

**THREE-YEAR OUTLOOK OF THE FISCAL COUNCIL ON THE  
MACROECONOMIC AND BUDGETARY DEVELOPMENTS**

**5TH OF JANUARY 2024**

## INTRODUCTION<sup>1</sup>

At its meeting on the 23rd of May 2023, the Fiscal Council decided to prepare a three-year outlook and forecast of the public finance developments as a further development of its work in order to assist in the implementation and compliance with the requirements of the Stability Law. The Council used the model calculations, projections, relevant studies and expert materials available or specially prepared for this purpose. With the forecast published as an opinion, the Fiscal Council aims to help medium-term budgetary planning and to comply with EU recommendations on the tasks and areas of work for independent fiscal institutions.

The work of the Fiscal Council (FC, Council), which has been operating for nearly fifteen years, was reorganized in 2012 after the adoption of Act CXCV of 2011 on the Economic Stability of Hungary. From this time, the work of the Council is being supported by a professional advisory board established under the authority of the Chairman of the Council, complementing the analyses of the State Audit Office (SAO) and the National Bank of Hungary (MNB), while the Council is also supported by decision-making analyses commissioned from independent research institutes since 2013. From 2012-2013, the Council's has been commissioning studies focusing on the current yearly tasks of the Council, in preparation of decisions related to the annual budgets.

Partly in response to criticism of the functioning of the Fiscal Council in the European Commission's "Hungary National Reform Programme 2013 and the Council's opinion on Hungary Convergence Programme 2012-2016" (European Commission, 2013), medium-term outlooks were published from 2014 onwards in various decision-making research papers, which helped the work of the Council at expert level, but not a separate decision born about them.<sup>2</sup>

While the economy was on a predictable path until 2020, the Council's work was dominated by an annual approach. But in the period of struggles with new types of crises; COVID, the Russia-Ukraine war and the turbulent movement of global processes, the professional perception of the Fiscal Council has changed by 2022-2023. In the uncertain environment and in response to the criticism – mentioned above – that has been repeatedly raised at some conferences,

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<sup>1</sup> The SAO and the staff of the MNB – led by Gyula Pulay, chief economist and Gergely Baksay, managing director – and experts of the Council secretariat – Dániel Csomós, Tünde Gergics, László Kékesi, Sándor Varga and Diána Vilmányi participated in the preparation of the document.

<sup>2</sup> It also serves transparency that the short-, medium- and longer-term outlooks, sustainability studies and analyses related to the biannual monitoring of the implementation of the current budget law can be found on the website of the Fiscal Council under Documents/Researches.

the Fiscal Council prepared for the first time in 2023 a three-year medium-term outlook, which was discussed and adopted by the Fiscal Council at its meeting on the 5th of January 2024.

In addition to the analyses prepared by the SAO and the MNB, the Council has been relying on the economic model calculations of domestic research institutes from the very beginning, which help the Council to form a more informed opinion. In addition to forecasts prepared by domestic research institutes and the European Commission, the Council also takes into account forecasts from major international organizations (e.g.: International Monetary Fund, World Bank, Organisation for Economic Co-operation and Development, European Central Bank). Thus, what is summarized below relies on a broad professional base, which is necessitated by the uncertainties of the period ahead.

The outlook does not aim to analyze sociological contexts and the quality of public services, but focuses primarily on financial and budgetary balance. Of course, there are social risks that strain the budget, however, among independent fiscal institutions, including the practice of the Hungarian Fiscal Council, internal redistribution issues (distribution policy) have so far appeared only to the extent when the Council experienced excessive spending, endangering financial stability and balance at the level of the national economy, such as spending on public investments (Kovács, 2023). This outlook also follows this principle.

The first chapter of the Fiscal Council's three-year outlook examines the international environment, the growth prospects of the global economy, the volatility of world trade and the realignments within it, as well as the place of Europe and the European Union, their role in the global political-economic realignment and the related new challenges. The second chapter presents the macroeconomic developments in Hungary, its strengths and weaknesses since the beginning of the decade, and presents an expected forecast on a three-year period. The third – and most extensive – chapter focuses on the – essentially budgetary – objectives of the Convergence Programme for the years 2024-2026 and identifies the risks surrounding the fulfilment of the sovereign debt rule.

## SUMMARY

### **Economic growth expected to recover**

Due to the crises and geopolitical realignments of recent years, international conditions have become even less certain than in the previous decade. In addition, the economic challenges caused by the Russia-Ukraine war and the sanctions imposed in response to it are having a negative impact in the European Union. According to the expectations of major international institutions, global economic growth in 2024 is projected to be between 2.4 and 2.9 percent, while Eurozone growth is projected at 1.2 to 1.5 percent.

After the economic downturn caused by the pandemic in 2020, the performance of the Hungarian economy quickly recovered, but the momentum of growth was broken by the 2022 energy crisis. The subdued economic activity in 2023 mainly reflected declining domestic demand driven by high inflation and the associated decline in real wages.

From 2024, however, the growth of the Hungarian economy may return to a balanced structure, for which restoring macroeconomic and financial balance is a must. Domestic inflation peaked at 25.7 per cent in January 2023 and had already fallen to single digits by the fourth quarter of 2023. In line with disinflationary developments, inflation could fall to between 4.0 and 5.5 percent in 2024 and remain stable at around 3 percent from 2025 onwards. Looking ahead, the labour market remains tight, but substantial employment growth faces demographic constraints. In view of this, workers will continue to be in a good bargaining position, so real wages could continue to rise significantly between 2024 and 2026.

Based on the still only mild growth of the economy in the second half of 2023, the 4 percent growth assumed by the Convergence Programme in 2024 can only be achieved under very favorable conditions, with a GDP growth of around 3 percent being more realistic. However, once consumption and investment have fully recovered, economic growth could return to the average of pre-coronavirus years, reaching 3.5 to 4.5 percent in 2025 and 3.0 to 4.0 percent in 2026. This is somewhat more moderate compared with the 4.3% and 4.5% growth assumed in the Convergence Programme, reflecting domestic demand items. If a higher domestic demand path materializes, this could lead to a deterioration in the external trade balance, unless it happens parallel with an increase in competitiveness and export capacity.

In order to sustainably maintain GDP growth above 4 percent, rebalancing have to accompanied by comprehensive competitiveness reforms that facilitate the transition to an intensive economic model based on productivity. The most important economic factors of the previous

decade can only be moderately increased in quantity, so their quality must be improved in order to continue catching up.

### **Compliance with the sovereign debt rule will present new challenges from 2024**

The government debt ratio decreased from 79.3 percent at the end of 2020 to 76.7 percent at the end of 2021 and then to 73.9 percent at the end of 2022, and the decline continued in 2023, based on the data available so far. This improvement occurred despite a significant increase in government debt, which was significantly higher than nominal GDP growth. At the same time, dynamic nominal GDP growth was increasingly due to price increases. It was expected that nominal GDP would increase in 2023 solely due to price growth, with the real economy stagnating. However, from 2024 onwards, inflation is projected to decline significantly and, consequently, the implicit price index of GDP (the GDP deflator) increases the denominator of the government debt ratio less. By contrast, the average interest rate on government debt is projected to rise further in 2024 and remain high in 2025 and 2026, increasing the numerator of the government debt ratio. As a consequence, the implicit interest rate on government debt will exceed the GDP deflator over the next three years, i.e. apart from all other factors (above all the primary balance of the budget and real growth), the numerator of the government debt ratio will grow faster than its denominator. As a result, the sovereign debt rule is only fulfilled if GDP volumes grow faster than government debt rises as a result of government sector deficits and revaluations of foreign currency debt. Consequently, substantial real GDP growth and/or a substantial reduction of the general government sector's deficit-to-GDP ratio are necessary for the government debt rule to be met. The objectives of the Convergence Programme meet this criterion and the risk is therefore whether these objectives will be met.

### **Reducing the deficit in the general government sector requires a significant improvement in the primary balance, a positive primary balance.**

In 2020, interest expenditure by the general government sector amounted to 2.3 percent of GDP. According to the Convergence Programme, this ratio will rise to 4.1 percent by 2024 and will fall to only 3.4 percent in 2026. Thus, achieving the deficit-to-GDP target of 2.9 percent by 2024 requires a primary surplus of 1.2 percent of GDP and a primary surplus of 2.0 percent of GDP to reach the deficit target of 1.4 percent by 2026. On the basis of expected fulfilment in 2023, interest expenditure as a share of GDP will be even higher than in 2022.

**The planned substantial reduction in centralization rates calls for a reduction in budgetary expenditures.**

According to the Convergence Programme, the centralization ratio will decrease from 42.6 percent in 2023 to 38.4 percent in 2026, which requires government sector spending to fall from 46.5 percent of GDP in 2023 to 39.8 percent in 2026, i.e. spending would have to be reduced by 6.7 percent of GDP over 3 years. The planned reduction in the centralization ratio is necessary to phase out extra-profit taxes. The centralization ratio is dampened by consumption growth expected to be lower than GDP growth in the Convergence Programme, with the result that the increase in consumption-related taxes lags behind GDP growth. The risk, therefore, is whether it is possible to reduce expenditure to such an extent over three years without jeopardizing the proper performance of public functions.

**There is uncertainty surrounding the processes that help reduce budgetary expenditure.**

The planned reduction in budget expenditures is mainly supported by lower energy prices than in 2022, which will reduce budget expenditure related to utility subsidies from the second half of 2023. However, the fragile international situation carries the risk of a renewed spike in energy prices.

The reduction of government expenditure as a share of GDP is facilitated by the need to increase pensions in line with inflation and the need to adjust other expenditures to price increases, i.e. relative savings can be achieved when GDP volume increases. However, in the event of more modest economic growth, which is a realistic possibility given the risks mentioned above and developments in 2023, this gap will narrow.

The Convergence Programme projects employee income expenditure to decline permanently from 10.1 percent of GDP (2022 data) to 9.1 percent of GDP and below 9 percent of GDP from 2026 onwards. The question is whether this can be achieved without further erosion (degradation) of the public sector's workforce retention capacity.

**Budgetary developments in 2023 are significantly less favorable than assumed in the Convergence Programme.**

The larger-than-planned deficit in the general government sector is mainly due to revenue shortfalls and higher-than-expected increases in interest expenditures, in addition to some one-off expenditure items. In the case of tax revenues, this means that the base of tax revenues in 2024

has also decreased, meaning that the shortfall in 2023 could also weigh on revenues in subsequent years, posing a particularly significant risk to the achievement of fiscal targets for 2024 and those planned for later years.

## 1. EVOLUTION OF INTERNATIONAL CONDITIONS

The global economic and financial crisis of 2008-2009 was a major turning point, slowing down globalization processes which were in turn then being partially halted by the pandemic as a new type of challenge to the modern world. Following the fragility of global value chains, countries and companies are moving towards security and geographical proximity – regionalization processes are increasing. In addition to crises, geopolitical realignments (intensification of tensions between West and China, West and Russia) lead to new military and economic conflicts and uncertainties, which make the forecasting of development processes more scenario and less predictable. All of this has an impact on the volatility of world trade.<sup>3</sup>

Large international organizations (World Trade Organisation<sup>4</sup>, International Monetary Fund<sup>5</sup>) have lowered their previous growth forecasts in the second half of 2023 in the light of developments of 2022 and 2023. In Western economies, inflation has caused a sharp slowdown in world trade and output. In addition, the economic challenges and sanctions caused by the Russia-Ukraine war are having a negative impact in the European Union while China's post-COVID recovery has been dampened by tensions in the property market.

Global trade in goods is expected to grow by 0.8 percent in 2023 and 3.3 percent in 2024. The slowdown in global trade is affecting many countries and a wide range of commodity groups.

Economic activity is still below pre-pandemic levels, especially in developing economies, leading to widening divergences between regions. Global GDP is expected to grow by 2.6 percent in 2023 and 2.5 percent in 2024, below the levels of circa 4 percent in previous years, and around 3 percent in the coming years, according to the IMF. While the swift recovery from the pandemic setback is encouraging, the duration of the Russia-Ukraine conflict is unpredictable, and the attack on Israel in the fourth quarter of 2023 and the response to it imply an escalation

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<sup>3</sup> The turnover value of global merchandise exports fell by more than 22 percent during the pandemic in the first half of 2020, recovering quickly to its pre-pandemic level in the first quarter of 2021, which was again broken by the Russia-Ukraine war in February 2022. Since then, global trade in goods has been slowly upward.

<sup>4</sup> World Trade Organization – Global Trade Outlook and Statistics Update: October 2023

<sup>5</sup> IMF – World Economic Outlook, October 2023

of the Middle East conflict. The major international institutions<sup>6</sup> estimate global economic growth from 2.1 percent to 3.0 percent in 2023, 2.4 percent to 2.9 percent in 2024, eurozone growth from 0.4 percent to 1.0 percent in 2023 and 1.2 percent to 1.5 percent in 2024.

Global inflation is expected to be on a downward trend, from nearly 9% in 2022 to below 7% in 2023 and to no more than 6% in 2024, owing to lower increases or declines in commodity prices, in particular energy prices, and tight monetary conditions.

Broader deglobalization has not yet begun, and data suggest that goods continue to be produced through complex supply chains, but the expansion of these chains has stopped in the short term. Signs of fragmentation of supply chains are increasing, security considerations are coming to the fore, even at the cost of economic inefficiencies, and long-term returns are based on it. All this can jeopardize the positive outlook. For example, the share of intermediate products in world trade, which indicates global supply chain activity, fell to 48.5 percent in the first half of 2023 compared to 2022, compared to an average of 51.0 percent in the previous three years. In addition, Asian bilateral partners' share of U.S. parts and accessories trade — a key subset of intermediate inputs — fell to 38 percent in the first half of 2023 from 43 percent in the same period in 2022.

One of the biggest winners of the transition to green energy, which underpins the competitiveness of the European Union, is China, where the production of electric batteries has begun, adapting innovations invented by the USA, using Japanese technology and German precision. China's leadership will be maintained in the near future, with lithium battery production capacity projected to be twice as large as the rest of the world combined by 2025. In electric car production, it also appears as a competitor in Western markets.

