	1 826	1 880	1 932	1 989	2 040	2 087	2 134	2 178	2 219
	<i>growth in %</i>	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>	<i>thous. persons</i>	<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>2 411</b>	<b>2 411</b>	<b>2 410</b>
	<i>growth in %</i>	0.0	0.0	0.6	0.9	0.8	0.3	0.3	0.0	0.0	0.0
<b>Old-age dependency ratios (as of 1 January)</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	45.3	45.2	45.2
<b>Fertility rate</b>	<i>children</i>	<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>	<i>thous. persons</i>	<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>	<i>thous. persons</i>	<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	<i>thous. persons</i>	107	110	111	113	114	114	111	109	107	105
Deaths	<i>thous. persons</i>	109	106	111	108	111	113	112	112	113	114
<b>Net migration</b>	<i>thous. persons</i>	<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	<i>thous. persons</i>	30	42	35	38	46	58	.	.	.	.
Emigration	<i>thous. persons</i>	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

In all likelihood, the Czech economy is still at the peak of the business cycle. The **positive output gap** reached 1.9% of potential output in Q2 2019. Taking into account the forecasted slowdown in economic growth and projected developments in potential output, the output gap should start to narrow gradually to 1.6% on average in 2019 and 1.0% in 2020. It should then almost close in the outlook horizon.

The positive output gap is most apparent on the **labour market** (see section 3.3). In Q2, the unemployment rate fell further to 1.9%; the number of vacancies more or less stagnated at around 350,000 and exceeded the number of registered unemployed by almost three quarters. The positive output gap is also reflected in core inflation.

We estimate that the year-on-year growth in **potential output** in Q2 2019 slowed very slightly to 2.7%. This is marginally more than the average growth rate of gross value added for the period since 1995. The average potential output growth should stay at 2.7% in 2019 and then slow down marginally to 2.6% in 2020.

**Total factor productivity** is the main driver of potential growth. In Q2, as in previous quarters, the trend compo-

nent of TFP contributed 2.0 pp to the growth in potential output.

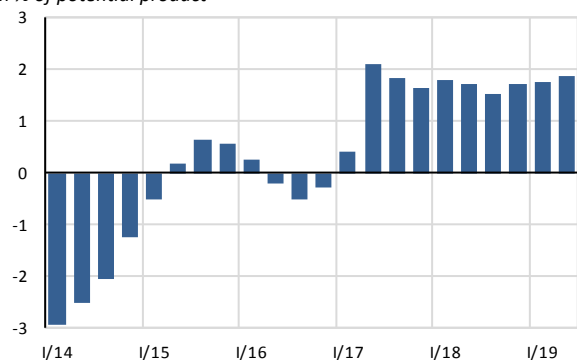
**Labour supply** is affected by population ageing (see section 1.6), a process that is being expressed, among other things, by a long-term decline in the working age (20-64) population, which shaved 0.3 pp from the year-on-year growth in potential output in Q2.

However, the negative impact that demographic trends are having on labour supply is 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) as well as high demand for labour have come to the fore here. In Q2, however, the year-on-year growth in participation unexpectedly stalled. In fact, there was a quarter-on-quarter drop according to the seasonally adjusted data. The contribution made by the participation rate to the growth of potential output thus came to just 0.4 pp and caused a slowdown in potential output growth.

**Capital stock** contributed 0.7 pp in Q2 2019 on the back of strong growth in gross fixed capital formation in 2018.

**Graph 2.1.1: Output Gap**

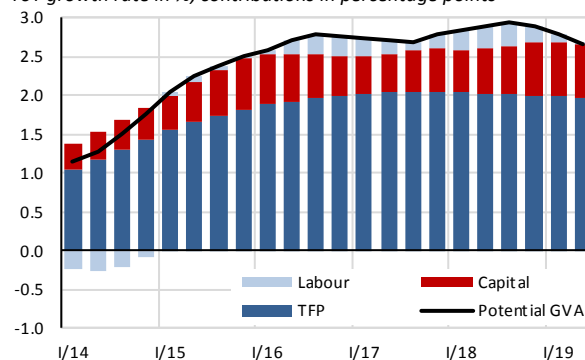
*in % of potential product*



Source: CZSO. Calculations of the MoF.

**Graph 2.1.2: Potential Product**

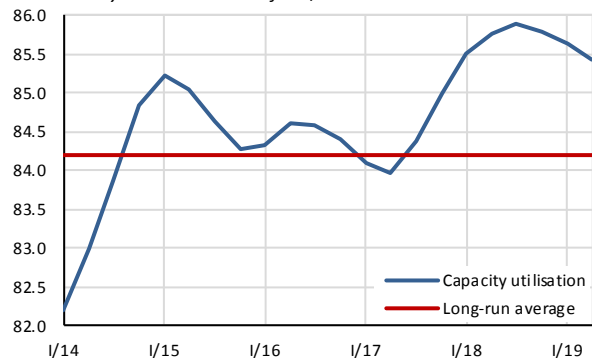
*YoY growth rate in %, contributions in percentage points*



Source: CZSO. Calculations of the MoF.

**Graph 2.1.3: Capacity Utilisation in Industry**

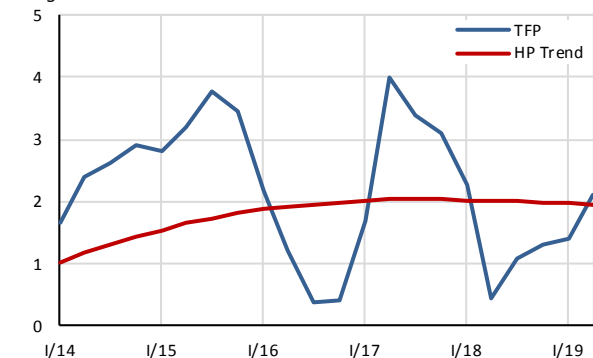
smoothed by Hodrick-Prescott filter, in %



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 H1
<b>Output gap</b>	%	-2.0	-0.8	-2.4	-4.0	-2.2	0.2	-0.2	1.5	1.7	1.8
<b>Potential product</b> <sup>1)</sup>	growth in %	0.8	0.7	0.9	1.2	1.4	2.3	2.7	2.7	2.9	2.7
<b>Contributions</b>											
Trend total factor productivity	pp	0.6	0.4	0.4	0.7	1.2	1.7	1.9	2.0	2.0	2.0
Fixed assets	pp	0.6	0.6	0.5	0.4	0.4	0.6	0.6	0.5	0.6	0.7
Population 20–64 yers	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	0.5
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.

Source: CZSO. Calculations of the MoF.

## 2.2 Business Cycle Indicators

Developments in confidence indicators in Q3 2019 signalled a slowdown in the year-on-year growth of gross value added in industry, trade, services and construction. However, the correlation between confidence and gross value added in construction is very low.

The Czech Statistical Office's consumer confidence indicator increased slightly in Q3 after more than a year of steady decline. This trend suggests that household final consumption expenditure maintained its momentum in H2 2019 because the confidence indicator has a lead of one to two quarters. The European Commission's consumer confidence indicator continued its gentle downward trajectory. Compared to the previous quarter, this could be attributed to the slightly worse assessment of

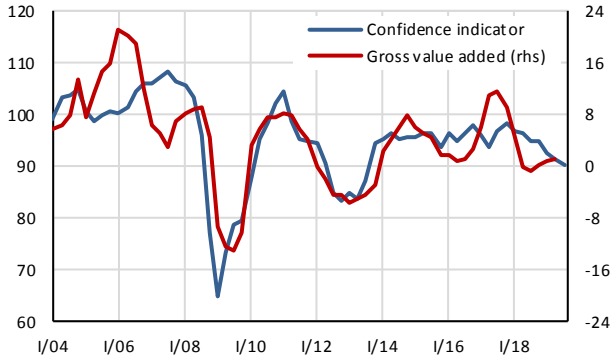
economic performance, the financial situation faced by households, and the lower propensity to consume.

With all of its components slackening, the composite confidence indicator is signalling there will be a slowdown in the year-on-year growth of gross value added in Q3 2019. On the other hand, the growth of gross value added has been more or less stable since Q2 2018, while the composite confidence indicator decreased quite significantly during that period.

The composite leading indicator points to a clear narrowing of the output gap in H2 2019, which might be a sign that the economy is entering a downward stage of the business cycle.

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

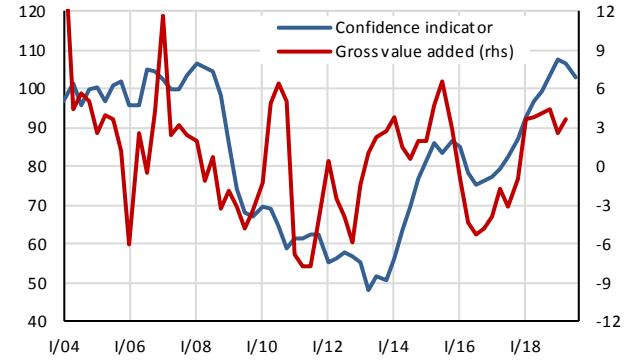
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

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

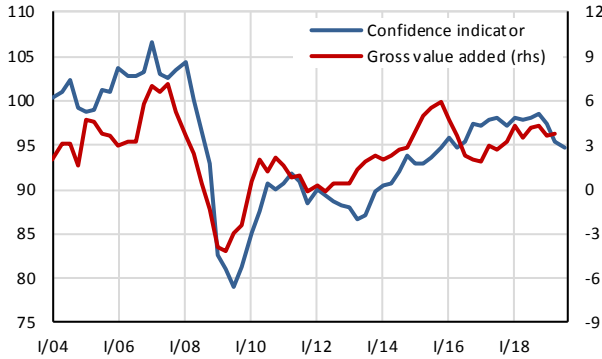
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

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

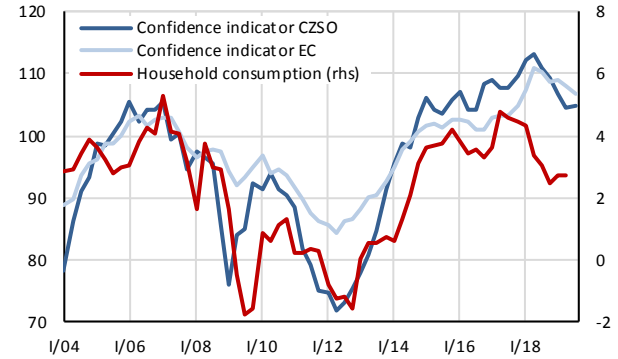
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO. Calculations of the MoF.

**Graph 2.2.4: Consumer Confidence and Consumption**

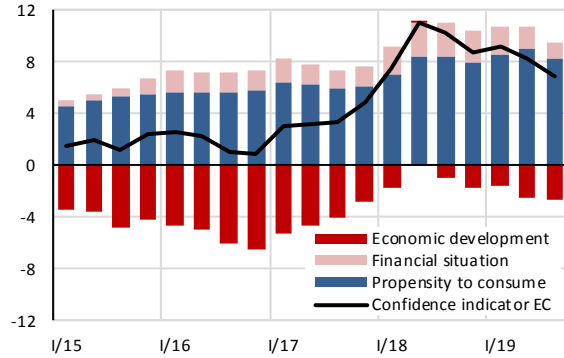
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO, European Commission.

**Graph 2.2.5: Decomposition of Consumer Sentiment**

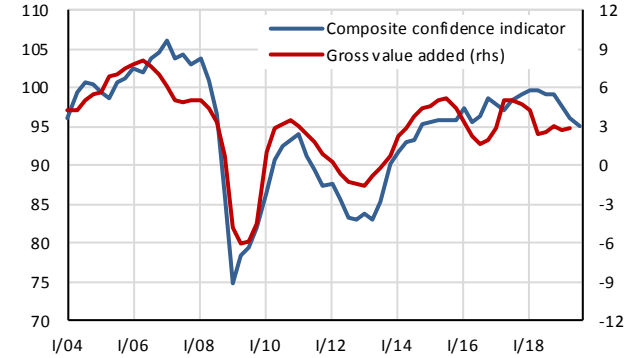
consumer confidence indicator (EC), balance, contributions



Source: European Commission. Calculations of the MoF.

**Graph 2.2.6: Composite Confidence Indicator and GVA**

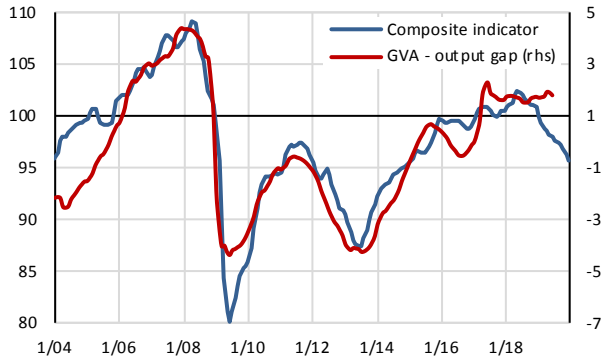
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

**Graph 2.2.7: 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 Second Quarter of 2019

Economic output measured by real GDP was up 2.5% YoY (*versus 2.4%*) in Q2 2019, after seasonal adjustment GDP climbed by 0.7% QoQ (*versus 0.6%*). All sectors except for manufacturing contributed to the quarter-on-quarter GDP growth. Year-on-year GDP growth was driven by rising foreign and, especially, domestic demand. The main pro-growth items were final consumption expenditure of households and the general government. The contribution made by the balance of foreign trade in goods and services was positive.

Consumption of households rose on the back of growth in their 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 expenditure. Growth in expenditure on consumer durables slowed further and falls well short of the long-term average. Even so, expenditure on semi-durables continues to rise at speed. Consequently, developments in the savings rate, consumer confidence and the structure of household expenditure all signal that households are being more cautious. In real terms, household final consumption expenditure increased by 2.6% (*as forecast*). General government consumption went up by 3.4% (*versus 2.4%*), mainly on account of the momentum exhibited by employment, social benefits in kind and intermediate consumption.

