



INFLATION REPORT



2019
SEPTEMBER

‘... wise is the man who can put purpose to his desires.’

Miklós Zrínyi: The Life of Matthias Corvinus



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Pursuant to Act CXXXIX of 2013 on the Magyar Nemzeti Bank, the primary objective of Hungary's central bank is to achieve and maintain price stability. Low inflation ensures higher long-term economic growth and a more predictable economic environment, and moderates the cyclical fluctuations that impact both households and companies.

In the inflation targeting system in use since August 2005, the Bank has sought to attain price stability by ensuring an inflation rate near the 3 percent medium-term target. The Monetary Council, the supreme decision-making body of the Magyar Nemzeti Bank, performs a comprehensive review of expected developments in inflation every three months, in order to establish the monetary conditions consistent with achieving the inflation target. The Council's decision is the result of careful consideration of a wide range of factors, including an assessment of prospective economic developments, the inflation outlook, financial and capital market trends and risks to stability.

In order to provide the public with a clear insight into how monetary policy works and to enhance transparency, the Bank publishes the information available at the time of making its monetary policy decisions. The Report presents the inflation forecasts prepared by the Directorate Economic Forecast and Analysis, the Directorate Monetary Policy and Financial Market Analysis, the Directorate for Fiscal and Competitiveness Analysis and the Directorate Financial System Analysis, as well as the macroeconomic developments underlying these forecasts. The forecast is based on the assumption of endogenous monetary policy. In respect of economic variables exogenous to monetary policy, the forecasting rules used in previous issues of the Report are applied.

The analyses in this Report were prepared under the direction of Barnabás Virág, Executive Director for Monetary Policy and Economic Analysis. The Report was prepared by staff at the MNB's Directorate Economic Forecast and Analysis, Directorate Monetary Policy and Financial Market Analysis, Directorate for International Monetary Policy Analysis and Training of Economic Sciences, Directorate for Fiscal and Competitiveness Analysis and Directorate Financial System Analysis. The Report was approved for publication by Márton Nagy, Deputy Governor.

The Report incorporates valuable input from other areas of the MNB and the Monetary Council's comments.

The projections are based on information available for the period ending 20 September 2019.

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The Monetary Council's key findings related to the Inflation report

The Magyar Nemzeti Bank's (MNB) single anchor is inflation, its primary objective is to achieve and maintain price stability. Inflation continues to be volatile. Therefore, in assessing the outlook, the Monetary Council pays more attention to the measures of underlying inflation capturing persistent trends. The significantly lower-than-expected core inflation excluding indirect tax effects and the effects of the slowdown in European economic activity indicate a strengthening in downside risks to the longer-term outlook for inflation.

In the second quarter of 2019, while risks were strengthening and global economic outlook was deteriorating, the expansion of the world economy continued. Global inflation has declined slightly in the past months. The Central and Eastern European region remained still the growth centre of the European Union.

The deterioration of the global economic outlook has continued in recent months. Developments related to international trade policy, the exit of the United Kingdom from the European Union, and globally high levels of debt result in a rise in risks and a worsening in the prospects for economic activity. In the second quarter of this year, the GDP of the United States expanded, while China's growth rate decreased. In parallel with the weakening and increasingly uncertain outlooks, economic growth in the euro area has also slowed down. As seen in recent quarters, the Central and Eastern European region remained the growth centre of the European Union. GDP growth in the region exceeded the expansion in the euro area by 2.5 percentage points.

Global inflation has declined slightly in the past months. Eurozone inflation remains below the central bank's 2 percent target, while core inflation, following a worsening inflation outlook, has once again fallen below 1 percent. Inflation rates in countries of the region increased in the last quarter and were above the central bank's inflation targets. Oil prices have declined for most of the past quarter, then increased with high volatility at the end of the period as a result of geopolitical events.

Global leading central banks have eased monetary conditions over the past quarter, as economic outlook continued to worsen.

As result of the deterioration of the global economic outlook and the muted inflationary processes, the external monetary policy environment has become looser again. After July, the Federal Reserve reduced its policy rate in September as well. At its latest policy meeting, the European Central Bank (ECB) decided to lower the deposit rate by 10 basis points and restart its asset purchase programme in an open-ended manner. According to the ECB's communication, policy rates are likely to remain at their present or lower levels until inflation rises close to the central bank target in a sustainable manner. According to global leading central banks' indications and analysts' expectations, a looser monetary policy environment will be persistently maintained, and additional loosening measures can be expected. Decision-makers in the central banks of the region have not changed monetary conditions in the last quarter, while expected interest rate paths for the coming years shifted downwards.

With a decline in risk appetite, developed countries' long-term bond yields declined, while their stock indices rose slightly.

In financial markets, risk appetite declined for most of the third quarter of 2019, driven mainly by continuously worsening in global growth prospects, developments related to international trade policy and geopolitical events. Its impact on both developed and emerging stock markets and emerging bond markets was unfavourable. However, at the end of the period stock indices in developed countries rose as a result of favourable information on trade negotiations. Due to rising expectations of easing global monetary conditions and strengthening growth concerns, developed countries' long-term bond yields declined over the past quarter, but they increased slightly in a more favourable market sentiment in September.

Since June, the domestic interbank and government securities yield curve has shifted lower and become flatter.

Over the past quarter, 1- and 3-month BUBOR rates declined slightly, while medium and longer-term interbank and government bond yields declined to a greater extent. The greatest decline was observed on the long section of yield curves. In line with this, interest rate expectations for two years from now have also shifted significantly downwards. As risk appetite decreased, the forint weakened against the euro in late June, in parallel with regional and emerging currencies.

Due to the base effects of the fall in fuel prices last year, the consumer price index is likely to rise again until the end of 2019, and then to stabilise at the level of the 3 percent inflation target, following a gradual decline. In the coming months, core inflation excluding indirect tax effects is expected to rise slightly, before decreasing to 3 percent along a lower than previously expected path, due to external disinflationary effects.

In addition to inflationary trend, the decline in fuel prices during the summer months also contributed to the decrease in the consumer price index. A dichotomy remains between the factors determining likely developments in inflation. Buoyant domestic demand is boosting, while weakening external activity is increasingly restraining the pace of inflation. The significantly lower-than-expected core inflation excluding indirect tax effects and the effects of the slowdown in European economic activity indicate a strengthening in downside risks to the longer-term outlook for inflation. Due to the base effects of the fall in fuel prices last year, the consumer price index is likely to rise again until the end of 2019, and then to stabilise at level of the 3 percent inflation target following a gradual decline. In the coming months, core inflation excluding indirect tax effects is expected to rise slightly, before decreasing to 3 percent along a lower than previously expected path, due to external disinflationary effects.

In addition to monetary policy, several government measures jointly strengthen Hungary's macroeconomic stability and reduce external vulnerability.

Since its launch in June, nearly HUF 2,000 billion of Hungarian Government Security Plus has already been purchased. More than half of the purchases was registered as a new source of financing for the government sector. Based on the ratified 2020 Budget Act, the budget deficit-to-GDP ratio is likely to decline to 1 percent, with the maintenance of a significant amount of reserves. After 2019, fiscal policy will remain counter-cyclical in 2020 and, in line with the Convergence Programme, in 2021 as well. The Economy Protection Action Plan announced in May is expected to gradually improve the competitiveness of the domestic economy.

Economic growth is expected to slow in the coming quarters. Weakening economic activity in Europe is likely to have an increasingly strong effect on the development of Hungarian GDP as well.

In the second quarter, the economy continued to grow at a slowing rate, supported mainly by domestic demand. In line with the gradual slowdown in economic growth, wage dynamics are slowing down and are expected to become single digit in coming years. In parallel with wage bill expansion slowing down, the growth rate of consumption will also slow down, while it will continue to contribute significantly to GDP growth. In the coming years, with the increase in the willingness of households to save, the income-to-savings ratio will remain permanently high, which will also be positively influenced by the new retail government securities scheme (MÁP Plusz). In a supportive financing environment, corporate sector's underlying investment developments are developing in a favourable manner, supported by dynamic corporate lending and the launch of the MNB's Bond Funding for Growth Scheme. By contrast, worsening external demand and strengthening uncertainties related to European economic activity may lead to a re-planning of the timing of export-oriented investments. Effective use of EU funds will gradually decline after this year, resulting in a decline in public investment in 2020-2021. Hungary's export growth may become more muted, reflecting the deterioration in the global and the outlook for European demand. Hungary's GDP is expected to grow by 4.5 percent in 2019 and by 3.3 percent in 2020-2021, respectively. Despite weakening external activity, the convergence of the Hungarian economy with the euro area is likely to continue in the coming years, with the maintenance of the at least 2 percentage points growth rate surpluses.

The loan portfolio of the private sector is expanding at a rate exceeding the regional dynamics.

In the second quarter of 2019, corporate loans grew by nearly 17 percent and in the SME sector by 15 percent year-on-year. Except for a few large individual transactions, total corporate credit expansion was dynamic and broad based across sectors. Buoyant credit demand is supported by negative real interest rates, funding by EU subsidies and announced large

investment projects, which points to the continuation of dynamic corporate credit expansion over the forecast horizon. The household loan portfolio continued to expand as well, with an annual dynamic of 6 percent in June. Growth continued to be driven primarily by housing and personal loans. Over the forecast horizon, in addition to the low interest rate environment and the growth of real wages, the prenatal baby support loan, launched as part of the Family Protection Action Plan, also contributes significantly to the maintenance of the household credit dynamics.

Hungary's current account balance will improve again from 2020, while the country's net lending is expected to stabilize at close to 2 percent of the GDP. Due to the net lending position, net external debt will decline to around zero over the forecast horizon.

The current account balance is expected to decline temporarily in 2019, as a result of the decreasing trade balance, as a result of the declining world market demand and rising import-intensive domestic demand. In parallel, as a result of the increasing absorption of EU transfers, net lending will be around 2 percent of the GDP in 2019. From 2020, net export is expected to contribute positively to economic growth, in line with a slower increase in import, due to the restrained growth path of investments. Meanwhile, the absorption of EU funds is likely to slightly decrease towards the end of the programming period. As a result, the current account balance is expected to increase again, and net lending will stabilize at close to 2 percent of the GDP. Due to a persistently favourable net lending position, external debt will continue to decline, thus reducing net external debt to nearly zero over the forecast horizon.

In 2019, the budget deficit may be in line with the 1.8 percent statutory appropriation. According to the Budget Act of 2020, the deficit, with significant reserves, will be reduced to 1 percent next year. After 2019, fiscal policy will remain counter-cyclical in 2020 and, according to the Convergence Program, in 2021 as well. In line with Hungarian and EU budgetary rules, debt will decline to 63 percent by the end of the forecast horizon. In parallel with this, a further decline in the foreign exchange ratio of government debt and an increase in the domestic equity ratio are also reducing the vulnerability of the economy.

In the Council's assessment, previously symmetric risks to inflation became asymmetric in the last quarter.

The Monetary Council highlighted three alternative scenarios around the baseline projection in the September Inflation Report. If the scenario featuring a stronger disinflationary effect from deteriorating global economic activity materialises, it would result in a lower inflation path and more restrained growth compared to the baseline scenario. The scenario involving the possibility of lower investment activity assumes lower inflation and a more subdued growth rate compared to the baseline scenario. In the case of the alternative scenario assuming higher wage growth and dynamic expansion in consumption, domestic economic growth is stronger and inflation is higher than in the forecast from the baseline scenario. In addition to the scenarios highlighted above, as further risks, scenarios that assume the implementation of competitiveness reforms and a stronger expansion in households' savings were discussed by the Monetary Council.

SUMMARY TABLE OF THE BASELINE SCENARIO

(Forecast based on endogenous monetary policy)

	2018	2019	2020	2021
	Actual		Projection	
Inflation (annual average)¹				
Core inflation	2.5	3.8	3.8	3.4
Core inflation excluding indirect tax effects	2.4	3.4	3.4	3.1
Inflation	2.8	3.3	3.4	3.3
Economic growth				
Household consumption expenditure	5.3	4.7	3.9	3.0
Government final consumption expenditure	0.0	1.1	1.1	0.3
Gross fixed capital formation	16.5	15.9	2.4	4.0
Domestic absorption	7.0	5.4	2.9	2.7
Exports	4.7	5.2	5.5	5.5
Imports	7.1	6.3	5.0	5.0
GDP	4.9	4.5	3.3	3.3
Labour productivity ⁶	2.7	2.5	2.7	3.1
External balance²				
Current account balance	-0.5	-0.9	-0.7	-0.4
Net lending	2.1	1.8	2.0	1.7
Government balance^{2,5}				
ESA balance	-2.2	(-1.8)–(-1.7)	(-1.4)–(-0.6)	(-1.3)–(-0.5)
Labour market				
Whole-economy gross average earnings ³	11.3	10.5	8.5	7.9
Whole-economy employment	1.1	1.1	0.5	0.2
Private sector gross average earnings ³	10.9	10.9	9.6	8.9
Private sector employment	1.3	1.5	0.7	0.4
Unemployment rate	3.7	3.4	3.3	3.3
Private sector nominal unit labour costs	5.9	7.1	4.7	4.1
Household real income ⁴	6.7	4.8	4.1	2.9

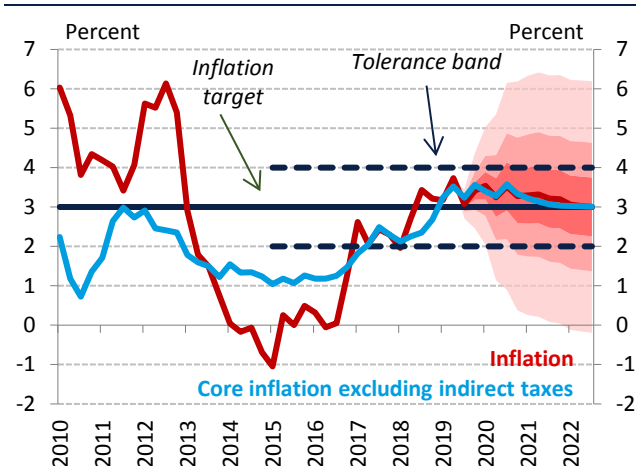
¹ Based on seasonally unadjusted data.² As a percentage of GDP.³ For full-time employees.⁴ MNB estimate.⁵ The lower value of the forecast band shows the ESA balance if the Country Protection Fund is used, while the higher value shows the ESA balance if the Country Protection Fund is not used.⁶ Whole economy, based on national accounts data.

1 Inflation and real economy outlook

1.1 Inflation forecast

The annual consumer price index was in line with our expectations during the summer months, while core inflation excluding indirect taxes was lower than anticipated. The weaker-than-expected development of underlying inflation developments in recent months and the continued deterioration in external economic activity point to stronger downward risks with regard to the longer-term inflation outlook. According to our current forecast, inflation will be around 3 percent in the autumn months, before increasing until the end of the year as a result of the base effect from last year's sharp drop in fuel prices. The rise in core inflation excluding indirect taxes is mitigated by the disinflationary effects stemming from the economic slowdown in the euro area, despite the weaker exchange rate of the forint in recent months. The regular, biannual increase in the excise tax on tobacco products, which falls outside the scope of monetary policy, raises the consumer price index over the entire forecast horizon. This measure does not cause any second-round inflationary effects and thus does not affect the development of core inflation excluding indirect taxes. After a gradual moderation, inflation is set to stabilise at the level of the 3 percent inflation target.

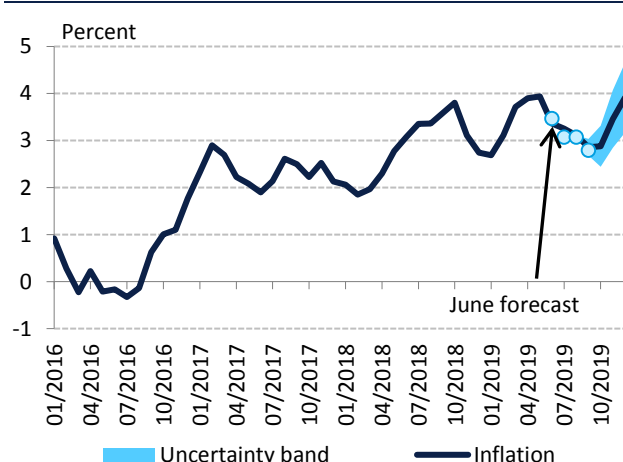
Chart 1-1: Fan chart of the inflation forecast



Note: Based on seasonally unadjusted data.

Source: HCSO, MNB

Chart 1-2: Monthly evolution of the near-term inflation forecast



Note: Annual change. The uncertainty band shows the root mean squared error of previous years' near-term forecasts.

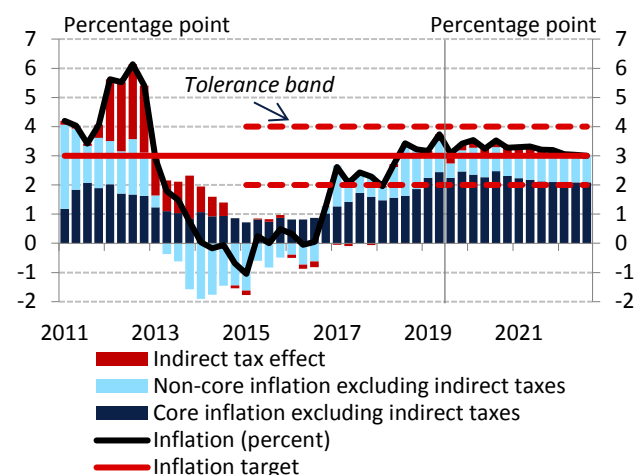
Source: HCSO, MNB

During the summer months, inflation declined in line with our expectations, while core inflation excluding indirect taxes was lower than our projections. In factors determining the expected development of underlying inflation there is still some dichotomy. The rate of price increases is accelerated by buoyant domestic demand, while weaker external economic activity hampers the pace of such increases, despite the weaker forint exchange rate observed in recent months. According to our current forecast, **the consumer price index will be around 3 percent in the autumn months, before rising again until the end of the year** (Chart 1-2). The rise is attributable to the base effect from the sharp decline in fuel prices observed in November and December of last year. After a gradual moderation, inflation is set to stabilise at the level of the 3 percent inflation target (Chart 1-1).

Core inflation excluding indirect taxes will rise slightly for the rest of the year, but this year and next year it will be somewhat lower than our previous projection. Disinflationary effects stemming from the economic slowdown in the euro area mitigate the rise in core inflation excluding indirect taxes, despite the weaker forint exchange rate in recent months. By contrast, strong domestic demand broadens companies' leeway in pricing, which may result in rising price dynamics. The inflationary effect of the fast private sector wage increases in excess of productivity growth will be reduced by a further cut in the social contribution tax paid by companies. Core inflation excluding indirect taxes will be 3.4 percent in 2019 and 2020, and 3.1 percent in 2021.

The significantly lower-than-expected core inflation excluding indirect tax effects and the effects of the slowdown in European economic activity indicate a

Chart 1-3: Decomposition of the inflation forecast



Source: HCSO, MNB

Table 1-1: Details of the inflation forecast

		2018	2019	2020	2021
Core inflation excluding indirect tax effects		2.4	3.4	3.4	3.1
Core inflation		2.5	3.8	3.8	3.4
Non-core inflation	Unprocessed food	6.9	8.9	6.3	3.6
	Fuel and market energy	8.2	1.3	1.7	3.1
	Regulated prices	0.1	0.8	1.7	2.4
	Total	3.6	2.4	2.6	2.8
Inflation		2.8	3.3	3.4	3.3

Note: Based on seasonally unadjusted data.

Source: MNB

strengthening in downside risks to the longer-term outlook for inflation. The subdued external inflation environment has a moderating effect on the rate of price increases in Hungary. In its latest forecast, the ECB projects more restrained inflation and core inflation paths. The core inflation forecast, which plays a more decisive role in terms of Hungarian price dynamics, remained unchanged in 2019, but it declined by 0.2 and 0.1 percentage point for 2020 and 2021, respectively.

Changes in indirect taxes point to an increase in inflation over the forecast horizon (Chart 1-3). The excise tax on tobacco products will be further increased in three steps from July 2019. The effect can only be partly offset by the reduction of the VAT rate on accommodation services from 18 percent to 5 percent from 1 January 2020 as well as cancellation of the financial transaction levy on cash transfer orders under HUF 20,000.

As regards non-core inflation, the rate is expected to rise (Table 1-1). In the case of unprocessed food (seasonal food and pork), we expect higher inflation this year and next year, and later we expect price dynamics to be in line with the historical average. Futures prices of Brent expressed in euros are lower than our projection in June, but due to the increased volatility the outlook for oil prices is highly uncertain. Fuel price dynamics are projected to be moderate in the coming quarters. Regulated energy prices will not change until the end of the forecast horizon, and moderate price dynamics are expected in the case of non-energy regulated prices. On balance, after the cost effects have faded out, the price dynamics of non-core inflation items will be around 3 from 2021.

Box 1-1: Assumptions applied in our forecast

Hungary is a small, open economy, and as such our forecasts for the most important macroeconomic variables are fundamentally influenced by developments in external factors and changes in the assumptions related to such. The purpose of this brief presentation of the changes in the external assumptions is to make our forecasts more transparent (Table 1-2).

Table 1-2: Main external assumptions of our forecast

Technical assumptions	2019		2020		2021		Change		
	Previous	Current	Previous	Current	Previous	Current	2019	2020	2021
EUR/USD	1.12	1.12	1.12	1.10	1.12	1.10	-0.3%	-1.2%	-1.2%
Oil (USD/barrel)	65.5	64.1	63.6	59.7	63.3	58.7	-2.1%	-6.1%	-7.3%
Oil (EUR/barrel)	58.3	57.3	56.8	54.1	56.6	53.1	-1.8%	-4.9%	-6.1%
Euro area inflation (%)	1.3	1.2	1.4	1.0	1.6	1.5	-0.1 pp.	-0.4 pp.	-0.1 pp.
Euro area core inflation (%)	1.1	1.1	1.4	1.2	1.6	1.5	0 pp.	-0.2 pp.	-0.1 pp.
GDP growth of Hungary's main trading partners*(%)	1.8	1.7	2.1	1.9	2.1	1.9	-0.1 pp.	-0.2 pp.	-0.2 pp.

Note: Annual average in the case of oil prices. *Growth rate of Hungary's 21 most important export partners, weighted by share in exports.

Source: Bloomberg, Consensus Economics, MNB, ECB

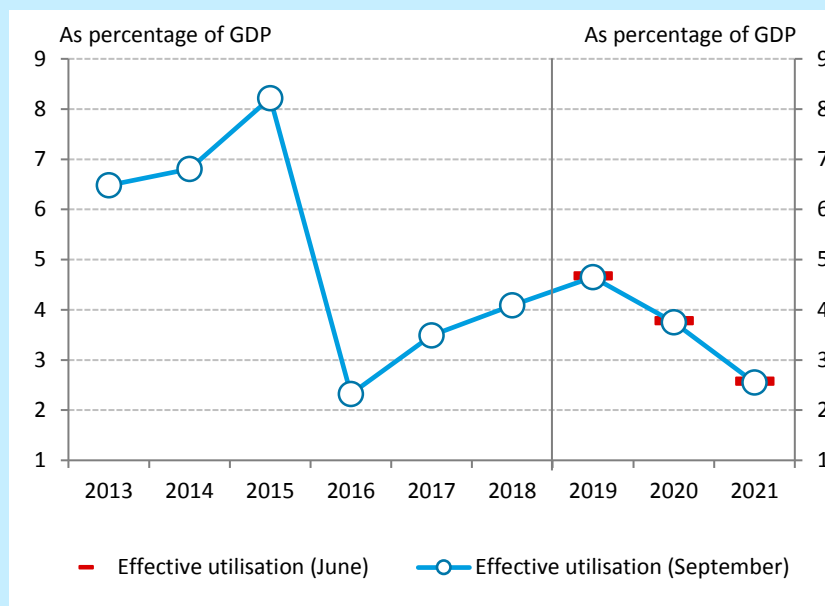
Compared to our previous assumptions, external demand growth is expected to be more restrained. In the past period, the growth rate of global trade decelerated sharply, primarily due to the increase in trade tensions between the United States and China. In addition, the more restrained expectations for euro area economic activity are explained by the uncertainty about Brexit as well as the weak performance of manufacturing around the world. In line with deteriorating global economic activity, growth prospects for Hungary's key trading partners (mainly Germany) continued to worsen, which also impacts the performance of Hungary's manufacturing industry via the real economy channel.

In line with European growth prospects, in its latest forecast the European Central Bank continues to project that price dynamics will fall short of its inflation target over the entire forecast horizon. In parallel with the reduction of the projection for euro area GDP growth, **the core inflation forecast for 2020 and 2021 is 0.2 and 0.1 percentage point lower, respectively, compared to the previously assumed path.** The ECB also downgraded its inflation projection, partly in view of the lower oil price forecast. Euro area inflation will drop from 1.2 percent in 2019 to 1.0 percent in 2020, before rising to 1.5 percent in 2021.

In recent months, the per barrel Brent crude oil price was highly volatile, fluctuating in the range of USD 55–70. The prices were determined by contrasting effects. In mid-September, rising geopolitical tensions led to a sharp increase in oil prices, after which there was a correction. Additionally, a larger-than-expected decline in US oil stocks and a possible increase in production caps by the OPEC countries may result in higher oil prices. By contrast, the slowdown in the Chinese and global economy in recent quarters and further deepening of the trade tensions between the USA and China point to weaker global demand, which may result in lower oil prices. Based on the September survey by Consensus Economics, forecasters expect oil prices to range between USD 55 and 71 (EUR 49.5–63.9) this year.

On the whole, **EUR-denominated oil prices, which determine changes in fuel prices in Hungary, declined compared to our June assumption.** With respect to the EUR/USD cross rate, compared to our previous assumption **the euro is expected to be slightly weaker** over the forecast horizon.

Chart 1-4: Effective utilisation of EU funds



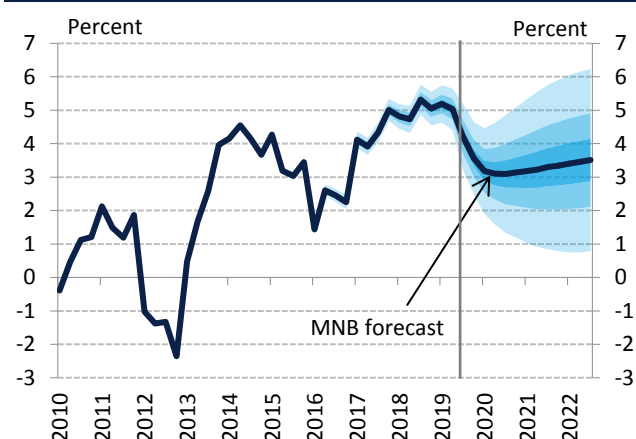
Source: Ministry of Finance, MNB

As a result of the **announced government measures and stronger-than-expected utilisation of the measures of the Family Protection Action Plan**, the 2019 deficit may be 0.1 percentage point higher than forecast in the June Inflation Report. In 2019, some 2.6 million pensioners receive utility vouchers worth HUF 9,000 and around 100,000 public workers receive a one-off grant amounting to HUF 54,000, which correspond to additional expenditures of HUF 30 billion for the budget. In addition, the higher-than-expected expenditures of the family protection measures related to the prenatal baby support and car purchases by large families also add to the accrual-based deficit, which is largely offset by the higher-than-expected corporate tax revenues. According to our forecast, the **2019 deficit may amount to 1.7–1.8 percent of GDP**, which is in line with the 1.8 percent statutory appropriation. Corresponding to our June expectation, in 2020 – with a partial use of the Country Protection Fund – the budget deficit may decline to 1 percent, whereas in 2021 it may be between 0.7–1.5 percent. Accordingly, **after 2019, fiscal policy will have a counter-cyclical effect in 2020 and 2021 as well**. In accordance with our earlier assumptions, the effective absorption of EU funds will peak in 2019 and then gradually decrease, contributing to a decline in public investment (Chart 1-4).

