GOVERNMENT OF HUNGARY:

CONVERGENCE PROGRAMME OF HUNGARY

2022–2026

April 2022

Contents

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 every year. (The Member States inside the eurozone are required to prepare a stability programme, while those outside the eurozone a convergence programme.)

Hungary's Convergence Programme for 2022 provides information on the Government's economic policy objectives, details macroeconomic and budgetary trends, with particular focus on economic recovery from the coronavirus crisis and economic policy responses, and as part of medium-term planning presents forecasts for the relevant year and the subsequent four years. It analyses macroeconomic effects of two alternative scenarios pending the outcome of the Russian-Ukrainian war.

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 Convergence Programme was closed on 30 April 2022.

2. Economic Policy Objectives

In the year since publication of the convergence programme for 2021, controlling the pandemic and restarting the economy have been key goals of Hungarian economic policy. Emphasis has also been placed on job protection, retention of families' income security and support of enterprises. On the basis of available data, government measures aimed at restarting the economy have been successful: the Hungarian GDP increased by 7.1% in 2021, significantly surpassing the growth forecast (4.3%) projected for 2021 in last year's convergence programme and ranked the seventh highest growth rate among EU Member States. First, this created an opportunity for Hungary to continue pursuing the path of growth, and second, Hungary's relative level of development increased to 76% of the EU average, passing that of Portugal, which has been an EU member since 1986.

The primary objective of the current convergence programme is to further strengthen external and internal balances in parallel with maintaining the restored growth dynamics. These efforts are facilitated by Hungary's strong economic fundamentals and its recent successful management of the epidemiological crisis. Although the pandemic caused an unprecedented downturn in Hungary's GDP in the second quarter of 2020 —in contrast with the decline in 2008, which required around six years of recovery— the Hungarian economy quickly rebounded. In only five quarters, by 2021 Q2 the economy surpassed pre-COVID economic performance and was again on the track of dynamic growth. Growth is built on a diverse base; firstly, the vast majority of sectors have already exceeded the pre-pandemic levels of output; secondly, employment has reached a record high in parallel.

Although the coronavirus pandemic is becoming less of a growth risk owing to a high vaccination uptake, the Russian-Ukrainian war may negatively impact economic trends through several channels, further increasing the rise in energy and commodity prices observed during the recovery from the COVID pandemic and compounding international supply chain problems.

The programme anticipates an end to the war this year, which may calm global markets and supply chains, and ease price pressures. Within a Hungarian context, on one hand, growth is boosted by a continuing rise in real incomes, owing to government measures, while on the other hand supply side capacities were maintained during the recent period, on the other. Additionally, notwithstanding the negative effects of the crisis, the exceptionally high 27% investment rate may further rise as a result of corporate investments stemming from Hungarian economic competitiveness, projecting a basis for a dynamic path of growth.

In 2020, owing to a supportive fiscal policy, providing additional funds for restarting the economy and controlling the pandemic, the budget deficit was higher, and the decade-long decline of the debt-to-GDP ratio was temporarily interrupted. In 2021, however, the trend of both deficit and government debt indicators was more favourable than projected in last year's programme, while businesses and households accessed sufficient additional funds to dynamically boost their economic activity and consumption. Last year the GDP-proportionate deficit in the general government sector equalled 6.8%—a one percentage point decline compared to the year 2020. (Last year's programme anticipated a deficit of 7.5% for 2021.) In 2021 the debt-to-GDP ratio again decreased to 76.8% from around 80% in the previous year.

In 2021 the focus remained on controlling the coronavirus pandemic, with the protection of health and the relaunch of the economy remaining a priority. At the same time, key elements of successful government policies and programmes of recent years, such as family protection and housing, and the building of a work-based society, had to be preserved. The 2022 budget bolsters key elements of government policies of recent years, with prioritisation of family and pension policies, and its housing and renovation programme.

The Government has set the key objective of protecting families from inflationary trends, which is supported by the policy of reducing overhead costs, capping fuel prices, household interest rates and the price of certain foods.

The Russian-Ukrainian war is affecting the budget in 2022. Providing care for refugees from Ukraine is an immediate task. Funds are available for assisting people forced to leave their homes due to the war; the targeted funds may be exceeded with Government approval. The Government supports on-the-spot humanitarian action of Hungarian aid organisations aimed at easing the crisis in Transcarpathia as a result of the Ukrainian conflict. Due to the flow of refugees, additional expenditures also arise in education, health care, social assistance, and employment.

On the basis of faster than planned recovery, in 2022 there is less need for economic stimulus by fiscal means, therefore the Government set a 4.9% deficit target at the end of 2021, which is 1 percentage point lower than set in the budgetary act. After revision of investment decisions, expenditures are cut by around HUF 755 billion to reach this target. Amidst a deteriorating geopolitical environment, the Government remains committed to reaching the 4.9% deficit target.

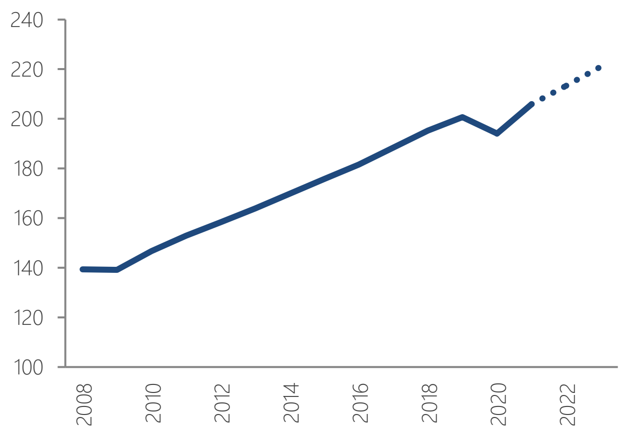
The programme projects economic growth of over 4% annually, with a continuing decline in the budget deficit and government debt in the coming years. As a result of the above, the deficit will decline to 1%, debt to 63.1% by 2026.

3. Macroeconomic Processes and Forecast

3.1. External Environment

In 2021 the global economy grew by 6.1%, indicating a strong rebound after the decline in 2020, with output exceeding the level in 2019 by 2.6%. Although the number of registered coronavirus infections increased last year over the previous period, the pandemic's restraining effect on the economy was more subdued as a result of more targeted measures and vaccine efficacy. Recovery, however, was significantly hampered by commodity and parts shortages caused by resurging demand and the long-term impairment of global supply chains, which affected the automotive industry most severely through semiconductor shortages, on the one hand, and resulted in significant inflation, on the other.

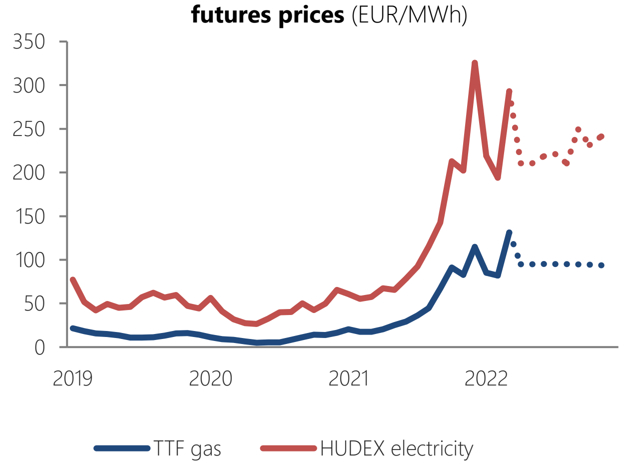
Figure 3.1: Global GDP developments
(2000 = 100)



Source: IMF, Fitch Ratings, calculations by the Ministry of Finance

Within the context of economic policies supporting recovery from the coronavirus shock, the supply side responded to strong demand pressure with significant delay, contributing to an inflationary global environment. The rise in energy and commodity prices from the second half of last year is also feeding global inflation, increasing producer prices, which in turn passes through to consumer prices as well. As a result, in most developed and developing economies, recent levels of inflation have significantly exceeded central bank targets. Amidst accelerating global inflationary trends, the Russian-Ukrainian war is generating further inflation.

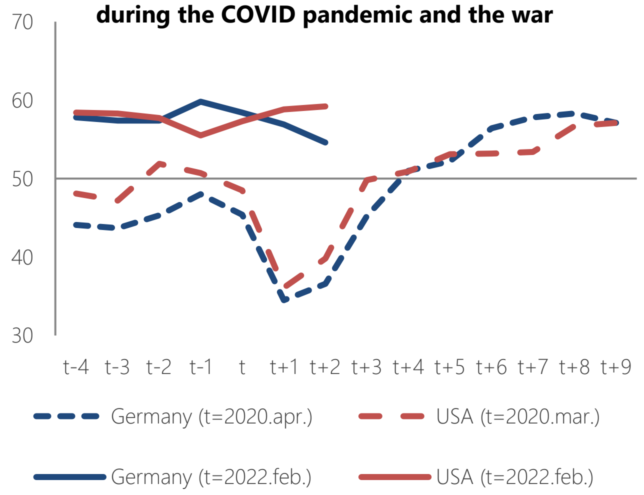
Figure 3.2: TTF gas and HUDEX electricity futures prices (EUR/MWh)



Source: Thomson Reuters

The growth paths just resuming after the pandemic are threatened by the recent escalation of Russian-Ukrainian conflict, especially in Europe. The war and the imposed sanctions have generated an immediate and significant negative impact on global money and commodity markets. Beyond the sharply rising cost of Russian energy imports for the European Union, supply chains are also significantly affected. For the European industry, the war has disabled or rendered uncertain imports of essential raw materials and commodities from the region, which has led to rising producer prices in many cases, and even to the potential short-term shutdown of production. It is also worth noting, however, that based on the purchasing managers' index, sentiment among manufacturing companies worsened significantly less compared to the first wave of the COVID virus. Although the German value steadily declined in recent months, it still exceeds the 50-point psychological threshold, above which business sentiment is considered to be optimistic.

Figure 3.3: The purchasing managers' index in the manufacturing industry during the COVID pandemic and the war



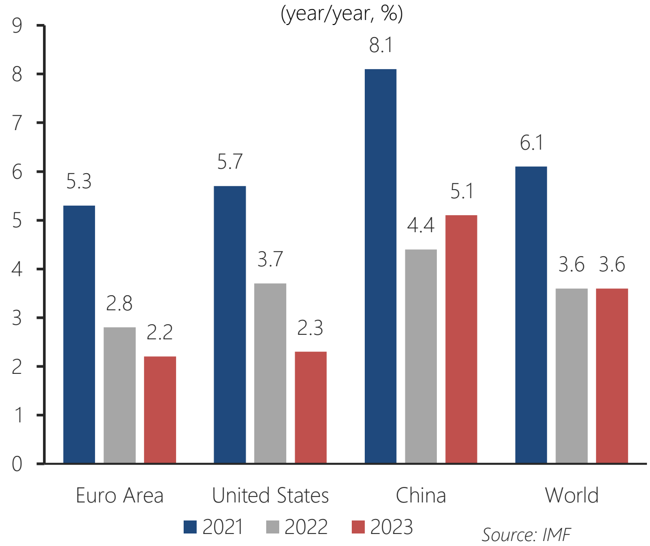
Source: Investing.com

Last year the Eurozone's economy increased by 5.3% and the unemployment rate also remained at record low levels. Recovery, however, was not steady. Although immunisation in the region proved to be successful, waves of the coronavirus pandemic limited the performance of certain service sectors and global parts shortages also hampered industry in the long term. The rate of inflation in the Eurozone has also increased to levels not seen in decades, further aggravated by the consequences of the Russian-Ukrainian war. Member States are attempting to ease the impact of inflation – particularly that of energy sources – on households and companies partly by regulatory and partly by fiscal means. Under these conditions, the sharp rise in the price of energy may significantly increase import costs in countries of the European Union, potentially leading to a 4–4.5 percentage point decline in the GDP-proportionate foreign trade balance of the European Union in 2022. Additionally, managing the flow of refugees from Ukraine—unprecedented since World War II—may increase government expenditures but may also expand the supply of labour in the region in the medium term.

The economy of the United States vigorously rebounded in 2021: with a growth rate of 5.7%, the highest since 1984, it has been outperforming the European Union for the fourth consecutive year. Recovery is attributable to the substantial rise in fiscal expenditures and a supportive, low yield environment. Due to economic stimulus policies, the central bank's channelling of additional liquidity, resurging demand, and supply side constraints, however, inflation reached levels last observed in the early 1980s. Although the energy supply of the United States is significantly less dependent on external factors than EU Member States, persistently high oil and commodity prices stemming from the Russian-Ukrainian war also add to inflationary pressures in the U.S. The Federal Reserve is expected to incrementally and significantly increase interest rates to dampen demand and to thereby halt inflation, which analysts expect to definitely reduce growth prospects and may even drive the world's biggest economy into a recession.

Figure 3.4. IMF April GDP forecast

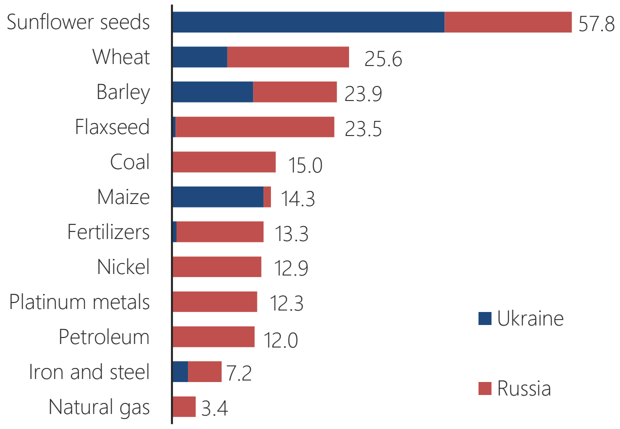
(year/year, %)



Source: IMF

In 2021 the Chinese economy grew at an annual rate of 8.1%. Growth is primarily attributable to dynamic exports, but in contrast with western countries, internal demand grew at a slower rate; in fact, household consumption still falls short of levels measured in 2019. The overheating construction sector arose as a growth and financial risk last year, with global economic implications. Although the government measures successfully cooled the overheated real estate market, the related downturn in the construction sector significantly cut growth for the second half of the year. In light of the coronavirus pandemic, it became clear that the industrial output of the world's largest exporter plays a key role in the global supply of parts. Resurging cases of coronavirus infections in the country early in the year have again led to shutdowns in production under a zero-COVID strategy, which may further throttle recovery of global supply chains.

Figure 3.5: Export shares of Ukraine and Russia in world exports of certain products (2020, %)



Source: ITC, MoF

In response to high inflation, regional central banks and the Fed have begun an interest rate hike cycle, while the ECB is expected to raise the key interest rate in the second half of this year. First, higher interest rates may curb private sector expenditures, and especially stifle investments. Second, the global level of government debt may significantly increase as a result of fiscal incentives offsetting negative effects of the coronavirus pandemic, which entails greater credit burdens amidst rising interest rates, further limiting fiscal space. A similar effect is also present in the heavily indebted part of the private sector. As a result of these factors, growth in the North Atlantic regions may slow down considerably. Looking forward, phasing out fiscal stimulus packages, high inflation eroding incomes, monetary tightening measures, worsening external economic trends attributable to the Russian-Ukrainian war, and the risk aversion of international money markets are less likely to support growth in Hungary.

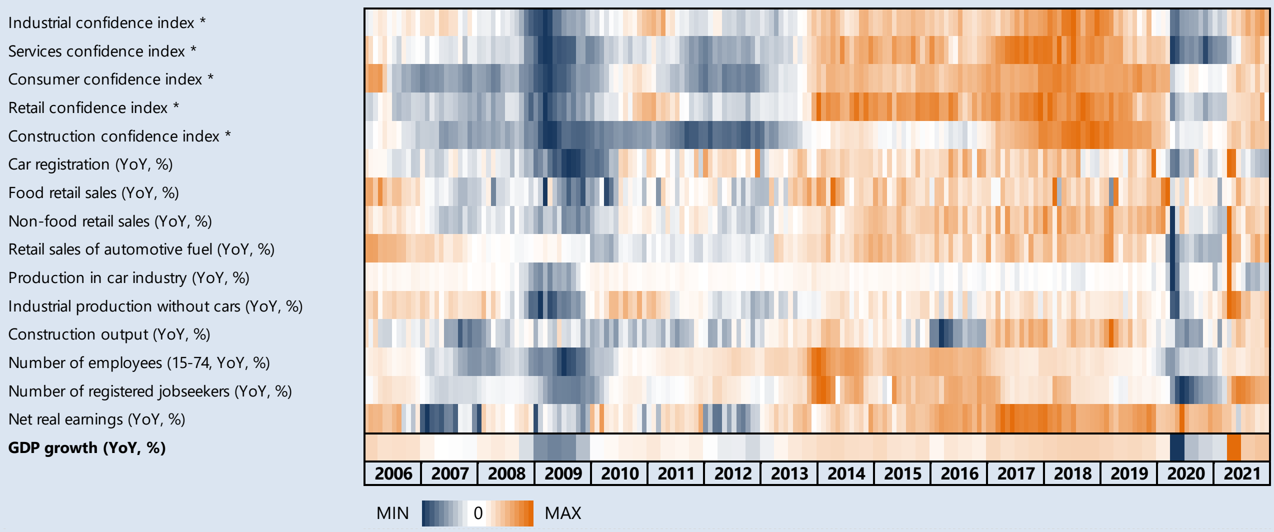
Box 1: The heat map of Hungarian economy also affirms rapid economic recovery following the slump caused by the COVID pandemic

The effects of the 2008 financial crisis and the 2020 COVID pandemic on Hungarian economy varied significantly, which are attributable to a number of factors beyond the nature of the crisis. At the time of the 2008 crisis the Hungarian economy was very vulnerable with one of the poorest employment market indicators in the European Union. Also the Hungarian growth increasingly lagged behind the regional competitors, with a high balance of payments, budget deficit and rising government debt. The downturn was aggravated by a jump in foreign currency-denominated loan instalments. 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.

In contrast, Hungarian economic fundamentals were significantly stronger before the outbreak of COVID pandemic. From 2013 Hungary was on the path of economic growth, resulting in dynamic expansion that placed Hungary among the fastest growing Member States in the EU. Unlike in previous years, fast growth was achieved within a healthy and balanced structure, without accumulation of 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, it was ensured primarily by the competitive business and tax environment, and by outstanding investment performance boosted by the Government’s successful incentive measures. Owing to the above factors, in early 2020 the COVID crisis struck a significantly more resistant, balanced economy.

The heat map of the Hungarian economy shows the main macroeconomic indicators, with shades of orange indicating positive changes in terms of GDP growth and shades of blue showing negative changes, depending on the degree of change. In relation to all variables, the colour scale shows annual changes between the own minimum and maximum values. Among the range of variables, in addition to production, service and labour market statistics, confidence indices are also used, each of which has a direct or indirect impact on economic performance.

Heat map of the Hungarian economy



** Difference from the long-term average index in percentage points*
Note: Reversed colour scale for number of registered job-seekers.
Source: HCSO, ESI, ACEA, MNB, NES, MoF calculation

The heat map effectively illustrates how recovery was significantly faster after the COVID pandemic than after the 2008 recession. It is clear that after 2008, effects of the crisis continued to hamper the economy for years. The confidence indices stayed in the negative range for a long time, and retail trade also underperformed for years as a result of growing caution of households. Moreover, in 2012 the spill over of recession in the European Union once again diminished Hungarian economic performance. As a result of successful economic policy measures adopted from 2013, however, the economy began to grow as shown by the indicators. The rise in employment had begun earlier, due to the labour market decisions of the Government. The construction sector, however, regained its momentum only later based on the 2015-2016 government measures aimed at the housing market.

In contrast, in 2021, one year after the outbreak of COVID pandemic, a number of indicators showed a dynamic rebound. Last year the confidence indices turned into positive figures, affirming projection of positive growth prospects. Retail segments continued to grow in the long term since the spring of 2021; the steady increase in net real wages during the pandemic contributed to these trends. In relation to the above, the sharp improvement in labour market indicators since April 2021 is in no small part attributable to the Government's economic protection measures aimed at job preservation and the creation of new jobs. The construction sector has also rebounded since May of last year, where housing investments owing to the expanded housing measures and the efficient use of EU funds have created stable demand in the sector. Total output in the industrial sector has been moderated by the automotive industry in recent months, due to global semiconductor shortage, while production in other industrial sectors showed strong recovery from the end of 2020. Thanks to the above trends, the Hungarian GDP grew at an unprecedented rate in 2021.

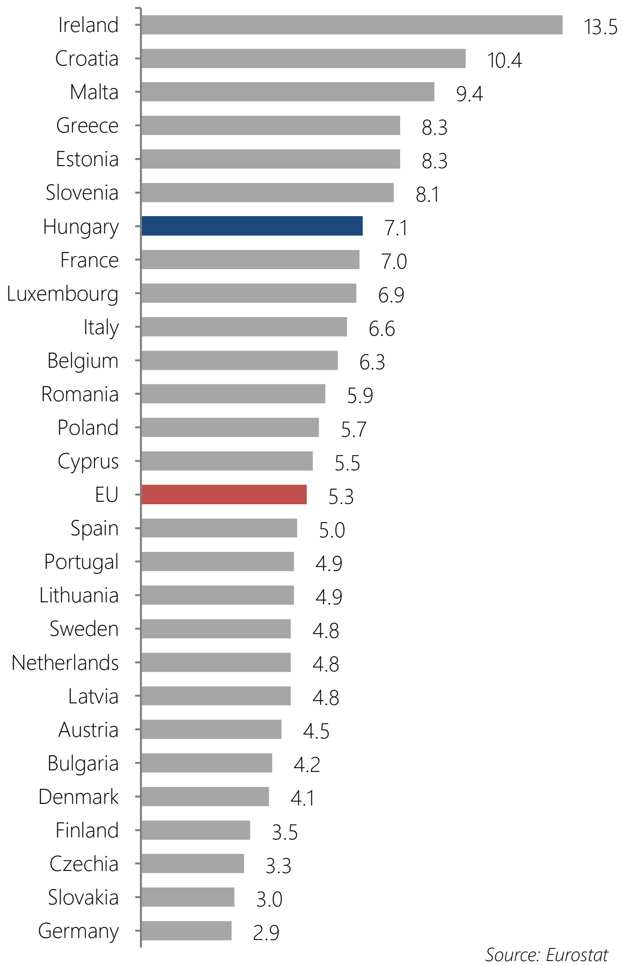
The positive economic fundamentals allowed the Government to adopt a set of measures of unparalleled scope in the history of Hungary to respond to the economic effects of coronavirus pandemic. The spill over of downturn in the affected sectors and the reduction of capacities were prevented by the inflow of significant resources into the economy under the Economic Protection Action Plan, which helped businesses, households, and employees alike. As a result, although the pandemic caused an unprecedented downturn in Hungary's GDP in 2020 Q2—in contrast with the decline in 2008, which required around six years of recovery—the Hungarian economy quickly rebounded.

In only five quarters, by 2021 Q2 the Hungarian economy surpassed economic performance before the COVID crisis and was again on the track of dynamic growth.

3.2. COMPONENTS OF GROWTH

The global coronavirus outbreak in 2019 brought major challenges for all around the world, including Europe. However, owing to the successful economic protection measures of the government, the rapidly recovering Hungarian economy grew at one of the highest rates in the EU in 2021. The 7.1% year-on-year growth significantly surpassed the EU average and is also the highest among the V4 countries (*Figure 3.6*). As a further result of the rapid recovery, Hungary's relative level of development increased to 76% of the EU average, surpassing Portugal and advancing to the 20th place in the EU ranking.

Figure 3.6: GDP growth in the EU, 2021
(percentage)



Source: Eurostat

The growth performance is built on a diverse economic base; the vast majority of sectors have already exceeded their pre-pandemic levels of output. This is in part attributable to the Government's effective response to the pandemic ensuring the country's operability and thereby the greater resilience of the Hungarian economy to the pandemic.

Services contributed the most to GDP growth in 2021. As a further positive development, industrial production also increased notwithstanding disruptions in international supply chains, which also demonstrates the international competitiveness of the sector.

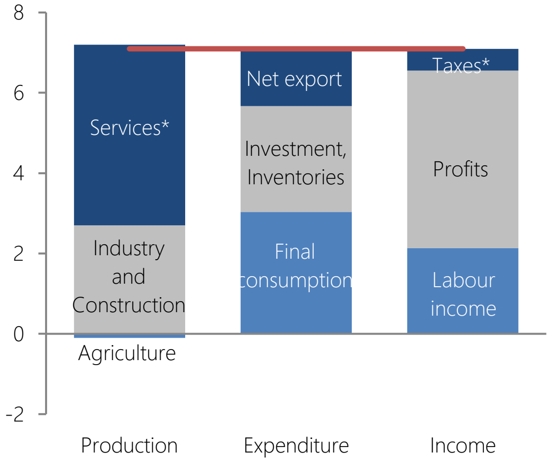
Construction showed rapid growth in recent years; last autumn even the record volumes of 2019 were surpassed. Overall, from the production side, agriculture contributed -0.1%, while Industry (1.9%), Construction (0.8%), Services (3.5%) and Net product taxes (1.0 %) all had positive growth contributions to the GDP.

When looking at growth components in terms of incomes generated within the economy, real wages continued to increase during the recovery cycle starting in 2020 Q3, and reached record-high levels in 2021. Wage dynamics were significantly boosted by the retention of qualified workers and tight labour market conditions. The increase in corporate operating profits considerably contributed to growth, indicating the recovered earning power of companies operating in Hungary *(Figure 3.7).* Tax burdens were also eased as a result of economic protection measures, as reflected by the decline in the ratio of tax revenues to total income.

From the expenditure side, consumption was the primary engine of growth, attributable to record high employment, growing real wages and income-enhancing policy measures. GDP growth was also supported by investments, especially corporate investments.

It is worth to note that net exports also positively contributed to Hungarian economic growth, owing to the increase in export of goods stemming from rising production and recuperating service exports related to the gradual return of foreign tourists.

Figure 3.7: Decomposition of the 7.1% GDP growth in 2021
(percentage point)



* *Including net product taxes* *Source: HCSO, MoF calculation*

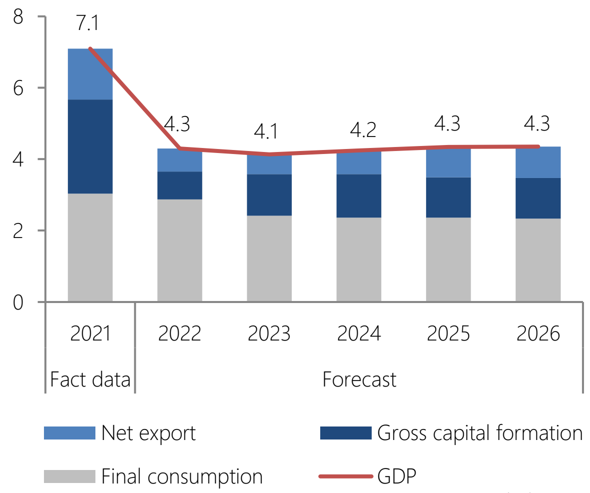
Although the coronavirus pandemic is becoming less of a growth risk, the Russian-Ukrainian war may negatively impact economic trends through several channels, further increasing the rise in energy and commodity prices already observed during the recovery from the coronavirus crisis, threatening the smooth operation of international supply chains and worsening business outlook in general. Additionally, monetary policy decisions aimed at curbing high global inflation may dampen global economic growth.

Going forward, growth rests on several pillars. First, positive labour market conditions and the roughly 20% increase of the minimum wage ensure rising real incomes even in a temporarily higher inflationary environment, which is bolstered by the Government's new measures, such as the personal income tax exemption of young people under the age of 25, reintroduction of the 13th month pension, and tax refunds of families with children. As a result, consumption may further increase, with reserves for growth provided by household credit volumes that are low in EU comparison and a high saving rate.

Second, the rate of investment that was already dynamic before the crisis in European comparison remains one of the highest among EU countries driven by business confidence in Hungary, the Government's active investment promoting policies and large corporate investments in the country, reaching record heights in terms of value. Going forward, the substantial capacity expansion in progress and the attractive business environment project a rise in corporate investments. Also due to available subsidies, housing investments may also increase, while the investment rate of the general government may stay around 5-6%, which ranks Hungary among the leading EU countries.

Third, as part of a favourable trend, the continuing rise in exports may be further supported by new capacities created through implemented large investments, on the one hand, and the recovery of international freight transport and tourism, on the other.

Figure 3.8: GDP growth: demand side
(percentage point)



Source: HCSO, MoF calculation

As a result of these developments, if the baseline scenario materializes, GDP growth of 4.3% is likely this year, and growth may continue to exceed 4% in the coming years as well. Growth might remain overall balanced, as potentially positive contributions from consumption, investments, and foreign trade contribute to the expansion. (*Figure 3.8*).

Box 2: Economic development indicators, 2010-2021

Between 2010 and 2021 Hungary's economy underwent a substantial transformation primarily as a result of the shift in economic policy at the beginning of the decade. The unsustainable growth model characterising the period before 2010 was replaced with development supported by internal demand and employment. The macroeconomic indicators reflect solid performance in the past 12 years.

The Hungarian GDP volume exceeded its level of 2010 by 37.6% at the end of 2021. GDP per capita at purchasing power parity increased from 66% of the EU average in 2010 to 76% in 2020, indicating a significant improvement in the level of relative development. Labour productivity in Hungary is dynamically improving following labour market reforms.

Hungary has also achieved major improvements in the competitiveness of its tax scheme. In the most recent international tax competitiveness ranking Hungary is ranked 13th among OECD countries, overtaking Austria, Slovenia, and the United States. Taxes on work have undergone significant reform in the past decade; as a result the tax wedge decreased by over 7 percentage points to 41.2% from 2016 to 2022. Based on the agreement with the Standing Consultation Forum of the Private Sector and the Government (PGF), employer taxes have decreased from 28.5% to 13%, and the number of tax types has also been reduced. Beyond the reduction of taxes on wages, the corporate income tax has been cut to 9% since 2017, which is unique in the EU. Thus, the Hungarian tax scheme is providing increasingly positive conditions for investments, companies, and employees, which is also reflected by the performance of the economy.