Within a short period of time, following the outbreak of the Russia-Ukraine war in February 2022, the European Union imposed several packages of sanctions on Russia (and Belarus soon after). These were primarily aimed at freezing Russian financial resources on EU markets, restricting foreign trade in certain industrial sectors, disconnecting major Russian banks from the international payment system and banning Russian aviation from EU airspace. The additional packages prohibited the import and export of certain raw materials, trade in gold and gold jewellery, the docking of Russian ships, and trade in certain military items (such as drones), all facilitated by bilateral and trilateral agreements to prevent sanctions from being circumvented through third countries.

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<sup>6</sup> World Trade Organization, OECD, IMF, World Bank, European Commission



The Russia-Ukraine war has had a significant impact mainly on European but also partly on global natural gas markets<sup>7</sup>. Over the past decade, Russian gas has accounted for about 40 percent of European gas consumption. Although market tensions eased in the first three quarters of 2023, high storage levels in the European Union gave rise to cautious optimism ahead of the 2023-2024 heating season. Although previous routes of gas supply have not been restored, prices are now falling, partly due to reduced consumption and partly due to the availability of alternative sources. Global gas demand growth is expected to slow significantly over the medium term (2022-2026).<sup>8</sup>

So far, European countries have built their competitiveness on the benefits of globalization, driven by export-based economic growth based on global supply chains based on cheap Russian energy and other imported raw materials. As a result of geopolitical processes, this situation seems to be overturned, which adversely affects European competitiveness. Rising raw material prices and unpredictable volatility, vulnerabilities in global supply chains, stronger Asian competitors and competitive advantages over US competitors based on better raw material prices are all undermining European manufacturing efficiency and market opportunities. The key to long-term and sustainable economic growth is the green transition, during which the technological requirements and costs of the production processes are higher, but it can nevertheless lighten the energy burden on our continent and reduce the environmental-climate load.<sup>9</sup>

Industrial production has declined in the vast majority of European countries since 2022. One of the biggest losers of the energy crisis is Germany, the engine of Europe, where both the IMF and <sup>10</sup>the European Commission<sup>11</sup> forecast a decline of around half a percent in GDP for 2023 and growth of only around one percent in 2024.

The IMF and OECD GDP estimates for the euro area are 0.7 percent and 0.9 percent respectively for 2023 and 1.2 percent and 1.5 percent for 2024, according to the new autumn

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<sup>7</sup> International Energy Agency: Medium-Term Gas Report 2023 <https://iea.blob.core.windows.net/assets/f2cf36a9-fd9b-44e6-8659-c342027ff9ac/Medium-TermGasReport2023-IncludingtheGasMarketReportQ4-2023.pdf>

<sup>8</sup> The 2022 gas supply shock reinforced structural trends that are weighing on the longer-term outlook for global gas demand. Total gas consumption in the markets of Asia Pacific, Europe and North America peaked in 2021 and is expected to decline in the medium term due to the rapid deployment of renewables and improved energy efficiency standards. Demand growth is almost entirely concentrated in fast-growing Asian markets and gas-rich countries in Africa and the Middle East.

<sup>9</sup> Macronome Institute (2023): Medium-term macroeconomic outlook, with particular reference to expected developments in public finances

<sup>10</sup> IMF – World Economic Outlook, October 2023

<sup>11</sup> EC – European Economic Forecast, Summer 2023

projections, while the European Commission calculates somewhat similar figures: 0.6 and 1.2 percent, respectively.

Following inflation of 8.4 percent in 2022, some international expectations point to 5.6 percent for the euro area, 6.5 percent for the European Union and 2.9 percent for the euro area and 3.5 percent for the European Union in 2023.

The European Union faces new challenges. The slow shift from internal combustion engine car production to electric car production is leading to significant market losses for the automotive industry, which provides jobs for nearly 14 million people who account for 7 percent of GDP. In 2022, China has already overtaken Germany in light-duty vehicle exports. Although European car manufacturers are still profitable, their market share is declining. In terms of innovation, it is necessary to compete with Asian suppliers.

In order to remain competitive, the European Union must adapt to global megatrends, creating its own path along European values, using particular economic complexity and cultural diversity. It is important to significantly increase investment in R&D and innovation so that European companies can maintain and strengthen their market positions.

## **2. MACROECONOMIC FORECAST**

### **2.1 Setting the economic stage**

#### **2.1.1 The new decade began with a series of crises**

Similarly, to the world economy, the decade of 2020 began with a series of crises of external origin in our country. Due to the lockdowns introduced as a result of COVID and the negative supply and demand shocks caused by the pandemic, the performance of the Hungarian economy declined by 4.5 percent in 2020. Due to temporary shutdowns of production units and frictions in global supply chains, both industrial production and construction value added declined in 2020. As a result of declining public confidence caused by the coronavirus, store closures and consumer caution, domestic demand also declined, thereby reducing the performance of services in 2020.

During the pandemic, the fundamentals of the domestic economy remained strong, and targeted central bank and government programmes also helped to recover quickly from the coronavirus crisis. Despite the economic downturn, the domestic investment rate remained high and the unemployment rate remained low in international comparison. Building on strong fundamentals, the coordinated crisis management of the Government and the National Bank of

Hungary supported a swift recovery. We managed to preserve jobs and the purchasing value of family incomes, so the recovery from the coronavirus was dynamic, with Hungary's GDP expanding by 7.1 percent in 2021. As domestic and external demand recovered, domestic consumption and net exports also contributed to economic growth.

Following the recovery, 2022 was characterized by duality: overall growth was 4.6 percent, while in the second half of the year we could already register a technical recession in the Hungarian economy. Government measures boosted domestic demand in the first half of the year. The significant increase in the minimum wage and fiscal stimuli (e.g. personal income tax refund, gun money, 13th month pension) significantly increased private consumption, thus contributing the most to GDP growth. However, in the second half of 2022, growth dynamics slowed sharply in a macroeconomic environment that had become unfavorable as a result of the Russia-Ukraine war and the energy crisis, and domestic GDP declined for two consecutive quarters on a quarterly basis – meaning the Hungarian economy fell into recession.

Overall, GDP is expected to decline in 2023 due to a weak first half of the year. The subdued economic activity mainly reflected declining domestic demand reflecting high inflation and the associated decline in real wages. The recession that began in the second half of 2022 continued in the first quarter of 2023, with the Hungarian economy stagnating in the second quarter and then increasing economic activity in the third quarter. Investment fell the most, declining by 14.7 percent year-on-year in the first three quarters, with public, private and corporate sectors all contributing. Annual real wage dynamics turned negative in September 2022, with household consumption moderating from the first quarter of 2023. Economic growth resumed in the third quarter of 2023, expanding by 0.9 percent on a quarterly basis, but still declining by 0.4 percent year-on-year. In 2023, GDP should decline overall compared to the previous year. The decline in production in other sectors is being cushioned by agricultural production, which is significantly boosting GDP due to the low base of drought-hit 2022.

Following the pandemic, investment momentum bounced back in 2021, but from 2022 onwards, the volume of developments declined again in the adverse economic environment. One of the pillars of economic growth after 2016 was the dynamic expansion of investments, however, due to the pandemic situation, the trend of investment activity in the national economy, which had been rising for years, was broken in 2020<sup>12</sup>. By the second half of 2021, investment

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<sup>12</sup> Between 2017 and 2019, investment growth contributed more than 3 percentage points to domestic GDP growth on average. The strong expansion had several drivers. Infrastructural developments financed from the 2014-2020 EU budget cycle, the capacity increase of enterprises, the strengthening capacity of the domestic economy to

performance had returned to its pre-pandemic level and then continued to increase. The investment-to-GDP ratio of nearly 27 percent was the second highest in the European Union after Estonia in 2021. The recovery of investments continued in 2022 but the trend was broken by the end of the year, in line with the protracted Russia-Ukraine war, heightened market uncertainty, the energy crisis and high inflation in Europe, as well as government rebalancing measures. The decline in investment in 2023 will mainly be driven by cuts in public investment, but will also contribute from the corporate and household sectors. Public investment-to-GDP is expected to decline from over 6 percent in 2021 to below 5 percent in 2023. There was a duality in business investment, as investment in sectors producing for foreign markets increased, while investment in domestic sectors declined.

### **2.1.2 A wave of inflation not seen for decades had to be contained globally and in Hungary**

In the decade of 2020, a series of waves of inflation hit the world economy and our country. The coronavirus pandemic in 2020-2021, the energy crisis from 2021, and the successive and overlapping crises of the Russia-Ukraine war from 2022 determined the development of price indices. Inflation has risen globally at a rate not seen in decades. The healthier starting state of the Hungarian economy compared to previous decades (stable fundamentals and strong growth) ensured more effective crisis management during the coronavirus pandemic. However, the crises of the decade of 2020 attacked the Hungarian economy at its weak points. Hungary's strong energy exposure, the low level of productivity in certain sectors (e.g. the food industry) and the weakening of competition (which translated into an increase in profits) have all led to inflation rising to the highest in the European Union in Hungary, which has hindered economic growth, and imbalances have also been upset in the areas of the budget and current account.

The development of domestic inflation in the decade of 2020 can be divided into three stages. In the first phase, domestic inflation developments were dominated by international, external factors until mid-2022. During this period, 80 percent of the increase in inflation was attributable to external cost factors. The domestic consumer price index increased in parallel with that of neighbouring countries, so price growth was not above average in regional comparison.

In the second phase, country-specific factors have already come to the fore, which have led to domestic inflation decoupling from trends in the region. Hungarian price dynamics exceeded

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attract capital, and the expansion of housing and other real estate investments all contributed to the acceleration of investments.

the regional average from August 2022 and rose to the highest level in Europe, 22.5 percent, in November. This stage revealed structural weaknesses through which domestic consumer prices responded more sensitively to global inflationary waves. Due to the high energy intensity of the Hungarian economy and the need for energy imports, the increase in global energy prices had a greater impact on companies' costs, which in the case of the food industry was compounded by problems arising from the sector's low productivity. Inflationary effects have also been amplified by competitive market failures, which have allowed companies to raise prices more than their costs rose, thereby making significant profits at the expense of rising inflation. In addition, inflation was boosted by outflows of fiscal income-boosting measures in early 2022, which raised prices on the demand side.

The third stage is a period of rapid disinflation. Domestic inflation peaked at 25.7 per cent in January 2023 and fell to single digits by October 2023. Disinflation is based on a wide range of products, with annual price increases moderating in at least 70% of the consumer basket since May. The significant moderation in price dynamics is more evident in short-based indicators, which track current repricing trends more quickly, with the annualised value of the 3-month change in core inflation already declining to 3% by October. The level of domestic repricing during the year was again in line with developments in the region.

Disinflation is also supported by disciplined monetary policy, pro-competitive government measures, a subdued demand environment, base effects and a substantially lower external cost environment than last year. With the tightening of its monetary policy starting in June 2021, the Magyar Nemzeti Bank was among the first to act against inflation in international comparison, and in autumn 2022 it took successful steps to stabilise financial markets. The lower level of global raw material, energy and food commodity prices compared to 2022 contributes to a moderation in corporate costs and thus in the consumer price index. Tensions previously present in global value chains have eased and the slowdown in global activity is dampening inflation. In order to curb the price increase, the Government introduced mandatory promotions from 1 June 2023, then increased its rate to 15 percent from August, and significantly expanded the range of products designated for mandatory promotions. In addition to mandatory actions, the Hungarian Competition Authority launched the online price monitoring system on 1 July 2023, which enables transparent comparisons of consumer prices for 62 food product groups, and at the same time significantly enhances market competition in the domestic retail sector. Core inflation is expected to moderate at a slower pace relative to the consumer price index.

### **2.1.3 The labour market has resilient to crises and employment has remained at record highs**

As a result of labour market and tax reforms implemented in the early 2010s, employment has increased by more than 850,000 people since 2010. While the employment rate of people aged 15-74 in Hungary was the third lowest in the European Union in 2010, by 2022 it had already exceeded the EU average. The number of unemployed fell from almost 470,000 at the beginning of the 2010 decade to less than 160,000 in 2019. Among the measures to support employment growth and reduce unemployment, the most important were the reduction of taxes on labour and the shift towards taxes on consumption. The activity rate has also risen steadily over the past decade, increasing by almost 10 percentage points to 66.5 per cent among 15-74 year olds in 2022.

The domestic labour market remained stable even during the coronavirus. Thanks to government and central bank programmes, the labour market proved to be stable during the COVID crisis, unlike the 2008-2009 financial crisis, and then did not show significant tension during the energy crisis caused by the Russia-Ukraine war. The Hungarian economy remained close to full employment even during the recession, and by 2023 the number of people employed had reached historically high values not seen since the regime change. The unemployment rate remains low by international standards. The slight increase in the number of unemployed occurred simultaneously with an increase in the number of employed people, i.e. the activity of the working-age population also increased.

The end of the decade of 2010 was marked by vigorous wage dynamics, which have persisted in recent years, while real wage growth temporarily reversed in 2023 due to high inflation. High inflation, despite significant nominal wage dynamics, resulted in a deterioration in income relations, reducing the purchasing power of wages for a year from September 2022. Accordingly, households' real disposable income declined in the course of 2023, which could only be partially offset by increases in self-employed income and household interest income. Household consumption expenditure is expected to decline significantly throughout 2023.

### **2.1.4 Relationship between savings developments and GDP growth**

Private savings play an important role in financing investment by national economies, while household consumption has a decisive influence on GDP growth as the largest expenditure item. Given that household savings are the remainder of disposable income after expenditure on final

consumption and investment, higher savings mean lower consumption at given prices. Disposable income of the household sector exceeded final consumption expenditure and from Q1 2020 to Q2 2023, the household sector was in a net saver position every quarter. The ratio of final consumption expenditure to disposable income varied between 83 and 98 percent during this period, averaging 89 percent. Similarly, the ratio of savings to disposable income during this period ranged from 2 to 18 percent and averaged 12 percent.