1.2 Real economy forecast

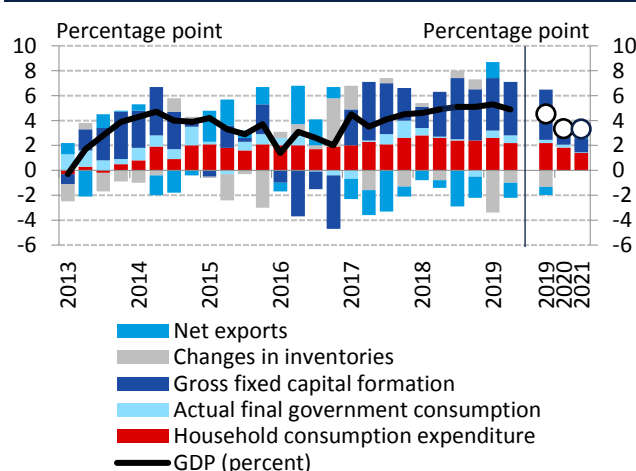
In the second quarter, the Hungarian economy continued to expand, albeit at a lower rate. Incoming data confirm that this year's growth may be higher than previously expected. According to our expectations, GDP growth will reach 4.5 percent this year, primarily driven by stronger corporate investment activity in line with the favourable financing environment. However, economic growth may have peaked in the first quarter of the year, and in the absence of measures to improve competitiveness, GDP may only expand at a more moderate pace in the period ahead; therefore, growth of 3.3 percent is projected for 2020–2021. Growth is still dominated by domestic demand. Consumption growth will be consistent with the development of the wage bill, and the contribution to growth remains crucial in the expansion of GDP. In the years ahead, the savings-to-income ratio will remain permanently high, thanks to positive impact of the product "Hungarian Government Bond Plus". The underlying trends in corporate sector investment will remain robust, in line with dynamic corporate lending and the Bond Funding for Growth Scheme. In accordance with our earlier assumptions, the effective absorption of EU funds will peak in 2019 and then gradually decrease, contributing to a decline in public investment. Fiscal policy will continue to exert a countercyclical effect over the forecast horizon. Hungarian exports will increase less than previously forecast, due to the ongoing deterioration in global and European economic prospects. Overall, the 2-percentage point growth surplus over the euro area will remain in place in the coming years. In terms of long-term, sustainable economic growth, structural measures targeting the competitiveness of the economy will become increasingly important.

Chart 1-5: Fan chart of the GDP forecast



Note: Based on seasonally and calendar adjusted and reconciled data. Source: HCSO, MNB

Chart 1-6: Contributions to annual changes in GDP



Note: Actual final government consumption includes social transfers in kind from government and NPISHs.

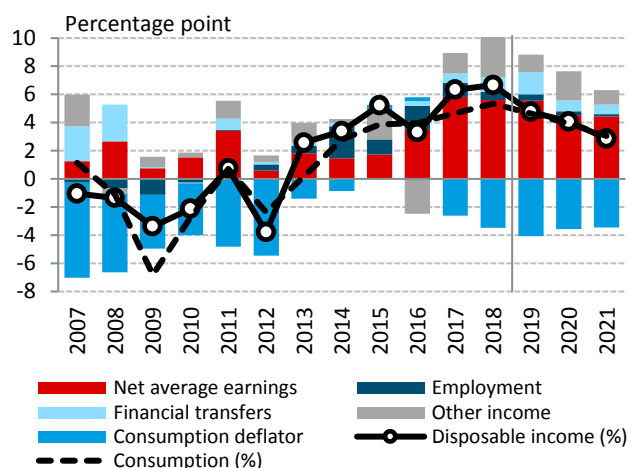
Source: HCSO, MNB

In the second quarter of 2019, Hungary's gross domestic product expanded by 4.9 percent in year-on-year terms and by 1.1 percent compared to the previous quarter. Incoming data confirm that **this year's GDP growth may be higher than previously expected**. According to our assumptions, economic growth **may have peaked in the first quarter of this year, and in the absence of measures improving competitiveness, GDP may only expand at a more moderate pace in the period ahead** (Chart 1-5). If the assumptions of the current forecast materialise, growth is projected to be 4.5 percent in 2019 and 3.3 percent in 2020 and 2021 (Chart 1-6).

Similar to previous years, real economy convergence continues, as the average 2-percentage point growth surplus over the euro area persists. Growth is still dominated by **domestic demand** (household consumption, investments). Over the whole forecast horizon, Hungarian exports will increase less than forecast in June, due to continued deterioration of global and European economic prospects (Chart 1-6).

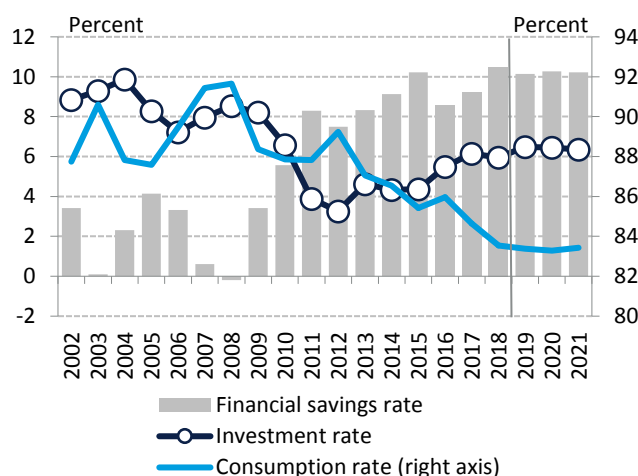
Household consumption is expected to remain dominant in economic growth in the coming years, supported by favourable underlying income trends, the expansion in household lending, the previously accumulated large amount of net financial assets, the high level of consumer confidence and the second-round effects of housing market investments (Chart 1-7). **The growth rate of household loans was faster than projected in June**. Banks expect a continued rise in credit demand, supported by the low interest rate environment as well as the government's family protection measures from the second half of 2019. According to incoming data from July, household demand

Chart 1-7: Decomposition of personal disposable income



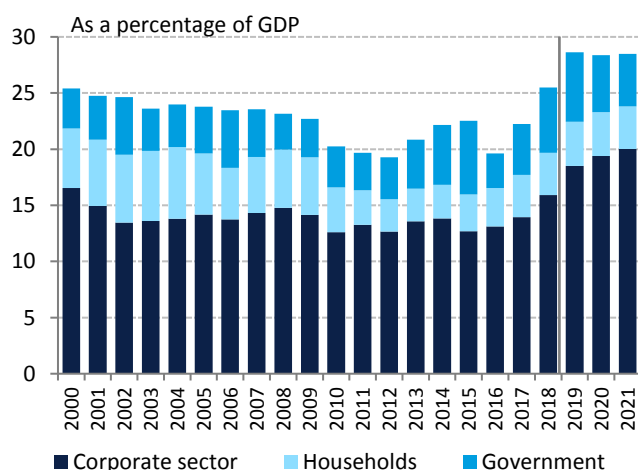
Note: Annual changes. Source: MNB

Chart 1-8: Evolution of households' consumption, investment and financial savings rates as a percentage of disposable income



Source: HCSO, MNB

Chart 1-9: Evolution of investment rate by sectors



Source: HCSO, MNB

for family-support programmes was high. Household lending is expected to gradually increase by around 7–9 percent over the forecast horizon.

Household consumption growth will gradually diminish, in line with the gradual slowdown of the expansion in the wage bill. The growth rate of disposable income continues to help boost savings. We forecast a **persistently high savings-to-income ratio of around 10 percent in the years ahead** (Chart 1-8). The growth in households' savings is facilitated by the **Hungarian Government Bond Plus** scheme available from this June and measures fostering demand for government securities (free account management, favourable redemption, elimination of the interest tax) (see Box 1-2).

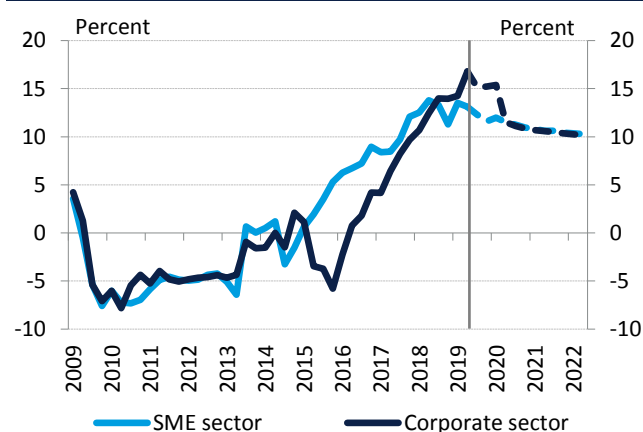
Whole-economy investment will grow over the entire forecast horizon. This year all three sectors' contribution to investment growth will be positive, but private investment growth is forecast to fall, and **government investments will decline from 2020**. The **whole-economy investment rate will climb to over 28 percent** from last year's historic peak and remain high over the entire forecast horizon (Chart 1-9).

Underlying trends in corporate sector investments will remain robust, in line with the favourable financing environment. Continued, **double-digit credit growth is projected** for both SMEs and the corporate sector as a whole (Chart 1-10) over the forecast horizon. The **Funding for Growth Scheme Fix**, which was launched in early 2019, and the **Bond Funding for Growth Scheme (BGS)**, which was launched by the central bank on 1 July this year with an initial allocated amount of HUF 300 billion, both help corporate finance grow in a sound structure. At the same time, the deteriorating external environment and the strengthening uncertainty surrounding European growth **may lead to a revision of the planned schedule of the investments by export-oriented companies.**

In line with the development of housing construction projects, **household investment growth is expected to peak in 2019**. Households' investment activity is also fostered by the government's family-support measures.

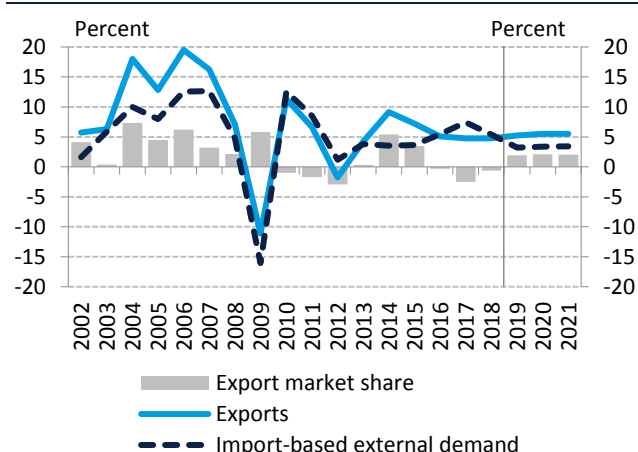
According to our forecast – in parallel with the peak in the effective absorption of EU funds – government investment is expected to grow this year. However, **investment by fiscal and quasi-fiscal entities will fall from 2020**, influenced by the more moderate effective absorption of EU funds and the countercyclical fiscal policy.

Chart 1-10: Annual changes in lending to non-financial corporations and SMEs



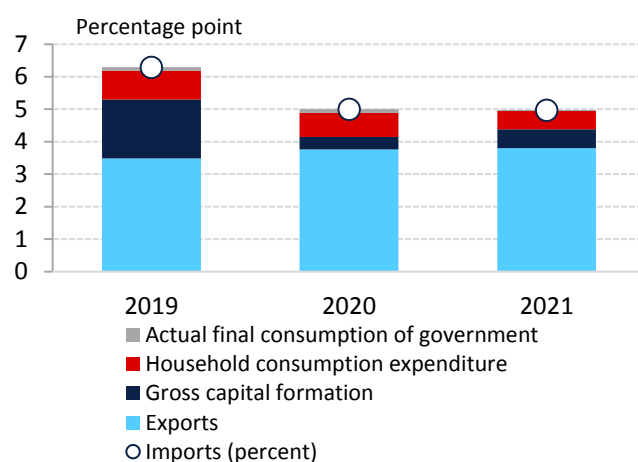
Note: Transaction-based, year-on-year data. The SME sector does not include the self-employed. The growth rate of the overall corporate sector is based on the total amount of outstanding credit to the entire financial intermediary system. Source: MNB

Chart 1-11: Changes in export market share



Note: Annual change. Source: HCSO, MNB

Chart 1-12: Contributions to annual changes in import



Note: Actual final government consumption includes social transfers in kind from government and NPISHs. Source: MNB

External demand is forecast to grow more slowly, compared to the June Inflation Report. In the past period, **growth in world trade tapered off considerably**, mainly on account of rising trade tensions between the United States and China. European prospects are undermined by poor global manufacturing performance and the uncertainty about Brexit, which affects the economies in the region and thus also Hungary, via Germany.

As Hungary is a small, open economy, it is fairly exposed to external growth developments, **the growth rate of Hungarian exports is hampered by the slowdown in the global economy and the muted performance of the country's main trading partners via direct and indirect effects**. Despite the poor performance of German industry seen in recent months, Hungarian industrial production is expected to continue expanding. **The deterioration of the global, and especially German, economic activity is partly offset by the Hungarian industrial product structure and the effects of earlier FDI in the short run**. The dynamic growth of services exports helps Hungarian export growth to be higher than the country's external demand growth, and therefore **Hungary's export market share will improve over the forecast horizon** (Chart 1-11).

In parallel with rising exports and domestic demand factors (consumption, investments), imports continue to grow (Chart 1-12), and thus **net exports will slightly restrain economic growth in 2019**. The expansion of imports restrains economic growth through a decline in net exports over the short run, but over the long run the growth in potential GDP is supported by an increase in the capital stock. Due to a slowdown in the growth rate of household consumption and investments, the import demand of the economy will decline over the forecast horizon. **In 2020 and 2021, the contribution of net exports to economic growth will be positive**.

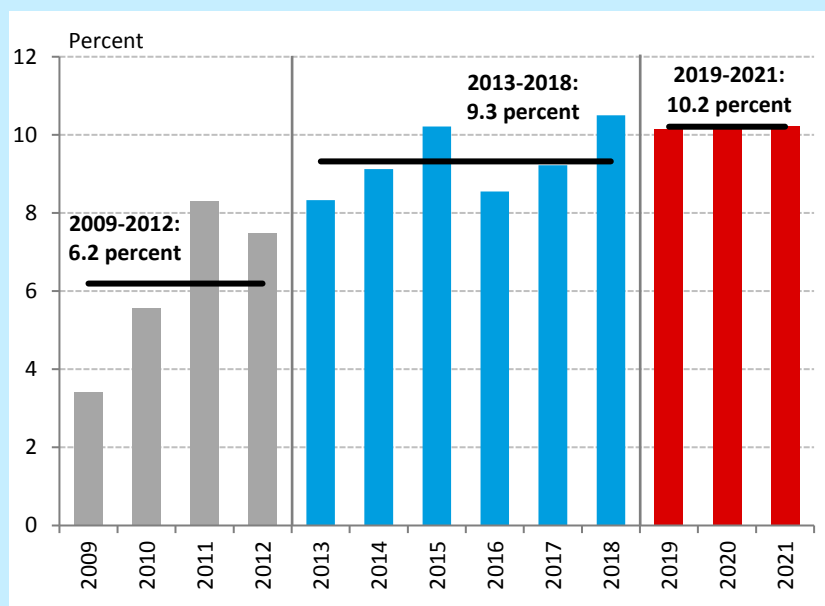
On account of the unfavourable weather in the first half of this year and a decline in acreage relative to last year, **value added in agriculture may result a slight negative contribution to this year's GDP growth**.

Box 1-2: Developments in the saving rate of households

In line with the favourable labour market developments in recent years (double-digit pay rises, increase in employment to a historic high level), the **real income of households grew considerably. Surpassing the growth rate of consumption, the disposable income growth allowed households to increase investments and savings.** The utilisation of households' income has occurred in a **healthy structure** in recent years; in contrast to the pre-crisis period, consumption expanded dynamically while the balance was also maintained.

After the crisis, households' saving habits changed significantly. In the years preceding the crisis the consumption-to-income ratio exceeded 90 percent, while the net savings rate was around zero percent. Since 2012 the share of savings has risen to 10.5 percent of income from 7.5 percent, which is the highest saving rate recorded since 1999. In parallel with the continued expansion of household income, household savings may rise further in the coming years, and thus the **saving rate may remain persistently high** (Chart 1-13).

Chart 1-13: Net financial saving rate of households (in percent of disposable income)



Source: HCSO, MNB

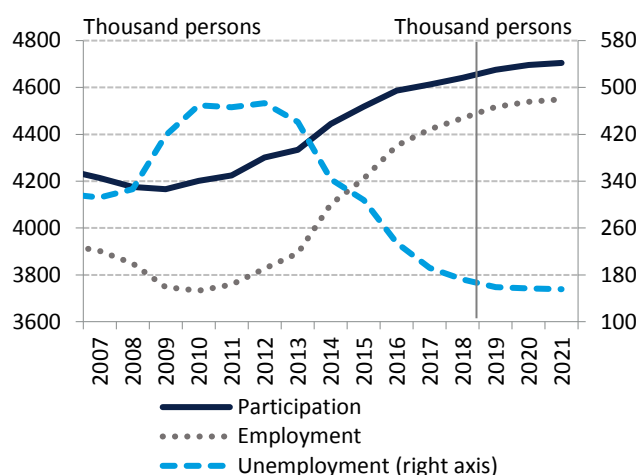
Households' **growing risk aversion** and the favourable savings scheme **Hungarian Government Bond Plus (MÁP+)** introduced on 1 June 2019 also contribute to the increase in households' willingness to save. The product offers the highest return among all currently available instruments providing the same risk level and maturity. The high return on MÁP+ may divert a larger part of the additional surplus income towards savings instead of consumption. In addition, a number of important government measures **encourage households to boost their savings even further: securities are exempt from the interest rate tax**, the Hungarian State Treasury offers **free securities account management**, and **redemption cost of bonds is zero** within 5 working days of interest payment. **According to available information, the amount of MÁP+ bonds sold exceeded HUF 2,000 billion by the middle of September 2019**, and even at present securities worth around HUF 70–80 billion are being sold every week.

The **growth rate of consumption decreases** in line with the deceleration in wage dynamics; **at the same time, the saving rate may stabilise at the current high level** (around 10 percent as a percent of income and 5 percent of GDP) **in the coming years.** The joint aim of the MÁP+ programme and the new securities market measures is to **activate household savings.** Firstly, it **facilitates the realignment of saving structure**, boosting the available cash and bank deposit stock toward higher-return government securities with longer maturities. On the other hand, it provides new funds for the government, which **mitigates the country's external vulnerability by improving the government's internal financing position.**

1.3 Labour market forecast

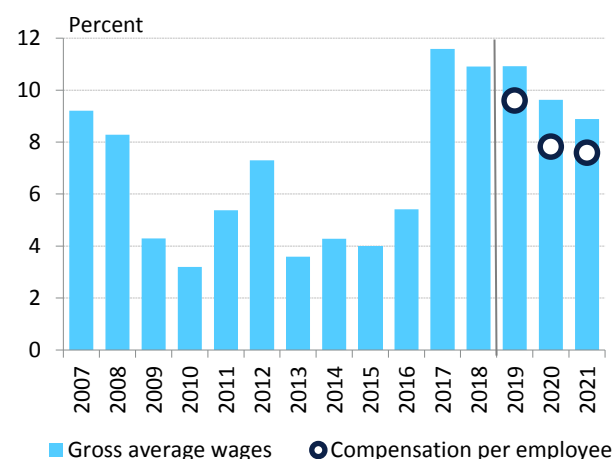
Since full employment is almost realised, employment growth gradually diminishes over the forecast horizon. At the same time, the unemployment rate will reach a historic low at 3.3 percent. This year, the private sector may see wage growth of around 11 percent, similar to last year, while this figure may gradually fall but remain robust in the coming years. The inflationary effect from the cost side will be moderated by the contribution reductions set forth in the wage agreement.

Chart 1-14: Employment, participation and unemployment in the whole economy



Source: HCSO, MNB

Chart 1-15: Annual changes in gross average wages and labour cost in the private sector



Source: HCSO, MNB

According to our expectations, demographic constraints become increasingly effective, **the rise in the labour participation will gradually decelerate** in the years ahead (Chart 1-14). In addition, in line with the dynamic expansion in employment seen in earlier years, **potential labour reserves have fallen to a historic low**.

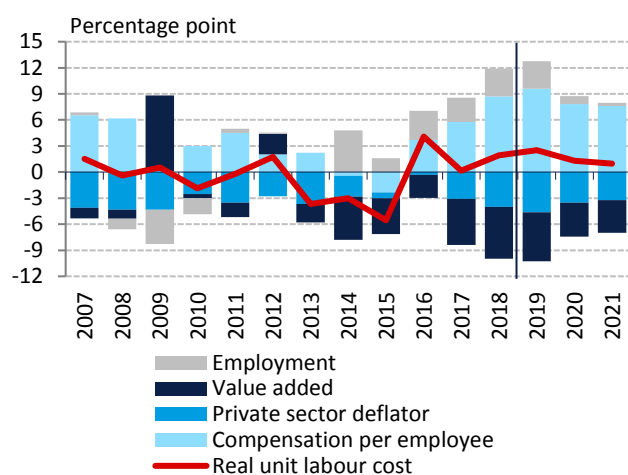
The main source of employment growth is the high labour demand in the private sector, which will decline over the forecast horizon in parallel with economic growth. However, companies' efforts to increase headcounts are rendered extremely difficult by the scarcity of labour reserves, the inadequate skills of the labour force and the lack of job mobility. Looking ahead, **whole-economy and private sector employment growth will gradually slow down in the forecast period**.

The number of workers in **public work** has dropped to less than half (109,000 people) since 2016, and based on our assumption, a further slight decrease is projected for the period ahead. In the tight labour market environment, some of those who leave public work are expected to find jobs on the primary labour market. According to the Budget Act, employment in the government sector will not change significantly in the years to come.

In our forecast, **the unemployment rate drops to a historic low** (3.3 percent), in parallel with a rise in the number of employed. In the tight labour market environment, there is strong competition between companies to retain labour and fill vacancies, and therefore significant wage growth will continue to occur in the private sector (Chart 1-15). **Consistent with our earlier projection and similar to last year, the private sector is expected to see wage growth of around 11 percent in 2019**. The effect of the transformation of the fringe benefits system will contribute 1 percentage point to this year's growth. However, in line with the slowdown in economic growth, **wage dynamics will gradually diminish in the coming years**, moving into single digits.

In line with the robust wage growth, **the wage share will exceed its historic average this year**; therefore looking ahead, dynamic wage increases, which are expected in a tight labour market environment, may be facilitated by improving productivity and competitiveness. **The**

Chart 1-16: Decomposition of real unit labour cost growth in the private sector



Source: HCSO, MNB

inflationary effect from the cost side will be moderated by the contribution reductions set forth in the wage agreement. The social contribution tax rate was cut by 2 percentage points on 1 July 2019, and depending on the development of real wages, the consecutive contribution reductions are expected to be implemented in the third quarter of 2020 and the last quarter of 2021. Despite the cuts to contributions, the rise in labour costs slightly exceeds productivity growth over the entire forecast horizon, but the difference will gradually decline in the years ahead (Chart 1-16).

Table 1-3: Changes in projections compared to the previous Inflation Report

	2018	2019		2020		2021	
	Actual	Projection					
		Previous	Current	Previous	Current	Previous	Current
Inflation (annual average) ¹							
Core inflation	2.5	4.0	3.8	3.9	3.8	3.4	3.4
Core inflation excluding indirect tax effects	2.4	3.6	3.4	3.5	3.4	3.1	3.1
Inflation	2.8	3.2	3.3	3.4	3.4	3.3	3.3
Economic growth							
Household consumer expenditure	5.3	5.1	4.7	3.9	3.9	3.0	3.0
Government final consumption expenditure	0.0	0.7	1.1	0.9	1.1	0.5	0.3
Gross fixed capital formation	16.5	14.9	15.9	2.0	2.4	3.4	4.0
Domestic absorption	7.0	5.2	5.4	2.7	2.9	2.6	2.7
Exports	4.7	5.4	5.2	6.2	5.5	6.2	5.5
Imports	7.1	6.5	6.3	5.7	5.0	5.6	5.0
GDP	4.9	4.3	4.5	3.3	3.3	3.3	3.3
Labour productivity ⁶	2.7	1.9	2.5	2.7	2.7	3.1	3.1
External balance ²							
Current account balance	-0.5	0.0	-0.9	0.4	-0.7	0.7	-0.4
Net lending	2.1	2.2	1.8	2.2	2.0	2.0	1.7
Government balance ^{2,5}							
ESA balance	-2.2	(-1.7)–(-1.6)	(-1.8)–(-1.7)	(-1.4)–(-0.6)	(-1.4)–(-0.6)	(-1.3)–(-0.5)	(-1.3)–(-0.5)
Labour market							
Whole-economy gross average earnings ³	11.3	10.5	10.5	8.5	8.5	8.0	7.9
Whole-economy employment	1.1	1.4	1.1	0.6	0.5	0.2	0.2
Private sector gross average earnings ³	10.9	10.9	10.9	9.6	9.6	8.9	8.9
Private sector employment	1.3	1.7	1.5	0.7	0.7	0.4	0.4
Unemployment rate	3.7	3.4	3.4	3.3	3.3	3.3	3.3
Private sector nominal unit labour cost	5.9	8.0	7.1	4.9	4.7	4.5	4.1
Household real income ⁴	6.7	4.9	4.8	4.1	4.1	2.9	2.9

¹ Based on seasonally unadjusted data.² As a percentage of GDP.³ For full-time employees.⁴ MNB estimate.⁵ The lower value of the forecast band shows the ESA balance if the Country Protection Fund will be used while the higher value shows the ESA balance if the Country Protection Fund is not used.⁶ Whole economy, based on national accounts data.

