



GOVERNMENT OF HUNGARY

**CONVERGENCE PROGRAMME
OF HUNGARY
2020–2024**



April 2020

Contents

| | | |
|--------|---|----|
| 1. | INTRODUCTION | 1 |
| 2. | ECONOMIC POLICY OBJECTIVES IN CONNECTION WITH THE COVID-19 CRISIS | 2 |
| 3. | MACROECONOMIC DEVELOPMENTS AND FORECAST | 4 |
| 3.1. | EXTERNAL ENVIRONMENT | 4 |
| 3.2. | THE COMPONENTS OF GROWTH | 6 |
| 3.2.1. | FOREIGN TRADE | 10 |
| 3.2.2. | INVESTMENT | 11 |
| 3.2.3. | CONSUMPTION | 15 |
| 3.3. | LABOUR MARKET | 17 |
| 3.3.1. | EMPLOYMENT | 17 |
| 3.3.2. | EARNINGS | 19 |
| 3.4. | INFLATION TRENDS | 20 |
| 3.5. | CYCLICAL PROCESSES | 21 |
| 3.6. | EXTERNAL BALANCE | 22 |
| 3.7. | ASSESSMENT OF THE ECONOMIC CONSEQUENCES OF GOVERNMENT MEASURES | 23 |
| 3.8. | MONETARY AND EXCHANGE RATE POLICY | 25 |
| 3.9. | FINANCIAL SECTOR | 27 |
| 4. | GENERAL GOVERNMENT DEFICIT AND DEBT | 30 |
| 4.1. | BUDGET POLICY OBJECTIVES | 30 |
| 4.2. | THE 2019 BUDGETARY OUTCOME | 30 |
| 4.3. | THE 2020 BUDGET IN LIGHT OF THE COVID-19 CRISIS | 33 |
| 4.4. | BUDGETARY DEVELOPMENTS FROM 2021 TO 2024 | 37 |
| 4.5. | STRUCTURAL BALANCE | 38 |
| 4.6. | GENERAL GOVERNMENT DEBT | 39 |
| 5. | STRUCTURE AND EFFICIENCY OF REVENUES | 43 |
| 6. | SENSITIVITY ANALYSES | 50 |
| 7. | LONG-TERM SUSTAINABILITY OF PUBLIC FINANCES | 52 |
| | TABLES | 53 |

1. INTRODUCTION

The Member States of the European Union submit their stability or convergence programmes to the Council of the European Union and the European Commission by the end of April in every year. (The Member States inside the eurozone are required to prepare a stability programme, while those outside the eurozone a convergence programme.)

The 2020 Convergence Programme provides information about the Government's economic policy objectives, the macroeconomic and budget processes, with special regard to the effects of the coronavirus crisis and the macroeconomic responses thereto, as well as about the forecasts prepared for

the year concerned and the following four years as part of the medium-term planning. It examines the macroeconomic effects of two alternative scenarios – which differ by the recovery periods after the pandemic – under a sensitivity analysis performed as part of the risk analysis. The Convergence Programme has been prepared together with the National Reform Programme. The latter document provides detailed information about the implemented and planned policy measures.

The preparation of the Convergence Programme was closed on 30 April.

2. ECONOMIC POLICY OBJECTIVES IN CONNECTION WITH THE COVID-19 CRISIS

The crisis created by the coronavirus pandemic had caused such a shock all around the world that posed unprecedented challenges for the health care systems and the governments' capacity to act. The economic crisis triggered by the pandemic overthrew previous economic outlooks, thus the protection of the already attained economic results has become the number one priority of the Hungarian economic policy, along with targeted measures aimed at re-boosting economic growth once the pandemic is gone.

Thanks to the consistent economic policy pursued in recent years, the pandemic has caught a resilient economy with a balanced structure in March 2020. In 2019 the GDP grew by 4.9% on an annual basis, which was largely supported by the tax and wage agreement established upon the Government's initiative in November 2016. A total number of 840 thousand new jobs were created over the last 9 years in line with the goal set in 2010 to create 1 million new jobs in 10 years. As a result, the number of employed exceeded 4.5 million, and in the meantime the unemployment rate moderated to 3.3% by the end of 2019, the latter being the fourth lowest level all across the Member States of the European Union. Owing to the recent expansion of investments, Hungary's investment rate increased to 28.6% last year, which is the second highest rate in the EU. Thanks to the developments that had been commenced previously and were implemented last year, industry – backed by extended capacities – saw a 5% growth in 2019 despite the lower external demand.

The moderation of Hungary's vulnerability witnessed over the past years continued last year, which is well reflected in the development of the country risk premium and the decreasing net foreign debt-to-GDP ratio. The general government deficit remained well below the reference value, i.e. 3% of the GDP in recent years. In 2019 it was 2% of GDP in 2019, and the general government debt-to-GDP ratio has presented a downward trend since 2011, resulting in a 66.3% debt ratio by 2019. As far as the financing of the government debt is concerned, the role of

foreigners has decreased, coupled with a moderation of FX exposure.

The Government has made the decisions in a timely manner that are essential to successfully combat the pandemic, as well as to support the relaunch of the economy once the pandemic is gone. The restrictions aimed at protecting health, on the one hand, has contributed to keeping the number of infected people low; on the other hand, they have adversely affected the performance of economic players. Therefore, the 2020 budget has been revised and modified in view of the sustainability of public finances, and of the need to ensure a solid budget background for combatting the pandemic and recovering in economic terms.

The first measures taken by the Government included the introduction of the loan repayment moratorium, whereby debtors (households and companies) have become exempted from the repayment of loans already disbursed under contracts in effect as at 18 March 2020. In addition, taxes and contributions are not charged on employers in the sectors that were severely affected by the crisis (e.g. tourism, hospitality, passenger transport etc.) and a number of small taxpayers threatened by the crisis are not required to pay simplified business taxes until 30 June.

In March-April 2020, the Government has adopted decisions which concern the budget in multiple phases in order to combat the pandemic and to relaunch the economy, a part of which affect the revenue side, while others the expenditure side. To date, a total amount of roughly HUF 600 billion has been spent directly on combatting the pandemic, purchasing equipment and financing investments. Furthermore, a decision has been adopted on a one-off wage supplement for health care workers in 2020, and on the extension of specific family support schemes.

Beyond the support provided to the sectors most exposed to the crisis triggered by the pandemic, measures were also adopted in order to reduce the general tax burden of businesses. As previously announced, the social contribution tax rate will decrease by further two percentage points, from 17.5% to 15.5% from 1 July 2020. Under the Economy Protection Action Plan, businesses are provided with job preservation support, loan, guarantee instruments, capital replacement. Favourable tax measures have also been adopted. In this regard, the job protection wage subsidy programme has been announced, under which the state assumes a part of the income lost by employees for the period of employment in shortened working hours. In addition, for the purpose of keeping highly qualified employees in the research, development and innovation sector, a wage subsidy can also be requested for a period of three months. The small business tax rate will decrease by one percentage point – from 12% to 11% – from 1 January 2021.

The Government has taken reallocation and other funding measures to cover the crisis management steps (special retail tax and one-off contribution by credit institutions, channelling motor vehicle tax into the central budget).

Beside the budgetary measures, new loan schemes with interest rate and guarantee subsidy have also been launched along with extending already existing ones, and capital programmes have been announced in order to provide businesses with favourable financing. Together with the measures taken by the Central Bank of Hungary (MNB), the volume of the policy package designed to counterbalance the adverse effects of the coronavirus crisis and to relaunch the economy corresponds to one-fifth of the Hungarian GDP.

Addressing the direct and indirect economic consequences of the coronavirus crisis entails increased budgetary support – even on top of the measures aimed at generating resources –, which

means that the deficit-to-GDP ratio is currently expected to exceed the target set in the 2019 Convergence Programme for this year. In order to secure the resulting higher funding needs, the HDMA was authorised to involve more funds compared to the original financing plan, of which it has already performed a bond issue of EUR 2 billion with favourable conditions in late April.

The economic policy remains committed to achieving a convergence process which is based on improving the competitiveness of the economy, while taking into account the long-term sustainability of public finances. Despite a high degree of uncertainty surrounding the potential course and economic impact of the coronavirus crisis, the processes that support long-term real convergence are expected to be maintained and strengthened on the time horizon of the Convergence Programme.

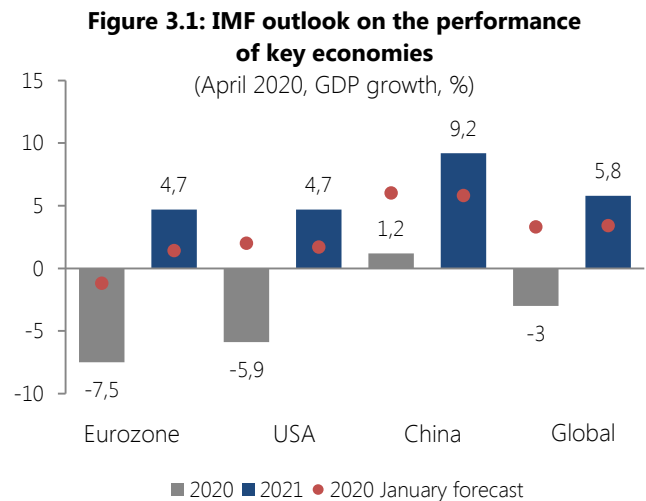
The macroeconomic baseline scenario of the programme foresees a 3.0% drop in this year's GDP, but 2021 is expected to see a 4.8% growth – in part due to the correction of this year's decline. From 2022 on a GDP growth of more than 4% can be foreseen until the end of the programme period. Following the temporary setback caused by the crisis in 2020, employment will expand continuously once again, thus the 3.5% unemployment rate in 2022 will hardly be higher than the corresponding rate in 2019, while it will be even lower (3.3%) in 2024.

According to the fiscal path of the programme, the deficit – taking account of the temporary economic downturn and the budgetary impact of the crisis management and recovery measures – is expected to remain low under the current circumstances, being 3.8% this year and gradually decreasing to 1% by the end of the programme period. Following this year's temporary halt, the general downtrend of the government debt-to-GDP ratio will return from 2021, and the debt ratio is expected to fall below the 60% reference value in 2024.

3. MACROECONOMIC DEVELOPMENTS AND FORECAST

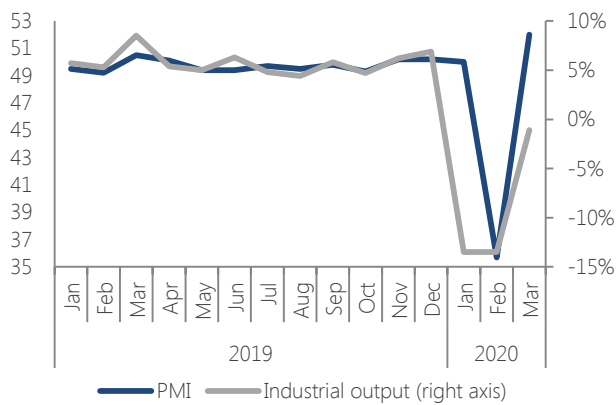
3.1. EXTERNAL ENVIRONMENT

The world economy was characterised by a moderate expansion in 2019 – though some Western European economies were in a fragile position on the edge of a recession –, and a similar performance was expected for this year, too. However, the coronavirus pandemic which had appeared and had spread from China overthrew all preliminary scenarios: by the end of April, the pandemic becoming global has already caused more than 3 million infections and 200 thousand deaths. China was followed by Europe and the United States where the infection spread like wildfire. The pandemic has posed a setback to the performance of the economies both directly and through the health care measures taken to combat it. Fiscal and monetary measures of historic volume have been introduced to mitigate economic damages. According to the outlooks, the first wave of the pandemic has been successfully stopped, thus the global economy can enter the recovery phase in the second half of this year, and it is expected to reach its output level of late 2019 in the next year (*Figure 3.1*). Nevertheless, there is a risk that the relaunch of economies may give rise to another wave of the pandemic, which may require a repeated restriction of pandemic-related measures. Therefore, such forecasts entail a high degree of uncertainty until the ultimate solution to the pandemic is found.



As pandemic's country of origin, China had already entailed a significant economic risk well before the pandemic. The intensive growth witnessed for years had slowed down, which was particularly reflected in the declining demand for passenger cars in both 2018 and 2019. The coronavirus pandemic escalating early this year heavily deteriorated the Q1 performance of the Chinese economy, as to the Lunar New Year holiday was extended by more than three weeks in the most infected regions, causing significant losses in the country's industrial production and a wide range of services. Nevertheless, it seems that the spread of the virus has been stopped in China by the start of the second quarter, and the lifting of restrictions has boosted production, as well. This is reflected in the improvement of the manufacturing purchasing managers' index and industrial output (*Figure 3.2*). These developments suggest that the country will have the chance to make up for the loss in the second half of the year. However, the lasting pressure put by the pandemic situation on the economies of the United States and the European Union as China's two most important trade partners limits the room for growth.

Figure 3.2: Development of the Chinese manufacturing purchasing managers' index and industrial output



Source Trading Economics.

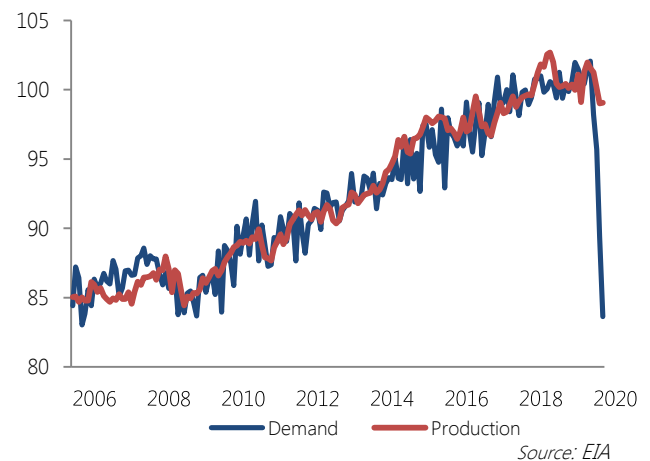
The effects are worsened by the fact that the pandemic has gone global. By the second half of April, one out of three confirmed infections and one out of four deaths could be associated with the US. On overseas an all-time high number have requested unemployment benefit over the past few weeks in consequence of the breakdown in several sectors. The federal government – together with the Fed – supports the recovery of the world’s largest economy with a package unseen before (including the one adopted for the financial crisis). By controlling the pandemic situation, some states are already planning to relaunch the economic life, in parallel with the commencement of a slow recovery process.

The 1.2% growth of the eurozone last year was lower than anticipated, while also falling short of the growth rate of the previous years. The current recession has also been caused by the coronavirus pandemic in the eurozone.. The pandemic – unfolding first in Italy – has already reached all eurozone states, causing significant economic setback everywhere. As a result of the breaks in supply chains, the sharp decline in demand and the pandemic-related regulations in specific sectors, a number of companies were forced to suspend their production activities for weeks across Europe. However, following the preparation of economic rescue packages representing up to two tenths of the GDP, it is promising that more and more EU Member States can now focus on relaunching the economy as the pandemic situation eases. All

Member States are witnessing a recession due to the negative effects of the crisis. The setback can be especially severe in countries like Italy, Spain or Greece, where tourism represents a large weight and had already struggled before the pandemic.

In addition to governments, central banks took their own measures one by one to mitigate the negative effects of the pandemic. In March the Fed has announced a total extraordinary rate cut of 100 basis points, thereby reducing interest rates to zero, for the first time since the crisis of 2008. Besides, Fed is willing to buy government securities and mortgages without an upper limit to support financial markets. The European Central Bank has announced a rescue package of EUR 540 billion to combat the crisis caused by the coronavirus pandemic. In the meantime, the WTI oil price has fallen to extreme lows over the past weeks, mainly due to the strong dampening effect of the pandemic on demand (Figure 3.3).

Figure 3.3: Global oil consumption and production
(million barrels/day)



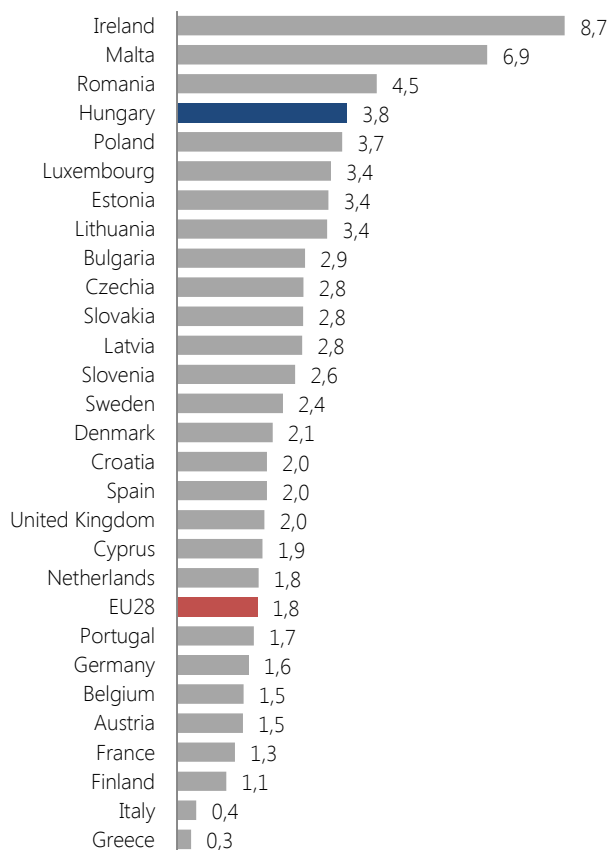
Source: EIA

Overall, due the coronavirus pandemic the Euro-Atlantic region is expected to sink into a recession this year – for the first time after more than a decade. The downturn may be more severe than the one witnessed in 2008. Consequently, the relevant export markets for the Hungarian economy will shrink in the first half of 2020. A recovery will be able to be foreseen from the second half year on, but its time course will largely depend on the development of the pandemic situation.

3.2. THE COMPONENTS OF GROWTH

The Hungarian economy has expanded by nearly 30% since the growth turnaround in 2013. In terms of convergence, it is an outstanding result that the expansion of the Hungarian economy exceeded not only the old but also the newly accessed Member States in the past years (with the exception of Romania). (Figure 3.4).

Figure 3.4: Average growth between 2013 and 2019
(percent)



Source: Eurostat, MoF calculation

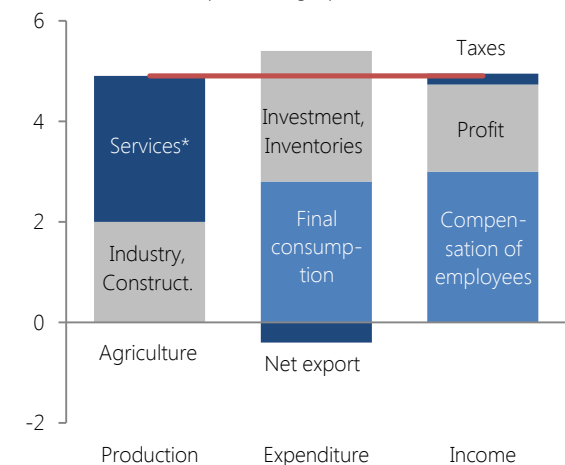
As for last year's performance, the Hungarian economy grew by 4.9% in 2019, which is the highest growth pace in the EU following the globally outstanding expansion of the Irish economy. The favourable developments were greatly supported by the productive and service sectors. Both industry and construction contributed to the growth by 1 percentage point, while services contributed by 2.9 percentage points.

According to the income approach of GDP, the largest contribution to acceleration was made by the rise in labour income (Figure 3.5). The main source of the

significant wage development was the wage and tax agreement concluded at the Permanent Consultation Forum of private sector representatives and the Government, which resulted in a substantial increase in the minimum wage and the guaranteed wage minimum, while employer's social security contributions has been decreasing in multiple steps by 15.5 percentage points in total. Since the social contribution tax rate will be cut to 15.5% as of 1 July 2020, a total decrease of 11.5 percentage points will have been concluded by the second half of the year. As an especially favourable development, companies' profitability has further improved along with increasing compensation of employees, which reflects that businesses could preserve their competitiveness even alongside growing wages. Among others, this occurred due to the improving efficiency of labor usage and expanding automation, reflected by increasing machinery-type investments.

On the expenditure side, domestic demand has increased significantly, as a result of higher wages which surfaced in the strong performance of both consumption and services. The more than 20% expansion of construction has also been supported by corporate and government investments, home creating subsidies and the efficient use of EU funds.

Figure 3.5: Decomposition of the 4.9% GDP growth in 2019
(percentage point)



* Including net product taxes

Source: HCSO, MoF calculation

Despite the weaker external environment, which is partly a result of the permanent weakness of German industry, the growth of Hungarian industry has accelerated compared to 2018, which is explained by the large volume of new capacities and the cost advantage offered by domestic production units. Although the growth of import of goods has exceeded that of export of goods, it is favorable that this was driven by not only consumption but the rapid expansion of investment. Furthermore, the steadily positive services balance, fuelled by transportation and tourism, over the past years is also worth stressing, as a result of which net exports have hindered growth only to a minor extent in 2019.

The Hungarian economy was characterised by a dynamic growth and strong fundamentals at the beginning of this year, but just like everywhere in the world, the coronavirus pandemic has fundamentally overwritten growth forecasts in Hungary. The first two months of the year had been essentially intact from the economic downturn which started to unfold in March. After 20 March, the increasing number of production halts resulted in a significant loss of industrial capacity in the last days of the first quarter. Besides, the tourism industry must have suffered massive losses, while cultural and recreational services were basically suspended in the second half of March. Even though in certain segments of retail, buying sprees increased turnover temporarily, the overall sales figures of the first quarter showed a loss of momentum.

In this time of pandemic, there is a high degree of uncertainty surrounding the GDP forecast. The baseline scenario was based on the assumption that the pandemic situation in Europe will allow for the gradual normalisation of the economy after the second quarter. This assumption is supported by the fact that several EU Member States are preparing to ease the restrictions put in place to contain the pandemic, and several factories in Hungary have partially resumed production in the second half of April. These developments promise that following the bottom hit between 23 March and 20 April the economic expansion will resume, partly thanks to the

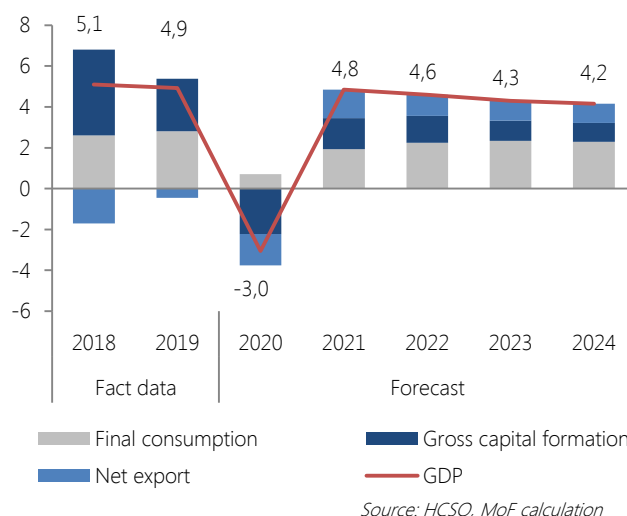
measures taken by the Government. Nevertheless, some sectors (such as tourism, cultural and recreational activities) are expected to face a lower demand even after easing of restrictions.

With the easing of pandemic-related restrictive measures household demand can also revive. This process will be reinforced by the fact that Hungary ranks first in the savings-to-GDP ratio and has the lowest household loan-to-GDP ratio in the EU, which both generate a substantial reserve for growth through consumption in the years to come.

The investment rate which has increased to all-time high in recent years is expected to remain at a high level, in spite of the moderation of investment activity foreseen this year, and projected to further increase in the coming years. These all foresee a significant expansion in production capacities, as a result of which exports can remain dynamic even despite a relatively unfavourable external economic situation, as a result Hungary's world market share can grow.

Consequently, in case of the baseline scenario a 3.0% drop in the GDP is forecasted this year, to be followed by a 4.8% rebound in 2021, partly due to the correction of the decline (Figure 3.6).