### **2.1.5 In addition to external demand, export expansion is supported by new domestic production capacities**

Due to the nature of the COVID crisis, foreign trade has been particularly affected. The Hungarian economy is one of the most open economies in the EU. A significant part of Hungarian industry produces for export, so Hungary was more exposed to the decline in foreign demand and the disruptions in international value chains arising as a result of the restrictive measures. Overall, the goods and services balance contributed 2.0 percentage points to the decline in GDP in 2020, a significant part of which was driven by reduced exports of services due to lockdown measures and the shutdown of tourism.

International trade has recovered from the coronavirus crisis, but both external and internal effects have dampened this recovery. Global semiconductor shortages in 2021, drastically rising raw material and energy prices in 2022, rising demand from household consumption and disruptions in production chains caused by the Russia-Ukraine conflict led to a deterioration in the trade balance. At the same time, the recovery in international tourism was able to offset this through service exports, so overall net exports contributed 0.8 percentage points to economic growth in 2022.

The current account deficit reached an all-time low as a result of the energy crisis. Like most European countries, Hungary is also a net importer of energy, so the country covers a significant part of its energy consumption from external sources. The decline in the energy balance was also reflected in the deterioration of the current account balance in 2022. In addition, chip shortages, tightening domestic demand and disruptions to production chains contributed to a significant widening current account deficit during the year to 8.2 percent of GDP for the year as a whole.

Foreign trade flows reversed in 2023 and by the middle of the year the trade balance in goods reached a record surplus. In the first half of the year, the trade surplus reached 4.7 percent of GDP, boosted by improvements in exports, imports and the terms of trade. As energy prices have moderated, the terms of trade have steadily improved since the beginning of the year, thus

supporting the balance of energy carriers. In addition to better prices, the improving energy balance was affected by subdued economic activity, the adjustment in household energy use and procurement timing. Exports of road vehicles and electrical equipment (including batteries) remained significant in 2023, accounting for a significant share of total merchandise exports. The current account was also improved by the recovering balance of services. Overall, the rapid improvement in the external balance in recent months was linked not only to a decline in energy prices, but also to a broad-based adjustment in the economy, including a decline in demand for imports. In view of this, it is worth examining how domestic consumption and the external trade balance contributed to GDP volume growth on the basis of statistical data available since 1995. In the period 1995-2022, domestic consumption was the determining factor for GDP growth, while there was a negative relationship between the external trade balance and the dynamics of internal use items. After the outbreak of the 2008 financial crisis, the trade balance improved spectacularly in addition to the stagnation and then decline in domestic consumption. The years 2013-2016 were characterized by stable economic growth with a slightly improving trade balance; Thus, economic growth and equilibrium existed simultaneously, while in 2017-2018 dynamic economic growth was coupled with a deteriorating trade balance, but still a surplus current account balance.

During 2022-2023, the production of sectors selling abroad and domestically showed a different picture. In the case of domestic sales sectors (e.g. food industry), industrial output has been declining since September 2022, while production in the case of exporting companies (automotive and battery production) was able to increase overall during the year. At the same time, since spring 2023, sectors selling abroad have already recorded several declines in production on an annual basis.

#### **2.1.6 Large FDI investments in recent years have been concentrated in areas of battery manufacturing**

FDI inflows provide a stable basis for the Hungarian economy in its external financing. Since the beginning of the previous decade, the inflow of direct investment has been 3-5 percent of GDP annually (gross FDI in Hungary), while net inflows (the difference between domestic investments of foreign companies and foreign investments of domestic companies) are estimated at 1-3 percent of GDP. FDI financing was supported both by the reinvestments of foreign companies already established in Hungary (the part of the profit not paid out as dividends) and by investments by newly arrived companies.



An increasing share of foreign direct investment came from Asian countries and was concentrated in battery production.<sup>13</sup> The role of battery production can already be felt in domestic industrial production, as the production of electrical equipment, including battery production, has doubled in weight in the past 5 years and now accounts for nearly 10 percent of industrial production. The value of investments in vehicle manufacturing and in the production of rubber and plastic products was relatively balanced (0.2-0.5 percent of GDP per year on average), which also shows that these industrial sectors have entered a mature phase in Hungary by now. Direct investment in the manufacturing of electronic products has shifted from 0.2 to 0.5 percent of GDP to a decline in 2022. In addition, FDI invested in trade and financial activities was significant, averaging 0.6 percent of GDP and 0.3 percent of GDP respectively over the past five years. The share of European direct investment has declined substantially over the past five years, but the continent still accounts for the majority of total annual transactions. The share of Asian countries (excluding Middle Eastern countries) in FDI inflows has risen to about 25-30 percent in recent years, while their share in total FDI holdings has risen to nearly 10 percent by 2022, doubling in five years. The largest growth was seen in South Korean investments, but FDI from China and Hong Kong also increased substantially.

Direct investment, by its very nature, cannot replace debt-type resources or EU transfers. FDI financing differs from the other two forms of financing in several ways. While a significant part of debt-type and EU funds provides resources not only for the domestic corporate sector, but also for the state, FDI inflows play an important role in financing foreign-owned companies. Both debt and EU funds can provide a background for financing domestic sectors in both the short and long term. In contrast, FDI resources could only replace other forms of financing lost for various reasons in the corporate sector and in the longer term – on the one hand, due to the time required to attract the appropriate parent companies to Hungary, and on the other hand, due to the subsequent time requirement of several years for the implementation of projects. Although FDI financing has the advantage of directly increasing GDP through financed corporate investment, it substantially increases income outflows in the context of high corporate profits. This can also be seen in the difference between the income generated (GDP) and the disposable income (GNI) of domestic operators, in which income paid to foreign companies plays a significant role. Since 2015, the gap between GDP and GNI has narrowed substantially, as a

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<sup>13</sup> In recent years, foreign companies have announced investments worth more than HUF 6 trillion in the field of battery manufacturing (e.g. CATL, Samsung SDI, SK On Hungary, Sunwoda, Huayou Cobalt, EVE Power). With capacity expansions, domestic production capacity will multiply in the future, which could become one of the largest in Europe by 2030.

result of which, similarly to 2021, the difference between the two indicators was around 3 percent in 2022, to which the profits of foreign-owned companies operating in Hungary contributed the most. In addition, it is important to highlight that direct capital investments are associated with a particular company, for which it is a sovereign decision on how to use its resources. Furthermore, FDI funds always finance investments by for-profit foreign companies and cannot be reallocated in accordance with current policy objectives.

### **2.1.7 The predictable and efficient use of EU funds allocated to Hungary is important**

The predictable and efficient use of EU funds allocated to Hungary are of paramount importance for several segments of economic policy, including state financing, central bank foreign exchange reserves, balance of payments and government debt. The receipt of funds provides funds for economic development, improves the balance of payments, helps finance public finances, reduces public debt and increases the foreign exchange reserves of the central bank. The use of funds stimulates economic growth, supports employment, increases tax revenues, and the implemented developments can improve the competitiveness of the Hungarian economy. In addition, unhindered access to EU funds is of paramount importance from the point of view of Hungary's perception of country risk.

The absorption of funds for the 2014-2020 cycle will soon be completed as planned, as the absorption rate reached 95 percent in December 2023. Based on European Commission data, Hungary has already drawn more than EUR 25 billion of the cohesion and rural development budget due to Hungary, which is worth more than EUR 27 billion. Hungary spent the cohesion funds of 2014-2020 primarily on infrastructure development, employment support, promoting the competitiveness of SMEs, as well as environmental investments and emission reduction.

Hungary currently estimated to have around €47 billion of EU funds allocated to it in the seven-year 2021-2027 budget cycle, which requires the fulfilment of the preconditions set by the European Commission. The drawing of more than €12 billion of agricultural and rural development funds for the new cycle is progressing as expected and the mobilization of cohesion funds could start following the Commission's decision in December 2023, while the release of around €21 billion of cohesion and recovery funds, which remain unavailable, requires the approval of the European Commission and the European Council. The remaining EUR 2.5 billion is related to other smaller programmes (primarily CEF, REACT-EU, Home Affair Funds), most of which have already become available to Hungary.

Hungary has had unhindered access to the agricultural and rural development part of the 2021-2027 budget worth more than EUR 12 billion from the very beginning. Since 2021, an average of around €1.3 billion in direct producer support has been received per year, which, by its very nature, is not reflected on the revenue and expenditure side of the budget. The Hungarian budget provides an 80 percent own contribution to rural development funds, which together exceeds HUF 4,000 billion in the planned total budget.

Uncertainty about the receipt of EU funds was reduced by the European Commission's acceptance in mid-December of the horizontal enabling conditions for judicial reform, allowing mobilization of cohesion funds for 2021-2027 up to a budget of €10.2 billion. Around 30% of the nearly €22 billion 2021-2027 cohesion envelope (Széchenyi Plan Plus) is blocked as a result of the conditionality procedure until the Commission and the Council approve the implementation of the 17 corrective measures that are part of the 27 super milestones. Around 10% of the cohesion envelope depends on the fulfilment of certain sectoral eligibility conditions. The remaining tranche, around €3 billion, could start disbursing once the Commission finds Hungary has appropriately fulfilled the horizontal enabling conditions set out in the Charter of Fundamental Rights.

Following the European Commission, ECOFIN also approved the REPowerEU chapter of Hungary's recovery plan in December, so Hungary could receive €920 million in RRF advances in 2024. However, the recovery funds of Next Generation EU, set up to address the coronavirus crisis, are subject to additional conditions. The mobilizations of around €6.5 billion in non-refundable RRF resources including REPowerEU and the €3.9 billion RRF credit line can start once the Commission and the Council approve the fulfilment of the 27 super milestones committed by Hungary in the recovery plan and identified by the Commission as preconditions.

## **2.2 Three-year macroeconomic outlook**

### **2.2.1 Conditions for economic growth are less favorable than in the previous decade**

In the decade of 2020, the external environment is less favorable for economic growth. In contrast to the 2010s, geopolitical confrontations have intensified in recent years, which also affect the availability of factors of production (labour, energy, capital). The domestic labour supply is shrinking due to demographic constraints, the era of cheap energy has come to an end in wartime, geopolitical tensions are having an impact on all areas of economic life, financial market stability typical of the 2010s has temporarily faltered, and due to inflationary waves, central banks tightened their monetary conditions, thus raising interest rates globally.

From next year, the growth of the Hungarian economy may be balanced again, but the condition for lasting convergence is the restoration of macroeconomic and financial balance. Real wages could rebound as inflation declines, allowing economic growth to be broad-based from 2024 onwards as domestic demand items gradually recover. Based on the milder growth of the economy in the second half of 2023, growth of 4.0 percent in 2024 assumed by the Convergence Programme will only be achievable under very favourable conditions and it is more realistic to achieve GDP growth of around 3 percent. However, after the full recovery of consumption and investment, economic growth could reach the average of pre-coronavirus years, so GDP could grow by 3.5 to 4.5 percent in 2025 and 3.0 to 4.0 percent in 2026. This is somewhat more moderate compared with the budget's assumption of growth of 4.3% and 4.5% respectively, reflecting domestic demand items. If a higher domestic demand path materializes, this could lead to a deterioration in the external trade balance, insofar as it does not lead to increased competitiveness and export capacity. The condition for lasting and sustainable convergence with the EU is the continuation of the restoration of economic equilibrium, as the risk of vulnerability is greater in the new decade without balance. Inflation has moderated back to the single digit range from October 2023 and is projected to continue declining in 2024. In addition, the current account is improving, and the budget needs to continue on a declining deficit path in order to rebalance.

In order to sustainably maintain GDP growth above 4 percent, rebalancing is accompanied by comprehensive competitiveness reforms that facilitate the transition to an intensive economic model based on productivity. 2024 will be a year following the energy and inflation crises, in which economic growth will depend on the speed of recovery, primarily on the recovery of consumption and investment. In the medium term, however, in addition to cyclical factors, structural indicators of the economy, productivity and competitiveness will become more important, which determine long-term growth capacity. Basically, it depends on these whether the Hungarian economy is able to continue on a fast catch-up path compared to the EU average, which would mean growth above the 3-4 percent range, or whether a slower path close to the lower part of the range will be realized. If our competitiveness does not adapt adequately to the characteristics of the new decade, this could lead to a decrease in our net exports and a decrease in our share of foreign markets.

The most important growth factors of the previous decade can only be moderately increased in quantity, so their quality needs to be improved in order to continue catching up. In order to transition to a quality growth model, the Hungarian economy will have to adapt to the

needs of the decade of 2020. Growth must be sustainable; energy efficiency must improve and digitalization needs to be improved in the longer term. Strengthening a sufficient number of healthy and skilled workers, companies' capacity to innovate, digitalize and export markets, easy and fast access to finance, and an energy-efficient and green economic transition are key to this.

One of the growth engines of the 2010s, employment growth faces demographic constraints, which will become increasingly challenging in the new decade. Even if the economy recovers, further employment growth cannot continue at the pace seen in the previous decade. An increasingly effective constraint on employment growth is the continuous decline in the number of people of working age. The decade of 2020 is characterized by a particularly large decline in the number of people aged 15-74, in line with the exit of those born in the Ratkó era from the age group. Based on current trends, the number of people of working age in Hungary may decrease by more than 450,000 by the end of the decade due to the aging and natural decline of the population. Thus, the labour market is expected to remain tight throughout, demand may exceed supply in some areas, so in the short to medium term, between 2024 and 2026, the number of people employed may grow by 0.0 to 0.5 percent per year. As a result, the unemployment rate is expected to remain at low levels by European standards, at 3.5 – 4.0 per cent in 2024, 3.2 – 3.8 per cent in 2025 and between 3.0 and 3.5 per cent in 2026, with the lower end of the range in line with the projections presented in the April 2023 Convergence Programme.

Adverse demographic effects may be partly offset by a further increase in the employment rate. Although employment has increased significantly since 2010 and the employment rate is above the EU average, there is room for catching up with developed Northern and Western European Member States and some Central and Eastern European countries (e.g. Czech Republic, Estonia). The inclusion of the unemployed as a potential reserve is hampered by structural unemployment, i.e. when labour supply and demand do not coincide geographically or by qualifications. The regional distribution of the labour force is not even: in the more developed, typically north-western regions of the country and around the capital, the employment rate is more than ten percentage points higher than the indicators of the eastern and northeastern counties, and the difference in the unemployment rate may exceed seven percentage points between counties. The inclusion of additional groups of the inactive population (young people, the low-skilled and those around retirement are the possible groups for this) would require further targeted measures and the spread of more flexible forms of work. The proportion of atypical forms

of work (part-time work, working from home, flexible working hours, etc.) that allow the inclusion of certain disadvantaged labour market groups is among the lowest in Hungary in EU comparison, and in most cases, it is also lower than that of the Visegrad countries. There are also reserves in the skill structure of the Hungarian workforce: the proportion of those with tertiary education (who typically have the highest employment rate) is below the EU average. Perhaps the most difficult form of labour reserve to exploit may be to lure back Hungarian citizens living and working abroad.

