

Macroeconomic Forecast of the Czech Republic

April 2019

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The Macroeconomic Forecast is prepared by the Economic Policy Department of the Czech Ministry of Finance. It contains a forecast for the current and the following year (i.e. until 2020) and for certain indicators an outlook for another 2 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:

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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
GVA.....	gross value added
IMF.....	International Monetary Fund
LFS.....	Labour Force Survey
MoF.....	Ministry of Finance
pp.....	percentage points
rev.....	revisions
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 **3 April 2019**, the cut-off date for selected forecast assumptions was 6 March 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 (January 2019) are indicated by italics. Data relating to the years 2021 and 2022 are an extrapolation scenario that indicates only the direction of possible developments, and as such are not commented upon in the following text.

Starting with this Macroeconomic Forecast, the definition of the working-age group has been changed from 15–64 years to 20–64 years, due to extremely low participation of the 15–19 years age group on the Czech labour market.

Introduction and Summary

Global economic expansion continues, though it is gradually losing momentum and downward risks are extending significantly. Forecasts of economic growth are decreasing for almost all the world's largest economies, especially for the euro area countries. That result is largely due to increased political uncertainty, continued tensions in international trade and further reductions in business and consumer confidence. For the time being, however, a recession is not forecasted in any of the world's largest economies, which is good news.

Climax of the process of the United Kingdom's withdrawal from the European Union is the crucial source of uncertainty. Given that the lower chamber of the British Parliament has not approved the withdrawal agreement, the Brexit date has been postponed to 12 April 2019, in line with conclusions of the European Council. As of the cut-off date of the forecast, a majority support has not been found in the British parliament for any of the proposals that would then pre-determine future relationships between the UK and the EU. The risk that there will be a no-deal "hard Brexit" on 12 April has thus increased significantly. This forecast is based on the assumption that the UK will not leave the EU without an approved withdrawal agreement, i.e. that a "hard Brexit" will be avoided.

Developments in the Czech economy were relatively favourable in Q4 2018, despite a rather negative impact of the external environment. After adjustment for seasonal and calendar effects, the growth in **real gross domestic product** accelerated to 0.8% QoQ and 2.6% YoY.

In the year-on-year perspective and in terms of components of domestic use, **investment in fixed capital** posted the most dynamic growth, of 10.9%. In that segment, not only investments in residential and non-residential construction but also investments in machinery and equipment achieved a double-digit growth.

From the sectoral perspective, investment activity of the general government accelerated significantly. A real increase of more than 35% was driven by domestic investments and projects co-funded from the European Structural and Investment Funds. Private investments also showed high dynamics exceeding 7%.

Household consumption growth slowed down to 2.4%. In the conditions of high dynamics of the wage bill it reflected not only higher consumer inflation but also a significant increase in the savings rate. Consumption of the general government increased by 3.6%, driven mainly by employment and intermediate consumption.

In Q4 2018, the contribution of **foreign trade** was only slightly negative. On the export side, increased export performance led to an accelerated export growth. Import growth remained dynamic mainly due to high import intensity of investments.

With respect to expected deterioration of the external environment, **the forecast for economic growth in 2019** was revised down from 2.5% to **2.4%**. The most important growth factor should be household consumption, which should reflect continued robust wage dynamics at an extremely low unemployment rate and a sharp increase in pensions. Investments in fixed capital and general government consumption should contribute to the growth positively, although to a lesser extent than in 2018, whereas the contribution of foreign trade should remain negative. The forecast for economic growth in **2020** remains unchanged at **2.4%**.

Since the beginning of 2017, the year-on-year growth in **consumer prices** has been hovering mostly in the upper half of the tolerance band of the Czech National Bank's 2% inflation target. It should remain there also for most of 2019. Pro-inflationary effects of growth in wages and salaries and of a positive output gap should continue to act but with a gradually decreasing intensity. We slightly increase the forecast for **inflation rate** in 2019, due to higher expected crude oil prices, from 2.1% to 2.3%, and we continue to expect inflation to be at 1.6% in 2020.

In Q4 2018, **employment** growth returned above the 1% threshold but this rate cannot be maintained in the future due to an extremely low unemployment and demographic factors. Lack of employees is a primary barrier to further extensive production growth, which motivates companies, mostly large ones, to make investments increasing labour productivity. We consider the space for a further decline in unemployment almost exhausted, and therefore maintain the forecast for the **unemployment rate** in 2019 and 2020 at 2.2%.

As regards the **current account of the balance payments**, the positive balance of goods has gradually been decreasing as a result of higher domestic demand for imports influenced by an increase in investments and consumption. This factor is being accompanied by the impact of uncertainties in world trade. The remaining items of the current account should more or less stagnate or improve only slightly. The result should be a small surplus of 0.2% of GDP in 2019 and 0.3% of GDP in 2020.

The **general government balance** reached a surplus of 0.9% of GDP in 2018, or 0.4% of GDP in structural terms. The year-on-year change in the budget performance was to a large extent determined by expenditures, whose dynamics of more than 10% exceeded the growth in revenues by more than 2 pp. The budget surplus is also reflected in the level of total indebtedness, which decreased by 2 pp YoY to 32.7% of GDP. The budget is forecasted to post a surplus (0.3% of GDP) also in 2019, while the debt-to-GDP ratio is expected to decrease further to 31.5%.

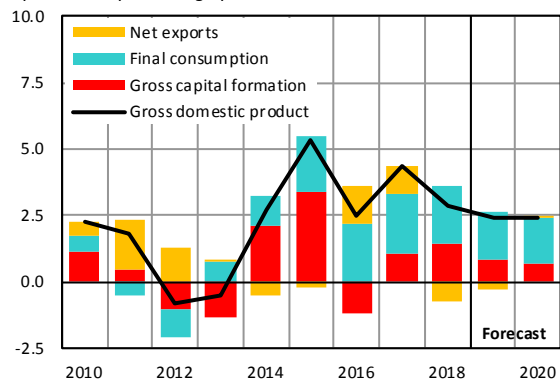
Table: Main Macroeconomic Indicators

		2014	2015	2016	2017	2018	2019	2020	2018	2019	2020
		Current forecast							Previous forecast		
Gross domestic product	bill. CZK	4 314	4 596	4 768	5 047	5 304	5 595	5 839	5 313	5 590	5 823
Gross domestic product	real growth in %	2.7	5.3	2.5	4.4	2.9	2.4	2.4	2.8	2.5	2.4
Consumption of households	real growth in %	1.8	3.7	3.6	4.3	3.2	2.9	2.8	3.5	3.3	3.0
Consumption of government	real growth in %	1.1	1.9	2.7	1.3	3.7	2.2	1.9	3.8	2.1	1.9
Gross fixed capital formation	real growth in %	3.9	10.2	-3.1	3.7	10.5	3.1	2.7	8.8	3.1	2.7
Net exports	contr. to GDP growth, pp	-0.5	-0.2	1.4	1.1	-0.7	-0.3	0.0	-0.6	-0.3	-0.1
Change in inventories	contr. to GDP growth, pp	1.1	0.8	-0.4	0.1	-1.2	0.0	0.0	-1.1	0.0	0.0
GDP deflator	growth in %	2.5	1.2	1.3	1.4	2.1	3.0	1.9	2.4	2.6	1.7
Average inflation rate	%	0.4	0.3	0.7	2.5	2.1	2.3	1.6	2.1	2.1	1.6
Employment (LFS)	growth in %	0.8	1.4	1.9	1.6	1.4	0.4	0.2	1.3	0.3	0.2
Unemployment rate (LFS)	average in %	6.1	5.1	4.0	2.9	2.2	2.2	2.2	2.3	2.2	2.2
Wage bill (domestic concept)	growth in %	3.6	4.8	5.7	8.3	9.3	7.5	5.9	9.6	7.7	6.3
Current account balance	% of GDP	0.2	0.2	1.6	1.7	0.3	0.2	0.3	0.3	0.3	0.2
General government balance	% of GDP	-2.1	-0.6	0.7	1.6	0.9	0.3	.	1.6	1.0	.
Assumptions:											
Exchange rate CZK/EUR		27.5	27.3	27.0	26.3	25.6	25.5	25.1	25.6	25.5	25.1
Long-term interest rates	% p.a.	1.4	0.6	0.4	1.0	2.0	2.2	2.4	2.0	2.7	3.0
Crude oil Brent	USD/barrel	99	52	44	54	71	66	65	71	56	57
GDP in Eurozone	real growth in %	1.4	2.1	2.0	2.4	1.8	1.0	1.4	1.9	1.4	1.5

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

Domestic demand should be the main driver of growth

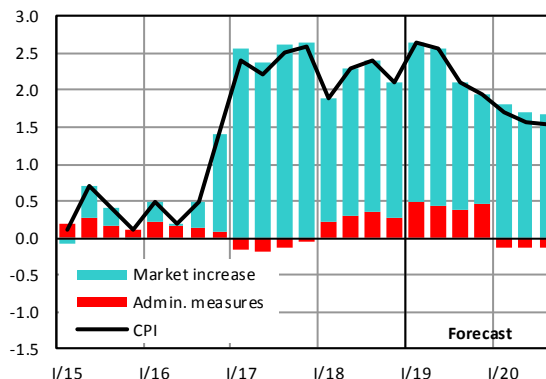
YoY growth rate of real GDP in %, contributions of individual expenditure components in percentage points



Source: CZSO. Calculations of the MoF.

Inflation within the tolerance band of the CNB's target

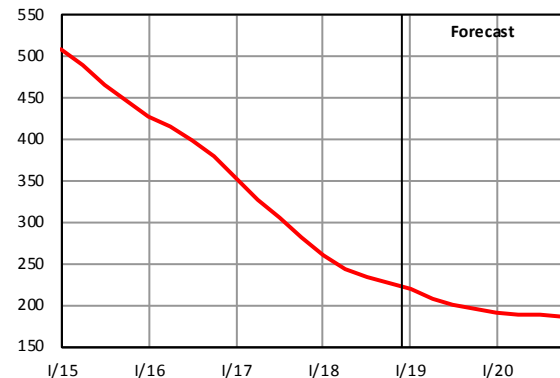
decomposition of YoY growth of CPI, contributions in pp



Source: CZSO. Calculations of the MoF.

Unemployment should decline only moderately

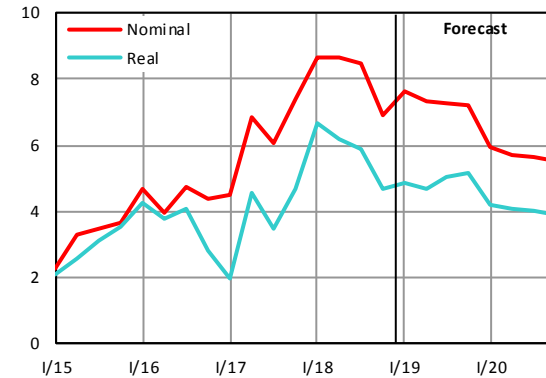
registered unemployment, in thous. of persons, seasonally adjusted



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

Growth of wages should gradually decelerate

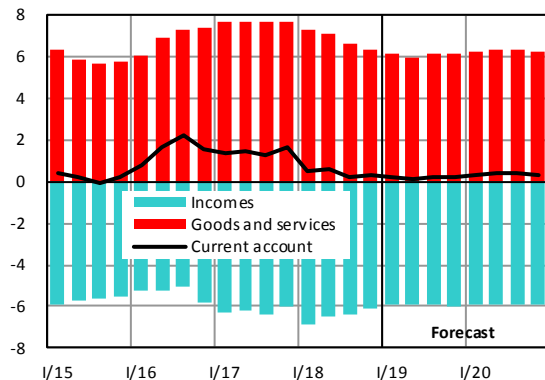
average gross monthly wage, YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

Current account should be in a moderate surplus

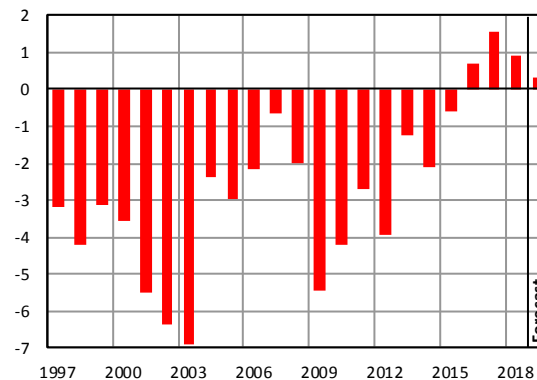
in % of GDP (yearly moving sums)



Source: CNB, CZSO. Calculations of the MoF.

General government balance staying positive this year

in % of GDP



Source: CZSO. Calculations of the MoF.

Forecast Risks and Uncertainty

The macroeconomic forecast is subject to a number of risks that we regard, on balance, to be **significantly tilted to the downside**.

The main negative risk for the strongly export-oriented Czech economy is currently the uncertainty associated with the **United Kingdom's withdrawal from the European Union**. On 22 March 2019, the European Council agreed that the date of Brexit would be postponed to 22 May, though this was conditional on the British Parliament approving the withdrawal agreement by 29 March. However, this did not happen and the withdrawal date was thus postponed to just 12 April, in line with conclusions of the Council. A majority support has not yet been found in the British parliament for any of the proposals outlining further progress in the Brexit issue. Therefore, it still remains uncertain when, under what conditions or if at all will the UK leave the EU. The risk that there will be a no-deal "hard Brexit" has increased significantly, though. This macroeconomic forecast is based on the assumption that a withdrawal agreement (though not necessarily the one negotiated by PM May) will ultimately be approved and a "hard Brexit" will thus be avoided.

A significant external risk is also the tendencies to increase **protectionism**, which are manifested mainly in trade relations between the United States and China. They could, however, also affect the mutual trade between the United States and the European Union. A potential increase in existing import duties or their imposition on other goods would, in addition to their negative effects on the volume of foreign trade and the resulting benefits, also have a negative impact on the confidence of economic agents. A higher uncertainty could then lead to the postponement of some investment decisions. The impact of higher tariffs on prices of imported goods and purchasing power of consumers should not be overlooked either. Moreover, given the high complexity of international supply chains, one cannot rule out that im-

port tariffs will have a number of unintended consequences, e.g. shifting production to other countries. Although the Czech Republic mainly trades with other EU countries, indirect exposure to some non-EU countries is not negligible; we even consider it higher than the direct effect.

A **slowdown in German economic growth** also poses a risk for the Czech economy. Industrial production has been declining since November 2018 and based on the development of business sentiment indicators, the situation should deteriorate further in the short term. Germany is the most important trading partner of the Czech Republic (31% of goods exports were exported to Germany in 2018).

Indirectly, the Czech economy could also be adversely influenced by an escalation of problems of the Italian banking sector or by a slowdown of economic growth in China. The uncertainty in the global economy is further increased by instability of some emerging economies (Turkey, Argentina, Brazil).

The Czech economy is showing marked signs of overheating in some areas, especially in the labour and real estate markets. In terms of the **cyclical development of the economy**, one cannot rule out the possibility of the economy entering the downward phase of the business cycle in the case that some risks listed here materialize in the forecast horizon. In business cycle surveys, a significant number of companies point to the shortage of workers as the main barrier to increasing their production. A key factor in the medium and longer terms will thus be, considering the current labour market situation and anticipated demographic developments, increasing the **labour productivity**. In the short term, labour market imbalances create a strong pressure on wage growth, which results in higher unit labour costs. This could adversely affect the competitiveness of some companies if this effect persists; however, on the other hand, this factor greatly supports the growth of disposable income of

households and productivity enhancing investments, and creates an incentive to focus more on the production of goods and services with higher value added.

The cyclical development of the economy in connection with low interest rates led to an increased dynamics of mortgage loans. Together with factors limiting the supply of residential real estate (some of which are Prague-specific), this development has contributed to a significant growth in asking prices of flats. Continuation of the **rapid growth in housing loans and property prices** poses a macroeconomic risk as some households might not be able to repay their loans in the case of deteriorated economic situation or an increase in market rates, which would also have an impact on the financial sector. The dynamics of housing loans, however, has been gradually decreasing approximately since mid-2017 due to interest rate increases, tightening of credit conditions, and the achieved high level of flat prices. At the end of 2018, the volume of new mortgage loans started declining significantly due to stricter regulatory recommendations of the CNB. Housing construction data suggest that the number

of completed dwellings should continue to grow dynamically in early 2019, though it should start slowing down given developments in the number of dwellings started.

Major structural changes in the **automotive industry**, which are likely to occur in this sector due to a gradual tightening of emission standards, pose a risk for the Czech economy in the medium to long-term horizon. Should producers fail to meet these standards, they would be subject to substantial fines. The transition to alternative fuels will, however, require enormous investments in technology development, machinery and equipment or in infrastructure. One can also expect effects on employment, customer-supplier relationships or energy prices.

Planned purchases of military machinery worth more than CZK 80 billion, which would significantly affect **investment dynamics**, represent an **upside risk**, though rather in the medium-term horizon.

1 Forecast Assumptions

1.1 External Environment

Global economic growth started slowing down in the second half of 2018 as a result of weakening world trade. This trend continues and is coupled by a significant widening of downside risks. At the same time, differences between individual economies grow further. While the U.S. economy is still showing a relatively robust growth as a result of fading fiscal stimulus, the growth rate has slowed down significantly and the outlook worsened considerably in developed Western European countries or in developing Asian economies. This development is mostly due to continued tensions in international trade, the uncertainty surrounding the United Kingdom's withdrawal from the EU and a further deterioration in business confidence.

GDP growth in the **United States of America** further slowed down to 0.5% QoQ (*versus 0.7%*) in Q4 2018, with household consumption expenditures and gross fixed capital formation being the major drivers. The growth in household consumption reflected the fading fiscal impulse and, in particular, an already very tense labour market situation and the associated wage growth. A partial government shutdown at the end of 2018 slowed down the dynamics of consumers' expenditures and also contributed to the stagnation of consumption of the general government sector. Gross fixed capital formation was driven by business investments. A slightly negative contribution of net exports reflecting a weak export growth was largely influenced by tensions in trade relations with China.

With regard to deteriorating developments of global and domestic economic activity and increased volatility in financial markets, the Fed kept interest rates unchanged at 2.25–2.50% at its March meeting. It does not plan to raise interest rates this year, though there could be one rate hike again in 2020. In May 2019, the Fed intends to lower the monthly volume of asset sales from the current level of USD 30 billion to USD 15 billion and end the sales altogether in September. In mid-2018, the inflation rate started to decrease slowly and it was at 1.5% in February. The Fed expects the inflation rate to stabilize around the 2% target in the medium term. The stock market situation has stabilized after a strong correction in Q4 2018, and stock indices have already recovered most of the losses from late 2018.

We expect that households' consumption expenditures will remain the main pro-growth factor also in the coming years. The partial government shutdown, which lasted 35 days, seems to have had only a very short-term impact. On the contrary, the labour market situation should have a positive and a more permanent effect on household consumption. The unemployment rate fell to

3.8% in February; moreover, growth in the participation rate has been slowly recovering after years of decline and stagnation. Lack of employees with appropriate skills is then reflected in an acceleration of the average wage. Investment and export activity should, at least in the short term, be negatively affected by the continued tensions in trade relations with China. Intensive negotiations between both countries concerning the resolution of mutual controversies continue but in the case of their failure, the United States of America are ready to impose further tariffs on Chinese goods. Obstacles could also increase in trade with the European Union, where there is a risk of increased U.S. import tariffs on EU manufactured cars. On the contrary, looser-than-expected monetary policy should stimulate the growth in investments. The development of confidence indicators remains encouraging; the business and consumer sentiment indicators remain above their long-term averages.

GDP increased by 2.9% in 2018 (*as estimated*). We expect economic growth to decelerate gradually to 2.3% (*versus 2.4%*) in 2019 and to 2.0% in the following year (*unchanged*) in the context of the fading fiscal stimulus impacts.

In Q4 2018, **China's** GDP grew by 1.5% QoQ. Despite a gradual and slow deceleration of the economy, China remains the main driver of global economic growth. Services are becoming the dominant sector, while the importance of industry is weakening further. The focus of economic growth is also slowly shifting from investments and exports to household consumption, which accounted for around 39% of GDP in 2017. Although the year-on-year growth rate in retail sales has long been declining, it is still above 8%. Growth in investments is decelerating gradually not just as a result of slowing economic activity but also due to a number of government measures aimed at curbing rising housing prices, shadow banking and risky loans or reducing overcapacity in some industries through stricter environmental regulations.

We expect the rate of economic growth to continue to slow down gradually. The development of leading indicators remains satisfactory in the case of consumer confidence and the Purchasing Managers' Index in services, but the business confidence indicator and the Purchasing Managers' Index in manufacturing have been signalling a decline since December 2018. A significant risk for economic growth is a possible further escalation of trade disputes with the United States of America. High debt of the public and private sectors or the share of non-performing loans also raises concerns. Given the limited space for another expenditure impulse, a decrease in value-added tax and social security contributions is

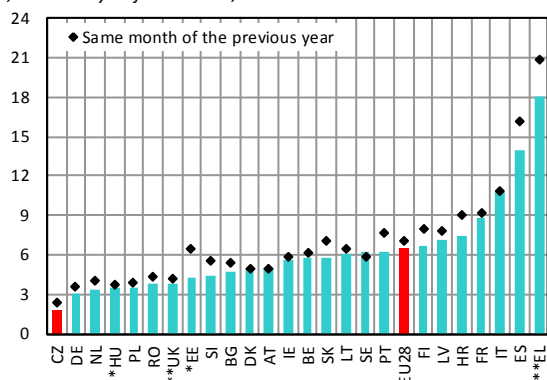
planned for Q2, which should prevent a significant slowdown in economic growth.

In the **European Union**, GDP increased only by 0.3% QoQ in Q4 2018 (*as estimated*) and by 0.2% QoQ in the EA19 (*as estimated*). The year-on-year GDP growth was 1.4% in the EU28 (*versus 1.5%*) and 1.1% in the EA19 (*versus 1.2%*). All expenditure components except the change in inventories contributed to the economic growth. The pace of economic growth varied significantly across countries, with Italy and Greece recording a slight quarter-on-quarter decrease in GDP of 0.1%. Italy has thus entered a recession for the third time in the last ten years. On the contrary, the fastest growing economies in quarter-on-quarter terms were those of Estonia (2.2%), Lithuania (1.3%), Latvia and Sweden (both 1.2%). In a number of countries, a more significant recovery is still being hampered, in addition to external factors, by structural problems, low labour productivity growth, loss of competitiveness or high indebtedness of the general government and private sectors.

The inflation rate in the euro area has hovered close to 1.5% since December 2018. In March the growth in consumer prices was driven primarily by higher prices of services and energy. The European Central Bank has kept the main refinancing rate at 0.00% and the deposit rate at -0.40% since March 2016. At the same time, it assumes that benchmark interest rates will remain at current levels at least until the end of 2019. Moreover, from September 2019 until March 2021 it will implement another series of targeted long-term refinancing operations with maturity of two years.

Graph 1.1.1: Unemployment rate in the EU in February 2019

in %, seasonally adjusted data, LFS



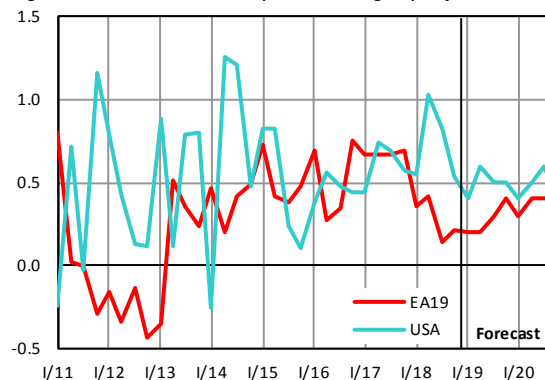
Note: *) January 2019. **) December 2018.
Source: Eurostat.

The slowing economic activity is also reflected in the development of the labour market. The unemployment rate has stagnated or declined only marginally in a number of countries. In February it stayed at 6.5% in the EU28 (a year-on-year decline of 0.6 pp), which is the lowest value in the recorded history since 2000. However, enormous differences still persist across economies (see Graph 1.1.1).

A number of leading indicators in the euro area reached their historically highest values at the turn of 2017 and 2018, and then began a steady decline. The Purchasing Managers' Index in manufacturing entered the contraction area in February and in March it reached the lowest level since April 2013. This is mainly due to a decline in new orders in the context of the slowing growth of world trade, tensions in global trade relations, and uncertainty surrounding the United Kingdom's withdrawal from the EU. The Purchasing Managers' Index in services has been indicating a very slight expansion. Despite their downward trends, the levels of business and consumer confidence still remain above their long-term averages.

GDP growth should be driven by domestic demand also in the coming years. Household consumption should remain the main factor; it will be supported, in the short term, by low interest rates and expansionary fiscal policy in some countries. Wage growth, associated with the tight labour market (similarly to the CR, shortage of skilled workers means a substantial barrier to economic growth in the short or medium term), will have a positive effect. On the contrary, the labour market situation together with high capacity utilization and eased monetary policy should contribute to investment growth, though it should be moderated by the global economic slowdown. Given strong domestic demand the balance of foreign trade should weigh on economic growth.

Graph 1.1.2: Growth of GDP in the EA19 and in the USA
QoQ growth rate, in%, seasonally and working day adjusted



Source: Eurostat. Calculations of the MoF.

We assume that economic growth will remain weak and muted in the short run, hit by the weakening global demand, the risk of escalation of trade relations with the US and by the uncertainty surrounding the UK's withdrawal from the EU. We expect, however, that the uncertainty will be to a considerable extent reduced in the near future. We also expect that there will be no further increase in obstacles to mutual trade between the United States of America on the one side and China and EU on the other. In the medium term, economic growth should thus recover slightly. GDP in the EU28 increased by 1.9% in 2018 as a whole (*versus 2.0%*). Economic growth should reach 1.3% in 2019 (*versus 1.6%*) and slightly accelerate to 1.6% in 2020 (*versus 1.8%*).

In Q4 2018, the output of the **German** economy stagnated (*versus a growth of 0.1%*), and Germany thus escaped a technical recession (two quarter-on-quarter GDP declines in a row) only by a narrow margin. The balance of foreign trade had a neutral effect on economic growth as imports and exports grew at the same pace. Growth in consumption of the general government sector, investments and in household consumption was fully offset by a negative contribution of the change in inventories, which was largely influenced by problems in the automotive industry associated with new standards of emission measurement that were introduced in September 2018. Household consumption expenditures were supported by a further decline in the unemployment rate and high consumer confidence, while gross fixed capital formation was boosted by investments in construction, which benefited from low interest rates and demographic and social developments.

A number of leading indicators that reached their long-term highs at the turn of 2017 and 2018 are now undergoing correction. The Purchasing Managers' Index in manufacturing fell to the area of contraction in January, and following another decrease recorded the lowest value since July 2012 in March. This development reflects a decline in production and in new orders as a result of a weaker demand from China, decline in car sales, and uncertainty surrounding the United Kingdom's withdrawal from the EU. For the first time in three years, moreover, there was a decrease, albeit a modest one, in the number of employees. A similar decline in business confidence, measured by the Ifo indicator, reflects deterioration in the economic situation and the future economic outlook. On the contrary, the consumer confidence index (GfK) remains high. Despite concerns about the United Kingdom's withdrawal from the EU and trade disputes between the USA and China or the EU, consumers assess the situation in the labour market and expected income as very good.

Graph 1.1.3: Ifo (Germany) and Czech manufacturing production

indicator balances (Ifo); seasonally adjusted index of industrial production in the Czech manufacturing, YoY growth in% (from quarterly moving averages)



Source: CESifo, CZSO.

We assume that the German economy will continue to be driven by domestic demand. Household consumption expenditures will be supported by a reduction in social security contributions, an increase in the minimum wage and, in particular, by further real wage growth associated with the lack of suitably skilled employees. The German economy is close to full employment; the unemployment rate dropped to 3.1% in February and employment has reached the highest values since the German reunification. The aforementioned factors together with low interest rates should foster further growth in construction, which is also confirmed by the development of the Purchasing Managers' Index in this sector. On the contrary, manufacturing will be negatively affected, in the short-term, by a decrease in demand for German products in connection with the weakening world trade. Moreover, the automotive industry is negatively affected by declining demand in China, introduction of regulatory emission standards or uncertainty associated with increasing numbers of prohibitions for entry of some cars in city centres. In the medium term, however, the development in manufacturing is expected to take a positive turn, i.e. we assume that already in 2019 the situation regarding the UK's withdrawal from the EU will become clearer and the US–China trade disputes will be settled. Last but not least, a higher number of working days should contribute to economic dynamics in 2020. GDP growth slowed down to 1.4% in 2018 (*versus 1.6%*) and with regard to the above reasons, we expect it to further slow down to 0.8% (*versus 1.3%*) in 2019. In 2020, the growth in economic output could accelerate to 1.4% (*versus 1.5%*).

The growth of the **French** economy stayed at 0.3% QoQ (*versus stagnation*) in Q4 2018. Economic activity was driven by foreign demand as the growth in exports outpaced the growth in imports. Domestic demand has had a neutral effect on economic output because higher consumption of the general government sector and investments were fully offset by a negative contribution of the change in inventories. The stagnation of household consumption expenditures was mainly due to protests of the “yellow vests” movement and a decline in consumer confidence to the lowest value since October 2014. Gross fixed capital formation increased only slightly.

The decline in business and consumer confidence and in the Purchasing Managers' Index in manufacturing almost stopped at the turn of 2018 and 2019 as the protests weakened. Extensive rallies against high living costs and economic policy have already led to the abandonment of some planned reforms and, on the contrary, to the adoption or at least a promise of a number of social measures (higher minimum wage, no increases in price tariffs of electricity and gas, abolishing the taxation of overtime pay or abandoning the introduction of a special tax for most pensioners). The package of social measures will positively impact household consumption, but at the same time it is likely to lead to a breach of the EU fiscal

rule and a further increase in the general government sector debt. Further questions are raised by the feasibility of other necessary structural reforms such as of the pension system.

We expect that the growth of the French economy will continue to be relatively insignificant. The driver of growth should remain domestic demand but with regard to the aforementioned social measures, the leading role should be assumed by household consumption expenditures. It cannot be expected, however, that they would be supported by the labour market situation as significantly as in many other European economies. Despite the reforms adopted, the French labour market is improving only very gradually and structural problems remain. By contrast, net exports should dampen economic growth in the short term due to the weakening world trade and worsening prospects of the main trading partners (almost 40% of French exports in 2017, which corresponded to 12% of GDP, went to Germany, the United States of America, the United Kingdom, and Italy). GDP grew by 1.6% in 2018 (*versus 1.5%*) and it could maintain a similar dynamics also in the coming years due to the fiscal impulse. We expect economic growth to reach 1.5% (*unchanged*) in 2019 and to slightly accelerate to 1.6% (*unchanged*) in the following year.

The **Polish** economy slowed dramatically as GDP growth rate was only at 0.5% QoQ in Q4 2018 (*versus 1.2%*). The growth was driven by both domestic and foreign demand and the only component that dampened it was a contribution of the change in inventories. The main pro-growth factor was net exports, despite the poor performance of the euro area. Household consumption was supported by declining unemployment rate, dynamic wage growth and high levels of consumer confidence. Investment activity was mainly driven by resources from the European Structural and Investment Funds.

The economy should continue to be driven by household consumption also in the coming years. The Government has announced a number of fiscal measures to support households' disposable income. The total amount of the fiscal impulse could reach up to 1.9% of GDP. Moreover, household consumption expenditures will be supported in the short term by low interest rates and in the long term by wage growth associated with the good labour market situation. The unemployment rate dropped to 3.5% in February (a year-on-year decline of 0.4 pp). Investment growth should be supported by projects co-financed from EU funds from the 2014–2020 financial perspective and the need to renew capital equipment. The risks are presented by a worsened predictability of economic policy and parliamentary elections that are to take place by November. GDP increased by 5.1% in 2018

(*versus 5.3%*). Economic growth should slow down to 3.9% in 2019 (*versus 4.0%*) but it should keep its dynamics in 2020 due to the fiscal impulse and reach 3.8% (*versus 3.4%*).

The **Slovak** economy slowed down slightly at the end of 2018; GDP growth was 0.8% QoQ in Q4 (*versus 1.0%*). Economic growth was driven exclusively by domestic demand; however, the dominating gross fixed capital formation, which reflected the statistical effect from the previous quarter related to the completion of the Jaguar Land Rover plant, was largely offset by a negative contribution of the change in inventories. Household consumption expenditures were driven by a high level of consumer confidence, declining unemployment and wage growth. A slightly negative contribution of net exports then reflected the lead of import growth before the export dynamics. While imports were driven by strong domestic demand, exports were negatively affected by weakening global trade.

In the forecast horizon, GDP growth should be driven mainly by domestic demand. Household consumption expenditures will be stimulated by a number of fiscal measures (doubling the tax bonus for children under the age of 6 or free lunches for children in kindergartens and elementary schools), high levels of consumer confidence, low interest rates and the labour market situation. The unemployment rate remained at 5.8% in February 2019 (a year-on-year decline of 1.3 pp), which is the lowest value in the recorded history since 1998. A mismatch between supply and demand in the labour market creates pressures on growth of the average wage, which was 5.8% YoY in Q4 2018. An increase in the minimum wage by 8.3% in 2019 or an increase in salaries in the public sector in 2019 and 2020 will help maintain the wage dynamics. Lack of suitably qualified workers will also be reflected in the growth of corporate investment in machinery and equipment that increase labour productivity. The gross fixed capital formation growth in the private sector and in the general government sector will be also driven by utilization of the European Structural and Investment Funds; however, the base effect of completion of construction of the Jaguar Land Rover car factory in 2018 will have an opposite effect. A gradual start-up of production in the factory, however, will help to sustain the growth in exports in 2019 in the conditions of a slowing world trade and growth of EU28 economies (total exports exceeded 80% of GDP in 2017; the share of exports to the EU was more than 80%). GDP increased by 4.1% in 2018 (*versus 4.3%*). Considering the strong domestic demand we estimate that economic growth will slow down gradually, to 3.8% (*versus 4.1%*) in 2019 and to 3.7% (*versus 3.8%*) in 2020.