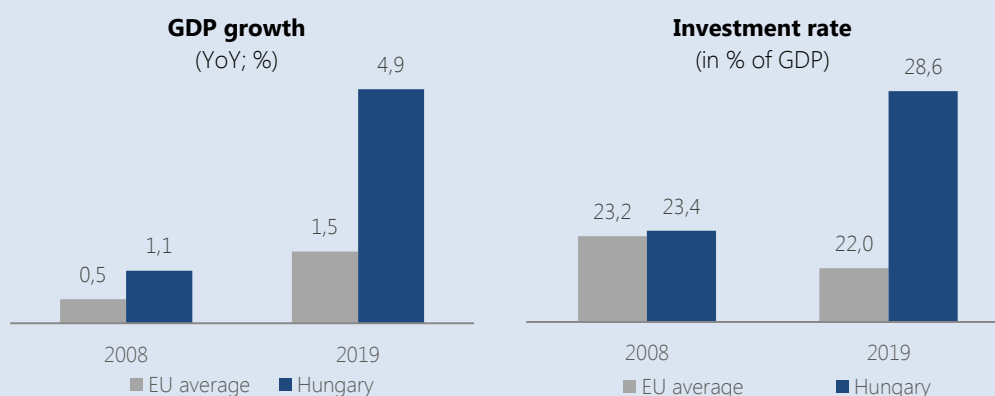
Figure 3.6: GDP growth: demand side
(percentage point)



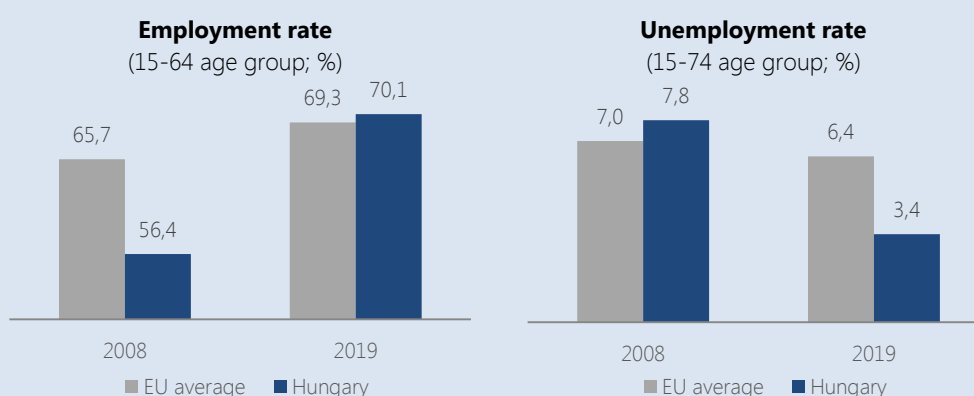
Box 1: Hungary relies on strong fundamentals in crisis management

At the onset of the financial crisis Hungary was economically vulnerable. In 2008 Hungary was characterised by one of the weakest labour market indicators in the European Union, the rate of economic growth was lagging behind that of regional competitors, government deficit was high, government debt was on the rise, and last but not least, the economic downturn was further deepened by surging instalments of foreign currency loans. As a consequence of these factors Hungary underwent a severe recession and due to the previously accumulated debt, it took several years for the economy to recover.

At the outbreak of the current pandemic, the fundamentals of the Hungarian economy were substantially stronger than at the onset of the 2008 financial crisis. In 2013, the Hungarian economy was steered back to the path of economic growth, resulting in a dynamic expansion, which put Hungary among the fastest growing Member States of the EU. Unlike in previous years, fast growth was achieved in a healthy and balanced structure, and without accumulating public debt. Growth relied on several pillars: on the production side, sustainable growth was supported by the industry, services and the construction sector, while on the expenditure side, the sustainability of growth was ensured primarily by the competitive business and tax environment, as well as by a remarkable investment performance boosted by the Government's incentive measures.



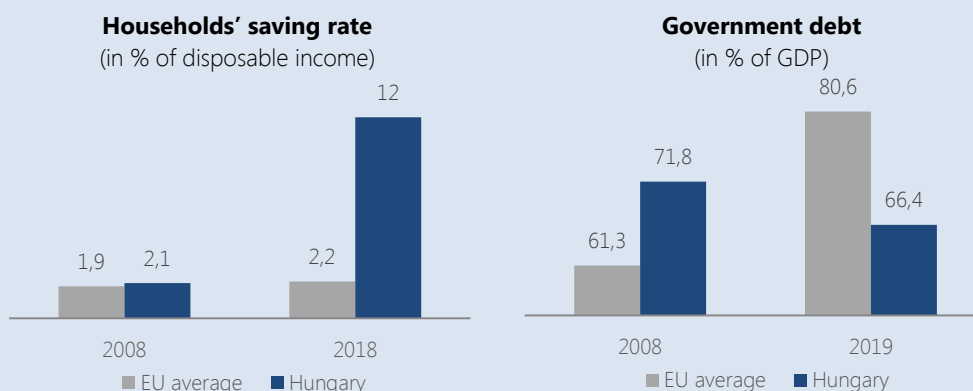
Dynamic growth was also supported by the Government's measures aimed at stimulating labour market activity, which helped improve labour market indicators and bring Hungary among the best performing Member States of the European Union in this regard.



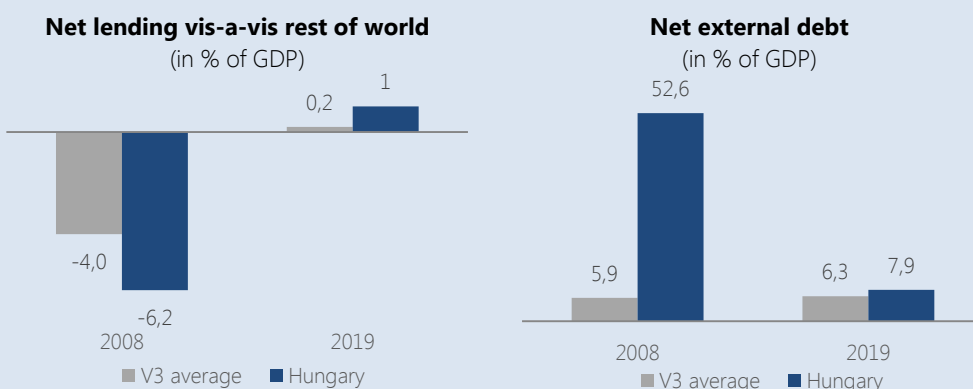
The development of a labour-based economy coupled with a dynamic rise in wages, and the phasing out of foreign currency loans, which put an enormous burden on the household sector, contributed to boosting family incomes and made households much more financially resilient than previously. While household consumption expanded due to the improving income position, growing consumption was not accompanied by over-indebtedness. This is well illustrated by the outstanding high household saving rate in European comparison.

Dynamic growth was accompanied by disciplined public spending, well characterised by the steadily declining deficit and debt. As a consequence of these favourable processes, Hungary's debt-to-GDP ratio is well below the EU average, in contrast to the situation in 2008. Parallel to its declining trend, the structure of government debt

also became more favourable as the share of non-resident investors and FX ratio of the debt went down. The restructuring of the tax system as well as measures aimed at making tax collection more effective and whitening the economy, such as the mandatory use of online cash registers and the introduction of the Electronic Trade and Transport Control System (EKAER) or online invoice data reporting, all contributed to stabilising the budget.



One of the key drivers of economic growth was the increasing export performance of industries and services, facilitated by the favourable business environment and the competitive domestic labour force. As a consequence, after relaunching economic growth, Hungary's foreign trade surplus reached its all-time high. As a result of the favourable external balance and the efficient use of EU funds, Hungary's net external financing capacity turned to remarkably positive and became one of the strongest even in regional comparison over the past 10 years, while it was negative at the dawn of the previous crisis. As a consequence, the net external debt-to-GDP ratio shrank from over 50% in 2008 to below 8%.



It is especially favourable that the rise of wages was accompanied by increasing business profits, that is, the wage convergence propelled by a record high employment rate did not erode the competitiveness of domestic enterprises. This trend can partly be explained by the improving efficiency of businesses, which is supported among other things by the increasing degree of automation.

To sum up, the Hungarian economy was characterised by strong fundamentals on the onset of 2020. This is true both in terms of the real economy, and in terms of the financial balance of individual sectors and the economy as a whole. These positive circumstances, on the one hand, allowed the Government to mobilise an unprecedented large-scale package to mitigate the economic impact of the coronavirus pandemic, and on the other hand, they underscore the assumption that the Hungarian economy will be able to rebound quickly and return to adynamic growth path once the pandemic abates.

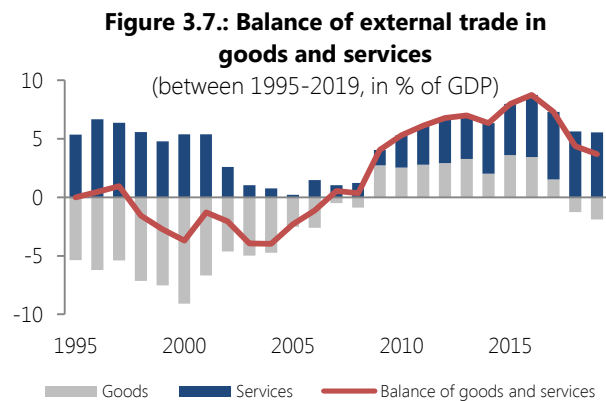
3.2.1. Foreign trade

2019 was characterised by a more moderate external demand than in previous years. However, Hungary’s export performance grew dynamically, primarily due to capacity extensions in the automotive industry. Parallel to that, imports also achieved a significant expansion thanks to integration in global production chains and as a result of strong domestic demand. Last year the volume of exports increased by 6.0%, whereas the volume of imports went up by 6.9% on an annual basis.

On the export side, services expanded by 9.1% last year, which – similarly to the past six years – is higher than the 5.2% growth rate of exports of goods. The significant expansion of services is primarily due to the growth of tourism. As for the exports of goods, the growth rate of exports accelerated in the case of machinery and transport equipment, while the export volume of processed products stagnated as compared to the previous year.

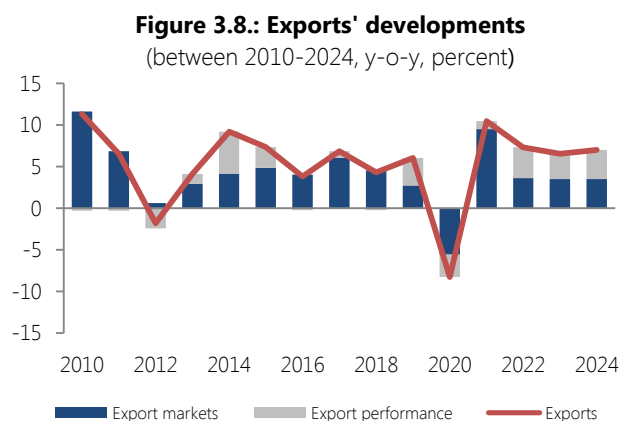
On the import side, services grew by 7.5%, while the imports of goods grew by 6.8% as compared to the previous year. The increase in tourism and business services substantially contributed to the expansion in the imports of services. In the case of imports of goods the most important driver of growth was a significant increase in the imports of fuels and energy, and machinery and transport equipment. The dynamic increase of investments (16%) – due to their high import content – substantially contributed to imports being able to grow more dynamically than exports.

As a consequence of the above processes, foreign trade surplus continued to decline after the peak in 2016, accounting for 3.7% of the GDP last year (Figure 3.7). This decrease was mainly due to the shrinking trade surplus of goods, caused by a deterioration in the balance of processed products and energy. As a result of these factors, net exports contributed negatively to GDP growth.



Looking forward, exports may be hampered by the negative impact of the coronavirus pandemic in the short term. However, once production resumes following the halts in the first half of 2020, a further expansion in foreign trade is expected in the coming years (Figure 3.8). Thanks to the already announced, large-scale corporate investments in a total amount of more than HUF 4,000 billion being implemented in the coming years, export performance may expand substantially, potentially increasing Hungary’s global market share.

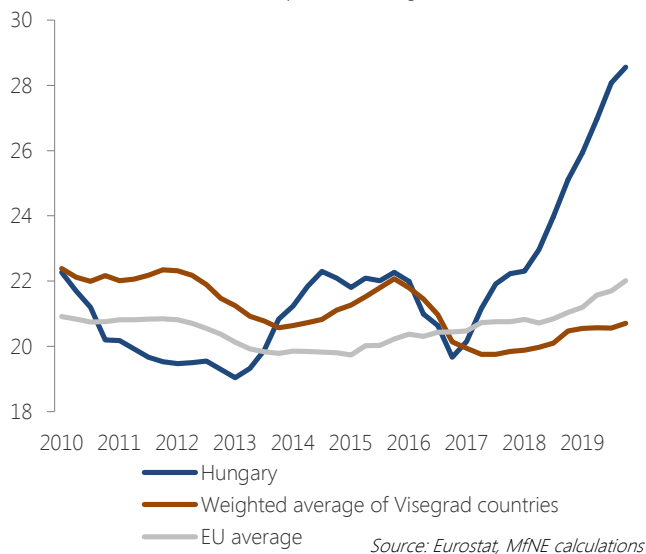
The coronavirus pandemic has a negative impact on import demand as well, prevailing in both consumption and investments. As a consequence, imports may show a considerable decline in 2020, followed by a rebound parallel to the recovery of internal and external demand. As a result of these factors, net exports may have a negative contribution to GDP growth in 2020, but this can gradually shift into positive in 2021.



3.2.2. Investment

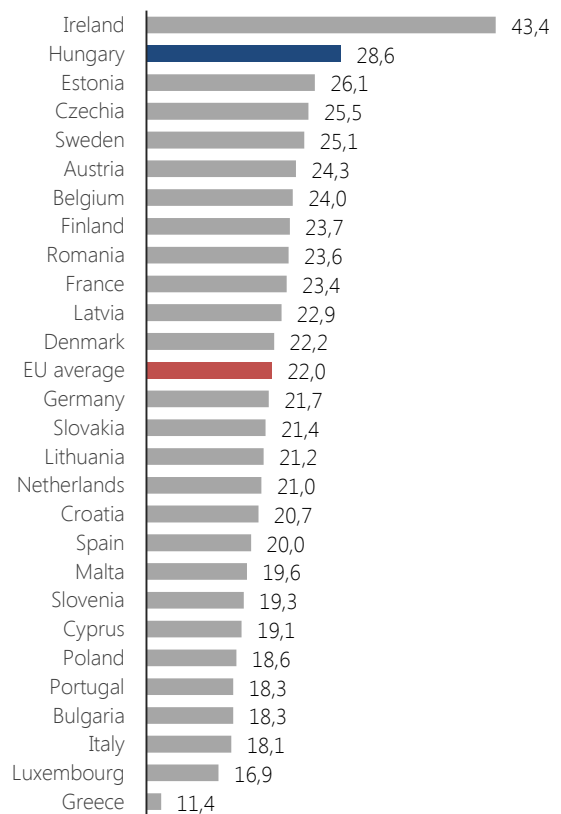
Thanks to the solid fundamentals, such as the all-time-high investment rate of last year, the balanced expansion of investments, the ongoing large-volume capacity expansions, and the attractive tax environment, Hungary is supported to fight the economic struggles brought along by the coronavirus pandemic.

Figure 3.9.: Investment rate in international comparison (gross fixed investments in percentage of GDP; 4-quarter rolling data)



In 2019, developments of more than HUF 13,400 billion were realised in Hungary, resulting in a 15.3% increase in investments year-on-year. Over the past 10 years, developments grew by a total of 77%, driving up the investment rate from 20.2% in 2010 to 28.6% last year, making Hungary rank second among the EU countries (Figure 3.9 and 3.10).

Figure 3.10.: Investment rates in 2019 (in % of GDP)



Source: Eurostat

The recent growth of investments is balanced in several respects: first, construction and machinery-type developments, which increase production capacities directly, thereby having a positive effect on growth potential as well, registered a double-digit increase last year. Second, almost every branch of national economy witnessed a dynamic expansion of investments, of which the manufacturing industry, with one quarter weight experienced a 16% growth in 2019, partly due to the increased performance of chemical industry and electricity industry, closely related to battery manufacturers. Third, the investment activity of all three sectors contributed to the favourable processes: household and corporate developments together achieved an outstanding 28% nominal growth last year, while public projects increased by 12%.

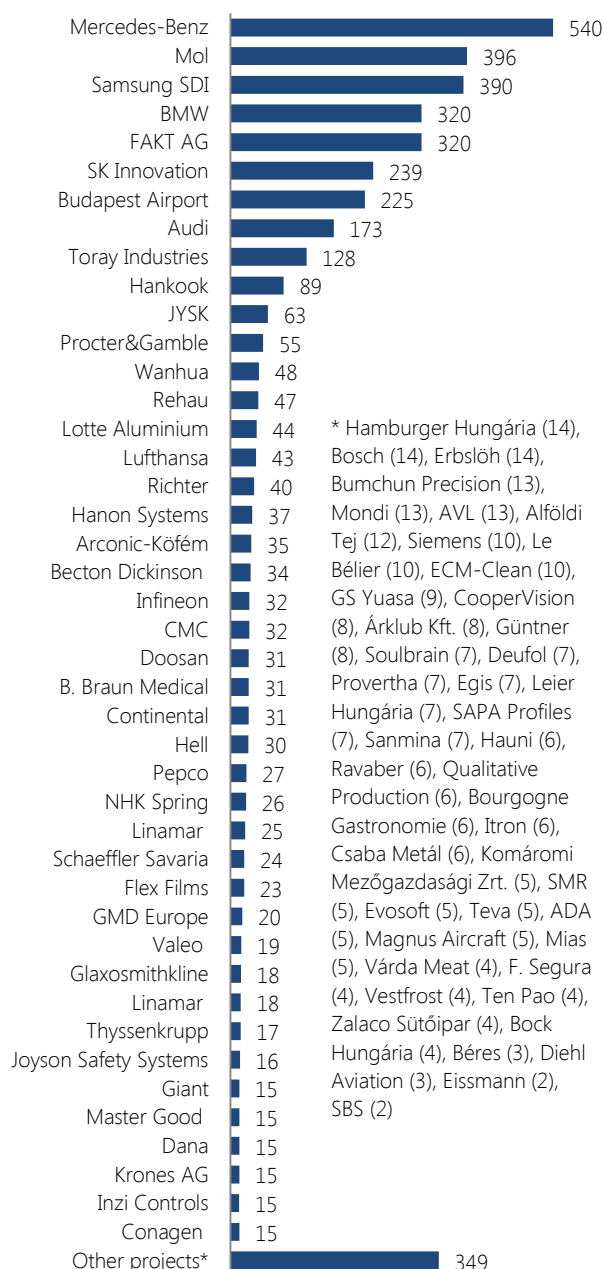
Companies

Based on the available information, in relation to the coronavirus pandemic, companies implementing or planning to implement large-scale investments in Hungary have not reported project delays or suspensions. Nevertheless, the risk prevails that the epidemic control measures and the decline in demand will cause the implementation of production investments take more time than anticipated, or some of them may even be cancelled. Overall, the investments are expected to moderate temporarily during this year but will regain their momentum in parallel with the economic recovery 2021 onwards.

The Government decided to launch a new export support and investment incentive programme in order to relaunching the economy, protecting the results achieved on export markets and creating new jobs. As part of this programme, Eximbank develops three new products: preferential loans to Hungarian companies for investments and working capital loans, offering a 0.1% interest rate on working capital loans for small enterprises which take out a loan within the year. In addition, a guarantee and an insurance programme will also be launched in order to provide protection against payment delays from the export markets. A grant to boost competitiveness will also be introduced with the aim of extending assistance to medium-sized and large enterprises operating in the manufacturing and business services sector, which face difficulties due to the outbreak of coronavirus pandemic. The non-refundable grant made available as advance can be applied for up to the end of 2020, for investments worth at least EUR 150,000. The maximum amount of grant is EUR 800,000.

On top of these, several preferential funds have been made available from late April to realise investments: on the one hand, the Funding for Growth Scheme Go! provides HUF 1,500 billion to SMEs; and on the other hand, the loan, guarantee and capital programmes of the Hungarian Development Bank offer preferential funding for investments in an amount of HUF 1,500 billion. The above listed programmes allow previously planned corporate investments to materialise despite the crisis situation triggered by the pandemic.

Figure 3.11.: Recently announced large investment projects (HUF billion)



Source: HIPA, Press information

Hungary's ability to attract foreign direct investment substantially improved over the past years supporting the increase of growth potential. Corporate investments announced recently alone exceed HUF 4,000 billion representing 9% of Hungary's annual GDP (Figure 3.11). In the medium run, following the gradual expansion, the additional capacities may raise Hungary's export performance by HUF 12,000–20,000 billion annually, which represents approximately 34–56% of Hungary's annual exports of goods. Overall, in the coming years, the above mentioned investments may give an one-time impetus of 12-16 percentage points for Hungary's economic growth. These favourable processes are also supported by a record

low corporate tax rate – reduced to 9% as of 2017 and the lowest throughout the EU –, which substantially reduces capital costs.

This is also supported by the projects managed by the National Investment Agency (HIPA), as in 2019 a record positive investment decisions were made in relation to a total of 101 projects in Hungary.. As a result of these investment projects, the coming years will see capital investments in the amount of over EUR 5.3 billion representing a 24% increase compared to 2018, and will directly create 13,500 new jobs in Hungary. The territorial distribution of investments is becoming increasingly balanced, which is reflected in the fact that in 2019 every county managed to attract at least one large investment project.

Looking at the composition of foreign direct investments, it can be concluded that – besides Germany and the USA as traditionally strong investors – countries targeted by the Eastern Opening strategy, such as South-Korea, Japan and China were the most dominant investors in 2019. In this context, the strengthening of electromobility sector is a welcome development: last year several large companies which manufacture batteries for electric cars decided to bring investment projects to Hungary, including Samsung SDI, SK Innovation and Toray, in a total value of HUF 2.85 billion. In addition, further developments in the vehicle industry related to e-mobility include the e-transformation project of Audi, which is aimed at expanding the capacity for electric engine production, a greenfield investment by the Schaeffler Group in Szombathely, an investment project by Infineon in Cegléd, and an electric vehicle manufacturing plant by Fox Automotive in Komárom. The stable expansion of business service centres is another important trend since this segment witnessed a record number of investment decisions last year.

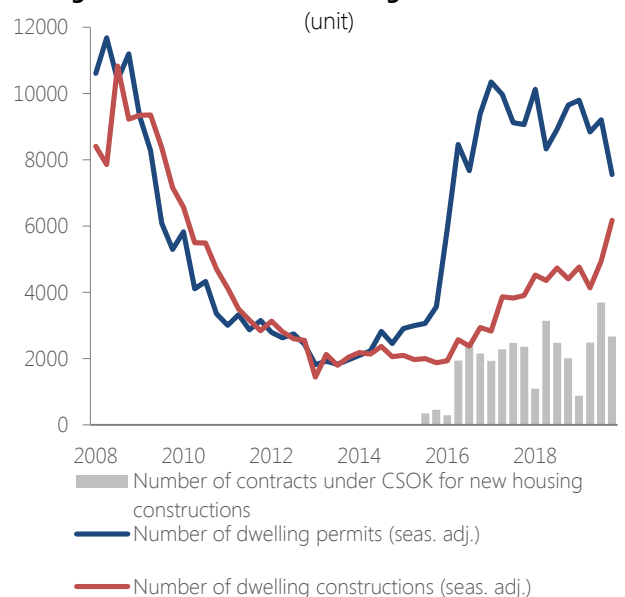
Hungary’s achievements in attracting FDI are widely acknowledged even abroad. On the one hand, the Global Best to Invest 2019 report by Site Selection, a magazine specialised in investment topics, ranked Hungary among the 10 most attractive investment target countries of the world for the second consecutive year. On the other hand, the IBM-PLI

Global Location Trends survey ranks Hungary 16th globally in terms of the number of jobs created as a result of foreign investments, while it ranks Hungary the 5th best performing country in the world – in terms of investment figures per 1 million inhabitants. Finally, Hungary improved its global ranking by 5 places, coming in 11th position in terms of value added created by new jobs, which reflects the trend that the share of projects producing high value added is continuously increasing.

Households

In December 2015, the Government adopted several measures to stimulate housing constructions on both the demand and supply side. Among others, the VAT rate of home sales was decreased temporarily to 5%, the amount of the Family Housing Subsidy Scheme (CSOK) was increased, and a tax refund subsidy was introduced. As a consequence, the housing market managed to recover from its historical bottom caused by the shock of the 2008 economic crisis, and the sector has witnessed a dynamic expansion over the past four years (Figure 3.12).

Figure 3.12.: Trends of housing market indicators



Source: HCSO, MoF calculation

Since 2016, the extended Family Housing Subsidy Scheme, which is part of the Family Protection Action Plan, has made a significant contribution to the boom of housing market, since banks received applications from 128,000 households until March 2020 in the amount of HUF 380 billion exceeding 0.8% of annual Hungarian GDP. In addition, the Rural Family Housing

Subsidy Scheme (Village CSOK) grants families subsidies for buying second-hand apartments and houses and/or for refurbishing, modernising and expanding the purchased property in small towns and villages involved in the scheme. Under this scheme, 8,000 families were granted subsidies in the amount of more than HUF 45 billion since July 2019. The favourable processes recently witnessed on the housing market were also supported by the stably low interest rate environment, and the permanent improvement in employment and income situation of households.

