



# INFLATION REPORT



2019  
JUNE

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

*Miklós Zrínyi: The Life of Matthias Corvinus*



# INFLATION REPORT

2019  
JUNE

Published by the Magyar Nemzeti Bank

Publisher in charge: Eszter Hergár

H-1054 Budapest, Szabadság tér 9.

[www.mnb.hu](http://www.mnb.hu)

ISSN 2064-8723 (print)

ISSN 2064-8774 (on-line)

*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 Fiscal and Competitiveness Analysis, Directorate Financial System Analysis and Directorate for International Monetary Policy Analysis and Training of Economic Sciences. 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 19 June 2019.*



# Contents

The Monetary Council's key findings related to the Inflation report .....	7
1 Inflation and real economy outlook .....	11
1.1 Inflation forecast .....	11
1.2 Real economy forecast .....	15
1.3 Labour market forecast .....	22
2 Effects of alternative scenarios on our forecast .....	27
3 Macroeconomic overview .....	30
3.1 Evaluation of international macroeconomic developments .....	30
3.2 Analysis of the production and expenditure side of GDP .....	38
3.3 Labour market .....	45
3.4 Cyclical position of the economy .....	46
3.5 Costs and inflation .....	47
4 Financial markets and interest rates .....	51
4.1 Domestic financial market developments .....	51
4.2 Credit conditions of the financial intermediary system .....	53
5 Balance position of the economy .....	55
5.1 External balance and financing .....	55
5.2 Forecast for Hungary's net lending position .....	57
5.3 Fiscal developments .....	59
6 Special topics .....	66
6.1 Transformation of the retail government securities market .....	66
7 Breakdown of the average consumer price index for 2019 .....	70
List of charts and tables .....	71

## List of boxes

Box 1-1: Impact of the European inflationary environment on domestic prices .....	13
Box 1-2: Assumptions applied in our forecast .....	20
Box 1-3: 'Employees' of zombie companies as labour market reserves .....	23
Box 3-1: Recent divergence in industrial production between the region and Germany .....	43
Box 3-2: Impact of this year's changes to the fringe benefit system .....	50
Box 5-1: Analysis of the 2020 budget bill and the related measures .....	63





# 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. The factors determining inflation continue to show volatility. Therefore, in assessing the outlook, the Monetary Council pays more attention to the measures of underlying inflation capturing persistent trends. A dichotomy remains between the factors determining likely developments in inflation. Buoyant domestic demand is boosting, and, from the second half of the year, weakening external activity is likely to restrain the pace of price increase.*

**In the first quarter of 2019, while risks were strengthening, the global economic expansion continued. The Central and Eastern European region is still the growth centre of the European Union. Global inflation increased slightly in the past months.**

At the beginning of the year, GDP growth in the United States exceeded expectations, while there was no considerable change in Chinese economic growth compared to the previous quarters. European economic activity improved slightly, as a result of temporary effects, but monthly indicators suggest slowdown again for the coming quarters. Although GDP data in the first quarter exceeded expectations in several cases, global economic outlook deteriorated further in the past months. Developments related to international trade policy, the exit of the United Kingdom from the European Union and globally high debts result recurrently in a rise in risks and a worsening in the prospects for economic activity. As seen in the previous quarters, the Central and Eastern European region proved to be the growth centre of the European Union at the beginning of 2019 as well. GDP growth in the region exceeded the expansion in the euro area by more than 3 percentage points.

A general increase in inflation was observed in the past months in parallel with the rise in oil prices. At the same time, core inflation capturing more permanent trends, continues to be subdued in developed economies. Euro area inflation remains below the 2 percent central bank target, while core inflation fell below 1 percent again in May. Inflation rates in the countries of the region increased, and, except in Poland, stand above central bank targets. Following the rise that had lasted until mid-May, global oil prices fell considerably in the past month.

**Due to a deterioration in growth prospects and downside risks to inflation, world's leading central banks' indications shifted to a likely monetary policy loosening.**

The Federal Reserve (Fed) kept its policy rate unchanged in the past quarter. In June, due to increased uncertainty, decision makers emphasised the importance of incoming data, and indicated, they are ready to act as appropriate to meet the central bank's objectives. According to the decision-makers' interest rate forecasts, some council members already expect an interest rate decrease in this year. In parallel with this, market pricings clearly point to an interest rate cut in the second half of the year. After March, the European Central Bank (ECB) modified its forward guidance again in June. According to communications from the ECB, the first interest rate hike shifted to an even later date: interest rates remain at their present levels at least through the first half of 2020, and beyond. Based on the President's latest indications, a growing number of market agents are pricing in the loosening of monetary conditions. In the Czech Republic, the policy rate rose by 25 basis points in May, while the Polish and Romanian central banks left their monetary conditions unchanged in the past quarter. Expected interest rate paths for the coming years shifted downwards in the countries of the region.

**Following favourable investor sentiment characterising the first quarter, international willingness to take risks deteriorated in the second quarter.**

In the past period, money market sentiment worsened, in parallel with a strengthening concern related to global growth and the US–Chinese trade tensions, which was also reflected in an increase in equity market risk indicators. Following a rise in the first months of the year, developed and emerging equity markets fell in May, then in June increased again, as market sentiment became more favourable, and due to the messages referring to monetary easing of the developed countries'

central banks. Developed country yields also decreased considerably, reflecting worsening willingness to take risks and declining interest rate expectations.

**Since March, with a decline in yields over one year, the domestic interbank and government securities market yield curve has become flatter.**

In the last quarter, one and three-month BUBOR rates, partly as a result of a decline in interbank liquidity, increased. Medium and longer term interbank and government securities yields decreased considerably. The greatest decline was observed in the middle section of the yield curves. With higher volatility compared to that observed in the region, the forint exchange rate against the euro depreciated compared to March.

**In the past quarter, the measures of underlying inflation capturing persistent trends were in line with the March forecast. Inflation is expected to decline gradually in the short run and core inflation excluding indirect tax effects to start to decrease from the end of this year.**

From around 3 percent early in the year, inflation rose to 3.9 percent by May. In line with the higher global oil prices, the rise in the consumer price index was caused by the increase in fuel prices. A dichotomy remains between the factors determining likely developments in inflation. Buoyant domestic demand is boosting, and, from the second half of the year, weakening external activity is likely to restrain the pace of price increase. Consistent with this, core inflation excluding indirect tax effects is expected to rise slightly in the coming months, and then, due to external disinflationary effects, mainly stemming from the slowdown of the eurozone, to decline gradually to 3 percent from the end of 2019. The increase of excise duty on tobacco products on a six-monthly basis, which is outside the scope of monetary policy, is likely to raise the consumer price index over the entire forecast horizon. This measure does not cause any second-round effects, consequently, does not influence changes in core inflation excluding indirect tax effects.

**In addition to monetary policy, the new retail government security strategy, the 2020 draft budget and the provisions of the Economy Protection Action Plan to improve competitiveness, are aimed at further strengthening macroeconomic stability and sustainable convergence.**

Attracting strong interest, the new retail government security (Hungarian Government Security Plus – MÁP Plus) was introduced in June. The MÁP Plus is expected to raise households' savings rate, in addition to the structural change of their financial assets. Consequently, an increasing share of rapid wage growth is converted into savings instead of consumption, while the promotion of self-financing also helps to reduce Hungary's external vulnerability. Based on the draft legislation for next year, the budget deficit-to-GDP ratio – with a significant amount of reserves – is likely to decline to 1 percent. After 2019, fiscal policy, will have a counter-cyclical effect in 2020 and, as planned by the Government, in 2021 as well. Announced in recent weeks, the Economy Protection Action Plan is expected to gradually improve the competitiveness of the domestic economy. The above measures jointly strengthen macroeconomic stability, reduce external vulnerability, and contribute to maintain a sustainable convergence path.

**Economic growth is expected to slow gradually from the next quarters, but to remain strong. From the second half of the year, the impacts of subdued European economic activity will be also reflected in a decline in growth in Hungary. Along with this, the convergence of the Hungarian economy will continue over the entire forecast horizon.**

Buoyant domestic demand will continue to play a major role in the developments in economic growth in the coming years. Double-digit wage growth observed in recent years will slow from 2020 but will remain dynamic. While incomes will continue to grow significantly, households' savings rate will increase, also as a result of the introduction of the new retail government security. With a further dynamic growth in credit markets, the investment rate is likely to continue to rise further this year, and looking ahead, to stabilise around 28 percent. The housing market cycle may reach its maximum in 2020, and from 2021, the number of new homes will decline. Mainly due to the slowdown in the euro area, weakening growth in external markets in the coming years will also reduce Hungarian GDP growth. The actual absorption of EU funds will peak in 2019, then decline, while the 2020 government budget will remain countercyclical, in line with the lower deficit target.

The economic expansion is likely to slow gradually following last year's growth of nearly 5 percent. The domestic economy is expected to grow by 4.3 percent in 2019 and by 3.3 percent in 2020-2021. In the coming years, the implementation of

the government measures announced in order to improve competitiveness may contribute maintaining dynamic GDP growth over the long term. With the maintenance of Hungary's growth surplus, economic convergence to the euro area will continue.

**Buoyant expansion in the corporate and household credit markets is expected to continue.**

In the first quarter of 2019, corporate lending and household loans outstanding increased by 13 percent and more than 6 percent, respectively, year on year. The structure of growth in lending continues to be sound. SME loans outstanding expanded at the same pace as the stock of corporate loans. The corporate sector's leverage ratio, which is low in both historical and international comparison, points to a further expansion in lending in the coming quarters. As far as housing loans are concerned, housing loans with interest rates variable within one year ceased to exist almost completely. In the first quarter of 2019, a mere 5 percent of newly granted loans had up to one-year initial rate fixation, while two-thirds of lending already had interest rate periods longer than 5 years. Accordingly, new loans for housing have gradually led to a decline in the interest rate risk of the outstanding loan portfolio. In line with the low interest rate environment, dynamic wage growth and supportive government measures, household loans outstanding are expected to expand further.

**In parallel with the stabilising of the external financing capacity at a high level, the current account balance is expected to improve again from 2020. As a result of the persistent external financing capacity, net external debt will decline to close to zero by 2021.**

As a result of the temporary decline in the trade balance in 2019, the current account surplus is likely to decrease. The underlying reason is that decelerating external demand as well as rising domestic investment and consumption point to lower net exports in 2019. However, as a result of the expanding absorption of EU transfers, the external financing capacity will be above 2 percent of GDP in 2019 as well. After 2020, the completion of new export capacities will result in an upturn in the trade surplus again. Approaching the end of the budget cycle, the absorption of EU funds will decline slightly. As a result, the external financing capacity will be around 2–2.5 percent of GDP in the coming years. Outflows of debt liabilities will continue, reflecting the stable surplus of the net external position, and thus the net external debt may decline to nearly zero by 2021.

In 2019, the budget deficit is expected to be lower than the 1.8 percent statutory appropriation. Based on the 2020 budget bill, the deficit target will fall to 1 percent next year. After 2019, fiscal policy, will have a counter-cyclical effect in 2020 and, as planned by the Government, in 2021 as well. This may be further strengthened if fiscal reserves will not be used. In line with Hungarian and EU fiscal rules, the government debt will decline to 62.9 percent by the end of the forecast period. In parallel with this, the further decrease in the share of foreign currency within government debt will also reduce the vulnerability of the economy.

**The macroeconomic outlook is surrounded by both upside and downside risks.**

In addition to the baseline projection in the June Inflation Report, the Monetary Council highlighted two alternative scenarios. 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 of the baseline scenario. Materialisation of the scenario presenting strengthening in the growth risks affecting the euro area results in a lower inflation path and more restrained growth compared to the baseline scenario. In addition to the scenarios set forth above, the Monetary Council discussed, as further risks, scenarios that present a larger impact of consumption expansion on inflation, a looser external monetary policy environment as well as the materialisation of competitiveness reforms.

## SUMMARY TABLE OF THE BASELINE SCENARIO

(Forecast based on endogenous monetary policy)

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

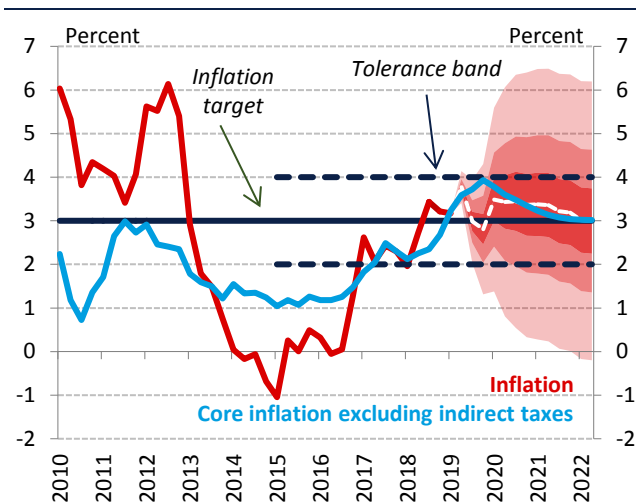
<sup>1</sup> Based on seasonally unadjusted data.<sup>2</sup> As a percentage of GDP.<sup>3</sup> For full-time employees.<sup>4</sup> MNB estimate.<sup>5</sup> The lower value of the forecast band shows the ESA balance if the Country Protection Fund will be used while the higher value shows the ESA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

# 1 Inflation and real economy outlook

## 1.1 Inflation forecast

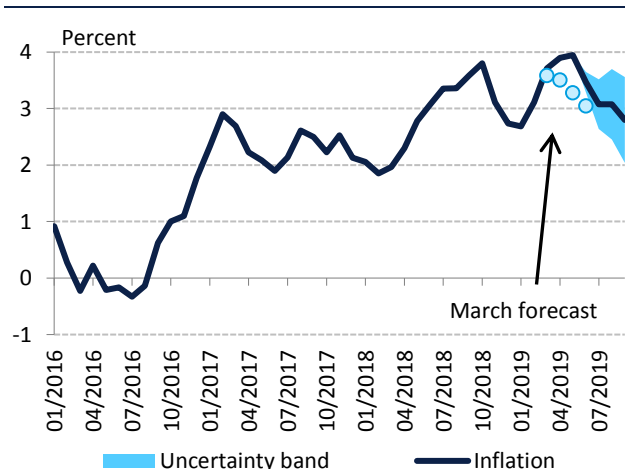
Starting from around 3 percent early in the year, inflation rose to the upper third of the tolerance band in recent months. According to our current forecast, in the coming months the consumer price index will fall below 3 percent as a result of the significant decline in fuel prices in the past period and due to base effects. From the end of the year, however, owing to base effects and the newly announced government measures, inflation will increase again and will only return to the 3-percent level by the end of the forecast period. The factors affecting core inflation excluding indirect tax effects reflect two different trends: over the short run, this indicator will rise slightly as a result of buoyant domestic demand, but due to external disinflationary effects – stemming mainly from the economic slowdown in the euro area – it will then gradually drop to 3 percent from the end of the year. As an effect, which falls outside the scope of monetary policy, the regular increases in excise duties on tobacco products every 6 months contribute to raising the consumer price index over the entire forecast horizon. This measure does not cause any second-round effects, so it does not affect the development of core inflation excluding indirect taxes.

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

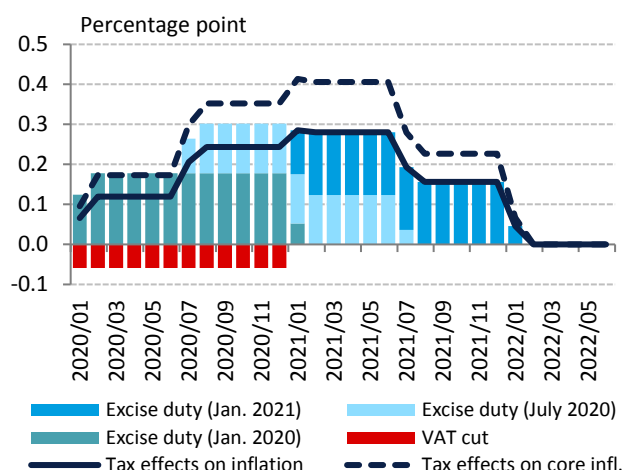


Note: Annual change. The uncertainty band shows the root mean squared error of previous years' near-term forecasts.

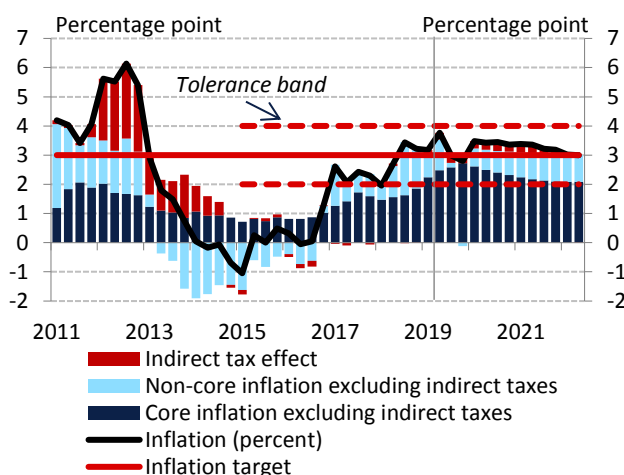
Source: HCSO, MNB

Starting from around 3 percent early in the year, inflation rose to the upper third of the tolerance band in recent months (Chart 1-1). The factors affecting the expected development of inflation reflect two different trends. Sustained buoyant domestic demand increases price dynamics, while deteriorating external growth moderates price dynamics from 2019 H2. According to our current forecast, **in the coming months the consumer price index will decline to below 3 percent** as a result of the sharp drop in fuel prices in the past period and due to base effects (Chart 1-2). From the end of the year, however, owing to base effects and the newly announced government measures, inflation will increase again and will only return to the 3-percent level sustainably by the end of the forecast period.

**Core inflation excluding indirect tax effects is expected to rise slightly in the months ahead. However, due to the external disinflationary effects – stemming mainly from the economic slowdown in the euro area – it will gradually fall to 3 percent from the end of the year.** Buoyant 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 starting from 1 July 2019. Core inflation excluding indirect tax effects will be slightly higher than our March projection over the entire forecast horizon. The difference is primarily explained by the effect of the stronger-than-expected wage dynamics reflected in the inflation of market services. **From 2019 H2, subdued external inflation may even more decelerate further rises in core inflation excluding tax effects** (for more details, see Box 1-1). However, by the end of the

**Chart 1-3: Inflation contribution of the newly announced tax changes**

Source: Draft Budget Act, MNB

**Chart 1-4: 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	3.6	3.5	3.1
Core inflation		2.5	4.0	3.9	3.4
Non-core inflation	Unprocessed food	6.9	6.6	3.7	3.6
	Fuel and market energy	8.2	-0.5	2.3	3.1
	Regulated prices	0.1	0.6	1.8	2.6
	Total	3.6	1.5	2.3	2.9
<b>Inflation</b>		<b>2.8</b>	<b>3.2</b>	<b>3.4</b>	<b>3.3</b>

Note: Based on seasonally unadjusted data. Source: MNB

monetary policy horizon, **core inflation excluding indirect tax effects will gradually decline to around 3 percent.**

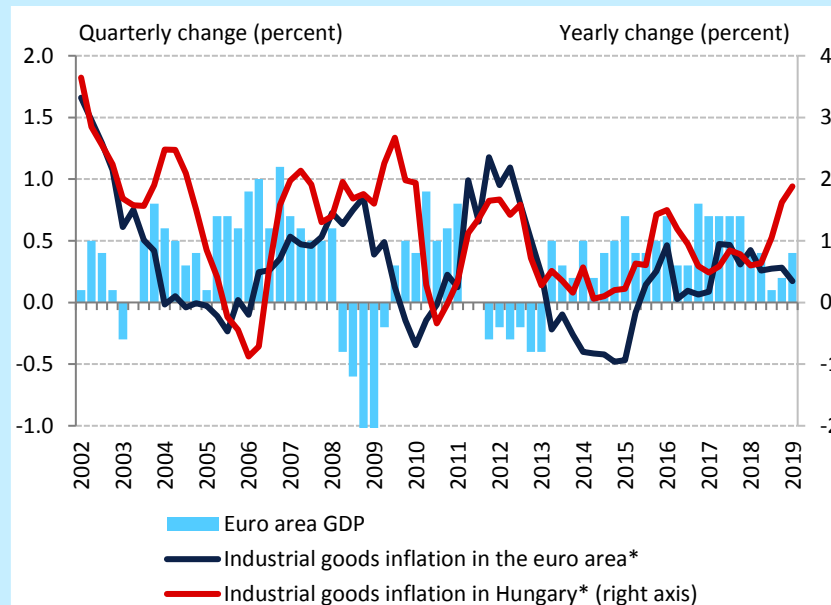
**The persistently subdued external inflation environment moderates the rate of price increases in Hungary. In its latest forecast, the ECB projects that price dynamics will fall short of its inflation target over the entire forecast horizon.** Euro area inflation was revised 0.1 percentage point downwards by the ECB for this year and the same degree upwards for next year in view of the global oil prices and the related base effects. At the same time, the core inflation forecast, which is more influential in terms of price dynamics in Hungary, declined by 0.1 percentage point for 2019.

**Changes in indirect taxes point to an increase in inflation over the forecast horizon** (Charts 1-3 and 1-4). The next excise tax hike for tobacco products will occur in July 2019. Compared to the tax hikes implemented in the first two steps (September 2018 and January 2019), the ensuing pass-through is expected to be similar but faster than in the previous years. Based on the tax package submitted by the government for next year, excise tax hikes will continue in three steps between January 2020 and January 2021 (increasing the price of a pack of cigarettes by approximately 30 forints on average). 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 (for more details, see Box 5-1).

**As regards non-core inflation, the rate is expected to be moderate this year and then gradually accelerate to nearly 3 percent in the coming years** (Table 1-1). Fuel price inflation will temporarily sink into negative territory over the short run, and then – after the effects of the price volatility observed at end-2018 and in 2019 H1 fade out – it will be around 3 percent starting from 2021. Compared to our March assumption, in conjunction with significant volatility, futures prices of Brent expressed in euros remained unchanged overall. 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 tapered off, the price dynamics of non-core inflation items will be around 3 percent from mid-2021.

**Box 1-1: Impact of the European inflationary environment on domestic prices**

**Hungary is a small, open economy, and thus global developments may have a significant impact on changes in consumer prices.** International economic activity may be reflected in persistent domestic inflation developments via import prices and its impact on domestic growth. **Considering that Hungary's most important trading partner is the euro area and within the euro area Germany, growth in this country (group of countries) and the price dynamics of industrial goods in Germany are key determinants of developments in inflation in Hungary.**

**Chart 1-5: Changes in euro area GDP and tradables inflation in the euro area and Hungary**

Note: \* Based on data excluding indirect taxes. Calculated using HICP data in the case of the euro area.

Source: Eurostat, HCSO, MNB calculations

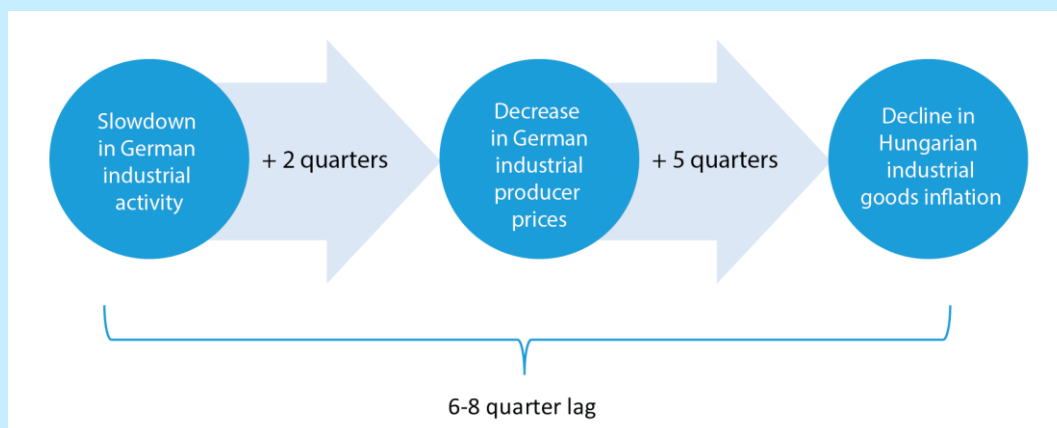
First, we investigated the effects on prices of the economic slowdown in the euro area. In the period following the turn of the millennium, the expansion of the euro area's economic output came to a halt several times – a total of four times – or possibly turned into recession, which was also reflected in the inflation developments (Chart 1-5). **The slowdown in euro area economic activity is reflected in euro area and Hungarian price dynamics with different degrees of delay.**

**In parallel with the euro area deceleration seen from 2002 Q2, industrial goods inflation declined, although in Hungary the related disinflationary effects were concealed by other effects.** Following the introduction of inflation targeting, a general deceleration in domestic inflation was observed. During the **2008–2009 crisis**, there was a major decline in the euro area's economic output. Weak economic activity **in the euro area also reduced the price dynamics of industrial goods, and roughly three quarters later weakening inflation was observed in this product group.** In the case of Hungarian industrial goods, the price index decreased in the 6<sup>th</sup> quarter following the crisis. The euro area debt crisis restrained growth rates in the group of countries from mid-2011. The slowdown **was reflected in industrial goods inflation 6 quarters later both in the euro area and Hungary.**

**Euro area economic performance decelerated gradually from early 2018. According to our results, we can expect the disinflationary effects to appear via domestic industrial goods prices from 2019 H2.**



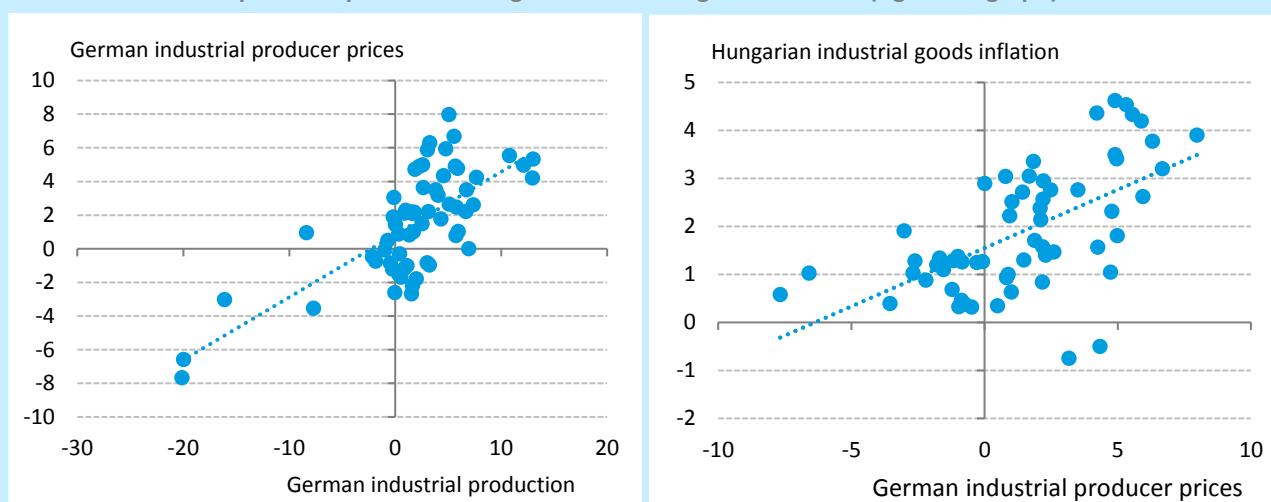
Chart 1-6: Flow chart of the effect of slowdown of German industrial production on Hungarian inflation



Source: MNB

In addition to the general slowdown in global economic activity, rising trade tensions and challenges impacting the vehicle industry (lower car sales in China and changing global vehicle industry trends) also restrained growth. Consequently, **industrial performance in Hungary's most important trading partner – Germany – and the related pricing effects were affected by unfavourable circumstances. The growth rate of German industrial production started falling from early 2018, and as a result of the WLTP (Worldwide Harmonized Light Vehicle Test Procedure) and the possible diesel car restrictions it fell into negative territory from the middle of last year. Based on our analysis, the slowdown in industrial activity reduces German producer prices with a delay of approximately one-half year, and the average pass-through of this into the rate of inflation for Hungarian industrial goods (via imported prices) takes 5-6 quarters.**

Chart 1-7: Connection between German industrial production and producer prices (left side graph) and German producer prices and Hungarian industrial goods inflation (right side graph)



Note: Quarterly data. In the left graph, German industrial producer prices are presented with a 2-quarter lag and in the right graph Hungarian industrial goods inflation data with a 5-quarter lag.