Hungary's debt ratio continuously declined in the eight years prior to the pandemic. As a result of the economic measures enacted in response to the coronavirus crisis, the indicator's value temporarily increased in 2020, but declined again in the following year. With regard to debt financing, as a positive development, the external exposure of Hungarian debt has significantly declined in the past decade, as the ratio of non-residents within total general government debt has decreased from 65% at the end of 2011 to 32% at the end of 2021, while the ratio of foreign currency fell from 53% to around 20%.

The competitive business and tax environment, and the Government's investment promotion activity also contributed to the increase of the Hungarian investment rate from 20.1% in 2010 to the current 27.1%. With this result Hungary is ranked second among EU countries. As indication of the healthy structure of development, the higher rate of investment is attributable to the combined performance of all three sectors. As a further positive development, investments in the corporate sector grew at the highest rate, which ensures the sustainability of economic growth.

The financial position of households has also improved significantly; their disposable income increased at a rate above the EU average between 2010 and 2021. The income structure of households is also showing improvement. The ratio of income from work, namely, has steadily increased; it accounted for 65.3% of total income in 2010 and 74.6% in 2020. Consumption took a dynamic turn in 2013 and in 2020 it was 41% higher at real value than in 2010. The saving rate of households also stabilised at a high level in international comparison; as a result, consumption increased in parallel with a preserved financial balance, in contrast with the period before 2008. Household savings more than tripled from HUF 19,000 billion in 2010 to HUF 62,000 billion at the end of 2021, indicating an increase of 1.5 times at real value.

In 2010 the Government aimed at creating 1 million new jobs in the next 10 years. By 2021 the number of employed persons had reached 4.7 million from 3.8 million, thus the 57% employment rate of people aged 15-64 in 2010 rose to above 73% last year, which is an outstanding result in EU comparison. The unemployment rate decreased from 10.9% 12 years ago to 3.7% by the end of 2021, despite the crisis caused by the coronavirus. The ratio of households without a member with employment already fell below the EU average from the second half of the decade. Initially public employment contributed to improving the indicator, but its decrease was subsequently driven by positive changes launched on the primary labour market. The job prospects of freshly graduated 20–34-year-olds have significantly improved, and there are also notable results in the employment of women as a result of family-friendly economic policies. While the employment rate for women merely approximated 60% in 2010, it exceeded 68% last year.

The positive labour market trends led to significant improvements in relation to income. By 2021 both gross and net monthly wages more than doubled since 2010. Thus, in the typically low inflationary environment of the past decade, the rise in real wages exceeded 60% during the reviewed period. The poverty rate has been decreasing for years in Hungary; according to data for 2020, the at-risk-of-poverty rate in Hungary was the fifth lowest among EU Member States.

Favourable trends in corporate investment contributed to the highest increase in the number of employees in R&D since 2010 in European comparison; in 2020, namely, 42 thousand people worked in the sector – twice as many as a decade earlier. This change is mainly attributable to the foreign-owned R&D centres in the manufacturing industry. By 2020 GDP-proportionate R&D expenditures increased to 1.61%, which equalled 1.13% in 2010. Although Hungary increased its innovation performance as well, together with other Central Eastern European countries it is still ranked among moderate innovators in EU comparison.

The above indicators reflect the positive shift of the Hungarian economy, strengthening of the economy's productivity and competitiveness, and the improved living conditions of Hungarian households.

ECONOMIC INDICATORS	2010	2021
EMPLOYMENT RATE (%)	**57.0**	**73.1**
GROSS WAGES (THUF)	**203**	**439**
EMPLOYER WAGE COSTS (%)	**28.5**	**13**
INVESTMENT RATE (GDP %)	**20.1**	**27.1**
RELATIVE LEVEL OF DEVELOPMENT (%)	**66**	**76**
FX SHARE OF GOVERNMENT DEBT (%)	**53**	**20**

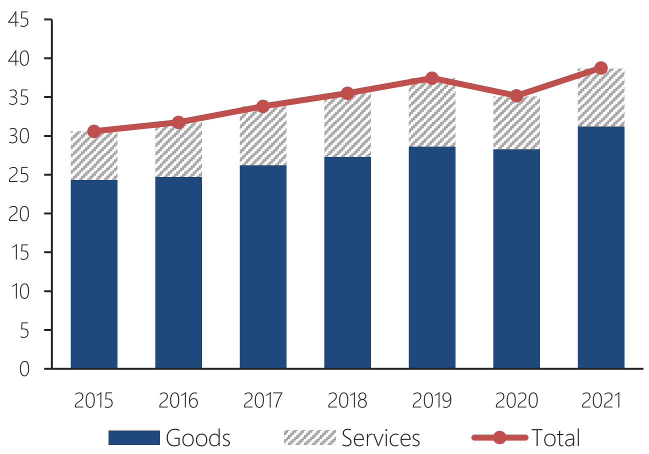
Source: Eurostat, HCSO, MNB

3.2.1. Foreign trade

The downturn in foreign trade caused by the coronavirus pandemic rebounded in the first half of 2021 in parallel with the upturn in industrial output. The dynamically growing export of goods successful offset the epidemiological restrictions and slumping service exports caused by cautious considerations that limited travel. From the summer of 2021, however, lower industrial output caused by global supply chain disruptions diminished the export performance. The volume of exported goods, however, still surpassed that of 2020 by 10.4% and that of 2019 by 9.1% (*Figure 3.9*). In terms of value, in 2021 all main groups of traded goods indicated growth over the previous year.

The export of services continued to recover in parallel with the improving epidemiological situation across Europe, particularly by relying on sectors most severely affected by the pandemic, such as tourism and transport services. The export of services dynamically grew by around 9.8% over the year 2020, although it still falls short of the volume for 2019 by 15.4%.

Figure 3.9: Development of export volumes
(2015 prices, thousand billion HUF)

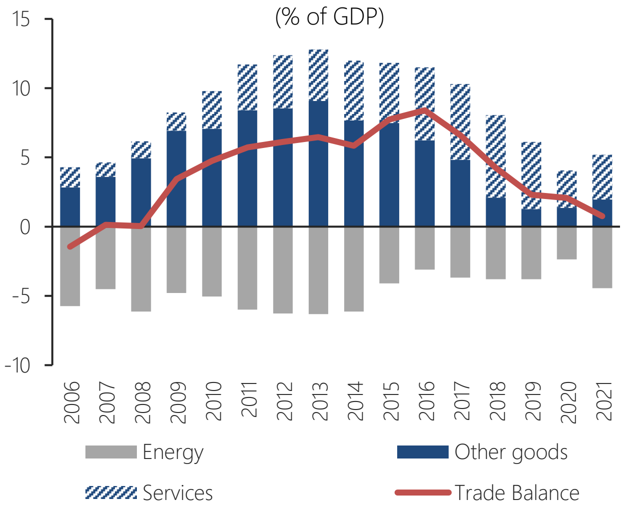


Source: HCSO, MoF

The volume of import of goods has increased by 8.8% over the previous year. Its value, however, increased significantly by around 21%, which is mainly attributable to the sharp rise in the cost of energy imports since the summer of last year. Due to the rise in energy prices, in 2021 the value of imports rose by around HUF 1,100 billion – 2% of the GDP – compared to the year 2019.

Although external demand successfully recovered from the coronavirus crisis, supply constraints also hindered Hungarian foreign trade. As a result, the trade balance worsened from the summer of 2021, hence the foreign trade surplus further declined in the whole of the year *(Figure 3.10).* This is mainly attributable to the fall in automotive exports from the second half of last year, caused by capacity limits, and to the downturn in the terms of trade accompanied by the significant rise in energy imports. The rise in the export of services in parallel with reopening, however, partly offset the trade deficit. Foreign trade still accounted for 1.4 percentage points of GDP growth.

Figure 3.10: Balance of external trade in Hungary
(% of GDP)



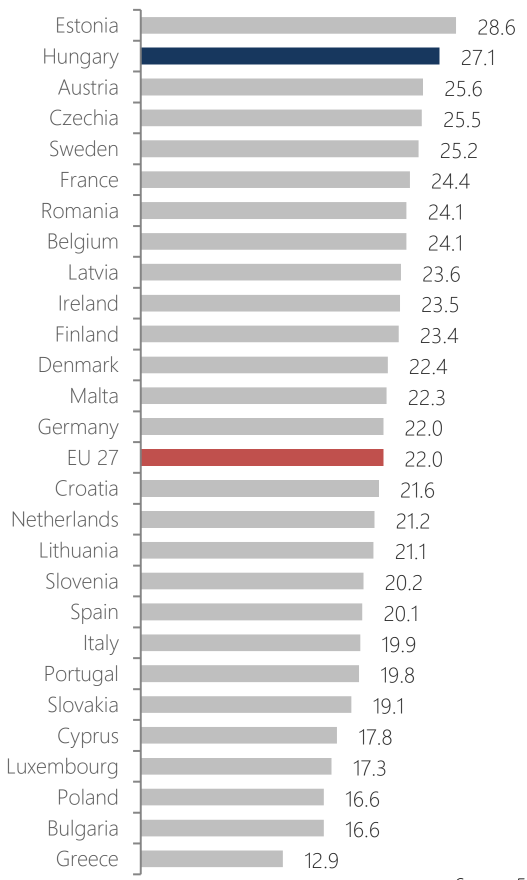
Source: HCSO, Eurostat, MoF

As regards the foreign trade trends of Hungary, due to the Russian-Ukrainian war, commodity shortages stemming from imposed sanctions and the worsening external environment are major constraints. For this reason, the volume of exports may increase less dynamically, while surging commodity and energy prices are worsening the terms of trade. Although the balance of services may improve mainly with the rebound of international transport and tourism, the foreign trade balance may temporarily show a deficit. In the medium term, however, the recently announced large scale investments in the value of around HUF 4,400 billion are a cause for optimism, significantly supporting a rise in exports and potentially generating a foreign trade surplus once again.

3.2.2. Investments

In 2021, around HUF 15,000 billion worth of development was realised in Hungary, resulting in a 5.9% increase in investments year-on-year. Nevertheless, developments have increased by a total of 71% since 2010, thus the Hungarian investment rate rose from 20.1% in 2010 to 27.1% in 2021. With this result Hungary is still ranked second among EU countries.

Figure 3.11.: Investment rates in 2021
(in % of GDP)

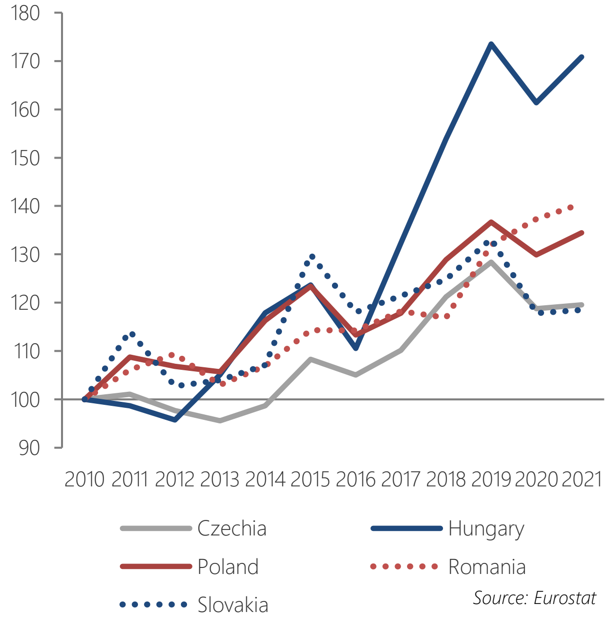


Source: Eurostat

The trends are supported by the Government's economic protection measures aimed at restarting the economy after the coronavirus pandemic, sustaining success achieved on the export markets, job retention and the creation of new jobs. The investment projects implemented through such measures significantly contribute to growth directly and later on through the gradual increase in production.

In evidence of this, the increase in investments last year was primarily linked to the 8% rise in corporate developments. Within the above figure, investments increased by 9.5% year-on-year in manufacturing, the largest sector accounting for a quarter of total investment, with a double-digit growth in mechanical engineering, automotive, metals, food and textile sub-sectors. In addition, companies in service sector also increased their investments dynamically: projects implemented in trade exceeded the activity of previous year by 18%.

Figure 3.12.: Gross fixed investments in regional comparison (2010=100)

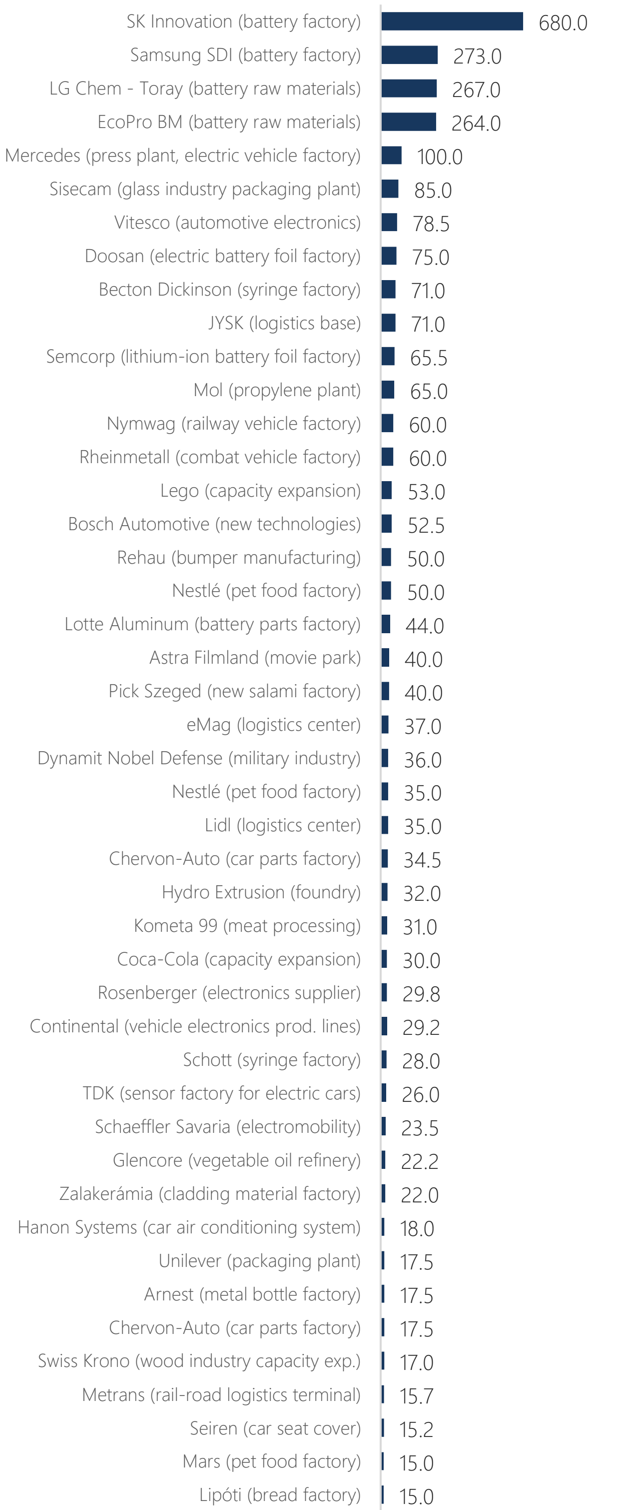


Source: Eurostat

Corporate development projects announced after the outbreak of coronavirus pandemic are expected to increase in the coming quarters. Although, with the escalation of geopolitical tensions there is a future risk that amidst an uncertain outlook and supply chain disruptions certain projects may take longer to implement than planned, and temporarily fewer new investment decisions are taken in the short term. Development projects of large companies announced since early 2020 are valued at around HUF 4,400 billion, amounting to over 7% of Hungarian annual GDP, which continues to evidence Hungary's outstanding ability to attract capital. In the medium term, the additional capacities developed through these investments could increase Hungary's export performance by about HUF

13,000–22,000 billion annually, amounting to 27-45% of current annual Hungarian exports of goods. All in all, in the coming years, the above investments can generate a total GDP surplus of 13-18 percentage points.

Figure 3.13.: High-volume investments announced since early 2020 (HUF billion)



Source: MoF collection

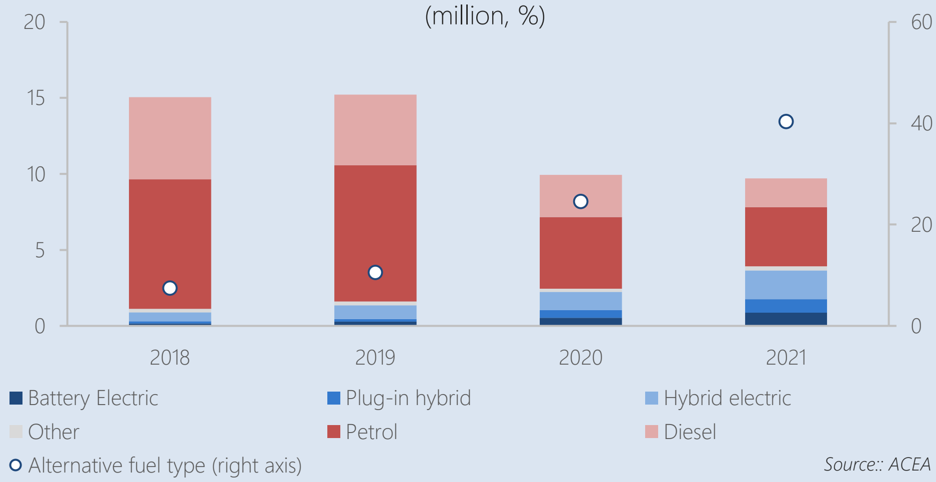
Aggregate figures for projects managed by the Hungarian Investment Promotion Agency (HIPA) also underline the positive trends: in 2021 the Government's investment promotion policy directly contributed to the implementation of 422 projects, as a result of which investments worth EUR 5.9 billion will be realized in Hungary, creating 13.9 thousand jobs. Within that, 96 large-scale FDI projects worth EUR 5.3 billion were also approved last year, which will create 12 thousand new jobs in the coming period. Additionally, the successful tenders of 326 medium-sized and large companies participating in the support scheme related to restarting the economy will result in investments valued at EUR 0.6 billion.

The results of investment promotion are also reflected in the large-scale projects of industries with development potential, such as electromobility (*Box 3*). Last year the production of batteries accounted for over one half of total investment value (51.9%), followed by the traditionally strong automotive industry, attracting the second highest amount of FDI (12.5%), with the food industry ranked third (11.1%). A favourable trend continued in 2021, as developments with high value added – e.g. business service centres, infocommunication investments and R&D – are also increasing in number. Concerning the composition of foreign direct investment, expansion from the Far Eastern is also prominent: Asian investors increased their share to 60% of the entire annual investment volume. Also, a considerable number of projects of a significant value arrive from Germany and the USA.

Box 3: Hungary is in a prominent position in Europe considering the production of batteries

The more stringent pollutant emission standards in the European Union have a considerable impact on the automotive industry. The production of batteries plays a key role not just in the renewable energy segment but also in the manufacturing of electric vehicles. Thanks to innovation, electric vehicles are presenting a more and more affordable alternative which may reduce oil dependency and the use of fossil fuels and thereby—in particular in the vicinity of residential environments—the emission of pollutants, too. This underpins the fact that, based on data from European Automobile Manufacturer's Association (ACEA), while the ratio of vehicles with alternative fuel types among new cars registered in 2019 was a mere 10%, the same figure had increased to more than 40% by 2021.

Newly registered passenger cars in the European Union by fuel type
(million, %)

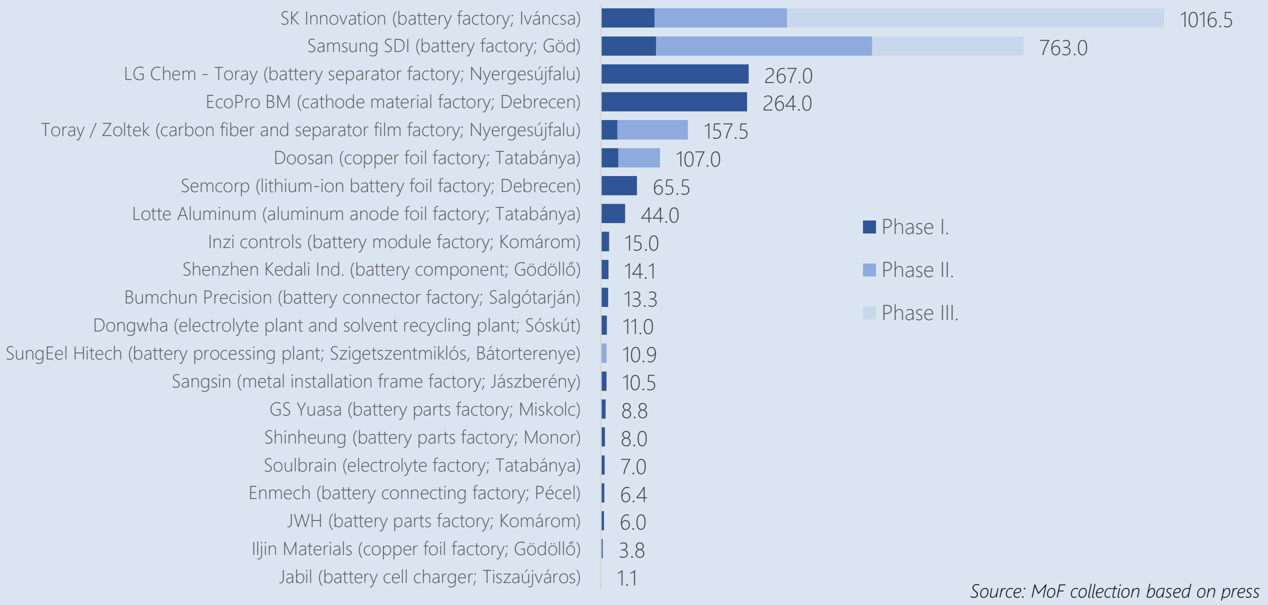


Source:: ACEA

Battery cells amount to nearly 40% of the value added during the manufacture of electric vehicles, this is why it is preferable that the European manufacturing capacity of lithium-ion batteries shows the highest growth rate globally. According to the most recent forecasts, the share of the continent in this global production segment will have risen to 33% by 2030 from 9% in 2020. Currently there are several high-volume battery cell manufacturing plants under construction in Europe, and although in 2020 the continent had a manufacturing capacity of approximately 50-60 gigawatt hours (GWh), manufacturing plants in Europe will be capable of producing a total of 410-480 GWh battery capacity by 2025 based on estimates. This capacity will mean approximately 5.3 million all-electric cars. Based on prognosis, by 2025 nearly a quarter of the manufacturing capacities will be provided by factories in Germany. The performance of European manufacturing capacity may grow as high as 730-970 GWh by the end of the decade which will be sufficient for the production of up to 10.1 million electric cars annually.

The total value of investments to be realized in Hungary related to the manufacture of batteries will have reached HUF 2,800 billion by now. There is an especially favourable trend that several companies, after a successful first phase, have already announced the development of a second or a third phase, and typically with a higher investment value. This confirms that companies relocating to Hungary have found what they were looking for. The deepening of production chains reflects that the large investments of past period attracted several upstream developments in connection with battery production to Hungary, in a total value of more than HUF 1,000 billion.

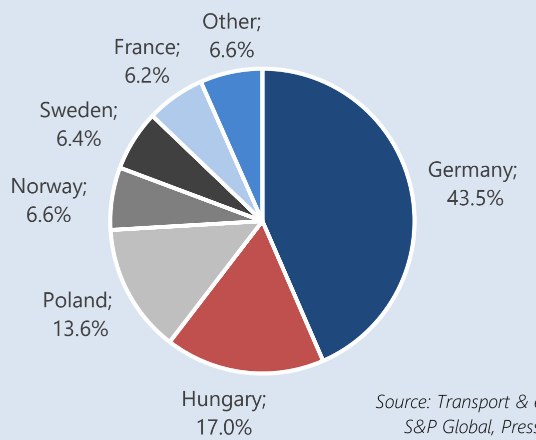
Investments related to battery production in Hungary
(HUF billion)



Source: MoF collection based on press

Based on announcements up to now, domestic production plants will acquire a significant slice of European battery sales in the coming years. SK Innovation's two plants in Komárom, and its recently announced plant in Iváncsa, will have a joint capacity of 47 gigawatt hours in Hungary, and Samsung SDI's capacity in Göd, a company also from South-Korea, will be added to this in the order of magnitude of 40 gigawatt hours. As a result of this, following the upswing of production, Hungary may represent an 87 gigawatt-hour capacity in the European battery production, thus it will have become the second largest player in the market of electric vehicle battery manufacturers after Germany.

Countries' share of expected European battery production capacity in 2025 (%)



Source: Transport & environment, S&P Global, Press information

Investments announced in connection with battery production may contribute to the growth of GDP in the order of magnitude of 1.8 percentage points. As a player at the end of the Hungarian value chain, the performance of SK Innovation and Samsung SDI will presumably have a considerable impact on export. Following the upswing of manufacturing capacities, surplus export sales of HUF 5,000-9,000 billion may be realized on average annually, adding a potential further 4-5 percentage points to economic growth. The investment projects mentioned therefore may give a one-time impetus of 5-7 percentage points to domestic GDP growth.

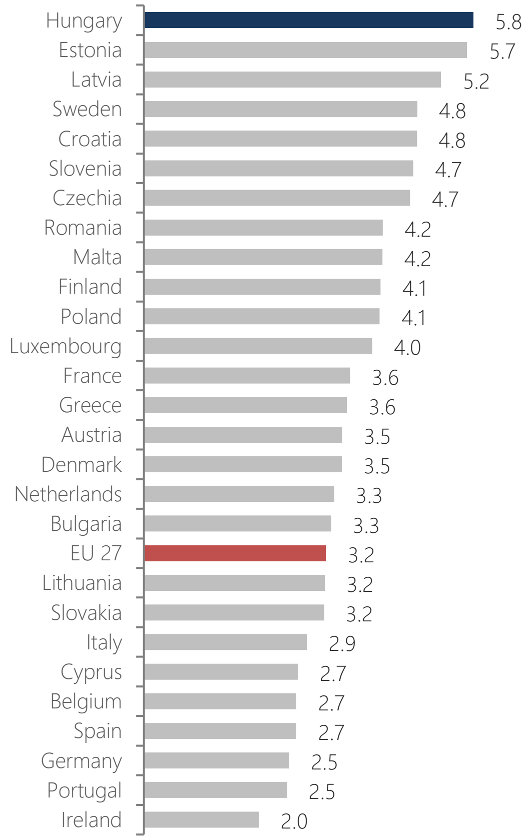
Regarding the investments of households, 2021 was throughout characterized by a surge in the desire to build, as 29.9 thousand new building permits were issued meaning a dynamic, 33% expansion year-on-year. The number of dwelling constructions, nevertheless, temporarily fell behind the outstanding performance of previous year. It may have been partly due to the increase in the price of and the shortage of construction materials, which adversely impacted mainly smaller projects. Also, developers could only slowly react to the changes in the VAT of housing, and, therefore, the large number of projects launched in 2021 - with a housing VAT of 5% - will likely be handed over in 1.5-2 years. Processes in housing construction will likely be energized by the Home-creating Programme (*see Box 4*).

During 2021, government developments worth nearly HUF 3,200 billion were implemented in the economy, leading to a 3.5% nominal increase in public investments year-on-year. Thanks to this, the domestic public investment rate of 5.8% of GDP remains at the forefront in an EU comparison. In the coming quarters, the untapped sources of 2014-2020 EU cycle may increase the government's investment performance. Looking ahead, a record amount of EU funds will be available to Hungary. On the one hand, in the period of 2021-2027, Hungary can count on EUR 22.5 billion of cohesion and EUR 11.9 billion of agricultural policy funds. On the other hand, Hungary is also entitled to a non-refundable amount of EUR 8.5 billion from the Next Generation EU funds, and a credit line of EUR 10 billion. The amount of more than EUR 50 billion available over the period 2021-2030 will on average correspond to 2.4% of GDP per year.

Overall, it can be stated that the investment rate, which is at the forefront of the EU, the ongoing large-scale capacity expansions as well as the attractive corporate environment all lay the foundations for the increase in Hungary's investment performance to remain steady over the forecast horizon.

Figure 3.14.:Public investment rates in 2021

(in % of GDP)



Source: Eurostat, MoF calculation

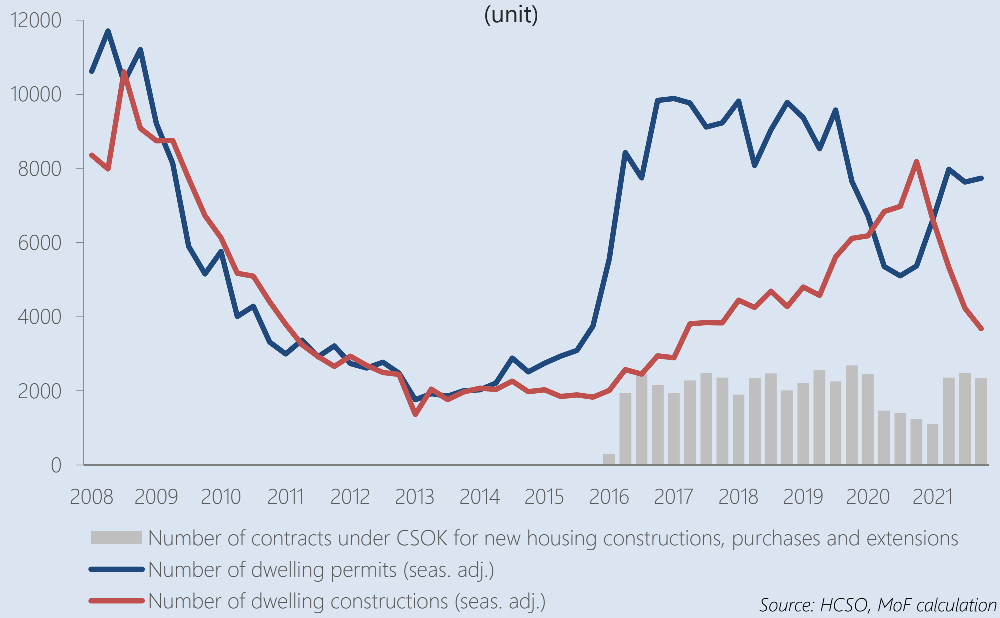
Box 4: The results of Family Housing Subsidy Scheme

In the past years, the Government adopted several measures to stimulate housing constructions on both the demand and supply side. In December 2015, among other things, a decision was made to temporarily reduce the VAT rate on housing sales to 5%, to increase the Family Housing Allowance Subsidy (CSOK) and to introduce a tax refund subsidy. Then, from 2021 onwards, the largest Home Creation Programme in Hungary to date became available to families with a further temporary decrease in the VAT on housing, included the expansion of CSOK: the subsidy can now also be used for establishing multi-generation homes; the refurbishment subsidy and a preferential refurbishment loan can both be applied for; those purchasing their homes using CSOK are eligible to full duty exemption and can apply for the refund of housing VAT.