Table 1.1.1: Gross Domestic Product – yearly

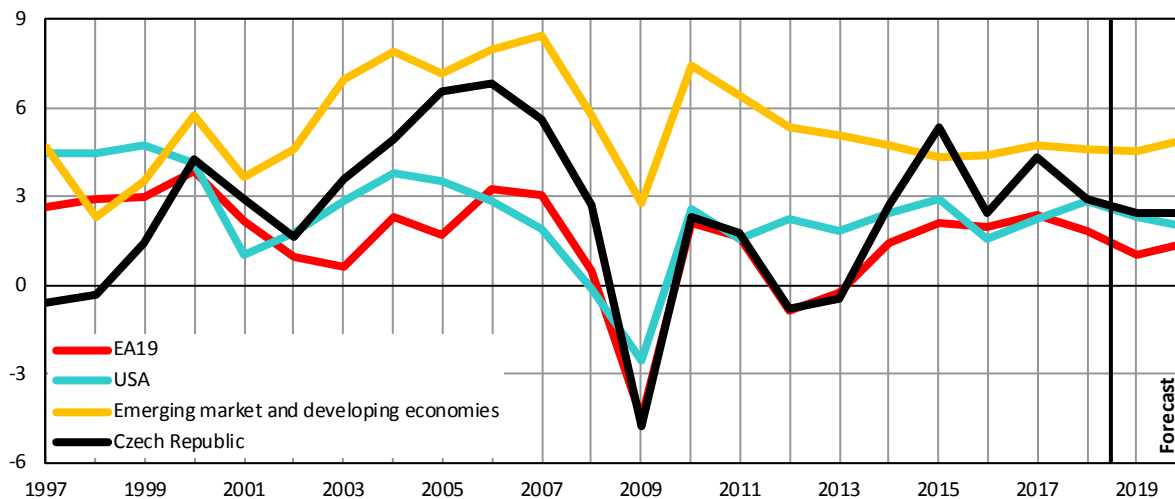
YoY real growth rate, in %

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
									Forecast	Forecast
World	4.3	3.5	3.5	3.6	3.5	3.3	3.7	3.7	3.5	3.6
USA	1.6	2.2	1.8	2.5	2.9	1.6	2.2	2.9	2.3	2.0
China	9.5	7.9	7.8	7.3	6.9	6.7	6.8	6.6	6.2	6.1
EU28	1.8	-0.4	0.3	1.8	2.3	2.0	2.4	1.9	1.3	1.6
EA19	1.6	-0.9	-0.2	1.4	2.1	2.0	2.4	1.8	1.0	1.4
Germany	3.7	0.5	0.5	2.2	1.7	2.2	2.2	1.4	0.8	1.4
France	2.2	0.3	0.6	1.0	1.1	1.2	2.2	1.6	1.5	1.6
United Kingdom	1.6	1.4	2.0	2.9	2.3	1.8	1.8	1.4	1.1	1.1
Austria	2.9	0.7	0.0	0.7	1.1	2.0	2.6	2.7	1.9	2.0
Hungary	1.7	-1.6	2.1	4.2	3.5	2.3	4.1	4.9	3.6	3.0
Poland	5.0	1.6	1.4	3.3	3.8	3.1	4.8	5.1	3.9	3.8
Slovakia	2.8	1.7	1.5	2.8	4.2	3.1	3.2	4.1	3.8	3.7
Czech Republic	1.8	-0.8	-0.5	2.7	5.3	2.5	4.4	2.9	2.4	2.4

Source: CZSO, Eurostat, IMF, NBS China. Calculations of the MoF.

Graph 1.1.4: Gross Domestic Product

YoY real growth rate, in %

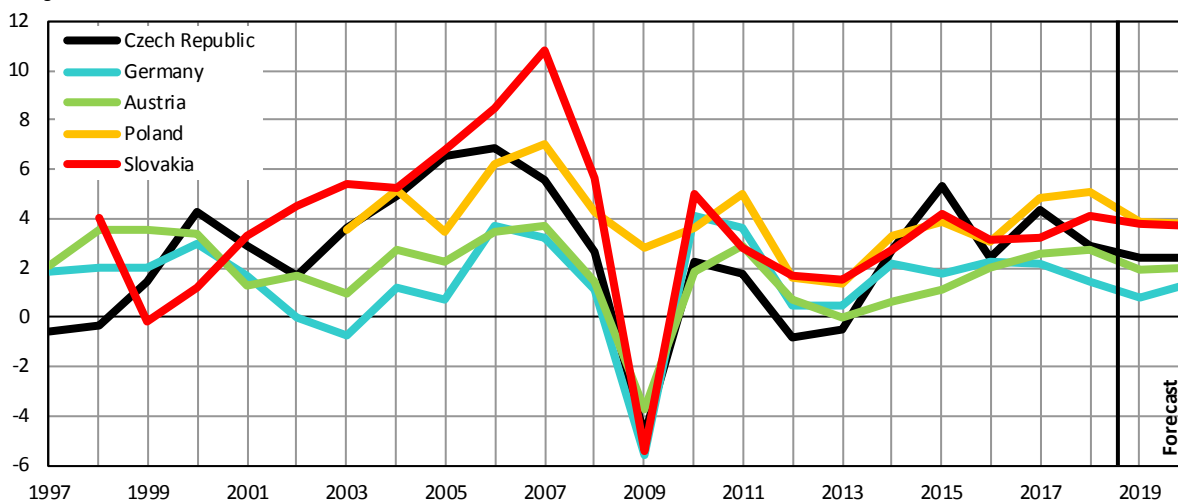


Note: Emerging market and developing economies comprising 154 countries (according to the IMF's classification)

Source: Eurostat, IMF. Calculations of the MoF.

Graph 1.1.5: Gross Domestic Product – Czech Republic and the neighbouring states

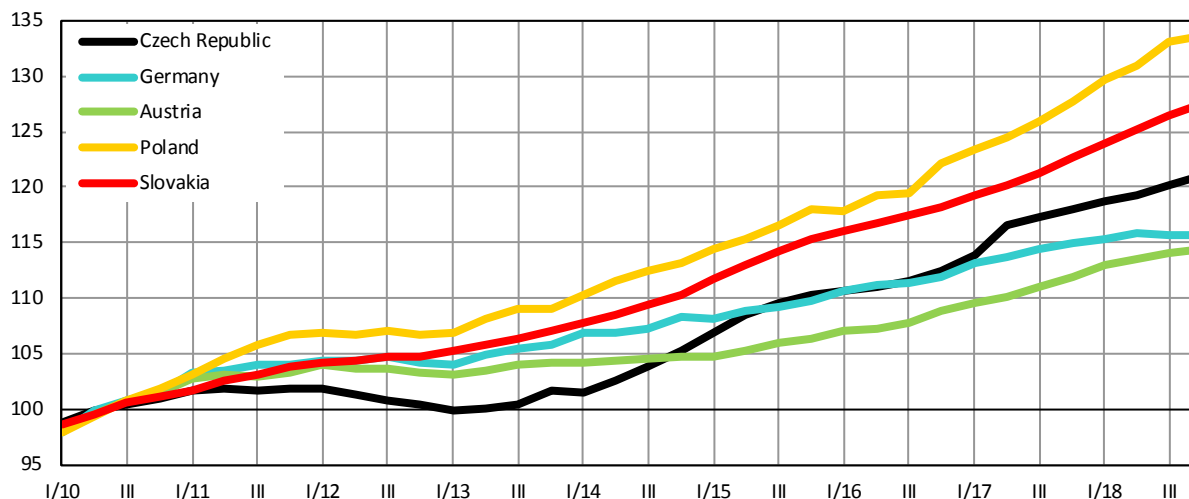
YoY real growth rate, in %



Source: Eurostat. Calculations of the MoF.

Graph 1.1.6: Gross Domestic Product – Czech Republic and the neighbouring states

2010=100, seasonally adjusted data, constant prices



Source: Eurostat. Calculations of the MoF.

Table 1.1.2: Gross Domestic Product – quarterly

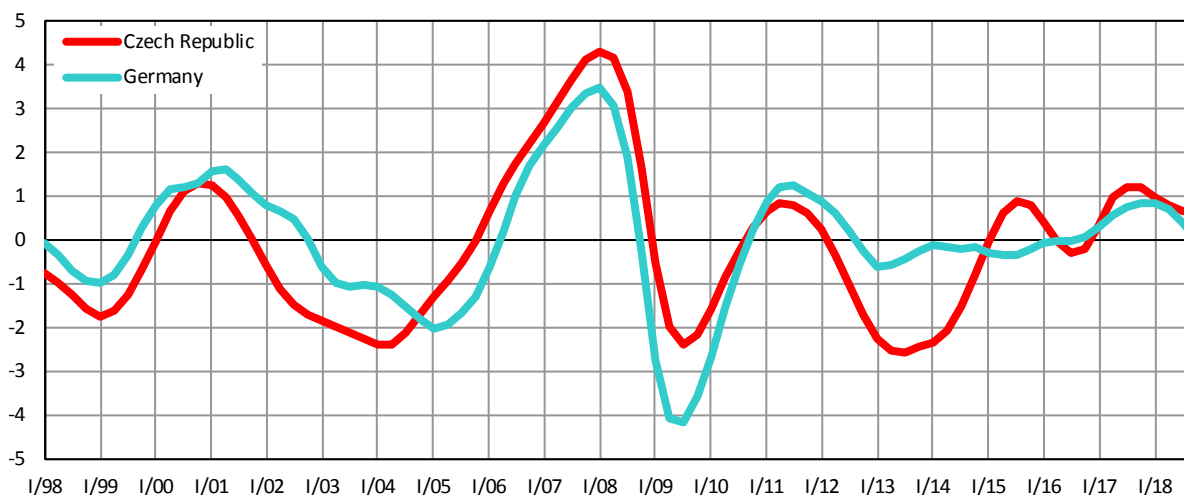
real growth rate, in %, seasonally adjusted data

		2018				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
USA	QoQ	0.5	1.0	0.8	0.5	0.4	0.6	0.5	0.5
	YoY	2.6	2.9	3.0	3.0	2.8	2.4	2.1	2.0
China	QoQ	1.5	1.7	1.6	1.5	1.4	1.6	1.4	1.5
	YoY	6.8	6.7	6.5	6.4	6.3	6.2	6.0	6.0
EU28	QoQ	0.4	0.5	0.3	0.3	0.3	0.3	0.4	0.4
	YoY	2.4	2.2	1.8	1.4	1.3	1.2	1.3	1.4
EA19	QoQ	0.4	0.4	0.1	0.2	0.2	0.2	0.3	0.4
	YoY	2.4	2.1	1.6	1.1	1.0	0.8	0.9	1.1
Germany	QoQ	0.4	0.5	-0.2	0.0	0.1	0.2	0.5	0.6
	YoY	2.1	2.0	1.2	0.6	0.4	0.1	0.8	1.4
France	QoQ	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.5
	YoY	2.2	1.7	1.4	1.0	1.1	1.3	1.5	1.7
United Kingdom	QoQ	0.1	0.4	0.7	0.2	0.1	0.2	0.4	0.3
	YoY	1.2	1.4	1.6	1.4	1.4	1.2	0.9	1.0
Austria	QoQ	0.9	0.5	0.4	0.3	0.4	0.5	0.5	0.4
	YoY	3.2	3.2	2.8	2.1	1.6	1.6	1.7	1.8
Hungary	QoQ	1.3	1.0	1.4	1.0	0.7	0.6	0.6	0.5
	YoY	4.9	4.8	5.3	4.9	4.2	3.8	3.0	2.4
Poland	QoQ	1.5	1.0	1.6	0.5	0.7	1.0	1.5	1.2
	YoY	5.0	5.1	5.6	4.6	3.8	3.8	3.7	4.5
Slovakia	QoQ	1.0	1.1	1.0	0.8	0.8	1.0	1.1	1.0
	YoY	3.9	4.2	4.3	4.0	3.8	3.7	3.8	4.0
Czech Republic	QoQ	0.6	0.5	0.7	0.8	0.6	0.4	0.4	0.4
	YoY	4.2	2.3	2.4	2.6	2.7	2.6	2.2	1.9

Source: Eurostat, NBS China. Calculations of the MoF.

Graph 1.1.7: Cyclical Component of GDP – Czech Republic and Germany

in % of GDP, derived using the Hodrick-Prescott filter



Source: Eurostat. Calculations of the MoF.

1.2 Commodity Prices

We estimate that the price of Brent crude oil averaged USD 66/barrel in Q1 2019 (*versus USD 56/barrel*). According to the estimate, it thus almost stagnated in year-on-year terms.

While the Q4 2018 was characterized by a gradual decline in the crude oil price and losses in stock markets, the situation has been completely opposite since the beginning of 2019. The crude oil price growth was supported by information that the agreement among members of the Organization of the Petroleum Exporting Countries and other participating countries to reduce extraction has been fulfilled. That factor was partly counterbalanced by rising oil production in the United States of America.

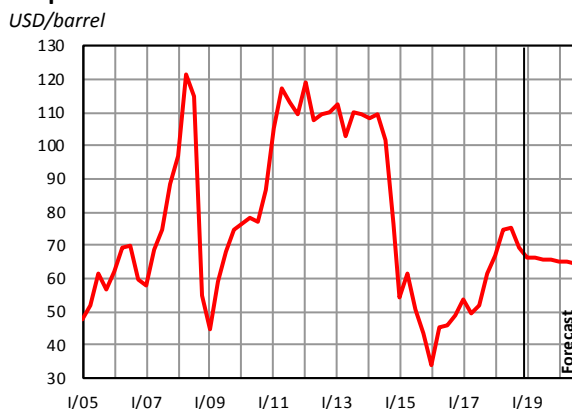
The U.S. Energy Information Administration estimates that extracted oil stocks will increase in 2019 and 2020, which should push the price down. That forecast is also in line with the situation in the futures market, where oil with later delivery is traded cheaper than oil with earlier delivery.

The projected development in the Brent crude oil price reflects the slightly declining curve of the futures prices. The average price should reach USD 66/barrel in 2019 (*versus USD 56/barrel*) and USD 65/barrel in 2020 (*versus*

USD 57/barrel). The increase in the forecast is due to an upward shift in futures prices.

Compared to the previous forecast the price of Brent oil increased in koruna terms in proportion to the increase in the dollar price as the forecast for the koruna exchange rate against the U.S. dollar has not changed. The koruna price is projected to fall at an annual rate of approximately 4% (see Chart 1.2.2) in 2019 and 2020.

Graph 1.2.1: Dollar Prices of Oil



Source: U. S. Energy Information Administration. Calculations 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
Crude oil Brent	USD/barrel	111.3	111.5	108.6	99.0	52.4	43.6	54.2	71.4	66	65	
	growth in %	39.8	0.2	-2.6	-8.8	-47.1	-16.9	24.3	31.7	-7.5	-2.0	
Crude oil Brent index (in CZK)	2010=100	129.5	143.8	139.9	134.6	85.0	70.1	83.1	102.1	97	94	
	growth in %	29.5	11.0	-2.7	-3.8	-36.9	-17.4	18.5	22.9	-4.6	-3.9	
Natural gas (Europe)	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	.	.	
Natural gas (Europe) index (in CZK)	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, IMF, U. S. Energy Information Administration. Calculations of the MoF.

Table 1.2.2: Prices of Selected Commodities – quarterly

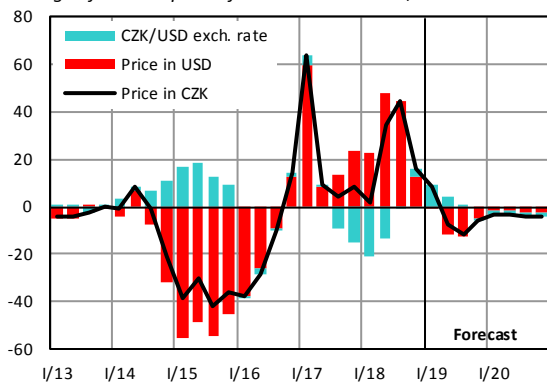
spot prices

		2018				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Crude oil Brent	USD/barrel	66.9	74.5	75.1	69.0	66	66	66	66
	growth in %	24.8	50.2	44.1	12.4	-1.0	-11.1	-12.2	-4.8
Crude oil Brent index (in CZK)	2010=100	91.0	105.6	109.7	102.2	99	98	97	96
	growth in %	1.6	34.2	44.1	16.0	8.3	-7.3	-11.5	-5.9
Natural gas (Europe)	USD/MMBtu	6.7	7.3	8.4	8.3	.	.	.	.
	growth in %	16.8	46.2	53.3	25.1	.	.	.	.
Natural gas (Europe) index (in CZK)	2010=100	87.5	99.2	117.9	118.8	.	.	.	.
	growth in %	-4.9	30.6	53.3	29.2	.	.	.	.

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

Graph 1.2.2: Koruna Price of Brent Crude Oil

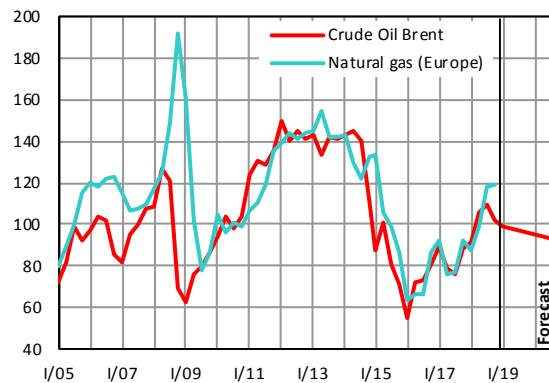
YoY change of the CZK price of Brent crude oil in %, contributions in pp



Source: CNB, U. S. Energy Inf. Administration. Calculations of the MoF.

Graph 1.2.3: Koruna Prices of Selected Commodities

index 2010=100



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

1.3 Fiscal Policy

According to data of the Czech Statistical Office, the general government balance posted a surplus of CZK 47.4 billion (*versus CZK 82.7 billion*) in 2018, which corresponds to 0.9% of GDP (*versus 1.6% of GDP*). This was the third surplus in a row and all sub-sectors contributed positively to the result. The balance adjusted for effects of the business cycle and one-off or other temporary measures thus reached 0.4% of GDP (*versus 1.1% of GDP*), the primary structural balance 1.1% of GDP (*versus 1.8% of GDP*).

The lower surplus of the general government sector was to a significant extent determined by expenditures, which increased by 10.1% and thus exceeded the growth in revenues by 2 pp. Tax revenues, including social security contributions, rose by almost CZK 132 billion (7.4%), which was the biggest increase ever in absolute terms. With respect to the position of the economy in the business cycle, high dynamics of the personal income tax (13.8%) and social security contributions (9.8%), i.e. revenues dependent on the development of the wage bill in the economy (see Chapter 3.3), was maintained. On the other hand, however, firms' profitability reflected the growing share of compensation of employees in gross domestic product. Apart from higher wage costs, firms' financial results were also affected by the moderate slowdown in economic dynamics. In year-on-year terms, the revenues from corporate income tax thus remained almost unchanged.

Revenues from taxes on production and imports increased by 4.8%. The growth in value-added tax, which was boosted significantly in 2017 by the VAT control statement and electronic registration of sales, moderated to 5.4%. A decrease of 1.6% in revenues from the excise duty on tobacco products was reflected in the development of excise duties. However, total revenues were boosted by higher yields from the sale of emission permits, which tripled.

Due to accelerated implementation of the general government sector's projects financed from the European structural and investment funds, there was an enormous growth in current (24.8%) as well as in capital (31.3%) transfers.

The fastest growing item on the expenditure side was gross fixed capital formation (27.7%), with almost 70% of its increase having been financed from national resources.

Dynamics of nominal final consumption expenditures of the general government accelerated to 8.9%, driven by compensation of employees (12.7%). They reflected a 10% increase in salaries of all employees of the general government sector that took place at the end of 2017, or a 15% increase, respectively, in the case of educational staff. In addition, salary scales in health care were raised by 10% from January 2018. Intermediate consumption

was the second dynamic component, with its 9.7% growth being due also to higher real consumption in connection with financing EU- projects-related current expenditures. The 6.8% growth in social benefits in kind reflected primarily an increase in expenditures of the health care system.

Apart from final consumption expenditures, there was also an increase in expenditures on social benefits (5.2%), due not only to the indexation of pension benefits and a change in the indexation formula, but also to e.g. the introduction of new sickness insurance benefits.

For 2019 we expect the balance of the general government sector to post a surplus of 0.3% of GDP (*versus 1.0% of GDP*), with a negative balance of the central government being more than offset by a positive budget balances of local government units and social security funds (health insurance companies). From the perspective of the structural balance, a negative fiscal effort should lead to an almost balanced budget.

Revenues of the general government sector should grow at a 5% pace. Tax revenues including social security contributions should play a dominant role, just like in the previous year. The forecast envisages a year-on-year increase in the dynamics of income taxes, driven primarily by an expected double-digit growth in the personal income tax. Its 10.3% growth should positively reflect the projected growth in wages and salaries by 7.5% as well as a change in their distribution resulting from the increase in the minimum and guaranteed wages. Both these factors should, together with a planned CZK 3 billion increase in government's payments for state insured persons, determine also social security contributions (6.7%). Apart from the personal income tax, revenues from the corporate income tax, which are expected to grow by 4.5%, should also contribute to high dynamics of income taxes.

We forecast revenues from the value-added tax to grow by 5.2% YoY in 2019. Expected autonomous developments are in line with the growth in nominal consumption of households and the relevant part of consumption of the general government sector of around 5.5%. For the first time since the introduction of electronic registration of sales, no additional tax effect is assumed this year, given that both remaining phases are expected to be launched in 2020. Dynamics of revenues from excise taxes should remain the same as in 2018 (0.7%).

On the expenditure side, we expect final consumption expenditures of the general government to decelerate towards 6.5% this year. Similarly to the last year, the growth should be primarily driven by strong dynamics of compensation of employees (10%), while a moderate acceleration on the year ago is expected in the case of social benefits in kind (7.2%). On the contrary, compared with an almost double-digit growth of intermediate con-

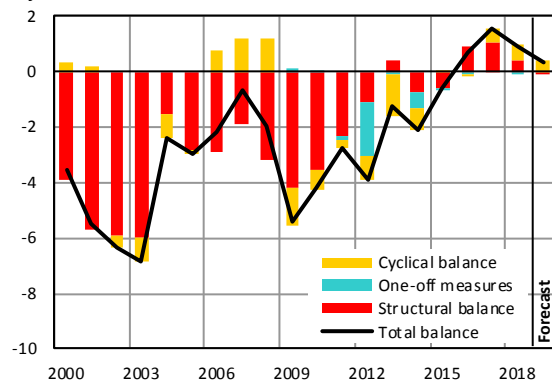
sumption in 2018, the growth in expenditures on goods and services should be considerably slower (2.4%).

For 2019 we expect a considerable increase of 7.3% in the area of cash social benefits, which reflects not only approved measures (especially in the area of pension benefits) but also economic developments. After an enormous growth of investment expenditures in 2018 we expect their dynamics to moderate to 5.5% this year. This growth should be driven primarily by investment financed purely from national resources. With respect to

expected developments of monetary policy of the CR we envisage further growth in interest rates, which should also be reflected in a 5.5% increase of interest expenses.

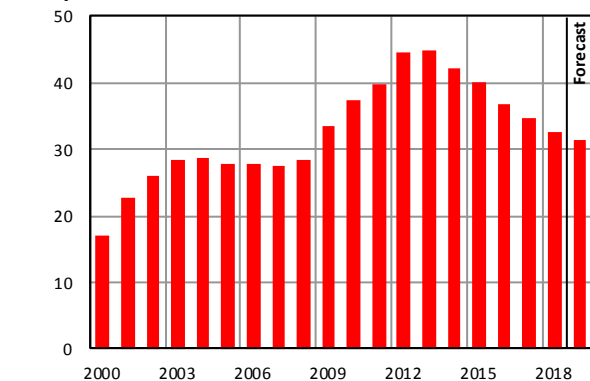
Having fallen in year-on-year terms at the end of 2018, the absolute level of the general government debt is expected to rise in 2019. As a ratio to GDP, however, debt has been decreasing since 2014 and this trend should continue also this year. As of the end of 2019, we expect the general government debt at 31.5% of GDP (*versus 31.7% of GDP*).

Graph 1.3.1: Decomposition of the Government Balance
in % of GDP



Source: CZSO. Calculations of the MoF.

Graph 1.3.2: General Government Debt
in % of GDP



Source: CZSO. Calculations of the MoF.

Table 1.3.1: Net Lending/Borrowing and Debt

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
											Forecast
General government balance	% GDP	-4.2	-2.7	-3.9	-1.2	-2.1	-0.6	0.7	1.6	0.9	0.3
	bill. CZK	-166	-110	-160	-51	-91	-28	34	79	47	18
Cyclical balance	% GDP	-0.7	-0.3	-0.9	-1.5	-0.8	0.1	-0.1	0.5	0.6	0.4
Cyclically adjusted balance	% GDP	-3.5	-2.4	-3.1	0.3	-1.3	-0.7	0.8	1.0	0.3	-0.1
One-off measures ¹⁾	% GDP	0.1	-0.1	-1.9	-0.1	-0.5	-0.1	-0.1	0.0	-0.1	0.0
Structural balance	% GDP	-3.5	-2.3	-1.1	0.4	-0.8	-0.6	0.9	1.0	0.4	-0.1
Fiscal effort ²⁾	pp	0.6	1.2	1.2	1.5	-1.2	0.2	1.5	0.1	-0.7	-0.5
Interest expenditure	% GDP	1.3	1.3	1.4	1.3	1.3	1.1	0.9	0.7	0.8	0.8
Primary balance	% GDP	-2.9	-1.4	-2.5	0.1	-0.8	0.5	1.6	2.3	1.7	1.1
Cyclically adjusted primary balance	% GDP	-2.2	-1.1	-1.6	1.6	0.0	0.4	1.7	1.8	1.0	0.6
General government debt	% GDP	37.4	39.8	44.5	44.9	42.2	40.0	36.8	34.7	32.7	31.5
	bill. CZK	1 480	1 606	1 805	1 840	1 819	1 836	1 755	1 750	1 735	1 763
Change in debt-to-GDP ratio	pp	3.8	2.5	4.6	0.4	-2.7	-2.2	-3.1	-2.1	-2.0	-1.2

¹⁾ 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.

²⁾ Change in structural balance.

Source: CZSO. Calculations of the MoF.

1.4 Monetary Policy, Financial Sector and Exchange Rates

1.4.1 Monetary Policy

In Q1 2019, the CNB kept its **two-week repo rate** at 1.75%. Caution with respect to further developments abroad and in the CR, the risks tilted towards slower growth of European economies and an increasing interest rate differential vis-à-vis the euro area have thus outweighed arguments for raising interest rates (domestic inflationary pressures stemming from growing wages and salaries and the labour market situation).

Due to the anticipated monetary policy stance and the expected appreciation of the koruna (see Chapter 1.4.3), we expect that monetary conditions in 2019 and 2020 will tighten mainly in the exchange rate component and only moderately in the interest rate one.

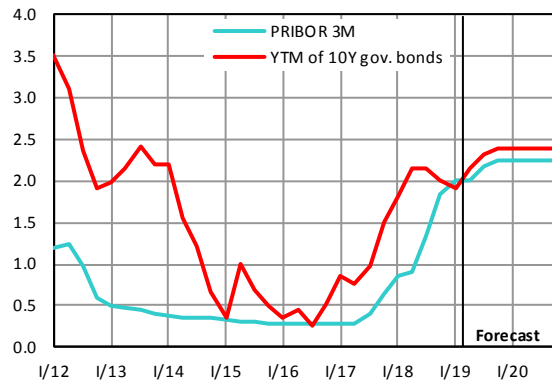
1.4.2 Financial Sector and Interest Rates

In line with the development of monetary-policy rates of the CNB, the **three-month PRIBOR** rate increased to 2.0% (*versus 2.1%*) in Q1 2019. We expect that due to more gradual hikes of the primary interest rate the PRIBOR rate should remain at 2.0% in Q2 (*versus 2.2%*) and reach 2.1% on average (*versus 2.3%*) in 2019 as a whole. It should then increase further to 2.3% in 2020 (*versus 2.5%*).

The **yield to maturity on ten-year government bonds** for convergence purposes dropped slightly to 1.9% in January and 1.8% in February. In Q1 2019, long-term interest rates could thus have averaged 1.9% (*versus 2.5%*). The yield curve of government bonds has been straightening on shorter maturities since mid-2018. For the first time since 2008, the yields of two-year government bonds were higher than yields of five-year ones, and came closer to yields of ten-year ones. Considering the expected monetary policy stance of the CNB and the ECB, the development of inflation and the inverse yield curve, we believe that the long-term interest rates will grow more slowly. They should be at 2.2% in Q2 (*versus 2.6%*) and average at the same level also in 2019 as a whole (*versus 2.7%*). They should then stabilize around 2.3% in 2020 (*versus 3.0%*).

Graph 1.4.1: Interest Rates

in % p.a.

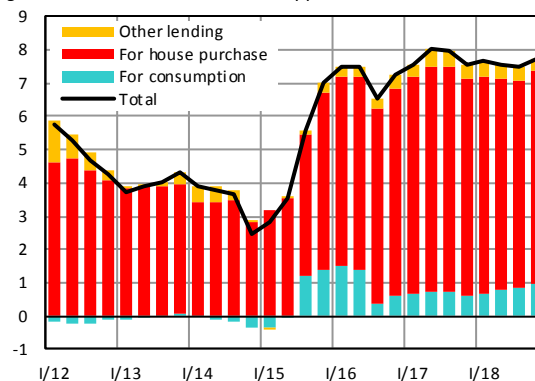


Source: CNB. Calculations of the MoF.

In Q4 2018, total **loans to households** increased by 7.7% YoY, and their growth rate has been above 7% since the end of 2016. Loans to households continue to be mainly driven by housing loans, which represent about 75% of all loans to households.

Graph 1.4.2: Loans to Households

YoY growth rate in%, contributions in pp



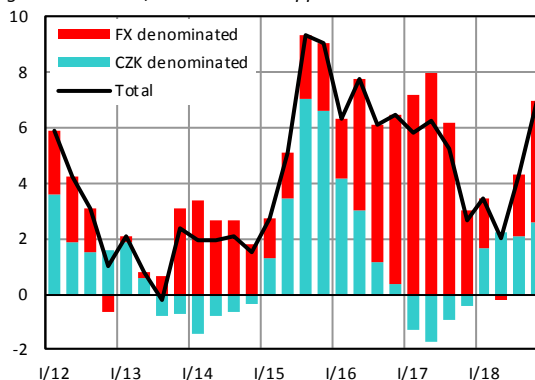
Source: CNB. Calculations of the MoF.

Following the CNB's recommendations on the management of risks associated with the provision of retail loans secured by residential property, in effect since 1 October 2018, there has been a pronounced year-on-year decline in new loans for property purchase (excluding refinanced loans) since December 2018, ranging from 25% to 30%.

Although the primary interest rate and money market rates have been rising since mid-2017, average client interest rates on the total volume of loans to households have been declining over the same period. Interest rates on new loans to households were higher by 0.8 pp in February 2019 than in September 2018, when they started growing.

Graph 1.4.3: Loans to Non-financial Corporations

YoY growth rate in%, contributions in pp



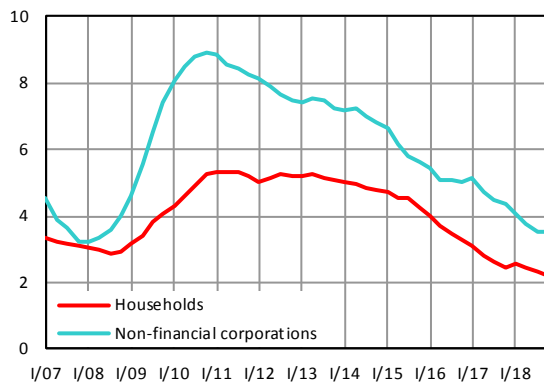
Source: CNB. Calculations of the MoF.

The year-on-year growth in total **loans to non-financial corporations** accelerated strongly to 7.0% in Q4 2018, being driven by long-term loans. Loans with maturity over 1 year constitute 75% of loans to non-financial corporations; the share of loans with maturity over 5 years

is 50%. The growth of koruna-denominated loans increased by 0.6 pp to 3.6%. Foreign currency loans accelerated dramatically to 15.3%, which contributed significantly to dynamics of total loans to non-financial corporations. These developments are consistent with continued heightened investment activity of nonfinancial corporations.

Graph 1.4.4: Non-performing Loans

ratio of non-performing to total loans, in%



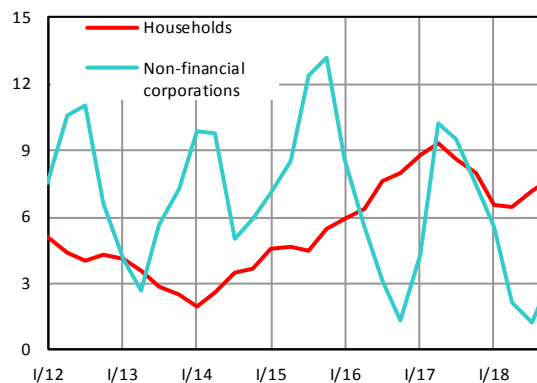
Source: CNB. Calculations of the MoF.

The **share of non-performing loans** in total loans reflected positive economic developments. For households it dropped to 2.2% in Q4 2018. For non-financial corporations the share stagnated at 3.5%, though it was higher in January and February 2019. This indicator, however, does not capture how loans will be repaid in the future.

The year-on-year growth in **deposits** in Q4 2018 accelerated to 3.1% for non-financial corporations and to 7.7% for households, but it slightly decelerated in January and February 2019. In terms of the capacity to finance future consumption and investments from own resources, the continued growth in deposits may be assessed positively.

Graph 1.4.5: Deposits

YoY growth rate, in%



Source: CNB. Calculations of the MoF.

