Ministry of Finance
of the Czech Republic

Macroeconomic Forecast
of the Czech Republic

November 2018

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Ministry of Finance of the Czech Republic
Economic Policy Department
Letenska 15, 118 10 Prague 1

Tel.: +420 257 041 111
E-mail: macroeconomic.forecast@mfcr.cz

ISSN 2533-5588 (on-line)

Issued quarterly, free distribution

Electronic archive:
http://www.mfcr.cz/macroforecast

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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 2019) and for certain indicators an outlook for another 2 years (i.e. until 2021). 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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Any comments or suggestions that would help us improve the quality of our publication and closer satisfy the needs of its users are welcome. Please send any comments to the following email address:

macroeconomic.forecast@mfcr.cz

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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
ESI .... Economic Sentiment Indicator
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
VAT .... value added tax

Basic Terms

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

Symbols Used in Tables

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

Cut-off Date for Data Sources

The forecast was made on the basis of data known as of **10 October 2018**.

Notes

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

Data from the previous forecast (July 2018) are indicated by italics. Data relating to the years 2020 and 2021 are an extrapolation scenario that indicates only the direction of possible developments, and as such are not commented upon in the following text.

Introduction and Summary of the Forecast

The outlook for the global economic growth is weaker than at the time of publication of the July Macroeconomic Forecast. Increasing tensions in global trade relations, monetary policy tightening in the United States of America and in many developing countries or mounting political risks affect economic sentiment and could undermine the strong economic growth and its sustainability in the medium term. Confidence indicators, albeit still high, are declining slightly. An unsettling fact is a slowdown in the growth rate of global trade and investment. Moreover, the crude oil price has reached the highest level in the past four years.

In 2017, economic growth in both the euro area and the European Union was the strongest in the past 10 years. From the beginning of 2018, however, it has been slowing down, though the fundamental factors remain favourable. Due to a strong link to economies of the European Union, a qualitatively similar scenario can be expected in the Czech Republic. A specific risk for the European Union is the fact that despite the approaching date of the United Kingdom's withdrawal from the EU, new conditions of mutual relations are neither clear nor predictable.

In line with our expectations the quarter-on-quarter **real gross domestic product growth** (adjusted for seasonal and calendar effects) slightly **accelerated to 0.7%** in Q2 2018. By contrast, the economic growth (without adjustment) slowed down to 2.7% in the year-on-year comparison due to a very high base of Q2 2017.

In year-on-year terms, the slowdown applied to all segments of domestic use. **Investment in fixed capital** recorded the most dynamic growth of 8.8% and the greatest contribution to the economic growth. Double-digit growth achieved not only construction investment including investment in housing, but also purchases of transport equipment.

From the sectoral point of view, the acceleration of investment activity in the general government sector was important, where the year-on-year increase by more than one fifth was due to a higher involvement of the European Structural and Investment Funds. Private investment also showed high dynamics exceeding 6%.

In comparison to the last forecast, **consumption of households** slowed down to 3.8%. In the conditions of high dynamics of the wage bill growth, this reflected not only a re-acceleration of consumer inflation, but also an unexpected increase in the savings rate by 0.5 pp. The general government consumption increased by 2.9%, driven mostly by higher employment.

The contribution of **foreign trade** was slightly negative in Q2 2018; it took 0.2 pp off the economic growth. This reflected not only an increase in imports, which was mainly due to high import intensity of investment, but also – on the export side – a slowdown in the growth of export markets.

For the remainder of 2018 and for 2019, we expect the dynamics of growth in economic output to be roughly at the level of Q2 2018.

Therefore, the **forecast for real GDP growth in 2018 is slightly revised down** from 3.2% **to 3.0%**. Growth should mainly be driven by investment, which should be stimulated not only by money from the European Structural and Investment Funds, by the need of the private sector to innovate technological equipment while coping with labour market imbalances, but also by decreasing relative cost of capital to the cost of labour at low real interest rates.

The forecast **for 2019** is also slightly reduced, from 3.1% **to 2.9%**. The most important growth factor should be household consumption, which will reflect the still robust wage dynamics at an extremely low unemployment rate and a sharp increase in pensions.

Since the beginning of 2017, the year-on-year growth in **consumer prices** hovers, with a few exceptions, in the upper half of the tolerance band of the Czech National Bank's 2% inflation target. Given the inflationary effects of wage and salary developments, positive output gap and an increase in oil prices in CZK, it can be expected to stay at this level to mid-2019. The forecast for the average **inflation rate** remains unchanged; we expect it to be 2.2% in 2018 and 2.3% in 2019.

High growth in employment, which has steadily been above 1% since the end of 2014, continues despite the limits of the **labour market**. Lack of employees is a primary barrier to further extensive growth in production, which motivates companies to invest with a view to raise labour productivity. The room for unemployment to decline further is very limited. Therefore, the forecast for the **unemployment rate** remains identical to the July forecast – 2.3% for both years.

As regards the **current account of the balance of payments**, the positive balance of goods has gradually been decreasing as a result of higher domestic demand for imports influenced by the increase in consumption and investment. This factor is being accompanied by the impact of the rising oil prices and uncertainties in world trade. That is, however, partly offset by an improving balance of services. Better-than-expected developments on the current account in Q2 2018 led to an improved forecast of its balance. The surplus could reach 0.4% of GDP in 2018 and 2019.

The growth of the Czech economy also affects the **budget performance of the general government sector**, which should end up in a **surplus of 1.6% of GDP in 2018**. In 2019 we expect a surplus of around 1% of GDP, which will result from moderating pace of revenues and stronger dynamics of expenditures, especially in the social area. As for the general government sector debt, we expect its relative level to decrease further to 31.9% of GDP at the end of 2019.

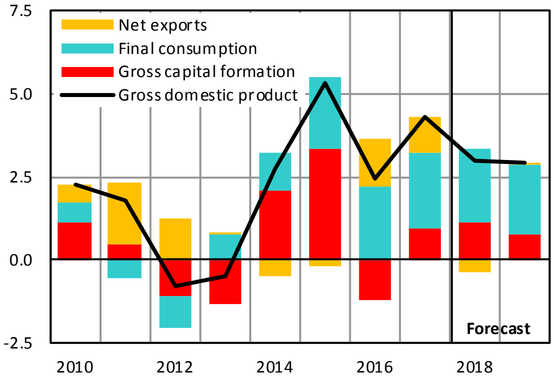
Table: Main Macroeconomic Indicators

		2013	2014	2015	2016	2017	2018	2019	2018	2019
							Current forecast		*Previous forecast*	
Gross domestic product	*bill. CZK*	**4 098**	**4 314**	**4 596**	**4 768**	**5 045**	**5 296**	**5 568**	5 300	5 589
Gross domestic product	*real growth in %*	**-0.5**	**2.7**	**5.3**	**2.5**	**4.3**	**3.0**	**2.9**	3.2	3.1
Consumption of households	*real growth in %*	**0.5**	**1.8**	**3.7**	**3.6**	**4.3**	**3.6**	**3.6**	4.3	3.9
Consumption of government	*real growth in %*	**2.5**	**1.1**	**1.9**	**2.7**	**1.3**	**2.5**	**2.1**	2.1	2.0
Gross fixed capital formation	*real growth in %*	**-2.5**	**3.9**	**10.2**	**-3.1**	**3.3**	**7.8**	**3.2**	7.5	3.2
Net exports	*contr. to GDP growth, pp*	**0.1**	**-0.5**	**-0.2**	**1.4**	**1.1**	**-0.4**	**0.0**	-0.7	0.1
Change in inventories	*contr. to GDP growth, pp*	**-0.7**	**1.1**	**0.8**	**-0.4**	**0.1**	**-0.8**	**0.0**	-0.4	0.0
GDP deflator	*growth in %*	**1.4**	**2.5**	**1.2**	**1.3**	**1.5**	**1.9**	**2.2**	1.8	2.3
Average inflation rate	*%*	**1.4**	**0.4**	**0.3**	**0.7**	**2.5**	**2.2**	**2.3**	2.2	2.3
Employment *(LFS)*	*growth in %*	**1.0**	**0.8**	**1.4**	**1.9**	**1.6**	**1.3**	**0.2**	1.3	0.2
Unemployment rate *(LFS)*	*average in %*	**7.0**	**6.1**	**5.1**	**4.0**	**2.9**	**2.3**	**2.3**	2.3	2.3
Wage bill *(domestic concept)*	*growth in %*	**0.5**	**3.6**	**4.8**	**5.7**	**8.2**	**9.5**	**8.4**	9.3	8.3
Current account balance	*% of GDP*	**-0.5**	**0.2**	**0.2**	**1.6**	**1.1**	**0.4**	**0.4**	-0.3	-0.2
General government balance	*% of GDP*	**-1.2**	**-2.1**	**-0.6**	**0.7**	**1.5**	**1.6**	**1.0**	1.6	.
Assumptions:										
Exchange rate CZK/EUR		**26.0**	**27.5**	**27.3**	**27.0**	**26.3**	**25.5**	**24.9**	25.6	25.2
Long-term interest rates	*% p.a.*	**2.2**	**1.4**	**0.6**	**0.4**	**1.0**	**2.1**	**2.6**	2.1	2.5
Crude oil Brent	*USD/barrel*	**109**	**99**	**52**	**44**	**54**	**74**	**77**	73	72
GDP in Eurozone	*real growth in %*	**-0.2**	**1.4**	**2.1**	**1.9**	**2.4**	**2.0**	**1.7**	2.1	1.8

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

Domestic demand should be the main driver of growth

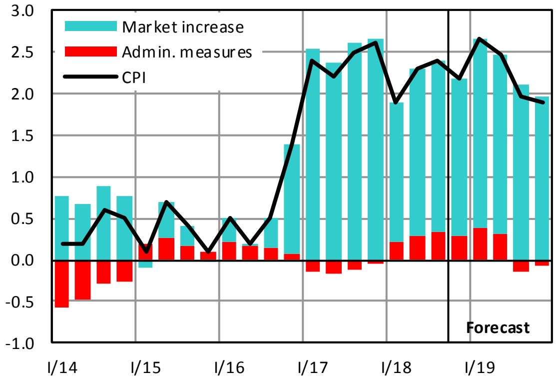
YoY growth rate of real GDP in %, contributions of individual expenditure components in percentage points



Source: CZSO. Calculations of the MoF.

Inflation should stay close to the 2% target of the CNB

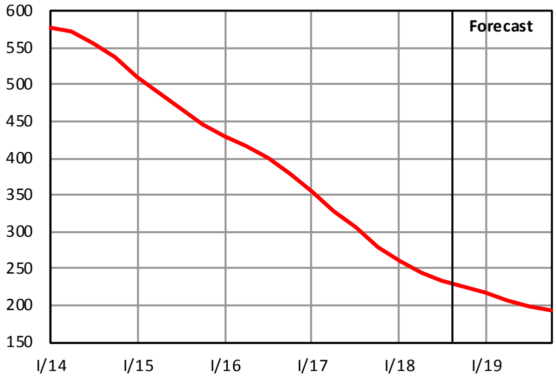
decomposition of YoY growth of CPI, contributions in pp



Source: CZSO. Calculations of the MoF.

Unemployment should continue to decline further

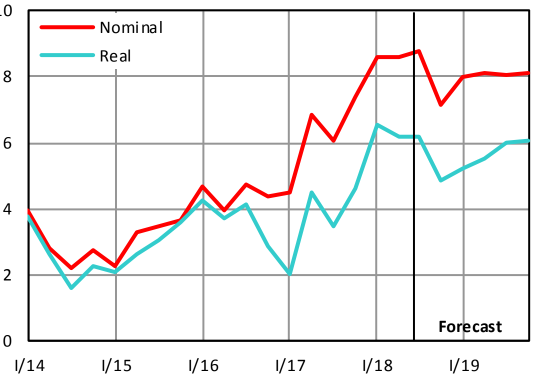
registered unemployment, in thous. of persons, seasonally adjusted



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

Dynamic growth of wages should continue

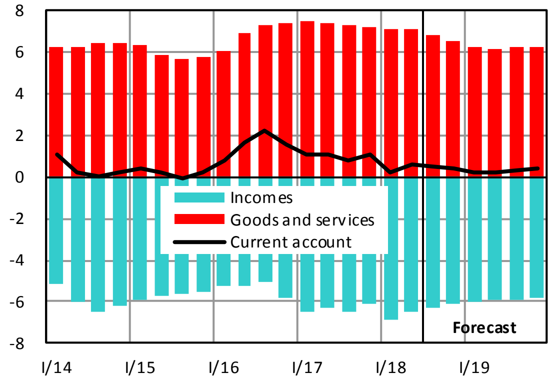
average gross monthly wage, YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

Current account should be in a moderate surplus

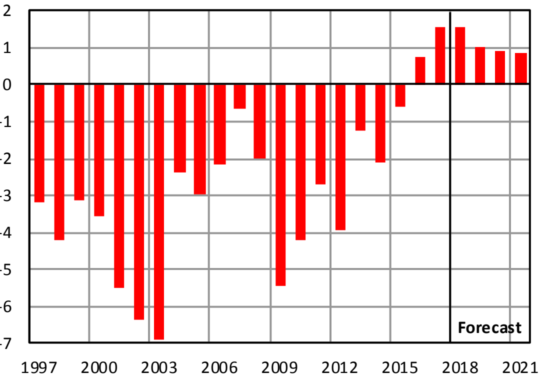
in % of GDP (yearly moving sums)



Source: CNB, CZSO. Calculations of the MoF.

Balance of the general government should stay positive

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.**

Currently, the main negative risk for the strongly export oriented Czech economy is the future **relationship between the United Kingdom and the EU**, especially in the area of free movement of goods and services. In the negotiations on the conditions under which the United Kingdom will leave the EU at the end of March 2019, an agreement has not yet been reached over some contentious issues (e.g. the regime on the Irish border). The risk that no agreement will have been reached before that date or that the agreement will not have been approved thus increases significantly. Nevertheless, we still expect that such an agreement will eventually be found and approved that will minimize the overall effects of the United Kingdom's withdrawal from the EU.

The tendency of **protectionism** to increase, which manifests itself mainly in the rise of tensions in mutual trade relations between the United States of America and China, is a significant external risk. It is to be expected that the increase in existing import duties or their imposition on new commodities will, 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. Higher uncertainty can then lead to postponement of some investment decisions. The impact of higher tariffs on the prices of imported goods and the purchasing power of consumers should also not be overlooked. However, given the high complexity of international supply chains, it cannot be excluded that import tariffs will have a number of unintended consequences, e.g. shifting production to other countries. Although the Czech Republic predominantly trades with other EU countries, indirect exposure to some non-EU countries can potentially be substantial, which makes a credible quantification of the effects of higher tariffs on selected types of goods (in mutual trade between the US and China, or the US and the EU) difficult.

Indirectly, the Czech economy could also be adversely influenced by an escalation of problems of the Italian banking sector as well as by geopolitical factors (e.g. by negotiations between the EU and Italy about the latter's budget). Instability of some emerging economies (Turkey, Argentina, Brazil) or the increase in volatility and falls in equity markets further add to the uncertainty.

The Czech economy shows 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 of the risks listed here materialized in the forecast horizon. In business surveys, more and more companies are pointing to the shortage of employees as a barrier to increasing their production. The key factor in the medium and longer terms will thus be the increase in **labour productivity**, considering the current labour market situation and anticipated demographic developments. In the short term, labour market imbalances create a **strong pressure on wage growth**, which leads to an increase in unit labour costs. This could adversely affect competitiveness of some companies if this effect persisted. On the other hand, however, this factor greatly supports the growth of households' disposable income and of investment increasing labour productivity, while creating an incentive to focus more on the production of goods and services with higher value added.

Another source of uncertainty about the future development of consumption of households and economic growth is a potential further **increase in minimum and guaranteed wages**. In this respect, we assume that with the effect from 1 January 2019, the minimum wage will be increased by CZK 1,000. In the case of **investment**, successful utilisation of EU funds from the 2014–2020 programming period will be a crucial aspect. In the longer term, the gap due to the discontinuation of the United Kingdom's payment to the EU budget will be significant, as well as the new allocation associated with the higher relative development level of the regions of the Czech Republic and a possible redirection of funds in the EU budget to other priorities.

The cyclical development of the economy in connection with low interest rates leads to an increased dynamics of mortgage loans. Together with factors limiting the supply of residential real estate (some of which are specific to Prague), this development has contributed to a significant growth in asking prices of flats. Continued **rapid growth in housing loans and property prices** poses macroeconomic risks as some households might not be able to repay their loans in the case of deterioration in economic situation or an increase in market rates, which would also have an impact on financial stability. The dynamics of housing loans, however, has been moderating slightly approximately since mid-2017 due to interest rate increases, tightening of credit conditions and the high level of housing prices. The CNB's regulatory recommendation, effective since October, should significantly affect the mortgage loans market. Housing construction data suggest that the number of completed dwellings should continue to grow quite dynamically in the near future. However, taking into account the developments of the number of dwellings started, the growth in the supply of residential estate should start slowing down in 2019.

1 Forecast Assumptions

1.1 External Environment

In Q2 2018, the growth rate of the **US economy** accelerated significantly, with GDP rising by 1.0% QoQ (*versus 0.8%*). The result was mainly due to domestic demand. The main growth driver was household consumption expenditure, reflecting an already tight labour market situation and the tax reform approved in December 2017. The main contributors to the growth in gross fixed capital formation were investment in intellectual property products and machinery and equipment, whereas investment in real estate declined further. While imports dropped slightly, export growth was the highest since the end of 2013, in connection with the anticipated introduction of tariffs between the USA and China at the beginning of July. That factor also led to a negative contribution of change in inventories.

With regard to the rising economic activity, strong creation of new jobs, very low unemployment rate and robust growth in investment and household consumption, the Fed increased the interest rates again in its September meeting, to 2.00–2.25%. At the same time, it mentioned that by the end of 2018 it plans to raise the rates once, and three times in 2019. The Fed continues to sell its assets, currently worth USD 50 billion a month. In mid-2017, the inflation rate started to grow again slowly and in August 2018 it was at 2.7%. However, the Fed expects the inflation rate to stabilize around the 2% target in the medium term.

We assume that the fiscal stimulus will slightly boost the growth rate of the US economy in the short term. Therefore, household consumption will remain the main growth driver, supported by high consumer confidence and low unemployment rate. The unemployment rate dropped to 3.7% in September, which is the lowest value since 1969. Even though companies face a considerable shortage of employees, wage growth remains moderate. Lack of skilled workers, together with a reduction in the statutory corporate income tax rate from 35% to 21%, should then support further growth in investment. While the main US stock indices exceeded their historical highs over the past three months, a significant increase in stock prices (the Dow Jones was almost 20% higher YoY in September), an increase in volatility at the beginning of October and a relatively strong decline of (not only US) stock markets as of the forecast cut-off date raise questions about excessive investor optimism. In order to reduce the trade deficit through limiting imports of selected products and to protect the domestic industry, the USA imposed tariffs on steel and aluminium in March and June, and on selected Chinese goods in July and September. Imposition of further tariffs on Chinese goods is being considered; tariffs on cars have been waived for the time being. Many countries have already taken retaliatory measures. Leading indicators do not reflect the growing protectionism yet and remain high. We expect GDP to grow by 2.9% in 2018 (*versus 2.8%*), then decelerate slightly to 2.5% in 2019 (*versus 2.3%*) as monetary conditions tighten and effects of the fiscal stimulus wear off.

The **Chinese economy** still maintains a decent growth. The quarter-on-quarter GDP growth was 1.8% in Q2, and China thus remains the main driver of global economic growth. Services are becoming the dominant sector, while the importance of industry is further weakening. The centre of economic growth is also gradually shifting from investment and exports to household consumption. Although the year-on-year growth rate of retail sales has long been falling, it is still very high and exceeds 9%. Growth in investment is also slowing down as a result of 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.

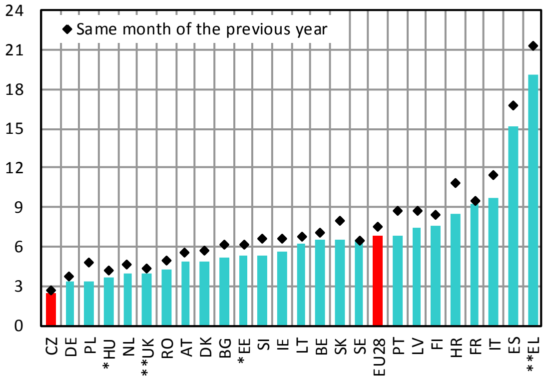
We expect the pace of economic growth to slow down very gradually. The development of leading indicators remains satisfactory, especially in the case of consumer confidence. The situation in financial markets is stabilized, although foreign exchange reserve have been declining slightly again since the turn of 2017 and 2018 and the stock market and the Chinese Yuan have seen a major correction related to the protectionist measures and cooling of mutual relations with the USA. In the short term, the most serious risk to economic growth is an escalation of the mentioned conflict. However, high public and private sector debt or the share of non-performing loans also cause major concerns as they could threaten macroeconomic stability in the case of a significant slowdown of the economy. From the long-term perspective, a substantial risk is mainly the unfavourable demographic development.

Economic growth in the **European Union** stagnated in Q2 when GDP grew by 0.4% QoQ in both the EU28 (*versus 0.5%*) and the EA19 (*in line with the estimate*). Also in a year-on-year comparison, GDP increased by 2.1% in the EU28 (*versus 2.3%*) as well as in the EA19 (*versus 2.2%*). Economic growth has been recorded by all the EU28 economies, though with considerable differences persisting among the individual countries. In a number of these economies a more significant recovery is still being hampered by structural problems, loss of competitiveness or high indebtedness of the government and private sectors.

In August, the price level growth slightly slowed down in the EA19 and the inflation rate reached 2.0%. The ECB has been keeping the main refinancing rate at 0.00% and the deposit rate at −0.40% since March 2016. At the same time, it assumes that key interest rates will remain at current or lower levels at least until summer 2019. Monthly purchases of assets worth EUR 30 billion were made until the end of September 2018, after which the volume was reduced to EUR 15 billion. If the medium-term inflation outlook (inflation below 2% but close to that level) is confirmed, net purchases will end at the end of 2018.

Graph 1.1.1: Unemployment rate in the EU in August 2018

in %, seasonally adjusted data, LFS



*Note: *) July 2018. **) June 2018.*
Source: Eurostat.

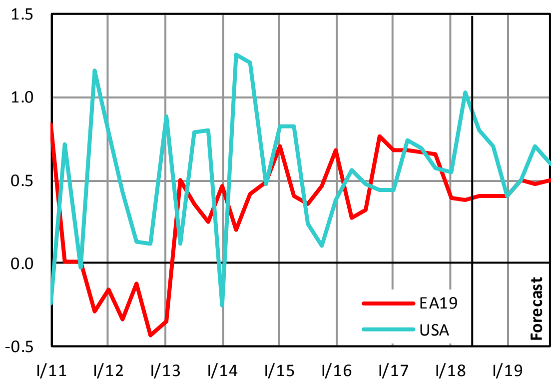
In the context of the growing economic activity, the labour market situation is further improving, albeit the unemployment rate is falling only marginally in a number of countries. In the EU28, it has been declining since mid-2013. It was 6.8% in August (a year-on-year decline of 0.7 pp), which equalled the lowest value from early 2008 in the history of measurement since 2000. However, enormous differences persist among individual economies. The worst situation is still in Greece, where the unemployment rate stood at 19.1% (data for June). In other countries of the EU28, high unemployment rate prevailed in Spain (15.2%), Italy (9.7%) and France (9.3%). By contrast, the lowest rates were seen again in the Czech Republic (2.5%), Germany and Poland (both 3.4%).

A number of leading indicators have reached their historical highs at the turn of 2017 and 2018. Despite their declining tendency, their levels are still relatively high from the long term perspective. The declining indicators of the business environment reflect fears of a possible trade war with the USA, lower growth of new orders and an increase in oil prices. Consumers then have more negative expectations of the future unemployment.

We expect economic growth to be driven by domestic demand in the coming years. The main driver will remain household consumption, which will be further boosted by low interest rates and favourable financial conditions in the short term, and good labour market situation and the related acceleration of the wage growth in the long term. The labour market situation in several countries is, however, very tight, as there is a considerable shortage of qualified workers. The labour market situation, coupled with the ECB's eased monetary policy and high capacity utilization, contributes to investment growth. Conversely, the uncertainty associated with the United Kingdom's decision to withdraw from the EU has a negative effect, because the future set-up of the EU-UK trade relationships has not yet been agreed. If the agreement is achieved, the United Kingdom should have access to the EU single market and remain in the customs union until the end of 2020. Introduction of tariffs by the USA on steel and aluminium has had only a marginal impact on exports, and for the time being the USA have not proceeded to sharply raise car tariffs. On the contrary, there have been trade negotiations between the EU and the USA concerning elimination of some tariffs and other trade barriers; the outcome is, however, uncertain. The economic growth in the Euro Area will also be probably hampered by persisting problems in the banking sector or high indebtedness of some economies. We expect economic growth in the EU to reach 2.1% (*versus 2.2%*) in 2018 and to slightly slow down to 1.9% (*versus 2.0%*) in 2019.

Graph 1.1.2: Growth of GDP in the EA19 and in the USA

QoQ growth rate, in%, seasonally and working day adjusted



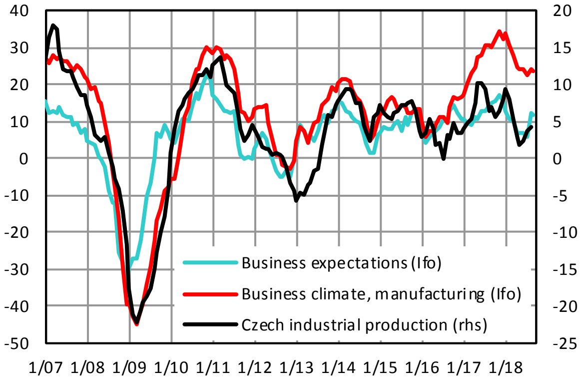
Source: Eurostat. Calculations of the MoF.

In Q2 2018, the quarter-on-quarter real GDP growth of **Germany** accelerated slightly to 0.5% (*in line with the estimate*). All components of domestic demand have positively contributed to this result, most importantly the change in inventories. Despite a moderate decline in the unemployment rate, household consumption expenditure slowed down, probably due to deterioration in consumer confidence in connection with global uncertainties related to the trade war. Slower growth in gross fixed capital formation was mainly due to a decrease in the dynamics of investment in machinery, equipment and in the construction industry. The balance of foreign trade weighed on economic performance as the growth rate of imports exceeded the growth of exports.

The German economy is close to full employment. In August, the unemployment rate was only 3.4% and employment reached the highest levels since the German reunification. Although shortage of employees has been increasingly evident in the labour market, wage growth remains moderate for the time being. A number of leading indicators, which reached their long-term highs at the turn of 2017 and 2018, are now undergoing correction. A drop in the Purchasing Managers' Index in manufacturing, the value of which was the lowest over the past two years in September, reflects mainly lower growth of new orders as a result of slowing global trade. Also the development of business confidence measured by the Ifo indicator reflects the deterioration of the economic outlook. The development of the consumer confidence index (GfK) remains satisfactory, though.

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.

Going forward, economic growth is expected to be driven by domestic demand. Household consumption expenditure will be supported mainly by wage growth in connection with the shortage of suitable workers. Next year, the planned tax cuts or increases in child allowances will also contribute to the growth in consumption. Due to relatively high capacity utilization, a more dynamic growth in business investment can be expected, which will also be supported by continuing good financial conditions. However, the deteriorating situation in global trade resulting from the tariff barriers that are being introduced or considered will keep weighing on business investments and exports. Another risk is the United Kingdom's withdrawal from the EU (German exports to the UK amounted to 3.5% of GDP in 2017). The GDP growth rate could slightly slow down to 2.0% (*versus 2.2%*) in 2018 and further to 1.9% (*versus 2.1%*) in the following year.

The performance of the **French** economy remained unconvincing in Q2, as GDP again increased only by 0.2% QoQ (*versus 0.3%*). Economic growth was hampered by foreign demand and, to a small extent, also by household consumption expenditure. As regards household consumption, however, there were a number of one-off factors, namely massive transport strikes or warm weather and associated low energy consumption. GDP growth was thus driven mainly by the contribution of the change in inventories and gross fixed capital formation, which reflected a growth in business investment.

We assume that the growth of the French economy will slightly weaken in the years to come. A number of leading indicators already point to some slowdown. Business and consumer confidence or the manufacturing and services Purchasing Managers' Indexes have been steadily dropping since the turn of 2017 and 2018, when they reached their long-term highs. The consumer confidence indicator was the lowest since April 2016 in September. The labour market situation has not improved much; in August the unemployment rate increased slightly to 9.3% (a year-on-year decline of only 0.2 pp). However, a reform of the Labour Code, which facilitated the recruitment and dismissal of employees, should contribute to increasing labour market flexibility. In the short term, household consumption will be affected negatively by the increase in the excise tax on fuel and tobacco; conversely, the reduction of employees' social security contributions will have a positive effect. Economic growth will be further supported by a gradual reduction of the statutory corporate income tax rate from 33.3% to 25% between 2018 and 2022 or adjustments to capital gains tax. However, long-term problems of the French economy, especially high and, moreover, still rising government and private debt impede better economic performance. We expect GDP to grow equally by 1.6% in 2018 (*versus 1.8%*) and 2019 (*versus 1.7%*).

The **Polish** economy continues to grow dynamically, rising by 1.0% QoQ (*versus 0.8%*) in Q2. The result was mainly due to foreign demand as the growth rate of imports lagged behind the growth of exports, whose dynamics were supported by strong demand of the German industry. The economic growth was, to a small extent, also due to household demand. The growth in consumption expenditure of households and the general government sector, however, was almost completely offset by a negative contribution of the change in inventories. Despite a strong increase in the general government sector investment through resources from the European Structural and Investment Funds, gross fixed capital formation showed only a modest growth. The cause could be the introduction of a new system limiting value-added tax evasion, or regulatory and political instability.

In years to come, the economy should be driven by household consumption, although its pace is likely to slow down gradually. In the short term, household consumption will be supported by low interest rates and high consumer confidence, which is the highest in the history of measurement since 2000. In the long term, it will be driven by wage growth supported by low unemployment rate (only 3.4% in August, a fall of 1.4 pp YoY) and record-high number of vacancies. With the start of new projects from the 2014–2020 programming period and the need for capital replacement, investments should also accelerate. Risks include worsened predictability of economic policy; a drastic reduction in the retirement age is a risk for the long-term sustainability of public finances and the labour market. We expect economic growth to reach 4.6% (*versus 4.5%*) in 2018 and to slow down to 3.5% (*versus 3.4%*) in 2019.

The **Slovak** economy rose by 1.1% QoQ (*versus 1.0%*) in Q2 2018, driven by foreign demand as the growth rate of exports outpaced the growth of imports. Except for the contribution of change in inventories, all components of domestic demand, especially gross fixed capital formation reflecting the use of financial resources from EU funds, contributed positively to the result. Conversely, higher growth in the price level contributed to a slowdown in the pace of growth of household consumption expenditure.

This year, Slovakia's GDP growth will be driven by investment and household expenditure, which will be supported by a high level of consumer confidence, low interest rates and, most importantly, continued sharp decline in the unemployment rate. In August, the unemployment rate was 6.6% (a year-on-year decline of 1.3 pp), which is the lowest value in the measurement history since 1998. However, a mismatch between the supply and demand in the labour market is already creating pressure on the growth of the average wage, which increased by 6.4% YoY in Q2. Last but not least, the increase in the minimum wage by 10.3% or a rise in salaries in public administration will contribute to the dynamics of wages in 2018. Gross fixed capital formation growth will then be supported, in particular, by continued investment in the automotive industry or government investment in infrastructure. The start of production in Volkswagen and Jaguar Land Rover car factories should significantly contribute to an acceleration of exports in 2018 and mainly in 2019. Economic activity will also be boosted by tax cuts for businesses and self-employed persons. A significant negative risk, however, is a moderating pace of global trade and a high share of the automotive industry in the economy. Conversely, faster wage growth in a tense labour market should have a positive effect. We expect GDP to grow by 4.0% (*versus 3.8%*) in 2018, then to accelerate slightly to 4.1% in the following year (*versus 3.9%*).