The past six years have proven the success of the Home-creating Programme. During this period, CSOK applications from a total of 168,000 households were accepted by banks with a total amount exceeding HUF 492 billion, nearly 1% of Hungary's annual GDP. Furthermore, in the 2016-2021 period, the total amount of subsidies provided to the 151,000 households in the framework of CSOK reached HUF 448 billion. In addition, applications from 28,000 more families have been accepted since July 2019 for a total value of HUF 153 billion, and contracts have been concluded with nearly 26,000 families for a total value of HUF 141 billion in the Village Family Housing Subsidy Scheme (Village CSOK). Village CSOK grants families subsidies for buying second-hand apartments and houses and/or for refurbishing, modernizing, and expanding the purchased property in preferred small towns and villages.

As a result of Government measures, after the historical trough, the housing market was able to leave behind the shock of the economic crisis of 2008 and the sector has seen dynamic growth over the past six years. While only 7-8,000 housing units were built on average during the 2013-2015 period, despite the coronavirus crisis the number of dwelling constructions during 2020-2021 exceeded 24,000 on average.

Trends of housing market indicators
(unit)



Source: HCSO, MoF calculation

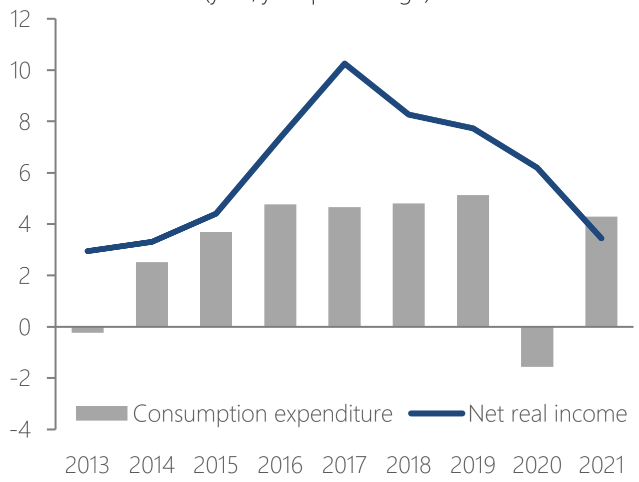
Based on this, the announced decisions aimed at creating housing together had a sizeable impact on economic growth. During the past six years, altogether 111,000 new homes were built in the country, of which 49,000 were created in the framework of Family Housing Subsidy Scheme. The value added of housing segment as a share of GDP in the 2016-2021 period was around 0.7% on an annual average, to which real estate under the CSOK contributed at a rate of 0.3 percentage points. It can be established that through the housing construction the Family Housing Subsidy Scheme directly supported during the past six years the realization of a total of 1.8% of the value added in the national economy. In addition, the refurbishment and modernization of real estate under the CSOK and Village CSOK schemes added further growth impact. The renewal of housing units is also facilitated by the Home Renovation Programme, under which approximately a total of 200 thousand homes can be modernized in both 2021 and 2022. Thereby the Home Renovation Programme may increase the value added for the national economy by 0.4-0.6% in each year.

Favourable housing market processes will likely to continue in the coming period, too, which is projected by a dynamic surge in the number of building permits issued from the second quarter of 2021. All these are also favourable because the Home Creation Programme, in addition to its growth impact, also plays an important role in tackling demographic challenges by supporting childbearing in the family.

3.2.3. CONSUMPTION

Owing to employment rates reaching record highs, high wage dynamics and the support measures of the Government, the consumption of households increased by 4.6% in 2021. Total retail turnover exceeded pre-pandemic volumes as early as in June, and, by October, every major segment surpassed its respective January 2020 level, even the sale of fuel that had previously experienced the largest slump. Despite the temporary loss of dynamic due to the coronavirus pandemic, consumption levels at the end of 2021 surpassed 2019 levels by 3.6%.

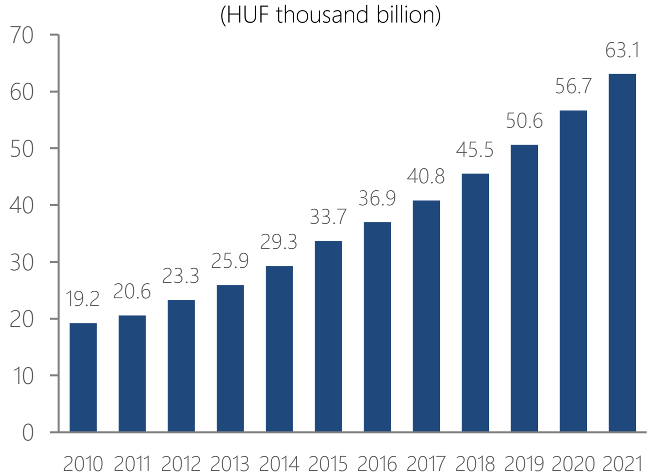
Figure 3.15: Private consumption expenditure and changes in net real wage
(year/year percentage)



Source: HSCO, MoF calculatio.

Several Government measures support the growth of consumption in 2022, too: these measures ensure that household consumption will remain a major growth driver. From January 2022, minimum wage increased to HUF 200,000 and minimum guaranteed wage to HUF 260,000. This led to a considerable increase in family subsidies tied to minimum wage and the salaries of public employees, too. Also from January, youth under 25 will not have to pay personal income tax for up to the sum of the average wage of the previous year, and, in early 2022, the state refunded the personal income tax paid in 2021 for parents raising children. For households, this meant a support of approximately HUF 680 billion. Support to pensioners will be realized by reintroducing the 13th month pension. In addition to this, public sector employees also received a significant pay rise: including medical specialists, doctors and professionals working in primary care, those employed in daycare, social and cultural sectors, teachers, and members of the military and law enforcement. The latter received a benefit in the amount of six months' salary in one sum under the title 'weapon allowance'.

Figure 3.16: Net financial savings of households
(HUF thousand billion)



Source: MNB

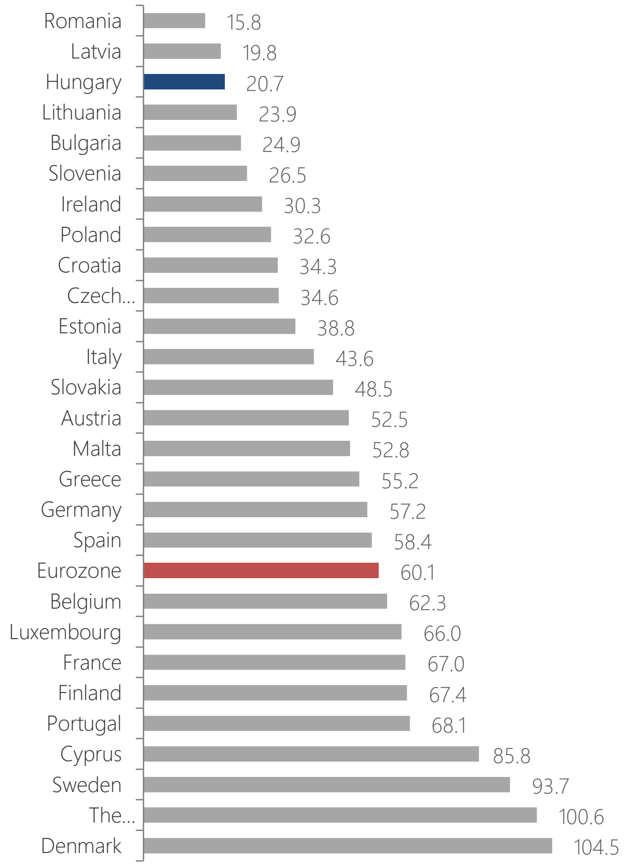
Owing to measures implemented by the Government, households receive nearly HUF 1,800 billion surplus income in 2022. The largest proportion of this will likely boost consumption, and a smaller proportion will, on the one hand, increase household savings or will be used in housing investment or real estate refurbishment. As a result of Government measures directly increasing the income of households, the growth performance of the economy in 2022 may be altogether 1.6 percentage points higher, in which the expansion of consumption-related expenses of households may be approximately 4.6 percentage points higher. Parallel to this, because of favourable spillover effects and the consumption smoothing behaviour of households, the years beyond 2022 will also take on a higher growth path.

The change in the amount of loans in households also supports growth. The amount of credit disbursed last year showed an increase of 15 percent. The dynamic expansion of the amount of loan was primarily supported by loans available under the Family Housing Scheme and the increase in prenatal baby loans: the latter already amounted to 17 percent of retail loans in December. The favourable conditions of these products do not jeopardize the solvency of users even in an increasing interest environment. To support housing loans, the Government fixed the interest rate of retail mortgage loans in December 2021. The interest rate freeze prevents a potential increase in instalments, thereby protecting households from unexpected expenditure and reinforcing their purchasing power. It can also be concluded that the loan-to-GDP ratio of households is lower than the average of both the countries in the region and the euro area. On the one hand, this mitigates burdens increasing due to rising yields, and the room for a potential growth of the amount can support an upward trend.

Looking ahead: in addition to Government measures, high employment and a two-digit average increase in wages also ensure an increase in real wages, and, therefore, in consumption. As a consequence of this, the dynamic growth of consumption continues to substantially contribute to the increasing performance of the Hungarian economy.

Figure 3.17: GDP-based household loans in EU comparision

(household and non-profit sector, Q4 2021, %)



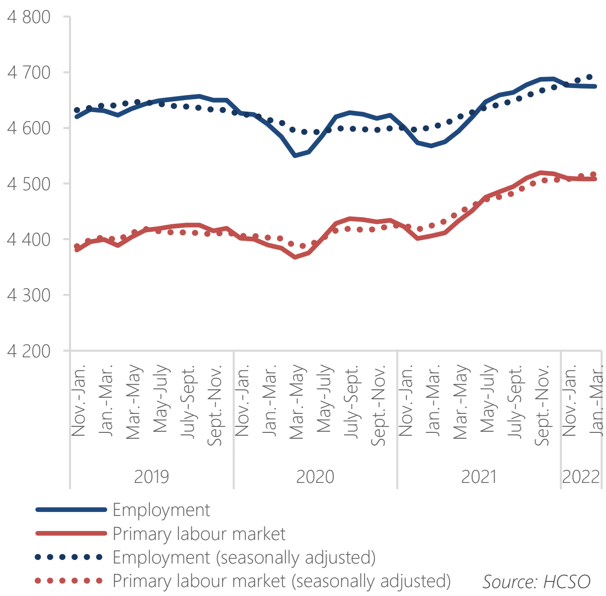
Source: Eurostat

3.3. Labour market

3.3.1. Employment

The coronavirus pandemic has caused a temporary fall in employment. The recovery was successfully supported by Government measures encouraging the preservation of jobs and the creation of new ones. Despite the rising wave of new coronavirus cases across Europe during autumn, favourable labour market tendencies are continuing, which was supported by epidemiological protective measures that maintained the functioning of the economy. The growth of employment continued in the second half of the previous year. The number of persons employed reached another peak by the end of 2021, the figure reached 4,688,000 in the fourth quarter. It is favourable that, based on figures adjusted for seasonality, the number of employed persons continued rising during the beginning of 2022, too. In March, 4.7 million people were employed in Hungary.

Figure 3.18 Number of employed people
(Population aged 15-74,3-month moving average)

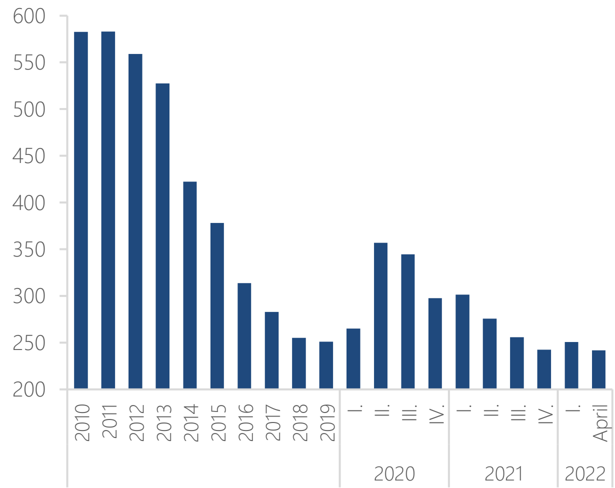


Source: HCSO

In 2021, the average number of employed persons was 4,635,000, which is 31,000 up in 2020. Border crossing made more difficult by epidemiological protective measures encouraged domestic employment, which led to a decrease in the number of persons employed abroad by 21,000 on an annual basis. In addition to this, the number of public workers also decreased by 6,000.

An increasing number of people found work in the domestic primary labour market, their number increased by 58,000 in a year, and permanently surpasses 4.5 million. The employment rate for the 20-64 age group increased by 1.3 percentage points to 78.8 percent in one year.

Figure 3.19: Number of registered jobseekers
(thousand persons, seasonally unadjusted data)



Source: National Employment Service

An average of 268,900 job seekers were registered with the National Employment Service in 2021, 47,200 less than in the previous year. The number of job seekers permanently dropped below pre-pandemic levels.

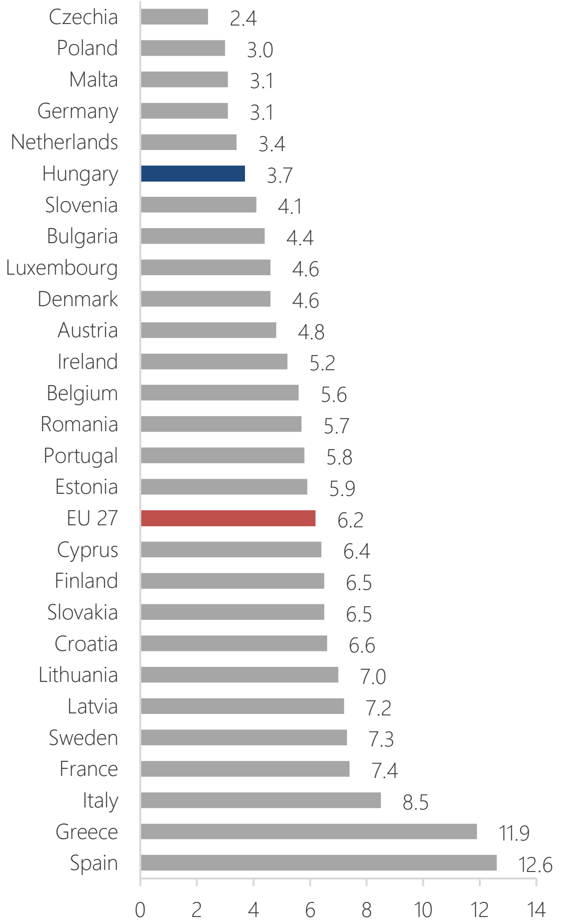
In terms of unemployment rate, Hungary remains one of the Member States with the most favourable indicators. Based on the most recent figures, unemployment rate decreased by 0.8% to 3.7% in a single year on average in the 2022 January-March period. The number of unemployed persons decreased to 180,000 in the past period.

On the one hand, the tight labour market encourages further increase in the wages, and also contributes to sustaining employment indicators that are high even in a forward-looking perspective. Wage rises, and the personal income tax exemption provided to those under 25 years for up to the average wage, increase labour market activity, too, and a growing number of those previously working abroad are finding employment in Hungary.

Although uncertainty clouds the economic outlook due to the Russian-Ukrainian war that broke out at the end of February, companies are interested in the retention of qualified workforce amidst scarce supply. As a result of declining labour reserves, employment growth is expected to moderate in the coming years.

Figure 3.20: Unemployment rate

(%, February 2022, seasonally adjusted data)



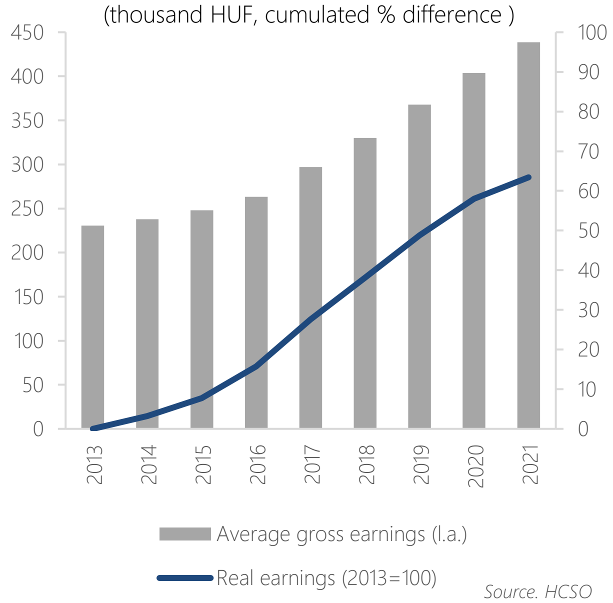
Source: Eurostat

3.3.2. Earnings

Retaining or hiring skilled labour in sectors less affected by the restrictions led to high wage growth in 2021, too. Quick recovery, and the growing demand for services after the lifting of restrictions also boosted wages in the sectors concerned. Gross average earnings in the national economy increased by 8.7% in 2021. In the budgetary sector gross average earnings increased by 9.5%, due to planned wage raises in certain government branches - including pay raise of doctors, judges, prosecutors and employees of nurseries. - Average gross earnings rose by 7.8% in the private sector.

Figure 3.21: Development of average earnings

(thousand HUF, cumulated % difference)

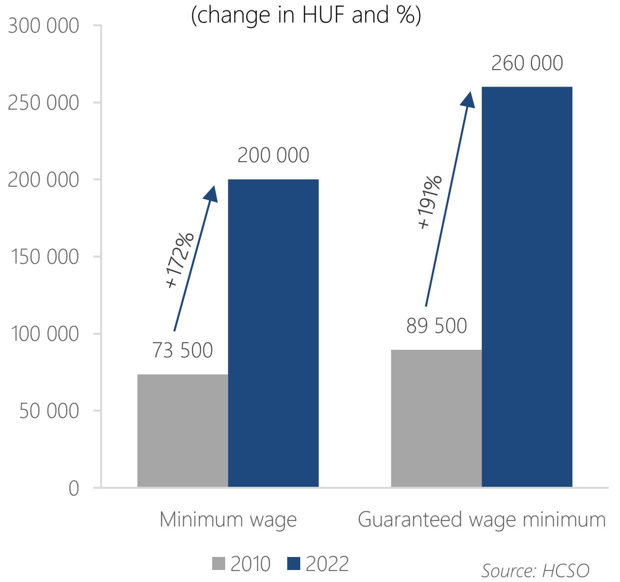


Source. HCSO

Despite the inflation being higher than in previous years, real earnings continued to grow. Real wage increased by 3.4% in 2021, along with a 5.1% year-on-year increase in consumer prices. Since the turning point in growth in 2013, real wage has increased considerably, which was further accelerated by the wage and tax agreement concluded on the initiation of the Government in November 2016. Between 2013 and 2021, net real earnings therefore increased in total by 63.4% in the national economy.

Figure 3.22: Development of the minimum wage

(change in HUF and %)



Source: HCSO

The favourable economic results of the previous years are reflected in the rate of growth of earnings, too. Gross average earnings more than doubled in Hungary between 2010 and 2021. The growth of minimum guaranteed wages is outstanding, they nearly tripled in the past 12 years. As of January 2022, after an increase of nearly 20%, minimum wage increased to HUF 200,000 and minimum guaranteed wage to HUF 260,000.

In the public sector, several career models ensure growing wages, for example, from January 2022, the earnings of nurses increased by 21%, earnings of nursery workers, social and cultural workers grew by 20%, and the wage supplement of teachers continued to grow, too. The allowance of law enforcement employees increased by 10%, and they also received the service premium (the so-called "firearms money") corresponding to six month salary. The Government will also gradually implement the medical salary increase programme from January 2021, so that by 2023 the salary of a novice resident doctor will increase to nearly HUF 700,000, while the salary of a specialist doctor with 40 years of professional experience will reach HUF 2,380,000.

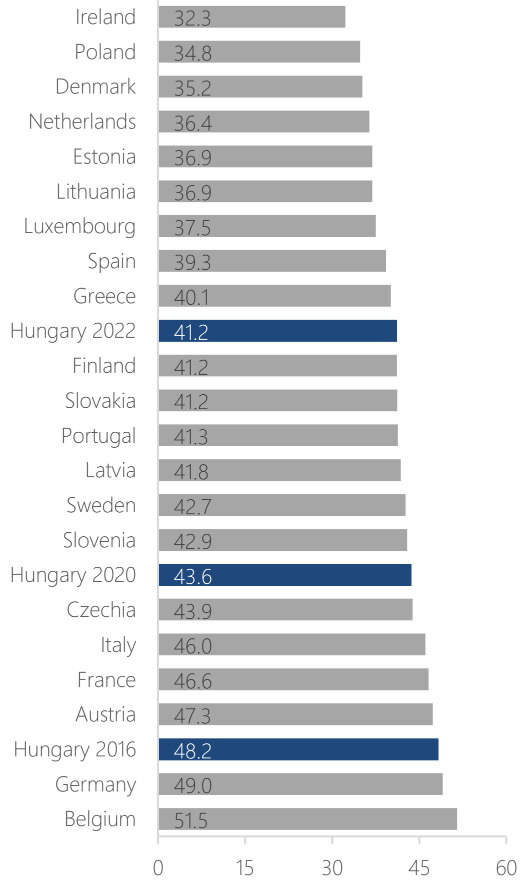
To mitigate the dynamics of the increase in wage costs, the Government introduced further tax cuts this year, as well. From 1 January 2022, burdens on employers decreased by further 4 percentage points, the 1.5 percent vocational training contribution was abolished, and the social contribution tax rate was reduced by a further 2.5 percentage points to 13 percent. With this, the large-scale tax reduction series determined in the wage and tax agreement concluded at the end of 2016 has been realized. As a result, the public burden on wages decreased substantially, the tax wedge has been reduced to a favourable level even in a regional comparison.

Earnings continued increasing in January-February 2022, as well, gross average wage was HUF 506,700, which is a 22.8% growth on an annual basis. The outstanding increase in wages was due to the service premium for the army and the law enforcement personnel corresponding to six-month salary in February, the wage developments of the public sector, and the nearly 20% increase in the minimum wage and guaranteed wage minimum. A two-digit wage development at 12.3% was measured in the private sector, too.

The Government also pays particular attention to enabling the youth to start their life independently. As result of the personal income tax exemption provided to those under 25 for up to the amount of the average wage, average net earnings including tax benefits grew at a pace higher than the gross average wage in the national economy.

Figure 3.23: Tax wedge

(2020, as a percentage of the average wage)



Source: OECD, MoF calculations

Looking forward, a two-digit wage increase may be realized in 2022, too, which is driven by favourable economic outlook in the beginning of the year, the spillover effect of the rise in minimum wage and guaranteed wage minimum, tight labour market and higher inflation environment and the wage developments of the public sector. All in all, the increase in the average wage will likely surpass the rate of inflation in 2022, too, therefore, the increase in real earnings may continue in the coming years, as well.

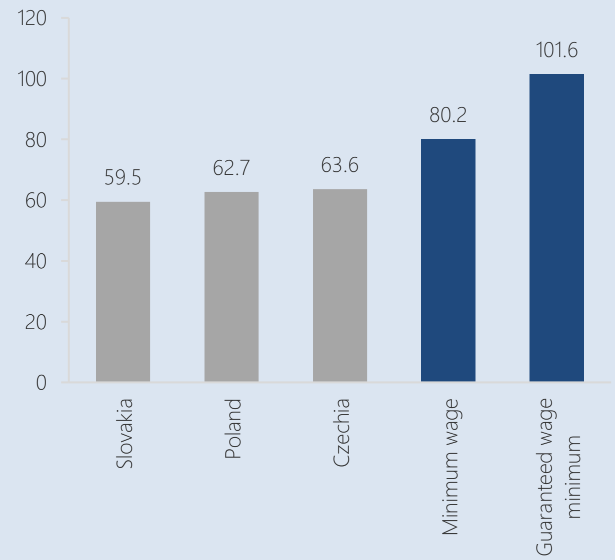
Box 5: Assessing the results of the wage and tax agreement of 2016

A major economic policy success of the previous years was the conclusion and implementation of the wage and tax agreement at the end of 2016. In 2010, the Government set out to reach a turning point in employment for which the tax system was reformed in a manner so that it would better encourage employment, support the preservation of jobs and the creation of new employment opportunities. As a result of the successful economic policy measures, employment and activity both started to increase considerably, while unemployment decreased significantly. Nevertheless, the labour market, as a result of increased employment, became ever tighter, which meant that dynamic economic growth can be sustained by stepping up productivity. To reach this objective, the agreement was concluded at the end of 2016 on the initiation of the Government.

This multi-annual programme has reached its goal and it has permanently contributed to economic growth or to enhance competitiveness by increasing labour productivity. While economic growth was primarily driven by the rise in the number of employed persons until 2016, afterwards it was mainly driven by improvement in productivity. Between 2010 and 2016, productivity showed only minor changes, however, in the period between 2017 and 2019 it grew at an annual average rate of 3.5%. This favourable process will likely remain looking forward, too.

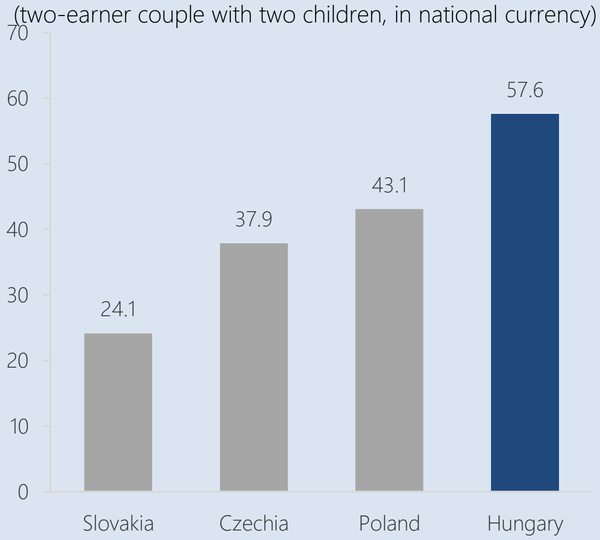
The agreement resulted in dynamic wage raises. As a consequence of the tightening labour market environment due to the favourable economic upswing and the large-scale expansion of employment, and of government measures, the domestic labour market has been characterized by a strong wage growth since 2017. The successful recovery of the economy following the pandemic made it possible to realize an approximately 20% raise in the minimum wage since 2022. Thus, minimum wage increased by 80% from 2016 to 2022, and the amount of the minimum guaranteed wage more than doubled. A more robust rise in the guaranteed wage minimum increased the value of higher qualifications on the labour market, too.

Development of the gross minimum wage
(% change between 2016 and 2022, national currency)



Source: Eurostat, MoF calculation

Changes in net average earnings (%) between 2016 and 2021
(two-earner couple with two children, in national currency)



Source: Eurostat, MoF calculation

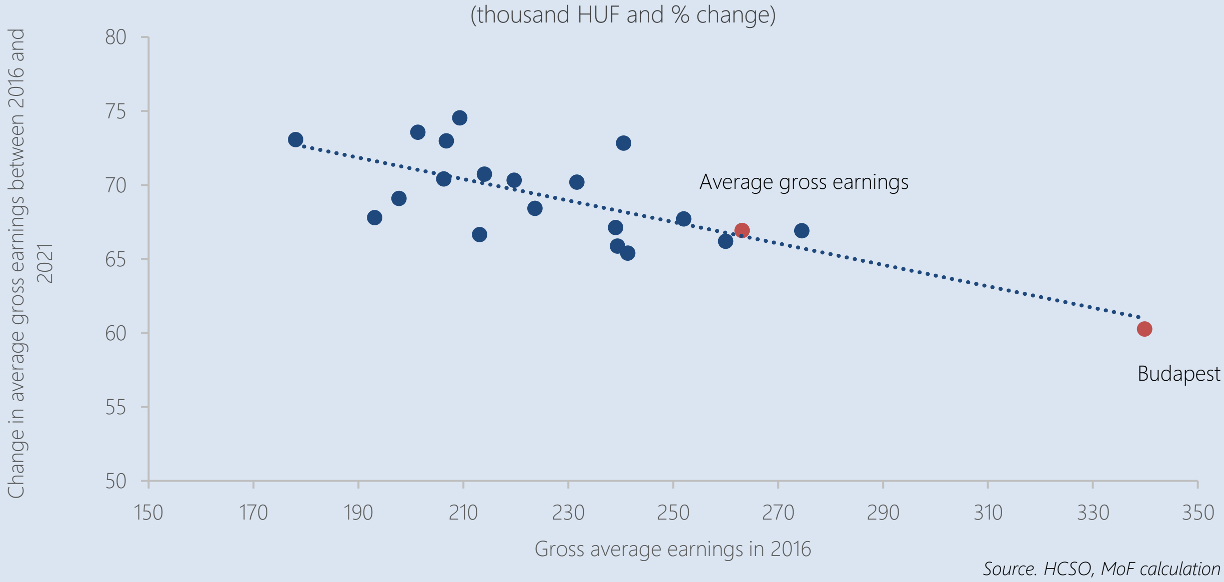
The rise in Hungarian wages is outstanding even in an international comparison. Considering minimum wage, Hungary realized the highest increase among the Visegrád Group which is also the third largest among EU Member States. The rise in minimum guaranteed wages have a significant spillover effect, too, due to which average earnings increased considerably across the national economy. The increase in net wages expressed in the national currency was the fastest in Hungary between 2016 and 2021 among the countries of the region.