Source: Eurostat, HCSO, MNB calculations

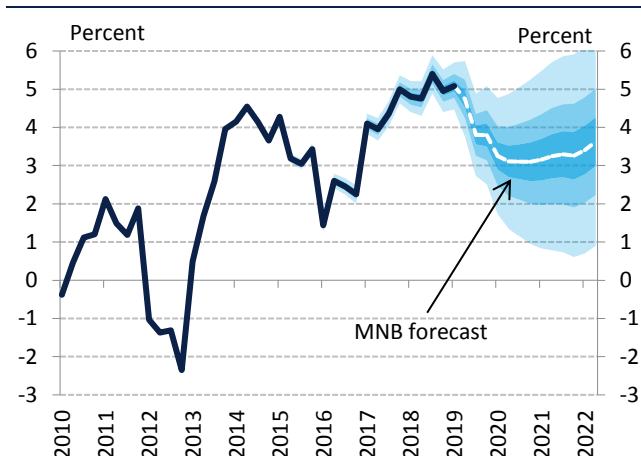
**Based on the experiences of the past nearly two decades, in the case of Hungarian industrial goods prices, the price index decreased from the 6<sup>th</sup> quarter following euro area deceleration. In order to achieve a better understanding of the slowing industrial activity and processes experienced in the past quarters, we examined the effects of the German pricing mechanism on Hungarian prices. Our results showed that the slowdown in German industrial activity is reflected in German producer prices with a lag of approximately one-half year. After that, the effect occurs in the price dynamics of the Hungarian industrial goods with a lag of 5–6 quarters on average. According to our expectations, the effects of the external economic slowdown may be seen in domestic industrial goods prices starting from 2019 H2. This is in line with the results of our analysis regarding the euro area.**



## 1.2 Real economy forecast

After the extremely strong performance in 2018, economic growth will remain brisk this year as well. Following the vigorous growth at the beginning of the year, in parallel with the high bases from the previous year and a decline in international economic activity, the growth rate is expected to decelerate. According to our assumptions, the deteriorating growth expectations in Hungary's export markets (mainly the euro area) will restrain the expansion of Hungary's GDP. In addition, the double-digit wage growth observed in recent years will decline to some extent from 2020, and thus we expect slower expansion in households' income. According to the draft budget bill which was submitted, the government is planning a much lower deficit for the 2020 budget, which will thus be even more countercyclical. In line with our previous assumptions, the actual absorption of EU funds will peak in 2019 before declining gradually. At the same time, the housing market cycle may reach its high point in 2020. On the whole, this year's economic growth of 4.3 percent will slow to 3.3 percent in 2020 and 2021. In our forecast, economic convergence with the developed European economies continues, and thus Hungary's growth surplus may be around 3 percent in 2019 and 1.5–2 percent looking ahead. In terms of long-term, sustainable economic growth, structural measures targeting the competitiveness of the economy will become increasingly important.

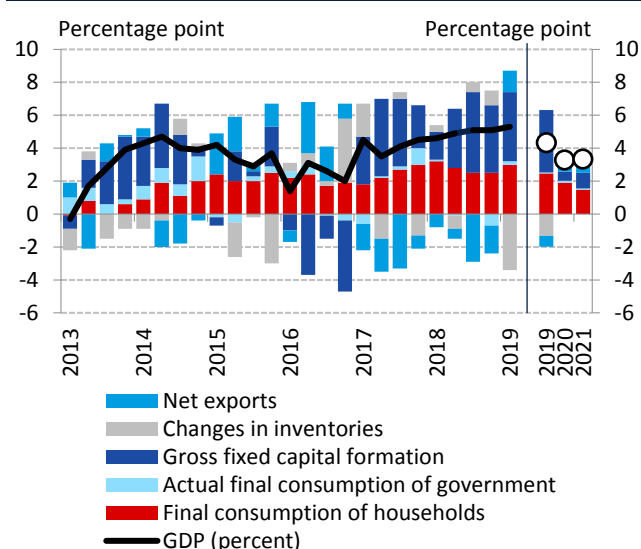
Chart 1-8: Fan chart of the GDP forecast



Note: Based on seasonally and calendar adjusted and reconciled data.

Source: HCSO, MNB

Chart 1-9: Contributions to annual changes in GDP

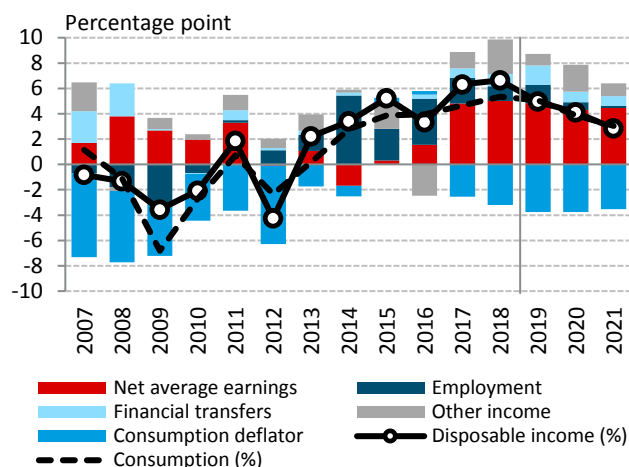


Source: HCSO, MNB

**In 2019 Q1, Hungary's gross domestic product expanded by 5.3 percent in year-on-year terms, while QoQ growth figure was 1.5 percent.** Following strong growth at the start of the year, in parallel with the high bases from the previous year and weakening international economic activity, **the growth rate is expected to decelerate for the remainder of 2019.** According to our assumptions, economic growth may have reached its peak at the beginning of the year, and in the coming years the implementation of structural measures that improve competitiveness may contribute to sustaining dynamic GDP growth over the long term. If our assumptions materialise, growth is projected at 4.3 percent in 2019 and 3.3 percent both in 2020 and 2021 (Chart 1-8). In our forecast, economic convergence with the European economies continues, and thus Hungary's growth surplus may be around 3 percent in 2019 and 1.5–2 percent looking ahead. Economic growth will still be determined by domestic demand. In line with the expansion in the corporate lending market, there will be an upswing in corporate investment, and favourable underlying income trends will continue to support consumption growth (Chart 1-9). Starting from 2020, the rate of economic growth will decline in parallel with a deceleration in real wages, the decrease in public investment following a high base and subdued external demand.

**Household consumption is expected to keep expanding,** and thus the role of consumption in economic growth will remain dominant. Growth in households' consumption expenditures is strongly supported by the favourable underlying income trends related to wage increases, which are higher than in our previous forecast, and to the expansion in employment (Chart 1-10). At the same time, demographic trends represent an increasingly effective constraint to the expansion of employment. The previously accumulated high net financial wealth and high level of consumer confidence as well as the second-round effects of

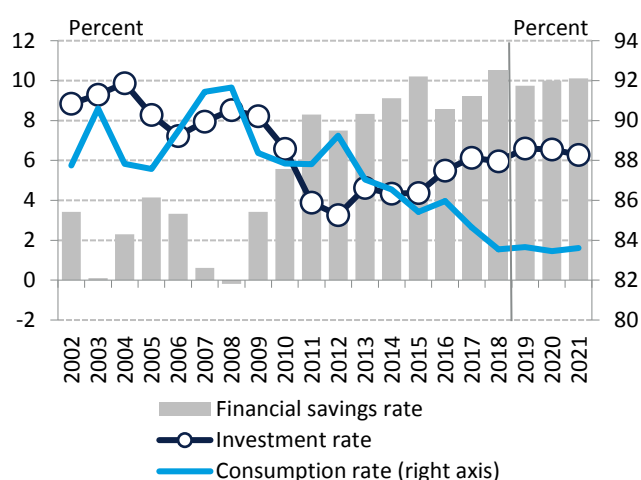
Chart 1-10: Decomposition of personal disposable income



Note: Annual changes.

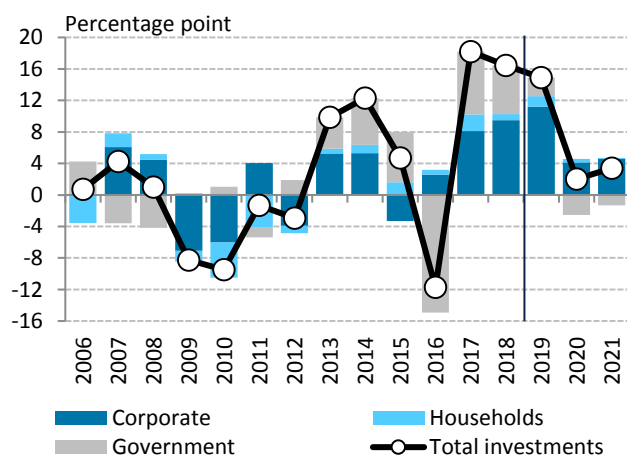
Source: MNB

Chart 1-11: Evolution of households' consumption, investment and financial savings rates as a percentage of disposable income



Source: HCSO, MNB

Chart 1-12: Evolution of total and sectoral investments



Note: Annual changes.

Source: HCSO, MNB

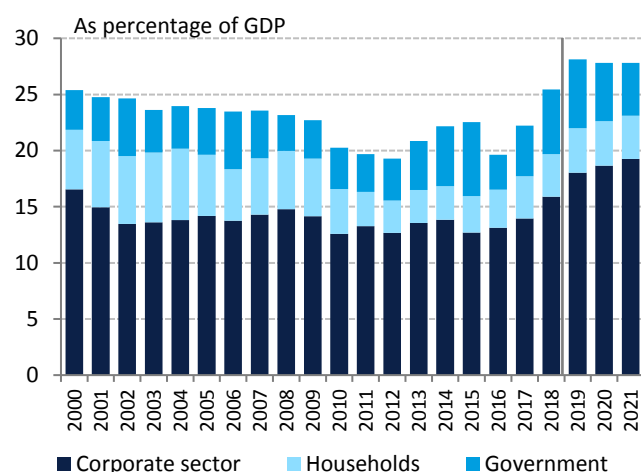
the pick-up in household lending and the housing market also contribute to the expansion in consumption. As a result of the new savings schemes offered by the state (Hungarian Government Security Plus; for more details, see Special topic 6.1), **households' savings rate may increase** (Chart 1-11), **and thus the net financial savings of the household sector may significantly exceed 5 percent of GDP over the entire forecast horizon.**

Growth in household lending continues to strongly support the rise in household consumption and investment. Looking ahead, the dynamic rise in the gross volume of new credit agreements will continue. Banks expect continued expansion in demand both for consumer and housing loans. In addition to the low interest rate environment, the high level of consumer confidence, the increase in real wages and the government's family protection package starting from 2019 also contribute to the pick-up in credit demand. According to our assumptions, as a result of the stock-increasing effect of the **family support programme** and the stock-reducing effect of cancellations of mortgages, **annual growth in household loans may be around 1 percentage point higher** over the forecast horizon. Accordingly, our overall picture of the underlying trends of household lending did not change significantly compared to the previous forecast. Thus, over the forecast horizon, **household lending is expected to rise gradually, by around 5–7 percent on average in the coming years.**

In line with the favourable underlying income trends, households' consumption expenditures are expected to increase further in a wide range of various consumer product groups. In the past period, **the consumption of services and durable goods increased considerably.** Continued expansion in the consumption of durable goods is also strongly supported by the housing market cycle. The expansion in the consumption of services is attributable to a rise in underlying income trends.

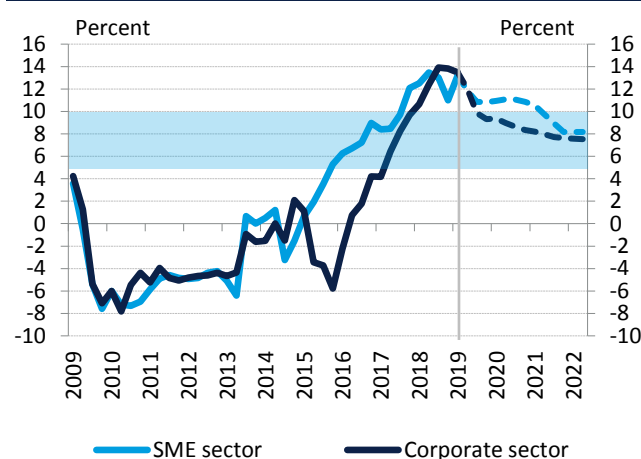
**Whole-economy investment is expected to grow over the entire forecast horizon.** According to our projection, this year all three sectors' contribution to investment growth will be positive. Nevertheless, **from 2020, the decline in government investment** – mainly due to base effects – will restrain the growth rate of whole-economy investment and indirectly that of the economy as well (Chart 1-12). **The countercyclical fiscal policy planned for 2020 will also contribute to the decline in the investment of the fiscal and quasi-fiscal segments.** Looking ahead, from last year's 25.5 percent **the whole-economy investment rate will rise**

Chart 1-13: Evolution of investment rate by sectors



Source: HCSO, MNB

Chart 1-14: 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

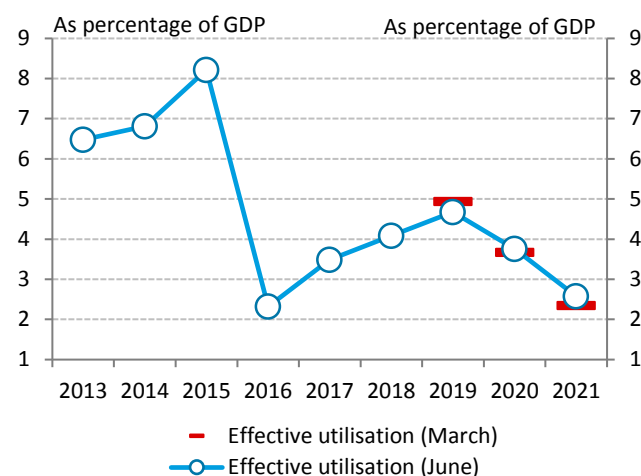
to above 28 percent this year and may be around that level over the entire forecast horizon (Chart 1-13).

Developments in corporate sector investment activity will be favourable. With the continued, double-digit expansion in SME loans, the corporate credit market will remain one of the key drivers of economic growth in the coming years. Compared to the current level, overall corporate loan expansion is projected to decelerate, but remain at a nearly double-digit rate over the forecast horizon (Chart 1-14). The corporate sector's leverage ratio, which is low in both historical and international comparison, continues to provide ample room for credit expansion. In addition, the expansion in the corporate credit market is strongly supported by the Funding for Growth Scheme Fix, which was launched in early 2019 and will be supplemented from 1 July 2019 with the HUF 300 billion initial credit line allocated under the central bank's new monetary policy instrument, the Bond Funding for Growth Scheme (BGS).

Expansion in corporate investment may be supported by the favourable financing environment as well as an increase in domestic demand, high capacity utilisation and the tight labour market. The corporate sector's underlying investment trends are favourable, as also corroborated by the figures available for Q1. The previously announced large investment projects and capacity expansions contribute to the upswing in corporate investment over the entire forecast horizon. The actual absorption of EU funds, a considerable portion of which serves the purpose of economic development, also supports the rise in corporate investment (primarily in 2019 and afterwards only to a decreasing extent).

In line with the expansion in home-building, household investment is expected to increase over the entire forecast horizon, also supported by the government measures announced in February (expansion of the Family Housing Benefit (CSOK) scheme, prenatal baby support) and by the investment activity connected to the maintenance and renovation of dwellings. As only a part of the measures will be implemented this year, they are expected to boost household investment mainly in 2020–2021. Our forecast is based on the assumption that housing starts will peak in 2020, which is also corroborated by the decreasing number of housing projects being launched. At the same time, the number of building permits is still high, and the gradual rise in housing starts also contributes to the further expansion in household investment.

Chart 1-15: Effective use of EU funds



Source: Ministry of Finance, MNB

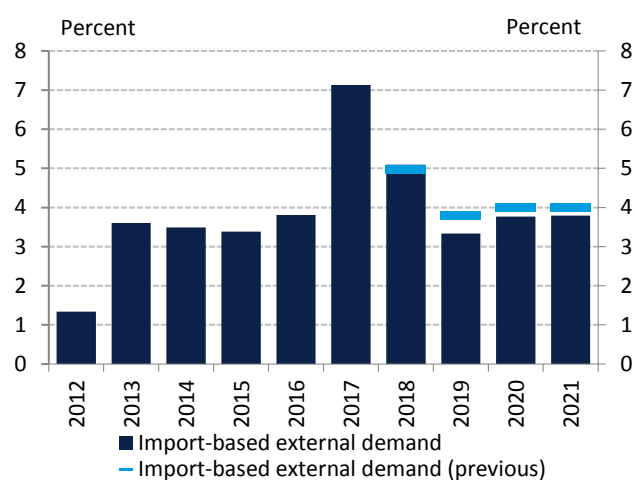
**In our forecast, we expect expansion in public investment until 2019, also supported by an upswing in the actual absorption of EU funds. From 2020, however, actual absorption will gradually decline (Chart 1-15), and thus we expect a decrease in public investment in 2020–2021.**

Compared to the March Inflation Report, **external demand is expected to develop more slowly** (Chart 1-16). Against the background of a general slowdown in global economic activity, expectations regarding the economic performance of the euro area this year also declined gradually in the past period, which is primarily attributable to the worsening outlook in Germany and Italy. **International institutions think that the slowdown is temporary and therefore they only slightly amended their growth expectations for 2020. The growth prospects of the euro area continue to be dominated by downside risks.** Identifiable risks include the deterioration in industrial production observed in the past period primarily due to the trade tensions, the vulnerability of Italy stemming from the high government debt, the indirect effects of deceleration in the Chinese economy and the uncertainty resulting from the fragile financial environment in the emerging markets. The uncertainty surrounding the exit of the United Kingdom from the EU continues to pose a risk.

During the past quarters, there was a major upswing in Hungary's industrial output and in goods exports in parallel with that, while both the performance of the German industry and orders in manufacturing weakened significantly. Nevertheless, the partial detachment of the Hungarian industry from German economic activity is considered a temporary phenomenon. Accordingly, as a result of moderate economic growth in Hungary's main trading partners and the subdued performance of the German automotive industry, **Hungarian exports in 2019 may fall short of the previous forecast.** Nevertheless, in the past period strong performance by industry was seen across a widening range of sectors. In addition, with the installation of new export capacities affecting a wide range of industrial subsectors, underlying industrial trends may continue to strengthen. Moreover, the dynamic growth in services exports also contributes to Hungary's export performance. In view of the industrial exports and the stable services exports, **Hungary's exports will steadily grow over the forecast horizon, resulting in further improvement in Hungary's export market share** (Chart 1-17).

In parallel with rising exports and the expansion in domestic demand factors (consumption, investment), imports also continue to increase; accordingly, we expect the

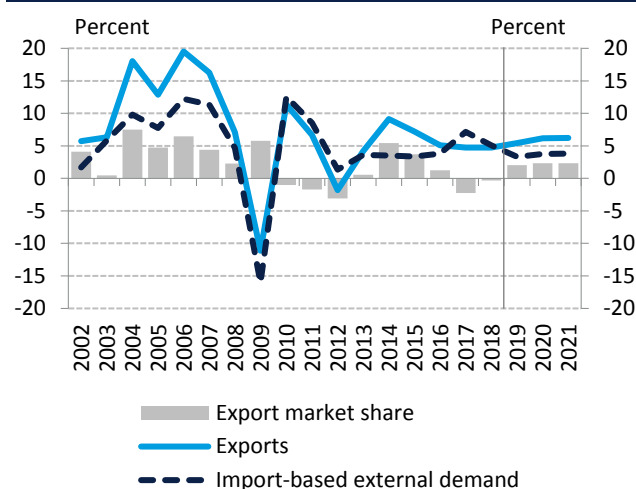
Chart 1-16: Evolution of import based external demand



Note: Annual change.

Source: MNB

Chart 1-17: Changes in export market share



Note: Annual change.

Source: HCSO, MNB

**contribution of net exports to economic expansion to be mildly negative in 2019.** Although in the near term the expansion in imports restrains economic growth via a decline in net exports, over the long run the increase in investment-related imports contributes to higher potential GDP via the rise in the capital stock. In addition, in the second half of the forecast horizon, as a result of a slowdown in the growth rate of household consumption and investment, the import demand of the economy will decline. **In 2020 and 2021, the contribution of net exports to economic growth will be positive.**

As a result of the lack of precipitation in Q1, **the contribution of agriculture to growth was negative.** Although due to the improvement in productivity the sector became more resistant to weather conditions, the structurally higher productivity cannot sufficiently offset the bad weather at the beginning of the year. As a result, **the contribution of the production of the sector to this year's GDP may be negative.**

According to our current forecast, the domestic output gap will be in slightly positive territory, and thus output will exceed its potential level to some extent. **Looking ahead, expansion in the supply side of the economy will become a key factor** in terms of the sustainability of growth. **In our forecast, we expect an improvement in labour productivity,** although this process may mainly reflect cyclical factors. One generally observed phenomenon is that in the ascending phase of economic activity an increase in labour productivity is typical (Kaldor–Verdoorn law). In the medium term, the high investment rate, the announced large investment projects and the capacity expansions of the supplier network also generate positive feedback across market services with higher value added (information and communication, finance, logistics, marketing). **Looking ahead, the developments in productivity determine the long-term, sustainable expansion in GDP. Economic policy can raise the rate of potential growth via structural measures aimed at improving competitiveness while maintaining stability. We expect closing of the output gap on our forecast horizon,** which is supported by an anticyclical fiscal policy, the fading out of the EU funds, the improvement in competitiveness and the households savings encouraged by the new government security programme (HGS+).

**Box 1-2: 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	1.14	1.12	1.13	1.12	1.13	1.12	-1.1%	-1.4%	-1.4%
Oil (USD/barrel)	65.0	65.5	65.1	63.6	65.1	63.3	0.8%	-2.4%	-2.8%
Oil (EUR/barrel)	57.3	58.3	57.4	56.8	57.4	56.6	1.9%	-1.0%	-1.4%
Food prices									
Wheat (USD/bushel)	5.11	5.06	5.44	5.58	5.67	5.77	-0.9%	2.5%	1.7%
Maize (USD/bushel)	3.87	4.14	4.12	4.48	4.22	4.24	6.8%	8.7%	0.4%
Euro area inflation (%)	1.2	1.3	1.5	1.4	1.6	1.6	0.1 pp.	-0.1 pp.	0 pp.
Euro area core inflation (%)	1.2	1.1	1.4	1.4	1.6	1.6	-0.1 pp.	0 pp.	0 pp.
GDP growth of Hungary's main trading partners*(%)	2.1	1.8	2.2	2.1	2.2	2.1	-0.3 pp.	-0.1 pp.	-0.1 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.

Sources: CBT, Bloomberg, OECD, Consensus Economics, MNB, ECB

In the past months, the per barrel price of Brent crude was highly volatile, first rising to nearly USD 70 before moving to around USD 62 in mid-June. The escalation of geopolitical risks in the Middle East (the civil war in Libya, the attack on Saudi tankers and the drone attacks on pumping stations) also contributed to the increase in prices. By contrast, the price declines experienced in recent weeks were caused by risks related to global growth, and furthermore by the increase of US oil stocks to a two-year high. Based on the June survey by Consensus Economics, forecasters expect oil prices to range between USD 58.5 and 76 (EUR 51.9–67.4) this year.

According to market analysts' opinion, future developments in oil prices are rather uncertain. In their analyses, they emphasised that the spot price of Brent does not well reflect the underlying developments. The tightness of the global oil market is indicated by the fact that futures prices for the following months include higher premia than the contracts for the end of the year. Presumably, the reason for this is that fears related to the continuity of oil supply have strengthened as a result of geopolitical risks. Looking ahead, this may cause price adjustments and/or further price rises. At the same time, due to further expansion in production in the USA, there may easily be oversupply in the global oil market, which has a price-reducing effect. Nevertheless, issues related to the quality of shale oil need to be taken into account.

Prior to the upswing in US shale oil production, US refineries were designed mainly for the processing of heavier (thicker) and sourer oil (with higher sulphur content). In terms of price changes, it is important what kind of product can be produced from the various types of oils: light oils are mainly used for petrol, while heavier types are suitable for diesel fuel and kerosene. Prior to the US shale oil revolution, the general opinion was that oil production will be dominated by heavy and extra heavy types, which are mainly produced by the OPEC countries and Russia. However, the increase in shale oil production changed this picture to the extent that the share of available light oil, which – within the USA – is mainly concentrated in the Perm Basin, rose within production.

In the first wave of the US shale oil production (2010–2015) there was a ban on exports, except to Canada, and thus the amount produced could only be used by refineries in the USA. Due to the availability of cheaper domestic oil they disregarded the fact that they were basically built to process heavier oils, and they work with lower capacity utilisation when refining lighter oil. For the second wave after lifting the ban the infrastructure is already being installed, which also allows the delivery of shale oil overseas. Accordingly, the most important question at present is how global demand is expected to be divided among petrol and diesel fuel and kerosene, and what changes in fuel use will be brought by the regulation concerning sulphur content entering into force on 1 January 2020. This is because this will determine what will happen to the large amount of shale oil appearing in the market. Much may also depend on the early-July meeting of the



**OPEC countries, as if they maintain the degree of production limitation, there may be a significant drop in global stocks, resulting in renewed oil price increases.**

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

**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.** Over the forecast horizon, euro area inflation rises moderately, from 1.3 percent projected for 2019 to 1.4 percent in 2020 and to 1.6 percent in 2021 and falls short of the inflation target of the ECB over the entire horizon. The core inflation path for the euro area for 2019 declined slightly, by 0.1 percent compared to the previous forecast.

**Compared to our March assumptions, external demand growth is expected to be more restrained.** Against the background of a general slowdown in global economic activity, expectations regarding the economic performance of the euro area this year declined gradually in the past period, which is primarily attributable to the worsening outlook in Germany and Italy.

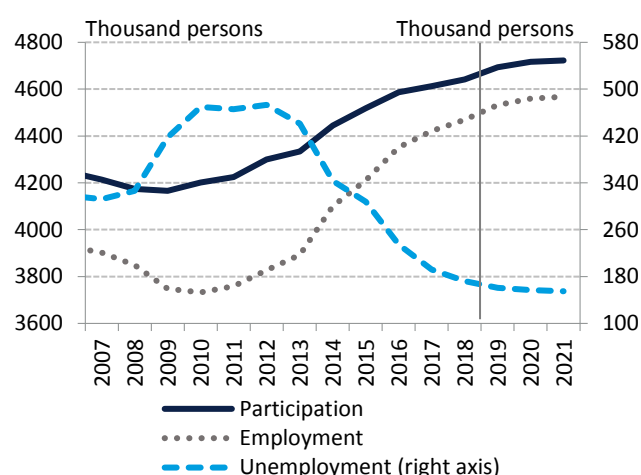
**Based on futures prices, the increase in wheat price is expected to be slightly higher, while the rise in the price of corn is expected to be significantly higher than the assumptions in the March Inflation Report.** In the case of the latter, the main reason behind the price increase is the considerable delay of the American corn planting.

The statistical accounting of the prenatal baby support increases the accrual-based deficit over the entire forecast horizon, which is offset by higher-than-expected tax revenues. Accordingly, the 2019 deficit is still projected to be slightly below the 1.8 percent deficit target. Pursuant to the government's 13+1-point Economy Protection Action Plan, the social contribution tax, the small business tax and the tax on advertising as well as the VAT on accommodation services will decline. In 2020, the effect of tax cuts will primarily be offset by a decrease in expenditures to GDP as well as by a rise in tax bases. Accordingly, compared to our March forecast, a significantly lower deficit is expected for next year. The 2020 budget bill submitted on 4 June indicates a 1- percent deficit target, which, according to our projection, may be achieved if the Country Protection Fund, which amounts to 0.8 percent of GDP, is partially spent.