Gross fixed capital formation virtually stagnated, creeping up by a mere 0.2% (*versus 1.9%*). Investments in intellectual property products and in housing had a pro-growth effect, while investments in machinery and equipment (including transport equipment) fell year on year. From the sectoral point of view, investment activity was driven solely by investment of the general government sector financed from national resources. Private investment, on the contrary, slowed the momentum. With the change in inventories making essentially zero contribution, gross fixed capital formation increased by almost as much as fixed capital investment, rising by 0.3% (*versus 0.2%*).

With export markets plainly slowing, 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 by 1.5% (*versus 3.5%*) in Q2 2019. Following the weaker growth of exports and import-intensive investment demand, imports of goods and services slowed to 0.8% (*versus 2.9%*).

The higher growth of export prices compared to import prices improved the terms of trade by 0.3% (*versus*

0.2%). Consequently, real gross domestic income rose by 2.8% YoY (*versus 2.6%*).

Gross operating surplus increased by 5.1% (*versus 4.7%*), compensation of employees climbed by 7.6% (*versus 7.4%*), and the net taxes on production were up by 5.1% YoY (*versus 3.7%*). As a result, nominal GDP posted 6.2% growth (*versus 5.8%*).

#### 3.1.2 Forecast for the Years 2019 and 2020

We estimate that real GDP increased by 3.4% YoY (*unchanged*) and by 0.3% QoQ (*versus 0.4%*) in Q3 2019. The year-on-year growth rate was significantly affected by calendar effects – Q3 2019 had three business days more than the same quarter of the previous year, adding 0.9 pp to GDP growth. The estimated reduction in the quarter-on-quarter momentum of GDP echoes data on economic developments in Q3 2019 available as of the forecast cut-off date (confidence indicators, output in industry and construction, sales in retail and services, and external trade).

In 2019, economic growth should be driven primarily by domestic demand, headed by strong household final consumption expenditure. GDP growth should also be boosted by general government consumption and, to a lesser extent, by investment activity. The external trade balance should also have a positive effect on GDP momentum. We forecast that real GDP will grow by 2.5% (*unchanged*) in 2019 and by 2.0% (*versus 2.3%*) 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 of wage and business income and higher inflation), despite the fact that numerous discretionary changes in the social area will be positively reflected in its momentum also in the next year. In the short term, household consumption should also be reinforced by dynamics 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 expenditure should also be curbed by the continuing rise in the savings rate, although this should not be as distinctive as in 2018. Consequently, real household consumption should decelerate to 2.7% in 2019 (*versus 2.8%*) and 2.4% in 2020 (*versus 2.6%*).

We forecast that general government final consumption expenditure will climb by 3.0% (*versus 2.4%*) in 2019 and by 1.8% (*versus 1.9%*) in 2020. The key factor underscoring the growth of government consumption in 2019 will be the rise in social benefits in kind, based mainly on health insurance plans, as well as payments to cover the

fare discounts that students and seniors are entitled to. The momentum will also be boosted by higher employment and a rise in expenditure on the purchase of goods and services, with contribution of current subsidies from EU funds.

Growth in gross fixed capital formation is forecast to decelerate sharply in 2019 under external pressure and as a result of the economic slowdown in the main trading partner countries. Monetary conditions should have a more or less neutral effect on investment activity, while growth in the gross operating surplus should, if anything, stimulate investment, as should the persistent labour shortage and a decline in the relative price of capital versus labour costs. Overall, private investment activity is expected to be broadly flat in both years. In the case of investment of the general government sector, we expect that investment expenditure financed from national resources will grow in both 2019 and 2020. Planned acquisitions of military technology in excess of CZK 80 billion could pose a significant upside risk (no details are available yet). Total investment should also be underpinned by the ongoing implementation of projects co-financed by EU funds. Consequently, gross fixed capital formation could grow by 0.9% (*versus* 2.5%) in 2019 and by 0.7%

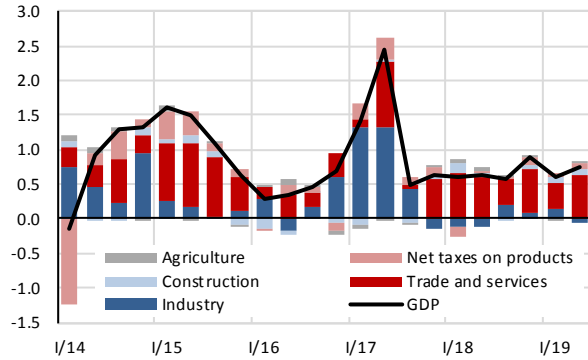
(*versus* 2.4%) in 2020. The significant slowdown in the momentum of investment activity in 2019 reflects external risks and foreign demand, as well as the slowdown in general government investments. The level of general government investments in 2018 has resulted in a high basis for comparison, not only as regards the amounts budgeted, but also in view of the fact that EU resources allocated for 2014 and 2015 could only be utilised by the end of last year. Going forward, we expect a normal level of investment co-financed by the EU.

We project that the contribution of change in inventories to GDP growth will be zero in 2019 and 2020. Total gross capital formation should thus increase by 0.7% both this year and next (*versus* 1.2% and 2.2%, respectively).

We forecast that exports of goods and services will grow by 2.0% (*versus* 3.6%) in 2019 and by 1.6% (*versus* 3.3%) in 2020. Momentum in exports of goods and services in 2019 should be lower than in the previous year due to the slowing export markets and the decline in export performance (see section 3.4). The slowdown in exports and import-intensive investment demand will be reflected in a lower rate of import of goods and services. As a result, imports are likely to increase by 1.6% (*versus* 3.4%) this year and by 1.3% (*versus* 3.4%) in 2020.

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

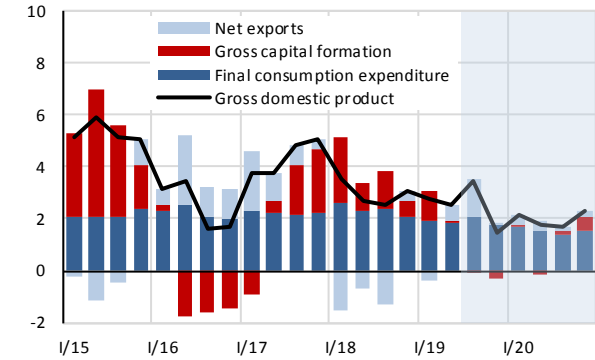
QoQ growth rate of real GDP in %, contrib. in pp, season. adjusted



Source: CZSO. Calculations of the MoF.

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

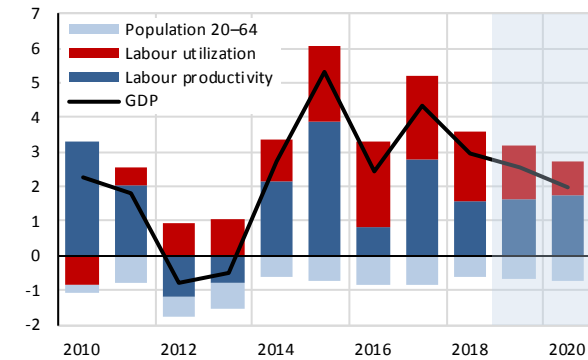
YoY growth rate of real GDP in %, contributions in pp



Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.1.3: Real Gross Domestic Product**

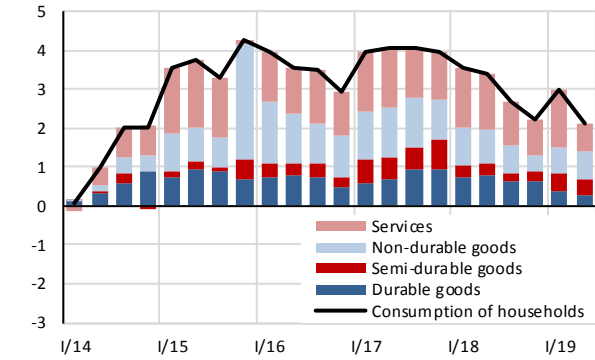
growth in %, contributions in percentage points



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**

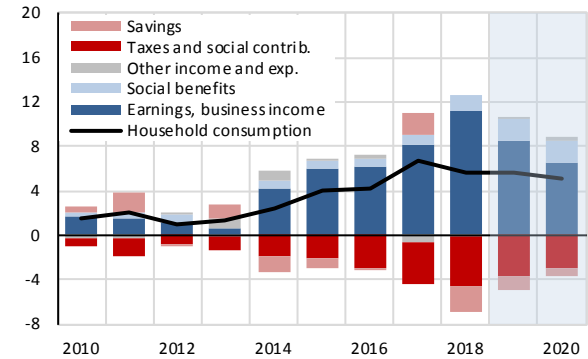
domestic concept, YoY growth rate in %, contributions in pp



Source: CZSO. Calculations of the MoF.

**Graph 3.1.5: Nominal Consumption of Households**

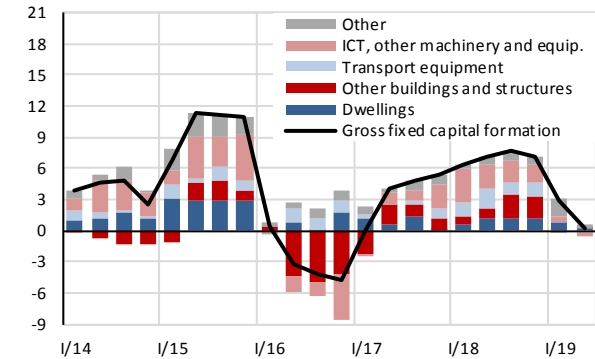
national concept, YoY growth rate in %, contributions in pp



Source: CZSO. Calculations and forecast of the MoF.

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

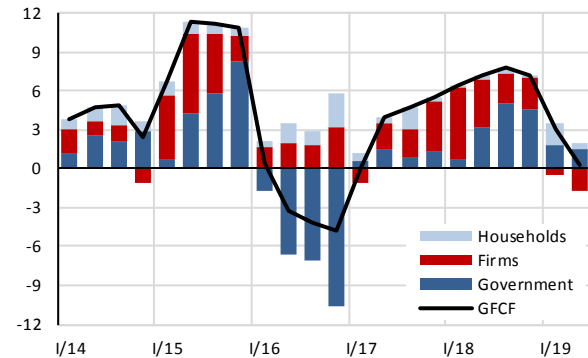
YoY growth rate of real GFCF in %, contributions in pp



Source: CZSO. Calculations of the MoF.

**Graph 3.1.7: Investment by Sector**

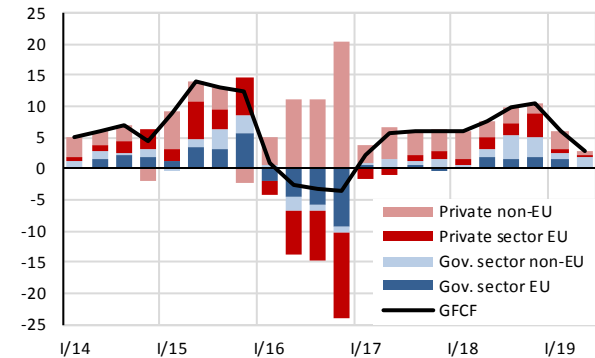
YoY growth rate of real GFCF in %, contributions in percentage points