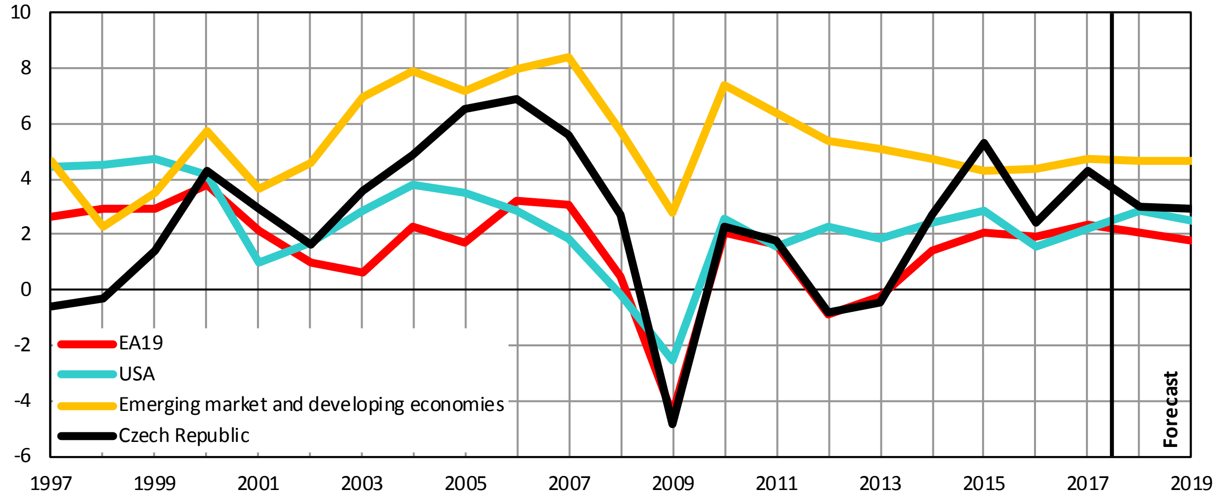
Table 1.1.1: Gross Domestic Product – yearly

YoY real growth rate, in %

	2010	2011	2012	2013	2014	2015	2016	2017	2018 *Forecast*	2019 *Forecast*
World	5.4	4.3	3.5	3.5	3.6	3.5	3.3	3.7	3.7	3.7
USA	2.6	1.6	2.2	1.8	2.5	2.9	1.6	2.2	2.9	2.5
China	10.6	9.5	7.9	7.8	7.3	6.9	6.7	6.9	6.6	6.5
EU28	2.1	1.8	-0.4	0.3	1.8	2.3	2.0	2.4	2.1	1.9
EA19	2.1	1.6	-0.9	-0.2	1.4	2.1	1.9	2.4	2.0	1.7
Germany	4.1	3.7	0.5	0.5	2.2	1.7	2.2	2.2	2.0	1.9
France	1.9	2.2	0.3	0.6	1.0	1.1	1.2	2.2	1.6	1.6
United Kingdom	1.7	1.6	1.4	2.0	2.9	2.3	1.8	1.7	1.1	1.1
Austria	1.8	2.9	0.7	0.0	0.7	1.1	2.0	2.6	2.9	2.0
Hungary	0.7	1.7	-1.6	2.1	4.2	3.5	2.3	4.1	4.6	3.1
Poland	3.6	5.0	1.6	1.4	3.3	3.8	3.0	4.6	4.6	3.5
Slovakia	5.0	2.8	1.7	1.5	2.8	3.9	3.3	3.4	4.0	4.1
Czech Republic	2.3	1.8	-0.8	-0.5	2.7	5.3	2.5	4.3	3.0	2.9

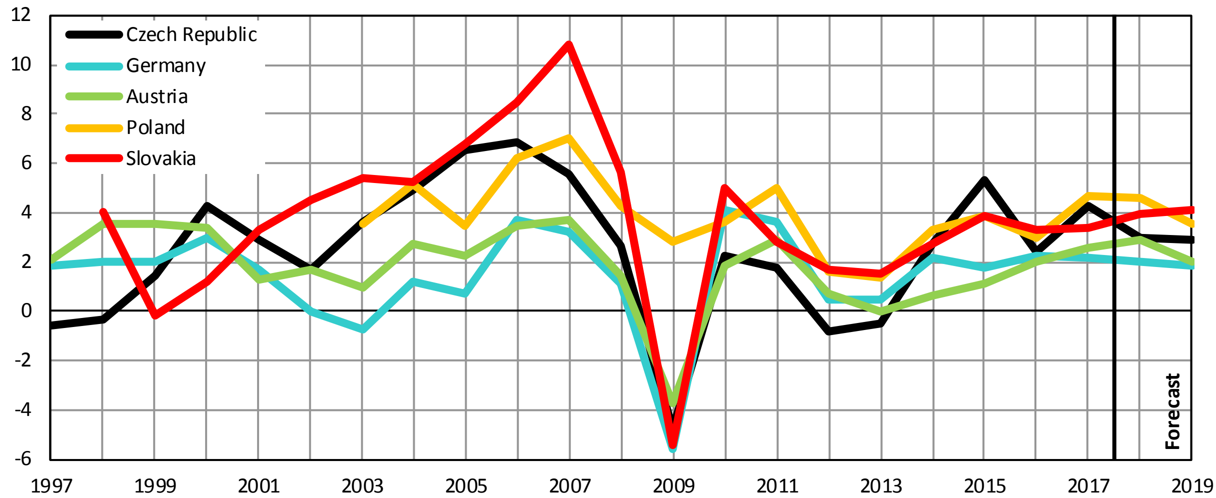
Source: CZSO, Eurostat, IMF, NBS China. Calculations of the MoF.

Graph 1.1.4: Gross Domestic Product
YoY real growth rate, in %



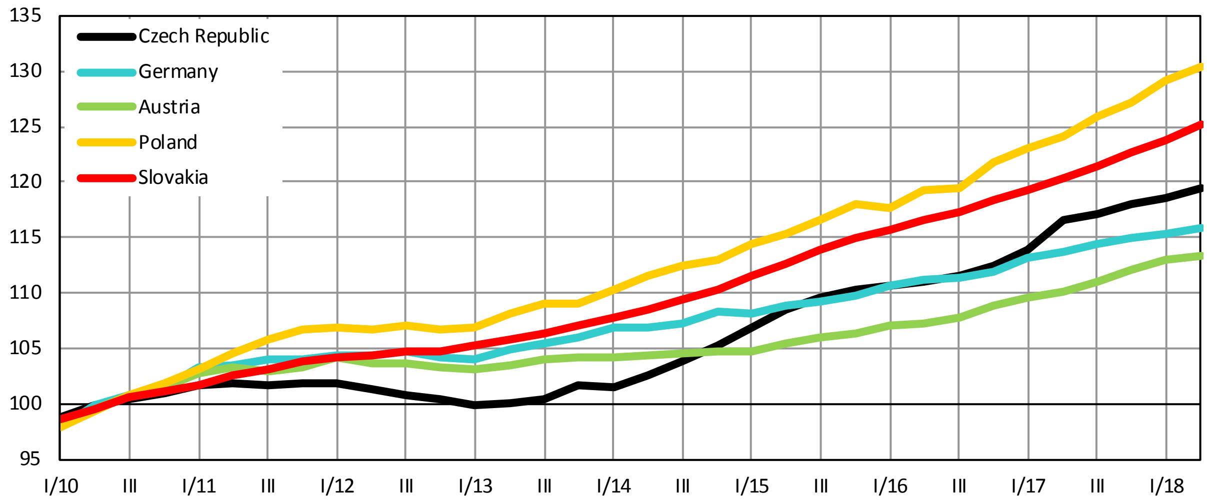
Note: Emerging market and developing economies comprising 154 countries (according to the IMF's classification)
Source: Eurostat, IMF. Calculations of the MoF.

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

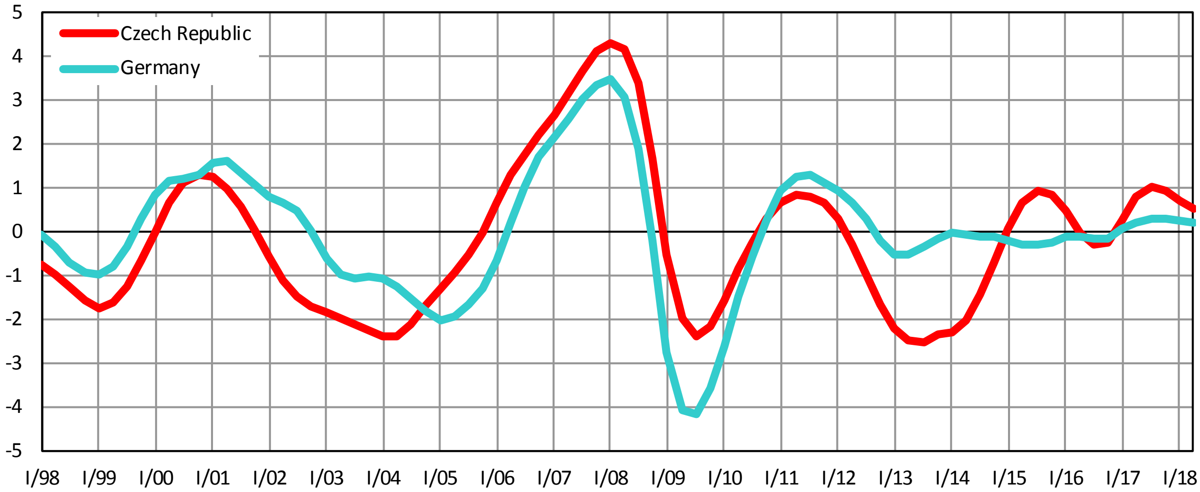
real growth rate, in %, seasonally adjusted data

		2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Estimate	*Forecast*
USA	*QoQ*	**0.4**	**0.7**	**0.7**	**0.6**	**0.5**	**1.0**	**0.8**	**0.7**
	YoY	1.9	2.1	2.3	2.5	2.6	2.9	3.0	3.1
China	*QoQ*	**1.5**	**1.9**	**1.8**	**1.6**	**1.4**	**1.8**	**1.6**	**1.5**
	YoY	6.9	6.9	6.8	6.8	6.8	6.7	6.6	6.4
EU28	*QoQ*	**0.7**	**0.6**	**0.6**	**0.6**	**0.4**	**0.4**	**0.5**	**0.4**
	YoY	2.2	2.5	2.8	2.6	2.3	2.1	2.0	1.8
EA19	*QoQ*	**0.7**	**0.7**	**0.7**	**0.7**	**0.4**	**0.4**	**0.4**	**0.4**
	YoY	2.0	2.5	2.8	2.7	2.4	2.1	1.8	1.6
Germany	*QoQ*	**1.1**	**0.5**	**0.6**	**0.5**	**0.4**	**0.5**	**0.5**	**0.4**
	YoY	2.1	2.2	2.7	2.8	2.0	1.9	1.9	1.7
France	*QoQ*	**0.8**	**0.6**	**0.7**	**0.7**	**0.2**	**0.2**	**0.3**	**0.3**
	YoY	1.4	2.3	2.7	2.8	2.2	1.7	1.3	0.9
United Kingdom	*QoQ*	**0.4**	**0.3**	**0.4**	**0.4**	**0.1**	**0.4**	**0.3**	**0.2**
	YoY	1.8	1.9	1.8	1.4	1.1	1.2	1.2	1.0
Austria	*QoQ*	**0.7**	**0.5**	**0.7**	**1.0**	**0.9**	**0.3**	**0.5**	**0.4**
	YoY	2.4	2.7	3.0	2.9	3.1	2.9	2.7	2.1
Hungary	*QoQ*	**1.4**	**1.1**	**1.1**	**1.3**	**1.2**	**1.0**	**0.8**	**0.7**
	YoY	4.1	4.0	4.4	5.0	4.8	4.7	4.4	3.8
Poland	*QoQ*	**1.0**	**0.9**	**1.4**	**1.0**	**1.6**	**1.0**	**0.9**	**0.8**
	YoY	4.6	4.2	5.5	4.4	5.0	5.0	4.5	4.3
Slovakia	*QoQ*	**0.8**	**0.9**	**0.9**	**0.9**	**1.0**	**1.1**	**1.1**	**0.9**
	YoY	3.1	3.3	3.5	3.6	3.8	3.9	4.1	4.1
Czech Republic	*QoQ*	**1.3**	**2.3**	**0.5**	**0.7**	**0.5**	**0.7**	**0.7**	**0.8**
	YoY	2.9	4.9	5.1	5.0	4.1	2.4	2.6	2.7

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

In Q3 2018, the average price of Brent crude oil reached USD 75.1/barrel (*versus USD 76/barrel*). It thus almost stagnated in quarter-on-quarter terms but increased by marked 44.1% YoY. At the end of September, the price exceeded USD 80/barrel.

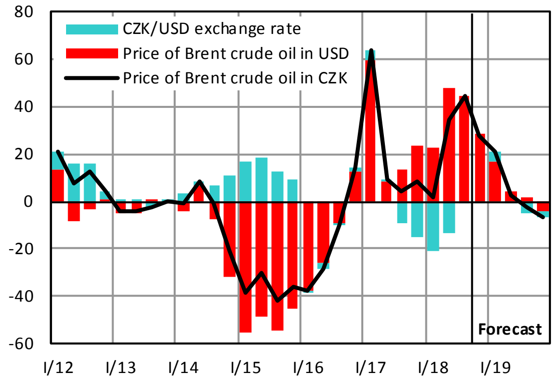
Global economic growth acts in the direction of higher crude oil prices. Moreover, following the withdrawal of the United States from the so-called nuclear agreement with Iran, there has been a decline in oil extraction in this country and exports from it. Oil production continued to fall in Venezuela. By contrast, oil extraction continues to grow in the United States. However, other countries, such as Russia, Saudi Arabia and Libya, also contributed to the increase in oil supply in the market. That was also facilitated by a June agreement of the Organization of the Petroleum Exporting Countries. Global inventories of extracted oil continued to be drawn down, although not to such a significant extent as in 2017. Almost an even balance of global production and consumption is expected in 2019.

Further projected developments in the Brent crude oil price reflect the declining futures prices curve. In 2018, the average price should reach USD 74/barrel (*versus USD 73*), and we expect it to be USD 77 (*versus USD 72*) in 2019. The increase in the forecast is due to a shift in the futures prices curve.

Compared to the previous forecast, the expected Brent oil CZK price in 2018 was revised up by less than the dollar price as we expect the koruna to be slightly stronger against the dollar (see Chapter 1.4.3). In 2018, the CZK price should increase by approximately 26% according to our assumptions, but it should increase only moderately in 2019 (see Graph 1.2.1).

Graph 1.2.1: Koruna Price of Brent Crude Oil

YoY change of the koruna price of Brent crude oil in %, contributions of the CZK/USD exchange rate and USD price of Brent crude oil in pp



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

Table 1.2.1: Prices of Selected Commodities – yearly

spot prices

		2010	2011	2012	2013	2014	2015	2016	2017	2018 *Forecast*	2019 *Forecast*
Crude oil Brent	*USD/barrel*	**79.6**	**111.3**	**111.5**	**108.6**	**99.0**	**52.4**	**43.6**	**54.2**	**74**	**77**
	growth in %	29.3	39.8	0.2	-2.6	-8.8	-47.1	-16.9	24.3	36.4	4.1
Crude oil Brent index *(in CZK)*	*2010=100*	**100.0**	**129.5**	**143.8**	**139.9**	**134.6**	**85.0**	**70.1**	**83.1**	**105**	**108**
	growth in %	31.3	29.5	11.0	-2.7	-3.8	-36.9	-17.4	18.5	26.0	2.7
Natural gas	*USD/MMBtu*	**8.3**	**10.5**	**11.5**	**11.8**	**10.1**	**7.3**	**4.6**	**5.6**	**.**	**.**
	growth in %	-4.9	26.9	9.1	2.7	-14.7	-27.8	-37.2	23.9	.	.
Natural gas index *(in CZK)*	*2010=100*	**100.0**	**117.9**	**142.2**	**145.9**	**131.7**	**113.0**	**70.6**	**83.4**	**.**	**.**
	growth in %	-6.2	17.9	20.6	2.6	-9.8	-14.2	-37.6	18.1	.	.

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

Table 1.2.2: Prices of Selected Commodities – quarterly

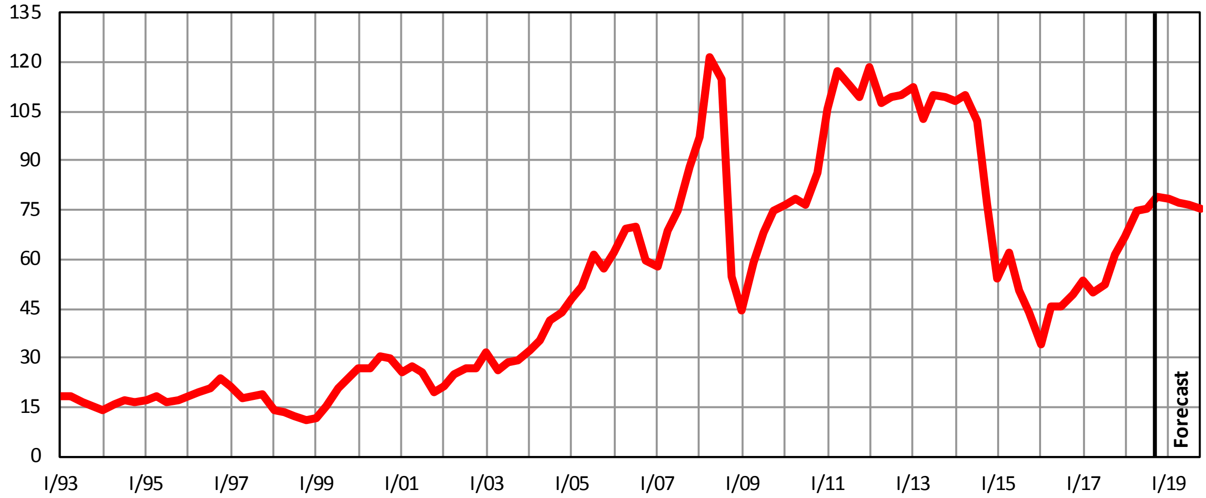
spot prices

		2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4 *Forecast*
Crude oil Brent	*USD/barrel*	**53.6**	**49.6**	**52.1**	**61.4**	**66.9**	**74.5**	**75.1**	**79**
	growth in %	58.6	8.8	13.8	25.1	24.8	50.2	44.1	28.8
Crude oil Brent index *(in CZK)*	*2010=100*	**89.6**	**78.7**	**76.1**	**88.1**	**91.0**	**105.6**	**109.7**	**113**
	growth in %	64.0	9.4	4.3	8.7	1.6	34.2	44.1	28.0
Natural gas	*USD/MMBtu*	**5.7**	**5.3**	**5.3**	**6.2**	**7.2**	**.**	**.**	**.**
	growth in %	17.8	30.1	21.3	26.9	25.6	.	.	.
Natural gas index *(in CZK)*	*2010=100*	**91.5**	**81.3**	**74.9**	**85.8**	**93.5**	**.**	**.**	**.**
	growth in %	21.8	30.9	11.2	10.4	2.2	.	.	.

Note: Data on prices of natural gas available only up to Q1 2018.
Source: CNB, U. S. Energy Information Administration, World Bank. Calculations of the MoF.

Graph 1.2.2: Dollar Prices of Oil

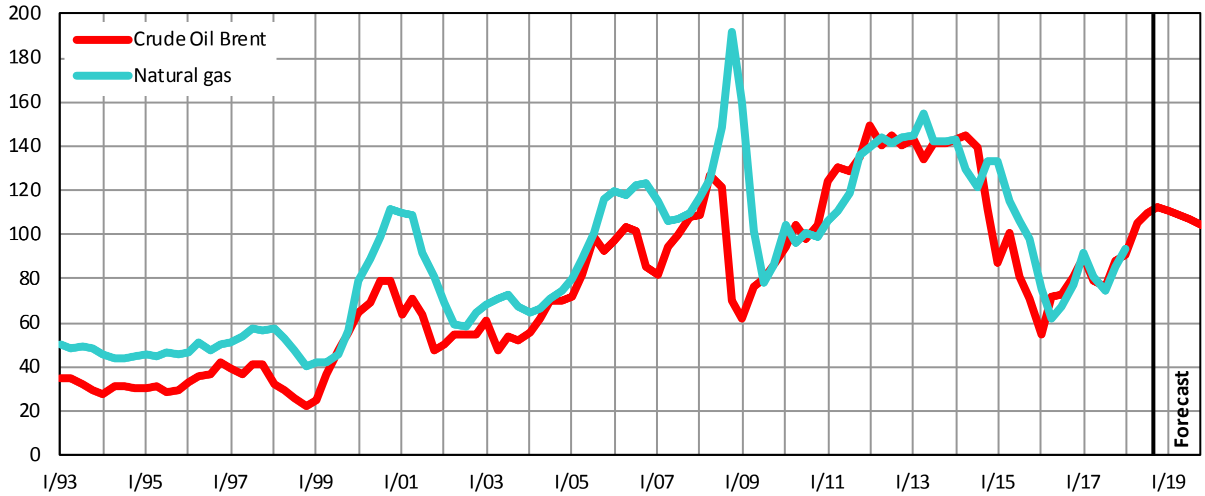
USD/barrel



Source: U. S. Energy Information Administration. Calculations of the MoF.

Graph 1.2.3: Koruna Indices of Prices of Selected Commodities

index 2010=100



Note: Data on prices of natural gas available only up to Q1 2018.

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

1.3 Fiscal Policy

The **general government sector** posted a record surplus of CZK 78.2 billion in **2017**, which amounts to 1.5% of GDP. All sub-sectors contributed positively to this result. After adjusting for the impact of the business cycle and one-off or other temporary measures, the surplus was 1% of GDP. Within the revision of data for 2017, the CZSO decreased the total balance by CZK 2.4 billion by adjusting both the revenue side (CZK +1.8 billion) and the expenditure side (CZK +4.2 billion).

Dynamic growth of the Czech economy **in 2018** is also reflected in the budget performance of the general government sector, which should end with a surplus of 1.6% of GDP (*versus 1.5% of GDP*). The reason for the improved forecast of the overall balance is above all the year-to-date income from tax revenues, including social security contributions. However, the development of revenues should be partly offset by higher spending. According to the forecast, spending will be influenced by the increase in final consumption expenditure, in particular compensation of employees and intermediate consumption. Expenditure on investment and transfer payments are expected to grow faster, too. This year's expected surplus (in accrual terms) is also supported by the year-to-date development of cash collection of the State budget and budgets of local governments as well as of health insurance companies. The markedly better year-on-year general government sector balance is also evident from national accounts data for the first half of this year. In terms of the structural balance, there should be a slight increase in the surplus by 0.1 pp to 1.1% of GDP.

The main factor of the surplus in overall and structural terms is the dynamic development of the revenue side of public budgets, especially tax revenues, including social security contributions. Their projected 8% growth is driven by both the growth of the economy as well as by the government's measures to improve tax collection and prevent tax evasion (electronic registration of sales and VAT control statement). In the year-on-year comparison, labour income should grow fastest, namely revenues from personal income tax (growth of 15.8%). In this respect, strong growth of wages in the economy, higher employment and increase in salaries in public administration should all be reflected positively. These factors together with more than 5% increase in the assessment base for payments for state insured persons also determine social security contributions. The forecast of their 9.7% growth is also supported by the year-to-date cash collection, where social security contributions grew by almost 10% YoY. With the expected gradual acceleration of the implementation of projects co-financed by EU funds, we expect both current and investment grants to increase in 2018.

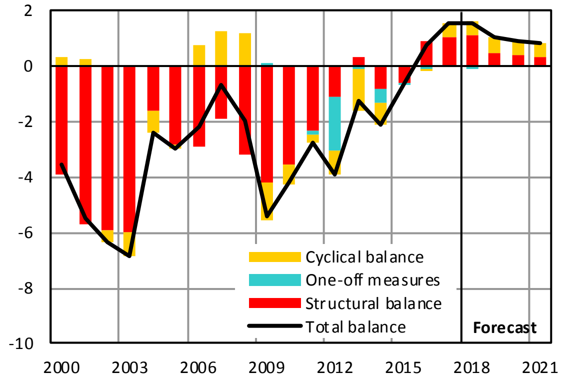
On the expenditure side, final consumption of the general government sector should increase by 7% compared to 2017. Similarly to the last year we expect the fastest growth in compensation of employees (11.5%). They reflect the increase in salary scales of virtually all employees in the general government sector, which occurred either in 2017 or from the beginning of January 2018. Intermediate consumption should grow at a rate exceeding 4 % due not only to higher real consumption (purchases in medical facilities included in the general government sector and purchases of goods and services co-financed by EU funds) but also to higher inflation rate. The growth rate of cash social benefits should double year-on-year to 5.5%. The development reflects both social measures already approved in 2017 as well as the macroeconomic environment. Due to a gradual rise in market interest rates, the forecast envisages a change in the trend of declining interest costs. Investment expenditure should gradually accelerate, as confirmed by quarterly national accounts data. Their year-on-year growth is estimated at 17.6%, financed both from the European Structural and Investment Funds and from national resources.

For 2019 we estimate the general government sector surplus to fall to 1.0% of GDP. Revenues should increase by 5.2%, driven primarily by personal income tax (12.4%) and social security contributions (7.4%) due to the high growth of the wage bill in the economy. The impact of discretionary revenue measures in 2019 will focus primarily on an amendment to the act on the registration of sales, with an impact of approximately CZK 3 billion. On the other hand, however, the transfer of some services and commodities to lower rates of value added tax should reduce revenues by about CZK 1.6 billion. Expenditures, on the other hand, should grow by 6.6% and should be driven mainly by the increase in pensions and government consumption. The structural balance should be reduced to 0.5% of GDP.

The general government debt reached CZK 1,749.5 billion at the end of 2017, which is 34.7% of GDP. The absolute government debt should remain almost unchanged at the end of 2018 compared to 2017, but nominal GDP growth of 5% should result in a year-on-year decline in relative indebtedness to 33.0% of GDP. In line with the sustained surplus of the general government sector in 2019, we expect the relative level of debt to decline further to 31.9% of GDP. The November Fiscal Outlook of the Czech Republic discusses fiscal policy in more detail.

Graph 1.3.1: Decomposition of the Government Balance

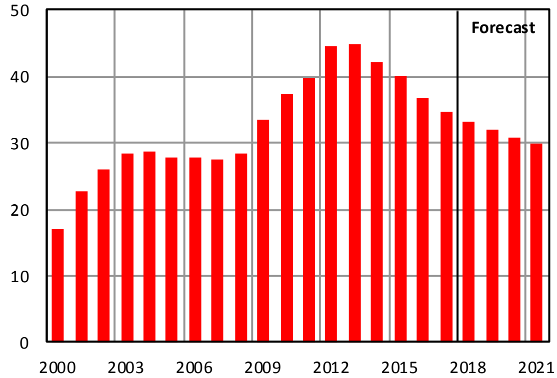
in % of GDP



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

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
								Forecast	*Forecast*	*Outlook*	*Outlook*
General government balance	*% GDP*	**-3.9**	**-1.2**	**-2.1**	**-0.6**	**0.7**	**1.5**	**1.6**	**1.0**	**0.9**	**0.8**
	bill. CZK	-160	-51	-91	-28	35	78	83	57	54	51
Cyclical balance	*% GDP*	**-0.9**	**-1.5**	**-0.8**	**0.1**	**-0.1**	**0.5**	**0.5**	**0.6**	**0.6**	**0.5**
Cyclically adjusted balance	*% GDP*	**-3.1**	**0.2**	**-1.3**	**-0.7**	**0.8**	**1.0**	**1.0**	**0.5**	**0.4**	**0.3**
One-off measures [1)]	*% GDP*	**-1.9**	**-0.1**	**-0.5**	**-0.1**	**-0.1**	**0.0**	**-0.1**	**0.0**	**0.0**	**0.0**
Structural balance	*% GDP*	**-1.1**	**0.4**	**-0.8**	**-0.6**	**0.9**	**1.0**	**1.1**	**0.5**	**0.4**	**0.3**
Fiscal effort [2)]	*pp*	1.2	1.5	-1.2	0.2	1.5	0.1	0.1	-0.6	-0.1	0.0
Interest expenditure	*% GDP*	**1.4**	**1.3**	**1.3**	**1.1**	**0.9**	**0.7**	**0.7**	**0.7**	**0.8**	**0.8**
Primary balance	*% GDP*	**-2.5**	**0.1**	**-0.8**	**0.5**	**1.6**	**2.3**	**2.3**	**1.8**	**1.7**	**1.6**
Cyclically adjusted primary balance	*% GDP*	**-1.6**	**1.6**	**0.0**	**0.4**	**1.7**	**1.8**	**1.7**	**1.2**	**1.1**	**1.1**
General government debt	*% GDP*	**44.5**	**44.9**	**42.2**	**40.0**	**36.8**	**34.7**	**33.0**	**31.9**	**30.9**	**30.0**
	bill. CZK	1 805	1 840	1 819	1 836	1 755	1 750	1 750	1 774	1 798	1 822
Change in debt-to-GDP ratio	*pp*	4.6	0.4	-2.7	-2.2	-3.1	-2.1	-1.6	-1.2	-0.9	-0.9

[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 Q3 2018, the CNB raised the **two-week repo rate** twice, in August by 0.25 pp and in September by the same amount. It was thus 1.50% at the end of Q3. By increasing the interest rates, the CNB reacted not only to the domestic inflationary pressures (dynamic increase in wages and salaries, strong growth in domestic demand in an environment of a positive output gap) but also to a weaker exchange rate of the koruna, which reflects the existing increase in interest rates only to a limited extent. The interest rates hikes were also motivated by the financial stability aspect although the main measure of the CNB in this regard is stricter recommendation for the provision of mortgage loans.

Thus, monetary conditions tightened further in the interest rate component. Given the assumed future path of monetary policy and the expected appreciation of the koruna (see below), monetary conditions should tighten in the forecast horizon not only in the interest rate but also in the exchange rate component.

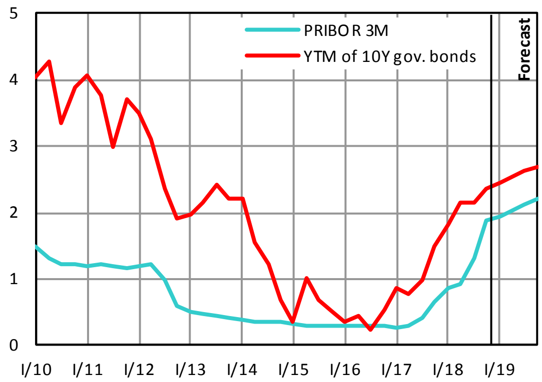
1.4.2 Financial Sector and Interest Rates

In line with the development of monetary-policy rates of the CNB, the **three-month PRIBOR** rate rose to 1.3% (*versus 1.1%*) in Q3 2018. We expect the trend of rising short-term rates to continue, with the PRIBOR rate averaging 1.2% (*versus 1.0%*) in 2018. Due to the assumed faster increase in monetary-policy interest rates, the three-month PRIBOR could increase to an average 2.1% (*versus 1.6%*) in 2019.

Long-term interest rates have been steadily increasing due to the tightening of monetary policy. The **yield to maturity on ten-year government bonds** for convergence purposes averaged 2.1% (*versus 2.2%*) in Q3 2018. Given the anticipated path of inflation and monetary policy stance of the CNB and the ECB, we expect long-term interest rates to continue to rise. In 2018 and 2019, they can reach 2.1% (*unchanged*) and 2.6% (*versus 2.5%*), respectively.

Graph 1.4.1: Interest Rates

in % p.a.

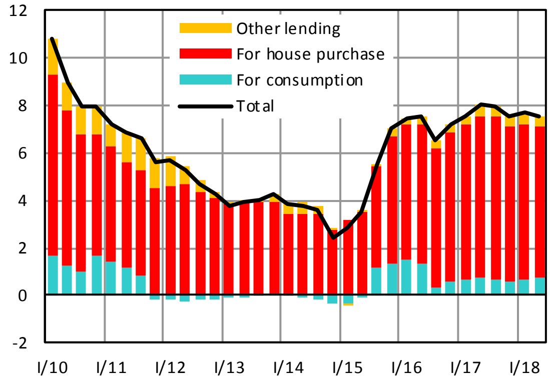


Source: CNB. Calculations of the MoF.

In Q2 2018, **loans to households** increased by 7.6% YoY, and their growth rate has been above 7.5% since early 2017. 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.

Accelerated growth in housing loans, observed since the beginning of 2015 and supported by low interest rates, led, in combination with limited supply of residential real estate, to a dynamic growth in real estate prices. Continuation of this trend poses a negative risk for the economy (especially households).

Although the repo rate and money market rates have been growing since mid-2017, average client interest rates for households declined in the same period, while client interest rates on new loans increase only slightly, including in July and August 2018. That may be due to higher competition in the mortgage loans market before the stricter recommendations of the CNB taking effect.

The CNB's recommendation on the management of risks associated with the provision of retail loans secured by residential property has been effective since 1 October 2018. In addition to the existing loan-to-value limits, the CNB issued a new recommendation on debt-to-income ratio (should not exceed 9) and debt service-to-income ratio (should not exceed 45%). However, exceptions can be made to a limited extent.

Despite a limited increase in client interest rates on new loans, the growth in the volume of housing loans has been slowing down slightly since mid-2017; it was 8.5% in Q2 2018 and 8.2% in August 2018. The cooling of the housing loans market Q2 2018 is confirmed by data on net new housing loans[1] provided by banks to households, where an average drop of 2.8% was seen. This figure is in contrast with values from the turn of 2016 and 2017, when the average growth was 20%. An upturn of

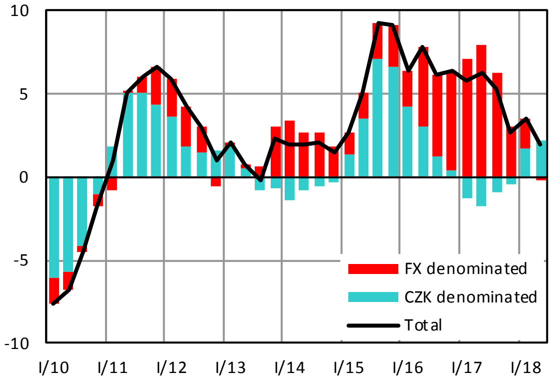
[1] Net new loans include loans that entered the economy for the first time in a given period. Net new loans also include an increase in refinanced and existing loans.

the market before the stricter recommendation of the CNB takes effect is also apparent. The average growth in new loans to households for purchasing real estate was 13.9% for July and August.

The growth in total **loans to non-financial corporations** was 2% YoY in Q2 2018, following a downward trend since Q3 2015. This may have been due to good financial situation of companies, which could finance their expenditures to a greater extent from their own sources, or from alternative sources of funding (for example, by issuing bonds). The growth in koruna loans increased to 3.2% in comparison with the last quarter, and foreign currency loans dropped for the first time since Q4 2012 (by 0.7%).

Graph 1.4.3: Loans to Non-financial Corporations

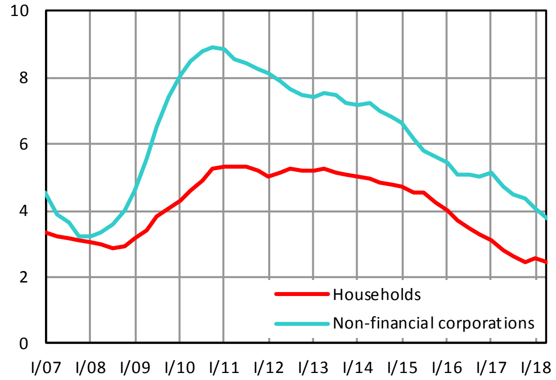
YoY growth rate in%, contributions in pp



Source: CNB. Calculations of the MoF.

