Hungary's Public Debt Rule in the Procrustean Beds of Inflation

Gyula Pulay[1] – Attila Erdélyi[2]

ABSTRACT: The ratio of public debt to gross domestic product is one of the most important indicators of fiscal sustainability, and its reduction is a central element of the Hungarian public debt rule. Objective: The study examines how rising inflation affects the public debt ratio in the short and medium term. Method: The article analyses the effect of inflation on nominal output, the increase in budget expenditures, and the lagged adjustment of the implicit interest rate on public debt, based on Hungarian data between 2022 and 2025. Results: The surge in inflation temporarily created favorable conditions for reducing the public debt ratio, but at the same time increased budget expenditures and, with some delay, interest burdens. Conclusions: Accelerating inflation cannot be considered a sustainable debt reduction tool because its effects on increasing budget expenditures remain persistent, making it difficult to reduce the public debt ratio. This may necessitate fiscal adjustment, which may also slow down growth.
KEYWORDS: inflation, public debt, fiscal policy
JEL-CODES: E31, H63, H68
DOI: https://doi.org/10.35551/PFQ_2026_3_2

Introduction

As one of the consequences of Russia's aggression against Ukraine, inflation increased sharply across Europe from the summer of 2022, and high inflation continued into 2023. This was even more typical of Hungary, where other factors also contributed to the price explosion. However, starting in the second half of 2023, the rate of price increases gradually but significantly decreased and barely exceeded 3 percent in 2024 and 2025. In 2022, as a result of inflation, the tax revenues of the central budget increased dynamically, and the public debt ratio

1 Gyula Zoltán Pulay, PhD, habilitated associate professor, Károli Gáspár University of the Reformed Church in Hungary; Analysis Expert, State Audit Office of Hungary, Budapest.
2 Attila Erdélyi, PhD candidate who has completed all coursework and examination requirements, University of Miskolc; Analysis Expert, State Audit Office of Hungary, Budapest.

improved by 2.1 percentage points. Seeing this, opinions were expressed in various media outlets that the state was the winner of inflation. However, after inflation was curbed, the public debt ratio also increased in 2024 and 2025. Individual factors also played a role in this, but the figures indicate that in the period of lower inflation, compliance with the public debt rule requiring a reduction in the public debt ratio became more difficult. Once again, the appearance arose that a high inflation rate was more favorable for reducing the public debt ratio.

The study refutes this misconception both theoretically and based on Hungarian data. It points out that the ease of reducing the public debt ratio is only a temporary effect of the soaring inflation, which triggers processes that make it more difficult to reduce the public debt ratio in two to three years. The article highlights the most important reason for this double effect, namely that the GDP deflator, which influences the denominator of the public debt ratio, immediately reflects the increase in prices, while the implicit interest rate on public debt, which largely determines the numerator of the ratio, only follows the development of inflation with a time lag. This is partly what makes the article novel. Another novelty is the discovery that the inflation that soared in 2022 and 2023 primarily increased those budget expenditures (e.g. current production consumption, current subsidies) that have a small multiplicative effect, while the reduction of the budget deficit that thus increased necessitated the curtailment of investment and capital transfer expenditures that serve to dynamize the economy.

The recent inflationary processes and their economic policy consequences have also sparked a lively professional discourse in the columns of the Public Finance Quarterly. Botos (2023) examined the causes of Hungarian inflation, the limitations of its management and its fiscal context, while Kutasi, Czeczeli and Szalai (2024) reflected on the relationship between impoverishment, monetary tightening and fiscal sustainability after the end of the inflationary period. This study contributes to this professional debate by examining the multi-year impact of the 2022 inflation shock on budget revenues, expenditures, deficit, public debt and the public debt ratio.

Before we turn to the description of the methodology and database of the study, it is useful to explain the analogy in the title in a few sentences. We chose such an unusual title to draw the attention of those who are less familiar with fiscal policy and therefore overestimate the possibility of "inflating" the public debt, i.e. reducing it through inflation, to the long-term negative impact of inflation. Procrustes, in Greek mythology, was a notorious robber who robbed and tortured his victims. This is what inflation does, and – with some metaphor – even its operating mechanism resembles Procrustes' methods.