As far as the supply side of housing market is concerned, in 2019, a total of 21,100 new homes were built across the country, which represents a 20% increase as compared to the previous year. Although we expect to see the delivery of a significant volume of property developments up to the end of 2023 – due to the Government's measure to temporarily lower the VAT rate on homes to 5% –, the changed economic situation will have a moderating impact on dwelling constructions.

As for the demand side, the total value of new housing loans amounted to HUF 910 billion in 2019 representing a 7% growth year-on-year, despite the high base effect. Although following the introduction of MÁP+ bond, the demand for property purchases for investment purposes started to decline from the second half of last year, the demand for real estate purchased for own use remained high. At the same time, due to the drop in property purchases for investment purposes, the number of housing market transactions also fell in the second half of 2019, and recent years' dynamic surge in property prices lost momentum, also the bargaining position of buyers strengthened. It can be concluded that, due to the reduction of social interactions the coronavirus pandemic had a negative impact on home purchases as well, and a significant upturn of demand is expected only in the long run, even after the economic recovery..

Government

In 2019, public investment grew by 12% nominally year-on-year, of which investments in public administration increased by 5% partly as a result of projects implemented by central public administration bodies, while health care investments rose by 10% due to developments related to inpatient care. In addition, the investment activity of transportation and storage branch expanded by 15% as a result of dynamic public and rail road infrastructure developments implemented with the utilisation of EU funds. This is particularly favourable because these projects, in addition to enhancing the economy's ability to attract capital, are key in promoting labour mobility.

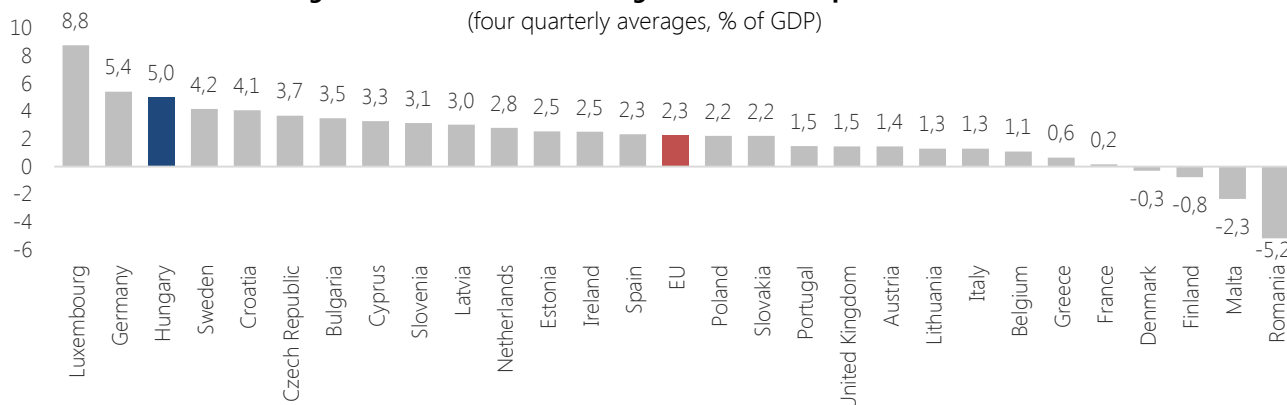
Similarly to the recent years, the dynamics of public investments will be significantly affected on the forecast horizon by the allocation of funds under the 2014-2020 Multiannual Financial Framework. In the 2014-2020 EU budget period, funds from the European Structural and Investment Fund (ESIF) are available to Hungary in the amount of EUR 25 billion, which is approximately equals to 2.9% of Hungary's annual GDP for the whole seven-year period. These projects are supplemented by an additional EUR 4.6 billion in domestic co-financing. By the end of 2019, a total of EUR 30.6 billion were awarded for projects, which represents 103% of the complete EUR 29.6 billion budget, but only EUR 12.1 billion were actually spent in the economy. Since this amounts to 41% of the available funds, nearly 60% of the EU transfers will be realised in the economic performance in the remaining four years, as, due to the so-called n+3 rule, the funds allocated for the 2014-2020 period can still be used until the end of 2023. Therefore, it can be concluded that EU transfers will continue to strengthen the investment performance in the period up to 2023.

3.2.3. Consumption

The real income of households saw a dynamic growth in 2019 as well, which allowed to keep up the strong expansion of consumption witnessed for several years. Due to favourable trends, consumption has accounted for approximately half of the GDP growth since the 2013 turnaround. The significant increase in real wages, which was also supported by a moderate inflation environment and the double-digit nominal increase in wages brought about by the wage and tax agreement of November 2016, played an important role in this. On the other hand, growing employment – exceeding 4.5 million people – also raised labour income. In addition, the improving purchasing power of households was also supported by the additional funds made available in the framework of the Family Protection Action Plan. As a result of these factors, household consumption expenditure went up by 5% in 2019.

fourth quarter of 2019, producing an annual increase of nearly 17%. This robust growth can, in great part, be attributed to new loans related to the Prenatal Baby Support launched in July, but a 9% increase could have been measured even without such loans. However, in spite of this strong expansion, the lending market still holds further growth potential for the coming years, as Hungary’s loan-to-GDP ratio is lower than both the regional and the eurozone average (Figure 3.14).

Figure 3.13: Households' saving rate in the third quarter of 2019
(four quarterly averages, % of GDP)

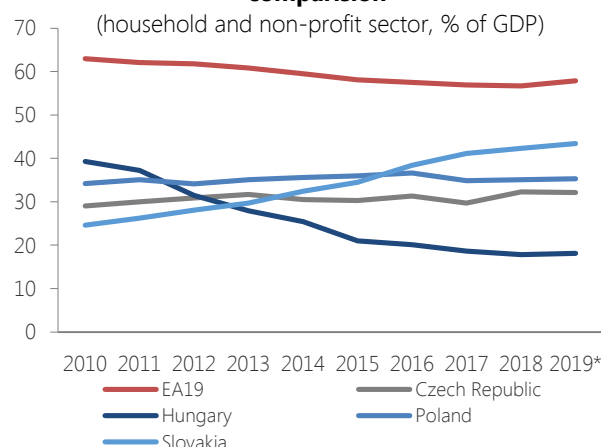


Source: Eurostat, MoF calculation

Over the past years, the growth rate of consumption expenditure has followed the expansion of real incomes. Household consumption decisions are still characterised by precautionary motives – partly as a sign of increasing financial awareness –, which contributed to the expansion of household investments and savings. Besides the dynamic economic growth of the past years, the savings rate of households has also stabilized at a high level in international comparison (Figure 3.13). As a result, unlike in the period before the crisis, consumption increased without deteriorating the financial balance of households.

In line with rising real wages and low interest rates, total household loans grew by HUF 300 billion in the

Figure 3.14: Household loans in regional comparison



*data of 2019Q3

Source: Eurostat, MoF calculation

Looking forward, the coronavirus pandemic is also expected to adversely affect household consumption in the short run. Although food stores, pharmacies and drug stores increased significantly in February and March as result of the pandemic, sales in this segments may also slow in the coming months due to the accumulated stocks. Programmes aimed at protecting existing jobs and creating new ones may help mitigate the moderation of companies' willingness to employ; however, the expansion of households' disposable income will probably still suffer a setback. The Government's recent measures

(among others, the loan repayment moratorium until the end of the year, the wage subsidy provided to protect jobs, exemption from the payment of certain taxes, or the extension of the eligibility for child care allowance, child care fee or child care support until the end of the state of emergency) provide additional support to preserve households' purchasing power and mitigate the social and economic damages caused by the pandemic. However, as the pandemic situation eases, households may, in part, make up for their delayed purchases, which could lead to high consumption dynamics in the future once again.

3.3. LABOUR MARKET

3.3.1. Employment

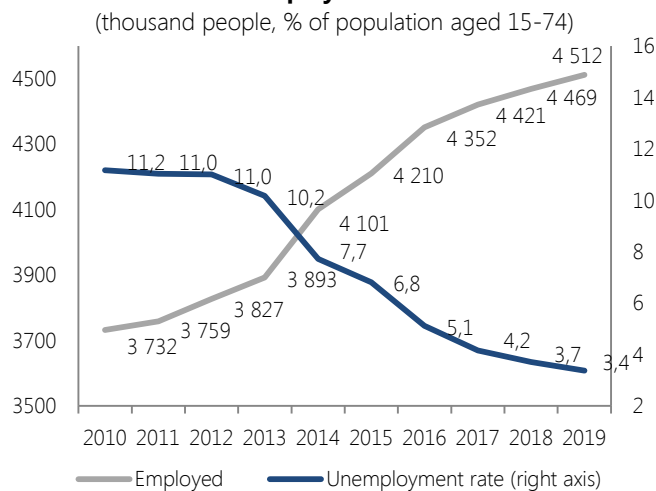
As a result of government measures aimed at promoting labour market participation and the strong economic performance, employment continued to increase in 2019 as well, bringing the number of employed persons to 4,512 thousand. In 2019, the number of employed persons was 43,000 higher on average than a year earlier, which represents a 1% expansion. Parallel to this, the number of people in public employment continued to fall, dropping to an average 101,000 persons in 2019. Taking everything into account, employment in the domestic primary labor market expanded by 68,000 (+1.6%). The employment rate increased to 70.1%, 0.9 percentage point higher than in the previous year. It is important to highlight that the employment rate of the 20–64 age group has been persistently over the 75% target defined in the Europe 2020 Strategy.

unemployment rates in the European Union, and the expansion of employment and activity is also outstanding.

Employment saw the most significant increase in the services sector. The highest employment growth was observed in trade, info-communication, scientific activities as well as in the transportation and storage sectors. The number of people working in the construction industry went up by 11,000. The manufacturing industry, which plays a key role in employment, continues to employ almost 1 million workers.

Besides the fact that the economy has started to follow a stable growth trajectory which increased labour demand, the listed results were founded by a number of measures stimulating labour market participation and labour demand as well. For instance, the personal income tax rate cut, the employers' social contribution tax allowances, the changes in job-seeking assistances, the tightening of the conditions of disability retirement, the rise in effective retirement age, the 'Road to the Labour Market' Programme, the Youth Guarantee Programme, as well as the wage agreement at the end of 2016.

Figure 3.15: Number of employed people and unemployment rate



Source: HCSO

In parallel with the expanding employment, the unemployment rate fell to a record low, an annual average of 3.4% (Figure 3.15). The number of unemployed people dropped to 160,000. In 2019, the number of economically active people increased by 30,000, while the participation rate hiked from 71.9% to 72.6%.

As a result of the significant expansion of employment and the strong economic growth, the labour market became tight over the past years. Last year the Hungarian labour market was still characterised by a strong labour demand, but the number of vacancies dropped over the past quarters, mostly in regard to the private sector, which indicates a moderation in labour shortage (Figure 3.16). This can probably be explained by the efficiency enhancing measures taken by companies, and by an increasing extent of automation, which comes as a result of intensive investment activities.

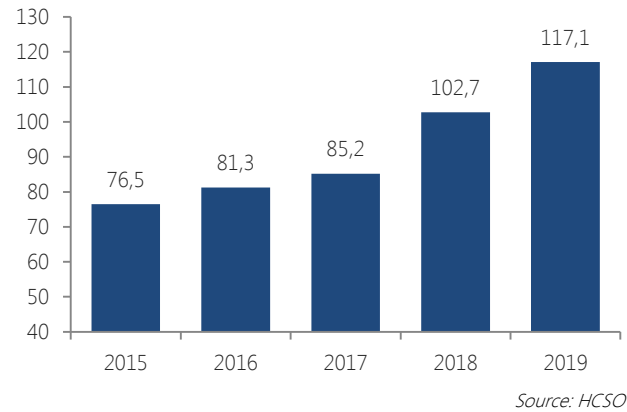
Hungary's achievements in regard to the labour market are outstanding even in international comparison. Hungary has one of the lowest

Figure 3.16: Number of vacancies

(thousand , seasonally adjusted)

**Figure 3.17: The number of employed pensioners**

(thousand)



The number of inactive people decreased to 2.75 million by 2019 from nearly 3.46 million in 2010. A vast majority of this group are pensioners, whose participation in the labour market will increase in the coming years due to the gradual raising of the retirement age by 2022, as well as the social security contribution exemption – for both of employers and employees – of retired workers.

The creation of “public interest pensioner cooperatives” as of 1 December 2017 contributed to strengthening the labour market participation of the elderly. As a result, the number of working pensioners grew by almost 20,000 in 2018 as compared to 2017. As a consequence of exempting working pensioners from contribution payments, this figure continued to increase in 2019, reaching almost 120,000 (Figure 3.17).

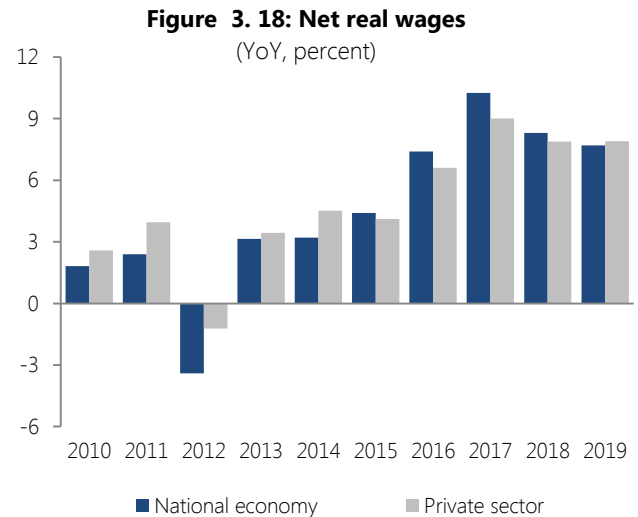
The favourable labour market developments of the previous years were disrupted by the coronavirus pandemic. As a result of the pandemic, several sectors suffered a contraction in demand, and producers who are integrated into international value chains suspended their activities temporarily, which posed a setback to businesses’ willingness to employ, thereby causing a temporary hike in unemployment and a drop in employment.. However, these negative developments are substantially mitigated by the Government’s measures aimed at protecting jobs and facilitating the creation of new jobs, as well as by measures supporting the relaunching of the economy, such as the wage subsidy scheme or the reduction of taxes and contributions.

Looking forward, it is encouraging to see that several larger companies, which had suspended production, announced in the past weeks that after having introduced health and safety measures and having partially restructured their operating processes, they were going to resume production. As the pandemic abates and the economy recovers, employment growth is expected to recommence..

3.3.2. Earnings

The dynamic wage increase of the past years can be attributed to strong economic growth, the tight labour market caused by the significant expansion of employment, the competition to retain a well-trained workforce, and the wage reform of government officials. In addition, government measures also contribute to maintaining wage growth. One of the most outstanding achievements of the growth-supporting economic policy is the wage and tax agreements concluded at the end of 2016, which promotes a dynamic increase in earnings while reducing employers' tax burden. This multi-annual programme aims to contribute durably to economic growth by increasing labour productivity and by enhancing competitiveness. The agreement includes the raise of the minimum wage and guaranteed wage minimum and along with these the significant decrease of the employers' tax burden. The reduction of the corporate income tax and the social contribution tax significantly offset, the additional burdens originated from the wage increase.

In 2019, average gross income in the national economy was 11.4% higher than a year earlier, maintaining a double-digit increase since 2017. The private sector witnessed a slightly higher wage increase that is 11.6%. Since 2010, net real wages in the national economy have increased 50 percent. In 2019, the dynamic wage increase and the 3.4% inflation rate resulted in a 7.7% real wage increase (*Chart 3.18*). In line with the wage and tax agreement and due to the dynamic wage convergence, the social contribution tax rate was cut by further 2 percentage points to 17.5% as of 1 July 2019.



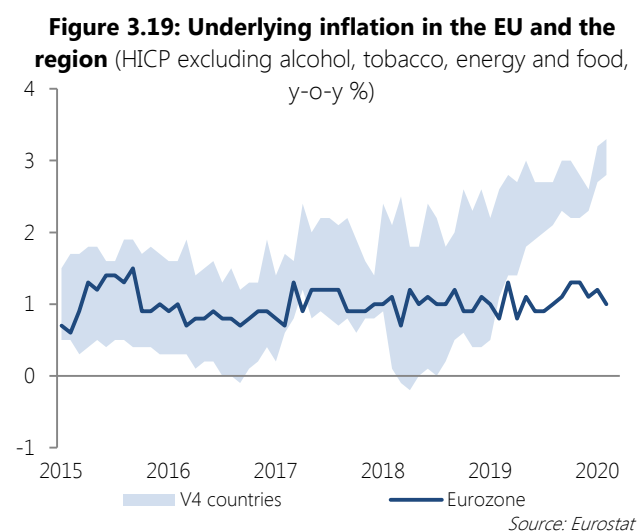
The dynamic wage increase did not affect Hungary's competitiveness on the expenditure side. This is because, on the one hand, the convergence of the minimum wages and wage levels of other countries in the region has also accelerated. On the other hand, in spite of the wage increase of recent years, the domestic wage share is still moderate both in regional and European comparison, which is also supported by the fact that the social contribution tax rate – that gradually reduces to 11.5% from 27% in multiple steps – decreases wage costs.

The slowdown of the economy pushes businesses to cut their costs, which may result in lower wage dynamics for this year. In order to prevent the economic effects of the coronavirus pandemic, protect jobs and mitigate employer burdens, among others, the social contribution tax rate will decrease by further 2 percentage points to 15.5% as of 1 July 2020. Looking ahead, the increase of wages will regain momentum, once the economy is boosted again.

3.4. INFLATION TRENDS

In 2019, the inflation rate was 3.4%, which represents a slight increase as compared to the 2.8% rate in 2018, while consumer price index excluding indirect taxes remained unchanged. As a result of adjusting the excise duty of tobacco products to the EU regulation, as well as of raising the public health product tax rate on beverages, alcoholic drinks and salty finished products, prices grew at a pace 0.2 percentage point higher in 2019, as opposed to 2018, when price growth had been moderated substantially by the reduction of the VAT rate on internet services.

Inflation rose in the whole region, the Visegrad countries recorded an average 0.6 percentage point acceleration, which corresponds to the Hungarian figure (Figure 3.19). The phenomenon was particularly visible in the services sector, which could be the result of the strong wage dynamics and a massive domestic demand. In contrast, the economic slowdown of the eurozone coupled with low inflation, and as a result, the inflation processes of the region and the eurozone significantly diverged.



Rising household demand in Hungary is also reflected in the price increase of market-based services, which exceeded 4%. The dynamic wage increase basically affected labour-intensive services and products, resulting in higher prices for repair and hospitality

services. Imported inflationary effects were mixed. The price of industrial goods was favourable, which can be explained by the spillover of weak EU economic performance. In contrast, the price increase of crude oil and food products – the latter including a strong price increase of meat and meat products in the second half of the year due to the swine fever spreading in China – drove up the price index considerably.

Similarly to previous years, the changes in indirect taxes also foresee a higher price increase in the future, which may result in an approximately 0.4 percentage point increase in the general price index. These tax changes are mostly related to adjusting the excise duty of tobacco products to the EU level, but the anticipated increase in the excise duty rate of fuels due to low oil prices may also have a significant effect. Nonetheless, inflation might be lower than last year due to the fact that the slowdown caused by the coronavirus pandemic may offset the price effects generated by rising demand.

Moreover, external effects also point to a sharp decline in inflation. The most important factor is the dramatic drop in oil prices since the beginning of the year, which in itself resulted in a 1.7 percentage point lower inflation rate in the first four months of the year. In addition, the coronavirus pandemic will probably have a negative impact on global demand and lower the price of various products and electronic devices, which may slow down the price increase in Hungary as well, although this might be offset by the depreciation of the Hungarian forint.

Overall, both internal and external factors indicate that the increase in consumer prices may slow down in 2020 and despite the sharp price increase witnessed in the first months of the year, the annual inflation rate is expected to be 2.8%. Then, however, the factors causing one-off price increases get included in the base, and inflation may rise moderately. As a consequence, from 2021, the pace of general price increase may be 3%, in line with the medium-term target of the Central Bank of Hungary.

3.5. CYCLICAL PROCESSES

The performance of the Hungarian economy in the 2000–2008 period exceeded its potentially attainable level. Prior to the financial crisis, economic growth was marked by excessive public deficit, excessive lending and the rapid accumulation of external debt, which made economic growth unsustainable. With the outbreak of the global financial crisis in 2009, the focus shifted to the repayment of the accumulated debt, and in parallel with that, the performance of the economy fell well below its potential level. In the subsequent years, the slow closing of the negative output gap was observed.

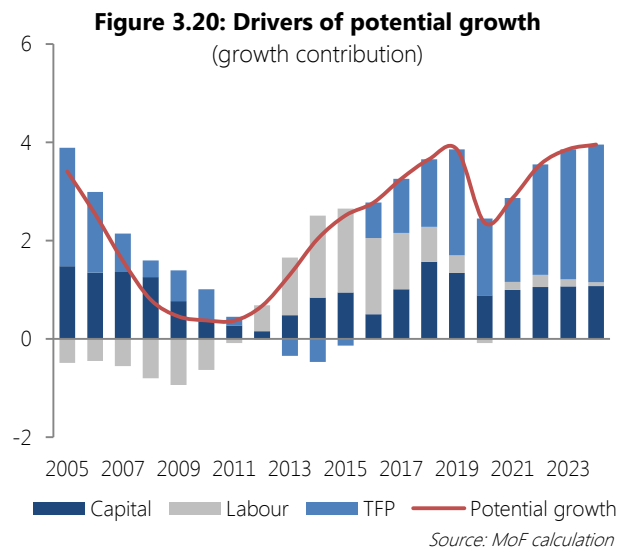
In 2018, the output gap could turn into the positive as a result of strong domestic demand. In 2019, the positive output gap could further expand due to continued exceptional growth performance. In 2020, economic growth is hampered by a fall in demand caused by the coronavirus pandemic, and together with that, the output gap may turn into the negative again.

In the coming period, economic growth may once again exceed the level enabled by structural factors, thereby gradually closing the output gap. This time, reaching the potential output level may take place more quickly, in contrast to the protracted process after 2009, since the pandemic has hit the economy in a much stronger condition. On the one hand, internal and external financial indicators, and the rate and structure of public debt are much more favourable. On the other hand, there is much more room for manoeuvre in fiscal and monetary policy, and as a result, economic policy is able to support the relaunching of the economy significantly through maintaining jobs and production capacities.

In terms of potential growth, the mid-term outlook remains essentially unchanged: in 2024, the economy may reach a potential growth of 4% (Figure 3.20). As

for the factors of economic growth, the trend unfolding in previous years seems to continue: the emphasis is shifting increasingly from labour-intensive, quantitative growth towards quality development through efficiency and capital accumulation. As a consequence of positive processes, the contribution of total factor productivity to the growth potential may gradually increase, approaching 3 percentage points in 2024.

Due to the pandemic, the potential growth rate of the Hungarian economy will slow down in the short term. However, on the one hand, it is a promising sign that the investment rate is persistently high on the forecast horizon, well above 25%, thus the contribution of capital accumulation to potential growth may remain high all the way through on the forecast horizon. On the other hand, after a temporary setback, labour market circumstances are improving again, owing to low structural unemployment, having decreased to around 4%, which was achieved through the reforms implemented since 2010.



3.6. EXTERNAL BALANCE

Regarding external balance processes, Hungary's current account surplus fell after the peak year of 2016 due to the realisation of previously postponed consumption and mostly due to the massive increase in investments. However, the decline in external surplus as compared to 2016 is a trend which can be observed across the region. It can be explained by the fact that the Visegrad economies managed to grow dynamically despite the slowdown of their key European trade partners, which naturally increased their import needs. Overall, the external balance indicators of Hungary remain favourable in regional comparison, just as much as the fact that Hungary's net foreign debt-to-GDP ratio fell below 7.9% by the end of 2019.

In 2019, the current account deficit stood at 0.9% of the GDP, while the net lending capacity amounted to 1% of the GDP. Looking at the details, the shrinking of the trade surplus slowed down as compared to the previous years, due to export capacity extensions in the vehicle and electronics industry as well as the increasing export of cereals. The income account deficit and the deficit of the balance of unrequited transfers were similar to the previous year; however, it is a welcome development that capital transfers from the EU amounted to 1.9% of the GDP, which represents a 0.3 percentage point increase as compared to the previous year.