Graph 1.4.4: Non-performing Loans

ratio of non-performing to total loans, in%



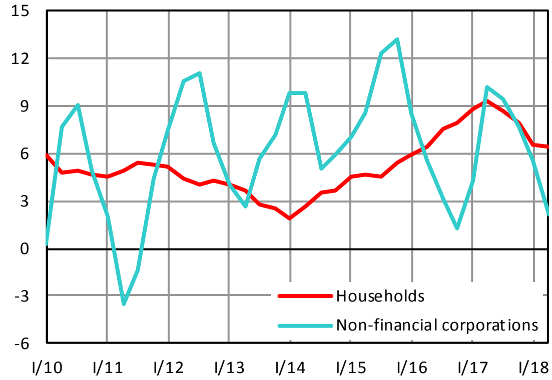
Source: CNB. Calculations of the MoF.

The **share of non-performing loans** in total loans reflects the positive economic development. In Q2 2018 it was 2.4% for households, and dropped to 3.8% for non-financial corporations. On the other hand, however, the risk level of currently provided loans cannot be deduced from this indicator.

The year-on-year growth in **deposits** in Q2 2018 was 6.4% for households and 2.2% for non-financial corporations. Therefore, the growth rates have been decreasing since Q2 2017. In terms of the capacity to finance future consumption and investment from own resources, the continued growth in deposits may be viewed positively.

Graph 1.4.5: Deposits

YoY growth rate, in%



Source: CNB. Calculations of the MoF.

1.4.3 Exchange Rates

Except from the start of July the koruna-euro exchange rate hovered between CZK 25.4/EUR and CZK 26.0/EUR in Q3, averaging CZK 25.8/EUR (*in line with the forecast*). As of the cut-off date of the forecast the koruna traded at CZK 25.8/EUR. Compared to this year's high reached at the beginning of February, the exchange rate weakened by more than 2.5% despite the interest rate differential against the euro area having risen by 1.0 pp. Other Central and Eastern European currencies (Polish zloty, Hungarian forint) also weakened. The reason is probably a withdrawal of investors from the region because of an increased risk aversion, which may be due to fears of protectionist measures in trade between the United States of America and China, or the economic situation in Turkey. In the case of the Czech koruna, the weakening is disconnected from economic fundamentals.

Due to the ongoing real convergence, expected developments of labour productivity and the positive interest rate differential between the CR and the euro area, the koruna could strengthen by 1.0% YoY, i.e. to CZK 25.4/EUR (*versus CZK 25.6/EUR*) in Q4. We expect that the koruna-euro exchange rate will average CZK 25.5/EUR (*versus CZK 25.6/EUR*) in 2018. In 2019, the koruna could strengthen to CZK 24.9/EUR (*versus CZK 25.2/EUR*) as a result of the aforementioned fundamental factors. The reason for the adjustment to the forecast towards a more dynamic strengthening of the koruna is a faster expected increase in the two-week repo rate, and thus also a faster growth in the interest differential against the euro area. However, a renewed closing of investment positions denominated in Central and Eastern European currencies, used by investors to avoid exchange rate risk, could act in the direction of a weaker koruna.

The expected development of the koruna-US dollar exchange rate is implied by the USD/EUR exchange rate, for which an assumption of stability at USD 1.17/EUR was adopted (average of 10 business days preceding the cut-off date for forecast assumptions).

Table 1.4.1: Interest Rates – yearly

average of period, unless stated otherwise

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
										Forecast	*Forecast*
Repo 2W rate CNB (*end of period*)	*in % p.a.*	0.75	0.75	0.05	0.05	0.05	0.05	0.05	0.50	.	.
Main refinancing rate ECB (*end of period*)	*in % p.a.*	1.00	1.00	0.75	0.25	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	0.25	0.50	0.75	1.50	.	.
PRIBOR 3M	*in % p.a.*	1.31	1.19	1.00	0.46	0.36	0.31	0.29	0.41	1.2	2.1
YTM of 10Y government bonds	*in % p.a.*	3.88	3.63	2.73	2.19	1.41	0.63	0.40	1.03	2.1	2.6
Client interest rates											
Loans to households	*in % p.a.*	7.01	6.84	6.47	6.05	5.59	5.15	4.65	4.10	.	.
Loans to non-financial corporations	*in % p.a.*	4.11	3.94	3.72	3.20	3.01	2.78	2.59	2.57	.	.
Deposits of households	*in % p.a.*	1.25	1.20	1.18	1.02	0.85	0.65	0.47	0.36	.	.
Deposits of non-financial corporations	*in % p.a.*	0.56	0.51	0.56	0.41	0.29	0.19	0.10	0.05	.	.

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

Table 1.4.2: Interest Rates – quarterly

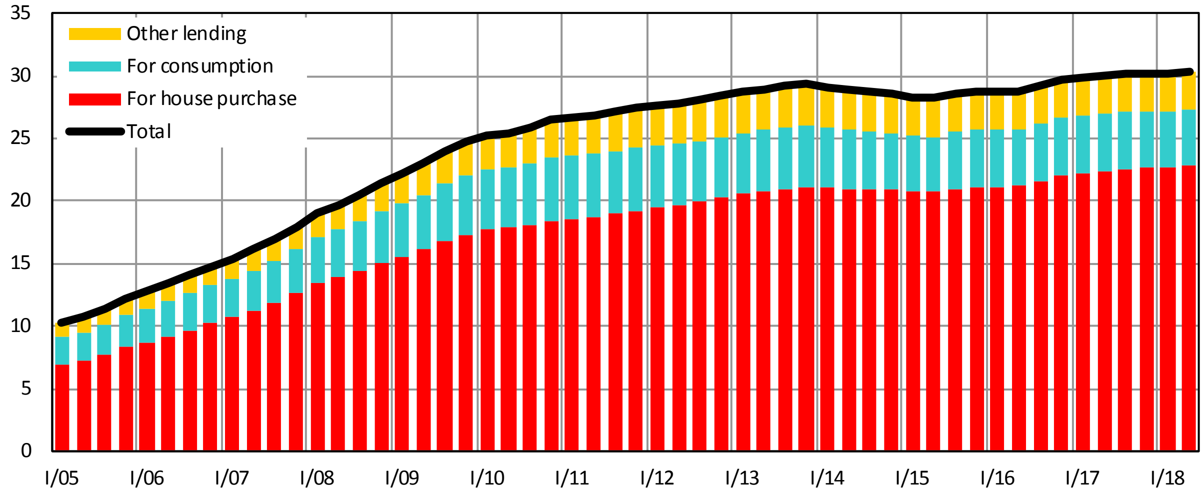
average of period, unless stated otherwise

		2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
									Forecast
Repo 2W rate CNB (*end of period*)	*in % p.a.*	0.05	0.05	0.25	0.50	0.75	1.00	1.50	.
Main refinancing rate ECB (*end of period*)	*in % p.a.*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.
Federal funds rate (*end of period*)	*in % p.a.*	1.00	1.25	1.25	1.50	1.75	2.00	2.00	.
PRIBOR 3M	*in % p.a.*	0.28	0.29	0.40	0.65	0.86	0.92	1.33	1.9
YTM of 10Y government bonds	*in % p.a.*	0.87	0.77	0.97	1.50	1.81	2.14	2.14	2.4
Client interest rates									
Loans to households	*in % p.a.*	4.29	4.15	4.04	3.94	3.85	3.78	.	.
Loans to non-financial corporations	*in % p.a.*	2.57	2.55	2.53	2.64	2.81	2.88	.	.
Deposits of households	*in % p.a.*	0.38	0.36	0.35	0.34	0.33	0.32	.	.
Deposits of non-financial corporations	*in % p.a.*	0.06	0.05	0.05	0.04	0.05	0.09	.	.

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

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Households											
Loans	*growth in %*	**29.2**	**16.5**	**8.9**	**6.6**	**5.0**	**4.0**	**3.4**	**4.8**	**7.2**	**7.8**
For consumption	*growth in %*	25.7	16.4	7.3	4.2	-1.0	-0.1	-0.9	3.4	6.0	4.3
For house purchase	*growth in %*	30.8	15.5	8.9	6.5	6.4	5.5	4.5	5.6	8.1	9.0
Other lending	*growth in %*	24.9	23.9	11.6	11.1	6.0	1.2	2.9	1.0	3.0	4.2
CZK denominated	*growth in %*	29.3	16.5	8.8	6.6	4.9	4.0	3.4	4.7	7.2	7.7
FX denominated	*growth in %*	-8.9	0.1	31.0	2.4	30.8	-1.3	0.0	12.7	8.5	36.3
Deposits	*growth in %*	**10.0**	**10.2**	**5.1**	**5.0**	**4.5**	**3.3**	**2.9**	**4.8**	**7.0**	**8.7**
CZK denominated	*growth in %*	10.7	10.1	5.6	5.4	4.7	3.3	2.7	4.1	6.9	9.7
FX denominated	*growth in %*	-3.4	13.1	-6.8	-4.0	-2.1	2.3	8.5	22.5	7.3	-13.9
Non-performing loans *(banking statistics)*	*share, in %*	**3.0**	**3.6**	**4.8**	**5.3**	**5.2**	**5.2**	**4.9**	**4.5**	**3.6**	**2.7**
Loans to deposits ratio	*in %*	**56**	**59**	**61**	**62**	**63**	**63**	**63**	**63**	**63**	**63**
Non-financial corporations											
Loans	*growth in %*	**15.9**	**1.9**	**-5.2**	**4.7**	**3.5**	**1.3**	**1.9**	**6.5**	**6.6**	**5.0**
CZK denominated	*growth in %*	18.7	0.5	-5.2	4.9	2.6	0.3	-1.0	5.9	2.8	-1.4
FX denominated	*growth in %*	3.4	9.1	-5.4	3.7	7.8	5.7	13.7	9.0	20.5	24.4
Deposits	*growth in %*	**5.1**	**-2.2**	**5.5**	**0.4**	**8.9**	**4.9**	**7.6**	**10.3**	**4.6**	**7.9**
CZK denominated	*growth in %*	6.4	-3.2	6.9	2.0	8.2	4.2	5.6	6.7	4.5	14.0
FX denominated	*growth in %*	0.5	1.6	0.2	-6.1	11.8	8.0	15.2	23.2	4.8	-11.1
Non-performing loans *(banking statistics)*	*share, in %*	**3.5**	**6.0**	**8.6**	**8.5**	**7.8**	**7.4**	**7.0**	**6.0**	**5.2**	**4.7**
Loans to deposits ratio	*in %*	**129**	**135**	**121**	**126**	**120**	**116**	**110**	**106**	**108**	**105**

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

		2016		2017				2018	
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Households									
Loans	*growth in %*	**6.6**	**7.2**	**7.6**	**8.0**	**8.0**	**7.6**	**7.7**	**7.6**
For consumption	*growth in %*	2.3	3.7	4.2	4.6	4.5	3.9	4.2	5.1
For house purchase	*growth in %*	8.0	8.5	8.9	9.2	9.2	8.8	8.8	8.5
Other lending	*growth in %*	3.0	3.5	3.7	4.7	4.4	4.1	4.7	4.5
CZK denominated	*growth in %*	6.6	7.2	7.6	7.9	7.9	7.5	7.7	7.6
FX denominated	*growth in %*	6.1	-2.0	12.0	48.5	49.4	35.8	11.1	-10.8
Deposits	*growth in %*	**7.6**	**8.0**	**8.8**	**9.3**	**8.6**	**8.0**	**6.6**	**6.4**
CZK denominated	*growth in %*	7.6	8.2	9.4	10.6	9.8	8.9	7.1	6.4
FX denominated	*growth in %*	6.6	3.1	-5.6	-18.7	-17.3	-13.7	-7.4	7.8
Non-performing loans *(banking statistics)*	*share, in %*	**3.5**	**3.3**	**3.1**	**2.8**	**2.6**	**2.4**	**2.6**	**2.4**
Loans to deposits ratio	*in %*	**63**	**64**	**62**	**62**	**63**	**64**	**63**	**63**
Non-financial corporations									
Loans	*growth in %*	**6.1**	**6.4**	**5.8**	**6.3**	**5.3**	**2.6**	**3.5**	**2.0**
CZK denominated	*growth in %*	1.5	0.5	-1.7	-2.3	-1.2	-0.5	2.3	3.2
FX denominated	*growth in %*	22.7	27.1	31.1	32.6	24.8	11.5	6.3	-0.7
Deposits	*growth in %*	**3.2**	**1.3**	**4.3**	**10.2**	**9.5**	**7.7**	**5.6**	**2.2**
CZK denominated	*growth in %*	3.2	2.4	8.5	19.8	15.6	12.4	6.8	0.2
FX denominated	*growth in %*	3.0	-2.2	-8.8	-18.0	-9.4	-7.8	1.0	10.7
Non-performing loans *(banking statistics)*	*share, in %*	**5.1**	**5.0**	**5.1**	**4.7**	**4.5**	**4.3**	**4.1**	**3.8**
Loans to deposits ratio	*in %*	**110**	**109**	**105**	**104**	**106**	**104**	**103**	**104**

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

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
								Forecast	*Forecast*	*Outlook*	*Outlook*
Nominal exchange rates											
CZK / EUR	*average*	**25.14**	**25.97**	**27.53**	**27.28**	**27.03**	**26.33**	**25.5**	**24.9**	**24.4**	**24.0**
	appreciation in %	-2.2	-3.2	-5.7	0.9	0.9	2.7	3.1	2.5	2.0	1.9
CZK / USD	*average*	**19.58**	**19.56**	**20.75**	**24.60**	**24.43**	**23.39**	**21.5**	**21.2**	**20.8**	**20.4**
	appreciation in %	-9.7	0.1	-5.7	-15.7	0.7	4.5	8.8	1.2	2.0	1.9
NEER	*average of 2015=100*	**108.9**	**106.4**	**100.8**	**100.0**	**102.4**	**105.4**	**109**	**112**	**114**	**117**
	appreciation in %	-3.5	-2.3	-5.2	-0.8	2.4	2.9	3.8	2.5	2.0	1.9
Real exchange rate to EA19 [1]	*average of 2010=100*	**99.8**	**96.8**	**92.7**	**93.3**	**94.7**	**97.6**	**101**	**104**	**107**	**109**
	appreciation in %	-2.1	-3.0	-4.2	0.7	1.5	3.0	3.7	3.1	2.1	2.1
REER [2]	*average of 2010=100*	**99.2**	**96.9**	**91.8**	**91.2**	**93.5**	**96.8**	**.**	**.**	**.**	**.**
	appreciation in %	-2.8	-2.3	-5.2	-0.7	2.5	3.6	.	.	.	.

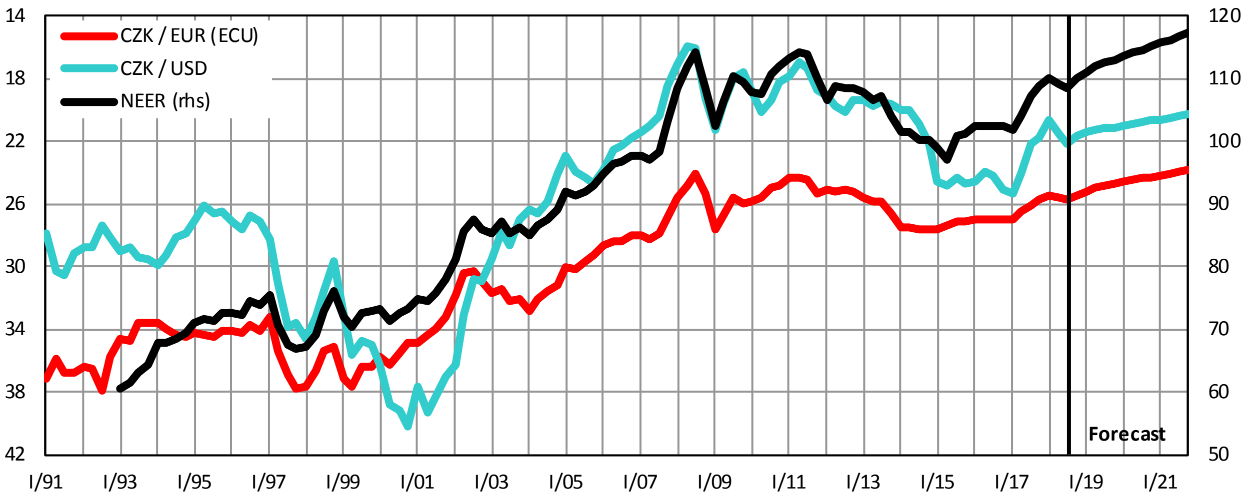
[1] *Deflated by GDP deflators.*
[2] *Eurostat calculations, deflated by CPI, versus 42 countries.*
Source: CNB, Eurostat. Calculations of the MoF.

Table 1.4.6: Exchange Rates – quarterly

		2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Estimate	*Forecast*
Nominal exchange rates									
CZK / EUR	*average*	**27.02**	**26.53**	**26.08**	**25.65**	**25.40**	**25.60**	**25.76**	**25.4**
	appreciation in %	0.1	1.9	3.6	5.4	6.4	3.6	1.3	1.0
CZK / USD	*average*	**25.38**	**24.09**	**22.19**	**21.79**	**20.66**	**21.51**	**22.19**	**21.7**
	appreciation in %	-3.3	-0.6	9.1	15.0	22.8	12.0	0.0	0.6
NEER	*average of 2015=100*	**101.9**	**104.0**	**107.1**	**108.9**	**110.1**	**109.3**	**108.4**	**110**
	appreciation in %	-0.5	1.5	4.5	6.3	8.0	5.1	1.2	1.0
Real exchange rate to EA19 [1]	*average of 2010=100*	**94.8**	**96.5**	**98.8**	**100.5**	**102.0**	**101.0**	**100**	**101**
	appreciation in %	0.1	1.9	3.9	6.5	7.6	4.7	1.6	0.8
REER [2]	*average of 2010=100*	**93.5**	**95.2**	**98.5**	**100.2**	**102.0**	**.**	**.**	**.**
	appreciation in %	-0.6	1.9	5.4	7.7	9.2	.	.	.

[1] *Deflated by GDP deflators.*
[2] *Eurostat calculations, deflated by CPI, versus 42 countries.*
Source: CNB, Eurostat. Calculations of the MoF.

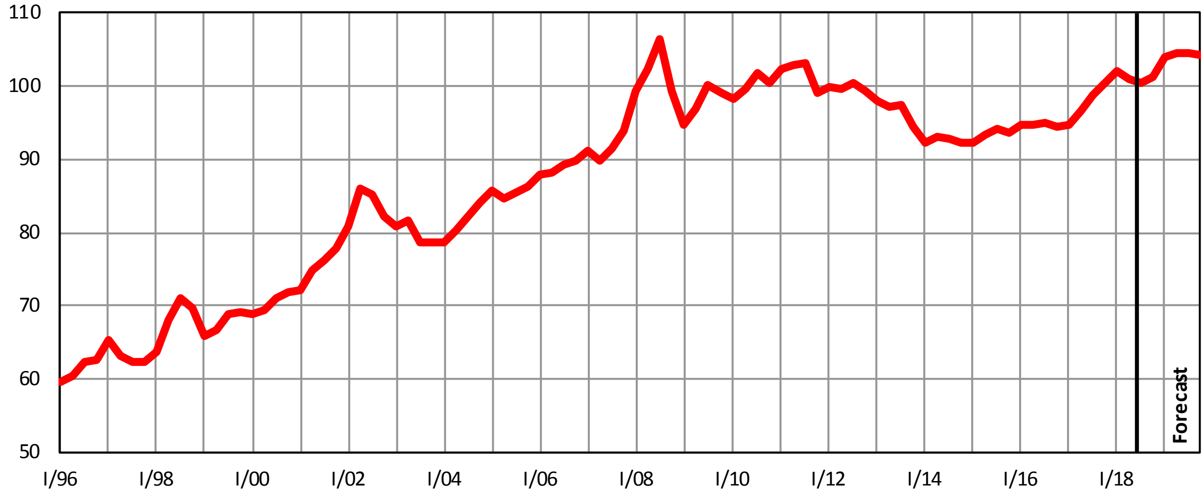
Graph 1.4.7: Nominal Exchange Rates
quarterly averages, average 2015=100 (rhs)



Source: CNB. Calculations of the MoF.

Graph 1.4.8: Real Exchange Rate to EA19

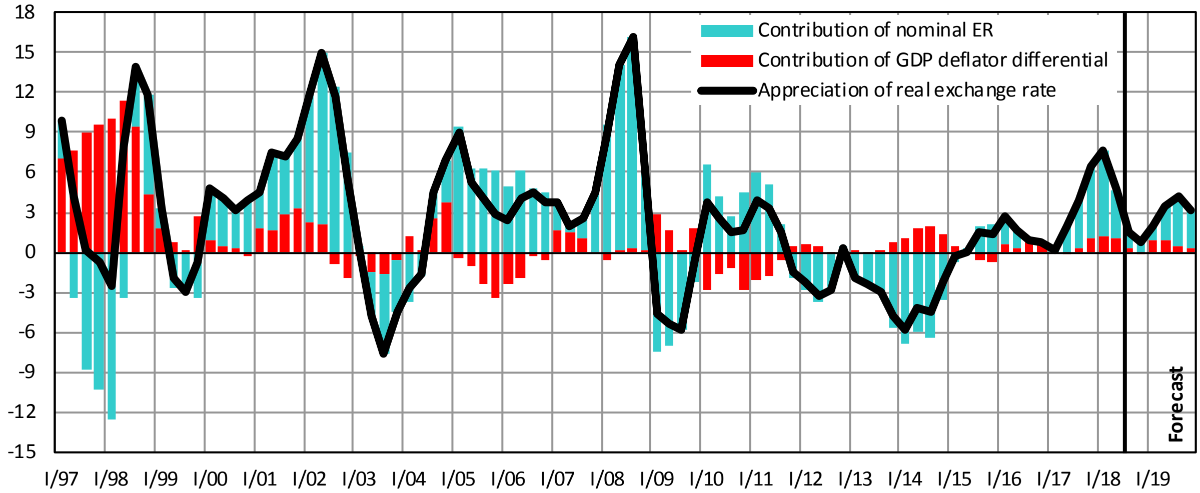
quarterly averages, deflated by GDP deflators, average 2010=100



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 percentage points



Source: CNB, Eurostat. Calculations of the MoF.

1.5 Structural Policies

In order to increase the transparency and effectiveness of investment incentives, the Government passed an **amendment to the Investment Incentives Act** on 26 September 2018. State incentives should be now provided to projects with higher value added and at the same time, emphasis is laid on improving the availability of incentives to small and medium enterprises and flexibility of the system in relation to the current economic situation.

An **amendment to the Education Act**, in effect since 1 September 2018, abolished a legal requirement to admission of children less than 3 years into kindergartens. The amendment also postponed the reform of regional education funding to 2020.

An **amendment to the Act on Accelerating the Construction of Transport Infrastructure** took effect on 31 August 2018, which facilitates and speeds up the preparation of building of transport, water, energy and communication infrastructure. The amendment includes a list of transport constructions for which it facilitates expropriation of land by means of interim consent. This allows the construction to start, irrespective of any dispute about the amount of compensation for the land, with the compensation being settled retroactively.

A **75% discount on the fare** on trains and buses for children, pupils, students under 26, and seniors over 65 years of age was introduced as of 1 September 2018.

An **amendment to the Pension Insurance Act** increases the basic pension assessment for newly granted and existing pensions from 9 to 10% of the average wage. At the same time, it increases pensions to pensioners who have reached the age of 85 by CZK 1,000 per month. The amendment came into effect on 1 September 2018, but the new rules will apply from 1 January 2019.

1.6 Demographic Trends

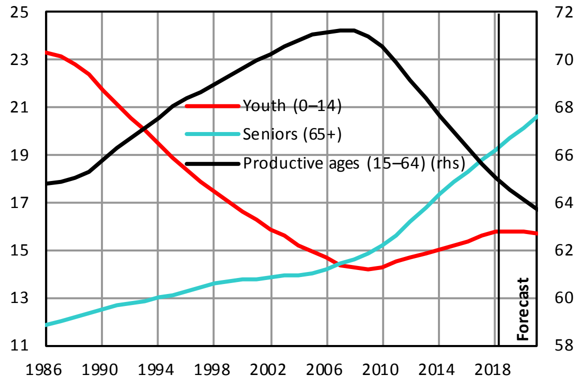
The population of the Czech Republic has seen a moderate but steady long-term increase. At the end of June 2018, the population of the Czech Republic stood at 10.625 million. The population increased by 35.9 thousand YoY, i.e. by 0.3%, and by 15.4 thousand in H1.

This increase was mainly due to a **positive net migration** of 17.7 thousand persons with a year-on-year increase of 5.2 thousand. While 29.2 thousand persons moved from abroad to the Czech Republic (7.8 thousand more YoY), 11.5 thousand persons moved abroad from the Czech Republic. The highest net migration balance was seen with the citizens of Ukraine (5.6 thousand) and Slovakia (2.7 thousand).

By contrast, the difference between the number of **births and deaths,** similarly to 2017, resulted in a decrease of 2.4 thousand persons. Also, the number of live births (55.7 thousand) and the number of deceased (58.1 thousand) roughly corresponded to the same period of the previous year.

Graph 1.6.1: Age Groups

shares on total population, in %



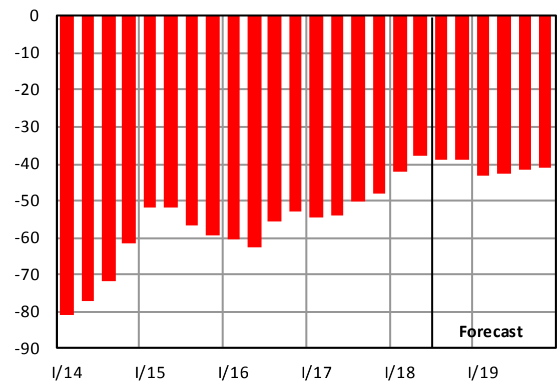
Source: CZSO. Calculations of the MoF.

Population ageing was reflected (data from the LFS) in the growth of the senior category of 65 years and over by 53 thousand people. High number of women born in the late 1970s and 1980s and a gradually increasing birth rate led to an increase in the number of children under the age of 14 by 23 thousand.

On the other hand, the number of **persons aged 15–64** has decreased considerably, by 38 thousand. With respect to past fluctuations in the birth-rate, however, the development in this category is far from homogeneous. The decline was concentrated in the age group of 20–39 years, which decreased by 71 thousand. By contrast, there was a considerable increase in the age group 40–49 of 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.

Graph 1.6.2: Population Aged 15–64

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



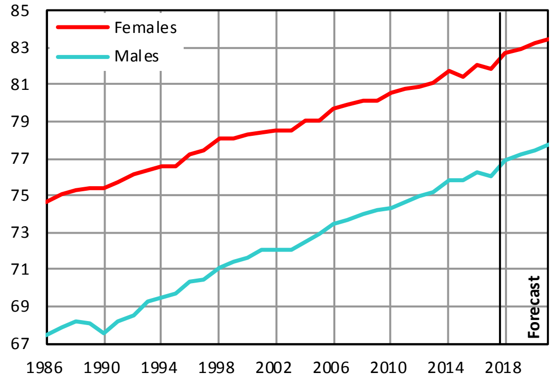
Source: CZSO. Calculations of the MoF.

The increasing number of **old-age pensioners** is lower than would correspond to demographic developments and rises in the statutory retirement age, probably due to the economic boom. At the end of June 2018, a total of 2.404 million old-age pensioners were clients of the pension system, i.e. 22.7% of the Czech population.

Their number stagnated in the last two quarters, and the year-on-year increase was 7 thousand persons, i.e. 0.3%. Because the increase in the number of old-age pensioners lags behind the growth of employment, there has been a notable decrease in the effective dependency rate by 2.2 pp. (see Graph 1.6.4) since 2012, which is one of the factors improving the balance on the pension account.

Graph 1.6.3: Life Expectancy at Birth

in years



Note: Change in methodology since 2017.
Source: CZSO.

Table 1.6.1: Demographics

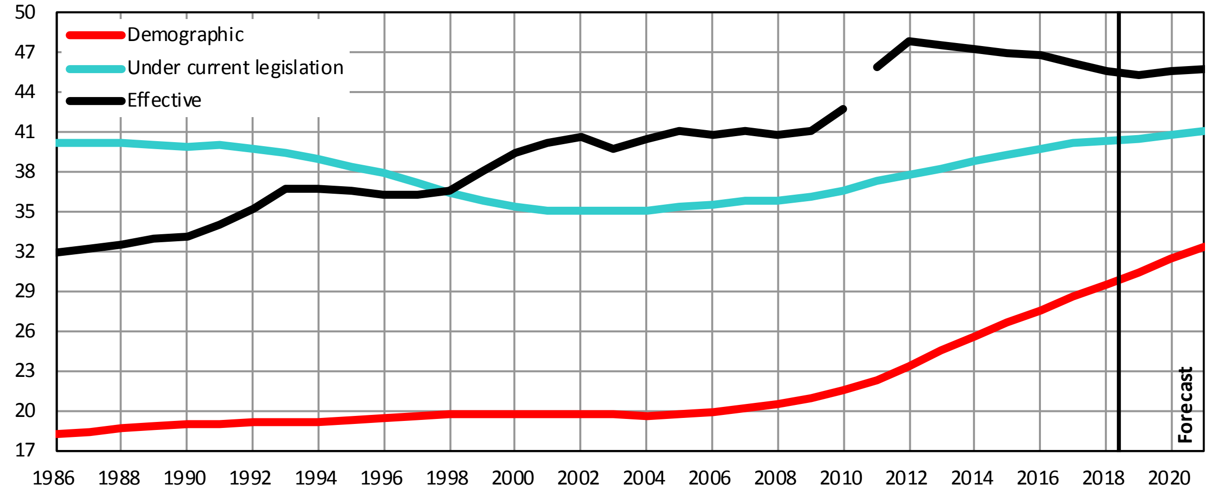
in thousands of persons (unless stated otherwise)

	2012	2013	2014	2015	2016	2017	2018 *Forecast*	2019 *Forecast*	2020 *Outlook*	2021 *Outlook*
Population (as of 1 January)	**10 505**	**10 516**	**10 512**	**10 538**	**10 554**	**10 579**	**10 610**	**10 623**	**10 635**	**10 645**
growth in %	0.2	0.1	0.0	0.2	0.1	0.2	0.3	0.1	0.1	0.1
0–14 years	**1 541**	**1 560**	**1 577**	**1 601**	**1 624**	**1 647**	**1 671**	**1 678**	**1 678**	**1 671**
growth in %	1.3	1.2	1.1	1.5	1.4	1.5	1.4	0.5	0.0	-0.4
15–64 years	**7 263**	**7 188**	**7 109**	**7 057**	**6 998**	**6 943**	**6 899**	**6 855**	**6 814**	**6 780**
growth in %	-0.9	-1.0	-1.1	-0.7	-0.8	-0.8	-0.6	-0.6	-0.6	-0.5
65 and more years	**1 701**	**1 768**	**1 826**	**1 880**	**1 932**	**1 989**	**2 040**	**2 089**	**2 142**	**2 194**
growth in %	3.9	3.9	3.3	3.0	2.8	2.9	2.6	2.4	2.5	2.4
Old-age pensioners (as of 1 January) [1]	**2 340**	**2 341**	**2 340**	**2 355**	**2 377**	**2 395**	**2 403**	**2 410**	**2 424**	**2 434**
growth in %	3.5	0.0	0.0	0.6	0.9	0.8	0.3	0.3	0.6	0.4
Old-age dependency ratios (as of 1 January, in %)										
Demographic [2]	**23.4**	**24.6**	**25.7**	**26.6**	**27.6**	**28.6**	**29.6**	**30.5**	**31.4**	**32.4**
Under current legislation [3]	**37.8**	**38.3**	**38.8**	**39.3**	**39.8**	**40.1**	**40.4**	**40.5**	**40.8**	**41.1**
Effective [4]	**47.9**	**47.6**	**47.2**	**46.9**	**46.8**	**46.2**	**45.7**	**45.4**	**45.5**	**45.7**
Fertility rate *(number of children)*	**1.452**	**1.456**	**1.528**	**1.570**	**1.630**	**1.687**	**.**	**.**	**.**	**.**
Population increase	**11**	**-4**	**26**	**16**	**25**	**31**	**13**	**12**	**10**	**9**
Natural increase	**0**	**-2**	**4**	**0**	**5**	**3**	**-6**	**-8**	**-9**	**-11**
Live births	109	107	110	111	113	114	.	.	.	.
Deaths	108	109	106	111	108	111	.	.	.	.
Net migration	**10**	**-1**	**22**	**16**	**20**	**28**	**19**	**20**	**20**	**20**
Immigration	30	30	42	35	38	46	.	.	.	.
Emigration	20	31	20	19	17	18	.	.	.	.

[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 (15–64).
[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 1.6.4: Dependency Ratios

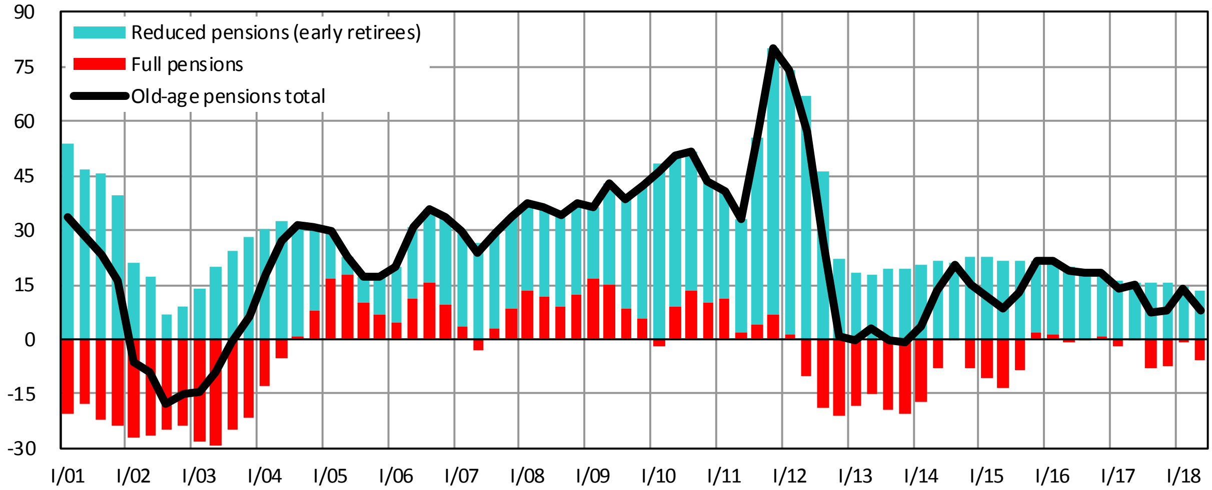
As of January 1, in %, inconsistent between 2010 and 2011 due to transfer of disability pensions to old-age pensions for people over 64 years



Source: CZSO. Calculations of the MoF.