### 1.3 Labour market forecast

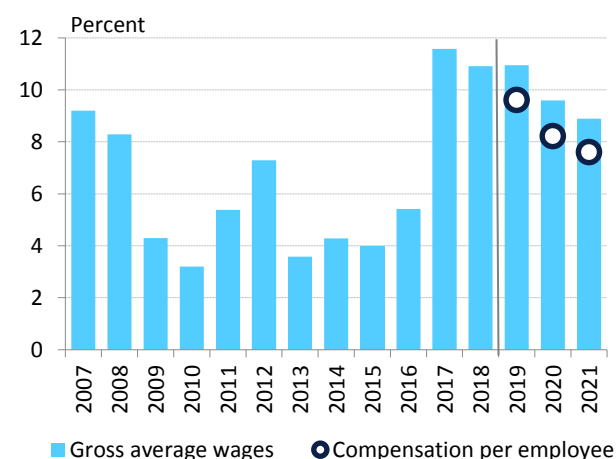
In parallel with a further increase in the number of employed, the unemployment rate will decline to a historical low (3.3 percent) over the forecast horizon. Similarly to last year, wage growth in the private sector may be around 11 percent this year, followed by declining but still strong growth of about 9 percent in the coming years. The inflationary effect from the cost side will be moderated by the reductions in contributions set forth in the wage agreement.

**Chart 1-18: Employment, participation and unemployment in the whole economy**



Source: HCSO, MNB

**Chart 1-19: Annual changes in gross average wages and labour cost in the private sector**



Source: HCSO, MNB

According to our expectations, as demographic constraints become increasingly effective, **the rise in activity will slow down** over the forecast horizon (Chart 1-18). In parallel with the demographic trends and with the dynamic expansion in employment seen in recent years, the potentially available labour reserve has dropped to a historical low, and thus, with a historically high employment rate, employment growth may stop.

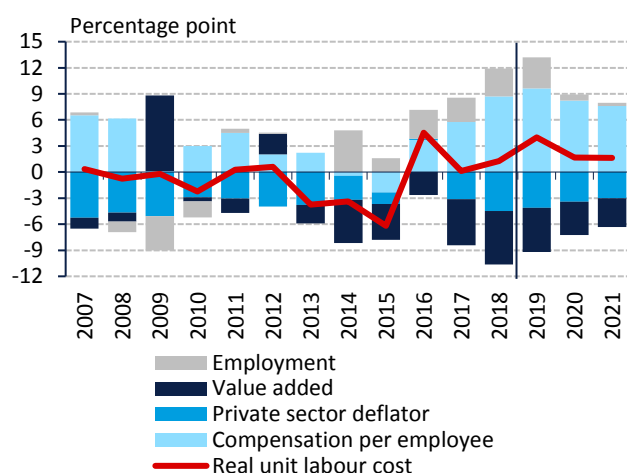
In conjunction with economic growth, the strong labour demand of the private sector contributes to further expansion in employment. However, companies' efforts to expand headcount are rendered especially difficult by the scarcity and mismatch problems of labour reserves (inadequate skills of the labour force and the lack of job mobility). **The growth rate of employment in the private sector decelerates gradually over the forecast horizon.**

The number of public workers declined considerably in the past years, and we assume a further decrease of 20,000 people by the end of the forecast period. In the tight labour market environment, some of those who leave public employment are expected to appear immediately on the primary labour market. Based on the budget bill, employment in the public sector will remain practically unchanged in the coming years.

**In parallel with a further rise in the number of employed, the unemployment rate will fall to 3.3 percent by the end of the forecast period.** In the historically tight labour market environment, there is fierce competition among companies to retain labour and fill vacancies, which leads to dynamic wage growth (Chart 1-19). As a result of this year's wage developments, which are stronger than our expectations, **compared to our March projection we expect higher private sector wage dynamics over the forecast horizon. Similarly to last year, wage dynamics in the private sector may be around 11 percent this year, followed by declining but still strong dynamics – of about 9 percent – in the coming years.** We assume that this year's changes in the fringe benefit system will contribute to the statistically detected private sector wage dynamics by 1 percentage point (see Box 3-2). Due to years of strong wage dynamics, **low-productivity, zombie companies may start to leave the market. The cleansing of the market as a result of the termination of zombie companies may**



**Chart 1-20: Decomposition of real unit labour cost growth in the private sector**



Source: HCSO, MNB

**moderate the increase in labour market tightness and contribute to the decline in private sector wage dynamics over the forecast horizon (see Box 1-3).**

With the continuation of the double-digit wage dynamics, **the wage share will exceed its historical average this year**, and thus, looking ahead, dynamic wage growth – expected in the tight labour market environment – may be allowed by productivity and competitiveness. Wage cost dynamics will exceed productivity growth this year as well and may remain slightly above that in the coming years (Chart 1-20). **The inflationary effect from the cost side will be mitigated by the reductions in contributions set forth in the wage agreement.** The next, 2-percentage point decline in the social contribution tax will come into force on 1 July 2019; subsequently, the following contribution reduction may take place in the last quarter of 2020.

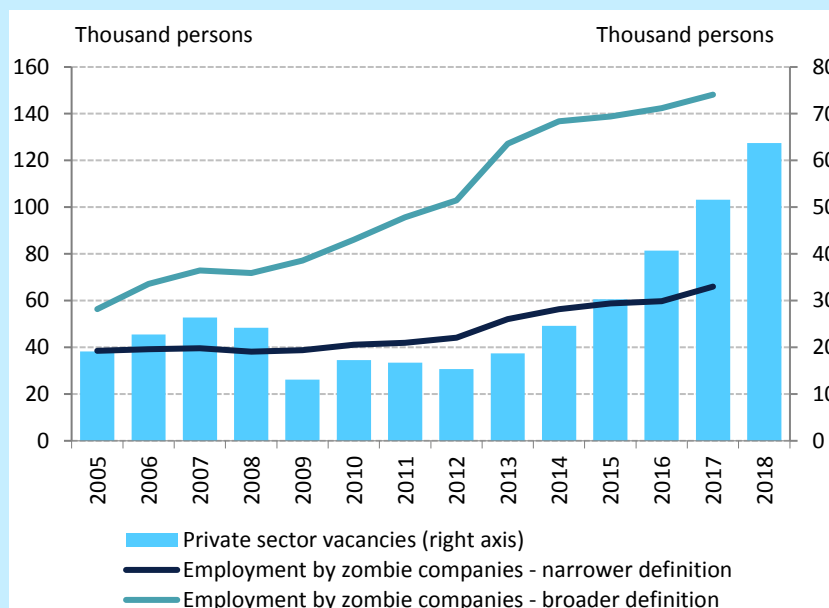
### Box 1-3: ‘Employees’ of zombie companies as labour market reserves

The economic growth that started in 2013 was achieved by involving free labour market capacities. In parallel with a dynamic expansion in employment and a decline in unemployment, labour market conditions became increasingly tight. **In addition to strong labour demand, recent years have already been characterised by narrowing labour supply;** in this environment, it is of the utmost importance to examine labour market reserves. In addition to the traditional groups (see Box 3-3 of the March 2017 Inflation Report), **persons employed by zombie companies may also be considered labour market reserves.**

**Zombie companies immobilise valuable resources – capital, labour – in the economy**, thus reducing productivity. By definition, a zombie company is one that is unable to repay its debts and/or to maintain economically viable operations in the longer run, but still does not cease to exist. In our analysis, we disregard the solvency criterion, and only focus on effective operation. Companies that are at least 10 years old and have not realised sales revenues for at least three years are considered zombie (narrower definition), or even those companies whose equity is less than or equal to zero for three years (broader definition).

Based on NTCA data, **in 2017 there were 31,400 such zombie companies according to the narrower definition, and 56,200 such zombie companies using the broader definition. The total number of people employed by them was 66,000 and 148,200, respectively.** As reference, according to HCSO data, in 2017 this compares to 51,600 vacancies in the private sector (Chart 1-21). 41 percent of those employed by zombie companies using the narrower definition are in the market services sector, 5 percent in manufacturing and 54 percent in other sectors. 54 percent of those employed by zombie companies using the broader definition are in the market services sector, 12 percent in manufacturing and 34 percent in other sectors.

Chart 1-21: Employees of zombie companies and vacancies in the private sector



Sources: NTCA, HCSO

This year, the wage share exceeded its historical average, and thus only productivity and competitiveness can make the dynamic pay rises expected in the tight labour market environment possible. This cost environment may result in low-productivity, zombie companies' starting to leave the market. In the present tight labour market environment, the more productive companies may more easily absorb the workforce that becomes available as a result of the above, which may lead to a decline in vacancies in the private sector. This trend may further be strengthened by the strong wage dynamics, which will continue in the coming years as well.

In connection with that, using the central bank's new macroeconometric model (Polaris), we examined how a decline in vacancies in the private sector would affect private sector wage dynamics. Assuming that the number of vacancies declines by 10,000 in a year, evenly spread over the whole year (2,500 per quarter), as a result, *ceteris paribus*, annual private sector wage dynamics declines by approximately 0.3 percent in the given year and 1–1.5 percent in the next year. It is important that this effect may be considered a maximum, as it does not contain the composition effect that the employees leaving zombie companies for more productive ones will be employed for higher wages.

Accordingly, on the whole, the cleansing of the market as a result of the termination of zombie companies may moderate the increase in labour market tightness and contribute to the decline in private sector wage dynamics over the forecast horizon. Nevertheless, further market cleansing measures are needed; see Chapter 3.2, Competitiveness Programme in 330 points.

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)							
Core inflation <sup>1</sup>	2.5	3.8	4.0	3.4	3.9	3.0	3.4
Core inflation excluding indirect tax effects	2.4	3.4	3.6	3.2	3.5	3.0	3.1
Inflation	2.8	3.1	3.2	3.1	3.4	3.0	3.3
Economic growth							
Household consumer expenditure	5.3	3.7	5.1	3.2	3.9	2.9	3.0
Government final consumption expenditure	0.0	0.7	0.7	1.1	0.9	0.6	0.5
Gross fixed capital formation	16.5	9.7	14.9	2.7	2.0	2.0	3.4
Domestic absorption	7.0	4.6	5.2	2.6	2.7	2.2	2.6
Exports	4.7	5.6	5.4	6.3	6.2	6.3	6.2
Imports	7.1	6.6	6.5	5.9	5.7	5.7	5.6
GDP	4.9	3.8	4.3	3.2	3.3	3.0	3.3
Labour productivity <sup>6</sup>	2.7	2.7	1.9	2.8	2.7	2.9	3.1
External balance <sup>2</sup>							
Current account balance	0.5	0.2	0.0	0.4	0.4	0.9	0.7
Net lending	2.2	2.3	2.2	2.3	2.2	2.3	2.0
Government balance <sup>2,5</sup>							
ESA balance	-2.2	(-1.5) – (-1.6)	(-1.6)–(-1.7)	(-1.4) – (-1.6)	(-0.6)–(-1.4)	(-1.5) – (-1.7)	(-0.5)–(-1.3)
Labour market							
Whole-economy gross average earnings <sup>3</sup>	11.3	9.2	10.5	7.2	8.5	7.5	8.0
Whole-economy employment	1.1	0.5	1.4	0.3	0.6	0.0	0.2
Private sector gross average earnings <sup>3</sup>	10.9	9.0	10.9	8.1	9.6	8.0	8.9
Private sector employment	1.3	0.9	1.7	0.4	0.7	0.2	0.4
Unemployment rate	3.7	3.6	3.4	3.5	3.3	3.4	3.3
Private sector nominal unit labour cost	5.7	4.8	8.0	3.2	4.9	3.4	4.5
Household real income <sup>4</sup>	6.7	3.4	4.9	3.0	4.1	2.8	2.9

<sup>1</sup> Based on seasonally unadjusted data.<sup>2</sup> As a percentage of GDP.<sup>3</sup> For full-time employees.<sup>4</sup> MNB estimate.<sup>5</sup> 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.<sup>6</sup> Whole economy, based on national accounts data.

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

	2019	2020	2021
<b>Consumer Price Index (annual average growth rate, %)</b>			
MNB (June 2019)	3.2	3.4	3.3
Consensus Economics (June 2019) <sup>1</sup>	3.0 – 3.4 – 3.7	2.5 – 3.1 – 3.7	
European Commission (May 2019)	3.2	3.2	
IMF (April 2019)	3.2	3.1	3.0
OECD (May 2019)	3.0	3.8	
Reuters survey (June 2019) <sup>1</sup>	3.2 – 3.4 – 3.5	3.0 – 3.2 – 3.5	3.0 – 3.1 – 3.2
<b>GDP (annual growth rate, %)</b>			
MNB (June 2019)	4.3	3.3	3.3
Consensus Economics (June 2019) <sup>1</sup>	3.5 – 4.2 – 4.9	2.0 – 3.0 – 3.7	
European Commission (May 2019)	3.7	2.8	
IMF (April 2019)	3.6	2.7	2.4
OECD (May 2019)	3.9	3.0	
Reuters survey (June 2019) <sup>1</sup>	3.9 – 4.4 – 4.7	3.2 – 3.5 – 3.7	
<b>Current account balance<sup>3</sup></b>			
MNB (June 2019)	0.0	0.4	0.7
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 (June 2019)	-0.2 – 0.7 – 1.8	-0.2 – 1.1 – 2.8	
<b>Budget balance (ESA 2010 method)<sup>3,4</sup></b>			
MNB (June 2019)	(-1.6)–(-1.7)	(-0.6)–(-1.4)	(-0.5)–(-1.3)
Consensus Economics (June 2019) <sup>1</sup>	(-1.5) – (-2.0) – (-2.6)	(-0.8) – (-1.8) – (-2.8)	
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 (June 2019) <sup>1</sup>	(-1.5) – (-1.8) – (-2.4)	(-0.8) – (-1.3) – (-2.6)	
<b>Forecasts on the size of Hungary's export markets (annual growth rate, %)</b>			
MNB (June 2019)	3.3	3.8	3.8
European Commission (May 2019) <sup>2</sup>	3.5	3.7	
IMF (April 2019) <sup>2</sup>	3.9	4.1	4.2
OECD (May 2019) <sup>2</sup>	3.4	3.4	
<b>Forecasts on the GDP growth rate of Hungary's trade partners (annual growth rate, %)</b>			
MNB (June 2019)	1.8	2.1	2.1
Consensus Economics (June 2019) <sup>2</sup>	1.8	1.8	
European Commission (May 2019) <sup>2</sup>	1.7	2.0	
IMF (April 2019) <sup>2</sup>	1.8	1.9	1.9
OECD (May 2019) <sup>2</sup>	1.6	1.7	

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> As a percentage of GDP.

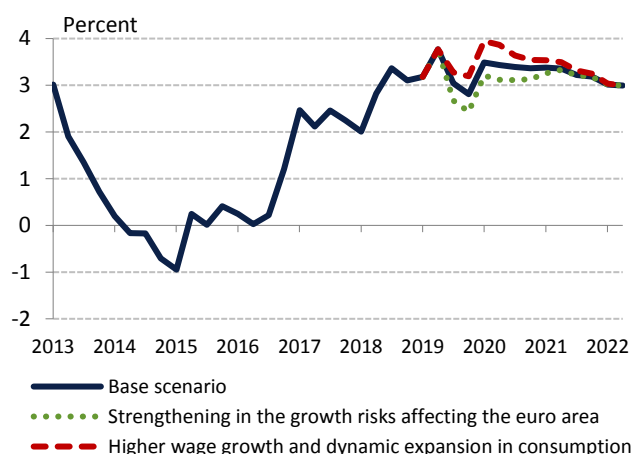
<sup>4</sup> The lower value of the forecast band shows the ESA balance if the Country Protection Fund is used while the higher value shows the ESA balance if the Country Protection Fund is not used.

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

## 2 Effects of alternative scenarios on our forecast

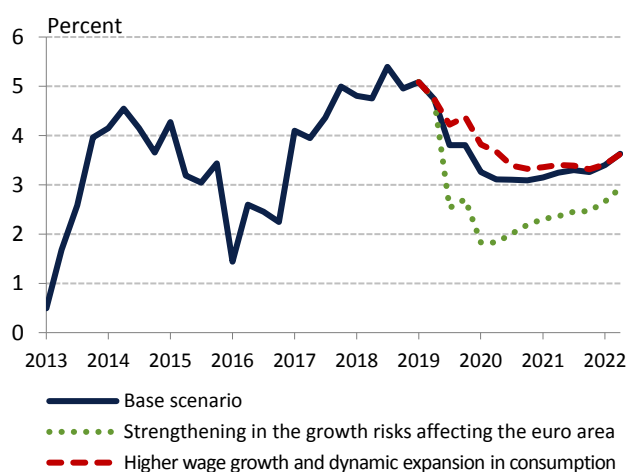
The macroeconomic outlook is surrounded by both upside and downside risks. In addition to the baseline projection in the June Inflation Report, the Monetary Council highlighted two alternative scenarios. In the case of the alternative scenario assuming higher wage growth and dynamic expansion in consumption, domestic economic growth is stronger, and inflation is higher than in the forecast of the baseline scenario. Materialisation of the scenario presenting strengthening in the growth risks affecting the euro area results in a lower inflation path and more restrained growth compared to the baseline scenario. In addition to the scenarios set forth above, the Monetary Council discussed, as further risks, scenarios that present a larger impact of consumption expansion on inflation, a looser external monetary policy environment as well as the materialisation of competitiveness reforms.

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



Source: MNB

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



Source: MNB

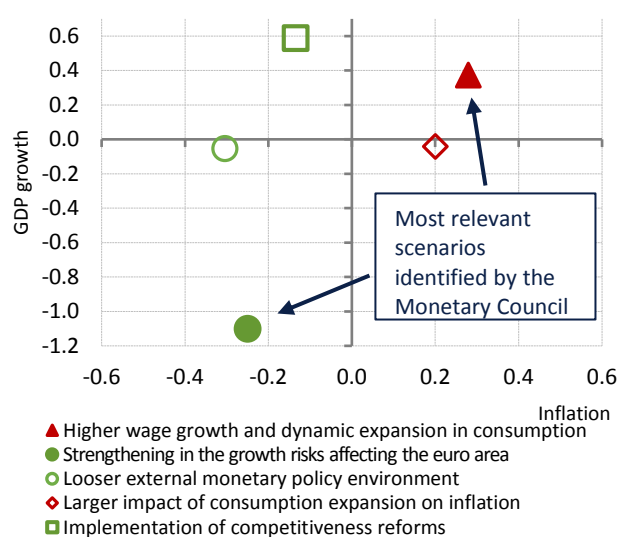
### Higher wage growth and dynamic expansion in consumption

In the past period, in parallel with a dynamic expansion in employment and a decline in unemployment, **labour market conditions became increasingly tight**. Over the past two years, the minimum wage and the guaranteed wage minimum rose by a total of 24 percent and 40 percent, respectively. At end-2018, employer and employee associations concluded an agreement for two years, based on which **the minimum wage and the guaranteed wage minimum will increase by an additional 8 percent both in 2019 and 2020**, while the wage recommendation is also 8 percent.

According to the data available for the beginning of the year, double-digit wage dynamics will continue this year as well. **In 2019 Q1, gross average earnings increased by 11.8 percent in the private sector year on year**. In January, the more than 4 percent rise in regular average earnings on a monthly basis was stronger than the usual January seasonality, indicating that companies implemented major pay rises at the start of the year. According to the available data, wage dynamics strengthened further not only among large enterprises, but also among small and medium-sized enterprises, **resulting in double-digit wage increases in the private sector as a whole**.

**In our baseline scenario**, double-digit wage dynamics is becoming general in the entire private sector this year, mainly due to the tight labour market conditions. **In the coming years, with a slowdown in GDP growth, we expect wage dynamics to moderate**. As a result of a rise in disposable income, **the growth rate of consumption and domestic demand will be higher over the forecast horizon**. In addition, the increase in wages and the new savings schemes offered by the state (MÁP+) contribute to **the stabilisation of the savings rate at a high level**. Moreover,

**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 means tighter and the green markers mean looser monetary policy than in the baseline forecast.

Source: MNB

even the structure of savings may become healthier with the decline in the share of foreign currency within savings.

**According to the assumptions of our alternative scenario, in a further tightening labour market environment, double-digit wage dynamics will remain in the whole private sector in the coming years as well, and thus the expansion in consumption and domestic demand may be stronger than the baseline scenario. This scenario may lead to faster economic growth and higher inflation than in the baseline scenario.**

**Strengthening in the growth risks affecting the euro area**

**Euro area growth decelerated gradually during 2018, and international institutions significantly reduced their growth forecasts for the economies of the area. Both global and individual factors contributed to the weaker increase in European economic activity.**

**The trade tensions between the USA and China may not directly affect the euro area, but may have indirect effects on it through various channels.** The negative effects of the introduction of customs duties and the increase in uncertainty may easily pass through, contributing to a general economic slowdown. The exposure of the vehicle industry is very high due to the disintegrated production structure and the 'just in time' production typical of car manufacturing, and thus it poses a major risk **if Great Britain leaves the EU without an agreement.** Brexit has a negative impact not only on the vehicle industry, but also on the related sectors.

**The impact of international economic activity may be reflected in domestic persistent inflation developments through import prices and the gradual closing of the output gap.** Considering that Hungary's most important trading partner is the euro area, growth in this group of countries and the price dynamics of industrial goods within the euro area are determinants in terms of the developments in inflation in Hungary.

In the **baseline scenario**, as a result of a slowdown in global economic activity, an increase in trade tensions as well as individual and structural factors that decelerate the growth of the euro area, the economic performance of Hungary's main trading partners will be subdued. In line with our previous expectations, this **points to slower growth in Europe.** The related effect **will be reflected in the domestic persistent inflation developments via import prices,** and thus prices industrial goods are expected to decline starting from 2019 H2.

In the **alternative scenario**, we assume that the existing structural problems, i.e. the trade tensions, the challenges

surrounding the vehicle industry and the uncertainty stemming from Brexit, will lead to a slowdown in European economic activity, resulting in **persistently lower external demand**. Depending on the degree of growth deceleration, external disinflationary effects are expected to be stronger than in the baseline scenario over the medium term as well. As a result of low imported inflation, **achieving the inflation target is consistent with looser monetary conditions**.

#### Other risks

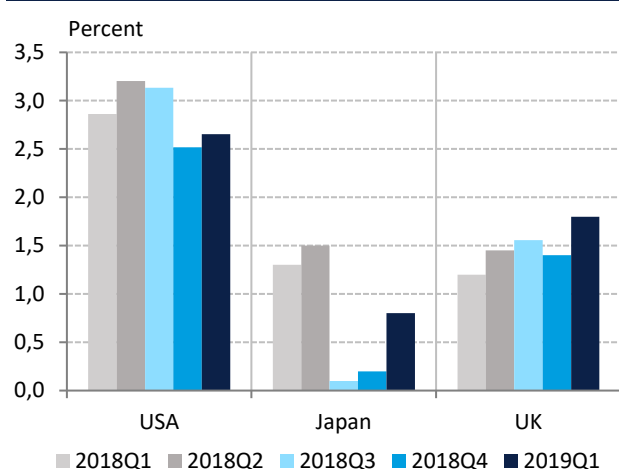
In addition to the scenarios highlighted above, the Monetary Council considered three more alternative scenarios. The scenario that assumes a **larger impact of consumption expansion on inflation** results in a higher inflation path than in the baseline scenario. The scenario that assumes a **looser external monetary policy environment** suggests a more moderate inflation path and a somewhat lower growth path compared to the baseline scenario. If the alternative scenario that assumes the **implementation of competitiveness reforms** materialises, it will result in lower inflation and higher growth than in the baseline scenario.

## 3. Macroeconomic overview

### 3.1. Evaluation of international macroeconomic developments

While risks intensified, global economic expansion continued in 2019 Q1. The Visegrád region is still the growth centre of the European Union. Due to the steady deterioration in global growth prospects and the downside risks to inflation, the expected interest rate path of the world's leading central banks shifted even further downwards in the past quarter. In line with that, in June the ECB extended its forward guidance regarding maintaining policy rates at unchanged levels by half a year. The decision-makers of the Federal Reserve did not change monetary conditions in June, but emphasised the downside risks. According to the forecast of the decision-makers, a reduction in the federal funds rate may be expected looking forward. Looking at the region, the Czech central bank raised its policy rate by 25 basis points, while the other central banks have not changed their respective monetary conditions.

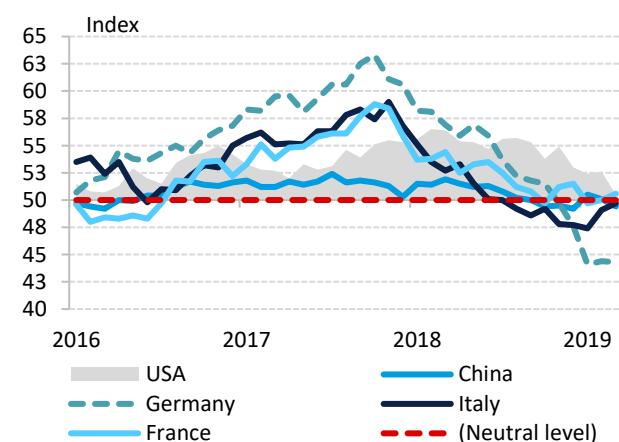
**Chart 3-1: Annual changes in GDP in certain key global economies**



Note: Seasonally adjusted series.

Source: OECD

**Chart 3-2: Evolution of the manufacturing PMI**



Note: Seasonally adjusted series.

Source: Bloomberg

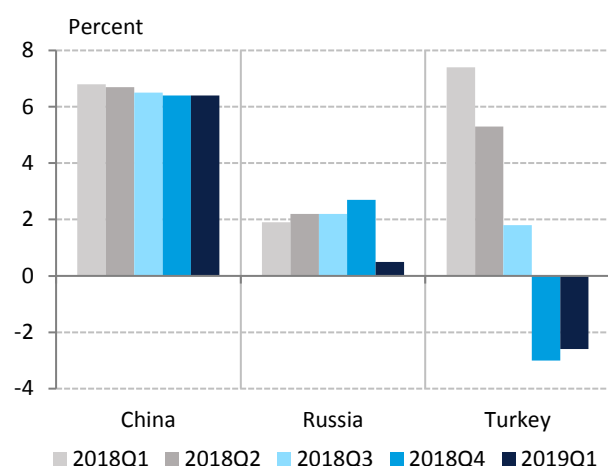
#### 3.1.1. Developments in globally important economies

**Global economic growth was positive during the first three months of 2019.** In globally important economies, growth figures significantly exceeded analysts' preliminary expectations. By contrast, confidence indicators for the manufacturing outlook steadily declined in the world's most important economic hubs in Q1 (Chart 3-2). **Global economic activity shows a contradictory picture for the coming months.**

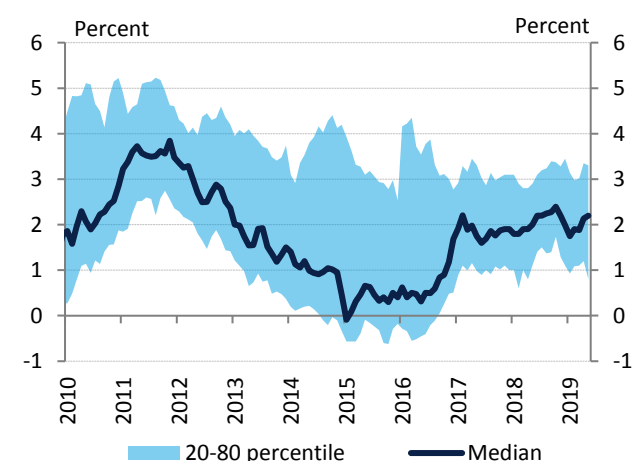
**In 2019 Q1, the US economy expanded by 3.1 percent year on year.** Quarterly growth was 0.8 percent, indicating acceleration compared to the previous quarter. The upswing was mainly driven by an upturn in the consumption of local governments and investment. Household consumption decelerated, as did the consumption of the federal government. Net exports made a positive contribution to economic performance, which was also supported by the decelerating imports following the entry into force of the customs measures. In addition, inventories also made major contribution to growth. The prospects related to the expansion in the US economy suggest gradual deceleration in parallel with the fading of growth-supporting measures (tax cuts and infrastructure investment programme). **Anxieties about trade tensions are becoming an increasingly strong factor in the concerns related to deceleration.** Due to the significant weight of the United States within global imports, potential tightening of customs measures may also have a major impact on global economic growth. The trade tensions between the USA and China reached a new phase, as a result of which the customs tariff that had been 10 percent increased to 25 percent.

The economic performance of the **United Kingdom** accelerated further last year, thereby achieving the highest growth of the past 5 quarters on an annual basis. The



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

Source: Macrobond, Trading Economics

**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

economic expansion was supported by domestic items, while net exports made negative contribution in Q1.