Due to demographic constraints, increasing labor productivity is coming to the fore. In view of the demographic constraints hindering the further expansion of the workforce, labour productivity and the intensive use of labour as a factor of production will play a key role. In international comparison, domestic labour productivity was low, at 73.5 percent of the EU average in 2022. With this performance, Hungary is in the bottom third of EU countries, based on which significant growth potential can be identified. Compared to the Visegrad countries, Hungary only overtook Slovakia in terms of labour productivity in 2022, by 0.2 percentage points, while Poland and the Czech Republic are almost 10 percentage points higher than Hungarian and Slovak performance, with a performance above 84 percent of the EU average. In addition, domestic productivity shows significant duality: broken down by company size, the productivity of SMEs corresponded to 43-73 percent of large enterprises, and a difference in productivity can also be observed in the case of domestic versus foreign-owned companies, as foreign companies were on average three times more productive than domestically owned companies. A meaningful increase in labour productivity may require structural reforms, steps to strengthen innovation, a shift towards higher value-added economic activities and strong productivity improvements in low-productivity sectors.

The most important factor in labor productivity is qualification. With automation, digitalization and the spread of artificial intelligence, the world of work is changing significantly and the value of flexible, digitally equipped lifelong learning workers is becoming more valuable. Adapting to the spread of artificial intelligence on the labour market will be a challenge in the coming years. On the one hand, its application increases productivity, and on the other hand, it can significantly reduce the labour demand of certain jobs, which requires retraining and career changes, even if the total number of jobs in the country increases due to technical progress.

Given the tightness of the labour market, workers will continue to be in a better bargaining position, so real wages are expected to increase steadily and significantly in the coming years. As the consumer price index gradually returns to the central bank's inflation target, real wages

will start to grow strongly again, rising throughout the year from 2024, putting real household incomes and consumption on an upward trajectory. However, it is important that wages rise sustainably in line with the underlying productivity, while ensuring decent livelihoods and rising prosperity. Finding the right proportions is paramount. Over the past decade, significant wage convergence has been achieved in Hungary, but this can only continue in parallel with productivity growth. In this case, average gross earnings could increase by 10.5 to 11.5 percent in 2024, by 8.0 to 9.0 percent in 2025 and by 7.5 to 8.5 percent in 2026, which is also in line with the forecast figures presented in the current Convergence Programme.

### **2.2.2 Broad-based growth can be expected**

Consumption may expand again in the coming years. Declining real wages and rising costs of living in the wake of high inflation, as well as an uncertain economic environment, weighed on household consumption, which reacted with financial caution to rising price levels. The achievement of price stability, the recovery of savings, the strengthening of consumer confidence and the moderation of inflation expectations should support the resumption of consumption growth, which could be between 3.0 and 3.5 percent in 2024 and between 2.5 and 3.5 percent in 2025 and 2026. The Convergence Programme envisages higher consumption, which is, however, called into question by international experience indicating a protracted consumption recovery.

Investment rates are expected to remain high, but structural improvements are inevitable. Infrastructure, industrial and construction investments have increased significantly in Hungary over the past 13 years, and the investment rate – even after its recent decline – currently stands at 26.1 percent. However, growth was achieved too much through construction investments, which resulted in two challenges. On the one hand, the price of this type of investment has risen rapidly, so the investment rate at constant prices has been decreasing in Hungary since 2019. On the other hand, intangible investments, which are of key importance for innovative, quality economic growth, remained low, amounting to 2.3 percent of Hungary's GDP in 2022. This is low in international comparison, in the last third of the EU ranking. The effect of innovations on economic growth is shown by the fact that, according to the MNB's research, 1100 innovation-driven companies in Hungary were able to account for 13 percent of total gross exports and 22.8 percent of domestic annual GDP growth between 2009 and 2019. A significant reduction in government investment and capital transfers could reduce the nominal investment rate by 2-3 percentage points from its peak in 2022.

The expansion of construction capacities could significantly increase the number of housing constructions with positive economic and social impacts. In recent years, typically 20-22 thousand new homes have been handed over, in which, in addition to COVID and the high inflationary environment, capacity constraints also played a role. On the policy side, demand support measures to encourage housing construction are regular, but if construction capacities remain constrained, demand growth will be largely translated into price increases rather than volumes. Nevertheless, the Hungarian economy has previously proven that 35,000 new homes can be built annually, which would bring the domestic renewal rate up to the average of the countries of the region. For this, in addition to measures to support demand, it is also important to help the supply side in the coming years. In addition to the economic impact, new housing investments also have positive social, welfare and demographic implications. As a result of the increase in house prices, it is very difficult for newlyweds to find suitable housing, which can be remedied primarily by the expansion of housing supply. To this end, it is essential to increase the efficiency of the construction industry and encourage home renovation, which would permanently increase both the quantity and quality of the housing stock.

As a result of the continued transformation of the structure of domestic industry, our country may become one of the producers of critical infrastructure of the new decade. Within Hungarian exports, the role of foreign corporations is decisive, therefore the development of foreign direct investment is important for the development of an export-oriented economic model. Another key factor for export-oriented growth in Hungary is the evolution of its exports in the light of uncertainties about external economic activity, the economic prospects of Hungary-important foreign market partners (e.g. Germany) and increasing international competition. In the long term, export growth can be supported by FDI-derived manufacturing investments. Battery factories, which mainly produce for export, are supporting long-term export growth, despite turbulence in external activity. Overall, domestic exports are expected to grow by 3.0 – 4.0 percent in 2024, 6.0 – 7.5 percent in 2025, and 4.5 – 6.6 percent in 2026. The Convergence Programme projections assumed a more dynamic expansion, but this may be explained by the fact that risks to the external environment in March 2023 were milder than at present.

Overall, export- and investment-led growth is expected, supported by consumption. On the basis of the data available, net exports and domestic consumption have not increased together over such a long period of time after 1995. As a result of new production capacities and continuous developments of the companies located here, exports are projected to make a sustained positive contribution to economic growth in the medium term. The contribution of investments



will also be positive, the import content of which will not lead to an overall negative trade balance. Gross fixed capital formation is expected to be 1.5 to 4.5 percent in 2024, followed by 2.5 to 4.5 percent in 2025 and 2.0 to 4.0 percent in 2026, mainly from the corporate sector.

In addition to balanced economic growth, the external balance is also expected to remain positive over a sustained period. Compared with the projections in the Convergence Programme published in April 2023, our external equilibrium indicators may develop more favourably, mainly due to the significant decline in energy prices since then, which supports the improvement of our equilibrium position through the terms of trade effect. After a high current account deficit in 2022, a positive balance could already be established in 2023, based on data available during the year. In the absence of a renewed adverse shift in the terms of trade, export-led growth is expected to result in a current account surplus with a sustained surplus. This can also be supported by the receipt of EU funds, if agreements are reached.

### **2.2.3 Price stability is restored, but megatrends are exerting inflationary pressures**

Inflation will remain within the tolerance band over the medium term once the central bank's target is expected to be reached by 2025. However, global megatrends are also influencing inflation developments in the medium and long term, with digitalization and climate change having an impact on price developments through several direct and indirect channels.

Inflation is projected to fall to between 4.0 and 5.5 percent in 2024 and to remain stable at around 3 percent from 2025. Disinflation is expected to continue at a significantly more moderate pace in 2024, but inflation is expected to remain between 4.0% and 5.5% below the previous budget projections of 6.0%. At the beginning of the year, inflation may fall below 6 per cent, then move into the range of 4 to 5 per cent, but within this moderation will slow down significantly, and in some months a temporary increase is possible due to base effects. From early 2025, inflation is expected to move again towards the central bank's 3% target, after which it is assumed to continue to circulate around this level.

As inflation declines, the central bank base rate will continue to fall in 2024. According to consistent projections, continued disinflation will allow the prudent decline in the base rate to continue in the course of 2024.

Digitalization and technological developments are contributing to moderating inflation in the longer term. The internet and digitalization are fundamentally impacting through e-commerce, more conscious, better-informed customers, automation and IT development. E-commerce can lower prices by increasing competition between companies and changing traditional

business models. Thanks to increasing internet use, consumers are becoming more aware and better informed about price developments, which reduces companies' pricing space. Robotization, the complexity of production processes and the rise of artificial intelligence are changing the way companies operate, transforming production chains and directly reducing company costs. The fall in prices of ICT products and services over the past decade(s) is directly dampening inflation.

Climate change risks also affect inflation and inflation expectations. In the case of inflation, we can expect changes in relative prices and increasing volatility in food and energy prices, which are already volatile compared to other items in the consumer basket. In addition to inflation, fluctuations in inflation expectations may intensify, which may warrant more frequent revisions to expectations developments, thereby jeopardizing the adequacy of anchoring inflation expectations.

The green transition may initially entail an inflationary surplus. A gradual transition to greener energy may entail higher and more volatile prices during the transition. During the green transition, sustained increases in inflation can be caused by too slow increase in the supply of alternative energy sources and by the cost of transition, i.e. shifting demand can lead to price shifts in certain sectors.

**Table 1: Expected developments in domestic macroeconomic indicators (annual change)**

	2022	2023	2024		2025		2026	
			FC	Convergence programme	FC	Convergence programme	FC	Convergence programme
Inflation (annual average)								
Inflation	14,5	17,6 - 17,7	4,0 - 5,5	6,0	2,5 - 3,5	3,0	2,5 - 3,5	3,0
Economic growth								
Household consumption expenditure	6,5	(-3,0) - (-2,9)	3,0 - 3,5	3,2	2,5 - 3,5	4,1	2,5 - 3,5	4,2
Gross fixed capital formation	1,2	(-12,2) - (-11,8)	1,5 - 4,5	3,7	2,5 - 4,5	4,9	2,0 - 4,0	4,2
Exports	11,8	0,4 - 0,6	3,0 - 4,0	5,9	6,0 - 7,5	7,4	4,5 - 6,6	8,3
Imports	11,1	(-4,8) - (-4,6)	3,0 - 4,0	4,3	4,0 - 6,0	6,5	3,1 - 5,1	6,9
GDP	4,6	(-0,6) - (-0,4)	2,5 - 3,5	4,0	3,5 - 4,5	4,3	3,0 - 4,0	4,5
External balance (% of GDP)								
Current account balance	-8,2	(-0,1) - 0,7	1,0 - 2,0	-1,0	2,0 - 3,0	-0,4	3,0 - 4,0	0,1
Net financing capacity	-6,1	2,1 - 2,9	2,2 - 3,4	1,4	3,4 - 4,8	1,9	4,3 - 5,9	2,1
Labour market								
Average gross earnings	17,4	13,7 - 13,9	10,5 - 11,5	10,7	8,0 - 9,0	8,5	7,5 - 8,5	8,2
Employment in the national economy	1,3	0,4 - 0,5	0,0 - 0,5	0,4	0,0 - 0,5	0,1	0,0 - 0,5	0,1
Unemployment rate	3,6	4,0	3,5 - 4,0	3,5	3,2 - 3,8	3,2	3,0 - 3,5	3,0

Source: Fiscal Council, Hungary Convergence Programme 2023-2027

### **3. BUDGETARY DEVELOPMENTS AND RISKS TO GOVERNMENT DEBT DEVELOPMENTS**

This chapter focuses on identifying risks to the continued reduction of the sovereign debt ratio, focusing primarily on the indicator's numerator. According to the Convergence Programme for the years 2023-2027, the general government debt ratio is projected to decline every year over this period, from 73.9 percent in 2022 to 56.3 percent in 2027. Consequently, the Hungarian Government has a medium-term programme which, if implemented, will meet the sovereign debt rule. Therefore, this chapter seeks to identify risks to the achievement of the objectives of the Convergence Programme for the years 2024-2026, thereby addressing the fulfilment of the sovereign debt rule.

#### **3.1 Main objectives and challenges of the Convergence Programme 2023-2027**

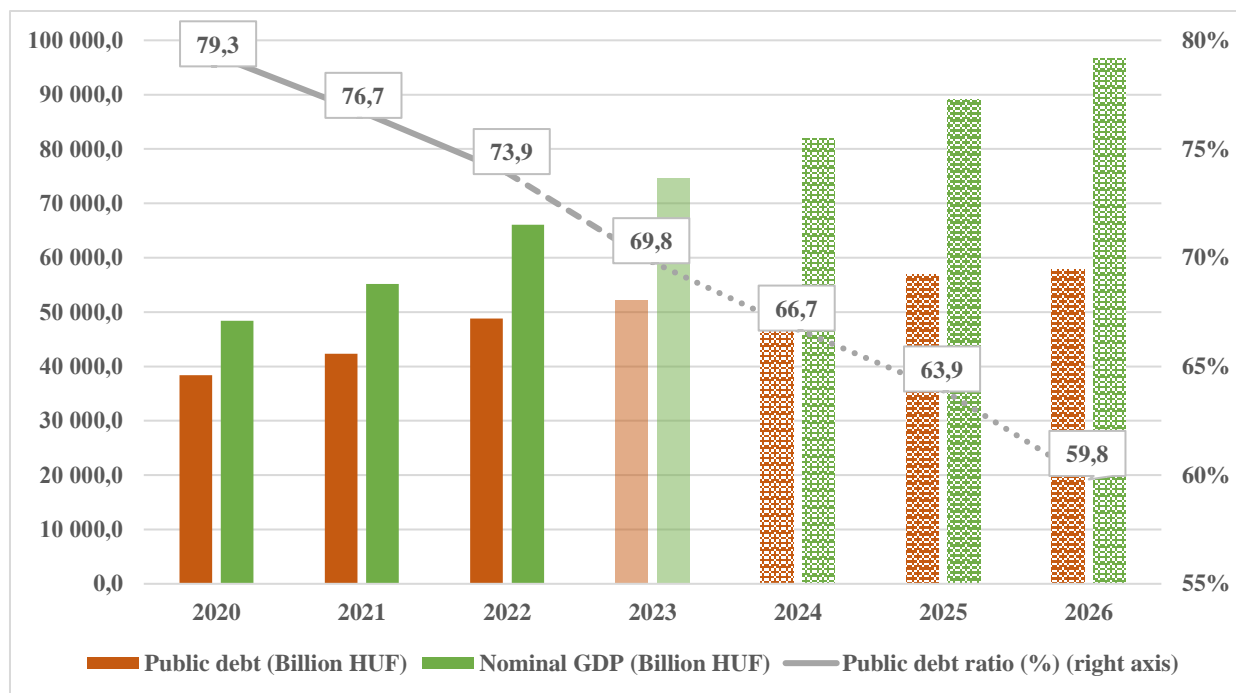
##### **3.1.1 Actual and projected evolution of the government debt ratio (2020-2026)**

Pursuant Section (2) of Act CXCV of 2011 on the Economic Stability of Hungary (Stab. act), the change in the government debt ratio is determined by the change in the amount of government debt and nominal GDP (Figure 1).