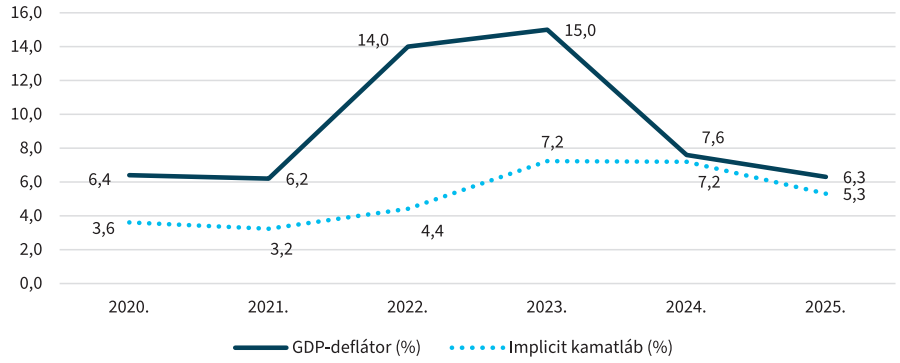
> *Who was Procrustes, and what cruel method is associated with his name? According to Ancient Greece Reloaded (n.d.), Procrustes is a well-known figure in Greek mythology. He was a blacksmith and innkeeper. He welcomed travelers who passed by his inn on the road between Athens and Eleusis. Procrustes*

had two iron beds, one larger and one smaller. He offered the shorter guests the wide and long bed, while the taller guests were placed in the narrow and short bed. He then made sure that his guest could fit into the bed. He stretched out the limbs of the shorter people to fill the entire length of the bed. He cut off the hands and feet of the taller people so that they could fit in the smaller bed. In this way, he killed his guests and stole their luggage.

Why do we compare inflation to Procrustes in terms of the public debt rule? Because initially inflation also offers a comfortable place (bed) with a large margin for fulfilling the public debt rule. As a result of inflation, GDP at current prices grows rapidly, which means that even with a significant increase in public debt, the public debt ratio can decrease, i.e. the public debt rule is fulfilled. Yes, but inflation also increases budget expenditures, just as Procrustes stretched the limbs of his victims. National economies do not die from the agony of inflation, but they suffer severely from it.

The effect of a decline in inflation can be compared to Procrustes putting a traveler in a narrow bed. With low inflation, GDP at current prices barely exceeds the growth in GDP volume, but interest rates remain high, contributing significantly to the growth of public debt. Consequently, it becomes more difficult to reduce the public debt ratio. Figure 1 illustrates the two "beds".

Figure 1: Development of the implicit interest rate on public debt and the GDP deflator between 2020-2025 in percentage



Source: Own calculation and editing based on Eurostat gov_10dd_edpt1 data

The frames of the "beds" are defined by the GDP deflator, i.e. the average index of price increases at the national level, and the implicit interest rate on public debt, i.e. the average interest rate on public debt. The figure shows that in 2022 and 2023, the GDP deflator significantly exceeded the implicit interest rate, i.e. it created a "comfortable" margin for compliance with the public debt rule. By "comfortable" we mean that the reduction in the public debt ratio was

achieved even with a significant primary deficit in the government sector and/or without significant economic growth.

In contrast, after 2023, the values of the two factors began to converge, and by 2024 the distance between them had already decreased to a minimum, while in 2025 the difference between the two indicators increased compared to 2024, but they still remained much closer to each other than in the 2020 and 2023 period. Consequently, the risk of non-compliance with the public debt rule increased, as a positive primary balance or/and significant real economic growth would have been required for the reduction of the public debt ratio.

Theoretical and Literary Background

The public debt/GDP ratio, as the most widely accepted indicator of a state's indebtedness

One of the most important models in relation to the dynamics of public debt was created by Evsey Domar. In the 1944 study presenting this model, Domar argued that the sustainability of public debt is determined not by the absolute level of debt itself, but by its relation to national income. He showed that if the growth rate of the economy exceeds the growth rate of the interest burden on public debt, the debt ratio can be stabilized over the longer term even in the presence of a persistent budget deficit. Domar's model thus laid the foundation for the later widespread approach that examines the development of public debt in the relationship between economic growth and financing costs. (Domar, 1944). However, the author assumed an unchanged price level in his analysis, so the difference between nominal and real growth did not appear as a factor in debt dynamics in his model.

According to the INTOSAI[3] guide on debt indicators published in 2020, "the most used indicator is the debt-to-GDP ratio. This indicator measures the level of indebtedness related to the country's economic activity." (INTOSAI, 2020, p. 33) The OECD publication on public debt indicators also states that public debt-to-GDP is a key indicator of the sustainability of public finances. (OECD, 2023) One of the so-called Maastricht criteria is also based on this, according to which public debt should not exceed 60% of GDP. In this context, several EU member states have introduced a fiscal rule that focuses on the public debt-to-GDP ratio. Hungary is one of them. The ratio of public debt to GDP, i.e. the public debt ratio, is at the heart of the Hungarian public debt rule. The national debt rule enshrined in the Fundamental Law of Hungary states that the national debt ratio must be reduced every year until it falls below 50 percent. (However, the Fundamental Law also establishes two exceptions to this.)