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>4 861</b>	<b>4 958</b>	<b>5 067</b>	<b>5 173</b>
	<i>growth in %</i>	-0.5	2.7	5.3	2.5	4.4	3.0	2.5	2.0	2.2	2.1
	<i>growth in %<sup>1)</sup></i>	-0.5	2.7	5.4	2.4	4.5	2.9	2.5	2.0	2.1	2.1
<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>2 339</b>	<b>2 395</b>	<b>2 450</b>	<b>2 502</b>
	<i>growth in %</i>	0.5	1.8	3.7	3.6	4.3	3.4	2.7	2.4	2.3	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>921</b>	<b>938</b>	<b>955</b>	<b>973</b>
	<i>growth in %</i>	2.5	1.1	1.9	2.7	1.3	3.9	3.0	1.8	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>1 291</b>	<b>1 300</b>	<b>1 325</b>	<b>1 356</b>
	<i>growth in %</i>	-5.1	8.6	13.0	-4.3	4.0	5.3	0.7	0.7	2.0	2.3
Gross fixed capital formation	<i>bill. CZK 2010</i>	1 016	1 056	1 164	1 127	1 169	1 253	1 264	1 273	1 298	1 329
	<i>growth in %</i>	-2.5	3.9	10.2	-3.1	3.7	7.2	0.9	0.7	2.0	2.4
Change in stocks and valuables	<i>bill. CZK 2010</i>	-19	26	59	43	48	29	27	27	27	27
<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>4 077</b>	<b>4 142</b>	<b>4 230</b>	<b>4 325</b>
	<i>growth in %</i>	0.2	8.7	6.0	4.3	6.7	4.4	2.0	1.6	2.1	2.2
<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>3 764</b>	<b>3 813</b>	<b>3 889</b>	<b>3 978</b>
	<i>growth in %</i>	0.1	10.1	6.8	2.8	5.9	5.9	1.6	1.3	2.0	2.3
<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>4 550</b>	<b>4 632</b>	<b>4 730</b>	<b>4 830</b>
	<i>growth in %</i>	-0.6	3.4	5.9	1.1	3.5	4.0	2.2	1.8	2.1	2.1
<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>-4</b>	<b>-5</b>	<b>-5</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>4 915</b>	<b>5 023</b>	<b>5 146</b>	<b>5 265</b>
	<i>growth in %</i>	0.4	3.9	5.6	3.3	3.5	3.0	2.8	2.2	2.4	2.3
<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>1.7</b>	<b>2.0</b>	<b>2.0</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>1.9</b>	<b>1.5</b>	<b>1.5</b>	<b>1.4</b>
Household expenditure	<i>pp</i>	0.3	0.9	1.8	1.7	2.0	1.6	1.3	1.1	1.1	1.0
Government expenditure	<i>pp</i>	0.5	0.2	0.4	0.5	0.2	0.8	0.6	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>0.2</b>	<b>0.2</b>	<b>0.5</b>	<b>0.6</b>
Gross fixed capital formation	<i>pp</i>	-0.6	1.0	2.6	-0.8	0.9	1.8	0.2	0.2	0.5	0.6
Change in stocks	<i>pp</i>	-0.7	1.1	0.8	-0.4	0.1	-0.4	0.0	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>0.3</b>	<b>0.2</b>	<b>0.1</b>
External balance of goods	<i>pp</i>	0.1	-0.1	-1.1	1.0	0.8	-0.5	0.3	0.2	0.2	0.1
External balance of services	<i>pp</i>	0.0	-0.4	0.9	0.4	0.3	-0.3	0.1	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>Prelim.</i>	<i>Estimate</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>1 225</b>	<b>1 244</b>	<b>1 253</b>
	<i>growth in %</i>	3.6	2.7	2.5	3.1	2.8	2.5	3.4	1.5
	<i>growth in %<sup>1)</sup></i>	4.2	2.4	2.5	2.7	2.7	2.8	2.5	1.8
	<i>QoQ in %<sup>1)</sup></i>	0.6	0.6	0.6	0.9	0.6	0.7	0.3	0.2
<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>593</b>	<b>604</b>
	<i>growth in %</i>	4.1	3.7	3.1	2.7	2.9	2.6	3.1	2.4
<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>226</b>	<b>225</b>	<b>256</b>
	<i>growth in %</i>	3.5	3.4	5.1	3.8	2.8	3.4	3.0	2.8
<b>Gross capital formation</b>	<i>bill. CZK 2010</i>	<b>266</b>	<b>320</b>	<b>363</b>	<b>332</b>	<b>279</b>	<b>321</b>	<b>362</b>	<b>329</b>
	<i>growth in %</i>	11.2	4.1	5.1	2.3	4.8	0.3	-0.2	-1.1
Gross fixed capital formation	<i>bill. CZK 2010</i>	271	303	326	353	279	304	332	350
	<i>growth in %</i>	6.4	7.2	7.7	7.2	3.0	0.2	1.6	-1.0
Change in stocks and valuables	<i>bill. CZK 2010</i>	-5	17	37	-21	0	18	31	-21
<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>1 006</b>	<b>1 028</b>	<b>989</b>	<b>1 054</b>
	<i>growth in %</i>	3.6	4.2	4.2	5.6	1.3	1.5	4.3	1.1
<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>917</b>	<b>931</b>	<b>924</b>	<b>991</b>
	<i>growth in %</i>	6.1	5.6	6.6	5.5	1.9	0.8	2.5	1.2
<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>1 051</b>	<b>1 130</b>	<b>1 179</b>	<b>1 190</b>
	<i>growth in %</i>	5.7	3.7	4.0	2.8	3.4	2.1	2.0	1.6
<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>-2</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>1 240</b>	<b>1 253</b>	<b>1 267</b>
	<i>growth in %</i>	4.6	3.1	1.7	2.8	2.7	2.8	3.8	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>	<b>1 110</b>	.	.
	<i>growth in %</i>	3.5	2.8	2.7	3.4	2.8	2.5	.	.
	<i>growth in %<sup>1)</sup></i>	4.2	2.5	2.7	3.0	2.7	2.8	.	.
	<i>QoQ in %<sup>1)</sup></i>	0.8	0.7	0.6	0.9	0.6	0.8	.	.
<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>	<b>115</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>5 645</b>	<b>5 894</b>	<b>6 146</b>	<b>6 404</b>
	<i>growth in %</i>	0.9	5.3	6.5	3.7	5.9	5.6	5.9	4.4	4.3	4.2
<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>2 673</b>	<b>2 809</b>	<b>2 930</b>	<b>3 051</b>
	<i>growth in %</i>	1.4	2.4	3.8	4.2	6.7	5.7	5.7	5.1	4.3	4.1
<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>1 150</b>	<b>1 200</b>	<b>1 252</b>	<b>1 306</b>
	<i>growth in %</i>	2.7	2.8	4.0	4.0	5.4	9.9	8.1	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>1 439</b>	<b>1 472</b>	<b>1 522</b>	<b>1 581</b>
	<i>growth in %</i>	-4.9	10.4	15.1	-3.6	5.4	6.8	3.2	2.3	3.4	3.9
Gross fixed capital formation	<i>bill. CZK</i>	1 027	1 084	1 216	1 189	1 250	1 358	1 403	1 436	1 486	1 545
	<i>growth in %</i>	-2.4	5.5	12.2	-2.3	5.2	8.6	3.3	2.4	3.5	4.0
Change in stocks and valuables	<i>bill. CZK</i>	-16	32	68	50	56	36	36	35	36	36
<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>382</b>	<b>413</b>	<b>442</b>	<b>466</b>
Exports of goods and services	<i>bill. CZK</i>	3 150	3 561	3 725	3 793	4 024	4 177	4 330	4 409	4 510	4 630
	<i>growth in %</i>	1.9	13.0	4.6	1.8	6.1	3.8	3.7	1.8	2.3	2.6
Imports of goods and services	<i>bill. CZK</i>	2 914	3 286	3 449	3 425	3 644	3 837	3 948	3 996	4 068	4 164
	<i>growth in %</i>	0.6	12.8	5.0	-0.7	6.4	5.3	2.9	1.2	1.8	2.3
<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>5 341</b>	<b>5 589</b>	<b>5 828</b>	<b>6 071</b>
	<i>growth in %</i>	1.2	4.4	6.5	4.0	6.2	6.2	6.1	4.6	4.3	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>-304</b>	<b>-305</b>	<b>-317</b>	<b>-333</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				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Prelim.	Prelim.	Estimate	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>1 307</b>	<b>1 417</b>	<b>1 444</b>	<b>1 477</b>
	<i>growth in %</i>	6.2	5.3	5.0	5.8	6.2	6.2	6.8	4.6
<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>665</b>	<b>683</b>	<b>695</b>
	<i>growth in %</i>	5.9	6.1	6.0	5.0	5.9	5.6	6.0	5.2
<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>279</b>	<b>282</b>	<b>332</b>
	<i>growth in %</i>	10.2	9.2	11.9	8.5	7.9	9.2	8.0	7.4
<b>Gross capital formation</b>	<i>bill. CZK</i>	<b>285</b>	<b>346</b>	<b>397</b>	<b>366</b>	<b>308</b>	<b>356</b>	<b>404</b>	<b>370</b>
	<i>growth in %</i>	10.8	4.6	7.2	5.4	8.2	2.9	1.9	1.0
Gross fixed capital formation	<i>bill. CZK</i>	289	326	355	388	307	336	368	392
	<i>growth in %</i>	6.0	7.7	9.8	10.4	6.1	2.9	3.8	1.0
Change in stocks and valuables	<i>bill. CZK</i>	-4	20	42	-22	2	21	36	-22
<b>External balance</b>	<i>bill. CZK</i>	<b>111</b>	<b>103</b>	<b>51</b>	<b>75</b>	<b>110</b>	<b>117</b>	<b>75</b>	<b>80</b>
Exports of goods and services	<i>bill. CZK</i>	1 023	1 055	996	1 103	1 064	1 090	1 051	1 126
	<i>growth in %</i>	-0.5	2.3	5.3	8.3	4.0	3.2	5.5	2.0
Imports of goods and services	<i>bill. CZK</i>	912	953	945	1 028	954	973	975	1 046
	<i>growth in %</i>	0.6	3.2	8.8	8.6	4.6	2.1	3.2	1.7

<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>5 645</b>	<b>5 894</b>	<b>6 146</b>	<b>6 404</b>
	<i>growth in %</i>	0.9	5.3	6.5	3.7	5.9	5.6	5.9	4.4	4.3	4.2
<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>524</b>	<b>547</b>	<b>566</b>	<b>586</b>
	<i>% of GDP</i>	9.8	8.8	9.4	9.5	9.8	9.6	9.3	9.3	9.2	9.2
	<i>growth in %</i>	4.2	-5.1	13.8	4.7	9.0	3.7	2.0	4.3	3.5	3.6
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> <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>2 461</b>	<b>2 606</b>	<b>2 741</b>	<b>2 871</b>
	<i>% of GDP</i>	40.9	40.2	39.6	40.4	41.4	43.0	43.6	44.2	44.6	44.8
	<i>growth in %</i>	0.7	3.5	5.0	5.9	8.4	9.7	7.4	5.9	5.2	4.7
Wages and salaries	<i>bill. CZK</i>	1 275	1 321	1 384	1 464	1 585	1 735	1 863	1 973	2 075	2 173
	<i>growth in %</i>	0.5	3.6	4.8	5.7	8.3	9.5	7.4	5.9	5.2	4.7
Social security contributions	<i>bill. CZK</i>	402	414	437	464	504	556	598	633	666	698
	<i>growth in %</i>	1.4	3.1	5.5	6.4	8.6	10.2	7.5	5.9	5.2	4.7
<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>2 660</b>	<b>2 742</b>	<b>2 838</b>	<b>2 947</b>
	<i>% of GDP</i>	49.3	50.9	50.9	50.0	48.8	47.4	47.1	46.5	46.2	46.0
	<i>growth in %</i>	0.5	8.8	6.5	1.9	3.2	2.5	5.4	3.1	3.5	3.8
Consumption of capital	<i>bill. CZK</i>	906	939	969	998	1 026	1 065	1 126	1 179	1 231	1 276
	<i>growth in %</i>	3.0	3.6	3.2	3.0	2.9	3.8	5.7	4.7	4.4	3.6
Net operating surplus	<i>bill. CZK</i>	1 114	1 259	1 372	1 388	1 436	1 459	1 534	1 563	1 607	1 671
	<i>growth in %</i>	-1.4	13.0	9.0	1.2	3.5	1.5	5.1	1.9	2.8	4.0

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>Prelim.</i>	<i>Estimate</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>1 307</b>	<b>1 417</b>	<b>1 444</b>	<b>1 477</b>
	<i>growth in %</i>	6.2	5.3	5.0	5.8	6.2	6.2	6.8	4.6
<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>139</b>	<b>141</b>	<b>134</b>
	<i>growth in %</i>	4.8	2.9	3.5	4.0	1.9	5.1	1.2	0.0
<b>Compensation of employees</b> <i>(domestic concept)</i>	<i>bill. CZK</i>	<b>545</b>	<b>571</b>	<b>567</b>	<b>608</b>	<b>588</b>	<b>614</b>	<b>607</b>	<b>651</b>
	<i>growth in %</i>	10.7	10.3	9.7	8.1	8.0	7.6	7.1	7.0
Wages and salaries	<i>bill. CZK</i>	411	431	430	462	444	464	461	494
	<i>growth in %</i>	10.5	10.4	9.8	7.4	7.9	7.5	7.1	7.0
Social security contributions	<i>bill. CZK</i>	133	140	137	147	144	150	146	157
	<i>growth in %</i>	11.3	10.0	9.4	10.3	8.1	7.9	7.1	7.0
<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>664</b>	<b>695</b>	<b>692</b>
	<i>growth in %</i>	2.6	1.6	1.6	4.1	5.4	5.1	7.7	3.4

Source: CZSO. Calculations and forecast of the MoF.

## 3.2 Prices

The year-on-year growth in **consumer prices** in September 2019 was 2.7% (*versus* 2.4%). The difference between the actual outcome and the forecast can be attributed almost exclusively to the market component of inflation. Administrative measures contributed 0.7 pp, of which only –0.1 pp was related to the change in indirect taxes (a reduction in value added tax on public transport). The largest slice of the contribution made by regulated prices was taken up by a hike in the electricity price (0.4 pp). As for individual divisions of the consumer basket, the biggest contribution (1.3 pp) was made by housing, where of all divisions prices also rose at the fastest rate (by 5.0% YoY).

In price-determining areas, the assumptions of the current macroeconomic forecast are not that different from those used for the previous forecast. Nevertheless, the inflation forecast slightly reflects the weaker – compared to the July forecast – exchange rate of the koruna against the euro and the US dollar. The forecast is also affected by the aforementioned difference between the actual and forecasted inflation in September 2019. Price impacts of these factors are only marginally cushioned by the small reduction in the forecast for the growth rate of household consumption.

**In 2019**, it is necessary to anticipate higher inflation than in the previous year, which will be fuelled considerably by administrative measures. 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 rise in consumer prices this year. We expect administrative measures to contribute 0.7 pp (*unchanged*) to the year-on-year growth of consumer prices in December 2019. This year, inflation should therefore be determined primarily by market factors.

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

In Q4 2019, the year-on-year inflation will probably be in the upper half of the tolerance band of the CNB's target. **In 2019**, the **inflation rate** should **average** 2.8% (*versus* 2.5%).

**In 2020**, the year-on-year inflation is again likely to be in the upper half of the tolerance band of the CNB's target, and it may well exceed the upper limit of that band for a short time (see Graph 3.2.1).

The growth in unit labour cost should slow further in 2020. Demand-pull inflationary pressures should also be

a little weaker than in 2019, given the trends expected in household consumption and the output gap. Nevertheless, these factors should be decisive in determining the market component underpinning developments in consumer prices. Moderate anti-inflationary pressures could stem from the projected fall in the price of oil, and the exchange rate should have a more or less neutral effect.

