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In-depth review for Hungary

**Prepared under Regulation 1176/2011 on the prevention and correction of
macroeconomic imbalances**

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Hungary

In-Depth Review 2024



This in-depth review presents the main findings of the Commission's staff assessment of macroeconomic vulnerabilities for Hungary for the purposes of Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances. It provides technical input to the Commission for the Communication "European Semester – 2024 Spring Package" that will set out the Commission's assessment as to the existence of imbalances or excessive imbalances in Hungary. That Communication will be published in June 2024.

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1. INTRODUCTION

This in-depth review (IDR) analyses the evolution of Hungary's vulnerabilities related to very strong price pressures, significant external and government financing needs exacerbated by policy inconsistencies, and possibly newly emerging risks. This year's IDR, which follows the 2024 Alert Mechanism Report (AMR) published in November 2023, assesses the persistence or unwinding of the vulnerabilities identified last year, potential emerging risks, and relevant policy progress and policy options that could be considered for the future ⁽¹⁾.

The vulnerabilities in Hungary are analysed in a macroeconomic context of low economic activity, decreasing inflation, high budget deficit and significant uncertainties over the strength of the recovery in 2024 ⁽²⁾. GDP declined by 0.9% in 2023 compared to an expansion by 4.6% in 2022, against a background of high inflationary pressures, tighter financing conditions and weakening global demand. According to the Commission Winter 2024 Interim Forecast, GDP growth is projected to recover to 2.4% in 2024 and 3.6% in 2025, supported by falling energy prices, lower inflation and interest rates. Nonetheless the economic outlook remains sensitive to energy prices, potential supply disruptions and global investor sentiment. Headline inflation started to decrease in 2023 and reached 3.6% in February 2024 after averaging 17.2% in 2023. The recent moderation in commodity prices and the economic recession contributed to the easing of inflationary pressures, but high labour cost growth and price indexation in certain sectors has kept core inflation (HICP excluding energy, food, alcohol and tobacco) elevated, at 7% in February 2024. Rapid wage growth is forecast to continue on the back of a tight labour market, following a 14% increase of nominal compensation per employee in 2023. In 2024, inflation is expected to continue decreasing, but to remain at 4.5% -- above the central bank's target - - as the recovery of consumption is set to increase the pricing power of companies. The recession reduced tax revenues while high inflation added to interest and pension expenditure, keeping the budget deficit elevated in 2023, at some 6.7% of GDP. Economic policies are geared toward stimulating the recovery from the 2023 recession, but perils to government finances and the need to address them could create headwinds to growth in the medium term.

High integration with Germany, and some non-EU partners, makes Hungary prone to spillovers resulting from developments in these economies ⁽³⁾. The Hungarian economy relies on imports of German, Austrian and Polish products, while Germany, Italy and Austria

⁽¹⁾ [European Commission \(2023\), Alert Mechanism Report 2024, COM \(2023\) 902 final](#); and [European Commission \(2023\), Alert Mechanism Report 2024, SWD\(2023\) 901 final](#).

⁽²⁾ Figures for GDP growth and inflation come from the Commission Winter 2024 Interim Forecast (European Economy, Institutional Paper 268). All other forecast data used in the IDR come from the Commission Autumn 2023 Forecast (European Economy, Institutional Paper 258), unless stated otherwise, and all calculations are carried out using these data to ensure the coherence of their various components. The cut-off date for the data for the preparation of this IDR was 19 March 2024. Actual outturn data that have become available after the Autumn and Winter Interim Forecasts, and before the cut-off date for the IDR, are used and supersede figures from those forecasts.

⁽³⁾ In the context of the multiple disrupting shocks that affected the world economy and the EU in the past few years, Commission Services have run an exercise to estimate the spillovers and the degree of exposures of Member States' economies to various partners and industries, in terms of nominal trade, value-added trade, inflation and financial assets. See European Commission Institutional Paper (forthcoming) 2024 - Economic spillovers and exposures in the EU.

are major destinations for Hungary's gross exports ⁽⁴⁾. When it comes to external demand the largest shares of total value added in the Hungarian economy are generated to satisfy domestic demand in Germany and US, while Hungarian domestic demand is mostly satisfied by value added generated in Germany and China. Due to Hungary's direct or indirect linkages to non-EU partners, geopolitical and trade tensions appear to pose a non-negligible risk to its economy.

2. ASSESSMENT OF MACROECONOMIC IMBALANCES

In recent years, Hungary's economy has been characterised by an expansionary fiscal policy, significant external and government financing needs and very strong price pressures. The current account and fiscal deficits have been sizeable for a number of years, with medium fiscal sustainability risks over the medium term. The combination of external and fiscal deficits added to external sustainability risks, which were exacerbated by the high energy intensity of the economy and by policies that slowed the adjustment of the economy to rising energy prices and interest rates. High inflation and interest rates have weighed on Hungary's competitiveness and increased debt servicing costs. The net international investment position (NIIP) has remained negative, although the associated risks have been mitigated by a sizeable share of non-defaultable instruments.

Assessment of the gravity, evolution and prospects of macroeconomic vulnerabilities

External balance

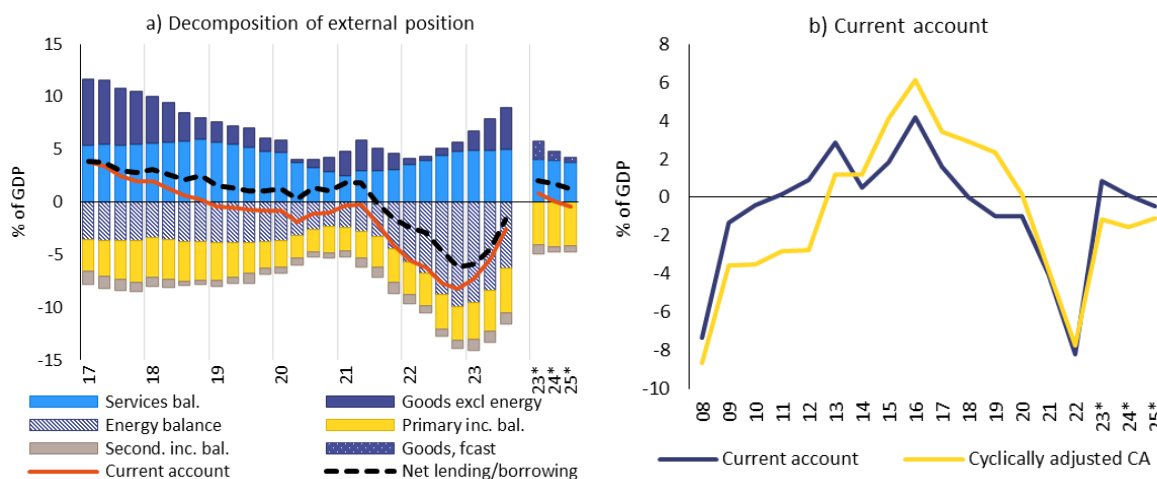
After recording in 2022 the largest deficit in nearly two decades, the current account improved in 2023 due to lower energy prices and, weaker import demand. Following a multi-year trend deterioration, the current account balance declined from a surplus of 4.5% of GDP in 2016 to a deficit of 8.3% in 2022, driven by a lower trade balance due to domestic overheating, and soaring energy import prices that worsened the energy trade deficit by 5.6 percentage points to 10% of GDP in 2022. High-frequency data point to a sharp improvement in 2023, with a preliminary estimate of a 0.1% current account surplus in 2023. Lower energy prices amid the economic recession at home contributed to the improving current account balance in 2023, with the non-energy trade balance rising to its highest level since 2017. At the same time, the income balance deteriorated due to higher financing costs (Graph 2.1 a). Based on a comparison of the headline and cyclically-adjusted current account balances, some 2.5 percentage points of the current account improvement in 2023 could be attributed to the economic recession that reduced import demand (Graph 2.1 b) ⁽⁵⁾.

⁽⁴⁾ Germany, Austria and Poland account for 25.6%, 6.3% and 6.2% of Hungary's imports, respectively, while Germany, Italy and Austria account for 29.7%, 6.2% and 6% of Hungarian exports, respectively.

⁽⁵⁾ This calculation might overestimate the impact of the economic cycle to some extent, as it is based on the estimated output gaps in Hungary and in trade partner countries which could be biased by the recent terms-of-trade shocks. The Commission's output gap is based on a production function approach, which rules out sudden changes in potential output by smoothing the factors of production over time. A large temporary adverse supply shock (such as a terms-of-

The improvement in the cyclically-adjusted current account balance was mostly driven by exogenous developments – falling import prices, essentially – rather than domestic policy action (see also Box 1).

Graph 2.1: Current account developments



Source: Eurostat, Ameco, ECB and European Commission services calculations

The government deficit continued to weigh on the external balance in 2023, but the rising net lending of the private sector reduced the external financing needs of the country. Net borrowing by the government remained substantial in 2023, at 6.7% of GDP according to preliminary financial accounts data ⁽⁶⁾. The improvement in the external balance of the economy compared to 2022 was due to the higher net lending of the private sector (Graph 2.7 b). Household saving rose, partly recovering financial buffers which had been eroded by high inflation. Meanwhile, household investment fell due to rising interest rates. The net borrowing of corporations fell mainly due to the drawdown of inventories (i.e., negative capital formation). Meanwhile, corporate savings fell more than investments, as the recession and higher production costs reduced profitability.

The current account balance is expected to deteriorate as the economy recovers from recession. Hungary's economic fundamentals are estimated to be consistent with a small current account surplus (see Table 2.2). The cyclically-adjusted current account balance, calculated at around -1% to -1.5% of GDP, is below that level, although it still exceeds the levels that are consistent with a stable NIIP. The Commission Autumn 2023 Forecast projected a gradual decrease of the current account balance towards these levels in 2024-25 as the negative output gap closes. From a sectoral saving-investment perspective, the pick-up of corporate investment and the gradual decrease of household savings were projected

trade deterioration) biases the output gap estimate downwards, because its negative short-term impact on supply is not considered in the potential output calculations. See also González-Torres, G., Gumiel, J. E. and B. Szörfi (2023), Potential output in times of temporary supply shocks, ECB Economic Bulletin, 8/2023.

⁽⁶⁾ Net lending/borrowing of the general government in the financial accounts is theoretically equivalent to the government deficit in terms of the European System of Accounts (ESA). However, the preliminary financial accounts use estimates instead of factual data for transfers from the EU and on the accrual accounting of tax revenues. Therefore, the actual ESA deficit might differ slightly from these figures. See: MNB (2024), Preliminary financial accounts of general government and households 2023 Q4, Magyar Nemzeti Bank (<https://statisztika.mnb.hu/sw/static/file/pszla-2023q4e-en.pdf>).

to reduce net lending by the private sector, partly to be offset by the decreasing net borrowing of the government.

Expansionary policies and renewed increases in international energy prices might have adverse impact on the external balance in the medium term. Should economic policies remain expansionary, they might worsen the trade balance and add to financing costs ⁽⁷⁾. The current account also remains exposed to energy price developments, due to the high energy import dependence of the economy, which is likely to persist in the medium term. The updated National Energy and Climate Plan (NECP) of Hungary expects the gross inland consumption of fossil fuels to decrease by just 7.5% between 2023 and 2030, while there remains little scope to increase the domestic production of these fuels. Furthermore, the doubling of nuclear energy generation by 2030 and the substantial increase of renewable energy sources are crucial premises of the NECP ⁽⁸⁾. Until these capacities are installed, Hungary could remain a net importer of electricity as well.

The external deficit has recently been financed by significant debt-generating capital inflows that continued in 2023. In the four quarters up to Q3-2023, these added up to 6.3% of GDP, largely driven by non-residents' increasing role in government debt financing, borrowing by state-owned development banks to finance subsidised lending schemes (see also Thematic chapter below), and international bond issuances by Hungarian banks as they prepared to comply with new capital requirements ⁽⁹⁾. Meanwhile net inward FDI amounted to just 0.2% of GDP, as gross FDI inflows were partly offset by some large outward transactions (Graph 2.7 a) ⁽¹⁰⁾.

High inflation and valuation effects have mitigated the rise in external debt. In Q3-2023, the net international investment position (NIIP) of Hungary stood at -47.6% of GDP, slightly above the estimated prudential level of -53%, with the negative position mainly attributable to a large inward FDI stock. At the same time, the NIIP excluding non-defaultable instruments (NENDI) stood at -9% of GDP, having worsened from -1.2% in 2021. This marks a reversal of a long-term improvement in the NENDI, from -52% of GDP in 2008. The current account surpluses of the early 2010s were driven by private deleveraging and fiscal consolidation, but from 2019 these turned into deficits that were mainly financed by external borrowing. Gross external debt edged up from 53.4% of GDP in 2019 to 67.2% in Q3-2022 but decreased thereafter to 65.2% in Q3-2023. The build-up in external debt was partly mitigated by high nominal GDP growth. Valuation effects added 1.1% of GDP to external debt in 2022, mainly due to currency depreciation, but this effect was partly reversed in 2023, as the currency appreciated again. In recent quarters, reserve assets were just sufficient to cover short-term external debt.

⁽⁷⁾ See the section assessing MIP relevant policies for examples of policy related risks.

⁽⁸⁾ The NECP foresees gross electricity generation to rise by nearly 20 TWh between 2023-30 (a 57% increase). Nuclear energy is expected to contribute to this increase by more than 18 TWh, new renewable capacities are expected to add 7 TWh, while electricity generation from fossil fuels is set to decrease by ca. 6 TWh. Figures for 2023 were estimated from monthly data of the Hungarian Energy and Public Utility Regulatory Authority.

⁽⁹⁾ The Minimum Requirement for own funds and eligible liabilities (MREL) is required by the Bank Recovery and Resolution Directive (2014/59/EU) to support an effective resolution of failing banks. The Hungarian legislation which transposed this Directive came into force on 1 January 2024. The Hungarian central bank estimated in late 2022 that banks would still need to raise HUF 1425 bn (some 2% of GDP) eligible assets before this deadline to comply with the MREL. See: MNB (2022), Macroprudential Report 2022, Magyar Nemzeti Bank.