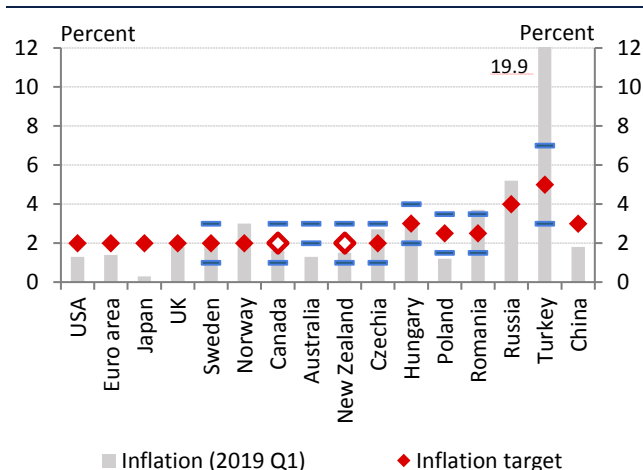
**Compared to the previous quarter, the Japanese economy grew by 0.5 percent, which significantly exceeded expectations. The economy expanded by 0.8 percent in annual terms (Chart 3-1).** The largest contribution to growth was made by the trade surplus, while **both exports and imports declined on an annual basis.** Household consumption remained subdued, which is a downside risk for growth in the months ahead, as the recently announced VAT increases may further reduce expansion in the retail sector.

**Of the major emerging countries, China's economy grew at a rate of 6.4 percent in 2019 Q1, thus registering its weakest quarter since 2016 (Chart 3-3).** Nevertheless, this growth figure was a surprise for analysts, who expected a lower rate. The expansion in the economy is mainly attributable to household consumption. The contribution of investment to growth was also positive, as a result of both private and state-financed fixed capital formation. Net exports contributed to economic growth again. Nevertheless, the trade surplus in April fell short of analysts' expectations. In spite of the decline in the surplus, the trade surplus vis-à-vis the United States did not change significantly in April. **The potential escalation of trade tensions poses downside risks to the growth prospects of the Chinese economy.** The indebtedness of province-level governments also poses a further risk. **Year-on-year GDP expansion in Russia was 0.5 percent, representing a major decline compared to the previous quarters.** All sectors on the production side contributed to the more modest growth; the largest downturn was seen in construction.

**Global inflation** rose slightly in the past months as oil prices have increased (Chart 3-4), and thus inflation increased close to central bank targets again in the first quarter, in some cases it has already increased above targets (Chart 3-5). In the period under review, commodity prices – except for crude oil – did not change significantly (Chart 3-6), against the background of strong volatility.

**During the past period, the Fed's decision-makers did not change the policy rate.** After its June meeting the Federal Reserve signalled that, although the economic outlook is still favourable, downside risks and uncertainties regarding the achievement of the inflation target had increased considerably. In the new forecast, decision-makers expect inflation to rise at a slower pace in 2019 and 2020, with the median estimate for inflation decreasing to 1.5 percent from 1.8 percent in 2019 and to 1.9 percent from 2.0 percent in 2020. In addition, the forecast regarding the

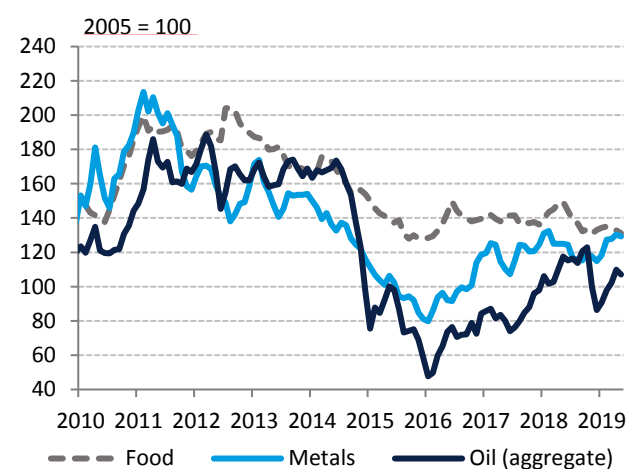
**Chart 3-5: Inflation targets of central banks and actual inflation**



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

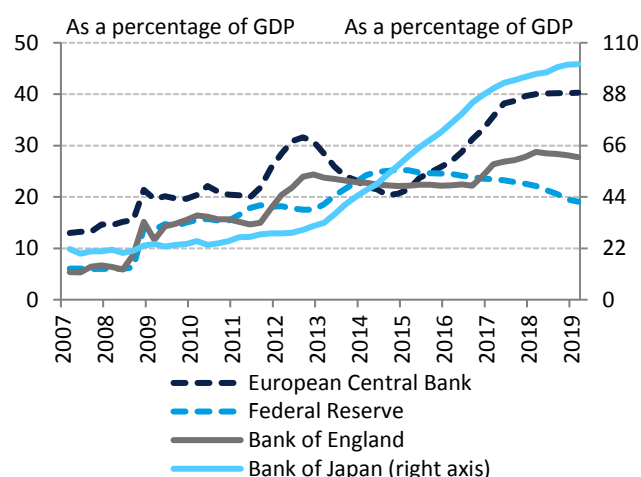
future path of the federal funds rate also shifted downwards. Fed officials were divided over the future path of interest rates, some of them would prefer cutting interest rates already this year, while the others would like to wait with the changes in monetary conditions. However, according to the median estimate for interest rates, the FOMC members expect an interest rate cut in the next year. The members of the FOMC signalled that they would closely monitor incoming data and would act as appropriate in order to achieve their objectives.

**In the past quarter, the Bank of Japan did not change the monetary conditions**, and continues to adjust its Quantitative and Qualitative Monetary Easing Programme to the 0-percent, long-term yields. **At the same time, the forward guidance concerning short- and long-term interest rates changed in April.** According to the amended forward guidance, the central bank intends to maintain the current extremely low level of short- and long-term interest rates for an extended period of time, at least until spring 2020. In addition, the central bank also eased the collateral conditions of its lending facilities: in the future it will also accept BBB-rated corporate bonds as collateral. Since the announcement of yield curve targeting, within the framework of which the central bank committed to maintaining the 10-year Japanese government bond yield at a level of 0 percent, the rate of monthly asset purchases declined further (Chart 3-7). At its May meeting, the Bank of Japan did not change monetary conditions but noted that downside risks concerning global growth prospects had increased significantly in the past period and signalled that it pays close attention to these risks.

**The decision-makers of the Bank of England did not change the base rate or the asset purchase programme during the past period.** At the same time, in its May Inflation Report the central bank expects a lower interest rate path compared to the February forecast. Looking ahead, economic prospects depend strongly on developments related to Brexit. As the decision-makers communicated, if inflation developments render it necessary, the central bank is ready to further tighten monetary conditions.

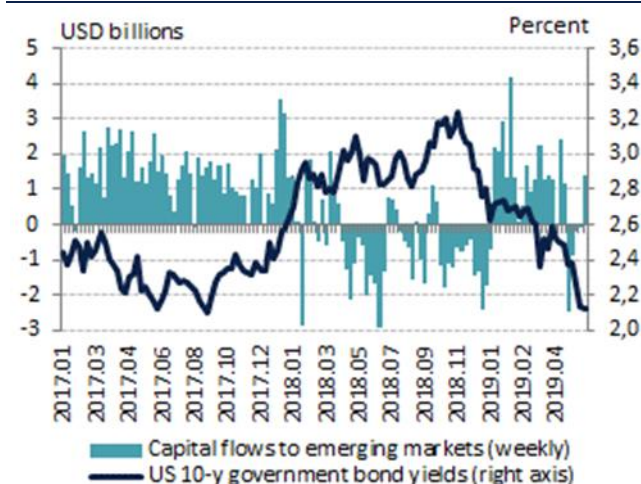
**The decision-makers of the Russian central bank decided to cut the key interest rate by 25 basis points.** In the view of the central bank, annual inflation had continued to slow. Inflation decreased to 5.1 percent in May, and in line with this, the central bank revised downward its inflation forecast for 2019 from 4.7–5.2 percent to 4.2–4.7 percent. Economic growth in 2019 H1 is also lower than the Bank of Russia's expectations. If economic conditions do not show

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

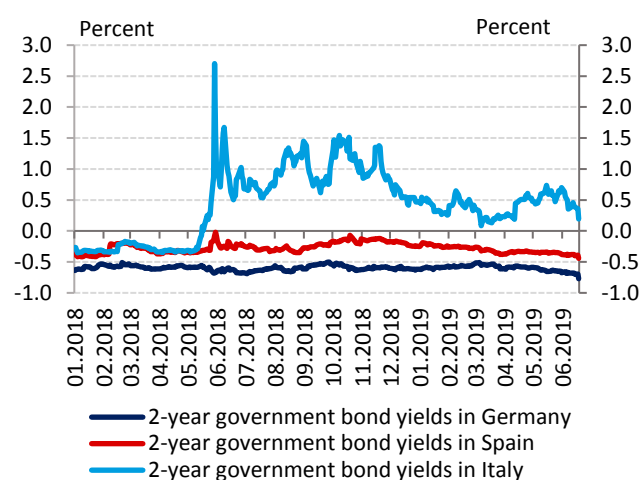
significant improvement, the central may decide to cut the interest rate further in the coming months.

**In order to reduce the financing costs of the SME sector, the Chinese central bank, with effect from 15 May, lowered the minimum reserve ratio of county-level small and medium-sized banks to 8 percent from the previous 11.5 percent.** The minimum reserve ratio for large banks remained unchanged at 13.5 percent. According to the central bank's estimate, the decision frees up long-term funds with a value of some CNY 280 billion, which may be used by banks to finance privately-owned businesses as well as small and medium-sized enterprises.

**Market sentiment deteriorated in the middle of the past quarter, followed by a correction, as a result of which developed equity markets rose and emerging equity markets declined. Risk indicators rose as well.** In Q2, risk aversion strengthened mainly due to renewed global growth concerns and the Chinese-US trade conflict, which also had an unfavourable impact on developed and emerging equity markets as well as on emerging bond markets. The effect of the Chinese-US customs tariff increases was also reflected in the depreciation of the Chinese renminbi and the significant weakening of the Chinese stock exchange, which exceeded the emerging average (Chart 3-8). As a result of the upward correction on the stock markets at the very end of the period, most of the developed stock markets rose in the whole period, but despite this the emerging stock markets still registered declines.

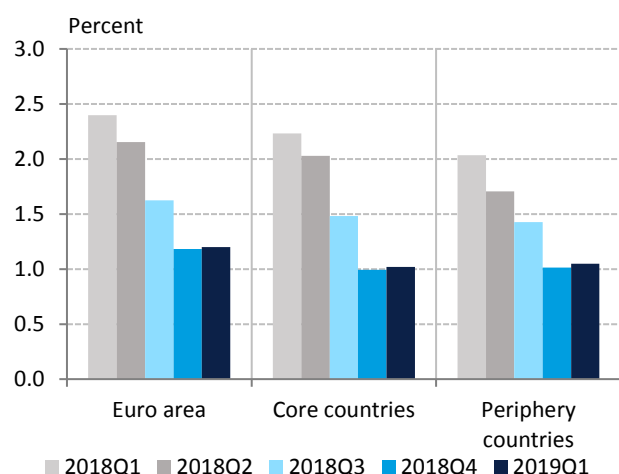
**Developed market interest rate cut expectations strengthened in the past period.** In the case of the Fed, market pricing suggests that there is a high chance of not just one, but two or three interest rate cuts of 25 basis points this year. The date for the first cut was brought sooner and as a result of that, the possibility of an interest rate cut cycle starting in the summer 2019 increased significantly. In line with this, market expectations regarding the first increase in the ECB's overnight deposit rate were postponed to an even later time, i.e. the first half of 2022. Moreover, as a response for the signals of the ECB the market is actually pricing in an interest rate cut for autumn 2019 as well as a further decline in the deposit rate. 10-year yields continued to fall as a result of the expectations regarding the monetary easing of developed central banks and growth concerns. The US 10-year yield and the German long-term yield dropped by 55 and 35 basis points, respectively. Two-year yields showed similar dynamics in the periphery countries of the euro area: similarly to the German two-year yield, which fell by

**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

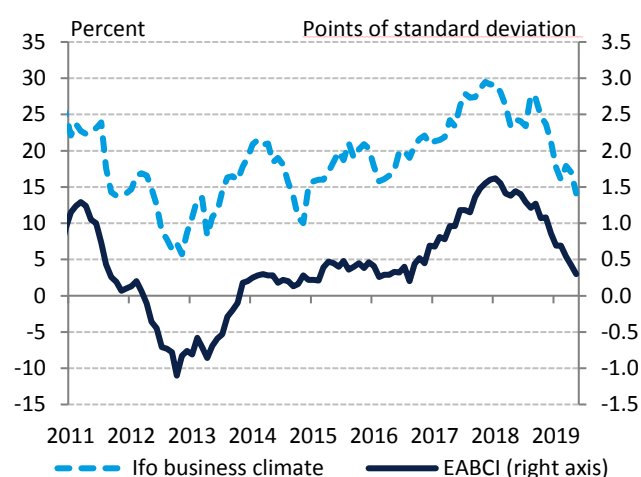
20 basis points, Spanish and Portuguese yields each fell by 10 basis points, while the Italian bond yield increased for most of the period owing to the concerns about the sustainability of the Italian government debt. Then, as a result of the developments in the final part of the period the Italian yield decreased to the level of the first part of the period. The risk-averse sentiment also contributed to the decline in developed bond yields, as in the past period a large amount of some USD 110 billion flowed into bonds, which were considered as a safe haven asset. By contrast, emerging bond markets saw capital withdrawal in May, although as a result of the capital inflow in the first half of the period, inflows amounted to USD 7 billion for the quarter as a whole.

**Growth concerns and news about the trade war also exerted downward pressure on the price of oil.** Oil prices rose until mid-May, before declining significantly in the last part of the period. In H1, prices were still boosted by concerns related to the tightness of supply (limitations on production by OPEC, sanctions on Iran, sharp fall in production in Venezuela). At the end of the period, however, the concerns related to the slowdown in growth in China as well as to the customs tariffs applied by the USA vis-à-vis China came to the fore. Latter factors decreased oil prices as well through demand side effects, thus oil prices fell by 9-10 percent during the whole period. By the end of the period, the price of Brent crude and US WTI declined to nearly USD 62 and USD 54, respectively.

### 3.1.2 Developments in the euro area

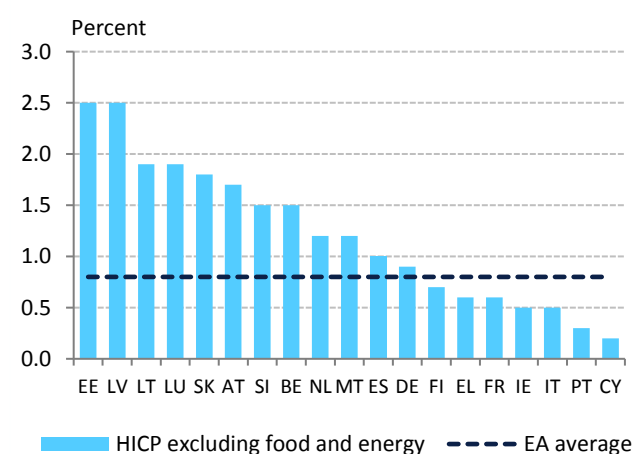
Economic growth in the **euro area** accelerated slightly in Q1. **Growth compared to the same period of the previous year and to the previous quarter amounted to 1.2 percent and 0.4 percent, respectively** (Chart 3-10). **Economic output in Germany, which is Hungary's most important trading partner, rose by 0.4 percent on a quarterly basis, following the deceleration observed in the past two quarters.** Growth was primarily supported by investment in construction and the machine industry, as well as by household consumption. Germany's industrial production, similarly to the previous months, declined further in April on an annual basis, with contributions by a wide range of subsectors. New orders of the German industry also decreased considerably year on year. At the same time, the acceleration seen in the case of both indices indicates an upswing over the near term. Exports rose in line with the moderately improving industrial performance. **In spite of the favourable Q1 data, expectations for the German economy's performance this year are still unfavourable. The impact of the German industrial trends on Hungary's**

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 (May 2019)



Source: Eurostat

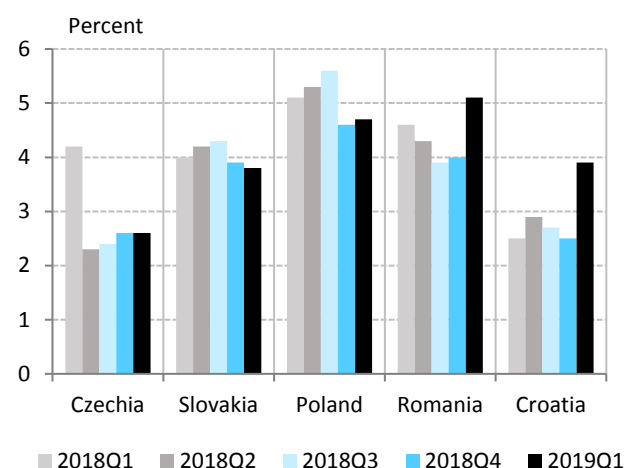
prospects is qualified by the fact that in the past months we witnessed decoupling of Central European and German industrial production.

In Q1, the **French economy** expanded by 1.1 percent, supported by consumption on the expenditure side. After positive contributions in the previous two quarters, net exports were unable to contribute to growth. The performance of the **Italian economy** is still stagnant, although some slight growth was seen in the first quarter of this year. Economic growth in **Austria** continued, and at 1.4 percent it slightly exceeded the GDP expansion of the euro area.

Both the business confidence index capturing the prospects of the euro area (EABCI) and the expectations for the German economy (Ifo) declined in the past period (Chart 3-11). The decline is primarily explained by the deterioration of the business prospects of the responding companies. **The growth prospects of the euro area continue to be dominated by downside risks.** Identifiable risks include the decline in industrial production observed in the past period primarily due to the trade tensions, the vulnerability of Italy stemming from the high government debt, the indirect effects of the deceleration in the Chinese economy and the uncertainty resulting from the fragile financial environment in the emerging markets. Uncertainty about the exit of the United Kingdom from the EU also continues to pose a risk. The deterioration in the prospects is mitigated to some degree by the decline in the chance of Brexit without an agreement, which is considered the worst-case scenario in terms of euro area growth. Nevertheless, with the resignation of Theresa May, the 'elimination' of the United Kingdom from the EU is still a realistic scenario. The direction of Brexit may depend on the successor to be elected at the end of July. As regards global economic activity, the increase in trade tensions remained the most significant financial market and growth risk in the past months.

In line with the deterioration in euro area economic activity, **inflation remained low in the area, fluctuating at around 1.5 percent since January.** In addition to the consumer price index, core inflation – which better captures underlying inflation developments – increased, but remained moderate in the past period, rising from 0.8 percent in March to 1.3 percent in April and then falling back to 0.8 percent in May. **However, at the level of individual Member States, significant differences are seen in the core inflation rates** (Chart 3-12), which is attributable to the different cyclical positions. 5-year inflation

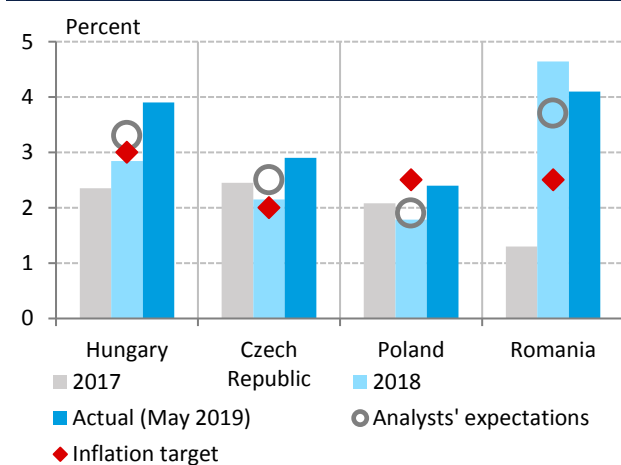
Chart 3-13: Annual changes in GDP in CEE countries



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

Source: Eurostat

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

expectations 5 years ahead still fall short of the ECB's inflation target.

**At its June meeting, the Governing Council of the European Central Bank left the key interest rates unchanged.** At the same time, the decision-makers **extended their forward guidance by half a year.** Accordingly, they expect the interest rates to **remain at the current levels at least until the first half of 2020.**

**The Governing Council also decided on the conditions of the quarterly targeted, longer-term refinancing operation (TLTRO III).** The interest rate on the loans granted within the framework of the TLTRO III was set by the central bank **at ten basis points above the average main refinancing operation rate (MRO) over the life of each operation.** However, the rate may **decline in the case of banks** whose lending activity exceeds a **threshold.** Accordingly, the **lowest rate may be 10 basis points above the average central bank deposit rate** prevailing during the term of the loan.

The principal repayment stemming from maturing securities purchased under the asset purchase programmes ended in December 2018 will be reinvested for an extended period of time after the key interest rates start to be raised, and in any case for as long as the Governing Council deems it necessary. However, according to market pricing, the key interest rates are expected to decline in the second half of 2019.

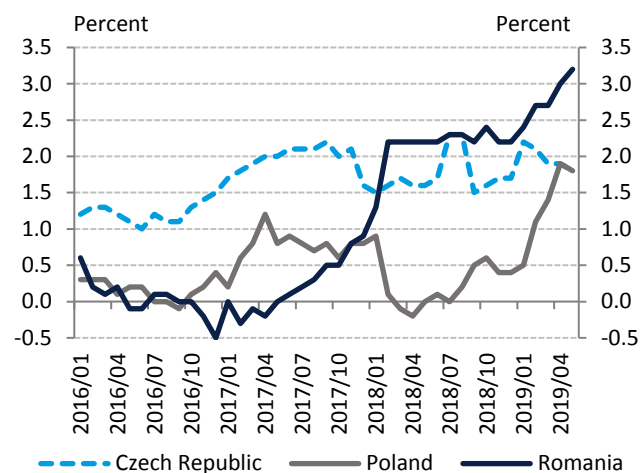
### 3.1.3 Developments in the CEE region

**As in the previous quarters, the Central and East European region once again proved to be the growth centre of the European Union in early 2019 (Chart 3-13).** According to seasonally adjusted data, in Q1, Poland, Romania, Slovakia and the Czech Republic recorded GDP growth rates of 4.6 percent, 5.1 percent, 3.8 percent and 2.5 percent, respectively. For the region as a whole, domestic demand is the main driver of growth, and – with the exception of the Czech Republic – **the region is characterised by decoupling from cyclical developments in Germany** (see Box 3-1).

**Inflation varied in the countries of the region in the past months.** In the Czech Republic, inflation once again rose above the inflation target during the period and was 2.9 percent in May. In Poland, consumer prices have been gradually increasing since January, and the inflation rate accelerated to 2.4 percent by May. In Romania, following a temporary decline at the beginning of the year, the rise in consumer prices is accelerating again. In March, the price index had exceeded 3.5 percent, which is the upper bound



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



Source: Eurostat

of the tolerance band, and then rose to 4.1 percent in May. According to the latest forecast of the central bank, inflation this year is expected to remain above the tolerance band, and then remain in the upper part of the band for the entire forecast period.

Based on the May analyst consensus, average inflation this year may come in slightly above the central bank's target in the Czech Republic and Romania, while in Poland the pace of price increases continues to fall short of the 2.5-percent target (Chart 3-14). In the countries of the region, core inflation varied during the period, rising in Poland and Romania, but falling slightly in the Czech Republic.

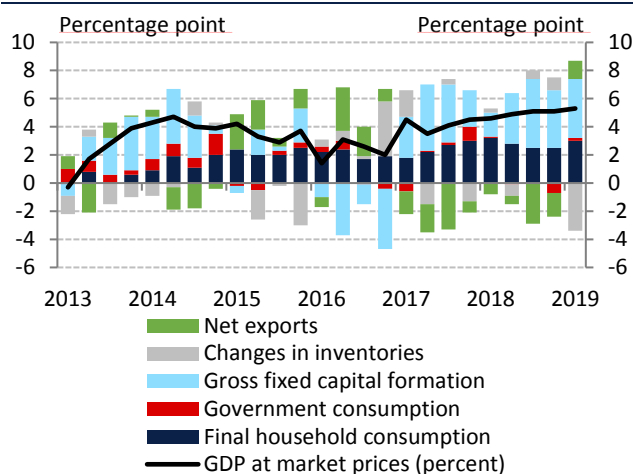
**Of the central banks in the region, in May the decision-makers of the Czech central bank decided to raise the policy rate by 25 basis points.** According to the central bank's latest forecast, inflationary pressure will not strengthen further, and inflation this year may still remain in the upper part of the tolerance band, before gradually declining to the 2-percent target next year. Due to the weaker-than-expected exchange rate, the interest rate path forecast shifted upwards. **During the past quarter, the Polish central bank's decision-makers did not change the policy rate.** According to the decision-makers, the central bank's measures are shaped by the deviation from the inflation target. The latest forecast suggests that prices will rise moderately, and inflation will remain close to the target over the transmission horizon of monetary policy. The decision-makers believe that the current level of interest rates facilitates the achievement of the inflation target and the sustainable growth of the Polish economy, as well as the preservation of macroeconomic equilibrium.

**The Romanian central bank's decision-makers also did not change the monetary conditions in the past period.** Following a temporary decline at the end of last year, inflation left the tolerance band in February again and rose to 4.1 percent in May. According to the latest forecast of the central bank, inflation may remain above the tolerance band until the end of the year, and then stay in the upper part of the band for the entire forecast period.

### 3.2 Analysis of the production and expenditure side of GDP

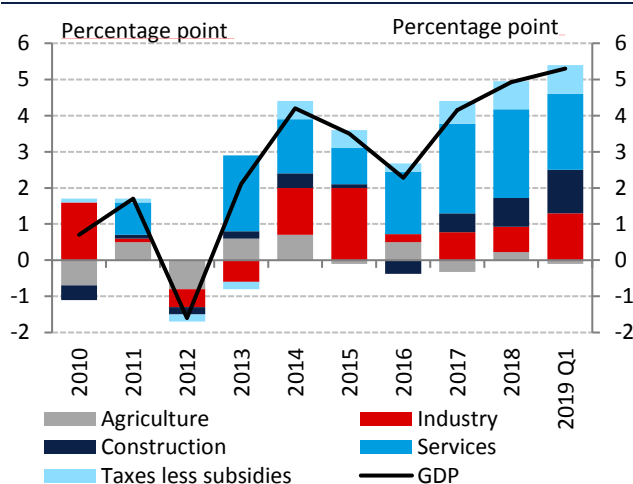
The Hungarian economy expanded significantly in 2019 Q1. A wide range of sectors contributed to the 5.3-percent GDP growth. On the expenditure side, domestic demand items – consumption and investment – contributed to economic expansion to the largest degree, while the contribution of net exports was also positive. In addition to favourable income developments, the expansion in household consumption was supported by an upswing in the household credit market and the high level of consumer confidence. The favourable financing environment, i.e. double-digit expansion in the corporate credit market and rising absorption of EU funds, contributed to the strong increase in investment. As a result of favourable developments in industry, the annual dynamics of total exports exceeded the growth rate of imports, and thus net exports had a positive impact overall on economic growth in Q1. On the production side, growth in market services continued, with construction as well as industrial sectors also contributing to GDP growth.

Chart 3-16: Contribution to annual changes in GDP



Source: HCSO

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



Source: HCSO

In 2019 Q1, gross domestic product increased by 5.3 percent year on year, while compared to the previous quarter GDP expanded by 1.5 percent. Economic growth continued to be supported by domestic demand, as investment expanded considerably and there was an upswing in household consumption as well. Imports rose in parallel with an increase in domestic demand items, but the growth rate of exports accelerated in Q1, and thus net exports made a positive contribution to growth (Chart 3-16).

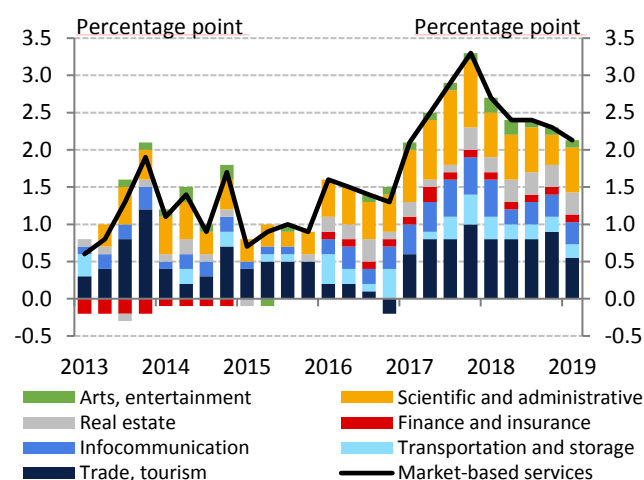
Looking at the production side, value added increased in all sectors except agriculture. In line with the strong growth in domestic demand on the expenditure side, market services supported economic growth to the greatest extent on the production side (Chart 3-17). The trade, accommodation and food service activities as well as professional, scientific and administrative services subsectors expanded the most. In addition, added value increased in the information and communication as well as the real estate sector (Chart 3-18). The dynamics of public services did not change year on year.