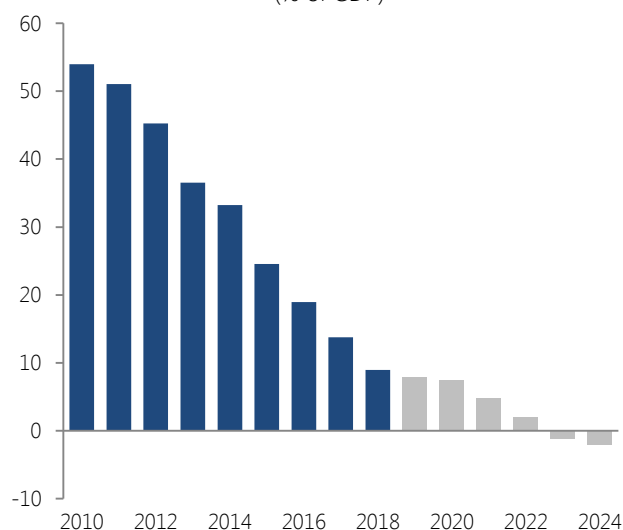
Looking forward, the significant slowdown of the global economy due to the coronavirus pandemic has a direct impact on Hungary's export opportunities. There may be a sharp decline in exports, especially in the case of tourism and air transport which generated a significant external surplus in previous years. Nevertheless, as a result of contracting domestic demand, imports also suffer a decline, and in the end, foreign trade balance will suffer only a slight setback. Hungary's current account balance may continue to decrease in 2020 due to the minor surplus of the goods and services

account. However, on the level of financing capacity, a substantial improvement is expected due to the faster accounting of capital transfers from the EU as opposed to previous years.

In the medium run, once the situation is normalised, foreign trade balance is expected to improve since capacities in manufacturing – which largely explained the deterioration of the trade balance over the past years during their implementation – will increase exports as production resumes, while import demand related to investments will decrease. Furthermore, Hungary may preserve its high net lending capacity due to transfers from the EU.

Overall, Hungary's resilience against negative external shocks is also enhanced by its favourable financial indicators. As a consequence of persistent external surplus and the return of dynamic economic growth once the pandemic subsides, Hungary may become a net lender in a few years' time after being a net borrower for half a century (*Figure 3.21*).

Figure 3.21: Developments in net foreign debt
(% of GDP)



Source: MNB, MF calculation

3.7. ASSESSMENT OF THE ECONOMIC CONSEQUENCES OF GOVERNMENT MEASURES

This Chapter contains a detailed economic impact assessment of the most important Government measures since the publishing of the 2019 Convergence Programme, of which the most significant is the Economy Protection Action Plan aimed at mitigating the effects of the coronavirus pandemic. The primary aim of the Action Plan is the preservation of existing jobs, creating new jobs and the protection of Hungarian businesses and families. In terms of economic size, this is the biggest rescue and stimulus package in Hungary's history, which – including the financing measures taken by the Central Bank of Hungary – represents almost 20% of the GDP. The broad range of government measures – of which only a few definitive ones will be presented here – effectively help the Hungarian economy in meeting the challenges posed by the coronavirus pandemic:

- Of the job preserving measures, one of the most important is the partial assumption of the wage payments of companies compelled to reduce working hours resulting from the significant decrease in demand. In the scope of the reduced working hours, the Government provides a wage subsidy for 3 months, the rate of which is 70% of the proportionate part of the net wage falling to the lost working hours. In addition, in many sectors, the companies operating in the given sector do not have to pay employer's social security contribution, while the contributions of employees are reduced to a significant extent: they do not have to pay pension contribution, and the health insurance fee is reduced to the statutory minimum. For people working in engineering and R&D jobs, the Government provides a 40% wage subsidy for the next 3 months. In addition, the social contribution tax will be reduced by 2 percentage points from 1 July 2020.
- It is also a high priority to create new jobs after the crisis, for which reason companies that keep their employees can apply for technology development, environmental and energy efficiency funds in an amount of several hundred billion forints in total, the state assumes 95 percent of the tuition fees of trainings, and jobseekers are eligible for interest-free student loans for adult training. Since there will be a need for a huge amount of trained labour after the crisis, university students may take a one-time, freely usable, interest-free student loan of HUF 500,000 and 75,000 students will be exempted from the language exam requirement, which is otherwise a condition of obtaining a university degree.
- A loan repayment moratorium has been implemented for enterprises and households until the end of this year. The implementation of an upper limit of 5.9% for the annual percentage rates of consumption loans facilitates the protection of the liquidity and disposable income of households. In addition, expiring child care allowances are extended for the term of the state of danger. Furthermore, the 13th month pension will be reintroduced from February 2021, in four steps.
- The Government also spends significant resources on the protection of priority sectors during the crisis. The sectors considered as priority are the ones whose operation has practically ceased due to the virus. These include tourism, health industry, food industry, agriculture, arts and entertainment, construction, transportation and storage. In the next 3 years, the Government will help these sectors with investment support programmes, preferential loans with state guarantee and capital subsidy, infrastructure development programmes and tax reductions. Tourism tax has been suspended until 31 December, and a non-repayable budget subsidy is paid to municipalities, equal to the amount of tax that is not paid by tourists. The social contribution tax charged on fringe benefits provided on SZÉP card has been abolished until 30 June. In 2020, the maximum amount increases to HUF 800,000 in the private sector, and HUF 400,000 in the public sector, to contribute in the stimulation of Hungarian tourism after the end of the pandemic. In the case of tourism, the Government provides a

development and loan programme with an amount of HUF 600 billion to hotels and restaurants. The health industry receives more significant support than ever before, in order to facilitate that the products of Hungarian pharmaceutical and medical device manufacturers appear in the Hungarian health care at a higher rate. University and corporate research institutes also receive support, and the Health Industry Innovation Agency will be founded.

- In order to protect employers, liquidity enhancing interest subsidised and state guaranteed loan and capital programmes have been announced, which may protect Hungarian companies from both economic recession and foreign takeovers. The total amount of corporate loans with preferential interest rates amount to almost HUF 2,000 billions, with a state guarantee of HUF 650 billion. In addition, the Funding for Growth Scheme Go! of the central bank provides loans with preferential and predictable interest rates to the SME sector for preserving jobs and production capacity, as well as to fund their investments, with a framework amount of HUF 1,500 billion.
- The extension of tax return deadlines and acceleration of VAT refunds ease the tax burdens of enterprises in a difficult situation. Enterprises may apply for tax exemption or payment in instalments for up to HUF 5 million. Small enterprises are supported by the small business tax (KIVA) rate cut from 12% to 11% in 2021. In certain sectors, small enterprises are exempted from small business lump sum tax (KATA) until the end of June.

The impact assessment was prepared using the DINAMO model of the Ministry of Finance. The structure of the DINAMO model rests on long-term neo-classical growth relationships, however, several short-term frictions slow down the adjustment to the equilibrium. The characteristics of the model make it suitable for the preparation of impact of Government

measures. On the one hand, this is explained by the fact that it uses a wide range of macroeconomic variables, thus modelling the behaviour of the specific economic players. On the other hand, it appears as a consistent representation of the relations between the national accounts and the financial accounts of public finances. In addition, several such transmission channels have been incorporated in the model through which the fiscal variables exert their effects on the economy.

At the same time, beyond the direct cyclical stimulation by budgetary implications, the individual measures also have such structural impacts that will result in additional growth pointing beyond the mechanisms integrated into the DINAMO model. One example of this in practice could be the introduction of wage subsidies, which can be presented directly as a transfer made from the budget to households within the framework of the model. At the same time, the wage subsidy also allows for the continued employment of employees, protecting jobs and production capacity; because of this, out-of-the-model calculations were also used in order to quantify these effects.

The macroeconomic effects of the measures quantified using the DINAMO model are shown in *Table 3.1*. The modelled economic policy measures support growth primarily by strengthening investment activity as well as by increasing employment dynamically, and thereby boosting household consumption. Capacity extensions improve the growth potential of the economy in the long run as well, since after their completion, they stimulate GDP growth through additional channels, primarily through export and higher labour incomes. On the whole, these government measures have a modest inflationary impact. To quantify this, the recently adopted government measures will improve this year's economic growth by 3.7 percentage points, and next year's growth by 4.3 percentage points. It is important to emphasise that these measures will continue to support economic performance in the period after 2021 as well.

Table 3.1: Macroeconomic impacts of the measures
(cumulated % difference in variables compared to the baseline scenario)

| | 2020 | 2021 |
|--|------------|------------|
| GDP | 3.7 | 4.3 |
| Households' consumption expenditure | 6.8 | 8.8 |
| Investments | 13.4 | 13.9 |
| Exports | 0.1 | 3.7 |
| Imports | 2.1 | 2.7 |
| Inflation | 0.0 | 0.5 |
| Private sector employment | 6.2 | 7.7 |
| Gross average wage in the private sector | 0.5 | 2.0 |

Source: MF calculation

3.8. MONETARY AND EXCHANGE RATE POLICY

The current Act on the Central Bank of Hungary sets out the achievement and preservation of price stability as the primary objective. This, as well as protecting financial stability and supporting the economic policy of the Government are the tasks of the central bank in a macroeconomic environment transformed as a result of the effects of the coronavirus pandemic. Since 2001 the MNB has been following an inflation-targeting monetary policy. Within the framework of this, the Monetary Council set a 3% mid-term inflation target; however, in March 2015, it defined a tolerance range of ± 1 percentage point around this value in order to create room for manoeuvre to mitigate the effects of eventual economic shocks. The monetary policy ensures inflation targeting by changing the base rate, exploiting the flexibility provided by the floating exchange rate, and using its non-conventional toolkit.

In 2019 – due to the international developments –, and then in the past weeks of 2020, in order for mitigating the negative economic effects of the coronavirus, the tools of monetary policy changed significantly:

In 2019, the benchmark instrument became the minimum reserves. The reserve rate uniformly required of credit institutions remained 1%, which was temporarily suspended as of 24 March 2020. The amount of the interest paid after the deposited

reserves and the penalty interest payable by credit institutions in the event of underprovisioning have been equal to the base rate since the 2004 EU accession, which remains 0.9% at present.

From September 2018, an optimal combination of the interest rate corridor and the fine-tuning foreign exchange swap served as the main tool of the monetary policy management strategy. In March 2019, the overnight deposit rate increased to -0.05%.

On 7 April 2020, the interest rate of the O/N collateralised loan – serving as the upper threshold of the interest rate corridor – increased from 0.9% to 1.85%, together with the interest rate of the one-week collateralised loan. This made the interest rate corridor symmetric. And since 1 April 2020, the one-week deposit instrument – that has been a potential part of the toolset since 2016 –, paying a more favourable interest rate compared to the O/N deposit instrument, has been announced each week. Moreover, the 0.9% interest rate of the one-week deposit instrument has become adaptable in a targeted manner as of 7 April: it may diverge from the base interest rate both in the positive and negative direction. The Central Bank decides regarding this at the time of announcement. Therefore, from here on, this instrument serves as the benchmark. All this means that the loose monetary policy is becoming more strict.

In addition, the MNB continues to provide excess liquidity for the bank system via its foreign exchange swap instrument. The amount of liquidity targeted to be crowded out changed on multiple occasions by +/- 100 billion forints throughout 2019, and the MNB did not set a target value for this for the second quarter of 2020 in order to increase the room for manoeuvring.

The excess liquidity of bond and loan programmes announced as a part of the non-conventional monetary policy toolkit (BGS, FGS) is offset by the preferential deposit having a base interest rate. The MNB will pay a preferential 4% interest rate on the increase of the BGS and FGS Go! schemes' portfolio until the end of July 2021.

As part of the liquidity-increasing measure package of 24 March 2020, a long-term (duration of 3, 6 and 12 months or 3 and 5 years), fixed-interest rate collateralised loan instruments (repo) have also been introduced with an unlimited framework amount and an interest rate equal to the base rate in order to ensure the liquidity needed by the financial sector. So far, the 5-year duration has proven to be the most popular, which supports reduction of the yields of long-term government securities. In addition, the central bank expanded the scope of the coverage of banks with loans intended for large enterprises, and as a result, at present, a total amount of HUF 9,600 billion is available to banks to support their liquidity by the central bank.

On 7 April 2020, the MNB also decided on launching a new instrument purchase programme on the secondary market, which is commencing in early May, and it is also restarting its mortgage bond purchase programme in order to increase the long-term availability of funds for the bank system.

The aim of the MNB's new monetary policy mix is to force the long end of the yield curve down with the additional liquidity placed in the financial system, which is complemented by a reverse process on the short side due to the one-week deposit instrument. This latter also facilitates the calming of the increased

HUF exchange rate. It is expected that the foregoing measures will flatten the yield curve.

In summary, we can say that in 2019, the Hungarian monetary policy was directed towards slow, gradual tightening, however, in 2020, the main motivating factor behind the monetary policy was to mitigate the economic and market impact of the coronavirus pandemic. In this scope, however, in addition to several – mainly liquidity-promoting – measures, tightening also became necessary (*Figure 3.22*).

In the international scene, the leading central banks pursued a strategy of tightening and waiting out in early 2019. Their cautious policy was motivated by the fact that the performance of the world economy entered into a more uncertain phase, as well as concerns related to economic uptrend. Central banks started to pursue milder strategies one after the other, and a number of loosening measures were launched. The Fed implemented rate cuts of 25 percentage points on three occasions in the second half of 2019. In accordance with its decision taken in March 2019, the ECB announced a loan promotion programme providing long-term loans for banks (TLTRO III), and in September, in addition to fine-tuning the foregoing, it also decided on implementing a package of loosening measures, in the scope of which the base rate decreased by 10 basis points to -0.5%. In addition, a two-tier interest scheme has been introduced in order that a portion of the excess liquidity of banks could be exempted from the negative deposit interest, and net government security purchasing (APP) has been relaunched with a monthly framework amount of EUR 20 billion.

All this was followed by extraordinary supporting monetary policy measures in spring 2020, as a result of the coronavirus pandemic. The central banks typically announced major interest rate cuts and quantitative easing programmes in order to address the issues arising. The most important ones are the Fed's two rate cuts (50 and 100 basis points), resulting in the decrease of the prevailing rate to 0%-0.25%. In addition, 1 to 3-month repos with amounts of USD 500 billion each, and then an instrument purchase programme with an unlimited framework amount, as well as the temporary release of capital requirements

were announced. The ECB also relaunched its net asset purchase programme, which provides the possibility for purchasing assets amounting to 120+750 billion euros, and a potential increase of the framework amount also came up as a possibility. This exceeds the monthly amount of EUR 80 billion applied in the crisis of 2008/2009. In addition, the European Central Bank also decided on loosening the conditions

of the programme supporting the provision of loans by commercial banks to SMEs (LTRO, TLTRO III), as well as a temporary suspension of the strict enforcement of liquidity and capital requirement indicators. On the regional scale, the palette of measures included 50-basis point interest cuts, repo and asset purchase programmes, a refinancing loan programme and mitigation of the capital requirement.

3.9. FINANCIAL SECTOR

In 2019, the loan portfolio of non-financial corporations grew on a transactional basis. The annual growth rate net of exchange rate effects showed a significant 14.2% growth in the entire corporate sector, while it amounted to 14% in the SME sector. The SME sector's share within the entire corporate transaction volume increased further, since 63% of the transactions – HUF 644 billion – are associated with this sector.

We can see growth with respect to the volume of new loans too: the volume of loans provided to non-financial corporations in 2019 exceeded the 2018 level by 2.5% (and 10% in the case of SMEs). It should be noted that a significant portion of the loan disbursements is made up of the yearly extensions of short-term corporate loans.

A new loan-promoting programme, FGS fix was launched in early 2019. The aim of the programme was to increase the share of long-term and fixed-rate loans. In the span of about a year, loan or leasing contracts amounting in total to more than HUF 460 billion were concluded with nearly 15,500 companies under the FGS fix, and by the start of April 2020, HUF 360 billion of this had been drawn down.

A substantial decrease of demand in the corporate sector can be predicted for 2020, which is definitely due to the negative economic effects of the COVID-19 pandemic. The effects of the pandemic include, among others, loss of revenue and delays by the suppliers, and it will also impact the rate of employment and the postponement of investments.

The regulator responded in several steps in order to help the corporate sector out. The measures taken in response included the ordering of a loan repayment moratorium for 2020, as well as the loosening of the conditions of the Bond Funding for Growth Scheme, which makes the conditions of funding large corporations less strict. The Funding for Growth Scheme Go! (FGS Go!) was launched in the second half of April 2020. In the scope of this programme, SMEs may apply for funds with preferential, fixed interest rates. Funds amounting to HUF 1,500 billion were allocated to the programme.

In addition, the Government has made the conditions of guarantee programmes even more favourable than before, assuming an even larger portion of interest risks than before (up to 90%) in order to facilitate the funding of companies. In addition, interest-subsidised schemes also mitigate the related burdens of companies.

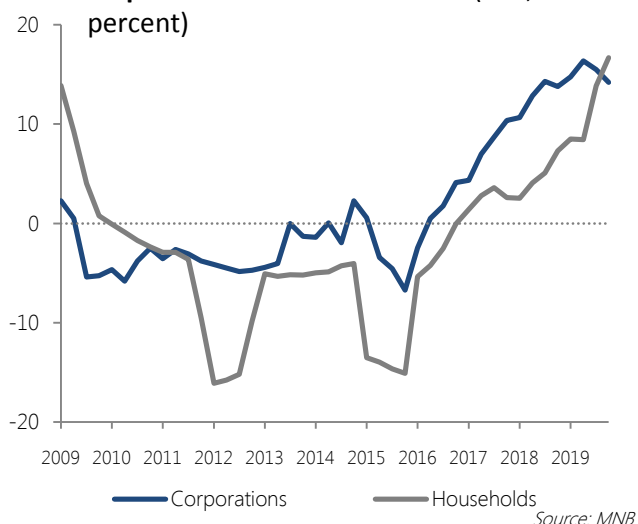
Similarly to the previous years, the corporate NPL ratio continued to decrease in 2019. After the 1.4 percentage point (HUF 69 billion) decrease, the rate of defaulting loans of financial companies was 4.1% at the end of 2019. The improvement of the portfolio quality merely due to the decrease of the amount of defaulting loans was 0.9 percentage point (excluding the effect of the growth of the loan portfolio). Excluding the effect of the decrease of the amount of defaulting loans, the growth of the total loan portfolio reduced the NPL ratio by 0.5 percentage point.

Previous years' favourable income situation of the bank system continued in 2019. Income from interest

increased, as well as income from fees and commissions. A significant portion of the income was spent on operating costs, which may be a potential direction of development for increasing profitability and efficiency.

The Hungarian bank sector continues to meet the capital requirements with a significant surplus. In 2019, the total capital adequacy ratio was 20.2%, while the CET1 capital adequacy ratio was 17.6%. The short-term liquidity coverage ratio decreased as compared to 2018, but its 155% value is still 50 percentage points above the regulatory minimum. The long-term net stable funding ratio was 124%.

Figure 3.23: Growth rate of non-financial corporate and household loans (YoY, percent)



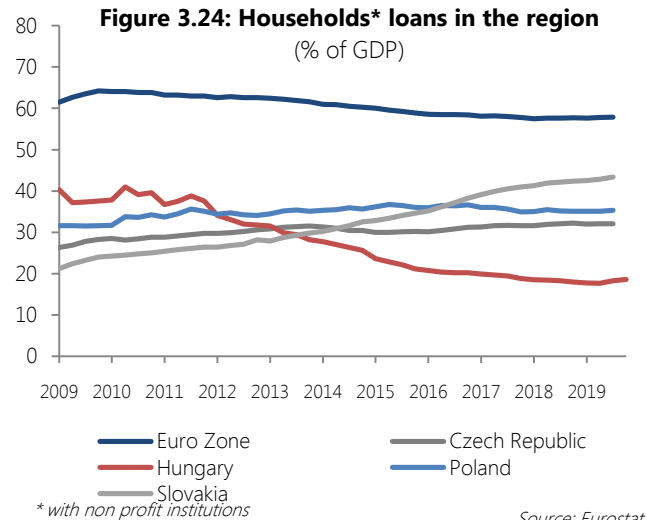
The newly disbursed household loans increased significantly in 2019, since the low interest rates, the increasing real wages and the introduction of the prenatal baby loan created favourable lending conditions. In spite of the increasing amount of repayments, in 2019 the overall volume of household loans witnessed the largest increase in the past 11 years by HUF 1,025 billion, indicating a 14.2% growth rate. In 2019, credit institutions disbursed HUF 2,411 billion in new loans to households, 48% more than in the previous year. The amount of housing loans disbursed increased by HUF 59 billion. The amount of consumption loans disbursed increased by HUF 709 billion, which is explained mainly by the HUF 454 billion disbursed in the scope of prenatal baby loans.

The prenatal baby loan is part of the Hungarian demographic programme. Eligible persons may take out a fully interest-subsidised, freely-usable loan with an amount of up to HUF 10 million, and if the person has a child within 5 years, the loan remains interest-free. The state assumes 30 percent of the remaining debt after the birth of the second child during the term of the loan contract, while if a third child is born, the state assumes the entire remaining debt.

A further benefit is that repayment can be put on hold for 3 years from the 12th week of pregnancy.

Despite the exceptional growth of the loan portfolio in the previous year, the rate of indebtedness of Hungarian households is among the lowest in the region, and is significantly lower than the eurozone average, which means that there is still a significant growth potential in household lending.

Figure 3.24: Households* loans in the region (% of GDP)



At the end of 2019, the proportion of loans in default for more than 90 days was 2.7%, which amounts to a 1.8 percentage point decrease compared to 2018, almost fully explained by the reduction in the non-performing portfolio. The National Asset Management Company had a huge role in the improvement of the loan portfolio, and it helped in the housing situation of nearly 43,000 families by purchasing their property and leasing it back to the former seller with preferential conditions. More than half of the lessees have already repurchased their previous property

either via a single-amount transaction or in instalments.

In the midst of the coronavirus pandemic, the volume of new loans decreased significantly, and due to this, it is possible that even the entire loan portfolio will decrease compared to the exceptional last year.

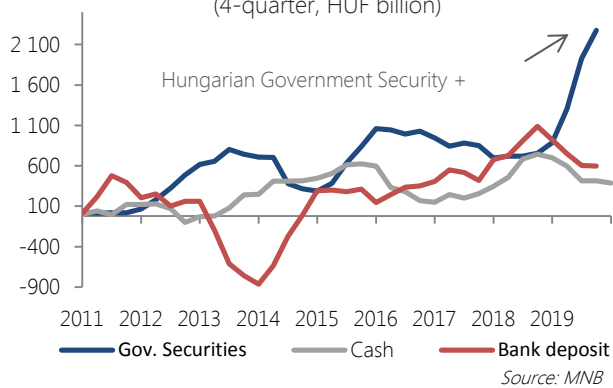
In order to mitigate the economic effects of the coronavirus pandemic, the Government announced a loan repayment moratorium including housing loans from 19 March 2020 to 31 December 2020.

In 2019, the savings of households increased at a record rate, by HUF 3,550 billion. Approximately two thirds of all new savings (HUF 2,276 billion) went into government securities. The exceptional growth of government securities was mainly due to the Hungarian Government Security Plus, introduced in June 2019, and the exemption from interest tax. In 2019, a HUF 3,200 billion stock was created from the new government securities in the span of 7 months, and with this, it soon became the government security with the largest stock. Hungarian Government Security Plus is a retail government security with a 5-year duration and with a fixed interest rate increasing in a tiered manner, which can be redeemed after half a year and at the end of each year free of charge.

while cash has the third biggest share (HUF 5,200 billion). Savings in insurance technical provisions, i.e. at funds and in insurances (HUF 4,600 billion) and in investment units (HUF 4,200 billion) should also be noted.

The coronavirus pandemic and its effects certainly represent a turning point in the processes of the financial sector. On the one hand, though, the Hungarian bank sector was in a quite good situation when the crisis hit, thanks to the economic policy measures of the past few years. The conversion of FX loans to HUF, the growing proportion of fixed interest rates in loans and the macro-prudential measures preventing excessive indebtedness all facilitated the development of a loan portfolio with a healthy structure. In addition, the favourable economic growth processes and demographic programmes, as well as the various subsidised corporate loan schemes all facilitated the increase of demand for loans, which ultimately had a favourable effect on the business and financial indicators of banks. On the other hand, the measures mitigating the adverse economic effects of the pandemic were implemented quickly and at a sufficient scale, which makes it possible for the economic policy to not just postpone, but in our expectations, substantially mitigate several negative consequences of the crisis, including the growth of defaulting stock eroding the profitability and capital of banks. This, in turn, facilitates that the financial sector can continue to appropriately contribute to the promotion of economic circulation by providing loans.

Figure 3.25: Development of key residential savings
(4-quarter, HUF billion)



As a result, the share of government securities increased within the savings of households. Of the savings that are easier to mobilise, bank deposits continue to have the most significant role (a stock of HUF 10,400 billion). The second most popular are savings in government securities (HUF 8,000 billion),

4. GENERAL GOVERNMENT DEFICIT AND DEBT

4.1. BUDGET POLICY OBJECTIVES

As a result of the budget consolidation implemented in the past years, the general government deficit has been under 3% since 2012, and consequently, the general government debt-to-GDP ratio has been continuously decreasing year by year. The public debt ratio decreased from 80.8% in 2011 to 66.3% by the end of 2019. The fiscal puffer and budget reserves created ensure appropriate room for manoeuvring to tackle the economic difficulties caused by the coronavirus pandemic.