Table 1-4: MNB baseline forecast compared to other forecasts

	2019	2020	2021
Consumer Price Index (annual average growth rate, %)			
MNB (September 2019)	3.3	3.4	3.3
Consensus Economics (September 2019) ¹	3.2 – 3.4 – 3.7	2.6 – 3.2 – 4.5	
European Commission (July 2019)	3.2	3.2	
IMF (April 2019)	3.2	3.1	3.0
OECD (May 2019)	3.0	3.8	
Reuters survey (September 2019) ¹	3.2 – 3.4 – 3.5	2.5 – 3.2 – 3.5	2.8 – 3.1 – 3.3
GDP (annual growth rate, %)			
MNB (September 2019)	4.5	3.3	3.3
Consensus Economics (September 2019) ¹	4.0 – 4.5 – 5.2	2.0 – 3.1 – 3.7	
European Commission (July 2019)	4.4	2.8	
IMF (April 2019)	3.6	2.7	2.4
OECD (May 2019)	3.9	3.0	
Reuters survey (September 2019) ¹	4.2 – 4.6 – 4.9	2.8 – 3.3 – 3.9	
Current account balance³			
MNB (September 2019)	-0.9	-0.7	-0.4
European Commission (May 2019)	-1.2	-1.4	
IMF (April 2019)	0.5	0.6	0.9
OECD (May 2019)	0.0	-0.7	
Reuters survey (September 2019)	(-0.8) – (-0.2) – (0.2)	(-1.1) – (0.0) – (0.8)	
Budget balance (ESA 2010 method)^{3,4}			
MNB (September 2019)	(-1.8) – (-1.7)	(-1.4) – (-0.6)	(-1.3) – (-0.5)
Consensus Economics (September 2019) ¹	(-2.8) – (-1.7) – (0.0)	(-2.3) – (-1.4) – (0.4)	
European Commission (May 2019)	-1.8	-1.6	
IMF (April 2019)	-1.9	-1.9	-1.8
OECD (May 2019)	-2.0	-2.1	
Reuters survey (September 2019) ¹	(-2.2) – (-1.7) – (-1.4)	(-2.2) – (-1.4) – (-1.0)	
Forecasts on the size of Hungary's export markets (annual growth rate, %)			
MNB (September 2019)	3.2	3.4	3.4
European Commission (May 2019) ²	3.5	3.7	
IMF (April 2019) ²	3.9	4.1	4.2
OECD (May 2019) ²	3.4	3.4	
Forecasts on the GDP growth rate of Hungary's trade partners (annual growth rate, %)			
MNB (September 2019)	1.7	1.9	1.9
Consensus Economics (September 2019) ²	1.7	1.7	
European Commission (July 2019) ²	1.8	2.1	
IMF (July 2019) ²	1.7	2.0	1.9
OECD (September 2019) ²	1.5	1.5	

¹ For Reuters and Consensus Economics surveys, in addition to the average value of the analysed replies, we also indicate the lowest and the highest values to illustrate the distribution of the data.

² Values calculated by the MNB; the projections of the named institutions for the relevant countries are adjusted with the weighting system of the MNB, which is also used for the calculation of the bank's own external demand indices. Certain institutions do not prepare forecast for all partner countries.

³ As a percentage of GDP.

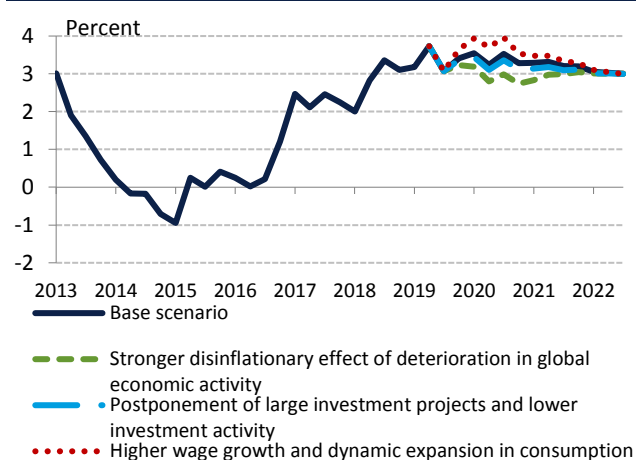
⁴ The lower value of the forecast band shows the ESA balance if the Country Protection Fund is used while the higher value shows the ESA balance if the Country Protection Fund is not used.

Source: Consensus Economics, European Commission, IMF, OECD, Reuters poll, MNB

2 Effects of alternative scenarios on our forecast

The Monetary Council highlighted three alternative scenarios around the baseline projection in the September Inflation Report. If the scenario featuring a stronger disinflationary effect from deteriorating global economic activity materialises, it would result in a lower inflation path and more restrained growth compared to the baseline scenario. The scenario involving the possibility of lower investment activity assumes lower inflation and a more subdued growth rate compared to the baseline scenario. In the case of the alternative scenario assuming higher wage growth and dynamic expansion in consumption, domestic economic growth is stronger and inflation is higher than in the forecast from the baseline scenario. In addition to the scenarios highlighted above, as further risks, scenarios that assume the implementation of competitiveness reforms and a stronger expansion in households' savings were discussed by the Monetary Council.

Chart 2-1: Impact of alternative scenarios on the inflation forecast



Source: MNB

Stronger disinflationary effect of deterioration in global economic activity

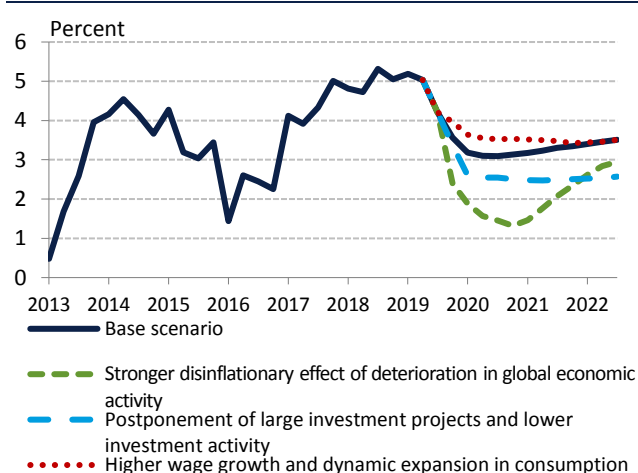
Deceleration in global economic activity **impacts the Hungarian economy via the performance of the euro area economy and the German economy. Prospects for this year's economic activity in the euro area continued to decline in the past period.** The worsening expectations for external economic activity in recent months **are also underpinned by the unfavourable industrial production data seen in Germany, deteriorating business confidence and risks to economic growth in Italy.** In addition, various significant risks – Brexit without a deal and the trade tensions between the USA and China – intensified in the past quarter.

Euro area inflation is well below the ECB's inflation target, and inflation expectations also fell to historical lows in June. In line with global growth and inflation developments, the **world's leading central banks eased monetary conditions** in the past quarter. In July and September, the Fed decided to cut the policy rate, while in September – in line with market participants' expectations – the ECB reduced the overnight deposit rate by 10 basis points, and announced a multi-element easing package.

In our baseline scenario, deteriorating external economic activity is reflected in a slower increase in Hungarian exports and in the disinflationary effect of external demand. In line with the growth prospects and the inflation outlook, loose monetary conditions will remain in place in the euro area.

According to the assumptions of our alternative scenarios, euro area economic activity will be more restrained compared to the baseline scenario, and Germany will slip into a lasting recession. As a result of downside risks to growth and inflation, **the ECB will ease the monetary**

Chart 2-2: Impact of alternative scenarios on the GDP forecast



Source: MNB

conditions to a greater degree and in more steps than expected. The significantly looser external monetary policy environment will cause a rise in domestic asset prices, while the considerable fall in external demand will result in a quicker-than-expected deceleration in Hungary's export performance and more significant external disinflationary effects than the baseline scenario.

Postponement of large investment projects and lower investment activity

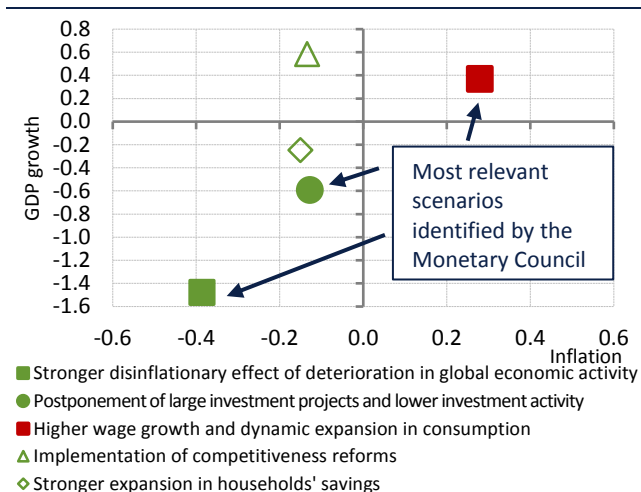
In the past years, several announcements were made about intentions to develop the domestic vehicle industry. Both during the construction phase and the pick-up period of production, the announced investment in new plants and capacity expansions may strongly increase Hungarian GDP growth. As opposed to the weak performance of the German industry seen in recent months, Hungarian industrial production increased further in line with our expectations in Q2, although the rate of expansion decelerated. Although the performance of the vehicle industry in Germany and in the region was below expectations, the production of the Hungarian vehicle industry continued to expand in Q2.

Various uncertainty factors have also appeared recently, and if they prevail, the announced investment projects may be postponed to later dates. Germany's economic performance declined by 0.1 percent in Q2 compared to the previous quarter. The Ifo expectations index capturing the economic prospects in Germany also declined further, as well as new orders in the German industry fell in June compared to the same period of the previous year. In addition to the unfavourable prospects for economic activity, German automotive manufacturers are also affected by sector-specific factors such as compliance with new environmental regulations and the global spread of e-mobility.

According to our assumption, in the baseline scenario, in spite of the slowdown in vehicle manufacturing in Western Europe, the Hungarian vehicle industry will continue to grow in the coming months. At the same time, in line with the unfavourable developments in economic activity in the euro area, the new plant constructions previously announced by German automotive manufacturers and the expansion of existing capacities may be implemented approximately 1 year later than expected at the time of the announcement.

In our alternative scenario, global economic growth will decelerate, which will also hinder the performance of the German industry. As a result, German automotive

Chart 2-3: Risk map: effect of alternative scenarios on the baseline forecast



Note: The risk map presents the average difference between the inflation and growth path of the alternative scenarios and the baseline forecast on the monetary policy horizon. The red markers mean tighter and the green markers mean looser monetary policy than in the baseline forecast.

Source: MNB

manufacturers will implement the planned investment and capacity expansions in Hungary later than expected. Accordingly, we expect lower investment activity compared to the baseline scenario. Consequently, the positive output gap becomes more closed, leading to lower underlying inflation developments.

Higher wage growth and dynamic expansion in consumption

In recent years, in parallel with the dynamic economic growth, employment also increased considerably, and unemployment declined to a historically low level. As a result, labour market conditions have become increasingly tight, leading to dynamic wage increases. In 2017, the minimum wage and the guaranteed wage minimum rose by 15 percent and 25 percent, respectively, whereas the corresponding figures for 2018 are 8 percent and 12 percent. Based on the end-2018 wage agreement between the employer and employee associations, the increase in the minimum wage and the guaranteed wage minimum amounts to 8 percent in both 2019 and 2020.

In 2019 Q2, gross average earnings in the private sector were up by 10.8 percent year on year. The wage growth, which substantially exceeds the rise in the minimum wage and the guaranteed wage minimum, is primarily attributable to the tight labour market conditions determining the underlying wage-setting trend. Buoyant wage dynamics were typical of a wide range of companies; double-digit wage increases were recorded among both large corporations and small and medium-sized enterprises.

According to our **baseline scenario**, wages in the private sector will rise by nearly 11 percent this year, similar to the previous year. Although in the coming years the increase in earnings is still expected to be strong, it is to be in the single-digit range in parallel with a slowdown in GDP growth. Household consumption will expand in line with income developments, while the savings rate will remain persistently high.

According to the assumptions of our alternative scenario, corporate labour demand will remain steadily high, and thus, as a result of the tighter labour market environment, there will be double-digit wage increases in the coming years as well across the whole private sector. Compared to the baseline scenario, the expansion in consumption may be permanently higher, resulting in a higher inflation path.

Other risks

In addition to the scenarios highlighted above, the Monetary Council considered two more alternative

scenarios. The scenario that assumes the **implementation of competitiveness reforms** results in lower inflation path and higher growth compared to the baseline scenario. In this scenario, **in the case of realisation of 330 points** presented by the Magyar Nemzeti Bank **with the purpose of improving competitiveness, Hungarian economic growth is likely to remain around 4 percent over the forecast horizon, strengthening the sustainable convergence of the Hungarian economy** (Box 2-1). If the alternative scenario that assumes **stronger expansion in households' savings** materialises, it will result in lower inflation and more subdued growth than the baseline scenario.

Box 2-1: Effect of the implementation of competitiveness reforms

Hungary's convergence can essentially take two paths: it may join the group of developed economies through implementation of the competitiveness reforms or, if the reforms fail to come to fruition, it may become stuck in the middle-income trap. The 330-points aimed at boosting Hungary's competitiveness presented by the Magyar Nemzeti Bank and the measures in the Government's recently announced **Economy Protection Action Plan** lead an improvement in competitiveness. Our baseline scenario reflects the effects of measures already announced; however, in line with our previous practice, our alternative scenario also quantifies the macroeconomic effects of the implementation of further competitiveness reforms.

Implementation of the Magyar Nemzeti Bank's 330-point competitiveness recommendation package is indispensable for Hungary's sustainable convergence. In the publication Competitiveness Programme in 330 Points published in February 2019, the MNB formulated recommendations in 12 key areas, **the implementation of which may broadly facilitate a competitiveness turnaround and Hungary's successful convergence.** In case of the implantation of the 330-point competitiveness recommendation GDP growth in the following years may remain around 4 percent. Positive changes and initiatives have been observed in several areas since the publication of the programme, but broad-based implementation of the recommendations still requires numerous steps and comprehensive reforms.

Several proposed steps in progress can contribute to successful convergence even in the short term. In line with the Competitiveness Programme, a number of points in the 13+1-point Economy Protection Action Plan adopted by the Government in May support the corporate sector, which is a key participant in convergence. Consequently, the MNB also welcomed the announcement of the action plan. **The reduction of the social contribution tax and small business tax (KIVA), the optimisation of small business taxes and the abolition of tax-advance top-ups foster firms' cost efficient operations and increased employment.** Development of the SME sector is also supported by the **gradual reduction of the development tax allowance value limit** and, in terms of access to funds, the capital injection for Garantiqa Hitelgarancia Zrt. Moreover, even in the short run, the successful launch of the Hungarian Government Security Plus scheme (MÁP+) will contribute to the further reduction of the country's external vulnerability and the expansion of the investor role and income of domestic market participants.

Over the longer term, sustainable convergence may be supported, among others, by demographic measures. The implementation of several proposals set forth in the Competitiveness Programme commenced under the Family Protection Action Scheme. A number of measures are intended to encourage families to have children, such as the **baby loan, the personal income tax exemption of mothers with large families and the increased number of nursery places.** The **strategy aimed at the renewal of vocational training and adult training** – the primary purpose of which is to prepare for changing employer expectations resulting from the fourth industrial revolution – also has an influence over the long term. Looking forward, the efficiency and productivity of agriculture may be considerably improved by the **long-term development of the irrigation system.**

Despite the measures which have been initiated, comprehensive implementation of the proposals formulated in the Competitiveness Programme still requires wide-ranging reforms. Since a high-quality labour force is a key factor in convergence, the **education level and health status of human capital needs to be improved.** Additional measures are required to **increase the efficiency of the state** as well, although some progressive initiatives aimed at **reducing bureaucracy and further reducing the shadow economy** have already commenced. Moreover, for sustainable growth, it is indispensable to make efforts with a view to achieving **innovation, a modern infrastructure, efficient energy consumption and social convergence.**

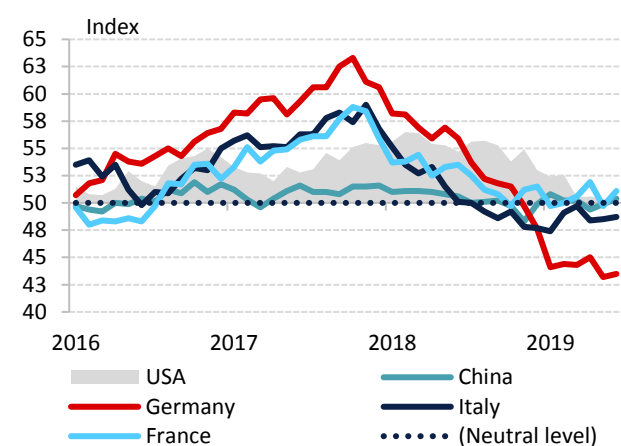
The Magyar Nemzeti Bank remains committed to improving and measuring Hungary's competitiveness and accordingly, it resolved to strengthen its competitiveness analysis and measurement system this year. A detailed measurement of the implementation of the 330 points proposed by the Competitiveness Programme will be included in the central bank's **Competitiveness Mirror** publication.

3 Macroeconomic overview

3.1 Evaluation of international macroeconomic developments

Amidst mounting risks, the global economy continued to expand in 2019 Q2. The Visegrád region is still the growth centre of the European Union. Deteriorating global economic prospects, the increase in trade tensions as well as the uncertainties relating to Brexit are currently the major determinants of monetary policy decisions. Of the world's leading central banks, the Fed reduced the base rate by 25 basis points in July and September, while the ECB announced a significant multi-element easing package in September. As in the previous quarters, the central banks of the region decided to keep the base rate at an unchanged level during the period under review.

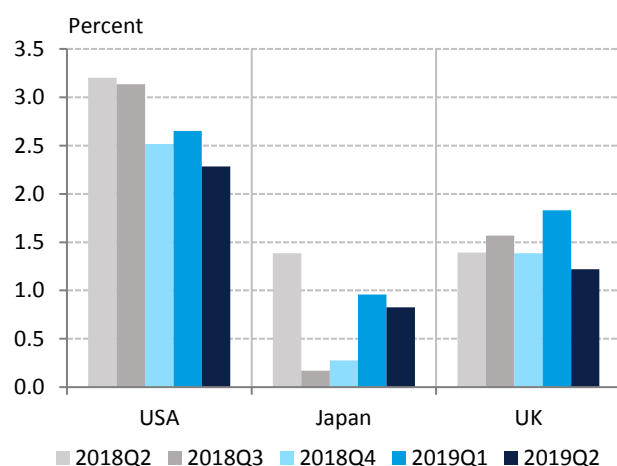
Chart 3-1: Evolution of the manufacturing PMI



Note: Seasonally adjusted series.

Source: Bloomberg

Chart 3-2: Annual changes in GDP in certain key global economies



Note: Seasonally adjusted series.

Source: OECD

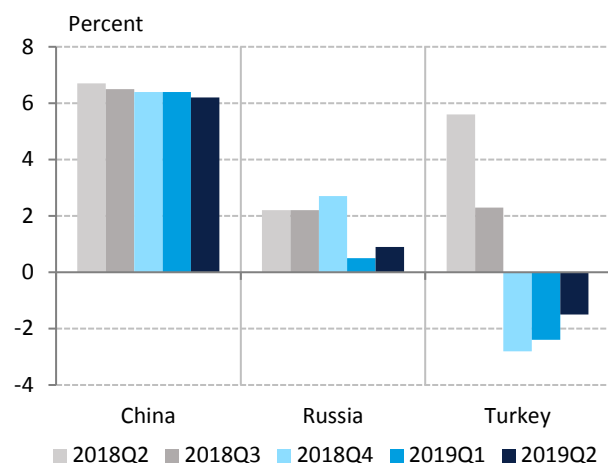
3.1.1 Developments in globally important economies

Growth in key global economies decelerated in 2019 Q2, and confidence indicators for manufacturing prospects also moved lower in recent months (Chart 3-1). Exceeding the expectations, the **US economy expanded by 2.3 percent** year on year (Chart 3-2). In addition to household and government consumption, local governments' investment also contributed to this expansion. The contribution of net exports and inventories to the performance of the economy was negative, and construction investment also restrained economic expansion. The prospects for US economic growth feature a gradual deceleration as the effects of growth-supporting measures (tax cuts and infrastructure investment programme) fade. Nevertheless, due to the significant weight of the USA and China in global imports, **the trade tension between these countries is considered to be the largest risk to growth**. Fears of an economic slowdown caused by the higher customs duties are already reflected in macroeconomic data as well, as the drop in prices determining the commodity markets also indicates narrowing global demand (for more details see Special Topic 6.1).

The economic output of the United Kingdom rose by 1.2 percent in 2019 Q2, marking the slowest rate since 2009 (Chart 3-2). Household and public consumption supported growth. Corporate investment declined further, which was also explained by the **uncertainty about leaving the EU**. As a result of the risk of a **no-deal Brexit** and the related trade disruptions, significant **layoffs started in the British manufacturing industry**, and British vehicle industry production fell nearly 20 percent year on year in the first half of this year.

The Japanese economy expanded by 0.3 percent compared to the previous quarter, and by **0.8 percent in year-on-year terms** (Chart 3-2). Domestic demand items were the strongest contributors to growth. It was mainly the construction investment projects for the 2020 Tokyo

Chart 3-3: Annual changes in GDP in certain emerging economies



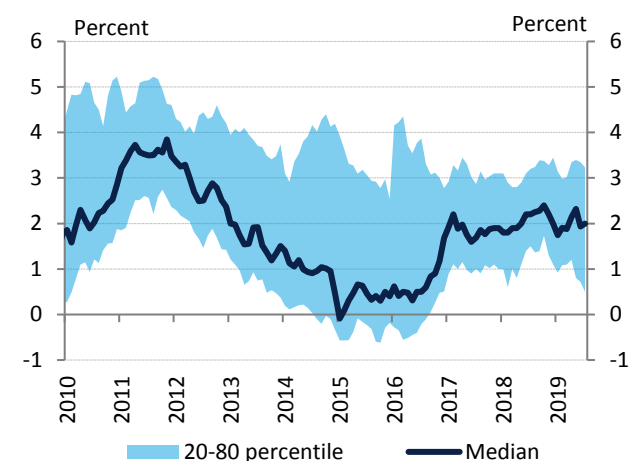
Source: Trading Economics

Summer Olympics that contributed to the expansion in gross fixed capital formation.

Of the major emerging countries, the economic performance of China continued to decelerate in the second quarter of this year, in line with expectations (Chart 3-3). The 6.4 percent year-on-year GDP growth seen in Q1 was followed by a rate of 6.2 percent. Growth in the economy is mainly attributable to household consumption. In addition, investment also contributed to growth, resulting from both private and state-financed fixed capital formation. The slowdown in global economic activity, the increase in trade tensions between the United States and China and the indebtedness of the provinces also contributed to deceleration, and, looking ahead, these factors may result in a further slowdown in the Chinese economy. **GDP in Russia expanded by 0.9 percent year on year.** Growth was stronger than in the previous quarter, mainly due to industrial production, while the performance of construction was below that of the previous period.

Global inflation declined slightly in recent months (Chart 3-4). **Inflation rates in the United States, Japan and the euro area still fall short of the central bank targets**, while inflation in the other developed and emerging economies – with the exception of Turkey – was still around the central bank targets (Chart 3-5). A decline in metal and food prices was observed in the period under review (Chart 3-6).

Chart 3-4: Global inflation developments



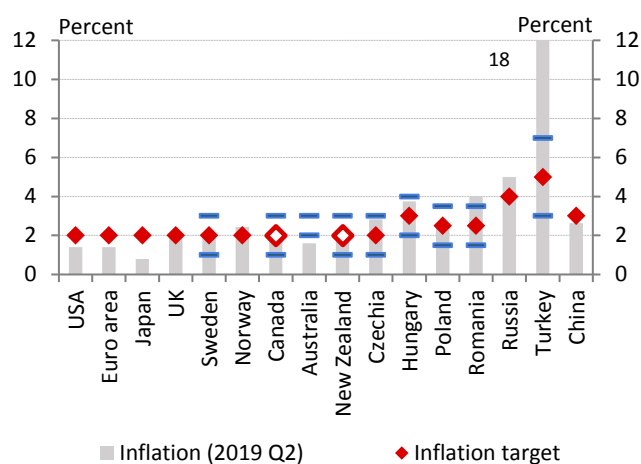
Note: Percentage change on the same period of the previous year, based on data from 43 developed and emerging countries.

Source: OECD

In July and September, decision-makers of the Fed decided to lower the policy rate by 25 basis points. Unfavourable global growth prospects and weak inflationary pressure were emphasised in the justification of the decisions. Another important decision at the July meeting was that the FOMC would finish the reduction of the securities holding purchased during the quantitative easing two months earlier than planned, in August 2019 (Chart 3-7). According to the September forecast of the FOMC, decision-makers expect slightly higher economic growth in 2019 and 2021 than previously foreseen. In line with the interest rate cut, the projected interest rate path became lower, but no further reductions are expected based on the median expectations of decision-makers. At the press conference following the decision Jerome H. Powell did not rule out the possibility of further interest rate cuts, but emphasised that there is no predetermined path and – due to the high degree of uncertainty – the Fed's decisions will depend on the incoming data.

Decision-makers at the Bank of Japan did not change monetary conditions during the past period, but at their September meeting they raised the possibility of expanding

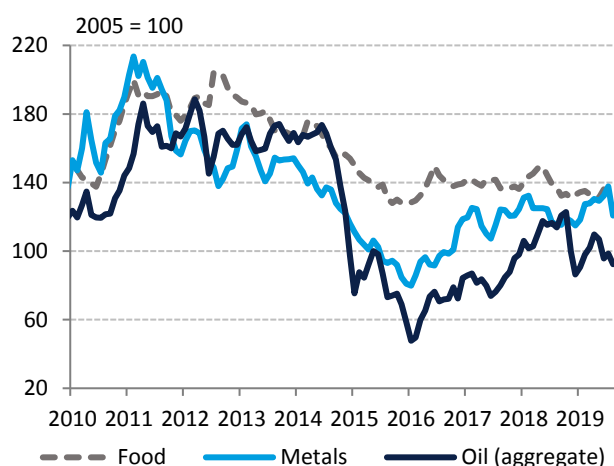
Chart 3-5: Inflation targets of central banks and actual inflation



Note: The blue lines represent the inflation control range in Australia, Canada and New Zealand, while in other countries they mark a permissible fluctuation band. In Canada and New Zealand the mid-point of the target band is accentuated, which is marked by empty diamond.

Source: OECD, FRED, National Institute of Statistics Romania

Chart 3-6: Major commodity price indices



Note: Calculated from prices in USD.

Source: World Bank

stimulus as early as October. Based on the forward guidance for interest rates, the bank intends to maintain the current extremely low levels of short-term and long-term rates for an extended period of time, at least through spring 2020. Accordingly, should external growth prospects deteriorate to a degree that already affects the achievement of the central bank's inflation target, it will not hesitate to introduce additional easing measures.