1.4.3 Exchange Rates

During Q1 2019, the exchange rate of the koruna against the euro hovered around CZK 25.7/EUR, appreciating by 0.5% compared to the previous quarter. Despite the growing interest rate differential vis-à-vis the euro area, however, the exchange rate fell by 1.1% YoY to an average of CZK 25.7/EUR (*in line with the estimate*).

With respect to the ongoing real convergence and the positive interest rate differential between the Czech Republic and the euro area, the koruna should appreciate in the forecast horizon. The average exchange rate should be CZK 25.6/EUR in Q2 (*unchanged*). The koruna should appreciate by 0.5% YoY to CZK 25.5/EUR (*unchanged*) in 2019 as a whole. In 2020, the average exchange rate could be CZK 25.1/EUR (*unchanged*); the koruna would thus appreciate by 1.8% against the euro.

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

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
Repo 2W rate CNB (end of period)	in % p.a.	0.75	0.05	0.05	0.05	0.05	0.05	0.50	1.75	.	.
Main refinancing rate ECB (end of period)	in % p.a.	1.00	0.75	0.25	0.05	0.05	0.05	0.00	0.00	.	.
Federal funds rate (end of period)	in % p.a.	0.25	0.25	0.25	0.25	0.50	0.75	1.50	2.50	.	.
PRIBOR 3M	in % p.a.	1.19	1.00	0.46	0.36	0.31	0.29	0.41	1.23	2.1	2.3
YTM of 10Y government bonds	in % p.a.	3.63	2.73	2.19	1.41	0.63	0.40	1.03	2.03	2.2	2.4
Client interest rates											
Loans to households	in % p.a.	6.84	6.47	6.05	5.59	5.15	4.65	4.10	3.76	.	.
Loans to non-financial corporations	in % p.a.	3.94	3.72	3.20	3.01	2.78	2.59	2.57	3.05	.	.
Deposits of households	in % p.a.	1.20	1.18	1.02	0.85	0.65	0.47	0.36	0.33	.	.
Deposits of non-financial corporations	in % p.a.	0.51	0.56	0.41	0.29	0.19	0.10	0.05	0.11	.	.

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

Table 1.4.2: Interest Rates – quarterly

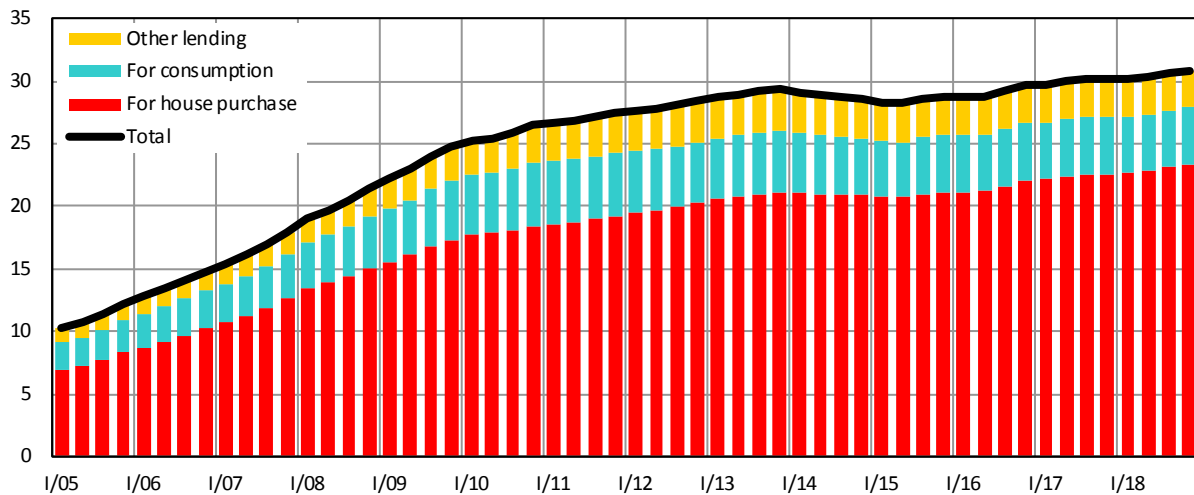
average of period, unless stated otherwise

		2018				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Forecast</i>
Repo 2W rate CNB (end of period)	<i>in % p.a.</i>	0.75	1.00	1.50	1.75	1.75	.	.	.
Main refinancing rate ECB (end of period)	<i>in % p.a.</i>	0.00	0.00	0.00	0.00	0.00	.	.	.
Federal funds rate (end of period)	<i>in % p.a.</i>	1.75	2.00	2.00	2.50	2.50	.	.	.
PRIBOR 3M	<i>in % p.a.</i>	0.86	0.92	1.33	1.83	2.01	2.0	2.2	2.3
YTM of 10Y government bonds	<i>in % p.a.</i>	1.81	2.14	2.14	2.01	1.9	2.2	2.3	2.4
Client interest rates									
Loans to households	<i>in % p.a.</i>	3.85	3.78	3.73	3.70	.	.	.	.
Loans to non-financial corporations	<i>in % p.a.</i>	2.81	2.88	3.06	3.46	.	.	.	.
Deposits of households	<i>in % p.a.</i>	0.33	0.32	0.32	0.33	.	.	.	.
Deposits of non-financial corporations	<i>in % p.a.</i>	0.05	0.09	0.13	0.19	.	.	.	.

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

Graph 1.4.6: Loans to Households

in % of GDP (from yearly moving sums)



Source: CNB, CZSO. Calculations of the MoF.

Table 1.4.3: Loans and Deposits – yearly averages

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Households											
Loans	<i>growth in %</i>	16.5	8.9	6.6	5.0	4.0	3.4	4.8	7.2	7.8	7.6
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
Deposits	<i>growth in %</i>	10.2	5.1	5.0	4.5	3.3	2.9	4.8	7.0	8.7	7.0
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
Non-performing loans (banking statistics)	<i>share, in %</i>	3.6	4.8	5.3	5.2	5.2	4.9	4.5	3.6	2.7	2.4
Loans to deposits ratio	<i>in %</i>	59	61	62	63	63	63	63	63	63	63
Non-financial corporations											
Loans	<i>growth in %</i>	1.9	-5.2	4.7	3.5	1.3	1.9	6.5	6.6	5.0	4.2
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	7.0
Deposits	<i>growth in %</i>	-2.2	5.5	0.4	8.9	4.9	7.6	10.3	4.6	7.8	3.0
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	6.7
Non-performing loans (banking statistics)	<i>share, in %</i>	6.0	8.6	8.5	7.8	7.4	7.0	6.0	5.2	4.7	3.7
Loans to deposits ratio	<i>in %</i>	135	121	126	120	116	110	106	108	105	106

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			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Households									
Loans	<i>growth in %</i>	7.6	8.0	8.0	7.6	7.7	7.6	7.5	7.7
For consumption	<i>growth in %</i>	4.2	4.6	4.5	3.9	4.2	5.2	5.8	6.5
For house purchase	<i>growth in %</i>	8.9	9.2	9.2	8.8	8.8	8.5	8.3	8.5
Other lending	<i>growth in %</i>	3.7	4.7	4.4	4.1	4.7	4.4	4.3	3.7
CZK denominated	<i>growth in %</i>	7.6	7.9	7.9	7.5	7.7	7.6	7.5	7.7
FX denominated	<i>growth in %</i>	12.0	48.5	49.4	35.8	11.1	-10.8	-0.9	10.9
Deposits	<i>growth in %</i>	8.8	9.3	8.6	8.0	6.6	6.4	7.2	7.7
CZK denominated	<i>growth in %</i>	9.4	10.6	9.8	8.9	7.1	6.4	7.2	7.7
FX denominated	<i>growth in %</i>	-5.6	-18.7	-17.3	-13.7	-7.3	7.8	6.9	7.5
Non-performing loans (banking statistics)	<i>share, in %</i>	3.1	2.8	2.6	2.4	2.6	2.4	2.3	2.2
Loans to deposits ratio	<i>in %</i>	62	62	63	64	63	63	63	64
Non-financial corporations									
Loans	<i>growth in %</i>	5.8	6.3	5.3	2.6	3.5	2.0	4.3	7.0
CZK denominated	<i>growth in %</i>	-1.7	-2.3	-1.2	-0.5	2.3	3.2	3.0	3.6
FX denominated	<i>growth in %</i>	31.1	32.6	24.8	11.5	6.3	-0.7	7.5	15.3
Deposits	<i>growth in %</i>	4.3	10.2	9.5	7.4	5.6	2.2	1.3	3.1
CZK denominated	<i>growth in %</i>	8.5	19.8	15.6	12.0	6.8	0.2	-0.1	1.8
FX denominated	<i>growth in %</i>	-8.8	-18.0	-9.4	-7.8	1.0	10.7	6.9	8.4
Non-performing loans (banking statistics)	<i>share, in %</i>	5.1	4.7	4.5	4.3	4.0	3.8	3.5	3.5
Loans to deposits ratio	<i>in %</i>	105	104	106	104	103	104	109	108

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
Nominal exchange rates											
CZK / EUR	average	25.97	27.53	27.28	27.03	26.33	25.65	25.5	25.1	24.6	24.2
	appreciation in %	-3.2	-5.7	0.9	0.9	2.7	2.7	0.5	1.8	1.8	1.9
CZK / USD	average	19.56	20.75	24.60	24.43	23.39	21.74	22.4	22.0	21.6	21.2
	appreciation in %	0.1	-5.7	-15.7	0.7	4.5	7.6	-3.0	1.9	1.8	1.9
NEER	average of 2015=100	106.4	100.8	100.0	102.4	105.4	109.3	110	112	114	116
	appreciation in %	-2.3	-5.2	-0.8	2.4	2.9	3.7	0.3	1.8	1.8	1.9
Real exchange rate to EA19¹⁾	average of 2010=100	96.8	92.7	93.3	94.6	97.5	100.8	103	105	107	109
	appreciation in %	-3.0	-4.2	0.7	1.4	3.0	3.4	1.8	2.0	2.1	2.1
REER²⁾	average of 2010=100	96.9	91.8	91.2	93.6	97.2	101.4	.	.	.	.
	appreciation in %	-2.3	-5.2	-0.7	2.6	3.9	4.3	.	.	.	.

¹⁾ Deflated by GDP deflators.

²⁾ Eurostat calculations, deflated by CPI, versus 42 countries.

Source: CNB, Eurostat. Calculations of the MoF.

Table 1.4.6: Exchange Rates – quarterly

		2018				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Nominal exchange rates									
CZK / EUR	average	25.40	25.60	25.76	25.81	25.68	25.6	25.5	25.4
	appreciation in %	6.4	3.6	1.3	-0.6	-1.1	0.1	1.1	1.8
CZK / USD	average	20.66	21.51	22.19	22.50	22.61	22.4	22.3	22.2
	appreciation in %	22.8	12.0	0.0	-3.1	-8.6	-4.1	-0.7	1.1
NEER	average of 2015=100	110.1	109.3	109.4	108.5	108.9	109	110	110
	appreciation in %	8.0	5.1	2.1	-0.3	-1.0	0.1	0.5	1.7
Real exchange rate to EA19¹⁾	average of 2010=100	101.6	100.8	100.5	100.3	102	102	103	103
	appreciation in %	7.4	4.6	1.8	0.0	0.6	1.7	2.3	2.5
REER²⁾	average of 2010=100	102.3	101.4	101.6	100.1	.	.	.	.
	appreciation in %	9.1	6.1	2.9	-0.4	.	.	.	.

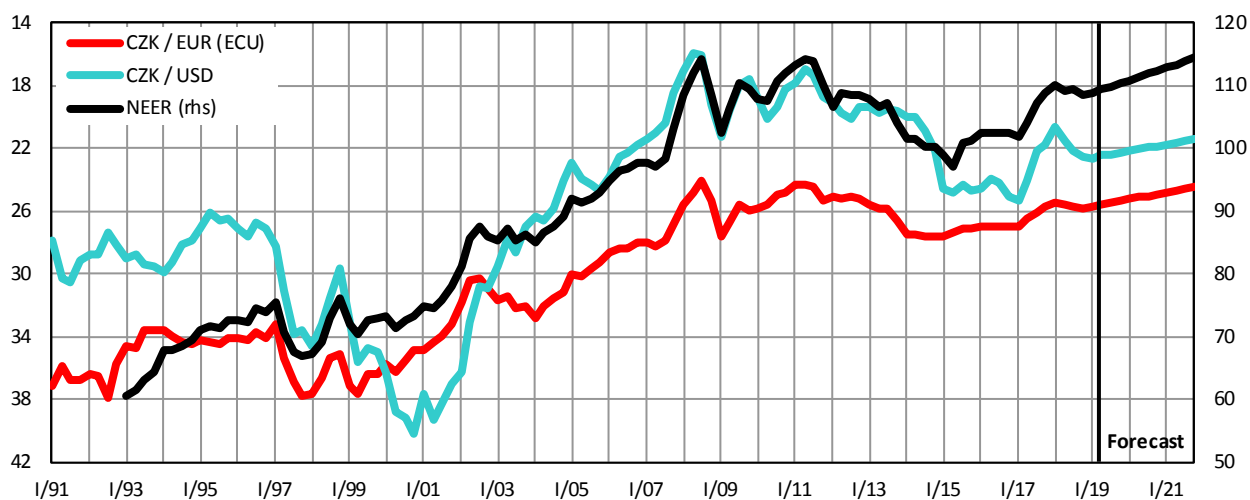
¹⁾ Deflated by GDP deflators.

²⁾ Eurostat calculations, deflated by CPI, versus 42 countries.

Source: CNB, Eurostat. Calculations of the MoF.

Graph 1.4.7: Nominal Exchange Rates

quarterly averages, average 2015=100 (rhs)



Source: CNB. Calculations of the MoF.

Graph 1.4.8: Real Exchange Rate to EA19

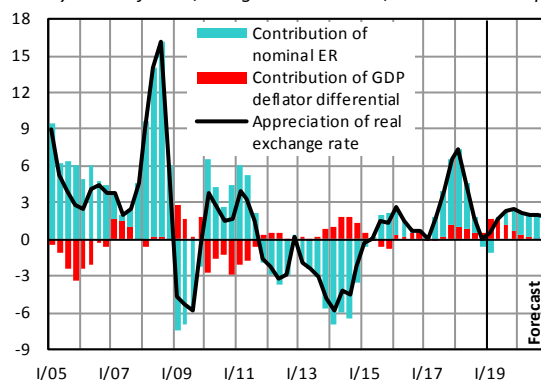
quarterly averages, deflated by GDP deflators, average 2010=100



Source: CNB, Eurostat. Calculations of the MoF.

Graph 1.4.9: Real Exchange Rate to EA19

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



Source: CNB, Eurostat. Calculations of the MoF.

1.5 Structural Policies

On 14 March 2019 the **Act regulating some relations in connection with the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union** came into effect. The law reflects the possibility of the United Kingdom's withdrawal from the EU without an agreement, and therefore, in the transitory period, it provides legal certainty for British citizens in the Czech Republic (stay, marriage, acquisition of citizenship of the CR, access to the labour market, recognition of professional qualifications, public health insurance, existing supplementary pension insurance, building savings, etc.).

On 15 March 2019, the President signed the **Act amending certain tax-related acts**. The new legal regulation doubles the limit for the use of lump-sum expenditure for self-employed persons to CZK 2 million. At the same time, it transfers value added tax on heat and cold from the first to the second reduced rate. Last but not least, it introduces excise duty on heated tobacco products. The law will enter into effect on 1 January 2020, but the new excise duty has been already effective since 1 April 2019.

On 30 January 2019, the President of the CR signed an **amendment to the Insolvency Act**, which makes the institution of debt relief available to more debtors by relaxing conditions for debt relief. Debtors will be able to enter the debt relief process if they repay to their creditors at least 60% of their debts within three years or at least 30% of their debts within five years. If they repay a lower amount, a court will decide on their debt relief.

1.6 Demographic Trends

The population of the Czech Republic has been rising slightly. At the end of 2018, 10.650 million people lived in the CR. Its population increased by 39.7 thousand persons during 2018, i.e. by 0.4%.

This increase was mainly due to a **positive net migration**. The migration balance, motivated mainly by tight

The amount of the monthly instalment will be at least the amount of the insolvency administrator fee, which is now CZK 1,089. The amendment will come into effect on 1 June 2019.

On 4 March 2019, the Government approved the **National Strategy for the Development of the Capital Market** for 2019–2023, which should make the domestic capital market more attractive by increasing its involvement in the real economy. The strategy brings a number of proposals to support households (investors), enterprises (issuers), professional capital market participants (market infrastructure) or the state itself. The development of the Czech capital market will be coordinated by the Ministry of Finance of the CR.

On 30 January 2019, the President of the CR signed an **amendment to the Labour Code**, abolishing the institution of no wage compensations in the first three days in the case of incapacity to work. Under the new legislation, employers will provide employees with compensation of 60% of the assessment base in the first three days of sickness. At the same time, sickness insurance premiums paid by employers or self-employed persons will be reduced by 0.2 pp. The amendment will come into effect on 1 July 2019.

An **amendment to the Social Services Act**, which took effect on 1 April 2019, increases the monthly allowance for home care for people with the most severe disability by CZK 6,000 and the severely disabled by CZK 4,000.

labour market situation, was the highest in ten years and amounted to 38.6 thousand people with a year-on-year increase of 10.4 thousand. While 58.1 thousand persons moved from abroad, 19.5 thousand left the Czech Republic. Citizens of Ukraine (13.2 thousand) accounted for more than one third of the net migration balance, but

the share of citizens of Slovakia (5.2 thousand) was also important.

Natural increase in the Czech population was 1.1 thousand persons. A period of high natality continues. A total of 114.0 thousand children were born alive during 2018, according to preliminary data. This value was 0.4 thousand lower than in 2017, but higher than in the years 2011–2016. In the course of 2018, 112.9 thousand people died, which was 1.5 thousand more than in the previous year.

As regards the **age structure** of the population (according to LFS data), its ageing was reflected in the year-on-year increase in the senior category of 65 years and over of 48 thousand people in Q4 2018, i.e. of 2.4%. High number of women born in the late 1970s and 1980s and the gradually rising natality led to an increase in the number of people under the age of 19 of 30 thousand, i.e. of 1.4%.

On the other hand, the number of **persons aged 20–64** has decreased considerably, by 39 thousand, i.e. by 0.6%. With respect to past fluctuations in the birth rate, however, the development within this category is far

from homogeneous. The decline was concentrated in the age group of 20–39 years, which decreased by 68 thousand. By contrast, there was a considerable increase in the age group 40–49 by 48 thousand. People in this age group show the highest employment and participation rates, which helps to eliminate the impact of population ageing on the supply side of the economy.

The increase in the number of **old-age pensioners** is lower than would correspond to demographic developments and postponement of the statutory retirement age, probably as a result of the economic boom. At the end of 2018, a total of 2.410 million old-age pensioners were clients of the pension system, i.e. 22.6% of the Czech population.

The year-on-year increase was only 7 thousand persons, i.e. 0.3%. As the increase in the number of old-age pensioners falls behind the growth in employment, the effective dependency ratio (see Graph 1.6.5) has shrunk markedly by 2.4 pp since 2012, which is one of the factors contributing to the improvement of the pensions account balance.

Table 1.6.1: Demographics

in thousands of persons (unless stated otherwise)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
							Forecast	Forecast	Outlook	Outlook
Population (as of 1 January)	10 516	10 512	10 538	10 554	10 579	10 610	10 650	10 674	10 697	10 717
growth in %	0.1	0.0	0.2	0.1	0.2	0.3	0.4	0.2	0.2	0.2
0–19 years	2 071	2 057	2 064	2 082	2 106	2 133	2 160	2 185	2 206	2 224
growth in %	-0.6	-0.6	0.3	0.9	1.2	1.3	1.3	1.1	1.0	0.9
20–64 years	6 678	6 630	6 594	6 540	6 484	6 437	6 400	6 356	6 313	6 274
growth in %	-0.7	-0.7	-0.5	-0.8	-0.9	-0.7	-0.6	-0.7	-0.7	-0.6
65 and more years	1 768	1 826	1 880	1 932	1 989	2 040	2 089	2 134	2 178	2 219
growth in %	3.9	3.3	3.0	2.8	2.9	2.6	2.4	2.2	2.1	1.9
Old-age pensioners (as of 1 January) ¹⁾	2 341	2 340	2 355	2 377	2 395	2 403	2 410	2 416	2 419	2 418
growth in %	0.0	0.0	0.6	0.9	0.8	0.3	0.3	0.3	0.1	0.0
Old-age dependency ratios (as of 1 January, in %)										
Demographic ²⁾	26.5	27.5	28.5	29.5	30.7	31.7	32.6	33.6	34.5	35.4
Under current legislation ³⁾	38.3	38.8	39.3	39.8	40.1	40.4	40.5	40.6	40.7	40.7
Effective ⁴⁾	47.6	47.2	46.9	46.8	46.2	45.7	45.2	45.3	45.3	45.2
Fertility rate (number of children)	1.456	1.528	1.570	1.630	1.687	1.69	1.69	1.70	1.70	1.70
Population increase	-4	26	16	25	31	40	25	23	20	17
Natural increase	-2	4	0	5	3	1	-1	-3	-6	-9
Live births	107	110	111	113	114	114	111	109	107	105
Deaths	109	106	111	108	111	113	112	112	113	114
Net migration	-1	22	16	20	28	39	26	26	26	26
Immigration	30	42	35	38	46	58	.	.	.	.
Emigration	31	20	19	17	18	20	.	.	.	.

¹⁾ In 2010 disability pensions of pensioners over 64 were transferred into old-age pensions.

²⁾ Demographic dependency: ratio of people in senior ages (65 and more) to people in productive age (20–64).

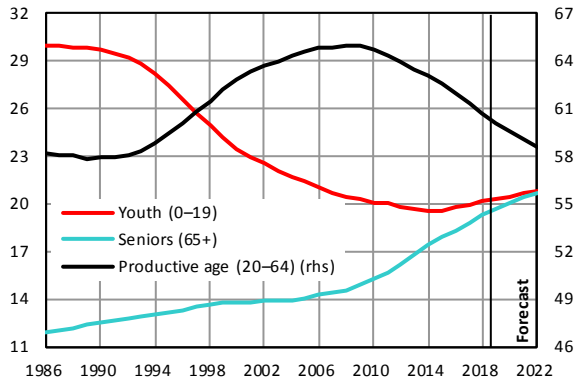
³⁾ Dependency under current legislation: ratio of people above the official retirement age to the people over 19 below the official retirement age.

⁴⁾ Effective dependency: ratio of old-age pensioners to working people (LFS methodology).

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

Graph 1.6.1: Age Groups

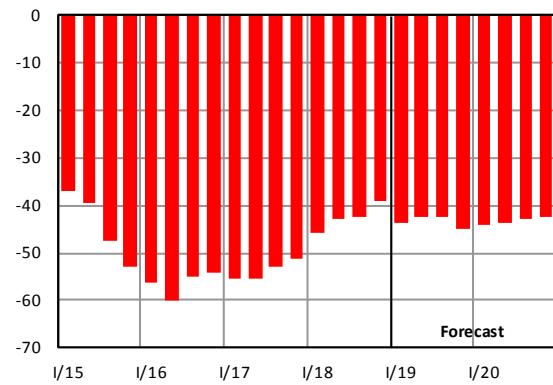
shares on total population, in %



Source: CZSO. Calculations of the MoF.

Graph 1.6.2: Population Aged 20–64

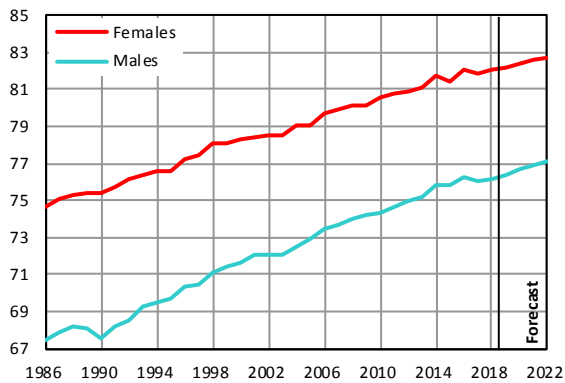
based on LFS, YoY increases of quarterly averages, in thousands



Source: CZSO. Calculations of the MoF.

Graph 1.6.3: Life Expectancy at Birth

in years

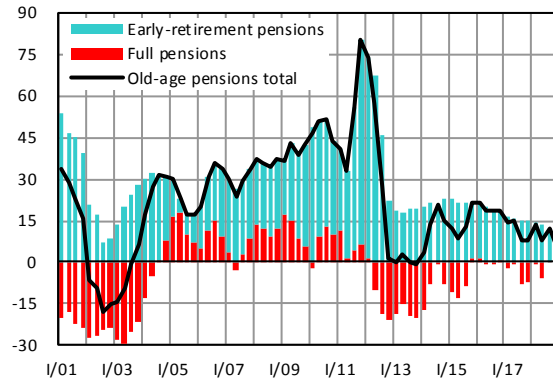


Note: Change in methodology since 2017.

Source: CZSO.

Graph 1.6.4: Old-Age Pensioners

absolute increase over a year in thousands of persons

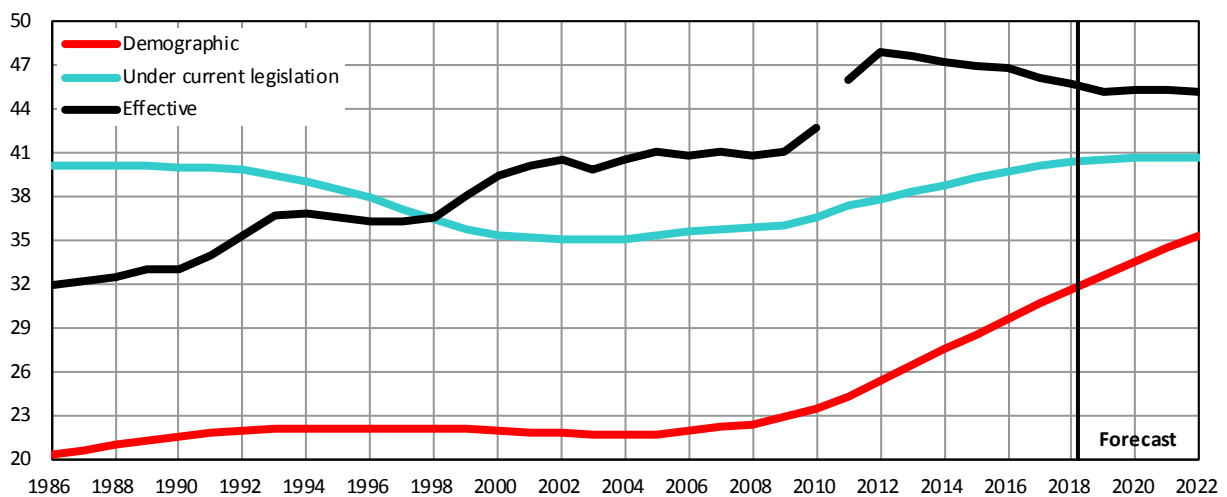


Note: Adjusted for the transfer of disability pensions to old-age pensions for people over 64 years in 2010.

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

Graph 1.6.5: Dependency Ratios

As of January 1, in %, inconsistent between 2010 and 2011 due to transfer of disability pensions to old-age pensions for people over 64 years



Source: CZSO. Calculations of the MoF.

2 Economic Cycle

2.1 Position within the Economic Cycle

The Czech economy is likely to have reached the peak of the business cycle in 2018. The **positive output gap** averaged 1.7% of the potential product, and was 1.8% in Q4 2018 (see Graph 2.1.1). Due to the expected slowdown in economic growth and anticipated developments of the potential product, the output gap should gradually decrease in the future and should proceed towards its closure at the outlook horizon.

The positive output gap is most evident in the **labour market** (see Chapter 3.3). In Q4 2018, the unemployment rate decreased to 2.0%, which is a record-low in the history of the CR. The number of vacancies continues to increase in year-on-year terms and exceeded the number of registered unemployed persons by almost two fifths in February 2019. Lack of workers is a strong barrier to extensive economic growth. The positive output gap can also be seen in an acceleration of core inflation and a decreasing surplus on the balance of goods.

We estimate that the year-on-year growth in **potential product** was 2.9% in Q4 2018 and also in 2018 as a whole, thus exceeding by 0.4 pp the average growth rate of the potential output over the period since 1995.

The main driver of potential growth is **total factor productivity**. The contribution of its trend component reached 1.9 pp in Q4 2018, which was the same as in the previous four quarters.

Labour supply is affected by population ageing (Chapter 1.6). This process manifests itself, among other things, in a long-term decline in the size of the working-age population¹, which subtracted 0.3 pp from the year-on-year growth of potential output in Q4 2018.

However, the negative impact of demographic developments on the labour supply is largely outweighed by a dynamic **increase in the participation rate**, thanks to which the size of the labour force in the economy increases. Structural factors (an increase in the number of inhabitants in age groups with naturally high participation, an increase in the statutory and effective retirement age) as well as higher labour force demand are reflected here. In Q4 2018, the contribution of the participation rate to the potential product growth reached 0.6 pp.

Strong growth in gross fixed capital formation in 2018 led to an increase in the contribution of **capital stock** to 0.7 pp in Q4 2018, which is the highest value since Q3 2009.

Table 2.1.1: Output Gap and Potential Product

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Output gap	%	-3.8	-2.1	-0.8	-2.5	-4.1	-2.2	0.2	-0.2	1.5	1.7
Potential product ¹⁾	growth in %	2.0	0.8	0.7	0.9	1.2	1.4	2.3	2.7	2.7	2.9
Contributions											
Trend total factor productivity	pp	1.1	0.6	0.4	0.4	0.7	1.2	1.7	1.9	2.0	1.9
Fixed assets	pp	0.8	0.6	0.6	0.5	0.4	0.4	0.6	0.6	0.5	0.6
Demography ²⁾	pp	0.2	-0.1	-0.1	-0.3	-0.3	-0.4	-0.3	-0.4	-0.4	-0.3
Participation rate	pp	0.2	-0.1	0.0	0.6	0.8	0.3	0.5	0.7	0.7	0.7
Usually worked hours	pp	-0.3	-0.3	-0.2	-0.3	-0.3	-0.2	-0.1	-0.1	-0.1	0.0

¹⁾ Based on gross value added.

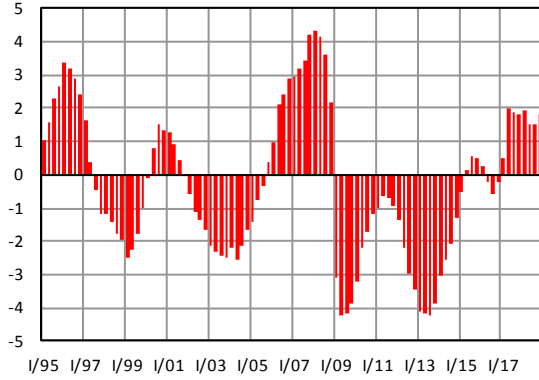
²⁾ Contribution of growth of working-age population (20–64 years).

Source: CZSO. Calculations of the MoF.

¹ The analysis of the contribution of the number of working-age population to the potential product growth is now based on the age group 20–64 years (formerly 15–64 years).

Graph 2.1.1: Output Gap

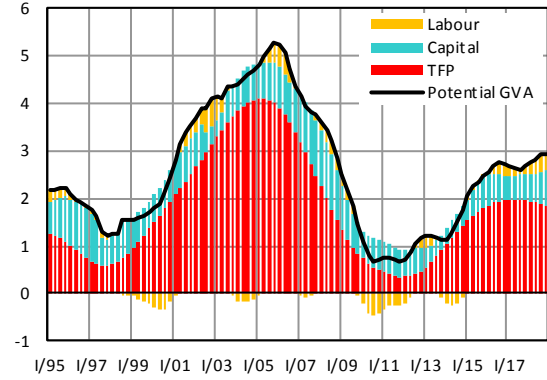
in % of potential product



Source: CZSO. Calculations of the MoF.

Graph 2.1.2: Potential Product

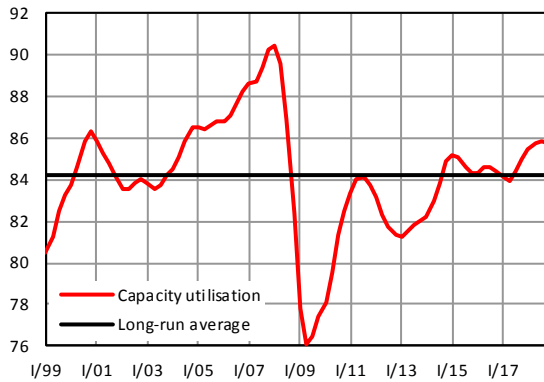
YoY growth rate in %, contributions in percentage points



Source: CZSO. Calculations of the MoF.

Graph 2.1.3: Capacity Utilisation in Industry

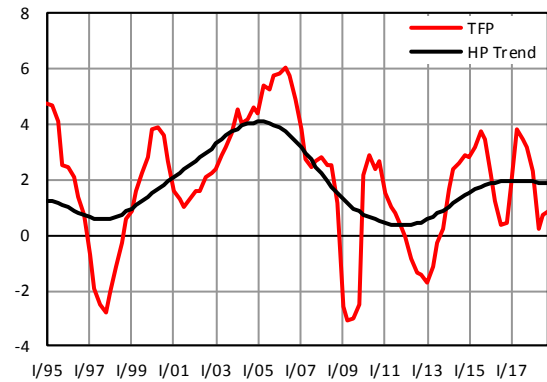
smoothed by Hodrick-Prescott filter, in %



Source: CZSO.