Graph 1.6.5: 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.

2 Economic Cycle

2.1 Position within the Economic Cycle

In Q2 2018, the **positive output gap** was 1.5% of potential output (see Graph 2.1.1). Compared to the peak in Q2 2017 it declined by 0.4 pp, which, however, cannot be interpreted as its closing. Due to the expected economic growth and anticipated developments of potential output, the output gap should be around 1.5% both this and in the next year.

The positive output gap is most reflected in the **labour market situation**, which shows clear symptoms of overheating (see Chapter 3.3). In Q2 2018 the unemployment rate dropped further to 2.2%, which is a record low in the history of the Czech Republic's market economy. The number of vacancies (according to data of the Ministry for Labour and Social Affairs) continues to increase dramatically and exceeded the number of registered unemployed persons by more than two fifths in September 2018. The lack of workers is a strong barrier to extensive economic growth.

We estimate that the year-on-year growth in **potential output** was 2.9% in Q2 2018. This is slightly better than the long-term average growth of gross value added (as well as of the potential output) since 1995 of 2.5%.

The main driver of potential growth is **total factor productivity**. The contribution of its trend component has been stable at 2.0 pp since Q3 2016.

Labour supply is influenced by the process of population ageing (see Chapter 1.6) that manifests itself, among other things, in a long-run decline in the size of the working-age population (15–64 years), which reduced the year-on-year potential output growth by 0.3 pp in Q2 2018.

However, the negative impact of population ageing on the labour supply is largely outweighed by a dynamic **increase in the participation rate**, which leads to steady increases of the labour force in the economy. Structural factors – an increase in the number of inhabitants in age groups with naturally high participation and an increase in the statutory and effective retirement age, as well as higher demand for labour – are predominating here. In Q2 2018, the contribution of the participation rate to potential product growth reached 0.7 pp.

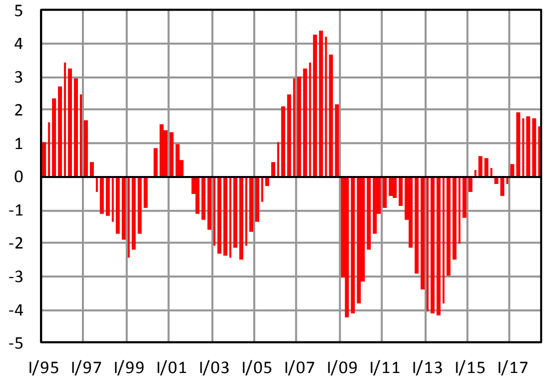
High growth in gross fixed capital formation in H1 2018 led to an increase in the contribution of the **capital stock** to 0.6 pp. This corresponds to the long-run average over the period 2008–2017.

Table 2.1.1: Output Gap and Potential Product

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 H1
Output gap	*%*	-3.8	-2.0	-0.8	-2.4	-4.0	-2.2	0.2	-0.2	1.5	1.6
Potential product [1]	*growth in %*	2.0	0.8	0.7	0.9	1.2	1.4	2.3	2.7	2.7	2.8
Contributions											
Trend total factor productivity	*pp*	1.1	0.6	0.4	0.4	0.7	1.2	1.7	1.9	2.0	2.0
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*	0.1	-0.2	-0.4	-0.5	-0.5	-0.5	-0.4	-0.4	-0.4	-0.3
Participation rate	*pp*	0.3	0.1	0.3	0.8	1.0	0.5	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	-0.1

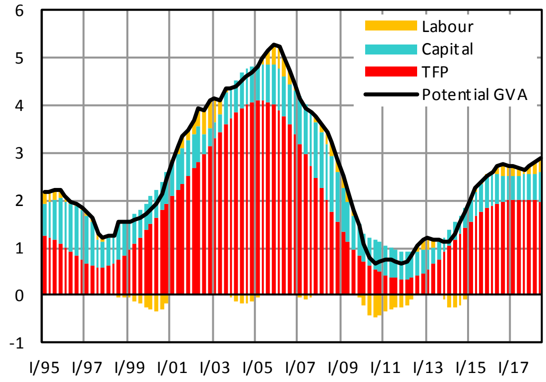
1) Based on gross value added.
2) Contribution of growth of working-age population (15–64 years).
Source: CZSO. Calculations of the MoF.

Graph 2.1.1: Output Gap
in % of potential product



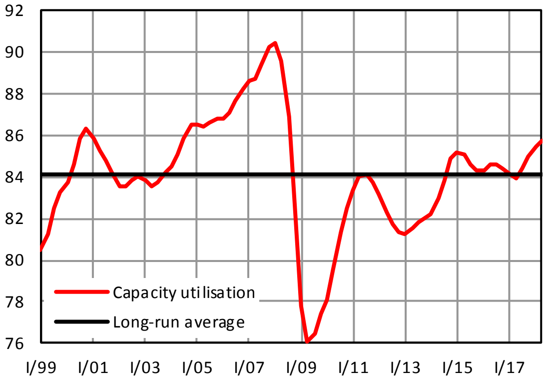
Source: CZSO. Calculations of the MoF.

Graph 2.1.2: Potential Product
YoY growth rate in %, contributions in percentage points



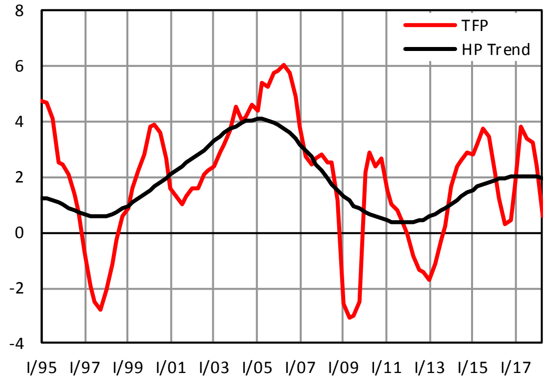
Source: CZSO. Calculations of the MoF.

Graph 2.1.3: Capacity Utilisation in Industry
smoothed by Hodrick-Prescott filter, in %



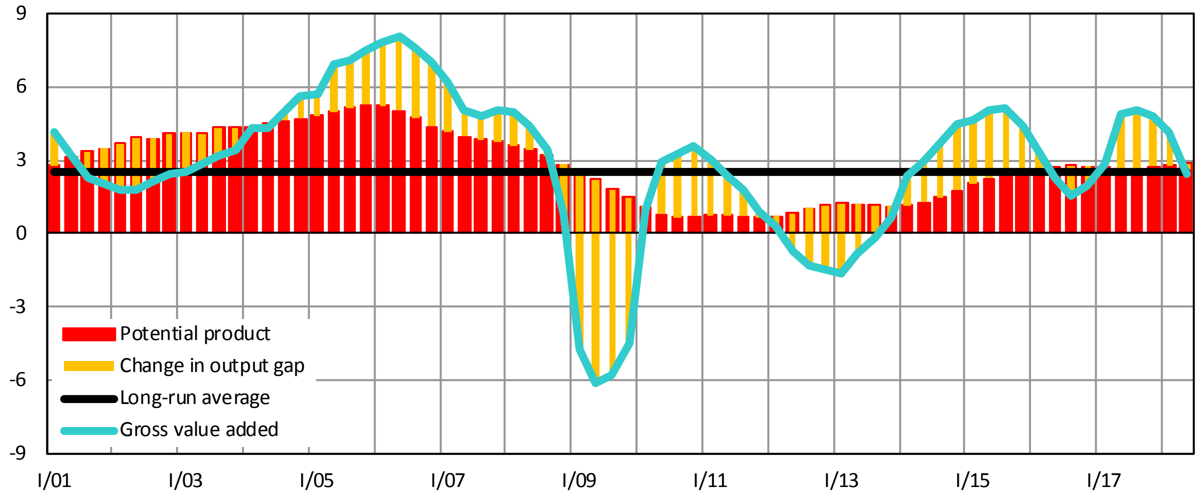
Source: CZSO.

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

The industrial confidence indicator continued to decline in Q3 2018. Therefore, the year-on-year dynamics of gross value added in industry probably slowed down further. In construction, the confidence indicator rose again significantly. This indicates a continued recovery of gross value added in this sector, although the correlation between confidence and gross value added in construction is very low (see Graph 2.2.2). Confidence in trade and services increased slightly, which indicates that the year-on-year growth in gross value added in the sector might have been sustained.

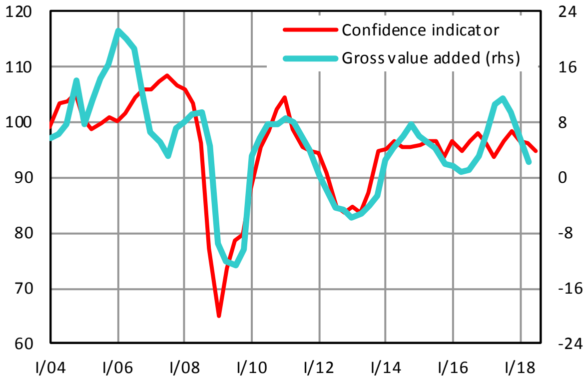
The consumer confidence indicator declined in Q3 2018. Considering the still very high levels of consumer confidence, the indicator implies that growth dynamics of household final consumption expenditure will rather be sustained in H2 2018, as the confidence indicator leads consumption of households by 1–2 quarters.

Overall, the composite confidence indicator thus declined slightly, indicating a slight year-on-year growth in total gross value added in Q3 2018.

The composite leading indicator signals the likely peak of the business cycle in Q2 2018. There is, however, an indication of a clear closing of the output gap in Q3 2018 and its slight increase at the end of this year. In the forecast, however, we expect the positive output gap to remain around 1.5% of potential product in H2 2018, i.e. at the same level as in Q2. We thus interpret the signal from the composite leading indicator as a downside risk.

Graph 2.2.1: Confidence and GVA in Industry

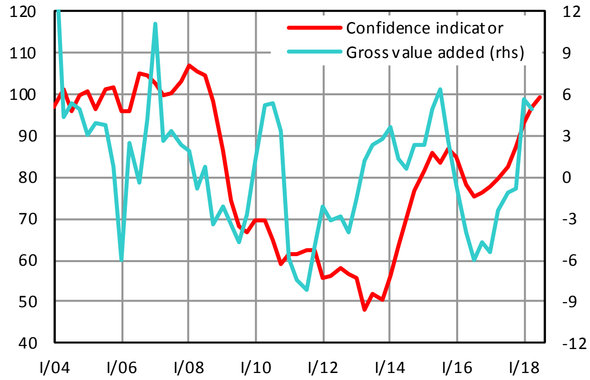
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.2: Confidence and GVA in Construction

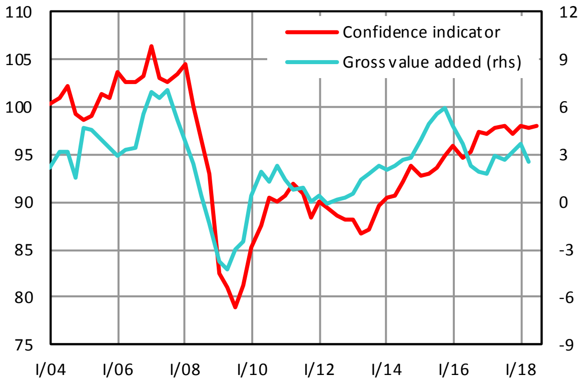
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.3: Confidence and GVA in Trade and Services

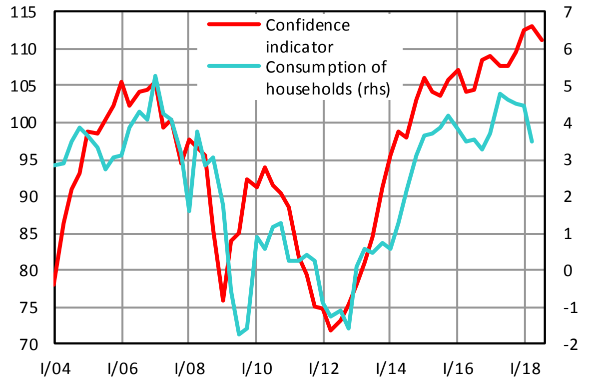
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO. Calculations of the MoF.

Graph 2.2.4: Consumer Confidence and Consumption

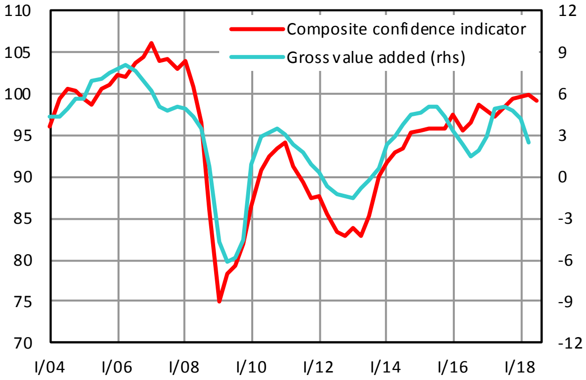
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.5: Composite Confidence Indicator and GVA

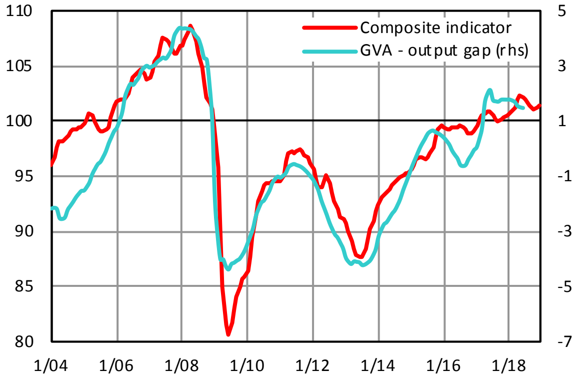
2005=100 (lhs), YoY growth in % (rhs)



Source: CZSO.

Graph 2.2.6: Composite Leading Indicator

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



Note: Synchronized with the output gap (based on GVA) derived from the Cobb-Douglas production function (see Chapter 2.1), on a monthly basis.

Source: CZSO. Calculations of the MoF.

3 Forecast of Macroeconomic Developments in the CR

3.1 Economic Output

3.1.1 GDP in the Second Quarter of 2018

Economic performance measured by real GDP increased by 2.7% YoY (*versus 2.9%*) in Q2 2018, while seasonally adjusted GDP rose by 0.7% QoQ (*versus 0.8%).* The greatest contributor to the quarter-on-quarter growth in GDP was industry and the section Public administration, education, health and social work. On the contrary, information and communication activities weighed on the growth dynamics slightly. When publishing national accounts for Q2, the Czech Statistical Office revised the data on GDP structure in Q1 2018; however, the impact on the dynamics of total GDP was negligible.

The year-on-year increase in GDP in Q2 2018 was exclusively due to the growing domestic demand. The main driver of growth was investment activity of companies and households' final consumption expenditure. The contribution of the balance of foreign trade in goods and services was slightly negative.

The increase in household consumption stemmed from rising disposable income amid unprecedentedly high consumer confidence. On the contrary, the year-on-year increase in the savings rate by 0.5 pp weighed on the household final consumption expenditure. Expenditure on 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. Expenditure on non-durable goods and services also grew strongly. Real consumption expenditure of households increased by 3.8% (*versus 4.2%*). Consumption of the general government sector rose by 2.9% (*versus 1.7%*) due to the dynamics of employment and intermediate consumption.

Gross fixed capital formation was higher by 8.8% (*versus 7.9%*). A major contributing factor was, in particular, investment in machinery and equipment, non-residential buildings and structures and dwellings. The acceleration of investment in transport equipment related to the clearance sale of stock vehicles homologated according to ending environmental standards was also evident. From the sectoral point of view (see Graph 3.1.7), investment activity was driven by a continued private investment growth (increased by 6.6% in real terms) and acceleration of the investment by the general government sector (increased by 23.2% in real terms). Private investment and, in particular, investment by the general government sector were significantly supported by projects co-financed from EU funds. Considering the strongly negative year-on-year contribution of change in inventories, the gross capital formation increased less than investment in fixed capital, only by 2.2% (*versus 4.2%*).

Due to a slowdown in export markets growth and decline in export performance, the year-on-year growth in exports of goods and services dropped sharply compared to the same quarter of the previous year. Total exports thus increased by 4.3% in Q2 2018 (*versus 4.9%*). Imports of goods and services, on the other hand, accelerated to 5.0% YoY (*versus 6.0%*) due to strong import intensive investment demand.

A higher decrease in import prices compared to export prices resulted in an improvement of the terms of trade of 0.3% (*versus a decrease of 0.3%*). The trading gain resulting from foreign trade brought about a situation where real gross domestic income increased by 2.9% YoY (*versus 2.6%*).

Gross operating surplus grew by 1.3% (*versus 0.9%*), compensation of employees increased by 10.1% (*versus 10.0%*) and net taxes on production were up by 3.5% YoY (*versus 3.1%*). As a result, nominal GDP recorded growth of 5.1% (*versus 4.8%*). Growth in compensation of employees, which has been significantly higher than GDP growth since early 2016, leads to a further shift in the distribution of income towards the production factor of labour.

3.1.2 Estimate for the Third Quarter of 2018

We estimate that in Q3 2018 real GDP increased by 2.7% YoY (*versus 3.0%*) and by 0.7% QoQ (*versus 0.9%*). The estimated sustenance of quarter-on-quarter GDP dynamics reflects the data on the development of the economy in Q3 2018 available as of the cut-off date of the forecast (industrial and construction production, sales in retail and in services, confidence indicators).

We believe that GDP growth was driven solely by the growth in domestic demand. Due to increasing disposable income of households and very high consumer confidence, the final consumption expenditure of households may have increased by 3.3% YoY (*versus 4.3%*), while consumption of the general government sector could have risen by 2.1% (*versus 1.8%*). The relatively large revision of the forecast for household consumption reflects not only the lower-than-estimated growth in Q2, but also the data on the dynamics of retail sales in July and August. Gross capital formation increased, according to our estimates, by 2.9% (*versus 3.9%*) due to an increase in investment in fixed capital. A negative change in inventories is likely to have significantly decreased the growth of total investment.

Foreign trade seemed to act neutrally towards GDP growth. The export growth was supported by strong foreign demand, while the growth in imports was boosted by the strengthening of import intensive investment demand. We estimate that exports of goods and services increased by 4.7% (*versus 4.1%*) and that imports, in relation to the development of domestic demand and exports, were up by 5.3% (*versus 5.2%*).

3.1.3 Forecast for the Years 2018 and 2019

In 2018, economic growth should be driven exclusively by domestic demand led by strong final consumption expenditure of households and investment activity of firms and the general government sector. The GDP growth should also be strengthened by the general government consumption. Foreign trade balance should affect the dynamics of GDP slightly negatively. We expect the real GDP to grow by 3.0% (*versus 3.2%*) in 2018 and by 2.9% (*versus 3.1%*) in 2019.

Household consumption in 2018 will be supported by growing real disposable income and slightly declining savings rate. We expect, however, that the savings rate will no longer decline in 2019. Unlike this year the increase in the wage bill in 2019 will be almost exclusively driven by a rise in the average wage (see Graph 3.3.9), with a more muted impact on consumption of households than this year. In 2018 and 2019, the development of household consumption should positively reflect a number of discretionary changes in the social area, the dynamics of consumer loans and consumers' optimistic expectations. Final household consumption expenditure could thus increase by 3.6% in both 2018 and 2019 (*versus 4.3% and 3.9%, respectively*).

We expect general government final consumption expenditure to increase by 2.5% (*versus 2.1%*) in 2018 and by 2.1% in 2019 (*versus 2.0%*). The main factor of the general government consumption growth in 2018 will be a rise in employment. The growth will also be supported by an increase in social security benefits in kind based mainly on health insurance plans and the medium-term outlook of health insurance companies, and by higher purchases of goods and services with the contribution of gradually starting current subsidies from EU funds.

The gross fixed capital formation in 2018 should grow not only due to investment activity of the private sector but also due to investments by the general government sector. Private investment is stimulated by continued economic growth abroad, low interest rates, slightly above-average capacity utilization in manufacturing, and by growth in gross operating surplus. Also, the increasingly pressing shortage of employees could motivate businesses to invest in order to increase labour productivity. Conversely, certain risks in the external environment (see the Chapter Forecast Risks and Uncertainty) could negatively affect private investments. As regards the general government sector investment, we expect not only a growth in investment expenditure financed from national resources, but also a continued implementation of projects co-financed by EU funds under the 2014–2020 programming period. The gross fixed capital formation could thus increase by 7.8% in 2018 (*versus 7.5%*) and by 3.2% in 2019 (*unchanged*). The lower dynamics of investment activity in 2019 reflects tighter monetary conditions, slower growth of economies of main trading partners, and a slowdown in investment of the general government sector (as a result of a high comparison base – resources from EU funds allocated for 2014 and 2015 can only be utilized by the end of this year; going forward we assume a normal level of EU financed investment).

We expect that the contribution of a change in inventories to GDP growth will be negative in 2018, while for 2019 a technical assumption of zero contribution was adopted. We expect gross capital formation to increase by 4.5% (*versus 5.6%*) in 2018; in 2019 its growth should slow down to 3.0% (*versus 2.9%*).

Exports of goods and services could grow by 4.5% (*versus 4.2%*) in 2018 and by 4.8% (*unchanged*) in 2019. The dynamics of exports of goods and services should be considerably lower in 2018 compared to the previous year due to a slower export market growth and export performance (see Chapter 3.4). On the side of imports of goods and services, we expect positive effects of, in particular, import intensive investment demand, whose acceleration offsets the lower pace of exports. Hence, imports will probably grow by 5.5% (*unchanged*) in 2018 and by 5.2% (*versus 5.0%*) in 2019

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

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
								Forecast	*Forecast*	*Outlook*	*Outlook*
Gross domestic product	*bill. CZK 2010*	4 001	3 981	4 089	4 307	4 412	4 601	4 738	4 876	5 010	5 136
	growth in %	**-0.8**	**-0.5**	**2.7**	**5.3**	**2.5**	**4.3**	**3.0**	**2.9**	**2.7**	**2.5**
	growth in % [1]	**-0.7**	**-0.5**	**2.7**	**5.4**	**2.4**	**4.5**	**3.0**	**2.8**	**2.7**	**2.4**
Private consumption expenditure [2]	*bill. CZK 2010*	1 921	1 931	1 966	2 038	2 113	2 203	2 283	2 364	2 434	2 499
	growth in %	**-1.2**	**0.5**	**1.8**	**3.7**	**3.6**	**4.3**	**3.6**	**3.6**	**2.9**	**2.7**
Government consumption exp.	*bill. CZK 2010*	783	803	812	827	849	860	881	900	917	935
	growth in %	**-2.0**	**2.5**	**1.1**	**1.9**	**2.7**	**1.3**	**2.5**	**2.1**	**1.9**	**1.9**
Gross capital formation	*bill. CZK 2010*	1 051	997	1 083	1 223	1 171	1 214	1 268	1 306	1 342	1 376
	growth in %	**-3.9**	**-5.1**	**8.6**	**13.0**	**-4.3**	**3.7**	**4.5**	**3.0**	**2.7**	**2.6**
Gross fixed capital formation	*bill. CZK 2010*	1 042	1 016	1 056	1 164	1 127	1 165	1 256	1 296	1 334	1 370
	growth in %	**-3.1**	**-2.5**	**3.9**	**10.2**	**-3.1**	**3.3**	**7.8**	**3.2**	**2.9**	**2.8**
Change in stocks and valuables	*bill. CZK 2010*	9	-19	26	59	43	49	12	10	8	6
Exports of goods and services	*bill. CZK 2010*	2 978	2 984	3 242	3 437	3 586	3 828	4 001	4 193	4 381	4 576
	growth in %	**4.3**	**0.2**	**8.7**	**6.0**	**4.3**	**6.7**	**4.5**	**4.8**	**4.5**	**4.5**
Imports of goods and services	*bill. CZK 2010*	2 732	2 734	3 008	3 212	3 302	3 499	3 692	3 884	4 060	4 247
	growth in %	**2.7**	**0.1**	**10.1**	**6.8**	**2.8**	**6.0**	**5.5**	**5.2**	**4.5**	**4.6**
Gross domestic expenditure	*bill. CZK 2010*	3 756	3 733	3 860	4 087	4 132	4 276	4 431	4 568	4 689	4 806
	growth in %	**-2.1**	**-0.6**	**3.4**	**5.9**	**1.1**	**3.5**	**3.6**	**3.1**	**2.7**	**2.5**
Methodological discrepancy [3]	*bill. CZK 2010*	-1	-1	-4	-7	-5	-5	-4	-3	-3	-3
Real gross domestic income	*bill. CZK 2010*	3 942	3 956	4 112	4 344	4 486	4 641	4 776	4 919	5 059	5 168
	growth in %	**-1.2**	**0.4**	**3.9**	**5.6**	**3.3**	**3.5**	**2.9**	**3.0**	**2.8**	**2.2**
Contributions to GDP growth [4]											
Gross domestic expenditure	*pp*	**-2.1**	**-0.6**	**3.2**	**5.5**	**1.0**	**3.2**	**3.4**	**2.9**	**2.5**	**2.3**
Consumption	*pp*	**-1.0**	**0.8**	**1.1**	**2.2**	**2.2**	**2.3**	**2.2**	**2.1**	**1.8**	**1.7**
Household expenditure	*pp*	**-0.6**	**0.3**	**0.9**	**1.8**	**1.7**	**2.0**	**1.7**	**1.7**	**1.4**	**1.3**
Government expenditure	*pp*	**-0.4**	**0.5**	**0.2**	**0.4**	**0.5**	**0.2**	**0.5**	**0.4**	**0.4**	**0.4**
Gross capital formation	*pp*	**-1.1**	**-1.3**	**2.1**	**3.4**	**-1.2**	**1.0**	**1.2**	**0.8**	**0.7**	**0.6**
Gross fixed capital formation	*pp*	**-0.8**	**-0.6**	**1.0**	**2.6**	**-0.8**	**0.8**	**1.9**	**0.8**	**0.7**	**0.7**
Change in stocks	*pp*	**-0.2**	**-0.7**	**1.1**	**0.8**	**-0.4**	**0.1**	**-0.8**	**0.0**	**0.0**	**0.0**
Foreign balance	*pp*	**1.3**	**0.1**	**-0.5**	**-0.2**	**1.4**	**1.1**	**-0.4**	**0.0**	**0.2**	**0.2**
External balance of goods	*pp*	**1.4**	**0.1**	**-0.1**	**-1.1**	**1.0**	**0.8**	**-0.6**	**-0.1**	**0.1**	**0.1**
External balance of services	*pp*	**-0.1**	**0.0**	**-0.4**	**0.9**	**0.4**	**0.2**	**0.2**	**0.1**	**0.1**	**0.1**
Gross value added	*bill. CZK 2010*	3 624	3 606	3 729	3 905	3 999	4 166	.	.	.	.
	growth in %	**-0.8**	**-0.5**	**3.4**	**4.7**	**2.4**	**4.2**	**.**	**.**	**.**	**.**
Net taxes and subsidies on products	*bill. CZK 2010*	376	375	363	402	414	436	.	.	.	.

[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

		2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Prelim.	*Prelim.*	*Estimate*	*Forecast*
Gross domestic product	*bill. CZK 2010*	1 069	1 162	1 174	1 196	1 105	1 193	1 206	1 234
	growth in %	**3.6**	**3.6**	**4.9**	**4.9**	**3.4**	**2.7**	**2.7**	**3.1**
	growth in % [1]	**2.9**	**4.9**	**5.1**	**5.0**	**4.1**	**2.4**	**2.6**	**2.7**
	QoQ in % [1]	**1.3**	**2.3**	**0.5**	**0.7**	**0.5**	**0.7**	**0.7**	**0.8**
Private consumption expenditure [2]	*bill. CZK 2010*	521	549	558	575	543	570	577	594
	growth in %	**4.0**	**4.2**	**4.4**	**4.5**	**4.1**	**3.8**	**3.3**	**3.4**
Government consumption exp.	*bill. CZK 2010*	200	211	208	240	207	217	213	245
	growth in %	**2.1**	**1.5**	**0.6**	**1.0**	**3.2**	**2.9**	**2.1**	**1.7**
Gross capital formation	*bill. CZK 2010*	238	306	347	323	256	313	357	342
	growth in %	**-4.2**	**1.3**	**7.2**	**8.9**	**7.4**	**2.2**	**2.9**	**6.1**
Gross fixed capital formation	*bill. CZK 2010*	255	281	302	327	277	306	323	350
	growth in %	**0.0**	**3.6**	**4.6**	**4.6**	**8.9**	**8.8**	**6.7**	**7.3**
Change in stocks and valuables	*bill. CZK 2010*	-16	25	44	-4	-21	7	34	-8
Exports of goods and services	*bill. CZK 2010*	958	972	909	988	994	1 014	952	1 040
	growth in %	**7.8**	**4.5**	**6.7**	**7.9**	**3.8**	**4.3**	**4.7**	**5.2**
Imports of goods and services	*bill. CZK 2010*	849	876	846	929	894	920	891	988
	growth in %	**5.8**	**3.5**	**6.4**	**8.2**	**5.3**	**5.0**	**5.3**	**6.3**
Gross domestic expenditure	*bill. CZK 2010*	960	1 066	1 112	1 138	1 006	1 099	1 144	1 181
	growth in %	**1.5**	**2.8**	**4.5**	**4.9**	**4.8**	**3.2**	**2.9**	**3.8**
Methodological discrepancy [3]	*bill. CZK 2010*	0	-2	-2	0	-1	-2	-2	1
Real gross domestic income	*bill. CZK 2010*	1 074	1 169	1 188	1 210	1 119	1 204	1 212	1 241
	growth in %	**1.9**	**2.3**	**4.3**	**5.2**	**4.2**	**2.9**	**2.0**	**2.6**
Gross value added	*bill. CZK 2010*	975	1 052	1 061	1 078	1 007	1 081	.	.
	growth in %	**3.6**	**3.5**	**4.9**	**4.6**	**3.3**	**2.8**	.	.
	growth in % [1]	**2.8**	**4.9**	**5.1**	**4.8**	**4.2**	**2.4**	.	.
	QoQ in % [1]	**1.3**	**2.2**	**0.5**	**0.8**	**0.7**	**0.5**	.	.
Net taxes and subsidies on products	*bill. CZK 2010*	95	109	113	119	98	112	.	.

[1] *From seasonally and 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.*

Source: CZSO. Calculations of the MoF.

Table 3.1.3: Nominal GDP by Type of Expenditure – yearly

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
								Forecast	*Forecast*	*Outlook*	*Outlook*
Gross domestic product	*bill. CZK*	**4 060**	**4 098**	**4 314**	**4 596**	**4 768**	**5 045**	**5 296**	**5 568**	**5 817**	**6 072**
	growth in %	0.6	0.9	5.3	6.5	3.7	5.8	5.0	5.1	4.5	4.4
Private consumption expenditure [1)]	*bill. CZK*	**1 998**	**2 025**	**2 074**	**2 152**	**2 243**	**2 394**	**2 544**	**2 696**	**2 827**	**2 956**
	growth in %	1.0	1.4	2.4	3.8	4.2	6.7	6.3	6.0	4.9	4.5
Government consumption exp.	*bill. CZK*	**804**	**826**	**849**	**883**	**919**	**969**	**1 039**	**1 105**	**1 153**	**1 202**
	growth in %	-1.1	2.7	2.8	4.0	4.0	5.4	7.2	6.4	4.3	4.3
Gross capital formation	*bill. CZK*	**1 063**	**1 011**	**1 116**	**1 285**	**1 239**	**1 303**	**1 361**	**1 412**	**1 463**	**1 520**
	growth in %	-2.2	-4.9	10.4	15.1	-3.6	5.2	4.4	3.8	3.6	3.9
Gross fixed capital formation	*bill. CZK*	**1 052**	**1 027**	**1 084**	**1 216**	**1 189**	**1 246**	**1 343**	**1 396**	**1 448**	**1 507**
	growth in %	-1.4	-2.4	5.5	12.2	-2.3	4.8	7.8	3.9	3.8	4.1
Change in stocks and valuables	*bill. CZK*	**11**	**-16**	**32**	**68**	**50**	**57**	**18**	**17**	**15**	**13**
External balance	*bill. CZK*	**195**	**236**	**275**	**276**	**368**	**379**	**352**	**355**	**373**	**394**
Exports of goods and services	*bill. CZK*	**3 092**	**3 150**	**3 561**	**3 725**	**3 793**	**4 025**	**4 178**	**4 362**	**4 559**	**4 785**
	growth in %	7.5	1.9	13.0	4.6	1.8	6.1	3.8	4.4	4.5	5.0
Imports of goods and services	*bill. CZK*	**2 897**	**2 914**	**3 286**	**3 449**	**3 425**	**3 645**	**3 826**	**4 007**	**4 186**	**4 391**
	growth in %	6.5	0.6	12.8	5.0	-0.7	6.4	5.0	4.7	4.5	4.9
Gross national income	*bill. CZK*	**3 808**	**3 854**	**4 023**	**4 286**	**4 459**	**4 735**	**5 008**	**5 273**	**5 514**	**5 760**
	growth in %	2.1	1.2	4.4	6.5	4.0	6.2	5.8	5.3	4.6	4.5
Primary income balance	*bill. CZK*	**-252**	**-245**	**-291**	**-310**	**-309**	**-310**	**-288**	**-295**	**-302**	**-312**

[1)] *The consumption of non-profit institutions serving households (NPISH) is included in the private consumption.*
Source: CZSO. Calculations of the MoF.