Another important result of the wage agreement is a decrease in regional wage differences. In 2016, average earnings in Budapest were 90% higher than the average wages in Szabolcs-Szatmár-Bereg county, which has the lowest average earnings, the same proportion decreased to 78.3% by 2021.

The wage development measured in fifteen counties was the same as or higher than the average. Of these, the increase surpassed 70%, including in Szabolcs-Szatmár-Bereg and Borsod-Abaúj-Zemplén counties, too. Counties with a lower wage level were characterized by a higher wage increase.

Relation between average gross earnings and its growth per counties

(thousand HUF and % change)



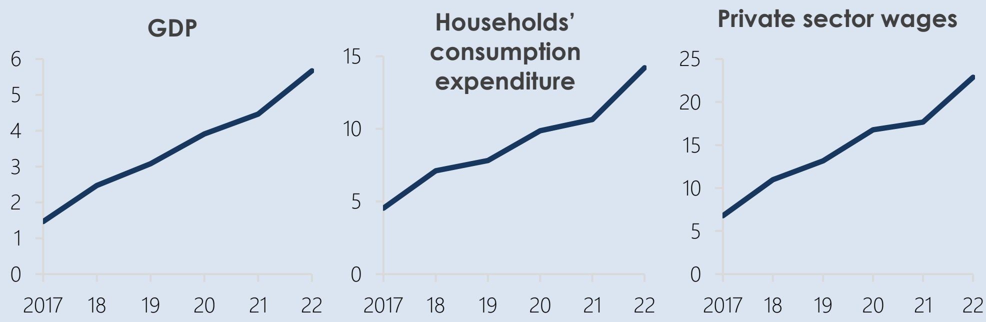
Source. HCSO, MoF calculation

The wage agreement concluded on the initiative of the Government maintained the cost-side competitiveness of domestic wages, too, as the decrease in payroll taxes and in corporate tax reduced the costs of companies. Hungary's power to attract capital was increased by the fact that the rate of corporate income tax decreased to 9% as of 1 January 2017, which is the lowest rate in the European Union. On 1 January 2022, the 1.5 percent vocational training contribution was abolished, and the rate of social contribution tax was reduced by a further 2.5 percentage points to 13 percent. In addition, the Government extended the local business tax relief of SME's and, in line with the decrease in social contribution tax, it reduced the rate of small business tax to 10 percent. Through the tax reductions that were carried out the employers' tax reduction included in the agreement was fully implemented and payroll burdens paid by the employers decreased from 28.5% to 13%, further increasing the competitiveness of the Hungarian tax system.

The sum saved through tax reductions gave enterprises room to further increase wages, increase employee numbers, finance various developments, which is also demonstrated by the large volume of working capital flowing in. As a consequence, Hungary boasts the second highest investment rate in the European Union. Permanently high wage dynamics encouraged a further increase in economic activity. The increase in the number of employed persons continued, this beneficial process was only temporarily hindered by the coronavirus pandemic. Employment has surpassed even pre-pandemic levels and the unemployment rate remains one of the lowest in the European Union. The agreement has greatly contributed to an increase in earnings and the standard of living, to the dynamic expansion of Hungarian economy in the recent period, to the increase in investment and consumption processes. The wage and tax agreement of 2016 was an economic policy instrument in line with the fundamentals of the economy which also successfully supported the processes of economic growth.

Based on the impact assessment carried out using the macroeconomic model of the Ministry of Finance, the agreement contributed to the increase in wages by 22.9% until the end of the 6-year period. Higher wage dynamics generated a further boost in household consumption by approximately 14.2%. Investment activity increased by 7.9%, largely due to the fact that corporate income tax was reduced to 9%. The completion of new production capacities boosted exports; thus Hungary's export performance grew at a rate of 8.1%. As a consequence of the wage and tax agreement, the GDP of Hungary may be 5.7% up by the end of the six-year period.

The macroeconomic impact of the wage and tax agreement of 2016
(cumulated % difference in variables compared to the baseline scenario)



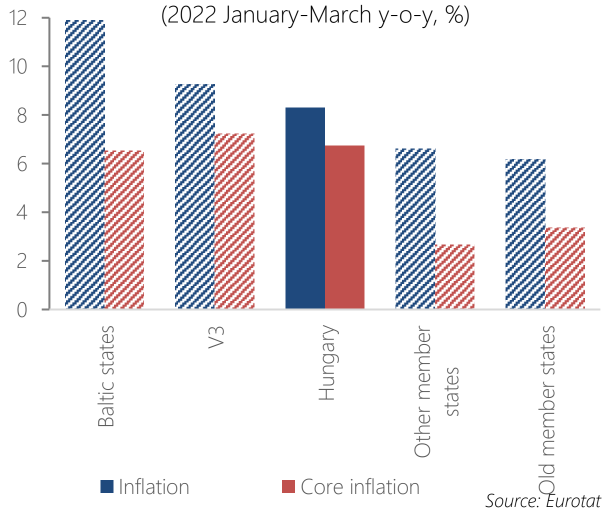
Source: MoF calculation

3.4. INFLATION TRENDS

In 2021, inflation was above 5%, a considerable increase over the previous years. Especially conspicuous was the rise in the price of energy and raw materials as well as the price increase in the tourism and catering industries that suffered substantial losses during the restrictions. Changes in indirect taxes increased the price hike by 0.4 percentage points during the year but this was largely counterbalanced by the expansion of the free textbook scheme. Furthermore, the end-of-year inflationary hike was mitigated by the fuel price cap.

After the reopening, inflation surged throughout Europe, nevertheless the tendency remained that evolution of prices in the region markedly differed from those in the European Union: core inflation calculated excluding the volatile alcohol and tobacco products energy, food in the Member States that joined prior to 2004 fluctuated at a low level. In contrast, the price increase is significant in Member States that joined afterwards even without accounting for energy prices.

3.24 Consumer prices in the EU
(2022 January-March y-o-y, %)



Source: Eurotat

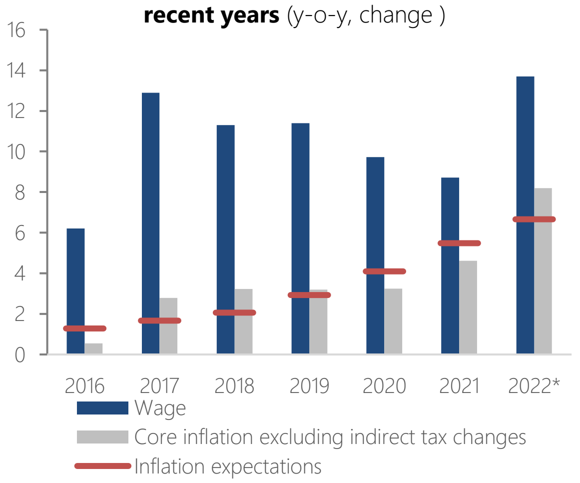
The price increase in Hungary was likely affected by the devaluation of the exchange rate. However, the robust price increase in the Baltic States and in Slovakia points to the fact that exchange rate changes only partially account for higher inflation. It suggests that price convergence accompanying fast growth may also have played a role, as well as the spillover effects from a tight labour market. The increase in prices earlier may have been mitigated by well anchored expectations, although this has changed to date: inflationary expectations have also increased.

The past period has seen a massive price increase unfolding concerning foodstuffs, industrial products and services, which will likely remain until the end of the year. The increase in prices is partly explained by supply-side factors, such as surging energy and raw material quotes, or bottlenecks in the logistics sector. However, monetary policy that has been supportive for years presumably also plays a role in these processes.

It is to be noted that the freeze on overhead costs, the freeze on food prices and the fuel price cap mitigate inflation by approximately 5.0%. It can be concluded that inflation would be at a considerably higher level without Government measures.

The pace of inflation may substantially decrease in 2023 as the effect of high energy prices fading out and, presumably, the excessive market reactions to the Russian-Ukrainian conflict may also become more moderate. However, inflation is expected to reach MNB's mid-term target only in 2024.

Figure 3.25.: Evolution of prices and wages in recent years (y-o-y, change)



** year to date* *Source: HCSO, MNB, Mod calculation*

Box 6: The impact of price regulation by the Government on consumer price index

In the second half of 2021, energy price quotes increased multifold across Europe over the previous period, fuelled not only by fundamentals, but speculation, too. The price increase fed into a number of other products, too, the most conspicuous example being the surge in food prices. Recently the Government has adopted a number of measures that are aimed at decelerating the price hike seen in a few particular cases. Hence, the Government protects households from exorbitant overhead costs seen in a number of other states and from the detrimental effects of market speculation.

Average price of liquid fuels* (forint)

*gasoil and diesel

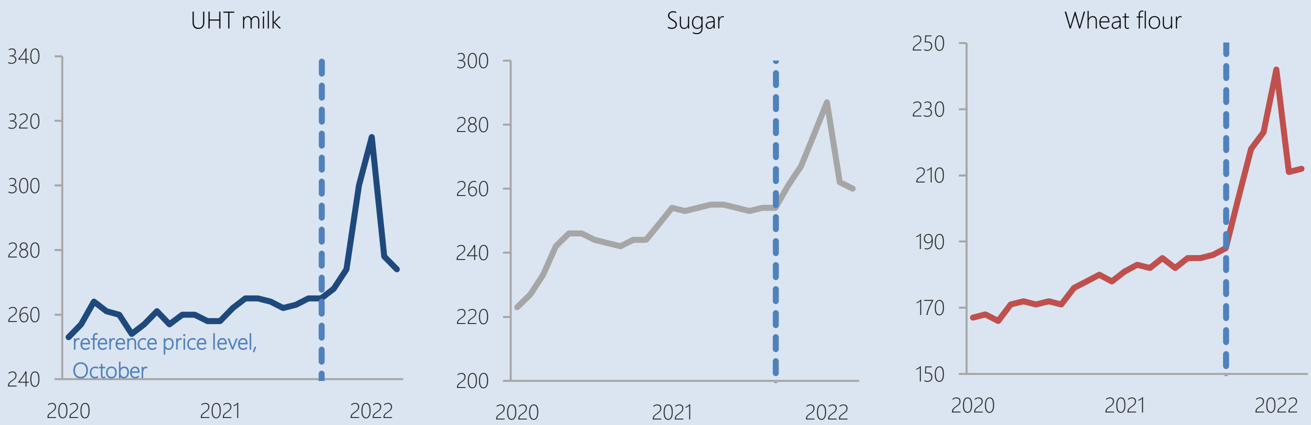
Source: HCSO, MoF calculation

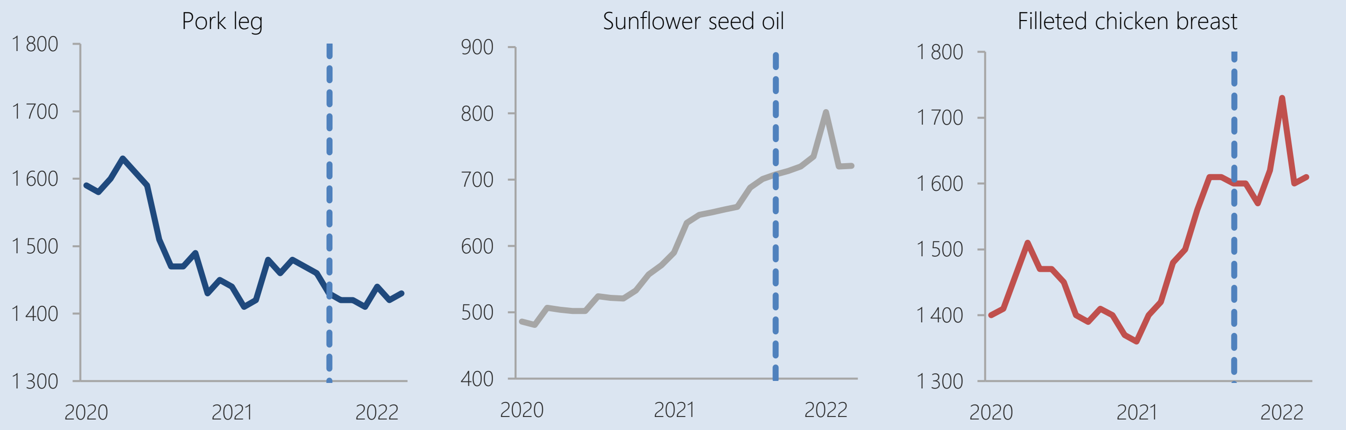
The regulation that came into effect on 15 November 2021 maximized the price of non-premium petrol and diesel prices at HUF 480 per litre. Without the price limit imposed, price levels would have been substantially higher in the past period. In March, drivers would have been faced with an average price above HUF 600, and the situation would have remained the same in April, too. This exempts households from inflation at a rate of approximately 1.5 percentage points.

A price freeze was imposed on certain foodstuffs, taking effect on 1 February 2022, which maximized the price of seven fundamental foodstuffs, pork leg, chicken breast, chicken back, sunflower seed oil, UHT milk, sugar, and wheat flour, as of 15 October levels. The measure mitigated the consumer price index by 0.5 percentage points.

Changes in the price of products impacted by the price freeze in the past period

(HUF/ natural unit of measure)

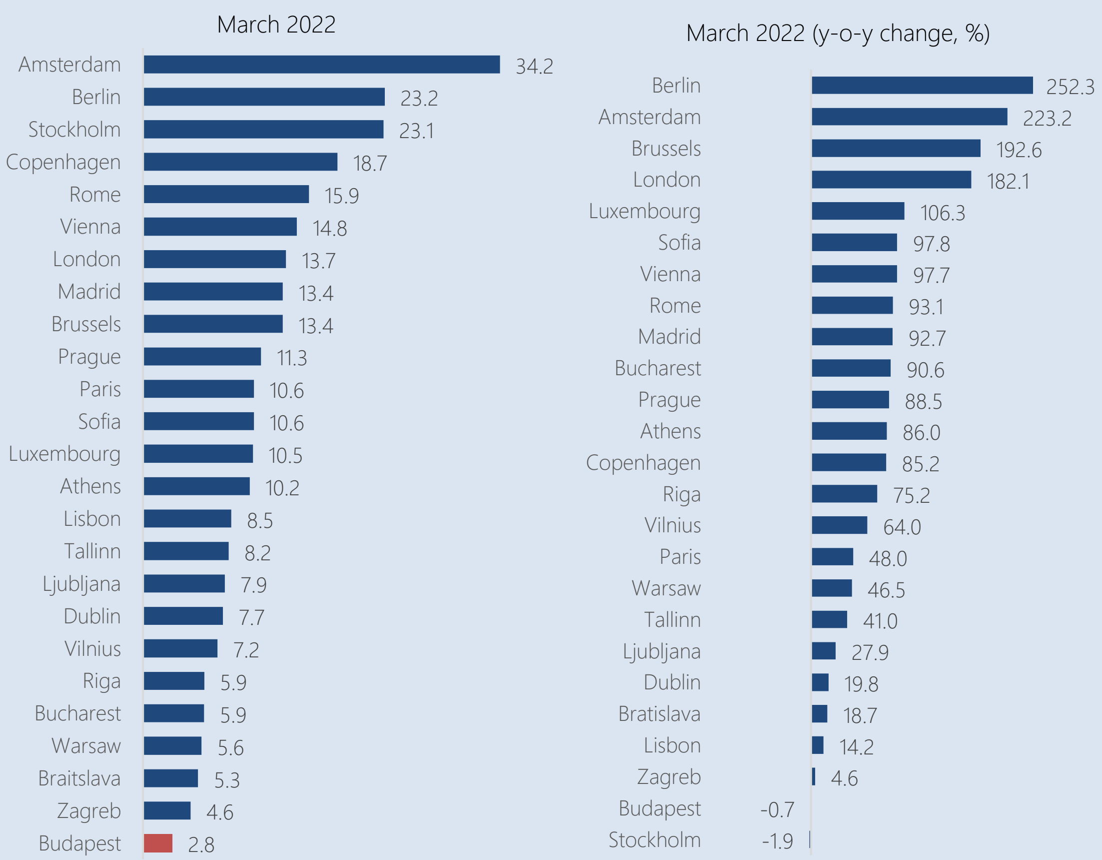




Source: HCSO

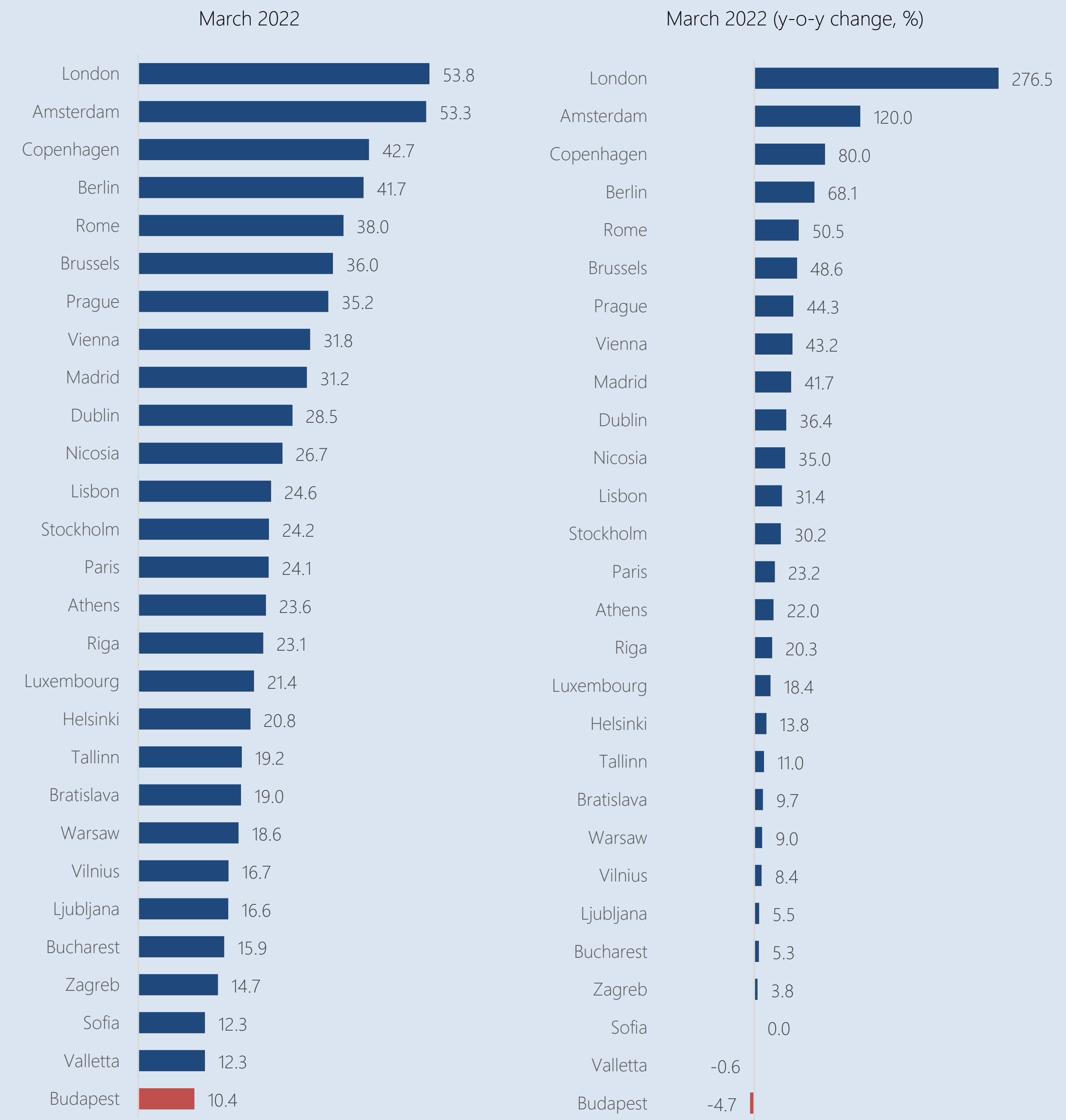
It is particularly beneficial in the current situation that the Government decreased the price of residential gas and electricity by 25% and the price of distant heating by 23% in three steps between 2013 and 2014. Domestic prices, which are the lowest in the European Union, offer an inflationary advantage of at least three percentage points over Slovakian and Polish prices which are also among the most favourable in an EU comparison.

Average price of natural gas in certain European capitals (EUR/m^3)



All in all, the inflation-mitigating measures of the Government reduce the rate of price increase by approximately 0.5% while in effect. It is important to note, however, that the Government mitigated consumer prices in previous years in other areas, too, in addition to those listed above. Examples to this are the blind bidding introduced in the market of regulated medicine, two instances of cash withdrawal free of charge, provision of free textbooks in public education.

Average price of electricity in certain European capitals (eurocent/kWh)



3.5. Cyclical developments

The setback caused by the pandemic temporarily decreased the growth potential of the economy. After 2020, the trend growth of the Hungarian economy slowed down as a result of declining investment sentiment and pandemic restrictions that necessarily reduced productivity.

However, in terms of long term growth prospects, the outlook have remained favourable: In 2026, the potential growth of the economy could again reach a rate of 4%. Continuously high investment rate during the economic downturn, ensures that the contribution of capital accumulation to potential growth will remain robust over the forecast horizon, facilitated by capacity increases of large corporations characterizing manufacturing as well as the absorption of EU funds. This favourable process is supported by the fact that the change in the relative price of work and capital further encourages automation of production, which, in turn, may lead to an increase in investment and capital as well as productivity.

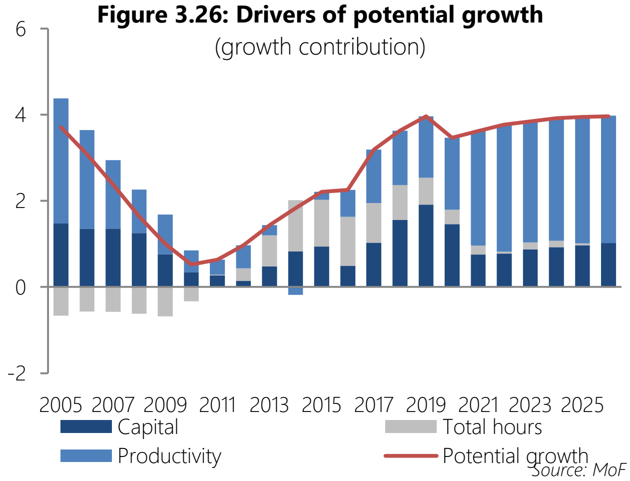
All this leads to the fact that, in terms of growth factors, the trend prevailing in 2017-2019 continues, according to which the emphasis is increasingly shifting from extensive growth based on workforce expansion to intensive development, i.e. efficiency and capital accumulation come to the fore. As a consequence of positive processes, the contribution of productivity to the growth potential may gradually increase and may reach 3 percentage points by the end of the forecast horizon.

Before the outbreak of the pandemic, the output gap was positive in 2018 and in 2019, too, resulting from outstanding economic growth. Following this, in 2020, as a result of the decline in demand caused by the coronavirus pandemic, the output gap fell back into negative territory, with an absolute value - although for a brief period - higher than in the post-financial crisis period. Due to the nature of the pandemic, the cyclical downturn proved to be strong in most sectors.

A swift correction in the industry and construction industry followed the shock caused by the coronavirus. In manufacturing adaptation of supply due to shortages of parts was much more apparent, while demand remained high due to a supportive fiscal and monetary policy. Supply limitations affected prices, too, which was more apparent from the second half of the year. In contrast, several services, in particular those related to international tourism, like catering, recreation and transportation still face unused capacities that remained high in the previous year.

In the coming period, economic growth may once again exceed the level enabled by structural factors, thereby the output gap is about to close gradually. On the positive side, however, catching up with potential output levels could be much faster than in the protracted process after 2009, as the pandemic hit the Hungarian economy in a much more resilient state. On the other hand, strong support from economic policy helped fast recovery. The output gap could thus decrease to -1.4 percent in 2022 after -1.8 percent in 2021 and then close by 2026.

Figure 3.26: Drivers of potential growth
(growth contribution)



Source: MoF

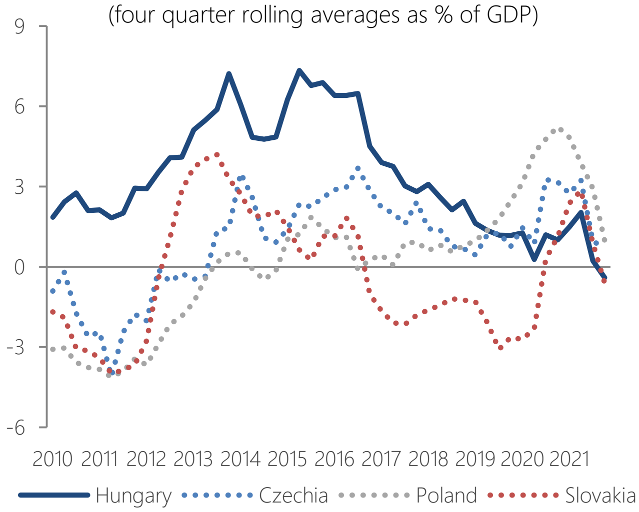
3.6. External balance

The declining trend of external balance indicators that is prominent since 2016 remained in 2021 too. Although the first half of the year showed spectacular improvement regarding the balance of payments, the loss of export due to supply chain shortages and the significant deterioration of terms of trade in the second half of the year halted this favourable process. All in all, there was a sizeable increase in the energy bill, the inflow of labour income declined, while foreign companies maintained high profits despite the crisis. With these unfavourable factors combined, the deficit of current account balance stood at 3.1% of the GDP in 2021, while considering the capital account, net borrowing from rest of world amounted to 0.5% of GDP. In general, it can be concluded that increasing energy prices had a marked impact on external balance indicator across Europe in the second part of 2021, through increasing imports. Thus, the improving trend following the coronavirus pandemic that was seen in all of the countries of the region was reversed.

Looking forward, external balance processes remain influenced in part by the negative impact of the coronavirus pandemic on international tourism and air traffic. As result of worsening terms of trade due to raw material and energy prices being notably higher than in the previous year, foreign trade surplus may further decrease. Thirdly, export continues to be held back by supply chain issues, worsened by the Russian-Ukrainian war and the sanctions imposed as a result. In the mid-term, however, the appearance of new manufacturing capacities may boost export and international tourism may also approach pre-pandemic levels. Therefore, the deficit in the balance of foreign trade may gradually decline.

Figure 3.27: Net financial capacity in regional comparison

(four quarter rolling averages as % of GDP)



The deficit of incomes and transfers may be around 4% of GDP. Although agricultural grants from the EU as a share GDP will gradually decrease in time, it will be counterbalanced by declining interest payments. Regarding labour income, an increase in surplus can be expected, while the revenues of companies in foreign ownership may change in line with economic growth. It is worth noting, however, that increasing energy and raw material prices may, in the short term, reduce the profit of foreign companies too, which will positively impact the current account.

Concerning the transfers from the European Union amounting to the majority of the capital account, 70% of the structural funds allocated to the 2014-2020 period were accounted for by the beginning of 2022. The remaining approximately 8 billion euros will improve the balance in 2022, or either in 2023. Parallel to this, EU funds received in the coming years from the multiannual framework of the 2021-2027 period and the Recovery and Resilience Facility will further reinforce capital account. Although the weight of EU funds as a key driver of external balance indicators significantly decreased in recent years due to the sizeable growth of domestic GDP, capital account may continue to show a substantial surplus. Thanks to this, the deficit in net lending vis-à-vis rest of world in 2021 may return to surplus from 2023.

All in all, bottlenecks in supply chains due to the coronavirus pandemic, increased energy and raw material prices, and the loss of tourism had a temporary adverse impact on the external balance indicators of Hungary. With the easing of these factors, and thanks to new export capacity being built up, a substantial improvement in the external balanced position is expected. Positive net lending to rest of world is thus restored. Moderate financing needs and working capital inflows should result in a continued decline in net external debt. This will further strengthen Hungary's resilience to negative external shocks.

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 2021 Convergence Programme. In terms of the economic scale of the measures, the measures announced since April 2021 amount to 12% of GDP together with the increased expenditures of previous decisions. The most significant of the new measures are the tax benefits for families, the minimum wage increase, the reduction in employer tax and the government's wage raise programmes:

- At the beginning of 2022, parents raising a child received a refund of their personal income tax paid in 2021, up to a ceiling equal to the tax on average wage. Not only private individuals, but also entrepreneurs, i.e. sole proprietorships, primary agricultural producers, landlords, KATA and EKHO taxpayers, have benefited from the tax refund subsidy.

- From 1 January 2022, the income of not only specialists but also primary care doctors and nurses has increased. From January 2022, the salaries of nurses have been increased by 21% and those of nursery employees, social workers, and cultural workers by 20%. Teacher wages were increased by 10% from 1 January 2022.
- From 1 January 2022, the minimum wage increased to HUF 200,000 and the guaranteed minimum wage to HUF 260,000.
- On 1 January 2022, the 1.5 percent vocational training contribution was abolished, and the social contribution tax rate was reduced by a further 2.5 percentage points from 15.5 percent to 13 percent. Overall, the burdens on employers have thus fallen by a further 4 percentage points since the beginning of the year.
- At the beginning of the year, professional members of the armed and law enforcement organisations received six months' pay in one lump sum as "weapon allowance".
- Local business tax was also halved in 2022, from 2 percent to 1 percent for small and medium-sized enterprises and sole proprietorships.
- In 2022, the full 13th month pension was reinstated instead of the half-month pension previously planned.

In addition to the above, the impact analysis also looked at the increased expenditure of Epidemic Control Fund since April 2021, such as additional payments for epidemiological control, the purchase of vaccines and medical equipment, and investments in emergency health care. The increased spending of Economic Control Fund since April 2021 to protect jobs and create new ones, to re-launch the economy, to protect priority sectors and to help companies finance their activities has also been taken into account in the impact analysis.

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 impact assessment 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 relations between the national accounts and the financial accounts of public finances.

The macroeconomic effects of 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 earnings dynamically, and thereby boosting household consumption. Capacity expansions improve the growth potential of the economy in the long run as well, since beginning from their completion, they stimulate GDP growth through additional channels, primarily through export and labour incomes.

In terms of quantified effects, the government's actions since April 2021 will improve the economy's performance by 3.2% this year and by 1.8% next year. The measures will have a lasting positive impact, boosting economic performance by 2.2-2.6% beyond 2023.