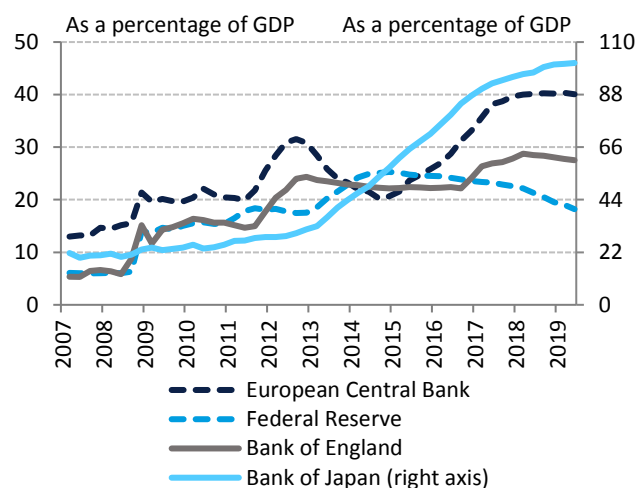
The decision-makers of the Bank of England did not change the base rate or the asset purchase programme during the past period. Inflation was close to the 2 percent central bank inflation target in the past months and fell below the target in August, reaching a level of 1.7 percent. The central bank expects inflation to remain slightly below the 2 percent target in the near term. In its August forecast, the central bank **reduced its growth prospects for this year and next year** taking account of an orderly Brexit. In the case of a Brexit agreement and improving global prospects, the BoE projects a limited and gradual interest rate rise, while in the case of other scenarios it is open to take steps in any direction.

In July and September, the Russian central bank reduced its policy rate by 25 basis points. The decisions were justified by falling inflation and the fact that economic growth was below the central bank's earlier expectations. Inflation declined steadily in the past period, dropping from the March peak of 5.3 percent to 4.3 percent by August. If economic and inflation developments are in line with the forecast, the central bank may further reduce the interest rate at one of its upcoming rate-setting meetings, and the monetary policy stance may become neutral in the first half of 2020.

In August, **the People's Bank of China introduced a new reference rate** for pricing bank loans. According to the recommendation, banks must price their new loans based on the loan prime rate (LPR) published by the National Interbank Funding Center. The central bank expects the reference rate to become market-based and more flexible as a result of this modification. In September, the central bank lowered the required reserve ratio for financial institutions. Inflation gradually rose from 1.5 percent in February to 2.8 percent by July, and thus remains slightly below the 3 percent central bank target.

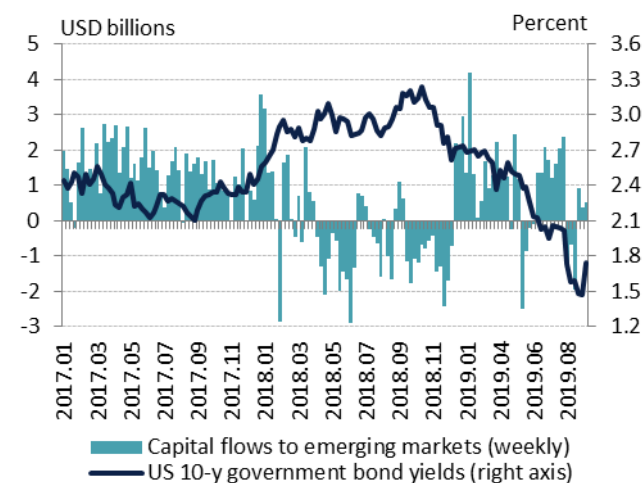
Market sentiment worsened towards the middle of the past quarter, followed by adjustment. Thus, on the whole, risk tolerance did not change, and although developed market equity indices rose slightly, emerging market indices decreased. Risk aversion strengthened slightly further at the end of July and in August, primarily as a result

Chart 3-7: Central bank balance sheet totals in developed countries



Source: Databases of central banks, Eurostat, FRED

Chart 3-8: Capital flows to emerging markets (weekly) and US 10y-government bond yields



Source: EPFR, Bloomberg

of global growth concerns as well as the China–US trade conflict, which had an unfavourable impact on the developed and emerging equity markets as well as on the emerging bond markets (Chart 3-8).

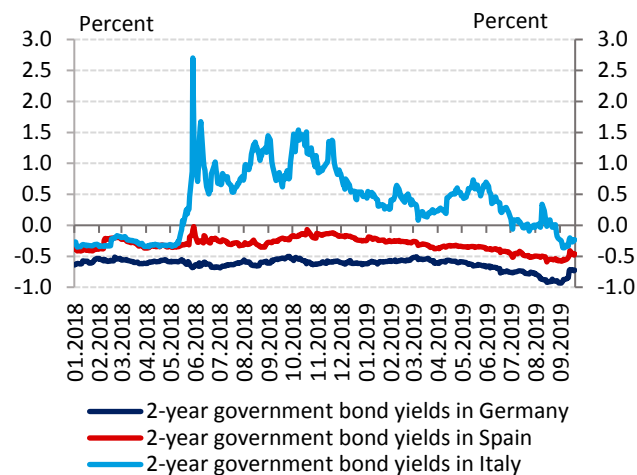
In the risk-averse environment typical of Q2, monetary policy expectations moved in a looser direction and this development continued in Q3 as well. At the September Fed meeting, decision-makers reduced the policy rate, and based on interest rate expectations, the market is **pricing in one more easing step of 25 basis points for this year**. The Governing Council of the ECB announced a significant multi-element easing package in September. In parallel with the leading central banks, easing is expected by central banks in other developed countries as well. As a result of looser expectations related to developed central banks, emerging market interest rate expectations also shifted downwards. In the past quarter, 10-year yields continued to fall, due to expectations of monetary easing and growth concerns. **US and German 10-year yields both sank by 22 basis points.** In the periphery countries of the euro area, 2-year government bond yields fell by 5 basis points in the case of Italy and Spain (Chart 3-9). The risk-averse sentiment also contributed to the decrease in developed bond yields. For most of Q3, capital inflows were typically seen in the emerging markets, before sustained capital withdrawals were registered in August, in parallel with an increase in risk aversion.

The volatility of oil prices increased in the past period. Oil prices were pushed down by growth concerns, news about trade tensions and weak Chinese retail trade and industrial production data. Even the drop in OPEC countries' July production to a multi-year low, i.e. below 30 million barrels, was unable to brake the price decline. In mid-September, geopolitical tensions led to a significant rise in oil prices, with the price of Brent crude oil advancing to USD 70 but then subsequently dropping back to around USD 65.

3.1.2 Developments in the euro area

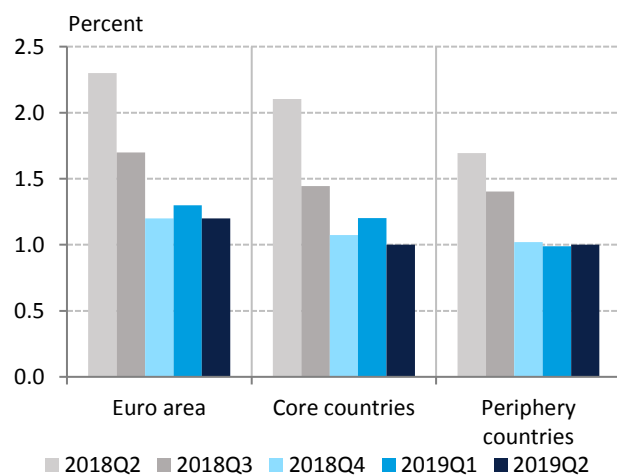
In line with weakening and increasingly uncertain external economic activity, **economic growth decelerated further throughout Europe in 2019 Q2**. Euro area economic output expanded at a rate of 1.2 percent compared to the same period of the previous year (Chart 3-10). In 2019 Q2, the economic performance of **Germany**, which is Hungary's main trading partner, **declined by 0.1 percent compared to the previous quarter**, due to a sharp downturn in industrial performance and exports. Expectations with regard to the German economy's performance this year continued to worsen. In addition, forward-looking purchasing manager

Chart 3-9: 2-year government bond yields in Germany, Italy and Spain



Source: Bloomberg

Chart 3-10: Annual changes in euro area GDP



Note: Seasonally and calendar adjusted series. Periphery countries (Portugal, Italy, Greece, Spain), Core countries (Belgium, Germany, France, Netherlands, Austria).

Source: Eurostat

indices for manufacturing also suggest continued unfavourable prospects (Chart 3-1), which is primarily explained by production declines in the German vehicle industry, in parallel with the emission control regulations introduced in the European Union in 2018 H2, the drop in the sales of diesel cars and the narrowing of global demand. The short-term impact of developments in the German industry on Hungary's prospects is nuanced by the fact that in recent months **the performance of the vehicle industry in Hungary has been better than in Germany.**

Similar growth rates were recorded for the euro area core countries and the periphery countries (Chart 3-10). The **French** economy expanded by 1.4 percent compared to the same period of the previous year, mainly supported by household consumption and hindered by a decline in inventories. Economic growth in **Austria** – based on a wide range of sectors – continued, and at 1.6 percent it surpassed GDP growth in the euro area. Growth in the periphery countries was mainly restrained by the decline in **Italian economic output** (-0.1 percent). The expansion in services was unable to offset the weak industrial and agricultural performance.

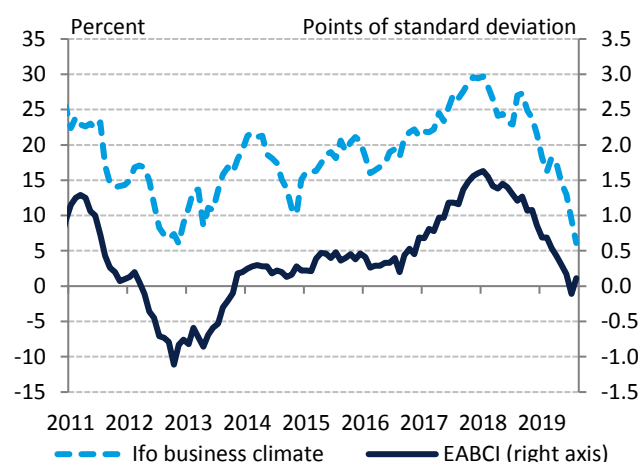
The business confidence indices (EABCI) capturing the prospects of the euro area and expectations for the German economy (Ifo) both declined in the past period (Chart 3-11). **Downside risks to euro area growth prospects intensified** (proliferation of trade restricting measures, Brexit, deceleration in the Chinese economy and the vulnerability of the Italian economy due to high government debt). As far as longer-term growth prospects are concerned, the slow expansion in productivity continues to pose risks.

Inflation remained moderate throughout the euro area.

The consumer price index was below the 2 percent central bank target in most Member States and was higher in six Member States (Estonia, Latvia, Lithuania, Slovakia, Slovenia and the Netherlands) in August. Core inflation dropped from 1.1 percent in June to 0.9 percent in July and remained unchanged at 0.9 percent in August (Chart 3-12). Examining the August changes in core inflation at the member-state level, a decline was observed in seven Member States compared to the previous month, while stagnation was seen in three cases and an increase in nine countries.

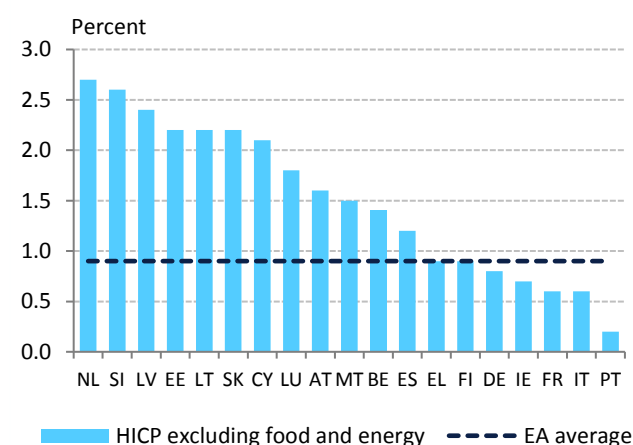
At its September meeting, the Governing Council of the ECB decided to reduce the deposit rate by 10 basis points to -0.5 percent. In addition, the decision-makers confirmed their forward guidance, according to which the policy rates would remain at the current or lower levels until inflation

Chart 3-11: Business climate indices for Germany and the euro area



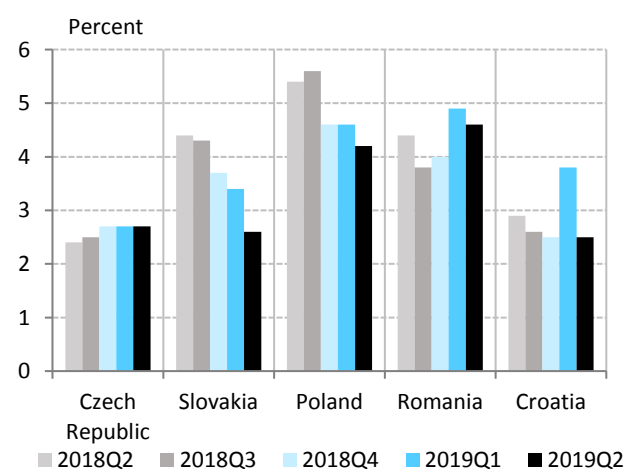
Source: European Commission, Ifo

Chart 3-12: HICP excluding energy, food, alcohol and tobacco in the EA members (August 2019)



Source: Eurostat

Chart 3-13: Annual changes in GDP in CEE countries



Note: Seasonally and calendar adjusted series. In the case of Slovakia, only seasonal adjustment.

Source: Eurostat

appears to be approaching a level below, but close to 2 percent.

The decision-makers also decided to restart net asset purchases, within the framework of which the ECB will purchase securities worth EUR 20 billion per month starting from 1 November 2019. **Purchases will be open-ended; asset purchases are expected to be ended shortly before raising the policy rates.** The central bank will continue to reinvest the principal amount of the securities purchased within the asset purchase programme even well after starting to raise the policy rates, but in any case as long as necessary for the maintenance of favourable liquidity conditions and ample monetary adjustment.

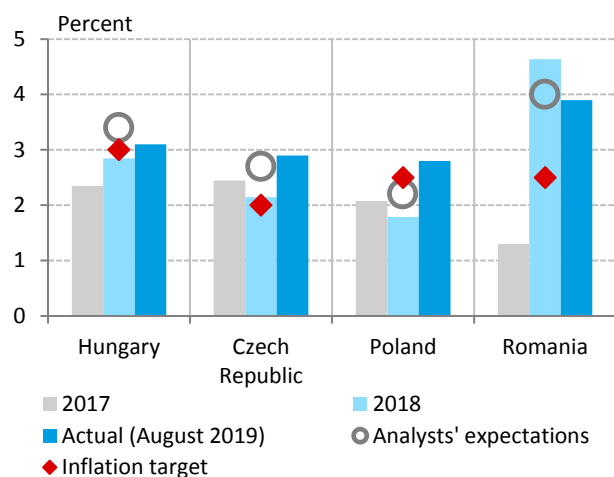
In addition, the central bank **also changed the conditions of the TLTRO-III programme** announced in March, making them even more favourable than previously announced. The interest rate on the loans granted within the framework of the TLTRO-III was set by the central bank at the average main refinancing operation rate (MRO, currently 0 percent) over the entire term of the loan. However, the rate may decline for banks whose lending activity exceeds a threshold. Accordingly, the lowest rate corresponds to the central bank deposit rate (-0.5 percent) prevailing during the term of the loan. In addition, the ECB extended the term of the loans granted within the framework of the TLTRO-III from 2 years to 3 years. **In line with expectations, the ECB will introduce the two-tier reserve system in order to eliminate the unfavourable effects of the negative interest rates.**

3.1.3 Developments in the CEE region

As in previous quarters, the CEE region was once again the growth centre of the European Union in 2019 Q2. According to seasonally adjusted data, Poland, Romania, Slovakia and the Czech Republic recorded GDP growth rates of 4.2 percent, 4.6 percent, 2.6 percent and 2.7 percent, respectively (Chart 3-13). As regards the region as a whole, domestic demand is the main driver of growth, while as a result of weakening external activity net exports reduced growth in several countries.

Looking at the countries in the region, the rate of increase in consumer prices was typically above the central bank targets in the past period. In Poland, following gradual increase since January, inflation declined slightly in August, but at 2.8 percent it remained above the 2.5 percent central bank target. In the Czech Republic, the increase in consumer prices was still above the 2 percent central bank target, amounting to 2.9 percent in August (Chart 3-14). In Romania, inflation remained above 3.5 percent, which is

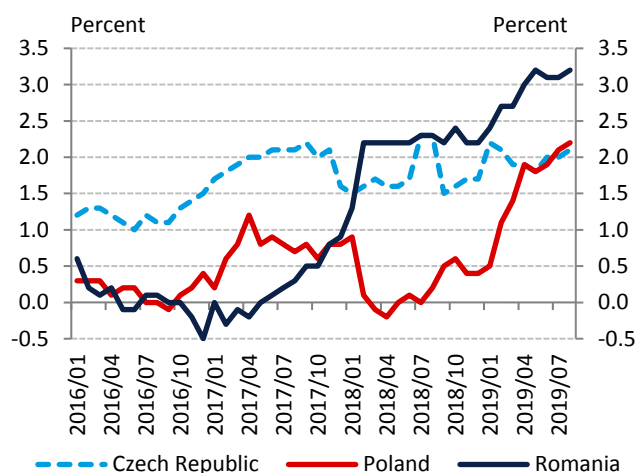
Chart 3-14: Inflation targets of central banks, inflation, and economic agents' expectations



Note: Analyst's expectations relate to annual average in 2019.

Source: OECD, Trading Economics, National Institute of Statistics Romania, Consensus Economics

Chart 3-15: Developments of inflation excluding energy, food, alcohol and tobacco in the Visegrad countries



Source: Eurostat

the upper boundary of the tolerance band, although it declined from 4.1 percent in July to 3.9 percent in August.

According to the August analyst consensus, average inflation in Romania and the Czech Republic may be 1.5 percentage points and 0.7 percentage point higher, respectively, than the central bank targets, while in Poland the rate of price increase may fall short of the 2.5 percent target (Chart 3-14). Regarding the countries of the region, core inflation declined in Hungary, while it rose in Poland and the Czech Republic during the past period. Regarding Romania, after a slight decline, core inflation increased again in August (Chart 3-15).

At the June and August meetings, the decision-makers of the Czech central bank decided to leave the policy rate unchanged. According to the latest forecast by the central bank, inflation in the coming quarters will be above the 2 percent inflation target, but within the tolerance band. The above-target inflation reflects the inflationary pressure stemming from strong domestic demand as well as the rapid increase in administrative and food prices. **Inflation is expected to start declining at the start of next year and is expected to fall to close to the target in the second half of next year.**

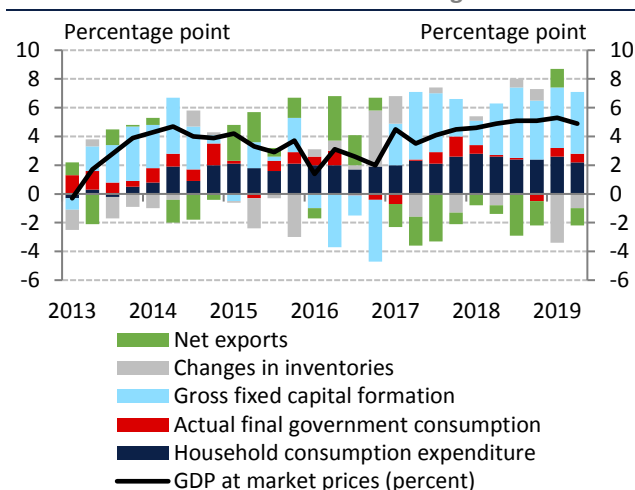
The decision-makers of the Polish central bank decided to leave the policy rate unchanged at the September meeting. According to the decision-makers' statement, in spite of the slowdown in global growth the prospects of the Polish economy are still favourable. In the second quarter, the Polish economy expanded by 4.5 percent on an annual basis. At the same time, the deceleration in global growth as well as its impact on the Polish economy represent increasing uncertainty. Looking ahead, following a temporary rise, inflation in the first quarter of 2020 will be close to the target over the forecast horizon. The decision-makers believe that the current level of interest rates continues to support sustainable growth in the Polish economy and maintain macroeconomic stability.

The decision-makers of the Romanian central bank kept the policy rate at an unchanged level in the past quarter. Inflation continued to exceed the (3.5 percent) upper boundary of the tolerance band in the past period as well. According to the August 2019 inflation report, **inflation is projected to remain above the tolerance band for the rest of the year** and be in the upper part of the tolerance band over the entire forecast horizon.

3.2 Analysis of the production and expenditure side of GDP

The Hungarian economy grew at a year-on-year rate of 4.9 percent in 2019 Q2. From the expenditure approach, domestic demand items – investment and consumption – continued to make the strongest contribution to growth. The expansion in household consumption was supported by favourable income developments, a buoyant household credit market and the high level of consumer confidence. A significant rise in investment was fostered by the favourable financing environment, including a double-digit increase in corporate loans outstanding and the increased absorption of EU funds. Net exports made a negative contribution to Hungarian GDP growth in Q2. On the production side, while growth in market services continued, construction and the industrial sectors also contributed to GDP growth.

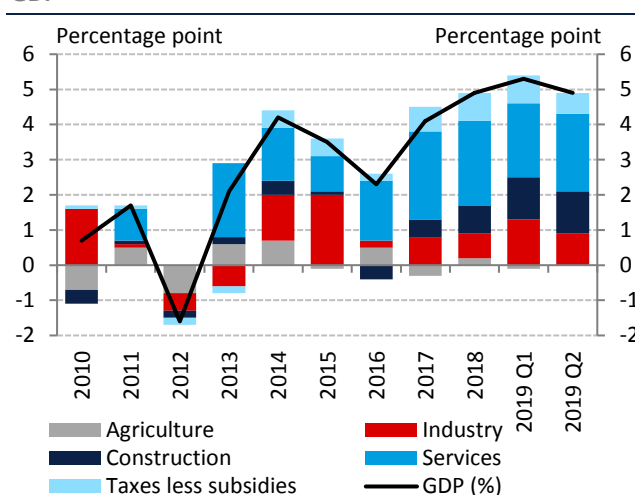
Chart 3-16: Contribution to annual changes in GDP



Note: Actual final government consumption includes social transfers in kind from government and NPISHs.

Source: HCSO

Chart 3-17: Decomposition of change in production side GDP



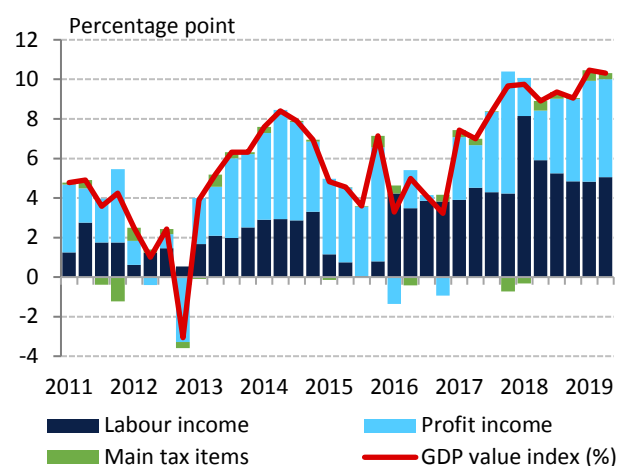
Source: HCSO

In 2019 Q2, Hungary's **gross domestic product expanded by 4.9 percent** in year-on-year terms, while quarter-on-quarter growth was 1.1 percent. Hungary takes second place in the growth ranking of the European Union. **Growth continues to be driven by domestic demand** through the pick-up in consumption and investment. In parallel with the increase in domestic demand items, the growth rate of goods imports exceeded export growth, and thus the **contribution of net exports to growth was negative** in the second quarter (Chart 3-16).

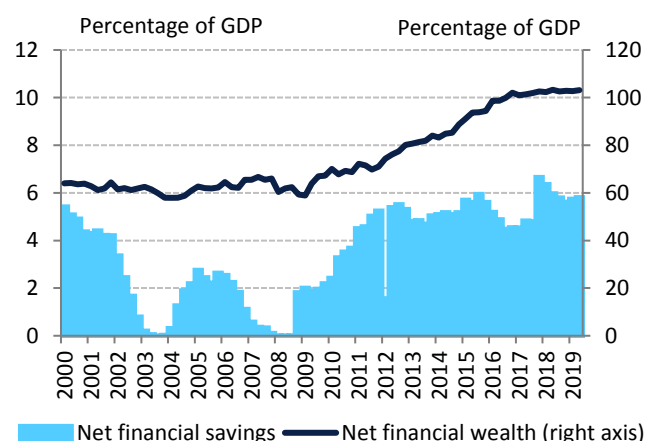
On the production side, **market services continued to expand** (Chart 3-17), with the strongest year-on-year value added growth registered for trade and accommodation services as well as transportation and storage. The dynamics of **construction output** decelerated in Q2, but its **contribution to growth remained high**. Despite months of weak German industrial performance, **Hungarian industrial production increased further** in Q2, which was also supported by the **strong performance of vehicle production**. The **contribution of agricultural performance to growth was slightly negative** in Q2, partly as a result of unfavourable weather conditions at the beginning of the year and the decrease in sowed area relative to the previous year.

Household consumption continued to expand in 2019 Q2, albeit at a slower rate than in Q1. Consumption growth was supported by **favourable income developments, a buoyant household credit market, and the high level of net financial wealth and consumer confidence as well** (Chart 3-18 and Chart 3-19). Spending on purchases of durable and semi-durable goods accelerated significantly faster (at 11.9 and 9.1 percent, respectively) than aggregate consumption, while the consumption of services grew at a slightly slower rate (3.5 percent) than in previous quarters. Pointing to favourable consumption developments, retail sales rose by 6.9 percent in July (Chart 3-20).

Annual expansion in the household sector's loans outstanding exceeded 6 percent. Household loans outstanding resulting from transactions with the financial intermediary system continued to expand during the

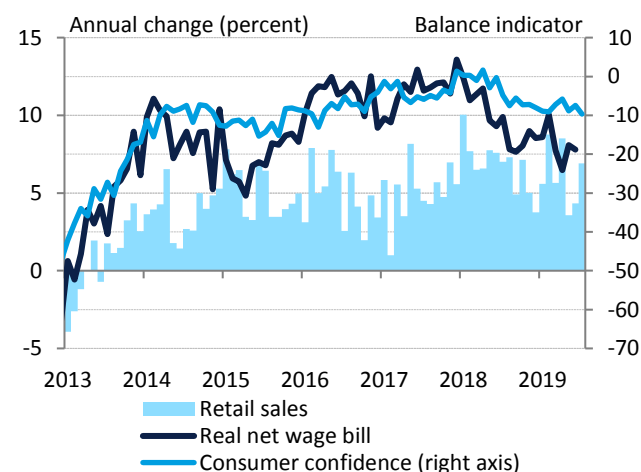
Chart 3-18: GDP decomposition based on the income account

Source: HCSO, MNB

Chart 3-19: Net financial savings of households

Note: Seasonally adjusted series.

Source: HCSO

Chart 3-20: Developments in retail sales, income and the consumer confidence index

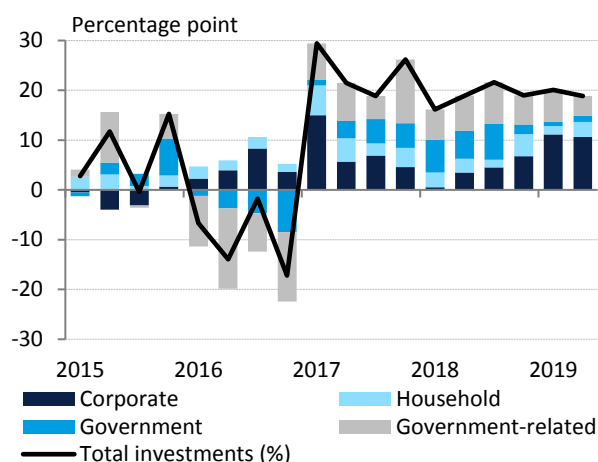
Note: Seasonally adjusted retail sales data.