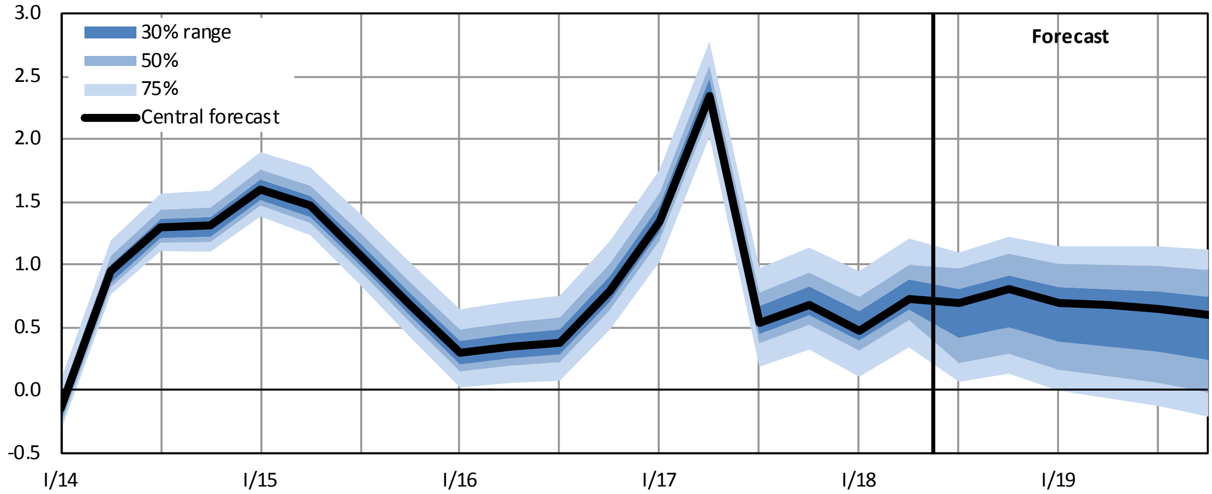
Table 3.1.4: Nominal GDP by Type of Expenditure – quarterly

		2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Prelim.	*Prelim.*	*Estimate*	*Forecast*
Gross domestic product	*bill. CZK*	**1 157**	**1 266**	**1 289**	**1 334**	**1 227**	**1 331**	**1 346**	**1 392**
	growth in %	4.4	4.7	6.6	7.4	6.1	5.1	4.4	4.4
Private consumption expenditure [1]	*bill. CZK*	**562**	**594**	**608**	**630**	**599**	**633**	**645**	**667**
	growth in %	6.5	6.5	6.8	7.2	6.6	6.5	6.1	5.8
Government consumption exp.	*bill. CZK*	**217**	**234**	**233**	**285**	**239**	**254**	**248**	**297**
	growth in %	5.2	5.1	4.8	6.4	10.2	8.9	6.6	4.0
Gross capital formation	*bill. CZK*	**257**	**330**	**371**	**345**	**273**	**336**	**384**	**368**
	growth in %	-2.4	3.5	8.9	9.3	6.4	1.9	3.3	6.6
Gross fixed capital formation	*bill. CZK*	**273**	**302**	**323**	**349**	**294**	**328**	**346**	**375**
	growth in %	2.2	5.3	6.0	5.4	7.9	8.6	7.1	7.6
Change in stocks and valuables	*bill. CZK*	**-16**	**28**	**49**	**-3**	**-22**	**9**	**38**	**-7**
External balance	*bill. CZK*	**122**	**108**	**77**	**72**	**116**	**107**	**69**	**60**
Exports of goods and services	*bill. CZK*	**1 028**	**1 031**	**946**	**1 019**	**1 023**	**1 057**	**1 008**	**1 091**
	growth in %	9.7	5.1	4.9	4.7	-0.5	2.5	6.6	7.0
Imports of goods and services	*bill. CZK*	**907**	**923**	**869**	**947**	**907**	**950**	**939**	**1 031**
	growth in %	9.8	6.0	5.4	4.7	0.0	2.9	8.1	8.8

[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)

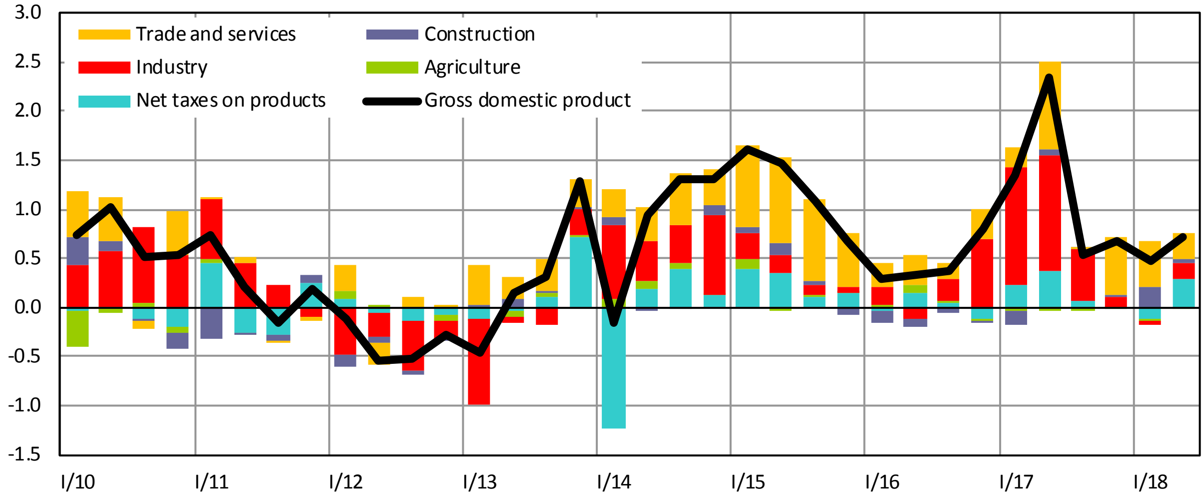
QoQ growth rate, in %, seasonally adjusted, past probability distribution reflects the actual distribution of data revisions, future probability distribution is based upon the MoF's forecasting performance



Source: CZSO. Calculations of the MoF.

Graph 3.1.2: Resources of Gross Domestic Product

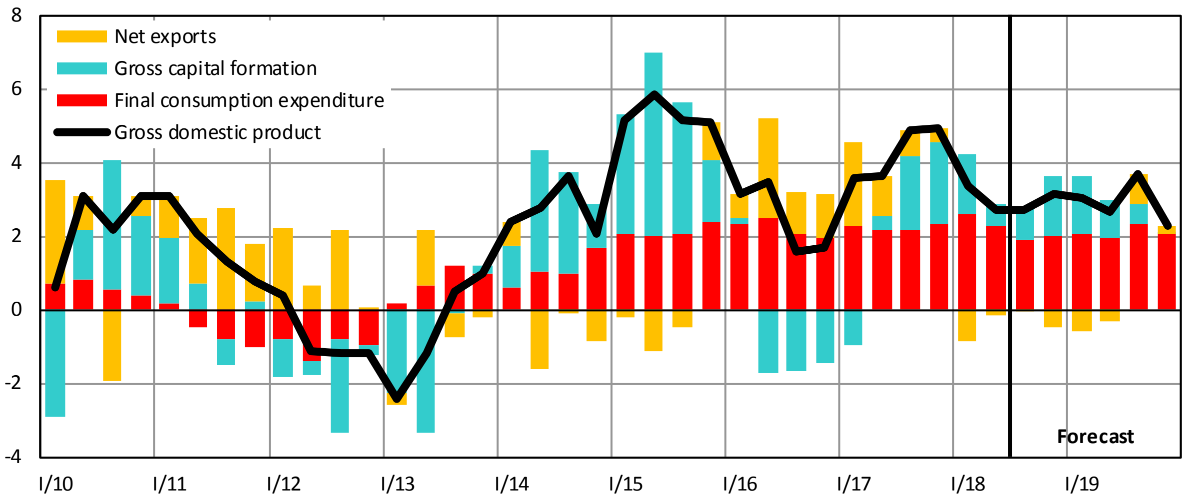
QoQ real growth rate of GDP in %, contributions of individual components in percentage points, seasonally adjusted



Source: CZSO. Calculations of the MoF.

Graph 3.1.3: Gross Domestic Product by Type of Expenditure

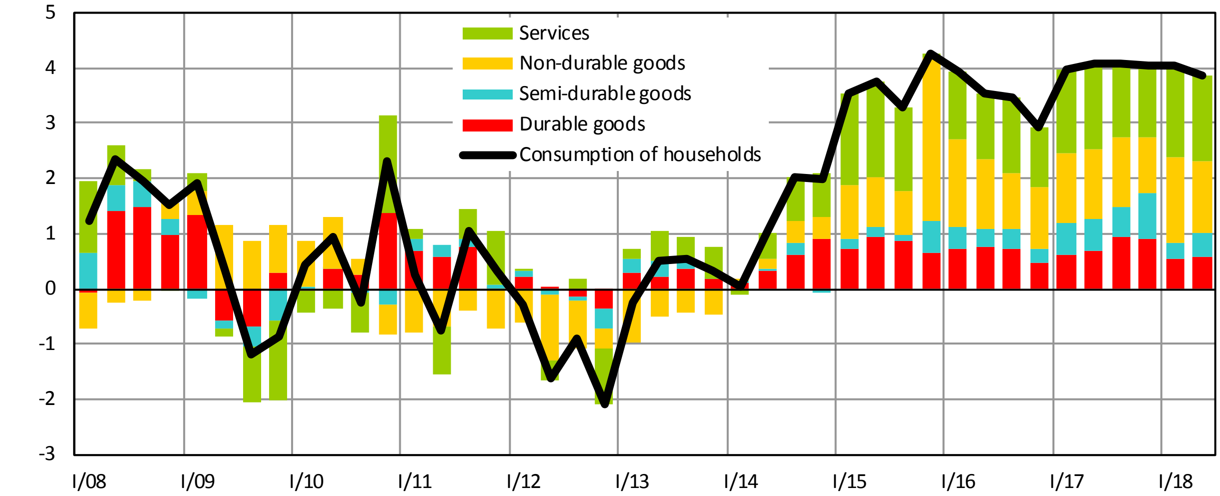
YoY real growth rate of GDP in %, contributions of individual components in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.4: Consumption of Households

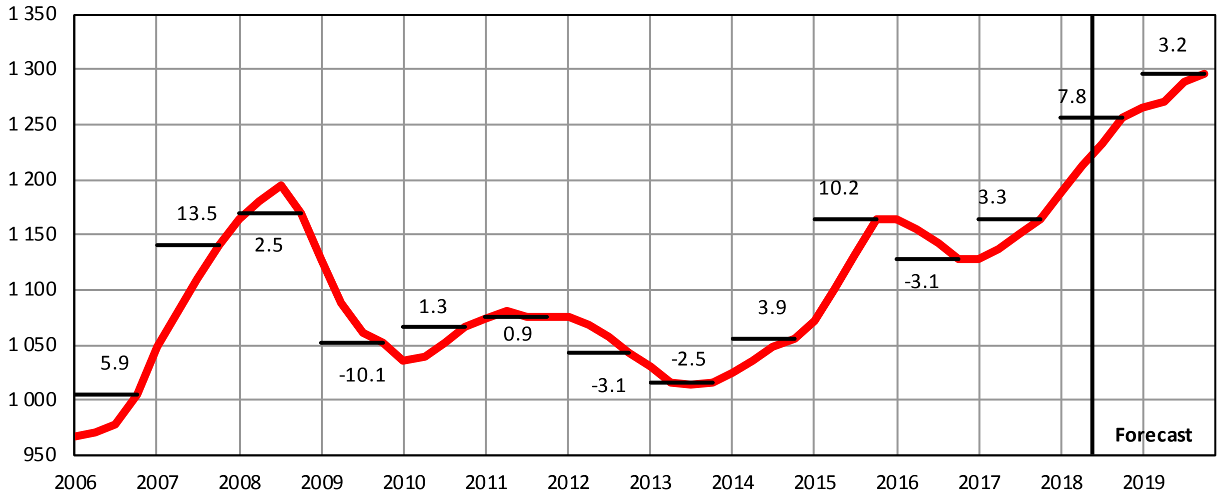
consumption of households in domestic concept, YoY real growth rate in %, contributions of individual components in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.5: Gross Fixed Capital Formation

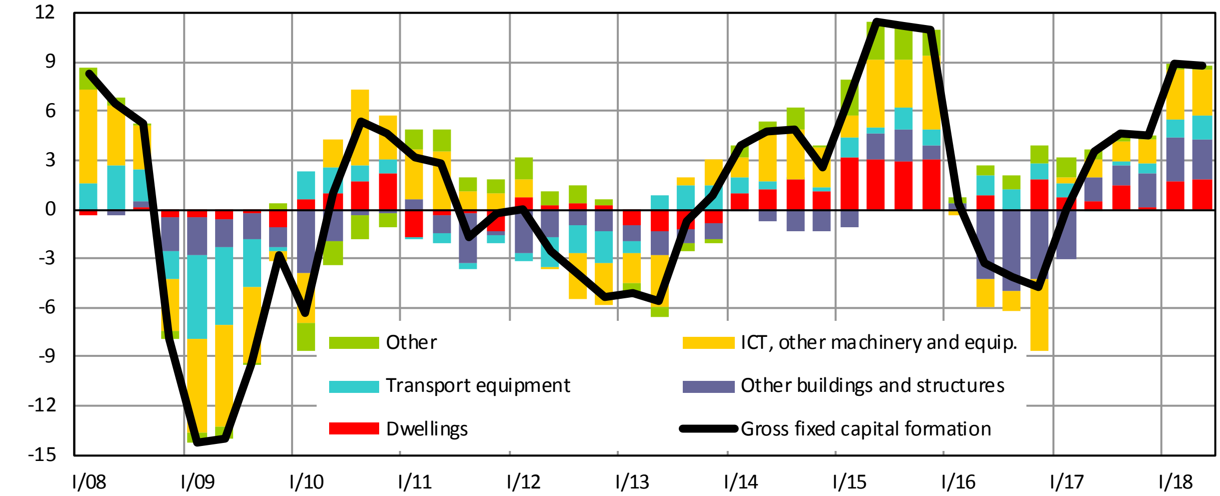
yearly moving sums, bill. CZK in const. prices of 2010, black lines with labels show the average level and growth rate in the given year



Source: CZSO. Calculations of the MoF.

Graph 3.1.6: Gross Fixed Capital Formation by Type of Expenditure

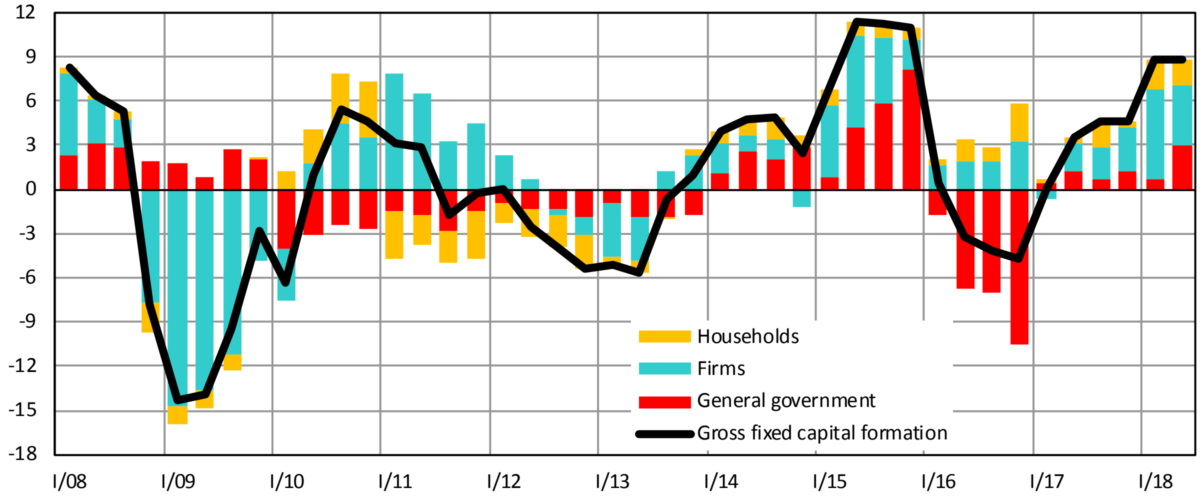
YoY real growth rate in %, contributions of individual components in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.1.7: Gross Fixed Capital Formation by Sector

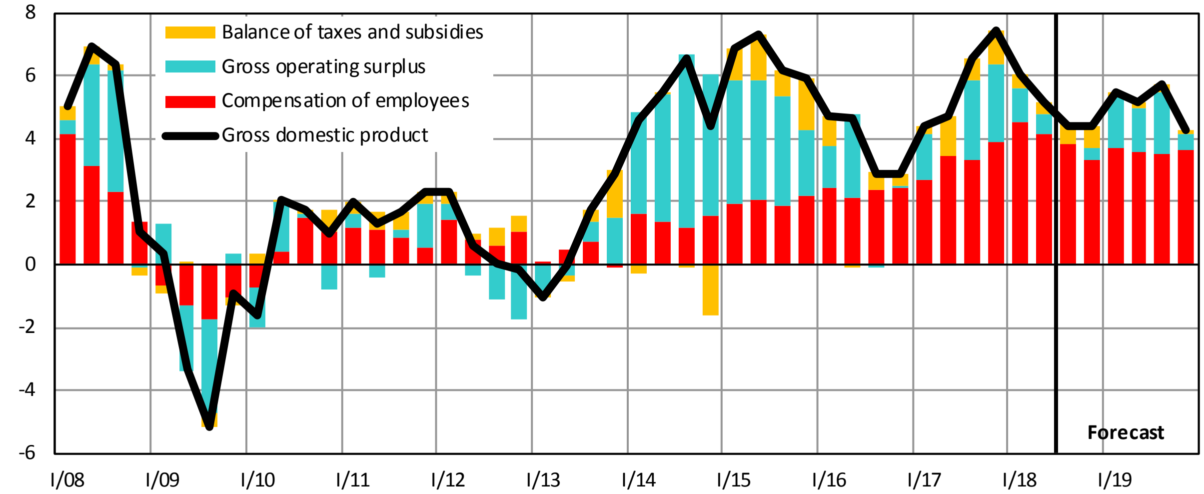
YoY real growth rate in %, contributions of individual sectors in percentage points



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

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
								Forecast	*Forecast*	*Outlook*	*Outlook*
GDP	*bill. CZK*	**4 060**	**4 098**	**4 314**	**4 596**	**4 768**	**5 045**	**5 296**	**5 568**	**5 817**	**6 072**
	growth in %	0.6	0.9	5.3	6.5	3.7	5.8	5.0	5.1	4.5	4.4
Balance of taxes and subsidies	*bill. CZK*	**385**	**402**	**381**	**434**	**454**	**495**	**522**	**531**	**549**	**567**
	% of GDP	9.5	9.8	8.8	9.4	9.5	9.8	9.9	9.5	9.4	9.3
	growth in %	4.4	4.2	-5.1	13.8	4.7	8.9	5.4	1.8	3.3	3.4
Taxes on production and imports	*bill. CZK*	**508**	**528**	**518**	**571**	**595**	**638**	**.**	**.**	**.**	**.**
	growth in %	4.1	3.9	-1.8	10.1	4.3	7.2	.	.	.	.
Subsidies on production	*bill. CZK*	**123**	**126**	**137**	**137**	**141**	**143**	**.**	**.**	**.**	**.**
	growth in %	3.0	2.7	8.5	-0.1	3.3	1.5	.	.	.	.
Compensation of employees	*bill. CZK*	**1 665**	**1 676**	**1 735**	**1 821**	**1 928**	**2 089**	**2 287**	**2 479**	**2 635**	**2 795**
(domestic concept)	*% of GDP*	41.0	40.9	40.2	39.6	40.4	41.4	43.2	44.5	45.3	46.0
	growth in %	2.4	0.7	3.5	5.0	5.9	8.3	9.5	8.4	6.3	6.1
Wages and salaries	*bill. CZK*	**1 269**	**1 275**	**1 321**	**1 384**	**1 464**	**1 584**	**1 734**	**1 879**	**1 997**	**2 119**
	growth in %	2.6	0.5	3.6	4.8	5.7	8.2	9.5	8.4	6.3	6.1
Social security contributions	*bill. CZK*	**396**	**402**	**414**	**437**	**464**	**505**	**553**	**599**	**637**	**676**
	growth in %	1.6	1.4	3.1	5.5	6.4	8.6	9.7	8.4	6.3	6.1
Gross operating surplus	*bill. CZK*	**2 010**	**2 020**	**2 198**	**2 341**	**2 386**	**2 462**	**2 487**	**2 559**	**2 633**	**2 710**
	% of GDP	49.5	49.3	50.9	50.9	50.0	48.8	47.0	46.0	45.3	44.6
	growth in %	-1.4	0.5	8.8	6.5	1.9	3.2	1.0	2.9	2.9	2.9
Consumption of capital	*bill. CZK*	**880**	**906**	**939**	**969**	**998**	**1 027**	**1 055**	**1 116**	**1 183**	**1 246**
	growth in %	1.8	3.0	3.6	3.2	3.0	2.9	2.8	5.7	6.0	5.4
Net operating surplus	*bill. CZK*	**1 130**	**1 114**	**1 259**	**1 372**	**1 388**	**1 435**	**1 431**	**1 443**	**1 451**	**1 463**
	growth in %	-3.8	-1.4	13.0	9.0	1.2	3.4	-0.3	0.8	0.5	0.9

Source: CZSO. Calculations of the MoF.

Table 3.1.6: GDP by Type of Income – quarterly

		2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Prelim.	*Prelim.*	*Estimate*	*Forecast*
GDP	*bill. CZK*	**1 157**	**1 266**	**1 289**	**1 334**	**1 227**	**1 331**	**1 346**	**1 392**
	growth in %	4.4	4.7	6.6	7.4	6.1	5.1	4.4	4.4
Balance of taxes and subsidies	*bill. CZK*	**103**	**128**	**135**	**129**	**108**	**133**	**143**	**137**
	growth in %	2.5	14.1	6.7	11.9	5.0	3.5	6.3	6.8
Compensation of employees	*bill. CZK*	**492**	**517**	**517**	**563**	**544**	**570**	**566**	**607**
(domestic concept)	*growth in %*	6.5	8.7	8.5	9.5	10.7	10.1	9.5	7.9
Wages and salaries	*bill. CZK*	**372**	**391**	**392**	**429**	**411**	**431**	**430**	**463**
	growth in %	6.7	8.4	8.2	9.5	10.5	10.2	9.5	7.9
Social security contributions	*bill. CZK*	**120**	**127**	**125**	**134**	**133**	**139**	**137**	**144**
	growth in %	5.9	9.8	9.4	9.2	11.4	10.1	9.5	7.9
Gross operating surplus	*bill. CZK*	**562**	**620**	**637**	**642**	**575**	**628**	**636**	**648**
	growth in %	2.9	-0.1	5.0	4.9	2.2	1.3	-0.1	0.8

Source: CZSO. Calculations of the MoF.

3.2 Prices

Growth in **consumer prices** was 2.3% YoY (*versus 2.4%*) in September 2018. Inflation was mainly driven by market factors, as the contribution of administrative measures reached only 0.3 pp. It was mainly due to an increase in electricity prices (0.2 pp); introduction of fare discounts acted in the opposite direction (−0.1 pp).

In terms of individual sections of the consumer basket, the largest contribution in September was recorded in housing (0.8 pp). The contributions of food and non-alcoholic beverages and transport were 0.3 pp each. Fuel and oil prices grew by 11.7% YoY following the CZK oil price development.

We do not change our forecast for the average inflation rate in 2018 and 2019. The inflation forecast in the July Macroeconomic Forecast has been quite accurate, and there are not any major reasons for a change in the forecast following from new assumptions or the assessment of domestic cost and demand inflationary pressures.

Administrative measures should only play a small role in the inflation rate **in 2018**. Within regulated prices, the latest electricity price increase will probably have the most positive impact on consumer prices. By contrast, the greatest negative impact can be expected from the introduction of fare discounts with the effect from 1 September. The increase in excise duty on tobacco products, which is already reflected in consumer prices, had very little effect. We expect the contribution of administrative measures to the year-on-year increase in consumer prices in December 2018 to reach 0.3 pp (*unchanged*).

The only significant anti-inflationary factor this year is the expected appreciation of the Czech koruna against the euro by 3.1% and the US dollar by 8.8%. On the other hand, powerful pro-inflationary effects of the continued strong increase in unit labour costs and the growth in domestic demand amid a positive output gap should be expected. The year-on-year rise in oil prices will also play a significant role.

The year-on-year inflation is likely to hover in the upper half of the tolerance band around the CNB's 2% target in Q4. **In 2018**, the **average inflation rate** should reach 2.2% (*unchanged*), with a year-on-year increase in consumer prices of 2.4% (*versus 2.5%*) in December.

In 2019, the pro-inflationary effect of several factors should moderate. The increase in unit labour costs and in domestic demand should slow down, and the growth in crude oil price should be very modest. In the first half of the year the year-on-year inflation should remain in the upper half of the tolerance band around the CNB's 2% target, but it should slow down in the second half of the year. The output gap, however, will probably remain clearly positive in 2019. Anti-inflationary effects of the strengthening koruna in 2019, however, should be weaker than this year.

The contribution of regulated prices should be higher by approximately 0.1 pp than in 2018. As for the changes in indirect tax, we assume that selected price representatives will be transferred to the second reduced VAT rate in mid-2019. 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.

In line with the above, **we expect the average inflation rate** at 2.3% (*unchanged*) in 2019 with consumer prices rising by 1.9% YoY (*unchanged*) in December.

In Q2 2018, the **GDP deflator** increased by 2.4% (*versus 1.8%*), with the gross domestic expenditure deflator rising by 2.5% (*in line with the estimate*) and terms of trade improving by 0.3% (*versus a deterioration of 0.3%*). As regards the gross domestic expenditure deflator, a lower-than-expected growth in the general government consumption deflator and a lower decline in the gross domestic expenditure deflator offset each other. As regards terms of trade, the error in the estimate was due to a higher-than-expected decrease in goods export prices.

GDP deflator should increase by 1.9% (*versus 1.8%*) in 2018, solely due to the growth of the gross domestic expenditure deflator. In 2019, GDP deflator growth could further accelerate to 2.2% (*versus 2.3%*). The situation is clearly shown in Graph 3.2.6.

The anticipated development of both export and import prices will be affected mainly by the expected appreciation of the koruna exchange rate and the dynamics of the oil price. As a result, the terms of trade could worsen by 0.1% in 2018 (*versus 0.3%*), then slightly increase by 0.1% (*unchanged*) in 2019.

Growth in the gross domestic expenditure deflator could slow down to 2.2% (*unchanged*) in 2018. The impact of the drop in the growth rate of the gross capital formation deflator will outweigh the effect of faster growth in the deflators if final consumption expenditure of households and the general government sector (see Graph 3.2.4). In 2019, the dynamics of gross domestic expenditure deflator could slightly increase to 2.3% (*unchanged*) as a result of the return of the growth in the gross capital formation deflator to positive figures.

Table 3.2.1: Prices – yearly

		2012	2013	2014	2015	2016	2017	2018 Forecast	2019 Forecast	2020 Outlook	2021 Outlook
Consumer Price Index											
Average of a year	*average 2005=100*	121.0	122.7	123.2	123.6	124.4	127.4	130.2	133.1	135.6	138.1
	growth in %	**3.3**	**1.4**	**0.4**	**0.3**	**0.7**	**2.5**	**2.2**	**2.3**	**1.9**	**1.8**
December	*average 2005=100*	121.1	122.8	122.9	123.0	125.4	128.3	131.4	133.8	136.4	138.8
	growth in %	**2.4**	**1.4**	**0.1**	**0.1**	**2.0**	**2.4**	**2.4**	**1.9**	**1.9**	**1.8**
Of which the contribution of:											
Administrative measures [1)]	*percentage points*	**2.2**	**1.0**	**-0.2**	**0.1**	**0.0**	**0.1**	**0.3**	**-0.1**	**0.3**	**0.3**
Market increase	*percentage points*	**0.2**	**0.4**	**0.3**	**0.0**	**2.0**	**2.3**	**2.1**	**1.9**	**1.6**	**1.5**
Harmonized index of consumer	*average 2005=100*	120.3	121.9	122.4	122.8	123.6	126.6	129.2	132.1	134.5	136.9
prices	*growth in %*	**3.5**	**1.4**	**0.4**	**0.3**	**0.6**	**2.4**	**2.1**	**2.2**	**1.8**	**1.8**
Offering prices of flats											
Czech Republic	*average 2010=100*	96.1	97.2	100.7	106.9	117.6	130.7	.	.	.	.
	growth in %	**1.1**	**1.1**	**3.6**	**6.2**	**10.0**	**11.1**	**.**	**.**	**.**	**.**
Czech Republic excluding Prague	*average 2010=100*	92.5	91.3	93.0	97.7	107.1	112.1	.	.	.	.
	growth in %	**-4.2**	**-1.3**	**1.9**	**5.1**	**9.6**	**4.7**	**.**	**.**	**.**	**.**
Prague	*average 2010=100*	99.6	103.1	108.5	116.1	128.2	149.2	.	.	.	.
	growth in %	**6.4**	**3.5**	**5.2**	**7.0**	**10.4**	**16.4**	**.**	**.**	**.**	**.**
Deflators											
GDP	*average 2010=100*	101.5	102.9	105.5	106.7	108.1	109.7	111.8	114.2	116.1	118.2
	growth in %	**1.5**	**1.4**	**2.5**	**1.2**	**1.3**	**1.5**	**1.9**	**2.2**	**1.7**	**1.8**
Domestic final use	*average 2010=100*	102.9	103.5	104.6	105.7	106.5	109.1	111.6	114.1	116.1	118.2
	growth in %	**1.8**	**0.5**	**1.1**	**1.0**	**0.7**	**2.5**	**2.2**	**2.3**	**1.7**	**1.8**
Consumption of households	*average 2010=100*	104.0	104.9	105.5	105.6	106.2	108.7	111.4	114.0	116.2	118.3
	growth in %	**2.2**	**0.8**	**0.6**	**0.1**	**0.5**	**2.4**	**2.5**	**2.3**	**1.9**	**1.8**
Consumption of government	*average 2010=100*	102.7	102.8	104.6	106.7	108.1	112.6	117.8	122.8	125.7	128.6
	growth in %	**0.9**	**0.2**	**1.7**	**2.0**	**1.3**	**4.1**	**4.6**	**4.2**	**2.3**	**2.3**
Fixed capital formation	*average 2010=100*	100.9	101.1	102.7	104.5	105.4	107.0	106.9	107.7	108.6	110.0
	growth in %	**1.7**	**0.1**	**1.6**	**1.8**	**0.9**	**1.5**	**-0.1**	**0.7**	**0.8**	**1.3**
Exports of goods and services	*average 2010=100*	103.8	105.6	109.8	108.4	105.8	105.1	104.4	104.0	104.1	104.6
	growth in %	**3.1**	**1.7**	**4.0**	**-1.3**	**-2.4**	**-0.6**	**-0.7**	**-0.4**	**0.0**	**0.5**
Imports of goods and services	*average 2010=100*	106.1	106.6	109.2	107.4	103.7	104.2	103.6	103.2	103.1	103.4
	growth in %	**3.7**	**0.5**	**2.5**	**-1.7**	**-3.4**	**0.4**	**-0.5**	**-0.4**	**-0.1**	**0.3**
Terms of trade	*average 2010=100*	97.9	99.0	100.5	100.9	102.0	100.9	100.8	100.8	100.9	101.1
	growth in %	**-0.6**	**1.2**	**1.5**	**0.4**	**1.0**	**-1.0**	**-0.1**	**0.1**	**0.1**	**0.2**

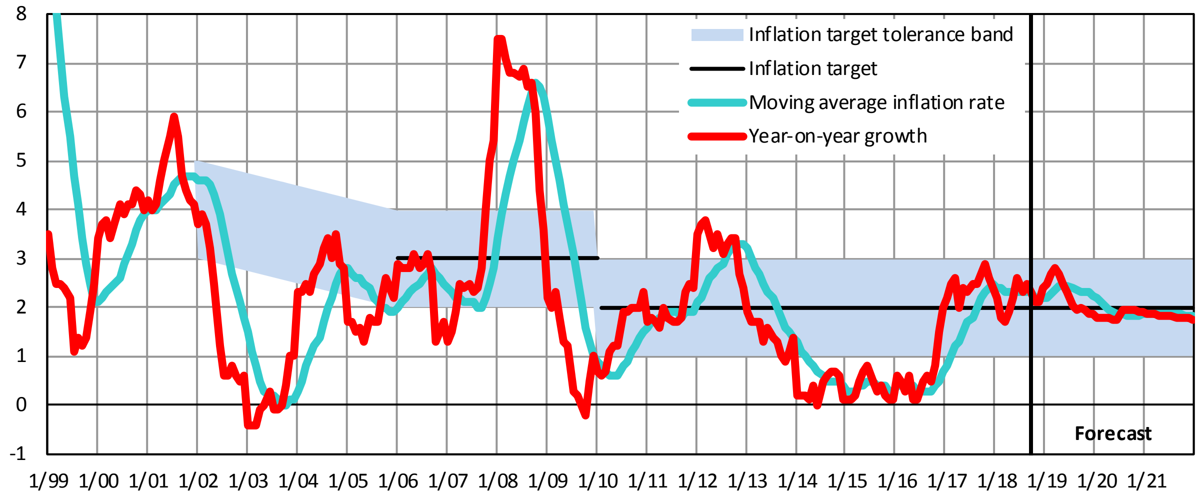
[1)] *The contribution of increase in regulated prices and in indirect taxes to increase of December YoY consumer price inflation.*
Source: CZSO, Eurostat. Calculations of the MoF.