Household consumption growth continued in 2019 Q1. The annual expansion in service consumption and in purchases of durable goods – in line with the housing market cycle – significantly exceeded the aggregate expansion in consumption. There was double-digit expansion in the consumption of durable goods, while the consumption of services continues to make a positive contribution to consumption growth (Chart 3-19). Growth was supported by robust consumer confidence, willingness to borrow and net financial wealth as well as by a dynamic increase in wages and further expansion in employment (Chart 3-20). Retail trade turnover data also corroborate the dynamics of consumption expansion, with further growth seen in April (Chart 3-21).

Loan dynamics accelerated further in the household segment during the quarter. As a result of transactions, household loans outstanding continued to increase during

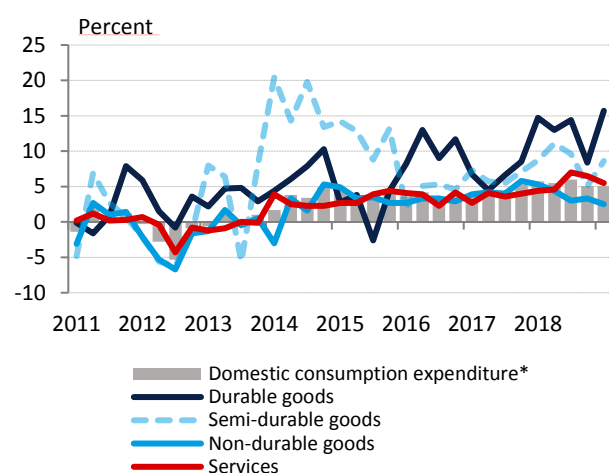


**Chart 3-18: Decomposition of the GDP growth contribution of subsectors of market-based services**



Source: HCSO

**Chart 3-19: Annual change in aggregate consumption and its subcomponents**



Note: \*Domestic consumption expenditure does not include the balance correction for tourism and therefore differs from household consumption expenditures in the national accounts data.

Source: HCSO

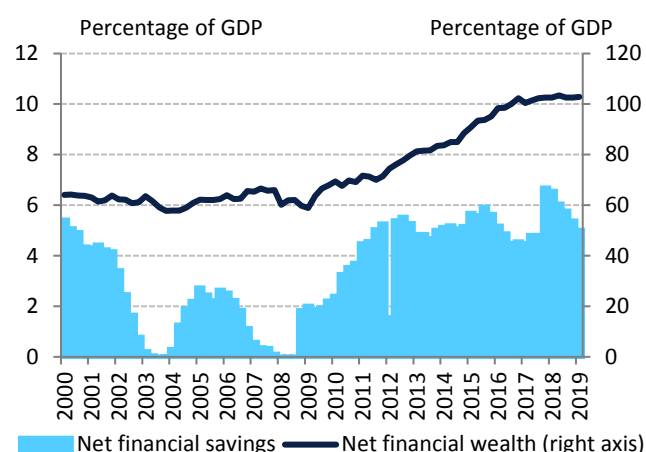
the quarter, with annual loan dynamics reaching nearly 6 percent by the end of the quarter. Growth is still mainly driven by housing loans and personal loans. In nominal terms, housing loan disbursement in the past 12 months exceeded the volume recorded in 2008, but in real terms and as a proportion of households' disposable income the level is well below the pre-crisis level. In the stock that is building up, the decline in interest rate risk is supported by the fact that housing loans with interest rates variable within a year are practically not issued any longer, and the debt cap rule concerning the payment-to-income ratio became stricter. More than half of the housing loan contracts concluded during the quarter and fixed for at least 5 years were Certified Consumer-friendly Housing Loan products, which ensures predictable repayment instalments with a low premium for households. As in the previous quarters, the majority of the banks participating in the Lending Survey reported buoyant demand in the case of housing loans, and similar intensity is expected for the next half year as well. The ongoing double-digit wage increases in the private sector and favourable credit conditions continue to point to dynamic lending. The prenatal baby support, as part of the Family Protection Action Plan starting from 1 July 2019, is expected to increase the total volume of lending only slightly; for statistical reasons, it will have a reducing effect on housing loan disbursement and an expanding impact on the volume of consumer loans.

In 2019 Q1, on a year-on-year basis, the level of public consumption rose together with the in-kind social benefits received from the government (2.2 percent increase).

**In 2019 Q1, whole-economy investment rose by 23.4 percent year on year** (Chart 3-22). In line with the outstanding performance of the construction industry observed in Q1, building-type investment increased by 32.4 percent, while investment in machinery expanded by 20.5 percent. **Looking ahead, the dynamic increase in investment in machinery may contribute to productivity growth.** Investment by companies producing goods and providing services for the domestic market was up compared to the previous quarter, with contributions from almost all sectors. Financial, insurance and construction investment rose considerably, while moderate growth was observed in the trade and catering sectors.

Investment by sectors producing primarily for export markets expanded significantly, supported by **investment in the vehicle industry**, which has a considerable weight, as well as by expansion in other manufacturing subsectors (manufacturing of electric equipment, chemical industry, metal industry, food industry). Investment in the public

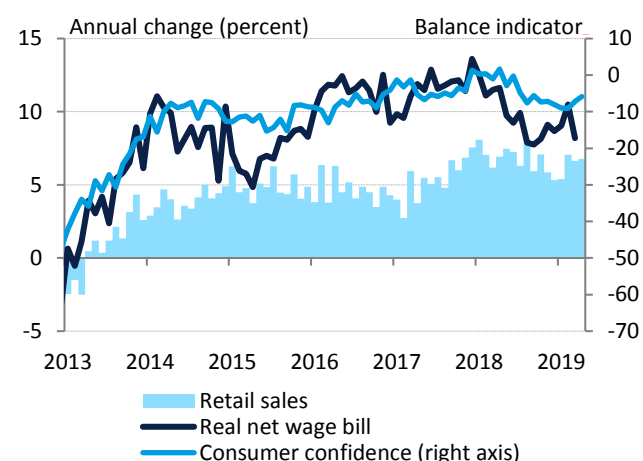
Chart 3-20: Net financial savings of households



Note: Seasonally adjusted series.

Source: HCSO

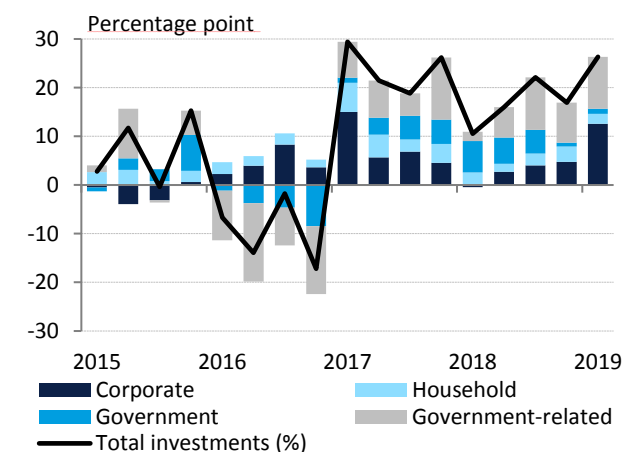
Chart 3-21: Developments in retail sales, income and the consumer confidence index



Note: Seasonally adjusted retail sales data.

Source: European Commission, Eurostat, HCSO

Chart 3-22: Decomposition of the annual change in investments



Source: HCSO

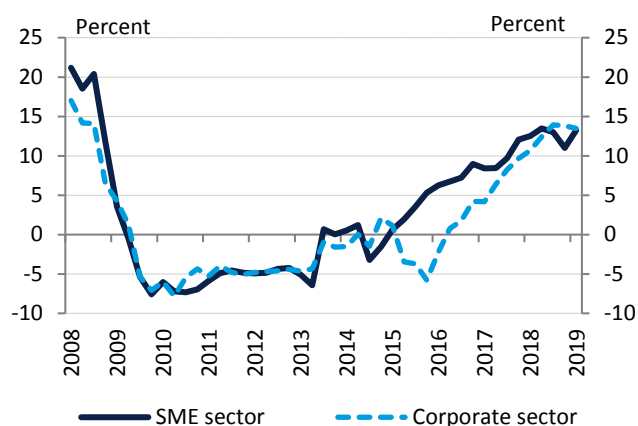
sector (health care, administration) increased moderately, while investment in the sectors closely related to the state (transport, energy) expanded considerably – primarily as a result of developments implemented from EU and own funds. **In line with the buoyant investment activity, the dynamic increase in construction output continued in Q1.**

**The quarter was characterised by outstanding corporate loan dynamics in an international comparison as well.** In 2019 Q1, domestic loans to non-financial corporations significantly exceeded repayments, and thus corporate loans outstanding and the SME sector's outstanding loans expanded by 14 percent and 13 percent, respectively, year on year (Chart 3-23). This robust increase, which was unprecedented since the crisis, was broad-based across sectors, with the outstanding loans of the manufacturing industry expanding by the largest degree. From the beginning of the year, the central bank launched the Funding for Growth Scheme Fix with an allocation of HUF 1,000 billion and utilisation of this programme reached HUF 131 billion by end-May 2019, helping to divert corporate loans towards a sounder structure, i.e. fixed-rate forint loans. Banks' responses to the Lending Survey also confirm that companies' demand has shifted strongly towards long-term, forint-denominated loans and looking ahead for the next half year banks expect this to remain the case. Responding to the increasing risks, in commercial real estate lending – primarily due to the increased risk of overvaluation of real estate prices – some banks tightened their credit conditions. Nevertheless, they do not expect any drop in demand in the case of real estate development objectives.

#### Households' investment activity increased further in Q1.

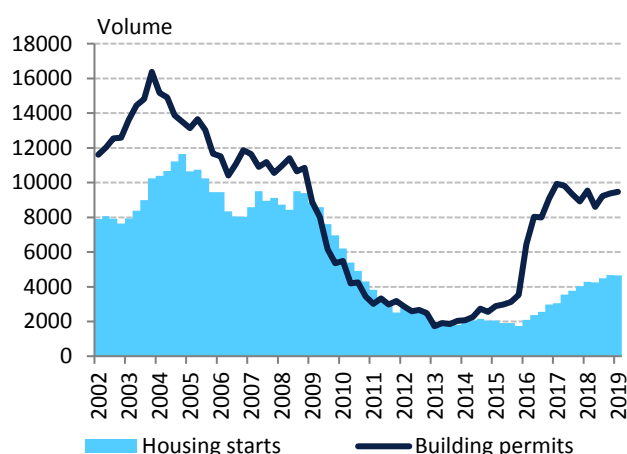
In parallel with the favourable demand conditions, the expansion in home-building continued (Chart 3-24), tangibly supported by households' high propensity to borrow and the housing programmes that provide favourable credit conditions. In line with the previously issued building permits, 3,661 new homes were completed in 2019 Q1, corresponding to an expansion of 7.9 percent year on year. However, the number of newly issued home building permits declined slightly compared to the same period of the previous year. Nevertheless, the number of building permits issued is still high, and we thus expect further expansion in housing starts in the coming quarters. **As a result of the buoyant demand, housing prices continued to rise, driven by price changes of pre-owned and new homes as well.** The deceleration in the rise in housing prices experienced in the past quarters continued, which can be explained by the fact that the weight of homes

**Chart 3-23: Annual changes in lending to non-financial corporates and SMEs**



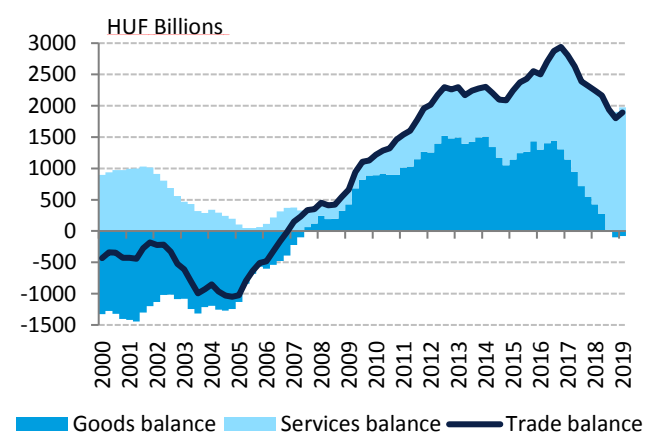
Note: Data for the corporate sector are based on transactions with the total financial intermediary system. The SME sector does not include the self-employed. Source: MNB

**Chart 3-24: Evolution of housing starts and building permits**



Note: Seasonally adjusted data. Source: HCSO

**Chart 3-25: Evolution of the trade balance**



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

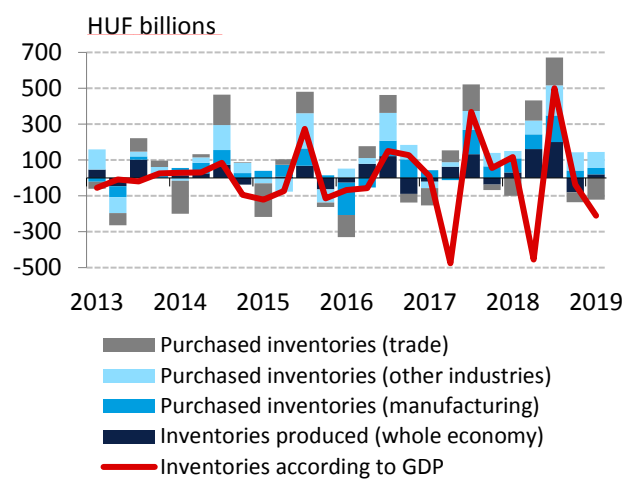
in the country, where the price level is typically lower, increased in housing market turnover.

The **contribution of net exports to domestic economic growth was positive in Q1**. The favourable developments in exports are based on the dynamic growth that emerged in domestic industry in the past months, despite the significant downturn in the performance of German industry and in the orders in manufacturing. While annual growth in German industry in the past half year corresponded to an average decline of 2.2 percent, the performance of Hungarian industry in the same period increased by 5.3 percent (developments in industry in Germany and the region are discussed in more detail in Box 3.1). In 2019 Q1, value added of Hungarian industry expanded by 5.9 percent year on year, while Hungarian export growth reached an even higher rate of 7.7 percent in this period. The reduction of inventories accumulated last year may also have contributed to the strong growth rate of exports. In parallel with a rise in domestic demand items (household consumption, investment), goods imports continued to increase, but the goods balance was positive owing to the strong export growth. The increase in Hungary's services exports continued, mainly related to exports of financial and other business services, in addition to tourism and transportation services. The trade surplus increased again in Q1, with the largest contribution coming from the remarkable surplus of the services balance (Chart 3-25). **On the whole, net exports had a positive impact on economic growth in Q1.**

According to the preliminary estimate of the HCSO, **agricultural performance made a negative contribution to economic growth in Q1**. As a result of the unusual drought at the beginning of the year, expectations concerning the autumn wheat harvest deteriorated. Although the April and May weather significantly improved the crop prospects, it is uncertain how the unusually rainy May will affect the autumn crop results.

The level and contribution to growth of whole-economy inventories was crucially affected by various factors. First, last year the favourable domestic developments in economic activity may have resulted in operations characterised by high inventory levels in a wide range of sectors. **The surge in industrial exports, however, resulted in the reduction of these inventories at the beginning of this year**, contributing to the decline in the inventory level on an annual basis. **The activation of investment projects on stock last year also strengthened these developments.** In addition, as a result of the dry weather at the beginning of the year, **the unfavourable agricultural output may also**

**Chart 3-26: Changes in inventory based on current prices and GDP**



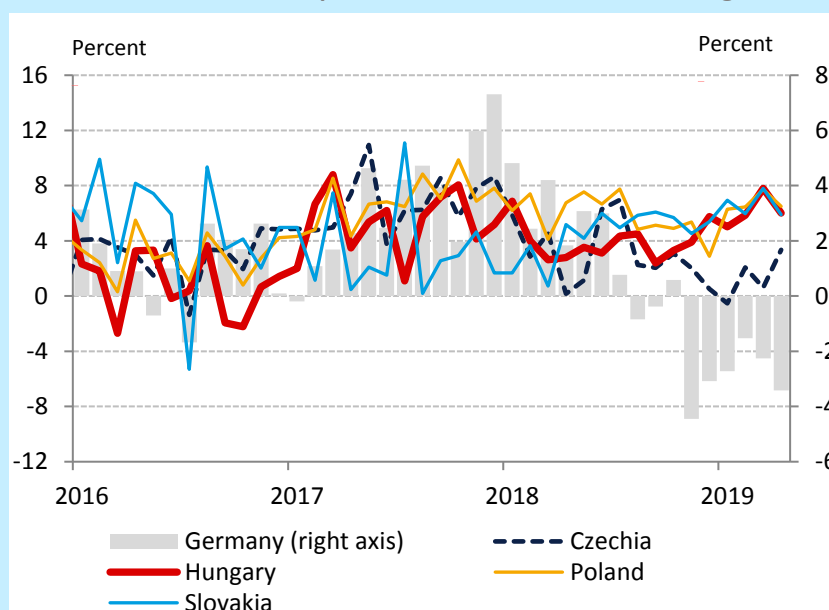
Note Quarterly change, HUF billions.

Source: HCSO, MNB calculation

have resulted in a decline in whole-economy inventories. On the whole, changes in inventories made a negative contribution to GDP growth in Q1 (Chart 3-26).

**Box 3-1: Recent divergence in industrial production between the region and Germany**

Last year, industrial output in the countries of the region gradually slowed, in line with the developments observed in the German manufacturing industry, which is the most important market for the region's industrial exports. Following that, however, **industrial output in Hungary and the region started to grow dynamically, while both the performance of German industry and orders in manufacturing dropped significantly. As a result, a large gap was seen between the developments in industry in the region and Germany.** While annual growth in German industry in the past half year corresponded to an average decline of 2.2 percent, the performance of Hungarian industry in the same period increased by 5.3 percent, with the Polish and Slovak industries growing by 5.6 percent and 6.1 percent, respectively. **Accelerating industrial performance played a major role in the economic growth of Hungary and the countries of the region, and thus the persistence of this phenomenon may be crucial in terms of this year's growth figures.**

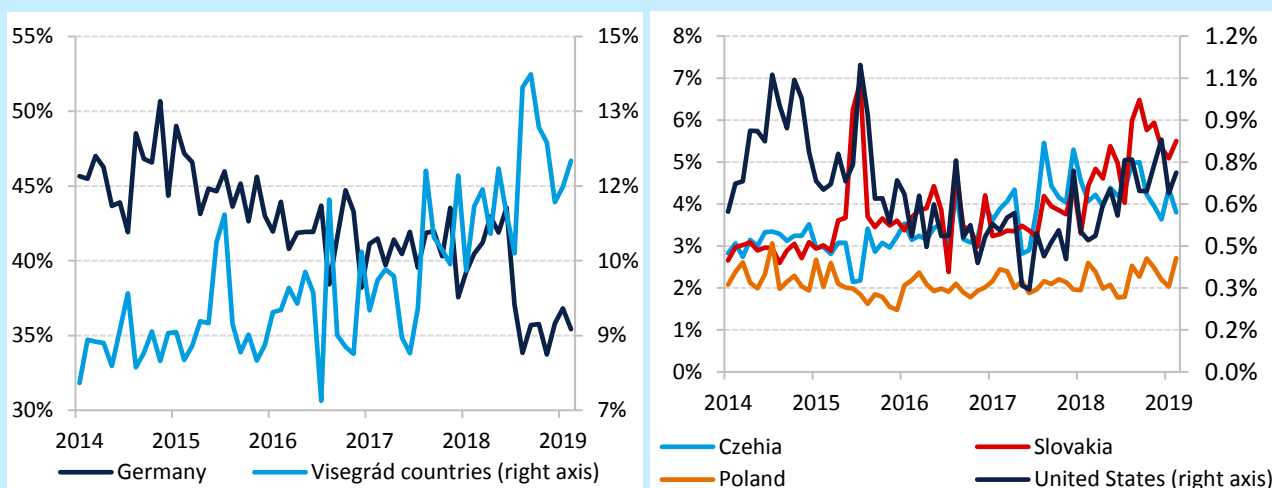
**Chart 3-27: Industrial production in the countries of the region**

Note: Seasonally and calendar day adjusted data, annual changes.

Sources: Eurostat, Destatis, HCSO

**German industrial performance clearly depends on the recently mounting sector-specific problems with vehicle manufacturing.** The biggest problems are caused by the global downturn in new car sales and trade tensions in the short run, and by increasingly strict emission requirements and the appearance of new technologies in the longer run. According to Audi's Q1 report, production in Western Europe slowed down, **and compared to the same period of the previous year, 19 percent fewer cars were manufactured in the factories in Germany in 2019 Q1.** By contrast, **production in the Audi factories in Hungary and Slovakia increased by more than 60 percent in the first three months of 2019.**

Chart 3-28: Development of the share of destination countries of domestic vehicle exports as percentage of total vehicle exports



Source: Eurostat

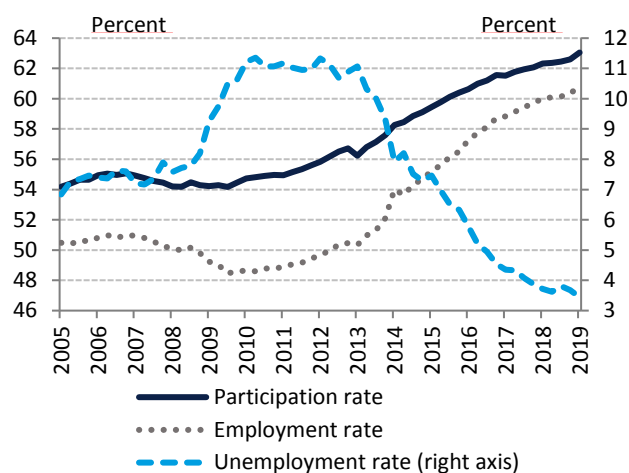
As a result of all the above, the weight of Germany within total vehicle exports declined by nearly 10 percentage points in the past quarters, and in parallel with that the share of the Visegrád countries and the USA increased considerably. The change in the geographical orientation of Hungary's vehicle exports is attributable to various factors. Firstly, **the dominance of Hungarian vehicle exports to Germany, which primarily served re-export purposes, was replaced by direct exports to the target markets.** Secondly, due to the rising trade tensions, **inventory-building activity strengthened in the US economy**, also because of the potential risk of further protective tariffs being extended to Europe, **which created additional demand for vehicle exports.** In addition, at the Audi factory in Hungary, following the end of the manufacturing of older models (e.g. Audi TT) and readjustment of the production lines, manufacturing of the Q3 model started, which may also strengthen Hungarian car manufacturing and vehicle exports. In addition, Mercedes's car sales fell in all major categories in the first quarter of 2019, except in the compact category manufactured in Hungary.

**Nevertheless, the partial divergence of Hungarian industry from German economic activity is only expected to boost the performance of Hungarian industry and exports temporarily.** In Germany, Hungary's most important foreign trading partner, industrial and manufacturing orders have declined by 4–6 percent this year, which may also impact the underlying trends for Hungarian industry. With the fading out of the short-term additional demand impulse, a permanent deceleration in economic in of Hungary's main export markets may have a negative impact on industrial performance in Hungary as well, pointing to a slowdown in the current buoyant dynamics.

### 3.3 Labour market

In 2019 Q1, employment increased significantly in the private sector. Within this sector, there was no major change in employment in manufacturing, while the number of employees in the market services sector rose considerably compared to the previous quarter. The number of public workers declined to 121,000. The seasonally adjusted unemployment rate fell to 3.4 percent.

**Chart 3-29: Participation, employment and unemployment rate in the whole economy**



Note: Seasonally adjusted data.

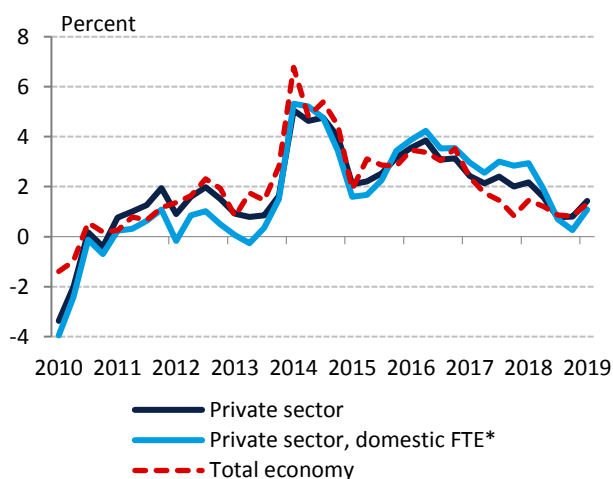
Source: HCSO

In 2019 Q1, the participation rate of the 15–74 age group was 62.8 percent, while the proportion of active people within the population aged 15–64 years amounted to 72.5 percent. **According to seasonally adjusted data, the number of economically active people increased considerably** (Chart 3-29).

It was primarily the private sector that contributed to the rise in whole-economy employment, while employment in the public sector increased to a lesser degree. Within the public sector, **the number of public workers declined to 121,000**, whereas the number of workers outside the public work scheme increased.

In the private sector, there was no major change in employment in manufacturing, while the number of employees in the market services sector rose considerably compared to the previous quarter. Amounting to 109,000, there was no major change in the number of those employed at sites abroad. The full-time equivalent number of employees in Hungary adjusted for the number of hours worked grew slower than employment (Chart 3-30).

**Chart 3-30: 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

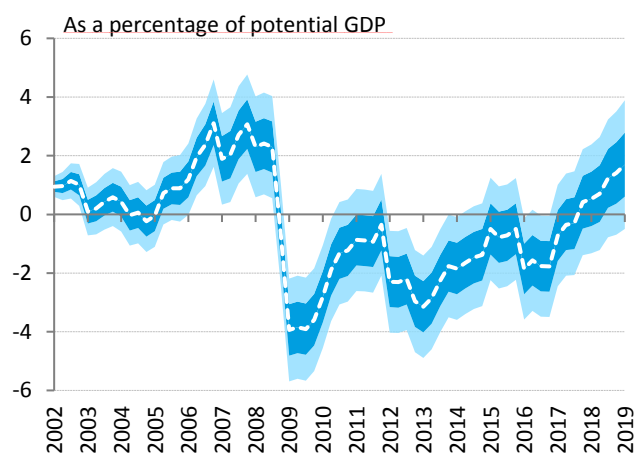
The number of unemployed declined further, and **the seasonally adjusted unemployment rate fell to 3.4 percent**. Based on the rate of vacancies, corporate labour demand moderated both in manufacturing and in the market services sector.



### 3.4 Cyclical position of the economy

GDP is estimated to have been slightly above potential in 2019 Q1. Corporate capacity utilisation remains high, while free reserves directly available on the labour market declined further. As the output gap closes, the expansion in the supply side of the economy will become a key factor in terms of the sustainability of growth. Economic policy can raise the rate of potential growth through specific structural measures aimed at improving competitiveness and increasing productivity while maintaining stability.

**Chart 3-31: Uncertainty band of the output gap**



Note: The blue area shows the estimation uncertainty band.

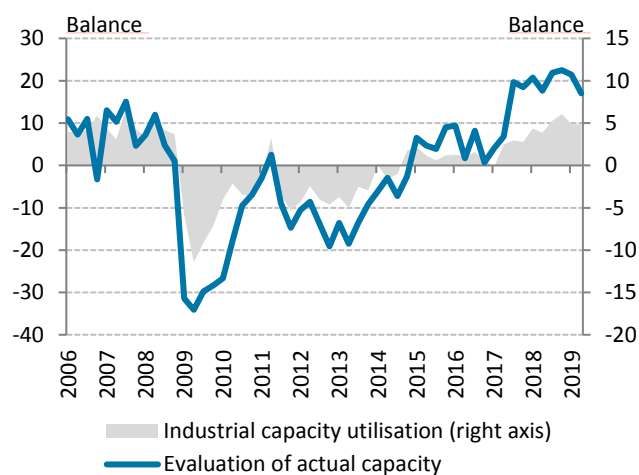
Source: MNB

GDP is estimated to have been slightly above potential (Chart 3-31). **Our assessment of the cyclical position of the Hungarian economy rose slightly** compared to our estimate in the March Inflation Report.