Source: European Commission, Eurostat, HCSO

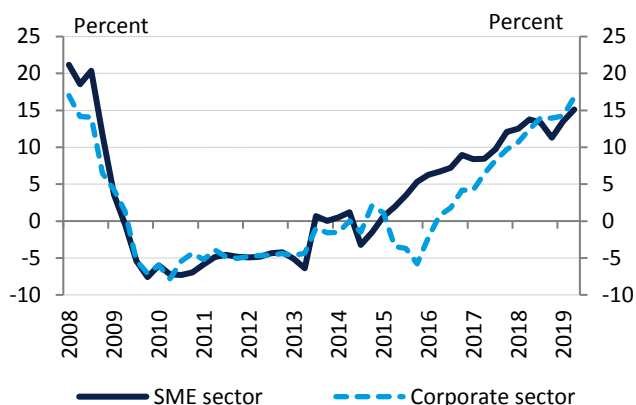
quarter, with annual loan growth reaching 6 percent in July. This growth is still **mainly driven by housing loans and personal loans**; the volume of new contracts rose by 20 percent for the former and 36 percent for the latter in annual terms. Respondent banks to the Lending Survey expect an upswing in demand both for housing loans and consumer credit, also boosted by the subsidy programmes launched in July 2019 under the Family Protection Action Plan. Credit demand is stimulated both by the continued expansion in household consumption and households' increasing investment activity. The pick-up in the underlying trends of household lending is supported by the **low interest environment and the increase in real wages**. The Prenatal baby support loan available since July 2019 is extremely popular and, if accepted as own funds, it can generate additional demand for retail loans.

In 2019 Q2, the **volume of whole-economy investments increased by 18.8 percent** in annual terms (Chart 3-21). Year-on-year growth was registered for both machinery (15.2 percent) and building-type (22.3 percent) investments. The **investment of companies producing and providing services for domestic market** increased in parallel with **investment of sectors producing mainly for external markets**, supported primarily by investments in the chemical and electrical equipment industries. Projects in the corporate sector are stimulated by the **favourable interest environment, high capacity utilisation, favourable trends in lending and the major investment projects previously announced**. Mainly driven by developments in public administration and healthcare, the **expansion in self-financed and EU-funded public sector investment continued**.

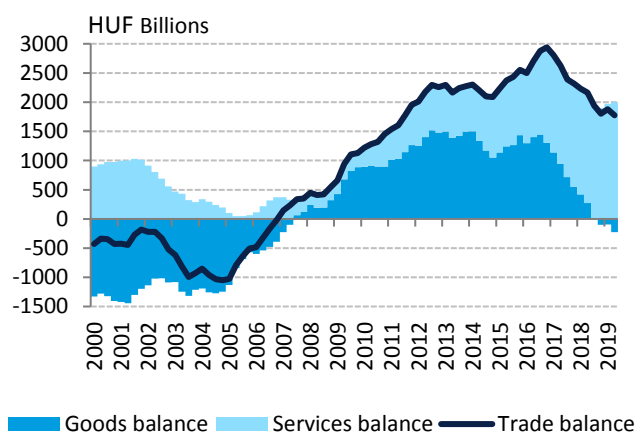
Supported also by a number of one-off items, loans outstanding in the corporate segment grew at a rate of almost 17 percent year on year (Chart 3-21). Loans outstanding in the SME sector grew by 15 percent year-on-year terms. In 2019 Q2, disbursements to corporations exceeded repayments by a spectacular HUF 544 billion. Even disregarding some major one-off transactions, total corporate credit growth would still amount to 14 percent, driven by broad-based expansion even in a sectoral breakdown. Lending to SMEs is also supported by the central bank's **Funding for Growth Scheme Fix** launched in January 2019, under which enterprises concluded contracts amounting to HUF 246 billion until August. According to the Lending Survey, the majority of banks observed elevated demand primarily for long-term and also for HUF-denominated loans, which may also reflect the role of the FGS fix scheme. Based on the banks' responses, the

Chart 3-21: Decomposition of the annual change in investments

Source: HCSO

Chart 3-22: Annual changes in lending to non-financial corporates and SMEs

Note: Data for the corporate sector are based on transactions with the total financial intermediary system. The SME sector does not include the self-employed. Source: MNB

Chart 3-23: Evolution of the trade balance

Note: Seasonally adjusted, 4-quarter cumulated values, in 2005 prices. Source: HCSO

stronger demand was mainly driven by the tangible asset purchases of enterprises, which may continue to contribute to a further increase in demand over the next 6 months. The most popular area of commercial property financing is the financing of logistics centres, while respondents expect a downturn in demand for the financing of housing projects in the next half of the year. The latter may have resulted from the fact that the VAT on residential property was restored to its previous level; thus the developments lost due to the lower return may reduce credit demand.

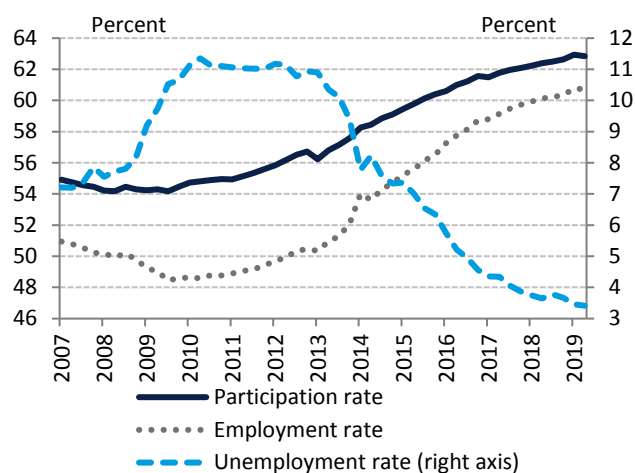
Household investment activity continued to rise in 2019 Q2, but home construction faltered. In Q2, 2,811 new homes were completed, corresponding to a year-on-year decline of 10 percent. The number of newly issued home building permits was up 4.5 percent in Q2 and thus its level remained high. Based on the MNB's composite house price index, in 2019 Q1 the **rise in house prices continued**. According to data released by the HCSO, prices increased in the markets of new and used homes alike.

The contribution of net exports to domestic economic growth was negative in Q2. In parallel with the expansion in domestic demand items (household consumption, investment), goods imports grew at a higher rate than exports, rendering the balance of goods negative in the second quarter. Owing to tourism and transportation services imports, the acceleration in services exports surpassed the dynamics of services imports. **The trade balance continued to decline in the second quarter, but the balance of services still showed a large surplus** (Chart 3-23).

3.3 Labour market

In 2019 Q2, employment in the private sector continued to increase in annual terms. The number of fostered workers dropped to 109 thousand. The seasonally adjusted unemployment rate remained at 3.4 percent. Based on the number of vacancies, corporate labour demand continued to moderate in a wide range of sectors. As a result, labour market tightness eased, but remains at a high level.

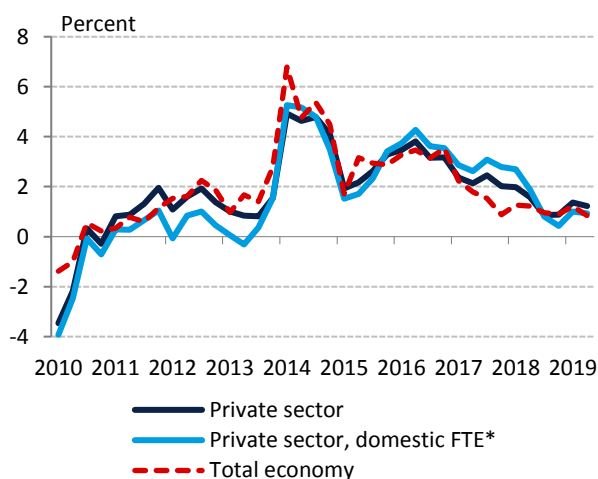
Chart 3-24: Participation, employment and unemployment rate in the total economy



Note: Seasonally adjusted data.

Source: HCSO

Chart 3-25: Annual change in main employment indicators



Note: *Full-time equivalent employment, excluding cross-border workers. Seasonally adjusted data.

Source: MNB calculation based on HCSO data

In 2019 Q2, the participation rate of the 15–74 age group was 62.9 percent, while the proportion of active persons within the population aged 15–64 years amounted to 72.4 percent. **Based on seasonally adjusted data, the number of economically active persons declined somewhat** compared to the previous quarter (Chart 3-24).

The private sector contributed to the further increase in whole-economy employment, while employment in the public sector showed a moderate annual decrease. Within the public sector, **the number of fostered workers dropped to 109 thousand**, whereas the number of workers outside the public work scheme increased.

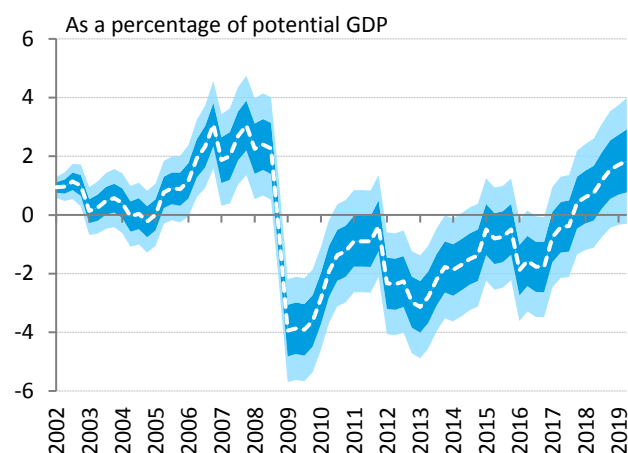
In the private sector, employment rose both in the market services sector and in manufacturing year on year, but the annual growth rate decelerated slightly compared to the previous quarter. The number of workers employed at sites abroad rose to 117 thousand. The full-time equivalent number of employed in Hungary adjusted for the number of hours worked grew slower than employment (Chart 3-25).

The number of unemployed decreased, and the **seasonally adjusted unemployment rate remained at 3.4 percent**. Based on the number of vacancies, **corporate labour demand continued to moderate** in a wide range of sectors. As a result, the **labour market tightness** indicator, calculated from the rate of vacancies and unemployed persons, **eased** similarly to the previous quarter, **but remains at a high level**.

3.4 The cyclical position of the economy

GDP is estimated to have been slightly above potential in 2019 Q2, which is supported by corporations' high capacity utilisation and the tight labour market. As the output gap closes, expansion in the supply side of the economy will become a key factor in terms of growth sustainability. Economic policy can raise the rate of potential growth through specific structural measures aimed at improving competitiveness and increasing productivity while maintaining stability.

Chart 3-26: Uncertainty band of the output gap



Note: The blue areas show the estimation uncertainty band.

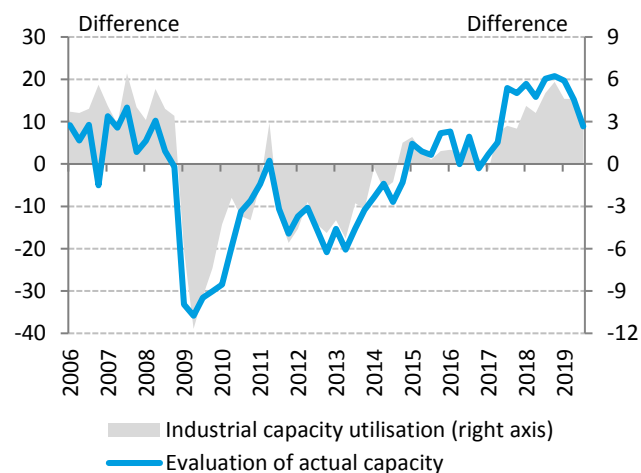
Source: MNB

According to our current estimate, the domestic output gap resided in a slightly positive range (Chart 3-26). **Our assessment of the cyclical position of the Hungarian economy remained unchanged** compared to our estimate in the June Inflation Report.

Based on questionnaire surveys, **corporate capacity utilisation still exceeds** its historical level, but on the whole industrial capacity utilisation and the tightness of the labour market have moderated since end-2018 (Chart 3-27). At the same time, consistent with the dynamic employment growth seen in recent years, labour market tightness remains above the historical average.

Closing the output gap may also take place with a decline in demand and an expansion in supply. Therefore, from a social perspective, **structural, competitiveness measures that expand supply, i.e. potential output**, will be crucial in the coming period.

Chart 3-27: Capacity utilisation and evaluation of actual capacity



Note: Deviation from historical average.

Source: ESI

Productivity increased in the past period, but for the most part, the increase can be attributed to cyclical factors and only to a lesser degree to structural improvement in the competitiveness of the economy. Nevertheless, over the medium term, the historically high investment rate, the announced large investment projects and the capacity expansion of the supplier network may also generate a positive feedback loop across **market services with higher value added** (infocommunication, finance, logistics, marketing).

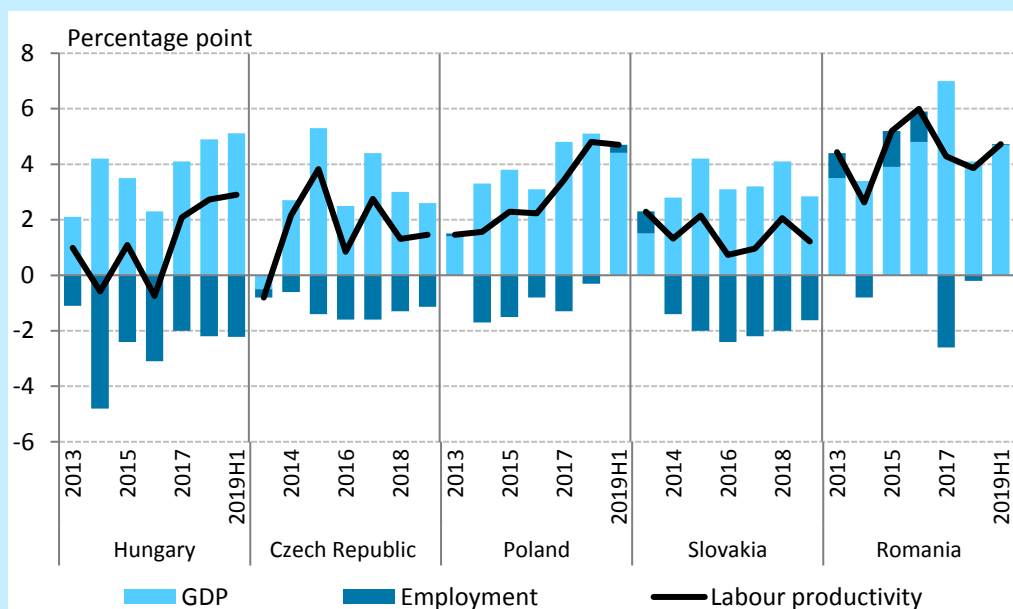
Box 3-1: Productivity in Hungary

The potential growth performance of an economy is determined by the amount of labour and capital in production as well as its efficiency and the quality of the technology used, in other words **productivity (TFP)**. TFP (total factor productivity) is difficult to quantify in many respects. First, estimation of the capital stock is fraught with uncertainties, and second, the qualitative features of capital and labour have statistical and methodological limits. This box presents the development of the Hungarian labour productivity, with a special emphasis on the turning points since the crisis and the further steps necessary for long-term, sustainable economic convergence.

After the crisis, Hungarian economic policy started to focus on **achieving financial equilibrium and improving the labour market participation rate which was low in European comparison**. As a result of the labour market turnaround, employment indicators improved considerably after 2010. Thanks to the reforms, unemployment dropped to a historically low level, and large, previously inactive groups were directed back to work permanently. **Between 2013 and 2016, the Hungarian economy grew in a labour-intensive manner**, as GDP growth was coupled with a robust rise in employment. Labour productivity is typically interpreted as the value added (GDP) per worker, therefore **the increase in productivity was muted in this period**.

In recent years, **as near-full employment has been achieved, productivity growth has started again**. Hungarian GDP growth was strongly supported by household consumption, which rose on account of the favourable labour market developments, as well as investments. Gross fixed capital formation expanded by almost 20 percent in both 2017 and 2018, and therefore by last year **the investment ratio had risen to a historic high (25.5 percent)**. Generally, the ascending phase of economic activity is characterised by an increase in labour productivity (Kaldor–Verdoorn’s law). Labour productivity has expanded by almost 2.5 percent in recent years on average, which is practically the same as the average of the countries in the region and substantially more than the growth rate in advanced European countries. It must be pointed out that the recent **productivity growth occurred in conjunction with a further expansion of employment**. Among the countries in the region, only the Czech Republic and Slovakia saw an increase in the whole-economy labour force in the past period, **however, productivity growth in these countries lagged far behind Hungary** (Chart 3-28).

Chart 3-28: Contribution to regional countries’ labour productivity

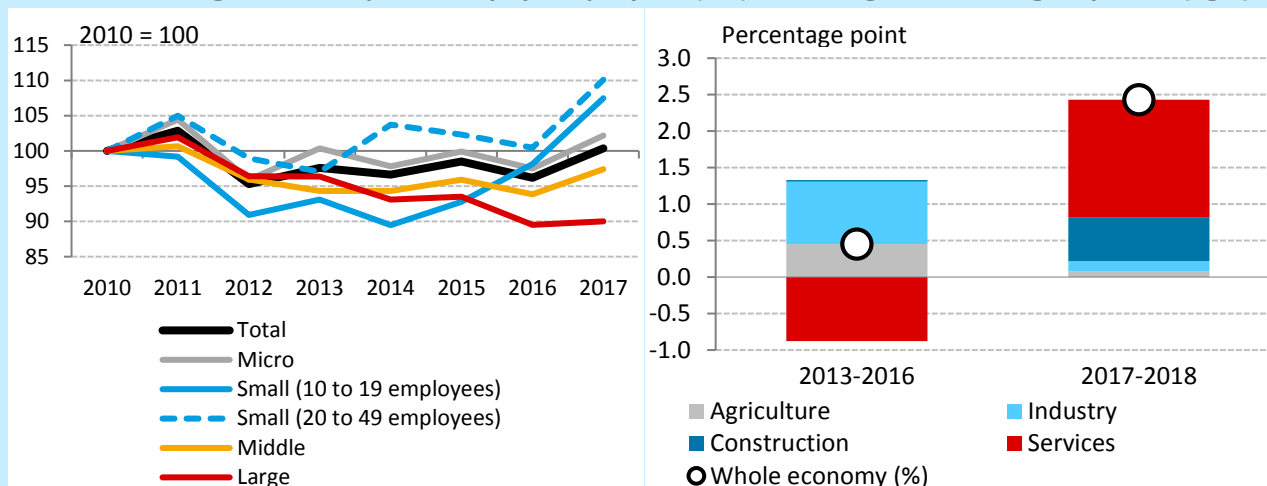


Source: Eurostat

Sustainable, long-term convergence hinges on dynamic productivity growth, which may be achieved through improving competitiveness. As a result of the successful labour market turnaround, Hungary has come close to full employment, and thus looking ahead the transition to the **capital- and knowledge-intensive growth model** is the key. Hungarian productivity can be increased partly by **easing corporate duality**, since the largest reserves can be identified in the **SME sector**. SMEs play a crucial role in economic life: the sector covers 99 percent of all companies and over 70 percent of workers, but

generates less than half of GDP. Although SME productivity is around one-third of the level recorded for large enterprises, the gap has started to close recently. In the past years, **corporations' labour productivity has gradually diminished**, and the 2017 figure was more than 10 percent lower than in 2010. Meanwhile, **SME productivity improved**, as in 2017 small enterprises' value added per capita exceeded the 2010 figure by almost 10 percent (Chart 3-29, left). There has also been a change in labour productivity by sector in recent years. The modest increase in productivity between 2013 and 2016 was mainly attributable to manufacturing and agriculture (which features highly volatile added value), but **in recent years a wide range of sectors contributed to labour productivity, which increased by almost 2.5 percent on average** (Chart 3-29, right). Productivity growth in the **service sector** has been striking. In line with the upturn in employment, productivity in the sector temporarily declined between 2013 and 2016, but **has increased significantly in recent years and provided substantial support for the expansion in whole economy productivity**.

Chart 3-29: Hungarian labour productivity by company size (left) and average annual changes by sector (right)



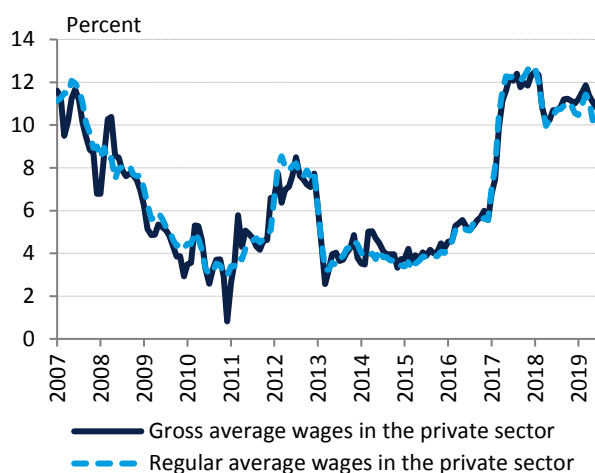
Source: MNB based on Eurostat and European Commission

All in all, increasing SME sector productivity and easing corporate duality are crucial in improving whole-economy productivity. SMEs' low productivity is attributable to problems such as the **fragmented corporate structure, the low number of exporting SMEs, shortcomings in management skills** and the sector's **low technological preparedness**. In the future, the sector needs to focus more on **taking advantage of economies of scale** and needs to prepare for a **generational change**. Moreover, another milestone in development may be the **unlocking of the potential in changing the entrepreneurial attitude** and **greater innovation capacity**, which can be achieved through digitalisation.

3.5 Costs and inflation

In 2019 Q2, gross average earnings in the private sector increased by 10.8 percent year on year. This double-digit wage growth exceeded the rise in administrative wages and mainly resulted from the tight labour market conditions determining the underlying trend. After the spring months, inflation decreased to near the 3-percent inflation target from the upper third of the tolerance band. In line with changes in global oil prices, the downward shift in the consumer price index was primarily attributable to the decline in fuel prices. In addition, underlying inflation trends have also moderated in recent months. Reflecting the decelerating price dynamics for industrial goods, core inflation excluding indirect taxes declined and stood at 3.2 percent in August.

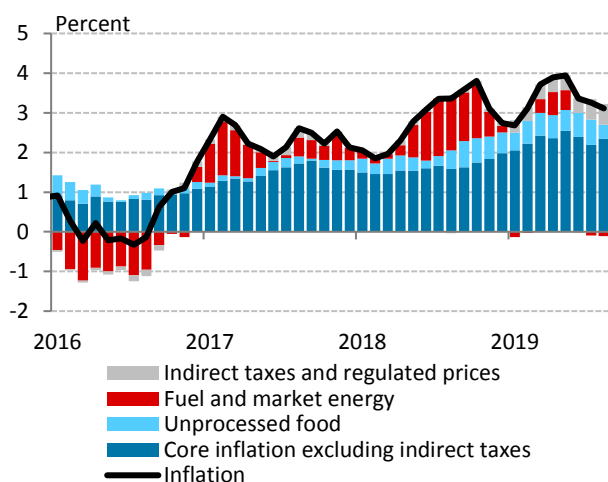
Chart 3-30: Annual change in gross average wages in the private sector



Note: Quarterly moving averages.

Source: HCSO

Chart 3-31: Decomposition of inflation



Source: MNB calculation

3.5.1 Wages

In 2019 Q2, gross average earnings in the private sector increased by 10.8 percent year on year (Chart 3-30). After the dynamic pay rises at the beginning of the year, on a monthly basis, regular average wages rose at a subdued rate in line with the usual seasonality. This year, both the minimum wage and the guaranteed wage minimum were raised by 8 percent. This **double-digit wage growth exceeded the rise in administrative wages and mainly resulted from the tight labour market conditions determining the underlying trend**. Moreover, in many cases companies offset the loss of other labour incomes stemming from this year's streamlining of the cafeteria system by raising wages.

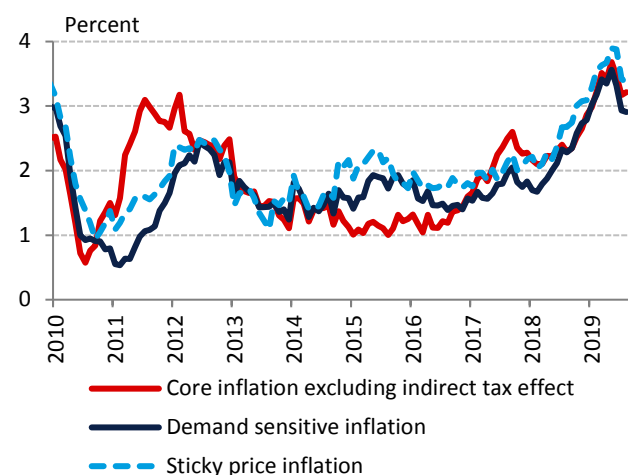
Within the private sector, wage dynamics in manufacturing exceeded the rate of wage growth in the market services sector, but at the same time **wage dynamics decelerated in both sectors relative to the previous quarter**. Wage outflows in sectors paying below-average wages remained higher than in sectors offering above-average wages. Data by headcount category indicate that the **double-digit wage growth continued both among large corporations and among small and medium-sized enterprises**.

3.5.2 Producer prices

Agricultural producer prices rose in year-on-year terms in 2019 Q2, mainly owing to price developments in seasonal products, as fruit prices had risen significantly since April. Besides seasonal products, grain prices and the prices of products of animal origin were also up year on year. The main contributors to the price increase in products of animal origin were hikes in the producer price of milk and pork.

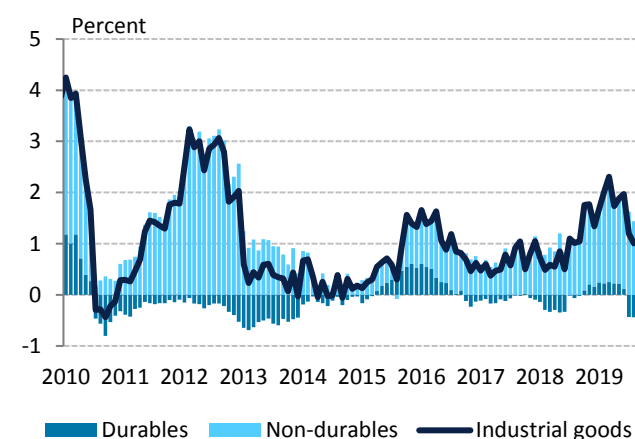
Until July, producer prices of consumer goods rose to a larger degree in year-on-year terms, compared to the historical average. In recent months, domestic sales prices of the industry as a whole have risen to a lesser degree than the historical average year on year, which mainly reflected the considerable decrease in the producer prices of energy producing sectors.