Table 3.2.2: Prices – quarterly

		2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Estimate	*Forecast*
Consumer Price Index	*average 2005=100*	126.7	127.1	127.6	128.3	129.1	130.0	130.7	131.1
	growth in %	**2.4**	**2.2**	**2.5**	**2.6**	**1.9**	**2.3**	**2.4**	**2.2**
Of which the contribution of:									
Administrative measures [1)]	*percentage points*	**-0.2**	**-0.2**	**-0.1**	**-0.1**	**0.2**	**0.3**	**0.3**	**0.3**
Market increase	*percentage points*	**2.6**	**2.4**	**2.6**	**2.7**	**1.7**	**2.0**	**2.1**	**1.9**
Harmonized index of consumer	*average 2005=100*	125.9	126.3	126.7	127.3	128.1	129.0	129.6	130.1
prices	*growth in %*	**2.5**	**2.3**	**2.4**	**2.5**	**1.8**	**2.1**	**2.3**	**2.2**
Offering prices of flats									
Czech Republic	*average 2010=100*	124.2	127.6	133.7	137.1	140.1	143.2	146.4	.
	growth in %	**9.5**	**9.5**	**12.5**	**12.5**	**12.8**	**12.2**	**9.5**	.
Czech Republic excluding Prague	*average 2010=100*	108.3	109.9	114.6	115.4	119.1	120.3	123.5	.
	growth in %	**4.6**	**3.6**	**5.7**	**4.7**	**10.0**	**9.5**	**7.8**	.
Prague	*average 2010=100*	140.0	145.3	152.8	158.8	161.1	166.0	169.2	.
	growth in %	**13.6**	**14.6**	**18.3**	**18.8**	**15.1**	**14.2**	**10.7**	.
Deflators									
GDP	*average 2010=100*	108.2	109.0	109.8	111.5	111.0	111.6	111.6	112.8
	growth in %	**0.7**	**1.0**	**1.6**	**2.4**	**2.6**	**2.4**	**1.6**	**1.2**
Domestic final use	*average 2010=100*	107.8	108.6	109.0	110.8	110.5	111.3	111.5	112.8
	growth in %	**2.4**	**2.5**	**2.4**	**2.5**	**2.4**	**2.5**	**2.4**	**1.7**
Consumption of households	*average 2010=100*	107.8	108.2	108.9	109.6	110.4	111.1	111.8	112.3
	growth in %	**2.3**	**2.2**	**2.3**	**2.6**	**2.4**	**2.7**	**2.7**	**2.4**
Consumption of government	*average 2010=100*	108.2	110.6	111.9	118.6	115.5	117.1	116.9	121.3
	growth in %	**3.1**	**3.6**	**4.2**	**5.3**	**6.8**	**5.8**	**4.4**	**2.2**
Fixed capital formation	*average 2010=100*	107.2	107.3	106.7	106.7	106.3	107.1	107.1	107.0
	growth in %	**2.2**	**1.7**	**1.3**	**0.8**	**-0.9**	**-0.2**	**0.4**	**0.3**
Exports of goods and services	*average 2010=100*	107.3	106.1	104.0	103.2	102.9	104.2	105.8	104.9
	growth in %	**1.7**	**0.6**	**-1.7**	**-3.0**	**-4.1**	**-1.8**	**1.8**	**1.7**
Imports of goods and services	*average 2010=100*	106.8	105.4	102.7	101.9	101.5	103.2	105.4	104.3
	growth in %	**3.8**	**2.3**	**-0.9**	**-3.2**	**-5.0**	**-2.1**	**2.7**	**2.4**
Terms of trade	*average 2010=100*	100.5	100.6	101.2	101.2	101.4	100.9	100.4	100.5
	growth in %	**-2.0**	**-1.7**	**-0.8**	**0.3**	**0.9**	**0.3**	**-0.9**	**-0.7**

[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.

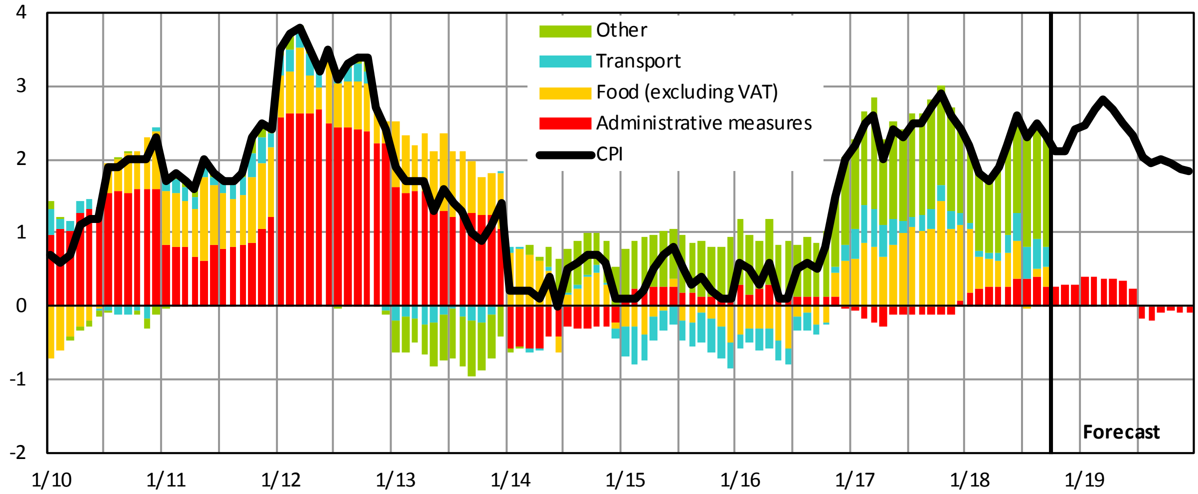
Graph 3.2.1: Consumer Prices
YoY growth rate, in %



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

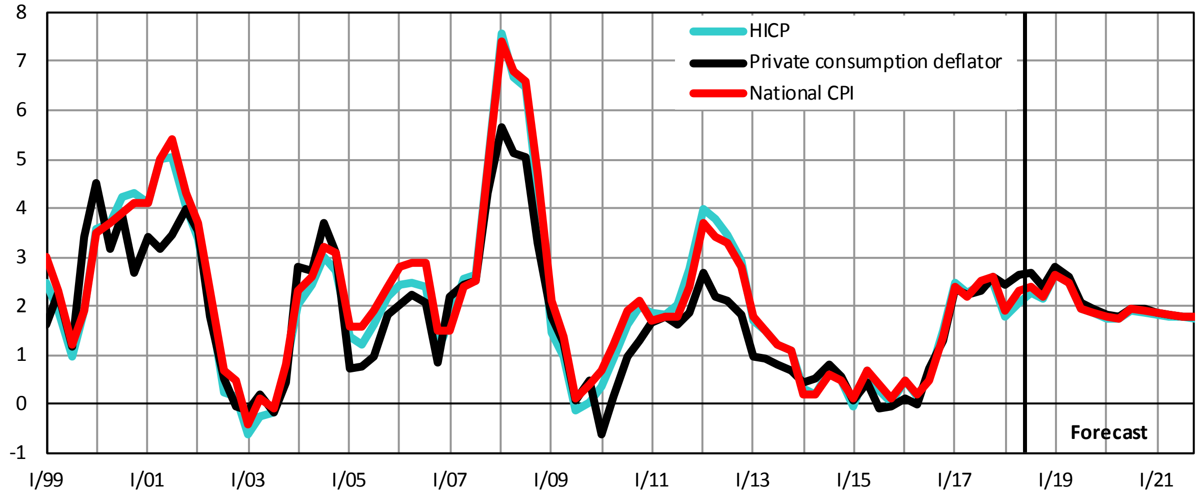
YoY growth of consumer price index, contributions in percentage points, Transport excluding administrative measures and excises



Source: CZSO. Calculations of the MoF.

Graph 3.2.3: Indicators of Consumer Prices

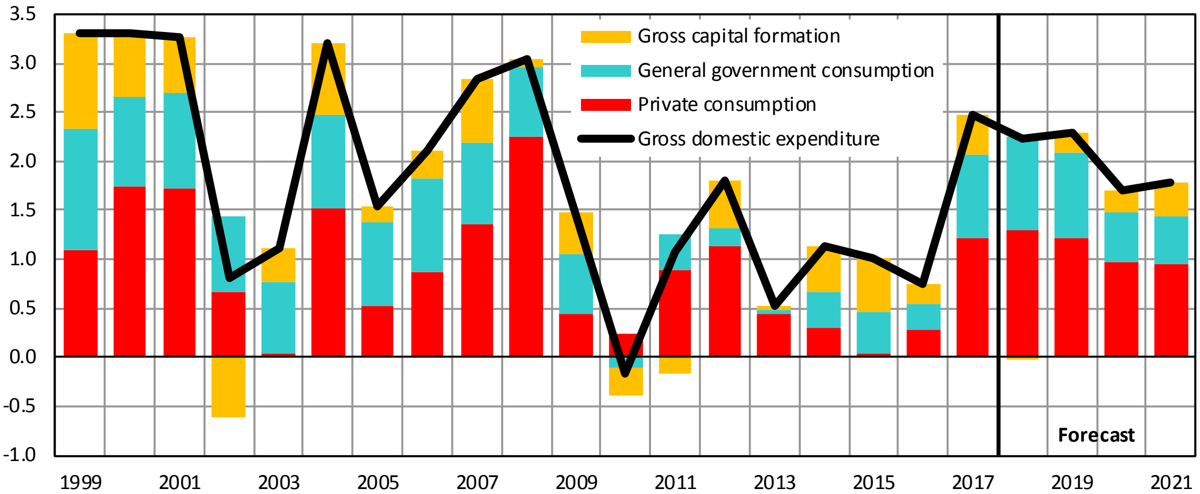
YoY growth rate, in %



Source: CZSO, Eurostat. Calculations of the MoF.

Graph 3.2.4: Gross Domestic Expenditure Deflator

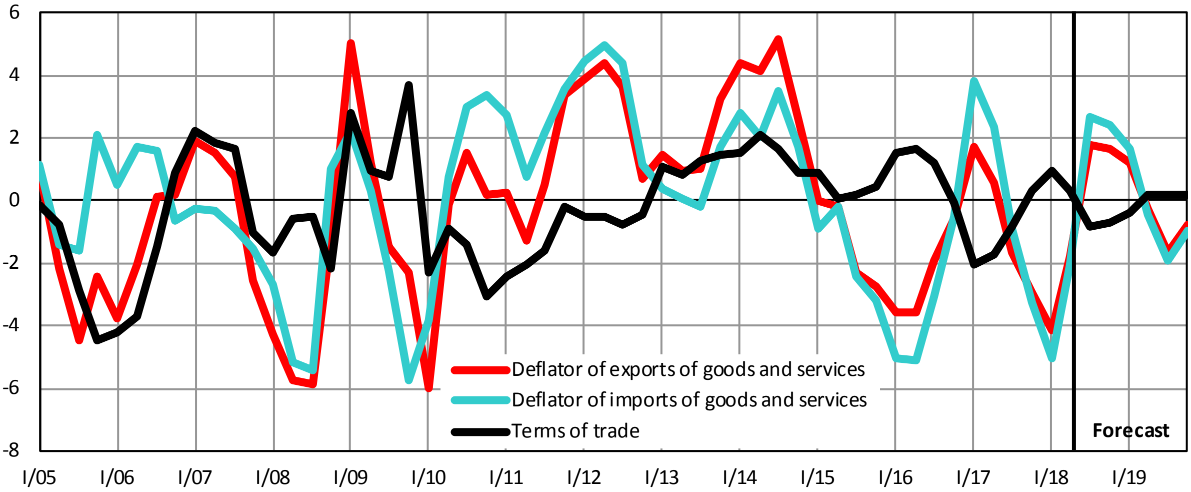
YoY growth rate in %, contributions of growth of deflators of individual components of gross domestic expenditure in percentage points



Source: CZSO. Calculations of the MoF.

Graph 3.2.5: Terms of Trade

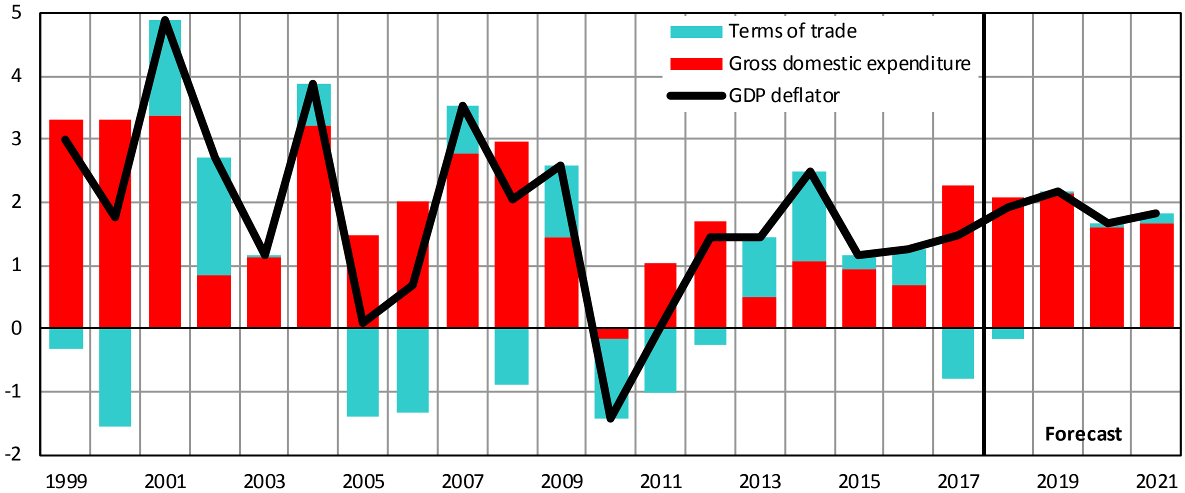
YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

Graph 3.2.6: 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.

3.3 Labour Market

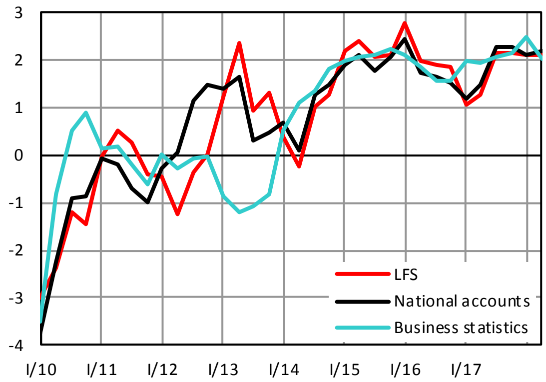
The labour market has long been showing signs of overheating. According to all available statistics, growth in employment continues. While the internationally comparable unemployment rate has probably reached its bottom, registered unemployment is further declining. The number of job vacancies is more than 300 thousand, thus exceeding the 2008 highs more than two-fold. This development is correlated with strong growth in wages and salaries.

Employment (LFS) grew by 1.8% YoY (*in line with the estimate*) in the second quarter of 2018. The number of employees increased by 2.1% (*versus 1.9%*), but the number of entrepreneurs more or less stagnated (an increase by 0.1%). The number of entrepreneurs without employees rose by 0.4%, whereas the number of entrepreneurs with employees decreased by 0.2%.

From the sectoral point of view, the manufacturing industry again contributed the most to the growth of employment (according to business statistics) in absolute terms, followed by wholesale and retail trade, and education. The largest relative increases were recorded in the energy sector, in real estate activities and in information and communication activities. The decline in employment in the mining and quarrying sector continued, but a decrease in the number of employees was also reported in administrative and support service activities (among which is, inter alia, agency employment).

Graph 3.3.1: Employees in Different Statistics

YoY growth rate, in%



Source: CZSO.

Shortage of workers is evident virtually in all sectors of the economy and almost in all regions. It thus represents a significant barrier to economic growth driven by the use of the workforce (more than a third of companies perceive the lack of employees as a barrier to growth).

Because of extremely low unemployment (see below), increasing employment through this channel is very unlikely. A certain solution may be to attract workers from the ranks of economically inactive people, such as people of retirement age. Employers also increasingly hire foreign workers. In the long 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, to which. To this end the government's draft act on investment subsidies (see Chapter 1.5) should also contribute.

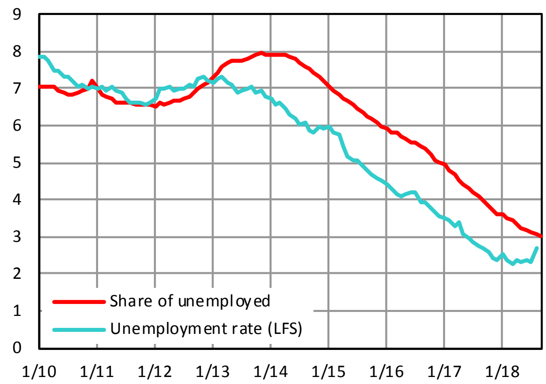
We maintain the forecast of employment growth for the entire 2018 at 1.3%. We assume that due to the general labour shortage, employment will increase only marginally in 2019 by 0.2% (*unchanged*).

Unemployment rate (LFS) declined to 2.2% in Q2 2018 (*versus 2.3%*). It can be assumed that it has bottomed, and further decrease is no longer probable. For the entire 2018 as well as for 2019 we forecast it to be at 2.3% (*unchanged*).

The year-on-year decline in the **share of unemployed persons** (methodology of the Ministry for Labour and Social Affairs) is gradually decreasing, reaching only 60 thousand in absolute terms in September. We assume, however, that there is still room for the registered unemployment to decline further. This can be explained, for example, by the fact that some job seekers (around 12 thousand in the past period) have so-called non-colliding part-time jobs and are therefore likely to be able to leave the registration and take up a full-time job. Another factor may be that many people subject to property seizures probably work in the grey economy and some of them may be motivated to become officially employed in the case of strong wage growth. For the entire 2018, we expect the share of unemployed persons to decrease to 3.2% and further to 2.8% in 2019 (*unchanged for both years*).

Graph 3.3.2: Indicators of Unemployment

seasonally adjusted data, in%



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.

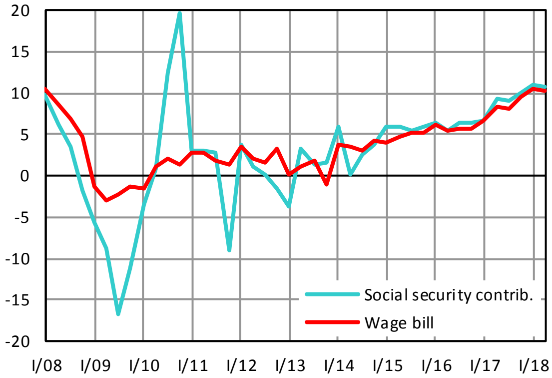
The **economic activity rate** (15–64 year-olds) grew by 0.9 pp YoY to 76.5% in Q2 2018 (*versus 76.6%*). The extremely high number of vacancies, coupled with strong wage growth, leads individuals who were formerly economically inactive to take part in the labour force, or results in people postponing retirement. We expect 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.

For the entire 2018, we expect the participation rate to increase by 0.8 pp to 76.7% (*unchanged*), and further to 77.3% (*unchanged*) in 2019.

The growth of the **wage bill** (national accounts, domestic concept) slightly slowed down to 10.2% (*versus 10.0%*) in Q2 2018. The dynamics of earnings was mainly driven by an increase in the general government sector salaries, though it was considerably above-average in all sectors. Salaries in public administration, defence, education and health and social care increased by 13.6%. In the economically significant manufacturing industry, the growth rate of wages slightly slowed down to 9.1%. The lowest increase (7.1%) was recorded in construction.

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

YoY growth rate, in%



Note: Time series of the collection of social security contributions is influenced, among other factors, by a legislative change in 2009 and a pay-out of exceptional bonuses at the end of 2012.
Source: CZSO, Ministry of Finance.

The tense situation in the labour market, with record-high number of vacancies and above-average rises in the minimum and guaranteed wages continue to represent a wage stimulus. Strong dynamics is also confirmed by data from the state budget's cash collection on the development of social security contributions, whose collection increased by more than 10% YoY in Q3. We estimate that growth in the wage bill reached 9.5% (*versus 9.3%*) in Q3 2018. In addition, the CZSO slightly revised the wage and salary growth in Q1 2018 up by 0.2 pp. The wage bill could thus increase by 9.5% in 2018 (*versus 9.3%*).

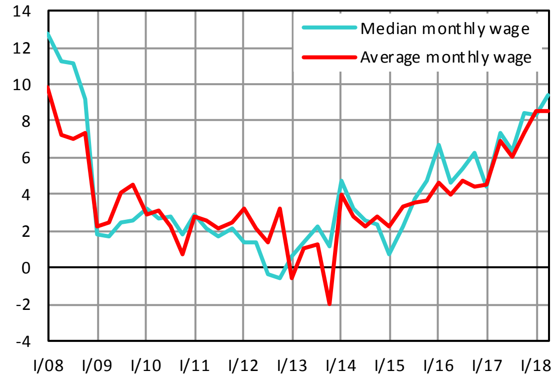
As in the previous forecast, the forecast for 2019 is based on the expected increase in the minimum wage by CZK 1,000 per month (8.2%) and the corresponding increase in the guaranteed wage levels. The contribution of the higher number of employees should be sharply reduced due to the lack of new workforce and the expected stagnation of the unemployment rate. On the other hand, compared with the July forecast, we expect a slightly higher employment growth in the general government sector. The wage bill growth could therefore slow down to 8.4% in 2019 (*versus 8.3%*).

The **average wage** (business statistics, full-time equivalent) increased by 8.6% (*versus 8.5%*) in Q2 2018. The wage median grew by 9.4% over the same period due to faster dynamics in low- and medium-income professions. The average wage in Q3 2018 may have slightly accelerated to 8.8% (*versus 8.4%*) due to the aforementioned factors.

The impact of the persisting frictions in the labour market and of the increase in the minimum wage on wage dynamics will be partly offset, at the end of this year, by the base effect of higher salary scales since November 2017. The growth rate of the average nominal wage could be 8.2% (*versus 8.0%*) in 2018. Due to the expected shortage of suitable workers amid continued high demand for labour, wage dynamics should remain high also in the next year. The average wage could thus increase by 8.1% (*versus 8.0%*) in 2019.

Graph 3.3.4: Nominal Monthly Wage

YoY growth rate, in%



Source: CZSO.

Table 3.3.1: Labour Market – yearly

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
								Forecast	*Forecast*	*Outlook*	*Outlook*
Labour Force Survey											
Employment	*av. in thous.persons*	**4 890**	**4 937**	**4 974**	**5 042**	**5 139**	**5 222**	**5 292**	**5 304**	**5 313**	**5 318**
	growth in %	0.4	1.0	0.8	1.4	1.9	1.6	1.3	0.2	0.2	0.1
Employees	*av. in thous.persons*	**3 997**	**4 055**	**4 079**	**4 168**	**4 257**	**4 327**	**4 396**	**4 411**	**4 422**	**4 431**
	growth in %	-0.5	1.5	0.6	2.2	2.1	1.7	1.6	0.3	0.3	0.2
Entrepreneurs and	*av. in thous.persons*	**893**	**882**	**895**	**874**	**882**	**894**	**896**	**894**	**891**	**887**
self-employed	*growth in %*	4.5	-1.3	1.5	-2.4	1.0	1.4	0.2	-0.3	-0.3	-0.4
Unemployment	*av. in thous.persons*	**367**	**369**	**324**	**268**	**211**	**156**	**125**	**124**	**123**	**123**
Unemployment rate	*average in %*	**7.0**	**7.0**	**6.1**	**5.1**	**4.0**	**2.9**	**2.3**	**2.3**	**2.3**	**2.3**
Long-term unemployment [1]	*av. in thous.persons*	**161**	**163**	**141**	**127**	**89**	**80**	**.**	**.**	**.**	**.**
Labour force	*av. in thous.persons*	**5 257**	**5 306**	**5 298**	**5 310**	**5 350**	**5 377**	**5 417**	**5 428**	**5 436**	**5 441**
	growth in %	0.7	0.9	-0.2	0.2	0.8	0.5	0.7	0.2	0.1	0.1
Population aged 15–64	*av. in thous.persons*	**7 229**	**7 154**	**7 081**	**7 026**	**6 968**	**6 917**	**6 877**	**6 835**	**6 798**	**6 769**
	growth in %	-0.9	-1.0	-1.0	-0.8	-0.8	-0.7	-0.6	-0.6	-0.5	-0.4
Employment/Pop. 15–64	*average in %*	**67.6**	**69.0**	**70.2**	**71.8**	**73.7**	**75.5**	**77.0**	**77.6**	**78.2**	**78.6**
Employment rate 15–64 [2]	*average in %*	**66.5**	**67.7**	**69.0**	**70.2**	**72.0**	**73.6**	**74.9**	**75.6**	**76.1**	**76.5**
Labour force/Pop. 15–64	*average in %*	**72.7**	**74.2**	**74.8**	**75.6**	**76.8**	**77.7**	**78.8**	**79.4**	**80.0**	**80.4**
Participation rate 15–64 [3]	*average in %*	**71.6**	**72.9**	**73.5**	**74.0**	**75.0**	**75.9**	**76.7**	**77.4**	**77.9**	**78.3**
Registered unemployment											
Unemployment	*av. in thous.persons*	**504**	**564**	**561**	**479**	**406**	**318**	**243**	**207**	**188**	**185**
Share of unemployed [4]	*average in %*	**6.8**	**7.7**	**7.7**	**6.6**	**5.6**	**4.3**	**3.2**	**2.8**	**2.6**	**2.5**
Wages and salaries											
Average monthly wage [5]											
Nominal	*CZK*	25 067	25 035	25 768	26 591	27 764	29 496	31 900	34 500	36 600	38 700
	growth in %	**2.5**	**-0.1**	**2.9**	**3.2**	**4.4**	**6.2**	**8.2**	**8.1**	**6.0**	**5.9**
Real	*CZK 2005*	20 717	20 403	20 916	21 514	22 318	23 152	24 500	25 900	27 000	28 000
	growth in %	**-0.8**	**-1.5**	**2.5**	**2.9**	**3.7**	**3.7**	**5.8**	**5.7**	**4.1**	**4.0**
Median monthly wage	*CZK*	20 828	21 110	21 786	22 414	23 692	25 279	.	.	.	.
	growth in %	**0.4**	**1.4**	**3.2**	**2.9**	**5.7**	**6.7**	**.**	**.**	**.**	**.**
Wage bill	*growth in %*	**2.6**	**0.5**	**3.6**	**4.8**	**5.7**	**8.2**	**9.5**	**8.4**	**6.3**	**6.1**
Labour productivity	*growth in %*	**-1.2**	**-0.8**	**2.2**	**3.8**	**0.8**	**2.7**	**1.6**	**2.7**	**2.6**	**2.4**
Unit labour costs [6]	*growth in %*	**3.0**	**0.5**	**0.4**	**-0.8**	**3.1**	**3.6**	**6.1**	**5.2**	**3.4**	**3.4**
Compens. of employees / GDP	*%*	**41.0**	**40.9**	**40.2**	**39.6**	**40.4**	**41.4**	**43.2**	**44.5**	**45.3**	**46.0**

[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.

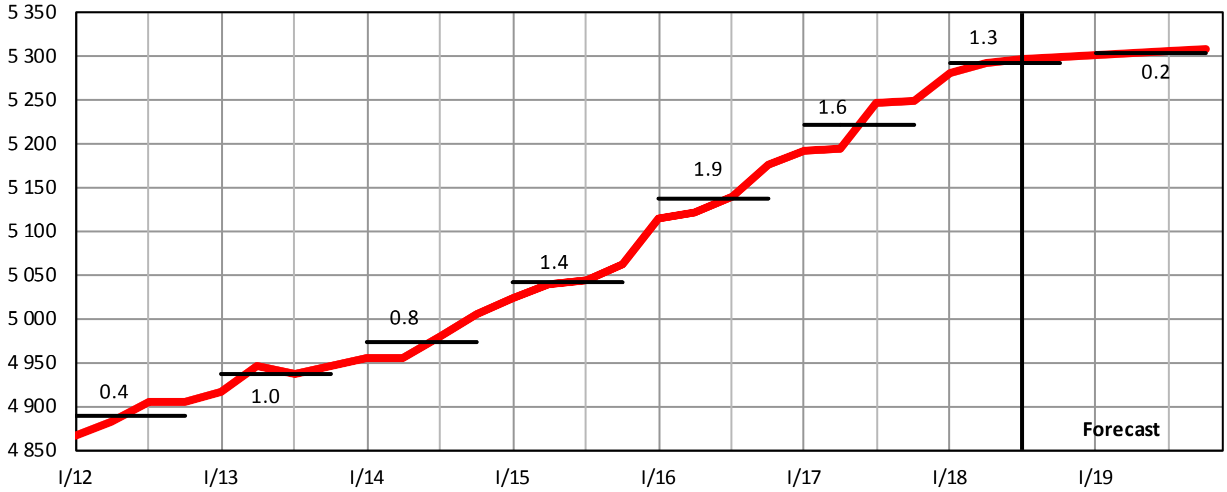
Table 3.3.2: Labour Market – quarterly

		2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Estimate	*Forecast*
Labour Force Survey									
Employment	*av. in thous. persons*	**5 169**	**5 197**	**5 257**	**5 263**	**5 258**	**5 289**	**5 308**	**5 313**
	YoY growth in %	1.6	1.3	2.0	1.5	1.7	1.8	1.0	0.9
	QoQ growth in %	0.3	0.0	1.0	0.1	0.6	0.2	0.1	0.1
Employees	*av. in thous. persons*	**4 276**	**4 298**	**4 360**	**4 375**	**4 367**	**4 389**	**4 407**	**4 421**
	growth in %	1.1	1.3	2.2	2.2	2.1	2.1	1.1	1.0
Entrepreneurs and	*av. in thous. persons*	**893**	**899**	**897**	**888**	**891**	**900**	**901**	**892**
self-employed	*growth in %*	4.4	1.6	1.5	-1.9	-0.2	0.1	0.5	0.5
Unemployment	*av. in thous.persons*	**185**	**159**	**150**	**129**	**130**	**118**	**127**	**125**
Unemployment rate	*average in %*	**3.4**	**3.0**	**2.8**	**2.4**	**2.4**	**2.2**	**2.3**	**2.3**
Long-term unemployment [1]	*av. in thous.persons*	**68**	**59**	**49**	**41**	**41**	**36**	**.**	**.**
Labour force	*av. in thous. persons*	**5 354**	**5 356**	**5 407**	**5 391**	**5 388**	**5 407**	**5 435**	**5 437**
	growth in %	0.7	0.3	0.8	0.2	0.6	1.0	0.5	0.9
Population aged 15–64	*av. in thous. persons*	**6 936**	**6 921**	**6 911**	**6 900**	**6 894**	**6 883**	**6 872**	**6 861**
	growth in %	-0.8	-0.8	-0.7	-0.7	-0.6	-0.5	-0.6	-0.6
Employment/Pop. 15–64	*average in %*	**74.5**	**75.1**	**76.1**	**76.3**	**76.3**	**76.8**	**77.2**	**77.4**
	increase over a year	1.8	1.6	2.1	1.6	1.7	1.7	1.2	1.2
Employment rate 15–64 [2]	*average in %*	**72.8**	**73.3**	**74.1**	**74.3**	**74.2**	**74.8**	**75.2**	**75.4**
	increase over a year	1.8	1.6	1.9	1.4	1.4	1.5	1.1	1.1
Labour force/Pop. 15–64	*average in %*	**77.2**	**77.4**	**78.2**	**78.1**	**78.2**	**78.6**	**79.1**	**79.3**
	increase over a year	1.1	0.9	1.2	0.7	1.0	1.2	0.9	1.1
Participation rate 15–64 [3]	*average in %*	**75.5**	**75.6**	**76.3**	**76.2**	**76.0**	**76.5**	**77.0**	**77.2**
	increase over a year	1.1	0.8	1.0	0.5	0.6	1.0	0.8	1.0
Registered unemployment									
Unemployment	*av. in thous. persons*	**379.5**	**320.8**	**297.0**	**273.1**	**280.7**	**238.7**	**228.9**	**222**
Share of unemployed [4]	*average in %*	**5.1**	**4.3**	**4.0**	**3.6**	**3.8**	**3.1**	**3.0**	**3.0**
Wages and salaries									
Average monthly wage [5]									
Nominal	*CZK*	27 880	29 335	29 058	31 661	30 267	31 851	31 600	33 900
	growth in %	**4.5**	**6.9**	**6.1**	**7.4**	**8.6**	**8.6**	**8.8**	**7.2**
Real	*CZK 2005*	22 005	23 080	22 773	24 677	23 445	24 501	24 200	25 900
	growth in %	**2.0**	**4.5**	**3.5**	**4.6**	**6.5**	**6.2**	**6.2**	**4.9**
Median monthly wage	*CZK*	23 709	24 887	25 188	27 333	25 676	27 236	.	.
	growth in %	**4.4**	**7.4**	**6.4**	**8.4**	**8.3**	**9.4**	**.**	**.**
Wage bill	*growth in %*	**6.7**	**8.4**	**8.2**	**9.5**	**10.5**	**10.2**	**9.5**	**7.9**

[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)

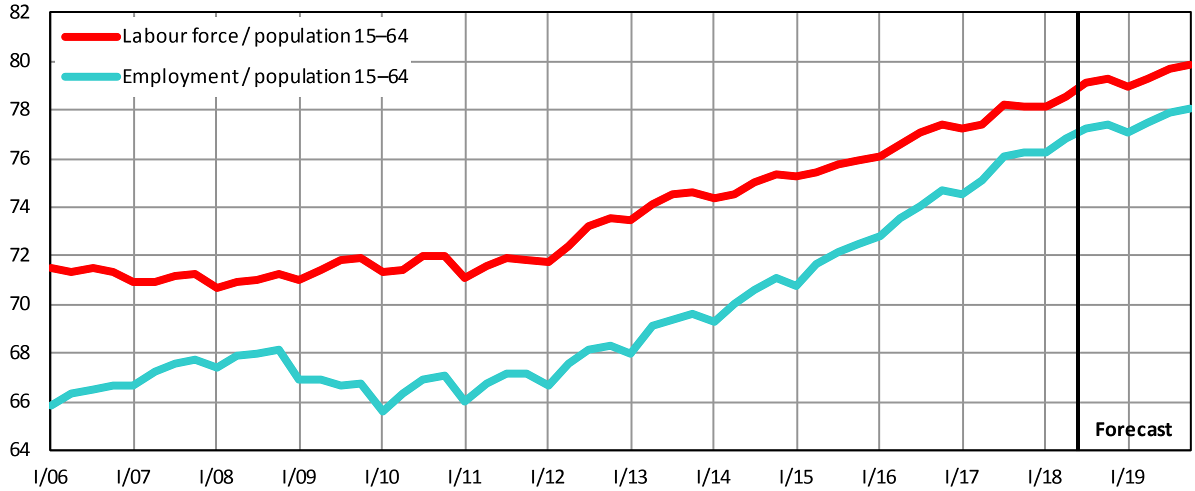
seasonally adjusted data, in thousands of persons, black lines with labels show the average level and growth rate in the given year



Source: CZSO. Calculations of the MoF.