⁽¹⁰⁾ These included the purchase of the local Vodafone subsidiary by 4IG, and the purchase of the Ipoteka Bank in Uzbekistan by OTP Bank, for a total ca. 1% of GDP.

Box 1: External adjustment to recent terms-of-trade changes ⁽¹¹⁾

Due to its large energy import dependence, the Hungarian economy was affected severely by the rise of energy commodity prices in 2021-22. This can be assessed through the evolution of real gross domestic income (RGDI), which adjusts real GDP with income gains or losses due to changes in the relative price of export and import ⁽¹²⁾. While real GDP exceeded its pre-pandemic level by 6.5% in Q2-2022, RGDI remained unchanged compared to Q4-2019 (Graph 2.2 a).

Policies aiming to protect households' purchasing power slowed the adjustment of the economy to external shocks until mid-2022. Rising import prices are expected to induce residents to consume less imported products. In addition, the long-run adjustment of the economy could be facilitated by investments in productivity and energy efficiency, which can mitigate import dependence. These would improve the volume of net exports, helping to offset the adverse impact of higher import prices on the trade balance. Economic policies in Hungary initially limited this adjustment. Price caps on motor fuel, residential energy, and certain food items isolated consumers from rising import prices under the premise that the terms-of-trade deterioration is mild and temporary. In addition, expansionary fiscal policy boosted import demand and inflation. The central bank raised interest rates in response to inflationary pressures, but interest rate caps (on variable rate mortgages, etc.) mitigated the response of domestic demand to a changing economic environment.

Consequently, high import demand added to the trade deficit in 2021-22. Changes in the trade balance can be decomposed to the contributions of price and volume changes based on the following formula (where X and M refer to export and import, 0 and 1 denote the two time periods, and P refers to the price index between these periods):

$$(X_1 - M_1) - (X_0 - M_0) = \underbrace{\left[(X_1 - M_1) - \frac{X_1 - M_1}{P_{XM}} \right]}_{\text{price level effect}} + \underbrace{\left[\frac{X_1 - M_1}{P_{XM}} - \left(\frac{X_1}{P_X} - \frac{M_1}{P_M} \right) \right]}_{\text{terms-of-trade effect}} + \underbrace{\left[\left(\frac{X_1}{P_X} - \frac{M_1}{P_M} \right) - (X_0 - M_0) \right]}_{\text{volume effect}}$$

The first term in square brackets (*price level effect*) shows how changes in the average price level of export and import affect the trade balance. The second term (*terms-of-trade effect*) measures the effects of changes in the relative price of export and import, while the third term (*volume effect*) indicates the contribution of changing export and import quantities. Graph 2.2 b shows the results of this decomposition, with the volume effect further decomposed into the contribution of exports (accounting for the import content of exported products) and imports related to domestic demand ⁽¹³⁾. The worsening of the trade balance in 2021-22 was due to both terms of trade changes and the rising import volume linked to domestic demand. These effects were partly offset by the recovery of exports after the COVID-19 pandemic.

The trade balance improved in 2023, after some policies were adjusted and energy prices moderated. As the fiscal cost of reimbursing the losses of state-owned utility prices proved unsustainable, regulated utility prices were raised in August 2022. In December 2022, supply shortages also led to the phase-out of the motor fuel price cap. Subsequently, higher import prices passed through to retail energy prices, raising inflation from 11.0% in Q2-2022 to 25.9% by Q1-2023. Furthermore, the impact of fiscal stimulus measures (such as the personal income tax refund for families) faded from mid-2022, while higher interest rates began to suppress lending. All these contributed to the contraction of domestic demand and imports in 2023. In addition, the more favourable terms of trade improved the trade balance by 5.3% of GDP in 2023.

Although the recent fall of energy prices can support the economic recovery, past policies have left a mark on public finances and could also impact productivity growth. Lower energy prices also helped real gross domestic income catch up to real GDP by the end of 2023. With the fading impact of the energy price shock on the purchasing power of residents, domestic demand and import volumes are poised to recover from 2024

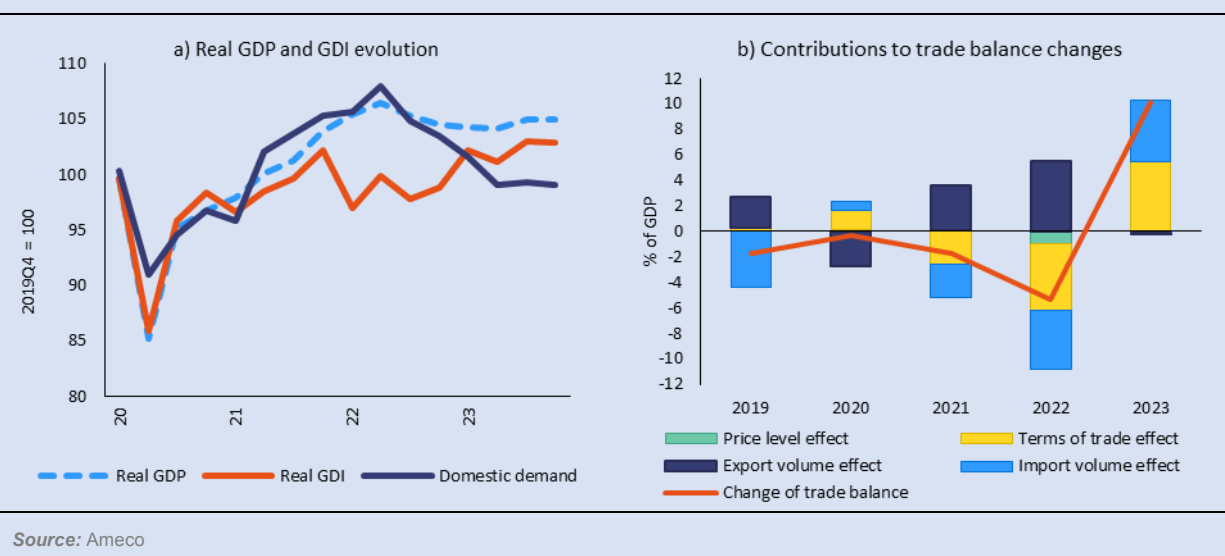
⁽¹¹⁾ This box builds on the analysis by Oblath, G. (2022), "Mivel jár az árrögzítésekkel súlyosbított keresletélénkítés hazai reáljövedelem-veszteség idején?", Hungarian Academy of Sciences, Institute of Economics blog (in Hungarian).

⁽¹²⁾ As the European System of Accounts (ESA 2010, Section 10.47) explains, the real income of residents is influenced not only by the volume of production but also by the terms of trade, i.e. the ratio of export and import prices. If the terms of trade improve, the same amount of exports can buy a larger volume of imports, thus the purchasing power of residents' income rises. The ESA 2010 proposes to compute real gross domestic income (RGDI) by adding to real GDP the following term measuring the trading gain/loss: $T = \frac{(X-M)}{P} - \left(\frac{X}{P_X} - \frac{M}{P_M} \right)$, i.e., the nominal trade balance deflated by a price index P minus the trade balance at constant prices. The P price index can be the average of the export and import price indexes.

⁽¹³⁾ OECD trade in value added (TiVA) data show that in 2020 the foreign value-added content of Hungarian exports was around 46%. The value of imports related to domestic demand is calculated as a residual: $M_{DD} = M - 0.46X$.

onward. However, the prospects of this recovery are overshadowed by the legacy of past policies. Expansionary fiscal policies and energy subsidies have added to public debt and risk premia in the past years. Fiscal consolidation is set to start from a high deficit level, above 6% of GDP in 2023, and could be complicated by subdued and still fragile domestic demand. Meanwhile, recent cuts to public investments, high financing costs and the uncertainty over medium term prospects could weigh on capital accumulation, productivity and potential growth.

Graph 2.2: The impact of terms of trade changes on the Hungarian economy



Prices, costs and competitiveness

Inflation has been decreasing from high levels, but it is projected to remain above the central bank target in 2024 and 2025. In 2023 Hungary recorded the highest inflation rate in the EU with HICP inflation at 17% compared to the EU average of 6.4%. The large inflation differential was also reflected in core inflation (Graph 2.7 c). Due to expansionary policies that boosted domestic demand, Hungary had already experienced stronger inflationary pressures than the EU at the outset of the energy crisis. The subsequent inflationary spike was also stronger than in the EU due to a larger share of energy and food in the consumer basket, currency depreciation, and policies that increased companies' costs, such as large minimum wage rises and indirect tax hikes. Although price caps tempered the inflationary shock in 2022, they were later phased out due to their negative

side effects, adding an estimated 2.5 percentage points to inflation in 2023 ⁽¹⁴⁾. Inflation peaked at 26.2% in January 2023, and decreased steadily since, to 3.6% in February 2024. This was driven by base effects, currency appreciation and the economic recession. Inflation excluding energy, food, alcohol and tobacco also decreased but remained high at 7% in February 2024. Although energy and food prices are projected to moderate further, high real wage growth and the recovery of domestic demand are set to keep core inflation elevated, and headline inflation is forecast to remain above the 3±1% target of Magyar Nemzeti Bank (MNB) in 2024 and 2025.

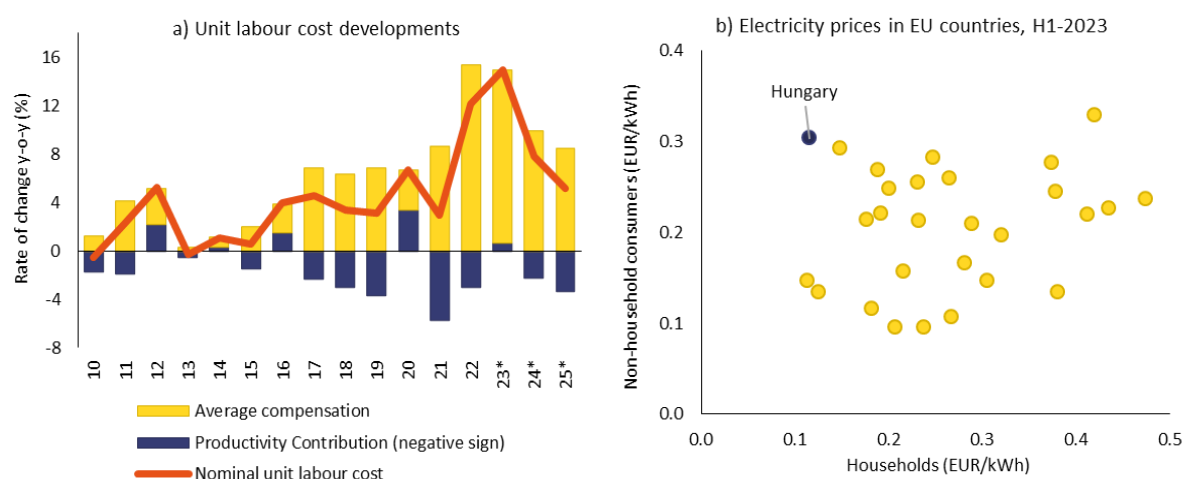
Cost competitiveness deteriorated further in 2023 on the back of a marked increase of labour costs. Unit labour costs (ULC) rose by 15.2% in 2023, after 12.1% growth in 2022. Due to pervasive labour shortages, companies retained workers during the 2023 recession, which contained the unemployment rate at 4.1% in 2023 but resulted in falling labour productivity. Nominal wage growth slowed in the public sector but picked up in the private sector, driven by high inflation, the tight labour market and large minimum wage hikes in January and December 2023 (Graph 2.3 a). Reflecting the impact of high wage growth and companies' weaker pricing power amid falling demand, the profit share of the private sector, measured as gross operating surplus over value added, decreased markedly in 2023. In manufacturing its level fell below the historical average. The recovery of output is set to improve labour productivity in 2024-25, but over the medium term these productivity gains could be constrained by weak product market competition, state intervention, low digitalisation and the shortage of skills ⁽¹⁵⁾. Although the labour market is expected to remain tight, lower inflation could contribute to slower wage growth in 2024-25. Overall, ULC growth is projected to slow down this year and the next but to remain elevated compared to the historical average.

After years of nominal depreciation, the stronger currency also contributed to real appreciation in 2023. In 2022, the currency depreciated due to market concerns over Hungary's external sustainability in the context of high energy import prices, rising inflation, and uncertainties regarding Hungary's access to EU funds. To stabilise the currency, MNB raised its main policy rate to 18% in October 2022. This, together with investors' improving perception of Hungary's risks in 2023, led to currency appreciation which persisted even as MNB gradually reduced its policy rate to 10.75% by the end of the year. Nonetheless, the currency has remained sensitive to market sentiment, while MNB continued to decrease its base rate, to 9% by the end of February 2024. With a stronger currency on top of high domestic price and cost inflation, the HICP and ULC-based real exchange rates appreciated markedly in 2023 (Graph 2.7 d).

⁽¹⁴⁾ This impact includes the carry-over effects from the introduction of a two-tier price system for residential electricity and gas in August 2022 (with a higher price level for above-average consumption), the phase-out of the motor fuel price cap in December 2023. The price cap on certain basic food items was phased out in August 2023, but its impact on inflation is more uncertain due to the small weight of the affected items in the HICP basket, and the fact that retail companies could increase the prices of non-affected products to offset their losses. For further discussion of these measures, see: European Commission (2023), In-depth review for Hungary, SWD(2023) 639 final, page 20.

⁽¹⁵⁾ See OECD (2024), OECD Economic Surveys: Hungary 2024, OECD Publishing, Paris. <https://doi.org/10.1787/795451e5-en>

Graph 2.3: Developments in cost competitiveness



Note: (b) households with annual consumption between 2500-4999 kWh, including all taxes and levies. Non-household consumers with annual consumption between 500-1999 MWh, excluding VAT and other recoverable charges.