Graph 2.1.4: Total Factor Productivity

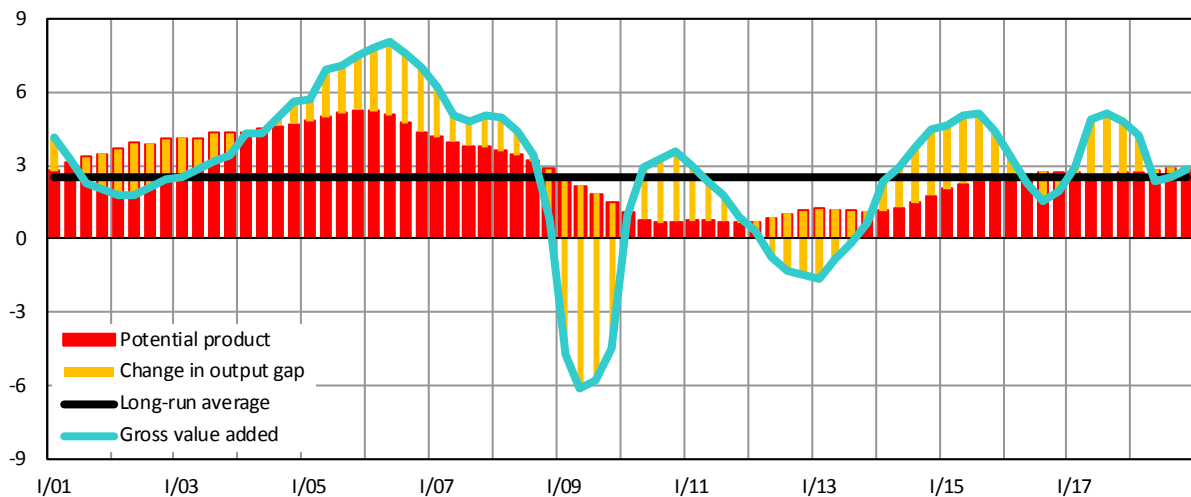
YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

Graph 2.1.5: Decomposition of the Growth in Gross Value Added – Business Cycle Perspective

YoY growth rate in %, contributions in percentage points



Source: CZSO. Calculations of the MoF.

2.2 Business Cycle Indicators

Developments in confidence indicators in Q1 2019 signal that year-on-year dynamics of gross value added in industry slowed down, recovery in construction continued and that the year-on-year growth in gross value added in trade and services was marginally lower (see Graphs 2.2.1–2.2.3).

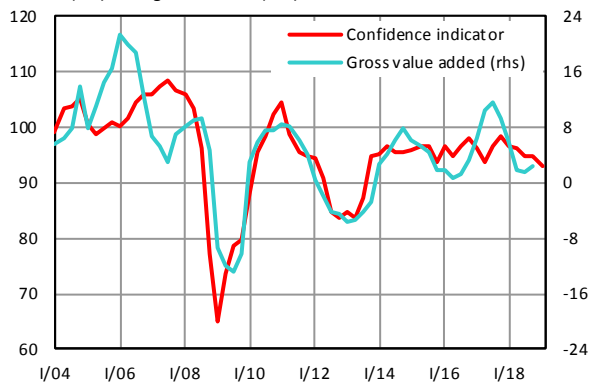
The consumer confidence indicator continued to drop sharply also in Q1 2019. Given a lead of 1–2 quarters, it thus signals the growth in households' final consumption expenditures will slow down further in H1 2019.

Due to the weakening in most of its components, the composite confidence indicator implies that the year-on-year growth in gross value added slowed down in Q1 2019.

For the first half of 2019 the composite leading indicator points to a steep narrowing of the output gap, which may be a signal of the beginning of the downward phase of the business cycle.

Graph 2.2.1: Confidence and GVA in Industry

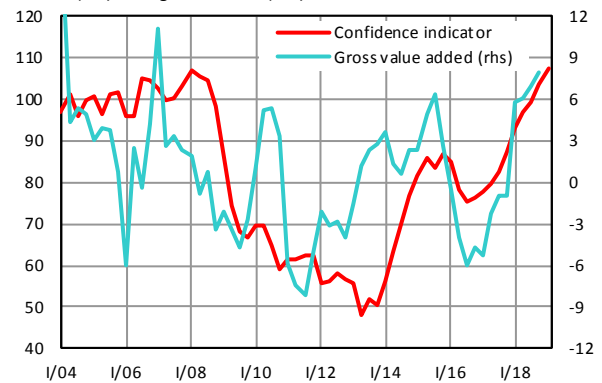
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.2: Confidence and GVA in Construction

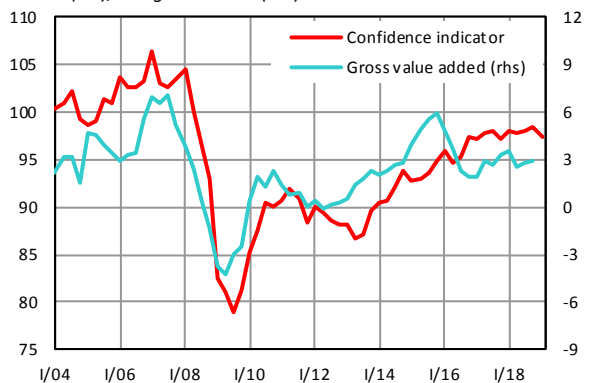
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.3: Confidence and GVA in Trade and Services

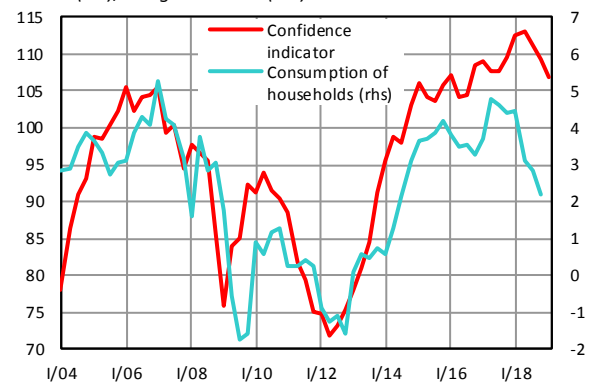
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO. Calculations of the MoF.

Graph 2.2.4: Consumer Confidence and Consumption

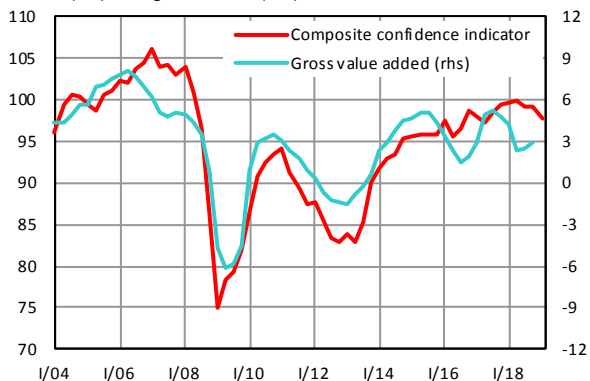
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.5: Composite Confidence Indicator and GVA

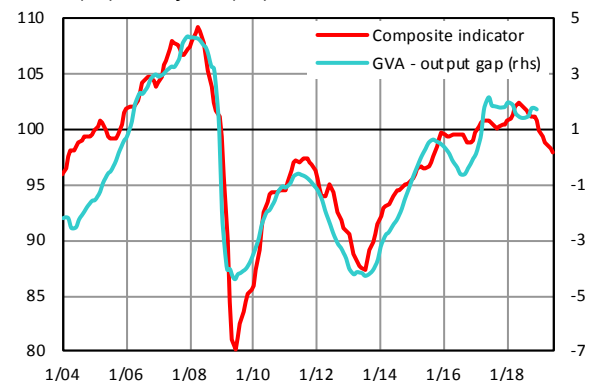
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.6: Composite Leading Indicator

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



Source: CZSO. Calculations of the MoF.

3 Forecast of Macroeconomic Developments in the CR

3.1 Economic Output

3.1.1 GDP in the Fourth Quarter of 2018

Economic output measured by real GDP was up 3.0% YoY (*in line with the estimate*) in Q4 2018, while seasonally adjusted GDP increased by 0.8% QoQ (*in line with the estimate*). Almost all sectors contributed positively to the quarter-on-quarter GDP growth, with highest contributions by manufacturing and trade, transportation, accommodation and food service. The Czech Statistical Office also revised GDP growth in previous quarters of 2018. A larger increase in investment dynamics was approximately offset by a slower growth in household consumption and exports.

The year-on-year GDP growth was driven exclusively by domestic demand in Q4 2018, especially by dynamically growing investments in fixed capital. The contribution of the balance of foreign trade in goods and services was essentially neutral.

The rise in household consumption was due to increasing disposable income against a backdrop of high consumer confidence. On the contrary, a year-on-year increase in the savings rate weighed on the growth rate of households' final consumption expenditures. Expenditures on services, semi-durable and durable goods were the most dynamic components of household consumption, which suggests optimism of households regarding their future economic situation and economic developments. Expenditures on non-durable goods also grew. In real terms, households' final consumption expenditures increased 2.4% (*versus 3.3%*). Consumption of the general government sector was up 3.6% (*versus 4.3%*), mainly due to dynamics of intermediate consumption and employment.

Gross fixed capital formation increased by 10.9% (*versus 7.8%*), with investments in machinery and equipment, non-residential buildings and dwellings being the most significant contributors. Investment activity was driven by private investments, though a dynamic growth in investments by the general government sector, which increased by 35.8% at constant prices, also contributed significantly to the overall growth in gross fixed capital formation (see Graph 3.1.7). Both private investment expenditure and investments of the general government were significantly supported by co-financing from EU funds. Given a considerably negative year-on-year contribution of the change in inventories, gross capital formation increased less than investments in fixed capital, by 4.3% (*versus 3.2%*).

Due to a slowdown in the growth of export markets and export performance, the year-on-year growth in exports of goods and services declined compared to the same

quarter of 2017. Total exports thus increased by 5.7% in Q4 2018 (*versus 4.1%*). Despite the acceleration of import-intensive demand, imports of goods and services slowed down to 6.3% (*versus 4.9%*) due to weaker exports.

A higher growth in import prices compared to export prices resulted in a deterioration of the terms of trade by 0.9% (*versus 0.2%*). As a result of the trading loss stemming from foreign trade, the real gross domestic income increased by 2.2% YoY (*versus 2.8%*).

Gross operating surplus grew by 2.7% (*versus 3.3%*), compensation of employees increased by 8.1% (*versus 8.7%*), and net taxes on production were up 4.0% YoY (*versus 2.1%*). As a result, nominal GDP posted growth of 5.1% (*versus 5.4%*).

3.1.2 Estimate for the First Quarter of 2019

We estimate that real GDP increased by 2.7% YoY (*unchanged*) and by 0.6% QoQ (*unchanged*) in Q1 2019. The estimated slowdown in the quarter-on-quarter GDP dynamics reflects the data on developments of the economy in Q1 available as of the cut-off date of the forecast (confidence indicators, production in industry and construction, sales in retail and services, foreign trade).

We believe that the rise in GDP was solely due to the growth in domestic demand. As a result of increasing disposable income of households and very high, though declining, consumer confidence, private final consumption expenditures may have increased by 2.7% (*versus 3.3%*) and consumption of the general government sector by 2.3% (*versus 2.2%*). Gross capital formation rose, according to our estimates, by 8.2% (*versus 6.4%*) due to an increase of investments in fixed capital. The change in inventories is likely to have significantly added to the total investment growth.

Foreign trade seems to have acted negatively towards the GDP growth. Export growth was boosted by foreign demand, while the growth rate of imports was driven by strengthening of import-intensive investment demand. We estimate that exports and imports of goods and services increased by 2.6% (*versus 2.7%*) and 4.2% (*versus 4.1%*), respectively; the latter in relation to the development of domestic demand and exports.

3.1.3 Forecast for the Years 2019 and 2020

In 2019, economic growth should be driven exclusively by domestic demand led by strong final consumption expenditures of households and investment activity of firms and the general government sector. GDP growth should also be strengthened by consumption of the general government sector. Foreign trade balance should

affect GDP dynamics slightly negatively. We expect real GDP to grow by 2.4% (*versus* 2.5%) in 2019 as well as in 2020 (*unchanged*).

Household consumption will be supported by growing real disposable income and, conversely, dampened by increasing savings rate in 2019. This year, the development of household consumption should positively reflect a number of discretionary changes in the social area, dynamics of consumer loans and optimistic – from a longer-term perspective – expectations of consumers (see Chapter 2.2). Final consumption expenditures of households could thus increase by 2.9% (*versus* 3.2%) in 2019, but their growth should slow down in 2020 to 2.8% (*versus* 3.0%) in connection with a further increase in the savings rate.

We expect the general government sector's final consumption expenditures to increase by 2.2% (*versus* 2.1%) in 2019 and by 1.9% in 2020 (*unchanged*). In addition to growing employment (esp. in education), the growth will also be supported by an increase in social benefits in kind (based mainly on health insurance plans and the medium-term outlook of health insurance companies) and in expenses on the purchase of goods and services, with the contribution of current subsidies from EU funds (especially in the first half of this year).

Gross fixed capital formation should grow in 2019 not only due to investment activity of the private sector but also due to investments by the general government sector. Private investments are stimulated by an increase in gross operating surplus, slightly above-average capacity utilization in manufacturing and by continuing, albeit slower, economic growth abroad. Also, the increasingly pressing shortage of employees motivates businesses to invest in order to increase labour productivity. Rising interest rates should have a relatively neutral effect on dynamics of investment activity. Conversely, materialization of certain serious risks in the external environment could hamper private investments. In the case of investments of the general government sector, we expect

that investment expenditures financed from national resources will grow in both these years. A significant upward risk, though rather in the medium term, is a planned acquisition of military machinery worth more than CZK 80 billion (detailed information is not known yet). Investments should also be supported by a continued implementation of projects co-financed by EU funds under the 2014–2020 financial perspective. Gross fixed capital formation could thus increase by 3.1% in 2019 and by 2.7% in 2020 (*unchanged in both years*). A sharp decrease in dynamics of investment activity in 2019 reflects tighter monetary conditions, slower growth of main trading partners' economies, and a slowdown in investments by the general government sector. The level of 2018 constitutes a high comparison base especially in the case of public investment, not just because of budgeted funds, but also due to the fact that resources from EU funds allocated for 2014 and 2015 could only have been utilized by the end of the last year. Subsequently we expect a normal level of investment co-financed by the EU.

For the years 2019 and 2020, a technical assumption of zero contribution of the change in inventories to GDP growth was adopted. We expect an increase in gross capital formation of 3.2% (*versus* 3.0%) in 2019, with its growth slowing down to 2.6% in 2020 (*unchanged*).

We expect that exports of goods and services will grow by 3.4% (*versus* 3.2%) in 2019 and by 3.5% (*versus* 3.4%) in 2020. The change in the forecast for 2019 is due solely to expected higher growth in exports of services, which was unexpectedly strong at the end of 2018. Dynamics of exports of goods and services should be lower in 2019 compared to the previous year due to a slower growth in export markets as well as export performance (see Chapter 3.4). The slowdown in exports and import-intensive investment demand will be reflected in a lower growth rate of imports of goods and services. Hence, imports will probably grow by 4.0% (*versus* 3.8%) in 2019 and by 3.7% (*versus* 3.8%) in 2020.

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>Prelim.</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Outlook</i>	<i>Outlook</i>
Gross domestic product	<i>bill. CZK 2010</i>	3 981	4 089	4 307	4 412	4 604	4 737	4 851	4 969	5 085	5 195
	<i>growth in %</i>	-0.5	2.7	5.3	2.5	4.4	2.9	2.4	2.4	2.3	2.2
	<i>growth in %¹⁾</i>	-0.5	2.7	5.4	2.4	4.5	2.9	2.3	2.4	2.2	2.2
Private consumption expenditure²⁾	<i>bill. CZK 2010</i>	1 931	1 966	2 038	2 113	2 202	2 272	2 339	2 404	2 463	2 514
	<i>growth in %</i>	0.5	1.8	3.7	3.6	4.3	3.2	2.9	2.8	2.5	2.1
Government consumption exp.	<i>bill. CZK 2010</i>	803	812	827	849	860	892	912	929	947	965
	<i>growth in %</i>	2.5	1.1	1.9	2.7	1.3	3.7	2.2	1.9	1.9	1.9
Gross capital formation	<i>bill. CZK 2010</i>	997	1 083	1 223	1 171	1 217	1 284	1 325	1 359	1 393	1 436
	<i>growth in %</i>	-5.1	8.6	13.0	-4.3	4.0	5.5	3.2	2.6	2.5	3.1
Gross fixed capital formation	<i>bill. CZK 2010</i>	1 016	1 056	1 164	1 127	1 169	1 292	1 332	1 369	1 405	1 446
	<i>growth in %</i>	-2.5	3.9	10.2	-3.1	3.7	10.5	3.1	2.7	2.6	2.9
Change in stocks and valuables	<i>bill. CZK 2010</i>	-19	26	59	43	48	-8	-8	-10	-11	-10
Exports of goods and services	<i>bill. CZK 2010</i>	2 984	3 242	3 437	3 586	3 828	4 001	4 136	4 280	4 420	4 562
	<i>growth in %</i>	0.2	8.7	6.0	4.3	6.7	4.5	3.4	3.5	3.3	3.2
Imports of goods and services	<i>bill. CZK 2010</i>	2 734	3 008	3 212	3 302	3 498	3 709	3 858	4 002	4 138	4 282
	<i>growth in %</i>	0.1	10.1	6.8	2.8	5.9	6.0	4.0	3.7	3.4	3.5
Gross domestic expenditure	<i>bill. CZK 2010</i>	3 733	3 860	4 087	4 132	4 279	4 446	4 573	4 689	4 800	4 911
	<i>growth in %</i>	-0.6	3.4	5.9	1.1	3.5	3.9	2.8	2.5	2.4	2.3
Methodological discrepancy³⁾	<i>bill. CZK 2010</i>	-1	-4	-7	-5	-5	-3	-1	-1	-1	0
Real gross domestic income	<i>bill. CZK 2010</i>	3 956	4 112	4 344	4 486	4 644	4 770	4 899	5 035	5 165	5 289
	<i>growth in %</i>	0.4	3.9	5.6	3.3	3.5	2.7	2.7	2.8	2.6	2.4
Contributions to GDP growth⁴⁾											
Gross domestic expenditure	<i>pp</i>	-0.6	3.2	5.5	1.0	3.3	3.6	2.7	2.4	2.2	2.2
Consumption	<i>pp</i>	0.8	1.1	2.2	2.2	2.2	2.2	1.8	1.7	1.6	1.4
Household expenditure	<i>pp</i>	0.3	0.9	1.8	1.7	2.0	1.5	1.4	1.3	1.2	1.0
Government expenditure	<i>pp</i>	0.5	0.2	0.4	0.5	0.2	0.7	0.4	0.4	0.4	0.4
Gross capital formation	<i>pp</i>	-1.3	2.1	3.4	-1.2	1.0	1.4	0.8	0.7	0.7	0.8
Gross fixed capital formation	<i>pp</i>	-0.6	1.0	2.6	-0.8	0.9	2.6	0.8	0.7	0.7	0.8
Change in stocks	<i>pp</i>	-0.7	1.1	0.8	-0.4	0.1	-1.2	0.0	0.0	0.0	0.0
Foreign balance	<i>pp</i>	0.1	-0.5	-0.2	1.4	1.1	-0.7	-0.3	0.0	0.1	0.0
External balance of goods	<i>pp</i>	0.1	-0.1	-1.1	1.0	0.8	-0.7	-0.5	-0.1	0.0	-0.1
External balance of services	<i>pp</i>	0.0	-0.4	0.9	0.4	0.3	-0.1	0.2	0.1	0.1	0.1
Gross value added	<i>bill. CZK 2010</i>	3 606	3 729	3 905	3 999	4 168	4 294	.	.	.	.
	<i>growth in %</i>	-0.5	3.4	4.7	2.4	4.2	3.0	.	.	.	.
Net taxes and subsidies on products	<i>bill. CZK 2010</i>	375	363	402	414	437	444	.	.	.	.

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

Source: CZSO. Calculations 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>Prelim.</i>	<i>Prelim.</i>	<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Forecast</i>
Gross domestic product	<i>bill. CZK 2010</i>	1 107	1 193	1 205	1 233	1 137	1 220	1 243	1 252
	<i>growth in %</i>	3.5	2.6	2.5	3.0	2.7	2.3	3.1	1.6
	<i>growth in %¹⁾</i>	4.2	2.3	2.4	2.6	2.7	2.6	2.2	1.9
	<i>QoQ in %¹⁾</i>	0.6	0.5	0.7	0.8	0.6	0.4	0.4	0.4
Private consumption expenditure²⁾	<i>bill. CZK 2010</i>	543	568	574	588	557	583	594	605
	<i>growth in %</i>	4.1	3.4	2.8	2.4	2.7	2.7	3.5	2.8
Government consumption exp.	<i>bill. CZK 2010</i>	206	217	219	249	211	222	224	254
	<i>growth in %</i>	2.8	3.0	5.2	3.6	2.3	2.3	2.2	2.1
Gross capital formation	<i>bill. CZK 2010</i>	262	318	365	338	284	333	369	339
	<i>growth in %</i>	9.8	3.9	5.1	4.3	8.2	4.6	1.1	0.1
Gross fixed capital formation	<i>bill. CZK 2010</i>	279	311	338	364	295	319	348	369
	<i>growth in %</i>	9.3	10.3	11.3	10.9	5.7	2.5	3.2	1.5
Change in stocks and valuables	<i>bill. CZK 2010</i>	-17	7	28	-26	-12	14	21	-31
Exports of goods and services	<i>bill. CZK 2010</i>	996	1 013	947	1 044	1 022	1 041	1 002	1 072
	<i>growth in %</i>	4.0	4.2	4.1	5.7	2.6	2.7	5.7	2.6
Imports of goods and services	<i>bill. CZK 2010</i>	900	923	900	987	937	957	945	1 019
	<i>growth in %</i>	6.0	5.4	6.4	6.3	4.2	3.8	5.0	3.2
Gross domestic expenditure	<i>bill. CZK 2010</i>	1 011	1 103	1 157	1 175	1 052	1 138	1 185	1 198
	<i>growth in %</i>	5.3	3.4	3.9	3.2	4.1	3.1	2.4	1.9
Methodological discrepancy³⁾	<i>bill. CZK 2010</i>	-1	-2	-1	1	-1	-2	-1	2
Real gross domestic income	<i>bill. CZK 2010</i>	1 121	1 203	1 208	1 238	1 152	1 234	1 251	1 263
	<i>growth in %</i>	4.3	2.9	1.6	2.2	2.7	2.6	3.5	2.0
Gross value added	<i>bill. CZK 2010</i>	1 009	1 081	1 091	1 113	.	.	.	.
	<i>growth in %</i>	3.4	2.7	2.7	3.3	.	.	.	.
	<i>growth in %¹⁾</i>	4.3	2.4	2.5	2.9	.	.	.	.
	<i>QoQ in %¹⁾</i>	0.8	0.3	0.7	1.0	.	.	.	.
Net taxes and subsidies on products	<i>bill. CZK 2010</i>	99	112	114	120	.	.	.	.

¹⁾ From seasonally and working day adjusted data²⁾ The consumption of non-profit institutions serving households (NPISH) is included in the private consumption.³⁾ Deterministic impact of using prices and structure of the previous year for calculation of y-o-y growth.

Source: CZSO. Calculations of the MoF.

Table 3.1.3: Nominal GDP by Type of Expenditure – yearly

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
							<i>Prelim.</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Outlook</i>	<i>Outlook</i>
Gross domestic product	<i>bill. CZK</i>	4 098	4 314	4 596	4 768	5 047	5 304	5 595	5 839	6 090	6 344
	<i>growth in %</i>	0.9	5.3	6.5	3.7	5.9	5.1	5.5	4.4	4.3	4.2
Private consumption expenditure ¹⁾	<i>bill. CZK</i>	2 025	2 074	2 152	2 243	2 393	2 532	2 673	2 793	2 914	3 027
	<i>growth in %</i>	1.4	2.4	3.8	4.2	6.7	5.8	5.6	4.5	4.3	3.9
Government consumption exp.	<i>bill. CZK</i>	826	849	883	919	968	1 054	1 123	1 172	1 222	1 274
	<i>growth in %</i>	2.7	2.8	4.0	4.0	5.4	8.9	6.6	4.3	4.3	4.3
Gross capital formation	<i>bill. CZK</i>	1 011	1 116	1 285	1 239	1 306	1 388	1 464	1 521	1 582	1 658
	<i>growth in %</i>	-4.9	10.4	15.1	-3.6	5.4	6.3	5.5	3.9	4.0	4.8
Gross fixed capital formation	<i>bill. CZK</i>	1 027	1 084	1 216	1 189	1 250	1 392	1 468	1 527	1 589	1 663
	<i>growth in %</i>	-2.4	5.5	12.2	-2.3	5.2	11.3	5.5	4.0	4.1	4.7
Change in stocks and valuables	<i>bill. CZK</i>	-16	32	68	50	56	-4	-4	-6	-8	-5
External balance	<i>bill. CZK</i>	236	275	276	368	380	330	335	353	372	385
Exports of goods and services	<i>bill. CZK</i>	3 150	3 561	3 725	3 793	4 024	4 182	4 385	4 538	4 688	4 848
	<i>growth in %</i>	1.9	13.0	4.6	1.8	6.1	3.9	4.9	3.5	3.3	3.4
Imports of goods and services	<i>bill. CZK</i>	2 914	3 286	3 449	3 425	3 644	3 852	4 050	4 184	4 317	4 463
	<i>growth in %</i>	0.6	12.8	5.0	-0.7	6.4	5.7	5.1	3.3	3.2	3.4
Gross national income	<i>bill. CZK</i>	3 854	4 023	4 286	4 459	4 737	5 034	5 314	5 545	5 786	6 030
	<i>growth in %</i>	1.2	4.4	6.5	4.0	6.2	6.3	5.6	4.4	4.3	4.2
Primary income balance	<i>bill. CZK</i>	-245	-291	-310	-309	-311	-271	-282	-294	-304	-314

¹⁾ The consumption of non-profit institutions serving households (NPISH) is included in the private consumption.

Source: CZSO. Calculations of the MoF.

Table 3.1.4: Nominal GDP by Type of Expenditure – quarterly

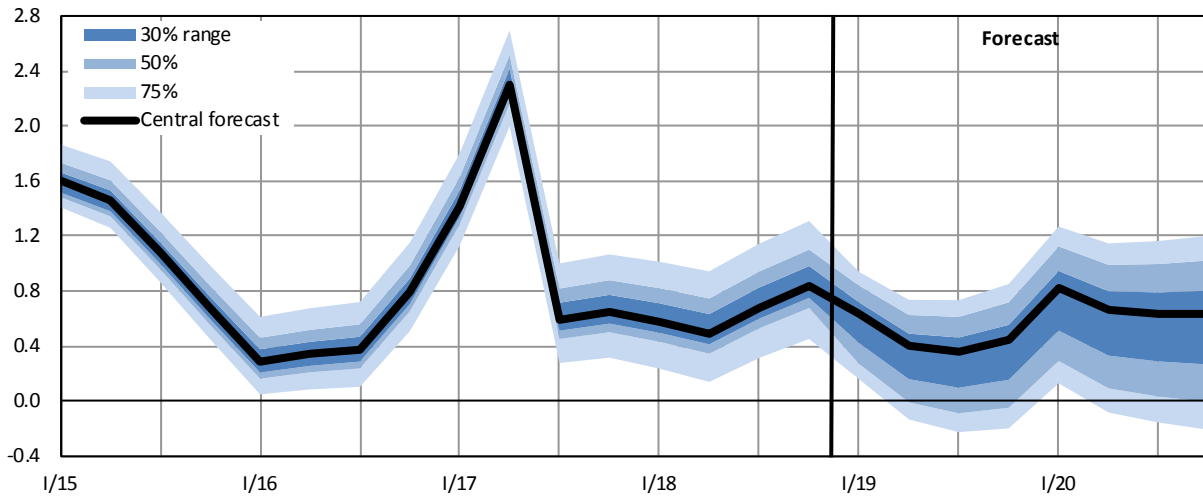
		2018				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		<i>Prelim.</i>	<i>Prelim.</i>	<i>Prelim.</i>	<i>Prelim.</i>	<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Forecast</i>
Gross domestic product	<i>bill. CZK</i>	1 226	1 329	1 348	1 402	1 302	1 405	1 430	1 458
	<i>growth in %</i>	5.9	4.9	4.5	5.1	6.2	5.7	6.1	4.0
Private consumption expenditure ¹⁾	<i>bill. CZK</i>	598	630	642	662	633	666	680	695
	<i>growth in %</i>	6.4	6.1	5.7	5.1	5.8	5.6	5.9	4.9
Government consumption exp.	<i>bill. CZK</i>	237	253	258	307	254	270	275	325
	<i>growth in %</i>	9.1	8.2	10.9	7.6	7.0	6.7	6.5	6.1
Gross capital formation	<i>bill. CZK</i>	279	342	396	370	312	368	409	375
	<i>growth in %</i>	8.7	3.6	6.5	6.8	11.8	7.7	3.3	1.1
Gross fixed capital formation	<i>bill. CZK</i>	297	333	365	397	324	352	384	408
	<i>growth in %</i>	8.3	10.1	12.6	13.6	9.3	5.6	5.3	2.6
Change in stocks and valuables	<i>bill. CZK</i>	-18	9	32	-27	-12	16	25	-33
External balance	<i>bill. CZK</i>	112	103	51	63	103	101	66	64
Exports of goods and services	<i>bill. CZK</i>	1 025	1 056	996	1 105	1 079	1 104	1 066	1 136
	<i>growth in %</i>	-0.3	2.4	5.3	8.5	5.2	4.6	7.0	2.8
Imports of goods and services	<i>bill. CZK</i>	913	953	945	1 042	975	1 004	1 000	1 072
	<i>growth in %</i>	0.7	3.2	8.8	10.1	6.8	5.4	5.8	2.9

¹⁾ The consumption of non-profit institutions serving households (NPISH) is included in the private consumption.

Source: CZSO. Calculations of the MoF.

Graph 3.1.1: Gross Domestic Product (real)

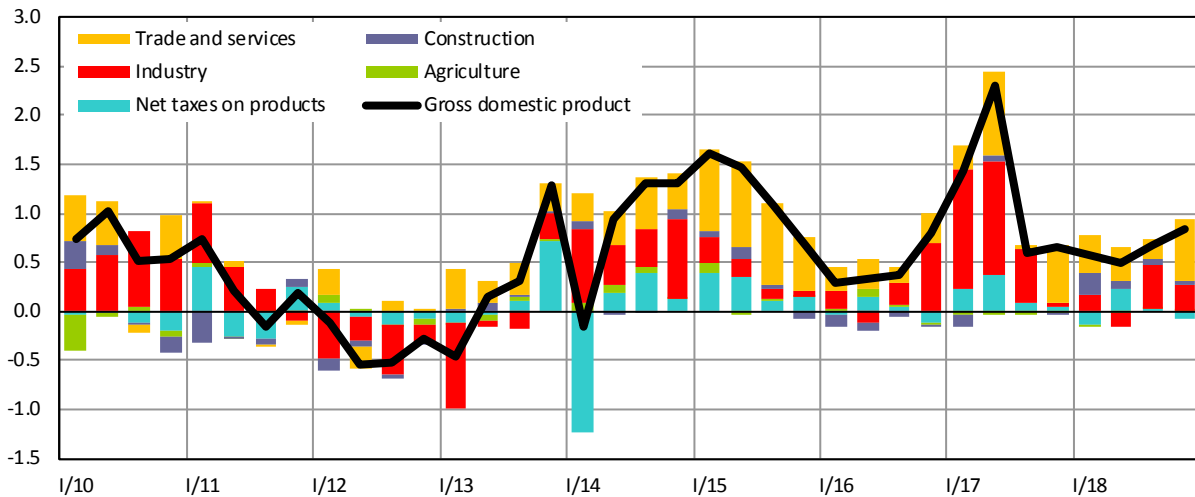
QoQ growth rate, in %, seasonally adjusted, past probability distribution reflects the actual distribution of data revisions, future probability distribution is based upon the MoF's forecasting performance



Source: CZSO. Calculations of the MoF.

Graph 3.1.2: Resources of Gross Domestic Product

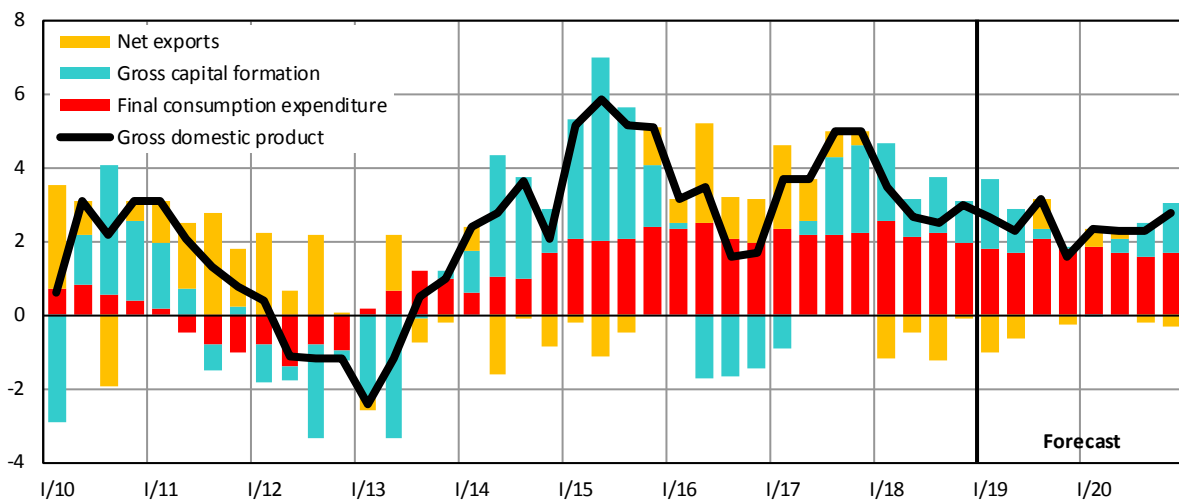
QoQ real growth rate of GDP in %, contributions of individual components in percentage points, seasonally adjusted



Source: CZSO. Calculations of the MoF.