Table 3.1: Macroeconomic impacts of the measures

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

	2021	2022	2023	2024	2025	2026
GDP	**1.8**	**3.2**	**1.8**	**2.2**	**2.5**	**2.6**
Households' consumption expenditure	4.3	7.2	3.3	3.5	3.9	4.0
Investments	1.6	7.2	6.4	5.2	4.0	4.3
Exports	0.0	0.9	2.3	3.3	4.2	4.4
Imports	2.1	4.2	3.1	3.9	4.3	4.1
Inflation	0.6	1.3	1.7	1.8	1.8	1.7
Private sector employment	0.0	0.2	0.4	0.2	0.1	0.1
Gross average wage in the private sector	5.1	5.5	5.8	6.0	6.1	6.0

Source: MoF calculation

3.8. Monetary and exchange rate policy

The current Act on the Central Bank of Hungary (MNB) sets out maintaining price stability as the primary objective. Without compromising its priority, the central bank supports the maintenance of financial health and the Government's policy on economic and environmental sustainability. Since 2001, the MNB has been shaping monetary policy in an inflation targeting system. 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 policy tools.

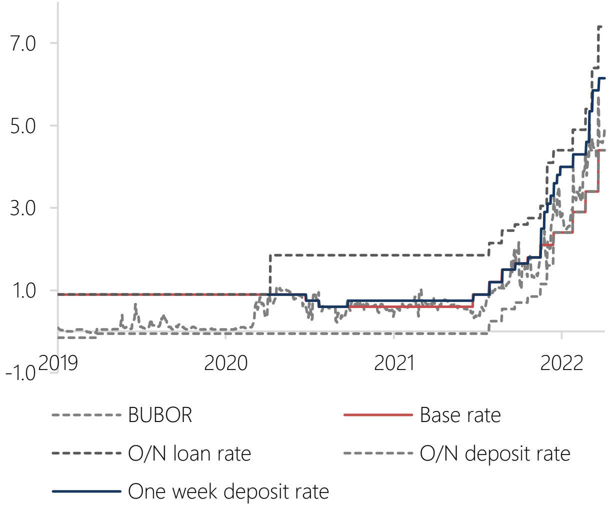
In 2021, the central bank started tightening on both the interest rate and liquidity side to cushion the negative economic impact: in June, the MNB was one of the first central banks to start a cycle of interest rate hikes in response to rising inflationary pressures and to gradually stop asset purchases to maintain price stability.

At the start of 2021, the base rate was 0.6% and the one-week deposit rate, which acts as a benchmark instrument, was 0.75%. Following the cycle of interest rate hikes, the year ended at 2.4% and 4% respectively. Market developments in the aftermath of the Russian-Ukrainian war have called for further sharp policy tightening, with the base rate now at 5.4% and the one-week deposit rate at 6.45%.

At the same time, the interest rate corridor has also moved substantially higher. The interest rate on overnight covered loans, which acts as the upper limit, rose from 1.85% to 8.4%, while the interest rate on overnight deposits, the lower limit, rose from -0.05% to 5.4%.

In November 2021, the MNB announced that it would separate the base rate from the one-week deposit rate, allowing it to respond more flexibly to movements in financial markets. From here, the former coincides with the bottom of the interest rate corridor and the latter approaches the top of the interest rate corridor. The MNB is prepared to keep the one-week deposit rate permanently above the base rate as long as financial and commodity market risks persist.

Figure 3.28: Monetary policy instruments



Source: MNB, MoF calculation

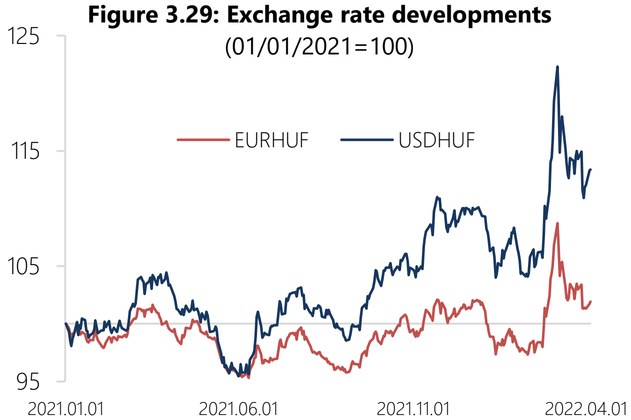
In line with tightening monetary conditions, the interbank rate has also risen: It stood at 0.5% at the start of 2021, 2.7% at the end of the year and now stands at 6.35%.

In December 2021, the Monetary Council decided to discontinue the government bond purchase programme, on the understanding that the MNB would continue to closely monitor liquidity developments in the government bond market and would be ready to intervene with temporary and targeted purchases of government bonds if necessary. Maintaining stability in the government bond market is crucial for the efficiency of monetary transmission in the long run. At the same time, the Central Bank has also closed other instruments with long maturities. The Funding for Growth Scheme Go programme was phased out after the HUF 3,000 billion allocation was used up. As a replacement for the FGS and as part of its new green asset strategy, the MNB has introduced the Green Home Programme for the residential sector from October 2021. The credit programme, which will be extended to HUF 300 billion in April 2022, is available for the construction or purchase of new homes with an energy rating of at least BB.

In December 2021, the Bond Funding for Growth Scheme (BGS), under which the Central Bank had purchased HUF 1,550 billion of bonds issued by non-financial corporations with good ratings in recent years, was also stopped. The ample liquidity of the banking system, its strong capital position, and the improvement in bond market conditions in recent years support the financing needs of the corporate sector. On the other hand, the Monetary Council considers it of the utmost importance that all elements of the central bank's monetary policy toolkit support the achievement of price stability as quickly as possible.

In line with this, the MNB is also gradually phasing out foreign exchange swaps providing forint liquidity, with no new transactions being concluded since autumn 2021, and the portfolio has thus declined significantly, with the last contract expiring in September 2022.

Figure 3.29: Exchange rate developments
(01/01/2021=100)



Source: MNB, Thomson Reuters, MoF calculation

In 2021, the Hungarian Forint exchange rate against the euro fluctuated by no more than 5%. However, the Russian-Ukrainian war that broke out on 24 February 2022 also had a significant impact on the domestic currency. A dramatic weakening in the first two weeks of the war resulted in the exchange rate falling by almost 11.4% by 7 March, reaching the 400 EUR/HUF psychological threshold during the day. This was mainly the result of a general risk aversion at the outbreak of the war, which affected emerging market assets, but the geographical proximity of the country also exacerbated the process. After hitting a historic low, the Hungarian Forint corrected relatively quickly and is currently 4.6% weaker against the euro than it was at the beginning of 2021.

In sum, the focus of Hungarian monetary policy in 2021 was on mitigating the economic and market effects of the coronavirus pandemic and rising inflation.

Internationally, the major central banks have moved towards a tighter monetary policy stance in the face of rising growth and inflation risks. The Federal Reserve began raising the general rate (by 25 basis points) in March 2022. Policy makers have indicated that they may also start to reduce holdings of government bonds and mortgage-backed securities at the next meetings. The European Central Bank decided in March to end the asset purchase programme (APP) at a faster pace than previously planned. In our region, the Polish central bank held a rate-setting meeting last month, where it raised its general rate further. It is therefore fair to say that the major central banks and those in the region are resorting to a series of tightening measures, which are now also needed to counter the inflationary impact of the Russian-Ukrainian war.

3.9. Financial sector

The past two years have brought new challenges for the financial, retail, and corporate sectors. Nonetheless, 2021 has delivered better-than-pre-pandemic performance, record bank profitability and - despite the end of the moratorium - stable portfolio quality, reflecting a resilient banking system and dynamic economic sectors.

The banking sectors' earnings before taxes reached HUF 629 billion at the end of 2021, which was 14% higher than the pre-pandemic record of 2019, resulting a 12.3% return on equity at the end of the year. Although a significant share of interest, fee and commission income continues to be absorbed by banks' operating costs, the trend appears to be improving. In 2021, operating costs accounted for 71%

of revenues, while in 2019 the figure was 80%. The improving trend may be driven by increasing digitalisation, whereby banks are trying to shift their operations to online platforms. The pandemic may have contributed to this as well, as many customers were “forced” to use digital channels. The merger of MKB and Budapest Bank in April 2022, as the first step in the creation of Magyar Bankholding Zrt., also foresees a reduction in operating costs through branch optimization.

Banks increased their impairment and provisioning levels to HUF 280 billion in 2020 in response to the economic slowdown caused by the coronavirus, but this was reduced to HUF 147 billion in 2021. Approximately half of the 2021 impairments and provisions portfolio was created in the fourth quarter, reflecting the impact of the government’s interest rate stop measure.

The Hungarian banking sector met the liquidity and capital requirements with a significant surplus. The capital adequacy ratio stood at 20% at the end of the year and the liquidity coverage ratio exceeded 200% on a consolidated basis, both of which are twice the regulatory minimum. The MNB has supported stable capital and liquidity levels by suspending bank dividend payout until the end of 2021.

From April 2020—with several extensions—until October 2021, a general credit moratorium protected household and corporate debtors who were economically weakened by the coronavirus. Participating loans of households and companies exceeded 50% at the start of the moratorium, gradually declining to respectively 48% and 21% by the summer of 2021. Between November 2021 and July 2022, the moratorium will continue in a reduced form, with 6% of the household loan portfolio (HUF 535 billion, 69,000 customers) and 2% of the corporate loan portfolio (HUF 225 billion, 2,500 companies) requesting a further moratorium on repayments. The extension, also known as Moratorium 3, is open to priority groups of the population: pensioners, parents and borrowers who have experienced a significant drop in income, and on the corporate side, customers who have experienced a drop in income of at least 25% could apply for the opt-in moratorium. At the end of 2021, the share of non-performing loans in total corporate loans stood at 4.2%, close to the level of a year earlier. The portfolio of household loans overdue by more than 90 days amounted to HUF 117 billion at the end of 2021, representing only 1.2% of total household loans. The indicator was down by 0.1 percentage point, or HUF 1 billion, compared to the previous year. It is important to note that 6% of household loan holders are still benefiting from the repayment moratorium, and mortgages are also protected by the interest rate stop measure, meaning that from 1 January 2022 until the end of June 2022, interest rates cannot rise above the level of 27 October 2021.

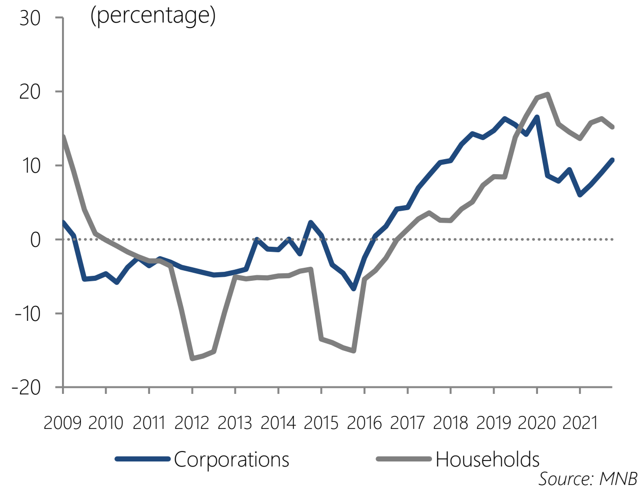
There have also been positive developments in the lending function of the banking system. The loan portfolio of non-financial corporations grew on a transaction basis in 2021, with the SME sector showing a significant increase. The exchange rate adjusted annual growth rate was 10.7% for the corporate sector as a whole and 16.8% for the SME sector (annual growth in 2020 was 9.4% and 13.7% respectively). New loans to non-financial corporations amounted to HUF 2,827 billion on an annual basis, up 16% from end-2020, although the current growth rate was influenced by the moderating impact of the coronavirus 1 year ago.

The economic impact of the pandemic eased after the spring 2021 vaccination programmes. The rebounding economy, the improvement in demand and consumption propensity projected an increase in inflation at the beginning of the summer. In response to this, in the summer of 2021, alongside a gradual increase in interest rates the MNB announced the phasing out of the FGS Go!, which played a key role during the pandemic. The programme, which provided HUF 3,000 billion in long-term loans at up to 2.5% interest rate was discontinued in September last year after financing nearly 40,000 Hungarian micro, small and medium-sized enterprises.

After the FGS Go! Ended, the role of supporting corporate lending was taken over by the Széchenyi Card GO! in the summer of 2021. The Programmes offer companies favourable fixed-interest loans of 0.5-2.5% thanks to state interest subsidies. The FGS Go! and the SzKP GO! programmes have met their economic policy objectives, as long-term corporate loans accounting for a significant share (79%) of new loans in 2021, reducing the year-on-year renewals of short-term corporate loans. The SzKP GO! programmes have so far supported the preferential access to credit of nearly 33,000 businesses for more than HUF 1,000 billion and will offer additional preferential funding until mid-2022.

In addition, MFB, Exim, Garantiqa and AVHGA have helped companies to access funding through a number of loan, equity and guarantee schemes. The Interest-Free Restart Quick Loan, Hungary's first publicly funded microcredit scheme, which lasted from March to December 2021, had received 11,000 loan applications from SMEs and supported their recovery from the coronavirus with an average of nearly HUF 9 million.

Figure 3.30: Annual growth rate of loans to non-financial corporations and households (percentage)



Source: MNB

Household borrowing increased significantly in 2021, mainly driven by a strong increase in housing loans. Household loans increased by HUF 1,232 billion last year, which corresponds to a growth rate of 15.2%. Loan repayments last year were roughly back to the level before the moratorium (HUF 1,451 billion), despite the fact that the vast majority of households took advantage of the possibility to defer repayments until November.

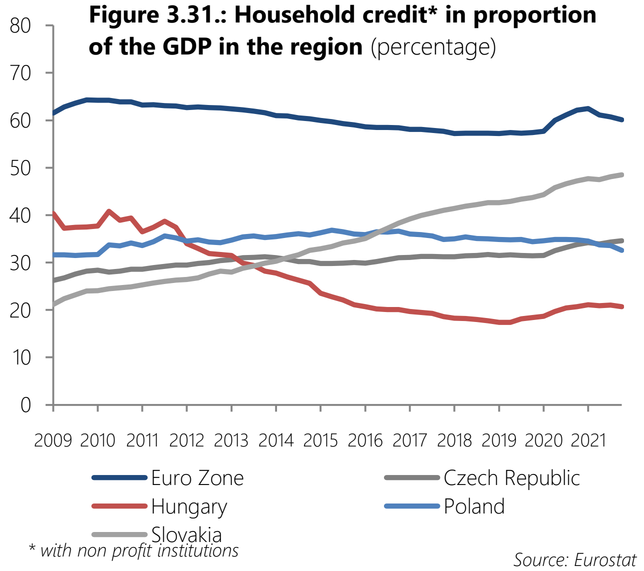
Banks disbursed HUF 2,683 billion new loans last year, 21% more than in 2020. Following a two-year hiatus, the largest issuance was again from housing loans (HUF 1,303 billion), a significant increase of 40% compared to the previous year. The issuance of consumer loans grew by 7% over a year (HUF 1,237 billion). Interest in consumer loans has been high for the third year in a row, thanks to the popularity of the Prenatal baby loan, of which HUF 545 billion was issued in 2021. HUF 143 billion was disbursed from other loans, which is equal to an increase of 14%.

In the second half of 2021, in order to address inflationary pressures, the Central Bank steadily increased the base rate, which was slowly reflected in bank lending rates. The average interest rate on new loans to households rose by 0.3 percentage point from May to December, and by a further 0.3 percentage point from December to February. Consumer loans increased by 0.7 and 1.6 percentage points over the same periods.

Despite the outstanding growth of the loan portfolio in previous years, the indebtedness of Hungarian households is still one of the lowest in the region and is significantly below the euro area average, which means that there is still significant growth potential in household lending.

In 2022, we expect a slight increase in housing loan disbursements, as the war and high inflation increase demand for housing, while rising lending rates reduce it. A sharper fall in consumer and other loans is also possible, reflecting the impact of interest rate rises.

Figure 3.31.: Household credit* in proportion of the GDP in the region (percentage)

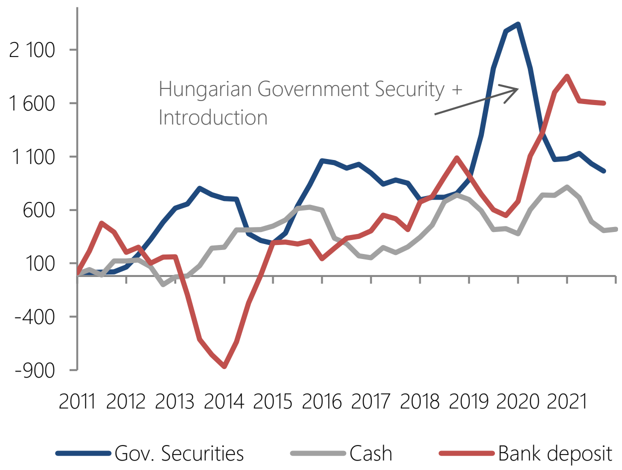


** with non profit institutions*

Source: Eurostat

Household savings increased by a record amount of HUF 5,221 billion in 2021. Most of the new savings (HUF 1,599 billion) were transferred into deposits. The increase in deposits is still presumably motivated by precautionary considerations, which may have persisted in the wake of the protracted coronavirus pandemic. The government bond portfolio increased by HUF 966 billion last year, which is slightly lower than last year's expansion but significantly higher than the pre-reform 2019 level.

Figure 3.32: Changes in key retail savings
(4 quarters, HUF billion)



Source: MNB

Overall, although the coronavirus pandemic and its effects marked a turning point in the financial sector's progress, the banking sector was able to restore its pre-pandemic growth trend and maintain a healthily structured lending portfolio as the economy rebounded last year. Economic and monetary policy actions have played a key role in this, as the government and macroprudential measures introduced or prolonged over the past year have served to boost credit demand and sustain credit portfolios, ultimately benefiting banks' business and financial ratios and hence the financing possibilities of economic agents.

Measures to cushion the adverse economic effects of the pandemic and then to support the economic recovery were implemented promptly and efficiently, allowing economic policies to not only postpone but also to substantially mitigate many of the negative consequences of the crisis, such as the accumulation of non-performing assets, which could have eroded banks' profitability and capital. This, in turn, will enable the financial sector to adequately contribute to boosting the circulation of the economy in the future through lending.

At the same time, monetary tightening in the context of disinflation is spilling over into retail, corporate and subsidised lending. This will lead to an increase in interest costs for market participants and the budget, with signs already visible at the end of the first quarter of this year. The Russian-Ukrainian war, disruptions to supply chains and rising raw material prices could pose upside credit risks as the war drags on, requiring banks to be sensitive and responsive to mitigate potential credit risks.

4. General government deficit and debt

4.1. Budget Policy Objectives

The budgetary reserves built up in the years preceding the coronavirus pandemic provided substantial room for manoeuvre to address the economic difficulties caused by the global pandemic and to re-launch the economy.

Fiscal policy has adopted a targeted and sufficiently flexible approach to respond appropriately and deliver the necessary anti-cyclical stimulation of domestic demand in the context of crisis defence and recovery. A fiscal policy of state intervention in bad times to mitigate the negative effects of the economic crisis has been put in place. Under the extraordinary circumstances caused by the pandemic, developed countries and EU Member States took similar steps.

In line with this, significantly higher budget deficits were recorded in 2020 and 2021.

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

	2021	2022	2023	2024	2025	2026
General government balance	-6.8	-4.9	-3.5	-2.5	-1.5	-1.0
Gross government debt	76.8	76.1	73.8	70.4	66.9	63.1

Source: KSH, MNB, calculations by the Ministry of Finance

4.2. The 2021 budgetary outcome

At the time of the adoption of the 2021 budget, the Government projected a 3% GDP contraction in 2020 and 4.8% GDP growth in 2021. The budget was adopted by the Parliament with moderate inflation of 3%, a deficit target of 2.9% of GDP, below the Maastricht reference value, and a contingency amount of more than 0.5% of GDP.

In 2021 the focus remained on controlling the coronavirus pandemic, with the protection of health and the relaunch of the economy remaining a priority. At the same time, key elements of successful government policies and programmes of recent years, such as family protection and housing, and the work-based society, had to be preserved.

Following the adoption of the 2021 Budget Act, the macroeconomic environment in 2020 turned out to be less favourable than expected, creating a worse baseline for 2021 and changing the pace of reduction of the budget deficit to a sustainable level. In view of the pandemic, after the adoption of the 2021 Budget Act, the Government decided on further wage raises, tax reliefs and new programmes to help families and businesses. For businesses forced to close due to the third wave of the pandemic, the Government has helped by extending the wage subsidy programme and tax advantages.

A number of government regulations have been adopted to mitigate the effects of the pandemic. In addition, the 2021 Budget Act was amended, with the opinion of the Fiscal Council, which set a higher deficit target of 7.5% due to the changed circumstances.

At the end of 2021, the Government's successful fiscal policy, which has helped to relaunch the economy and improve the situation of families, while maintaining and even expanding the programmes launched earlier, was already showing that the economic recovery was taking hold and that a high growth rate was to be expected.

As a result, there has been less need to stimulate recovery through public investment. Therefore, in December 2021, the Government decided to delay the implementation of certain investments, thus significantly increasing Hungary's financial reserves by HUF 350 billion in 2021, while reducing public debt. As a result of this measure and the rapid economic recovery, the deficit was 6.8%, well below the revised deficit target and the public debt fell to 76.8% from 79.6% the previous year.

Revenues

Tax revenues on an accrual basis were HUF 1,167 billion higher than in the previous year, despite the decision on significant tax reliefs.

The Government has decided that parents raising a child will receive a refund of their personal income tax paid in 2021, up to the amount paid or up to a ceiling. The payment was made in February 2022, but the measure affected accrual-based tax revenues under the EU methodology for 2021. The budgetary impact of the measure could reach around HUF 680 billion. Not only private individuals, but also entrepreneurs, i.e. sole proprietorships, primary agricultural producers, landlords, KATA and EKHO taxpayers, have benefited from the tax refund. The maximum refund was up to the taxable amount of the average annual wage, up to a maximum of HUF 809,000.

Furthermore, in order to facilitate the home creation of families with children, the purchase of both new and second-hand flats are exempt from the property acquisition tax for consideration if the acquirer uses the Family Housing Allowance (CSOK) for the purchase from January 1, 2021.

The tax rate on the sale of newly built homes under the Home Creation Action Plan was reduced again to 5 per cent from January 1, 2021.

In 2021, taxpayers already benefited for the full year from the reduction of the social contribution tax by two percentage points from 1 July 2020. In parallel, the small business tax rate was also reduced by one percentage point from 1 January 2021.

Instead of HUF 1 billion, KIVA (small business tax) could be chosen up to a revenue limit of HUF 3 billion from 2021. In line with this, the termination limit is increased from HUF 3 billion to HUF 6 billion.

The maximum rate of local business tax for micro, small and medium-sized enterprises was halved in 2021, from 2% to 1%. The Government compensated for the loss of business tax revenue in the case of small settlements with fewer than 25,000 inhabitants, while for larger local governments it reviewed the financial situation on an individual basis and decided to grant aid based on that.

Additional liquidity-enhancing measures were adopted in an effort to help struggling businesses. Companies in financial difficulty could benefit from a payment discount. The faster VAT repayment was maintained until the end of the year.

Businesses benefited further from the provision that the social contribution tax credit can be claimed in case of employing a person after three months of unemployment instead of the previous six months.

In 2021, the amount of the SZÉP card with reduced tax rate increased to HUF 800 thousand in the private sector and HUF 400 thousand in the public sector, contributing to the recovery of domestic tourism after the end of the pandemic situation. The social contribution tax on SZÉP card was abolished until the end of the year.

The waiver of the tourism development contribution paid by the hospitality and tourism sector has been extended until the end of 2021. In addition, the social contribution tax on entertainment and business gifts has been abolished until 31 December 2021.

Expenditure

In view of the pandemic, after the adoption of the 2021 Budget Act, the Government decided on further wage raises and new programmes to help families and businesses:

Doctors have received a significant wage raise in 3 steps, with wages increasing at an unprecedented rate over three years starting in 2021. In addition to specialists, the incomes of dentists, primary care doctors and nurses have also risen. The amount allocated to wage raises was HUF 359 billion.

The Government provided an interest-free quick loan of HUF 10 million over 10 years to the most vulnerable small and medium-sized enterprises. The budget of the program was HUF 100 billion, and the repayment must start after a grace period of three years. Families raising children can apply for a Government support for renovation up to HUF 3 million from 2021. In addition to the home renovation scheme, the Government also provided a soft loan option. The loan amount is up to HUF 6 million, with a discounted interest rate at 3%. The loan includes a HUF 3 million non-refundable grant, which can be applied for at the end of the renovation.

In 2021, soaring energy prices have already had a significant impact on the budget and the cost of public services provided by the state. Partly for this reason, and partly in view of the pandemic situation, individual and normative aids were HUF 179 billion higher than the estimate. Spending increased by nearly HUF 100 billion on subsidies for interurban and passenger transport and by HUF 78 billion on compensation for services related to electricity generation and district heating.

Housing subsidies were HUF 127 billion higher, mainly due to the newly introduced Home Renovation Programme.

Thanks to economic growth, pension premium was also paid, amounting to nearly HUF 200 billion, which was HUF 138 billion more than originally planned.

In view of the pandemic situation, the Central Reserve for Pandemic Control exceeded the planned amount by nearly HUF 400 billion. The largest amounts are for the purchase of vaccines and personal protective equipment for healthcare workers.

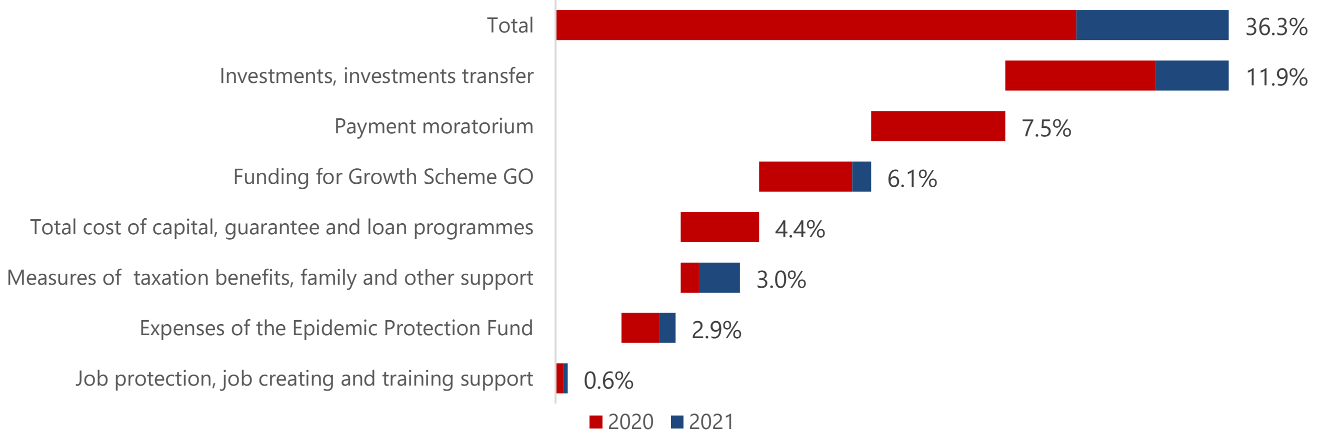
Expenditure on public assets exceeded the planned amount by more than HUF 950 billion. A significant share of this is related to capital increases and investments in companies and, to a lesser extent, to expenditure on real estate and movable property.

Net interest expenditure already reflected a substantial increase in yields, as this burden was almost HUF 80 billion higher than planned on an accrual basis.

In 2021, the important government objective to use EU funds as quickly as possible continued to be pursued. By the end of 2021, the commitment level for the 2014-2020 period exceeded 113%.

In 2021, EU revenues exceeded HUF 1,550 billion. With the launch of new measures to combat the pandemic and mitigate its economic impact, the use of funds from the EU React framework has started, with around HUF 150 billion of this funding being used in 2021.

Figure 4.1: Economic scale of the planned measures
(as a % of the GDP)



Source: MF

4.3. The 2022 budget

The 2022 budget was adopted by the Parliament with dynamic economic growth of 5.2%, moderate inflation of 3% and a contingency amount of more than 0.4% of GDP, i.e. HUF 233 billion. The 2022 budget was intended to further strengthen the key elements of the government's policies of recent years, in particular family and pension policies, and the housing and renovation programme. At the same time, the priority was to maintain financial health and responsible fiscal management, which are necessary for the development of our country and the continuation of sovereign economic policy.

Following the adoption of the Budget Act, the economic recovery has been more dynamic than planned, with strong growth, employment, wages and consumption. As a result, tax revenues can be expected to be HUF 1,400 billion higher than the tax revenues foreseen in the Budget Act.

The increased room for manoeuvre has been used by the government to implement measures that benefit businesses and families:

- The maximum rate of local business tax remains at 1% in 2022 for small and medium-sized enterprises and sole proprietorships.
- From 1 January 2022, workers in the health, education, social, nursery and cultural sectors, as well as law enforcement and armed forces personnel, have received significant wage raises. In recognition of professional service, the six-months' weapon allowance was paid until mid-February to members of the armed forces and law enforcement.
- The full 13th month pension was reinstated this year. Pensions and pension-like benefits increased by 5% from 1 January 2022. A pension premium may be paid again, as economic growth is expected to exceed the 3.5% rate that is a precondition for this.
- The VAT and tax exemptions introduced under the Home Creation Programme will continue this year.
- From 1 January 2022, the minimum wage increased to HUF 200,000 and the guaranteed minimum wage to HUF 260,000. This means that from 1 January 2022 the minimum wage is higher than the average wage in 2010. At the same time, childcare benefit, childcare benefit for students and children's home care allowance also increases. The maximum amount of childcare benefit reaches HUF 280,000 gross, while the childcare benefit for students has risen to HUF 140,000 gross and children's home care allowance to HUF 180,000 net. In connection with the increase in the minimum wage, the wages of the workers in the public work programme rose to HUF 100,000.