Source: Eurostat, Ameco, ECB and European Commission services calculations

The high energy intensity of the economy exacerbated the impact of the recent energy price shock. The Hungarian economy used 12% more energy per unit of output in 2022 than the EU average (at purchasing power standards), marking a deteriorating relative performance since 2010 when the gap was just 9.5%. This is due to the high energy consumption of households and the rising energy demand of manufacturing that is specialised in energy-intensive assembly activities⁽¹⁶⁾. Therefore, Hungarian companies were particularly burdened by rising energy prices in 2022-23. In 2023, Hungarian businesses faced some of the highest energy price levels in the EU, as the significant cost of residential price caps was shifted onto non-household consumers (Graph 2.3 b). The sizeable increase in companies' energy costs added to inflationary pressures, contributing to Hungary's large inflation differential vis-à-vis the EU in recent years, and worsened the international competitiveness of domestic companies.

Housing market

The housing market has cooled down as high interest rates and the recession weighed on demand. Nominal house price growth slowed to 1.5% y-o-y in Q3-2023 (down from 24.1% in Q3-2022, Graph 2.7 e) and the available metrics show an easing of house price overvaluation in 2023 to 15% down from over 20% at the end of 2022. The house-price-to-income ratio was 3.8% above its long-term average in Q3-2023, down from 15.6% in 2022 (Graph 2.7 f)⁽¹⁷⁾. The Hungarian central bank estimates an overvaluation of some 10% in 2023⁽¹⁸⁾. The halt in house prices was due to lower demand owing to the sharp rise of

⁽¹⁶⁾ Hungarian households' per capita energy consumption was 12.8% higher than the EU average in 2021, also exceeding the values of most regional peers with comparable income levels and climatic conditions.

⁽¹⁷⁾ For a description of the methodology, see: Philipponnet, N. and A. Turrini (2017), Assessing House Price Developments in the EU. European Economy, Discussion Paper 048.

⁽¹⁸⁾ MNB (2023), Financial Stability Review November 2023, Magyar Nemzeti Bank.

mortgage rates above 10% for much of 2023, as well as the decrease of households' real income and confidence amid the economic recession. Mortgage rates started to decrease recently as Hungary's long-term interest rates began to ease. In October 2023, banks agreed to a government proposal to limit interest rates on new mortgages at 8.5%; an extension of this accord in December reduced the interest rate ceiling to 7.3% in Q1-2024.

With declining interest rates and the prolongation of government support measures in the housing sector, housing demand and prices could pick up as the economic recovery gathers momentum. Recent data suggest a revival of demand, with the number of new mortgages rising by 46% year-on-year in January 2024, and the volume of new mortgages doubling. This could lead to a re-emergence of risks, also because housing supply has remained limited. In 2023, the number of housing units completed was 9.2% lower than in 2022, while the number of new building permits fell by 39%, which does not bode well for supply going forward.

Banking sector

The banking sector has adequate capital and liquidity buffers, but its profitability largely depends on the high central bank policy rate. The banking sector meets capital adequacy requirements, with the 16.8% Common Equity Tier 1 (CET1) ratio in Q3-2023 above the EU average (16.1%). Despite some deposit outflows towards high-yielding government bonds, the loan-to-deposit ratio remained at 76% in Q3-2023. After-tax profits rose to a record high 1.8% of GDP in 2023 from 0.7% in 2022. High-yielding deposits at the central bank were the main source of revenue in 2023, generating an estimated gain of nearly 2.5% of GDP, and offsetting a windfall profit tax of 0.5% of GDP, and the revenue-decreasing effect of interest rate caps on variable rate mortgages and SME loans (see Table 3 in the Thematic chapter below) ⁽¹⁹⁾. The non-performing loan (NPL) ratio decreased slightly to 2.7% in Q3-2023, and the number of corporations brought under liquidation also remained modest in 2023. By contrast, the Stage-2 loans ratio has remained high in EU comparison since 2020 and has recently risen in the case of corporate loans. Nonetheless, banks provisioning for potential losses is also high in international comparison ⁽²⁰⁾. The main risks for the banking sector are related to a weaker-than-expected economic recovery and the downturn in the commercial real estate (CRE) sector, which has seen declining activity and increasing vacancy ratios in recent quarters. While banks' exposure to CRE remains modest at some 4% of their assets, foreign currency lending remains predominant in the sector, even though many tenants lack foreign currency revenues. The share of government bonds among bank assets has decreased steadily in recent years, from around 22% in 2018 to 14% at the end of 2023.

Private sector debt decreased amid weak credit demand in recent quarters, but the interest burden on corporations rose. Corporate debt fell to 57% of GDP in Q3-2023 from 63% a year before. Credit demand decreased amid low investment activity, while high

⁽¹⁹⁾ The Hungarian central bank estimates that during their lifetime in 2022-2024, the interest rate caps reduce banks' interest income by a cumulated 0.5% of GDP.

⁽²⁰⁾ See: MNB (2023), Financial Stability Review November 2023, Magyar Nemzeti Bank, Budapest. As Box 4 of that report explains, indicators of portfolio quality have been affected by the general and automatic payment moratorium on household loans that was introduced as a response to the COVID-19 pandemic between March 2020 and December 2022. Banks were required to classify some of these loans to the non-performing and the Stage-2 categories, increasing these ratios. Following the expiry of the moratorium, most of these loans are gradually being reclassified into Stage-1.

inflation contributed to nominal GDP growth. The interest burden on corporations rose substantially in recent years, to 13.1% of gross operating surplus in Q3-2023, compared to an average of 7.9% in 2013-2021. The share of foreign currency loans rose in the corporate sector to 44.9% of domestic bank loans in Q3-2023, as companies took advantage of lower lending rates in foreign currencies, especially euro, compared to domestic currency ⁽²¹⁾. Household debt decreased by 2 percentage points in the year up to Q3-2023 to 17% of GDP, as mortgage lending stalled. The debt burden of households remained stable at 2.3% of gross disposable income due to the high share of fixed rate mortgages in recent years and an interest rate cap on variable rate mortgages in force since late 2022 (see Table 3 in Thematic chapter below).

Public debt

According to preliminary financial account data of the central bank, the budget deficit is estimated at 6.7% of GDP in 2023 and, in the absence of a consolidation plan, is set to remain elevated ⁽²²⁾. The 2023 deficit was some 3 percentage points above the target of the original budget law, driven primarily by substantially weaker GDP growth, higher inflation and expenditure overruns ⁽²³⁾. The consumption tax revenue, in particular VAT, was markedly lower than expected while interest and pension expenditure turned out significantly higher. The Commission Autumn 2023 forecast projected the headline deficit to remain elevated at 4.3% of GDP in 2024 and 3.8% in 2025, driven by the elevated spending, including on interest and energy subsidies. The worse-than-expected outturn data in 2023, in the absence of a credible consolidation plan, constitutes a significant upside risk to the deficit projections.

Public debt reduction is slowing down. The public debt-to-GDP ratio has been on a declining trend since its recent peak at 79.3% in 2020, largely driven by nominal GDP growth and a gradually improving primary budget balance. However, the debt-to-GDP ratio decreased by just 0.4 percentage points in 2023 to 73.5%, owing to the significant budget slippage. The persistently high headline deficits are expected to stall debt consolidation in 2024 and 2025.

The high-inflation and high-interest environment has posed a challenge to government financing and increased debt-servicing costs. In 2022, households and domestic banks reduced their demand for fixed-rate local currency government bonds in the context of soaring inflation and currency depreciation ⁽²⁴⁾. In response, the authorities

⁽²¹⁾ A large acquisition deal in the telecom sector, the purchase of the local subsidiary of Vodafone by 4IG, was also financed by foreign currency loans, accounting for half of the increase in the foreign currency loan stock in 2023.

⁽²²⁾ See footnote 6 for methodological details of preliminary financial accounts.

⁽²³⁾ The Hungarian Parliament approved the 2023 budget law on 19 July 2022 with GDP growth projected at 4.1%, inflation at 5.2%, and a deficit target of 3.5% of GDP. In contrast, real GDP contracted by 0.9% while inflation (according to the national definition) was 17.5%.

⁽²⁴⁾ The most affected market segment was the retail bond market, which authorities developed since the 2010s to reduce financing risks by channelling domestic savings to the government bond market. By 2021, the stock of retail government bonds reached 18.6% of GDP or 25% of government debt. Between the end of 2021 and November 2023, when inflation and interest rates spiked, households sold off the most popular fixed-coupon bonds (called MÁP+), which were redeemable without cost, amounting to over 8% of GDP. The debt management agency had to accommodate this additional financing need by external borrowing and by offering higher-yielding retail products, notably inflation-linked bonds.

stepped up the issuance of costly inflation-linked retail bonds ⁽²⁵⁾, borrowed more in foreign currency, and relied on regulatory interventions to incentivise holdings of government securities by the financial sector. Since early 2023, the yields on 10-year government bonds have fallen somewhat (to 6.2% in February 2024) but remain higher than in the past decade (see Thematic chapter below for the analysis of the drivers of high interest rates in Hungary). In the same period, spreads to the German government bonds narrowed from above 500 bps to below 400 bps. The high level of government bond yields since 2021 and the reliance on inflation-linked retail bonds are set to increase interest expenditure from below 3% of GDP in 2022 to some 4.4% in 2024. Hungary's debt servicing costs are projected to be among the highest in the EU, with the implicit interest rate on government debt reaching 6.8% in 2024 and the interest-to-government-revenue ratio rising to 10% in 2024, up from 5% in 2021. However, the slightly falling gross financing needs, and the projected fall in inflation and interest rates may moderate refinancing risks in the medium term.

Risks to fiscal sustainability are overall low in the short term, medium in the medium term, and medium in the long term according to the Commission's debt sustainability framework ⁽²⁶⁾. The Commission's early-detection indicator (S0) does not point to major short-term fiscal risks. Government gross financing needs in 2024 and 2025 are expected to average some 12% of GDP per year. Hungary's credit rating remains at the lower end of the investment grade. The debt sustainability analysis shows that under the baseline scenario, the government debt-to-GDP ratio is expected to decline over the medium term to reach around 65% in 2029 and 62% in 2034 (see Box 3 for more on the medium-term risks to fiscal sustainability). Over the long term, the Commission's fiscal gap indicators (S1 and S2) show that the risks stem in particular from the projected significant increase in ageing-related costs. At the same time, additional risk factors need to be considered such as contingent liability risks, stemming from a high level of government guarantees, and a relatively elevated share of foreign debt.

⁽²⁵⁾ The stock of inflation-linked retail bonds amounted to some 9% of GDP by end 2023. These bonds are the major driver of high interest expenditure in 2023 and 2024, as their coupon payments are linked to last-year inflation (which reached 14.5% in 2022 and 17.5% in 2023).

⁽²⁶⁾ The results presented here are based on the debt sustainability analysis published in the Debt Sustainability Monitor 2023 (European Commission, Institutional Paper 271), which is based on the Commission 2023 autumn forecast. The Debt Sustainability Monitor also includes information on the methodology of the Commission's fiscal sustainability risk framework.

Box 2: Drivers of Hungary's declining tax-to-GDP ratio in recent years

Hungary's tax-to-GDP ratio has been on a downward trend in recent years, falling from 39.1% of GDP in 2017 to 35.1% in 2022. This box lays out the drivers of this process by decomposing changes in the tax-to-GDP ratio since 2009 into (i) a discretionary component that captures the impact of changes in the implicit tax rates of consumption and labour taxes, and (ii) other revenue windfalls/shortfalls due to changes in the GDP composition ⁽²⁷⁾.

The tax cuts implemented since 2017 have offset the revenue-increasing impact of earlier consumption tax hikes. In the early 2010s, to support fiscal consolidation and allow for lowering the labour tax burden, Hungary increased the role of consumption taxes in the tax mix, most notably by increasing the VAT rate to 27% in 2012, improving VAT collection, and introducing certain sector-specific taxes (e.g., on financial transactions and telecommunication services). These measures increased the implicit tax rate on consumption by 4 percentage points (pps) between 2011 and 2022 and boosted tax revenue by some 2.2% of GDP (see Graphs 2.4 and 2.5). Since 2017, Hungary implemented further labour tax cuts to stimulate employment growth. Employers' social contributions were gradually lowered from 27% of gross wages in 2016 to 13% in 2022, which decreased the implicit tax rate on labour by some 5 pps, and reduced tax revenue by 1.6 pps of GDP by 2022. In addition, the reduction of the corporate tax rate to 9% in 2017 lowered the tax-to-GDP ratio by further 2.2 pps, by 2021, before increasing again in 2022 due to the introduction of the temporary windfall profit and sectoral taxes, levied on companies in the energy, financial and retail sectors.