Graph 3.1.3: Gross Domestic Product by Type of Expenditure

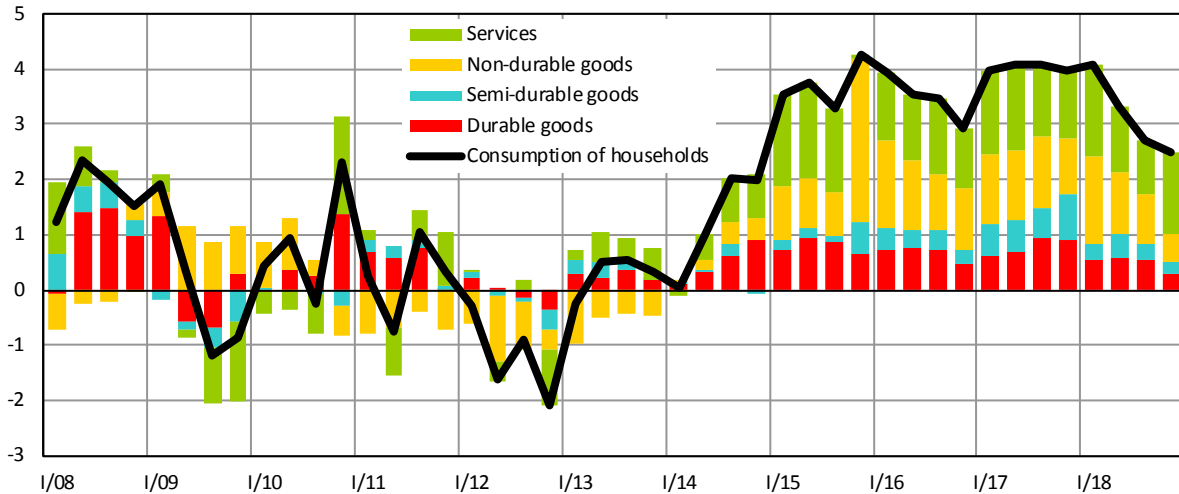
YoY real growth rate of GDP in %, contributions of individual components in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.4: Consumption of Households

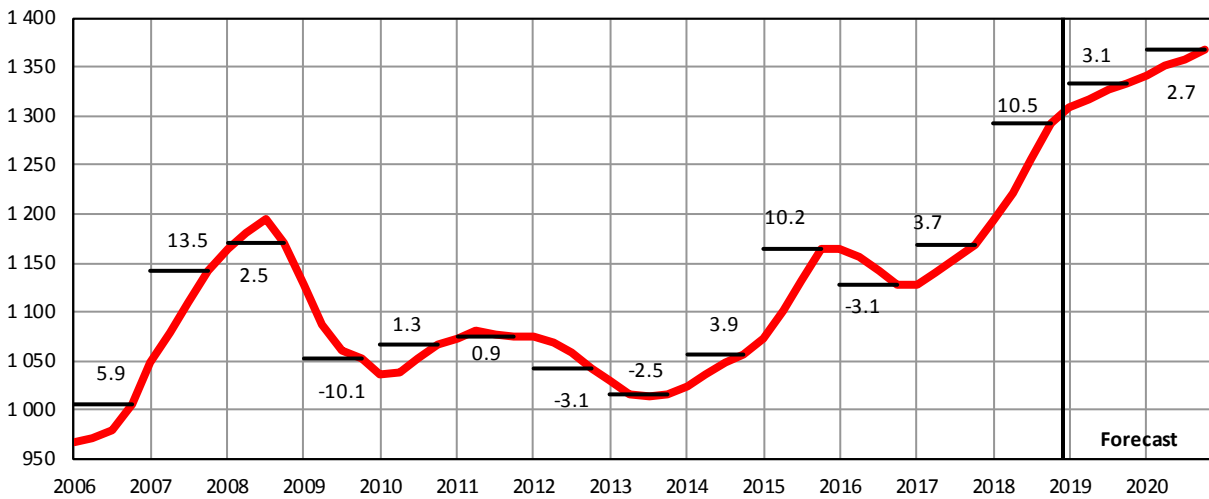
consumption of households in domestic concept, YoY real growth rate in %, contributions of individual components in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.5: Gross Fixed Capital Formation

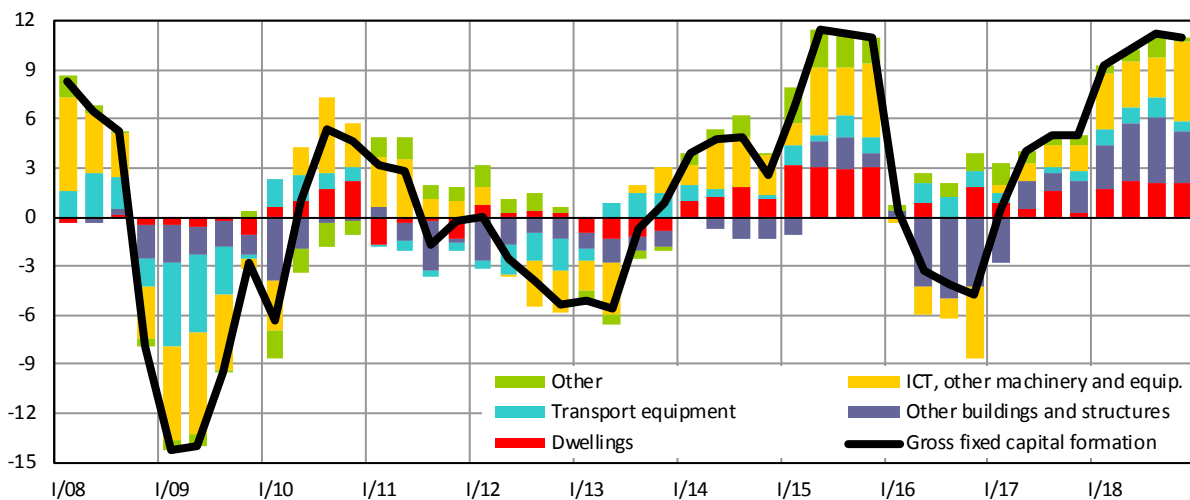
yearly moving sums, bill. CZK in const. prices of 2010, black lines with labels show the average level and growth rate in the given year



Source: CZSO. Calculations of the MoF.

Graph 3.1.6: Gross Fixed Capital Formation by Type of Expenditure

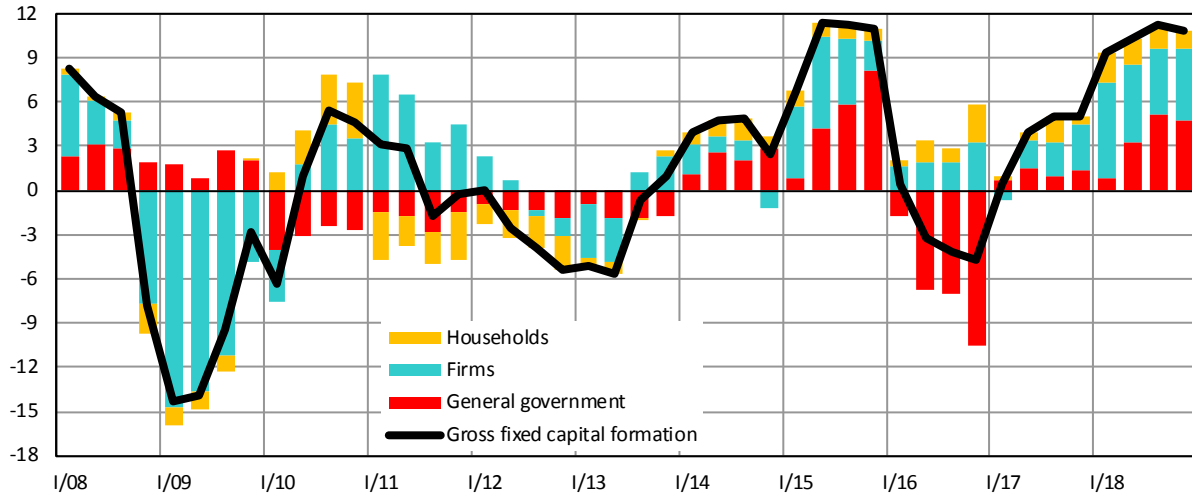
YoY real growth rate in %, contributions of individual components in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.7: Gross Fixed Capital Formation by Sector

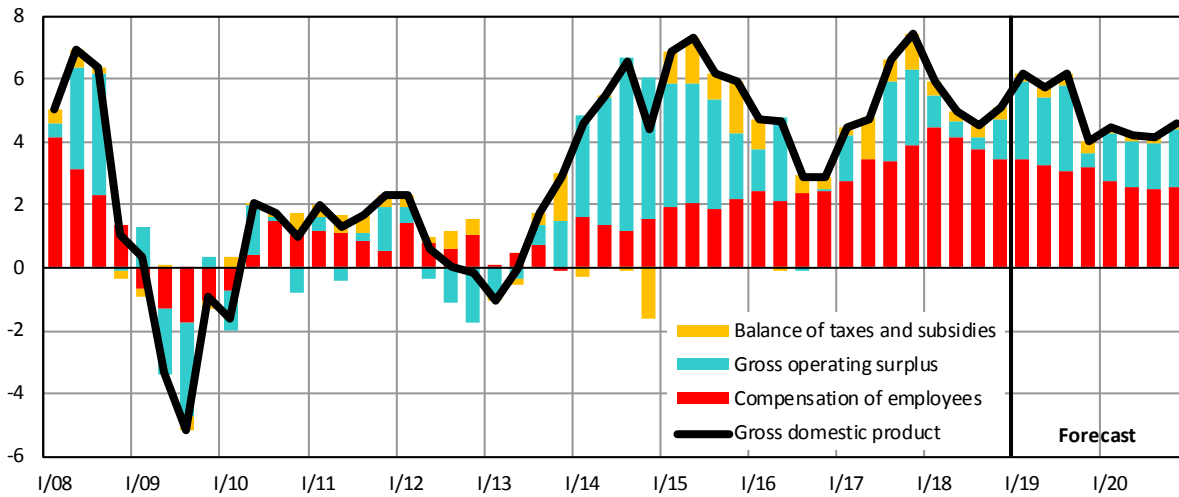
YoY real growth rate in %, contributions of individual sectors in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.8: Nominal Gross Domestic Product

YoY growth rate of GDP in %, contributions of individual components in percentage points



Source: CZSO. Calculations of the MoF.

Table 3.1.5: GDP by Type of Income – yearly

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
							<i>Prelim.</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Outlook</i>	<i>Outlook</i>
GDP	<i>bill. CZK</i>	4 098	4 314	4 596	4 768	5 047	5 304	5 595	5 839	6 090	6 344
	<i>growth in %</i>	0.9	5.3	6.5	3.7	5.9	5.1	5.5	4.4	4.3	4.2
Balance of taxes and subsidies	<i>bill. CZK</i>	402	381	434	454	495	514	531	542	562	581
	<i>% of GDP</i>	9.8	8.8	9.4	9.5	9.8	9.7	9.5	9.3	9.2	9.2
	<i>growth in %</i>	4.2	-5.1	13.8	4.7	9.0	3.7	3.3	2.2	3.6	3.4
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	.	.	.	.
Compensation of employees <i>(domestic concept)</i>	<i>bill. CZK</i>	1 676	1 735	1 821	1 928	2 089	2 288	2 459	2 604	2 746	2 883
	<i>% of GDP</i>	40.9	40.2	39.6	40.4	41.4	43.1	43.9	44.6	45.1	45.4
	<i>growth in %</i>	0.7	3.5	5.0	5.9	8.4	9.5	7.5	5.9	5.5	5.0
Wages and salaries	<i>bill. CZK</i>	1 275	1 321	1 384	1 464	1 585	1 732	1 862	1 972	2 079	2 183
	<i>growth in %</i>	0.5	3.6	4.8	5.7	8.3	9.3	7.5	5.9	5.5	5.0
Social security contributions	<i>bill. CZK</i>	402	414	437	464	504	556	597	632	667	700
	<i>growth in %</i>	1.4	3.1	5.5	6.4	8.6	10.1	7.5	5.9	5.5	5.0
Gross operating surplus	<i>bill. CZK</i>	2 020	2 198	2 341	2 386	2 463	2 503	2 606	2 693	2 782	2 880
	<i>% of GDP</i>	49.3	50.9	50.9	50.0	48.8	47.2	46.6	46.1	45.7	45.4
	<i>growth in %</i>	0.5	8.8	6.5	1.9	3.2	1.6	4.1	3.3	3.3	3.5
Consumption of capital	<i>bill. CZK</i>	906	939	969	998	1 026	1 050	1 109	1 176	1 247	1 307
	<i>growth in %</i>	3.0	3.6	3.2	3.0	2.9	2.3	5.6	6.1	6.0	4.8
Net operating surplus	<i>bill. CZK</i>	1 114	1 259	1 372	1 388	1 436	1 453	1 497	1 517	1 534	1 573
	<i>growth in %</i>	-1.4	13.0	9.0	1.2	3.5	1.1	3.0	1.3	1.1	2.5

Source: CZSO. Calculations 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>Prelim.</i>	<i>Prelim.</i>	<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Forecast</i>
GDP	<i>bill. CZK</i>	1 226	1 329	1 348	1 402	1 302	1 405	1 430	1 458
	<i>growth in %</i>	5.9	4.9	4.5	5.1	6.2	5.7	6.1	4.0
Balance of taxes and subsidies	<i>bill. CZK</i>	108	132	140	134	111	136	144	139
	<i>growth in %</i>	4.8	2.9	3.5	4.0	2.9	2.8	3.5	3.9
Compensation of employees <i>(domestic concept)</i>	<i>bill. CZK</i>	544	570	566	608	586	613	608	652
	<i>growth in %</i>	10.5	10.1	9.4	8.1	7.7	7.6	7.4	7.3
	Wages and salaries	<i>bill. CZK</i>	411	430	429	462	443	463	461	495
	<i>growth in %</i>	10.3	10.1	9.5	7.5	7.7	7.6	7.4	7.3
Social security contributions	<i>bill. CZK</i>	133	139	137	146	143	150	147	157
	<i>growth in %</i>	11.2	9.9	9.3	10.2	7.7	7.6	7.4	7.3
Gross operating surplus	<i>bill. CZK</i>	574	627	642	660	605	656	678	667
	<i>growth in %</i>	2.1	1.1	0.7	2.7	5.3	4.7	5.6	1.0

Source: CZSO. Calculations of the MoF.

3.2 Prices

Growth in consumer prices was 2.7% YoY (*versus* 2.4%) in February 2019. The contribution of administrative measures reached 0.5 pp. The contribution of changes in indirect taxes was zero as the effect of the last year's increase in the excise tax on cigarettes and this year's decrease in the value-added tax on public transport almost equally offset each other. The contribution of regulated prices of 0.5 pp was driven to the greatest extent by an increase in the price of electricity (0.4 pp). In terms of sections of the consumer basket, the highest contribution was recorded by the housing section (1.4 pp), where prices also grew at the highest rate of all sections, by 5.4% YoY.

Assumptions of this macroeconomic forecast in areas determining price developments differ significantly from assumptions of the January forecast only in the higher crude oil price (see Chapter 1.2). The forecast also takes into account the higher-than-predicted year-on-year inflation in February 2019. Price effects of these factors are partly mitigated by a lower forecast for the growth rate of household consumption and unit labour costs, which in aggregate leads only to a small increase in the forecast for inflation in 2019.

It can be expected that inflation in 2019 will be similar as in the previous year; however, administrative measures will probably influence inflation more than in 2018. Within regulated prices, whose growth has already accelerated, the greatest impact on the increase in prices in 2019 will probably have electricity prices (0.3 pp). The only change in indirect taxes taken into account in the forecast for inflation in 2019 is the already implemented reduction in the value-added tax in public transport (a contribution of -0.1 pp). We expect the contribution of administrative measures to the year-on-year increase in consumer prices in December 2019 to reach 0.5 pp (*unchanged*).

The expected drop in crude oil prices should act less anti-inflationary than we believed in the January macroeconomic forecast. On the other hand, one still has to expect pro-inflationary effects of a continued strong growth in unit labour costs and inflation pressures resulting from the growing household consumption in the positive output gap environment. Nevertheless, these pro-inflationary factors should be weaker, compared with the January forecast. The exchange rate, according to current assumptions, should not have much impact on this year's inflation.

The year-on-year inflation will probably hover in the upper half of the CNB's tolerance band also in Q2 2019, but it should slow down slightly in the second half of the year. In 2019, the **average inflation rate** should reach 2.3% (*versus* 2.1%).

In 2020, anti-inflationary effects of the crude oil price should be more moderate and the growth in unit labour costs should slow down. Demand-driven inflationary pressures should be slightly weaker than in 2019, given the expected output gap development. The appreciation of the Czech koruna against both major world currencies should have a slightly anti-inflationary effect.

In the area of changes to indirect taxes in 2020, we assume that selected services will be transferred to the second reduced value-added tax rate from the beginning of the year in connection with the extension of electronic registration of sales. However, the estimated technical price impact of this measure (-0.4 pp) will most likely not correspond to the effective impact, which will not be so significant. The effective price impact and the timing of this measure are associated with a considerable degree of uncertainty. We also expect that the value-added tax rate on heat will be reduced in early 2020. Administrative measures will thus contribute to lower inflation. In line with the above, we expect a slowdown in the **average inflation rate** to 1.6% (*unchanged*) in 2020.

In Q4 2018, the **GDP deflator** increased by 2.1% (*versus* 2.4%), with the gross domestic expenditures deflator rising by 2.8% (*versus* 2.5%) and terms of trade deteriorating by 0.9% (*versus* 0.2%). Higher than expected growth in the gross domestic expenditures deflator reflected especially stronger dynamics of the gross capital formation deflator. The decline in terms of trade was driven by a slower increase in the deflator of exports compared to the deflator of imports.

The GDP deflator should increase by 3.0% (*versus* 2.6%) in 2019 due to a growth in the gross domestic expenditures deflator as well as in terms of trade. In 2020, the growth of GDP deflator could slow down to 1.9% (*versus* 1.7%). The situation is clearly shown in Graph 3.2.5.

The anticipated development of both export and import prices will be affected mainly by the expected appreciation of the koruna exchange rate and dynamics of the crude oil price. As a result, the terms of trade could improve by 0.3% in 2019 (*unchanged*), and increase by 0.4% (*unchanged*) in 2020.

Growth in the gross domestic expenditures deflator could accelerate to 2.8% (*versus* 2.5%) in 2019. The deceleration in the growth rate of the general government final consumption deflator should be more than offset by the acceleration of the gross capital formation deflator (see Graph 3.2.4). The growth rate of the household consumption deflator should remain unchanged. In 2020, the dynamics of the gross domestic expenditures deflator could drop more significantly to 1.7% (*versus* 1.5%) as a result of the slowdown in all its components.

Table 3.2.1: Prices – yearly

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
								Forecast	Forecast	Outlook	Outlook
Consumer Price Index											
Average of a year	<i>average 2015=100</i>	99.3	99.7	100.0	100.7	103.1	105.3	107.8	109.5	111.5	113.5
	<i>growth in %</i>	1.4	0.4	0.3	0.7	2.5	2.1	2.3	1.6	1.8	1.8
December	<i>average 2015=100</i>	99.4	99.5	99.5	101.5	103.9	106.0	108.1	109.8	111.7	113.7
	<i>growth in %</i>	1.4	0.1	0.1	2.0	2.4	2.0	2.0	1.6	1.8	1.8
Of which the contribution of:											
Administrative measures ¹⁾	<i>percentage points</i>	1.0	-0.2	0.1	0.0	0.1	0.3	0.5	-0.1	0.3	0.3
Market increase	<i>percentage points</i>	0.4	0.3	0.0	2.0	2.3	1.7	1.5	1.7	1.5	1.5
Harmonized index of consumer prices	<i>average 2015=100</i>	99.3	99.8	100.0	100.7	103.1	105.1	107.4	109.0	110.8	112.7
	<i>growth in %</i>	1.4	0.4	0.3	0.6	2.4	2.0	2.1	1.5	1.7	1.7
Offering prices of flats											
Czech Republic	<i>average 2010=100</i>	97.2	100.7	106.9	117.6	130.7	144.6	.	.	.	.
	<i>growth in %</i>	1.1	3.6	6.2	10.0	11.1	10.6	.	.	.	.
Czech Republic excluding Prague	<i>average 2010=100</i>	91.3	93.0	97.7	107.1	112.1	121.9	.	.	.	.
	<i>growth in %</i>	-1.3	1.9	5.1	9.6	4.7	8.7	.	.	.	.
Prague	<i>average 2010=100</i>	103.1	108.5	116.1	128.2	149.2	167.2	.	.	.	.
	<i>growth in %</i>	3.5	5.2	7.0	10.4	16.4	12.1	.	.	.	.
Deflators											
GDP	<i>average 2010=100</i>	102.9	105.5	106.7	108.1	109.6	112.0	115.3	117.5	119.8	122.1
	<i>growth in %</i>	1.4	2.5	1.2	1.3	1.4	2.1	3.0	1.9	1.9	2.0
Domestic final use	<i>average 2010=100</i>	103.5	104.6	105.7	106.5	109.1	111.9	115.0	117.0	119.1	121.3
	<i>growth in %</i>	0.5	1.1	1.0	0.7	2.4	2.6	2.8	1.7	1.8	1.9
Consumption of households	<i>average 2010=100</i>	104.9	105.5	105.6	106.2	108.7	111.4	114.3	116.2	118.3	120.4
	<i>growth in %</i>	0.8	0.6	0.1	0.5	2.4	2.6	2.6	1.7	1.8	1.8
Consumption of government	<i>average 2010=100</i>	102.8	104.6	106.7	108.1	112.6	118.2	123.2	126.1	129.0	132.0
	<i>growth in %</i>	0.2	1.7	2.0	1.3	4.1	5.0	4.2	2.3	2.3	2.3
Fixed capital formation	<i>average 2010=100</i>	101.1	102.7	104.5	105.4	106.9	107.7	110.2	111.5	113.1	115.0
	<i>growth in %</i>	0.1	1.6	1.8	0.9	1.4	0.7	2.3	1.2	1.4	1.7
Exports of goods and services	<i>average 2010=100</i>	105.6	109.8	108.4	105.8	105.1	104.5	106.0	106.0	106.1	106.3
	<i>growth in %</i>	1.7	4.0	-1.3	-2.4	-0.6	-0.6	1.4	0.0	0.0	0.2
Imports of goods and services	<i>average 2010=100</i>	106.6	109.2	107.4	103.7	104.2	103.8	105.0	104.6	104.3	104.2
	<i>growth in %</i>	0.5	2.5	-1.7	-3.4	0.4	-0.3	1.1	-0.4	-0.2	-0.1
Terms of trade	<i>average 2010=100</i>	99.0	100.5	100.9	102.0	100.9	100.6	101.0	101.4	101.7	102.0
	<i>growth in %</i>	1.2	1.5	0.4	1.0	-1.0	-0.3	0.3	0.4	0.3	0.3

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

Source: CZSO, Eurostat. Calculations of the MoF.

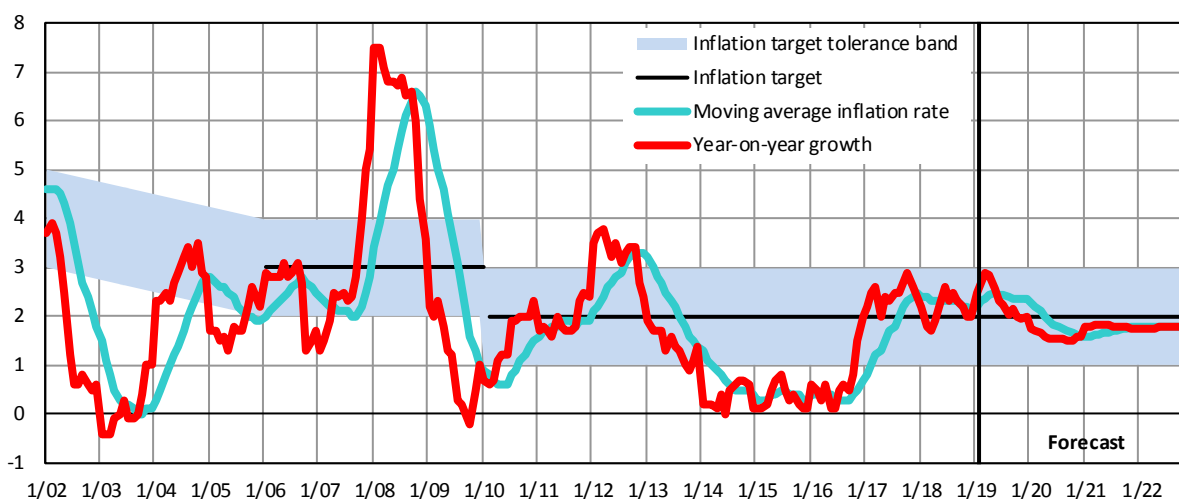
Table 3.2.2: Prices – quarterly

		2018				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Consumer Price Index	<i>average 2015=100</i>	104.5	105.2	105.8	106.0	107.3	107.9	108.0	108.1
	<i>growth in %</i>	1.9	2.3	2.4	2.1	2.7	2.6	2.1	1.9
Of which the contribution of:									
Administrative measures ¹⁾	<i>percentage points</i>	0.2	0.3	0.3	0.3	0.5	0.4	0.4	0.5
Market increase	<i>percentage points</i>	1.7	2.0	2.1	1.8	2.2	2.1	1.7	1.5
Harmonized index of consumer prices	<i>average 2015=100</i>	104.3	105.1	105.6	105.5	106.8	107.5	107.7	107.5
	<i>growth in %</i>	1.7	2.1	2.3	1.8	2.3	2.3	2.0	1.9
Offering prices of flats									
Czech Republic	<i>average 2010=100</i>	140.1	143.2	146.4	148.7	.	.	.	.
	<i>growth in %</i>	12.8	12.2	9.5	8.5	.	.	.	.
Czech Republic excluding Prague	<i>average 2010=100</i>	119.1	120.3	123.5	124.8	.	.	.	.
	<i>growth in %</i>	10.0	9.5	7.8	8.1	.	.	.	.
Prague	<i>average 2010=100</i>	161.1	166.0	169.2	172.7	.	.	.	.
	<i>growth in %</i>	15.1	14.2	10.7	8.8	.	.	.	.
Deflators									
GDP	<i>average 2010=100</i>	110.8	111.4	111.9	113.7	114.5	115.1	115.1	116.5
	<i>growth in %</i>	2.4	2.2	1.9	2.1	3.4	3.3	2.9	2.4
Domestic final use	<i>average 2010=100</i>	110.1	111.1	112.1	113.9	113.9	114.6	115.1	116.4
	<i>growth in %</i>	2.1	2.3	2.9	2.8	3.4	3.2	2.7	2.2
Consumption of households	<i>average 2010=100</i>	110.2	111.1	111.9	112.5	113.5	114.2	114.5	114.9
	<i>growth in %</i>	2.2	2.7	2.8	2.6	3.0	2.8	2.3	2.1
Consumption of government	<i>average 2010=100</i>	114.8	116.2	117.9	123.2	120.1	121.3	122.8	128.0
	<i>growth in %</i>	6.1	5.1	5.4	3.9	4.6	4.4	4.2	3.9
Fixed capital formation	<i>average 2010=100</i>	106.2	107.1	107.9	109.2	109.8	110.3	110.2	110.4
	<i>growth in %</i>	-0.9	-0.2	1.2	2.4	3.4	3.0	2.1	1.1
Exports of goods and services	<i>average 2010=100</i>	102.9	104.2	105.2	105.8	105.5	106.1	106.4	106.0
	<i>growth in %</i>	-4.2	-1.8	1.1	2.6	2.5	1.8	1.2	0.2
Imports of goods and services	<i>average 2010=100</i>	101.5	103.3	105.0	105.5	104.0	104.8	105.8	105.2
	<i>growth in %</i>	-5.0	-2.1	2.3	3.5	2.6	1.5	0.7	-0.3
Terms of trade	<i>average 2010=100</i>	101.4	100.9	100.1	100.3	101.4	101.2	100.6	100.8
	<i>growth in %</i>	0.9	0.3	-1.1	-0.9	0.0	0.3	0.5	0.5

¹⁾ The contribution of increase in regulated prices and in indirect taxes to increase of December YoY consumer price inflation.
Source: CZSO, Eurostat. Calculations of the MoF.

Graph 3.2.1: Consumer Prices

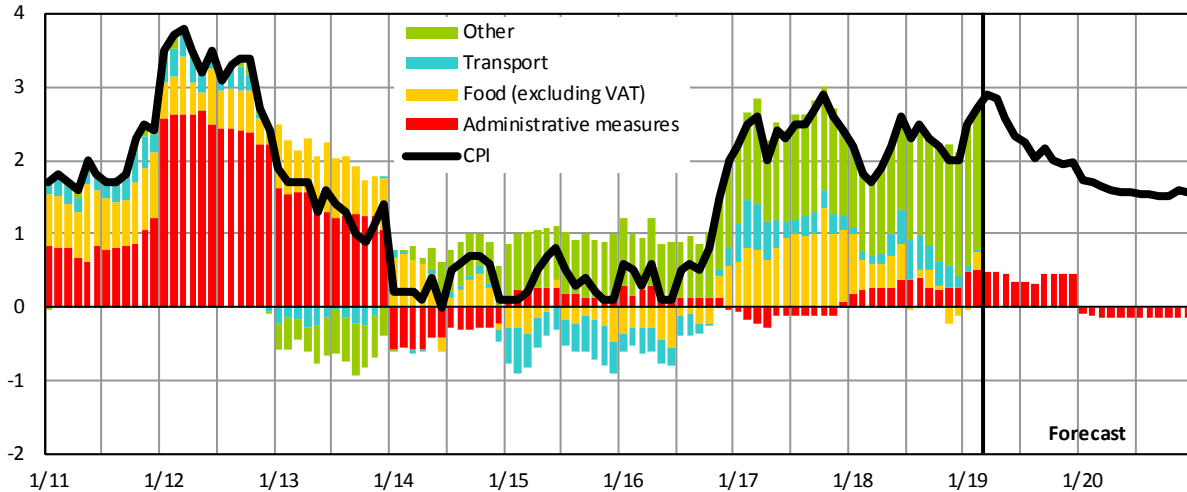
YoY growth rate, in %



Note: For the years 2002–2005 the highlighted area represents target band for headline inflation, whereas from 2006 on it is the tolerance band of the CNB's point target for headline inflation.
Source: CNB, CZSO. Calculations of the MoF.

Graph 3.2.2: Consumer Prices in Main Divisions

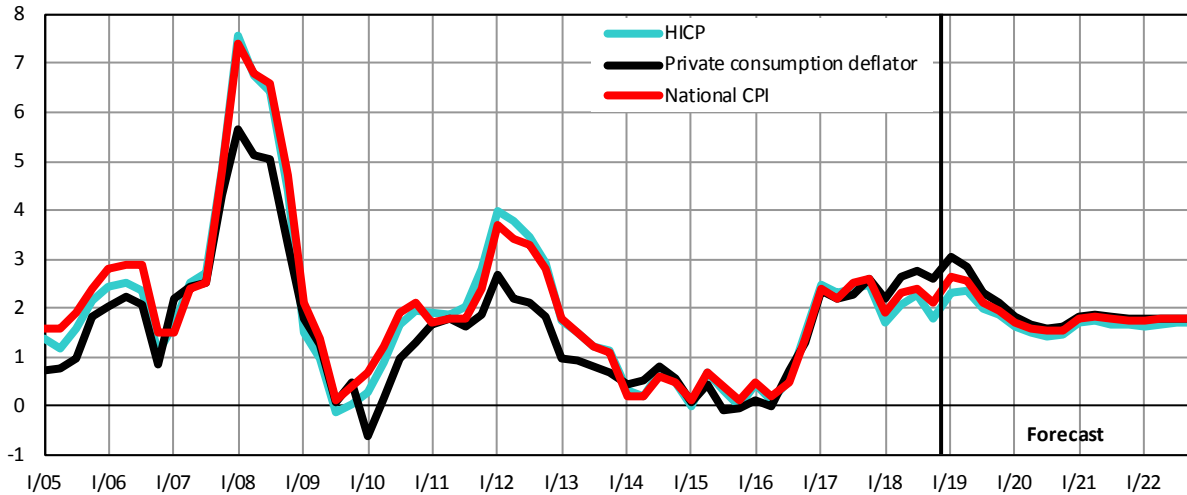
YoY growth of consumer price index, contributions in percentage points, Transport excluding administrative measures and excises



Source: CZSO. Calculations of the MoF.

Graph 3.2.3: Indicators of Consumer Prices

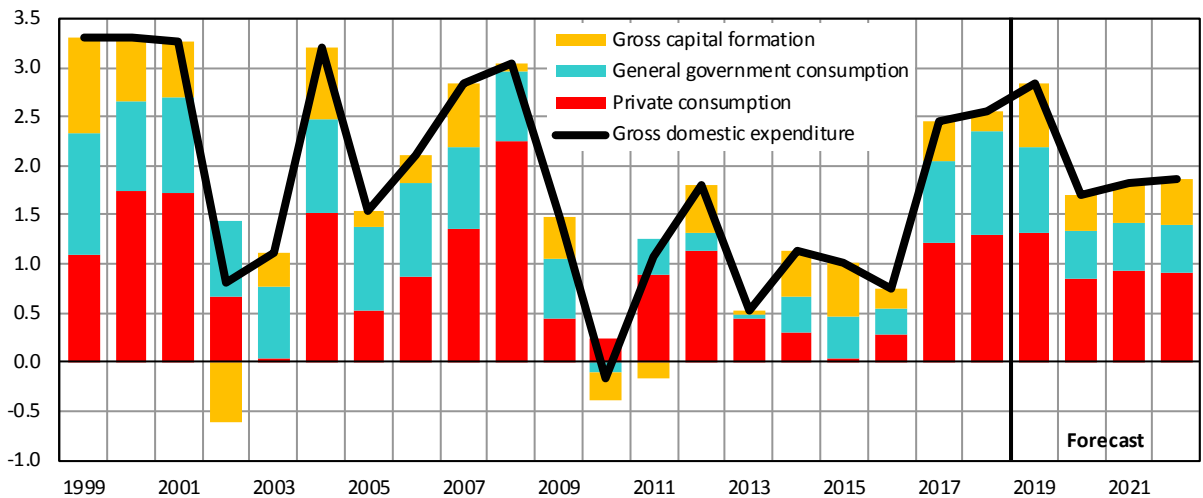
YoY growth rate, in %



Source: CZSO, Eurostat. Calculations of the MoF.