In 2020, consumer prices will be affected by the following changes in indirect taxes (see also section 1.5):

- reclassification of selected price representatives to the second reduced value added tax rate in connection with the expansion of electronic sales registration, effective as of 1 May 2020;
- reclassification of heat to the second reduced value added tax rate, effective as of 1 January 2020;
- increase in excise duty applied to tobacco products and alcohol, effect expected as of 1 January 2020.

The aggregate technical impact of these measures on the increase in consumer prices during 2020 could be 0.2 pp. However, we assume that the real impact will be 0.4 pp as prices tend to be sticky downward (the above-mentioned value added tax reduction will not be fully reflected in end-user prices).

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 2.6% (*versus* 2.2%).

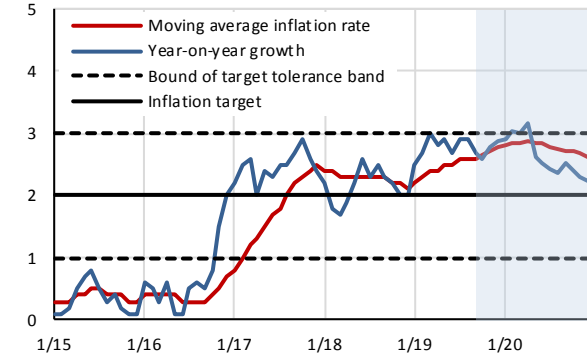
In Q2 2019, the **GDP deflator** increased by 3.6% (*versus* 3.3%), with the gross domestic expenditure deflator growing by 3.4% (*versus* 3.1%) and terms of trade improving by 0.3% (*versus* 0.2%). Developments in the gross domestic expenditure deflator reflected the growth in deflators of the general government and household consumption as well as of gross fixed capital formation.

In 2019, the GDP deflator should grow by 3.3% (*versus* 3.0%), mainly on the back of a rise in the gross domestic expenditure deflator. In 2020, the reduced growth of the gross domestic expenditure deflator could result in the growth of GDP deflator slowing down to 2.4% (*versus* 2.1%). The contribution of terms of trade could be positive in both years.

The forecasted modest appreciation of the koruna and the oil price momentum should affect expected developments in both export and import prices. As a result, terms of trade could improve by 0.3% in both 2019 and 2020 (*versus* 0.2% in 2019; *unchanged* in 2020).

### Graph 3.2.1: Consumer Prices

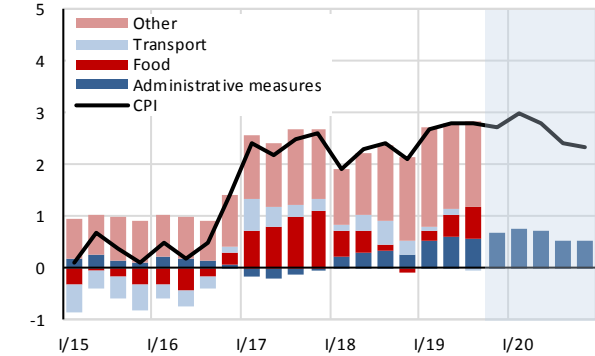
YoY growth rate in %



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

### Graph 3.2.2: Consumer Prices in Main Divisions

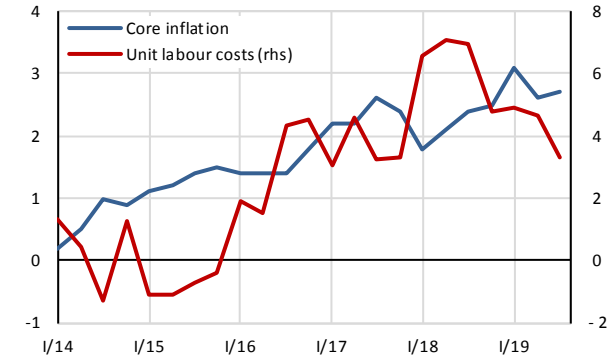
YoY growth of consumer price index in %, contributions in pp



Source: CZSO. Calculations and forecast of the MoF.

### Graph 3.2.3: Core Inflation and Unit Labour Costs

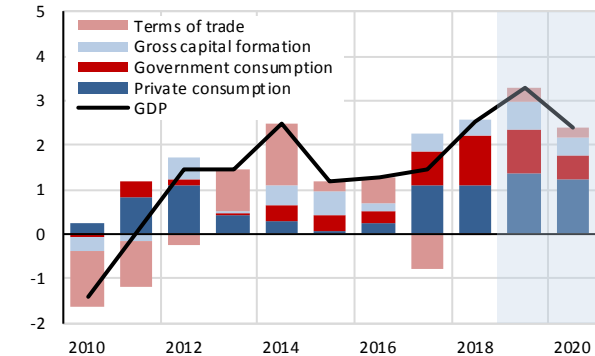
YoY growth rate in %



Source: CZSO. Calculations and forecast of the MoF.

### Graph 3.2.4: Gross Domestic Product Deflator

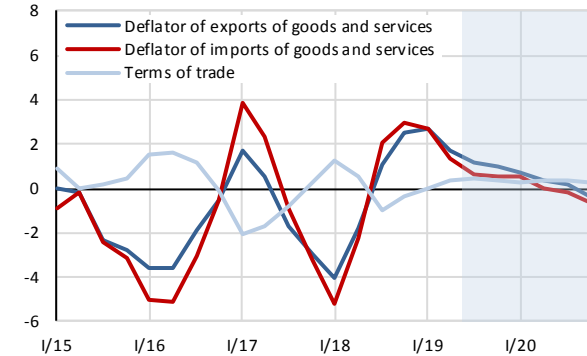
growth rate in %, contributions in percentage points



Source: CZSO. Calculations and forecast of the MoF.

### Graph 3.2.5: Terms of Trade

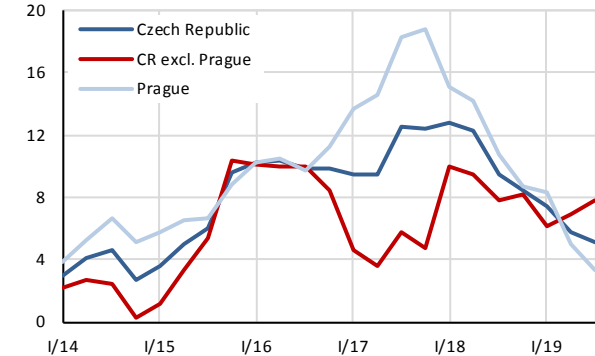
YoY growth rate in %



Source: CZSO. Calculations and forecast of the MoF.

### Graph 3.2.6: Offering Prices of Flats

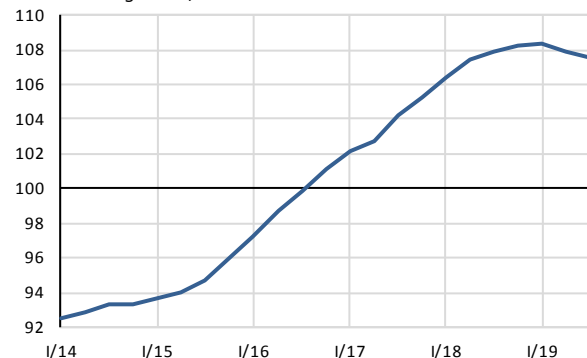
YoY growth rate in %



Source: CZSO.

### Graph 3.2.7: Housing Affordability in the CR

ratio of index of offering prices of flats to index of average wage, from annual moving totals, Q4 2010=100



Source: CZSO. Calculations 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>Level</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>108.3</b>	<b>111.1</b>	<b>113.3</b>	<b>115.5</b>
<b>Average inflation rate</b>	%	<b>1.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.7</b>	<b>2.5</b>	<b>2.1</b>	<b>2.8</b>	<b>2.6</b>	<b>2.0</b>	<b>2.0</b>
Administrative measures <sup>1)</sup>	<i>percentage points</i>	1.4	-0.4	0.2	0.2	-0.1	0.3	0.6	0.6	0.4	0.4
Market increase	<i>percentage points</i>	0.0	0.8	0.1	0.5	2.6	1.8	2.2	2.0	1.6	1.6
<b>Level in 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>109.1</b>	<b>111.5</b>	<b>113.8</b>	<b>116.0</b>
<b>Annual inflation in December</b>	%	<b>1.4</b>	<b>0.1</b>	<b>0.1</b>	<b>2.0</b>	<b>2.4</b>	<b>2.0</b>	<b>2.9</b>	<b>2.2</b>	<b>2.0</b>	<b>2.0</b>
<b>Harmonized index of consumer prices</b>											
<b>Level</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>107.7</b>	<b>110.4</b>	<b>112.4</b>	<b>114.5</b>
<b>Average inflation rate</b>	<i>growth in %</i>	<b>1.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.6</b>	<b>2.4</b>	<b>2.0</b>	<b>2.5</b>	<b>2.5</b>	<b>1.8</b>	<b>1.9</b>
<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>116.1</b>	<b>118.9</b>	<b>121.3</b>	<b>123.8</b>
	<i>growth in %</i>	1.4	2.5	1.2	1.3	1.4	2.5	3.3	2.4	2.0	2.1
<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>115.7</b>	<b>118.3</b>	<b>120.6</b>	<b>122.9</b>
	<i>growth in %</i>	0.5	1.1	1.0	0.7	2.4	2.7	3.2	2.3	1.9	2.0
<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>114.3</b>	<b>117.3</b>	<b>119.6</b>	<b>122.0</b>
	<i>growth in %</i>	0.8	0.6	0.1	0.5	2.4	2.3	2.8	2.6	2.0	2.0
<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>124.9</b>	<b>128.0</b>	<b>131.0</b>	<b>134.2</b>
	<i>growth in %</i>	0.2	1.7	2.0	1.3	4.1	5.7	4.9	2.5	2.4	2.4
<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>111.0</b>	<b>112.8</b>	<b>114.5</b>	<b>116.2</b>
	<i>growth in %</i>	0.1	1.6	1.8	0.9	1.4	1.4	2.4	1.7	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>106.2</b>	<b>106.4</b>	<b>106.6</b>	<b>107.0</b>
	<i>growth in %</i>	1.7	4.0	-1.3	-2.4	-0.6	-0.6	1.6	0.2	0.2	0.4
<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>104.9</b>	<b>104.8</b>	<b>104.6</b>	<b>104.7</b>
	<i>growth in %</i>	0.5	2.5	-1.7	-3.4	0.4	-0.6	1.3	-0.1	-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>101.3</b>	<b>101.6</b>	<b>101.9</b>	<b>102.3</b>
	<i>growth in %</i>	1.2	1.5	0.4	1.0	-1.0	0.0	0.3	0.3	0.3	0.3

<sup>1)</sup> The contribution of change in regulated prices and indirect taxes to the average inflation rate.

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
							Estimate	Forecast	
<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>108.8</b>	<b>108.9</b>
	<i>growth in %</i>	1.9	2.3	2.4	2.1	2.7	2.8	2.8	2.7
<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	2.2	2.0
<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>107.6</b>	<b>108.2</b>	<b>108.2</b>
	<i>growth in %</i>	1.7	2.1	2.3	1.8	2.3	2.4	2.5	2.5
<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>114.7</b>	<b>115.7</b>	<b>116.1</b>	<b>117.9</b>
	<i>growth in %</i>	2.6	2.5	2.5	2.6	3.4	3.6	3.2	3.1
<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>115.1</b>	<b>116.0</b>	<b>117.4</b>
	<i>growth in %</i>	2.1	2.5	3.3	3.0	3.4	3.4	3.1	2.9
<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>115.1</b>	<b>115.2</b>
	<i>growth in %</i>	1.7	2.3	2.8	2.2	2.9	2.9	2.8	2.7
<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>123.5</b>	<b>124.9</b>	<b>129.5</b>
	<i>growth in %</i>	6.5	5.7	6.5	4.5	4.9	5.6	4.9	4.5
<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>110.0</b>	<b>110.6</b>	<b>111.1</b>	<b>112.1</b>
	<i>growth in %</i>	-0.4	0.5	1.9	3.0	3.0	2.6	2.2	2.0
<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>105.8</b>	<b>106.0</b>	<b>106.3</b>	<b>106.8</b>
	<i>growth in %</i>	-4.0	-1.8	1.1	2.5	2.7	1.7	1.1	0.9
<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>104.5</b>	<b>105.5</b>	<b>105.5</b>
	<i>growth in %</i>	-5.2	-2.3	2.1	3.0	2.7	1.4	0.6	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>101.7</b>	<b>101.5</b>	<b>100.7</b>	<b>101.3</b>
	<i>growth in %</i>	1.2	0.5	-1.0	-0.4	0.0	0.3	0.5	0.4

<sup>1)</sup> The contribution of change in regulated prices and indirect taxes.

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. However, it appears to be reaching its limits. Employment growth is showing a tendency to slow down and has virtually come to a standstill in the Labour Force Survey methodology. While the internationally comparable unemployment rate evidently bottomed out at around 2%, registered unemployment continues to fall moderately. There are around 350,000 vacancies; this is more than double the previous highs reported in 2008. The ongoing robust increases in wages and salaries echo this situation.

According to the Labour Force Survey, **employment** grew by 0.1% YoY (*versus 0.7%*) in Q2 2019. The number of employees went up by 0.3% (*versus 0.8%*) and the number of entrepreneurs dipped by 0.3% (*versus growth by 0.5%*). While the number of entrepreneurs without employees fell by 0.3%, the decline in the number of entrepreneurs with employees was a more pronounced 2.0%. Broken down by age structure, the growth was driven by the 45-49 and 55-59 brackets; in the younger age groups, demographic factors played a role in the decrease in employment.