- The employer tax burden on wages has been further reduced by 4 percentage points from 2022, which, together with the exemption of young people under 25 from personal income tax up to the average wage, represents another significant step forward in reducing taxes on labour.
- The small business tax rate was further reduced from 11% to 10% from 1 January 2022.

The Government has set the key objective of protecting families from inflationary trends, which is supported by the policy of reducing overhead costs, capping fuel prices, household interest rates and the price of certain foods. In 2022, an increase in subsidies to the most affected public (energy and transport) companies is expected due to the increase in energy prices.

As in the previous year, national defence is a top priority. The war on our eastern borders also makes the development of the Hungarian military force a priority. Since 2017, the budgetary framework of the Ministry of Defence has been set as a percentage of GDP, i.e. the share of GDP of the chapter's subsidy envelope had to increase by at least 0.1% per year. Accordingly, the Ministry's support has increased steadily and significantly since 2016. In 2022, as in 2021, the annual increase is 0.2 percentage points instead of the previous 0.1 percentage points. Defence spending could exceed HUF 800 billion in 2021, and by 2022 it could more than quadruple compared to 2010, to close to HUF 1,000 billion.

In 2022, the budget is also clearly affected by the Russian-Ukrainian war. In particular, the task of caring for refugees from Ukraine came up. Funds are available for assisting people forced to leave their homes due to the war; the targeted funds may be exceeded with Government approval. The Government supports humanitarian activities on the ground planned by Hungarian aid organisations to alleviate the crisis situation in Transcarpathia as a result of the conflict in Ukraine.

Due to the flow of refugees, additional expenditures also arise in education, health care, social assistance, and employment. The planning of expected expenditure should take into account that only a small proportion of refugees arriving in Hungary intend to settle here, so this direct impact on the budget balance can be managed.

Given the faster-than-planned recovery, there is less need to stimulate the economy by fiscal means in 2022, so the Government has set a lower deficit target of 4.9% at the end of 2021 than the one set in the Budget Act. After revision of investment decisions, expenditures are cut by around HUF 755 billion to reach this target. Amidst a deteriorating geopolitical environment, the Government remains committed to reaching the 4.9% deficit target.

4.4. 2023-26 BUDGETARY PROCESSES

For the last four years of the forecast period, already established government measures are taken into account by the Convergence Programme.

The key parts of the revenue side of the budget are the tax and social contribution revenues, as well as the EU transfers. In this respect employment creation and subsidies for families and businesses are set to continue. As regards EU transfers a new EU budget cycle has started from 2021, but at the same time the resources of the previous EU budget cycle will also be used. Overall, in the years ahead significant EU transfers can be received, while contributions to the EU budget will also increase.

We expect tax cuts (e.g. PIT exemptions for under-25s, tax exemptions for housing purchased with CSOK) to remain, while tax centralisation could decline by 1.2 percentage points by 2026, given the dynamic GDP growth. Total government revenue in proportion to the GDP could fall by 2.2 percentage points.

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

	2023	2024	2025	2026
Taxes and social contributions	34.8	34.5	34.1	33.6
Other revenues without EU transfers	4.3	4.0	3.8	3.6
Total revenue without EU transfers	39.0	38.5	37.9	37.2
EU transfers	2.6	2.6	2.4	2.2
Total revenue	41.6	41.1	40.3	39.4

Note: Due to rounding, the summed data might differ from the sum of the detailed data.
Source: MF calculation

Total revenue-to-GDP ratio excluding EU funds could fall by 1.8 percentage points between 2023 and 2026, while expenditure excluding EU funds could fall by a larger 4.3 percentage points.

The forecast takes into account the following:

- in certain cases, reduction of the VAT on newly bought or built homes from 27% to 5%,
- the exemption from property transfer tax for property purchased in the Family Housing Allowance (CSOK) scheme, for the entire time horizon,
- income tax exemption for persons under 25 years of age, which will help young persons to participate in the labour market, and to start an independent life and a family,
- the payment of the 13th month pension, the preservation of the real value of pensions and the introduction of a pension premium in the case of growth exceeding 3.5%,
- a wage increase programme for doctors, started in 2021 and lasting several years,
- increase in spending on national defence in the proportion of the GDP,
- infrastructure developments, such as public road and railroad developments, creation of industrial parks, and regional development tasks of similar significance as those implemented in the previous years,
- the Investment Fund intended to finance the preparation and flexible implementation of investment projects,
- progress of the Hungarian Village and Modern Cities Programme,
- the investments taking place in the scope of the Healthy Budapest Programme,
- touristic and other economic developments.

Wages could rise in the public sector, including in health and education, but dynamic GDP growth could reduce the share of GDP spent on compensation of employees by 1.2 percentage points between 2023 and 2026.

Savings prevail in the government sector's operating expenditures, reflected in a decline in the proportion of GDP spent on goods and services purchased from purely domestic sources from 6.4% to 5.8%.

The level of benefits provided through market producers in the proportion of the GDP will show a slight decline towards the end of the period from 2023 onwards.

The development of social benefits is still influenced by the structural reforms implemented earlier. Financial benefits will decrease in proportion to the GDP due to the fast return of dynamic economic growth, despite the implementation of the 13th month pension. Between 2023 and 2026, total social transfers as a percentage of the GDP may decrease by 1.3 percentage point, by which they will contribute at a significant rate to the reduction of the redistribution ratio.

Interest expenditure increases substantially in the years leading up to 2023 as government bond yields rise and inflation accelerates but falls from 3% in 2023 to 2.7% by the end of 2026 as yields stabilise and inflation falls. Although the high level of the volume of government bonds held by the public raises interest expenditures as the interest rate of residential securities is higher than that of other government bonds, 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 2023, 67 percent of all government investments are expected to be implemented from domestic sources (including domestic co-financing for EU development), this proportion may grow to 72 percent by 2026. The Paks 2 investment is not included in this ratio, as statistics take this project into account as capital transfer.

Rising energy prices will require increased public involvement to keep overheads down. Due to transfers to energy operators, other government expenditure is expected to remain high in the coming years compared to the period preceding 2020. On medium term compensation for MNB's loss must be considered as well; taking into account MNB's significant capital, the current prognosis suggests this will take place first in 2024.

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

	2023	2024	2025	2026
Balance	-3.5	-2.5	-1.5	-1.0
Total revenue	41.6	41.1	40.3	39.4
Total expenditure	45.1	43.6	41.8	40.4
Total expenditure without EU transfers	42.5	41.0	39.4	38.2
of which:				
compensation of employees	9.7	9.5	8.8	8.5
purchases of goods and services from purely domestic resources	6.4	6.2	6.0	5.8
investments from domestic sources (including co-financing)	3.7	4.2	4.3	4.3
social transfers	12.1	11.7	11.2	10.8
interest expenditure	3.0	3.0	2.8	2.7

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 for period between 2023 and 2025 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 before the coronavirus pandemic. Due to the coronavirus crisis, however, the output gap became significantly negative in 2020. According to the baseline estimate of the Ministry of Finance, it is likely to be 1.3% this year. Looking ahead, a gradual closing of the output gap can be foreseen during the time span of the convergence programme.

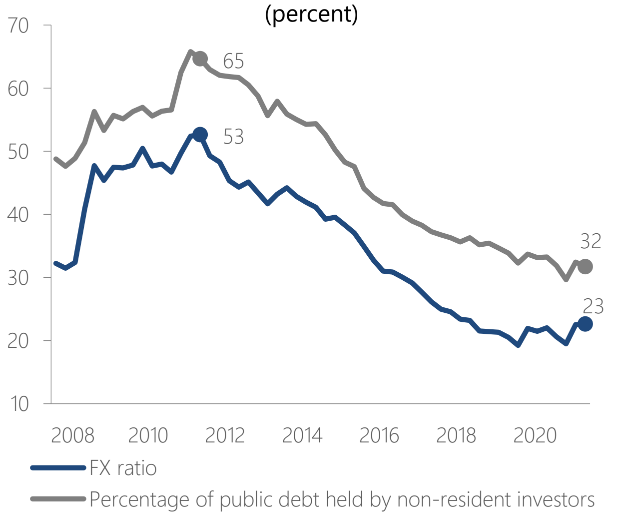
Based on current calculations, the structural balance of the budget shows a deficit of 3.6% of the GDP in 2022.

4.6. General government debt

The Hungarian government debt management retains the main strategic priorities of the previous years: reducing external exposure, curbing the currency ratio as well as extending the average term to maturity of the debt portfolio. In line with this, the share of foreigners in total general government debt dropped from 65% to 32% from the end of 2011 to the end of 2021, while the foreign currency ratio decreased from 53% to around 20% in the same period, even with the successful issuances of foreign currency bonds by the debt manager in the past year, just like in 2020 (*Figure 4.2*).

Currently best reflecting country risk, the Z-spread, i.e. the mark-up of the five-year euro-denominated Hungarian government bond over the risk-free euro government bond, declined in 2021 from 60 to 23 basis points. Since then, however, mainly due to the Russia-Ukraine conflict, it rose to 100 basis points. The CDS mark-up with a similar content started from 64 basis points in 2021 and passed 110 basis points till the end of April 2022.

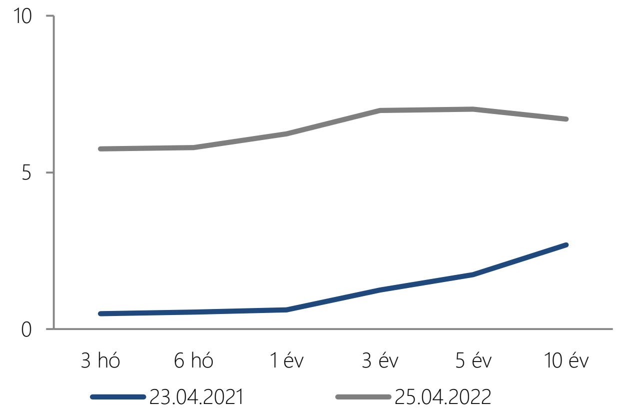
Figure 4.2: FX share of the government debt and the share of government debt held by foreigners
(percent)



Source: MNB

Although yields on both short and long-term government bonds have fallen significantly, by around 2-3 percentage points compared to the level seen at the end of 2011, in recent years, rising inflation and the monetary policy response it triggered as well as external factors, such as the uncertainties caused by the Russia-Ukraine war, led to the increase of yield levels. Thus the 3-month yield is currently 5.7%, the five- and ten-year yield is 6.7-7.0%. Over the past year the yield curve took a significant upward shift and became flat: its short end rose by 5.3 percentage points, its long end by 4.0-5.3 percentage points (*Figure 4.3*).

Figure 4.3: Shift of the yield curve
(percent)



Source: ÁKK

Similarly, on the primary market, auction yields largely followed the secondary market trends. Although the yield increase effected a continuous rise of the funding costs, the pace of repricing is considerably mitigated by the high ratio of fixed-interest debt components within the debt portfolio and the increasing term to maturity. The implicit interest rate, showing 5.3% in 2012, i.e. the average interest burden of the debt was 3.2% in 2021, but is expected to rise to as much as 4.3% till the end of the planning period.

After successfully overcoming the economic effects of the coronavirus pandemic in 2020, entering the international market seemed to be a favourable opportunity in 2021 as well. The tightening of advanced market and domestic monetary policies has begun, thus making use of these favourable conditions also encouraged issuance. Fiscal stimulus played a major role in relaunching the Hungarian economy after the pandemic, thus the building of safety reserves has gained further importance. Reserves of the government and of MNB are crucial in times of crisis, they serve smooth funding. To secure financing, the diversification of investors, using international bond issuance was still advisable. This way Hungary could demonstrate that it is able to secure its arising resource demand accompanied by high market interest.

Accordingly, a large international bond issue took place on 14 and 15 September 2021. This was the greatest Hungarian bond issue on the international markets of all times. Foreign exchange bonds were issued to the highly interested investors under favourable conditions, at low interest rates with maturities of 10 and 30 years of a total value of USD 4.25 billion and with 7-years maturity for a total amount of EUR 1 billion. The interest rate of dollar bonds with maturity of 10 and 30 years is 2.125% and 3.125% respectively, while the interest rate of euro bonds reached 0.326%. The coupon of the euro bond is the lowest ever attained by the Hungarian government with its euro issuances.

The increasingly important sustainability or “greening” aspect was integrated further in debt management by the issuances on the Asian markets. On 14 December 2021 Hungary was the first state in the world to issue sovereign green bonds in China. Onshore green “Panda” market bonds were issued of a value of around RMB 1 billion (amounting to around EUR 140 million) with a maturity of 3 years. On 18 February 2022 Hungary issued JPY 75.3 billion (EUR 580 million) of Samurai bonds in four tranches, out of which three have longer maturities (green bonds with maturity of 5, 7 and 10 years and traditional bonds with a maturity of 3 years). Coupon interest rates varied between 0.45 and 1.15%.

Through the transactions reserves reached a securely high level, while the foreign currency share did not deteriorate. The success of the issues has confirmed investors’ unwavering confidence in the government's economic policy pursued since 2010.

The role of domestic sectors in the investment structure of government debt financing remained substantial in the meantime. Similarly to international examples, purchases of institutional investors were supported by the bond purchase schemes of the central bank till the end of 2021, additionally, the share of debt financing owed to individual investors remained strong. The MÁP+ bond retained the powerful growth trend of the government bond volume held by individual investors and most recently, with rising inflation, the PMÁP inflation-linked bond offered a very favourable investment opportunity for the citizens. Currently more than a quarter of the government debt is financed by individual investors, the government bond portfolio held by households grew by HUF 1,000 billion to HUF 10,300 billion from the beginning of 2021. Individual investors are reliable, they play a major role in stabilizing debt financing. Relying on domestic sectors protects the country from vulnerability caused by external exposure. For it has been proven several times in the past two years that individual investors typically retain their investments during market turbulences. A further benefit, which should not be neglected, is that the interest paid increases the revenues of the Hungarian families.

The third priority in debt management is increasing the debt’s average term to maturity. As both residential as well as domestic and foreign institutional investors tend to be looking for long-term government bonds, in the past years, the term to maturity and duration of the debts have continued to climb sharply, the former reaching 6 years and the latter 5 years by end of January 2021. In addition to the success of MÁP+, the issuing of the foreign currency bonds also contributed substantially to this. With this, the renewal risk of debt has decreased substantially.

Table 4.4: Government bond market share of certain sectors (%, February 2022)

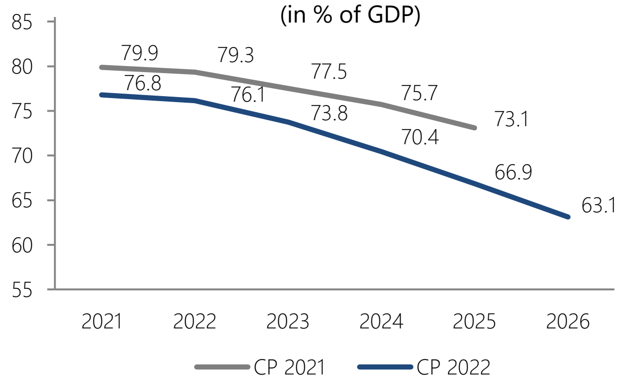
Investor groups	
Foreigners	28
Credit institutions	27
Households	27
Insurance companies, pension funds	6
Miscellaneous	12

Source: MNB, MoF calculation

Earlier debt management priorities are retained invariably. In 2022, the currency ratio will further decline together with a decreasing foreign share, while the role of domestic investors, primarily the households, will continue to strengthen in financing. Government efforts to achieve a healthier debt structure, and to reduce external vulnerability while doing so, are recognised not only by investors, but also by credit rating agencies, as Hungary retained its rating even in the uncertain times of the pandemic. Since then, in September 2021 Moody's also raised its rating to the same level as that of the other two rating agencies, commending the strong resilience and growth outlook of the Hungarian economy.

The steady decline in public debt-to-GDP ratios since 2011 inevitably came to a halt in 2020 as a result of the economic effects of the coronavirus crisis and the government measures taken in an effort to address them, in 2020 it rose from 65.5% to 79.6%. This is a growth of similar extent to other member states, as the EU debt level increased from 77.2% to 90.1% during this period. In 2021, however, at a stronger pace than the EU average, the Hungarian debt ratio started to decline at a 369 HUF/HUF/EUR exchange rate to 76.8%. The decrease is expected to continue dynamically, as a result of which the debt ratio is foreseen to drop back to 63.1% by the end of the planning horizon in 2026 (*Figure 4.4*).

Figure 4.4: Public debt ratio in Convergence Programmes for 2021 and 2022
(in % of GDP)



Source: MoF calculation

The current Convergence Programme anticipates a debt trajectory running at a lower level compared to last year, reflecting the successful management of the economic and financial impacts of the coronavirus pandemic and the effect of a higher deflator.

Table 4.5: Difference between debt trajectory forecasts for 2021 and 2022 (percentage points)

2022	2023	2024	2025
-3.2	-3.8	-5.3	-6.2

Source: Calculation of the Ministry of Finance

(1) Nominal GDP: Nominal GDP exceeding the figures of the 2021 Convergence Programme push the debt trajectory slightly lower compared to last year's forecast.

Table 4.6: The impact of different nominal growth on the debt trajectory (percentage point)

2022	2023	2024	2025
-6.2	-8.8	-9.6	-9.6

Source: Calculation of the Ministry of Finance

(2) Numerator effect: A higher debt projection for the period between 2022 and 2025 compared to the 2021 Convergence Programme modifies by itself the 2021 debt trajectory forecast as described below.

Table 4.7: The impact of different debt volumes on debt trajectories (percentage point)

2022	2023	2024	2025
+3.0	+5.1	+4.3	+3.4

Source: Calculation of the Ministry of Finance

The shift is due to a combination of factors, of which, in addition to the changes in 2021, a more moderate deficit than planned last year is the main driver for the years ahead.

(2a) Gross interest expenditure and primary balance: The primary balance figures have increased significantly over the entire planning period compared to what was foreseen in the 2021 Convergence Programme, which in itself results in a debt trajectory down by 0.9-1.2 percentage points. The interest rate expenditure prognosis increased, this alone pushed up the debt trajectory by 0.5-1.0 percentage points, suppressing the major part of the improvement brought about by the primary balance.

(2b) Other items: 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 2022-2023, it causes a reduction of 1.4-2.2 percentage points, while later on it pushes it slightly higher, thus improving the debt trajectory during the first two years, afterwards, however, it virtually neutralizes the positive effect of the primary debt. The technical exchange rate assumption used for debt prediction (HUF/EUR 370.0) is 2.5% weaker than the HUF/EUR exchange rate of 360.9 in the 2021 Convergence Programme. The assumed exchange rate exceeding last year's figure by 9.1 units is in itself pushing up the debt trajectory by 0.4 percentage point. In addition, the change in cash reserves of the state (Single Treasury Account and the foreign currency deposit at the MNB) also causes a larger deviation from the previous forecast.

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 2022 until the end of the period would mitigate the gross debt ratio by 1 percentage point in 2022 and by 0.8 percentage point by 2025.

(B) Exchange rate: Owing to a resuming decrease in foreign currency share from 2022, the foreign exchange exposure of the debt will downslide, which is clearly reflected by the fact that the 1-unit shift in the exchange rate will change the debt ratio by 0.05 percentage point in 2022 and just by 0.04 percentage point at the end of the period. Therefore, a nominal exchange rate 1% weaker than the exchange rate assumption specified in the Convergence Programme (HUF/EUR 373.7) would result in 2022 in a gross debt ratio higher by 0.18 and in 2025 higher by 0.15 percentage point.

(C) Economic growth: Should the nominal GDP growth end up 1 percentage point higher in 2022, the debt trajectory would see a 0.5–0.7 percentage point downward shift over the entire time span.

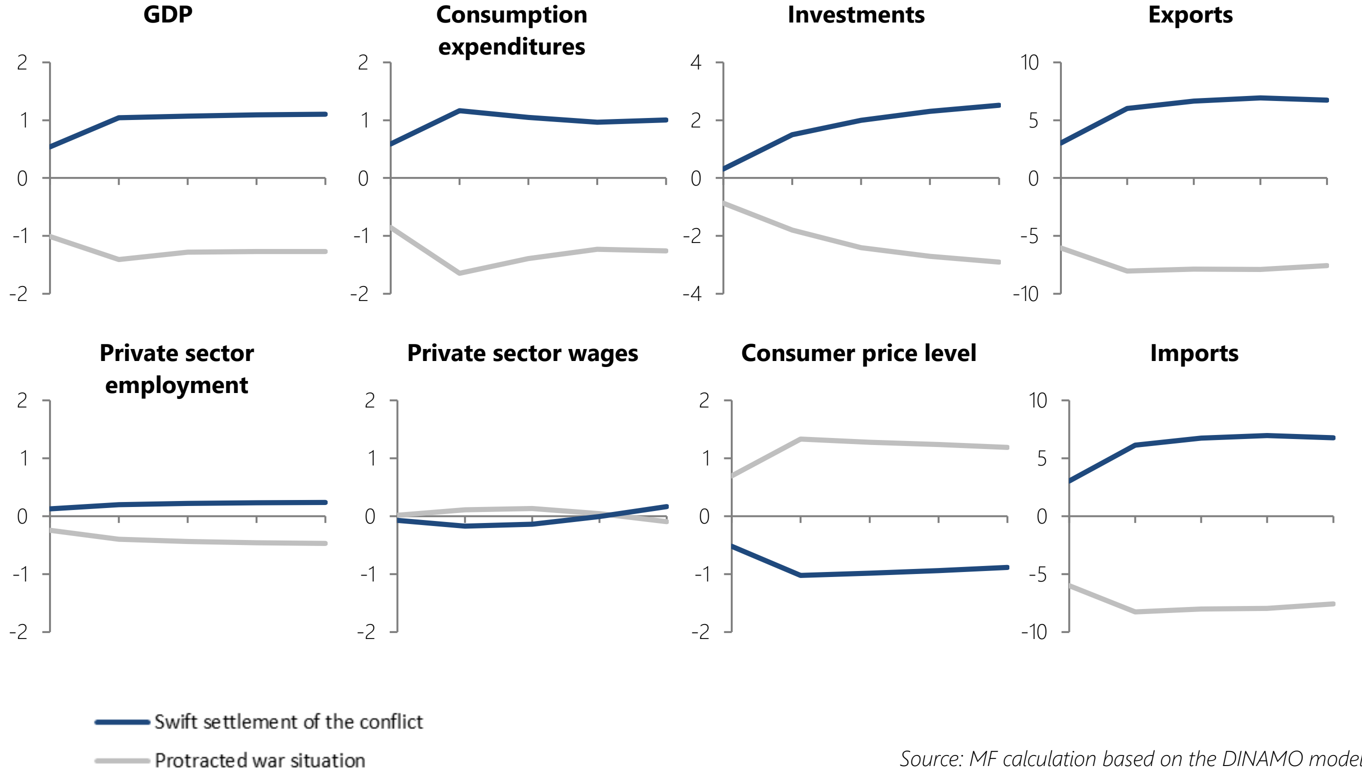
Following the successful management of the impacts of the coronavirus pandemic, the intention of the government during the planning time span remains the ensuring of the continued long-term improvement of the debt trajectory and debt structure in accordance with the practice of the past years.

5. Sensitivity analyses

The macroeconomic forecast of Convergence Programme is surrounded by risk factors, particularly in the present situation, when the course of Russia-Ukraine war and of economic measures responding to it represent significant uncertainties. In relation to this, two alternative scenarios and the resulting economic impacts are presented below. Created with the DINAMO model of the Ministry of Finance, the sensitivity analyses quantify the extent by which the levels and growth rates of the major macroeconomic variables would differ from the baseline scenario as a consequence of shocks *(Figure 5.1 and Table 5.1).*[1]

Figure 5.1: Alternative scenarios

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



Source: MF calculation based on the DINAMO model

** The horizontal line represents years from 2022 to 2026.*

A positive risk to the macroeconomic outlook is that the swift settlement of the Russian-Ukrainian conflict could lead to normalization of energy and commodity prices. It would secure supply chains, reduce uncertainty about the outlook and incite a recovery in external demand, which would have a positive impact on domestic economic activity. This is quantified by Scenario 1 in which, as a result of settling supply chain issues, the export performance of Hungary would grow at a faster rate than foreseen in the baseline projection, as well as due to the favourable outlook, the investment activity in the producing sectors would recover, resulting in a growth in employment. The normalization of raw material prices reduces production costs and consequentially the inflation, which increases households' consumption propensity. The recovery of internal demand would drive import demand. The increase in production resulting from consumption and additional capacities generates additional revenue for the budget as a whole. As a

[1] The Dynamic National Accounts Based Model (DINAMO) is described at the link below:
https://2015-2019.kormany.hu/download/9/97/10000/El%C5%91rejelz%C3%A9si%20m%C3%B3dszertan_angol.pdf#!DocumentBrowse

result of all this, overall GDP growth this year and next year could be around 0.5 percentage points higher than projected in the baseline, assuming a positive scenario.

However, based on the forecast of Convergence Programme the protracted Russia-Ukraine conflict represents a negative risk. This is modelled in Scenario 2, in which a less favourable external demand and escalation of supply chain issues would significantly contribute to the deterioration of the Hungarian export. The slowdown of export dynamics would result in a more moderate expansion of domestic production capacities than expected, and therefore employment and investment levels would also decrease. Furthermore, rising raw material prices will take their toll in the form of higher inflation which would dampen the dynamics of consumption. Due to moderate external and internal demand the economic performance would be lower on the long term, and, in line with economic developments, the general government balance would be worse than projected in the baseline scenario. Overall, in the negative scenario economic growth in 2022 would be 1.0 percentage points lower than anticipated in the baseline scenario.

Table 5.1: Risk scenarios

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

Scenario 1: Swift settlement of the conflict	**2022**	**2023**	**2024**	**2025**	**2026**
GDP	0.54	0.51	0.03	0.02	0.01
Households' consumption expenditure	0.59	0.57	-0.11	-0.09	0.04
Gross fixed capital formation	0.31	1.19	0.50	0.30	0.21
Exports	3.01	3.00	0.63	0.28	-0.18
Imports	3.05	3.08	0.60	0.23	-0.19
Inflation	-0.52	-0.50	0.04	0.04	0.06
Private sector employment	0.12	0.08	0.02	0.01	0.00
Gross average wage in the private sector	-0.07	-0.10	0.03	0.14	0.17
Income taxes*	0.00	0.00	-0.01	0.01	0.02
Employer contributions*	0.00	0.00	0.00	0.01	0.01
Turnover taxes*	0.01	0.01	0.00	0.00	0.01
Corporate taxes*	0.02	0.02	0.00	0.00	0.00
Interest expenditure of the general government*	0.00	0.00	0.00	0.00	0.00
General government balance*	0.03	0.01	-0.03	0.00	0.04

Scenario 2: Protracted war situation	**2022**	**2023**	**2024**	**2025**	**2026**
GDP	-1.01	-0.40	0.13	0.01	0.00
Households' consumption expenditure	-0.86	-0.79	0.25	0.16	-0.03
Gross fixed capital formation	-0.87	-0.93	-0.60	-0.30	-0.20
Exports	-6.03	-1.99	0.17	-0.03	0.32
Imports	-6.01	-2.27	0.26	0.06	0.37
Inflation	0.69	0.64	-0.05	-0.04	-0.05
Private sector employment	-0.24	-0.15	-0.04	-0.02	-0.01
Gross average wage in the private sector	0.02	0.10	0.02	-0.09	-0.14
Income taxes*	-0.02	0.01	0.01	0.00	-0.02
Employer contributions*	-0.01	0.01	0.01	0.00	-0.01
Turnover taxes*	-0.02	-0.02	0.01	0.02	-0.01
Corporate taxes*	-0.05	0.01	0.00	0.00	0.00
Interest expenditure of the general government*	0.00	0.00	0.00	0.00	0.00
General government balance*	-0.09	0.02	0.05	0.02	-0.05

Source: MoF calculation based on the DINAMO model

** Difference of main fiscal items obtained in shock scenario are in percentage of nominal GDP estimated in baseline scenario.*

6. LONG-TERM SUSTAINABILITY OF PUBLIC FINANCES

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

In the period following the coronavirus crisis, the Government's fiscal policy objective will be to reduce the debt ratio and to progressively realise a balanced budget, while ensuring economic recovery and growth. The reducing government debt level and budget deficit create sufficient room to tackle the long-term challenges of climate change and ageing population. Furthermore, the Government implemented several measures to support families in order to manage the budgetary consequences of ageing society and to further a demographic upswing.

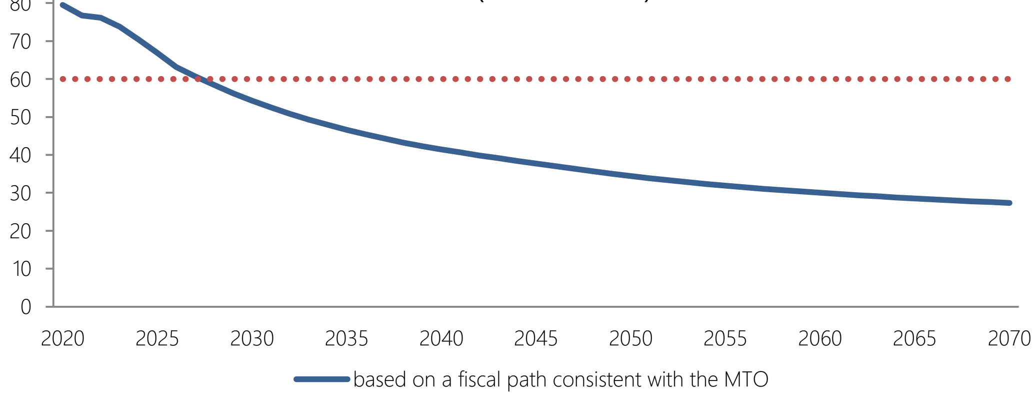
According to the estimates of the Ageing Report approved by the European Commission and the EU's Economic Policy Committee, age-related budgetary expenditure in Hungary in 2030 are anticipated to develop similarly to the 2019 data, at 17.1% of GDP. In the long term, spending appears to converge with the EU average and will reach 22.5% of GDP by 2070.

The projections for the main areas are as follows: pension expenditure in proportion of the GDP will increase from 8.3% to 12.4%, health-related expenditure from 4.8% to 5.6%, long-term care expenditure from 0.6% to 1.2% and education expenditure from 3.4% to 3.3% of GDP between 2019 and 2070.