Graph 3.2.4: Gross Domestic Expenditure Deflator

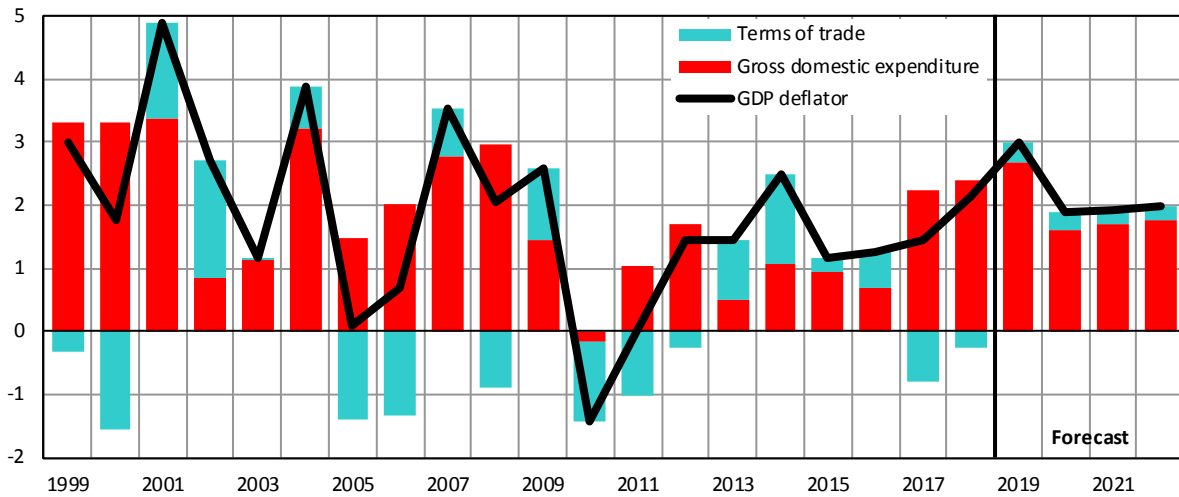
YoY growth rate in %, contributions of growth of deflators of individual components of gross domestic expenditure in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.2.5: GDP deflator

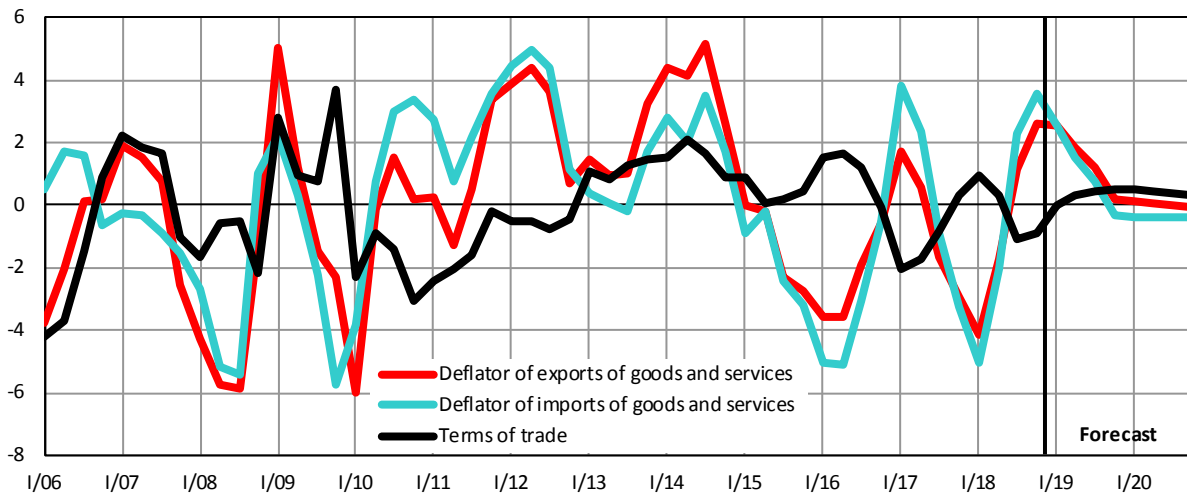
YoY change in %, contributions of growth of gross domestic expenditure deflator and change in terms of trade in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.2.6: Terms of Trade

YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

3.3 Labour Market

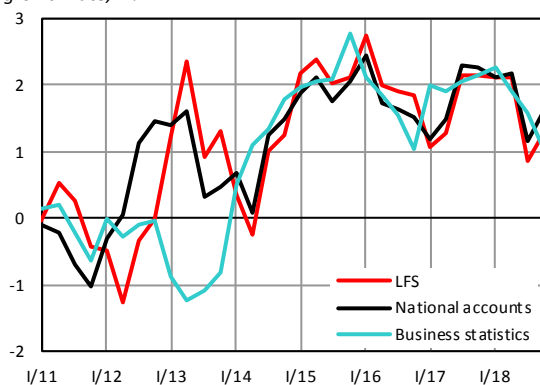
The labour market has been showing signs of overheating for several years. According to all available statistics, the growth in employment continues. While the seasonally adjusted internationally comparable unemployment rate has probably reached its bottom level close to 2%, registered unemployment continues to decline. The number of job vacancies has been above 300 thousand since June 2018, thus exceeding the previous 2008 highs by more than twice. This development is in line with continued strong growth in wages and salaries.

Employment (LFS) grew by 1.2% YoY (*versus 0.8%*) in Q4 2018. The number of employees increased by 1.3% (*versus 0.9%*), the number of entrepreneurs was up 0.8% (*versus 0.5%*). While the number of entrepreneurs without employees stagnated, the number of entrepreneurs with employees rose by 2.9%. Employment increased by 1.4% in 2018 as a whole (*versus 1.3%*). From the perspective of the age structure, the increase was driven by age groups 45–49 years and 60 or more years.

From a sectoral point of view, wholesale and retail trade, education, and professional, scientific and technical activities were the largest contributors to the growth in employment (business statistics, full-time equivalent) in absolute terms. A long-term decline continued in the mining and quarrying sector but the number of workers decreased slightly in five more sectors (less than 3 thousand in total). Growth in employment virtually stopped in manufacturing.

Graph 3.3.1: Employees in Different Statistics

YoY growth rate, in%



Source: CZSO.

Lack of workers has long been evident practically in all sectors of the economy and in almost all regions (in February, the number of vacancies exceeded the number of unemployed in nine regions). The limited increase in the labour force constitutes a significant barrier to economic growth (lack of employees was perceived as a barrier by approximately 30% of industrial and construction companies at the beginning of 2019).

Due to the extremely low unemployment, further growth in employment through this channel is virtually impossible. Firms and institutions increasingly employ

persons that had so far been economically inactive (younger pensioners, women on parental leave, etc.). Moreover, hiring of foreign workers continues quite intensively but it often faces administrative barriers and adaptability of these people to the local environment. In the medium to longer term, space is being created for the development of automation and robotization, and stronger orientation of the economy to less labour-intensive sectors with higher value added.

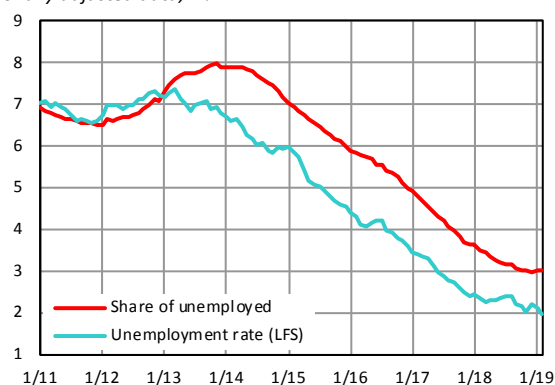
Due to the increase at the end of 2018, we raise the estimate for the growth of total employment in 2019 to 0.4% (*versus 0.3%*), and we forecast a slight increase by 0.2% (*unchanged*) for 2020.

The **unemployment rate** (LFS) was 2.0% (*versus 2.1%*) in Q4 2018 and 2.2% (*versus 2.3%*) in 2018 as a whole. We keep the forecast for the unemployment rate at 2.2% in 2019 and 2020. We consider a further decline in the unemployment rate improbable due to the extremely low level reached. Possible pressures increasing unemployment that could be manifested as the economy slows down and the output gap gradually closes should be dampened by the number of unfilled job vacancies.

The year-on-year decline in the **number of unemployed persons** (Ministry of Labour and Social Affairs) further slows down but we still expect that there is certain room for further decline. This can be explained e.g. by the fact that some job seekers have non-colliding part-time jobs and are therefore likely to be able to leave the registration and take up a regular job. Another aspect is that many people subject to distraint probably work in grey economy and some of them may be motivated to become officially employed in a situation of continued strong wage growth and a very wide offering of job vacancies. For 2019, we expect the share of unemployed persons to decrease to 2.8% and further to 2.6% in 2020 (*unchanged*).

Graph 3.3.2: Indicators of Unemployment

seasonally adjusted data, in%



Note: Share of unemployed (Ministry of Labour and Social Affairs) is the share of available job seekers aged 15–64 years in the population of the same age.

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

As the participation rate in the age group 15–19 years has long been very low (between 5 and 8% since 2015) we switch to monitoring the participation rate in the age group 20–64 years, starting from this macroeconomic forecast. The **participation rate** grew by 0.8 pp YoY to 82.1% in Q4 2018. The extremely high number of vacancies, coupled with a strong wage growth, continues to lead to the inclusion of formerly economically inactive individuals in the work process. The participation rate averaged 81.7% in 2018.

We suppose there is still some room for a further growth in the participation rate, with demographic aspects in the form of an increasing weight of cohorts with a naturally high economic activity rate (especially of those aged 40–49 years) and gradual increases in the statutory as well as actual retirement age playing a crucial role. Due to the aforementioned factors, we expect the participation rate to increase to 82.4% in 2019 and 83.0% in 2020.

The growth rate of the **wage bill** (national accounts, domestic concept) slowed down to 7.5% (*versus 8.7%*) in Q4 2018. As regards individual sectors, the fastest wage growth was recorded in information and communication activities (by 10.2%); conversely, public administration, education, health and social work saw a very pronounced slowdown as the salary bill increased by 7.4% (compared to 13% in the previous quarter). The base effect of a significant increase of salary scales in the general government sector in November 2017 was manifested here. Wage growth in manufacturing slowed down to 6.8%. Wages and salaries in the national economy increased by 9.3% (*versus 9.6%*) in 2018 as a whole.

The current development of cash collection of social security contributions in Q1 2019 indicates a slowing

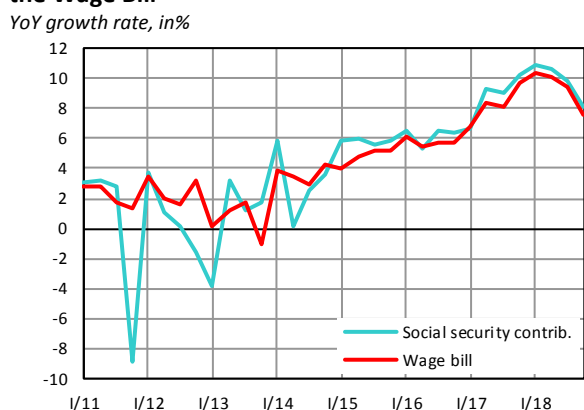
growth rate of earnings (compared to 2018). Therefore, the wage bill growth could reach 7.7% (*versus 8.0%*) in Q1 2019.

The continued tense labour market situation with an extremely high number of job vacancies will be reflected in this year’s strong growth rate of earnings. An increase in the minimum and guaranteed wages by 9.4%, effective from 1 January 2019, will also drive wage growth. Since the start of 2019 there has also been an increase in salary scales in the general government sector, the highest in education. By contrast, wage developments in major market sectors at the end of 2018 indicate a more pronounced slowdown in wage dynamics than had been estimated. The growth in the wage bill could thus reach 7.5% (*versus 7.7%*) in 2019.

Given the shortage of workers and the rapid growth in wages in less paid professions in recent years, the motivating effect of further increases in earnings on the labour supply will decline gradually. Next year, we expect a slowdown in the growth of number of employees and their average wage. The wage bill could thus increase by 5.9% in 2020 (*versus 6.3%*).

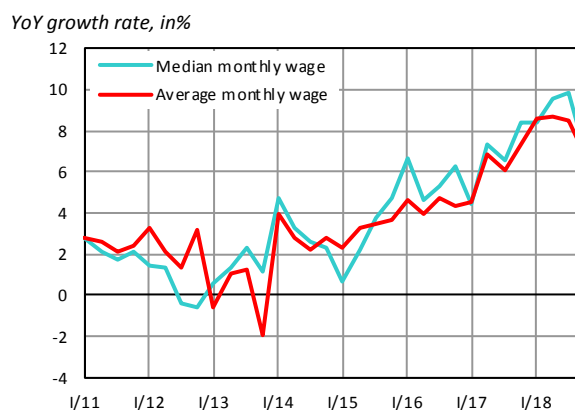
The **average wage** (business statistics, full-time equivalent) grew by 6.9% (*versus 8.7%*) in Q4 2018 and by 8.1% (*versus 8.4%*) in 2018 as a whole. Dynamic wage growth was recorded especially in low- and medium-earning professions. The median wage was up 7.1% in Q4 2018, thus slightly exceeding dynamics of the average wage. The average nominal wage could increase by 7.6% (*versus 8.0%*) in Q1 2019 and by 7.3% (*versus 7.6%*) in 2019 as a whole. The growth rate of the average wage could slow down slightly to 5.7% (*versus 6.0%*) in 2020.

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



Source: CZSO, Ministry of Finance.

Graph 3.3.4: Nominal Monthly Wage



Source: CZSO.

Table 3.3.1: Labour Market – yearly

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
								Forecast	Forecast	Outlook	Outlook
Labour Force Survey											
Employment	<i>av. in thous.persons</i>	4 937	4 974	5 042	5 139	5 222	5 294	5 317	5 325	5 331	5 333
	<i>growth in %</i>	1.0	0.8	1.4	1.9	1.6	1.4	0.4	0.2	0.1	0.0
Employees	<i>av. in thous.persons</i>	4 055	4 079	4 168	4 257	4 327	4 396	4 418	4 427	4 432	4 434
	<i>growth in %</i>	1.5	0.6	2.2	2.1	1.7	1.6	0.5	0.2	0.1	0.0
Entrepreneurs and self-employed	<i>av. in thous.persons</i>	882	895	874	882	894	897	899	899	899	899
	<i>growth in %</i>	-1.3	1.5	-2.4	1.0	1.4	0.4	0.2	0.0	0.0	0.0
Unemployment	<i>av. in thous.persons</i>	369	324	268	211	156	122	117	120	125	126
Unemployment rate	<i>average in %</i>	7.0	6.1	5.1	4.0	2.9	2.2	2.2	2.2	2.3	2.3
Long-term unemployment¹⁾	<i>av. in thous.persons</i>	163	141	127	89	54	48	.	.	.	.
Labour force	<i>av. in thous.persons</i>	5 306	5 298	5 310	5 350	5 377	5 415	5 434	5 446	5 456	5 459
	<i>growth in %</i>	0.9	-0.2	0.2	0.8	0.5	0.7	0.4	0.2	0.2	0.1
Population aged 20–64	<i>av. in thous.persons</i>	6 659	6 610	6 566	6 510	6 456	6 414	6 370	6 327	6 286	6 251
	<i>growth in %</i>	-0.6	-0.7	-0.7	-0.9	-0.8	-0.7	-0.7	-0.7	-0.6	-0.6
Employment/Pop. 20–64	<i>average in %</i>	74.1	75.3	76.8	78.9	80.9	82.5	83.5	84.2	84.8	85.3
Employment rate 20–64²⁾	<i>average in %</i>	72.5	73.6	74.8	76.7	78.5	79.9	80.6	81.2	81.7	82.2
Labour force/Pop. 20–64	<i>average in %</i>	79.7	80.1	80.9	82.2	83.3	84.4	85.3	86.1	86.8	87.3
Participation rate 20–64³⁾	<i>average in %</i>	77.9	78.2	78.7	79.9	80.9	81.7	82.4	83.0	83.6	84.1
Participation rate 15–64³⁾	<i>average in %</i>	72.9	73.5	74.0	75.0	75.9	76.4	77.1	77.5	77.9	78.0
Registered unemployment											
Unemployment	<i>av. in thous.persons</i>	564	561	479	406	318	242	207	188	185	186
Share of unemployed⁴⁾	<i>average in %</i>	7.7	7.7	6.6	5.6	4.3	3.2	2.8	2.6	2.5	2.6
Wages and salaries											
Average monthly wage⁵⁾											
Nominal	CZK	25 035	25 768	26 591	27 764	29 496	31 885	34 200	36 200	38 100	40 000
	<i>growth in %</i>	-0.1	2.9	3.2	4.4	6.2	8.1	7.3	5.7	5.4	5.0
Real	CZK 2005	25 211	25 846	26 591	27 571	28 609	30 280	31 700	33 000	34 200	35 300
	<i>growth in %</i>	-1.5	2.5	2.9	3.7	3.8	5.8	4.8	4.0	3.5	3.1
Median monthly wage	CZK	21 110	21 786	22 414	23 692	25 288	27 478	.	.	.	.
	<i>growth in %</i>	1.4	3.2	2.9	5.7	6.7	8.7	.	.	.	.
Wage bill	<i>growth in %</i>	0.5	3.6	4.8	5.7	8.3	9.3	7.5	5.9	5.5	5.0
Labour productivity	<i>growth in %</i>	-0.8	2.2	3.8	0.8	2.8	1.3	2.0	2.3	2.2	2.1
Unit labour costs⁶⁾	<i>growth in %</i>	0.5	0.4	-0.8	3.1	3.6	6.2	4.9	3.4	3.1	2.8
Compens. of employees / GDP	%	40.9	40.2	39.6	40.4	41.4	43.1	43.9	44.6	45.1	45.4

¹⁾ Persons in unemployment for longer than 12 months.

²⁾ The indicator does not include employment over 64 years.

³⁾ The indicator does not include labour force over 64 years.

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

⁵⁾ Derived from full-time-equivalent employers in the entire economy.

⁶⁾ Ratio of nominal compensation per employee to real productivity of labour.

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

Table 3.3.2: Labour Market – quarterly

		2018				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Labour Force Survey									
Employment	<i>av. in thous. persons</i>	5 258	5 289	5 301	5 326	5 293	5 315	5 331	5 331
	<i>YoY growth in %</i>	1.7	1.8	0.8	1.2	0.7	0.5	0.5	0.1
	<i>QoQ growth in %</i>	0.6	0.2	0.0	0.5	0.0	0.0	0.0	0.0
Employees	<i>av. in thous. persons</i>	4 367	4 389	4 398	4 431	4 399	4 413	4 425	4 437
	<i>growth in %</i>	2.1	2.1	0.9	1.3	0.7	0.5	0.6	0.1
Entrepreneurs and self-employed	<i>av. in thous. persons</i>	891	900	903	895	894	902	906	894
	<i>growth in %</i>	-0.2	0.2	0.7	0.8	0.3	0.3	0.3	-0.2
Unemployment	<i>av. in thous. persons</i>	130	118	127	111	116	114	120	118
Unemployment rate	<i>average in %</i>	2.4	2.2	2.3	2.0	2.1	2.1	2.2	2.2
Long-term unemployment ¹⁾	<i>av. in thous. persons</i>	41	36	37	35	.	.	.	.
Labour force	<i>av. in thous. persons</i>	5 388	5 407	5 429	5 437	5 409	5 430	5 450	5 448
	<i>growth in %</i>	0.6	1.0	0.4	0.9	0.4	0.4	0.4	0.2
Population aged 20–64	<i>av. in thous. persons</i>	6 431	6 418	6 407	6 398	6 387	6 376	6 365	6 353
	<i>growth in %</i>	-0.7	-0.7	-0.7	-0.6	-0.7	-0.7	-0.7	-0.7
Employment/Pop. 20–64	<i>average in %</i>	81.8	82.4	82.7	83.2	82.9	83.4	83.8	83.9
	<i>increase over a year</i>	2.0	2.0	1.2	1.5	1.1	1.0	1.0	0.7
Employment rate 20–64 ²⁾	<i>average in %</i>	79.2	79.8	80.1	80.5	80.1	80.5	80.9	81.0
	<i>increase over a year</i>	1.6	1.6	1.1	1.1	0.8	0.7	0.8	0.5
Labour force/Pop. 20–64	<i>average in %</i>	83.8	84.3	84.7	85.0	84.7	85.2	85.6	85.8
	<i>increase over a year</i>	1.1	1.4	0.9	1.2	0.9	0.9	0.9	0.8
Participation rate 20–64 ³⁾	<i>average in %</i>	81.1	81.6	81.9	82.1	81.8	82.2	82.7	82.8
	<i>increase over a year</i>	0.7	1.0	0.8	0.8	0.7	0.6	0.8	0.7
Participation rate 15–64 ³⁾	<i>average in %</i>	76.1	76.4	76.8	77.0	76.6	77.0	77.3	77.4
	<i>increase over a year</i>	0.6	0.8	0.6	0.8	0.5	0.6	0.5	0.4
Registered unemployment									
Unemployment	<i>av. in thous. persons</i>	280.7	238.7	228.7	219.5	238	205	196	190
Share of unemployed ⁴⁾	<i>average in %</i>	3.8	3.1	3.0	2.9	3.2	2.8	2.6	2.6
Wages and salaries									
Average monthly wage ⁵⁾									
Nominal	CZK	30 284	31 876	31 516	33 840	32 600	34 200	33 800	36 300
	<i>growth in %</i>	8.6	8.7	8.5	6.9	7.6	7.3	7.3	7.2
Real	CZK 2005	28 980	30 300	29 788	31 925	30 400	31 700	31 300	33 600
	<i>growth in %</i>	6.6	6.2	5.9	4.7	4.8	4.7	5.1	5.2
Median monthly wage	CZK	25 690	27 257	27 719	29 247	.	.	.	.
	<i>growth in %</i>	8.4	9.5	9.8	7.1	.	.	.	.
Wage bill	<i>growth in %</i>	10.3	10.1	9.5	7.5	7.7	7.6	7.4	7.3

¹⁾ Persons in unemployment for longer than 12 months.

²⁾ The indicator does not include employment over 64 years.

³⁾ The indicator does not include labour force over 64 years.

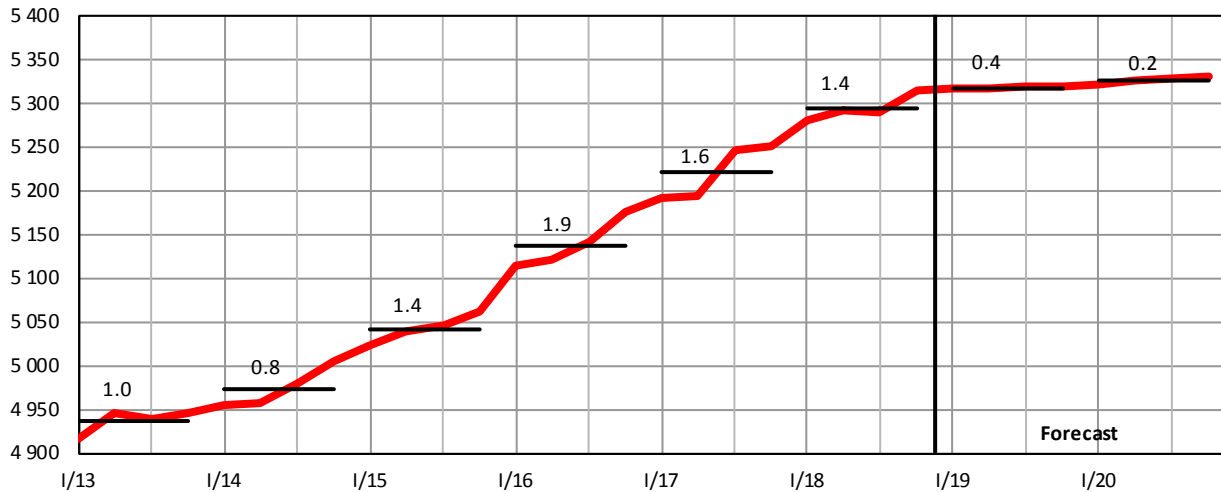
⁴⁾ Share of available job seekers aged 15 to 64 years in the population of the same age.

⁵⁾ Derived from full-time-equivalent employers in the entire economy.

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

Graph 3.3.5: Employment (LFS)

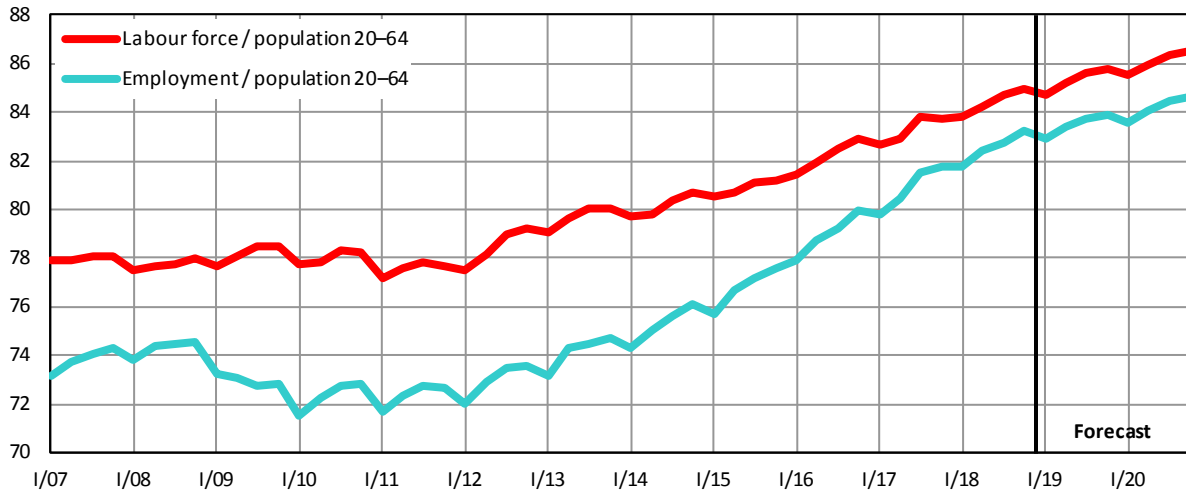
seasonally adjusted data, in thousands of persons, black lines with labels show the average level and growth rate in the given year



Source: CZSO. Calculations of the MoF.

Graph 3.3.6: Ratio of Labour Force and Employment to Population Aged 20–64

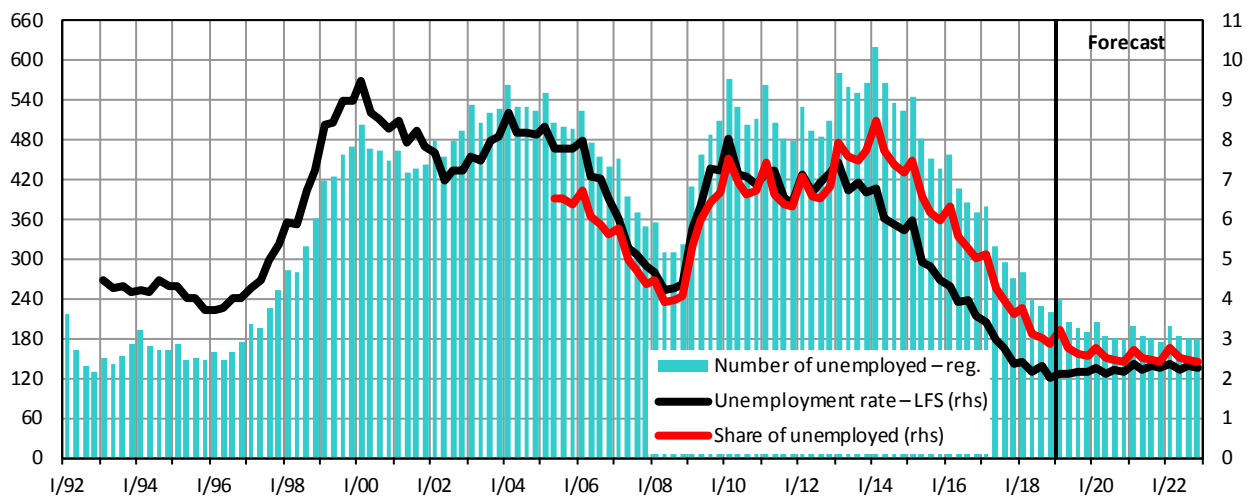
in %



Source: CZSO. Calculations of the MoF.

Graph 3.3.7: Unemployment

quarterly average, in thousands of persons, in % (rhs)

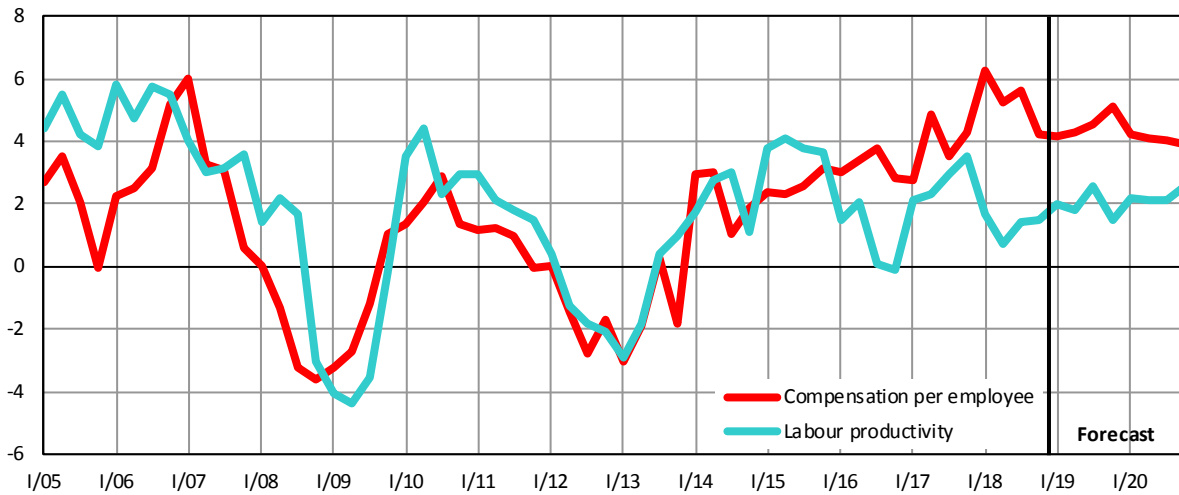


Note: Share of unemployed (Ministry of Labour and Social Affairs) is defined as a share of available job seekers aged 15 to 64 years in the population of the same age.

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

Graph 3.3.8: Compensation per Employee and Real Productivity of Labour

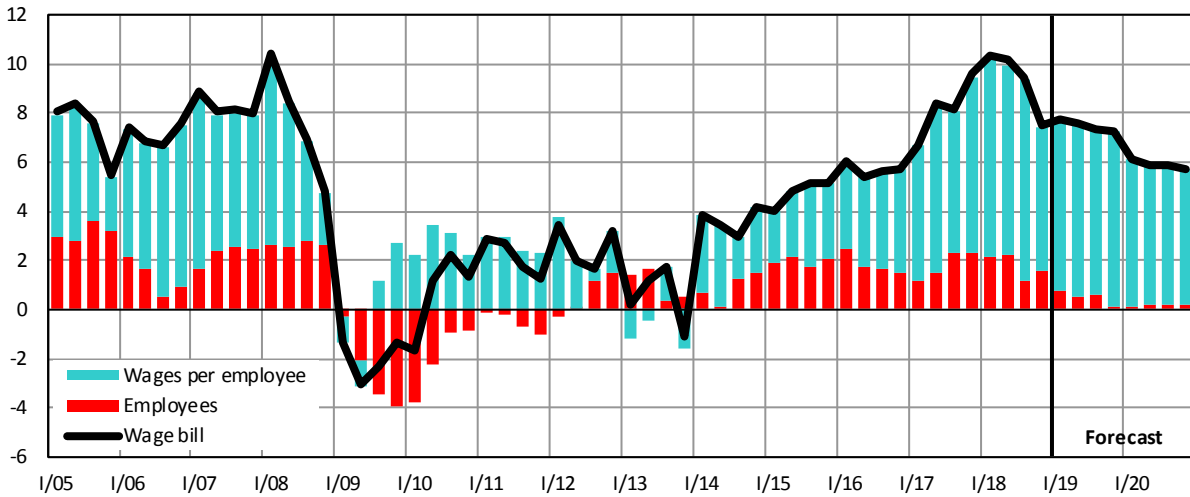
YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

Graph 3.3.9: Nominal Wage Bill

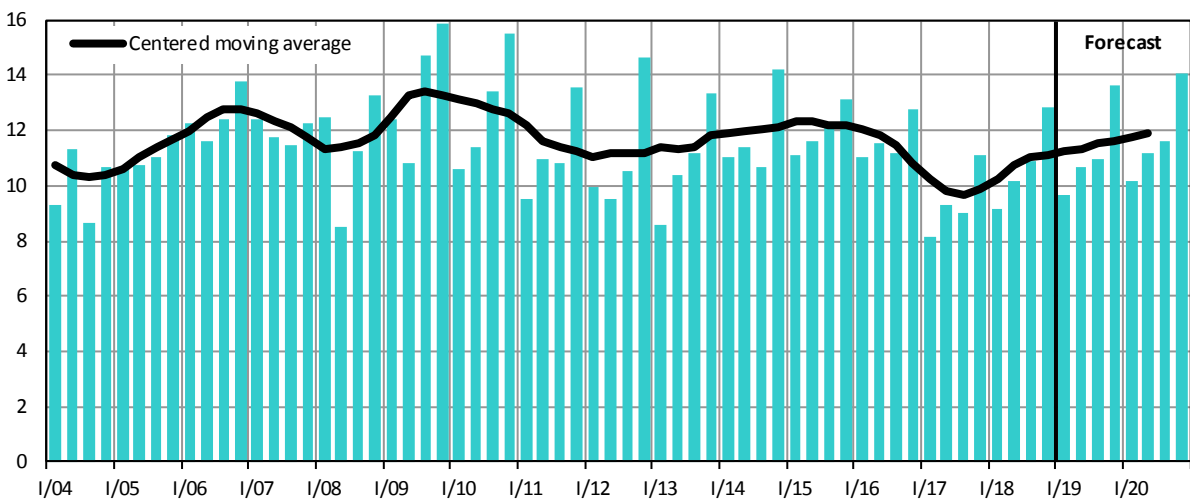
YoY growth rate, in %, domestic concept of the wage bill



Source: CZSO. Calculations of the MoF.