From the 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 sector is dominant (education; health care and social work activities). Conversely, there was a significant decrease in manufacturing (by 7,000) and in administrative and support service activities (where employment agencies are heavily represented).

Scarcity of labour has long been evident in virtually all sectors of the economy and in almost all regions (in September 2019, the number of vacancies surpassed the number of unemployed in 10 out of 14 regions). This factor severely impedes economic growth (in Q3 2019, the labour shortage was singled out as the main barrier to production growth by almost a third of industrial enterprises and nearly a half of construction companies).

Considering how extremely low unemployment is, further increases in employment via this channel are virtually impossible. Consequently, companies and institutions often resolve this shortage by recruiting employees who would otherwise be economically inactive. Hiring from outside the EU, especially from Ukraine, but also from other post-Soviet or Asian countries, continues. In the medium and long term, the current labour market situation is paving the way for advances in automation and robotization and the economy's greater focus on less labour-intensive sectors with higher value added.

Due to the lower growth in Q2 2019, we revise down our forecast for employment growth this year to 0.3% (*versus 0.7%*). In Q3 and Q4 2019, as well as in 2020, em-

ployment should increase only marginally, owing to the aforementioned factors and a gradual deceleration in the growth of labour demand. In 2020 it should thus increase by just 0.1% (*versus 0.3%*).

The **unemployment rate** (Labour Force Survey) fell to 1.9% (*versus 2.2%*) in Q2 2019, which is the lowest level recorded in the history of the independent Czech Republic. However, in our opinion it will not decrease further. This is also confirmed by developments in monthly data on the seasonally adjusted unemployment rate (15-64 years), which has been fluctuating around 2% since the end of last year. Growth in labour demand should weaken as the economy gradually slows down, and also as a result of previous investment to increase productivity. Due to demographic and some structural factors (increase in the statutory retirement age) the supply of labour should grow faster than demand. We could therefore see gradual and very modest increases in the unemployment rate. Owing to the lower level in Q2, however, we cut our forecast for 2019 to 2.0% (*versus 2.2%*). We expect a moderate rise to 2.2% (*versus 2.3%*) in 2020. A more significant rise in unemployment should be prevented by the extremely high number of vacancies and significant number of foreign nationals granted time-limited work permits 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 room, though very limited, for a further reduction. 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 as registered unemployed), which means they are probably capable of deregistration and taking on a full-time job. Another crucial factor is that some people have had enforcement writs issued against them and/or are working in the informal economy, but may be motivated to find an official job by the continuing robust wage growth and the very wide range of vacancies on offer. We anticipate a decline in the share of unemployed persons to 2.8% in 2019 and 2.6% in 2020 (*unchanged in both years*).

The **participation rate** (20-64 years) rose only slightly in Q2 2019 – by 0.1 pp to 81.7% (*versus 82.3%*) – in connection with lower employment growth.

Demographic aspects, specifically the representation of age brackets with a naturally high degree of economic activity (especially those in the 40-49 category), will play the key role in further participation rate growth. The rise in the statutory retirement age will also have an effect. We expect the participation rate to average 82.1% (*ver-*

82.5%) in 2019, rising to 82.7% (*versus* 83.2%) in 2020 on account of the factors explained above.

The growth in **wages and salaries** in Q2 2019 slowed down to 7.5% (*versus* 7.4%). Although earnings grew most in real estate activities (+15.1%), overall growth continued to be driven by strong wage and salary momentum in public administration, defence, education, and health and social work (+10.7%). However, most industries recorded slackening wage growth; in the economically important manufacturing, dynamics slowed to 5.7%, which was the lowest level since Q4 2014.

Developments in monthly data on cash receipts for social security contributions and a weakening growth rate of wages in industry suggest that earnings momentum is petering out. In Q3 2019, wages and salaries could have grown by 7.1% (*versus* 7.2%).

The situation in the labour market is set to remain tense for the rest of this year, and this will be reflected in the continued high number of vacancies. Besides the labour shortage, the hike in the minimum and guaranteed wage (a year-on-year increase of 9.4%) has been another strong impulse for wage growth. From the sectoral perspective, we expect the general government sector to be a major contributor on the basis of the increase in

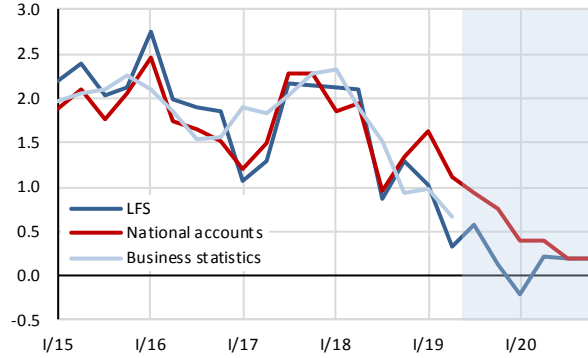
pay scales (especially in education). The wage slowdown in industrial sectors in response to weakening foreign demand should pull in the opposite direction. This year, wages and salaries could therefore grow by 7.4% (*unchanged*).

The lower demand for labour as the forecast slowdown in economic output sets in should stifle the growth in the number of employees and their average wages next year. Another important factor will be the extent of the increase in the minimum and guaranteed wage (no agreement had been reached by the forecast cut-off date). Wage and salary growth in 2020 could slow to 5.9% (*unchanged*).

In Q2 2019, the **average wage** (business statistics, FTE) grew by 7.2% (*versus* 7.1%). Wage increases were again uneven across the pay distribution range. By far the fastest growth was reported in low- and middle-income professions. The median wage rose by 6.9% in Q2 2019. There may have been an increase in the average nominal wage of 6.9% (*versus* 7.0%) in Q3 2019, and of 7.1% (*unchanged*) in 2019 as a whole. In 2020, the rate at which the average wage increases could slow down to 5.7% (*unchanged*).

**Graph 3.3.1: Employees in Different Statistics**

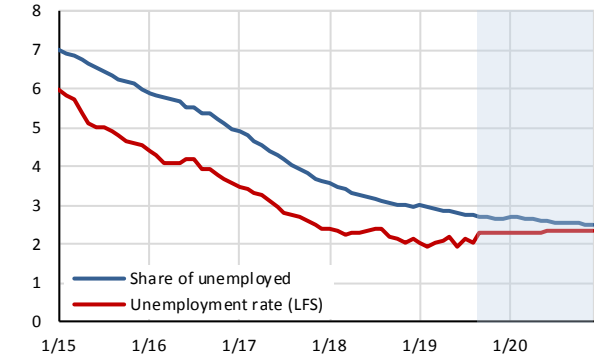
YoY growth rate in%



Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.3.2: Indicators of Unemployment**

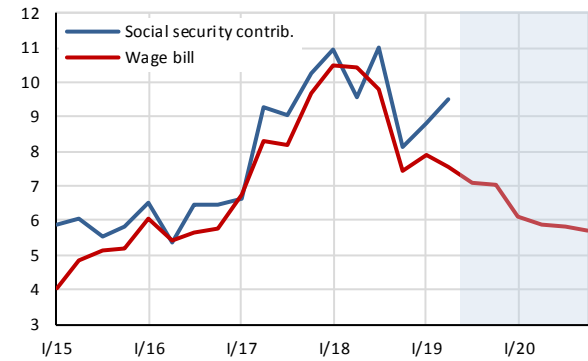
seasonally adjusted data, in%



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

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

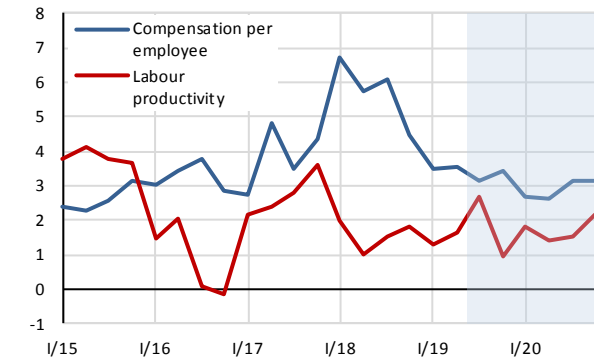
YoY growth rate in%



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

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

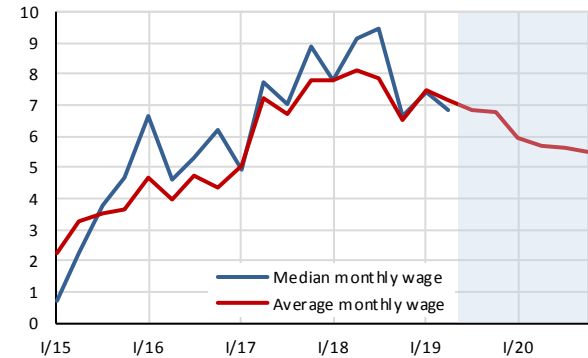
YoY growth rate in%



Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.3.5: Nominal Monthly Wage**

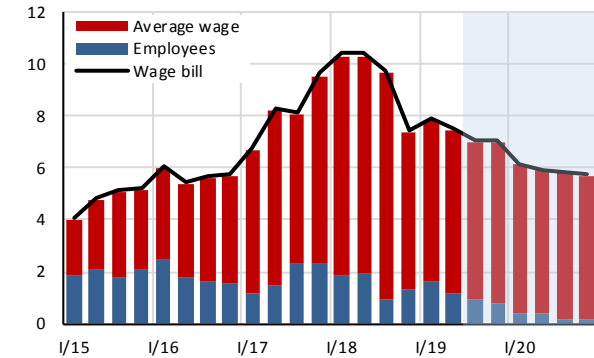
YoY growth rate in%



Source: CZSO. Calculations and forecast of the MoF.

**Graph 3.3.6: Nominal Wage Bill**

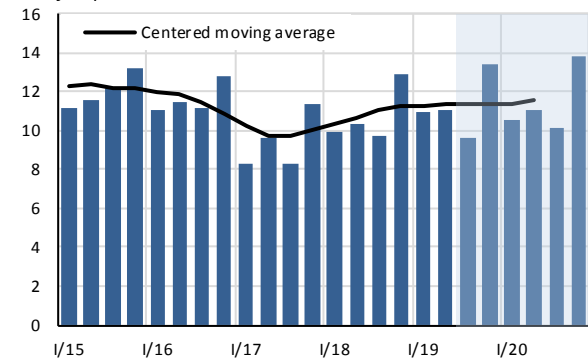
YoY growth rate in %, domestic concept of the wage bill