Changes in the composition of GDP exacerbated the downward trend in the tax-to-GDP ratio, decreasing it by 3.2 pps between 2009 and 2022. Between 2012 and 2023, the share consumption tax base in GDP has fallen by 4.0 pps, while the share of labour tax base in GDP fell by 5.3 pps (Graph 2.5). These trends can be explained by structural changes in Hungary's economy:

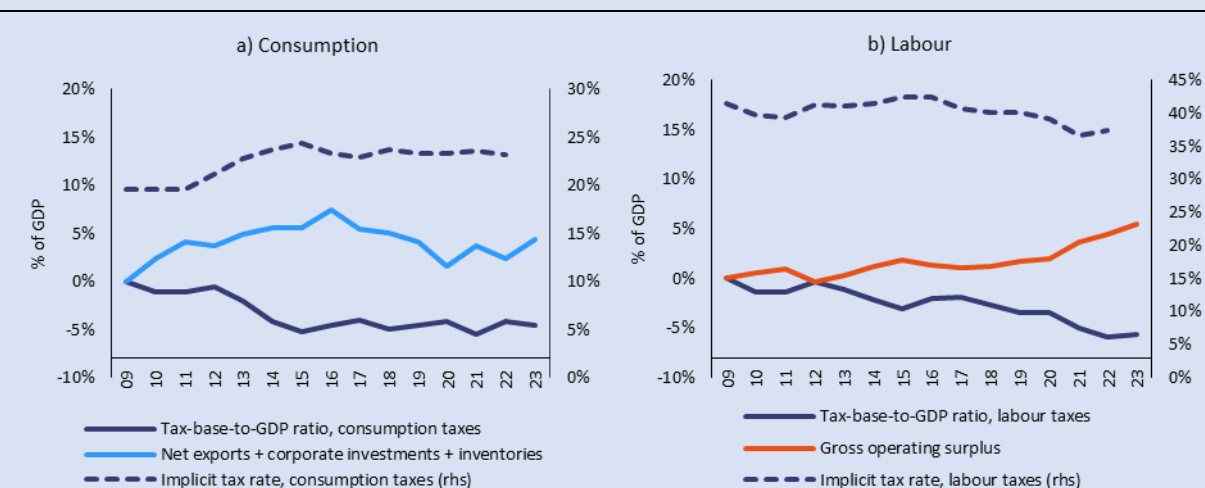
- **Investment and export-led economic growth decreased the weight of consumption in GDP.** The GDP share of 'tax-poor' expenditure-side components of GDP, such as corporate investments and exports, which are not in principle liable to VAT, has increased strongly since 2009, also supported by policies promoting high investment levels, with a particular focus on export-oriented foreign direct investments.
- **The falling wage share in the Hungarian economy has hampered growth of labour tax revenue.** Between 2009 and 2021, wage growth has remained below the growth of profits, thus the profit share increased by some 4 pps of GDP (Graph 2.5). This process was driven partly by capital accumulation, and to some extent by the social contribution rates cuts implemented since 2017, which were not fully passed on to workers in the form of higher salaries and employment. More recently, the profit share rose further in the context of commodity price and inflation shocks ⁽²⁸⁾.

The permanent erosion of tax revenue constrains fiscal policy going forward. The tax cuts enacted since 2017 have partly reversed the fiscal consolidation efforts of the early 2010s and, together with the structurally-driven tax revenue shortfalls, have permanently decreased the tax-to-GDP ratio. In the absence of a commensurate adjustment of expenditure, these policies resulted in elevated headline deficits and an expansionary fiscal stance. The temporary introduction of the windfall profit and sectoral taxes has addressed this challenge only momentarily, and risks leading to market distortions. Unless Hungary shores up tax revenue in a sustainable way, the needed fiscal adjustment is likely to disproportionately affect the expenditure side of the budget.

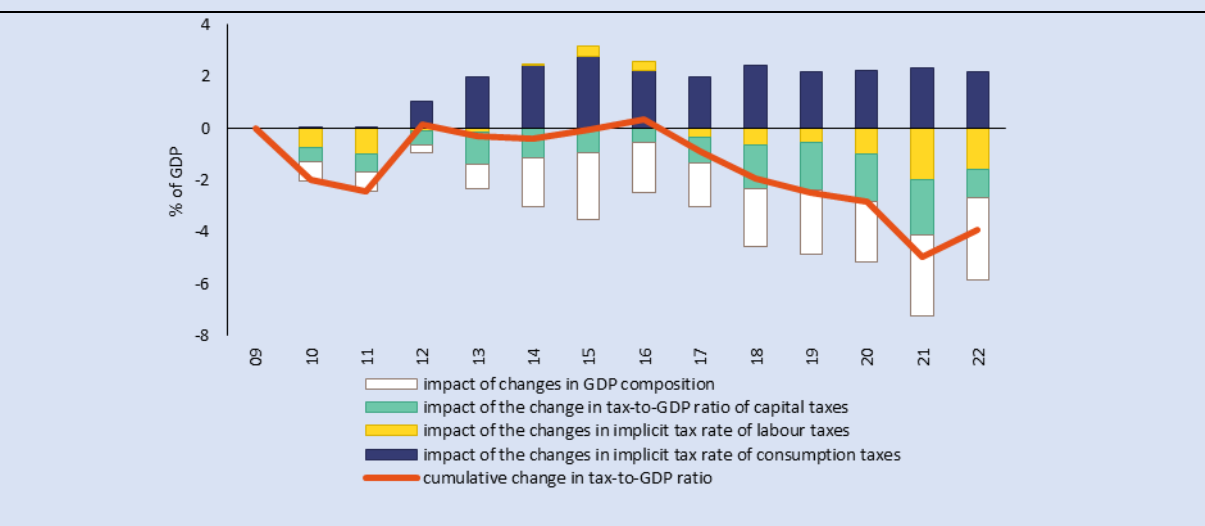
⁽²⁷⁾ The decomposition is based on labour and consumption taxes data and, with some adjustments, data on the tax bases from the 2024 Data on Taxation Trends, Directorate-General for Taxation and Customs Union. The discretionary component is calculated as a difference between the hypothetical tax-to-GDP ratio with an assumption of a constant implicit tax rate and the observed values. The windfalls/shortfalls due to changes in the GDP composition are calculated as a difference between the hypothetical tax-to-GDP ratio with an assumption of a constant tax-base-to-GDP ratio and the observed values. Due to data limitations, we do not decompose the change in the tax-to-GDP ratio of capital taxes.

⁽²⁸⁾ For more analysis of the potential drivers of the falling labour share see European Commission (2023), In-depth review for Hungary, SWD(2023) 639 final, box on The evolution of the labour and profit shares in Hungary since 2016.

Graph 2.4: Implicit tax rate and change in the tax bases of consumption and labour taxes



Graph 2.5: Decomposition of the change in the tax-to-GDP ratio of consumption and labour taxes



Source: DG TAXUD's Data on Taxation Trends, 2024, and European Commission services.

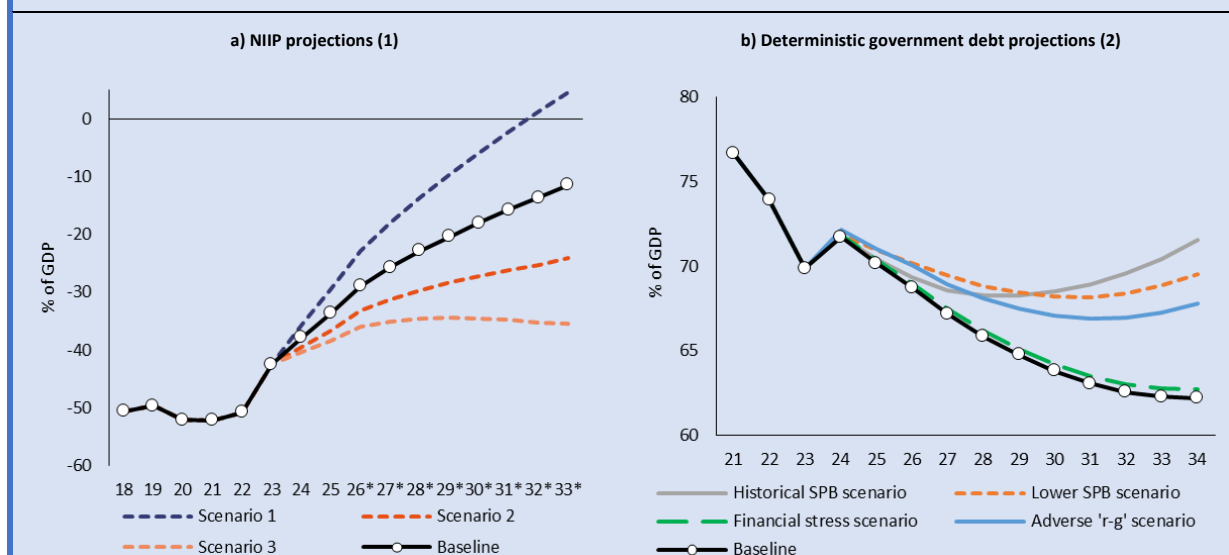
Box 3: Hungary – Medium term external, private, and government debt projections

This Box summarises external and internal debt-to-GDP projections for Hungary over the next decade, based on scenario analysis conducted by the Commission. It covers scenarios to take into account different underlying assumptions for external debt stocks, as well as the outcomes of the latest government debt sustainability analysis conducted by the Commission.

Hungary's net international investment position (NIIP) is projected to improve in the medium term. Projections for the next decade, which take the Autumn 2023 forecast as a starting point, suggest that the assumed high trade balance in a baseline scenario brings Hungary's NIIP to nearly -10% of GDP by 2033 (Graph 2.6 a). Scenario 1 shows that the NIIP might increase at a faster pace and turn positive before the end of the projection horizon, should the interest rate spread narrow (-2 pp), growth increase (+1 pp) and the net lending position worsen (-1 pp), for instance as result of the effective implementation of credible and relevant policy reforms. In Scenario 2, characterised by a higher nominal growth (+2 pp), a lower trade balance (-1 pp) and a higher interest spread between liabilities and assets (+1 pp), for example due to persistently expansionary economic policies, the NIIP increases to around -25% of GDP in 2033. However, should the net lending/borrowing position and GDP growth turn out worse than assumed in the baseline, as in Scenario 3 (-2 pp and -1 pp respectively), for instance due to higher-than-expected energy import prices, the NIIP improvements may fade in the next few years.

In Hungary, medium-term risks to fiscal sustainability are medium overall ⁽²⁹⁾. The debt sustainability analysis for Hungary shows that, under the baseline scenario, the government debt-to-GDP ratio is expected to decline over the medium term to reach around 65% in 2029 and 62% in 2034 (Graph 2.6 b). That projection assumes that, at unchanged policies, the structural primary balance (excluding changes in the cost of ageing) remains at a surplus of 1% of GDP between 2024 and 2034. However, the recent deterioration in the fiscal situation creates a risk to this assumption, with preliminary data pointing to a 2023 deficit that is nearly 1 percentage point higher than the Commission's Autumn 2023 forecast. The Spring 2024 Forecast will reassess the fiscal prospects. The debt reduction benefits until 2028 from a still favourable (although declining) snowball effect. Real GDP is expected to grow by 2.2% on average over 2025-2034. Government gross financing needs are expected to average close to 11% of GDP over the projection period. The DSA baseline projections are stress-tested against four alternative deterministic scenarios to assess the impact of changes in key assumptions. All those scenarios would lead to a more rapid increase in debt compared with the baseline. Stochastic projections point to some degree of uncertainty.

Graph 2.6: External and government debt projections, based on scenario analysis for Hungary



²⁹ The results presented here are based on the debt sustainability analysis published in the Debt Sustainability Monitor 2023 (European Commission, Institutional Paper 271), which was based on the Commission 2023 autumn forecast. See notes to Graph 2.6 for more details on the four scenarios used.

(1) In the baseline scenario, assumptions for GDP growth and interest rates come from the Commission's Autumn 2023 forecast. For the net lending/borrowing position, simplified assumptions are made. Namely, beyond 2025, the trade balance remains at its level projected for 2025 in the Autumn forecast. The median value of last three years is used for non-investment primary income, secondary income and capital account balances. However, the capital account and secondary income are adjusted for the flow of RRF and MFF funds. Scenario 1 is a stylised scenario for the government pursuing prudent policies in which real GDP growth is higher by 1pp while the trade balance is lower by 1 pp and the interest on liabilities is lower by 2pp in each year starting in 2024 compared to the baseline scenario. In another stylised scenario, Scenario 2, an overheating of the economy leads to higher real GDP growth (1 pp) and inflation (1 pp) while the trade balance worsens by 1 pp and the interest on liabilities increase by 1 pp in each forecast year compared to the baseline scenario. Finally, Scenario 3 assumes a lower real GDP growth (-1 pp) and the trade balance (-2 pp) in each forecast year compared to the baseline scenario, for instance due to persistently higher energy import prices.

(2) The baseline projection is stress-tested against four alternative scenarios to assess the impact of changes in key assumptions: 'historical SPB scenario': the SPB gradually converges to its historical 15-year average; 'adverse interest-growth rate differential scenario': the differential is 1 pp. higher than in the baseline; 'lower SPB scenario': SPB level permanently lower than in the baseline as from 2024; 'financial stress scenario': temporarily increase in market interest rates by 2.4 pps. in 2024. **Source:** Eurostat, Ameco, Commission services calculations.

Assessment of MIP-relevant policies

The policy mix has not improved. Monetary policy has been tight, but its transmission to the real economy has been partially weakened by government interventions, limiting the response of aggregate demand to changes in central bank interest rates. The budget deficit remained elevated in 2023, credible and coherent fiscal consolidation plans over the medium-term have been lacking, and contingent liabilities of the government have increased. The government fostered large minimum wage hikes to bolster consumption and tax revenues in the short term, risking that inflation and thereby interest rates remain elevated. High interest rates have impacted the profitability of the central bank, whose recapitalisation was postponed by an amendment of the central bank law, thus shifting the fiscal burden to the future. The weaknesses of the policy framework increase the risk that after emerging from the recession, domestic demand could overheat again, keeping inflation high, pushing the current account again into a deficit and widening vulnerabilities across the economy.

The high budget deficits in recent years have been largely driven by expansionary policies. While the government debt ratio was on a declining trend before and immediately after the pandemic, driven by buoyant nominal GDP growth, the pace of consolidation in structural terms remained low. The structural primary balance over 2015-2022 was expansionary at -1.7% of GDP on average, 1.3 percentage points lower than the EU average. Cuts to labour and corporate tax rates since 2017 have permanently decreased the tax-to-GDP ratio and were not offset by a commensurate adjustment of expenditure (see Box 2). In contrast, the temporary measures in response to the COVID-19 pandemic, Russia's war of aggression against Ukraine and the subsequent energy crisis had a smaller overall impact on deficits since 2021.

Hungary's response to the deteriorating fiscal balance has been mainly based on potentially growth-harming public investment cuts and temporary windfall profit and sectoral taxes. These taxes were levied mainly on the energy, financial and retail sectors. The initial deficit target for 2023 was likely exceeded by more than 3 pps of GDP. Yet, in its medium-term budgetary plan published on 30 December 2023, Hungary reiterated the ambitious deficit targets for 2024 and 2025 that had been set in Spring 2023 (at 2.9% and 1.9% of GDP, respectively), without specifying policies that would secure the planned deficit reduction. More recently, the government has communicated that deficit targets would be revised to 4.5% of GDP in 2024 and 3.7% in 2025, but it has not elaborated on the underlying macroeconomic assumptions or any accompanying fiscal measures.