Graph 3.3.10: Gross Savings Rate of Households

in % of disposable income



Source: CZSO. Calculations of the MoF.

Table 3.3.3: Income and Expenditures of Households – yearly

SNA methodology – national concept

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
											Forecast	Forecast
Current income												
Compensation of employees	bill.CZK	1 627	1 669	1 692	1 760	1 852	1 964	2 127	2 318	2 486	2 631	
	growth in %	2.5	2.6	1.3	4.0	5.3	6.0	8.3	9.0	7.2	5.8	
Gross operating surplus and mixed income	bill.CZK	674	654	645	662	691	711	728	780	807	821	
	growth in %	-1.7	-2.9	-1.3	2.6	4.3	2.9	2.5	7.1	3.5	1.7	
Property income received	bill.CZK	153	147	158	166	166	175	165	170	179	188	
	growth in %	-0.6	-4.0	7.8	5.1	-0.4	5.7	-5.8	3.2	4.9	5.2	
Social benefits not-in-kind	bill.CZK	553	566	563	576	591	606	623	654	702	750	
	growth in %	2.1	2.4	-0.6	2.2	2.6	2.6	2.8	5.0	7.3	6.8	
Other current transfers received	bill.CZK	139	151	146	160	181	217	244	267	284	301	
	growth in %	-0.5	8.6	-3.1	9.2	13.3	19.4	12.8	9.4	6.4	6.0	
Current expenditure												
Property income paid	bill.CZK	21	15	21	16	14	14	16	23	25	27	
	growth in %	-8.5	-27.2	40.5	-24.3	-10.7	0.2	8.3	46.6	8.2	8.7	
Curr. taxes on income and property	bill.CZK	156	158	166	177	183	203	226	234	258	276	
	growth in %	8.1	1.6	4.9	6.9	3.2	11.1	11.0	3.8	10.3	6.9	
Social contributions	bill.CZK	640	654	670	696	732	775	836	910	971	1020	
	growth in %	3.1	2.3	2.4	3.8	5.3	5.8	7.8	8.9	6.7	5.1	
Other current transfers paid	bill.CZK	145	154	140	150	168	205	235	256	272	288	
	growth in %	3.2	6.2	-9.3	6.9	11.9	22.5	14.7	8.9	6.2	5.8	
Gross disposable income	bill.CZK	2 184	2 206	2 208	2 285	2 383	2 474	2 576	2 767	2 932	3 080	
	growth in %	0.2	1.0	0.1	3.5	4.3	3.8	4.1	7.4	6.0	5.0	
Final consumption	bill.CZK	1 952	1 970	1 997	2 044	2 125	2 213	2 361	2 497	2 636	2 754	
	growth in %	2.0	0.9	1.3	2.4	3.9	4.1	6.7	5.7	5.6	4.5	
Change in share in pension funds	bill.CZK	16	15	35	35	33	31	32	33	40	43	
Gross savings	bill.CZK	248	250	246	276	291	292	247	304	337	369	
Capital transfers (income (-) / expenditure (+))	bill.CZK	-25	-21	-13	-32	-12	-14	-11	-12	-21	-24	
Gross capital formation	bill.CZK	198	183	181	195	208	228	242	263	273	281	
	growth in %	-13.9	-7.8	-1.3	8.3	6.6	9.6	5.9	8.6	3.8	3.1	
Change in financial assets and liab.	bill.CZK	73	87	77	110	93	76	15	52	84	111	
Real disposable income	growth in %	-1.5	-1.2	-0.8	2.9	4.2	3.3	1.7	4.7	3.3	3.3	
Gross savings rate	%	11.3	11.3	11.0	11.9	12.1	11.6	9.5	10.8	11.3	11.8	

Source: CZSO. Calculations of the MoF.

3.4 External Relations

The **current account balance to GDP ratio**² was 0.3% in Q4 2018 (*in line with the estimate*), thus improving by 0.1% of GDP quarter-on-quarter.

Together with the publication of data for Q4 2018, data for 2017 and the first three quarters of 2018 were revised. The most significant change in 2017 was an increase in the surplus on the balance of goods by 0.4% of GDP to 5.1% of GDP. The surplus on the current account was revised up by 0.6% of GDP.

Export market growth³, which reached 3.5% in Q4 2018 (*versus 2.6%*), was significantly faster than estimated. The main cause was a surprisingly strong quarter-on-quarter growth in imports of our main trading partners, especially Germany, Slovakia and the United Kingdom, where it could have been due to stockpiling in connection with the risks of withdrawal from the EU. While GDP growth of main trading partners remained only slightly below the forecast (by 0.2 pp), the growth in import intensity was more than 1 pp stronger. The export market growth reached 4.0% (*versus 3.7%*) in 2018 as a whole. With regard to the expected slowdown in GDP growth of our main trading partners (especially Germany), the development of their import intensity and deteriorating confidence indicators, we forecast the export market growth to slow down to 2.9% (*versus 2.7%*) in 2019. We expect a modest acceleration to 3.0% in 2020 (*versus 2.8%*).

Export performance increased by 1.4% (*versus 1.7%*) in Q4 2018. In 2018 as a whole the growth in export performance thus slowed down to 0.5% (*versus 0.9%*) from 1.3% in 2017. We expect that the export performance will grow only slightly by 0.1% (*versus 0.4%*) in 2019 and by 0.2% (*versus 0.3%*) in 2020. Low dynamics of export performance reflect the increasing unit labour costs, the expected appreciation of the koruna and the shortage of suitable workforce.

As regards foreign trade (in the balance of payments methodology), a steady gradual decline in the surplus on the **balance of goods** has continued since Q1 2017. According to current data, it reached 4.1% of GDP (*versus 4.2% of GDP*) in 2018. The declining balance was due to factors on the import side, especially strong demand for investment goods, stemming from the position of the economy in the economic cycle.

On the export side, growth was recorded in all commodity classes significant for the Czech economy. Trade in machinery and transport equipment (especially cars, machinery and electrical equipment), which account for

more than a half of Czech exports, contributed significantly to the overall balance of goods.

Prices of mineral fuels remain an important factor affecting the **terms of trade** of the foreign trade in goods. The deficit on the fuel part of the balance was 2.9% of GDP (*versus 2.8% of GDP*) in Q4 2018 due to an unexpected increase in crude oil prices. In connection with the projected crude oil price, we expect the deficit to decrease to 2.7% of GDP (*versus 2.3% of GDP*) in 2019 and further to 2.5% of GDP (*versus 2.2% of GDP*) in 2020.

We expect that the surplus on the **balance of goods** will continue to decline and reach 3.8% of GDP this year (*versus 4.0% of GDP*). As a ratio to GDP, we expect the same surplus also in 2020 (*versus 3.9% of GDP*). The slight deterioration in the forecast reflects – on the export side – the slowdown in growth of major trading partners (especially Germany) and an expected decline in demand for cars. Both exports and imports could be affected by fears from increased tariff barriers after the United Kingdom's withdrawal from the EU, and a possible deepening of trade disputes between the United States of America and the EU.

The surplus on the **balance of services** was 2.3% of GDP in 2018 (*versus 2.2% of GDP*). In a year-on-year comparison, there was a deterioration of, in particular, the balance of tourism, financial services and services in the area of research and development. We expect a slight increase in the surplus on the balance of services due to unwinding of one-off factors in the form of a significant increase in imports of research and consultancy services in Q3 2018. The surplus should reach 2.4% of GDP in 2019 and 2020 (*versus 2.2% of GDP in both years*).

In addition to the aforementioned narrowing of the surplus on the balance of goods and services by 1.3% of GDP, the year-on-year decrease in the surplus on the current account in 2018 by 1.4% of GDP was also due to a deterioration of the **primary income balance** by 0.3% of GDP. The balance saw a deficit of 5.3% in 2018 (*as estimated*). The deficit reflects high profitability of foreign direct investments in the CR. The primary income balance exhibits high volatility over time related to the cyclical development of the economy. In view of the tight situation in the labour market and sustained pressures on wage growth, and thus on a shift in GDP distribution from corporate net profits to compensation of employees, a decrease in profitability of foreign-controlled firms can also be expected. For this and the next year, we expect a steady deficit of primary incomes at 5.2% of GDP (*unchanged*).

In this context, we estimate that the **current account of the balance of payments** will post a slight surplus of 0.2% of GDP in 2019 (*versus 0.3% of GDP*). In 2020 the surplus could inch up to 0.3% of GDP (*versus 0.2% of GDP*).

² All *quarterly* figures relative to GDP are listed in annual rolling totals.

³ Among the most important trading partners (according to the national statistics of foreign trade in goods) in 2018 were Germany with a share in Czech exports of 31.3%, Slovakia with 8.8%, Poland with 6.3%, France with 5.0%, and United Kingdom and Austria both with 4.4%.

Table 3.4.1: Balance of Payments – yearly

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
										Forecast	Forecast
Goods and services	<i>bill.CZK</i>	157	201	237	276	266	353	387	338	343	362
	<i>% GDP</i>	3.9	5.0	5.8	6.4	5.8	7.4	7.7	6.4	6.1	6.2
Goods	<i>bill.CZK</i>	75	124	167	220	188	246	259	217	210	222
	<i>% GDP</i>	1.9	3.0	4.1	5.1	4.1	5.2	5.1	4.1	3.8	3.8
Services	<i>bill.CZK</i>	81	78	70	56	78	108	128	121	133	140
	<i>% GDP</i>	2.0	1.9	1.7	1.3	1.7	2.3	2.5	2.3	2.4	2.4
Primary income	<i>bill.CZK</i>	-223	-238	-249	-261	-255	-252	-255	-282	-294	-306
	<i>% GDP</i>	-5.5	-5.9	-6.1	-6.0	-5.5	-5.3	-5.1	-5.3	-5.2	-5.2
Secondary income	<i>bill.CZK</i>	-18	-27	-10	-7	0	-27	-48	-40	-40	-39
	<i>% GDP</i>	-0.5	-0.7	-0.2	-0.2	0.0	-0.6	-1.0	-0.8	-0.7	-0.7
Current account	<i>bill.CZK</i>	-85	-63	-22	8	11	74	83	16	10	18
	<i>% GDP</i>	-2.1	-1.6	-0.5	0.2	0.2	1.6	1.7	0.3	0.2	0.3
Capital account	<i>bill.CZK</i>	13	53	82	32	102	54	41	14	22	30
	<i>% GDP</i>	0.3	1.3	2.0	0.7	2.2	1.1	0.8	0.3	0.4	0.5
Net lending/borrowing	<i>bill.CZK</i>	-72	-10	61	40	113	128	124	30	32	48
	<i>% GDP</i>	-1.8	-0.3	1.5	0.9	2.5	2.7	2.5	0.6	0.6	0.8
Financial account	<i>bill.CZK</i>	-75	12	68	64	175	117	121	12	.	.
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	.	.
International investment position	<i>bill.CZK</i>	-1 823	-1 864	-1 695	-1 577	-1 513	-1 283	-1 264	-1 251	.	.
	<i>% GDP</i>	-45.2	-45.9	-41.4	-36.6	-32.9	-26.9	-25.0	-23.6	.	.
Gross external debt	<i>bill.CZK</i>	2 312	2 434	2 733	2 947	3 119	3 498	4 370	4 355	.	.
	<i>% GDP</i>	57.3	60.0	66.7	68.3	67.9	73.4	86.6	82.1	.	.

Source: CNB, CZSO. Calculations of the MoF.

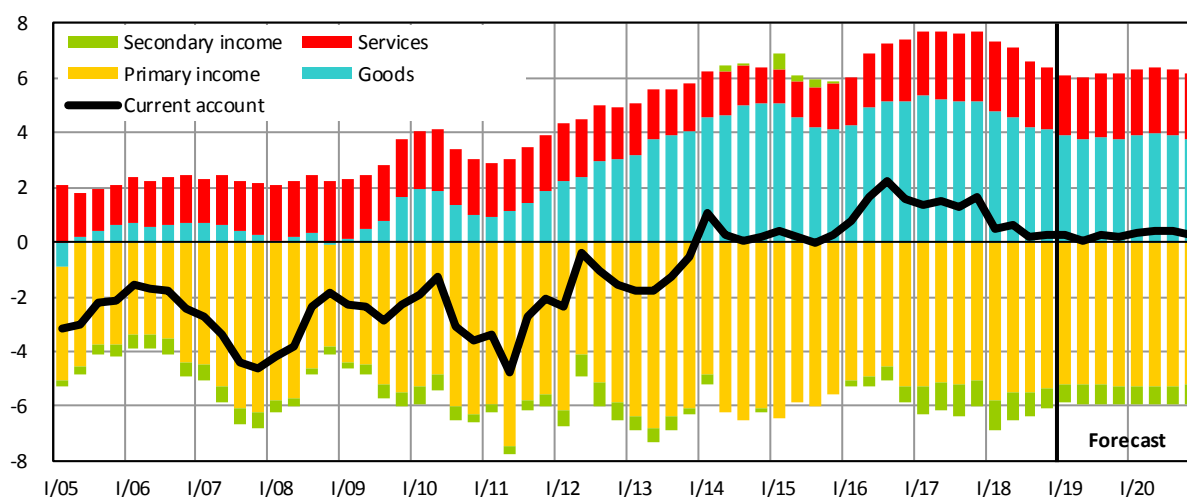
Table 3.4.2: Balance of Payments – quarterly
moving sums of the latest 4 quarters

		2018				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>	<i>Forecast</i>
Goods and services	<i>bill.CZK</i>	374	368	344	338	329	327	342	343
	<i>% GDP</i>	7.3	7.1	6.6	6.4	6.1	6.0	6.2	6.1
Goods	<i>bill.CZK</i>	245	237	221	217	209	206	213	210
	<i>% GDP</i>	4.8	4.6	4.2	4.1	3.9	3.8	3.9	3.8
Services	<i>bill.CZK</i>	129	131	123	121	120	121	129	133
	<i>% GDP</i>	2.5	2.5	2.3	2.3	2.2	2.2	2.3	2.4
Primary income	<i>bill.CZK</i>	-297	-286	-288	-282	-279	-284	-289	-294
	<i>% GDP</i>	-5.8	-5.5	-5.5	-5.3	-5.2	-5.2	-5.2	-5.2
Secondary income	<i>bill.CZK</i>	-54	-51	-47	-40	-37	-38	-39	-40
	<i>% GDP</i>	-1.0	-1.0	-0.9	-0.8	-0.7	-0.7	-0.7	-0.7
Current account	<i>bill.CZK</i>	24	32	10	16	14	4	14	10
	<i>% GDP</i>	0.5	0.6	0.2	0.3	0.3	0.1	0.3	0.2
Capital account	<i>bill.CZK</i>	42	34	31	14	16	18	20	22
	<i>% GDP</i>	0.8	0.7	0.6	0.3	0.3	0.3	0.4	0.4
Net lending/borrowing	<i>bill.CZK</i>	67	66	41	30	30	22	34	32
	<i>% GDP</i>	1.3	1.3	0.8	0.6	0.6	0.4	0.6	0.6
Financial account	<i>bill.CZK</i>	91	71	14	12	.	.	.	.
Direct investments	<i>bill.CZK</i>	2	-20	-68	-91	.	.	.	.
Portfolio investments	<i>bill.CZK</i>	36	178	23	23	.	.	.	.
Financial derivatives	<i>bill.CZK</i>	-15	-16	-9	-15	.	.	.	.
Other investments	<i>bill.CZK</i>	-55	-88	71	46	.	.	.	.
Reserve assets	<i>bill.CZK</i>	123	17	-3	50	.	.	.	.
International investment position	<i>stock in bill.CZK</i>	-1 234	-1 158	-1 247	-1 251	.	.	.	.
	<i>% GDP</i>	-24.1	-22.4	-23.8	-23.6	.	.	.	.
Gross external debt	<i>stock in bill.CZK</i>	4 300	4 331	4 339	4 355	.	.	.	.
	<i>% GDP</i>	84.0	83.6	82.9	82.1	.	.	.	.

Source: CNB, CZSO. Calculations of the MoF.

Graph 3.4.1: Current Account

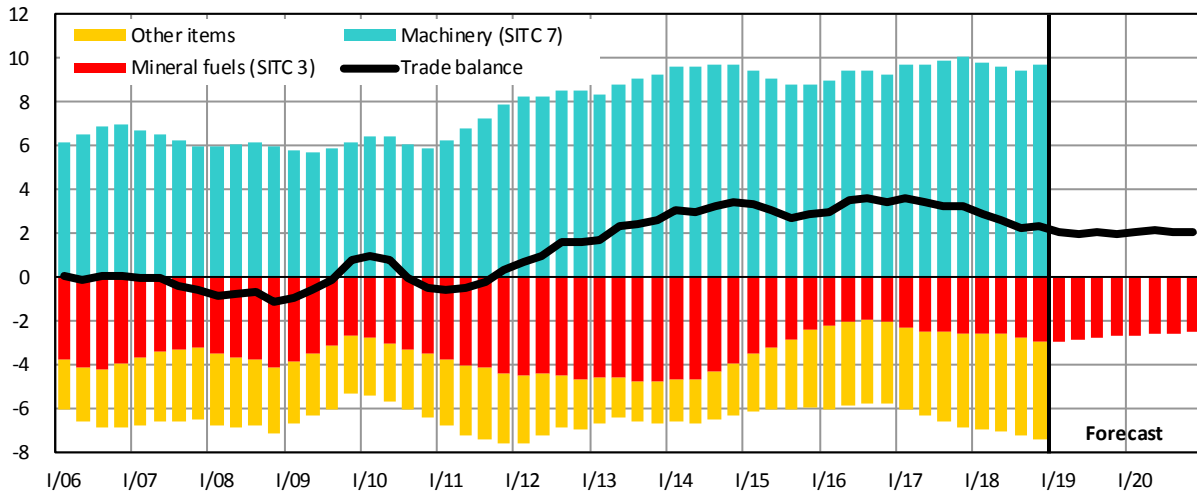
moving sums of the latest 4 quarters, in % of GDP, trade and service balances in BoP definitions



Source: CNB, CZSO. Calculations of the MoF.

Graph 3.4.2: Balance of Trade (national concept)

moving sums of the latest 4 quarters, in % of GDP, in cross-border definitions

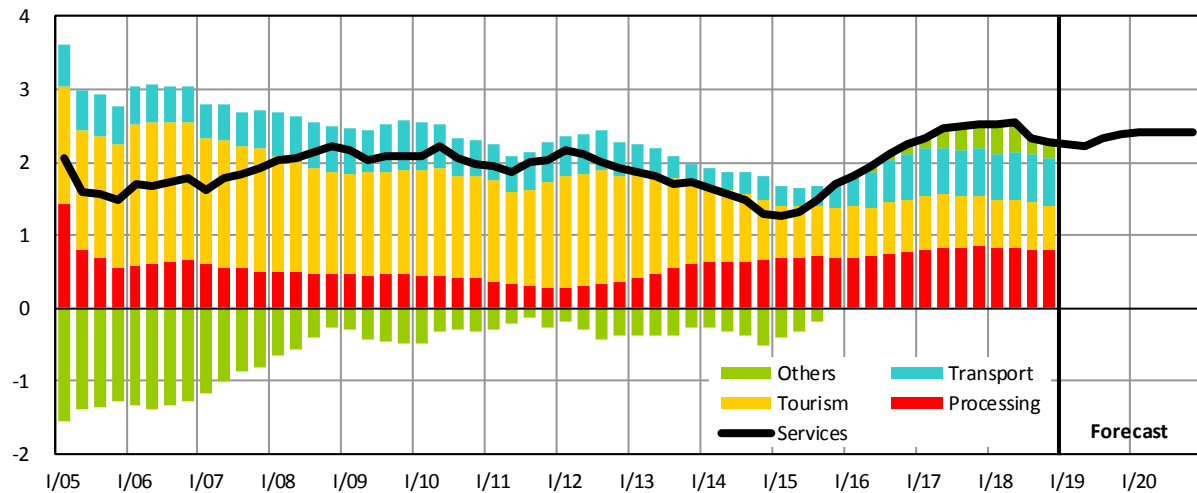


Note: The data in the graph show imports in cif methodology. For this reason, the graph is not comparable with Tables 3.4.1 and 3.4.2, where imports are in fob methodology. Trade balance in the national concept (unlike in the BoP methodology in Table 3.4.1) does not include the import of JAS-39 Gripen fighter jets in the fourth quarter of 2015 amounting to CZK 9.9 bill., i.e. 0.2% of GDP.

Source: CZSO. Calculations of the MoF.

Graph 3.4.3: Balance of Services

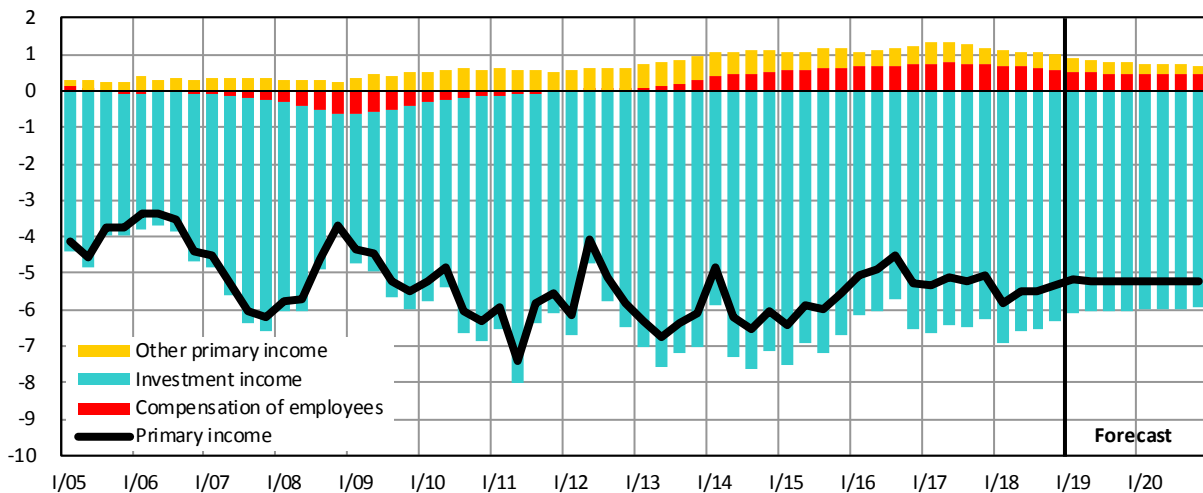
moving sums of the latest 4 quarters, in % of GDP



Source: CNB, CZSO. Calculations of the MoF.

Graph 3.4.4: Balance of Primary Income

moving sums of the latest 4 quarters, in % of GDP



Source: CNB, CZSO. Calculations of the MoF.

Table 3.4.3: Decomposition of Exports of Goods – yearly*seasonally adjusted*

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
										Forecast	Forecast
GDP ¹⁾	<i>average of 2005=100</i>	103.4	104.4	105.3	107.7	110.0	112.5	115.6	118.3	120	123
	<i>growth in %</i>	3.4	1.0	0.9	2.2	2.2	2.3	2.8	2.3	1.6	2.0
Import intensity ²⁾	<i>average of 2005=100</i>	104.0	103.1	104.6	107.2	110.7	113.0	116.3	118.3	120	121
	<i>growth in %</i>	4.0	-0.8	1.4	2.5	3.3	2.0	3.0	1.7	1.2	0.9
Export markets ³⁾	<i>average of 2005=100</i>	107.5	107.7	110.2	115.5	121.8	127.1	134.5	139.9	144	148
	<i>growth in %</i>	7.5	0.1	2.3	4.8	5.5	4.3	5.8	4.0	2.9	3.0
Export performance	<i>average of 2005=100</i>	102.4	106.8	105.0	109.5	109.4	109.2	110.5	111.1	111	111
	<i>growth in %</i>	2.4	4.2	-1.6	4.2	-0.1	-0.2	1.3	0.5	0.1	0.2
Real exports	<i>average of 2005=100</i>	110.2	115.0	115.7	126.4	133.3	138.8	148.7	155.5	160	165
	<i>growth in %</i>	10.2	4.4	0.6	9.2	5.4	4.1	7.2	4.6	2.9	3.2
1 / NEER	<i>average of 2005=100</i>	97.0	101.2	103.0	108.6	109.9	106.9	103.9	100.2	100	98
	<i>growth in %</i>	-3.0	4.4	1.7	5.5	1.2	-2.8	-2.8	-3.6	-0.3	-1.8
Prices on foreign markets	<i>average of 2005=100</i>	103.9	102.7	102.6	101.0	98.3	98.3	100.5	103.2	105	107
	<i>growth in %</i>	3.9	-1.1	-0.1	-1.6	-2.6	0.0	2.2	2.7	1.9	1.8
Exports deflator	<i>average of 2005=100</i>	100.8	104.0	105.6	109.6	108.1	105.1	104.3	103.4	105	105
	<i>growth in %</i>	0.8	3.2	1.5	3.8	-1.4	-2.8	-0.7	-0.9	1.6	0.0
Nominal exports	<i>average of 2005=100</i>	111.0	119.6	122.2	138.6	144.0	145.8	155.1	160.7	168	173
	<i>growth in %</i>	11.0	7.7	2.2	13.4	3.9	1.2	6.4	3.6	4.6	3.2

¹⁾ Weighted average of GDP of the seven most important partners – Germany, Slovakia, Austria, the United Kingdom, Poland, France and Italy.²⁾ Index of ratio of real imports of goods to real GDP.³⁾ Weighted average of imports of goods of the main partners.

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

Table 3.4.4: Decomposition of Exports of Goods – quarterly*seasonally adjusted*

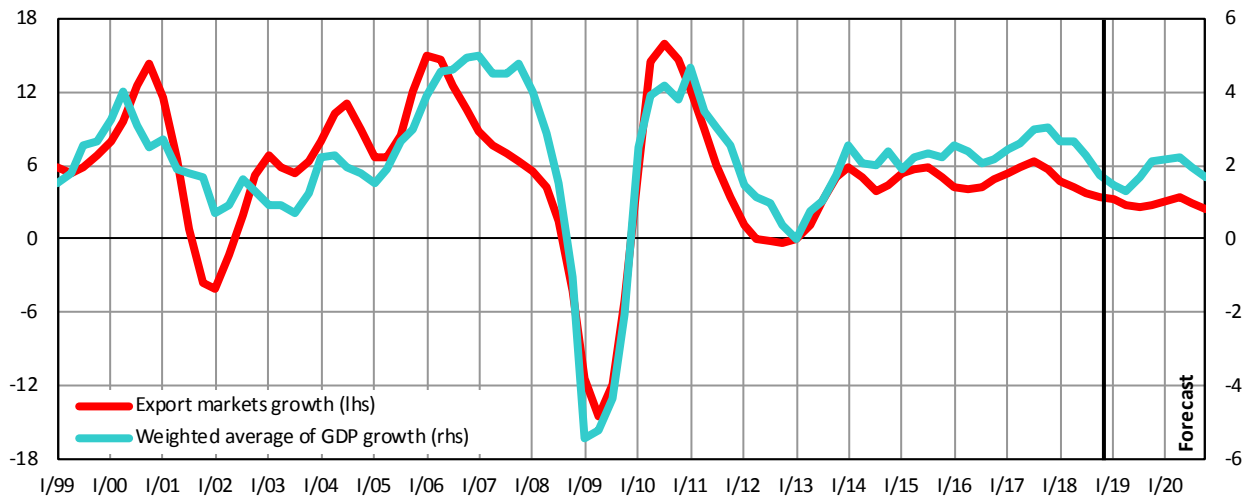
		2018				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
GDP ¹⁾	<i>average of 2010=100</i>	117.5	118.2	118.6	118.9	119	120	121	121
	<i>growth in %</i>	2.7	2.6	2.2	1.7	1.4	1.3	1.7	2.1
Import intensity ²⁾	<i>average of 2010=100</i>	117.4	117.7	118.7	119.3	119	119	120	120
	<i>growth in %</i>	1.9	1.5	1.5	1.7	1.7	1.5	0.9	0.7
Export markets ³⁾	<i>average of 2010=100</i>	138.0	139.2	140.7	141.9	142	143	144	146
	<i>growth in %</i>	4.7	4.2	3.8	3.5	3.2	2.8	2.6	2.8
Export performance	<i>average of 2010=100</i>	111.7	111.1	109.8	111.9	111	112	110	112
	<i>growth in %</i>	1.3	-0.9	0.4	1.4	-0.8	0.4	0.4	0.2
Real exports	<i>average of 2010=100</i>	154.1	154.6	154.6	158.8	158	160	159	164
	<i>growth in %</i>	6.1	3.2	4.2	4.9	2.4	3.2	3.1	3.0
1 / NEER	<i>average of 2010=100</i>	99.5	100.2	100.1	100.9	100	100	100	99
	<i>growth in %</i>	-7.4	-4.8	-2.1	0.3	1.0	-0.1	-0.5	-1.7
Prices on foreign markets	<i>average of 2010=100</i>	102.3	102.7	103.8	103.9	104	105	106	106
	<i>growth in %</i>	2.6	2.8	3.0	2.5	1.7	2.2	2.0	2.0
Exports deflator	<i>average of 2010=100</i>	101.7	102.9	103.9	104.9	105	105	106	105
	<i>growth in %</i>	-5.0	-2.2	0.9	2.8	2.7	2.1	1.5	0.3
Nominal exports	<i>average of 2010=100</i>	156.7	159.1	160.6	166.4	165	168	168	172
	<i>growth in %</i>	0.7	1.0	5.1	7.8	5.2	5.3	4.6	3.3

See notes to Table 3.4.3.

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

Graph 3.4.5: GDP and Imports of Goods in Main Partner Countries

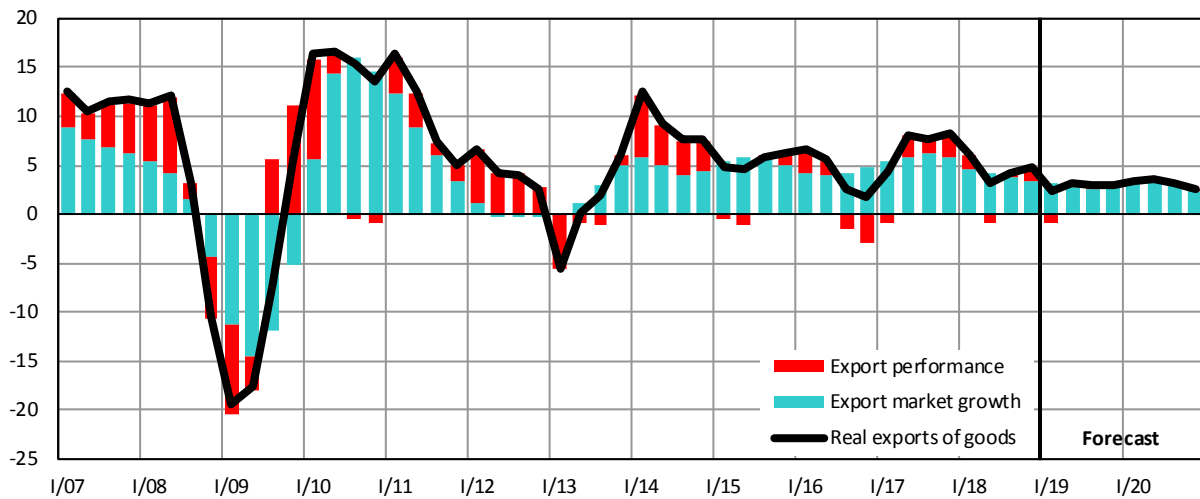
YoY growth rate, in %, seasonally adjusted



Source: Eurostat. Calculations of the MoF.

Graph 3.4.6: Real Exports of Goods

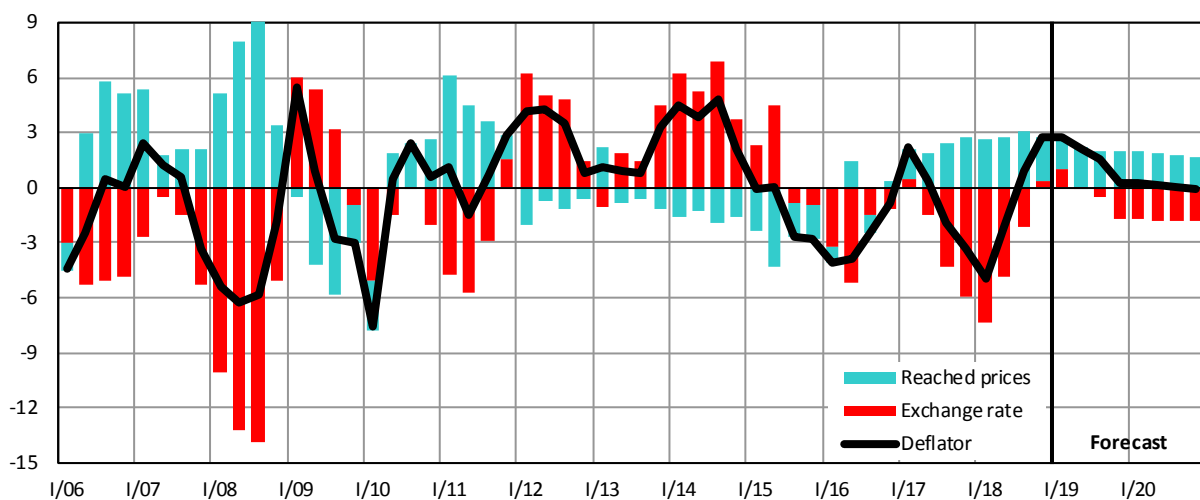
decomposition of YoY growth, in %, seasonally adjusted



Source: CZSO, Eurostat. Calculations of the MoF.