In the scope of combatting the crisis, the fiscal policy plans to use a targeted approach – sufficiently flexible at the level of the budget balance – in order to

respond appropriately and boost demand in an anti-cyclical manner as necessary.

In accordance with this, the higher rate of budget deficit resulting from the pandemic-related and economy protection expenses, the tax measures aimed at mitigating the burdens of the crisis and the operation of the automatic stabilisers result in a temporary increase of the debt ratio this year. In the 2019 Convergence Programme, the Government planned to reduce the debt ratio below 60% by the end of 2022. This is expected to be delayed by two years due to the crisis. Following the principle of gradualness, the 60% reference value can be set as an objective for 2024.

Table 4.1: The medium-term fiscal path (% of GDP)

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|----------------------------|------|------|------|------|------|------|
| General government balance | -2.0 | -3.8 | -2.7 | -2.2 | -1.6 | -1.0 |
| Gross government debt | 66.3 | 72.6 | 69.3 | 66.3 | 63.2 | 59.8 |

Source: HCSO, MNB, MF calculation

4.2. THE 2019 BUDGETARY OUTCOME

In 2019, the reduction of the deficit-to-GDP ratio remained the Government's fiscal policy priority alongside the moderation of government debt at least at a pace meeting the domestic and EU expectations, the realisation of balanced economic growth, the expansion of employment and the improvement of competitiveness. The Parliament adopted the budget for 2019 with a 4.1% economic growth and 2.7% inflation, setting the deficit target at 1.8% of the GDP. According to the factual data, in 2019 the deficit was somewhat higher than the target, it was 2.0% of the GDP, but remained under the 2.1% level of 2018 and the 2.5% level of 2017..

Revenues

In the past years, one of the cornerstones of budget policy was the increasing employment, which was founded on the idea that the budget can only be balanced in the long run via this approach, since

almost half of the tax revenue of the budget is directly related to revenues associated with employment. To that end, several significant measures with substantial effects on the budget were implemented earlier. The wage and tax agreement concluded in November 2016 by the Permanent Consultation Forum of the Private Sector and the Government fits into these efforts. In accordance with the agreement another stage of the tax cut of 2 percentage points was implemented in Q3 2019. The eligibility limit of the small business tax (KIVA) has also been increased: instead of HUF 500 million, this simpler taxation form became available for up to a revenue limit of HUF 1 billion.

In order to promote the mobility of workers within the country, as of autumn 2019, in addition to municipalities, municipality associations and business organisations in 100% municipality ownership, it has

also been possible for privately-owned companies to apply for a subsidy for building and refurbishing workers' accommodation.

As of 1 January 2019, social security contribution is not charged on the wage income of employees eligible for old-age pension, and employers are also exempted from paying social contribution tax on the payroll of such workers.

In 2019, by introducing the possibility of group taxation in corporate income tax the administrative burden of large enterprises also decreased. The recent measure in addition to easing the administrative burdens of company groups, may also result in tax savings for the companies. Similarly, it mainly affects larger companies that the upper limit of development reserves was raised from HUF 500 million to HUF 10 billion as of 2019.

Several tax reliefs were implemented to support households, such as the further increase of the family tax benefit (the monthly amount of the benefit was increased to HUF 20,000 per child), as well as the reduction of the VAT on UHT and ESL milk from 18% to 5%. In addition, every retail bank transfer is exempted from the payment of financial transaction duty up to a transfer value of HUF 20,000 per transaction.

The wage agreement brought dynamism into the labour market, considerably boosted consumption and finally increased tax bases. The government measures serving the 'whitening' of the economy – that only had their full impact in 2019 –, such as the mandatory online invoice data reporting from 1 July 2018 and the connection of the foodstuff selling machines to the NTCA, also significantly contributed to the increase in budget revenues.

According to the EU national accounts methodology, approximately HUF 1,299 billion more tax and contribution revenues were collected in 2019 comparing to 2018, due to the higher than expected wage dynamics and more favourable employment indicators. The effects of the tax and contribution reductions were well compensated by the favourable

economic processes. The robust wage development resulted nearly HUF 244 billion higher personal income tax revenues than in 2018. Value-added tax revenues increased by HUF 397 billion partly as a result of the whitening measures. Small business tax revenues increased by HUF 30 billion as a result of that the number of businesses choosing this popular type of taxation exceeded 50,000 by the start of 2020.

Expenditure

The budget policy ensured the fiscal condition of the Government's economic and socio-political priorities, and in particular, the implementation of the demographic programme.

In order to reverse the demographic trend, the Government adopted the Family Protection Action Plan, under which it expanded the scope of interest-subsidised loans to the purchase of used dwellings as of 1 July 2019. In order to reduce the mortgage debts of families with more than two children, these families could apply for a subsidy of HUF 4 million after the third child, and a further 1 million subsidy for every additional child. Since 1 July 2019, young married couples can apply for Prenatal loan, while married couples with three or more children could apply for a support for purchasing cars. In addition, the nursery development programme has been extended, in the scope of which the Government plans to increase nursery capacity to 70,000 children by 2022, as well as to ensure that an appropriate number of professionals is available in nurseries. Furthermore, it was decided in the scope of the Hungarian Village Programme that a Village CSOK would be introduced. Additionally, as of 1 January 2019, the Government has introduced the child home care allowance for parents with children who are suffering from a long-term sickness and are incapable of caring for themselves.

The *career models* launched in the public sphere continued in 2019. In the scope of the military and law enforcement career model, the wage of soldiers and law enforcement employees increased on average by 5% in 2019. From 2019, civilians working at the defence forces are employed as defence employees in

a new category, and they benefit from a uniform wage increase of 35 percent in four years. An assignment benefit and office benefit have also been introduced for prosecutors. Health care professionals and district nurses received their 8% wage increase, which was due from 1 November 2019, as early as from 1 July 2019. In 2019, the wage of government officials employed in ministries and background institutions rose by 30 percent on average, in parallel to the rationalisation of the operation of the government and the reduction of headcount.

In line with the favourable labour market situation, the expenditures of the *public work programme* amounted to HUF 165 billion, HUF 8 billion lower than in the previous year, which shows that those employed as public workers continued to flow to the labour market. The average number of persons participating in the public work programme decreased from 126,000 in 2018 to 101,000 in 2019.

Social expenditure was also somewhat above the previous year's level due to the higher than earmarked public education and social normative subsidies.

In 2019 the budget again covered the funds needed for the preservation of real value of pension expenditures and pension-like income replacement allowances. In addition, pensioners could also benefit from the results of rapid economic growth in the form of the utility voucher and the pension premium. As a result, pension expenses were 4.7% higher in 2019 than in the previous year.

The funds allocated to curative-preventive care, medicine support and medical aids together exceeded the previous year's levels by HUF 64 billion due to the wage increases implemented in the health care sector.

The net interest expenditure according to the EU methodology was higher than in the previous year by HUF 66 billion, in part due to the demand for the

retail government securities with higher interest rates.

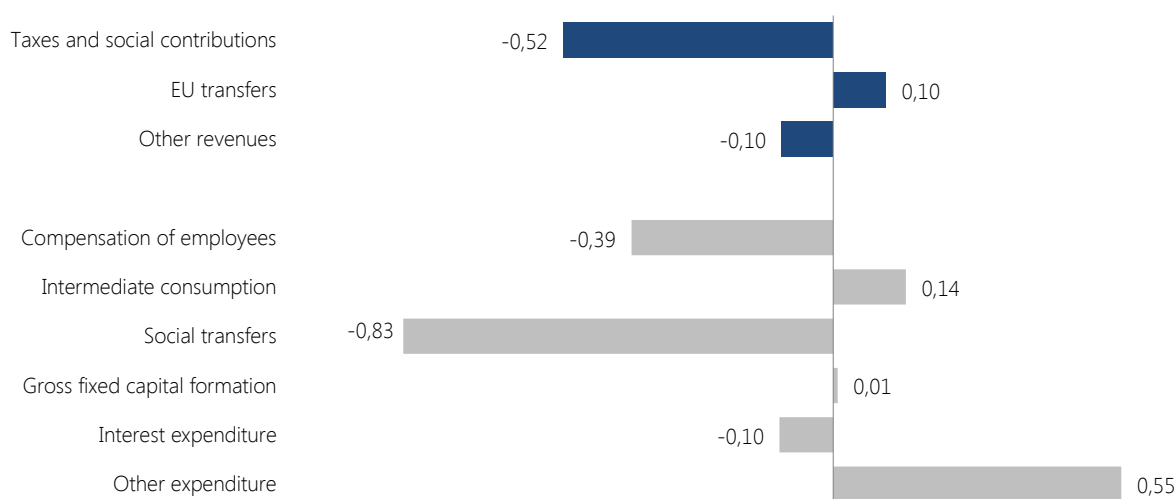
As the EU's financial cycle progressed, the emphasis shifted towards utilisation of the funds paid out in previous years. Implementation of the projects advanced by the domestic budget accelerated, which contributed to maintaining the momentum of economic growth. In addition to non-repayable supports, financial assets are also announced in a significantly higher proportion as compared to the previous financial period, and through multiple allocations, these can provide a secure source of funding for the future development of strengthening businesses in the long run. At the end of the period, it is possible to take the programmes to be announced in the scope of the 2021–2027 planning period into account.

Investments realised from domestic sources also gathered pace. The Government expended a significant amount on transportation development. In 2019, HUF 380 billion was paid out from the appropriation for priority public road projects funding highway developments, HUF 79 billion was paid out from the appropriations for refurbishing the public road network, and HUF 39 billion was disbursed from the appropriation for developing the railway network. From the appropriation "Modern Cities Programme", HUF 114 billion was paid for a number of developments modernising the major provincial cities and increasing competitiveness, attractiveness for tourists and quality of life.

At the end of the year, the Government granted the members of armed forces a one-off benefit, and educational, church and sports organisations were provided with additional funds for various social purposes. The volume of these one-off expenses is far lower than that of the year-end measures of previous years, amounting to only 0.1% of the GDP.

Figure 4.1: Key expenditure and revenue changes 2019–2018

(% of GDP, percentage point)



Source: MF calculation

4.3. THE 2020 BUDGET IN LIGHT OF THE COVID-19 CRISIS

When preparing the 2020 budget, the Government set a 1% deficit target by anticipating a 4% economic growth and a 2.8% inflation rate, which corresponds to a 1.1% structural deficit. Practically, this would have meant the fulfilment of the medium-term objective established for Hungary. However, the unfolding global coronavirus pandemic is causing a significant economic setback both domestically and internationally, which is expected to result in a deterioration of the budget situation. In the current situation, the macroeconomic and fiscal conditions changed as a result of the global pandemic. Consequently, it is necessary to deviate from the 2020 budget. The pandemic-related and economy protection measures implemented by the Government affect both the income and expenditure side.

In order to provide the resources required for the measures, the Government reallocated funds of thousand billion forints from appropriations where savings are expected to occur in the current situation, or where funding may be delayed due to the nature of the given appropriation. The discretionary expenditure items used for the reallocations represent nearly one-third of the central government budget (budgetary organisations, chapter-managed appropriations). It is important to highlight that

instead of uniformly cutting specific budget appropriations a rearrangement took place which, on the one hand, ensures the funds actually necessary within the ministries' budget, and, on the other hand, sets up two funds from the sources released – one for addressing the pandemic situation (Disease Control Fund–DCF) and one for relaunching the economy (Economy Protection Fund – “EPF”).

The main source of the Fund for Combatting Pandemic comes from the merger of the Country Protection Fund (“CPF”) with total reserves of HUF 378 billion. This is supplemented by the reallocation of 50% of the political parties' subsidy, the newly introduced retail tax, the motor vehicle tax channelled into the central budget from local governments' budget, the contribution of the financial sector and other reallocations. These all resulted in a total funding capacity of HUF 634 billion for the DCF at the time of its founding. The funds released thanks to the savings imposed on ministries are reallocated into the EPF, and with the merger of the National Employment Fund, the EPF's total funding capacity reaches HUF 1,346 billion.

Revenues were mostly determined by the processes that commenced prior to the emergence of the pandemic. The measures aimed at whitening the economy continued based on the tax package

adopted in the autumn of 2019, which provided for expansion of the online invoice data reporting for all invoiced transactions between domestic VAT resident businesses, starting from 1 July 2020. According to earlier estimates, this could result in an additional revenue of about 5 to 10 billion forints in the budget in 2020.

As of 1 January 2020, the normal 27% VAT rate has become applicable to the sale of new dwellings once again, with a transitional rule in effect alongside it. The rate of excise duty on cigarettes and fine cut smoking tobacco was increased further as of January 2020 in order to get closer to the EU tax minimum.

The Government mitigated the effects of the economic breakdown with significant tax reliefs at the beginning of the pandemic. The sectors most affected by the crisis received tax and contribution benefits in order to mitigate short-term damage, which means that employers do not have to pay social contribution tax, training levy and rehabilitation contribution. The measures also provide substantial benefits for employees, as their labour market and pension contribution liabilities were temporarily eliminated, and the chargeable amount of health insurance contribution is limited to the statutory minimum (HUF 7,710). In accordance with the measures concerning social security contributions, personnel- costs shall not be taken into account in the calculation of the tax base by small business tax (KIVA) payer enterprises. Tax liabilities of the smallest businesses and the self-employed under the simplified scheme of the lump-sum tax for small enterprises (KATA) are also temporarily waived in certain sectors until 30 June. Furthermore, the tax authority suspended tax executions until the end of the state of danger. In view of the fact that tourism was hardly hit, the payment of the tourism development contribution is suspended for the period 1 March and 30 June 2020.

In the future, the so-called development reserve may be utilised for up to the entire amount of profits before taxes, subject to the upper threshold of HUF 10 billion. The latest investment-promoting measure of the Government makes it possible for companies planning investments in Hungary in the next four years to be exempted from corporate income tax with

respect to even the entire amount of the profit intended to be spent on the investment.

The eligibility for health insurance and family support benefits provided with respect to childcare and child-raising benefit was extended until the cessation of the state of danger, which is aimed at improving the position of families. According to recent estimates, the combined budgetary effect of the tax benefits and family protection measures may reach HUF 381 billion this year.

The second phase of the Economy Protection Action Plan, which was announced by the Government in early April, aims to preserve jobs and relaunch the economy, in addition to immediate crisis management.

The Action Plan contains the following components:

1. Preservation of jobs

In the case of shortened working hours (“Kurzarbeit”), Job Protection Wage Subsidy may be applied for, which compensates the employee for 70% of the net wages lost, provided that working hours are reduced at minimum to 25% and at maximum to 85%. In addition, engineers and people in R&D jobs may apply for a 40% wage supplement – up to the threshold set out in the legislation – for 3 months.

In order to relieve the administrative and tax burdens of companies, the deadline for submitting the audited accounts and the associated annual tax returns is extended until 30 September, special payment reliefs (payment in instalments, postponement of payment) and tax mitigation options are available, and the deadline of VAT refunds is also reduced.

The recently adopted 2 percentage point social contribution tax cut also significantly moderates the payroll costs of businesses as of 1 July 2020.

2. Job creation

A simplified tender scheme will open up for businesses that, even in this period of distress, plan to implement investments, technological transformations, environmental developments, or that undertake the online retraining of employees to

whom they cannot provide any work currently. When the economy restarts, there will be a need for a huge number of graduates. Because of this, as part of the Economy Protection Action Plan, anyone who takes or has taken a successful final exam in tertiary education by 31 August 2020 but has not completed a language exam – which is otherwise a condition of acquiring a degree – will be relieved of the obligation to take a language exam and can acquire their degree. In order to facilitate the structural change of the economy, subsidies may be claimed for remote education trainings in digitalisation and design, as well as the development of future industries (self-driving vehicles, biotechnology, hydrogen-based industry, artificial intelligence, cyber-security, quantum technology, space industry, data economy). In addition, it is also necessary to transform research and development subsidies in order that they can contribute to the restart of the economy more pronouncedly.

3. Protection of key sectors

The Government will promote the recovery of tourism, health industry, food industry, agriculture, construction industry, logistics, transportation, film and creative industry by means of investment promotion programmes, preferential loans with capital and guarantee subsidy, by supporting infrastructural developments and applying tax cuts over the next three years. In order to support tourism, infrastructural developments, programmes promoting domestic tourism and tax reductions (cancellation of the social contribution tax related to the SZÉP Card, as well as tourism tax) will be implemented. State support for health care industry benefits will also increase, and the selection criteria will be transformed in order so the products of Hungarian factories appear in the Hungarian health care at a higher rate.

4. Support of domestic businesses

Preferential loans with interest and guarantee subsidy are available to Hungarian businesses, supplemented with a state guarantee scheme. Besides, equity capital

programmes will be launched to protect Hungarian businesses.

5. Family and pensioner programme element

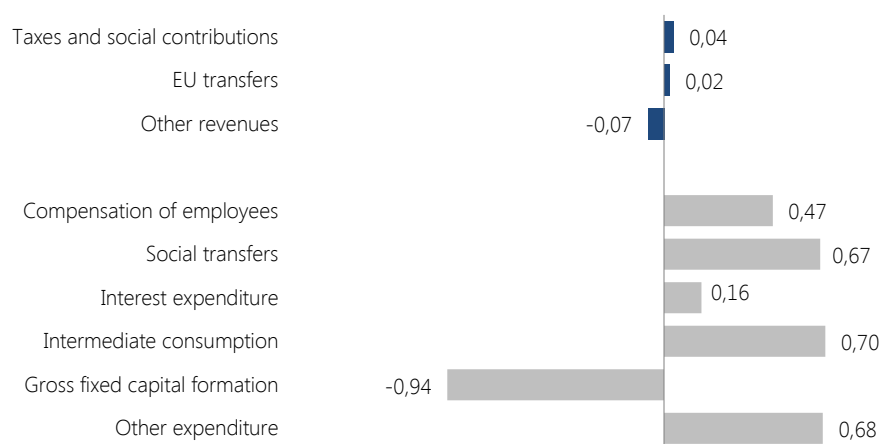
The 13th month pension will be reintroduced in four instalments as of February 2021. In each of the years from 2021 to 2024, an extra one-week pension will be added to the monthly January pension. Parents' family allowance paid after a child/children with severe illness will remain in place even after the cessation of the state of danger.

The direct costs related to combatting the pandemic amounted to approximately HUF 600 billion by the end of April. These, as well as the wage measures in health care, take place in the scope of the DCF.

In continuation of the 4-step wage increase of health care professionals and nurses started in 2019, the base wage will increase a further 14 percent compared to 2018 from January 2020, and a further 20 percent from November, which will incur an expense of HUF 82 billion. In appreciation of their exceptional efforts during the pandemic, every health care worker will be granted a wage supplement of a gross amount of HUF 500,000, for which the DCF allocated HUF 70.6 billion.

Though the Member States are permitted to deviate from the fiscal requirements applicable in "normal" times this year under the general escape clause, the Government strives to keep the deficit at a low level as possible in the present circumstances. In 2020, the total amount of funds disposable by the Government and the ministries is not expected to increase significantly, since the available reserves and reallocations are expected to cover the costs related to managing the pandemic situation and the restart of the economy. In addition, considering that the proportion of one-off items related to the coronavirus pandemic will increase significantly within the total expenditure due to the reallocations, the structural position of the budget will not deteriorate compared to what was planned in the Budget Act.

Figure 4.2: Key expenditure and revenue changes 2020-2019
(% of GDP, percentage point)



Source: MF calculation

4.4. BUDGETARY DEVELOPMENTS FROM 2021 TO 2024

In the last four years of the program period, the forecast of the Convergence Programme mainly takes into account the Governmental decisions already taken so far.

Tax and contribution revenues alongside with EU transfers are crucial components of the budget income. Considering the gradual decrease of the social contribution tax rate and the further stages outlined in the competitiveness programme, as well as the support provided for the SME sector (the reduction of the small business tax rate), tax centralisation may reduce by 2.4 percentage points between 2021 and 2024. The labour-friendly transformation of the tax structure, i.e. the reduction of tax burden on employment also continues. As a result of the acceleration of absorption of EU

transfers, a significant proportion of the funds available for the 2014–2020 EU programming period have been disbursed by 2020, but at the same time, utilisation of the advances paid contributes substantially to government investments in the planning horizon. We expect that utilisation of the funds under the new multiannual financial framework will take place at an increasing rate from 2021. Nevertheless, the ratio of utilisation of EU support will decrease in proportion to the GDP. As a result of this and that the increase of tax revenues is lower than the change in the nominal GDP, the centralisation rate will decrease significantly. The total revenue-to-GDP ratio could be reduced by nearly 4.4 percentage points in the last four years of the forecast period.

Table 4.2: Main revenues of the general government (in % of GDP)

| | 2021 | 2022 | 2023 | 2024 |
|-------------------------------------|-------------|-------------|-------------|-------------|
| Taxes and social contributions | 36.9 | 35.7 | 34.9 | 34.4 |
| Other revenues without EU transfers | 4.6 | 4.3 | 4.0 | 3.8 |
| Total revenue without EU transfers | 41.4 | 39.9 | 38.9 | 38.2 |
| EU transfers | 1.8 | 1.4 | 1.4 | 0.6 |
| Total revenue | 43.2 | 41.3 | 40.3 | 38.8 |

Remark: Due to rounding, the summed data might differ from the sum of the detailed data.

Source: MF calculation

In the period from 2021 to 2024, without the EU transfers the total revenue-to-GDP ratio may be reduced by 3.2 percentage points, while expenditures without EU transfers may drop by 4.9 percentage points. The forecast takes into account:

- public road and railroad developments of similar significance as those implemented in the previous years,
- progress of the Hungarian Village and Modern Cities Programme,
- the investments taking place in the scope of the Healthy Budapest Programme,
- touristic, green economy and other economic developments,
- continuation of the nursery development programme,

- the disbursement of Prenatal loan and utilisation of the Village CSOK (this is possible until 2022),
- the complete digitalisation of tax returns to reduce tax administration tasks and (from 2021, the tax authority may prepare the tax returns also for companies).

In the public sector, the amount spent on the employees' income may increase, among others, in health care, education, the social sector and policing, though the social contribution tax cuts agreed on in the six-year wage agreement have a mitigating effect on these expenditures.

The GDP-proportionate share of benefits provided through market producers may decrease after the increase resulting from combatting the pandemic in

2020, and may continue to decrease year by year afterwards.

The development of social benefits is still influenced by the structural reforms implemented earlier. A decrease is expected due to that the number of employed persons will start to increase again from 2021. Financial benefits will decrease in proportion to the GDP due to the fast return of dynamic economic growth, despite the gradual implementation of the 13th month pension. Between 2021 and 2024, total social transfers as a percentage of the GDP may decrease by 0.9 percentage point, by which they will contribute at a significant rate to the reduction of the redistribution ratio.

Interest expenditure – while expected to increase in nominal term in 2022 and 2023 – is expected to be lower by 0.3 percentage point as a percent of GDP by

2024. Although the increase of the volume of government securities held by the public raises interest expenditures as the interest rate of residential securities is higher than that of other securities, the interest income obtained by Hungarian households also contribute to the increase in GDP and, indirectly, to rising tax revenues.

Investments funded from domestic sources are expected to remain stable at a high level. While in 2021, 72 percent of all government investments are expected to be implemented from purely domestic sources, by 2024 this proportion may grow to 87 percent. The Paks 2 investment is not included in this ratio, as statistics take this project into account as capital transfer.

Table 4.3: Main expenditures of the general government (% of GDP)

| | 2021 | 2022 | 2023 | 2024 |
|--|------|------|------|------|
| Balance | -2.7 | -2.2 | -1.6 | -1.0 |
| Total revenue | 43.2 | 41.3 | 40.3 | 38.8 |
| Total expenditure | 45.9 | 43.5 | 41.9 | 39.8 |
| Total expenditure without EU transfers | 44.1 | 42.1 | 40.5 | 39.2 |
| of which: | | | | |
| compensation of employees | 10.0 | 9.5 | 9.2 | 8.7 |
| purchases of goods and services from purely domestic resources | 6.8 | 6.4 | 6.1 | 6.2 |
| investments financed from purely domestic resources | 4.2 | 3.9 | 3.2 | 3.8 |
| social transfers | 12.4 | 12.0 | 11.8 | 11.5 |
| interest expenditure | 2.3 | 2.2 | 2.1 | 2.0 |

4.5. STRUCTURAL BALANCE

Structural balance is defined as the cyclically-adjusted general government balance net of one-off measures. The medium-term budgetary objective is the target value determined for structural balance, which is defined as a structural deficit of 1.0% of the GDP in the period between 2020 and 2022 in line with the methodology outlined in the Code of Conduct.