The national fiscal framework continues to lack a genuine medium-term orientation and accountability, with the role of the Fiscal Council remaining limited. As discussed in the 2023 IDR ⁽³⁰⁾, Hungary's fiscal framework suffers from several weaknesses: (i) the large discretion in the implementation of the annual budgets, enabled since 2020 by the extensive use of government "state of danger" decrees, continues to reduce budget transparency and overall policy predictability, while exacerbating the expansionary bias; (ii) the early adoption of annual budgets weighs on the quality of the macroeconomic and budgetary forecasts, especially in a period of increased uncertainty; (iii) frequent and significant revisions of the annual and multiannual fiscal targets undermine the role of the budget as an anchor for market participants and put in question the credibility of the government's medium-term fiscal plans; (iv) and the fiscal council's limited role and resources hinder its effectiveness in promoting fiscal discipline and transparency.

Wage increases, including minimum wage hikes, are driving unit labour costs higher, which could undermine competitiveness unless productivity growth picks up. The growth in unit labour costs has been among the highest in the EU over 2022 and 2023 and it is projected to be the highest also in 2024. Between December 2021 and December 2023, the minimum wage rose by 59.3%, above the 31.9% increase in the consumer price level. While the minimum wage agreement for 2023 was based on forward-looking inflation expectations, the focus of social partners shifted to past inflation developments when negotiating the minimum wage for 2024 (applicable from December 2023). If backward-looking expectations become predominant during wage setting, they risk increasing the inertia of inflation. The ratio of the minimum wage and the median wage rose from 51.4% in 2022 to almost 60% at the end of 2023. As some 8% of employees are estimated to earn close to the minimum wage in Hungary, the recent minimum wage hikes are expected to have contributed to average wage growth and inflation ⁽³¹⁾. Furthermore, the social partners are considering a medium-term agreement to raise the minimum wage faster than the currently higher minimum wage for skilled workers (amounting to 72.8% of the median wage in December 2023) until the two are eventually merged at the higher level. If future minimum wage hikes are not accompanied by high productivity growth, they could continue to feed inflation and become detrimental to cost competitiveness. A full and correct transposition of the directive on adequate minimum wages in the EU, which requires establishing clear criteria for setting and updating minimum wages, including a set of elements based on economic fundamentals, could help address this.

Energy costs for businesses, which are relevant for competitiveness and external sustainability, are inflated by the cross-subsidising of household consumers. The introduction of a two-tier price system in August 2022 for household electricity and gas contributed to a 23% drop of household energy consumption from 2021 to 2023. However, due to generous subsidies in the lower price tier, the average prices paid by Hungarian households remained among the lowest in the EU in the first half of 2023, below the wholesale cost of energy. This incurred losses at utility companies that have been regularly reimbursed from the budget. The fiscal burden of energy subsidies has been shifted to the corporate sector in the form of higher taxes and higher energy prices (see Table 1). These

⁽³⁰⁾ See European Commission (2023), In-depth review for Hungary, SWD(2023) 639 final, Thematic chapter

⁽³¹⁾ Eurostat (2023), Statistics explained: Minimum wage, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Minimum_wage_statistics (based on 2018 data). For evidence on the economic impact of earlier large minimum wage hikes in Hungary, see Harasztosi P. and A. Lindner (2019), Who Pays for the Minimum Wage? American Economic Review 109: 2693-2727.

policies increased production costs and prices, fuelling inflation and worsening the international competitiveness of domestic companies ⁽³²⁾. They also cast a shadow on the government's medium-term plans to spur investment in energy-intensive manufacturing branches, such as battery production. Recognising the risks to competitiveness, the government introduced an electricity price cap to business consumers at 200 EUR/MWh between July-December 2023, then administratively reduced the network tariffs for businesses from January 2024. The Hungarian Recovery and Resilience Plan foresees the introduction of network tariffs that reflect actual costs by the end of 2024, and the introduction of dynamic pricing for households and micro-enterprises by the end of 2025.

Table 2.1: Policy measures affecting corporate energy costs

Period	Measure	Impact
Since 2013	Price regulation of household energy at a low level	The price regulations effectively reserve energy suppliers with the lowest marginal costs (e.g. nuclear energy, domestically produced natural gas) for household customers, leaving business customers with more expensive options.
Since April 2022	Ministerial decree (5/2022 ITM) preventing the refund of profits realised on the renewable energy subsidy scheme because the renewable electricity could be sold at a higher market price than the guaranteed purchase price paid to renewable producers	Under normal circumstances the industrial companies financing the renewable energy subsidies would have been entitled to HUF 168.5 bn (0.25% of GDP), partly offsetting their higher electricity bill. The guaranteed purchase price for renewable producers was increased in January 2023, limiting the scope for such refunds in the future.
2022-2024	Levy on the income surtax of energy companies on certain manufacturing branches (Gov. decree 197/2022) and increasing its rate from 31% to 41% in the 2023 fiscal year (Gov. decree 496/2022)	Higher tax burden on manufacturing. Higher tax rate in 2023 passed on to business consumers
2022-2024	Higher cost of balancing energy for businesses	Only paid by businesses as network tariffs for households were frozen by government decree
Since October 2023	Windfall profit tax on freely allocated CO ₂ emission quotas	Higher production cost (HUF 41 bn, 0.05% of GDP in 2023)
July-December 2023	Electricity price cap for businesses at 200 EUR/MWh	Price above the threshold was paid from the budget to energy traders (HUF 36 bn, 0.05% of GDP)
Since January 2024	Reduction of network tariffs for businesses	Lower energy costs (HUF 96 bn, 0.13% of GDP)

Reforms of housing support measures are de facto benefitting higher-income couples, while the generosity of those measures increased. Government subsidies and mortgage loan support in place since 2015 were identified by the European Systemic Risk Board as a factor behind house price growth and overvaluation against a background of

⁽³²⁾ Low production costs, partly due to abundant freely distributed CO₂ emission allowances, appear to be a key competitive advantage of certain Hungarian manufacturing branches. See: Egyensúly (2023), A nehézipar dekarbonizációja. Egyensúly Intézet, Budapest (in Hungarian, [link to report](#)).

insufficient supply of new housing and an underdeveloped rental market ⁽³³⁾. The main support scheme, the Family Home Creation Support (CSOK) has been redesigned from January 2024 ⁽³⁴⁾. The new scheme tightens the eligibility criteria, notably by excluding poorer households with low credit rating. However, the available loan amounts have increased substantially, and are coupled with partial debt forgiveness for families with at least two newborn children. It is estimated that the new scheme could result in larger amounts of subsidised loan disbursements as compared to the earlier scheme ⁽³⁵⁾. The subsidy scheme for home purchases in rural areas was also amended, limiting its geographical scope but increasing the amount of financial support. The prenatal loan scheme, which was due to expire in December 2024, was also extended indefinitely, albeit the age limit for applicant women was lowered from 41 to 30 years. At the same time, the Magyar Nemzeti Bank (MNB) reduced the loan-to-value limit for all first home buyers from 90% to 80% in 2024. Overall, these measures do not appear well targeted and could again fuel house price overvaluation if the higher demand they enhance is not matched by increased supply. Meaningful measures to increase supply have been left wanting.

Credit market interventions by the government aim to lower interest rates in the economy. Since 2022 the central bank has maintained high short-term interest rates to sterilise excess liquidity in the financial system and stabilise the currency. To limit the impact of high interest rates on the real economy, the government introduced interest rate caps on various loans and deposits, encouraged commercial banks to temporarily reduce their profit margins on new lending, and extended subsidised loans (see Table 3 in the Thematic chapter below). While the interest rate caps on variable rate mortgages and SME loans could initially help to prevent a rise in delinquency, such benefits now appear more limited as high nominal income growth in recent years has enabled most borrowers to withstand a rise in debt servicing costs.

The credit market interventions hinder the transmission of monetary policy. With real investment opportunities constrained by low capacity utilisation and low business confidence, according to the MNB less than 20% of subsidised loans in recent programmes were used to finance actual physical investment projects. That suggests that companies likely invested in financial assets, also finding way to circumvent caps on deposit interest rates ⁽³⁶⁾. Meanwhile, the European Central Bank concluded that the cap on bank deposit rates and certain restrictions on the purchases of central bank bills by financial market actors impede the MNB from independently choosing the necessary means and instruments to conduct an efficient monetary policy, and therefore it holds the view that they infringe on central bank independence. In March 2024 a press release by MNB also listed several government interventions which it perceives as interfering with its independence ⁽³⁷⁾.

⁽³³⁾ ESRB (2024), Follow-up report on vulnerabilities in the residential real estate sectors of the EEA countries, February 2024.

⁽³⁴⁾ While the earlier system offered both grants and subsidised loans, differentiated based on the number of children in the family (including future children), the new system only provides a subsidised loan, whose maximum amount depends on the number of children yet to be born.

⁽³⁵⁾ MNB estimates HUF 270-330 bn annual disbursements from CSOK Plusz in 2024-2026, with an estimated HUF 28 mn disbursement per loan. In comparison, HUF 286 bn subsidised housing loans were approved in 2022, with an average loan size of HUF 9.4 mn. See MNB (2023), Inflation Report, December 2023. Magyar Nemzeti Bank, Budapest.

⁽³⁶⁾ See Box 4-1 in MNB (2023), Inflation Report, December 2023. Magyar Nemzeti Bank, Budapest.

⁽³⁷⁾ Opinion of the European Central Bank of 26 April 2023 on the restriction of the negotiability of discount bills issued by the Magyar Nemzeti Bank and the extension of an interest rate cap. CON/2023/10 (<https://eur-lex.europa.eu/legal->

These credit market interventions also have fiscal consequences. Loose fiscal and monetary policy in earlier years boosted liquidity in the financial sector, leading to the build-up of a large deposit stock by commercial banks at the central bank. As the central bank raised short-term interest rates to control inflation and stabilise the currency, the banking sector recorded huge revenues on this deposit stock. In exchange, banks condoned the introduction of various interest rate caps on their loans and a windfall profit tax. However, these interventions keep interest rates higher for longer, as they reduce the effectiveness of the monetary transmission mechanism and increase risk premia⁽³⁸⁾. High interest rates have also resulted in losses at the central bank in recent years and its capital fell to HUF -2.1 tn (some -3% of GDP) by the end of 2023. While an amendment of the central bank act in late 2023 allows the government to postpone the recapitalisation of the MNB in the medium term, central bank losses nonetheless weigh on the budget in the long term through foregone dividends⁽³⁹⁾. The fiscal cost of loan subsidies has also risen with higher market interest rates, whilst credit guarantees have added to the contingent liabilities of the general government. The stock of government guarantees doubled since 2019 and was among the largest in the EU in 2022 at 12.4% of GDP (see Thematic chapter below).

Timely and effective implementation of Hungary's Recovery and Resilience Plan is expected to help reduce macroeconomic vulnerabilities and support growth, which would be reinforced by the phasing out of distortive interventions in markets and reforms that support fiscal consolidation. The combination of significant external and fiscal deficits over the years have led to large government financing needs and added to external sustainability concerns, which have been exacerbated by policy choices and the high energy intensity of the economy, while very high price and cost pressures weigh on Hungary's competitiveness and on the costs of borrowing. Timely and effective implementation of Hungary's Recovery and Resilience Plan is expected to help reduce macroeconomic vulnerabilities and support growth. In particular, the plan includes measures such as regular spending reviews, allowing to identify options for savings and efficiency gains, and a pension reform to improve fiscal sustainability, and reforms and investments to reduce fossil fuel dependence. In addition, a stronger medium-term budgetary framework and less discretion during the execution of annual budgets could help reduce the expansionary bias of fiscal policy. An enhanced role of the fiscal council could improve budget transparency and fiscal discipline. The phasing out of price and interest rate caps would disencumber monetary policy, while stronger price signals in regulated energy prices could reduce energy import dependence and allow more competitive prices for companies. Ensuring the smooth transmission of monetary policy would help to achieve price stability and sustainably low financing costs for the economy.

[content/EN/TXT/PDF/?uri=CELEX:52023AB0010](https://www.mnb.hu/sajtoszoba/sajtokozlemenyek/2024-evi-sajtokozlemenyek/egyetlen-erdek-szamit-magyarorszag-a-magyar-gazdasag-erdeke)). The March 2024 press release of MNB is available (in Hungarian) at <https://www.mnb.hu/sajtoszoba/sajtokozlemenyek/2024-evi-sajtokozlemenyek/egyetlen-erdek-szamit-magyarorszag-a-magyar-gazdasag-erdeke>

⁽³⁸⁾ For example, in January 2024 the government proposed to change the reference rate for corporate loans from the interbank rate to the significantly lower treasury bill rate in a bid to further stimulate lending. This triggered criticism from a credit rating agency and worsened market sentiment. See e.g., MNB (2024), Minutes of the Monetary Council Meeting 30 January 2024, Magyar Nemzeti Bank, Budapest. <https://www.mnb.hu/letoltes/roviditett-jegyzokonyv-a-monetaris-tanacs-2024-januar-30-i-uleserol-en.pdf>

⁽³⁹⁾ A 2022 amendment of the central bank act stipulated that 50% of the central bank's annual profit must be paid to the budget whenever the bank's own capital exceeds its statutory capital (see Article 166(1) of Act CXXXIX of 2013).

Table 2.2: MIP-relevant policy progress in Hungary

Vulnerability	Policies enacted since January 2023	Policies in progress since January 2023
External sustainability		Investments in domestic electricity generation.
Price and cost competitiveness	<p>Minimum wage hike in December 2023.</p> <p>Electricity price cap for businesses at 200 EUR/MWh between July-December 2023.</p> <p>Lower electricity network charges for companies as of 1 January 2024.</p> <p>Windfall profit tax on CO2 emission quotas allocated for free.</p>	
Housing	<p>Reform of housing subsidy scheme.</p> <p>Lower loan-to-value limit for first home buyers.</p>	
Financial sector	<p>Interest rate cap on corporate deposits.</p> <p>Voluntary cap on new mortgages, working capital loans and corporate loans.</p> <p>Subsidised lending schemes.</p> <p>Reactivation of systemic risk buffer for commercial real estate exposures from 1 July 2024.</p>	
Government financing needs	<p>Amendment of the central bank act allowing the government to postpone the recapitalisation of the central bank in the medium term.</p> <p>Extension of windfall profit taxes for fiscal year 2024.</p>	Spending review, pension reform design (RRP commitments).