According to the actual data, the government debt ratio decreased from 79.3 percent to 73.9 percent between 2020 and 2022, with the improvement continuing according to the projections for 2023 and 2024-2026. However, the components of the government debt ratio contributed differently to this improvement (Figure 2).

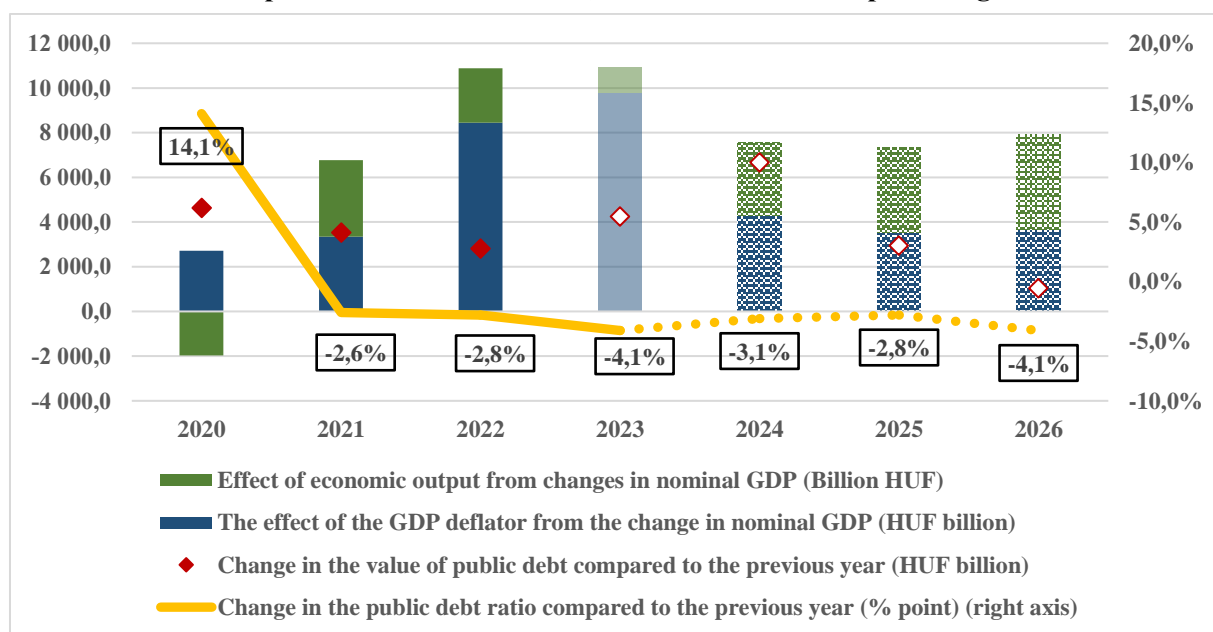
In 2020, government debt increased more than nominal GDP compared to the previous year as a result of the adverse macroeconomic and budgetary effects of the coronavirus outbreak, resulting in a 14.1 percentage point increase in the government debt ratio. However, from 2021 onwards, the trend was reversed, nominal GDP increased (and is projected to continue to rise) more than government debt, putting the value of the government debt ratio on a declining path. The improvement in the government debt ratio over the period 2021-2022 is mainly driven by rapid nominal GDP growth, which is above 10 percent year-on-year.

**Figure 1: Government debt, nominal GDP and government debt ratio developments between 2020-2022 and projected developments between 2023-2026 in billions of forints and percentages respectively**



Source: HCSO, EDP report (2023), Convergence Programme p. 64, pp. 1a and 67, based on data in Table 3, SAO calculation and editing.

**Figure 2: Change in the value of the components of government debt and nominal GDP\* and of the government debt ratio compared to the previous year between 2020-2022 and projected development between 2023-2026, in billion forints and percentages**



Source: MNB Inflation Report (2023), HCSO EDP Report (2023), HCSO STADAT 21.1.1.1.1., Convergence Programme p. 64. Table 1.a-1b, p. 67. Based on the data of Table 3, SAO calculation and editing

In nominal GDP growth in the years 2020-2023 combined, the impact of price increases was felt to a greater extent than the increase in the volume of economic output, due to accelerating inflation from the second half of 2021 and the economic contraction starting in the second half of 2022. (Based on three-quarter data, nominal GDP growth in 2023 is likely only due to the impact of price increases). By contrast, nominal GDP growth between 2023 and 2026 is projected to grow only at a more modest pace, and consequently the government debt rule can be met with a decreasing year-on-year increase in public debt.

In 2024-2026, the government aimed to reduce the budget deficit-to-GDP ratio in addition to a stable and dynamic pace of economic growth (in order of years: 4.0 percent, 4.3 percent, 4.5 percent). With regard to economic growth, nominal GDP growth is projected to be increasingly important to real growth, i.e. the latter contributing more favorably between the GDP deflator effect<sup>14</sup> and the economic output effect. Nominal GDP growth between 2024 and 2026 is projected to be 9.8 percent, 8.7 percent and 8.6 percent, respectively.

### **3.1.2 Development of the balance of the general government sector (2020-2026)**

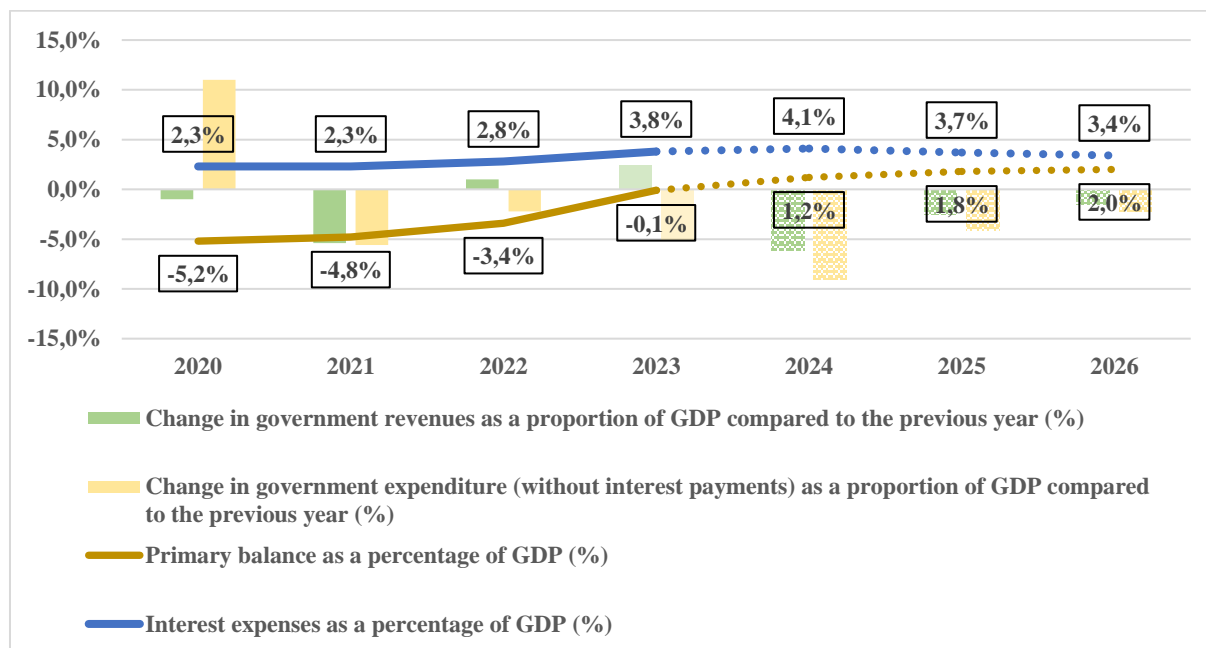
The amount of gross government debt is basically determined by the financing needs arising from the budget deficit in a given budget year. The primary balance, and thus the level of debt, can be directly influenced by fiscal policy through tax and expenditure planning and planned implementation, while interest expenditure is mainly determined by the value of government debt and the reference yields on government debt financing government debt. Consequently, the primary balance is the one through which the Government can intervene to meet the deficit target. Optimally, fiscal policy can slow down the pace of government debt growth by improving the primary balance (deficit reduction), thereby reducing interest expenditure.

The year-on-year change in government expenditure excluding government revenues (centralization ratio) and interest expenditure, as well as the development of the primary balance and interest expenditure as a share of GDP, are shown in Figure 3.

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<sup>14</sup> The quantified amount by which price increases contributed to nominal GDP growth in a given year.

**Figure 3: Year-on-year change in government revenues and expenditure, interest expenditure-to-GDP and primary balance as a percentage of GDP 2020-2022 and projected 2023-2026**



Source: Proposal for the Discharge Act 2022 and Convergence Programme p. 66, based on Table 2a, SAO drafting and calculation. Note: The figures show the primary balance and interest expenditure as a share of GDP.

After stagnating levels in 2020-2021, interest expenditure-to-GDP ratios increased in 2022-2023 and will continue to rise in 2024 and decline until 2026, but may reach a less favorable level (3.4 percent) than in 2020-2021 (2.3 percent). By contrast, the primary balance improved from 2020 onwards and is projected in the Convergence Programme to be positive from 2024 onwards. A comparison of developments in interest expenditure-to-GDP ratios with the primary balance shows that an increase in the primary balance is necessary to reduce the deficit of the general government sector in the period 2024-2026, as interest expenditure-to-GDP ratios are projected to deteriorate or reach high levels over the period compared to previous years.

Between 2024 and 2026, government forecasts project that government expenditure excluding interest expenditures will decline more sharply (by 6.7 percentage points, 14.4 percent, from 46.5 percent in 2023 to 39.8 percent in 2026) than the centralization ratio (by 4.2 percentage points, 9.9 percentage, from 46.5 percent in 2023 to 39.8 percent in 2026). Current income and wealth tax revenues, which play an important role in the centralization ratio, are projected to decline as a share of GDP between 2023 and 2026 (from 35.3 percent to 32.4 percent), after increasing between 2021 and 2023 (from 33.7 percent to 35.3 percent). This is partly due to the

fact that most of the extra profit taxes introduced in 2022<sup>15</sup> are expected to be phased out from 2025. The fact that consumption growth lags behind real GDP growth over the period 2024-2026, according to the Convergence Programme data, may also contribute to the decline in tax revenues-to-GDP ratios. Spending cuts related to utility subsidies, government investment and wage increases in the public sector will play an important role in reducing government expenditure excluding interest expenditures as a share of GDP between 2024 and 2026.

### **3.2 Budgetary stress points for the years 2023-2026**

This chapter analyses individual elements of the Convergence Programme while taking several assumptions of the Convergence Programme for granted.

#### **3.2.1 Projected developments in interest expenditure**

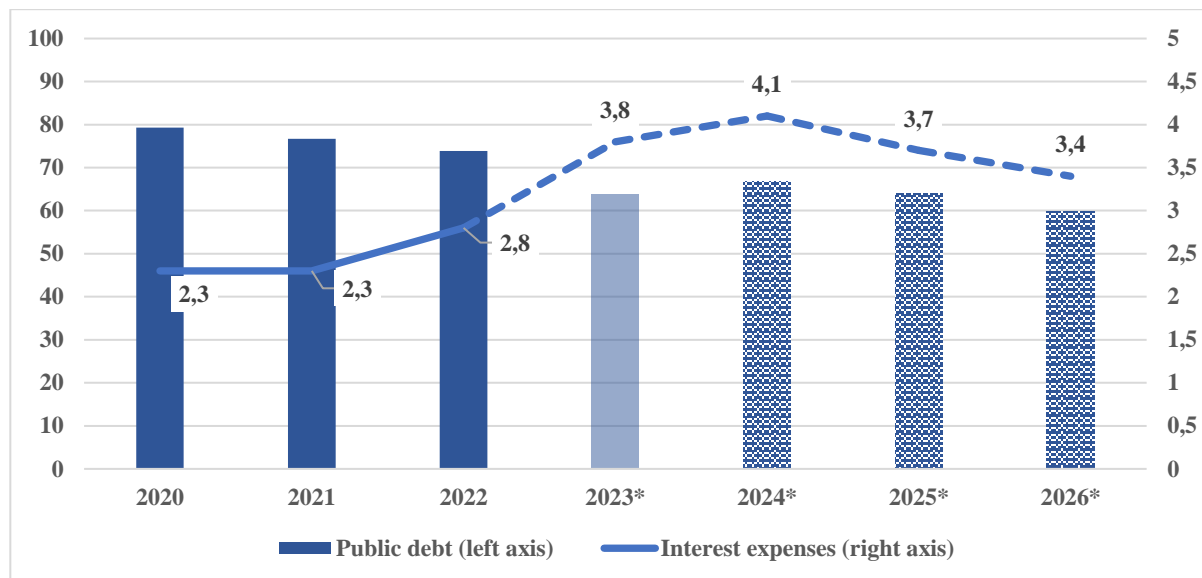
By the second half of the 2010s, interest expenditures as a proportion of GDP had fallen significantly (from over 4 percent to around 2 percent) due to the favorable global environment and low government bond market yields. From 2020, however, changes in the global market environment no longer allowed the issuance of low-interest government securities and the renewal of debt at low interest rates, and interest expenditures were also increased by the growth in government debt in connection with a higher budget deficit compared to the pre-2020 period. With an appropriate debt management strategy, the future rate of interest expenses can be somewhat influenced (by indebtedness in domestic / foreign currency, by choosing short/long maturities, by adjusting the ratio of fixed/variable rate papers). Figure 4 shows developments in government debt and interest expenditure.