To estimate the structural balance, the convergence programme uses a coefficient of 0.45 for the calculation of the cyclically adjusted balance, which is

in line with the methodology adopted by the Output Gap Working Group of the EU. This coefficient means that the general government balance changes by 0.45 percentage points as a result of a 1% difference between actual and potential GDP (assuming no change in its composition).

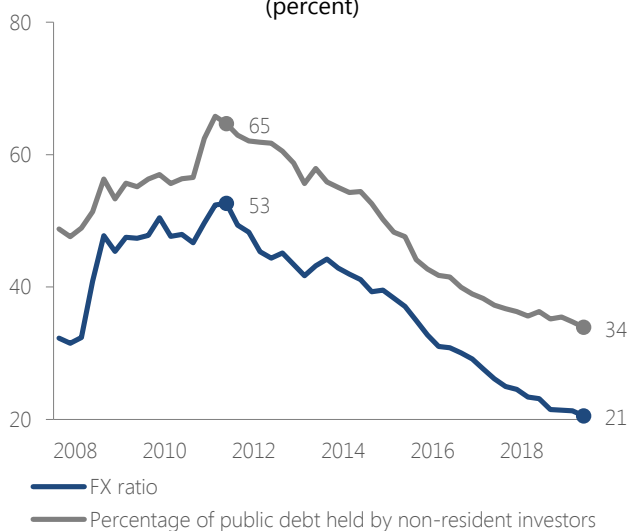
As a result of the strong domestic demand, the output gap turned into positive in 2018, and its value continued to increase in 2019 due to the persistent exceptional growth performance. Due to the coronavirus crisis, however, the output gap may significantly be negative in 2020. According to our

current estimate, its amount could be -3.5%. A gradual closing of the output gap is expected on the forecast horizon of the convergence programme.

4.6. GENERAL GOVERNMENT DEBT

Decreasing the debt ratio while turning the structure of the general government debt more sound and reducing the share of FX debt remain the main strategic priority of the Hungarian government debt management. The foreign currency ratio decreased to 21% from the 53% at the end of 2011, while the foreign share decreased to 34% from 65%, which resulted in the further moderation of the country’s FX exposure and external vulnerability (Figure 4.3).

Chart 4.3: FX share of the government debt and the share of government debt held by foreigners
(percent)



Source: MNB

Looking back on the past eight years, the five-year CDS spread is currently around 80 basis points as compared to the level exceeding 600 basis points recorded in early 2012. In the previous year, it decreased to this level in a stable manner from around 90 as recorded at the start of the year, and in February 2020, it even decreased below 50 basis point. Of course, the coronavirus did not leave this indicator untouched either, and the level of the Hungarian CDS spread started to increase again. Partly due to the significant decrease of the country risk premium in recent years, the yields of both short- and

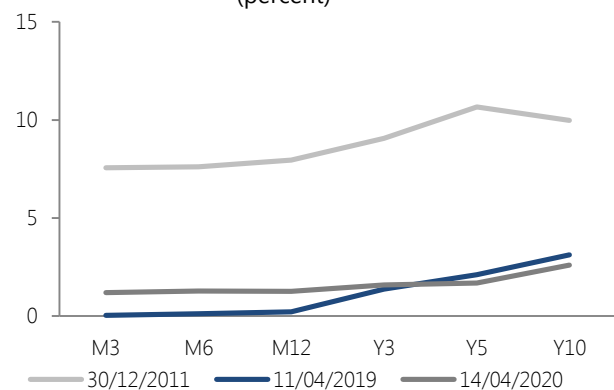
Due to the one-off and temporary items related to the coronavirus pandemic and the significant negative output gap, according to the current information, the structural balance of the budget may show a deficit amounting to about 0.1% of the GDP in 2020.

long-term government securities have decreased significantly, by around 6.5 to 9.0 percentage points since 2012: 3-month yields decreased from 7.5% to 1.2%, while five- and ten-year yields decreased from 10% to 1.7% to 2.6%.

In the course of the previous year, both short and long-term yields fell to an all-time minimum in the low interest environment in Hungary. The 3-month yield, which was around 0% throughout the year, even had negative values by the end of the year, while 5 and 10-year yields decreased from their 1.5%-2.5% levels at the start of the year to 1%-2% by the second half of the year. In 2020, however, following the international processes – including the effects of the coronavirus pandemic in the past few weeks –, yield levels started to increase, and at present, the short-term yields are at 1.2%, while long-term yields are between 1.7% and 2.6%.

In recent weeks, the yield curve started to flatten: its shorter end increased by 1.1 percentage points, while its long end went through a 40-50-basis point decrease in the past one year.

Chart 4.4: Shift of the yield curve
(percent)



Source: ÁKK

Similarly, on the primary market, auction yields largely followed the secondary market trends. Nonetheless, in the still favourable yield environment debts can still be financed at apparently low costs: while in 2012 the implicit interest rate for the debt was 5.3%, this average interest burden decreased to 3.7% by 2018 and 3.5% by 2019.

As part of the efforts to further moderate external vulnerability, the improvement of the debt structure can be implemented with reliance on the domestic investment sectors and with the mitigation of the FX exposure of the government debt. The Hungarian Debt Management Agency supports the efforts of the Government aiming at the gradual shrinking of the foreign currency ratio by negative net foreign currency issue, i.e. it refinances a significant part of the maturing foreign currency debt via HUF-denominated instruments. Thanks to the increased raising of funds on the HUF market, there was no need to issue international foreign currency bonds in 2019 either. At the same time, there was a significant volume of repurchases, mainly with regard to USD-denominated bonds.

Beside the reduction of FX-based debts, the debt structure has been influenced positively by the fact that the Hungarian Debt Management Agency strongly encourages the financing of government debt by domestic investors to the largest possible extent. The first important initiative to this end appeared back in 2012 with the introduction of the retail programme, which was supported by the HDMA's ongoing measures (prolongation of the duration, improvement of accessibility). In 2019, the government securities market was transformed in many aspects in order to create even more favourable conditions for residential investors for the prolongation of durations. In addition to the phasing out of several government securities, the MÁP Plus with a 5-year duration and fixed tiered interest rates was introduced, which garnered unprecedented popularity.

As a result of all these measures, the share of foreign security holders has decreased substantially, while the holdings of domestic actors in the government securities market have risen substantially, from 43% in

2011 to 71% to date. The portfolio of government bonds held by retail customers has been steadily growing, and increased by more than HUF 7,700 billion until February 2020, which means that the share of the households in the government securities market increased from 5% to 28%.

Table 4.4: Sovereign debt market share of certain sectors
(%, February 2020)

| Investor groups | |
|------------------------------------|----|
| Foreigners | 29 |
| Credit institutions | 29 |
| Households | 28 |
| Insurance companies, pension funds | 8 |
| Other | 6 |

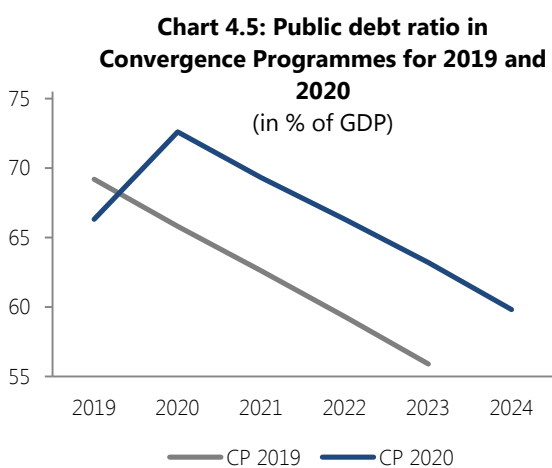
Source: MNB, MF calculation

Without changing the fundamental direction of the debt management strategy, on 23 April 2020, Hungary issued euro bonds with 6 and 12-year duration, for a total amount of EUR 2 billion. The issue took place to secure the financing, preventing any unforeseeable risks, in order to increase the precautionary financing reserve. The issue was exceptionally successful. To date, this has been the largest EUR issue of the Hungarian Government executed on a single day. In addition, the 1.125% interest rate of the 6-year bond has the lowest interest rate that of all EUR bonds that have been issued to date, and the 1.625% interest rate of the 12-year series is lower than the interest rate of the 10-year Hungarian government bond issued in EUR in 2017.

With the issue, Hungary was the first European non-eurozone sovereign to demonstrate that it is able to raise funds from mainly European long-term investors at a low interest rate, for an amount exceeding any previous example, and to strengthen its reserves without the support of the European Central Bank available to eurozone countries, in the midst of the coronavirus crisis, among hectic market conditions. The country entered the international market once again, and had itself measured with a successful transaction, getting ahead of many other countries.

In conclusion, the market has long recognised the success of the debt management strategy with the significantly decreased country risk premiums and favourable yield levels, and the analyses of credit rating agencies and international organisations regularly confirm the reduction of external

The government debt-to-GDP ratio has been sliding steadily since 2011. At the end of 2019, the debt ratio was 66.3% at a 330.52 HUF/EUR exchange rate. The 15 percentage point debt reduction implemented in the past eight years was one of the most significant achievements among the EU Member States. After last year’s strong decreasing tendencies, in 2020, a one-time boom of the debt ratio (72.6%) is expected as a result of the economic effects of the coronavirus crisis and the government measures implemented to manage them, followed by dynamic decrease once again, which is expected to result in the decrease of the debt ratio (59.8%) below the 60% Maastricht criterion by the end of the planning horizon, i.e. 2024 (Figure 4.5).



Source: MfNE calculation

The current Convergence Programme calculates with debt levels about 5.9 to 7.4 percentage points above last year’s level, due to the changed deficit trajectory, the effects of the other items, as well as less favourable growth.

vulnerability as a notably positive factor. All this established the foundations making it possible for the Hungarian markets to remain relatively stable in the current turbulent market situation.

Table 4.5: Difference between government debt trajectory forecasts for 2019 and 2020 (percentage point)

| 2020 | 2021 | 2022 | 2023 |
|------|------|------|------|
| +5.9 | +6.6 | +7.1 | +7.4 |

Source: MNB, MF calculation

(1) Nominal GDP: Set lower than in the Convergence Programme for 2019, the nominal GDP values will substantially push the debt trajectory higher in comparison to last year’s forecasts.

Table 4.6: Effect of nominal growth developments for the debt path (percentage point)

| 2020 | 2021 | 2022 | 2023 |
|------|------|------|------|
| +2.5 | +1.7 | +1.2 | +0.3 |

Source: MNB, MF calculation

(2) Numerator effect: Being significantly higher in comparison to the Convergence Programme of 2019 over the entire time horizon, the debt forecast for the period 2020-2023 itself modifies the debt trajectory projected for 2019 as follows.

Table 4.7: Effect of government debt stock developments on the debt path (percentage point)

| 2020 | 2021 | 2022 | 2023 |
|------|------|------|------|
| +3.3 | +4.7 | +5.7 | +6.5 |

Source: MNB, MF calculation

This shift can be attributed to the combined effect of a number of factors, the most significant being the much higher deficit and much weaker exchange rate used for planning as compared to the previous year.

(2a) Gross interest expenditure and primary balance: The values of the primary balance

significantly deteriorated on the entire planning horizon compared to what was planned in this Convergence Programme of 2019, which in itself results in a debt trajectory higher by 1.4 to 2.1 percentage points. Meanwhile, the interest expenditure forecast practically remained unchanged.

(2b) Other items: Furthermore, the change of the debt trajectory is also significantly, if varyingly affected by the difference in the balance of other items (the so-called SFA, stock-flow adjustments): in 2020 and 2021, it increases it, while later it pushes it down somewhat. In addition to the practically unchanged interest trajectory, the primary deficit and the SFA items have about a 50% percent role each in the numerator effect in 2020 compared to the 2019 trajectory. The technical exchange rate assumption used for debt prediction (HUF/EUR 356.6) is 7.9% weaker than the HUF/EUR exchange rate of 330.5 in the 2019 Convergence Programme. The assumed exchange rate is 26 point higher than last year's figure and is in itself pushing up the debt trajectory by 0.8-1.1 percentage point. In addition, the change in cash reserves (Single Treasury Account and the foreign currency deposit at the MNB), the advance payment of EU transfers, and the fact that the values of the difference between cash flow and accruals based balance of the budget deviate significantly from the projections of the previous Convergence Programme also cause a major divergence.

The future development of the debt ratio is sensitive to changes in the following major factors, *ceteris paribus*:

(A) Primary balance: A 1 percentage point upward shift in the primary balance in terms of GDP from 2020 until the end of the horizon would mitigate the

debt-to-GDP ratio by 1 percentage point in 2020 and by 0.8 percentage point by 2023.

(B) Exchange rate: The share of foreign currency denominated gross Maastricht debt may drop to 15% by 2024 as a result of the Government's endeavours. Owing to the decreasing foreign currency share, the foreign exchange exposure of the debt will downslide, which is clearly reflected in the fact that the 1 percentage point shift will change the debt ratio by 0.05 percentage point in 2020 and just 0.03 percentage point at the end of the time horizon. Therefore, a nominal exchange rate 1% weaker than the exchange rate assumption specified in the convergence programme (HUF/EUR 360.2) would result in a 0.16 and only 0.11 percentage point higher gross debt ratio in 2020 and in 2023, respectively.

(C) Economic growth: Should the nominal GDP growth end up 1 percentage point higher in 2020, the debt trajectory would see a 0.5–0.7 percentage point downward shift over the entire time horizon.

While in 2020, the processes of recent years affecting the efficient debt ratio and debt structure were temporarily halted by the adverse economic and market effects arising from the coronavirus pandemic, this can be deemed as a one-time effect associated with the coronavirus pandemic. On the whole, the intention of the Government on the planning time horizon remains the ensuring of the continued long-term improvement of the debt trajectory and debt structure in accordance with the traditions of the past years. The fact that the international issuance of euro bonds implemented in 2020 with the purpose of creating safety reserves ended in success – which clearly reflects the investors' confidence in Hungary – laid down the foundations of the success of the Government's efforts concerning debt management in the past years.

5. STRUCTURE AND EFFICIENCY OF REVENUES

From the beginning of 2010, a range of significant measures had been implemented in order to increase competitiveness of the tax system. The most significant structural changes were implemented between 2010 and 2014, followed by the enhancement of tax collection efficiency, considerable reductions in labour and income type taxes and broadening the scope of targeted tax benefit schemes to push forward economic growth. The reduction of taxes and contributions, alongside with enhancing the employment- and enterprise-friendly character of the tax system remain priority goals for the Government. In accordance with these goals, in the upcoming years, tax policy will continue to focus on the reduction of the payroll taxes, the tax and administration burdens on business operations, the improvement of tax collection efficiency and the simplification of the tax system.

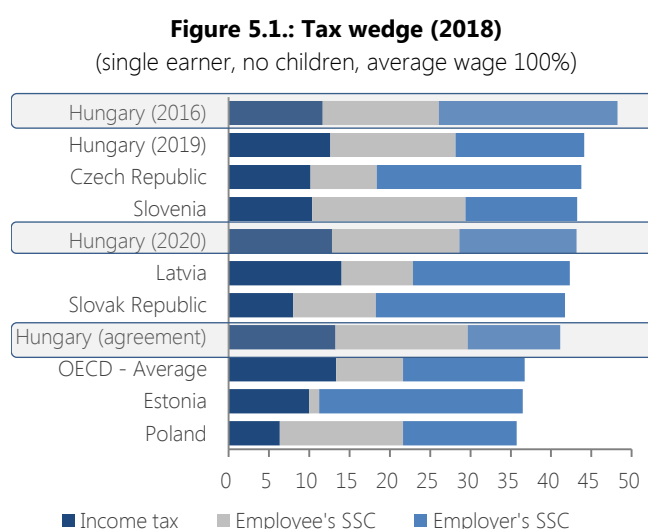
Measures for tax reduction

Taxes on labour

Due to the series of structural changes implemented as of 2010, the current tax system supports employment and allows additional work to be remunerated better than ever before. The main foundation of the new tax system is the entirely linear taxation introduced in multiple stages between 2010 and 2013 (such as the introduction of the flat personal income tax rate and removing the ceiling of pension contribution).

One of the Government's policy objectives is the general reduction of labour taxes. The fast economic growth fuelled by the favourable processes and the successful fight against black economy until 2016 facilitated the implementation of a 1 percentage point reduction in the personal income tax rate, from 16 to 15 percent. In accordance with the comprehensive agreement concluded between the Government of Hungary, business and employers organisations and employee representatives in the same year, labour tax

burden is continuously decreasing since 2017. Considering the limited room for fiscal manoeuvre, the social contribution tax rate decreased by 9.5 percentage points in total between July 2016 and July 2019, and it will further decrease by 2 percentage points from 1 July this year. Then, the social contribution tax rate is expected to decrease in further two stages in the medium term, provided that the annual increase of real wages will not be less than 6% in the business sector. Thanks to the consistent implementation of the commitments by the Government, the tax wedge – i.e. the ratio between the amount of taxes charged on wage incomes and the corresponding total labour cost for the employer – has spectacularly decreased in the recent years. The tax wedge decreased from 48.3% to 44.1% as of the second half of 2019. After the full implementation of the agreement, the tax wedge calculated regardless of tax benefits will potentially decrease by more than 7 percentage points in comparison with the rate of 2016, and Hungary may reach the level similar to its regional competitors.



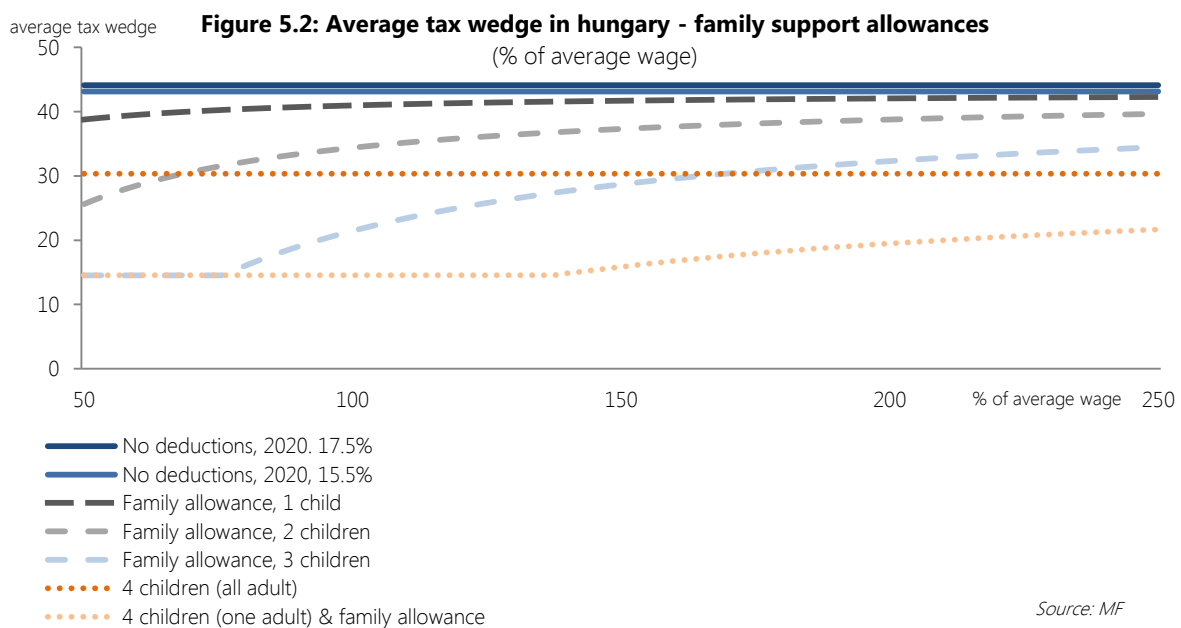
Forrás: MF calculation, OECD

Simultaneously with the gradual reduction of employer charges, the agreement also includes the increase of the minimum wage and the guaranteed minimum wage of skilled workers. As a result, the

minimum wage increased by 45 percent, while the guaranteed minimum wage of skilled employees grown by 63.3 percent this year, comparing to the corresponding amounts in 2016. Thanks to the agreement, wages and employment presented a robust expansion, along with the increase of budgetary revenues (even by taking account of the impact of tax cuts). Since 2011, the linear taxation system has been complemented by the system of family allowances due after children, while since 2013, also by the system of differentiated employer allowances.

Thanks to the family tax allowance, the personal income tax obligation of households decreases in proportion to the number of dependent children. From 2016, the family tax allowance of households with two children doubled in four equal stages, thus

HUF 20,000 deduction may be claimed per child as of January 2019 instead of the HUF 10,000 formerly applicable in 2016. From 2015, the family-friendly tax system was complemented with an allowance provided to couples in their first marriage, which can also be claimed simultaneously with the family allowance as of 2017. The Government continues to consider the support of families and encouragement to have children as a priority in 2020. Under the Family Protection Action Plan, large families receive unprecedented support through a new measure introduced as of 1 January 2020, since women raising (or raised) at least four children are fully exempted from the payment of personal income tax for the overall length of their working life. For 2020, the Government has ensured an all-time high amount – HUF 380 billion – to support families and first-married couples.

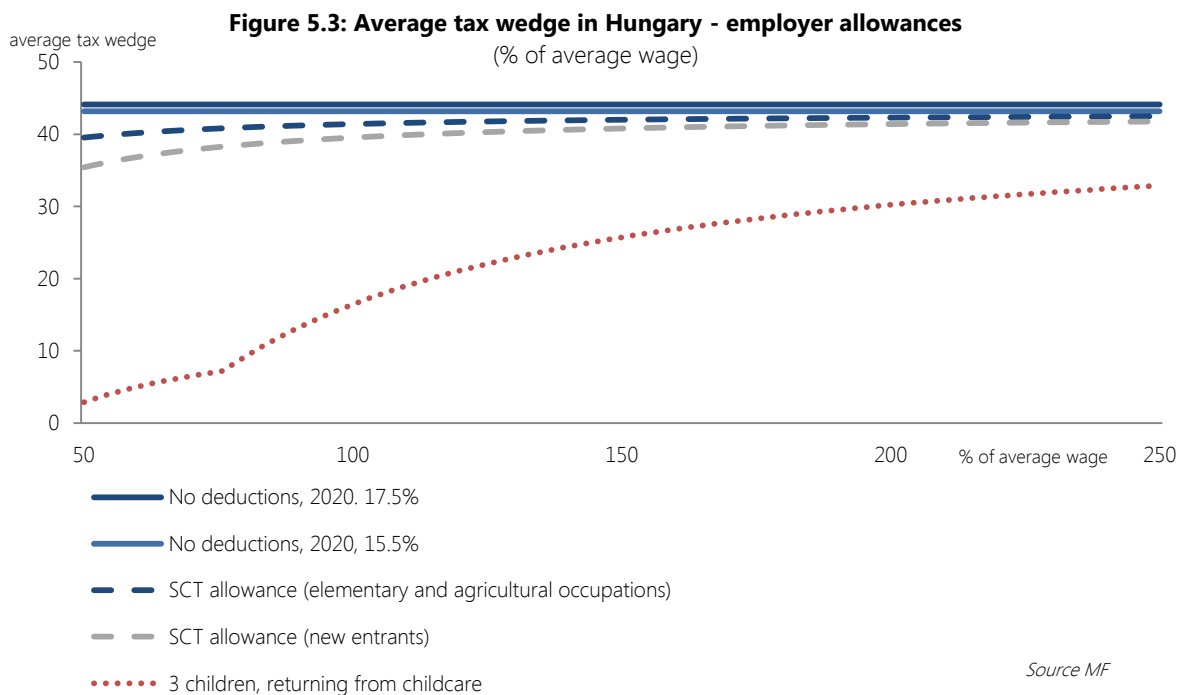


Another key element of the tax benefit system is supporting the most disadvantaged groups to find a job and remain in employment. For this purpose, the Job Protection Action Plan was launched in 2013, which offers targeted tax deduction from employer taxes (social contribution tax and small business tax). The previous priority of the job protection mechanism was replaced by the need of the efficient use of labour market reserves in recent years. In response to the changes, the Government transformed the employer allowances, creating a new system that is more generous and targeted with simplified

administration. The most important change is the introduction of the allowance provided to new entrants to the labour market. The aim of new allowance is to support the employment of the long-term unemployed and other groups that are loosely connected to the labour market, as well as new entrants and re-entrants after a longer break. The new allowance is available for everyone employee who did not earn income from an employment contract for at least 6 months of the 9 months preceding their hiring, replacing the previous allowance for career starters and long-term

unemployed persons, and further supporting the labour market integration of persons previously inactive for a long period. The new allowance also provides reduced administrative burdens for employers, as for newly registered employees, because the NTCA automatically examines the eligibility for the tax allowance and notifies the employer of its availability. The upper limit of the allowances was increased from the previous HUF

100,000 to the amount of the current minimum wage. Due to the change in the focus of the programme, the number of employees concerned by the allowance decreased significantly – simultaneously with a long-term improvement of the employment rates. The new allowance system concerned about 533,000 employees in December 2019.