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>5 311</b>	<b>5 314</b>	<b>5 320</b>	<b>5 322</b>
	<i>growth in %</i>	1.0	0.8	1.4	1.9	1.6	1.4	0.3	0.1	0.1	0.0
Employees	<i>av. in thous.persons</i>	4 055	4 079	4 168	4 257	4 327	4 396	4 419	4 423	4 428	4 430
	<i>growth in %</i>	1.5	0.6	2.2	2.1	1.7	1.6	0.5	0.1	0.1	0.0
Entrepreneurs and self-employed	<i>av. in thous.persons</i>	882	895	874	882	894	897	893	892	892	892
	<i>growth in %</i>	-1.3	1.5	-2.4	1.0	1.4	0.4	-0.5	-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>111</b>	<b>121</b>	<b>130</b>	<b>137</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>2.0</b>	<b>2.2</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>5 422</b>	<b>5 435</b>	<b>5 450</b>	<b>5 458</b>
	<i>growth in %</i>	0.9	-0.2	0.2	0.8	0.5	0.7	0.1	0.2	0.3	0.2
<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>6 380</b>	<b>6 334</b>	<b>6 294</b>	<b>6 259</b>
	<i>growth in %</i>	-0.6	-0.7	-0.7	-0.9	-0.8	-0.7	-0.5	-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>83.2</b>	<b>83.9</b>	<b>84.5</b>	<b>85.0</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>80.4</b>	<b>80.9</b>	<b>81.5</b>	<b>82.0</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>85.0</b>	<b>85.8</b>	<b>86.6</b>	<b>87.2</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>82.1</b>	<b>82.7</b>	<b>83.4</b>	<b>83.9</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>76.6</b>	<b>76.9</b>	<b>77.4</b>	<b>77.8</b>	<b>78.0</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>211</b>	<b>196</b>	<b>191</b>	<b>195</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	<i>CZK monthly</i>	25 035	25 768	26 591	27 764	29 638	31 868	34 116	36 057	37 896	39 669
	<i>growth in %</i>	-0.1	2.9	3.2	4.4	6.7	7.5	7.1	5.7	5.1	4.7
Real	<i>CZK 2010</i>	23 447	24 036	24 730	25 641	26 735	28 146	29 304	30 179	31 111	31 932
	<i>growth in %</i>	-1.5	2.5	2.9	3.7	4.3	5.3	4.1	3.0	3.1	2.6
<b>Median monthly wage</b>	<i>CZK monthly</i>	<b>21 110</b>	<b>21 786</b>	<b>22 414</b>	<b>23 692</b>	<b>25 398</b>	<b>27 489</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>5.2</b>	<b>4.7</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>1.6</b>	<b>1.7</b>	<b>2.1</b>	<b>2.1</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>4.5</b>	<b>3.8</b>	<b>2.9</b>	<b>2.6</b>
<b>Compens. of employees / GDP</b>	<i>%</i>	<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>43.6</b>	<b>44.2</b>	<b>44.6</b>	<b>44.8</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				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Estimate	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>5 296</b>	<b>5 321</b>	<b>5 322</b>
	<i>YoY growth in %</i>	1.7	1.8	0.8	1.2	0.9	0.1	0.4	-0.1
	<i>QoQ growth in %</i>	0.6	0.2	0.0	0.5	0.2	-0.4	0.1	0.0
Employees	<i>av. in thous. persons</i>	4 367	4 389	4 398	4 431	4 411	4 403	4 423	4 436
	<i>growth in %</i>	2.1	2.1	0.9	1.3	1.0	0.3	0.6	0.1
Entrepreneurs and self-employed	<i>av. in thous. persons</i>	891	900	903	895	894	893	898	886
	<i>growth in %</i>	-0.2	0.2	0.7	0.8	0.3	-0.8	-0.6	-1.1
<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>102</b>	<b>116</b>	<b>116</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>1.9</b>	<b>2.1</b>	<b>2.1</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>33</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>5 398</b>	<b>5 438</b>	<b>5 437</b>
	<i>growth in %</i>	0.6	1.0	0.4	0.9	0.5	-0.2	0.2	0.0
<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>6 384</b>	<b>6 372</b>	<b>6 360</b>
	<i>growth in %</i>	-0.7	-0.7	-0.7	-0.6	-0.4	-0.5	-0.5	-0.6
<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>83.0</b>	<b>83.5</b>	<b>83.7</b>
	<i>increase over a year</i>	2.0	2.0	1.2	1.5	1.1	0.5	0.8	0.4
<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>80.1</b>	<b>80.6</b>	<b>80.8</b>
	<i>increase over a year</i>	1.6	1.6	1.1	1.2	0.9	0.3	0.6	0.3
<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>84.6</b>	<b>85.3</b>	<b>85.5</b>
	<i>increase over a year</i>	1.1	1.4	0.9	1.2	0.8	0.3	0.6	0.5
<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>81.7</b>	<b>82.4</b>	<b>82.5</b>
	<i>increase over a year</i>	0.7	1.0	0.8	0.8	0.7	0.1	0.5	0.4
<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>76.6</b>	<b>76.5</b>	<b>77.1</b>	<b>77.2</b>
	<i>increase over a year</i>	0.6	0.8	0.6	0.8	0.6	0.1	0.3	0.2
<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>202.9</b>	<b>197</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>2.7</b>	<b>2.6</b>
<b>Wages and salaries</b>									
<b>Average monthly wage <sup>5)</sup></b>									
Nominal	<i>CZK monthly</i>	30 230	31 815	31 533	33 871	32 485	34 105	33 698	36 177
	<i>growth in %</i>	7.8	8.1	7.9	6.5	7.5	7.2	6.9	6.8
Real	<i>CZK 2010</i>	26 910	28 133	27 725	29 725	28 163	29 349	28 812	30 906
	<i>growth in %</i>	5.9	5.6	5.3	4.3	4.7	4.3	3.9	4.0
<b>Median monthly wage</b>	<i>CZK monthly</i>	<b>25 690</b>	<b>27 258</b>	<b>27 734</b>	<b>29 274</b>	<b>27 598</b>	<b>29 127</b>	.	.
	<i>growth in %</i>	7.8	9.2	9.4	6.6	7.4	6.9	.	.
<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>7.9</b>	<b>7.5</b>	<b>7.1</b>	<b>7.0</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>2 477</b>	<b>2 621</b>
	growth in %	2.5	2.6	1.3	4.0	5.3	6.0	8.3	9.2	6.7	5.8
<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>855</b>	<b>882</b>
	growth in %	-1.7	-2.9	-1.3	2.6	4.3	2.9	2.5	9.7	7.0	3.2
<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>178</b>	<b>187</b>
	growth in %	-0.6	-4.0	7.8	5.1	-0.4	5.7	-5.8	3.9	3.7	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>703</b>	<b>754</b>
	growth in %	2.1	2.4	-0.6	2.2	2.6	2.6	2.8	5.1	7.3	7.3
<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>305</b>	<b>324</b>
	growth in %	-0.5	8.6	-3.1	9.2	13.3	19.4	12.8	14.6	9.1	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>22</b>	<b>24</b>
	growth in %	-8.5	-27.2	40.5	-24.3	-10.7	0.2	8.3	44.4	-2.8	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>285</b>	<b>305</b>
	growth in %	8.1	1.6	4.9	6.9	3.2	11.1	11.0	14.4	10.4	7.2
<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>975</b>	<b>1031</b>
	growth in %	3.1	2.3	2.4	3.8	5.3	5.8	7.8	8.9	7.2	5.7
<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>298</b>	<b>316</b>
	growth in %	3.2	6.2	-9.3	6.9	11.9	22.5	14.7	16.3	9.0	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>2 937</b>	<b>3 092</b>
	growth in %	0.2	1.0	0.1	3.5	4.3	3.8	4.1	7.3	6.3	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>2 636</b>	<b>2 770</b>
	growth in %	2.0	0.9	1.3	2.4	3.9	4.1	6.7	5.7	5.6	5.1
<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>35</b>	<b>37</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>336</b>	<b>358</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>-18</b>	<b>-23</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>262</b>	<b>271</b>
	growth in %	-13.9	-7.8	-1.3	8.3	6.6	9.6	5.9	1.5	6.9	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>95</b>	<b>114</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>2.6</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>11.5</b>

Source: CZSO. Calculations of the MoF.

### 3.4 External Relations

The **current account balance to GDP ratio**<sup>2</sup> was 0.7% (*versus 0.4%*) in Q2 2019, meaning that it had improved by 0.5% of GDP quarter on quarter.

**Export market growth** of 2.5% (*versus 4.2%*) in Q2 2019 lagged far behind expectations. The root cause was the steep 15.9% QoQ decline in imports into the United Kingdom (a consequence of a robust import growth in Q1 2019). There was also a downturn in imports into Slovakia and Germany. Taking into account the revised forecast for developments in our main trading partners' economies and expected trend in their import intensity, we project that export market growth will slow to 2.6% (*versus 4.1%*) this year and then to 1.7% (*versus 3.4%*) in 2020.

**Export performance** dipped by 0.1% (*versus growth of 0.1%*) in Q2 2019, a decline for the second quarter in row. However, performance did not drop as much as in the previous quarter, partly due to faster growth of domestic industrial production, especially manufacture of cars. A slowdown in the growth of final product prices may also have contributed to a lesser decline in export performance. We forecast a reduction in export performance by 0.9% (*versus 0.8%*) this year. In 2020 we expect this drop to soften to 0.2% (*versus 0.4%*). This negative development reflects the growth in unit labour costs related to the shortage of suitably skilled labour, and predicted moderate appreciation of the koruna.

Within external trade (balance of payments methodology) surplus on the **balance of goods** increased for the first time since Q1 2017. In Q2 2019, current data put the surplus at 4.0% of GDP (*versus 4.1% of GDP*). Higher activity on the export side contributed to the increase in the surplus.

Nominal volume of exports (statistics of external trade, national concept) was positively affected by higher-than-average growth in exports of machinery and transport equipment, which account for more than half of all exports of goods. Within this group exports of cars and electronic products were the most successful. Weak domestic demand for capital goods lowered the import momentum (see Section 3.1).

Prices of mineral fuels remain an important factor affecting the goods **terms of trade**. In Q2 2019, the deficit on the fuel part of the balance was 2.9% of GDP (*as forecast*). As the oil price scenario has barely changed, we envisage a reduction in the deficit to 2.7% of GDP in 2019 and then to 2.4% of GDP in 2020 (*unchanged in both years*).

We estimate that the surplus on the balance of goods will continue to increase and that it will come to 4.3% of GDP (*versus 4.2% of GDP*) this year. We expect the sur-

plus to rise further in 2020 to 4.5% of GDP (*versus 4.3% of GDP*). The improved forecast reflects positive external trade developments in the first two months of Q3 2019. This can be attributed to strong exports of motor vehicles (boosted as car makers resolved issues related to implementation of the WLTP method for measuring emissions, which reduced the base in 2018), and a major slowdown in domestic (especially investment) demand. The planned procurement of military machinery worth more than CZK 80 billion, which would have a one-time impact on import momentum, poses a risk in the direction of worse external trade balance.

In Q2 2019, the surplus on the **balance of services** was 2.3% of GDP (*as forecast*). In the year-on-year comparison, contributory factors to the improved balance were a rise in income from telecommunications services and an improvement in the balance of repair work. With one-off factors – in the form of a major hike in imports of research and consulting services in Q3 2018 – fading, we continue to expect stable developments in the surplus on the balance of services. In relative terms it should come to 2.3% of GDP (*versus 2.4% of GDP*) this year and 2.4% of GDP (*versus 2.5% of GDP*) next year.

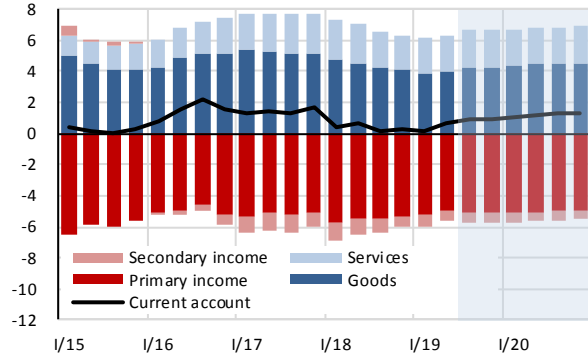
The current account balance to GDP ratio remained almost unchanged in the year-on-year comparison. The decline in the surplus on the balance of goods and services by 0.8% of GDP was offset by a reduction in the primary and secondary income deficit to the same extent. The **primary income balance** improved by 0.5% of GDP, reporting a deficit of 5.0% of GDP (*versus 5.2% of GDP*) in Q2 2019. This improvement was attributed to lower outflow of income from direct investments, reflecting a reduction in the growth of profitability among foreign-owned companies. Primary income is exhibiting high volatility over time; this 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 forecast that there will continue to be an impact on the profitability of foreign-controlled companies in the future. In this light, we believe that the primary income deficit relative to GDP will dip to 5.1% this year and then to 4.9% in 2020 (*versus 5.2% of GDP in both years*).

In this context, we estimate that the **current account of the balance of payments** will report a surplus amounting to 0.9% of GDP (*versus 0.6% of GDP*) in 2019. We forecast a further rise in the surplus to 1.4% of GDP (*versus 0.8% of GDP*) in 2020.

<sup>2</sup>All quarterly figures relative to GDP are reported as annual rolling totals.

### Graph 3.4.1: Current Account

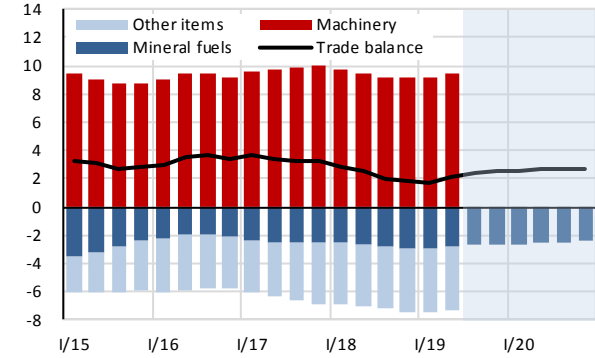
four-quarter moving totals, in % of GDP, BoP methodology



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

### Graph 3.4.2: Balance of Trade

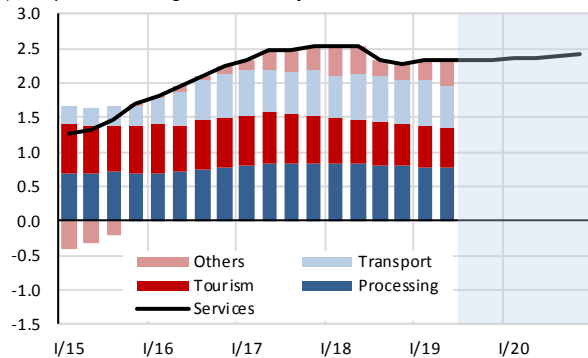
four-quarter moving totals, in % of GDP, national concept



Source: CZSO. Calculations and forecast of the MoF.

### Graph 3.4.3: Balance of Services

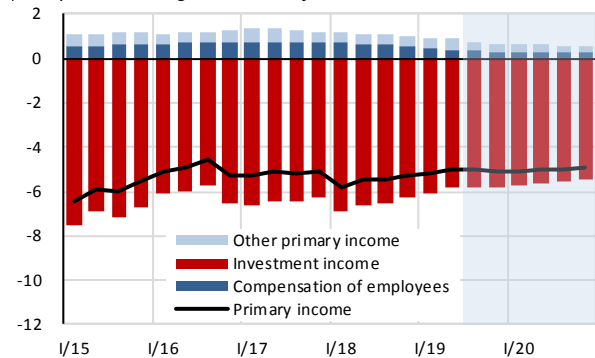
four-quarter moving totals, in % of GDP



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

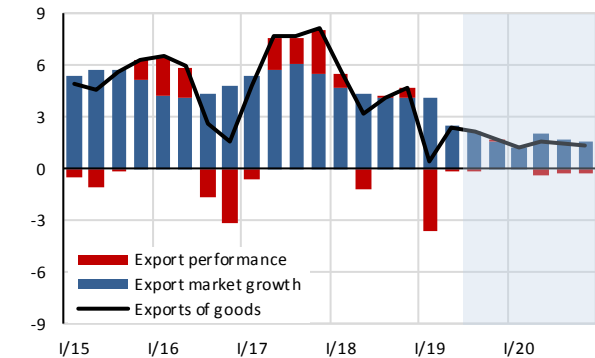
YoY growth rate in %, seasonally adjusted



Source: Eurostat. Calculations and forecast of the MoF.