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<sup>15</sup> Under the Convergence Programme, they can only be considered temporary taxes, are not permanent elements of the tax system in the long run, and will remain in force only as long as necessary to offset increased budgetary expenditure due to the Russia-Ukraine war and energy prices.



**Figure 4: Government debt and interest expenditure developments up to 2022 and projected development as a percentage of GDP (%) between 2023 and 2026**



Source: HCSO EDP report (2023), Discharge Act, Discharge Act proposal, CCTV. and Convergence Programme, SAO editing

In Hungary, interest expenditures have also increased as a result of the high level of government debt and high yields. In 2020, the economic downturn and expenditure increase associated with the outbreak of the coronavirus pandemic led to an increase in cash flow shortages, but at that time, this did not yet mean an immediate, significant increase in interest expenditures. In 2021, however, the amount of interest expenses increased not only compared to the previous year, but also compared to the planned amount (interest expenses exceeded the amount of the revised appropriation by 36.7 percent). The increased interest expenditure was driven by increased financing needs and rising yields that started in 2021 (and peaked in 2022), linked to reduced risk appetite and problems around global supply chains. A higher amount of government bonds financing the deficit was sold in 2021, and the forint-euro exchange rate also developed unfavorably due to deteriorating international sentiment and rising inflation.

In 2022, gross interest expenditures continued to increase compared to previous years, bringing interest expenditures to nearly 3 percent from 2.3 percent of GDP in 2020. Interest expenditure is expected to increase further in 2023 and exceed 4% of GDP by 2024, according to the Convergence Programme (Figure 4).

The ratio of interest expenditures to government debt has increased, from 3.3 percent in 2020-2021 to 4.3 percent in 2022 and is expected to rise further in 2023. In the first half of 2023, interest expenses amounted to HUF 1,360.1 billion, which is 73.7 percent higher than a year earlier. Growth in 2023 will be reflected in both market and retail bonds, discount treasury

bills and interest expenditure on international foreign currency bonds. Variable rate and newly issued market forint bonds contribute the most to the increase in interest expenditures.

In addition to high yields, debt issued at fixed interest rates in 2022-2023<sup>16</sup> will be accompanied by high interest expenditures in the coming years, which will place a greater burden on the budget compared to the previous value of around 2.5 percent until 2021. The share of higher fixed income assets may be favorable to future developments in interest expenditures if issued in a low-yield environment.

The Convergence Programme projects that both short- and long-term yields will moderate in the coming years, with short-term yields expected to decline by more than 60 percentage points and long-term yields by more than 30 percentage points by 2026. In these cases, an external event indicating an increase in yields will have less influence on the level of interest expenditure. As debt is repriced, interest expenditures could start to decrease in the coming years from 2026. The ratings of credit rating agencies, the evolution of the country risk premium and the decrease in yields all point in the direction that the debt issued in the coming years will place a lower burden on the budget in the form of interest expenditures compared to previous years, but this is conditional on the realization of the economic growth projected by the Government.

### **3.2.2 Projected revenue developments**

#### ***Development of direct revenue of the budget***

Among the direct revenues of the budget, revenues from consumption-related taxes are decisive, which increased from 12.9 percent of GDP in 2020 to 13.2 percent in 2022, thanks to a significant increase in consumption. Payments by business entities increased from 3.3 percent to 4.4 percent, which was due to the extension of sectoral special taxes in 2022. Retail payments decreased from 5.8 percent to 4.8 percent as a result of the extensive PIT tax benefits in 2022.

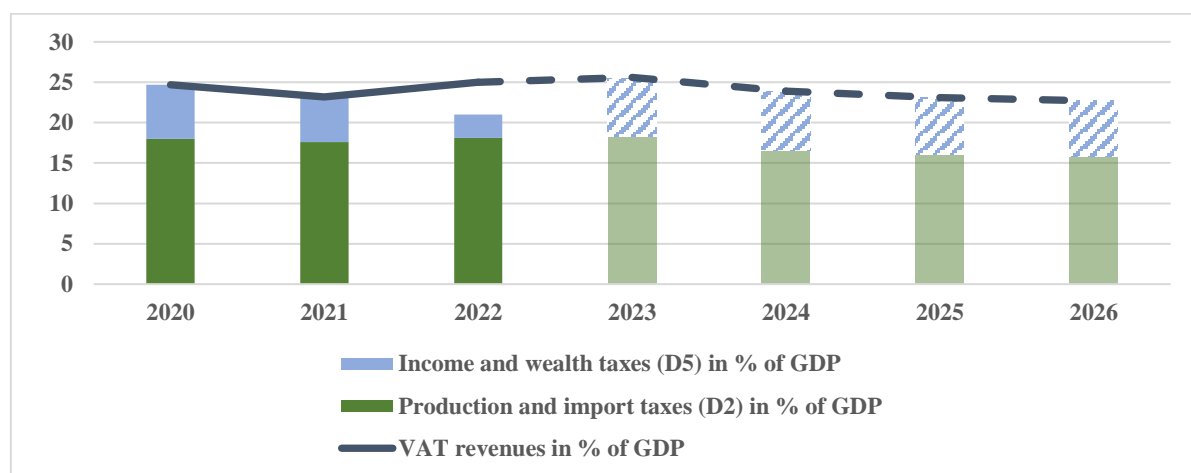
The Government's goal, also stated in the Convergence Programme, is to reduce the tax burden on businesses and to reduce the weight of taxes on income in order to encourage employment, while increasing the proportion of sales-type taxes.

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<sup>16</sup> According to the debt management benchmark targets, the fixed ratio should remain in the range of 60-80%, currently 69%.

Figure 5 shows the projected development of tax revenues, including taxes on production and imports, taxes on income and wealth, as a percentage of GDP.<sup>17</sup>

**Figure 5: Development of tax revenues of the central budget<sup>18</sup> between 2020-2022 and their projected performance between 2023-2026, as a percentage of GDP**



Source: HCSO STADAT 21.1.1.1., 21.1.1.20., Convergence Programme Table 2.a., SAO editing

The figure shows that tax revenues as a share of GDP decreased in 2021 compared to 2020, partly as a result of the tax relief measures taken to help the recovery from the economic downturn and the fact that the amount of the 2022 PIT refund was recorded in the ESA system in 2021. In 2022, tax revenues as a share of GDP were slightly above 2020 levels. The projections envisage that tax centralization, and thus tax revenues as a share of GDP, could decline by 1.7 percentage points in 2024, 0.8 percentage points in 2025 and 0.4 percentage points in 2026 in a growing GDP volume. This decrease is mainly due to the reduction in taxes on production and imports as a proportion of GDP, which includes, in addition to taxes on consumption, sectoral special taxes (extra-profit taxes). From 2025, revenues from the advertising tax suspended until the end of 2024 will increase tax revenues, and the change in the tax on utility lines from 2024 and its termination from January 1, 2025 will reduce tax revenues by 0.05 percent of GDP in 2024. Despite the decline, taxes on production and imports are projected to still reach 15.8 percent of GDP in 2026. Tax revenues depend to a large extent on developments in consumption

<sup>17</sup> Of the main tax groups according to the ESA methodology for taxes and contributions of the European Union, taxes on production and imports include consumption-related taxes planned in the CCTV (of which 78.6% is VAT, 14.1% is excise duty) and extra-profit taxes (e.g. retail tax, payments by financial organizations) from the payments of economic entities. The most significant elements of income and wealth taxes according to ESA in the CCTV are TAO and personal income tax.

<sup>18</sup> These include, according to the ESA classification, taxes on production and imports (D2), taxes on income and wealth (D5), taxes on capital gains (D91). Capital income taxes as a share of GDP are 0.0% of GDP in the period under review and are therefore not included in the Figure.

taxes. Tax revenues are projected to decline by 3.2 percent of GDP between 2024 and 2026, mainly due to the planned decrease in the centralization ratio.

### ***Change in the ratio of consumption-related taxes to GDP***

Consumption-linked tax revenues constitute a significant part of taxes on production and imports. In 2022, growth in taxes on production and imports exceeded nominal GDP growth due to an increase in disposable income (e.g. personal income tax refund, allowances for armed forces).

The growth rate of production and import tax revenues from 2024 onwards is projected by the Convergence Programme to be below GDP growth and will decline by 1.7 percent in 2024. This could also contribute to a 1.7 percent decline in tax revenues as a share of GDP in 2024 (compared to 2023). According to our calculations, if the growth rate of consumption does not match the growth rate of GDP, then every percentage point difference reduces tax revenues by 0.6 percent of GDP.<sup>19</sup> An increase in rates of certain consumption-related taxes from 2024 onwards has the opposite effect.

### ***Impact of compensation developments on wage-related tax and contribution revenues***

Increases in the value of labour incomes<sup>20</sup> and nominal GDP growth also increase tax and contribution revenues as a proportion of wages.<sup>21</sup> The ratio of nominal GDP, compensation of employees and compensation of employees to nominal GDP is shown in Figure 6.

The compensation ratio of employees to nominal GDP decreased from 45.2 percent in 2016 to 42.8 percent in 2020 and 40.1 percent in 2022, and is projected to be between 40.6 and 40.8 percent in 2023-2026. In 2024, compensation growth is projected to exceed nominal GDP growth (9.8 percent) (10.7 percent). By 2025-2026, the trend will be reversed, with the projected growth rate of compensation of employees (2025: 8.5 percent; 2026: 8.2 percent) slightly below the projected nominal GDP growth rate (2025: 8.7 percent; 2026: 8.6 percent).

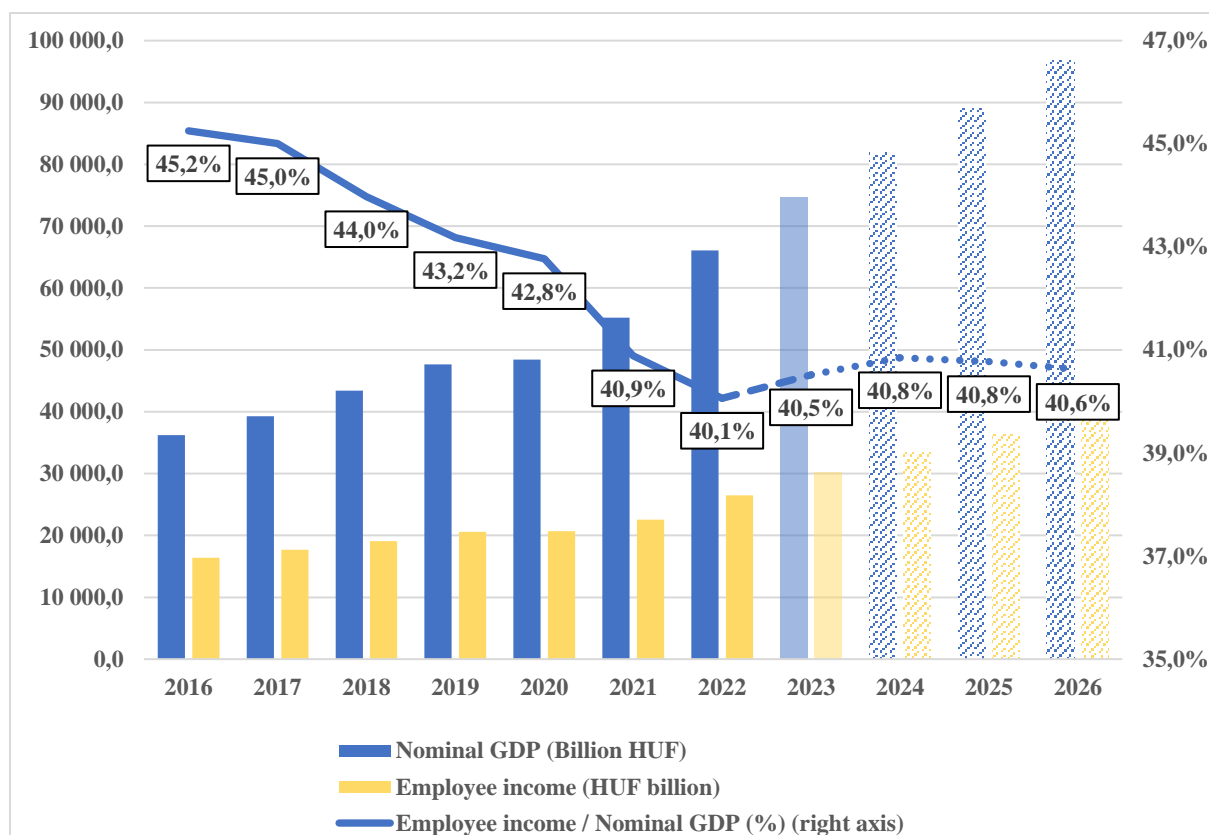
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<sup>19</sup> Data calculated on the basis of the Convergence Programme projections.

<sup>20</sup> Under Regulation (EU) No 549/2013, compensation of employees (D.1) means all remuneration, in cash or in kind, paid by an employer to an employee in return for work performed during the accounting period. This includes wages and salaries in cash, which include the value of all social contributions, income taxes and other payments, etc., payable by the employee, including those deducted and paid directly into the social security system by the employer instead of the employee, to the tax authorities.

<sup>21</sup> Based on the data available from the Central Statistical Office for the years 2020-2022, nominal compensation of employees for the years 2023-2026 was calculated using the growth rates included in the forecast of the Convergence Programme, and their value was then compared with nominal GDP growth data. For nominal GDP, the values calculated in I/1 are taken into account.