Chart 3-32: Underlying inflation indicators



Source: MNB calculation based on HCSO data

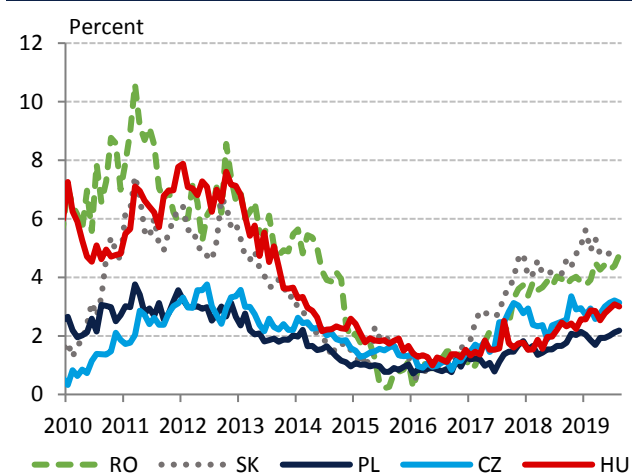
Chart 3-33: Inflation of industrial goods



Note: Annual change, excluding the effect of indirect taxes.

Source: MNB calculation based on HCSO data

Chart 3-34: Inflation expectations in the region



Source: MNB calculations based on European Commission data

3.5.3 Consumer prices

After the spring months, inflation decreased near to the 3 percent inflation target from the upper third of the tolerance band. In line with changes in global oil prices, the downward shift in the consumer price index was primarily attributable to the decline in fuel prices (Chart 3-31).

In recent months, a **decline was observed in indicators capturing longer-term inflation trends** (inflation of demand-sensitive and sticky-price products) (Chart 3-32). Core inflation excluding indirect taxes fell to 3.2 percent in August, reflecting the decelerating price dynamics of industrial goods.

On the whole, the inflation of industrial goods decreased in the past months. Slower price dynamics for both durable and non-durable industrial goods contributed to this decline (Chart 3-33).

In the summer months, **market services inflation continued to fall.** The inflation of labour-intensive services slowed, while the inflation of less labour-intensive services remained practically unchanged.

Prices of alcohol and tobacco products rose, mainly as a result of the tax changes affecting this product group, namely the increase in the public health product tax and the excise duty. In the case of the higher excise duty on tobacco products, swifter and stronger pass-through was observed compared to earlier tax changes.

On the whole, the price dynamics of food increased in the past months. The inflation of unprocessed food increased in recent months, primarily owing to price increases for seasonal foods and pork. Processed food inflation also increased as a result of rising prices in several product groups.

In line with the lower oil prices, fuel prices have declined in recent months. As a result, the inflation of the product group sank into negative territory.

Looking at the data from recent months, on the whole, inflation was practically in line with the forecast in the June Inflation Report, while core inflation and core inflation excluding indirect taxes were lower than our previous projection. Compared to our forecast, the lower core inflation and core inflation excluding indirect taxes were attributable to the lower-than-expected price dynamics of industrial goods.

3.5.4 Inflation expectations

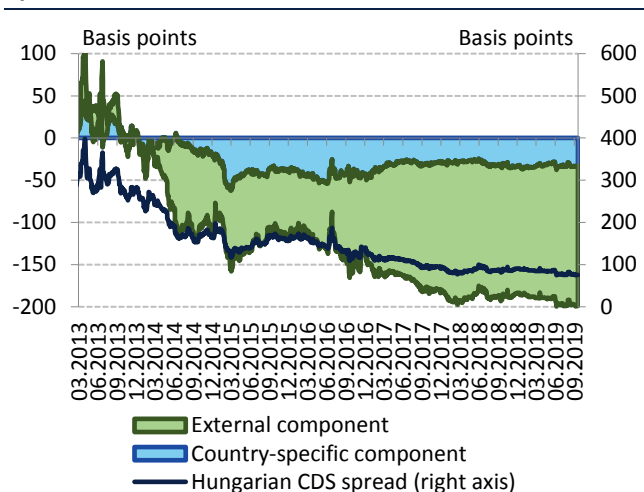
In recent months, **households' inflation expectations** did not change considerably and **remain moderate**, indicating that expectations are anchored. Expectations in Hungary were in line with the expectations observed in the countries of the region, where persistently low inflation was previously typical as well (Chart 3-34).

4 Financial markets and interest rates

4.1 Domestic financial market developments

Global market sentiment deteriorated in the middle of the previous quarter, on account of global growth concerns and fears about trade tensions, but risk perception then improved at the end of the period. The VIX index measuring stock market volatility decreased from 24 percent at the middle of the period to the initial level of 14.5 percent by mid-September. Long-term developed market yields on government securities have fallen by 5–25 basis points since the end of June, and the emerging bond market EMBI Global spread was down 20 basis points. The US dollar appreciated continuously and moderately against the euro from mid-June. On the Hungarian market, 10-year yields dropped in tandem with long-term developed-country yields and long-term yields in the region, but fell more than the regional average, while the credit risk indicator declined somewhat. The forint depreciated against the euro, together with other currencies from the region.

Chart 4-1: Components of the 5-year Hungarian CDS spread



Note: The decomposition method used can be found in the MNB Bulletin: Variance decomposition of sovereign CDS spreads, Kocsis-Nagy (2011). Source: Bloomberg

4.1.1 Risk assessment of Hungary

Hungary's credit risk premium fell slightly in the third quarter (Chart 4-1). The 2 basis point decline in the credit risk premium was influenced by the contraction of the international factor. The decline in the international component was mainly supported by improving risk appetite and communications by developed-country central banks indicating easing.

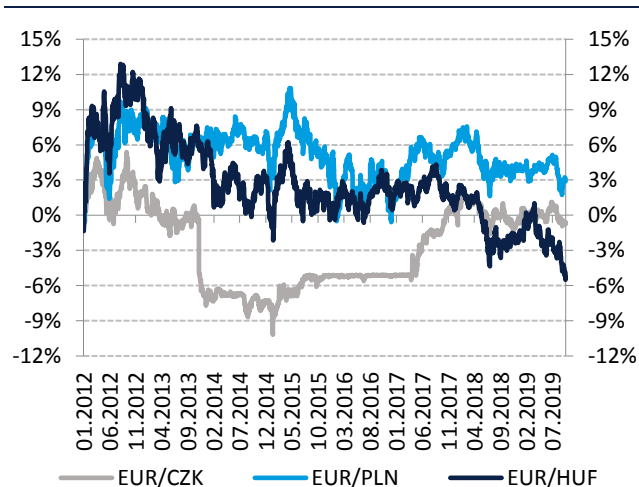
4.1.2 Developments in foreign exchange markets

The forint depreciated against the euro by 3 percent, which was in line with regional developments. Among the currencies in the region, the Polish zloty was down by 1.8 percent, the Czech koruna dropped by 1 percent, while the exchange rate of the Romanian leu weakened by 0.3 percent (Chart 4-2). Since mid June, the HUF/EUR exchange rate fluctuated in the 322–329 range, depreciating to 333 by the end of the period. The forint depreciated against the dollar by 4.5 percent, whereas the regional currencies weakened by 2–4 percent.

4.1.3 Government securities market and changes in yields

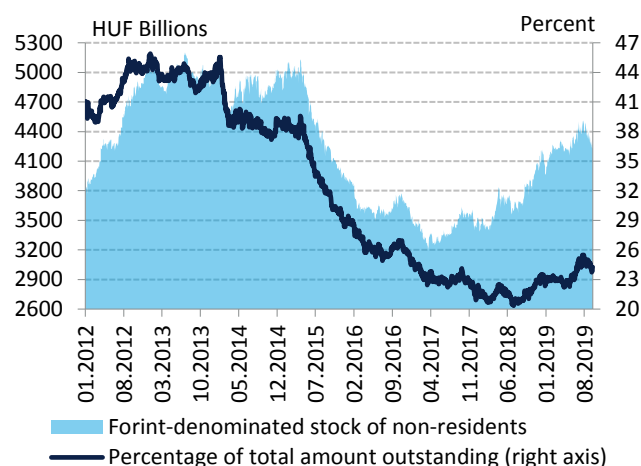
Non-residents' HUF-denominated government securities holdings dropped in the past quarter (Chart 4-3). Following a practically continuous decline since 2015, non-residents' HUF-denominated government securities holdings first stabilised and then started to rise in early 2018. At the beginning of the period under review, the holdings of non-residents first diminished and then rose until the middle of the period. After that, following another decrease, they declined by roughly HUF 100 billion by the end of the period. HUF-denominated government securities held by non-residents amounted to under HUF 4,300 billion at end-September 2019. Non-residents' share in HUF-denominated government securities holdings was over 24 percent, slightly higher than in previous quarters.

Chart 4-2: Exchange rates in the region



Note: Changes compared to beginning of 2012. Positive values represent appreciation of the currency. Source: Bloomberg

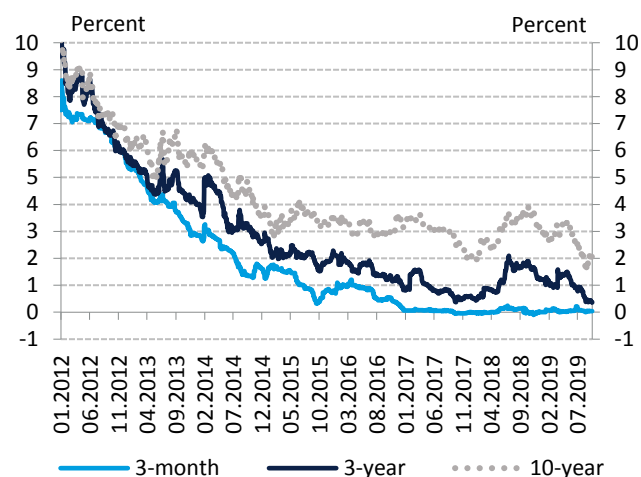
Chart 4-3: HUF-denominated government securities held by non-residents



Note: The chart shows the stock of T-bills and T-bonds.

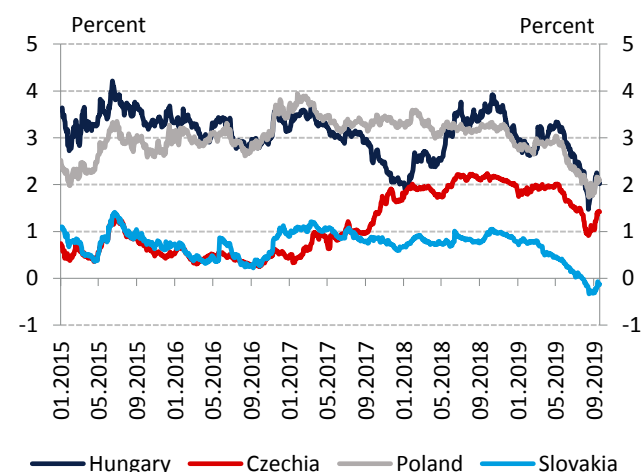
Source: MNB

Chart 4-4: Yields of benchmark government securities



Source: Government Debt Management Agency (ÁKK)

Chart 4-5: 10-year government benchmark yields in CEE countries



Source: Bloomberg

Demand on the primary market of government securities was strong. In the case of longer-term securities, the Government Debt Management Agency often accepted higher amounts than announced. Average auction yields fell in the third quarter, for both 3- and 12-month paper. They dropped considerably, by 75–80 basis points, for 5- and 10-year paper, with a minor adjustment seen only at the end of the period. In June, the Government Debt Management Agency placed on the market the new, 5-year retail government securities (Hungarian Government Bond Plus), for which exceptional demand was seen from households.

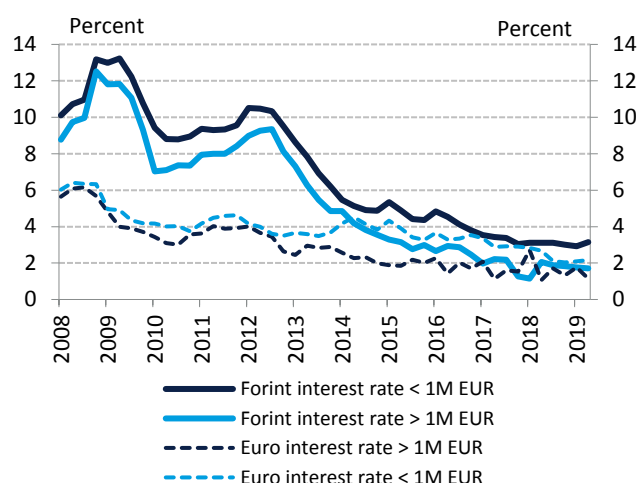
The short-term section of the government securities yield curve decreased moderately, the 3–5-year segment declined slightly, while long-term yields dropped significantly (Chart 4-4). Until the middle of the period, the section of the yield curve beyond 3 years exhibited a major fall, and an adjustment was seen at the end of the period. By contrast, the short end of the yield curve declined gradually and moderately during the period. The downward shift in the Hungarian yield curve is mainly attributable to the lowering of global interest rate expectations. The 10-year benchmark yield fell by 70 basis points overall. By the end of the period, the 1- and 3-month BUBOR rates declined, partly owing to the expansion of the banking system's surplus liquidity. Similar to the government securities market curve, medium- and longer-term interbank yields were down considerably: yields on 3–5-year securities dropped moderately, while long-term yields fell substantially.

Long-term benchmark yields in the region also declined during the quarter (Chart 4-5). 10-year forint yields fell from 2.7 percent at the end of June to 1.5 percent in mid-August, adjusting to 2 percent by the end of the period. The drop in the Hungarian long-term yields was in line with regional developments, but was more substantial than the drop in the region. Czech and Polish yields declined by 15–30 basis points, while Slovak long-term yields fell 52 basis points.

4.2 Credit conditions of the financial intermediary system

Despite strong market competition, banks did not ease corporate credit conditions in 2019 Q2 and only saw room for easing price conditions in the case of loans granted to medium-sized and large companies. However, with regard to commercial real estate loans, one quarter of the banks are already indicating tightening, due to worries about a real estate price bubble developing. A rise in the interest rate on corporate forint loans was observed during the quarter, while a decline took place in the case of – mainly high-amount – euro loans. Banks offer both housing loans and consumer loans with unchanged conditions. Nevertheless, according to the responses to the Lending Survey, conditions on consumer loans may become tighter in H2. Interest rate fixation for a longer term is facilitated by the fact that banks reduced the average APR on loans with interest rate fixation over 5 years, which was also supported by a decline in the costs of funds. The decline observed in real interest rates during the quarter is attributable to a rise in analysts' inflation expectations.

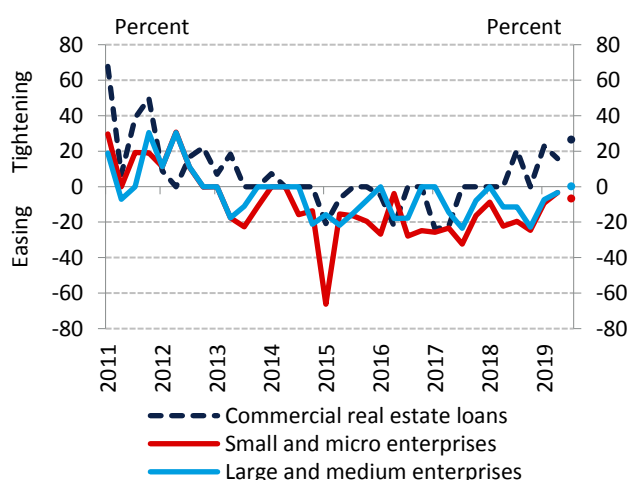
Chart 4-6: Interest rates on new corporate loans



Note: Loans with variable interest rate or with up to 1-year initial rate fixation. From 2015, based on data net of money market loans exceeding EUR 1 million.

Source: MNB

Chart 4-7: Changes in credit conditions in the corporate sub-segments



Note: Net percentage balance of respondents tightening/easing credit conditions weighted by market share. Forecast for Q3 and Q4 of 2019.

Source: MNB, based on banks' responses

4.2.1 Corporate credit conditions

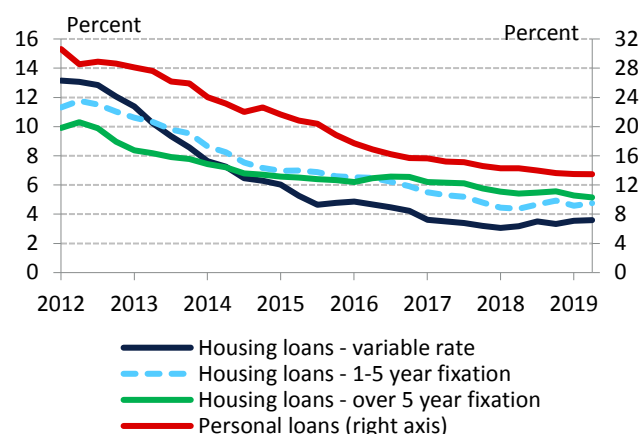
The financing costs of corporate forint loans rose slightly.

The smoothed average interest rate on new corporate forint loans excluding money market transactions was up 0.2 percentage point for low-amount loans, and fell slightly for high-amount forint loans. As a result, the average interest rate on forint loans increased to 2.2 percent. The average interest rate on euro loans below EUR 1 million rose by 0.1 percentage point, while in the case of higher-amount loans one-off, high-volume items also played a role in the 0.6 percentage point decline in the interest rate. Accordingly, interest rates on euro loans decreased to an average of 1.2 percent (Chart 4-6). During the quarter, the levels of interest rates on corporate loans were determined by the changes in average interest rate spreads.

Banks did not change their corporate credit conditions. On the whole, the banks participating in the Lending Survey also did not change the conditions of access to loans in 2019 Q2 (Chart 4-7). However, regarding partial conditions, 20 percent of the respondents in net terms eased their price conditions, which they justified with the competition, which is becoming stronger in the case of smaller company sizes as well. Looking ahead to the next half year, respondents do not plan any major easing of corporate credit conditions, although in the case of small and micro enterprises they held out the prospect of a further reduction in fees and spreads. They intend to continue tightening in the case of commercial real estate loans, primarily involving the financing of shopping centres and office buildings, as 63 percent of the respondents in net terms are afraid of the development of a real estate price bubble.

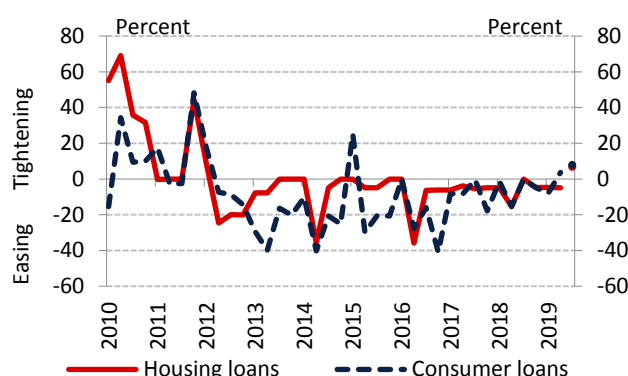
4.2.2 Household credit conditions

Banks granted housing loans with higher spreads. During the quarter, the average APR on housing loans with interest rate fixation between 1–5 years increased by 0.2 percentage point, while a decline of 0.1 percentage point was observed in the case of loans with interest rate

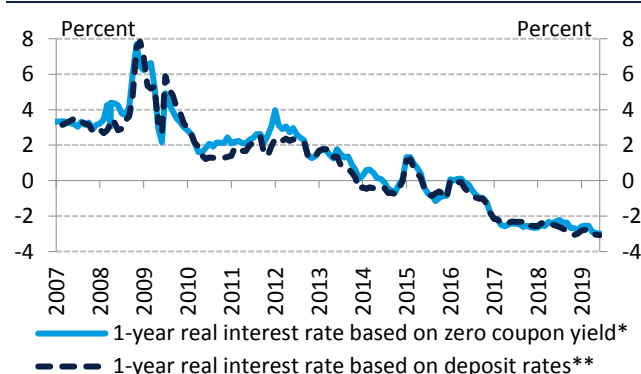
Chart 4-8: Annual percentage rate of charge on new household loans

Note: Quarterly average of lending rates on newly disbursed loans.

Source: MNB

Chart 4-9: Changes in credit conditions in the household sector

Note: Net percentage balance of respondents tightening/easing credit conditions weighted by market share. Forecast for Q3 and Q4 of 2019. Source: MNB, based on banks' responses

Chart 4-10: Forward-looking real interest rates

Note: * Based on the one-year forward-looking inflation expectations of analysts calculated by the MNB using the 1-year zero coupon yield and the Reuters poll. **Based on the one-year forward-looking inflation expectations of analysts calculated by the MNB using deposit rates with maturity up to 1 year and the Reuters poll. Source: MNB, Reuters poll

fixation over 5 years. Accordingly, the former stood at 4.8 percent and the latter at 5.2 percent (Chart 4-8). Loans with longer interest rate fixation continued to gain ground in 2019 Q2. One fifth of the housing loans granted have an interest rate period of 5 years and half of them have a 10-year interest rate period, while the rest were fixed until maturity. The decline in longer-term costs of funds (relevant IRSs) exceeded the decrease in interest rates, and thus banks granted housing loans with a higher spread during the quarter. At the end of the period under review, the average APR on personal loans stood at its level observed in the previous quarter, i.e. at 13.5 percent.

The conditions of access to housing loans or consumer loan products were not eased. On the whole, the banks participating in the Lending Survey did not change conditions on housing loans in 2019 Q2 (Chart 4-9). However, looking at the partial conditions, one quarter of the banks eased price conditions, which they justified with housing market developments. In the next half year, they may reduce the spreads in view of the competition, but on the whole the conditions of access to housing loans will remain unchanged. Conditions on consumer loans were also not eased during the quarter, although a higher share of banks indicated reductions of spreads in order to achieve market share targets. In H2, some tightening may occur as a result of the amendment to the debt cap rule concerning the payment-to-income ratio, but this is not expected to have a negative impact on banks' lending activity.

4.2.3 Changes in real interest rates

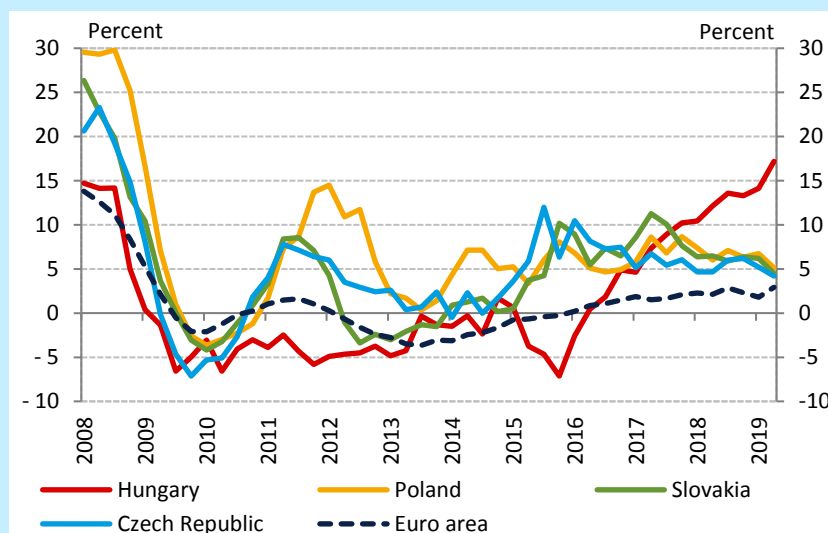
The decline in real interest rates was caused by an increase in analysts' inflation expectations. Estimated on the basis of government securities market yields, the real interest rate level reduced by inflation expectations sank by 0.4 percentage point to -3 percent, and the real interest rate estimated on the basis of deposit rates stood at the same level following a fall of 0.3 percentage point (Chart 4-10). The decline in the real interest rate level is explained by the rise in inflation expectations, which were higher by 0.4 percentage point in June compared to the previous quarter.

Box 4-1: Factors behind the dynamic expansion of corporate and household lending

In parallel with output and investment, the **outstanding loans of the private sector exhibited a remarkable expansion during the year** both in historical and international comparison. **The supply side was characterised by conservative loosening of credit conditions and price competition, while dynamic growth was seen on the demand side, both in corporate and household lending.** To provide a better understanding of the reasons behind this credit expansion, which was unprecedented since the crisis, we provide an overview of the structure of changes in the loan portfolios.

Over the past 12 months, the **outstanding loans of non-financial corporations vis-a-vis the Hungarian financial intermediary system** rose strongly by HUF 1,365 billion on a transaction basis,¹ which corresponds to an increase of almost 17 percent. **By international comparison, this is not only a remarkable expansion** but also a break from the dynamics of regional corporate credit after the strong correlation shown throughout the past decade (Chart 4-11). The Hungarian corporate sector's low aggregate indebtedness – reflected both in the average leverage ratio and the average level of the domestic credit-to-GDP ratio – provides room for this dynamic credit expansion. Business cycles in the Visegrád countries were typically synchronous in past decades, which was also reflected in corporate lending – with the exception of the bank resolution at the end of 2015. In all probability, therefore, there are country-specific factors behind the extremely strong credit dynamics that are currently unparalleled in the region.

Chart 4-11: Annual growth rate of corporate loans in an international comparison



Source: ECB, MNB

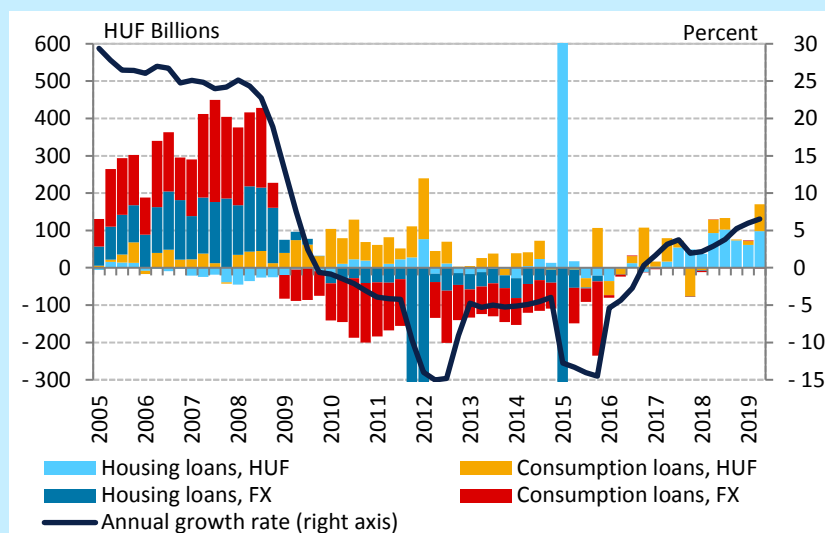
The most striking difference is last year's contribution of gross fixed capital formation to GDP growth, which was much higher in Hungary than in the countries under review. **In line with the surge in corporate investment, the credit expansion primarily occurred in the stock of loans with a maturity of over 1 year**, with these loans accounting for more than two thirds of the growth in credit volume. Similar proportions can be observed in a breakdown by currency: two thirds of the growth can be attributed to HUF loans. This is far more favourable from a stability standpoint than foreign currency lending, which dominated the pre-crisis credit cycle. The expansion in foreign currency loans was almost entirely the result of growth in long-term loans related to large corporation and project investments. **The breakdown by sectors shows that similar to economic expansion, corporate credit growth was also broad-based.** Loans outstanding in the manufacturing sector exhibited the largest increase. The credit expansion in manufacturing was shaped by the borrowing of several international corporations in Hungary, linked to their Hungarian projects. This was followed by the sector of firms providing financial and insurance services. The borrowing of holding companies with public and private shareholders played a dominant role in this sector. **The credit demand of the agricultural sector was also supported by the supplementary financing of EU transfers.** **For the time being, the robust activity observed in construction and the real estate sector raised the credit portfolio of these sectors to a lesser degree**, thanks to the buoyant investment activity of real estate funds: the bank loans outstanding

¹ Excluding the effect of other flows such as write-offs, reclassifications and exchange rate revaluations.

on the properties purchased by the funds were, for the most part, repaid upon the conclusion of the purchase transaction. Nevertheless, acquisition-related borrowing contributed to the credit expansion through a number of major, one-off loans in several sectors last year.