Another positive change is that both employers and private individuals are now exempted from the payment of social security contribution on income from employment contract earned by employees entitled for old-age pension. This measure affected more than 120,000 persons in 2019, and left around HUF 104.1 billion potential tax revenue uncollected in the Hungarian economy.

In order to simplify the tax system and reduce the number of taxes and reducing administration burden, employees’ social security contributions will be merged into a single contribution type as of 1 July 2020. At the same time, the fundamental legislation of social provisions and social security contribution will be integrated into a consolidated, uniform regulation. The integration of social security contributions is included in the Economy Protection Action Plan, adopted in June 2019 and among the objectives of the Programme for a More Competitive

Hungary as well. In addition to the simplification, the Government pays particular attention to the possibilities promoting employment, but the law also includes amendments designed to combat abusive conducts.

All forms of work conducted by retired persons are exempted from the payment of social security contributions and the social contribution tax, and the minimum base of the employers’ social security contributions (the minimum amount they must take into account, when calculating and paying the social security contribution obligation) is reduced to the amount of the minimum wage for both private entrepreneurs and members of partnerships, instead of the previous threshold with a multiplier of 1.5 (for health insurance and labour market contributions).

The family contribution allowance may be claimed up to 18.5 percent (i.e. the uniform social security

contribution) as of 1 July 2020, resulting in a 1.5 percentage point increase in the maximum amount to be deducted. The measure provides further HUF 1 billion to families with children.

In order to further simplify and streamline the tax system and making it more transparent, five taxes were abolished from 2019. As of 1 January 2019,

health care contribution merged into the social contribution tax and the regulation of accident tax was integrated with insurance tax in order to reduce administrative burden. Additionally, cultural tax and the 75% special tax associated with the termination of public employment contracts of private persons were abolished. The special tax of credit institutions was also abolished.

Corporate taxes

In 2017 the corporate income tax rate was reduced to a flat-rate 9%, and several measures were implemented to boost investments, In addition, the taxes available for SMEs – KIVA and KATA – were fine-tuned, their competitiveness was increased, promoted.

Since these taxes provide a more favourable solution, the competitiveness of the simplified entrepreneurial tax has deteriorated significantly in recent years, and the number of taxpayers decreased continuously. Due to this, in accordance with the goals of the Government with regard to reducing the number of taxes and simplifying the tax system, the simplified entrepreneurial tax was abolished as of 1 January 2020.

Starting from 2017, the regulation of small business tax (KIVA) was simplified to a significant extent, the eligibility criteria were expanded, and the upper threshold for the value added tax exempt status was increased. In addition, the rate of the tax gradually decreased simultaneously with the reduction of the social contribution tax: In 2017 from 16% to 14%, in 2018, it decreased by further 1 percentage point, to 13%, and as of 1 January 2020 to 12%, providing a more favourable tax environment for SMEs. As a result of the above measures and the campaigns aimed at popularising the tax, the number of companies subject to this tax has increased eightfold since 2016. According to the records of the tax authority, the number of taxpayers paying this tax exceeded 51,000 in March 2020.

The revenue threshold of the lump sum tax of small enterprises (KATA) increased from HUF 6 million to HUF 12 million in 2017, facilitating the tax compliance of even more small businesses – typically self-employed persons – with significantly a lower tax and administrative burden compared to the traditional regimes. The threshold of VAT exemption was increased from HUF 8 million to HUF 12 million in 2019, therefore administrative burdens were further reduced. Thanks to the favourable changes, the popularity of KATA continues to grow, and the number of taxpayers was almost 395,000 in April 2020.

In addition to SMEs, the administrative burdens of large companies also decreased due to the introduction of the possibility of group taxation with regard to corporate income tax in 2019. This measure may further boost the improvement of the competitiveness of the country, and significantly alleviates the burdens of groups of companies and results in significant tax savings. With the aim of encouraging bigger companies to make investments, the upper limit of development reserves was raised from HUF 500 million to HUF 10 billion from 2019. A new possibility was introduced with regard to the local business tax, according to which municipalities may grant exemption or relief from the local business tax to entrepreneurs in relation to investments installed within the territory of the municipality in the year concerned.

In order to promote investments in the SME sector, the value limits of the development tax credit for small and medium-sized enterprises are gradually becoming more and more favourable in a 3-year process started in 2019. The criteria of claiming the development tax credit have been loosened further: for investments announced on or after 1 January 2020, the criteria of increasing the headcount and wage cost were abolished.

In 2019 measures significantly easing the administrative burden on businesses took effect: the obligation to tax advance supplement was eliminated regarding the corporate tax, the income tax on energy suppliers and the innovation contribution.

Consumption and turnover taxes

The shift of the focus of taxation towards consumption and turnover taxes remains an important element of the Government's tax policy. Thanks to the favourable economic processes of the last years and the successes of the measures aimed at whitening the economy, it became possible to implement targeted VAT rate reductions for several products and services. Pressure has been mounting to apply a reduced VAT rate instead of the general rate for certain services and products strongly affected by the grey economy. Having regard to this, the VAT rate

on pork and the housing constructions¹ was lowered to 5% in 2016, while the VAT rate on poultry meat, eggs and fresh milk was cut to 5% in 2017. The VAT rate on restaurant meals and internet access was reduced in two stages: to 18% in 2017, and to 5% in 2018. As of 2018, a 5% VAT rate applies to edible offal of swine, fish meat, as well as Braille printers and screens. As of 2019, in order to further simplify the tax system, UHT and ESL milk were reclassified to the lowest VAT rate. In addition, as of 1 January 2020, the VAT rate on commercial accommodation services was reduced from 18% to 5%. At the same time, the 4% tourism development contribution has become payable after commercial accommodation services as well since January 2020.

In order to get closer to the EU tax minimum on cigarettes, the rate of the excise duty on cigarette and fine cut smoking tobacco will gradually increase from September 2018 in three steps (September 2018, January and July 2019), then in further three steps from January 2020 (January 2020, July 2020, January 2021).

From 2020, customers belonging to the scope of the treasury are exempted from the financial transaction duty (which results in savings on the expenditure side), and exemption from this duty has also been introduced for postal cheques for up to HUF 20,000, as well as an upper limit of HUF 6,000 for this duty.

Measures for combatting tax avoidance

In recent years, measures aimed at the whitening of the economy have principally focused on the collection of consumption taxes. 2014 saw the introduction of online cash registers, followed by the introduction of the Electronic Public Road Trade Control System in 2015. In 2016, a POS terminal installation program was launched to encourage electronic payments, and then online invoicing data

reporting became mandatory as from 1 July 2018, which will be expanded in two further steps from July 2020 and January 2021. The purpose of the online data reporting obligation is to combat VAT fraud with regard to transactions between taxpayers.

The point of the online invoicing system is to provide real-time data to the tax authority in relation to the details of invoices with a VAT content of at least HUF 100,000 issued between taxpayers instead of the earlier, follow-up data disclosure on the level of individual invoices, thereby enabling more efficient risk analysis and control. Another advantage of the new system is the reduction of administrative burdens on invoice issuers, as it has replaced follow-up data reporting on the level of individual invoices.

In accordance with the tax package adopted in the autumn of 2019, the online invoice data reporting will be extended in two steps:

- As of 1 July 2020, the value threshold of the data reporting obligation will be reduced to 0, and it will apply to all invoiced transactions between domestic VAT resident businesses.
- As of 1 January 2021, the data reporting will become comprehensive, meaning that it will apply to invoices issued to non-taxable persons as well.

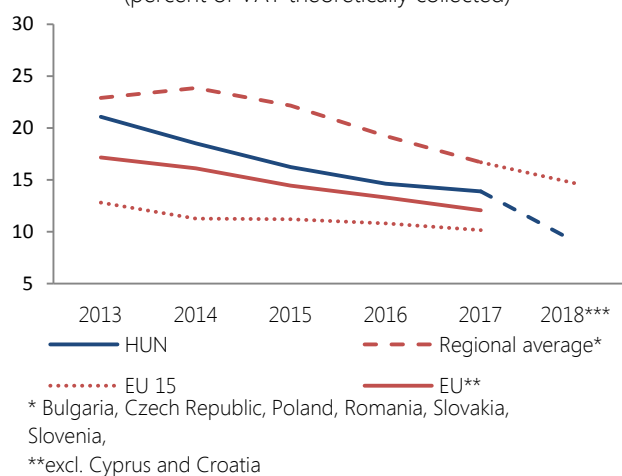
As a result of the measures taken in recent years, the amount of uncollected VAT in Hungary significantly decreased, which is also confirmed by the latest CASE study² on the estimation of the VAT gap. In 2013, the level of the Hungarian VAT gap was 21% in proportion to the theoretical VAT liability. The VAT gap has been decreasing ever since, and its rate was 13.9% in 2017, while according to the preliminary estimate of CASE, around 9% in 2018. In the period between 2013 and 2017, the rate of decrease of the Hungarian VAT gap exceeded the average rate of the EU countries. While the development of the VAT gap was also influenced by other items affecting the VAT base (household investments, government purchases), the measures

¹The VAT rate on the construction of new apartments is once again 27% starting from 1 January 2020, having regard to the temporary regulations

² CASE (2019): Study and Reports on the VAT Gap in the EU-28 Member States: 2019 Final Report, Warsaw, September 2019

aimed at whitening the economy had the largest effect on it.

Figure 5.4: Value added tax gap
(percent of VAT theoretically collected)



Beyond all, Hungary is committed to and involved in the international fight against aggressive tax avoidance. The European Union's Anti-Tax Avoidance Directive (ATAD) requires Member States to adopt measures for the protection of their tax bases in order to counteract international tax evasion by business entities. In 2018, Hungary amended the rules concerning controlled foreign companies in accordance with the Directive, and implemented the rules for limitations to the deductibility of interest, effective as of 1 January 2019. Moreover, the other provisions of the Directive, i.e. the rules pertaining to capital withdrawals and the handling of hybrid instruments (tax avoidance as a result of differences in the legal evaluation of the same factual circumstances) have been transposed in 2020. Beyond all that, broad progress was made in the field of the exchange of international tax information, and in this context, the EU regulations on cross-border tax arrangements were transposed in 2019.

In terms of the tax procedure, primary aims include improving tax compliance, strengthening the relationship between the tax authority and taxpayers, as well as encouraging cooperation and voluntary compliance. In this scope, recent years have seen the restructuring of the tax authority's organisation, and a number of measures have been implemented in order to strengthen the service provider profile of the tax authority.

Based on international experiences, an efficient reduction of administrative burdens can be achieved by introducing the electronic submission of tax returns, enlarging the scope of pre-filled tax return forms, reducing the frequency of reporting, simplifying forms, and eliminating or merging certain tax types. At the same time, however, electronic tax administration can only reach its full potential if the services provided by the tax authority exploit the advantages of digitalisation in the widest possible range. The NTCA already provides a number of modern services: it drafts the income tax return for a wide scope of taxpayers, operates an integrated electronic interface for contact (easy to access, up-to-date documents, information about eligibility and obligations, balances), and provides online form-filling and checking programs, a personalised tax calendar, calculators, mobile applications, one-stop-shop data contact etc.

The most apparent step of recent years taken towards a customer-centric approach was the introduction of the electronic personal income tax system (eSZJA). With this system, the NTCA prepares a draft income tax return for more than 5 million private individuals, taking over the burden of preparing the income tax return for a significant portion of taxpayers. Relying on experiences acquired through using the eSZJA and due to the gradual integration of data reporting, the tax authority may become able to suggest draft declarations for an increasing number of tax types and for a bigger scope of taxpayers. In 2019, the tax authority prepared a draft tax return for the smallest businesses, i.e. private entrepreneurs on the first occasion, and draft declarations were also made available for the excise duty, which concerns an easily definable group of taxpayers.

The overall goal is to rid the widest possible range of businesses from the most prevalent administrative burdens (e.g. VAT), and to make available drafts for the reporting obligations of employers in the medium term as well. The aim of expanding the online invoice data reporting is, in addition to increasing the effectiveness of monitoring and thereby further reducing VAT abuses, to make it possible in the future that the data so reported be used as the basis of the VAT return drafts (eÁFA) prepared by the tax authority.

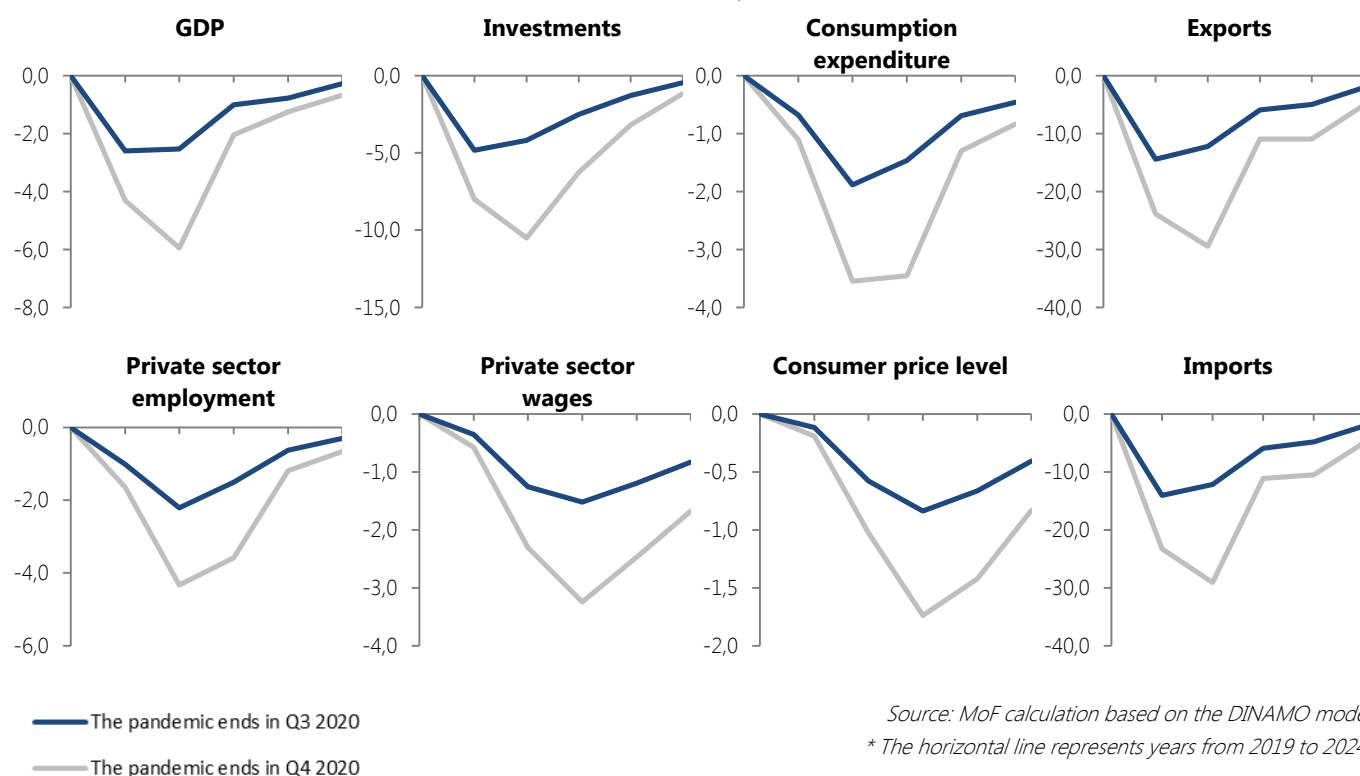
6. SENSITIVITY ANALYSES

The macroeconomic forecast of convergence programme is surrounded by risk factors, particularly in the present situation, when the coronavirus pandemic has a significant effect on economic performance worldwide. In connection with this, two alternative scenarios differing in terms of recovery time from pandemic, and their economic effects are

presented below. Prepared with the DINAMO model³ of Ministry of Finance, the sensitivity analyses quantify the extent by which the levels and growth rates of the major macroeconomic variables would deviate from the baseline scenario as a consequence of shocks (Figure 6.1 and Table 6.1).

Figure 6.1: Alternative scenarios

(cumulated % difference in variables compared to the baseline scenario*)



Source: MoF calculation based on the DINAMO model
* The horizontal line represents years from 2019 to 2024.

Baseline scenario of convergence programme is based on the assumption that the pandemic will be pushed back throughout Europe in Q2. As a result, the output of branches can gradually recover starting from Q3, though with demand levels remaining lower in certain sectors for a longer period. At the same time, there is a risk that the fight against the pandemic will take a longer time, and as a result, the recovery of economies would also start later.

In the 1st alternative scenario, the coronavirus pandemic will be curbed in Q3 2020, and thus economies could start to recover one quarter later than assumed in the baseline scenario, i.e. in Q4. In the 2nd alternative scenario, the pandemic will be

curbed half a year later than assumed in the baseline forecast, and thus economies could practically only restart in 2021. In these cases, the slowdown of external demand would directly and significantly worsen the possibilities of Hungarian export even further. The slowdown of export dynamics would result in a more moderate expansion of domestic production capacities than expected, i.e. employment and investment levels would also decrease. More subdued demand would entail a more moderate inflation rate. In line with the economic developments, the general government deficit would also be higher than projected in the baseline scenario.

Table 6.1: Risk scenarios

(difference in growth rates of the variables from the baseline scenario, in percentage point)

| Scenario 1: The pandemic ends in Q3 2020 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|-------------|-------------|-------------|-------------|-------------|
| GDP | -2.60 | 0.08 | 1.52 | 0.24 | 0.49 |
| Households' consumption expenditure | -0.68 | -1.21 | 0.42 | 0.78 | 0.23 |
| Gross fixed capital formation | -4.83 | 0.64 | 1.69 | 1.22 | 0.82 |
| Exports | -14.40 | 2.18 | 6.26 | 0.44 | 3.59 |
| Imports | -14.05 | 1.89 | 6.19 | 0.63 | 3.43 |
| Inflation | -0.12 | -0.46 | -0.26 | 0.17 | 0.26 |
| Private sector employment | -1.02 | -1.20 | 0.71 | 0.83 | 0.32 |
| Gross average wage in the private sector | -0.35 | -0.90 | -0.26 | 0.33 | 0.36 |
| Income taxes* | -0.11 | -0.17 | 0.03 | 0.09 | 0.05 |
| Employer contributions* | -0.08 | -0.13 | 0.02 | 0.07 | 0.04 |
| Turnover taxes* | -0.07 | -0.16 | 0.00 | 0.08 | 0.04 |
| Corporate taxes* | -0.31 | 0.01 | 0.18 | 0.03 | 0.06 |
| Interest expenditure of the general government* | 0.00 | -0.01 | -0.01 | -0.01 | 0.00 |
| General government balance* | -0.51 | -0.40 | 0.24 | 0.25 | 0.16 |
| Scenario 2: The pandemic ends in Q4 2020 | 2020 | 2021 | 2022 | 2023 | 2024 |
| GDP | -4.31 | -1.64 | 3.91 | 0.80 | 0.57 |
| Households' consumption expenditure | -1.10 | -2.44 | 0.09 | 2.15 | 0.46 |
| Gross fixed capital formation | -8.00 | -2.51 | 4.24 | 3.06 | 2.05 |
| Exports | -23.88 | -5.60 | 18.54 | -0.04 | 5.87 |
| Imports | -23.28 | -5.78 | 17.93 | 0.61 | 5.58 |
| Inflation | -0.19 | -0.83 | -0.72 | 0.32 | 0.59 |
| Private sector employment | -1.65 | -2.69 | 0.75 | 2.39 | 0.53 |
| Gross average wage in the private sector | -0.57 | -1.73 | -0.94 | 0.77 | 0.80 |
| Income taxes* | -0.17 | -0.34 | -0.03 | 0.23 | 0.11 |
| Employer contributions* | -0.13 | -0.27 | -0.02 | 0.19 | 0.08 |
| Turnover taxes* | -0.11 | -0.30 | -0.09 | 0.20 | 0.08 |
| Corporate taxes* | -0.52 | -0.20 | 0.47 | 0.10 | 0.07 |
| Interest expenditure of the general government* | -0.01 | -0.03 | -0.03 | -0.02 | -0.01 |
| General government balance* | -0.84 | -1.00 | 0.35 | 0.69 | 0.13 |

Source: MF calculation based on the DINAMO model

* Difference in the main fiscal items in the baseline and the alternative shock scenario, in % of the estimated baseline nominal GDP.

Remark: Due to rounding, the summed data might differ from the sum of the detailed data.

7. LONG-TERM SUSTAINABILITY OF PUBLIC FINANCES

The sustainability of public finances is basically determined by the current fiscal stance (budget balance, general government debt and debt-to-GDP ratio), the size of future budgetary expenditures associated with ageing and the demographic trends.

The Government fosters the improvement of long-term sustainability of public finances through several channels with complex and targeted measures. The Government has set the reduction of the debt ratio as a key objective in its budget policy and has been implementing fiscal discipline accordingly. A lower government debt level and budget deficit create more favourable conditions to tackle the challenges of an ageing population in the long run. In addition to these, several parametric changes took place in the pension system, which contributed to the sustainability of the pension system and had a positive effect on employment. Additionally, the Government has introduced family-friendly incentives and implemented several measures to support families, which could mitigate the budgetary consequences of the projected ageing of the Hungarian society through demographic changes.

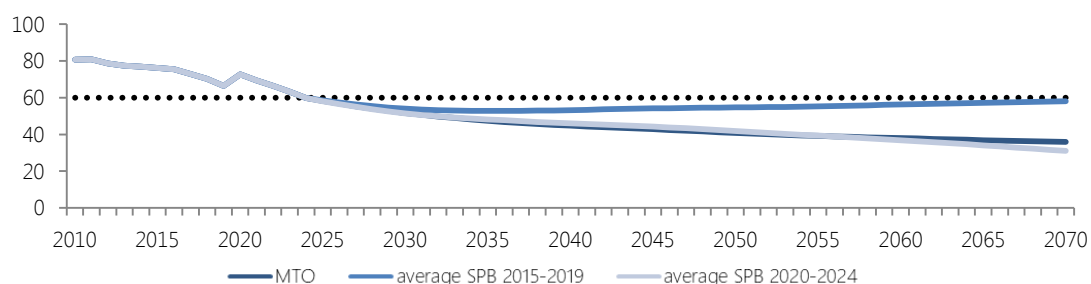
According to the calculations approved by the European Commission and the EU Economic Policy Committee (*The 2018 Ageing Report*), pension expenditures are expected to increase from 9.7% in 2016 to 11.2% in proportion of the GDP by 2070, which is considered an average result in the evolution

of long-term pension expenditure in the European Union. Further expenditure figures with relevance to long-term sustainability are as follows: health expenditures will increase in proportion of the GDP from 4.9% in 2016 to 5.7% by 2070, elderly care expenditures will rise from 0.7% to 1.1%, and expenditures on education will be up from 3.6% to 3.8% in the same period in Hungary.

Based on the analysis of the European Commission published on 24 January 2020 (*Debt Sustainability Monitor*), the risk of sustainability of the Hungarian budget is low both on the short and medium term. On the long term, average, medium-level risks were identified in comparison to all EU Member States, primarily due to the future budgetary expenditure associated with growing older. Based on the estimates of EU experts, debt may decrease to 41.3% of the GDP by 2030.

Based on the forecast of the convergence programme, the gradual decrease of the debt ratio may temporarily be suspended this year due to the coronavirus crisis. On the medium term, however, the decrease of the debt ratio may continue, and is expected to fall below the reference value of 60% by 2024. Thereafter, the debt trajectory is expected to remain sustainable in the long run, based on either the fiscal path forecast in the convergence programme or the budgetary policy implemented in recent years (*Figure 7.1*).