According to the European Commission's Fiscal Sustainability Report 2021 published on 25 April 2022, the risk to the sustainability of the Hungarian budget is low in the short term, however, in long term risks were identified primarily due to the future budgetary expenditure associated with ageing society. Considering the baseline of the debt sustainability analysis presented in the report, which is based on the Commission’s economic forecast of autumn 2021, Hungary's debt will fall to 68.2% of GDP by 2030.

The Convergence Programme projects the debt ratio to decline to 63.1% of GDP in 2026; with a continuation of the prudent medium-term budgetary position, it will drop to 60% of GDP by 2028 (*Figure 6.1*). The public debt trajectory is expected to remain sustainable in the long run, based on either the mid-term fiscal path forecast in the Convergence Programme, or the fiscal policy implemented before the crisis.

Figure 6.1: Changes in the public debt rate
(in % of the GDP)



Note: until 2026 the macroeconomic trajectory is based on the assumptions described in the Convergence Programme, and thereafter on the macroeconomic assumption presented in the 2021 Ageing Report.
Source: MF calculation

7. Quality of General Government

7.1. Structure and Efficiency of General Government Expenditure

The improvement of the efficiency of public spending is supported not only by labour market measures, but also by measures taken in the area of education and science policy, which indirectly contribute to achieving a higher quality level. In the light of this, the convergence programme outlines in a concise manner the steps taken and planned by the Government in the areas of vocational education and training as well as in higher education. A detailed description of the structural measures is included in Hungary's 2021 National Reform Programme.

Vocational training

In 2020, the new vocational training act entered into force, creating a more streamlined training structure and more flexible training conditions than before, thereby further strengthening the system's capacity to adapt to labour market needs. In parallel with this, vocational trainers have received a 30% wage increase, which will support the efforts to keep qualified trainers in their jobs and to further improve the quality of vocational training. In order to strengthen dual training, the related tax credit for employers who operate as practical apprenticeships and the wages of apprentices participating in dual training have also been almost tripled. Significant improvements in vocational training curricula and in training and examination centre infrastructure are planned to be implemented from the resources of the EU budget cycle 2021-2027 and at the expense of RRF resources.

Higher education

The process of changing the model of higher education began in 2019, with the replacement of the maintainer of the Corvinus University of Budapest (hereinafter: BCE). In 2020, the Parliament decided to change the model of 9 further public higher education institutions, seven of which changed maintainer in 2020, and 2 more changed maintainer in 2021. In the summer of 2021, 11 further public higher education institutions changed structure, whereby almost two thirds of Hungarian higher education will operate under a new maintainer form. In the context of the model change, the state will transfer the right to maintain the institutions to a trust foundation established for this specific purpose. This has not changed the funding of the universities (with the exception of BCE, which is funded from the proceeds of a share package transferred to it free of charge), as they continue to receive budget support on the same terms as public higher education institutions.

It is also worth highlighting that in autumn 2020, the Parliament adopted the foundations of the new performance-based funding system for higher education institutions, which entered into force on 1 September 2021. Within this framework, the Government concludes a long-term (15-25 years) strategic agreement with the maintaining foundation in the case of the model-changing institutions, and a 3-5 years financing contract with the institution itself in the case of public higher education institutions, in which it stipulates the provision of education & training, research, other public services, and special regional and third-mission tasks (the term “third-mission" covers all institutionalised relationships with partners in the non-academic world, including the transfer and utilisation of intellectual property generated during the activities, and the contributions to the elaboration of professional policies).

Funding is planned to be based on three pillars: education, research, and infrastructure maintenance. When ordering the task, in addition to updated training cost and research task performance, quality indicators would also be included, which, according to international examples, are typically output performance indicators. Each indicator can be adapted to the characteristics, expected regional, third-mission and national aspects of the university. The strategic agreement may identify areas of training that the university is required to strengthen and may also identify courses that are not justified for continuation and that strengthen the profile of other universities. The training transition specified in the strategic agreement, on the other hand, is to be reflected in financing contracts and government training orders.

7.2. Structure and efficiency of revenues

7.2.1. Tax policy objectives, strategy and the "big picture"

In the past decade, a number of measures have been introduced in order to boost the competitiveness of the tax system. The most important structural changes took place between 2010 and 2014. The tax system was designed to encourage having children and to boost employment. Efficiency of tax collection continued to improve, tax burdens on labour and income continued to decrease, and further incentives were implemented to boost economic growth and weaken the shadow economy.

Tax reduction continued throughout the coronavirus pandemic, during the economic recovery and in 2022 as well. The tax reduction of 2022 was based on the comprehensive agreement reached in 2016 on the permanent consultation forum between social partners and the Government aiming to reduce employers' burdens (also touching on the increase of the minimum wage). The reduction of employers' burdens foreseen by the agreement was completely fulfilled by January 2022. As a part of the last step of easing employers' burdens, the vocational training contribution of 1.5% was abolished (and its benefits were integrated in the social contribution tax). All in all, based on the agreement with the Standing Consultation Forum of the Private Sector and the Government (VKF), employer taxes have decreased from 28.5% to 13%, the number of taxes have been reduced and the tax system has been simplified. Career starters are supported by the personal income tax exemption introduced from 2022 for young adults under the age of 25. To facilitate the housing of families - as a temporary rule in force till end of 2026 - 5% VAT rate is applied on the sale of new residential buildings in case the building permit is finalized till 31 December 2022 and the simple reporting is completed till the aforementioned date. Since 2021, with the family home-start subsidy programme, the purchase of new and used homes is exempt of duties and in case of new housing the VAT of 5% is reimbursed. Restrictions on the development reserve limits within corporate taxation had been lifted gradually, as since 2021 the development reserve can be applied to the full profit without limitation. To encourage the investments of small and medium-sized enterprises (hereinafter: SMEs), since 1 January 2022, the development tax credit is granted to small businesses for investments with a present value of at least HUF 50 million and to medium-sized companies for investments of a present value of at least HUF 100 million. In 2021 and 2022 the local business tax decreased to 1% instead of 2% among SMEs and sole proprietors.

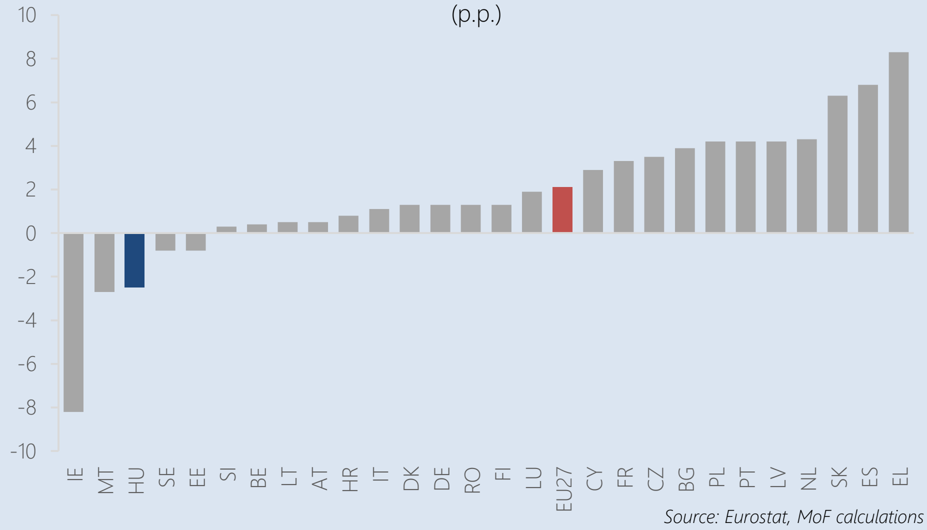
The priority of the tax policy is still the reduction of taxes on labour and entrepreneurial incomes, as well as to further strengthen the tax system's mechanisms supporting employment and families. Also, the government will continue to simplify the tax system and reduce administrative burdens, improve communication between tax payers and the tax authority, and promote cooperation and voluntary legal compliance.

Box 7: Tax centralization

Countries of the central and eastern European region seem to be more competitive than Western European countries in terms of taxation level and tax structure. Although the Hungarian taxation level was not considered outstanding among EU member states even at the beginning of the 2010s, this indicator was found to be particularly high in comparison to countries of the region. This posed a serious competitiveness issue relative to the direct competitors.

A notable success in the development of tax-to-GDP ratio, is that the budget was stabilized so that the degree of tax centralisation did not significantly change from its pre-crisis level. However, further significant drops could only be achieved after the budgetary adjustment, in the second half of the 2010s. Despite the reduction in tax rates, the decrease in tax centralisation was sluggish due to the success in whitening the economy over the decade. This however is a favourable outcome, as shrinking the shadow economy increases tax revenues without deteriorating competitiveness, and mitigates the distortionary effect of tax evasion.

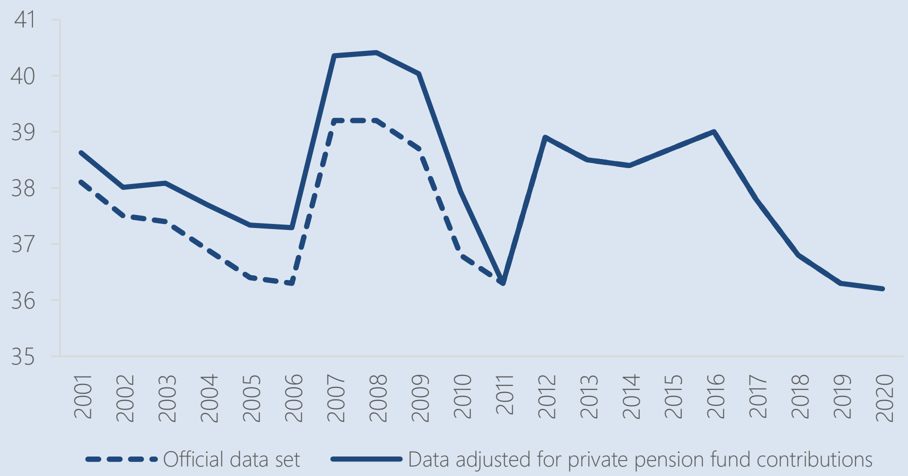
Change in tax-to-GDP ratio, 2009-2020
(p.p.)



Source: Eurostat, MoF calculations

In international comparison, the development of tax-to-GDP ratio over the past decade is considered to be a significant reduction, especially, as most countries experienced a post-crisis rise. Based on data from Eurostat, the tax-to-GDP ratio in Hungary dropped by 2.5% between 2009 and 2020, which is the third largest among EU member states.

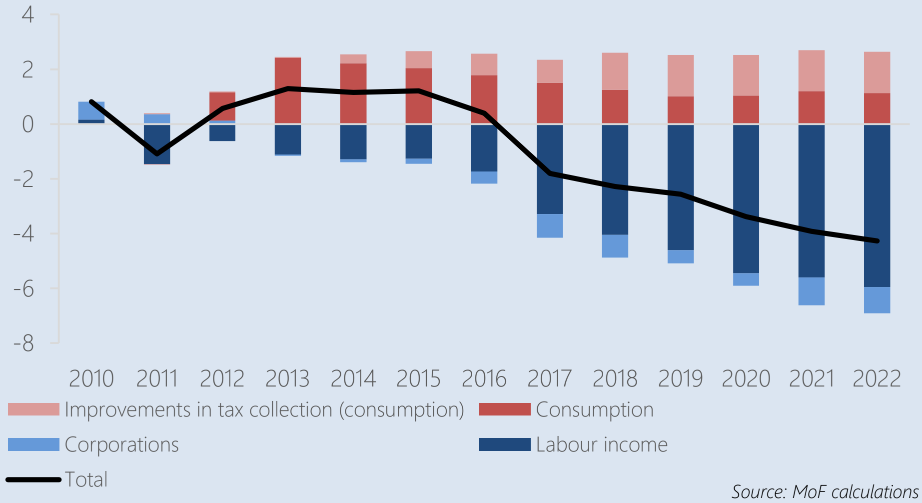
Tax revenues
(% of GDP)



Source: Eurostat, MoF calculations

As a result of the reforms introduced since 2010, the structure of tax revenues changed considerably. The directive of tax policy measures was to shift the centre of tax revenues from income taxes - as these have an adverse effect on economic growth - to consumption taxes in order to boost competitiveness.

Static revenue effect of tax policy measures since 2010
(% of GDP)

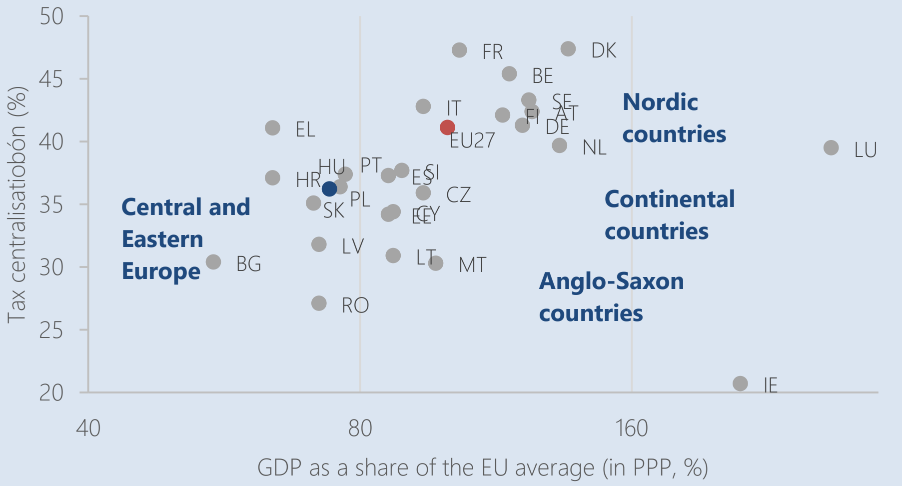


Source: MoF calculations

Tax policy aims to simplify the tax system, remove unnecessary taxes and regulations, thus many taxes generating minor revenues have been abolished. This came to pass by abolishing several small taxes (e.g.: the special tax on credit institutions, cultural tax, the 75% special tax on the employment termination of private individuals, simplified entrepreneurial tax), and by merging taxes that have similar tax bases (e.g._ accident tax and insurance tax, social contribution tax, healthcare contribution and vocational training contribution, energy tax and excise duty, social security contributions). Overall, the number of taxes was reduced by 11 from 2010 to 2022.

As a result of the improvement in recent years, the rate of tax payments is not considered outstanding anymore in comparison to countries at a similar development level, but overall it is still among higher ones (although in the EU it is below the average).

Taxation as a share of GDP and economic development, 2020



Source: Eurostat

The results of restructuring the tax system are reflected in international comparison as well: while in terms of the proportion of indirect and consumption taxes Hungary is the 4th highest, the proportion of direct taxes is one of the lowest and the previously record high social security revenues are now considered moderate. (There is some uncertainty in correctly determining the proportion of consumption taxes, as the statistical methods used classify the local business tax a consumption tax as well, however this only affects our ranking by one position.) Taxes on capital are the 3rd lowest in the EU, and taxes on labour are lower than in 2/3 of the member states.

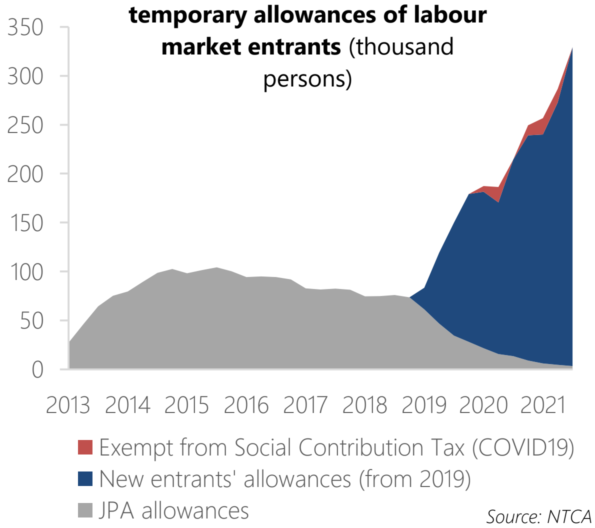
7.2.2. Structure of revenues, efficiency of tax collection and tax credits, structural measures aiming at improvement of efficiency

The reduction of taxes on labour

During the past decade, important reforms on labour taxation had been carried out, a result of which is a tax system that is linear in principle, encourages employment and rewards extra work. The earlier scheme, spurring concealment of wages and salaries, was replaced by a system containing targeted allowances. The reduction of labour taxes became one of the Government's main economic policy objectives (*Box 8*).

Targeted tax allowances for employees are focused primarily on families raising children who are eligible for a reduction of their personal income tax base and contribution base depending on the number of children raised. Meanwhile, the employment of disadvantaged employees is furthered by employers' tax allowances which target those affected even more efficiently from 2019 and onwards than previously. This way employers are eligible for allowances up to the amount of the minimum wage after workers in agricultural and unskilled jobs, career starters and mothers with three or more children.

Figure 7.1: Persons affected by temporary allowances of labour market entrants (thousand persons)



Source: NTCA

The Government's objective is the simplification of the tax system and the reduction of the number of taxes. As a part of this, as of 1 July 2020, individual contributions have been merged into a single contribution category, and at the same time the basic provisions of social insurance and contribution regulation have been redefined in a consolidated legislation. Since 2022 burdens on employers decreased to 13% by the 2.5 percentage point reduction of the social contribution tax and by the elimination of the vocational training contribution of 1.5%.

Due to the steps taken by the Government, the tax wedge has fallen spectacularly over the last few years, dropping by more than 7 percentage points to 41.2% from 2016 to 2022, and the labour market experienced a significant whitening.

The new entrants' allowance was a significant help for both employers and jobseekers in 2020, and the number of people receiving the benefit rose further in 2021, helping people who have lost their jobs due to the COVID-19 to re-enter the labour market. Within the personal income tax refund in 2022, parents raising children received an even larger support than in previous years, a total of ca. HUF 610 billion till 15 February 2022. In an effort to support young people, from 2022 onwards, persons under 25 will be exempt from personal income tax, which will typically allow them to earn 22.6% higher net income.

In order to support families in purchasing a home, the purchase of new and second-hand apartments is exempt from tax from 2021 – regardless of the value threshold – if funded from the Family Housing Allowance (CSOK).

A number of measures have been implemented over the past years to simplify the tax system, reduce the number of taxes and minimise administration burdens. 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 addition, the cultural tax, the 75% special tax on the termination of employment of private individuals and the special tax on credit institutions have been abolished. As of 1 July 2020, individual contributions have been merged into a single contribution category, and at the same time the basic provisions of social insurance and contribution regulation have been redefined in a consolidated legislation. The family allowance has also become more favourably applicable, up to the amount of the social insurance contribution, i.e. a raise of 1.5 percentage points. In January 2022 the vocational training contribution was abolished as well by merging its system of benefits into the social contribution tax.

Box 8: Tax burden on labour

After corporate income taxes, the taxes on labour pose the second largest obstacle to economic growth, which in a strongly progressive tax system with high rates would be reflected in concealment of incomes and reduced labour intensity. This was a common practice during the tax credit system before 2010, however since then several measures were introduced in order to reduce the tax burden on labour income, and subsidies became more targeted. Personal income tax was changed to a single-rate tax, the "super gross" tax base system has been removed, and the tax rate was reduced to 15% in 2016.flat

Further tax reductions were based on the comprehensive agreement reached in 2016 on the permanent consultation forum (VKF) between social partners and the Government aiming at the reduction of employers' burdens (in order to increase wages and employment). Based on this, the Government had been continuously decreasing the taxes on labour since 2017. The social contribution tax was reduced from 27% to 22% in the first step, then, in the coming years till 2021 to 15.5%. Since 2022 not only had the social contribution tax been reduced by 2.5 percentage points to 13%, but also the 1.5% vocational training contribution was eliminated (by merging its system of benefits into the social contribution tax). Overall, based on VKF agreement, employer taxes have decreased from 28.5% to 13%, the number of taxes has been reduced and the tax system has been simplified.

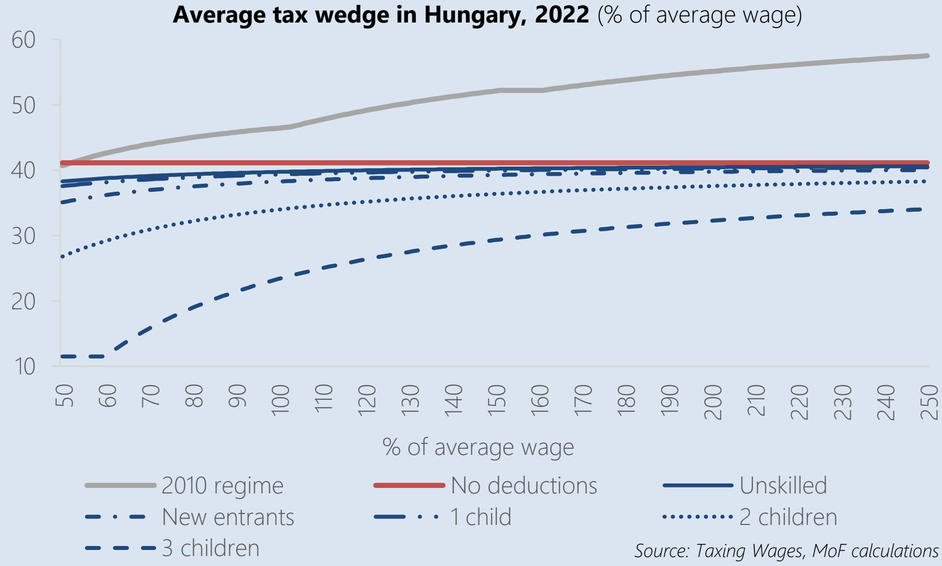
Beyond tax reduction, numerous targeted tax allowances and subsidies support both employees and employers with a special focus on families. Those raising children receive family tax and contribution allowances. The most widely used tax allowance – the family tax base allowance in personal income tax – is steadily growing year by year. In 2010 benefits amounted to HUF 12.5 billion, in 2021 it already reached HUF 380 billion. Furthermore, private individuals raising children, eligible for family tax allowance, are reimbursed in 2022 for a certain share of their personal income tax, simplified contribution to public revenues (EKHO) or lump-sum tax of small taxpayers (KATA) paid in 2021 (maximally up to HUF 809 thousand).

Another important pillar of tax allowances is employers' benefits supporting the employment of persons suffering from labour market disadvantages. Since 2013 a job protection benefit may be used for eligible employees; after 2019 the benefits became even more efficiently targeted, and the amount of the allowance rose from HUF 100,000 to the amount of the statutory minimum wage. Employees after whom benefits can be applied: workers in agricultural and unskilled jobs, career starters and mothers with three or more children.

Beyond the above, several other measures aiming at the reduction of the tax burden on labour were introduced. Young couples may receive the benefit for couples in their first marriage. Since 2019, pensioners working in employment contracts, and since 2020 in all forms of work are exempt from social contribution tax and social security contribution. Mothers raising four or more children are exempt from personal income tax. Since 2022 young adults under the age of 25 are exempt from personal income tax obligation up till the amount of the gross average wage.

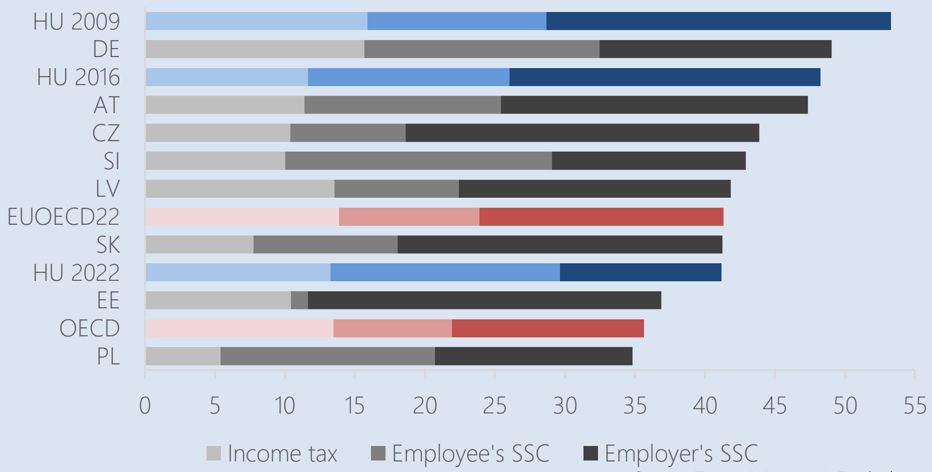
As a result of the measures of the Government, the Hungarian tax wedge - i.e. all burdens on labour relatively to total costs - decreased spectacularly. In 2009 the tax wedge was 53.1% for a single employee earning average wage, which was one of the highest among EU member states. As of 2020 this dropped to 43.2% and, hence the effective measures, from 2022 it decreased even further, to 41.2%. The above improvements were achieved without accounting for the social contribution tax and family benefits, which would significantly lower the actual average tax wedge.

Average tax wedge in Hungary, 2022 (% of average wage)



Source: Taxing Wages, MoF calculations

Tax wedge according to the six-step wage agreement
(2020, %)



Source: Taxing Wages, MoF calculations

Encouraging investments, supporting SMEs through corporate taxes

In the case of corporate tax, in order to encourage investment, restrictions on the amount of the development reserve have been lifted gradually over the past period. In 2020, the profit-linked 50% restriction was abolished, and this could already be applied with respect to tax year 2019 and onwards. This provided the possibility for using the development reserve up to the full amount of pre-tax profit, or the upper limit of HUF 10 bn. . As of 2021 the HUF 10 bn.

ceiling was also abolished, this way the development reserve can now be applied to the entire pre-tax profit without any limitation. Furthermore, in order to encourage investment by smaller businesses, the threshold for the development tax credit for small and medium-sized enterprises was gradually reduced in three steps from 2020.

To further economic recovery, in 2021, similarly to the corporate tax, loss carry forward was introduced within the income tax on energy suppliers, which can be applied by enterprises first in the tax year of 2021 for their losses occurred in 2020.

Starting from 2017, the regulation of small business tax (KIVA) was simplified to a significant extent, and both the entry and exit thresholds for the tax regime were raised. In 2021, the sales revenue and balance sheet total threshold for KIVA entry has been increased to HUF 3 billion, and the income threshold for the cessation of small business tax regime has been increased to HUF 6 billion. The reduction of the social contribution tax was accompanied by the gradual reduction of the tax rate in the past years: In 2017, the tax rate was reduced from 16% to 14%, then by further 1 percentage point in 2018, 2020 and 2021 respectively. On 1 January 2022, by another reduction of 1 percentage point, it decreased to 10%, thus ensuring a more favourable tax environment for SMEs. As a result of these measures and the campaigns to promote the tax regime, the number of taxpayers has increased twelve-fold since 2016, reaching over 76,000 by the end of February 2022.

To reduce the administrative burden for micro-enterprises and private entrepreneurs, the threshold for the small taxpayers' lump-sum tax (KATA) was raised from HUF 6 million to HUF 12 million in 2017. The threshold of value-added tax exemption was increased from HUF 8 million to HUF 12 million as of 2019, in an effort to further reduce the administrative burdens. However, there have been a number of cases of misuse within this tax regime through the hidden employment for the purpose of aggressive tax optimisation. This places employers who employ professionals on a traditional employment basis into serious competitive disadvantage compared to those who outsource work. Employees may also be affected adversely by this situation, given that, as 'KATA' entrepreneurs, they lose their employment protection, and may be granted lower social insurance benefits in the future. Consequently, from January 2021, the rules on the lump-sum tax of small businesses have been changed to discourage outsourcing: the revenues above HUF 3 million of a small taxpayer originating from the same paying company is now subject to an additional 40% tax on the paying party's side. Despite the changes, the popularity of the KATA scheme continues to grow due to the simplicity of the tax regime and the low tax burden, with the number of taxpayers exceeding 455,000 in February 2022.

The tax advance supplement was abolished for central taxes in 2019 and for local business tax in 2020. As of 2021, the submission of local business tax returns via the NTCA became mandatory, which will significantly reduce the administrative burden for businesses. As of 2022, the batch type local business tax returns was introduced with numerous integrated formula and control mechanisms. This largely simplifies the completion and submission of tax returns for larger companies with several branches as each enterprise is required to file one return including data on all of its sites. Separate sheets have been designed for taxpayers choosing simplified tax base calculation (e.g. private entrepreneurs, primary agricultural producers), thus the completion of the tax return became easier for them too.

A further substantial measure concerning local business tax is that, with respect to 2021 and 2022, the maximum rate of local business tax for small and medium-sized enterprises with a sales revenue or balance sheet total of less than HUF 4 billion has been set at 1%, and the businesses concerned could already enforce the 50% reduction on their tax advances payable in 2021 and 2022.

In order to replenish the Epidemic Control Fund, a special retail tax was introduced effective from 1 May 2020, the basis for which is the amount of sales revenue from retail. Furthermore, a special tax imposed on credit institutions based on the special tax on financial institutions provided further significant resources for controlling the pandemic in 2020. The amount of the excess contribution paid by credit institutions can be deducted in equal instalments from the tax liability of the special tax on financial institutions for the current year for five years starting in 2021.

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. In line with this, in recent years, the reduction of the value-added tax has been used only as a targeted measure – keeping an eye on the budget's room for fiscal manoeuvres – in areas where it was justified by the need for sectorial development or to combat the shadow economy. Thus, VAT rates on a number of basic foodstuffs have been reduced, and VAT rates on internet services and restaurant meals have also been lowered in the past few years.

As a transitional measure to mitigate the impact of the coronavirus pandemic, the tourism development contribution and the tourism tax were abolished from spring 2020, and a 5% VAT rate was introduced from November 2020 until the end of July 2021 for takeaway and door-to-door sales of food and drink, which would otherwise have been subject to a 5% VAT rate in the framework of restaurant catering services.

A reduced VAT rate of 5% has been introduced as of summer 2020 for the sale of residential property built in so-called brownfield areas with a useful floor area not exceeding 150 square metres. In addition, under the Home Creation Action Plan, a 5% VAT rate will again apply to the sale of new housing as from 2021 until 31 December 2022 (with transitional provisions until the end of 2026).