In the household sector, new disbursements by financial intermediaries reached the trough in 2012 before embarking on a path of dynamic growth in 2013 (Chart 4-12). However, this did not increase the portfolio until 2017, as repayments consistently exceeded disbursements. This is because the loans concerned were annuity loans: as the maturity of loans disbursed before the crisis progresses – accounting for a substantial proportion of existing debt – the share of principal repayments grow progressively in the monthly instalments paid by debtors. **From mid-2017, however, new credit outflows already exceed the repayments of existing contracts, and the outstanding borrowing of households began to grow.**

Chart 4-12: Household credit transactions and annual growth rate of outstanding loans



Source: MNB

The current growth is driven by the double-digit increase in new housing and personal loans. To some extent, **the surge in housing loans can be attributed to housing market processes**: the gradual rise in price dynamics since 2015 raises the credit demand of households, which is also reflected in the average loan amounts. The number of home purchases from credit also increased over the past few years, although still less than one half of all home purchases are financed with credit. However, not only housing loans, but personal loans also can be the source of housing investment. As a result of the improving labour market and income position of households, in the supply of unsecured consumer credit a rise can be observed in the maximum credit amounts. Combined with fast loan assessment and disbursement, this encourages households to take out **personal loans for lower-value housing purposes** as well, despite the fact that the cost of finance associated with personal loans is still three times higher than that of mortgage loans. The use of personal loans for housing purposes is also confirmed by the increase in average credit amounts in concluded contracts and by the findings of bank surveys.

The dynamic, currently nearly 7 percent expansion in household lending is driven by demand: supply conditions have not eased significantly since the crisis. The debt cap rules introduced in 2015 – which have been recalibrated several times since – **also support the prevention of excessive indebtedness.** According to banks, credit demand is picking up practically continuously in the case of housing loans and consumer credit as well. In addition to the low interest environment and the high level of consumer confidence, the expansion of demand is also supported by the family policy programmes of the government, such as the Family Housing Allowance (CSOK) available since 2016 – and the extension thereof – and the Prenatal Baby Support available since July 2019. The latter, which is technically consumer credit but in terms of loan purpose, is more intended to serve investment purposes and may give a new momentum to credit growth through the rise of credit penetration. Based on all the above it should be emphasised that **lending tends to exert its impact primarily in household investment rather than consumption.**

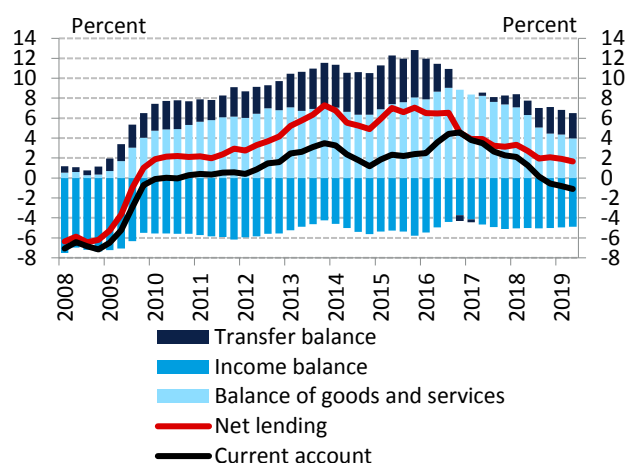
On the whole, **thanks to the favourable financing environment and buoyant investment demand, we expect the dynamic expansion to continue** both in the corporate and in the household segment over the forecast horizon.

5 Balance position of the economy

5.1 External balance and financing

In the second quarter of 2019, the net lending of the economy was close to 1.6 percent of GDP: in conjunction with a current account deficit of 1.1 percent, the capital account showed a surplus of 2.7 percent. The revision of the balance of payment statistics in September had a significant impact on the external balance data retrospectively as well. The decrease in the external balance indicators observed in the past half-year is mostly attributable to the declining trade balance. The goods balance continues to be driven by strong investment dynamics, but in the past half-year the depletion of previously accumulated inventories slowed down the decline in the trade balance. The services balance surplus was significant in the first half of 2019 again. In the first quarter, there was substantial FDI inflow on the financing side, while the outflow of debt liabilities continued; then, in the second quarter – due to the seasonally usual dividend payments – foreign direct investments declined. At the end of the second quarter, the net external debt of the economy amounted to 8.8 percent of GDP, while gross external debt declined to 56.2 percent of GDP.

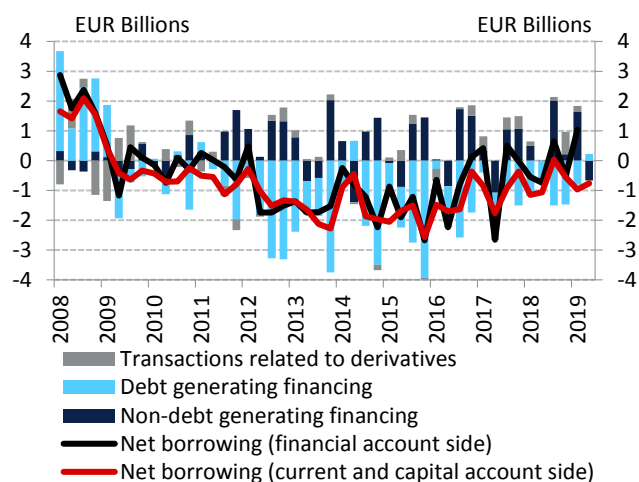
Chart 5-1: Changes in net lending and its components



Note: Cumulated four-quarter values, as a percentage of GDP.

Source: MNB

Chart 5-2: Structure of net lending



Note: The net lending calculated by a bottom-up method corresponds to the total of the net lending and the BOP balance of statistical errors and omissions.

Source: MNB

5.1.1 Developments in Hungary's external balance position

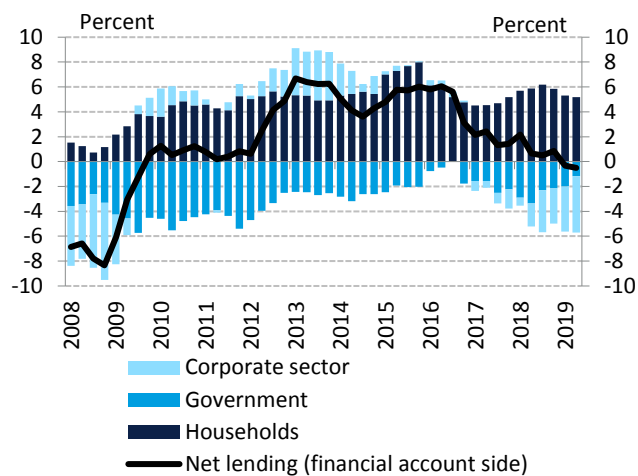
The September revision of the balance of payments data resulted in a lower current account balance than previously anticipated. The revision is the combined result of several factors: due to the revision of HCSO's valuation methods, it mostly related to the smaller amount of income transfers to Hungary made by those working abroad, and to a lesser degree to the higher profit of non-resident companies and the lower trade balance. On the whole, the revision, which also entailed an increase in the capital account, did not materially change the net lending of the economy in 2018. In addition, the retrospective amendment of the data also had no impact on the strong decline in the external debt ratios which was reported earlier.

In 2019 Q2, the four-quarter net lending of the Hungarian economy and the current account deficit amounted to 1.6 percent and 1.1 percent of GDP, respectively (Chart 5-1). The decline, which was slower than observed in the previous year, related to the trade balance, while the income balance improved further. In 2019 H1, the decline in net exports was still driven by dynamically expanding imports fuelled by strong investment growth, which was partly offset by the trade balance improving effect of the use of previously accumulated inventories. In line with the steadily high absorption of EU funds, no material change was registered in the transfer balance. The continuing moderate decline in the income balance deficit was attributable to the improvement in the interest balance.

5.1.2 Developments in financing

In 2019 H1, a strong FDI inflow was registered, while the outflow of debt liabilities continued at a slower rate (Chart 5-2). In the first quarter, the net FDI inflow amounted to EUR 1.5 billion, which substantially surpassed the figure for same period in previous years while in the second

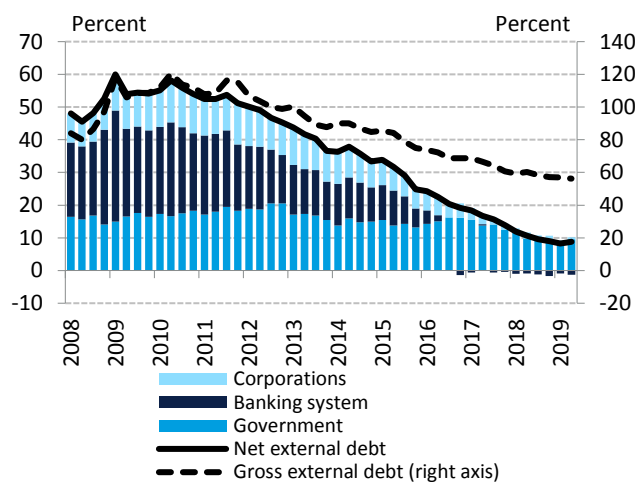
Chart 5-3: Decomposition of net lending by sectors



Note: Four-quarter cumulation, as a percentage of GDP.

Source: MNB

Chart 5-4: Development of net external debt by sectors



Note: Excluding intercompany loans, as a percentage of GDP.

Source: MNB

quarter – due to the usual annual dividend payments – net FDI declined. The outflow of debt liabilities continued in the first half-year at a slower rate than observed in previous years. The decline in debts, registered in the first quarter, related to the consolidated general government and corporations: the net ratio was improved by a decline in the government securities holdings of non-residents and by the rise in external assets, respectively. There was a moderate debt inflow in the second quarter, which was mostly attributable to purchases of government securities by non-residents and to the decline in foreign exchange reserves, while the banking sector reduced its external debt.

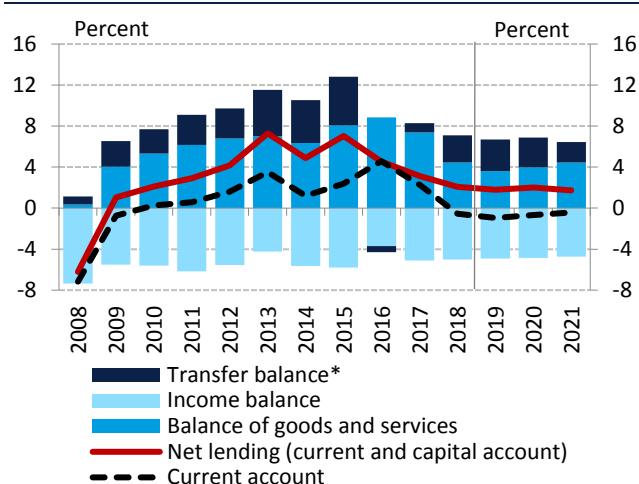
The decrease in net lending according to the savings of the sectors was attributable to a decline in the net position of the private sector (Chart 5-3). The four-quarter balance of the general government continued to improve in the first half-year, as a result of higher tax revenues from consumption and wages. In parallel with a significant rise in wages, household consumption accelerated further in early 2019, leading to a decline in households' net financial savings. Despite lower gross savings, households' net lending remains substantial. In line with high investment activity and strong wage outflows, corporate net borrowing expanded further.

Compared to end-2018, Hungary's net external debt as a percentage of GDP decreased slightly, amounting to 8.8 percent at end-June 2019 (Chart 5-4). In addition to the outflow of debt-generating liabilities, the rise in nominal GDP also contributed to the lower ratio, while revaluation effects increased net external debt. The moderate decline in the debt ratio was linked to the private sector, while the net external debt of the general government rose. By the end of the second quarter, Hungary's gross external debt as a percentage of GDP had declined by 1 percentage point and amounted to 56.2 percent of GDP.

5.2 Forecast for Hungary's net lending position

Looking ahead, the net lending of the economy will remain stable and high, resulting in a further decrease in net external debt. The temporary increase in the current account deficit in 2019 is driven by the impact of the change in the trade balance, which will temporarily decrease due to the slowdown in global market demand and strong investment. From 2020, more restrained investment due to declining government investment and external demand as well as the expansion in export market share point to an improving trade balance, resulting in a rise in the current account balance again. The net lending of the economy will be persistently around 2 percent of GDP over the forecast horizon, as the change in the trade balance will roughly be offset by the changes in EU funds reflected in the transfer balance. Looking at the individual sectors of the economy, stable net lending will be achieved as households' permanently high net financial savings and the gradual decline in the net borrowing of the general government offset the rise in companies' financing requirement related to their significant investment activity. As a result of the considerable net lending position of the economy and the strong FDI inflows, which are expected to continue, Hungary's net external debt will decline to close to zero over the forecast horizon.

Chart 5-5: Evolution of net lending



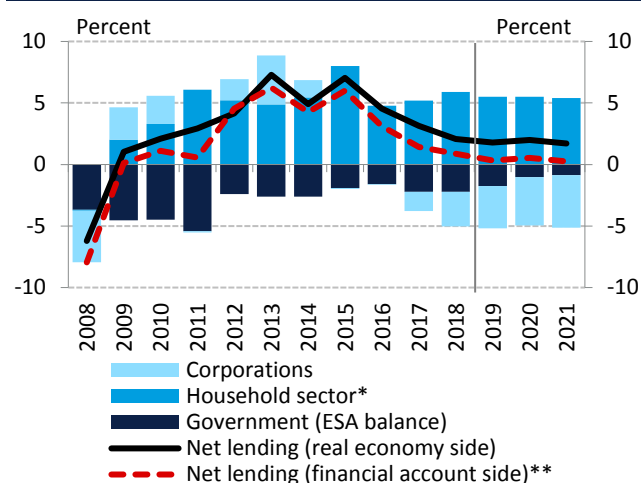
Note: As a percentage of GDP* The sum of the balance of the current transfers and the capital account balance.

Source: MNB

The net lending position of the economy will remain in place, ensuring a further decrease in external debt ratios (Chart 5-5). The temporary increase in current account deficit is attributable to the decline in the trade balance, which is partly offset by the improvement in the income balance and the transfer balance. The decrease in the goods and services balance will take place as a joint result of a deterioration in external demand and strong investment dynamics. From 2020, the deficit of the current account will improve: while the export market share increases, import growth will slow down due to moderated investment stemming from the expected decrease in public investment and external demand. Against the background of the lower interest rate environment and the declining debt stock, the improving interest balance will result in a slight decrease in the deficit of the income balance. As a result of significant EU fund inflows, the transfer balance will be at a high level in 2019 and will then decline approaching the end of the budget period. In view of the above developments, the net lending position will stabilise at close to 2 percent of GDP, while the current account balance will increase close to zero by 2021.

Over the forecast horizon, stabilisation of the net lending position will occur in parallel with a gradual decline in the net borrowing of the general government and households' persistently high financial savings (Chart 5-6). A decline in government expenditures as well as a rise in revenues from taxes on consumption and labour will also contribute to the lower net borrowing of the general government. In parallel with investment activity, which is picking up in line with the housing market cycle, households' net financial savings will fall slightly, but remain significant in 2019. From 2020, the sector's net lending will stabilise at this high level of above 5 percent of GDP, which will also be supported by wage dynamics as well as measures that stimulate demand in the

Chart 5-6: Changes in the savings of sectors



Note: As a percentage of GDP. * Net financial saving of households does not contain the pension savings of those who return to the public pension system. The official net saving is different from the data in the chart. ** We expect that 'Net errors and omissions' (NEO) will return to the historical average.

Source: MNB

government securities market. In connection with the strong investment activity, corporate net borrowing will be around 4 percent of GDP over the forecast horizon.

As a result of the above, the net lending of the economy will remain persistently high, allowing for a decline in the external vulnerability of the country. In view of the favourable external balance position, the country's external debt indicators continue to improve, and net external debt will decline to close to zero over the forecast horizon.

5.3 Fiscal developments

Based on our forecast, the budget deficit may remain low this year and in the coming years as well, which – coupled with the dynamic economic growth – will result in a steady decline in the government debt-to-GDP ratio. According to our projection, in 2019 the accrual-based deficit of the government sector may be in line with the 1.8 percent deficit target, whereas in 2020 the historically low deficit target of 1.0 percent of GDP may be achieved in the case of partial utilisation of the increased Country Protection Fund. The low deficit will be the result of a rapid growth in tax bases as well as control over expenditures. On the projected path, the fiscal policy accumulates countercyclical reserves, and thus it may reduce aggregate demand over the forecast horizon. According to our forecast, the Maastricht government debt-to-GDP ratio calculated with a constant exchange rate from the end of last year will drop to 68 percent of GDP by end-2019 and may then fall to around 63 percent by the end of the forecast period. The share of foreign currency within government debt will decrease dynamically over the entire forecast horizon, further reducing Hungary's external financial vulnerability.

Table 5-1: General government balance indicators

	2018	2019	2020	2021
ESA balance	-2.2	(-1.8)–(-1.7)	(-1.4)–(-0.6)	(-1.3)–(-0.5)
Primary ESA balance	0.1	0.2–0.3	0.6–1.4	0.7–1.5
Fiscal impulse* (point estimate)	0.5	-0.2	-0.9	-0.3

Note: As a percentage of GDP. The lower value of the forecast band shows the ESA balance if the Country Protection Fund is used while the higher value shows the ESA balance if the Country Protection Fund is not used. *Change in the augmented (SNA) primary balance. The point estimate assumes either cancellation or utilisation of the Country Protection Fund depending on which one is closer to the government deficit target.

Source: HCSO, MNB

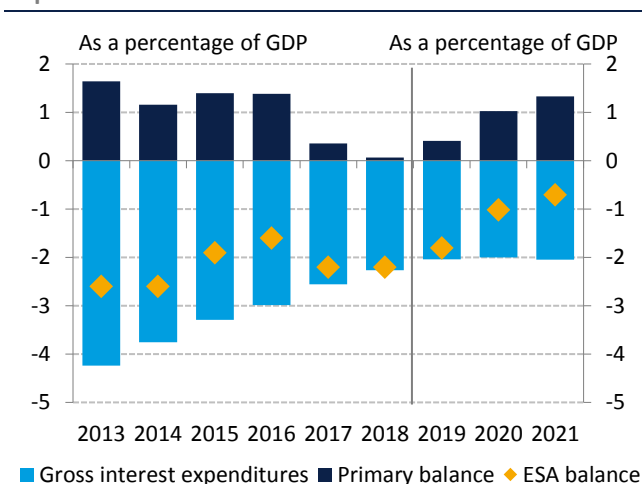
5.3.1 Main balance indicators and the fiscal impulse

Our forecast suggests that the accrual-based deficit of the government sector will be around 1.7–1.8 percent of GDP in 2019. In 2020, in line with the statutory appropriation – and with partial utilisation of the Country Protection Fund – the deficit may amount to 1 percent (Table 5-1). Higher tax revenues in view of the favourable macroeconomic developments and restraint in government expenditures (investment, material expenditures and financial transfers) both lead to a declining trend for the deficit. The rise in revenues and cutting certain expenditures provide coverage for the gradual reduction of the social contribution tax as well as for the measures of the Economy Protection Action Plan and the Family Protection Action Plan. With a significant reduction of the general government deficit, fiscal policy accumulates countercyclical reserves in 2019 and potentially in the coming years as well (Chart 5-8).

5.3.2 Budget balance in 2019

According to our forecast, the budget deficit in 2019 may be 1.7–1.8 percent of GDP, i.e. in line with the 1.8 percent statutory appropriation. The slight increase in the deficit compared to our June projection results primarily from the newly adopted government measures. Some 2.6 million pensioners will receive utility vouchers worth HUF 9,000, and around 100,000 public workers will receive a one-off allowance amounting to a net sum of HUF 54,000. Based on the data from the first months, there was keen interest in the prenatal baby support and in the car purchase subsidy, which are parts of the Family Protection Action Plan, and thus we increased their fiscal effect in our forecast. On the other hand, in spite of the new programmes, expenditures related to the home-building subsidies did not increase by the end of August compared to the previous year, and thus savings on this item are expected compared to the forecast in the June Inflation Report. There is no major change in the expected

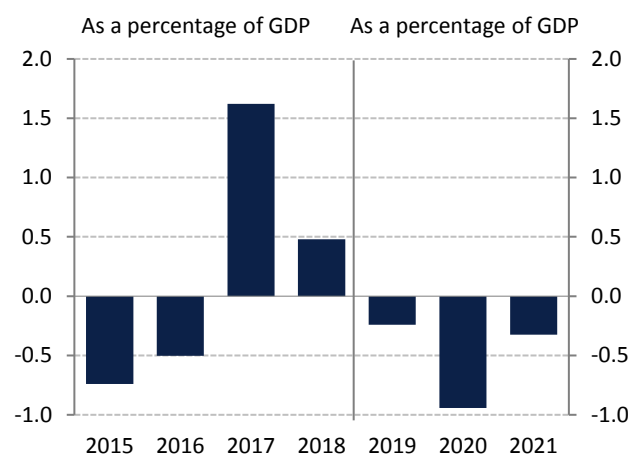
Chart 5-7: Changes in the fiscal balance and interest expenditures



Note: The point estimate seen in the chart assumes either cancellation or utilisation of the Country Protection Fund depending on which one is closer to the government deficit target. The figures do not include the imputed interest expenditures from 2012 related to the reform of the pension system.

Source: HCSO, MNB

Chart 5-8: Fiscal impulse



Note: As a percentage of GDP. The fiscal impulse corresponds to the change in the augmented (SNA) primary balance. The fiscal impulse contains the effect of EU funds to the extent of the co-financing. The positive prefix indicates demand expansion, while the negative prefix implies demand restraint.

Source: MNB

Table 5-2: Decomposition of the change in the 2019 ESA balance forecast (compared to the previous Inflation Report)

	Economic developments	Measure and other
I. Central government revenues	0.1	0.0
Taxes on consumption and duties	-0.1	
Taxes on labour	0.1	
Payments by economic organisations	0.1	
II. Central government expenditures	0.0	0.0
Housing subsidies		0.1
One-off allowances for pensioners and public employees		-0.1
Prenatal baby support		-0.1
III. Other items	0.0	-0.1
Other		-0.1
Total (I.+II.+III.)	0.1	-0.2

Note: As a percentage of GDP. The positive and negative prefixes indicate deficit-reducing and deficit-increasing effects, respectively. The sum of partial data may differ from the aggregated values because of the rounding.

Source: MNB

macroeconomic path, so our expectation concerning revenues also changes only slightly. VAT revenues, which had increased extremely rapidly before, decelerated slightly in the summer months, which may be a result of the fact that the online invoicing introduced as of July last year became included in the base. This is offset, however, by higher personal income tax and corporate tax revenues stemming from the favourable economic activity (Table 5-2).

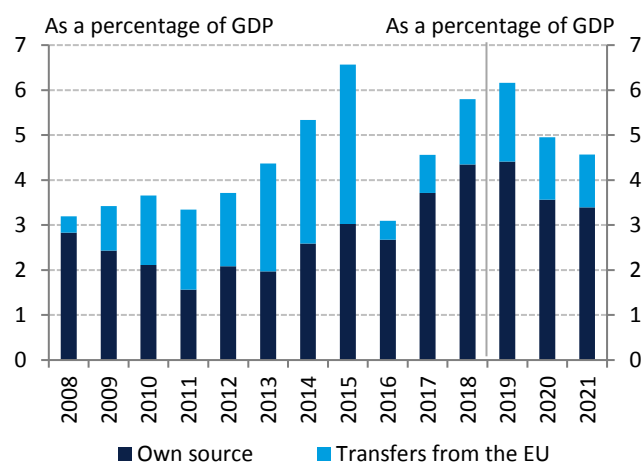
Our forecast for the 2019 deficit is in line with this year's deficit target (Table 5-3). Revenues from economic organisations' contributions and from consumption taxes are still expected to significantly exceed the plan, which allowed the raising of certain expenditures. Compared to the Budget Act, the one-off allowances and the family protection measures that entered into force as of July increase the expenditures by 0.4 percent of GDP. The expenditures of central budgetary institutions are expected to exceed the statutory appropriation, which will only be partly offset by the co-payment related to the lower-than-foreseen EU funding. We also expect higher realisation of pension expenditures than the 2019 Budget Act, as a result of the pension supplement and pension premium due on the basis of the higher inflation and economic growth than forecast by the government.

5.3.3 Balances in 2020 and 2021

According to the Budget Act adopted on 12 July 2019, the ESA budget deficit in 2020 may amount to 1 percent of GDP, which is lower than any deficit seen before. The set deficit target is 0.8 percentage point lower than the 1.8 percent appropriation for 2019. Our projection published in the June Inflation Report remained practically unchanged. According to our forecast, the increase in expenditures related to the family protection measures is offset by a decline in home-building subsidies.

The decrease in the budget deficit compared to 2019 will primarily be achieved by cutting expenditures. The decline in the deficit is mainly supported by government investment, which rose to a very high level in 2018–2019, as well as by a decrease in personnel expenditures and financial transfers relative to GDP. The adopted tax measures serve mostly aim to the further reduction of taxes on labour as well as the stimulation of corporate investment and household savings. According to our expectations, as a result of the changes in real earnings, the social contribution tax rate may drop by a further 2 percentage points in 2020 Q3 in line with the 6-year wage agreement. At the same time, the impact of the

Chart 5-9: Development of government investment



Source: HCSO, MNB

Table 5-3: Differences between our forecast and the appropriations set out in the 2019 Budget Act

	Difference from appropriation
I. Central government revenues	0.7
Consumption taxes	0.6
Taxes on labour	-0.1
Payments by economic organisations	0.3
II. Central government expenditures	-0.9
Expenditures of budgetary organisations and EU co-financing	-0.2
Family protection action plan	-0.4
Pension and healthcare expenditures	-0.3
One-off allowances for pensioners and public employees	-0.1
III. Other effects	0.1 – 0.2
Cancellation of Country Protection Fund	0.0 – 0.1
Other	0.1
Total (I.+II.+III.)	0.0 – 0.1

Note: As a percentage of GDP. The positive and negative prefixes indicate deficit-reducing and deficit-increasing effects, respectively. The sum of partial data may differ from the aggregated values because of the rounding.

Source: MNB

announced tax cuts will be offset by a rise in tax revenues due to significant increases in wages and consumption.