Figure 7.1: General government debt developments
(in % of the GDP)



Remark: until 2024 the macroeconomic trajectory is based on the assumptions described in the convergence programme, and thereafter on the macroeconomic assumption presented in the 2018 Ageing Report, while the structural balance data are based on the estimations of the convergence programme. SPB: structural primary balance
Source: MF calculation

TABLES

Table 'A'

Preliminary assessment of the measures taken in response to the COVID-19 crisis and the effects on the budget 2020-2021

| Measure | Description of the measure | ESA-code | Adoption status | Effect on the budget (GDP %) | |
|--|--|-----------------------|--|------------------------------|--------------|
| | | | | 2020 | 2021 |
| EXPENSES RELATED TO COMBATTING THE PANDEMIC | | | | | |
| Expenses related to combatting the pandemic | Procurement of assets, investments, other measures | P.2, P.51 | Adopted | 1.26% | |
| One-off gross HUF 500,000 wage supplement per health worker in the year 2020 | | D.1 | Adopted | 0.15% | |
| Extension of Child Care Fee and Child Care Benefit | Extension of certain family benefits expiring during the crisis | D.62 | Adopted | 0.02% | |
| ECONOMY PROTECTION ACTION PLAN | | | | | |
| Job protection | | | Adopted | 0.37% | |
| Of which: | | | | | |
| | Employment Protection Wage Subsidy (Kurzarbeit) (70% of the net wages lost is paid by the Hungarian state) | D.3 | Adopted | 0.32% | |
| | Employment Protection Wage Subsidy – 40% wage subsidy for persons working in engineering (R&D) jobs | D.3 | Adopted | 0.05% | |
| Creating employment | | | Adopted in a small part, the larger part is still under development | 0.50% | 0.29% |
| Of which: | | | | | |
| | Competitiveness-increasing subsidy necessary due to the coronavirus pandemic | D.7 | Adopted | 0.11% | |
| Relaunching the economy | | P.51, D.7, D.9 | Under development | 1.37% | 0.62% |
| Financing of companies | | D.9 | Partially adopted | 0.10% | 0.23% |
| Of which: | | | | | |
| | Guarantee programmes | D.9 | Partially adopted | 0.06% | 0.14% |

The table continues on the next page with the tax measures.

| Measure | Description of the measure | ESA-code | Adoption status | Effect on the budget (GDP %) | |
|---|--|-----------|-----------------|------------------------------|--------------|
| | | | | 2020 | 2021 |
| TAX MEASURES | | | | | |
| Measures related to the Széchenyi Recreational Card (fringe benefits) | The social contribution tax on the Széchenyi Recreational Card is reduced to 0%. | D611C-C08 | Adopted | 0.02% | |
| | Increase of the envelope of the Széchenyi Recreational Card in 2020 to HUF 800,000 (currently: HUF 450,000) in the competitive sector, and to HUF 400,000 (currently: HUF 200,000) in the public sector. | D611C-C08 | Adopted | 0.02% | |
| Suspension of the tourism development contribution | The tourism development contribution does not have to be paid between 1 March and 30 June. | D214H-C04 | Adopted | 0.03% | |
| Reduction of the burdens of employers and employees in certain sectors | Suspension of employers' contribution payment obligation and employees' pension insurance contribution, reduction of the health insurance contribution to the statutory minimum until 30 June in certain sectors. | D611C-C08 | Adopted | 0.13% | |
| Suspension of the rehabilitation contribution tax in certain sectors | Exemption from the rehabilitation contribution tax in certain sectors until 30 June. | D29C-C01 | Adopted | 0.01% | |
| Suspension of vocational training contribution tax in the eligible sectors | Exemption from the vocational training contribution tax in certain sectors until 30 June. | D29C-C02 | Adopted | 0.01% | |
| Temporary waiver of the obligation to pay KATA for certain services | Temporary waiver of the obligation to pay KATA for certain services until 30 June. | D29C-C05 | Adopted | 0.06% | |
| Establishment of preferential KIVA payment obligation in certain sectors | In the case of the sectors impacted by the coronavirus the most, personnel-related payments do not count into the tax base when establishing the monthly KIVA payment obligation between March and June 2020. | D29C-C06 | Adopted | 0.005% | |
| Excise duty allowance for entities manufacturing disinfectants | As an authorised warehousekeeper with a temporary authorisation for biocidal products, after a simple registration one can produce disinfectants without denaturing free of excise-duty | D214A-C03 | Adopted | 0.002% | |
| Municipalities will be annual VAT declarants | If the municipality is a taxpayer subject to VAT, the period for establishing the tax with respect to VAT is the calendar year. (The yearly tax payment concerns VAT obligations amounting to HUF 80-81 billion in total. The time-proportionate part of this for March to December 2020, if we assume that it is evenly distributed within the year, results in a loss of HUF 60 billion for the budget.) | D211-C01 | Adopted | 0.13% | -0.12% |
| A further 2 percentage point decrease in the social contribution tax rate | From 1 July 2020, the tax rate decreases by 2 percentage points, from 17.5% to 15.5%. | D611C-C01 | Adopted | 0.34% | 0.64% |
| 1 percentage point KIVA reduction | The small business tax (KIVA) rate decreases by 1 percentage point, from 12% to 11% from 2021. | D29C-C06 | Adopted | | 0.02% |
| MEASURES FOR COMBATting THE PANDEMIC AND PROTECTING THE ECONOMY IN TOTAL | | | | 4.55% | 1.68% |

Remark: Due to rounding, the summed data might differ from the sum of the detailed data.

Table 'B'

Revenue increasing measures taken due to the COVID-19 crisis 2020-2021

| Measure | Description of the measure | ESA-code | Adoption status | Effect on the budget (GDP %) | |
|--|--|---------------------|-----------------|------------------------------|--------------|
| | | | | 2020 | 2021 |
| Reallocation from budgetary heading to the Economy Protection Fund | In order to provide funds for the economy protection measures, the Government reallocated the subsidies of institutions (in a smaller part) and of those programmes can be postponed (in a larger part). | P.51, P.2, D.7, D.9 | Adopted | 1.96% | |
| Central Reserve for Combatting Pandemic | Utilisation of the Country Protection Fund for protecting against the pandemic. | P.2 | Adopted | 0.80% | |
| Reduction of party support | Reallocation of 50% of the support of parties. | D.7 | Adopted | 0.003% | |
| Budget reallocations | Budget reallocations. | P.2 | Adopted | 0.10% | |
| Introduction of the retail tax | Introduction of the special retail tax from 1 May 2020. | D.29 | Adopted | 0.08% | 0.11% |
| Redirection of the motor vehicle tax to the central budget | Redirection of the motor vehicle tax into the central budget | D.29, D.59 | Adopted | 0.07% | |
| Contribution of the banking sector | The higher rate of the bank tax applicable to credit institutions increases by 0.19 percentage point in 2020, and the higher amount paid as a result of the increase will contribute to the Fund for Combatting Pandemic. Credit institutions may deduct the amount so paid from their tax obligations in the next 5 years in equal instalments. | D214I-C06 | Adopted | 0.12% | -0.02% |
| REVENUE INCREASING MEASURES IN TOTAL | | | | 3.13% | 0.08% |

Remark: Due to rounding, the summed data might differ from the sum of the detailed data.

Table 'C'

State guarantees announced/adopted in connection with the COVID-19 crisis

| Measure | Description of the measure | Adoption status | Maximum amount of conditional commitment (GDP %) |
|---|--|--------------------------------|--|
| MFB Force Majeure Guarantee Programme | A loan repayment guarantee available at the MFB (Hungarian Development Bank) for SMEs and large enterprises, regarding which the state irrevocably commits to act as first-payment guarantor for up to 90% of the amount of the guarantee. | Adopted by government decision | 0.11% |
| Garantiqa Crisis Guarantee Programme | Commitment to state counter-guarantee for guarantees undertaken for the purpose of handling the corporate payment difficulties and liquidity problems arising as a result of the expansion of COVID-19, as well as restoring and maintaining the operability of companies, with guarantor fee support by the state for up to 90% of the amount of the guarantee. | Adopted by government decision | 1.06% |
| Increase of the framework amount of Garantiqa guarantee with state counter-guarantee. | Commitment to state counter-guarantee to the guarantee undertaken with conditions identical to those applicable before, with state guarantor fee support for up to 85% of the amount of the guarantee. | Adopted by government decision | 0.28% |
| AVHGA Crisis Agriculture Guarantee Programme | Commitment to state counter-guarantee for guarantees undertaken for the purpose of handling the agricultural corporate payment difficulties and liquidity problems arising as a result of the expansion of COVID-19, as well as restoring and maintaining the operability of agricultural companies, with guarantor fee support by the state for up to 90% of the amount of the guarantee. | Work is in progress | 0.21% |
| EXIM Damage Relief Guarantee Programme | Provision of a guarantee with a public background to entrepreneurial loans provided by banks and commitment of the state to act as guarantor for up to 100% of the amount of the guarantee provided in order for addressing the liquidity problems arising as a result of the outbreak of the COVID-19 pandemic and ensuring the continuity of the economic activity of companies. | Work is in progress | 0.11% |
| GUARANTEES IN TOTAL | | | 1.76% |

Remark: Due to rounding, the summed data might differ from the sum of the detailed data.

Table 1a

Macroeconomic prospects

| | ESA- code | 2019 HUF billion | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---------------|---------------------|-------------|------|------|------|------|------|
| | | | change in % | | | | | |
| 1. Real GDP (at constant prices) | B1g | 44,764.1 | 4.9 | -3.0 | 4.8 | 4.6 | 4.3 | 4.2 |
| 2. Nominal GDP | B1g | 46,786.7 | 9.7 | 0.5 | 8.2 | 8.0 | 7.7 | 7.5 |
| Components of real GDP (at constant prices) | | | | | | | | |
| 3. Private consumption expenditure | P.3 | 20,977.1 | 5.0 | 0.9 | 3.8 | 4.6 | 4.6 | 4.5 |
| 4. Government consumption expenditure | P.3 | 8,549.6 | 1.7 | 1.5 | 0.7 | 0.3 | 0.8 | 0.8 |
| 5. Gross fixed capital formation | P.51 | 12,385.2 | 15.3 | -8.8 | 5.5 | 4.8 | 3.4 | 3.2 |
| 6. Changes in inventories and net acquisition of valuables (% of GDP) ¹ | P.52+ P.53 | 329.4 | -1.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7. Exports of goods and services | P.6 | 38,426.3 | 6.0 | -8.3 | 10.5 | 7.3 | 6.5 | 7.0 |
| 8. Imports of goods and services | P.7 | 36,752.2 | 6.9 | -6.8 | 8.9 | 6.3 | 5.6 | 6.2 |
| Contribution to real GDP growth (at constant prices) | | | | | | | | |
| 9. Final domestic demand | | 42,760.6 | 6.7 | -1.8 | 3.4 | 3.6 | 3.3 | 3.2 |
| 10. Changes in inventories and net acquisition of valuables | P.52+ P.53 | 329.4 | -1.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11. External balance of goods and services | B.11 | 1,674.1 | -0.4 | -1.5 | 1.4 | 1.0 | 1.0 | 0.9 |

¹ The change of stock reflects the work and leap day effect in 2020.

Table 1b

P

Price developments

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|------|------|------|------|------|------|
| change in % | | | | | | |
| 1. GDP deflator | 4.5 | 3.7 | 3.2 | 3.3 | 3.2 | 3.2 |
| 2. Private consumption deflator | 3.5 | 2.8 | 3.0 | 3.0 | 3.0 | 3.0 |
| 3. HICP | 3.4 | 2.8 | 3.0 | 3.0 | 3.0 | 3.0 |
| 4. Public consumption deflator | 6.0 | 2.4 | 2.7 | 4.1 | 4.9 | 5.3 |
| 5. Investment deflator | 8.0 | 6.5 | 5.1 | 4.3 | 3.9 | 3.6 |
| 6. Export price deflator (goods and services) | 1.5 | 1.2 | 1.3 | 1.4 | 1.7 | 2.0 |
| 7. Import price deflator (goods and services) | 1.4 | 0.6 | 1.3 | 1.6 | 1.7 | 2.0 |

Table 1c

L

Labour market developments

| | ESA-code | 2019 level | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|--|----------|------------|-------------|------|------|------|------|------|
| | | | change in % | | | | | |
| 1. Employment, persons ('000; 15-74) | | 4512.1 | 1.0 | -1.8 | 1.6 | 0.8 | 0.4 | 0.3 |
| 2. Unemployment rate (%; 15-74) | | - | 3.4 | 5.6 | 4.3 | 3.7 | 3.5 | 3.3 |
| 3. Labour productivity, persons | | - | 3.9 | -1.2 | 3.2 | 3.8 | 3.8 | 3.8 |
| 4. Compensation of employees (HUF bn) | D.1 | 20234 | 10.9 | 2.2 | 7.6 | 6.9 | 6.9 | 6.3 |
| 5. Compensation per employee (HUF million) | | 4.6 | 10.5 | 3.9 | 6.0 | 6.1 | 6.5 | 6.0 |

¹ LFS employment.

Table 1d

Sectoral balances

| | ESA-code | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|--|----------|----------------|------|------|------|------|------|
| | | percent of GDP | | | | | |
| 1. Net lending/borrowing vis-à-vis the rest of the world | B9. | 1.0 | 1.6 | 2.5 | 2.9 | 3.4 | 1.5 |
| of which: | | | | | | | |
| - Balance of goods and services | | 3.7 | 2.6 | 3.7 | 4.4 | 5.0 | 5.7 |
| - Balance of primary incomes and transfers | | -4.5 | -4.0 | -4.2 | -4.4 | -4.6 | -4.9 |
| - Capital account | | 1.8 | 2.9 | 3.0 | 2.9 | 2.9 | 0.8 |
| 2. Net lending/borrowing of the private sector including statistical discrepancy | B9. | 3.0 | 5.4 | 5.2 | 5.1 | 5.0 | 2.5 |
| 3. Net lending/borrowing of general government | B9. | -2.0 | -3.8 | -2.7 | -2.2 | -1.6 | -1.0 |

Table 2a

General government budgetary prospects

| | ESA-code | 2019 HUF billion | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|--|--------------------------------|---------------------|----------------|------|------|------|------|------|
| | | | percent of GDP | | | | | |
| Net lending (EDP B.9.) by sub-sector | | | | | | | | |
| 1. General government | S.13 | -958.1 | -2.0 | -3.8 | -2.7 | -2.2 | -1.6 | -1.0 |
| 2. Central government | S.1311 | -799.0 | -1.7 | -3.4 | -2.5 | -2.1 | -1.5 | -0.9 |
| 3. State government | S.1312 | - | - | - | - | - | - | - |
| 4. Local government | S.1313 | -22.0 | 0.0 | 0.2 | -0.1 | 0.0 | 0.0 | 0.0 |
| 5. Social security funds | S.1314 | -137.1 | -0.3 | -0.6 | -0.1 | -0.1 | -0.1 | 0.0 |
| General government (S.13) | | | | | | | | |
| 6. Total revenue | TR | 20,587.6 | 44.0 | 44.0 | 43.2 | 41.3 | 40.3 | 38.8 |
| 7. Total expenditure | TE | 21,545.7 | 46.1 | 47.8 | 45.9 | 43.5 | 41.9 | 39.8 |
| 8. Balance | B.9 | -958.1 | -2.0 | -3.8 | -2.7 | -2.2 | -1.6 | -1.0 |
| 9. Interest expenditure | D.41 | 1,070.5 | 2.3 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 |
| 10. Primary balance | | 112.4 | 0.2 | -1.4 | -0.4 | 0.0 | 0.6 | 1.0 |
| 11. One-off and other temporary measures ¹ | | 75.7 | -0.2 | -2.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Selected components of revenues | | | | | | | | |
| 12. Total taxes (12=12a+12b+12c) | | 11,668.4 | 24.9 | 25.4 | 25.4 | 24.9 | 24.6 | 24.3 |
| 12a. Taxes on production and imports | D.2 | 8,503.9 | 18.2 | 18.2 | 18.2 | 17.7 | 17.4 | 17.2 |
| 12b. Current taxes on income, wealth etc. | D.5 | 3,147.6 | 6.7 | 7.2 | 7.2 | 7.2 | 7.1 | 7.1 |
| 12c. Capital taxes | D.91 | 16.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13. Social contributions | D.61 | 5,582.2 | 11.9 | 11.5 | 11.4 | 10.8 | 10.3 | 10.1 |
| 14. Property income | D.4 | 174.7 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 |
| 15. Other | | 3,162.3 | 6.8 | 6.7 | 6.1 | 5.4 | 5.2 | 4.2 |
| 16.=6. Total revenue | TR | 20,587.6 | 44.0 | 44.0 | 43.2 | 41.3 | 40.3 | 38.8 |
| Tax burden ² (D.2+D.5+D.61+D.91-D.995) | | 17,332.1 | 37.0 | 37.1 | 37.0 | 35.8 | 35.0 | 34.6 |
| Selected components of expenditure | | | | | | | | |
| 17. Compensation of employees + intermediate consumption | D.1+P.2 | 8,590.2 | 18.4 | 19.5 | 17.5 | 16.4 | 15.9 | 15.1 |
| 17.a. Compensation of employees | D.1 | 4,776.6 | 10.2 | 10.7 | 10.0 | 9.5 | 9.2 | 8.7 |
| 17.b. Intermediate consumption | P.2 | 3,813.6 | 8.2 | 8.8 | 7.5 | 6.9 | 6.7 | 6.5 |
| 18. Social payments (18=18.a+18.b) | | 5,705.7 | 12.2 | 12.9 | 12.4 | 12.0 | 11.8 | 11.5 |
| <i>of which: Unemployment benefits³</i> | | 106.0 | 0.2 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 |
| 18.a. Social transfers in kind supplied via market producers | D.6311, D.63121, D.63131 | 587.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.2 | 1.2 |
| 18.b. Social transfers other than in kind | D.62 | 5,118.4 | 10.9 | 11.5 | 11.1 | 10.8 | 10.5 | 10.3 |
| 19.=9. Interest expenditure | D.41 | 1,070.5 | 2.3 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 |
| 20. Subsidies | D.3 | 815.8 | 1.7 | 2.0 | 1.6 | 1.5 | 1.4 | 1.3 |
| 21. Gross fixed capital formation | P.51 | 2,809.8 | 6.0 | 5.1 | 5.8 | 5.2 | 4.5 | 4.3 |
| 22. Capital transfers | D.9 | 998.6 | 2.1 | 1.6 | 1.9 | 2.2 | 2.2 | 2.0 |
| 23. Other | | 1,555.1 | 3.3 | 4.2 | 4.3 | 4.1 | 4.0 | 3.5 |
| 24.=7. Total expenditure | TE | 21,545.7 | 46.1 | 47.8 | 45.9 | 43.5 | 41.9 | 39.8 |

Remark: Due to rounding, the summed data might differ from the sum of the detailed data.

¹: A plus sign means deficit-reducing one-off measures

²: Including revenues collected by the EU

³: Cash benefits of National Employment Fund and financing of certain trainings

Table 2b

No-policy change projections

| | 2019 HUF billion | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|--|---------------------|----------------|------|------|------|------|------|
| | | percent of GDP | | | | | |
| 1. Total revenue at unchanged policies | 20,587.6 | 44.0 | 44.0 | 43.2 | 41.3 | 40.3 | 38.8 |

The table contains revenue projections based on measures taken until 30 April 2020.

Table 3

General government debt developments

| | ESA-code | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|--|----------|----------------|------|------|------|------|------|
| | | percent of GDP | | | | | |
| 1. Gross debt | | 66.3 | 72.6 | 69.3 | 66.3 | 63.2 | 59.8 |
| 2. Change in gross debt ratio | | -3.9 | 6.3 | -3.3 | -3.0 | -3.1 | -3.4 |
| Contribution to changes in gross debt | | | | | | | |
| 3. Primary balance | | 0.2 | -1.4 | -0.4 | 0.0 | 0.6 | 1.0 |
| 4. Interest expenditure | D.41 | 2.3 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 |
| 5. Stock-flow adjustment | | 0.3 | 2.8 | -0.5 | 0.0 | 0.1 | 0.0 |
| Implicit interest rate on debt (%) | | 3.5 | 3.5 | 3.4 | 3.3 | 3.4 | 3.3 |

Table 4

Cyclical developments

| | ESA-code | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|-----------------------------------|----------|----------------|------|------|------|------|------|
| | | percent of GDP | | | | | |
| 1. Real GDP growth (%) | | 4.9 | -3.0 | 4.8 | 4.6 | 4.3 | 4.2 |
| 2. Potential GDP (%) | | 3.9 | 2.4 | 2.9 | 3.6 | 3.9 | 4.0 |
| contributions: - labour | | 0.4 | -0.1 | 0.2 | 0.2 | 0.1 | 0.1 |
| - capital | | 1.3 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 |
| - total factor productivity (TFP) | | 2.2 | 1.6 | 1.7 | 2.2 | 2.6 | 2.8 |
| 3. Output gap | | 1.9 | -3.5 | -1.6 | -0.6 | -0.2 | 0.0 |

Remark: Due to rounding, the summed data might differ from the sum of the detailed data.

Table 5

Divergence from previous update

| | ESA-code | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|--|----------|------|------|------|------|------|------|
| Real GDP growth (%) | | | | | | | |
| 1. 2019 Convergence Programme | | 4.0 | 4.0 | 4.1 | 4.2 | 4.0 | - |
| 2. 2020 Convergence Programme | | 4.9 | -3.0 | 4.8 | 4.6 | 4.3 | 4.2 |
| 3. Difference | | 0.9 | -7.0 | 0.7 | 0.4 | 0.3 | - |
| General government net lending (percent of GDP) | | | | | | | |
| 1. 2019 Convergence Programme | EDP B.9 | -1.8 | -1.5 | -1.2 | -0.5 | 0 | - |
| 2. 2020 Convergence Programme | B.9 | -2.0 | -3.8 | -2.7 | -2.2 | -1.6 | -1.0 |
| 3. Difference | | -0.2 | -2.3 | -1.5 | -1.7 | -1.6 | - |
| General government gross debt (percent of GDP) | | | | | | | |
| 1. 2019 Convergence Programme | | 69.2 | 66.7 | 62.8 | 59.3 | 55.9 | - |
| 2. 2020 Convergence Programme | | 66.3 | 72.6 | 69.3 | 66.3 | 63.2 | 59.8 |
| 3. Difference | | -2.9 | 5.9 | 6.5 | 7.0 | 7.3 | |

Table 6

Long-term sustainability of public finances¹

| | 2016 | 2020 | 2030 | 2040 | 2050 | 2060 | 2070 |
|--|----------------|------|------|------|------|------|------|
| | percent of GDP | | | | | | |
| Pension expenditure | 9.7 | 9.0 | 8.4 | 9.4 | 10.6 | 11.1 | 11.2 |
| Old-age and early pensions | 8.0 | 7.4 | 7.0 | 8.5 | 9.5 | 10.1 | 10.2 |
| Other pensions (disability, survivors) | 1.7 | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| Health care, education and other age-related expenditure | 9.3 | 9.2 | 9.5 | 10.0 | 10.4 | 10.7 | 10.8 |
| Health care expenditures | 4.9 | 5.1 | 5.4 | 5.6 | 5.8 | 5.8 | 5.7 |
| Long-term care expenditures | 0.7 | 0.7 | 0.8 | 0.9 | 1.0 | 1.1 | 1.1 |
| Education expenditures | 3.6 | 3.4 | 3.3 | 3.5 | 3.6 | 3.7 | 3.8 |
| Other age-related expenditures | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Pension contribution revenue | 9.4 | 8.3 | 8.5 | 8.5 | 8.4 | 8.4 | 8.5 |
| Assumptions | | | | | | | |
| Labour productivity growth | 0.2 | 1.8 | 2.4 | 2.1 | 1.9 | 1.7 | 1.5 |
| Real GDP growth | 2.0 | 1.0 | 2.1 | 1.2 | 1.5 | 1.3 | 1.3 |
| Participation rate, males (20-64) | 82.8 | 84.1 | 88.1 | 87.9 | 88.1 | 88.2 | 88.1 |
| Participation rate, females (20-64) | 68.0 | 71.8 | 78.5 | 78.1 | 78.5 | 78.6 | 78.6 |
| Total participation rate (20-64) | 75.3 | 78.0 | 83.3 | 83.0 | 83.3 | 83.5 | 83.4 |
| Unemployment rate | 5.0 | 3.9 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 |
| Population aged 65 + over / total population | 18.5 | 20.3 | 22.2 | 25.2 | 28.2 | 29.6 | 29.1 |

¹: Based on the budgetary projections approved by the Economic Policy Council (EPC) in January 2018

Table 7**Contingent liabilities**

| percent of GDP | 2019 |
|-------------------|------|
| Public guarantees | 6.5 |

Table 8**Basic assumptions¹**

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|-------|-------|-------|-------|-------|-------|
| Hungary: Short-term interest rate (annual average, %) | 0.1 | 0.9 | 1.5 | 1.6 | 1.6 | 1.6 |
| Hungary: Long-term interest rate (annual average, %) | 2.4 | 2.7 | 3.1 | 3.2 | 3.2 | 3.2 |
| HUF/EUR | 325.3 | 350.3 | 353.8 | 353.8 | 353.8 | 353.8 |
| World excluding EU, GDP growth | 3.0 | -2.9 | 5.0 | 3.4 | 3.3 | 3.3 |
| EU27 GDP growth | 1.7 | -7.1 | 4.8 | 1.6 | 1.6 | 1.5 |
| Growth of relevant foreign markets | 2.7 | -5.6 | 9.5 | 3.6 | 3.5 | 3.5 |
| World import volumes, excluding EU | 0.1 | -10.1 | 6.5 | 3.4 | 3.3 | 3.3 |
| Oil prices (Brent, USD/barrel) | 64.1 | 38.4 | 40.2 | 40.2 | 40.2 | 40.2 |

¹: Based on common assumptions applied in the European Commission's forecast of spring 2020.