Based on questionnaire surveys, **corporate capacity utilisation remains still high**. In addition, the current assessment of capacities already exceeds its average pre-crisis level. Moreover, the dynamic expansion in employment in recent years has contributed to the tightening of the labour market (Chart 3-32).

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 3-32: Capacity utilisation and evaluation of actual capacity**



Source: ESI

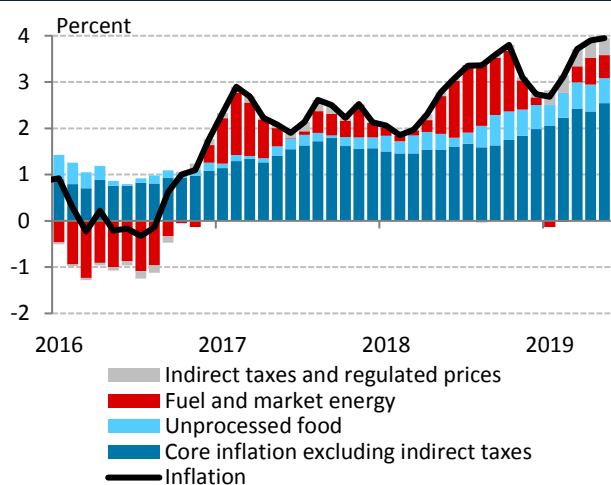
**Productivity has risen in the past period**, but this is attributable to cyclical factors rather than a structural improvement in the competitiveness of the economy. Nevertheless, over the medium term, the high investment rate, the large investment projects which have been announced and the capacity expansion of the supplier network also may generate a positive feedback loop across **market services with higher value added** (information and communication, finance, logistics, marketing).



### 3.5 Costs and inflation

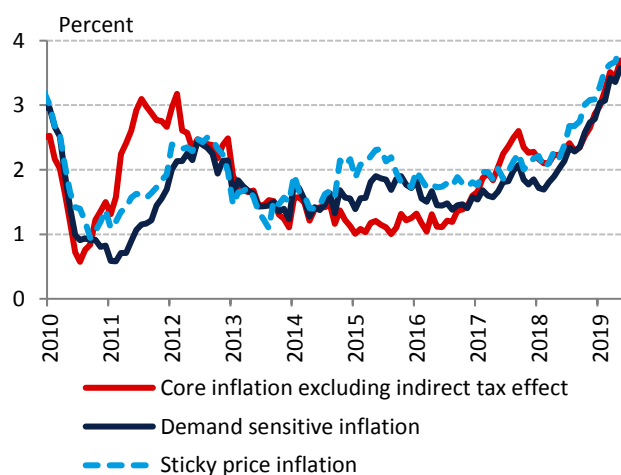
Starting from the around-3-percent level observed early this year, inflation increased to the upper one third of the tolerance band in recent months. In line with changes in global oil prices, the rise in the consumer price index was primarily attributable to the increase in fuel prices. At the same time, the recent rise in core inflation excluding indirect taxes is explained by the increase in the price dynamics of market services and processed food. Accordingly, the indicator rose to 3.7 percent in May. In 2019 Q1, gross average earnings in the private sector were up 11.8 percent year on year. This year's wage growth, which exceeds the rise in the minimum wage and the guaranteed wage minimum, may primarily be attributable to the tight labour market conditions determining the underlying wage setting trend. Similar, double-digit wage growth was observed among large corporations as well as small and medium-sized enterprises.

Chart 3-33: Decomposition of inflation



Source: MNB calculations

Chart 3-34: Underlying inflation indicators



Source: MNB calculations based on HCSO data

#### 3.5.1 Consumer prices

**Starting from the roughly 3-percent level observed early this year, inflation increased to the upper one third of the tolerance band in the past months.** In line with the changes in global oil prices, the rise in the consumer price index was primarily attributable to the increase in fuel prices (Chart 3-33).

In recent months, **indicators capturing longer-term inflation trends** (inflation of demand-sensitive and sticky-price products) **continued to rise** (Chart 3-33). Higher core inflation excluding indirect taxes was caused by the increase in the price dynamics of market services and processed food. Accordingly, the indicator rose to 3.7 percent in May.

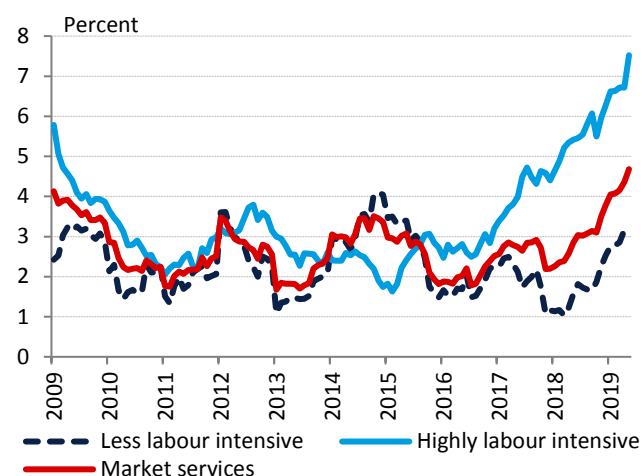
**On the whole, the inflation of industrial goods increased slightly in the past months.** The inflation of non-durable industrial goods also rose, explained by the volatile-price air tickets and price changes of clothing. At the same time, durable industrial goods inflation has remained practically unchanged.

In the spring months, **market services inflation continued to increase.** The observed price dynamics were higher than in previous years and typical of a wide range of products. Within services, the inflation of both labour intensive and less labour-intensive services increased (Chart 3-34).

**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 was still high in the past months.** The inflation of unprocessed food continues to hover around the 10-percent mark, primarily owing to price increases for seasonal foodstuffs and pork. Processed food inflation also increased, mainly due to higher prices of milk and dairy products.

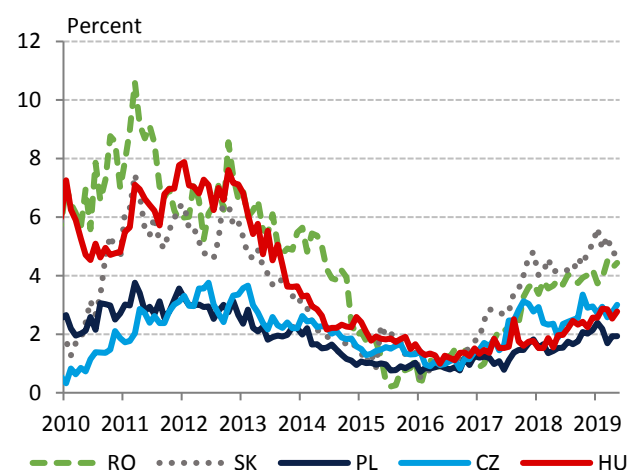
Chart 3-35: Inflation of market services



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

Source: MNB calculations based on HCSO data

Chart 3-36: Inflation expectations in the region



Source: MNB calculations based on European Commission data

**Amid significant volatility, fuel prices increased on the whole, rising by more than 10 percent overall between March and May. In the first weeks of June, however, these prices declined in parallel with the adjustment seen in oil prices.**

**Looking at the data from recent months, on the whole, inflation, core inflation and core inflation excluding indirect taxes were higher than the projection in the March Inflation Report.** The difference seen in overall inflation was caused by the stronger-than-expected rise in fuel prices. Compared to our forecast, the higher core inflation and core inflation excluding indirect taxes were attributable to the stronger-than-expected price dynamics of market services.

### 3.5.2 Inflation expectations

In recent months, **households' inflation expectations** have not changed 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 had been typical earlier as well (Chart 3-36).

### 3.5.3 Wages

**In 2019 Q1, gross average earnings in the private sector rose by 11.8 percent year on year (Chart 3-37).** In January, the 4-percent rise in the regular average wage on a monthly basis was larger than the usual seasonality, whereas in March, the monthly increase in the regular average wage was slightly lower than the usual seasonality. The overall conclusion that can be drawn from this is that – although the typical seasonality of wage-setting remained unchanged (i.e. companies typically changed wages in March this year as well) – **compared to the previous years, many companies raised wages already at the beginning of the year, in January.**

Within the private sector, wage dynamics in manufacturing significantly exceeded the rate of pay increases in the market services sector. Wage growth in sectors paying below-average wages was still higher than in sectors with above-average wages. Based on data according to headcount categories, **wage dynamics strengthened further not only among large corporations but also among small and medium-sized enterprises, and similar, double-digit wage increases were recorded** in each company type. According to the wage agreement concluded at end-2018, this year the degree of raising the minimum wage and the guaranteed wage minimum as well as the guiding wage recommendation for the private sector is 8 percent. **The wage growth observed across a wide range of companies**

**Chart 3-37: Annual change in gross average wages in the private sector**



Note: Quarterly moving averages.

Source: HCSO

which exceeds the rise in the minimum wage and the guaranteed wage minimum may primarily be attributable to the tight labour market conditions determining the underlying wage-setting trend.

With the restriction of the fringe benefit system this year, the first-quarter ratio of other earned incomes declined by 0.8 percentage point year on year; companies may have offset the lost income by raising wages (see Box 3-2).

#### 3.5.4 Producer prices

**Agricultural producer prices rose in year-on-year terms in 2019 Q1.** The price increase is mainly attributable to the price developments of seasonal products: the rising price of vegetables and potatoes was only partly offset by the drop in the price of fruits. In addition to seasonal products, grain prices were also up year on year. The prices of products of animal origin overall declined slightly in the past period, despite the fact, that we could observe an increase in the producer prices of milk year on year.

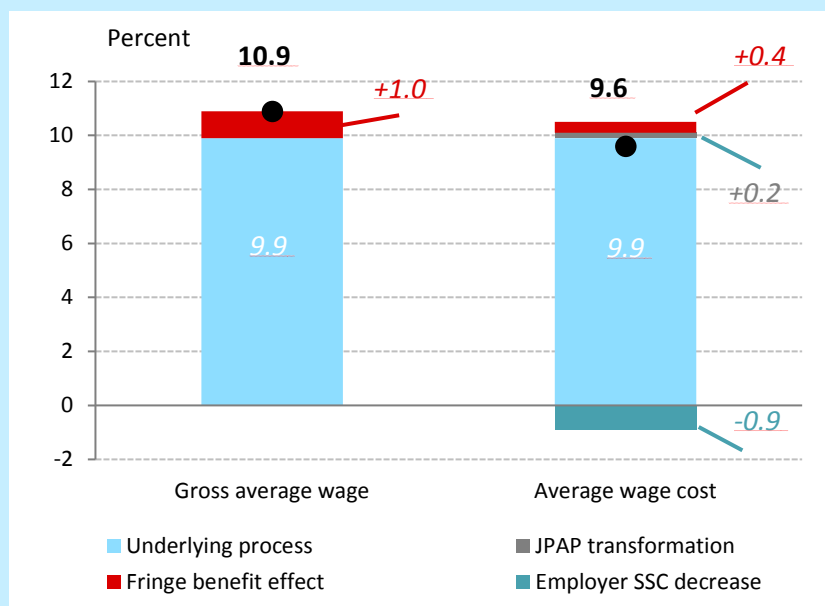
Until May, on a year-on-year basis, producer prices of consumer goods and domestic sales prices of the industry as a whole rose to a greater degree than the historical average. In the case of the latter, the higher price dynamics are attributable to the rising producer prices of the energy producing sectors.

### Box 3-2: Impact of this year's changes to the fringe benefit system

The rules concerning fringe benefits changed significantly in 2019: of the three components of the fringe benefit scheme, the tax exempt benefits were terminated almost in full, after the cancellation of the cash benefits only the SZÉP card (Széchenyi Recreation Card) remained in the category of preferential fringe benefits up to an annual limit of HUF 450,000, while most of the certain defined benefits were also cancelled or are taxed as wages. Corporate reactions to the new regulation are highly uncertain. According to surveys, taking into account their longer-term motivation effect, despite the the transformation of tax conditions, majority of employers have not terminated the fringe benefits. However, **the narrowing of the range of fringe benefits this year may have had an impact on the strong wage dynamics at the beginning of this year**, if the terminated benefits were paid as wages by companies.

In addition to the decline in tax revenues on fringe benefits, the drop in Q1 in other earned incomes, which mainly include fringe benefits, also shows that **companies restrained fringe benefits this year**. Tax revenues on certain defined benefits not taxed as wages declined by 65 percent, while tax revenues on preferential fringe benefits (SZÉP card) fell by 22 percent in Q1. Since there was tax change for fringe benefits (SZÉP card) – the tax base multiplier was terminated – so the net income received in this category actually declined by only 9 percent in the first quarter. Based on the available Q1 HCSO institutional wage data, the ratio of other earned incomes fell by 0.8 percentage point year on year. **We assume that in the current tight labour market environment the earned income lost as a result of the reduction of fringe benefits was offset by companies to a certain extent by pay rises** realised at the beginning of the year. Accordingly, **we estimate that the administrative measure concerning the fringe benefit scheme contributes to this year's private sector wage dynamics by 1 percentage point**. Changes in the fringe benefit system – based on our assumed corporate reactions – will increase this year's private sector average wage cost dynamics by 0.4 percentage point due to higher tax burden through two effects; on the one hand, the payment of terminated benefits as a wage, on the other hand the maintenance of fringe benefits which are already taxed as wage since the beginning of this year. The decrease in the sum of allowances used due to this year's transformation of the targeted allowances under the Job Protection Action Plan increases average wage cost dynamics by additional 0.2 percentage point. The average wage cost dynamics determining the inflationary impact on the cost side will be reduced by nearly 1 percentage point this year by the reduction of the social contribution tax on 1 July (Chart 3-38).

Chart 3-38: Annual change in private average gross wages and average wage costs in 2019



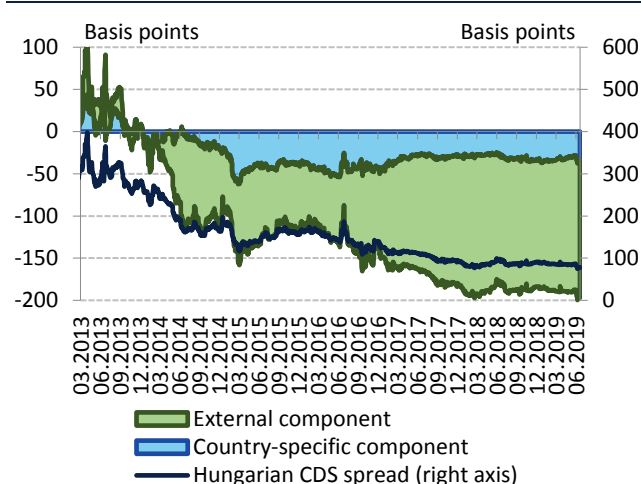
Sources: HCSO, MNB estimation

## 4 Financial markets and interest rates

### 4.1 Domestic financial market developments

Market sentiment deteriorated in the past quarter, mainly due to global growth concerns and trade war fears, although developed stock markets started to rise in June. The values of the VIX Index, which measures stock market volatility, and the emerging bond market EMBI Global spread have risen by 1.5 percentage points and 15 basis points, respectively, while long-term developed government securities market yields have declined by 20–55 basis points since the second half of March. As a result of global risk aversion, the US dollar appreciated against the euro for most of the period. The Hungarian credit risk indicator dropped slightly, while the domestic 10-year yield decreased together with long-term yields of developed and CEE countries. Unlike other currencies in the region, the forint depreciated against the euro.

**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 spread declined slightly in Q2** (Chart 4-1).

The decrease in both international and domestic factors contributed to the spread falling by around 10 basis points. The decline in the international component was mainly due to developed central banks' communication at the end of the period which suggested some easing, while the decrease in the domestic component caused the CDS spread to drop at the beginning and the end of the period.

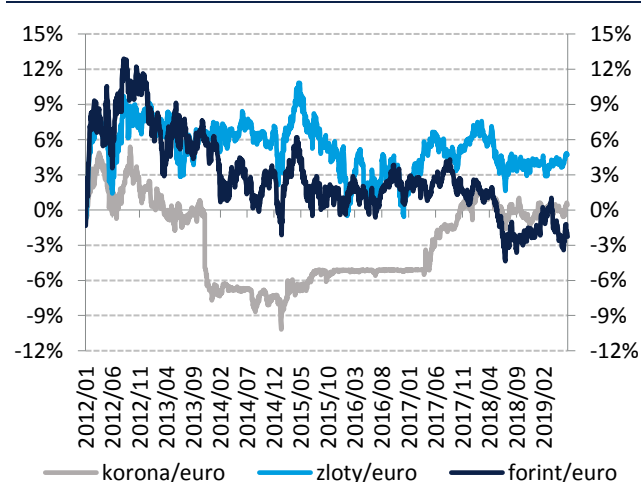
#### 4.1.2 Developments in foreign exchange markets

**The forint depreciated by 2.5 percent against the euro, while the Czech koruna, the Polish zloty and the Romanian leu appreciated slightly, strengthening by 0.3 and 0.7 percent** (Chart 4-2). At the start of the period, the forint exchange rate fluctuated between 315–320, weakening to 326 by the middle of the period. After some minor strengthening at end-May, the forint returned to the level of 324. The forint depreciated against the US dollar by 4.3 percent as well, whereas the currencies in the region weakened less against the US currency, falling by 1–1.3 percent.

#### 4.1.3 Government securities market and changes in yields

**Non-residents' HUF-denominated government securities holdings increased 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 from early 2018. Non-residents' HUF-denominated government securities holdings amounted to around HUF 4,300 billion at end-March 2019, before temporary declining in the middle of the period under review. Then, in June, they rose again, and on the whole they increased slightly in the period under review. Contrary to previous periods, non-residents' ownership of HUF-denominated government securities increased slightly to around 24 percent.

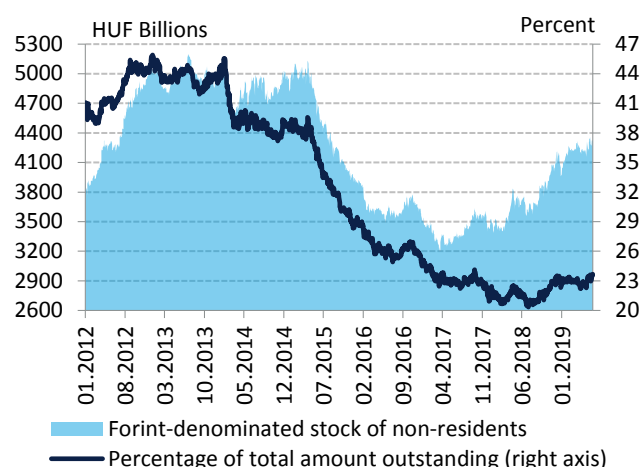
**Chart 4-2: Exchange rates in the region**



Note: Changes compared to beginning of 2012. Positive values mean appreciation of the currency.

Source: Bloomberg

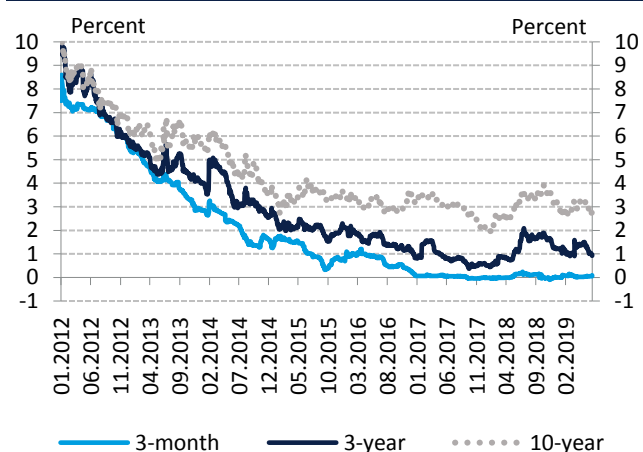
**Chart 4-3: HUF-denominated government securities held by non-residents**



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

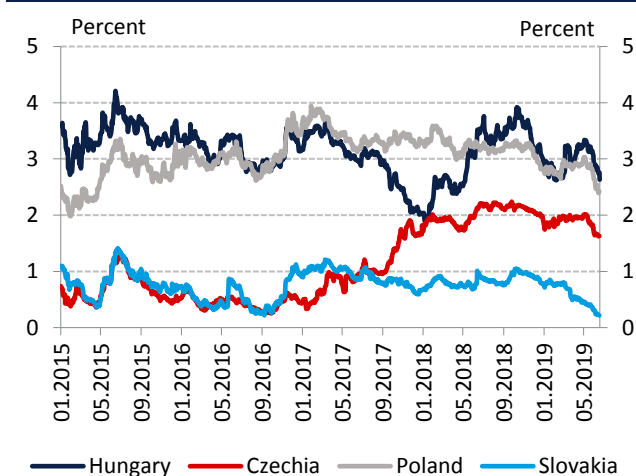
Source: MNB

**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 was strong in the primary government securities market. In the case of longer-term securities, the ÁKK (Government Debt Management Agency) often accepted higher amounts than announced.** Average 3-month auction yields increased slightly, while 12-month yields decreased. By the middle of June, at the 3-, 5- and 10-year maturities the average auction yield declined significantly, falling by 65 to 75 basis points. The ÁKK introduced its new 5-year retail government security (Hungarian Government Security Plus) on the market in June, with strong interest shown by households. As a result, in the first week already the ÁKK was able to collect funds amounting to more than HUF 500 billion through sales of this security.

**While the short section of the government securities market yield curve did not change significantly in the secondary market, 3–5-year yields declined considerably, and longer-term yields fell to a lesser degree (Chart 4-4).** Although in the middle of the period yields increased temporarily, mainly on the longer segment, by the end of the period the yield curve became flatter, in parallel with the international environment becoming less favourable and the decline in domestic interest rate expectations. On the whole, a decline of some 45–55 basis points took place in the middle segment, while a slighter, 30-basis point drop took place on the longer end of the yield curve. In line with that, the 10-year benchmark yield was at 2.7 percent at the end of the period, while the yield of the 3-year reference security fell by some 55 basis points from the level of 1.5 percent recorded at the beginning of the period. In the past period, 1- and 3-month BUBOR rates rose, partly due to the temporary narrowing of interbank liquidity. Mid- and long-term interbank yields declined considerably mirroring the government securities yield curve, and thus the middle section of the interbank yield curve shifted downwards more strongly while the longer end fell to a medium degree, respectively.

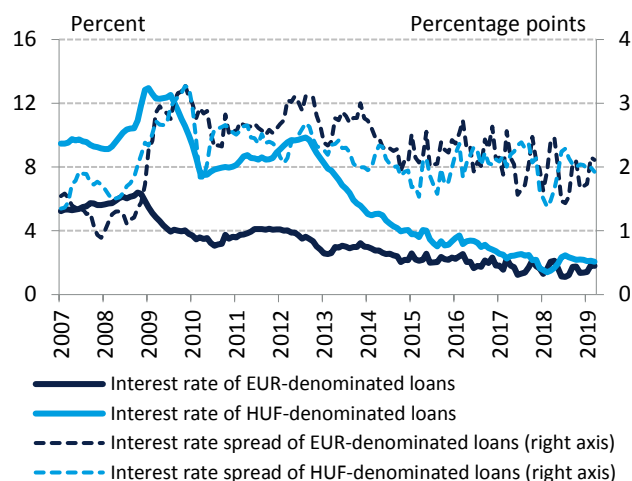
**Long-term reference yields in the region also declined during the quarter (Chart 4-5).** After a rise to 3.3 percent in early May, the 10-year forint yield fell steadily in the second half of the period, essentially following the trends observed in developed countries and the countries of the region. The Czech and Polish yields declined by 35–50 basis points, while the Slovak long-term yield was 40 basis points lower.



## 4.2 Credit conditions of the financial intermediary system

In 2019 Q1, pricing competition among banks moderated. They made no significant changes to credit conditions, even though market competition and economic growth would allow further easing. The interest rate on corporate forint loans declined during the quarter, while in the case of EUR-denominated loans a rise was observed, mainly for high-amount loans. Banks left the standards of both housing and consumer loans unchanged, as income and housing market developments support the buoyant demand among households. The APR on housing loans in the case of contracts fixed for a longer period decreased during the quarter, while an increase in spreads was observed as a result of a strong decline in the costs of funds. With the easing of inflation expectations, the declining trend of the 1-year forward-looking real interest rate came to a halt.

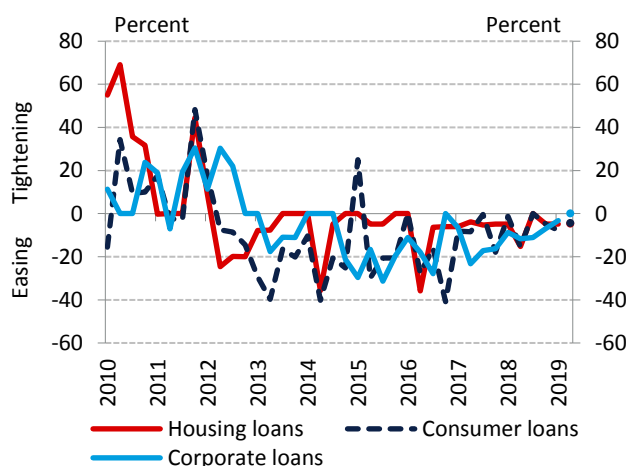
**Chart 4-6: Smoothed interest rates and spreads on corporate loans by denomination**



Note: Interest rates smoothed by the 3-month moving average. The spread is the 3-month moving average of spreads on the 3-month BUBOR and EURIBOR, respectively. Loans with floating interest rates or with up to 1-year initial rate fixation. Since January 2015, Money market transactions are excluded.

Source: MNB

**Chart 4-7: Changes in credit conditions in the corporate and household sectors**



Note: Net percentage balance of respondents tightening/easing credit conditions weighted by market share. Forecast for Q2 and Q3 of 2019.

Source: MNB, based on banks' responses

### 4.2.1 Corporate credit conditions

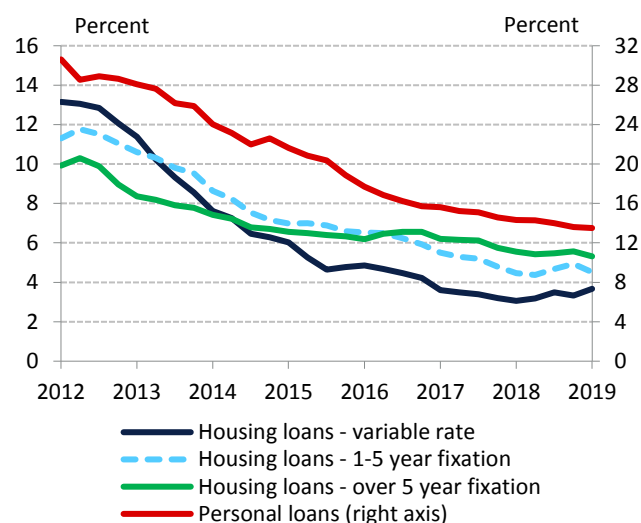
**The interest rate and spread on corporate forint loans fell during the quarter.** The smoothed average interest rate on market-based new corporate forint loans excluding money market transactions declined by 0.1 percentage point for both low- and high-amount forint loans, and thus the average forint interest rate stood at 2.1 percent at the end of the period under review. The average interest rate on EUR-denominated loans increased by 0.1 percentage point in the case of loan amounts below EUR 1 million, while the rise reached even 0.4 percentage point for higher contract amounts. As a result, interest rates on euro loans rose to 1.8 percent on average (Chart 4-6). While the costs of funds remained unchanged, developments in interest rates were driven by the average interest rate spreads.

**Corporate lending was characterised by unchanged credit conditions.** The banks participating in the Lending Survey did not change their credit conditions on the whole or in the individual company size categories (Chart 4-7). According to the participants' responses, the intensity of pricing competition among banks declined during the quarter, even though market competition and economic growth would allow further easing. Reacting to the increasing risks of the overvaluation of real estate prices, 22 percent of banks in net terms tightened the conditions of commercial real estate loans in the period under review. Looking ahead to the next half year, on the whole they do not plan to ease their credit conditions, but in the case of small and micro enterprises they held out the prospect of a further reduction of spreads.