Graph 3.4.7: Deflator of Exports of Goods

decomposition of YoY growth, in %



Source: CNB, CZSO. Calculations of the MoF.

3.5 International Comparisons

Comparisons for the period up to and including 2017 are based on Eurostat statistics. Since 2018, our own calculations on the basis of real exchange rates have been used.

GDP per capita in **current purchasing power parity** increased in all of the monitored countries⁴ in 2017, although Italy, Slovakia, Greece and Portugal posted a slight decrease in relative terms compared to the EA19. In the CR the purchasing power parity was 17.75 CZK/PPS compared to the EU28 and 17.21 CZK/EUR compared to the EA19. The economic level was circa 26,900 PPS, corresponding to 84% of the economic level in the EA19. The relative economic level of the Czech Republic should gradually reach up to 87% of the EA19 average in 2020 thanks to a stable economic growth, thus approaching the level of Spain.

GDP per capita recalculated using the current **exchange rate** was approx. 18,100 EUR in the CR in 2017, that is, 55% of the EA19 level. The stable economic growth and a moderate appreciation of the exchange rate will result in a gradual increase in the relative level up to 61% of the EA19 average in 2020.

When comparing price levels, the **comparative price level of GDP** in the Czech Republic again slightly increased in 2017, thus reaching 65% of the EA19 average. In the coming years, the comparative price level of GDP should increase gradually up to 70% in 2020. However, this increase should not jeopardize the competitiveness of the Czech economy.

By breaking the GDP per capita down into individual components⁵ (labour productivity, labour market component and demographic component) it is possible to determine in detail sources of economic growth. The results of the analysis are summarised in Graphs 3.5.5 and 3.5.6.

Labour productivity measured as the GDP/hours worked ratio has long been increasing in the monitored countries; however, its level is still relatively low compared to

the EA19 average. Although the economic crisis slowed down labour productivity growth, its absolute level did not decrease, in 2008–2017, in any of the monitored countries except in Greece. In the given period, however, a decrease in the relative level of labour productivity to the EA19 countries was also seen, in addition to Greece, in Italy, Portugal, Slovenia and Spain, whereas increases in the relative level in Latvia, Poland, Lithuania and Estonia exceeded 8 pp in the monitored period. In the Czech Republic, the relative level of labour productivity to the average of EA19 countries increased slightly to 67% in 2017.

In the case of the **labour market component**, which gives the number of hours worked per working-age person, the situation is mostly opposite. In 2017, the relative level of the labour market component exceeded the average of the EA19 countries in all states except Slovakia, Spain, Croatia and Italy. In Estonia, the Czech Republic, Latvia, Poland, Portugal and Lithuania the difference was more than 20 pp. In 2008–2017, the absolute level of the labour market component dropped in Greece, Croatia, Spain, Latvia, Italy and Portugal, with Greece falling by 12% in the aforementioned years as a result of a 17% drop in hours worked.

The share of the working-age population, captured by the **demographic component**, reached its peak in most monitored countries during the first decade of the 21st century and is now decreasing due to population ageing. In 2008–2017, the sharpest decrease of 5.7 pp was recorded in the Czech Republic. Compared to the EA19 average, however, the demographic component is still higher in all monitored countries except Poland, Latvia, Greece and Italy; in Slovakia it exceeded the EA19 average by 8 pp in 2017.

⁴ The surveyed countries are Croatia, the Czech Republic, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Poland, Portugal, Slovakia, Slovenia and Spain.

⁵ GDP per capita can be written as follows:

$$\begin{aligned} \text{GDP per capita} &= \frac{\text{GDP}}{\text{number of inhabit.}} = \\ &= \frac{\text{GDP}}{\text{no. of hours worked}} * \frac{\text{no. of hours worked}}{\text{population aged 15–64}} * \frac{\text{population aged 15–64}}{\text{no. of inhabit.}} = \\ &= \text{labour productivity} * \text{labour market component} * \text{demographic component} \end{aligned}$$

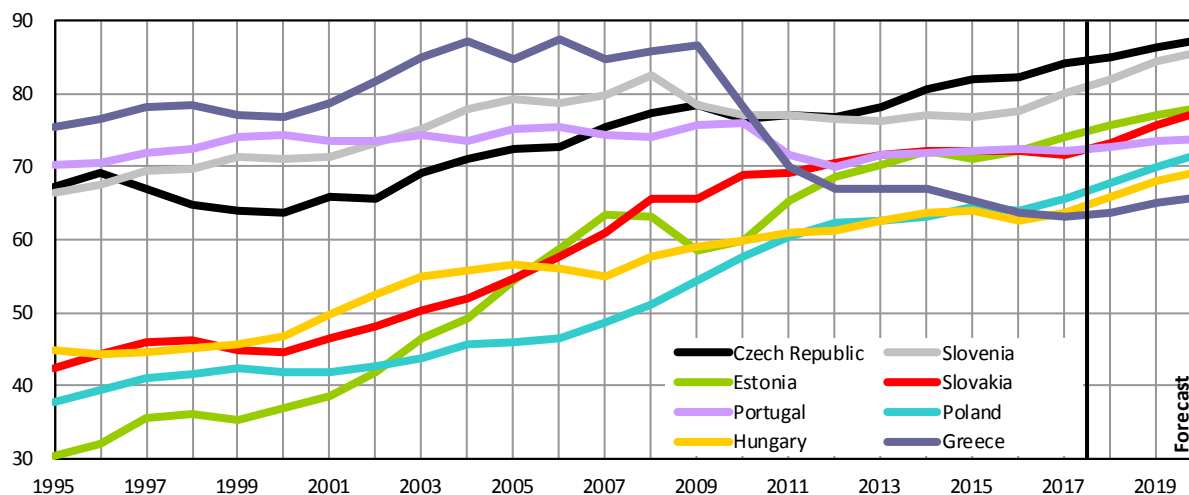
Table 3.5.1: GDP per Capita – Using Current Purchasing Power Parities

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
									<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>
Italy	PPS	27 100	27 000	26 400	26 600	27 700	28 400	28 900	29 600	30 400	31 400
	EA19=100	96	95	92	90	90	91	91	90	90	91
Spain	PPS	24 200	24 200	24 000	24 900	26 300	26 700	27 600	28 600	29 600	30 600
	EA19=100	86	85	84	84	85	86	87	87	88	88
Czech Republic	PPS	21 700	22 000	22 400	23 800	25 300	25 600	26 900	27 900	29 100	30 200
	EA19=100	77	77	78	81	82	82	84	85	86	87
Slovenia	PPS	21 700	21 800	21 900	22 700	23 800	24 100	25 500	27 000	28 400	29 700
	EA19=100	77	76	76	77	77	78	80	82	84	86
Lithuania	PPS	17 200	18 600	19 600	20 800	21 700	22 000	23 500	24 900	26 300	27 700
	EA19=100	61	65	68	70	70	71	74	76	78	80
Estonia	PPS	18 500	19 600	20 200	21 300	22 000	22 500	23 600	24 800	26 000	27 100
	EA19=100	65	69	70	72	71	72	74	76	77	78
Slovakia	PPS	19 500	20 100	20 500	21 300	22 300	22 500	22 900	24 100	25 400	26 800
	EA19=100	69	71	72	72	72	72	72	73	76	78
Portugal	PPS	20 200	20 000	20 500	21 200	22 300	22 600	23 000	23 900	24 700	25 600
	EA19=100	72	70	72	72	72	72	72	73	73	74
Poland	PPS	17 000	17 800	17 900	18 600	19 900	19 900	20 900	22 300	23 500	24 800
	EA19=100	60	62	63	63	64	64	65	68	70	72
Hungary	PPS	17 200	17 500	18 000	18 800	19 800	19 500	20 300	21 700	22 900	24 000
	EA19=100	61	61	63	64	64	63	64	66	68	69
Latvia	PPS	14 900	16 100	16 700	17 500	18 600	18 800	20 000	21 500	22 800	24 000
	EA19=100	53	56	58	59	60	60	63	65	68	69
Greece	PPS	19 700	19 100	19 200	19 800	20 200	19 800	20 200	20 900	21 900	22 800
	EA19=100	70	67	67	67	65	64	63	64	65	66
Croatia	PPS	15 700	16 000	16 000	16 300	17 300	17 900	18 500	19 300	20 300	21 300
	EA19=100	55	56	56	55	56	57	58	59	60	62

Source: AMECO, CZSO, Eurostat. Calculations of the MoF.

Graph 3.5.1: GDP per Capita – Using Current Purchasing Power Parities

EA19=100



Source: AMECO, CZSO, Eurostat. Calculations of the MoF.

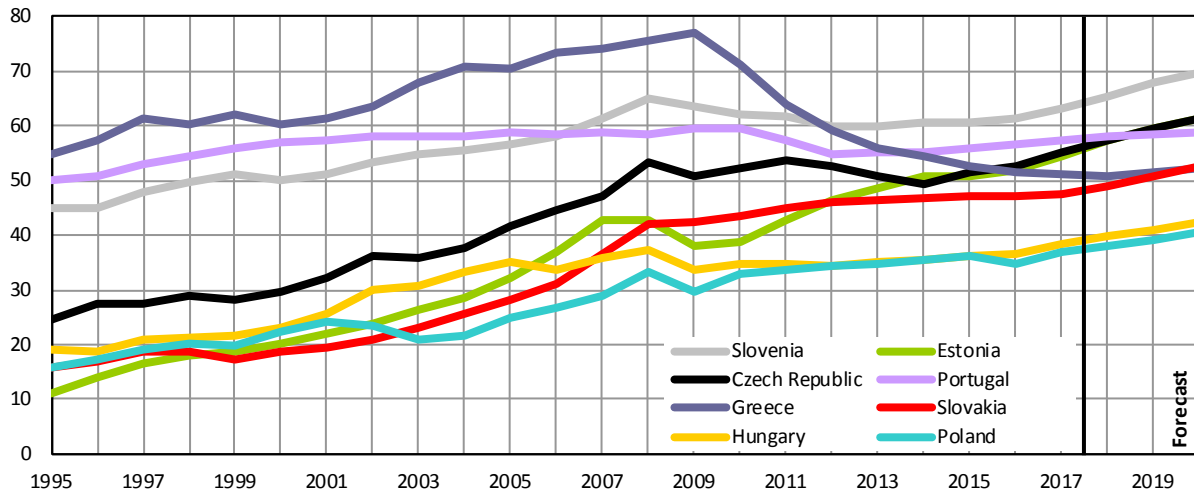
Table 3.5.2: GDP per Capita – Using Current Exchange Rates

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
									<i>Estimate</i>	<i>Forecast</i>	<i>Forecast</i>
Italy	<i>EUR</i>	27 300	26 700	26 500	26 700	27 200	27 900	28 500	29 000	29 700	30 500
	<i>EA19=100</i>	93	91	90	89	88	88	87	86	86	86
	<i>Comparative price level EA19=100</i>	97	97	98	98	98	96	96	95	95	94
Spain	<i>EUR</i>	22 900	22 200	22 000	22 300	23 300	24 100	25 100	25 900	26 800	27 600
	<i>EA19=100</i>	78	76	75	74	75	76	76	76	77	77
	<i>Comparative price level EA19=100</i>	92	90	89	88	88	88	88	88	88	88
Slovenia	<i>EUR</i>	18 000	17 500	17 600	18 200	18 800	19 500	20 800	22 200	23 500	24 800
	<i>EA19=100</i>	62	60	60	61	61	61	63	65	68	70
	<i>Comparative price level EA19=100</i>	80	78	78	79	79	79	79	80	80	81
Estonia	<i>EUR</i>	12 500	13 500	14 300	15 200	15 700	16 500	18 000	19 500	20 700	21 800
	<i>EA19=100</i>	43	46	49	51	51	52	55	57	60	61
	<i>Comparative price level EA19=100</i>	66	67	69	70	71	72	74	76	77	78
Czech Republic	<i>EUR</i>	15 600	15 400	15 000	14 900	16 000	16 700	18 100	19 500	20 600	21 900
	<i>EA19=100</i>	54	53	51	49	51	52	55	57	59	61
	<i>Comparative price level EA19=100</i>	70	68	65	61	63	64	65	68	69	70
Portugal	<i>EUR</i>	16 700	16 000	16 300	16 600	17 400	18 100	18 900	19 600	20 300	20 900
	<i>EA19=100</i>	57	55	55	55	56	57	57	58	58	59
	<i>Comparative price level EA19=100</i>	80	78	77	77	77	78	80	80	80	79
Greece	<i>EUR</i>	18 600	17 300	16 500	16 400	16 400	16 400	16 800	17 200	17 900	18 600
	<i>EA19=100</i>	64	59	56	55	53	51	51	51	52	52
	<i>Comparative price level EA19=100</i>	91	88	84	81	81	81	81	80	79	79
Slovakia	<i>EUR</i>	13 100	13 400	13 700	14 000	14 600	15 000	15 600	16 600	17 700	18 800
	<i>EA19=100</i>	45	46	46	47	47	47	47	49	51	53
	<i>Comparative price level EA19=100</i>	65	65	65	65	65	65	66	67	67	68
Lithuania	<i>EUR</i>	10 300	11 200	11 800	12 500	12 900	13 500	14 900	16 100	17 400	18 600
	<i>EA19=100</i>	35	38	40	41	41	43	45	48	50	52
	<i>Comparative price level EA19=100</i>	58	58	59	59	59	60	62	63	64	65
Latvia	<i>EUR</i>	9 800	10 800	11 300	11 800	12 300	12 800	13 900	15 300	16 300	17 400
	<i>EA19=100</i>	34	37	38	39	40	40	42	45	47	49
	<i>Comparative price level EA19=100</i>	64	66	66	66	66	67	67	69	70	70
Hungary	<i>EUR</i>	10 200	10 000	10 300	10 700	11 300	11 600	12 700	13 500	14 200	15 100
	<i>EA19=100</i>	35	34	35	36	36	36	39	40	41	42
	<i>Comparative price level EA19=100</i>	57	56	56	56	57	58	60	60	60	61
Poland	<i>EUR</i>	9 900	10 100	10 300	10 700	11 200	11 100	12 200	12 900	13 600	14 500
	<i>EA19=100</i>	34	35	35	36	36	35	37	38	39	41
	<i>Comparative price level EA19=100</i>	56	55	56	56	56	54	56	56	56	57
Croatia	<i>EUR</i>	10 500	10 300	10 300	10 300	10 600	11 200	11 900	12 500	13 100	13 700
	<i>EA19=100</i>	36	35	35	34	34	35	36	37	38	39
	<i>Comparative price level EA19=100</i>	65	63	62	62	61	61	62	63	63	63

Source: AMECO, CZSO, Eurostat. Calculations of the MoF.

Graph 3.5.2: GDP per Capita – Using Current Exchange Rates

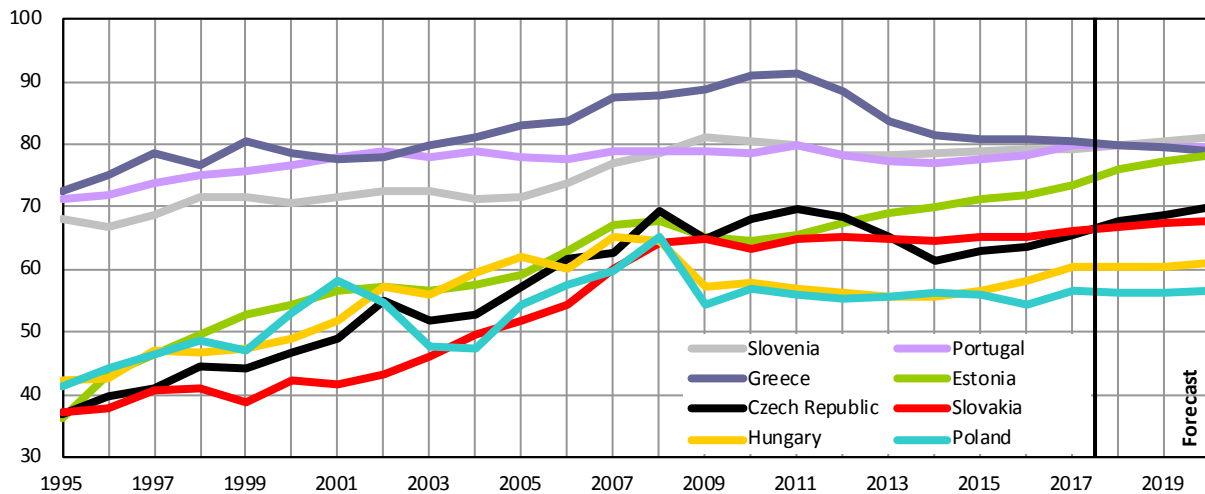
EA19=100



Source: AMECO, CZSO, Eurostat. Calculations of the MoF.

Graph 3.5.3: Comparative Price Level of GDP per Capita

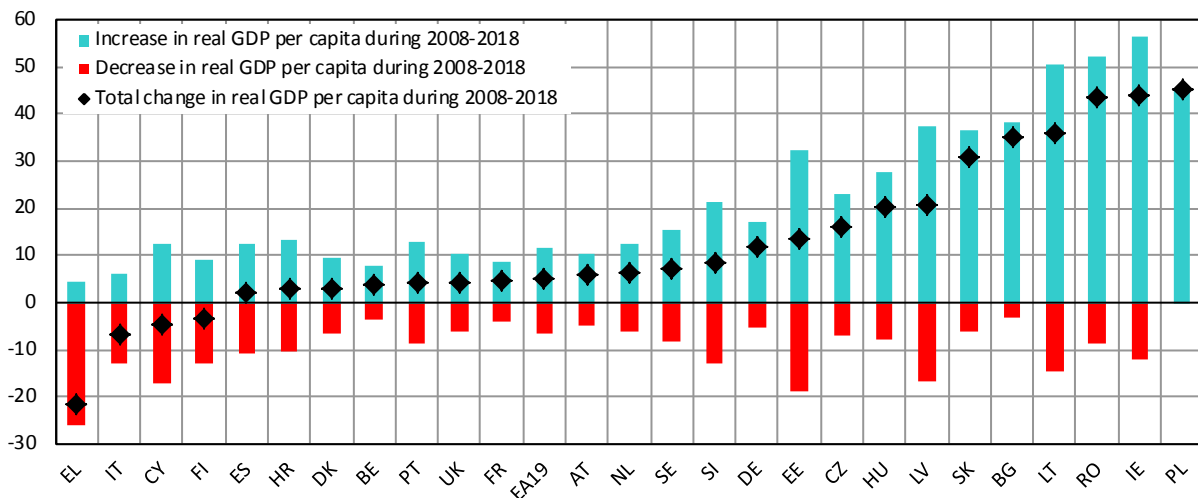
EA19=100



Source: AMECO, CZSO, Eurostat. Calculations of the MoF.

Graph 3.5.4: Change in Real GDP per Capita during 2008–2018

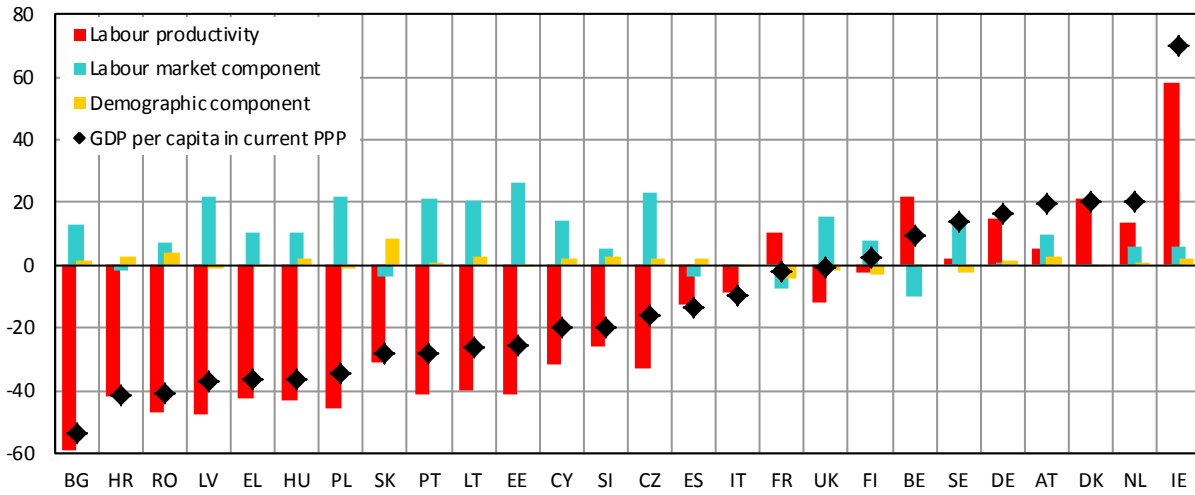
growth in %



Source: Eurostat. Calculations of the MoF.

Graph 3.5.5: Current PPP Adjusted GDP per Capita Level Relative to the EA19 Average in 2017

in percentage points

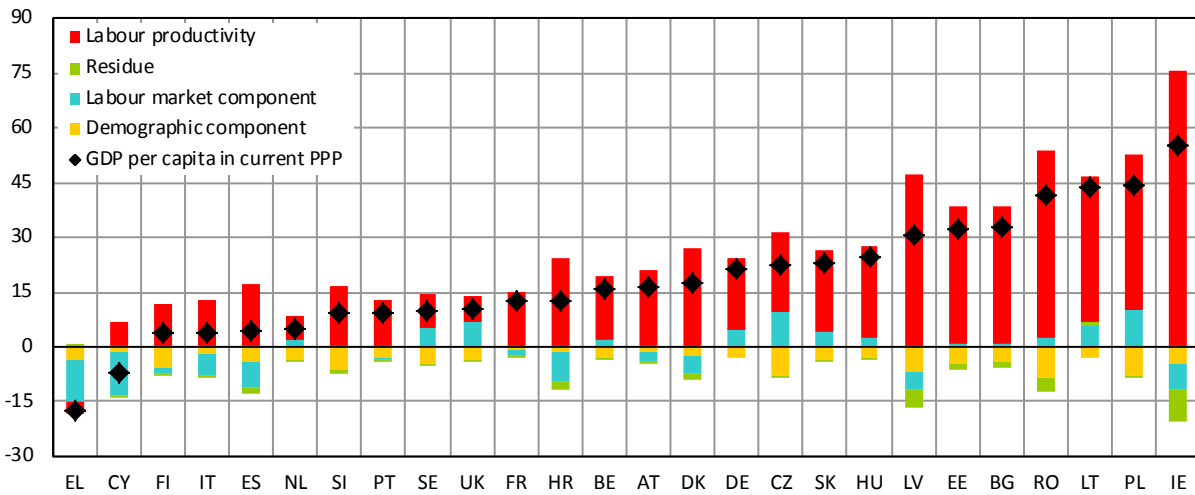


Note: The labour market component is defined as the ratio of total hours worked to working-age (15–64) population, the demographic component is the ratio of the working-age to total population.

Source: Eurostat. Calculations of the MoF.

Graph 3.5.6: Change in Current PPP Adjusted GDP per Capita during 2008–2017

growth in %



Source: Eurostat. Calculations of the MoF.

4 Monitoring of Other Institutions' Forecasts

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

Table 4.1: Summary of the Monitored Forecasts

		April 2019			April 2019
		min.	max.	average	MoF forecast
Gross domestic product (2019)	<i>growth in %, const.pr.</i>	2.1	3.1	2.7	2.4
Gross domestic product (2020)	<i>growth in %, const.pr.</i>	1.4	3.0	2.6	2.4
Average inflation rate (2019)	%	2.1	2.6	2.3	2.3
Average inflation rate (2020)	%	1.8	2.2	2.0	1.6
Average monthly wage (2019)	<i>growth in %</i>	6.1	8.6	7.1	7.3
Average monthly wage (2020)	<i>growth in %</i>	4.8	7.6	5.4	5.7
Current account / GDP (2019)	%	-0.9	1.2	0.5	0.2
Current account / GDP (2020)	%	0.1	1.6	0.6	0.2

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

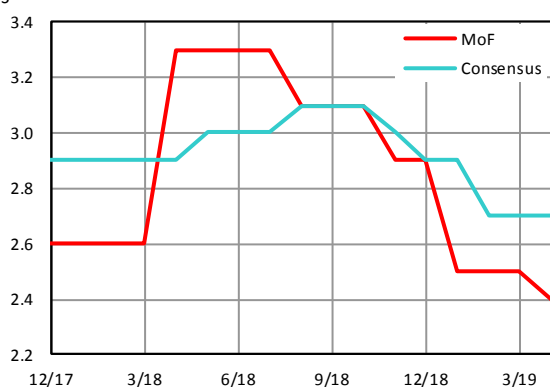
According to the average of estimates of the monitored institutions, real GDP should increase by 2.7% in 2019 and 2.6% in 2020. The price level growth should be 2.3% in 2019 and then it should slow down to 2.0% in 2020, in line with the CNB's inflation target. The dynamic growth of the average wage by 7.1% in 2019 should slightly slow down, and the average wage could only increase by 5.4% in 2020. The surplus on the current account of the balance payments should hover around 0.5% of GDP in 2019 and 2020.

Compared to the average of estimates of the monitored institutions, the Ministry of Finance expects only slightly

lower dynamics of economic activity, due to deteriorated developments of the external environment. Thus, GDP growth could be 2.4% in both 2019 and 2020. The average inflation rate should be 2.3% in 2019 and then slow down to 1.6% owing to weaker inflationary pressures (e.g. softening growth in unit labour costs) and anti-inflationary effects of administrative measures. The Ministry of Finance's estimate of growth dynamics of the average wage is in line with the average of estimates by the monitored institutions in both years. The Ministry of Finance expects that the current account of the balance of payments should be in a slight surplus in both years.

Graph 4.1: Forecasts for Real GDP Growth in 2019

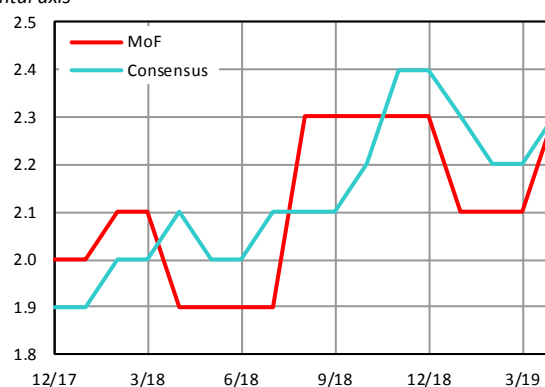
in %; the month, in which the monitoring was conducted on the horizontal axis



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

Graph 4.2: Forecasts for Average Inflation Rate in 2019

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



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

5 Looking back at the Year 2018

The macroeconomic framework of the 2018 State Budget has been prepared on the basis of data known as of 5 September 2017. Table 5.1 offers comparison with the 2018 data published by 3 April 2019. For most of the indicators, however, the data cannot be considered definitive as they will be revised further.

In retrospect, it can be said that the State Budget was based on a realistic macroeconomic framework. Real and nominal economic growth in 2018 corresponded almost exactly to the macroeconomic framework, with positive and negative forecast errors of individual expenditure components offsetting each other. Among indicators relevant to the budget performance of the general government sector, the development of the wage bill was much more favourable (especially due to a higher increase in employment). By contrast, real and nominal household consumption somewhat lagged behind the projected values.

At the time of preparation of the State Budget's macroeconomic framework, the economy was in a period of a very dynamic economic growth. At the beginning of September 2017, the second estimate of national accounts for Q2 2017 was published, and its results significantly exceeded expectations of the July 2017 Macroeconomic Forecast. The macroeconomic framework was therefore updated based on data known as of 5 September 2017.

According to then available data, real GDP increased by 2.5% QoQ in Q2 2017. Although that figure was later revised to 2.3%, it is still the highest growth since Q1 2006. In a year-on-year comparison, the reported growth was 3.4%, which was later revised to 3.7%. With year-on-year growth rates of 3.8% (4.2% after revision) and 5.2% (revised to 4.0%), household consumption and gross fixed capital formation, respectively, also recorded very good results.

Despite sound fundamentals of the Czech economy, the dynamics were considered one-off and unsustainable in the medium term. Therefore, the macroeconomic scenario was based on the hypothesis of a gradual slowdown in the growth of most of the basic indicators.

Assumptions of the framework more or less materialized. The exchange rate of the koruna vis-à-vis the euro strengthened in the expected range. Similarly, economic growth of main trading partners has reached projected figures, although it started to slow down in the second half of 2018. Long-term interest rates increased somewhat faster due to a tightening of the Czech National Bank's monetary policy. Only crude oil prices recorded a significant increase compared to the expected stagnation.

The greatest deviations from the macroeconomic framework, in a positive direction, recorded the labour market. In contrast to the forecast, a dynamic growth in

employment continued also in 2018, resulting in an increase of 1.4%. The unemployment rate, which was the lowest in the EU already at the beginning of 2016, reached an average of 2.2% in 2018 compared to the forecast of 2.8%.

The strong employment growth, a further pronounced increase in the minimum wage and in salaries in the general government sector, and a lasting shortage of suitably-skilled employees all contributed to the fact that the wage bill increased by 9.3% versus 8.0% envisaged in the macroeconomic framework of the State Budget. The growth rate of earnings was thus the highest since 1996.

The average inflation rate was slightly lower in 2018, reaching 2.1% against the forecast of 2.3%. The main cause was a break in the growth trend of food prices since the beginning of Q2 2018, which was a more significant factor than pro-inflationary effects of increases in wages and in the price of crude oil.

Having grown by 3.2%, final consumption expenditures of households lagged behind the estimate of the macroeconomic framework by 0.5 pp. Neither the significantly more favourable developments of employment, nor high consumer confidence and faster-than-expected wage growth offset a more cautious behaviour of households, where a surprising increase in the savings rate from 9.5% in 2017 to 10.8% in 2018 occurred.

The tight labour market situation and an accelerated absorption of European Structural and Investment Funds have boosted investment growth. This was due mainly to investments in residential and non-residential construction and investments in machinery, equipment, and information and communication technologies. However, expenditures on transport equipment and intellectual property products also increased significantly. A decrease in the comparative base of 2017 by 2.4 pp due to the subsequent revision of data was another factor. The resulting increase in investments by 10.5% thus exceeded the forecast by 6.4 pp, i.e. more than two-fold.

The extremely high unexpected growth in investments was significantly reflected in a deterioration of the contribution of the balance of foreign trade in goods and services to GDP growth, which reached -0.7 pp instead of the forecast of zero contribution.

Real GDP growth of 2.9% was ultimately marginally lower than forecasted, which is also true of nominal growth.

Table 5.1: Macroeconomic Framework of the 2018 State Budget – Comparison with Actual Data

		2018 State Budget (September 2017)				Outcome (April 2019)				Difference (outcome - forecast)			
		2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
		<i>Forecast</i>				<i>Prelim.</i>							
Gross domestic product	<i>bill. CZK</i>	4 596	4 773	5 040	5 311	4 596	4 768	5 047	5 304	0	-5	7	-7
Gross domestic product	<i>growth in %, curr.pr.</i>	6.5	3.9	5.6	5.4	6.5	3.7	5.9	5.1	0.0	-0.2	0.3	-0.3
Gross domestic product	<i>growth in %, const.pr.</i>	5.3	2.6	4.1	3.1	5.3	2.5	4.4	2.9	0.0	-0.1	0.3	-0.2
Consumption of households	<i>growth in %, const.pr.</i>	3.7	3.6	3.6	3.7	3.7	3.6	4.3	3.2	0.0	0.0	0.7	-0.5
Consumption of government	<i>growth in %, const.pr.</i>	1.9	2.0	1.9	1.7	1.9	2.7	1.3	3.7	0.0	0.7	-0.6	2.0
Gross fixed capital formation	<i>growth in %, const.pr.</i>	10.2	-2.3	6.1	4.1	10.2	-3.1	3.7	10.5	0.0	-0.8	-2.4	6.4
Contr. of net exports to GDP growth	<i>p.p., const.pr.</i>	-0.2	1.2	0.8	0.0	-0.2	1.4	1.1	-0.7	0.0	0.2	0.3	-0.7
GDP deflator	<i>growth in %</i>	1.2	1.2	1.4	2.2	1.2	1.3	1.4	2.1	0.0	0.1	0.0	-0.1
Average inflation rate	<i>%</i>	0.3	0.7	2.3	2.3	0.3	0.7	2.5	2.1	-	-	0.2	-0.2
Employment (LFS)	<i>growth in %</i>	1.4	1.9	1.5	0.5	1.4	1.9	1.6	1.4	-	-	0.1	0.9
Unemployment rate (LFS)	<i>average in %</i>	5.1	4.0	3.0	2.8	5.1	4.0	2.9	2.2	-	-	-0.1	-0.6
Wage bill (domestic concept)	<i>growth in %, curr.pr.</i>	4.8	5.8	7.3	8.0	4.8	5.7	8.3	9.3	0.0	-0.1	1.0	1.3
Current account balance	<i>% of GDP</i>	0.2	1.1	0.5	0.4	0.2	1.6	1.7	0.3	0.0	0.5	1.2	-0.1
<u>Assumptions:</u>													
Exchange rate CZK/EUR		27.3	27.0	26.4	25.6	27.3	27.0	26.3	25.6	-	-	-0.1	0.0
Long-term interest rates	<i>% p.a.</i>	0.6	0.4	0.9	1.5	0.6	0.4	1.0	2.0	-	-	0.1	0.5
Crude oil Brent	<i>USD/barrel</i>	52	44	49	50	52	44	54	71	-	-	5	21
GDP of the euro area	<i>growth in %, const.pr.</i>	2.0	1.8	2.0	1.8	2.1	2.0	2.4	1.8	0.1	0.2	0.4	0.0

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

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