Conclusion

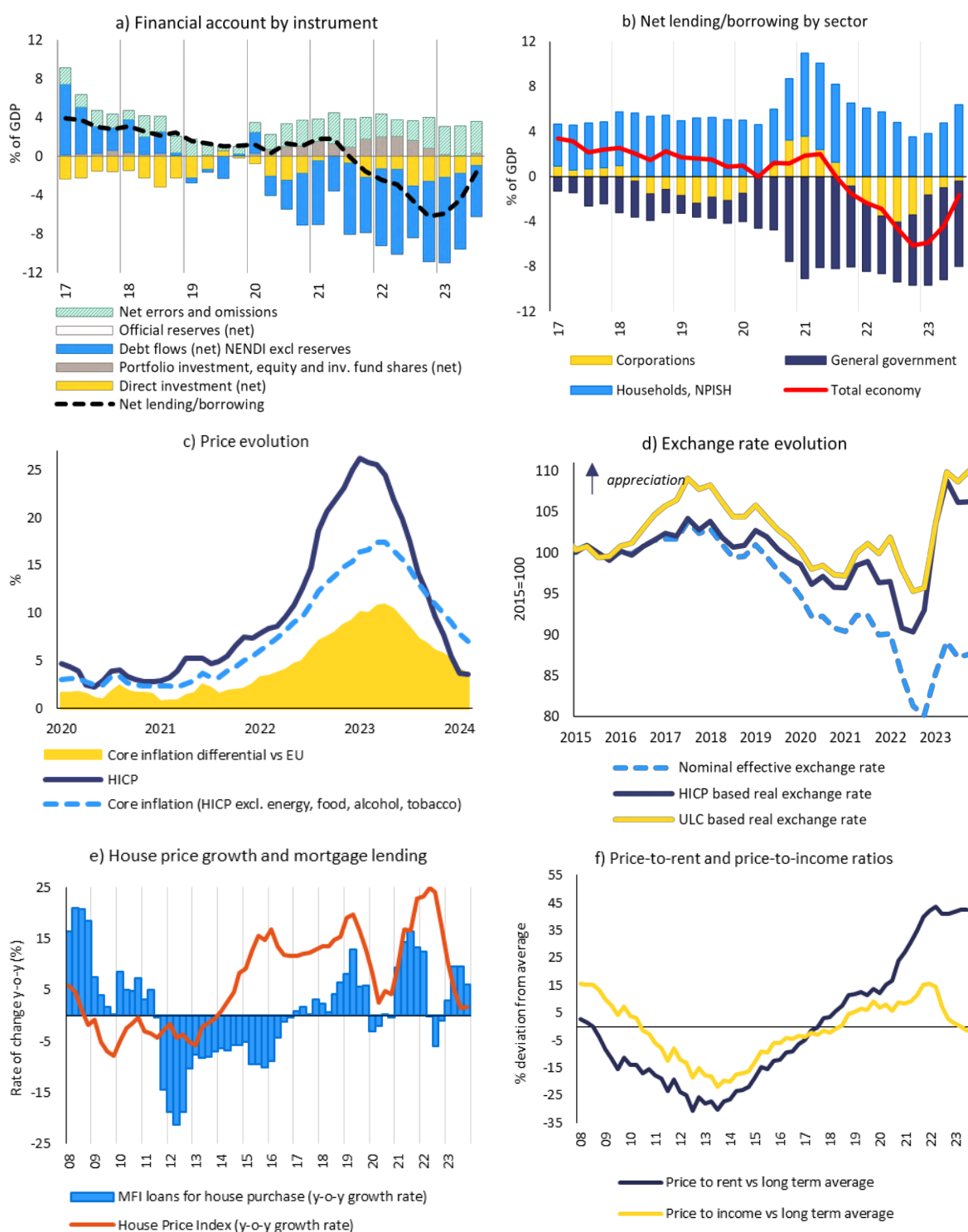
Hungary is facing vulnerabilities relating to its external and government financing needs, although an improving external environment mitigated some short-term risks.

A tighter monetary policy, lower energy prices and weaker import demand improved the external balance and reduced the very high inflation in the course of 2023. However, the recession also contributed to a persistently high budget deficit, on the top of continued expansionary policies even in earlier years of strong economic growth. High interest rates contributed to the slowdown of house prices and an easing of overvaluation in 2023. A gradual reduction of interest rates and moderate energy prices can support a gradual economic recovery from 2024 onwards, but fiscal consolidation needs weigh on growth prospects, and the economy remains exposed to external developments in energy prices and risk premia.

Policy progress has been limited, keeping Hungary vulnerable to both external and domestic shocks. A more coherent approach to economic policy is needed to deliver fiscal

consolidation and macro-financial stability, and to lay the foundations for sustainable economic growth, without risking the overheating of the economy that would worsen external sustainability and keep inflation and interest rates entrenched at relatively high levels. The fiscal framework continues to lack a medium-term orientation. Large minimum wage hikes are based on the premise of future productivity gains that might not be realised due to structural factors such as low innovation, low digitalisation, and barriers to competition in the service sector. The cost of household energy subsidies has been passed on to companies, weakening their price and cost competitiveness. Support schemes for home purchase appear to remain generous and risk fuelling house price overvaluation amid low housing supply. Frequent credit market interventions have had a limited impact on economic growth while they have interfered with the functioning of monetary policy and create longer-term fiscal burden through central bank losses and contingent liabilities.

Graph 2.7: Selected graphs, Hungary



Source: Eurostat, Ameco, ECB and European Commission services calculations

Table 2.3: Selected economic and financial indicators (Part 1), Hungary

all variables y-o-y % change, unless otherwise stated	2003-07	2008-12	2013-19	2020	2021	2022	2023	forecast	
								2024	2025
Real GDP	3.5	-0.8	4.1	-4.5	7.1	4.6	-0.9	2.4	3.6
p.m.: Real GDP (Winter 2024 interim Forecast)							-0.8	2.4	3.6
Contribution to GDP growth:									
Domestic demand	2.8	-2.0	4.7	-2.6	4.2	3.8	-3.3	2.3	4.5
Inventories	0.0	-0.4	-0.2	0.0	2.0	-0.1	-2.4	0.0	0.0
Net exports	0.6	1.6	-0.4	-2.0	0.9	0.8	4.8	0.2	-1.0
Output gap ⁽¹⁾	2.5	-3.2	1.8	-3.9	-0.6	0.7	-2.1	-1.9	-0.7
Unemployment rate	6.6	9.9	5.0	4.1	4.1	3.6	4.1	4.2	4.1
Harmonised index of consumer prices (HICP)	5.4	4.9	1.5	3.4	5.2	15.3	17.0	5.2	4.1
p.m.: HICP (Winter 2024 interim Forecast)								4.5	4.1
HICP excluding energy and unprocessed food (y-o-y)	4.6	4.1	2.1	3.7	4.5	14.2	16.8	5.7	4.9
GDP deflator	4.4	3.3	5.7	6.4	6.4	14.5	14.6	4.8	4.7
External position									
Current account balance (% of GDP), balance of payments	-7.8	-1.1	1.6	-1.0	-4.1	-8.3	0.1	0.0	-0.5
Trade balance (% of GDP), balance of payments	-1.7	4.5	6.1	1.9	0.2	-4.3	5.3	.	.
Primary income balance (% of GDP)	-5.9	-4.9	-3.6	-2.5	-3.2	-3.1	-4.2	.	.
Secondary income balance (% of GDP)	-0.2	-0.7	-0.9	-0.5	-1.1	-0.8	-1.0	.	.
Current account explained by fundamentals (CA norm, % of GDP) ⁽²⁾	-0.8	-0.5	-0.3	-0.1	-0.1	0.0	0.3	0.4	0.6
Required current account to stabilise NIIP above -35% of GDP over 20Y (% of GDP) ⁽³⁾	-1.3	-3.7	-5.6	-5.6	-5.2	-4.6	-4.3	-4.2	0.0
Capital account balance (% of GDP)	0.4	1.9	2.2	2.1	2.5	2.1	.	.	.
Net international investment position (% of GDP)	-88.8	-102.9	-60.2	-52.1	-52.2	-50.8	.	.	.
NENDI - NIIP excluding non-defaultable instruments (% of GDP) ⁽⁴⁾	-28.8	-48.3	-12.5	-2.5	-1.2	-5.3	.	.	.
Net FDI flows (% of GDP)	-1.9	-1.7	-1.9	-1.8	-2.2	-2.6	.	.	.
Competitiveness									
Unit labour costs (ULC, whole economy)	4.8	2.6	3.7	6.7	2.9	12.1	15.2	7.8	5.2
Nominal compensation per employee	8.4	2.5	4.2	3.1	8.8	15.5	14.0	10.2	8.7
Labour productivity (real, hours worked)	4.6	0.4	1.5	0.4	3.8	2.4	0.1	1.5	2.8
Real effective exchange rate (ULC)	2.7	-2.3	-2.4	-5.3	0.6	-1.2	9.8	2.5	2.5
Real effective exchange rate (HICP)	3.0	-0.4	-2.2	-4.2	0.4	-3.8	13.3	.	.
Export performance vs. advanced countries (% change over 5 years)	.	3.9	-1.2	7.5	1.4	0.1	.	.	.
Private sector debt									
Private sector debt, consolidated (% of GDP)	79.2	110.5	76.3	77.0	80.9	78.8	72.0	.	.
Household debt, consolidated (% of GDP)	23.3	36.5	20.3	20.8	21.1	18.6	16.8	.	.
Household debt, fundamental benchmark (% of GDP) ⁽⁵⁾	8.5	11.8	20.3	27.2	29.1	30.6	32.5	.	.
Household debt, prudential threshold (% of GDP) ⁽⁵⁾	40.2	43.7	38.0	38.5	37.9	37.8	41.6	.	.
Non-financial corporate debt, consolidated (% of GDP)	55.9	74.0	56.0	56.1	59.8	60.2	55.2	.	.
Corporate debt, fundamental benchmark (% of GDP) ⁽⁵⁾	33.4	29.0	34.8	41.1	43.1	44.2	46.1	.	.
Corporate debt, prudential threshold (% of GDP) ⁽⁵⁾	60.9	65.2	54.2	55.1	54.5	54.3	60.7	.	.
Private credit flow, consolidated (% of GDP)	13.3	0.8	0.5	8.2	12.9	9.2	15e	.	.
Household credit flow, consolidated (% of credit stock)	23.4	-1.8	0.3	12.9	13.4	5.5	.	.	.
Non-financial corporate credit flow, consolidated (% of credit stock)	95.3	30.1	2.5	20.2	34.7	26.5	.	.	.
Net savings rate of households (% of net disposable income)	5.4	5.3	8.5	11.1	13.1	8.5	.	.	.

(e) estimate based on ECB quarterly data

(1) Deviation of actual output from potential output as % of potential GDP.

(2) Current accounts in line with fundamentals ("current account norms") are derived from reduced-form regressions capturing the main determinants of the saving-investment balance, including fundamental determinants, policy factors and global financial conditions. See L. Coutinho et al. (2018), "Methodologies for the assessment of current account benchmarks", European Economy, Discussion Paper 86/2018, for details.

(3) This benchmark is defined as the average current account required to reach and stabilise the NIIP at -35% of GDP over the next 20 years. Calculations make use of Commission's T+10 projections.

(4) NENDI is a subset of the NIIP that abstracts from its pure equity-related components, i.e. foreign direct investment (FDI) equity and equity shares, and from intracompany cross-border FDI debt, and represents the NIIP excluding instruments that cannot be subject to default.

(5) Fundamentals-based benchmarks are derived from regressions capturing the main determinants of credit growth and taking into account a given initial stock of debt. Prudential thresholds represent the debt threshold beyond which the probability of a banking crisis is relatively high, minimising the probability of missed crisis and that of false alerts. Methodology to compute the fundamentals-based and the prudential benchmarks based on Bricongne, J. C., Coutinho, L., Turrini, A., Zeugner, S. (2019), "Is Private Debt Excessive?", Open Economies Review, 1- 42.

Source: Eurostat and ECB as of 2024-03-19, where available; European Commission for forecast figures (Autumn forecast 2023)

Table 2.3: Selected economic and financial indicators (Part 2), Hungary

all variables y-o-y % change, unless otherwise stated	2003-07	2008-12	2013-19	2020	2021	2022	2023	forecast	
								2024	2025
Housing market									
House price index, nominal	.	-2.5	12.3	4.9	16.5	22.3	.	.	.
House price index, deflated	.	-6.7	9.7	1.5	9.6	5.2	.	.	.
Overvaluation gap (%) ⁽⁶⁾	10.2	-3.7	-5.5	7.3	14.0	20.1	15.7	.	.
Price-to-income overvaluation gap (%) ⁽⁷⁾	16.6	1.3	-5.7	7.4	9.4	13.0	0.5	.	.
Residential investment (% of GDP)	4.5	3.1	2.6	4.1	3.9	4.7	4.2	.	.
Government debt									
General government balance (% of GDP)	-7.2	-4.1	-2.2	-7.6	-7.2	-6.2	-5.8	-4.3	-3.8
General government gross debt (% of GDP)	61.5	77.7	72.3	79.3	76.7	73.9	69.9	71.7	70.3
Banking sector									
Return on equity (%)	.	10.9	6.8	8.3	13.4	10.3	.	.	.
Common Equity Tier 1 ratio	.	14.1	14.6	15.2	17.7	16.7	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (8)	.	9.8	9.7	.	2.4	2.6	.	.	.
Gross non-performing loans (% of gross loans) ⁽⁸⁾	.	.	10.7	3.6	3.2	3.1	2.7	.	.
Cost of borrowing for corporations (%)	.	.	1.5	2.1	5.1	15.6	11.9	.	.
Cost of borrowing for households for house purchase (%)	.	.	4.4	4.0	4.4	10.9	8.7	.	.