According to our forecast, in 2020 the budget deficit may range between 0.6–1.4 percent depending on the degree of utilisation of the Country Protection Fund, and thus the deficit target may be achieved with the partial saving of the reserves (Table 5-4). In our projection, we expect lower tax revenues compared to the appropriation, as in the case of the main tax bases we foresee lower growth than the Budget Act. At the same time, revenues falling short of the appropriations are partly offset by the assumption in our forecast that the co-financing related to the EU expenditures and the expenditures related to the home-building subsidy will be lower than those adopted in the Budget Act. The amount of the Country Protection Fund became 0.8 percent of GDP, i.e. higher than in the previous years, which may ensure achievement of the deficit target if the revenues fall short of the appropriation. Accordingly, assuming utilisation of the reserves, next year's deficit is estimated to amount to 1.4 percent of GDP, which, however, may be reduced to the targeted 1.0 percent by partial saving of the reserves.

In the absence of a statutory appropriation, a technical forecast is prepared for 2021, which shows a declining deficit path. The shrinking of the deficit relative to 2020 is mainly attributable to the rise in tax revenues as a result of economic growth. Similarly to the June forecast, the accrual-based deficit is still expected to be 0.5–1.3 percent of GDP in 2021.

5.3.4 Risks surrounding the baseline scenario

Our forecast continues to be significantly affected by uncertainty related to the utilisation of EU funds, the structure of payments and the transfers received from the EU. Absorption of the transfers affects the accrual-based balance and real economy developments, while the advance subsidies and their receipt influence government debt. In the years ahead, advance payments are expected to decrease, and the reimbursement of the previously paid advances may also be gradually received by the budget, and therefore the EU transfers could help the swifter reduction of the debt in the future. The real economic impact of payments, i.e. the effective utilization of EU funds will diminish after 2019.

There was keen interest in several measures of the Family Protection Action Plan in the first months. The fiscal effects estimated for the individual years may even be different from the baseline scenario, depending on the degree of the deviation in the utilisation of the benefits on the whole

Table 5-4: Differences between our forecast and the appropriations set out in the 2020 Budget Act

	Difference from appropriation
I. Central government revenues	-0.6
Consumption taxes	-0.4
Taxes on labour	-0.1
Payments by economic organisations	-0.1
II. Central government expenditures	0.1
Pension expenditures	-0.1
Housing subsidies	0.1
EU funds co-financing	0.1
III. Other effects	0.1 – 0.9
Cancellation of Country Protection Fund	0.0 – 0.8
Other	0.1
Total (I.+II.+III.)	(-0.4) – 0.4

Note: As a percentage of GDP. The positive and negative prefixes indicate deficit-reducing and deficit-increasing effects, respectively. The sum of partial data may differ from the aggregated values because of the rounding.

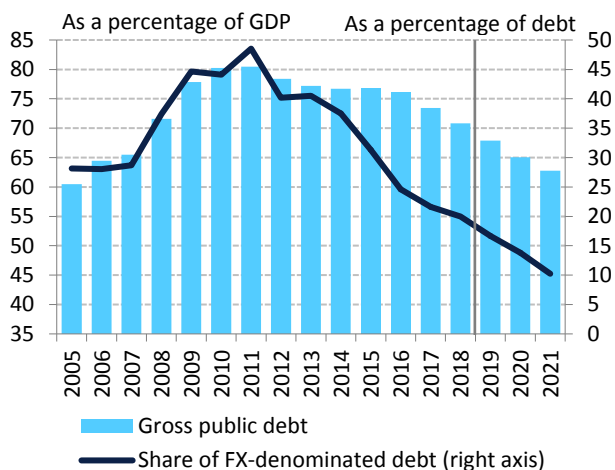
Source: MNB

and in terms of their distribution over the years, as compared to the preliminary expectations. One risk in 2020 is that, in parallel with the lower expenditure appropriations, expenditures carried over from previous years (residuals) may occur at many budgetary institutions, but the significantly increased reserves provide coverage for them.

5.3.5 Expected developments in public debt

According to preliminary data, at the end of 2019 Q2, the gross government debt-to-GDP ratio was 68.7 percent (Chart 5-10). The debt ratio fell significantly, by 5.3 percentage points year-on-year. In contrast to previous years, the debt ratio declined further in 2019 Q1 and Q2 as well from the 70.8 percent at end-2018. In addition to robust economic growth, the moderate net financing need also contributed to the decline.

According to our forecast, assuming a constant end-2018 forint exchange rate, the gross government debt-to-GDP ratio will fall to 67.9 percent by end-2019, and thus the debt rule of the Fundamental Law is expected to be complied with this year as well. As a result of the economic growth and the moderate deficit, government debt will decline rapidly over the forecast horizon. According to our projection, between 2019 and 2021 the value of the government debt ratio will decline by around 2.7 percentage points each year and may be down to nearly 63 percent by end-2021. By end-2019, the share of foreign currency within the central government debt may be around 17 percent, subsequently declining to nearly 10 percent over the forecast horizon, which may further reduce Hungary's external financial vulnerability.

Chart 5-10: Gross public debt forecast – calculated with unchanged (end-of-2018) exchange rate over the forecast horizon

Source: MNB

6 Special topics

6.1 An in-depth analysis of the determinants of the deteriorating global activity

The growth rate of global trade has slowed considerably in the recent period, primarily owing to the intensification of **trade tensions between the United States and China**. The deceleration in China's economic performance, the **uncertainties surrounding Brexit and the weak worldwide performance of the manufacturing sector** all pointed to a deceleration in global growth, which – via the euro area (Germany) – also has an impact on the Central and Eastern European region (including Hungary), primarily through the real economy channel. **As a small, open economy, Hungary is strongly exposed to changes in external activity**, which may restrain the dynamics of domestic industrial production and exports both through direct and indirect channels. In addition to macroeconomic data, recent developments in goods and financial markets may also signal mounting fears of a recession, which highlights the importance of analysing the developments behind the global downturn.

Table 6–1: Evolution of tariffs between the United States and China

Effective date of disposal	USA	China
February 2018	Announcement of tariffs on solar panel and washing machine imports	
March-April 2018	Tariffs imposed on steel (25 percent) and aluminium (10 percent) products	China's response: Tariffs imposed on 128 products imported from the USA, including aluminium, fruits, meats and wine
July 2018	25 percent tariff on USD 34 billion of Chinese goods	China's response: 25 percent tariff on USD 34 billion of US goods (including agricultural products)
August 2018	25 percent tariff imposed on Chinese goods worth USD 16 billion	25 percent tariff imposed on American goods worth USD 16 billion
September 2018	The USA announces a 10 percent tariff on USD 200 billion worth of Chinese goods	China retaliates with 5–10 percent tariffs on USD 60 billion worth of US goods
May-June 2019	After the failure of a series of negotiations, the USA raises the tariffs imposed in September 2018 to 25 percent	In response, China also raises the tariffs imposed in September 2018 (to 5–25 percent)
September 2019	USA imposes tariffs on Chinese goods worth USD 125 billion	China retaliates with 5–10 percent tariffs on US goods worth USD 25 billion (including US oil)
October 2019	Tariffs are to be raised from 25 percent to 30 percent on the existing USD 250 billion worth of Chinese imports	
December 2019	Tariffs may be imposed on an additional USD 175 billion worth of Chinese goods from 15 December	Tariffs may be imposed on an additional USD 50 billion worth of US goods from 15 December
Value of products with elevated tariffs:	USD 375 billion (+USD 175 billion envisaged)	USD 135 billion (+USD 50 billion envisaged)

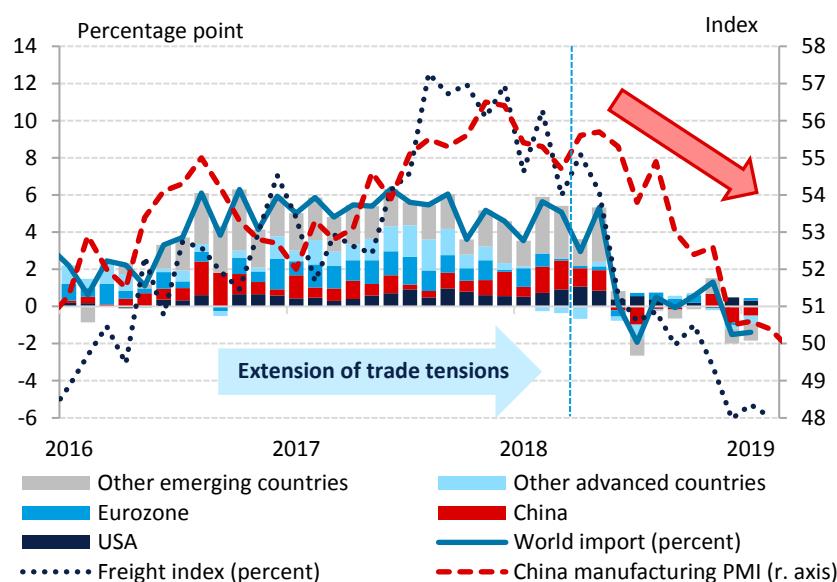
Source: MNB, based on press releases

Owing to the significant weight of the USA and China in global imports, the **US–Chinese trade tensions are deemed to be the greatest risk to growth** by market participants. The tariff increases imposed and envisaged may have far-reaching consequences, which may **restrain global economic growth through various channels**. The primary channel materialises through direct and indirect external trade relations, but the increase in tariffs may also have a negative influence on the direction and volume of FDI flows, economic prospects and commodity markets. The increase in the tariffs imposed on imports to the United States started in February 2018. **During the year and a half since then, the USA has raised the tariffs on Chinese imports worth more than USD 375 billion**, with predictable retaliation on the part of China (Table 6-1). **At**

present, US imports worth USD 135 billion are subject to higher tariffs in China, including crude oil. Looking ahead, the US government envisages the introduction of tariffs on yet another USD 175 billion worth of imports and the raising of existing tariffs, which China may sanction by raising the tariffs on additional US goods and potentially by banning the imports of US agricultural products.

As confirmed by US and Chinese macroeconomic data, the effect of the tariff increases has already been reflected in the recent weakening of world trade (Chart 6-1). Since September 2018, nearly one half of Chinese imports from the USA have been subject to higher tariffs. In addition to the contraction in goods imports, this also prompted a sharp fall in the freight index of North America measuring total transport by land, air and water. In the US market, agriculture and manufacturing may bear the brunt of the escalation of the trade war. As a result of the mutual tariff increases, US wine and soy beans exports slumped last year, reflecting China's role as the largest import market for the soy beans produced by US farmers. Moreover, in August the US manufacturing sector's Purchasing Managers' Index – falling considerably short of expectations – pointed to a slowdown in the sector for the first time in nine years. As regards China, in addition to decelerating GDP growth, manufacturing prospects have also deteriorated significantly. In addition, in July 2019 the growth rate of Chinese industrial production dropped to a 17-year low, which may point to a more rapid deceleration in the Chinese economy than expected.

Chart 6-1: Annual changes in goods import and freight index, and evaluation of Chinese manufacturing PMI















Note: The Freight Index of North-America includes transportation by land, air and water.

Source: CPB, Bloomberg, Cassinfo, MNB

In addition to the negotiations between the USA and China, another focal point in Asia is coming to the forefront in trade tensions. In early July 2019, Japan announced a restriction on the exports of three key raw materials for South Korea's semi-conductor, display and memory chip production. Due to the tight supplier chains between US and global corporations, the effect of the Japanese export restriction is already being felt in the global semi-conductor market.

The slowdown in global economy also exerts an impact on goods markets. It has been observed in historical comparisons that the deceleration or tightening in global GDP is also reflected in the waning demand for – and thus the prices of – a number of key commodities (oil, industrial metals) (Chart 6-2). From the second half of 2018, prices of industrial metals fell considerably. Of the industrial metals, the prices of aluminium and lead dropped by around 20 percent, while copper was quoted at its 2007 level in August. Global oil prices have been characterised by considerable volatility in recent months. Prices were shaped by a number of opposing effects: the geopolitical tensions in the Middle East pushed prices up, whereas the trade tensions between China and the USA combined with the effect of contracting global demand pointed to lower prices. In its latest forecast, the International Energy Agency adjusted its growth expectations for global oil demand significantly downwards.

Chart 6-2: Average annual change in commodity and precious metal prices

												
	Oil	Coal	Nat. gas	Alu.	Copper	Lead	Nickel	Zinc	Gold	Platinum	Silver	Pallad.
2006	21%	4%	35%	36%	83%	32%	70%	137%	36%	27%	58%	65%
2007	12%	35%	1%	3%	7%	103%	79%	6%	16%	15%	17%	10%
2008	41%	101%	57%	-3%	-1%	-8%	-44%	-43%	26%	23%	13%	-2%
2009	-26%	-39%	-32%	-30%	-11%	0%	-14%	2%	13%	-11%	6%	-2%
2010	34%	38%	-1%	33%	54%	34%	57%	38%	26%	35%	37%	102%
2011	40%	24%	27%	11%	19%	14%	7%	3%	28%	7%	81%	43%
2012	1%	-21%	10%	-15%	-9%	-12%	-22%	-10%	7%	-9%	-10%	-11%
2013	-2%	-12%	3%	-9%	-8%	4%	-14%	-2%	-15%	-4%	-23%	12%
2014	-9%	-17%	-15%	2%	-6%	-2%	14%	13%	-10%	-7%	-19%	11%
2015	-47%	-16%	-32%	-10%	-20%	-15%	-29%	-10%	-8%	-24%	-17%	-14%
2016	-13%	15%	-30%	-3%	-11%	5%	-15%	12%	8%	-5%	10%	-6%
2017	26%	40%	26%	23%	27%	25%	9%	41%	1%	-3%	1%	43%
2018	32%	22%	36%	8%	7%	-3%	28%	3%	1%	-7%	-8%	18%
2019	-9%	-21%	-32%	-16%	-9%	-16%	-6%	-14%	4%	-7%	-4%	48%

Note: 2019 based on the first eight months of the year.

Source: Bloomberg, World Bank, MNB

It is a generally observed phenomenon that **investors' security seeking behaviour** intensifies in situations close to recession. In such periods, precious metals, especially **gold**, are traditionally popular investment instruments. It should also be noted, however, that it is not only in uncertain market conditions that investors shift their focus to gold from other – even low-risk – instruments. Low expected returns on other investments (bonds, shares) also tend to nudge the market toward gold. **The recent increase in the price of gold** may reflect the current **loose interest environment** (the easing already implemented by Fed and ECB), the **negative yields on bonds** and the **recent expansions of central banks' gold reserves**. According to some investors, **rising gold prices may also signal the future erosion of global activity and increased recession risks**.

Besides the macroeconomic effects and the effects exerted on goods markets, investors are also concerned about the **financial market effects** of the trade disputes. **As a consequence of weakening equity market sentiment and falling profit expectations, corporations may be forced to carry out balance sheet adjustments** which, in parallel with growing uncertainty, **may lead to a decline in investment projects**. As a result of the risk aversion characterising markets in the recent period, **the 10-year US bond yield dropped below the 2-year yield in mid-August** – a phenomenon that is considered by analysts to be a **warning sign for a looming recession** based on past experience. Indeed, the phenomenon of the **inverted yield curve** has preceded all nine economic recessions in the USA since the 1950s. Although the phenomenon is not necessarily followed by a crisis, the probability of a deterioration in US and global economic performance has risen considerably in the recent period. Similarly, the New York Fed's recession probability index has also exhibited a sharp rise in recent months.

In line with the weakening and increasingly uncertain external activity, **in 2019 Q2 economic growth decelerated further across Europe**. Growth in the euro area is also negatively affected by the exit of the United Kingdom from the EU and the uncertainty arising from Brexit negotiations, both of which have already taken their toll on the British economy. Falling considerably short of expectations, the economic performance of the UK dropped by 0.1 percent in 2019 Q2, mainly as a result of the contraction in corporate investment. Looking ahead, **confidence indicators point to a decline in construction and manufacturing, and the British economy may even slide into a technical recession in Q3**. So far, negotiations have failed to bring the parties' positions closer together regarding the issue of border control between the Republic of Ireland and Northern Ireland; therefore, along with a no-deal Brexit, further delays in the UK's exit appears as another possible outcome. **A Brexit without a trade agreement** would undermine the economic performance of European countries through significant negative spillover effects, in addition to direct trade channels. The direct effects would primarily materialise in the case of electronic products, transport equipment as well as agricultural products, but **supplier networks would also**

sustain severe damages owing to the low-inventory production processes. The uncertainty surrounding Brexit also affects companies' investment decisions; their postponement, therefore, also suggests slower European economic growth.

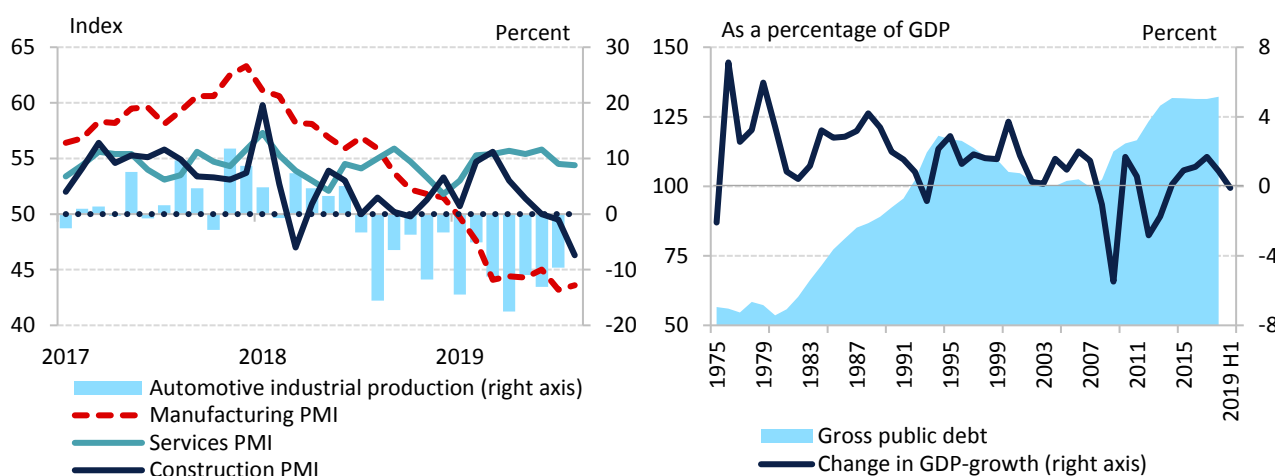
Table 6-1: Change in GDP growth forecasts

	2019			2020		
	Consensus Economics (June 2019)	Consensus Economics (September 2019)	Difference	Consensus Economics (June 2019)	Consensus Economics (September 2019)	Difference
United States	2.5	2.3	-0.2	1.8	1.8	0.0
China	6.3	6.2	-0.1	6.0	5.9	-0.1
United Kingdom	1.4	1.2	-0.2	1.4	1.1	-0.3
Germany	0.8	0.5	-0.3	1.4	1.0	-0.4
Italy	0.1	0.0	-0.1	0.5	0.4	-0.1

Source: Consensus Economics, MNB

Expectations about the euro area's economic performance this year have gradually moderated in the past period, mainly as a result of the worsening outlook for Germany and Italy (Chart 6-2). In the years ahead, the concerns about high government debt, the budget and the major exposure of the banking sector to Italian government securities will weigh heavily on Italian growth prospects. The current level of Italian government debt is extremely high even by historical standards, far more than double the level – 60 percent of GDP – stipulated in the Maastricht criteria (Chart 6-3, right).

Chart 6-3: Annual change in German automotive production and evaluation of business confidence (left-hand panel) and the evolution of Italian GDP and public debt (right-hand panel)



Source: Bloomberg, Destatis, Eurostat, IMF

The deceleration in global imports and the erosion of manufacturing prospects are both reflected in the subdued performance of the German economy and vehicle industry. **The economic performance of Germany** – Hungary's main trading partner – **decreased by 0.1 percent in quarter-on-quarter terms** in 2019 Q2, due to declining exports in the context of weakening industrial performance. Germany's GDP may only grow by 0.5 percent this year and by 1.0 percent next year, but **cyclical and structural effects** both point to a deterioration in economic performance. Although household consumption is still strong, signs of deceleration have already been perceived – in addition to the manufacturing sector – in the labour market, the services sector and the construction industry. In parallel with the European Union's tightening of emission standards in the second half of 2018, the spread of alternative (electric) generation technologies and the contraction in global demand, the downturn of **German vehicle production continues** (Chart 6-3, left). Orders remain below last year's levels, putting enormous adjustment pressures on German vehicle manufacturers, which in turn may result in the revision of previous strategies, alteration of development plans, cost-cutting and cost optimisation measures and a possible realignment of production. As a result, **regional and German industrial production trends have deviated from each other in recent months**. The deterioration in global – in particular, German – economic activity, may be partly offset

in the short term by the domestic industrial product structure and the effect of previous FDI. Major German car manufacturers may continue the **cost optimisation** commenced in recent years: the **capacity of higher-cost Western European plants may be scaled down, while production may be stepped up in emerging countries (including Hungary) in view of their typically lower operating costs**. At the same time, since the **domestic industry has become deeply integrated into European value chains**, in the medium term, the **weak performance of the German vehicle industry will also spill over to the economic performance of Hungary through the real economy channel**.

7 Breakdown of the average consumer price index for 2019 and 2020

Table 7-1: Decomposition of inflation to carry-over and incoming effects
(percentage points and percent respectively)

	Effect on CPI in 2019			Effect on CPI in 2020		
	Carry-over effect	Incoming effect	Yearly index	Carry-over effect	Incoming effect	Yearly index
Administered prices	0.0	0.1	0.1	0.0	0.3	0.3
Market prices	0.6	2.4	3.0	1.2	1.7	2.9
Indirect taxes and government measures	0.1	0.1	0.2	0.1	0.1	0.2
CPI	0.7	2.6	3.3	1.3	2.1	3.4

Note: The tables show the decomposition of the yearly average change of the consumer price index. The yearly change is the sum of so-called carry-over and incoming effects. The carry-over effect is the part of the yearly index, which can be explained by the preceding year's price changes, while the incoming effect reflects the changes in the recent year. We decomposed these indices to the sub-aggregates of the consumer price index and calculated the inflationary effects of changes in the indirect taxes, administered prices, and market prices (not administered prices excluding indirect tax effects). The subgroups may not sum to the aggregate figure due to rounding.

Source: MNB

Table 7-2: Detailed decomposition of our inflation forecast into carry-over and incoming effects
(percentage points and percent respectively)

	2019					2020				
	Average carry-over effect	Carry-over indirect tax effect	Average incoming effect	Incoming indirect tax effect	Yearly index	Average carry-over effect	Carry-over indirect tax effect	Average incoming effect	Incoming indirect tax effect	Yearly index
Food	1.5	0.0	4.2	-0.3	5.4	1.6	0.0	4.0	0.0	5.6
non-processed	1.6	0.0	7.3	0.0	8.9	0.4	0.0	5.9	0.0	6.3
processed	1.4	0.0	2.9	-0.5	3.8	2.2	0.0	3.1	0.0	5.3
Tradable goods	0.9	0.0	0.6	0.1	1.6	1.0	0.0	0.6	0.0	1.6
durables	0.5	0.0	-0.4	0.0	0.1	0.8	0.0	0.2	0.0	1.0
non-durables	1.1	0.0	0.9	0.2	2.2	0.9	0.0	1.0	0.0	1.9
Market services	1.3	0.0	3.1	-0.2	4.2	1.5	0.0	3.0	0.0	4.5
Market energy	5.3	0.0	1.8	0.0	7.1	0.1	0.0	0.0	0.0	0.1
Alcohol and Tobacco	1.6	0.9	3.1	2.3	7.9	1.4	0.8	1.1	1.8	5.1
Fuel	-5.1	0.0	5.6	0.0	0.5	2.0	0.0	-0.1	0.0	1.9
Administered prices	0.2	0.0	0.6	0.0	0.8	0.3	0.0	1.4	0.0	1.7
Inflation	0.6	0.1	2.5	0.1	3.3	1.2	0.1	2.0	0.1	3.4
Core inflation	1.3	0.1	2.2	0.2	3.8	1.4	0.1	2.0	0.3	3.8

Note: The tables show the decomposition of the yearly average change of the consumer price index. The yearly change is the sum of so-called carry-over and incoming effects. The carry-over effect is the part of the yearly index, which can be explained by the preceding year's price changes, while the incoming effect reflects the changes in the recent year. We decomposed these indices to the sub-aggregates of the consumer price index and calculated their inflationary effects. The subgroups may not sum to the aggregate figure due to rounding.

Source: MNB

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Mátyás Hunyadi

(23 February 1443 – 6 April 1490)

He ruled from 1458 to 1490 as King of Hungary, and had been Czech king from 1469 and Prince of Austria from 1486. Hungarian tradition regards him as one of the greatest Hungarian kings whose memory is preserved in many folk tales and legends. He is also known as Matthias Corvinus, King Matthias the Just or officially as Matthias I, but commonly he is simply denoted as King Matthias.

His father, János Hunyadi, the regent of Hungary, was one of the most outstanding military leaders and strategists in the country's medieval history who triumphed at the Battle of Nándorfehérvár in 1456. Matthias' mother was Erzsébet Szilágyi, and he had an elder brother, László Hunyadi. The future king was brought up by his mother and nurse until the age of six, and was subsequently placed under the supervision of his tutors. János Hunyadi did not have a chivalrous education in mind for his son: first, it was a Polish humanist, Gergely Szánoki who introduced him to the realm of knowledge, then this task was assigned to János Vitéz. Mátyás was brought up and educated in a humanistic spirit to become a versatile and curious-minded person who had been taught canon and constitutional law, arts and Latin. In addition to Hungarian, he also spoke German and Czech.

After the death of László V, his uncle, Mihály Szilágyi, and the armed forces supporting Hunyadi exercised pressure to have Matthias crowned as King of Hungary on 24 January 1458. Even in the early years of his reign Matthias had troubles both with the magnates of the country and Emperor Frederick III of the Holy Roman Empire. As the king was still a minor, parliament appointed Mihály Szilágyi to act as regent on his behalf. However, Matthias did not tolerate any guardianship and pushed his uncle to the background who devised a plot against the king in response. Returning from battle with the Turks, the king had the rebels captured and he imprisoned his uncle in the castle of Világos.

Upon his ascension to the throne the annual income of the treasury hardly exceeded 110 to 120 thousand forints. During his rule spanning thirty-two years the king managed to multiple revenues from taxes. Considering the average of the taxes levied, less the revenues from the Czech and Austrian provinces, this yearly amount approximated 628,000 forints and may as well reached 900,000 gold forints in the most prosperous years. This was still much less than the annual revenue of the western powers of the age. In order to raise the low income of the treasury, reform-like and comprehensive financial actions were needed. Matthias recognised that a centralised, nationwide financial system was the only solution to the problem, and that the royal revenues had to be directed to a single person, the treasurer. The reforms of Matthias were adopted by parliament and his decrees were promulgated on 25 March 1467.

We can get a glimpse of the cultural life in the royal court, which represented the elite of European civilisation at the time, at the partly reconstructed Royal Palace in Visegrád. The most distinguished pieces of the cultural legacy of Matthias are the Corvinian books, richly illustrated volumes of the former royal library.

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