### 4.2.2 Household credit conditions

**Housing loans became cheaper during the quarter.** The average APR on housing loan contracts concluded during the quarter rose only in the case of variable-rate loans, edging higher by some 0.3 percentage point to 3.7 percent. At the same time, practically all housing loan contracts are now concluded with interest rate fixation over one year, and two thirds of the housing loans disbursed during the quarter had interest rate periods longer than 5 years. In the case of housing loans fixed for 1–5 years and over 5 years,

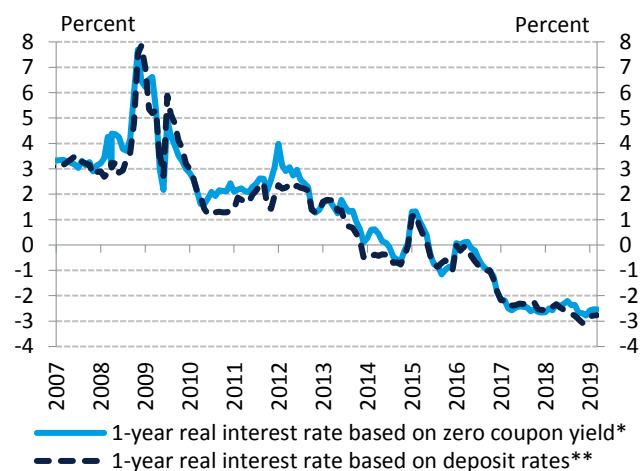
**Chart 4-8: Annual percentage rate of charge on new household loans**



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

Source: MNB

**Chart 4-9: Forward-looking real interest rates**



Note: \* Based on the 1-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 1-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

declines of 0.4 and 0.3 percentage point, respectively, were observed. At the end of the quarter, the average APR on the former and the latter stood at 4.5 percent and 5.3 percent, respectively (Chart 4-8). In the case of housing loans with longer interest rate periods, the decline in the costs of funds significantly exceeded the decrease in the APR, allowing banks to disburse these loans with a higher spread. In the case of loans fixed for 1–5 years and ones with interest rate fixation over 5 years, spread increases of 0.2 percentage point and 0.5 percentage point, respectively, were observed during the quarter, and thus the average spread stood at 3 percentage points in both categories. In 2019 Q1, the average APR on personal loans declined by 0.1 percentage point to 13.5 percent, while the average spread rose by 0.3 percentage point to 12.1 percentage points.

**Banks did not change the conditions of household loans either.** On the whole, banks participating in the Lending Survey did not change the standards of housing or consumer loans (Chart 4-7). Easing did not take place in spite of the fact that according to banks it would be supported by housing market developments and ample liquidity. In parallel with the rising housing prices, the average loan amount applied for housing purposes and, accordingly, the average maturity are also increasing. For the construction or purchase of new homes, loan contracts with an average value of nearly HUF 13 million are concluded, with an average maturity of nearly 20 years. Almost all respondents reported easing in the case of vehicle loans, primarily through the reduction of spreads. The responding institutions do not plan any easing in the conditions of access to loans in the next half year either.

#### 4.2.3 Changes in real interest rates

**The downward trend in real interest rates came to a halt during the quarter.** The real interest rate level reduced by inflation expectations rose by 0.2 percentage point, estimated on the basis of both government securities market yields and deposit rates. As a result, by March the former and the latter reached levels of –2.5 percent and –2.8 percent, respectively (Chart 4-9). The rise in the real interest rate level is explained by the decline in inflation expectations, where the market expects a 0.3 percentage point lower inflation compared to the December level.

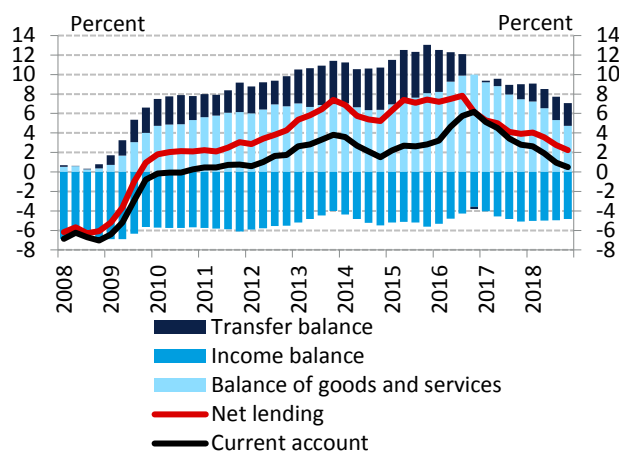


# 5 Balance position of the economy

## 5.1 External balance and financing

In the fourth quarter of 2018, the net lending of the economy and the current account surplus amounted to 2.2 percent and 0.5 percent of GDP, respectively, which can still be considered outstanding in an international comparison. Changes in the external balance indicator were determined by the decline in the balance of goods, which – in addition to the strong domestic demand – was attributable to the slowdown in external demand. Meanwhile, the surplus of the balance of services continues to significantly contribute to net lending. As a result of EU fund inflows, the surplus of the transfer balance stabilised at a high level. Due to a decline in interest expenditures, the income balance deficit was slightly lower. Still strong FDI inflows are observed on the financing side, while the country's external debt has continued to decline. The net external debt of the economy dropped to a historical low, i.e. 9 percent of GDP, while gross external debt corresponded to 57 percent of GDP. According to preliminary monthly data, the decline in the external financing capacity of the economy decelerated in 2019 Q1.

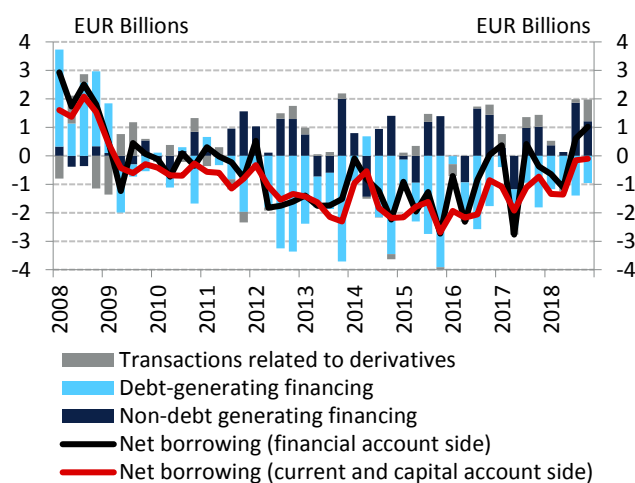
Chart 5-1: Changes in net lending and its components



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

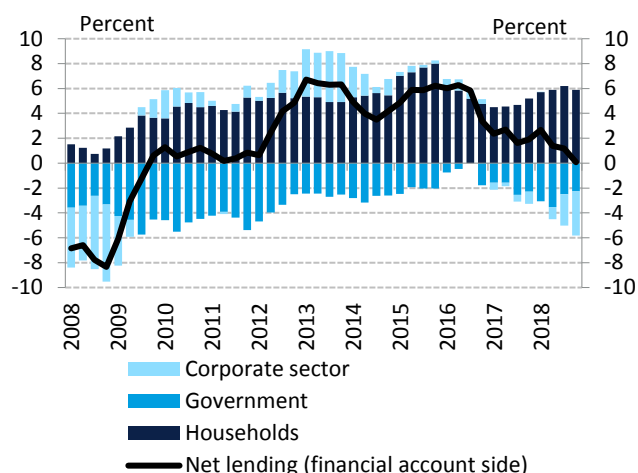
### 5.1.1 Developments in Hungary's external balance position

**In 2018 Q4, the net lending and the current account surplus amounted to 2.2 percent and 0.5 percent of GDP, respectively** (Chart 5-1). As in the previous quarters, the decline was related to the trade balance, the impact of which was attenuated by a decrease in the deficit of the income balance. The decline in the real economy balance was attributable to the deceleration in external demand, the expansion in domestic investment and the acceleration in household consumption. As a result of steady EU funds inflows, there was no material change in the four-quarter transfer balance at the end of the year. The income balance deficit improved slightly, which was attributable to an improvement in the interest balance. According to preliminary monthly data partly based on estimates, the decline in net lending slowed down in Q1. In the first three months, the four-quarter trade and transfer balance declined slightly, but the current account balance still had a surplus.

### 5.1.2 Developments in financing

**FDI inflows and the decline in net external debt remained significant at end-2018 as well** (Chart 5-2). Compared to the previous quarter, net FDI inflows declined, but were still historically high, which is mainly attributable to foreign companies' reinvestments. The decline in debt-type liabilities was contributed to by the consolidated general government and the banking sector: while in the case of the former the decline was mainly related to the rise in FX reserves, in the case of the latter it was attributable to the decline in liabilities. According to preliminary monthly data, significant FDI inflows continued in 2019 Q1, while the country's net external debt as a result of transactions remained practically unchanged.

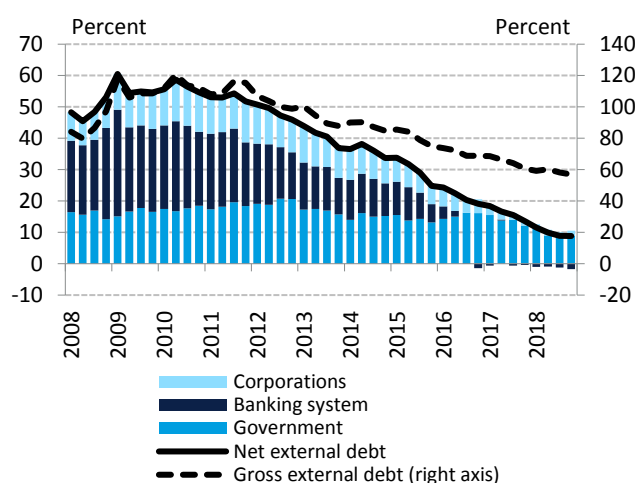
Chart 5-3: Decomposition of net lending by sectors



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

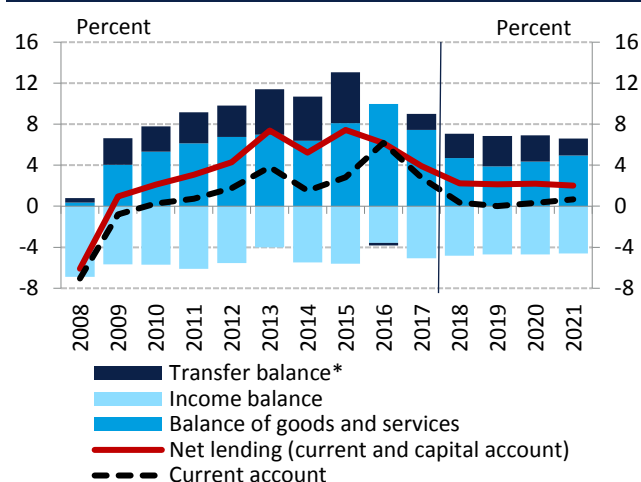
The developments in net lending according to the savings of sectors are attributable to the decline in households' net position and the expansion in corporate net borrowing (Chart 5-3). The four-quarter budget deficit of the general government improved slightly in Q4, as a result of higher tax revenues and declining interest expenditures. The ongoing dynamic rises in wages contributed to households' financial savings, which remain high in spite of a minor decline. Corporate net borrowing increased in line with the steady expansion of investment. Based on the preliminary financial accounts, there was no major change in the developments in savings in 2019 Q1: in parallel with an expansion in corporate net borrowing, households' savings declined further, while the net borrowing of the state decreased considerably.

Hungary's net external debt-to-GDP ratio fell to a historical low of 9 percent (Chart 5-4). This decline was mainly attributable to outflows of debt-generating liabilities, but the expansion in nominal GDP also reduced the indicator. Similarly to what was observed in the case of transaction developments, the general government and the banking sector contributed to the decline in net external debt. As a result of the decline, the net external debt of the private sector as a whole turned negative. In Q4, the country's gross external debt-to-GDP ratio fell to 57 percent. In line with the outflow of debt-generating liabilities, the decline in net external debt may have decelerated in Q1.

## 5.2 Forecast for Hungary's net lending position

Looking ahead, the net lending of the economy will stabilise at a high level, while the surplus of the current account will increase again after temporarily falling in 2019. Developments in the current account are explained by the changes in the trade surplus, which is determined by the lower external demand and strong domestic absorption. The surge in exports owing to new capacities coming online from 2020 is reflected in the renewed rise in the trade balance and the current account balance. Over the forecast horizon, the net lending of the economy will be stable at around 2–2.5 percent of GDP, as the change in the trade balance will be roughly offset by EU fund inflows, which primarily affect the transfer balance. Looking at the sectors' savings developments, against the background of steadily high household savings due to the significant increase in income, the budget deficit will gradually decline to below 1 percent of GDP, while the net borrowing of the corporate sector will remain relatively high in connection with robust investment activity. As a result of the significant net lending and the expected still strong FDI inflows, the net external debt of the economy will decline to nearly zero by 2021.

Chart 5-5: Evolution of net lending



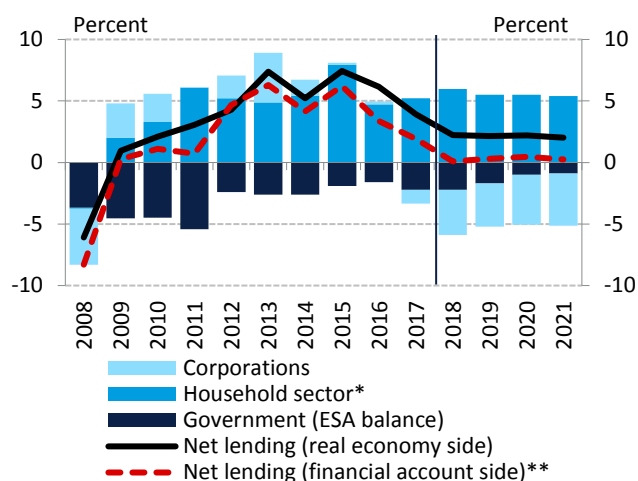
Note: As a percentage of GDP\* The sum of the balance of the current transfers and the capital account balance.

Source: MNB

In 2019, the net lending of the economy will amount to around 2.1 percent of GDP, whereas the current account surplus will temporarily fall to nearly zero (Chart 5-5). Changes in the current account balance are explained by the decline in the trade surplus, the effect of which is partly offset by an increase in the income balance and current transfers. The decrease in the goods and services balance is attributable to decelerating external demand and rising imports in connection with accelerating domestic absorption. With the expected completion of new production capacities, net exports will start to grow again, as a result of which the current account surplus will expand again. The slightly declining deficit of the income balance will be the result of a deteriorating profit balance and improving interest balance. The transfer balance, which contains EU funds, will remain at a high level in 2019 and 2020 before declining in 2021, towards the end of the budget cycle. As a result of the above developments, net lending will be stable around 2–2.5 percent of GDP over the forecast horizon, while the current account surplus will exceed 0.5 percent of GDP by 2021.

The gradual decline in general government net borrowing and households' persistently high net financial savings will result in a stabilisation of net lending over the forecast horizon (Chart 5-6). In connection with the strong investment activity, corporate net borrowing will be between 3–4 percent of GDP over the forecast horizon. In parallel with that, general government net borrowing will decline considerably, as a result of a decrease in government expenditures and a rise in revenues from taxes on consumption and labour. The moderate deficit of the general government significantly contributes to the maintenance of the favourable external balance position of the economy. Although households' net financial savings will slightly decline following the peak in 2018, looking ahead, they will continue to be around 5 percent

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

of GDP. The expected high net savings are explained by strong wage outflows as well as subdued lending activity.

**As a result of all that, net lending will remain, and thus the external vulnerability of the country may decline further.** In view of the external position stabilising at a high level, the external indebtedness of the economy will decrease further, and thus the net external debt of the economy will fall to nearly zero by 2021.

### 5.3 Fiscal developments

The budget deficit is expected to reach an all-time low over the forecast horizon, which – together with the dynamic economic expansion – will contribute to a faster decline in government debt. According to our projection, the historically low deficit target of 1.0 percent of GDP set in the budget bill may be achieved in 2020 in the case of a partial preservation of the increased Country Protection Fund. The low deficit will be the result of rapid growth in tax bases as well as a decline in investment and other budgetary expenditures. Fiscal policy accumulates countercyclical reserves through the reduction of the deficit, and thus it may reduce aggregate demand over the forecast horizon. At end-2018, the debt ratio amounted to 70.8 percent of GDP and may decline 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	(-1.6)–(-1.7)	(-0.6)–(-1.4)	(-0.5)–(-1.3)
Primary ESA balance	0.1	0.4–0.5	0.6–1.4	0.7–1.5
Fiscal impulse*	0.5	-0.3	-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

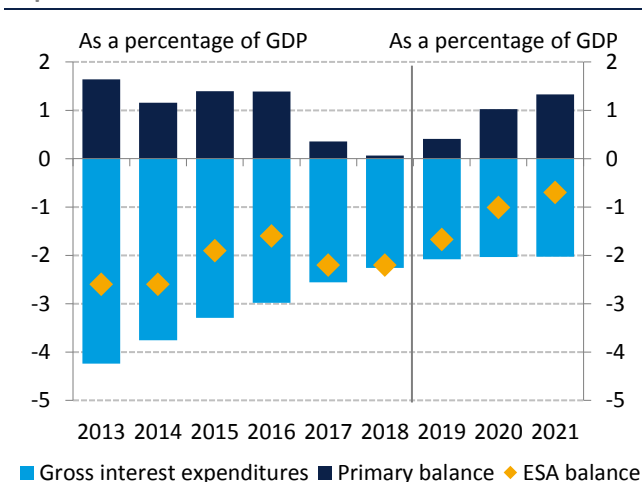
**According to our forecast, the accrual-based deficit of the government sector may amount to 1.6–1.7 percent of GDP in 2019, whereas in 2020 with partial preservation of the Country Protection Fund the deficit may reach 1 percent** (Table 5-1). In 2018, the budget deficit fell slightly short of the 2.4-percent target and amounted to 2.2 percent. According to our projection, compared to 2018, the general government deficit will decline significantly in 2019, primarily driven by a major increase in tax revenues, the effect of which will be offset to some extent by the measures of the Family Protection Action Plan introduced from July 2019 and the 2-percentage point reduction of the social contribution tax. In the budget bill submitted to the Parliament on 4 June the 2020 fiscal deficit target declines to 1.0 percent of GDP, which, according to our forecast, can be achieved if a part of the reserves is not spent. The low deficit is partly the result of rapid growth in tax revenues and partly of the restraining of government expenditures (investment, material expenditures and financial transfers). In our technical projection for 2021, the level of the deficit continues to decrease compared to the previous year.

**By significantly reducing the general government deficit, fiscal policy accumulates countercyclical reserves.** Burdens on labour are planned to decline again from 2020 and the VAT on certain products and services will also become lower, but considerable restraint of central expenditures and transfers will result in a demand-reducing effect, which will be stronger than previously expected. As a result, similarly to 2019, fiscal policy accumulates countercyclical reserves in 2020. According to our forecast, the level of deficit in 2021 will be lower than in the previous year, and thus the fiscal demand effect may be nearly negative in 2021 again (Chart 5-8).

#### 5.3.2 Budget balance in 2019

**According to our forecast, the budget deficit in 2019 may amount to 1.6–1.7 percent of GDP, i.e. slightly below the**

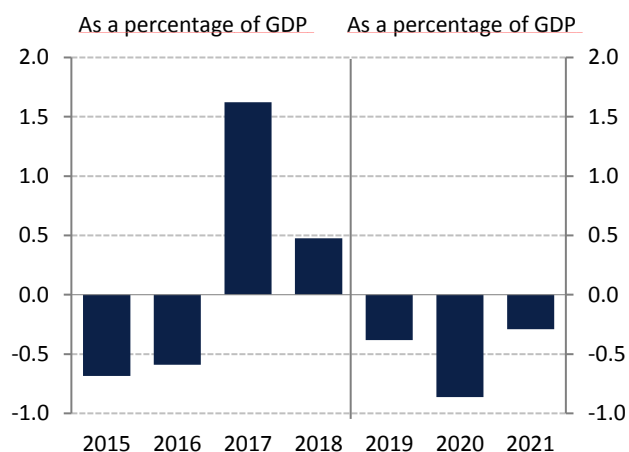
**Chart 5-7: Changes in the fiscal balance and interest expenditures**



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	0.3	0.0
Taxes on consumption and duties	0.2	
Taxes on labour	0.1	
II. Central government expenditures	-0.1	-0.2
Housing subsidies		-0.1
Pension expenditures	-0.1	
Prenatal baby support		-0.2
III. Other items		-0.1
Other		-0.1
Total (I.+II.+III.)	0.2	-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

**1.8-percent target.** The small increase in the deficit compared to our March projection is caused by higher expenditures, the effect of which is largely offset by a faster-than-expected increase in tax revenues. Statistical accounting also contributes to the rise in expenditures: around one third of the prenatal baby support presumably disbursed during the year (0.2 percent of GDP) must be recorded as budget deficit already this year in spite of the fact that according to the programme, the conditional debt relief will only take place later. The amount of the Family Allowance for Home Building available in small settlements is estimated to correspond to 0.1 percent of GDP in 2019, which adds to the accrual-based deficit compared to our March expectation. In addition, the higher inflation and economic growth expected in 2019 increase the pension expenditures through the pension supplement and the pension premium. At the same time, the higher expenditures are offset to a great degree by our tax revenue projection increased by 0.3 percent of GDP in view of the actual data and the more favourable macro path.

**Our forecast for the 2019 deficit is slightly lower than this year's deficit target.** Of the tax revenues, payments by economic organisations and consumption taxes are still expected to be higher than the statutory appropriation, while tax and contribution revenues on labour may be somewhat lower. The Budget Act adopted in 2018 does not contain the expenditure-increasing effect of the family protection measures, which is projected at 0.4 percent of GDP in 2019. The expenditures of central budgetary organisations are expected to exceed the statutory appropriation, which will only be partly offset by the lower share of national co-financing regarding the EU funds. As a result of the pension supplement and pension premium due on the basis of the higher inflation and economic growth, we also expect higher realisation in the case of pension expenditures compared to the 2019 Budget Act. On the whole, this year's fiscal balance may be 0.1 percent of GDP lower than the deficit target, depending on use of the Country Protection Fund.

### 5.3.3 Balances in 2020 and 2021

**According to the budget bill, the ESA deficit of the general government in 2020 may amount to 1 percent of GDP, which is a historically low deficit level.** This deficit target is 0.8 percentage point lower than the 1.8-percent appropriation for 2019, and 0.5 percentage point lower than the deficit path indicated in the Convergence Programme. Based on the budget bill, we significantly cut our deficit expectation compared to the projection

**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	0.7
Taxes on labour	-0.2
Payments by economic organisations	0.2
II. Central government expenditures	-0.7
Expenditures of budgetary organisations and EU co-financing	-0.2
Family protection action plan	-0.3
Pension and healthcare expenditures	-0.3
III. Other effects	0.1 – 0.2
Cancellation of Country Protection Fund	0.0 – 0.1
Other	0.1
<b>Total (I.+II.+III.)</b>	<b>0.1 – 0.2</b>

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

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

	Difference from appropriation
I. Central government revenues	-0.5
Consumption taxes	-0.3
Taxes on labour	-0.1
Payments by economic organisations	-0.1
II. Central government expenditures	0.1
Pension expenditures	-0.1
Family protection action plan	0.1
EU funds co-financing	0.1
III. Other effects	0.1 – 0.8
Cancellation of Country Protection Fund	0.0 – 0.8
Other	0.1
<b>Total (I.+II.+III.)</b>	<b>(-0.4) – 0.4</b>

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

published in the March Inflation Report. The improvement in the balance was mainly caused by significant restraint of expenditures and transfers of budgetary organisations and the rise in tax revenues stemming from a more favourable macro path.

**The decline in budget deficit compared to 2019 will primarily be attained by cutting expenditures.** The decline in the deficit will mainly be supported by the GDP-proportional decrease in government investments, which rose to a very high level in 2018–2019, as well as in compensation of employees in the public sector and financial transfers. The submitted budget bill contains various tax measures, which, *inter alia*, serve the further reduction of taxes on labour as well as the stimulation of corporate investment and household savings. According to the budget bill, depending on changes in real earnings, during 2020 the social contribution tax rate may decline by another 2 percentage points in line with the 6-year wage agreement. However, the impact of the 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 be between 0.6–1.4 percent depending on the degree of using the Country Protection Fund, and thus the deficit target may be achieved with the partial preservation of the reserves.** Our baseline scenario contains lower growth and more moderate tax revenues compared to the budget bill. However, the lower-than-planned revenues are offset by the assumption that, according to our forecast, the co-financing related to the EU expenditures and the expenditures related to the prenatal baby support may be lower than what is assumed in the budget bill. In addition, the amount of the Country Protection Fund is envisaged to be 0.8 percent of GDP, i.e. higher than in the previous years, which may ensure the achievability of the deficit target if the revenues fall short of the appropriation.

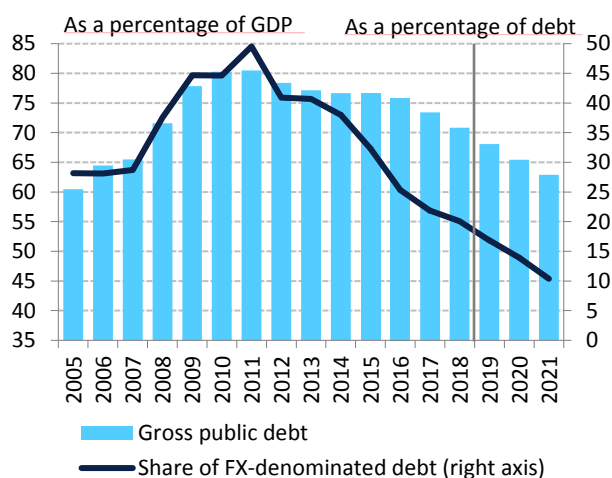
As there is no budget bill available yet, we have prepared a technical forecast for 2021, according to which the deficit may decline further compared to the previous year.

#### 5.3.4 Risks surrounding the baseline scenario

Fiscal developments are significantly affected by the absorption of EU funds, the structure of disbursements and the degree of invoice payments received from the European Commission. Similarly to last year, in 2019 payment transaction revenues from the EU are expected to be below the appropriation, which is caused by the slower upturn in actual absorption. Through the



Chart 5-9: Gross public debt forecast – calculated with an unchanged (end-2018) exchange rate over the forecast horizon



Source: MNB

proportionately smaller co-financing, the lower absorption results in a decline in general government deficit.

One uncertainty related to the measures of the family protection action plan is that the statistical accounting of the prenatal baby support and – depending on the recourse to certain benefits compared to what was expected – the estimated fiscal effects may be different from the baseline scenario. In 2020, one risk is that, in parallel with the low expenditure appropriations, expenditures carried over from previous years (accumulated arrears) may occur at many budgetary institutions, but the significantly increased reserves provide cover for them.

### 5.3.5 Expected developments in public debt

**According to preliminary data, at the end of 2019 Q1, the gross government debt-to-GDP ratio was 70.1 percent (Chart 5-9). The debt ratio fell significantly, by 2.9 percentage points on a year-on-year basis. As opposed to previous seasonal developments, in the first quarter of this year, the debt ratio declined further from the 70.8 percent observed at end-2018. In addition to robust economic growth, the low net financing need also contributed to the decline. The financing need was significantly reduced by the fact that advance payments related to EU funds to economic units that belong to the government sector were settled on their accounts held with the Hungarian State Treasury.**

**According to our forecast, assuming a constant end-2018 forint exchange rate, the gross government debt-to-GDP ratio will decline to 68.1 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 faster than previously expected over the forecast horizon. According to our projection, between 2019 and 2021 the value of the government debt ratio will drop by around 2.5 percentage points annually and will fall 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.