Graph 3.3.6: Ratio of Labour Force and Employment to Population Aged 15–64

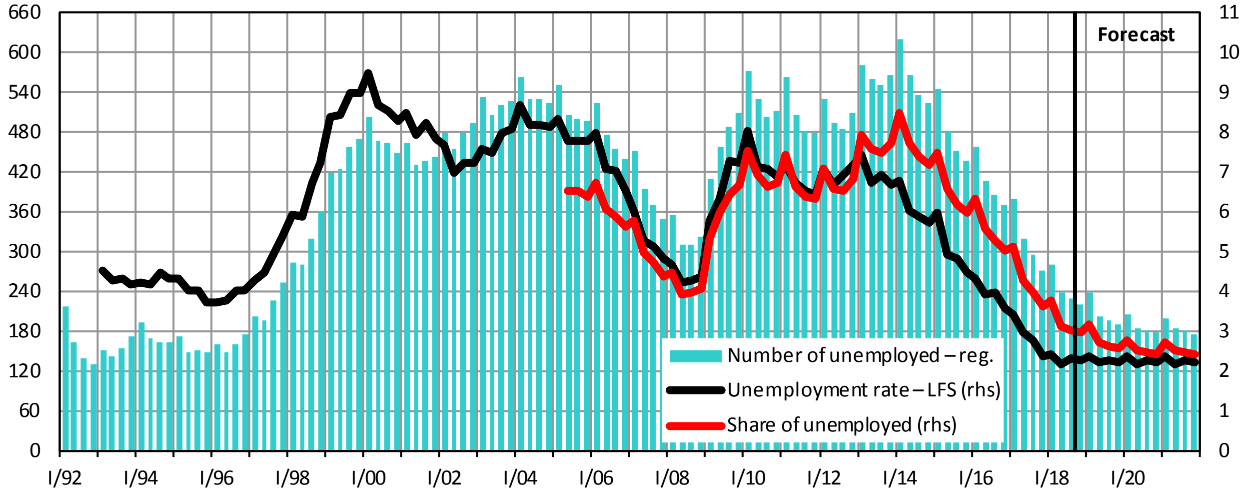
in %



Source: CZSO. Calculations of the MoF.

Graph 3.3.7: Unemployment

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

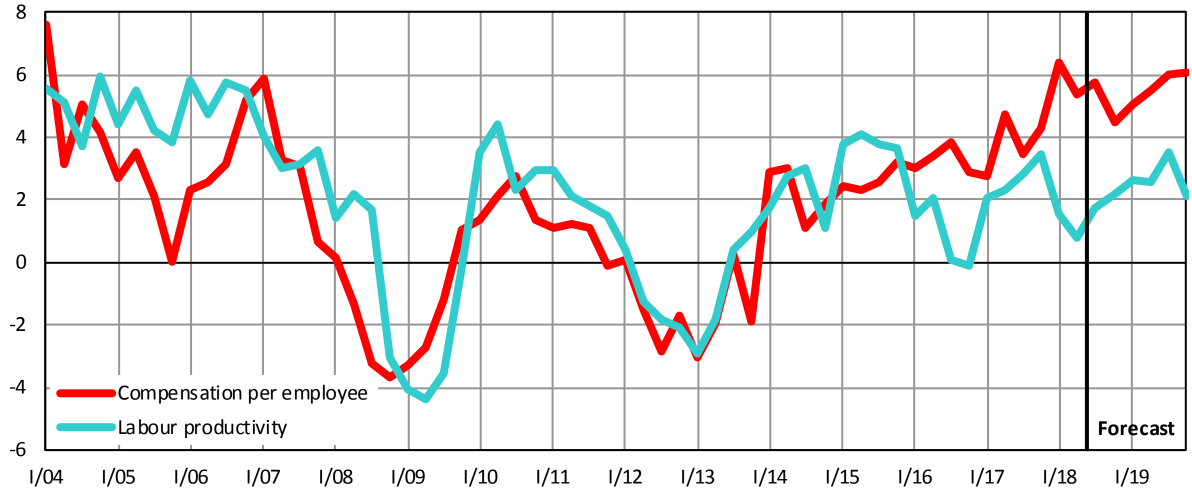


Note: Share of unemployed (Ministry of Labour and Social Affairs) is defined as a share of available job seekers aged 15 to 64 years in the population of the same age.

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

Graph 3.3.8: Compensation per Employee and Real Productivity of Labour

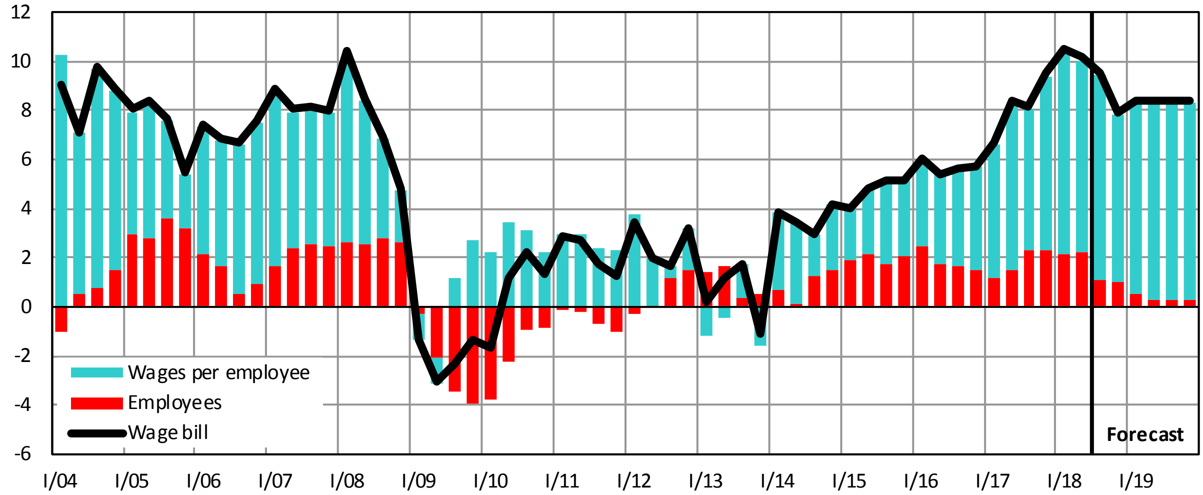
YoY growth rate, in %



Source: CZSO. Calculations of the MoF.

Graph 3.3.9: Wage Bill – nominal, domestic concept

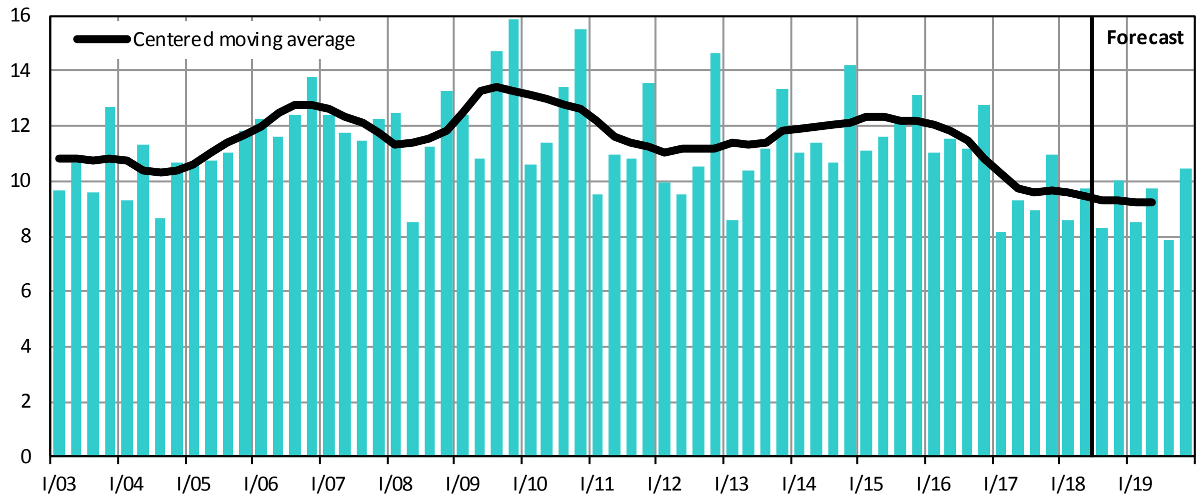
YoY growth rate, in %



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

		2010	2011	2012	2013	2014	2015	2016	2017	2018 *Forecast*	2019 *Forecast*
Current income											
Compensation of employees	*bill.CZK*	**1 587**	**1 627**	**1 669**	**1 692**	**1 760**	**1 852**	**1 964**	**2 126**	**2 320**	**2 511**
	growth in %	2.2	2.5	2.6	1.3	4.0	5.3	6.0	8.3	9.1	8.2
Gross operating surplus	*bill.CZK*	**685**	**674**	**654**	**645**	**662**	**691**	**711**	**728**	**759**	**776**
and mixed income	*growth in %*	-0.2	-1.7	-2.9	-1.3	2.6	4.3	2.9	2.5	4.2	2.3
Property income received	*bill.CZK*	**154**	**153**	**147**	**158**	**166**	**166**	**175**	**165**	**175**	**184**
	growth in %	-2.5	-0.6	-4.0	7.8	5.1	-0.4	5.7	-5.8	6.3	4.9
Social benefits not-in-kind	*bill.CZK*	**541**	**553**	**566**	**563**	**576**	**591**	**606**	**623**	**657**	**703**
	growth in %	1.1	2.1	2.4	-0.6	2.2	2.6	2.6	2.9	5.5	6.9
Other current transfers received	*bill.CZK*	**140**	**139**	**151**	**146**	**160**	**181**	**217**	**244**	**264**	**280**
	growth in %	-1.0	-0.5	8.6	-3.1	9.2	13.3	19.4	12.7	8.0	6.4
Current expenditure											
Property income paid	*bill.CZK*	**23**	**21**	**15**	**21**	**16**	**14**	**14**	**16**	**23**	**25**
	growth in %	17.7	-8.5	-27.2	40.5	-24.3	-10.7	0.2	8.3	47.7	8.2
Curr. taxes on income and property	*bill.CZK*	**144**	**156**	**158**	**166**	**177**	**183**	**203**	**225**	**251**	**281**
	growth in %	-2.5	8.1	1.6	4.9	6.9	3.2	11.1	10.9	11.3	12.2
Social contributions	*bill.CZK*	**621**	**640**	**654**	**670**	**696**	**732**	**775**	**836**	**917**	**985**
	growth in %	2.9	3.1	2.3	2.4	3.8	5.3	5.8	7.8	9.7	7.4
Other current transfers paid	*bill.CZK*	**141**	**145**	**154**	**140**	**150**	**168**	**205**	**235**	**254**	**270**
	growth in %	-1.6	3.2	6.2	-9.3	6.9	11.9	22.5	14.6	8.2	6.2
Gross disposable income	*bill.CZK*	**2 179**	**2 184**	**2 206**	**2 208**	**2 285**	**2 383**	**2 474**	**2 575**	**2 730**	**2 892**
	growth in %	0.8	0.2	1.0	0.1	3.5	4.3	3.8	4.1	6.0	5.9
Final consumption	*bill.CZK*	**1 913**	**1 952**	**1 970**	**1 997**	**2 044**	**2 125**	**2 213**	**2 362**	**2 509**	**2 659**
	growth in %	1.5	2.0	0.9	1.3	2.4	3.9	4.1	6.7	6.2	6.0
Change in share in pension funds	*bill.CZK*	**15**	**16**	**15**	**35**	**35**	**33**	**31**	**32**	**34**	**36**
Gross savings	*bill.CZK*	**282**	**248**	**250**	**246**	**276**	**291**	**292**	**245**	**254**	**269**
Capital transfers											
(income (-) / expenditure (+))	*bill.CZK*	**-29**	**-25**	**-21**	**-13**	**-32**	**-12**	**-14**	**-11**	**-18**	**-23**
Gross capital formation	*bill.CZK*	**230**	**198**	**183**	**181**	**195**	**208**	**228**	**242**	**257**	**265**
	growth in %	8.8	-13.9	-7.8	-1.3	8.3	6.6	9.6	5.8	6.3	3.2
Change in financial assets and liab.	*bill.CZK*	**79**	**73**	**87**	**77**	**110**	**93**	**76**	**14**	**14**	**26**
Real disposable income	*growth in %*	**0.4**	**-1.5**	**-1.2**	**-0.8**	**2.9**	**4.2**	**3.3**	**1.7**	**3.4**	**3.5**
Gross savings rate	*%*	**12.8**	**11.3**	**11.3**	**11.0**	**11.9**	**12.1**	**11.6**	**9.4**	**9.2**	**9.2**

Source: CZSO. Calculations of the MoF.

3.4 External Relations

The current account balance to GDP ratio[2] was 0.6% in Q2 2018 (*versus 0.1%*), thus having improved by 0.4% of GDP QoQ.

The export market growth[3] reached 4.3% (*versus 3.8%*) in Q2 2018. The higher-than-estimated growth is associated with a revision of imports of goods in national accounts of Germany and Poland for Q1 2018. Higher investment activity abroad supported by interest in machinery and motor vehicles also contributed to the higher dynamics. In view of the data revisions, the forecasted slowdown in growth of GDP of our main trading partners and the developments of their import intensity, we expect the export market growth to slow down to 4.1% (*versus 3.7%*) this year and further to 3.9% (*versus 4.0%*) in 2019.

Export performance decreased by 1.0% (*versus increase by 0.3%*) in Q2 2018. This development may be related to the year-on-year appreciation of the koruna's exchange rate against the euro and low growth in labour productivity. We expect the growth in export performance to slow down from 1.4% last year to 0.4% (*versus 0.6%*) this year and further to 0.3% (*versus 0.5%*) in 2019. Export performance should now benefit from the continued growth in private investment increasing the efficiency of production and the competitiveness of Czech products. The increasing unit labour costs, the expected appreciation of the koruna and the shortage of workforce will act against a further increase in export performance.

As regards foreign trade (in the balance of payments methodology), a steady gradual decline in the surplus on the **goods balance** has continued since Q2 2017. According to current data, it reached a positive value of 4.5% of GDP (*versus 4.3% of GDP*) in Q2 2018. Strong demand for investment goods reflecting the position of the economy in the business cycle contributed to the decrease in the surplus.

On the export side, there was growth in commodity classes significant for the Czech economy, with the exception of industrial consumer goods. Growth in exports of machinery and transport equipment, which accounts for more than half of Czech exports, contributed fundamentally to the overall balance of goods.

Mineral fuel prices remain an important factor affecting the **terms of trade** of the foreign trade in goods. In Q2 2018, the deficit of the fuel balance reached 2.6% of GDP (*versus 2.7% of GDP*); for 2018, we expect the deficit to grow to 2.9% of GDP (*versus 3.0% of GDP*) following the significant rise in oil prices. We expect the same deficit also for 2019 (*unchanged*).

We expect that the surplus in **the balance of goods** will continue to decline and will reach 4.0% of GDP this year (*versus 3.6% of GDP*). For 2019, we expect a further decrease in the surplus to 3.7% of GDP (*versus 3.5% of GDP*). The declining surplus on the balance of goods is mainly driven by rising domestic demand (especially increasing investment activity), higher crude oil prices, worsening terms of trade, fears from increased tariff barriers after the UK's withdrawal from the EU, and problems of automotive companies with the implementation of new emission standards.

Since Q1 2015, the surplus on the **balance of services** has been steadily increasing. The total surplus on this balance reached 2.5% of GDP in Q2 2018 (*in line with the estimate*). In year-on-year comparison, the balance of transport services, tourism, telecommunication services and computing services improved. With regard to the continuing economic growth we expect improved sales of services abroad in the coming period and the surplus maintained at similar levels. For 2018, we expect a surplus of 2.5% of GDP (*unchanged)*, and the same also in 2019 (*versus 2.4% of GDP*).

Apart from the above-mentioned and expected decrease in the balance of goods and services of 0.3% of GDP, the year-on-year decline in the current account surplus in Q2 2018 by 0.5% of GDP was also due to deterioration on **the primary income balance**, also by 0.3% of GDP. In Q2 2018, the deficit reached 5.5% of GDP (*versus 5.6% of GDP*). The deterioration was due to higher outflow of income from direct investments (dividends), based on the increased profitability of foreign-owned companies. The primary income shows a high volatility over time related to the cyclical development of the economy. In view of the ongoing wage pressures (see Chapter 3.3) and thus the shift in GDP distribution from corporate net profits to compensation of employees, a decrease in profitability can also be expected for foreign-controlled companies. Therefore, we estimate a slight decrease in the deficit of primary incomes in the coming two years. The deficit could reach 5.2% of GDP this year (*versus 5.4% of GDP*), then 5.1% of GDP in 2019 (*versus 5.3% of GDP*).

In this context, the **current account of the balance of payments** should record a slight surplus of 0.4% of GDP in 2018 (*versus a deficit of 0.3% of GDP*), and remain at that level also in 2019 (*versus a deficit of 0.2% of GDP*).

[2] All the *quarterly* figures relative to GDP are listed in annual moving totals.

[3] Among the most important trading partners (according to the national statistics of foreign trade in goods) in 2017 are Germany with a share in Czech exports of 32.2%, Slovakia with 9.0%, Poland with 6.4%, France with 5.1%, United Kingdom with 4.8%, and Austria with 4.4%.

Table 3.4.1: Balance of Payments – yearly

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
										Forecast	*Forecast*
Goods and services	*bill.CZK*	119	157	201	237	276	266	353	363	344	347
	% GDP	**3.0**	**3.9**	**5.0**	**5.8**	**6.4**	**5.8**	**7.4**	**7.2**	**6.5**	**6.2**
Goods	*bill.CZK*	40	75	124	167	220	188	246	241	211	205
	% GDP	**1.0**	**1.9**	**3.0**	**4.1**	**5.1**	**4.1**	**5.2**	**4.8**	**4.0**	**3.7**
Services	*bill.CZK*	78	81	78	70	56	78	108	122	134	142
	% GDP	**2.0**	**2.0**	**1.9**	**1.7**	**1.3**	**1.7**	**2.3**	**2.4**	**2.5**	**2.5**
Primary income	*bill.CZK*	-250	-223	-238	-249	-261	-255	-252	-261	-276	-283
	% GDP	**-6.3**	**-5.5**	**-5.9**	**-6.1**	**-6.0**	**-5.5**	**-5.3**	**-5.2**	**-5.2**	**-5.1**
Secondary income	*bill.CZK*	-11	-18	-27	-10	-7	0	-27	-48	-45	-42
	% GDP	**-0.3**	**-0.5**	**-0.7**	**-0.2**	**-0.2**	**0.0**	**-0.6**	**-1.0**	**-0.9**	**-0.8**
Current account	*bill.CZK*	-142	-85	-63	-22	8	11	74	54	23	21
	% GDP	**-3.6**	**-2.1**	**-1.6**	**-0.5**	**0.2**	**0.2**	**1.6**	**1.1**	**0.4**	**0.4**
Capital account	*bill.CZK*	38	13	53	82	32	102	54	46	29	39
	% GDP	**0.9**	**0.3**	**1.3**	**2.0**	**0.7**	**2.2**	**1.1**	**0.9**	**0.5**	**0.7**
Net lending/borrowing	*bill.CZK*	-104	-72	-10	61	40	113	128	101	52	60
	% GDP	**-2.6**	**-1.8**	**-0.3**	**1.5**	**0.9**	**2.5**	**2.7**	**2.0**	**1.0**	**1.1**
Financial account	*bill.CZK*	-122	-75	12	68	64	175	117	117	.	.
Direct investments	*bill.CZK*	-95	-47	-121	7	-80	50	-187	-135	.	.
Portfolio investments	*bill.CZK*	-150	-6	-55	-93	90	-164	-170	-268	.	.
Financial derivatives	*bill.CZK*	5	4	-9	-5	-6	-5	11	-14	.	.
Other investments	*bill.CZK*	77	-9	116	-30	-13	-57	-102	-712	.	.
Reserve assets	*bill.CZK*	41	-17	80	188	73	351	564	1 246	.	.
International investment position	*bill.CZK*	-1 823	-1 823	-1 864	-1 695	-1 577	-1 513	-1 283	-1 337	.	.
	% GDP	**-46.0**	**-45.2**	**-45.9**	**-41.4**	**-36.6**	**-32.9**	**-26.9**	**-26.5**	.	.
Gross external debt	*bill.CZK*	2 164	2 312	2 434	2 733	2 947	3 119	3 498	4 372	.	.
	% GDP	**54.6**	**57.3**	**60.0**	**66.7**	**68.3**	**67.9**	**73.4**	**86.7**	.	.

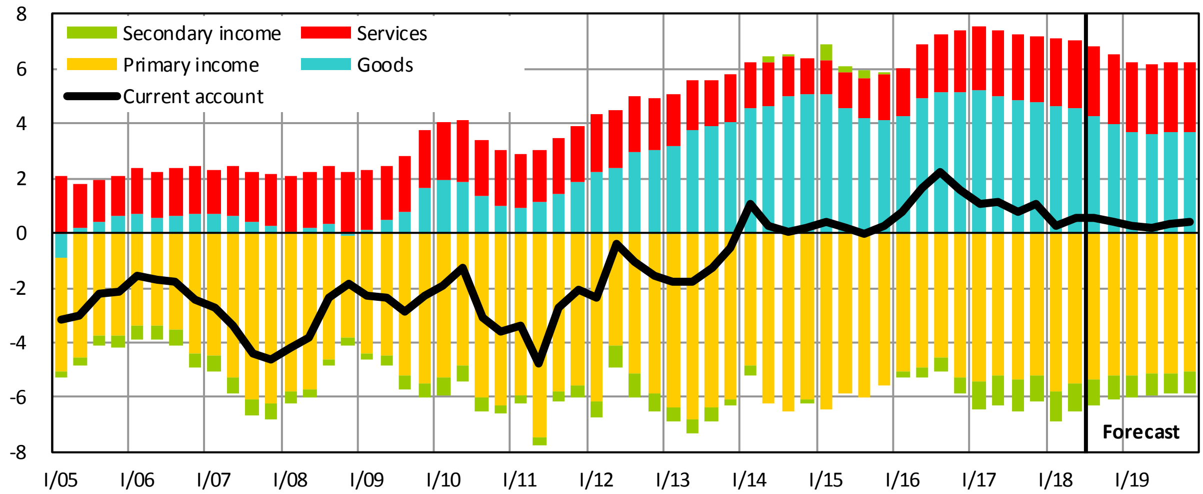
Source: CNB, CZSO. Calculations of the MoF.

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

		2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Estimate	*Forecast*
Goods and services	*bill.CZK*	362	360	361	363	363	365	357	344
	% GDP	**7.5**	**7.4**	**7.3**	**7.2**	**7.1**	**7.1**	**6.8**	**6.5**
Goods	*bill.CZK*	251	243	241	241	236	235	226	211
	% GDP	**5.2**	**5.0**	**4.9**	**4.8**	**4.6**	**4.5**	**4.3**	**4.0**
Services	*bill.CZK*	111	118	120	122	127	130	132	134
	% GDP	**2.3**	**2.4**	**2.4**	**2.4**	**2.5**	**2.5**	**2.5**	**2.5**
Primary income	*bill.CZK*	-261	-253	-263	-261	-297	-286	-281	-276
	% GDP	**-5.4**	**-5.2**	**-5.3**	**-5.2**	**-5.8**	**-5.5**	**-5.4**	**-5.2**
Secondary income	*bill.CZK*	-49	-53	-59	-48	-53	-51	-48	-45
	% GDP	**-1.0**	**-1.1**	**-1.2**	**-1.0**	**-1.0**	**-1.0**	**-0.9**	**-0.9**
Current account	*bill.CZK*	52	54	39	54	12	29	28	23
	% GDP	**1.1**	**1.1**	**0.8**	**1.1**	**0.2**	**0.6**	**0.5**	**0.4**
Capital account	*bill.CZK*	36	22	18	46	47	38	33	29
	% GDP	**0.7**	**0.5**	**0.4**	**0.9**	**0.9**	**0.7**	**0.6**	**0.5**
Net lending/borrowing	*bill.CZK*	88	76	57	101	59	67	61	52
	% GDP	**1.8**	**1.6**	**1.1**	**2.0**	**1.2**	**1.3**	**1.2**	**1.0**
Financial account	*bill.CZK*	89	134	135	117	66	22	.	.
Direct investments	*bill.CZK*	-247	-178	-127	-135	-82	-102	.	.
Portfolio investments	*bill.CZK*	-479	-464	-363	-268	36	178	.	.
Financial derivatives	*bill.CZK*	11	6	-2	-14	-15	-16	.	.
Other investments	*bill.CZK*	-728	-815	-804	-712	5	-55	.	.
Reserve assets	*bill.CZK*	1 532	1 586	1 430	1 246	123	17	.	.
International investment position	*stock in bill.CZK*	-1 023	-1 193	-1 250	-1 337	-1 309	-1 261	.	.
	% GDP	**-21.2**	**-24.5**	**-25.2**	**-26.5**	**-25.6**	**-24.3**	.	.
Gross external debt	*stock in bill.CZK*	4 347	4 397	4 438	4 372	4 315	4 388	.	.
	% GDP	**90.3**	**90.2**	**89.6**	**86.7**	**84.4**	**84.7**	.	.

Source: CNB, CZSO. Calculations of the MoF.

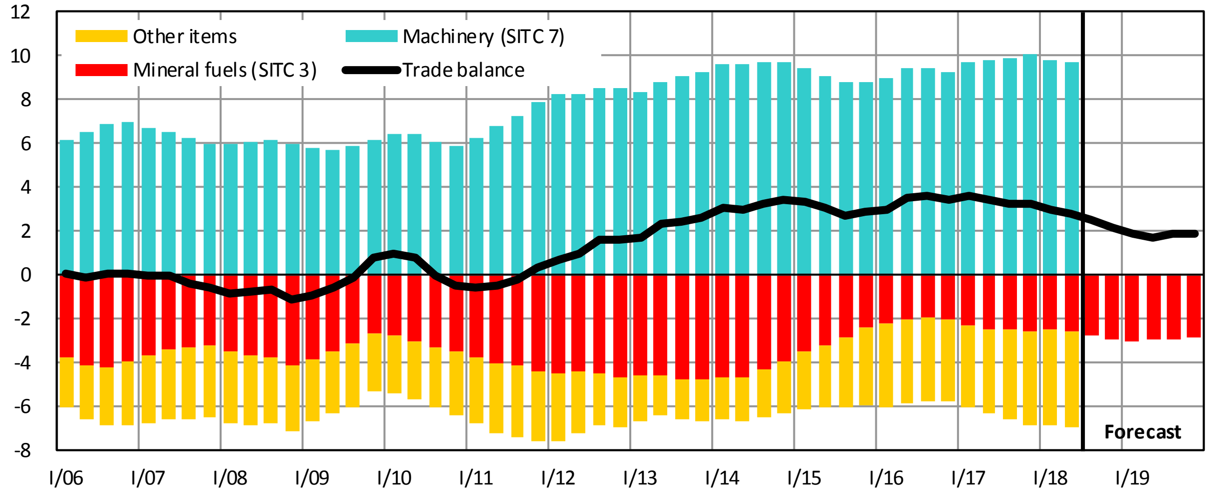
Graph 3.4.1: Current Account
moving sums of the latest 4 quarters, in % of GDP, trade and service balances in BoP definitions



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

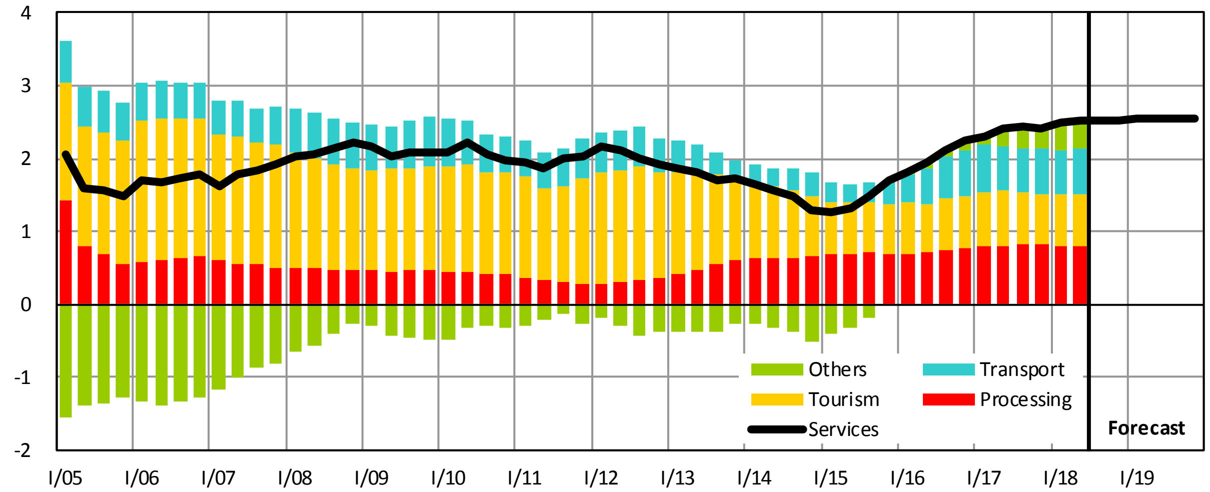


Note: The data in the graph show imports in cif methodology. For this reason, the graph is not comparable with Tables 3.4.1 and 3.4.2, where imports are in fob methodology. Trade balance in the national concept (unlike in the BoP methodology in Tables 3.4.1 and 3.4.2) does not include the import of JAS-39 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

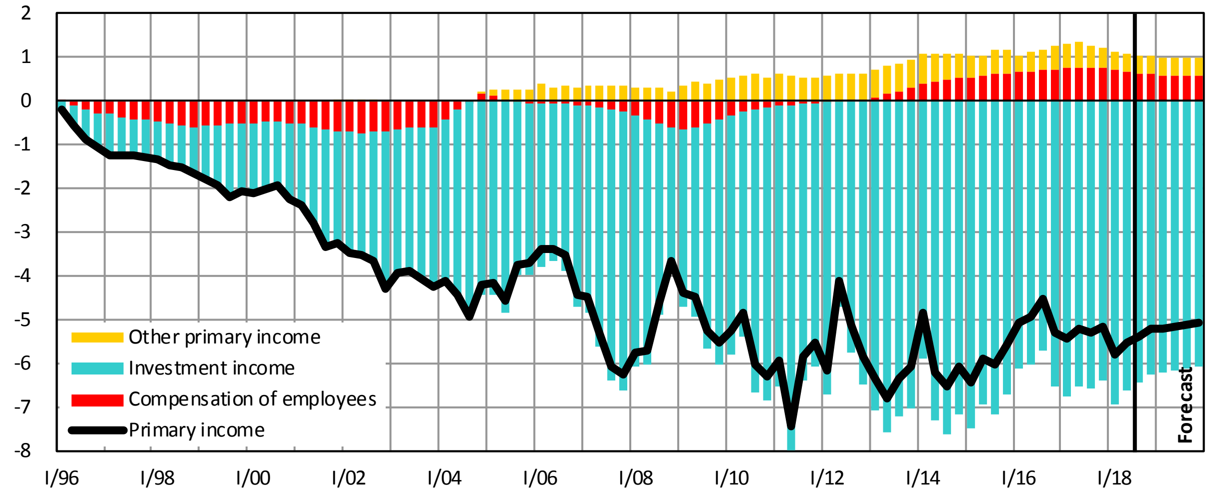
moving sums of the latest 4 quarters, in % of GDP



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

		2010	2011	2012	2013	2014	2015	2016	2017	2018 Forecast	2019 Forecast
GDP [1]	*average of 2005=100*	100.0	103.4	104.4	105.3	107.7	110.0	112.5	115.6	118	121
	growth in %	**3.6**	**3.4**	**1.0**	**0.9**	**2.2**	**2.1**	**2.3**	**2.8**	**2.5**	**2.3**
Import intensity [2]	*average of 2005=100*	100.0	104.0	103.1	104.6	107.2	110.8	113.0	116.1	118	120
	growth in %	**8.8**	**4.0**	**-0.8**	**1.4**	**2.5**	**3.3**	**2.0**	**2.8**	**1.6**	**1.6**
Export markets [3]	*average of 2005=100*	100.0	107.5	107.7	110.2	115.5	121.8	127.1	134.3	140	145
	growth in %	**12.6**	**7.5**	**0.1**	**2.3**	**4.8**	**5.5**	**4.4**	**5.6**	**4.1**	**3.9**
Export performance	*average of 2005=100*	100.0	102.4	106.8	105.0	109.5	109.4	109.1	110.7	111	112
	growth in %	**2.5**	**2.4**	**4.2**	**-1.6**	**4.2**	**-0.1**	**-0.2**	**1.5**	**0.4**	**0.3**
Real exports	*average of 2005=100*	100.0	110.2	115.0	115.7	126.4	133.3	138.8	148.7	155	162
	growth in %	**15.4**	**10.2**	**4.4**	**0.6**	**9.2**	**5.4**	**4.1**	**7.2**	**4.6**	**4.2**
1 / NEER	*average of 2005=100*	100.0	97.0	101.2	103.0	108.6	109.9	106.9	103.9	100	98
	growth in %	**-2.2**	**-3.0**	**4.4**	**1.7**	**5.5**	**1.2**	**-2.8**	**-2.8**	**-3.7**	**-2.4**
Prices on foreign markets	*average of 2005=100*	100.0	103.9	102.7	102.6	101.0	98.3	98.3	100.5	103	106
	growth in %	**1.0**	**3.9**	**-1.1**	**-0.1**	**-1.6**	**-2.6**	**0.0**	**2.2**	**2.9**	**2.1**
Exports deflator	*average of 2005=100*	100.0	100.8	104.0	105.6	109.6	108.1	105.1	104.3	103	103
	growth in %	**-1.2**	**0.8**	**3.2**	**1.5**	**3.8**	**-1.4**	**-2.8**	**-0.7**	**-0.9**	**-0.4**
Nominal exports	*average of 2005=100*	100.0	111.0	119.6	122.2	138.6	144.0	145.8	155.1	161	167
	growth in %	**14.3**	**11.0**	**7.7**	**2.2**	**13.4**	**3.9**	**1.2**	**6.4**	**3.7**	**3.8**