**Figure 6: Development of nominal GDP (HUF billion), compensation of employees (HUF billion) and compensation of employees to nominal GDP between 2016-2022 and projected development between 2023-2026, in percentage terms**



Source: HCSO STADAT 21.2.1.24., Convergence Programme, year 2023 based on MNB and analyst forecasts, SAO edit

The amount of personal income tax and contribution income is influenced by several factors. On the one hand, it depends on the nominal amount of compensation of employees, and on the other hand, on the average tax rate and the amount of tax refunds.

The projected growth in nominal labour income exceeds the forecast for employment growth (2024: 0.4 percent, 2025-2026: 0.1 percent). Since the Convergence Programme does not include planned measures on tax and contribution rates on labour income, higher tax and contribution revenues resulting from an increase in the ratio of compensation of employees to nominal GDP can be identified as a revenue risk *"ceteris paribus"*.

### ***Impact of phasing out extra-profit taxes***

From 1 July 2022, the Government introduced extra-profit taxes. Some of the types of taxes specified in the related decree are not new tax types, but in the case of these, the rate and method of calculation of the tax type have changed temporarily. The other, larger part of the extra-profit

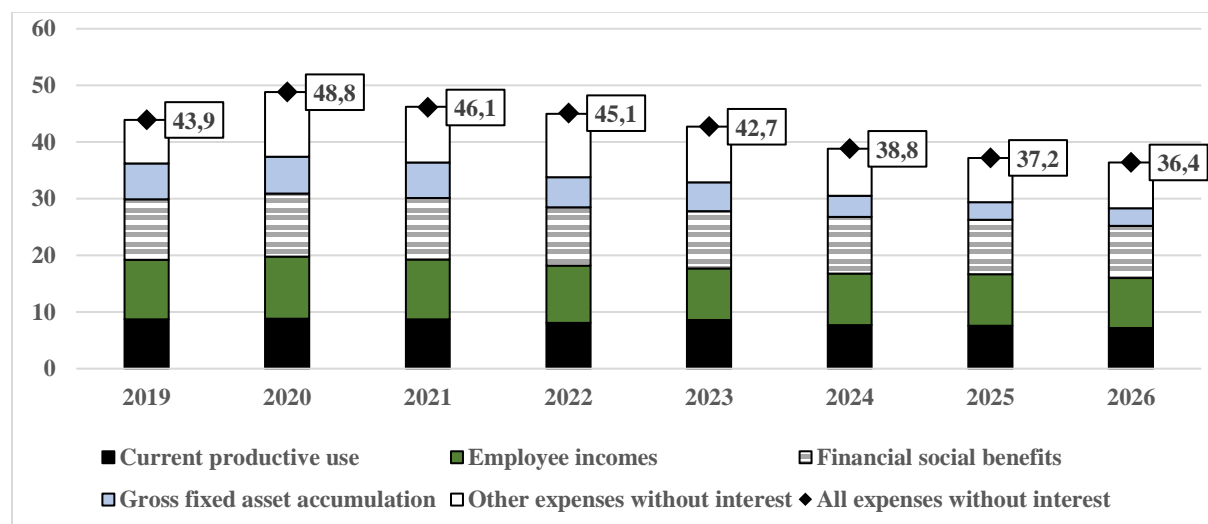
taxes operates as a temporary additional tax in addition to the "basic tax", the so-called "surcharge", and the special tax with special tax base and rate rules for the years 2022-2024. Extra-profit tax revenues accounted for 9.2 percent of government tax revenues in 2022 and are projected to reach 12.7 percent in 2023.<sup>22</sup>

Hungary made a commitment to phase out extra-profit taxes by 30 June 2024 in its Recovery and Resilience Plan. In 2024, the importance of extra-profit taxes will decrease, from 3.2 percent of GDP in 2023 to 2.4 percent of GDP.

### 3.2.3 Projected developments in expenditure excluding interest

Figure 7 shows the composition of government expenditure, excluding interest as a share of GDP, between 2019 and 2026.

**Figure 7: Development of the composition of government expenditure excluding interest between 2019 and 2022 and projected development between 2023 and 2026 as a percentage of GDP**



Source: HCSO EDP report (2023), based on HCSO STADAT 21.2.1.26. and Convergence Programme, SAO editing and calculation.

<sup>22</sup> Total appropriations for extra-profit taxes included in the CCTV of 2023, as a percentage of the planned tax revenue. The planned tax revenue is the planned tax revenue as a proportion of GDP (25.6 percent) in Table 2.a of the Convergence Programme multiplied by the projected nominal GDP for 2023 calculated by the SAO. (HUF 74,640,882 billion)

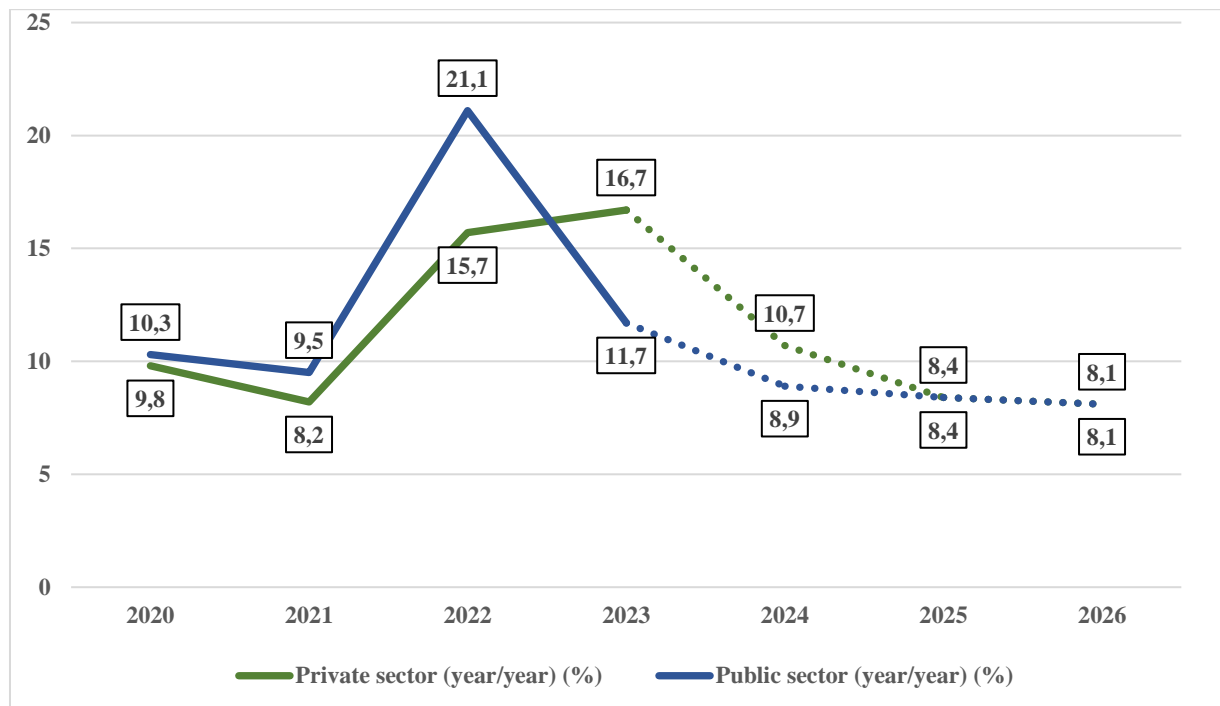
***The impact on public sector wages of maintaining expenditure-to-GDP levels***

The Convergence Programme envisages average gross and net average earnings growth of 8.9 percent, 8.4 percent and 8.1 percent respectively for public sector workers for the period 2024-2026, while the number of employees remains unchanged. Over the same period, public sector employee income expenditures as a share of GDP declined to 9.1%, 9.1% and 8.8% respectively. The nominal value recalculated from the value of budget expenditures on compensation of employees as a share of GDP is forecast to increase by 9.8 percent, 8.7 percent and 5.0 percent respectively in the period 2024-2026. In the budgetary sphere (government, municipal institutions, institutions of the government sector), the average annual growth rate (7.8 percent) of the nominal value of budget coverage planned for employee income for the years 2024-2026 lags behind the planned average annual increase in average gross and net earnings of employees working in budgetary bodies of 8.5 percent.

If, due to the above-detailed lack of funds, a lower than planned wage increase is implemented in the budgetary sphere, the wage gap between those working here and those working in the private sector (wage gap) may increase the rotation of the workforce in the public sector, and the increase in the wage gap between the two sectors may result in a decrease in the quality and efficiency of public services due to the replacement of the workforce leaving the public sector, resulting in an increase in budgetary expenditures.

In order to reduce wage gaps, the government has increased wages in the public sector in several areas (health, public administration, defence and law enforcement bodies, education). As a result, between 2020 and 2022, gross earnings in the fiscal sector increased more on a year-on-year basis than in the private sector (Figure 8).

**Figure 8: Change in gross earnings in the private and non-profit sectors and in the fiscal sector between 2020-2022 and projected change in percentage terms between 2023-2026\***



Source: HCSO STADAT 20.2.1.42., 20.2.1.43., 20.2.1.44., based on PM data reporting, SAO editing and calculation.

Note: \*Compared to last year. The figures for 2020-2022 only show the development of average gross earnings in the private sector.

Gross earnings in the private sector are expected to increase more year-on-year than in the public sector between 2023 and 2024, but the gap in wage dynamics will decrease by 2024 and then close in 2025-2026. Although the difference in wage dynamics between the two sectors will close by 2026, according to the projected data of the Convergence Programme, wage differences will persist.

Taking into account the impact of career models in the coming years, the forecast for slower inflation and more modest economic growth than in previous years, the projected wage differences for the period 2024-2026 can be considered realistic. The closing of the wage roll-over in 2020-2022 reduced implicit debt (indirect budgetary expenditure not directly included in debt), while the period 2023-2026 has a downward effect on an increase in implicit debt, which may indirectly act as an increasing factor in public debt, especially in the period 2024-2026.

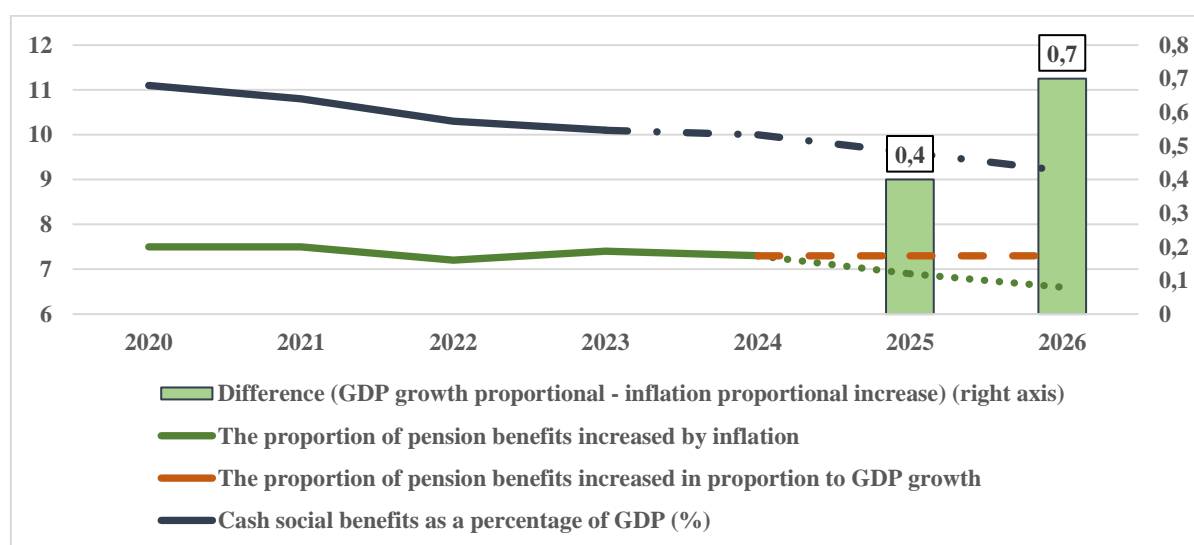


### *Evolution of the share of social contributions in cash in GDP*

A wide range of social benefits in cash includes cash benefits, social security pensions, social security benefits other than pensions, other social security benefits and social assistance in cash. Within cash social benefits, expenditure related to pension benefits represents a significant proportion (about 70 percent based on actual data for 2020-2022). The annual development of budgetary expenditures related to pension benefits is basically determined by the rate of inflation forecast for the given year, the change in headcount, turnover and composition<sup>23</sup>.

In the years 2025-2026, the increase in pension benefits after inflation will be below the amount of pension benefits increased by nominal GDP growth as a proportion of GDP. The difference shown in Figure 9 shows how much savings are made as a percentage of GDP.

**Figure 9: Development of social benefits in cash and retirement benefit expenditure between 2020-2022 and projected development in 2023-2026 as a percentage of GDP**



Source: Discharge Act 2021-2022, Kvtv. 2023-2024, Convergence Programme p. 64, pp. 1a-1b. table, based on HCSO STADAT 20.2.1.26., HCSO EDP report (2023), MNB Inflation Report (2023), SAO editing and calculation. Note: Data for 2023-2026 show dashed lines for the Convergence Programme projections.

The figure shows the share of social cash benefits and pensions as a share of GDP. The red line values show how spending on pension benefits, which accounts for about 70 percent of social benefits in cash, would develop in the years 2025-2026 if they increased with changes in nominal GDP, while the green line shows how pension benefit expenditures increase with inflation, as defined by law. In the case of the latter (green dotted line), it can be seen that the

<sup>23</sup> The amounts for 2025-2026 were determined on the basis of the rate of inflation projected in KP2023, as well as the change in nominal GDP.

value of pension benefits as a share of GDP will decrease significantly in 2025-2026 compared to previous years (from 7.3 percent planned in 2024 to 6.6 percent). Conversely, if pension benefit expenditures were to increase with changes in nominal GDP (red dotted line), their debt-to-GDP ratio in the years 2025-2026 would remain at the planned level of 2024 (7.3 percent). The difference between the two calculation methods could result in savings of 0.4 percent of GDP in 2025 and 0.7 percent in 2026.