The rate of the excise duty on cigarette and fine cut smoking tobacco gradually increased from September 2018 in seven steps (September 2018, January 2019, July 2019, January 2020, July 2020, January 2021 and April 2021). Furthermore, from 2021, the distillation of spirits for consumption by the households of fruit growers and their guests, up to a certain quantity, became exempt from tax.

Starting February-March 2022, excise duty on petrol and diesel will be reduced by HUF 25 per litre for a limited period of time.

Mitigation of tax avoidance mitigation and improvement of tax compliance

Hungary continues to be committed to and involved in the international fight against aggressive tax avoidance. In 2018, Hungary amended the rules concerning controlled foreign companies in accordance with the provisions of the European Union's Anti-Tax Avoidance Directive and implemented the rules for limitations to the deductibility of interest, effective from 2019. Moreover, the other provisions of the Directive, i.e. the rules pertaining to capital withdrawals and the rules against hybrid instruments (tax avoidance as a result of differences in the legal evaluation of the same factual circumstances) have been transposed in 2020. At the beginning of 2021, Hungary ratified the Multilateral Convention on the implementation of tax convention measures for preventing tax base erosion and profit shifting, which provides additional tools to combat aggressive tax optimisation. The Multilateral Convention will apply to Hungary as of 1 January 2022, and more than 50 tax treaties have already been amended accordingly. In addition, Hungary is an active participant in the OECD-coordinated Pillar1 and Pillar2 negotiations on international tax reform and related EU legislative work.

The primary objectives of the tax procedure area 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 and customer oriented nature of the tax authority. The most significant step has been the introduction of the eSzja system, which now allows NTCA to prepare draft returns for more than 5 million private individuals, taking over the burden of preparing the personal income tax returns 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 drafts of the tax returns 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 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. In the medium term, the objective of the Government is to enable even more businesses to be provided with pre-completed drafts prepared by the tax authority in connection declarations requiring the most burdensome administrative procedures (e.g. VAT) and the various reporting obligations of employers. The data provided by the extension of the online invoice data service will be used as the basis of the VAT return drafts (eÁFA) prepared by the tax authority in the future.

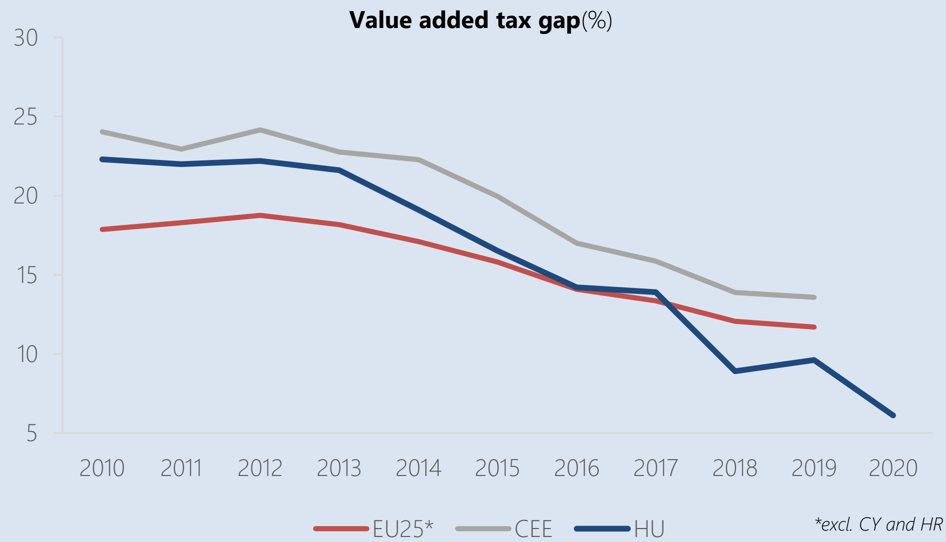
Box 9: Measures for whitening the economy and combatting tax avoidance

In recent years, measures aimed at the whitening the economy have demonstrated tangible results in budget income. As a consequence, the increase in VAT revenues exceeded the increase justified by macroeconomic parameters (household consumption, household investment, government purchases).

With regard to the positive impact on tax revenues, the electronic integration of cash registers with the NTCA played a prominent role. The introduction of online cash registers began in 2013 and was fully implemented in 2014 to reduce fraud in retail sales. The introduction of the Electronic Public Road Trade Control System (EKÁER) in 2015 allowed the real-time tracking of the movement of goods. As a result, the position of law-abiding market operators has been strengthened, the trade of goods has become more transparent, and it has become easier to exclude abuses and identify tax evaders. A POS terminal installation programme was launched to encourage electronic payments in 2016. In addition, automated food vending machines operating without operating staff were integrated to the NTCA system as of 1 July 2018. All vending machines have to be registered as of 30 June 2019.

In order to combat VAT fraud related to transactions among taxable persons, an online invoice data reporting service has been introduced and became mandatory from 1 July 2018, which was extended in two further steps from July 2020 and January 2021 (on both occasions with a 3-month penalty-free period granted by the tax authority taking the coronavirus pandemic-related difficulties into consideration). In phase 1, the limit for the data provision obligation in case of output tax was reduced to HUF 0, applicable to all invoices issued between domestic businesses subject to VAT. In phase 2, as of January 2021 data reporting has become comprehensive, including for invoices issued to non-taxable persons. Given that the reporting obligation now also covers intra-Community sales and exports of products, the entire data flow of practically the entire economic life will be transparent to the NTCA. As of 1 July 2020, the range of transactions subject to the obligation to issue invoices has been extended to facilitate online invoice reporting, and the deadline for issuing invoices has been reduced from 15 to 8 days.

As a result of the measures implemented in recent years for the purpose of combatting tax avoidance, the rate of uncollected VAT has decreased significantly in Hungary, which is also confirmed by the European Commission's latest study on estimating VAT gap (European Commission 2021). According to the estimate, the level of domestic VAT gap in proportion to the theoretical collected VAT reached 21.6% in 2013. The domestic VAT gap has been decreasing ever since, and its rate was 9.6% in 2019, while according to the preliminary estimate of CASE, decreased to 6.1% in 2020. The rate of decline in domestic VAT gap between 2013-2016 has exceeded the average rate for EU countries, placing Hungary among the EU leaders in 2020, ahead of countries such as Belgium (with an estimated 12% for 2020) and France (with an estimated 9.5% for 2020). While the development of the VAT gap was also influenced by other items affecting the VAT base (household investments, government purchases), the measures related to whitening the economy took major part in it.



Source: European Commission (2021), MoF calculations

7.2.3. Analysis of revenue developments: revenue outcomes in 2021, expected developments in 2022 and medium-term outlook

The negative economic and labour market impacts of the coronavirus pandemic have been mitigated by a number of tax and contribution benefits. As in the March–June 2020 period, the hardest-hit sectors were exempt from paying employer contributions in the November 2020–May 2021 period, and personnel contributions were not included in the small business tax base in this period either. The KATA entrepreneurs concerned were also exempted from paying their lump sum tax in March and April 2021. The unemployment condition for the social contribution tax relief for labour market entrants was reduced from 6 months to 3 months from June 2021 until the end of 2021, and representation and business gifts were exempted from social contribution tax. The social contribution tax rate will be reduced by 2 percentage points from 17.5% to 15.5% as of 1 July 2020, despite the fact that the wage increase condition in the previous VFK agreement was not met. The reduction of labour taxation continued in 2022, with the social contribution tax rate falling to 13% from January, while the 1.5% vocational training contribution was abolished. Accordingly, the small business tax rate has also been reduced to 11% in 2021 and 10% in 2022. Besides the reduction in the rate for small business tax, the entry thresholds for small business tax have also been raised in 2021, allowing more and more taxpayers to opt for this favourable tax scheme.

Since families with children have been particularly badly affected by the coronavirus pandemic, the Government has decided that parents with children would receive a refund of their personal income tax paid in 2021 up to the average wage level in 2022, and small taxpayers with children and sole proprietorships will also be compensated.

In order to mitigate the impact of the coronavirus pandemic and taking into consideration the particular impact on the tourism sector, the tourism development contribution (from 1 March 2020 to 31 December 2021) and the tourism tax (from 26 April 2020 to 30 June 2021) were temporarily exempted, while SZÉP card top-ups were also exempted from the social contribution tax in 2021. A 5% VAT rate was introduced from 14 November 2020 until 31 July 2021 for takeaway or door-to-door sales of food and drink, which would otherwise have been subject to a 5% VAT rate in the framework of restaurant catering services.

The VAT rate of new housing decreased to 5 % between 1 January 2021 and 31 December 2022 (until 2026 in relation to building permits issued up to 2022) to encourage investments and support home purchases. A VAT rate of 5% has been introduced as of summer 2020 for the sale of residential property built in so-called brownfield areas with a useful floor area not exceeding 150 square metres.

To strengthen the liquidity of micro, small and medium-sized enterprises, the tax authority will pay the reclaimed VAT to reliable taxpayers within 30 days from March 2020 instead of the previous 75 days, and within 20 days instead of 30 days. This measure has also been extended to 2022 in order to re-launch the economy.

The online invoice data reporting service became fully functional as of 4 January 2021 (the tax authority granted a penalty-free period until 31 March, taking into consideration the difficulties caused by the coronavirus pandemic), i.e. it essentially covers all invoices issued to taxable and non-taxable persons.

As regards excise duties, the tax rates on cigarettes and fine cut smoking tobacco have also been increased in January and April 2021 to align them with the EU minimum rates. Excise duties on petrol and diesel will be reduced by HUF 5 per litre as of 28 February 2022, and by another HUF 20 per litre as of 10 March 2022.

The distillation of spirits for consumption by the households of fruit growers and their guests, up to a certain quantity, will be exempt from tax as of 2021.

Taxpayers in payment difficulties were eligible for special duty-free discounts. Taxpayers could apply for a six-month grace period or twelve-month penalty-free instalment payments for any tax category for tax arrears of up to HUF 5 million in the event of payment difficulties attributable to the emergency. In addition, businesses have also been given the possibility of tax mitigation. Should the payment of tax render the business's activities impossible due to the emergency, the business could apply for a tax reduction of up to 20% and up to HUF 5 million per tax category on one occasion.

A special retail tax has been introduced as of May 2020 to provide the necessary resources to protect and restart the economy, and the top marginal tax rate has been increased to 2.7% as of February 2022. In addition, the motor vehicle tax revenue collected by municipalities has been transferred to the central budget. A special tax imposed on credit institutions due to the coronavirus pandemic based on the special tax on financial institutions provided significant funds for controlling the pandemic in 2020. The amount of the excess contribution paid by credit institutions in 2020 can be deducted in equal instalments from the tax liability of the special tax on financial institutions for the current year for five years starting in 2021, which may decrease revenues from this tax category until 2025.

To encourage investments the limits on the development reserve in corporation tax have been gradually reduced in a phased process, and from 2021 onwards it will be fully applicable to total profits. In order to encourage investments by small and medium-sized enterprises, the threshold for receiving development tax relief has been lowered in 2021 and in 2022, meaning that it is now available for investments of at least HUF 50 million for small businesses and HUF 100 million for medium-sized enterprises.

In order to mitigate the liquidity difficulties of businesses, from 2021, the income tax of energy suppliers will also allow for deferral of loss similarly to the corporate tax. The first time it could be claimed for the 2021 tax year, for losses in 2020.

Stock exchanges, commodity exchanges and venture capital fund managers will no longer be subject to the special tax on financial institutions as of 2022.

Municipalities may not set a higher local or municipal tax rate in 2021 and 2022 than the rate in 2020, nor may they reduce existing tax exemptions or reductions, or impose new local or municipal taxes.

A further substantial measure concerning local business tax is that the maximum rate of local business tax for small and medium-sized enterprises with a sales revenue or balance sheet total of less than HUF 4 billion has been set at 1% for tax years 2021 and 2022. The businesses concerned will be able to claim the 50 % reduction for their tax advances for the years 2021 and 2022 as well.

8. Institutional characteristics of general government

8.1. Budgetary framework

The framework rules for the preparation of the budget are laid down in the Fundamental Law, in Act CXCIV of 2011 on the Economic Stability of Hungary (Economic Stability Act), Act CXCV of 2011 on Public Finances (Public Finances Act) and Government Decree 368/2011 (XII.31.) on its implementation.

In view of the pandemic situation, the Government has taken a number of legal and economic measures. The state of emergency is one of the special legal orders provided for in the Fundamental Law. In a state of emergency, the Government may take decisions differently from the standard legal orders, to the extent that may be substantiated based on the emergency situation. The escape clause in Article 36(6) of the Fundamental Law is activated at times when a special legal order is applied, under which the requirement to reduce debt may be derogated from to the extent necessary to mitigate the consequences of the circumstances triggering the special legal order, or, in case of an enduring and significant national economic recession, to the extent necessary to restore the balance of the national economy. Similarly, the Act on Disaster Management also provides for a derogation from the public finance rules.

The budget deficit target may exceed 3% of GDP in the years of recovery from the economic situation caused by the emergency and need not be consistent with the medium-term budgetary objective. The 2022 budget law has been drafted accordingly.

8.2. Structure of the general government's statistical data reporting

In Hungary, statistics on the government sector are compiled by the Hungarian Central Statistical Office (KSH) and the National Bank of Hungary (MNB). According to the current division of labour, the KSH is responsible for non-financial accounts and the MNB for financial accounts. In the data report provided in the excessive deficit procedure (EDP Notification), the above division of labour applies to the compilation of factual data up to the period preceding the reference year, while the calculation of the expected government balance and debt for the given year is the duty of the Ministry of Finance. The statistical working committee consisting of representatives of the KSH, the MNB and the MoF operates at the managerial and expert level. The procedural issues related to data flow, division of labour and methodological judgement are set out in a cooperation agreement updated in 2015. The main source of data for the government sector's statistics is the Public Finance Information System, the annual and interim reports of public finance institutions, complemented by the collection of statistical data on government enterprises and non-profit organisations, and the collection of banking and securities statistics for the government sector as a whole. The notification report will be published by the KSH on its website when issued to Eurostat. After a three-week consultation period with Eurostat, the KSH publishes – together and simultaneously with the Eurostat press release – the EDP Notification Tables approved by Eurostat. It also publishes the methodological description related to its compilation, which is continuously updated by the Hungarian statistical authorities. In the explanatory part of the annual budget and final accounts submitted to Parliament, the Ministry of Finance presents the divergence between the official general government balance and the Maastricht balance and debt indicators in a separate section. The disclosures required by Council Directive 2011/85/EU of 8 November 2011 on requirements for budgetary frameworks of the Member States are fully complied with by the Ministry of Finance.

9. TABLES

Table 1a

Macroeconomic prospects

	ESA-code	2021 HUF billion	2021	2022	2023 change in %	2024	2025	2026
1. Real GDP (at constant prices)	**B1g**	51702.3	7.1	4.3	4.1	4.2	4.3	4.3
2. Nominal GDP	B1g	55256.7	14.5	10.3	11.8	9.2	8.5	8.2
Components of the growth (previous year's prices)								
3. Private consumption expenditure	P.3	23991.3	4.6	5.5	4.4	4.4	4.5	4.5
4. Government consumption expenditure	P.3	10507.6	3.7	1.6	1.5	1.6	1.6	1.5
5. Gross fixed capital formation	P.51	13616.1	5.9	2.7	4.2	4.4	4.1	4.1
6. Changes in inventories (% of GDP)[1]	P.52+ P.53	843.0	1.1	0.0	0.0	0.0	0.0	0.0
7. Exports of goods and services	P.6	42054.7	10.3	5.7	6.3	6.5	7.5	7.5
8. Imports of goods and services	P.7	40361.6	8.7	4.9	5.5	5.7	6.5	6.5
Contribution to real GDP growth (at the previous year's prices)								
9. Final domestic demand		49166.2	4.6	3.6	3.6	3.6	3.5	3.5
10. Change in stocks	P.52+ P.53	843.0	1.1	0.0	0.0	0.0	0.0	0.0
11. External balance of goods and services	B.11	1693.1	1.4	0.6	0.6	0.7	0.9	0.9

[1] *The stock change reflects the work and leap day effect in 2020.*

Table 1b

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rice developments

	2021	2022	2023 change in %	2024	2025	2026
1. GDP deflator	6.9	5.7	7.3	4.8	4.0	3.7
2. Implicit price index for household final consumption expenditure	6.3	8.9	5.2	3.0	3.0	3.0
3. Harmonised Index of Consumer Prices (HICP)	5.2	8.9	5.2	3.0	3.0	3.0
4. Implicit price index for government consumption expenditure	7.7	8.2	3.7	5.8	5.8	5.7
5. Implicit price index for fixed capital formation	10.1	10.5	8.3	5.1	4.8	4.3
6. Export price index (goods and services)	6.9	9.2	0.0	3.4	1.9	1.7
7. Import price index (goods and services)	10.3	13.5	-1.7	2.7	1.9	1.7

Table 1c

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abour market developments

	ESA-code	2021 level	2021	2022	2023	2024	2025	2026
			change in %					
1. Number of employees (thousands) (15-74)[1]		4634.6	0.7	0.7	0.3	0.2	0.1	0.1
2. Unemployment rate (%) (15-74)		-	4.1	3.6	3.3	3.1	2.9	2.8
3. Labour productivity, per person		-	6.4	3.6	3.8	4.0	4.2	4.3
4. Compensation of employees (HUF bn)	D.1	22215.7	11.1	13.0	9.6	9.1	8.6	8.3
5. Compensation per employee (HUF million)		5.7	8.9	12.2	9.3	8.8	8.5	8.2

[1] *Employment by Labour Force Survey statistics.*

Table 1d

Sectorial balances

	ESA-code	2021	2022	2023	2024	2025	2026
		% of GDP					
1. Net external financing capacity (+) /demand (-)	B9.	-0.5	-2.6	0.6	0.5	0.9	2.0
of which:							
- Balance of goods and services		0.8	-1.9	0.8	1.9	2.5	3.1
- Balance of primary incomes and transfers		-3.8	-3.7	-3.4	-3.4	-3.1	-3.1
- Capital account balance		2.5	3.0	3.3	2.0	1.5	1.9
2. Net lending (+) / borrowing (-) of the private sector including statistical discrepancy	B9.	6.3	2.3	4.1	3.0	2.4	3.0
3. Net lending (+) / borrowing (-) of general government	B9.	-6.8	-4.9	-3.5	-2.5	-1.5	-1.0

Table 2a

General government budgetary prospects

	ESA-code	2021 HUF billion	2021	2022	2023	2024	2025	2026
			% of GDP					
Net lending (EDP B.9.)								
1. General government	S.13	-3736.1	-6.8	-4.9	-3.5	-2.5	-1.5	-1.0
2. Central government	S.1311	-4122.0	-7.5	-4.6	-3.6	-2.7	-1.7	-1.1
3. State government	S.1312	-	-	-	-	-	-	-
4. Local governments	S.1313	109.9	0.2	0.0	0.0	0.1	0.1	0.1
5. Social insurance funds	S.1314	276.0	0.5	-0.3	0.1	0.1	0.1	0.1
General government (S.13)								
6. Total revenue	TR	22695.1	41.1	41.1	41.6	41.1	40.3	39.4
7. Total expenditure	TE	26431.2	47.8	46.0	45.1	43.6	41.8	40.4
8. Balance	B.9	-3736.1	-6.8	-4.9	-3.5	-2.5	-1.5	-1.0
9. Interest expenditure	D.41	1290.3	2.3	2.7	3.0	3.0	2.8	2.7
10. Primary balance		-2445.8	-4.4	-2.2	-0.5	0.5	1.3	1.7
11. One-off and other temporary measures[1]		-829.0	-1.5	-0.7	0.0	0.0	0.0	0.0
Selected components of revenues								
12. Total taxes (12=12a+12b+12c)		12739.9	23.1	24.4	24.5	24.2	23.8	23.4
12a. Taxes on production and imports	D.2	9669.5	17.5	17.1	17.2	16.9	16.5	16.1
12b. Taxes on income and on capital	D.5	3053.0	5.5	7.3	7.3	7.3	7.3	7.3
12c. Capital taxes	D.91	17.4	0.0	0.0	0.0	0.0	0.0	0.0
13. Social security contributions	D.61	5790.6	10.5	10.4	10.2	10.3	10.3	10.2
14. Property income	D.4	239.5	0.4	0.4	0.3	0.3	0.3	0.3
15. Miscellaneous		3925.1	7.1	5.9	6.5	6.4	5.9	5.6
16. =6. Total revenue	TR	22695.1	41.1	41.1	41.6	41.1	40.3	39.4
Tax burden[2] (D.2+D.5+D.61+D.91-D.995)		18647.5	33.7	35.0	35.0	34.7	34.3	33.8
Selected components of expenditure								
17. Compensation of employees + intermediate consumption	D.1+P.2	10331.1	18.7	18.1	17.1	16.4	15.5	15.1
17.a. Compensation of employees	D.1	5623.3	10.2	10.9	9.7	9.5	8.8	8.5
17.b. Intermediate consumption	P.2	4707.8	8.5	7.3	7.4	6.8	6.7	6.6
18. Social payments (18=18.a+18.b)		6784.7	12.3	12.5	12.1	11.7	11.2	10.8
of which: Unemployment benefits[3]		94.2	0.2	0.2	0.2	0.2	0.1	0.1
18.a. Social transfers in kind supplied via market producers	D.6311, D.63121, D.63131	825.9	1.5	1.5	1.4	1.3	1.3	1.2
18.b. Social transfers other than in kind	D.62	5958.8	10.8	11.0	10.7	10.3	9.9	9.6
19. =9. Interest expenditure	D.41	1290.3	2.3	2.7	3.0	3.0	2.8	2.7
20. Subsidies	D.3	738.2	1.3	1.1	1.1	1.0	0.9	0.8
21. Gross fixed capital formation	P.51	3187.3	5.8	5.3	5.6	6.2	6.1	6.0
22. Capital transfers	D.9	2053.2	3.7	2.8	4.1	3.6	3.3	3.1
23. Other costs		2046.4	3.7	3.5	2.1	1.8	1.9	1.9
24. =7. Total expenditure	TE	26431.2	47.8	46.0	45.1	43.6	41.8	40.4

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

[1]: The convergence programme does not include a one-off item to estimate the structural balance. Table 'A' describes the discretionary measures.

[2]: Including revenues collected by the EU

[3]: Cash benefits from the National Employment Fund and certain training grants

Table 2b

No-policy change projections

	2021 HUF billion	2021	2022	2023 % of GDP	2024	2025	2026
1. Total revenue at unchanged policies	22695.1	41.1	41.1	41.6	41.1	40.3	39.4

The table contains revenue projections based on measures taken until 30 April 2021.

Table 2c

tems not included in the expenditure aggregate

	2021 HUF billion	2021	2022	2023 % of GDP	2024	2025	2026
1. Spending on EU programmes, which is completely offset by revenues from EU funds	1446.7	2.6	1.7	2.6	2.6	2.4	2.2
1a. of which investments fully covered by revenues from EU funds	945.6	1.7	1.2	1.8	2.1	1.8	1.7
2. Part of unemployment-related expenditure explained by the evolution of the cycle	-5.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Impact of discretionary revenue measures	-979.5	-1.8	-0.1	0.2	0.1	0.0	0.0
4. Legislative revenue-increasing items	-	-	-	-	-	-	-

Table 3

General government debt developments

	ESA-code	2021	2022	2023 % of GDP	2024	2025	2026
1. Gross debt		76.8	76.1	73.8	70.4	66.9	63.1
2. Change in gross debt ratio		-2.8	-0.7	-2.3	-3.4	-3.5	-3.8
Contribution to changes in gross debt							
3. Primary balance		-4.4	-2.2	-0.5	0.5	1.3	1.7
4. Interest expenditure	D.41	2.3	2.7	3.0	3.0	2.8	2.7
5. Stock-flow adjustment		0.3	1.7	2.3	0.5	0.5	0.4
Implicit interest rate on debt (%)		3.2	3.7	4.3	4.3	4.3	4.3

Table 4

Cyclical developments

	ESA-code	2021	2022	2023	2024	2025	2026
		% of GDP					
1. GDP at previous year's prices (annual growth rate)		7.1	4.3	4.1	4.2	4.3	4.3
2. General government balance	B.9	-6.8	-4.9	-3.5	-2.5	-1.5	-1.0
3. Interest expenditure	D.41	2.3	2.7	3.0	3.0	2.8	2.7
4. One-off and other temporary items		-1.5	-0.7	0.0	0.0	0.0	0.0
of which: one-off items on the revenue side		-1.5	-0.2	0.0	0.0	0.0	0.0
one-off items on the expenditure side		0.0	-0.5	0.0	0.0	0.0	0.0
5. Potential GDP (%)		3.6	3.8	3.8	3.9	3.9	4.0
components: - labour		0.2	0.0	0.2	0.1	0.0	0.0
- capital factor		0.7	0.8	0.9	0.9	1.0	1.0
- total factor productivity (TFP)		2.7	3.0	2.8	2.8	2.9	3.0
6. Output gap		-1.8	-1.3	-1.0	-0.7	-0.3	0.0
7. Cyclical component of government sector balance		-0.8	-0.6	-0.5	-0.3	-0.2	0.0
8. Cyclically adjusted balance (2-7)		-5.9	-4.3	-3.0	-2.2	-1.3	-1.0
9. Cyclically adjusted primary balance (8+3)		-3.6	-1.6	0.0	0.8	1.5	1.7
10. Structural balance (8-4)		-4.4	-3.6	-3.0	-2.2	-1.3	-1.0

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

Table 5.

Divergence from the previous convergence programme

	ESA-code	2021	2022	2023	2024	2025	2026
Real GDP growth (%)							
1. 2021 Convergence Programme		4.3	5.2	4.1	4.0	4.2	-
2. 2022 Convergence Programme		7.1	4.3	4.1	4.2	4.3	4.3
3. Difference		2.8	-0.9	0.0	0.2	0.1	-
General government net balance (% of GDP)							
1. 2021 Convergence Programme	EDP B.9	-7.5	-5.9	-3.9	-3.0	-2.0	-
2. 2022 Convergence Programme	B.9	-6.8	-4.9	-3.5	-2.5	-1.5	-1.0
3. Difference		0.7	1.0	0.4	0.5	0.5	-
General government gross debt (percent of GDP)							
1. 2021 Convergence Programme		79.9	79.3	77.5	75.7	73.1	-
2. 2022 Convergence Programme		76.8	76.1	73.8	70.4	66.9	63.1
3. Difference		-3.1	-3.2	-3.8	-5.3	-6.2	-

Table 6

Long-term sustainability of public finances[1]

	2019	2030	2040	2050	2060	2070
	% of GDP					
Pension expenditure	8.3	8.3	9.7	11.2	11.9	12.4
Old-age and early pensions	6.7	7.0	8.5	10.1	10.9	11.3
Other pensions (disability, survivors)	1.6	1.3	1.2	1.1	1.0	1.1
Health, long-term care and education expenditure	8.8	8.7	9.2	9.7	10.1	10.1
Health care expenditures	4.8	5.1	5.3	5.6	5.7	5.6
Long-term care expenditures	0.6	0.6	0.8	0.9	1.1	1.2
Education expenditures	3.4	3.0	3.1	3.2	3.3	3.3
Pension contribution revenue	7.7	7.4	7.4	7.4	7.4	7.4
Assumptions						
Labour productivity growth	2.9	2.3	2.3	2.1	1.8	1.5
Real GDP growth	4.9	2.4	1.4	1.6	1.4	1.3
Participation rate, males (20-64)	85.9	89.8	89.8	90.1	90.2	90.1
Participation rate, females (20-64)	70.0	79.3	79.4	80.1	80.2	80.1
Total participation rate (20-64)	77.9	84.6	84.8	85.3	85.3	85.3
Unemployment rate (20-64)	3.3	4.0	4.0	3.9	3.9	3.9
Population aged 65 + over (%)	19.6	21.7	24.6	27.8	29.5	29.6

[1]Based on the budgetary and macroeconomic projections prepared for the 2021 Ageing Report, approved by the Economic Policy Council (EPC) in January 2021.

Table 6a

State guarantees announced/adopted in connection with the coronavirus crisis

Measure	Maximum amount of conditional commitment (billion HUF)
Rural Credit Guarantee Foundation – Crisis Agricultural Guarantee Programme	150
Magyar Export-Import Bank Zrt. - EXIM Loss Mitigation Credit Programme	700
Magyar Export-Import Bank Zrt. - EXIM Loss Mitigation Credit Programme	50
Garantiqa Hitelgarancia Zrt. – Garantiqa Crisis Guarantee Programme[1]	2500
MFB Magyar Fejlesztési Bank Zrt. - MFB Force Majeure Guarantee Programme	50
MFB Magyar Fejlesztési Bank Zrt. - MFB Crisis Credit Programme and Crisis Credit Plus Programme	180
MFB Magyar Fejlesztési Bank Zrt. - MFB Competitiveness Credit Programme	15
Total	3645

[1]Total Garantiqa budget, with no limit as regards the Crisis Programme

Table 7

Assumptions on the external economic environment

	2021	2022	2023	2024	2025	2026
Hungary: Short-term interest rate (annual average, %)	1.3	6.2	6.6	6.5	6.2	6.0
Hungary: Long-term interest rate (annual average, %)	3.2	6.5	7.0	6.8	6.6	6.3
HUF/EUR rate	358.5	373.9	377.1	377.1	377.1	377.1
World excluding EU, GDP growth rate	5.8	3.4	3.7	3.7	3.7	3.6
EU-27 GDP growth rate	5.4	2.9	2.5	2.1	1.9	1.8
Growth of relevant foreign markets	10.9	5.8	4.2	4.1	4.1	4.1
World import volumes, excluding EU	10.7	4.5	4.5	3.5	3.7	3.6
Oil prices (Brent, USD/barrel)	70.9	102.8	94.0	94.0	94.0	94.0

Table 8.

Recovery and Resilience Facility (RRF) support

	2021	2022	2023	2024	2025	2026
Revenues as projected	0.55	0.64	0.80	1.03	0.45	0.23
Current expenses	0.55	0.18	0.23	0.29	0.13	0.07
Gross fixed capital formation	0.00	0.46	0.57	0.74	0.32	0.17
Expenditures as projected	0.55	0.64	0.80	1.03	0.45	0.23