**Box 5-1: Analysis of the 2020 budget bill and the related measures**

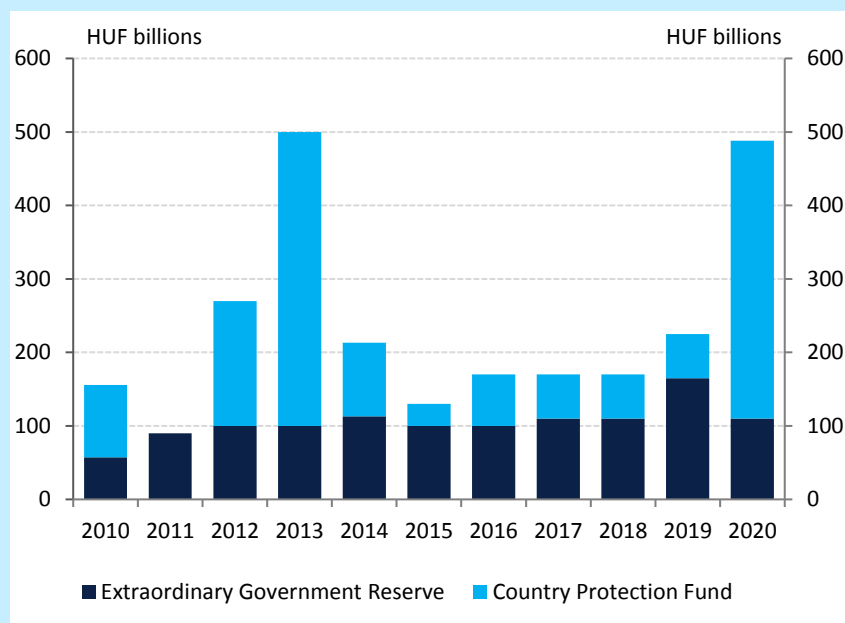
**The Government submitted the 2020 budget bill with a deficit target of 1 percent of GDP to the Parliament on 4 June 2019.** This deficit target is 0.8 percentage point lower than the 1.8 percent envisaged for 2019, and 0.5 percentage point lower than the deficit path indicated in the Convergence Programme. The deficit target is also much lower than the 1.4-1.6 percent forecast published in the March Inflation Report.

**According to our forecast, the deficit target can be achieved in case of partial preservation of reserves.** According to our projection, certain tax revenues may fall short of the appropriation, as the MNB's forecast includes more subdued growth in the main tax bases than the bill. This, however, is partly offset by the fact that in the case of the own resources of EU funds and the prenatal baby support we expect lower expenditures than the budget bill. Accordingly, using 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 level by partial preservation of the reserves.

**As a result of the declining deficit, fiscal policy accumulates countercyclical reserves.** Due to the low deficit, as in 2019, fiscal policy may be demand reducing in 2020.

**In 2020, the amount of fiscal reserves is planned to be 1 percent of GDP, i.e. higher than in the past years.** The Country Protection Fund and the extraordinary government reserves will amount to HUF 378 billion and HUF 110 billion, respectively, in 2020. Accordingly, their total amount will grow to HUF 488 billion, i.e. some HUF 260 billion higher than the amount of these reserves (HUF 225 billion) in 2019. The high amount of the Country Protection Fund can ensure the achievement of the deficit target even if revenues fail to reach the appropriations, as its spending is only possible if the deficit does not exceed 1 percent.

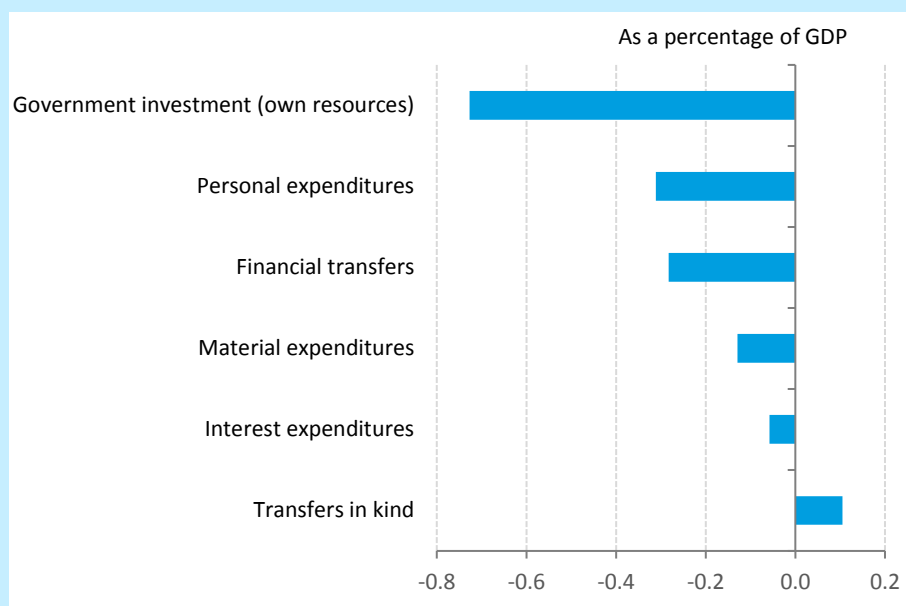
**Chart 5-10: Fiscal reserves (extraordinary government reserves and the Country Protection Fund) between 2010 and 2020**



Source: Budget acts and bills 2010–2020

**Reduction of the budget deficit will primarily be implemented by restraining expenditures.** The deficit reduction will mainly be supported by government investment, which rose to a very high level in 2018–2019, as well as a decline in personnel expenditures and financial transfers as a proportion of GDP. In addition, tax revenues as a percentage of GDP will only slightly decline. This is because the impact of the announced tax cuts will be offset by a rise in tax revenues due to significant increases in wages and consumption.

Chart 5-11: Changes in expenditures as a percentage of GDP between 2019 and 2020

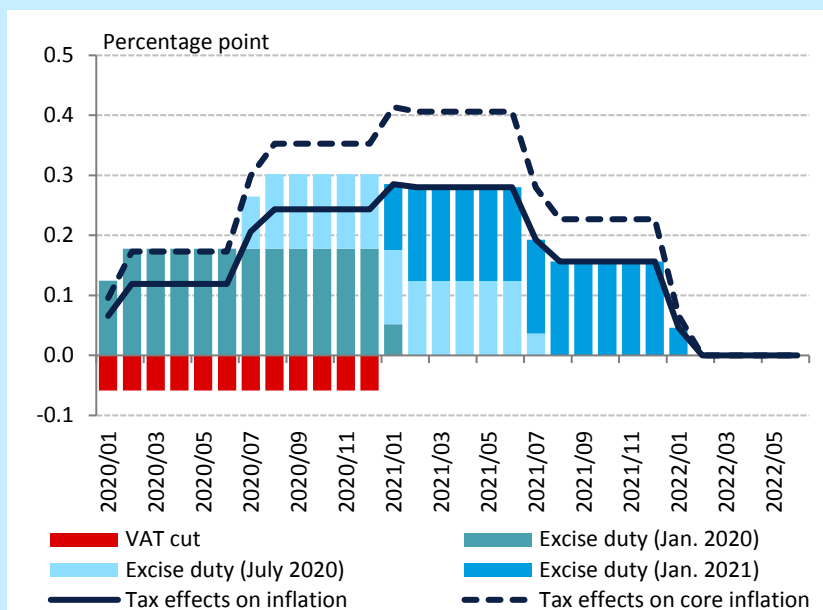


Source: MNB

The bill that was submitted contains various tax measures, which, *inter alia*, serve the further reduction of taxes on labour as well as the stimulation of corporate investment and household savings. Depending on real earnings, in 2020 the social contribution tax rate may decline by a further 2 percentage points in line with the 6-year wage agreement. The simplified entrepreneurial tax will be terminated, the rate of the tax on advertising will decline to zero, while the rate of the small business tax will decrease from 13 percent to 12 percent from the beginning of 2020. In addition to the tax measures, pursuant to the Economy Protection Action Plan, which contains 13+1 measures, it will also be possible to apply for VAT refund for residential properties in village HPS settlements for construction as well as expansion and renovation up to HUF 5 million. The lower value limit of investment that can be supported by development tax allowances will gradually be reduced from HUF 500 million to HUF 50 million for small enterprises and to HUF 100 million for medium-sized companies by 2022. In addition, the budget bill takes into account the interest tax exemption of government securities as well as the complete PIT exemption of women who are raising at least 4 children.

One of the measures, which will have inflationary effects, is the VAT cut on accommodation services from the current 18 percent to 5 percent, which is partly offset by the extension of the tourism development contribution to the aforementioned group of services. Overall, this measure moderates both inflation and core inflation, but this effect will be completely offset by the increase in the excise duty on tobacco products. This is so because after July 2019 the excise duty increase on tobacco products will continue in three further steps – January 2020, July 2020 and January 2021 – in accordance with the EU legislation harmonisation. Based on historical experiences, we expect that the changes in the excise duty will be fully incorporated into the consumer prices in 2–3 months. Overall, the new measures' contribution to the increase of the inflation will be 0.2–0.2 percentage points in 2020 and in 2021, respectively (Chart 5-12).

Chart 5-12: Inflation contribution of the newly announced tax changes



Source: Draft Budget Act, MNB

## 6 Special topics

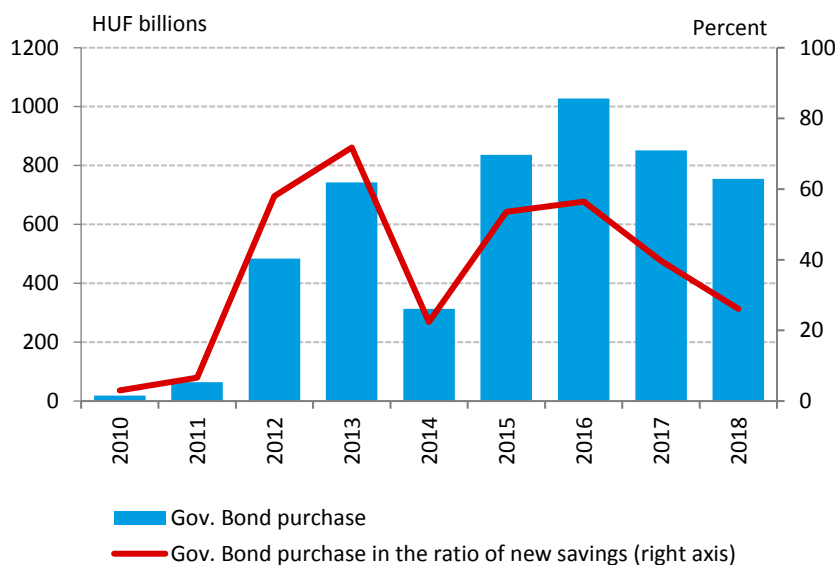
### 6.1 Transformation of the retail government securities market

**Strengthening the domestic financing of government debt is favourable in terms of the decline in external vulnerability. Accordingly, in April 2019 the transformation of the retail government securities portfolio and the introduction of the MÁP+ (Hungarian Government Security Plus) Scheme were announced** with the objective of increasing households' government securities holdings to HUF 11,000 billion by 2023. Firstly, phasing out the tax on interest income in June and the attractive parameters of the MÁP+ (e.g. gradually rising yield, free of redemption charges in certain periods) may contribute to sustaining households' high savings rate and trigger rearrangement in households' savings portfolio. Secondly, the new scheme may help to direct the cash held by the population for hoarding and the additional incomes generated as a result of the current wage dynamics towards savings. In addition to the impacts on these savings decisions, renewal of the government securities strategy may support improvement of the country's external vulnerability via various channels (e.g. reduction and more stable financing of external and FX debt) and may contribute to the expansion of domestic economic agents' incomes and thus to the improvement of Hungary's income balance and current account balance.

**The financial crisis revealed that financing relying upon external funds entails a number of risks, and thus it is crucial to strengthen domestic financing.** One of the biggest risks related to external financing is that non-resident players may quickly sell their government securities holdings, while domestic players represent a more stable source of financing. Accordingly, in recent years, as a result of the debt strategy, which supports domestic financing, as well as the MNB's self-financing programme and restructuring of instruments, the role of households within government debt has increased considerably.

**Between 2012 and end-2016, on average households spent half of their new savings on purchases of government securities. However, this dynamic broke in 2017, and households' government securities purchases started to decline both in nominal terms and in terms of their ratio.** Households' government securities holdings had been increasing dynamically since 2012, and in parallel with that liquid forms of investment had also grown strongly in recent years' low yield environment. In the course of six years, households' government securities holding rose by HUF 5,000 billion, from HUF 800 billion at end-2012 to HUF 5,800 billion by end-2018. In the first half of the period, the rearrangement of household portfolios was the main driver of the increase, and then in the past two years the expansion in savings in parallel with strong wage dynamics made a major contribution to this growth. Portfolio rearrangement stopped in 2016 as the decline in yield premium resulted in slower growth in government securities holdings. Meanwhile, in the extremely low yield environment, liquid investment forms – including cash – started to expand strongly. In 2018, households spent only around 25 percent of their new financial assets on purchases of government securities. Looking ahead, this may be an obstacle to the simultaneous roll-over of maturing FX bonds and the government borrowing requirement from domestic sources. These factors suggested a renewal of the retail government securities strategy.

Chart 6-1: Households' government bond purchases



Source: ÁKK, MNB

On 8 April 2019, the Government Debt Management Agency (ÁKK) announced the transformation of the retail government securities portfolio, the most important element of which is the introduction of the Hungarian Government Security Plus (MÁP+) in June. The objective of this renewal of the government securities strategy and the introduction of the MÁP+ is to double households' government securities holdings by 2023. In addition to introducing the new security, the ÁKK also decided on further measures that contribute to achieving this target (introduction of exemption from tax on interest income, and phasing out the FMÁP, 2MÁP, BMÁP és KTJ+<sup>1</sup> in order to simplify the retail product choice).

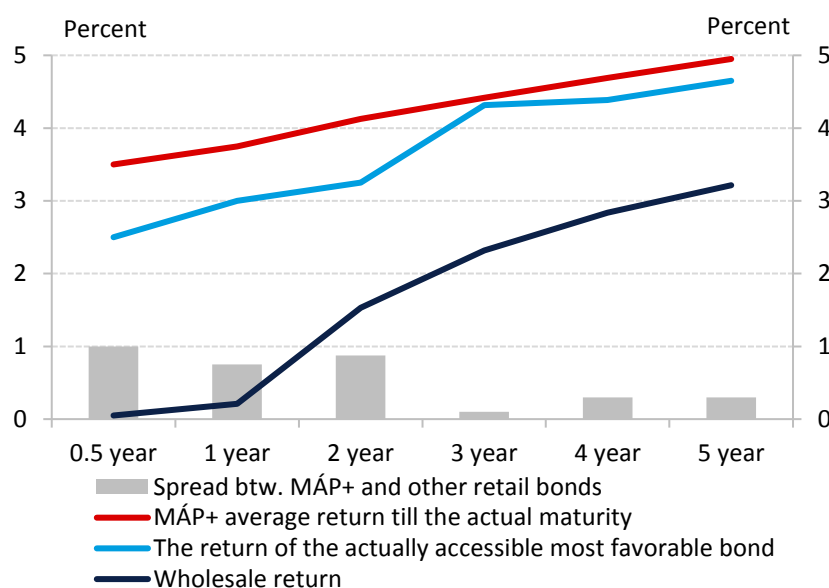
The parameters of the MÁP+ may help to sustain households' high savings rate and direct households' new savings to the government securities market.

- The MÁP+ **offers gradually rising yield** throughout the 5-year term: the annual interest rate is 3.5 percent in the first half year, 4 percent in the second half year, and then, increases by 50 basis points each year, leading to an annual interest rate of 6 percent at the end of the fifth year.
- It results in an increase in savings and the government securities holdings as well as in the simplification of government securities investments that the received **interest is automatically reinvested** (in the same government securities series).
- In the case of the MÁP+ – and the other retail government securities series issued after 1 June – **the tax on interest income** has been phased out, which also helps to direct savings towards the government securities market.
- The new security is even more attractive because within 5 working days following the interest payments the security **can be redeemed free of charge** – i.e. investors can sell their securities without any loss on redemption. Apart from this 5-day time interval a year, investors may redeem the securities at a cost of 0.25 percent at most distributors.
- At the Hungarian State Treasury, any Hungarian citizen and foreign natural person **may open and have securities accounts free of charge**, through which they may purchase MÁP+ or other government securities. In addition to the Hungarian State Treasury, the security is available from certain commercial banks, from post offices and through the home savings network of Fundamenta Lakáskassza Zrt.

<sup>1</sup> FMÁP: Half-year Hungarian Government Security; 2MÁP: Two-year Hungarian Government Security; BMÁP: Bonus Hungarian Government Security; KTJ+: Treasury Savings Bill Plus.

- In addition to the expansion in sales channels, the wide availability of the security is also supported by the fact that **there is no lower limit for purchasing**; it is possible to purchase even for one forint, and there is also no limitation on the maximum purchase.

Chart 6-2: Return of MÁP+ and annualised average return of other retail bonds



Note: Based on FMÁP, 1MÁP, 2MÁP, PMÁP and wholesale market government bonds.

Source: ÁKK, MNB

**In addition to the effects on households' savings decisions, the new security may contribute to improving the country's external vulnerability through various channels.** In recent years, as a result of the central bank's self-financing programme and households' significant government securities purchases, the external and FX debts of the state have declined considerably, which may have played a role in Hungary's upgrading and the decline in risk spreads. Looking ahead, in the light of an expected further rise in households' government securities purchases, domestic financing is expected to continue to increase and economic stability to strengthen. As a result of the continuous maturities, FX debt is able to decline even without further measures if the maturing FX debt is refinanced from government securities purchases from the household sector's newly arising savings. In addition, involving households' cash holdings in financing may also contribute to the decrease in the foreign share.

**The new retail government security may contribute to the expansion of domestic economic agents' incomes as well as to the improvement of the domestic income balance.** The decline in risk spreads supports a reduction in the interest expenditures of the budget. And as a result of the fact that government debt is increasingly financed by the Hungarian population and not by non-residents, the paid interest also remains in the country, with the households. Moreover, the state receives additional income on the interest thus paid as a result of VAT revenues on the income spent. During this process, the country's income balance and current account balance improve, and the difference between GDP and GNI as well as external debt also decline.

**Improving the efficiency of sales channels may further boost the role of retail government securities in the financing of government debt and the income of domestic economic agents.** Firstly, boosting the role of sales by the Treasury would reduce the costs related to financing the debt, as it would mean savings for the state if it did not have to pay distributor commission to bank intermediaries. Secondly, in the case of direct sales by the Treasury, households could have access to an investment service without transaction costs, and could also save the costs of opening and maintaining an account.

**On the one hand, the renewal of the government securities strategy and the introduction of the MÁP+ may trigger a restructuring in households' savings portfolio, and on the other hand, this may also direct the additional incomes stemming from the current wage dynamics towards savings.** Following the announcement of the introduction of the MÁP+, households' net government securities purchases in April rose to a similar degree compared to the previous months, but examining their decomposition, there are signs of a rearrangement, which can be linked to the introduction of the

MÁP+. The rise was a result of an increase in the holdings of short-term securities and a decline in the holdings of long-term securities, which may indicate that economic agents are waiting for the introduction of the MÁP+. Of the long-term securities, a major decline took place in the case of the two-year Hungarian government security, which may have been attributable to the significant maturities as well as its relatively unfavourable yield compared to other securities. According to May data, some of the maturing one-year Hungarian government securities were not rolled over, which may also indicate waiting for the MÁP+. All of this results in an extension in the maturity of retail government securities holdings, which is a favourable development in terms of reducing roll-over risk. In addition, as a result of the above favourable conditions, the MÁP+ may direct the cash held by the population for hoarding and the additional incomes generated as a result of the current wage dynamics towards savings.

**In the first subscription week of the MÁP+, the value of purchases of the new government security exceeded HUF 500 billion, which is the highest one-week turnover in the market to date.** In the first week of June, subscriptions to the new government security amounted to HUF 529 billion, compared to the flexibly modifiable HUF 100 billion limit amount announced by the ÁKK. In the first week, buoyant demand was experienced in all sales channels. The waiting experienced in the previous weeks may have played a major role in the strong demand observed in the starting week. Considering that, sales in the future may already be lower than in the first week. In addition to funds originating from earlier maturities and redemptions, significant new funds also appeared, but the availability of data is still limited. In the light of all this, it will be possible to carefully examine how the introduction of the MÁP+ affects households' consumption–savings decisions and hoarding preferences when data for a longer period become available.



## 7 Breakdown of the average consumer price index for 2019

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

	Effect on CPI in 2019		
	Carry-over effect	Incoming effect	Yearly index
Administered prices	0.0	0.1	0.1
Market prices	0.6	2.3	2.9
Indirect taxes and government measures	0.1	0.1	0.2
<b>CPI</b>	<b>0.7</b>	<b>2.5</b>	<b>3.2</b>

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 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				
	Average carry-over effect	Carry-over indirect tax effect	Average incoming effect	Incoming indirect tax effect	Yearly index
Food	1.5	0.0	3.4	-0.3	4.6
non-processed	1.6	0.0	5.0	0.0	6.6
processed	1.4	0.0	2.7	-0.5	3.6
Tradable goods	0.9	0.0	0.9	0.1	1.9
durables	0.5	0.0	0.1	0.0	0.6
non-durables	1.1	0.0	1.0	0.2	2.3
Market services	1.3	0.0	3.5	-0.2	4.6
Market energy	5.3	0.0	1.7	0.0	7.0
Alcohol and Tobacco	1.6	0.9	3.2	2.3	8.0
Fuel	-5.1	0.0	3.6	0.0	-1.5
Administered prices	0.2	0.0	0.4	0.0	0.6
<b>Inflation</b>	<b>0.6</b>	<b>0.1</b>	<b>2.4</b>	<b>0.1</b>	<b>3.2</b>
Core inflation	1.3	0.1	2.4	0.2	4.0

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

# List of charts and tables

## List of charts

Chart 1-1: Fan chart of the inflation forecast .....	11
Chart 1-2: Monthly evolution of the near-term inflation forecast .....	11
Chart 1-3: Inflation contribution of the newly announced tax changes.....	12
Chart 1-4: Decomposition of the inflation forecast.....	12
Chart 1-5: Changes in euro area GDP and tradables inflation in the euro area and Hungary.....	13
Chart 1-6: Flow chart of the effect of slowdown of German industrial production on Hungarian inflation.....	14
Chart 1-7: Connection between German industrial production and producer prices (left side graph) and German producer prices and Hungarian industrial goods inflation (right side graph) .....	14
Chart 1-8: Fan chart of the GDP forecast .....	15
Chart 1-9: Contributions to annual changes in GDP .....	15
Chart 1-10: Decomposition of personal disposable income.....	16
Chart 1-11: Evolution of households' consumption, investment and financial savings rates as a percentage of disposable income .....	16
Chart 1-12: Evolution of total and sectoral investments.....	16
Chart 1-13: Evolution of investment rate by sectors.....	17
Chart 1-14: Annual changes in lending to non-financial corporations and SMEs .....	17
Chart 1-15: Effective use of EU funds .....	18
Chart 1-16: Evolution of import based external demand.....	18
Chart 1-17: Changes in export market share.....	19
Chart 1-18: Employment, participation and unemployment in the whole economy.....	22
Chart 1-19: Annual changes in gross average wages and labour cost in the private sector .....	22
Chart 1-20: Decomposition of real unit labour cost growth in the private sector .....	23
Chart 1-21: Employees of zombie companies and vacancies in the private sector .....	24
Chart 2-1: Impact of alternative scenarios on the inflation forecast .....	27
Chart 2-2: Impact of alternative scenarios on the GDP forecast .....	27
Chart 2-3: Risk map: effect of alternative scenarios on the baseline forecast .....	28
Chart 3-1: Annual changes in GDP in certain key global economies .....	30
Chart 3-2: Evolution of the manufacturing PMI .....	30
Chart 3-3: Annual changes in GDP in certain emerging economies .....	31
Chart 3-4: Global inflation developments .....	31
Chart 3-5: Inflation targets of central banks and actual inflation .....	32
Chart 3-6: Major commodity price indices .....	32
Chart 3-7: Central bank balance sheet totals in developed countries .....	33
Chart 3-8: Capital flows to emerging markets (weekly) and US 10y-government bond yields .....	33
Chart 3-9: 2-year government bond yields in Germany, Italy and Spain.....	34
Chart 3-10: Annual changes in euro area GDP .....	34
Chart 3-11: Business climate indices for Germany and the euro area .....	35
Chart 3-12: HICP excluding energy, food, alcohol and tobacco in the EA members (May 2019).....	35
Chart 3-13: Annual changes in GDP in CEE countries .....	36
Chart 3-14: Inflation targets of central banks, inflation, and economic agents' expectations.....	36
Chart 3-15: Developments of inflation excluding energy, food, alcohol and tobacco in the countries of the region .....	37
Chart 3-16: Contribution to annual changes in GDP .....	38
Chart 3-17: Decomposition of change in production side GDP .....	38
Chart 3-18: Decomposition of the GDP growth contribution of subsectors of market-based services .....	39
Chart 3-19: Annual change in aggregate consumption and its subcomponents.....	39

Chart 3-20: Net financial savings of households .....	40
Chart 3-21: Developments in retail sales, income and the consumer confidence index .....	40
Chart 3-22: Decomposition of the annual change in investments .....	40
Chart 3-23: Annual changes in lending to non-financial corporates and SMEs.....	41
Chart 3-24: Evolution of housing starts and building permits .....	41
Chart 3-25: Evolution of the trade balance .....	41
Chart 3-26: Changes in inventory based on current prices and GDP .....	42
Chart 3-27: Industrial production in the countries of the region .....	43
Chart 3-28: Development of the share of destination countries of domestic vehicle exports as percentage of total vehicle exports.....	44
Chart 3-29: Participation, employment and unemployment rate in the whole economy .....	45
Chart 3-30: Annual change in main employment indicators .....	45
Chart 3-31: Uncertainty band of the output gap.....	46
Chart 3-32: Capacity utilisation and evaluation of actual capacity .....	46
Chart 3-33: Decomposition of inflation .....	47
Chart 3-34: Underlying inflation indicators .....	47
Chart 3-35: Inflation of market services .....	48
Chart 3-36: Inflation expectations in the region .....	48
Chart 3-37: Annual change in gross average wages in the private sector.....	49
Chart 3-38: Annual change in private average gross wages and average wage costs in 2019.....	50
Chart 4-1: Components of the 5-year Hungarian CDS spread .....	51
Chart 4-2: Exchange rates in the region .....	51
Chart 4-3: HUF-denominated government securities held by non-residents .....	52
Chart 4-4: Yields of benchmark government securities .....	52
Chart 4-5: 10-year government benchmark yields in CEE countries .....	52
Chart 4-6: Smoothed interest rates and spreads on corporate loans by denomination.....	53
Chart 4-7: Changes in credit conditions in the corporate and household sectors .....	53
Chart 4-8: Annual percentage rate of charge on new household loans.....	54
Chart 4-9: Forward-looking real interest rates .....	54
Chart 5-1: Changes in net lending and its components.....	55
Chart 5-2: Structure of net lending.....	55
Chart 5-3: Decomposition of net lending by sectors .....	56
Chart 5-4: Development of net external debt by sectors .....	56
Chart 5-5: Evolution of net lending .....	57
Chart 5-6: Changes in the savings of sectors .....	58
Chart 5-7: Changes in the fiscal balance and interest expenditures .....	59
Chart 5-8: Fiscal impulse.....	60
Chart 5-9: Gross public debt forecast – calculated with an unchanged (end-2018) exchange rate over the forecast horizon .....	62
Chart 5-10: Fiscal reserves (extraordinary government reserves and the Country Protection Fund) between 2010 and 2020 .....	63
Chart 5-11: Changes in expenditures as a percentage of GDP between 2019 and 2020 .....	64
Chart 5-12: Inflation contribution of the newly announced tax changes.....	65
Chart 6-1: Households' government bond purchases .....	67
Chart 6-2: Return of MÁP+ and annualised average return of other retail bonds.....	68

**List of tables**

Table 1-1: Details of the inflation forecast .....	12
Table 1-2: Main external assumptions of our forecast.....	20
Table 1-3: Changes in projections compared to the previous Inflation Report .....	25
Table 1-4: MNB baseline forecast compared to other forecasts.....	26
Table 5-1: General government balance indicators .....	59
Table 5-2: Decomposition of the change in the 2019 ESA balance forecast (compared to the previous Inflation Report) ...	60
Table 5-3: Differences between our forecast and the appropriations set out in the 2019 Budget Act .....	61
Table 5-4: Differences between our forecast and the appropriations set out in the 2020 Budget Act .....	61
Table 7-1: Decomposition of inflation to carry-over and incoming effects (percentage points and percent respectively)..	70
Table 7-2: Detailed decomposition of our inflation forecast into carry-over and incoming effects (percentage points and percent respectively) .....	70

---

# 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.

**INFLATION REPORT**

**June 2019**

Print: Pauker–Prospektus–SPL consortium

H-8200 Veszprém, Tartu u. 6.

mnb.hu

©MAGYAR NEMZETI BANK

H-1054 BUDAPEST, SZABADSÁG SQUARE 9.