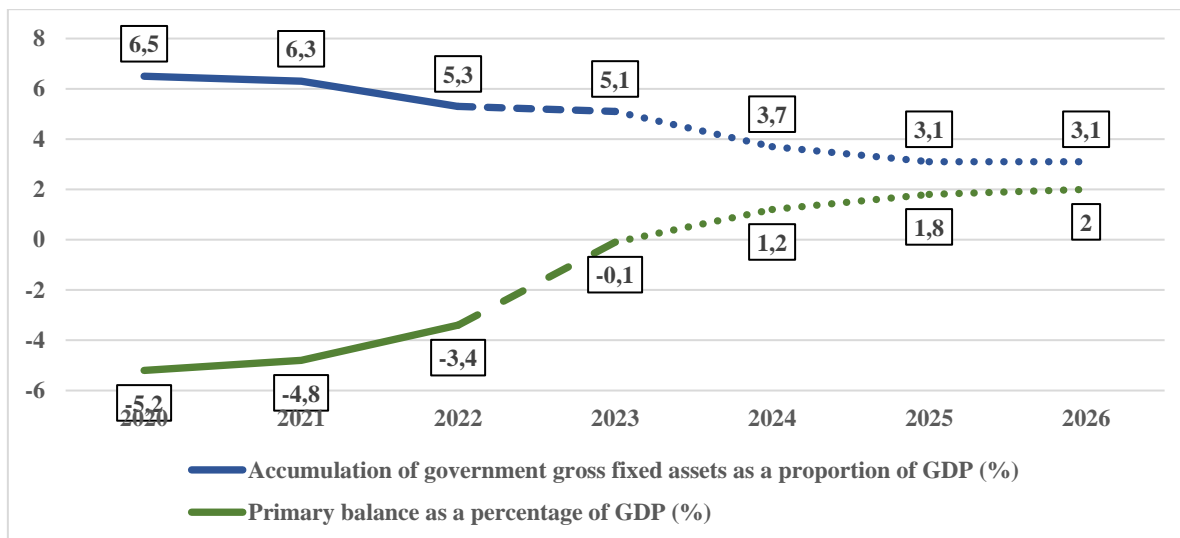
The share of social payments in cash is planned to decrease from 11.1 percent to 9.2 percent of GDP over the period 2020-2026, based on the actual figures for 2020-2022 and the projections of the Convergence Programme. The ratio of pension benefits to GDP would decrease by 12.0 percent between 2020 and 2026 (from 7.5 percent in 2020 to 6.6 percent in 2026) with inflation, taking into account the projections of the Convergence Programme. In addition to pension benefits, the ratio of other social benefits to GDP is also projected to decrease over the period 2024-2026.

### ***Reduction of gross fixed capital formation expenditure and its expected effects***

One of the instruments for reducing government expenditure, also envisaged in the Convergence Programme, is to curb expenditure on gross fixed capital formation. In 2022, the government decided to postpone and reschedule government investments in the amount of HUF 2,100 billion (involving 270 investments). Cuts in government investment improve the primary balance, as shown in Figure 10.

According to the data, public investment as a share of GDP declined continuously between 2020 and 2022, is expected to decline between 2023 and 2024 and stagnate in the years 2025-2026, while the primary balance improves steadily over the analyzed period. At the same time, cuts in government investment could dampen investment rates, an important pillar of economic growth. Gross fixed capital formation is projected to decline from 27.2 percent of GDP in 2019 to 24.9 percent in 2026. All this could be a serious brake on economic growth in the period 2024-2026, as gross fixed capital formation encouraged by government investments has been one of the engines of the Hungarian economy since 2017.

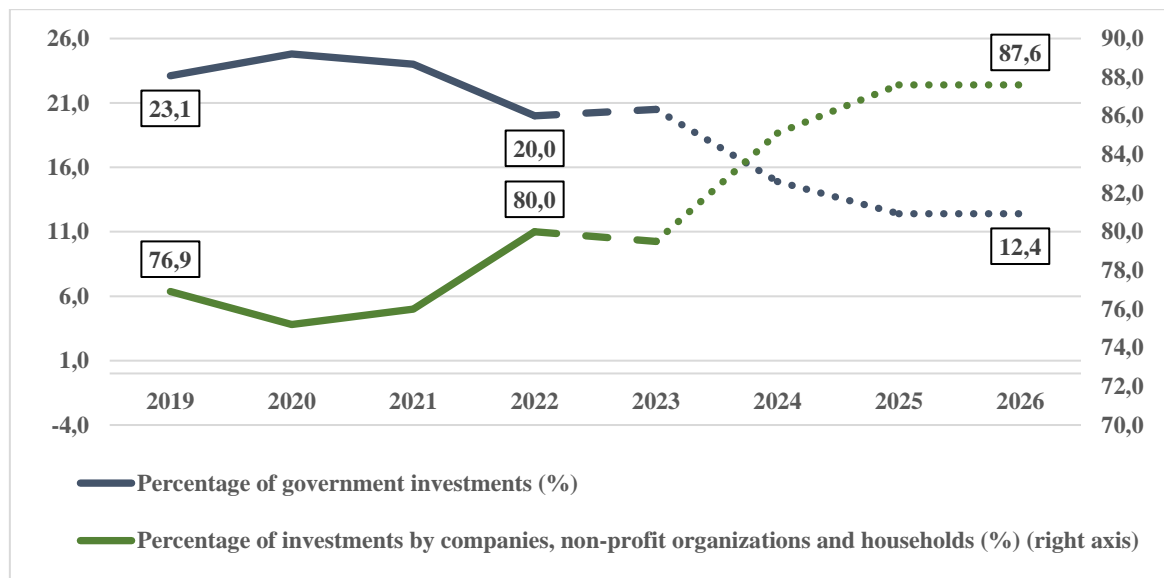
**Figure 10: Development of gross fixed capital formation and primary balance 2020-2022 and projected development between 2023 and 2026 as a percentage of GDP**



*Source: Based on HCSO STADAT 21.2.1.26. and Convergence Programme, SAO drafting and calculation*

Within gross fixed capital formation, as a proportion of GDP (at previous year's prices), investments by firms, non-profit bodies and households will decrease in addition to government investments within the analyzed period, but at the same time increase in their share. The development of government investment and the share of investment by companies, non-profit bodies and households in gross fixed capital formation as a proportion of GDP measured at previous year's prices between 2019 and 2026 is shown in Figure 11.

**Figure 11: Share of government investment and investment of other sectors\* in gross fixed capital formation 2019-2022 and projected development between 2023-2026 (in percentages)**



Source: Based on the Convergence Programme (2021, 2022, 2023), SAO editing and calculation

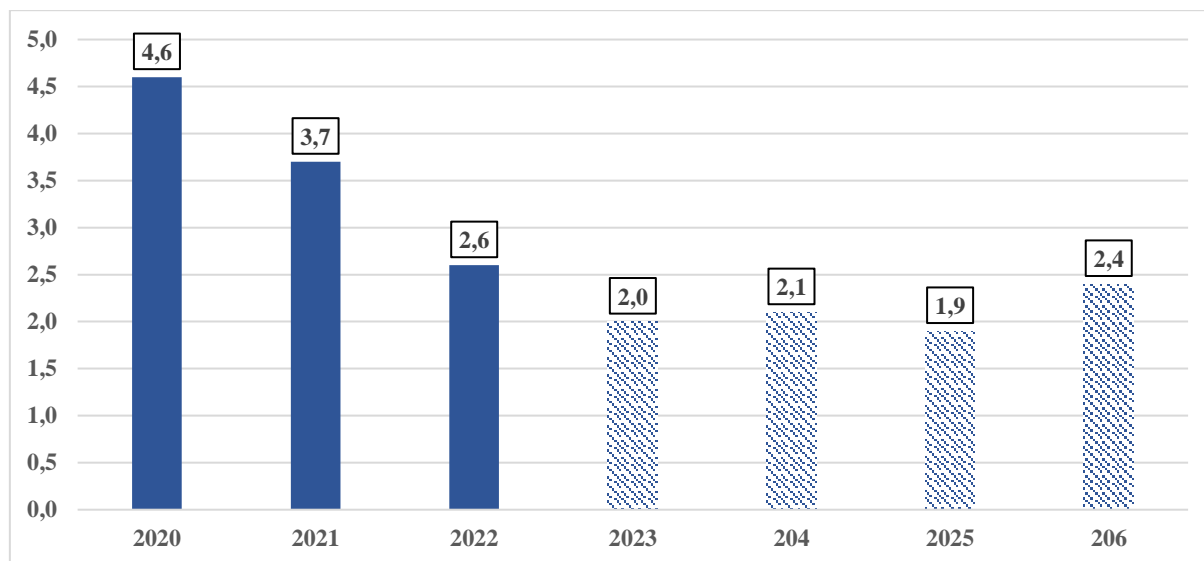
Note: \*corporations, non-profit organizations, households

Based on projected data, the share of government investment will halve by 2026 compared to 2019 (from 23.1 percent to 12.4 percent), while the share of other players of the national economy in investments will increase from 76.9 percent to 87.6 percent. Consequently, the Hungarian economy will increasingly rely on investment activity from non-government actors in the period 2024-2026. In order to achieve this ambition, inflation needs to decline at the rate projected in the Convergence Programme, which creates the conditions for the interest rate environment to support the investment activity of economic actors (lowering lending rates). In the case of households, in addition to maintaining government housing support programmes (expanding them if necessary, adapting them to market conditions), it is important that the sector's disposable income increases again with positive real wages.

### 3.2.4 The role of capital transfers

The role of capital transfers (investment support to non-government organizations and grants from the EU) will become more important in the period 2024-2026 as government investment is reduced, as transfers can contribute to the realization of investments and development goals of companies, non-profit bodies and households, thereby increasing their investment activity, which supports economic growth. The evolution of capital transfers between 2020 and 2022 and the projected share of GDP between 2023 and 2026 is shown in Figure 12.

**Figure 12: Capital transfer expenditure developments 2020-2022 and projected development between 2023 and 2026, as a percentage of GDP**



*Source: Based on the Convergence Programme (2021, 2022, 2023), SAO editing and calculation*

The value of capital transfers as a share of GDP decreased significantly in 2022 compared to the years of the coronavirus pandemic (2020-2021), while the projected values under the Convergence Programme typically show a stagnation for the years 2024-2026.

### 3.2.5 Impact of expenditure on utility subsidies on the debt ratio

The prices fixed in the 2013-2021 period in the system of utility cost reduction provided sufficient cover for the operation of the system, and until 2021 it did not cause significant expenses for the budget.

At the end of 2021, however, natural gas prices started to rise due to supply risks and the uncertain global environment. Following the Russia-Ukraine war, in the first half of 2022, the price of natural gas on the Dutch gas exchange increased significantly, related to high demand (storage facilities are replenished during the summer period), uncertainty due to the Russia-Ukraine war, a decrease in the volume of natural gas deliveries from Russia to Europe. Natural gas prices declined significantly during the winter 2022-2023 period and beyond, falling to around one-tenth compared to August 2022 prices.

Due to the energy crisis, in order to ensure Hungary's energy supply and preserve the reduction of utility charges, the government amended the rules for reducing utility charges in 2022 and established the Public Utility Protection Fund. Most of the Public Utility Protection Fund (more than half) serves the purposes of public utility protection, and also includes com-

compensation for central budgetary bodies and local governments, support for church and civil institution maintainers, state-owned companies and the private sector. The expenses of the Public Utility Protection Fund were covered by payments from the energy sector, mining royalties, contributions from airlines and telecommunications tax. From September 2022, a total amount of HUF 780.5 billion was used from the Public Utility Protection Fund chapter, amounting to approximately 2.3 percent of the total expenditure of the budget. For 2023, the government originally planned the Public Utility Protection Fund with a total expenditure amount of HUF 670 billion, which was increased to HUF 2,580 billion with the year-end amendment.

Based on the 2024 allocation for the Public Utility Protection Fund, the Government expects spending to be reduced by almost half compared to 2023. Looking ahead to this winter, it is positive news that the filling level of domestic gas storage facilities is 98 percent at the end of October 2023, while it is 65 percent in proportion to consumption, which exceeds the filling levels of around 85 and 55 percent in this period in 2022, respectively.

For the years 2025-2026, the Convergence Programme foresees stagnant natural gas prices. Accepting the forecasts on the price of energy carriers, the government may plan the Public Utility Protection Fund for 2025-2026 in an amount similar to that of 2024, if it intends to maintain the system of reducing utility charges unchanged. At the same time, the special natural gas stock purchased in 2022 will have to be used in the coming years, which is expected to represent a significant expense to the budget in the year(s) in which the stock is used (as a result of the fact that the difference between the reduced overhead price and the selling price will be reimbursed by the Hungarian State to MVM Zrt.). The expenditure incurred increases the total amount of expenditure of the Public Utility Protection Fund, while at the same time an increasing advance affects the cash flow deficit (in November 2023, it may mean expenditure of over HUF 700 billion overall).

**1. Annex No****LIST OF LAWS AND OTHER ARTICLES OF PUBLIC LAW****Laws**

Fundamental Law of Hungary (April 25, 2011)

Act LXVI of 2011 on the State Audit Office

Act CXCI of 2011 on Benefits for Persons with Altered Working Capacity and on the Amendment of Certain Acts (effective from 1 January 2012) Act CXCIV of 2011 on Hungary Economic Stability

Act XC of 2021 on Hungary 2022 Central Budget

Act CXVI of 2021 on the implementation of Act LXXI of 2019 on the Hungary's 2020 Central Budget

Act XXV of 2022 on Hungary 2023 Central Budget

Act LXXII of 2022 on the implementation of Act XC of 2020 on the Hungary's 2021 Central Budget

Act VI of 2023 amending Act XXV of 2022 on the Hungary's 2023 Central Budget

**Government regulations**

Government Decree No. 712/2021 (XII.20.) on the service allowance established for the recognition of professional service at armed forces and law enforcement bodies

Government Decree No. 197/2022 (VI.4.) on extra-profit taxes

Government Decree No. 260/2022 (VII.21.) on the establishment of special natural gas reserves

Government Decree 613/2022 of 29 December 2022 on the different rules of the Hungary's 2023 central budget related to the state of emergency

**European Union source of law**

Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union

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