(6) Unweighted average of price-to-income, price-to-rent and model valuation gaps. The model valuation gap is estimated in a cointegration framework using a system of five fundamental variables; total population, real housing stock, real disposable income per capita, real long-term interest rate and price deflator of final consumption expenditure, based on Philipponnet, N., Turrini, A. (2017), "Assessing House Price Developments in the EU," European Economy - Discussion Papers 2015 - 048, Directorate General Economic and Financial Affairs (DG ECFIN), European Commission. Price-to-income and price-to-rent gaps are measured as the deviation to the long term average (from 1995 to the latest available year).

(7) Price-to-income overvaluation gap measured as the deviation to the long term average (from 1995 to the latest available year).

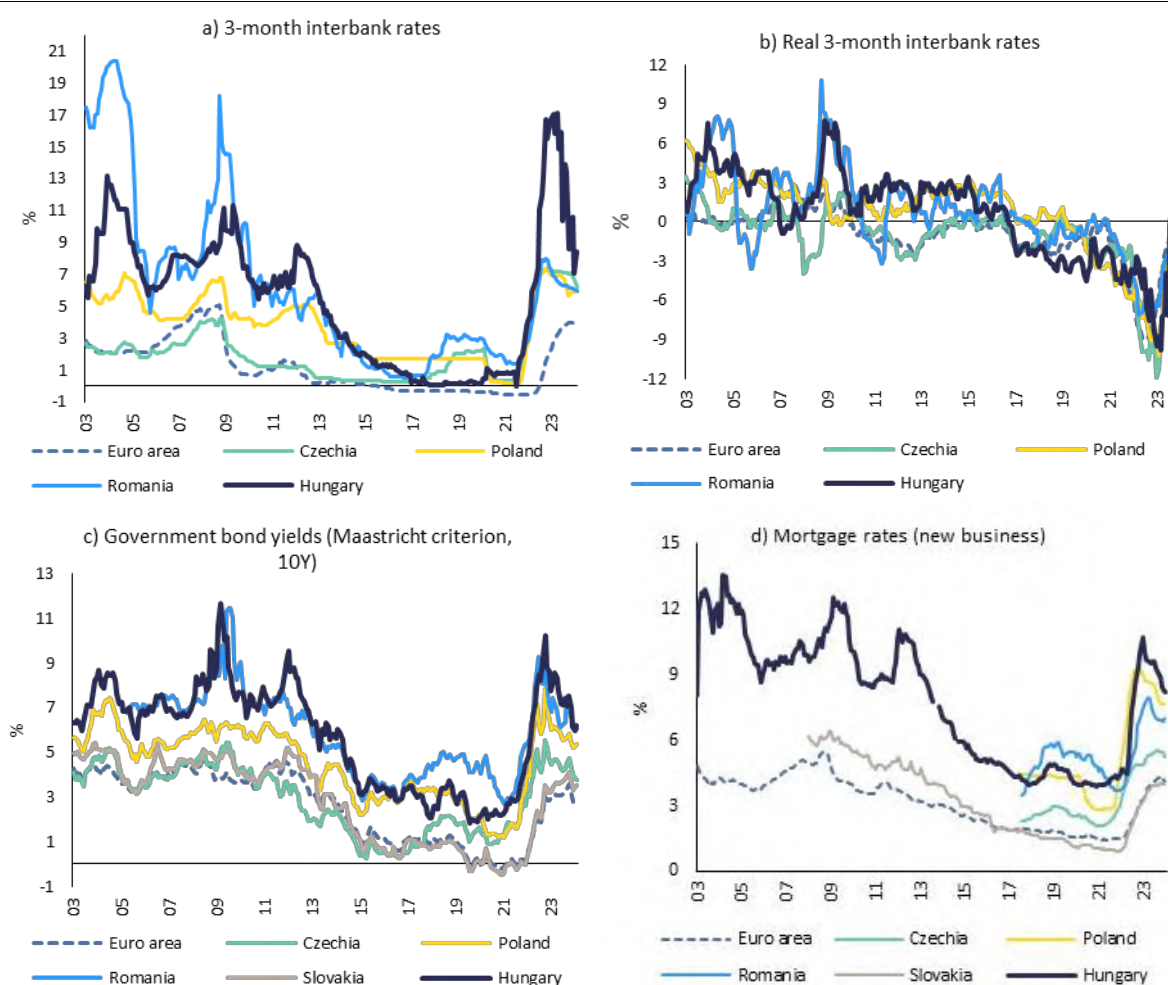
(8) Domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.

Source: Eurostat and ECB as of 2024-03-19, where available; European Commission for forecast figures (Autumn forecast 2023)

3. THEMATIC CHAPTER. HIGH INTEREST RATES IN HUNGARY: CAUSES AND CONSEQUENCES

Interest rates have historically been high in Hungary. This can be observed across a wide range of financial products, such as short-term money market rates, government borrowing costs and bank lending rates (Graph 3.1). In the last two decades, nominal interest rates were significantly higher than in the euro area, with spreads frequently around 500 bps for short-term rates, and some 200-400 bps for long-term government bond yields and mortgage rates. These spreads are relatively high also in regional comparison. Real interest rates also appear elevated in most of the period.

Graph 3.1: Interest rates in Hungary and selected countries



Note: (b) Backward-looking real interest rates, calculated with 12-month HICP inflation.

Source: Eurostat, MNB, ECB and European Commission services calculations

The second half of the 2010s, a period of unprecedented low interest rates globally, was a temporary exception. In addition to very low interest rates in advanced economies, Hungary's risk premium also decreased amid steadily declining external and public debt ratios. Favourable market sentiment allowed Hungarian monetary policy to compress the short-term yield differential vis-à-vis the euro area to 50 bps. For a short while, the short-term real interest rate even fell below that of the euro area. The spread between Hungarian

and euro area mortgage rates also shrank in this period (partly due to subsidised mortgage schemes), however no such spread compression was visible for government bond yields.

Hungarian yields have risen sharply since 2021, and interest rates are expected to remain elevated. The marked rise in interest rates was driven by spiking inflation and a rise in risk premia. Higher country risk was due to the spike in energy prices which raised concerns about Hungary's external sustainability, expansionary economic policies and uncertainty regarding Hungary's access to EU funds. Hungarian interest rates peaked at the turn of 2022-2023, when the central bank kept its key policy rate (at the time, the overnight deposit rate) at 18%. Since then, risk perception improved somewhat with lower energy prices, falling inflation rates, and the unlocking of some EU funds to Hungary, allowing the reduction of the policy rate to 9% by February 2024, with further rate cuts expected by markets. Nonetheless, higher monetary policy rates in advanced economies, and persistently high government deficit and debt in Hungary, are set to keep Hungarian interest rates and spreads vis-à-vis the euro area elevated.

Causes of high interest rates

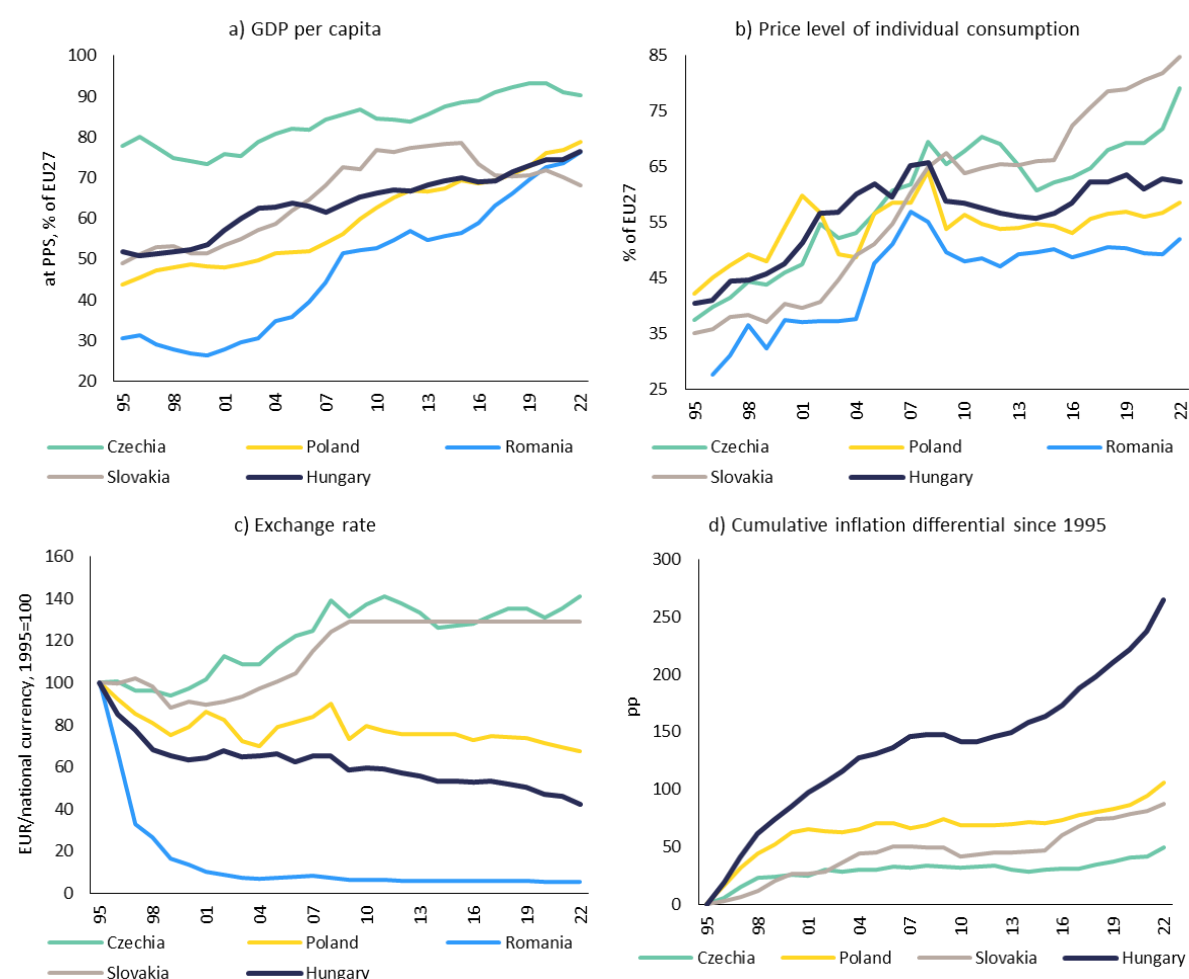
Structurally higher interest rates in Hungary compared to the euro area and regional peers could be due to a variety of factors, reflecting macroeconomic uncertainty and policy inconsistencies:

1. **Higher sovereign risk, reflecting a challenge to debt sustainability:** Hungary has had one of the lowest credit ratings in the EU (currently just 1-2 notches above junk grade), reflecting relatively large public and external debt stocks (some 27% in foreign currencies), especially compared to the country's level of economic development. Fiscal policy has been frequently expansionary. Although the government maintained a solid track record in delivering deficit targets and debt reduction in the 2010s, the deficit ballooned since 2020 and is proving difficult to contain. Hungary's credit default spread (CDS), which is the closest to measuring default risk, currently stands at some 130 bps, having widened from around 50 bps since end-2021. In the first half of the 2010s, CDS spreads were even higher, between 200-400 bps.
2. **Higher inflation, due to both long-term price convergence and policies.** Hungary is a catching-up economy, and its price level (expressed in euros) is gradually converging to the EU average (Graph 3.2 b) ⁽⁴⁰⁾. However, in contrast to some regional peers, price convergence has taken place exclusively through higher domestic inflation, while the nominal exchange rate has been on a depreciating trend. Since August 2005, when the Hungarian central bank (MNB) switched to a stable 3% inflation target, HICP inflation averaged 4.9%, compared to 2.1% in the euro area. A higher trend inflation partly reflects policy choices, as the inflation target of MNB exceeds the respective targets of non-euro area countries in the region, even though these economies face the same long-term prospects of price convergence

⁽⁴⁰⁾ The Balassa-Samuelson effect is a standard theoretical explanation why income convergence leads to real exchange rate appreciation. As the real exchange rate is defined as a relative price level expressed in a common currency, a price convergence observed between Hungary and the EU27 is in fact a manifestation of real appreciation.

(⁴¹). The historically large overshooting of inflation targets also points to low policy credibility (⁴²).

Graph 3.2: Income and price convergence developments in the long term



Source: Eurostat and European Commission services calculations

3. Higher macroeconomic volatility due to the small size and openness of the economy, amplified by procyclical economic policies.

Investors require compensation for risks stemming from the uncertainty over future yields, inflation and the exchange rate, raising longer-term interest rates in particular. Since 2005, the standard deviations of inflation and short-term interest rates were 2.5 times higher in Hungary than in the euro area, and also more volatile than in regional peer countries.

(⁴¹) The inflation target is 2% in Czechia, 2.5% in Poland and Romania. Upon the 2015 review of the inflation target, MNB argued that the 3±1% inflation target also accounts for the price convergence stemming from income convergence ([link to MNB statement](#)). However, in a recent paper MNB authors dismiss any long-term link between export growth and the nominal exchange rate or the relative price level. While the authors do not pursue the idea further, their argument also implies that long-term price convergence is feasible through nominal appreciation and a lower inflation target, without repercussions for growth. See: Balatoni A. – Soós G. (2023), *Változó világ, változó hatások – Az árfolyam makrogazdasági hatásai*. Magyar Nemzeti Bank (in Hungarian, [link to paper](#))

(⁴²) A recent study by IMF staff finds that lagged inflation is an important driver of inflation in Hungary, which is typical for economies with unstable trend inflation. See: Cohn Bech, E., K. Foda and A. Roitman (2023), *Drivers of Inflation: Hungary*. IMF Selected Issues Paper SIP/2023/004, Washington D.C.