### Graph 3.4.6: Real Exports of Goods

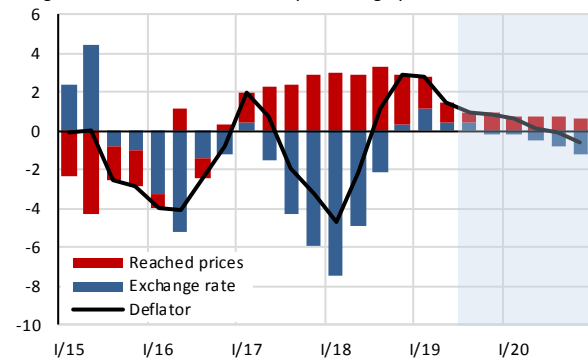
YoY growth in %, contributions in pp, seasonally adjusted



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>375</b>	<b>406</b>	
	<i>% GDP</i>	3.9	5.0	5.8	6.4	5.8	7.4	7.7	6.3	6.6	6.9	
Goods	<i>bill.CZK</i>	75	124	167	220	188	246	259	217	243	264	
	<i>% GDP</i>	1.9	3.0	4.1	5.1	4.1	5.2	5.1	4.1	4.3	4.5	
Services	<i>bill.CZK</i>	81	78	70	56	78	108	128	121	132	142	
	<i>% GDP</i>	2.0	1.9	1.7	1.3	1.7	2.3	2.5	2.3	2.3	2.4	
<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>-289</b>	<b>-291</b>	
	<i>% GDP</i>	-5.5	-5.9	-6.1	-6.0	-5.5	-5.3	-5.1	-5.3	-5.1	-4.9	
<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>-35</b>	<b>-34</b>	
	<i>% GDP</i>	-0.5	-0.7	-0.2	-0.2	0.0	-0.6	-1.0	-0.7	-0.6	-0.6	
<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>51</b>	<b>81</b>	
	<i>% GDP</i>	-2.1	-1.6	-0.5	0.2	0.2	1.6	1.7	0.3	0.9	1.4	
<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>24</b>	<b>36</b>	
	<i>% GDP</i>	0.3	1.3	2.0	0.7	2.2	1.1	0.8	0.3	0.4	0.6	
<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>75</b>	<b>117</b>	
	<i>% GDP</i>	-1.8	-0.3	1.5	0.9	2.5	2.7	2.5	0.6	1.3	2.0	
<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				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3 <i>Estimate</i>	Q4 <i>Forecast</i>
<b>Goods and services</b>	<i>bill.CZK</i>	<b>374</b>	<b>368</b>	<b>344</b>	<b>338</b>	<b>335</b>	<b>346</b>	<b>371</b>	<b>375</b>
	<i>% GDP</i>	7.3	7.1	6.6	6.3	6.2	6.3	6.6	6.6
Goods	<i>bill.CZK</i>	245	237	221	217	209	218	240	243
	<i>% GDP</i>	4.8	4.6	4.2	4.1	3.9	4.0	4.3	4.3
Services	<i>bill.CZK</i>	129	131	123	121	126	128	131	132
	<i>% GDP</i>	2.5	2.5	2.3	2.3	2.3	2.3	2.3	2.3
<b>Primary income</b>	<i>bill.CZK</i>	<b>-297</b>	<b>-286</b>	<b>-288</b>	<b>-282</b>	<b>-280</b>	<b>-274</b>	<b>-282</b>	<b>-289</b>
	<i>% GDP</i>	-5.8	-5.5	-5.5	-5.3	-5.2	-5.0	-5.1	-5.1
<b>Secondary income</b>	<i>bill.CZK</i>	<b>-54</b>	<b>-51</b>	<b>-47</b>	<b>-40</b>	<b>-47</b>	<b>-36</b>	<b>-36</b>	<b>-35</b>
	<i>% GDP</i>	-1.0	-1.0	-0.9	-0.7	-0.9	-0.7	-0.6	-0.6
<b>Current account</b>	<i>bill.CZK</i>	<b>24</b>	<b>32</b>	<b>10</b>	<b>16</b>	<b>8</b>	<b>36</b>	<b>53</b>	<b>51</b>
	<i>% GDP</i>	0.5	0.6	0.2	0.3	0.1	0.7	1.0	0.9
<b>Capital account</b>	<i>bill.CZK</i>	<b>42</b>	<b>34</b>	<b>31</b>	<b>14</b>	<b>6</b>	<b>16</b>	<b>20</b>	<b>24</b>
	<i>% GDP</i>	0.8	0.7	0.6	0.3	0.1	0.3	0.4	0.4
<b>Net lending/borrowing</b>	<i>bill.CZK</i>	<b>67</b>	<b>66</b>	<b>41</b>	<b>30</b>	<b>14</b>	<b>52</b>	<b>73</b>	<b>75</b>
	<i>% GDP</i>	1.3	1.3	0.8	0.6	0.3	1.0	1.3	1.3
<b>Financial account</b>	<i>bill.CZK</i>	<b>91</b>	<b>71</b>	<b>14</b>	<b>12</b>	<b>3</b>	<b>42</b>	<b>.</b>	<b>.</b>
Direct investments	<i>bill.CZK</i>	2	-20	-68	-91	-97	-88	.	.
Portfolio investments	<i>bill.CZK</i>	36	178	23	23	-76	-195	.	.
Financial derivatives	<i>bill.CZK</i>	-15	-16	-9	-15	-18	-9	.	.
Other investments	<i>bill.CZK</i>	-55	-88	71	46	140	270	.	.
Reserve assets	<i>bill.CZK</i>	123	17	-3	50	54	64	.	.
<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>-1 130</b>	<b>-1 133</b>	<b>.</b>	<b>.</b>
	<i>% GDP</i>	-24.1	-22.3	-23.8	-23.5	-20.9	-20.6	.	.
<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>4 365</b>	<b>4 342</b>	<b>.</b>	<b>.</b>
	<i>% GDP</i>	84.0	83.5	82.6	81.7	80.8	79.1	.	.

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>	<i>average of 2005=100</i>	<b>103.6</b>	<b>104.5</b>	<b>105.4</b>	<b>107.8</b>	<b>110.1</b>	<b>112.6</b>	<b>115.9</b>	<b>118.7</b>	<b>120</b>	<b>122</b>
	<i>growth in %</i>	3.6	0.9	0.8	2.3	2.2	2.3	2.9	2.4	1.4	1.2
<b>Import intensity</b> <sup>2)</sup>	<i>average of 2005=100</i>	<b>103.9</b>	<b>103.1</b>	<b>104.7</b>	<b>107.3</b>	<b>110.8</b>	<b>113.2</b>	<b>116.2</b>	<b>118.4</b>	<b>120</b>	<b>120</b>
	<i>growth in %</i>	3.9	-0.8	1.5	2.5	3.3	2.1	2.7	1.9	1.2	0.4
<b>Export markets</b> <sup>3)</sup>	<i>average of 2005=100</i>	<b>107.6</b>	<b>107.8</b>	<b>110.4</b>	<b>115.7</b>	<b>122.1</b>	<b>127.5</b>	<b>134.7</b>	<b>140.5</b>	<b>144</b>	<b>147</b>
	<i>growth in %</i>	7.6	0.2	2.4	4.8	5.5	4.4	5.7	4.3	2.6	1.7
<b>Export performance</b>	<i>average of 2005=100</i>	<b>102.4</b>	<b>106.7</b>	<b>104.8</b>	<b>109.2</b>	<b>109.1</b>	<b>108.8</b>	<b>110.3</b>	<b>110.4</b>	<b>109</b>	<b>109</b>
	<i>growth in %</i>	2.4	4.2	-1.7	4.2	-0.1	-0.2	1.3	0.1	-0.9	-0.2
<b>Real exports</b>	<i>average of 2005=100</i>	<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>158</b>	<b>160</b>
	<i>growth in %</i>	10.2	4.4	0.6	9.2	5.4	4.2	7.1	4.4	1.7	1.5
<b>1 / NEER</b>	<i>average of 2005=100</i>	<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>101</b>	<b>100</b>
	<i>growth in %</i>	-3.0	4.4	1.7	5.5	1.2	-2.8	-2.8	-3.6	0.5	-0.7
<b>Prices on foreign markets</b>	<i>average of 2005=100</i>	<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>105</b>
	<i>growth in %</i>	3.9	-1.1	-0.1	-1.6	-2.6	-0.1	2.2	3.0	1.0	0.7
<b>Exports deflator</b>	<i>average of 2005=100</i>	<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>105</b>	<b>105</b>
	<i>growth in %</i>	0.8	3.2	1.5	3.8	-1.4	-2.8	-0.6	-0.7	1.5	0.0
<b>Nominal exports</b>	<i>average of 2005=100</i>	<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>166</b>	<b>168</b>
	<i>growth in %</i>	11.0	7.7	2.2	13.4	3.9	1.2	6.4	3.7	3.2	1.5

<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
<b>GDP</b> <sup>1)</sup>	<i>average of 2010=100</i>	<b>117.9</b>	<b>118.6</b>	<b>118.9</b>	<b>119.3</b>	<b>120.0</b>	<b>120.2</b>	<b>120</b>	<b>121</b>		
	<i>growth in %</i>	2.8	2.8	2.2	1.7	1.8	1.3	1.2	1.1		
<b>Import intensity</b> <sup>2)</sup>	<i>average of 2010=100</i>	<b>117.3</b>	<b>117.8</b>	<b>118.7</b>	<b>119.7</b>	<b>119.9</b>	<b>119.2</b>	<b>120</b>	<b>120</b>		
	<i>growth in %</i>	1.8	1.6	1.8	2.4	2.2	1.1	1.0	0.5		
<b>Export markets</b> <sup>3)</sup>	<i>average of 2010=100</i>	<b>138.2</b>	<b>139.7</b>	<b>141.2</b>	<b>142.9</b>	<b>143.9</b>	<b>143.2</b>	<b>144</b>	<b>145</b>		
	<i>growth in %</i>	4.7	4.4	4.1	4.2	4.1	2.5	2.2	1.6		
<b>Export performance</b>	<i>average of 2010=100</i>	<b>111.1</b>	<b>110.5</b>	<b>109.5</b>	<b>110.5</b>	<b>107.1</b>	<b>110.5</b>	<b>109</b>	<b>111</b>		
	<i>growth in %</i>	0.9	-1.1	0.1	0.5	-3.5	-0.1	-0.1	0.1		
<b>Real exports</b>	<i>average of 2010=100</i>	<b>153.5</b>	<b>154.5</b>	<b>154.6</b>	<b>157.8</b>	<b>154.2</b>	<b>158.2</b>	<b>158</b>	<b>161</b>		
	<i>growth in %</i>	5.6	3.2	4.1	4.7	0.4	2.4	2.1	1.7		
<b>1 / NEER</b>	<i>average of 2010=100</i>	<b>99.5</b>	<b>100.2</b>	<b>100.1</b>	<b>100.9</b>	<b>100.6</b>	<b>100.6</b>	<b>101</b>	<b>101</b>		
	<i>growth in %</i>	-7.4	-4.8	-2.1	0.3	1.1	0.4	0.5	-0.1		
<b>Prices on foreign markets</b>	<i>average of 2010=100</i>	<b>102.7</b>	<b>103.0</b>	<b>104.1</b>	<b>104.1</b>	<b>104.5</b>	<b>104.0</b>	<b>105</b>	<b>105</b>		
	<i>growth in %</i>	3.0	2.9	3.3	2.6	1.7	1.0	0.5	1.0		
<b>Exports deflator</b>	<i>average of 2010=100</i>	<b>102.2</b>	<b>103.2</b>	<b>104.2</b>	<b>105.1</b>	<b>105.1</b>	<b>104.7</b>	<b>105</b>	<b>106</b>		
	<i>growth in %</i>	-4.6	-2.1	1.1	2.9	2.8	1.4	1.0	0.8		
<b>Nominal exports</b>	<i>average of 2010=100</i>	<b>156.9</b>	<b>159.3</b>	<b>161.0</b>	<b>165.8</b>	<b>162.0</b>	<b>165.6</b>	<b>166</b>	<b>170</b>		
	<i>growth in %</i>	0.7	1.1	5.3	7.7	3.3	3.9	3.1	2.6		

<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 Survey of Other Institutions' Forecasts

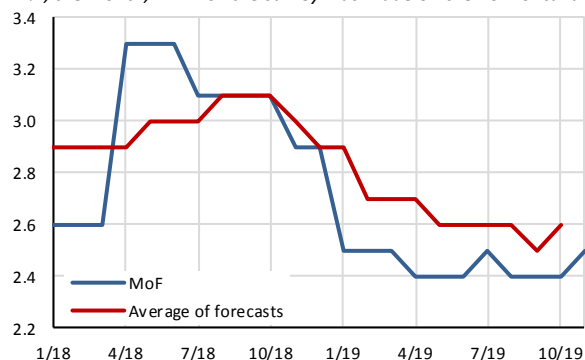
The averaged forecasts of surveyed institutions indicate that real GDP should rise by 2.6% in 2019 and by 2.4% in the next year. In 2019, prices should grow by 2.6%, before slowing to 2.2% in 2020. Dynamic growth of the average wage by 6.9% in 2019 should cool slightly to 5.5% in 2020. In both years, there should be a small surplus on the current account. With the exception of the current account, the MoF's forecast is broadly in line with the average of surveyed institutions' estimates.

According to the MoF, economic growth should be slightly lower – real GDP could grow by 2.5% in 2019 and slow

to 2.0% in 2020. The MoF's forecast for inflation and average wage growth is slightly higher in both years than the average of surveyed institutions' estimates. In both years, however, the MoF anticipates a current account surplus close to the upper limit of the range of surveyed institutions' estimates. This may be due to the MoF placing more stress on the impact of expected slowdown in domestic demand on the balance of goods, or of a reduction in profitability of foreign-controlled firms on the primary income balance.