[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

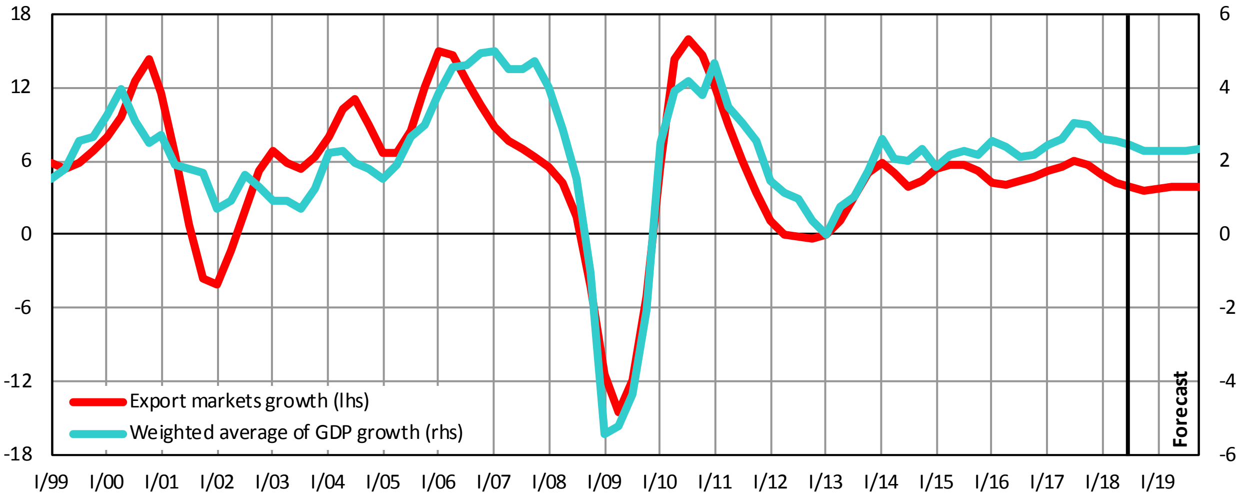
seasonally adjusted

		2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3 Estimate	Q4 Forecast
GDP [1]	*average of 2010=100*	114.5	115.2	116.0	116.8	117.5	118.1	119	119
	growth in %	**2.5**	**2.6**	**3.0**	**3.0**	**2.6**	**2.5**	**2.4**	**2.2**
Import intensity [2]	*average of 2010=100*	115.0	115.8	116.6	117.2	117.4	117.7	118	119
	growth in %	**2.7**	**2.9**	**2.9**	**2.6**	**2.1**	**1.7**	**1.4**	**1.3**
Export markets [3]	*average of 2010=100*	131.6	133.3	135.2	136.9	137.9	139.1	140	142
	growth in %	**5.2**	**5.6**	**6.0**	**5.6**	**4.8**	**4.3**	**3.8**	**3.6**
Export performance	*average of 2010=100*	110.4	112.3	109.7	110.6	111.5	111.2	111	111
	growth in %	**-0.7**	**2.4**	**1.6**	**2.6**	**1.0**	**-1.0**	**1.0**	**0.6**
Real exports	*average of 2010=100*	145.3	149.8	148.4	151.4	153.9	154.7	156	158
	growth in %	**4.5**	**8.1**	**7.7**	**8.3**	**5.9**	**3.3**	**4.9**	**4.2**
1 / NEER	*average of 2010=100*	107.4	105.3	102.2	100.6	99.5	100.2	101	100
	growth in %	**0.5**	**-1.5**	**-4.3**	**-6.0**	**-7.4**	**-4.8**	**-1.2**	**-1.0**
Prices on foreign markets	*average of 2010=100*	99.7	99.9	100.8	101.4	102.3	102.7	104	104
	growth in %	**1.7**	**1.9**	**2.5**	**2.8**	**2.6**	**2.8**	**3.2**	**3.0**
Exports deflator	*average of 2010=100*	107.1	105.2	103.1	102.0	101.7	102.9	105	104
	growth in %	**2.2**	**0.4**	**-1.9**	**-3.3**	**-5.0**	**-2.2**	**2.0**	**1.9**
Nominal exports	*average of 2010=100*	155.6	157.5	152.9	154.4	156.5	159.1	163	164
	growth in %	**6.7**	**8.5**	**5.7**	**4.7**	**0.6**	**1.0**	**6.9**	**6.2**

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

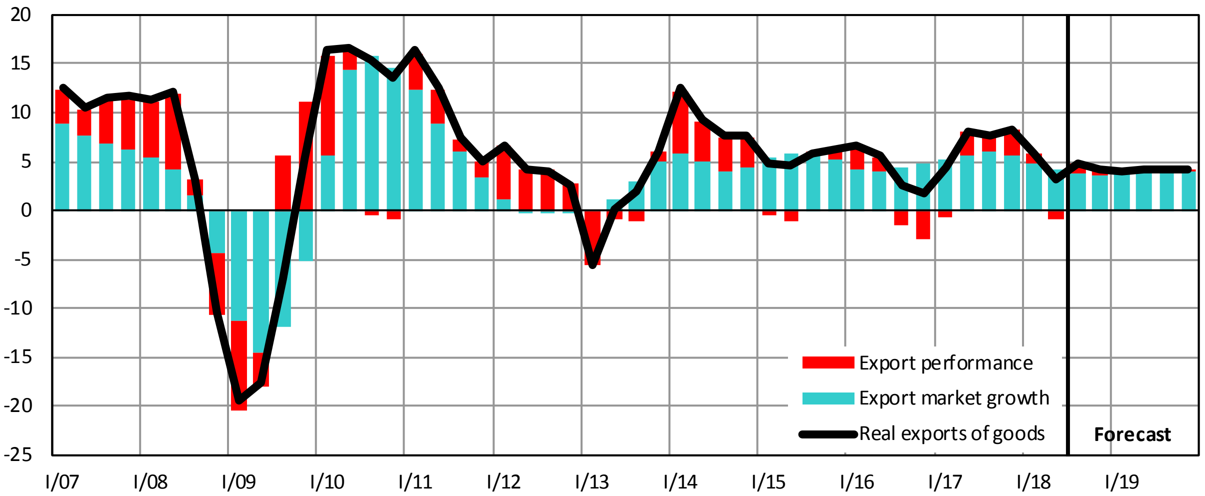
YoY growth rate, in %, seasonally adjusted



Source: Eurostat. Calculations of the MoF.

Graph 3.4.6: Real Exports of Goods

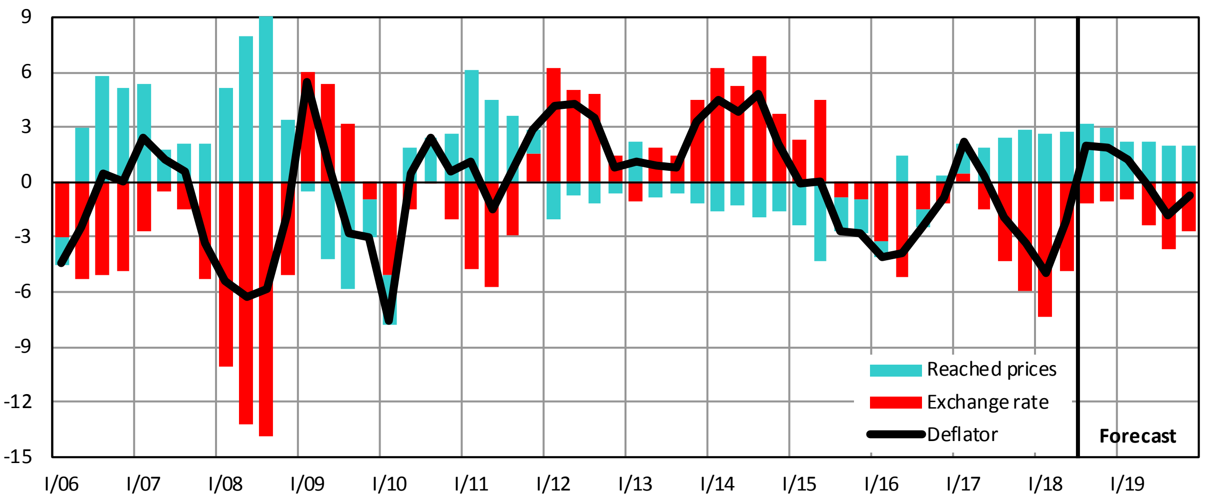
decomposition of YoY growth, in %, seasonally adjusted



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.

In 2017, the GDP per capita **in current purchasing power parity** increased in all of the monitored countries[4], although a slight decrease in relative terms compared to the EA19 was recorded in Italy, Portugal, Greece and Slovakia. In the Czech Republic, the purchasing power parity was 18.02 CZK/PPS compared to the EU28 and 17.48 CZK/EUR compared to the EA19. The economic level was circa 26,400 PPS, corresponding to 83% of the economic level in the EA19. The relative economic level of the Czech Republic should gradually reach up to 85% of the EA19 average in 2019, thanks to the stable economic growth.

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. Higher economic growth and the exchange rate appreciation will result in a gradual increase in the relative level up to 60% of the EA19 average in 2019.

When comparing price levels, the **comparative price level of GDP** in the Czech Republic again slightly increased in 2017, thus reaching 66% of the EA19 average. In the coming years, the comparative price level of GDP should increase gradually towards 71% in 2019. However, this increase should not jeopardize the competitiveness of the Czech economy.

Through the decomposition[5] of GDP per capita into individual components (labour productivity, labour market component and demographic component) it is possible to determine in detail the 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 Greece. In the given period, however, a decrease in the relative level of labour productivity to the EA19 countries was seen, in addition to Greece, also in Italy, Portugal, Slovenia and Spain, whereas increases in the relative level in Latvia, Poland and Lithuania exceeded 9 pp. In the Czech Republic, the relative level of labour productivity to the average of EA19 countries remained at 66% in 2017 for the third consecutive year.

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 an 18% drop in the number of 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 Latvia, Poland and Italy; in Slovakia it exceeded the EA19 average by 8 pp in 2017.

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

[5] GDP per capita can be written as follows:

$$GDP\ per\ capita = \frac{GDP}{number\ of\ inhabit.} =$$

$$= \frac{GDP}{no.\ of\ hours\ worked} * \frac{no.\ of\ hours\ worked}{population\ aged\ 15-64} * \frac{population\ aged\ 15-64}{no.\ of\ inhabit.} =$$

$$= labour\ productivity * labour\ market\ component * demographic\ component$$

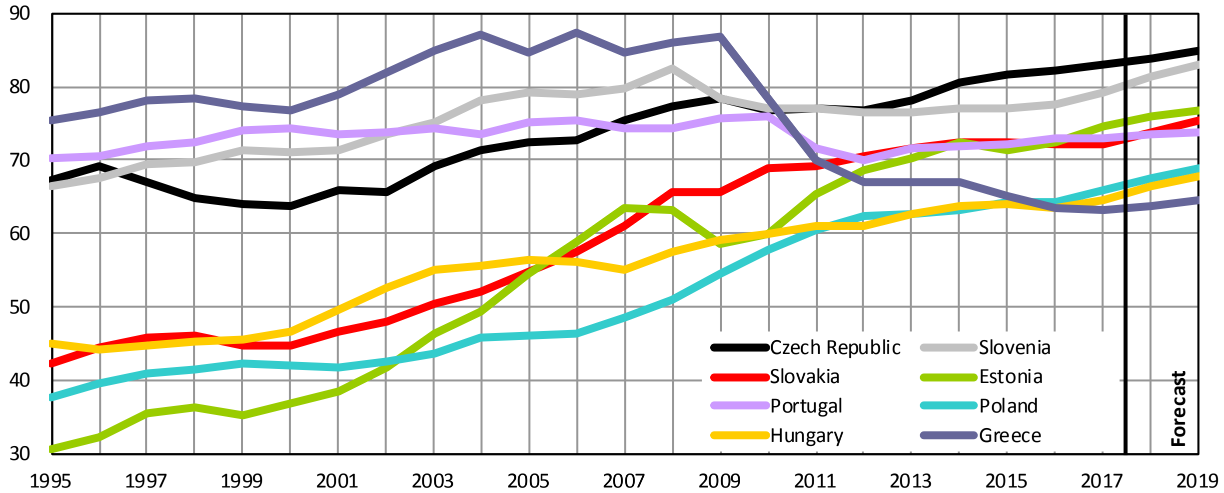
Table 3.5.1: GDP per Capita – Using Current Purchasing Power Parities

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
										Forecast	*Forecast*
Italy	*PPS*	**26 500**	**27 100**	**27 000**	**26 400**	**26 600**	**27 700**	**28 400**	**28 800**	**29 700**	**30 500**
	EA19=100	96	96	95	92	90	89	91	91	90	90
Spain	*PPS*	**24 400**	**24 200**	**24 200**	**24 000**	**24 900**	**26 300**	**26 700**	**27 700**	**28 800**	**29 900**
	EA19=100	89	86	85	84	84	85	86	87	88	88
Czech Republic	*PPS*	**21 100**	**21 700**	**22 000**	**22 400**	**23 800**	**25 300**	**25 500**	**26 400**	**27 600**	**28 800**
	EA19=100	77	77	77	78	81	82	82	83	84	85
Slovenia	*PPS*	**21 200**	**21 700**	**21 800**	**21 900**	**22 700**	**23 800**	**24 100**	**25 200**	**26 800**	**28 200**
	EA19=100	77	77	76	76	77	77	77	79	81	83
Lithuania	*PPS*	**15 400**	**17 200**	**18 600**	**19 600**	**20 800**	**21 700**	**22 100**	**23 600**	**25 000**	**26 300**
	EA19=100	56	61	65	68	70	70	71	74	76	78
Estonia	*PPS*	**16 500**	**18 500**	**19 600**	**20 200**	**21 300**	**22 000**	**22 500**	**23 700**	**24 900**	**26 100**
	EA19=100	60	65	69	70	72	71	72	74	76	77
Slovakia	*PPS*	**19 000**	**19 500**	**20 100**	**20 500**	**21 300**	**22 400**	**22 400**	**23 000**	**24 200**	**25 600**
	EA19=100	69	69	71	72	72	72	72	72	74	75
Portugal	*PPS*	**20 900**	**20 200**	**20 000**	**20 500**	**21 200**	**22 300**	**22 700**	**23 200**	**24 100**	**25 000**
	EA19=100	76	72	70	72	72	72	73	73	73	74
Poland	*PPS*	**15 900**	**17 000**	**17 800**	**17 900**	**18 600**	**19 800**	**19 900**	**20 900**	**22 200**	**23 400**
	EA19=100	58	60	62	63	63	64	64	66	68	69
Hungary	*PPS*	**16 500**	**17 200**	**17 500**	**18 000**	**18 800**	**19 800**	**19 700**	**20 500**	**21 900**	**23 000**
	EA19=100	60	61	61	63	64	64	63	64	66	68
Latvia	*PPS*	**13 400**	**14 900**	**16 100**	**16 700**	**17 500**	**18 500**	**18 900**	**20 200**	**21 400**	**22 700**
	EA19=100	49	53	56	58	59	60	61	64	65	67
Greece	*PPS*	**21 500**	**19 700**	**19 100**	**19 200**	**19 800**	**20 200**	**19 700**	**20 100**	**20 900**	**21 900**
	EA19=100	78	70	67	67	67	65	63	63	64	65
Croatia	*PPS*	**15 100**	**15 600**	**16 000**	**16 000**	**16 300**	**17 200**	**17 600**	**18 400**	**19 300**	**20 300**
	EA19=100	55	55	56	56	55	56	57	58	59	60

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.

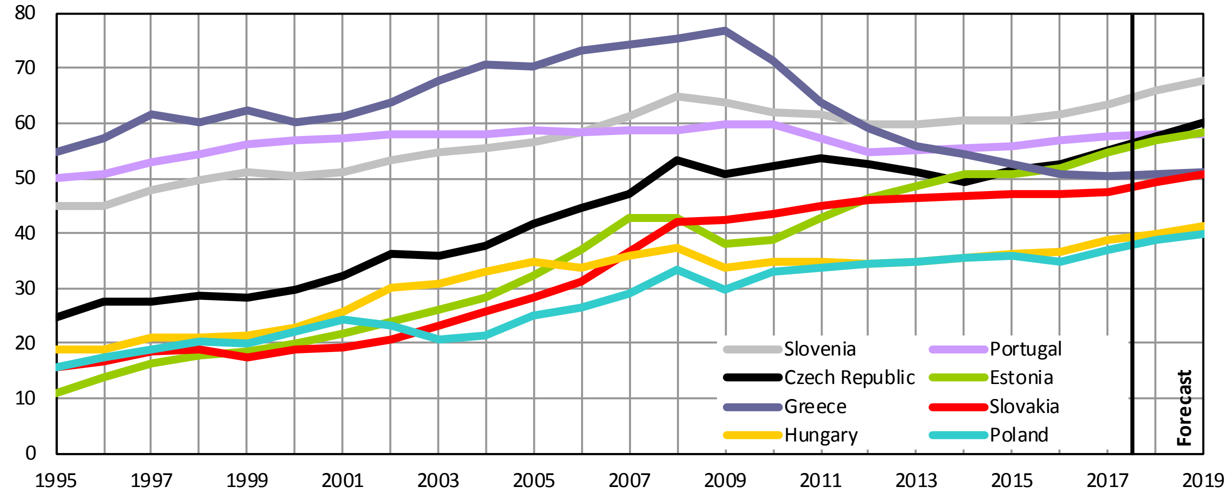
Table 3.5.2: GDP per Capita – Using Current Exchange Rates

			2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
											Forecast	*Forecast*
Italy		*EUR*	**26 800**	**27 300**	**26 700**	**26 500**	**26 700**	**27 200**	**27 900**	**28 500**	**29 300**	**30 100**
		EA19=100	94	93	91	90	89	88	88	87	87	86
	Comparative price level	*EA19=100*	**98**	**97**	**97**	**98**	**98**	**98**	**96**	**96**	**96**	**96**
Spain		*EUR*	**23 200**	**22 900**	**22 200**	**22 000**	**22 300**	**23 300**	**24 100**	**25 100**	**26 000**	**27 000**
		EA19=100	81	78	76	75	74	75	76	76	77	77
	Comparative price level	*EA19=100*	**92**	**92**	**90**	**89**	**88**	**88**	**88**	**88**	**88**	**88**
Slovenia		*EUR*	**17 700**	**18 000**	**17 500**	**17 600**	**18 200**	**18 800**	**19 500**	**20 800**	**22 300**	**23 700**
		EA19=100	62	62	60	60	61	61	62	63	66	68
	Comparative price level	*EA19=100*	**80**	**80**	**78**	**78**	**79**	**79**	**79**	**80**	**81**	**82**
Portugal		*EUR*	**17 000**	**16 700**	**16 000**	**16 300**	**16 600**	**17 400**	**18 100**	**18 900**	**19 600**	**20 300**
		EA19=100	60	57	55	55	55	56	57	58	58	58
	Comparative price level	*EA19=100*	**79**	**80**	**78**	**77**	**77**	**78**	**78**	**79**	**79**	**79**
Czech Republic		*EUR*	**14 900**	**15 600**	**15 400**	**15 000**	**14 900**	**16 000**	**16 700**	**18 100**	**19 500**	**21 000**
		EA19=100	52	54	53	51	49	51	53	55	58	60
	Comparative price level	*EA19=100*	**68**	**70**	**68**	**65**	**61**	**63**	**64**	**66**	**69**	**71**
Estonia		*EUR*	**11 000**	**12 500**	**13 500**	**14 300**	**15 200**	**15 700**	**16 500**	**18 000**	**19 300**	**20 400**
		EA19=100	39	43	46	49	51	51	52	55	57	58
	Comparative price level	*EA19=100*	**65**	**66**	**67**	**69**	**70**	**71**	**72**	**73**	**75**	**76**
Greece		*EUR*	**20 300**	**18 600**	**17 300**	**16 500**	**16 400**	**16 300**	**16 200**	**16 600**	**17 100**	**17 900**
		EA19=100	71	64	59	56	55	52	51	51	51	51
	Comparative price level	*EA19=100*	**91**	**91**	**88**	**84**	**81**	**80**	**80**	**80**	**79**	**79**
Slovakia		*EUR*	**12 400**	**13 100**	**13 400**	**13 700**	**14 000**	**14 600**	**15 000**	**15 600**	**16 600**	**17 700**
		EA19=100	44	45	46	46	47	47	47	48	49	51
	Comparative price level	*EA19=100*	**63**	**65**	**65**	**65**	**65**	**65**	**65**	**66**	**67**	**67**
Lithuania		*EUR*	**9 000**	**10 300**	**11 200**	**11 800**	**12 500**	**12 900**	**13 500**	**14 900**	**16 000**	**17 000**
		EA19=100	32	35	38	40	41	41	43	46	47	49
	Comparative price level	*EA19=100*	**57**	**58**	**58**	**59**	**59**	**59**	**60**	**62**	**62**	**63**
Latvia		*EUR*	**8 500**	**9 800**	**10 800**	**11 300**	**11 800**	**12 300**	**12 800**	**13 900**	**14 900**	**16 000**
		EA19=100	30	34	37	38	39	40	40	43	44	46
	Comparative price level	*EA19=100*	**61**	**64**	**66**	**66**	**66**	**66**	**66**	**67**	**68**	**68**
Hungary		*EUR*	**9 900**	**10 200**	**10 000**	**10 300**	**10 700**	**11 300**	**11 600**	**12 700**	**13 600**	**14 400**
		EA19=100	35	35	34	35	36	36	37	39	40	41
	Comparative price level	*EA19=100*	**58**	**57**	**56**	**56**	**56**	**57**	**58**	**60**	**60**	**61**
Poland		*EUR*	**9 400**	**9 900**	**10 100**	**10 300**	**10 700**	**11 200**	**11 100**	**12 200**	**13 200**	**14 000**
		EA19=100	33	34	35	35	36	36	35	37	39	40
	Comparative price level	*EA19=100*	**57**	**56**	**55**	**56**	**56**	**56**	**54**	**56**	**57**	**58**
Croatia		*EUR*	**10 500**	**10 500**	**10 300**	**10 300**	**10 200**	**10 600**	**11 200**	**11 800**	**12 500**	**13 200**
		EA19=100	37	36	35	35	34	34	35	36	37	38
	Comparative price level	*EA19=100*	**67**	**65**	**63**	**62**	**62**	**61**	**62**	**62**	**63**	**63**

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

Graph 3.5.2: GDP per Capita – Using Current Exchange Rates

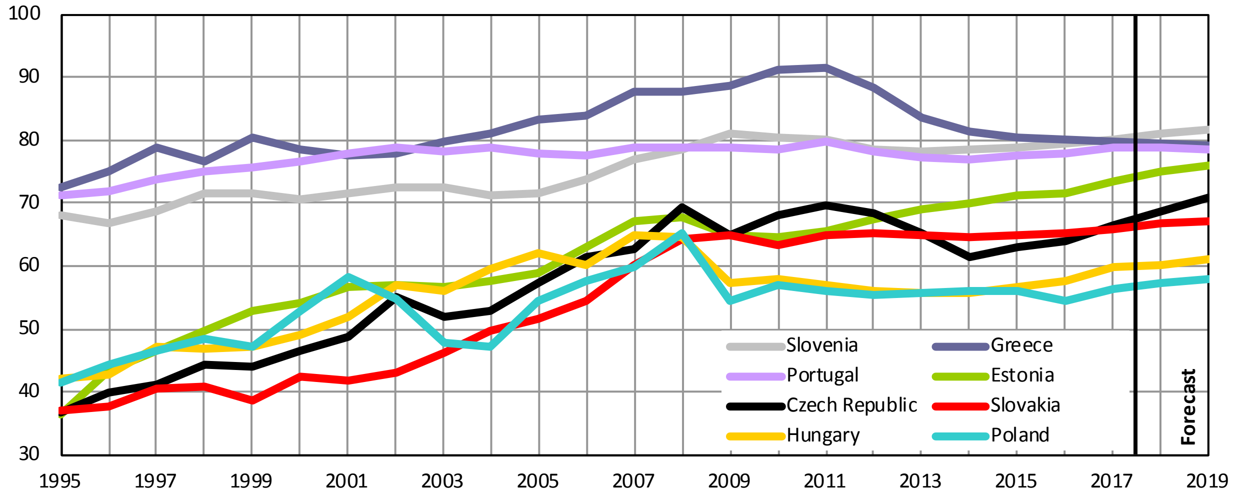
EA19=100



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

Graph 3.5.3: Comparative Price Level of GDP per Capita

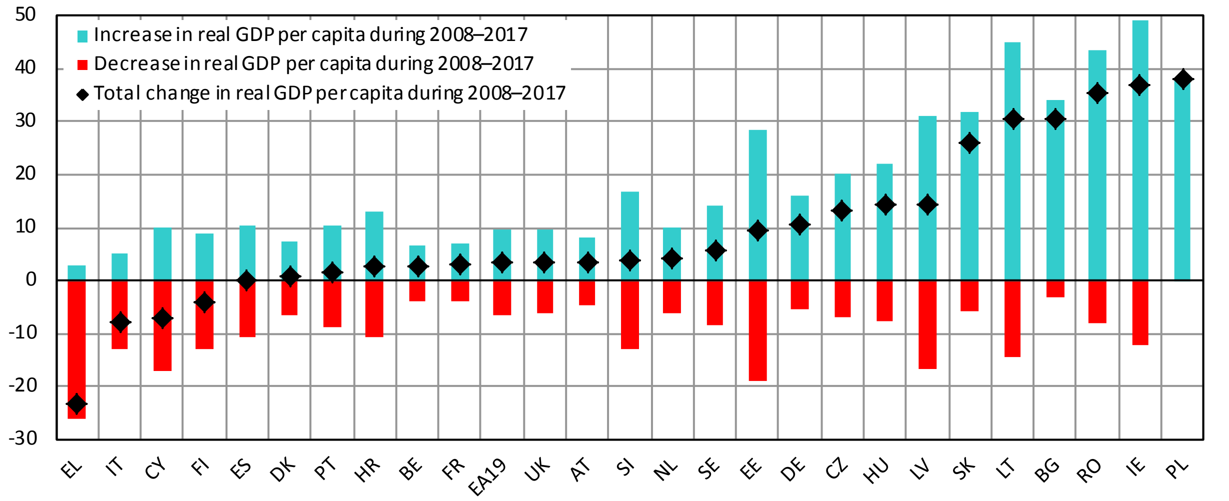
EA19=100



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

Graph 3.5.4: Change in Real GDP per Capita during 2008–2017

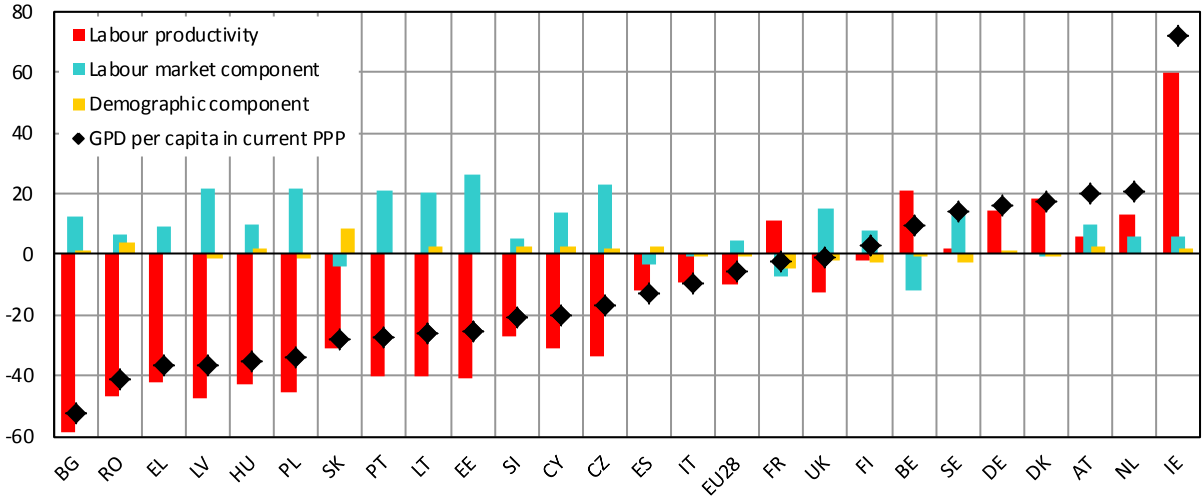
growth in %



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

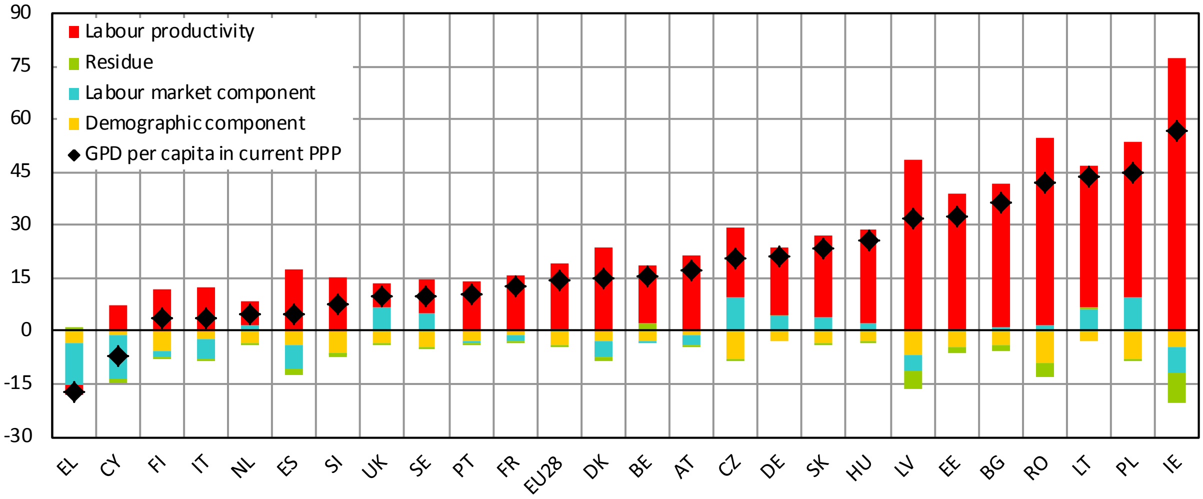


Note: The labour market component is defined as the ratio of total hours worked to working-age (15–64) population, the demographic component is the ratio of the working-age to total population.

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 the future development 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

		October 2018			November 2018
		min.	*max.*	*average*	*MoF forecast*
Gross domestic product (2018)	*growth in %, const.pr.*	3.0	4.2	3.3	3.0
Gross domestic product (2019)	*growth in %, const.pr.*	2.8	3.4	3.0	2.9
Average inflation rate (2018)	*%*	1.7	2.5	2.2	2.2
Average inflation rate (2019)	*%*	2.0	2.7	2.2	2.3
Average monthly wage (2018)	*growth in %*	7.5	8.6	8.2	8.2
Average monthly wage (2019)	*growth in %*	5.5	8.1	6.6	8.1
Current account / GDP (2018)	*%*	-0.4	2.1	0.8	0.4
Current account / GDP (2019)	*%*	-0.9	1.3	0.6	0.4

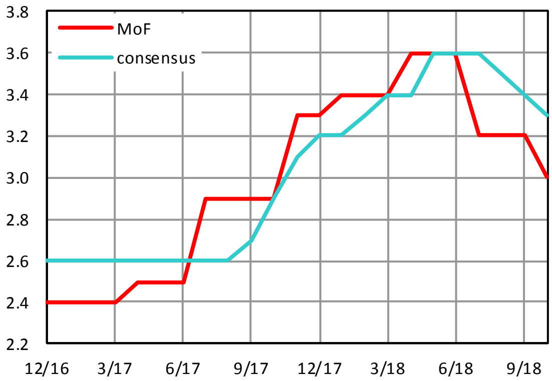
Source: Forecasts of individual institutions. Calculations of the MoF.

According to estimates of the institutions surveyed, real GDP should increase by 3.3% in 2018 and 3.0% in the following year. The average inflation rate should be slightly above the CNB's inflation target, reaching 2.2% in both years. The dynamic growth of the average wage by 8.2% in 2018 should then slightly slow down, and the average wage should only increase by 6.6% in 2019. The surplus on the current account of the balance payments should hover around 0.7% of GDP in 2018 and 2019.

The Ministry of Finance anticipates the dynamics of economic growth at the lower end of the range of forecasts of the monitored institutions. The new forecast of the Ministry of Finance already takes full account of the slower-than-expected growth of the economy in Q2 2018 and deteriorated developments of the external environment. In the case of expected price level developments, the deviation from the average of the monitored forecasts is negligible in both years. As regards the average wage, the Ministry of Finance estimates it to grow at slightly over 8.0% in both years. Maintaining such high dynamics also in 2019 is to a large extent due to the expected increase in the minimum wage by CZK 1,000 from January 2019. The Ministry of Finance expects that the surplus on the current account of the balance payments could reach 0.4% of GDP both in 2018 and 2019.

Graph 4.1: Forecasts for Real GDP Growth in 2018

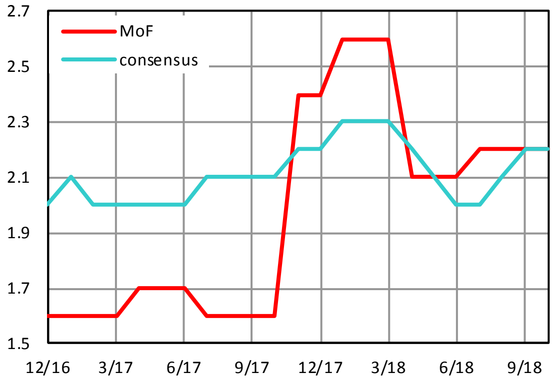
in %; the month, in which the monitoring was conducted on the horizontal axis



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

Graph 4.2: Forecasts for Average Inflation Rate in 2018

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



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

Ministry of Finance of the Czech Republic
Economic Policy Department
Letenska 15
118 10 Prague 1

http://www.mfcr.cz/en

ISSN 2533-5588