The exchange rate of the Hungarian forint has also fluctuated more than regional currencies, with pronounced spikes of volatility in periods of financial market stress. Larger volatility partly reflects the high trade openness of the Hungarian economy, which makes it more sensitive to external shocks. However, procyclical economic policies have also tended to amplify economic fluctuations in Hungary instead of smoothing them. The large difference between the yields of domestic and foreign currency government bonds illustrates the potential impact of currency risk on sovereign borrowing costs: on 7 September 2023 Hungary issued 10-year local currency bonds with a yield of 7.67%, while on 6 September it issued a 10-year euro bond with a yield of 5.52% ⁽⁴³⁾.

4. **Smaller and less liquid financial markets:** in times of financial market stress, investors in Hungarian financial assets also required compensation for the potential inability to liquidate their positions due to a market freeze. Based on the bid-ask spreads of government bonds, the liquidity premium of Hungarian government bonds amounted to up to some 50 bps in the 2010s but disappeared more recently ⁽⁴⁴⁾.

The relevance of these factors in explaining the relatively high level of Hungarian interest rates is shown in recent analysis by MNB staff on the decomposition of the yield spread between Hungarian and German government bonds. This attributes some 170 bps from that yield to default risk, and some 300 bps to other factors including exchange rate risk ⁽⁴⁵⁾. Erhart (2021) estimates that the benefits from euro adoption for long-term real interest rates are substantial, amounting to up to 200 bps. These benefits stem from a better credit rating (of up to 1.5 notches), lower liquidity and exchange rate risk, and access to ECB's quantitative easing operations ⁽⁴⁶⁾.

Consequences and policy responses

High nominal interest rates are a challenge to debt sustainability. The implicit interest rate on Hungary's government debt is the highest in the EU (Graph 3.3), which is coupled with a relatively high debt stock. The recent build-up of high-yielding retail government bonds also contributes to the rapid rise of the interest burden. Inflation-linked retail bonds amount to some 13% of total government debt, thus the recent spike in inflation (14.5% in 2022 and over 17% in 2023) leads to large interest payments. Consequently, interest expenditure has risen to above 4% of GDP in 2023, which needs to be offset by large primary surpluses.

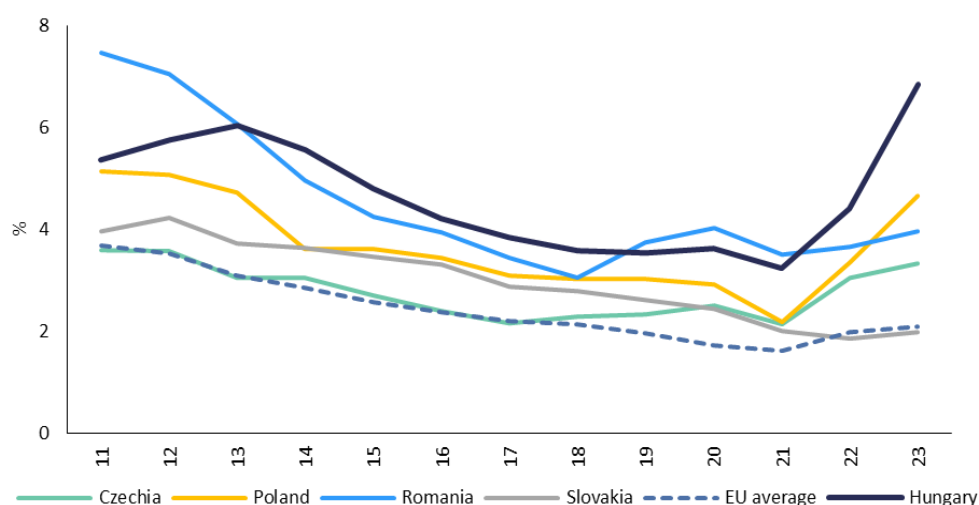
⁽⁴³⁾ This spread also reflects the fact that foreign denominated bonds are issued under foreign law, which gives creditors more protection against default, thereby reducing yields especially in periods of distress. See Chamon, M., Schumacher, J. and Trebesch, C. (2018), Foreign-law bonds: can they reduce sovereign borrowing costs? ECB Working Paper Series, No. 2162.

⁽⁴⁴⁾ Source: MNB (2023), Chart-pack on recent economic and financial market developments, 19 December 2023. Magyar Nemzeti Bank ([link](#)).

⁽⁴⁵⁾ For the methodology and historical results, see Monostori Z. (2012), Magyar szuverén fix kamatozású forintkötvények hozamdekompozíciója. Hitelintézet Szemle 12(5), 462-475 (in Hungarian)

⁽⁴⁶⁾ Erhart, Sz. (2021), The Impact of Euro Adoption on Sovereign Credit Ratings and Long-term Rates. JRC Technical Report. A back-of-the-envelope calculation corroborates these findings: on 1 March 2024 the 10-year government bond yield of Hungary stood at 6.3%, while the yields of euro area members with similar public debt levels (AT, FI, HR, SI) were around 2.8-3.2%. The 310-350 bp higher yield in Hungary seems roughly consistent with a euro premium of some 200 bps and a higher inflation target in Hungary by 100 bps.

Graph 3.3: Implicit interest rate on government debt



Source: AMECO, forecast for 2023 based on Commission autumn 2023 forecast.

High nominal rates limit the private sector's borrowing capacity and create incentives for foreign currency borrowing. Hungarian households must comply with macroprudential regulations that limit monthly debt service at 50% of regular net income (DSTI). During the years of very low interest rates, Hungarian households could access mortgages with a 4% interest rate on average, which allowed them to borrow up to 6.9 times their annual income. In contrast, households in the euro area could borrow at 1.5%, which would allow borrowing up to 8.6 times the annual income. Therefore, high nominal interest rates can help explaining why household debt, at 17.6% of GDP, is among the lowest in the EU. Furthermore, large interest rate differentials are conducive to foreign currency borrowing, which became a serious risk to financial stability following the global financial crisis of 2008-2009 ⁽⁴⁷⁾. Borrowing in foreign currencies exposes borrowers, and possibly lenders too, to risks owing to exchange rate and foreign interest rate volatility, with the latter fully outside the control of domestic monetary policy. Foreign currency lending has since been effectively banned in the case of households, but still accounts for 58% of the loan stock of non-financial corporations. Foreign currency borrowing even persists in non-tradable sectors such as construction and real estate, where borrowers are unlikely to earn significant foreign currency revenues.

Policymakers have launched subsidised loan schemes to improve the access to finance for selected groups. For example, at the end of 2022, 18% of the outstanding mortgage stock was subsidised by the state, and subsidised lending has been the main source of credit growth to households since 2018, even though market interest rates were historically low until 2021. In the corporate sector, the share of subsidised loans among new disbursements rose to 46% in Q2 2023. The balance sheet of Hungarian development banks amounted to ca. 10% of GDP in 2023, growing by 4.6 pps since 2018 ⁽⁴⁸⁾.

⁽⁴⁷⁾ See e.g. Brzoza-Brzezina, M., Chmielewski, T. and Niedźwiedzińska, J. (2010), Substitution between domestic and foreign currency loans in Central Europe. Do central banks matter? ECB Working Paper Series, No. 1187.

⁽⁴⁸⁾ Total assets of development banks in EU member states range widely, from 50.4% of GDP in France to 0.1% of GDP in Portugal in 2021, with Hungary ranking 11th. Source: Xu, J., Marodon, R., Ru, X., Ren, X. and X. Wu (2021), What are Public Development Banks and Development Financing Institutions? Qualification Criteria, Stylized Facts and Development Trends, China Economic Quarterly International 1: 271-294.

Since 2022 the government also resorted to interest rate caps to limit borrowing costs. A regulatory cap was introduced on variable mortgage rates in January 2022, and it was later extended to mortgages with an interest period up to 5 years, affecting one quarter of all outstanding mortgages. In November 2022, the measure was extended to SME loans, representing 17% of the corporate loan stock. A cap on the interest rates of large household deposits was also introduced in November 2022, and in December 2023 it was extended to corporate deposits. While the mortgage rate cap aimed to shield borrowers from the effects of monetary tightening, the deposit rate cap primarily aimed to limit the rise of government borrowing costs. Finally, since October 2023 commercial banks also introduced voluntary caps to new mortgages and working capital loans, at the request of the government (see Table 3 for details).

Table 3.1: Interest rate caps in Hungary

Period	Measure	Impact
January 2022-June 2024	Mortgage interest rate cap	Mortgage rates were capped initially for six months at the 27 October 2021 levels for mortgages with interest fixation periods up to five years. Initially introduced for six months but extended repeatedly.
November 2022-March 2024	SME interest rate cap	Interest rates on HUF-denominated business loans to SMEs were capped at the reference rate on 28 June 2022. Initially introduced until June 2023 but later extended.
January 2023-June 2024	Student loan interest rate cap	The interest rate on the interest-bearing student loan variant would have increased to 10% for some 100 thousand borrowers. Due to the measure this interest rate remained at 4.99% after January 2023.
November 2022-March 2024	Large deposit interest rate cap	Interest rates on bank deposits exceeding HUF 20 mn (ca. EUR 52,500) were capped at the average 3-month T-bill yield, to divert savings towards government securities. Initially introduced until March 2023, but extended repeatedly.
December 2023-March 2024	Corporate deposit interest rate cap	The interest rate cap on large deposits was also extended to corporate deposits, with similar conditions, to encourage corporate investment.
October 2023-	Voluntary interest rate ceilings on new mortgages and working capital loans	At the initiative of the government, and as an alternative to paying a higher bank tax, commercial banks voluntarily agreed to cap interest rates on certain products at below-market levels. The interest rate ceilings were lowered from January 2024.
February-April 2024	Voluntary interest rate ceiling on corporate loans	At the initiative of the government, commercial banks voluntarily agreed to set the interest rate spread of new corporate loans at 0% above the interbank rate for the first six months of the loan. The agreement followed a suggestion by the government to change the reference rate of these loans from the interbank rate to the currently much lower T-bill rate.

Extensive use of subsidised lending schemes and interest rate ceilings contribute to higher interest rates in the longer run, mainly by undermining the effectiveness and credibility of monetary policy and by creating fiscal risks. Such schemes create a shadow interest rate for various borrowers and savers that is not directly influenced by monetary policy decisions. By reducing the elasticities of credit demand and savings to the central bank policy rate, the interest rate channel of monetary transmission is weakened. Consequently, the central bank needs to raise interest rates higher and for longer, to achieve

its price stability objective. It must also rely more on the exchange rate to contain inflation, potentially limiting the shock-absorbing role of a flexible exchange rate. Subsidised lending schemes can also amplify economic volatility, for example if programmes with predefined envelopes are quickly exhausted, or if they are extended procyclically, and through this channel they might even lead to higher interest rates in the long run ⁽⁴⁹⁾. The recent growth of subsidised lending in Hungary indeed coincided with economic overheating and domestic inflationary pressure, while the ample liquidity of the corporate sector has raised questions about the necessity for such schemes ⁽⁵⁰⁾. Further potential negative effects of such interventions may include credit misallocation to unproductive (zombie) firms. A recent study on a Hungarian subsidised lending scheme found no positive impact on the productivity of borrowers ⁽⁵¹⁾. Finally, subsidised loans create fiscal costs through higher deficits and public debt, and additional fiscal risks through implicit liabilities (of credit guarantees), raising sovereign financing costs through both channels. Government expenditure on interest subsidies reached 0.6% of GDP in 2023, having tripled in nominal terms since 2021, while the implicit subsidies provided by the central bank on its own subsidised lending schemes are estimated at 0.4% of GDP in 2023 ⁽⁵²⁾. The stock of guarantees provided by the government rose from 5% of GDP in 2018 to 12.4% in 2022, among the highest in the EU.

Stability-oriented macro-financial policies are key for sustainably reducing interest rates. The phasing out of interest rate caps would improve the effectiveness of monetary policy, requiring less monetary tightening to achieve price stability. The economic rationale for lending subsidies could be reviewed, their targeting could be improved to relevant social needs, and the disbursement of subsidised loans could be better aligned with the monetary policy stance. Changes in the policy framework that reduce the tendency for procyclical economic policies could help to achieve credible disinflation, mitigate economic volatility and risk premia.

⁽⁴⁹⁾ The adverse side-effect of the large-scale lending activity of development banks on monetary policy in Brazil is analysed by de Bolle, M. (2015), Do Public Development Banks Hurt Growth? Evidence from Brazil, Peterson Institute for International Economics Policy Brief PB15-16. Further evidence on the link between policy interventions and the monetary transmission mechanism come from financial deregulation episodes. For example, deposit rate deregulation in Hong Kong led to an improving monetary transmission mechanism, see Chong, B. S. (2010), Interest rate deregulation: Monetary policy efficacy and rate rigidity, *Journal of Banking and Finance* 34(6), 1299-1307.

⁽⁵⁰⁾ See e.g. Banai, Á., Dancsik, B. and T. Nagy (2023), Minél célzottabb, annál jobb, Magyar Nemzeti Bank (in Hungarian, [link to article](#)).

⁽⁵¹⁾ See e.g. Acharya, V. V., Eisert, T., Eufinger, C. and Hirsch, C. (2019), Whatever It Takes: The Real Effects of Unconventional Monetary Policy, *Review of Financial Studies* 32(9), 3366-3411. For the experience of the Hungarian lending scheme see: Telegdy, Á. and G. Tóth (2024), A támogatott hitelezés hatásvizsgálata Magyarországon, *Közgazdasági Szemle* 71:113-130 (in Hungarian).

⁽⁵²⁾ See: MNB (2023), Költségvetési jelentés: A 2024. évi költségvetési törvényjavaslat elemzése, Magyar Nemzeti Bank, Budapest. The central bank's Funding for Growth lending scheme started in 2023, and was extended to companies through commercial banks with a refinancing rate of 0%. The calculation assumes that the market reference rate for these loans would have been the 3-month interbank rate. This implicit interest subsidy adds to the central bank's losses, which should be reimbursed by the budget in the long run.