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

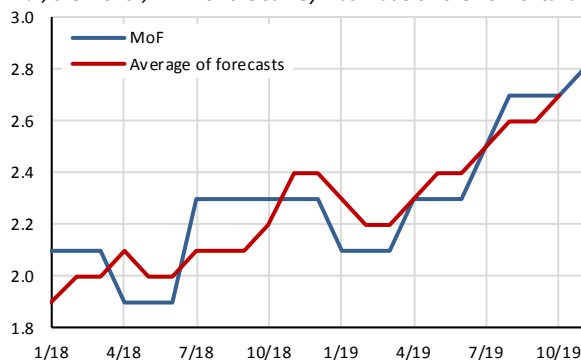
in %; the month, in which the survey was made on the horizontal axis



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

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

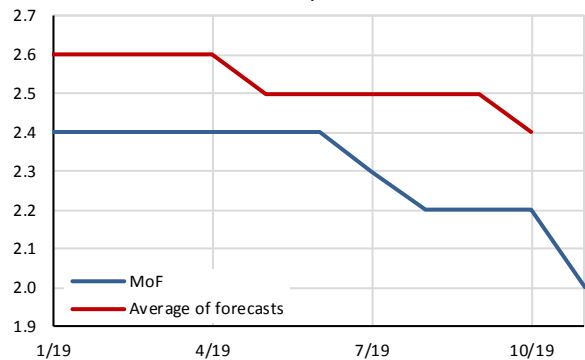
in %; the month, in which the survey was made on the horizontal axis



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

**Graph 4.3: Forecasts for Real GDP Growth in 2020**

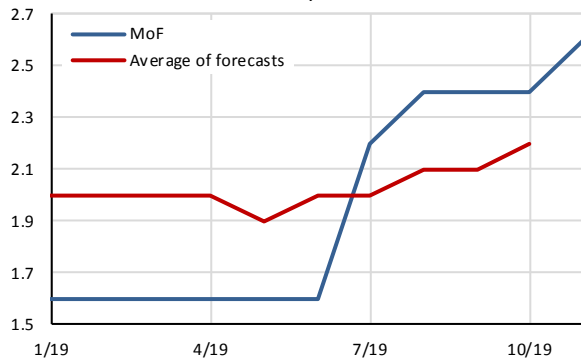
in %; the month, in which the survey was made on the horizontal axis



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

**Graph 4.4: Forecasts for Average Inflation Rate in 2020**

in %; the month, in which the survey was made on the horizontal axis



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

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

		October 2019			November 2019
		min.	max.	average	MoF forecast
Gross domestic product (2019)	growth in %, const.pr.	2.3	2.9	2.6	2.5
Gross domestic product (2020)	growth in %, const.pr.	1.8	2.9	2.4	2.0
Average inflation rate (2019)	%	2.3	2.9	2.6	2.8
Average inflation rate (2020)	%	1.7	2.7	2.2	2.6
Average monthly wage (2019)	growth in %	6.5	7.4	6.9	7.1
Average monthly wage (2020)	growth in %	5.2	6.1	5.5	5.7
Current account / GDP (2019)	%	-0.6	1.3	0.4	0.9
Current account / GDP (2020)	%	-0.8	1.1	0.4	1.4

Note: The survey is based on publicly available forecasts of 16 institutions, of which 11 institutions are domestic (CNB, Ministry of Labour and Social Affairs, Chamber of Commerce, domestic banks and investment companies) and the remaining are foreign entities (European Commission, OECD, IMF etc.). 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.

## 5 The Impact of US Import Tariffs on Automobiles on the Czech Economy

In its October 2019 forecast, the World Trade Organisation expects growth in world trade to accelerate from 1.2% in 2019 to 2.7% in 2020.<sup>3</sup> The forecast for 2020 is based on the assumption that there will be no escalation of trade disputes, especially between the United States and the EU. However, the risks of tariff increases and the further fencing-in of economies are considerable. According to regression estimates of volume elasticities of external trade, a slowdown in global trade in goods by 1.0 pp would prompt a 1.1 pp decline in Czech real export momentum. In this context, the potential escalation of trade disputes between the US and the EU is a potential threat to the Czech economy.

Back in June 2018, the US imposed a 10% import duty on aluminium and a 25% duty on steel from the EU, which it justified by citing national security and efforts to help the domestic steel industry. In the same month, the EU adopted retaliatory measures on selected commodities. The US President subsequently asked the Department of Commerce to run an analysis and make recommendations regarding the protection of the US automotive industry against imports of European cars and vehicle components, again on grounds of national security. US shelved this decision, which was due by 17 May 2019, for six months to allow more time for trade talks with the EU. A decision on whether duties will be imposed should be known by 15 November 2019. If no mutual agreement has been reached by then, 25% tariffs are likely to be imposed on imports of cars

and parts to the US. The European Union would start to apply the same rate to imports of American cars.<sup>4</sup>

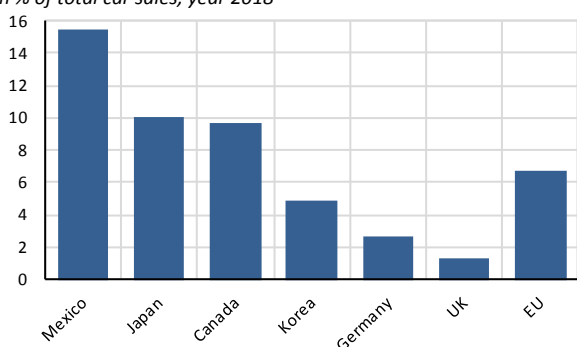
According to the US Department of Commerce, car imports accounted for 47.7% of total US car sales in 2018. Imports of cars from the EU account for 6.8% of sales. As for components, the EU accounts for 12.2% of imports of parts and accessories into the US. 13.0% of cars exported from the US are headed to the EU, with almost two thirds ending up in Germany. Road vehicles account for 2.1% of all US exports to the EU. The US is an important market for European car manufacturers. According to the Eurostat database, in 2018 every tenth exported car from the EU went to the US; cars from Germany (the main trading partner of the CR) accounted for 15.1% of total car exports to the US. The share of road vehicles in total exports to the USA was 9.1%.

While the US is not a significant market for the CR, a deterioration in economic developments in the euro area, where a high proportion of Czech exports is headed, would pose a risk to the Czech economy. Taking into account the openness of the Czech economy and the position of the automotive industry,<sup>5</sup> we are assessing the potential impacts of these tariffs.

The analysis assesses both the direct and indirect impacts of tariffs on the Czech economy. Direct effects stem from a decline in the volume of foreign trade between the US and the Czech Republic due to the higher tariffs. Indirect impact is in the form of a derived effect of lower volume of trade between the euro area and the US.

**Graph 5.1: Car Sales in the USA**

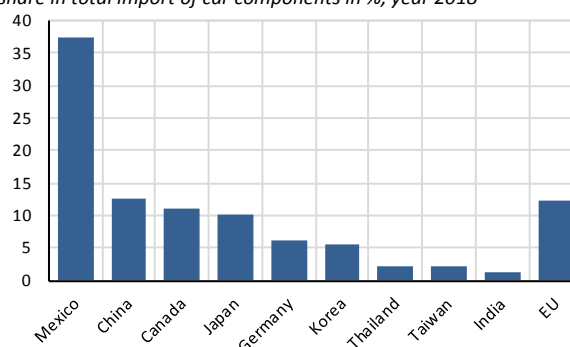
*in % of total car sales, year 2018*



Source: U.S. Department of Commerce. Calculations of the MoF.

**Graph 5.2: Imports of Car Components to the USA**

*share in total import of car components in %, year 2018*



Source: U.S. Department of Commerce. Calculations of the MoF.

<sup>3</sup> World Trade Organisation (2019): WTO lowers trade forecast as tensions unsettle global economy. World Trade Organisation, [accessed on 1 October 2019], <[https://www.wto.org/english/news\\_e/pres19\\_e/pr840\\_e.htm](https://www.wto.org/english/news_e/pres19_e/pr840_e.htm)>.

<sup>4</sup> In addition to this, on 2 October 2019 the US announced that it was prepared to impose import duties of 10% on European aircraft and 25% on selected agricultural and engineering products. These are goods with a nominal value of USD 7.5 billion per year. Customs duties would affect items such as wine, Scotch, Irish whiskey, cheese and selected aviation technology. The US justifies this step by claiming that European aircraft manufacturer Airbus is unlawfully subsidised. The WTO's Dispute Settlement Body officially authorised the imposition of tariffs on 14 October 2019. They came into force on 18 October 2019.

<sup>5</sup> Ministry of Finance (2019): Macroeconomic Forecast – July 2019. Ministry of Finance of the Czech Republic [accessed on 3 October 2019], <<https://www.mfcr.cz/assets/en/media/Macroeconomic-Forecast-July-2019.pdf>>.

We apply the EU and US tariffs applicable for 2018, as entered in the World Trade Organisation's database. After factoring in a 25% tariff on cars and parts, the effective duty rate on exports of goods to the US would be 3.1% for the Czech Republic (versus the current rate of 1.9%) and 6.5% for the euro area (versus 2.8%). The tariffs applied are the same for individual commodities; the differences in the effective rates result from the different structure of external trade. Goods exported from the US to the euro area would be subject to an effective tariff of 6.4% (versus the current rate of 3.4%).

However, the resultant impact that the introduction of customs measures would have on the Czech economy also depends on factors other than the level of the customs tariffs themselves, especially the extent of the negative impact of customs tariffs on the EU economy and, by extension, the US economy. In this respect, estimates vary widely, e.g. the Pictet Group<sup>6</sup> estimates a one-off decline in the euro area's GDP growth by 0.3 pp, the IFO Institute<sup>7</sup> reports a slowdown in the euro area by 0.1 pp if US tariffs were to be unilaterally imposed (the impact on the EU economy would be zero if the EU were to take retaliatory action), and the Dutch Bureau for Economic Policy Analysis (CPB)<sup>8</sup> discusses a positive cumulative impact on the EU economy of up to 0.2% of GDP by 2030. Similarly, according to the Trade Partnership Worldwide,<sup>9</sup> the decline in external trade and higher costs would slow down real GDP growth in the US by around 0.4 pp over a period of one to three years. CPB (Bollen, Rojas-Romagosa, 2018) states that the impact on US GDP up to 2030 would be a negative 0.3 pp.

The MoF estimates that there will be one-off slowdown in GDP growth in the euro area by 0.3 pp. For the US, we envisage a slowdown in growth by 0.1 pp, partly because that economy is not so open. These figures do not depart from the estimates outlined above.

As part of our regression analysis approach to identifying the impact that customs tariffs on cars and parts would have on the Czech economy, we work with the above-mentioned effective tariff barriers and with Czech external trade's model-estimated price and volume elasticities.<sup>10</sup> The import intensity figures are based

on the Czech Statistical Office's symmetric input-output tables for 2015. The analysis divides the impact of tariffs into four channels.

The aggregate effect resulting from the impact on the Czech Republic's external trade in 2020 would be reflected in a slowdown in Czech GDP growth by 0.33 pp. The analysis takes into account the estimated impact that the weakening of net exports would have on domestic demand. The slowdown in GDP due to a decrease in household final consumption expenditure and gross capital formation would come to 0.11 pp.

**Table 5.1: Individual Effects on Czech GDP**  
in % of GDP

	<b>2020</b>
Direct exports of goods from the CR to the USA	-0.02
Indirect export to the USA via major trading partners	-0.09
Effect of 0.3 pp weaker euro area GDP	-0.23
Effect of 0.1 pp weaker US GDP	0.00
<b>Total impact on foreign trade</b>	<b>-0.33</b>
Response of domestic demand	-0.11
<b>Total impact on GDP</b>	<b>-0.45</b>

Source: Calculations of the MoF.

The **overall impact of a one-off slowdown in the Czech economy** could thus amount to approximately 0.5 pp. This is a mean estimate and could be much more pronounced if combined with a no-deal Brexit.

The calculation provides a one-time annual impact on the GDP of the Czech Republic. The drop in the rate of GDP growth here would likely be temporary. In the medium term, adjustment of the exchange rate or a more accommodative monetary policy of the CNB would help economic growth to regain momentum. Long-term impacts will also depend on the speed at which companies in the Czech Republic and, especially, in the EU establish new business relationships (amid softening dynamics of the global economy any eventual reorientation on new markets will be even more challenging). In this respect, for example, the IFO Institute (Felbermayr, Steininger, 2019) estimates that 90% of contracts should be redirected towards new customers within five years.

<sup>6</sup> Gharbi, Nadia (2019): The threat of US tariffs to the euro area. Pictet Wealth Management, [accessed on 20 September 2019], <<https://www.group.pictet/wealth-management/threat-us-tariffs-euro-area>>.

<sup>7</sup> Felbermayr, Gabriel & Steininger, Marina (2019): Effects of New US Auto Tariffs on German Exports, and on Industry Added Value Around the World. ifo Institute, [accessed on 20 September 2019], <<http://www.cesifo-group.de/de/dms/ifodoc/docs/pr/pr-PDFs/201902-Felbermayr-Steininger-Automotive-Tariffs.pdf>>.

<sup>8</sup> Bollen, Johannes & Rojas-Romagosa, Hugo (2018): Trade Wars: Economic impacts of US tariff increases and retaliations. CPB Netherlands Bureau for Economic Policy Analysis, [accessed on 20 September 2019], <<https://www.cpb.nl/sites/default/files/omnidownload/CPB-Background-Document-November2018-Trade-Wars-update.pdf>>.

<sup>9</sup> Trade Partnership Worldwide, LLC (2019): Estimated Impacts of Tariffs on the U.S. Economy and Workers. Washington, DC, [accessed on 20 September 2019], <<https://tradepartnership.com/wp-content/uploads/2019/02/All-Tariffs-Study-FINAL.pdf>>.

<sup>10</sup> Ministry of Finance (2018): Macroeconomic Forecast – January 2018. Ministry of Finance of the Czech Republic [accessed on 3 October 2019], <<https://www.mfcr.cz/assets/en/media/Macroeconomic-Forecast-January-2018.pdf>>.

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