3 International Organization of Supreme Audit Institutions

After the global financial crisis of 2008-2010, most EU countries were able to reduce their debt-to-GDP ratios, at least to some extent, but the COVID pandemic had the opposite effect. (Briceño & Perote, 2020) On the one hand, the budget deficit soared, causing a significant increase in public debt, and on the other hand, real GDP fell. Together, the two factors pushed the debt-to-GDP ratio to a peak. The authors also note that deflation in some eurozone countries also increased the public debt ratio. In their article, in the table summarizing the factors influencing the public debt ratio, they present inflation as a factor reducing the public debt ratio. In contrast, this article shows that this effect of accelerating inflation only applies in the short term, as the nominal GDP-increasing effect of inflation is partially or fully offset over time by the increase in the implicit interest rate on government debt.

Theoretical correlations between the government debt ratio and inflation trends

When interpreting the budgetary effects of high inflation, it is not sufficient to examine monetary policy responses alone. Botos (2023) emphasizes that Hungarian inflation was the result of a combination of several internal and external factors, and monetary policy alone cannot be considered sufficient in its management. Kutasi et al. (2024) point out in this connection that managing high inflation through monetary tightening may entail significant real economic and social costs, while fiscal sustainability considerations also come to the fore. Based on these approaches, it is justified to examine inflation not only as an issue of price stability, but also as an issue of budgetary and public debt dynamics.

The denominator of the public debt ratio is nominal GDP. Consequently, inflation[4], or more precisely the average increase in the price level of the national economy, which is shown by the so-called GDP deflator, increases the denominator, thereby reducing the value of the ratio. Would it be that simple: if the price level increases at a faster rate, the country's indebtedness will decrease? Of course not, since price increases also affect other components of the public debt ratio, for example, they can increase public debt through an increase in government spending and restrain economic growth.

Several studies have concluded that the effect of reducing the public debt ratio is strongest when the increase in the price level is reflected in the nominal GDP value faster than in the average financing costs of the public debt (Fukunaga, Komatsuzaki and Matsuoka, 2019; IMF, 2013). This mechanism is formulated in international literature as a short-term debt-reducing effect of the increase in the price level. However, the literature also emphasizes that this effect

4 Inflation expresses the average increase in the price of consumer goods, but it can also increase the price of capital goods and community services, and it can also worsen the terms of trade, all of which increase the general price level of the national economy.

in itself does not mean a lasting improvement in sustainability, since the increase in the price level sooner or later triggers an increase in interest rates, and the increase in financing costs increases public debt. (Fukunaga, Komatsuzaki and Matsuoka, 2019; Blanchard, 2019)

Despite theoretical derivations, in daily practice we can encounter views that present inflating away public debt as a real possibility, ignoring the long-term negative effects of inflation that increase indebtedness. One reason for this may be that the rise in the price level influences the development of the public debt ratio through several transmissions. We will mention only two of these. The first is the increase in primary budget expenditures, which increases the budget deficit and thereby the public debt. The second is the increase in the interest rate level, which, however, usually only occurs with a time lag. Why?

To better understand the phenomenon, we need to familiarize ourselves with the concept of the implicit interest rate of public debt, which is an indicator expressing the average interest burden of the total stock of public debt. Literature considers it an indicator that captures the financing burden of public debt well because it not only takes into account the current market yield of issues related to new debt but also quantifies the actual interest burden on the total debt stock in the budget in a given period (Escolano, 2010). Public debt is made up of debt elements raised at different times and under different conditions, therefore government securities issued and loans raised at a lower fixed interest rate previously reduce the implicit interest rate of public debt until their maturity. The longer the maturity of the fixed-interest instruments financing the public debt, the slower the repricing of the interest rate level of the public debt occurs, while the greater weight of shorter-term and variable-interest debt elements results in faster repricing[5].

The impact of the implicit interest rate on public debt occurs primarily through budgetary interest expenditure. An increase in the average interest rate increases the budget's interest expenditure related to debt service and, through this, the budget deficit. A higher budget deficit, in turn, leads to an increase in the amount of public debt. According to the related literature, therefore, the issue of the development of the interest burden is one of the direct determining factors of the sustainability of public debt. The yields of new government securities issues follow the tightening of monetary policy (increase in the key interest rate), the rise in the price level or the deterioration of investor confidence relatively quickly, while the implicit interest rate only gradually adapts to changes in the monetary environment, since the outstanding debt stock is composed of elements issued at different times and under different interest conditions (Abbas et al., 2010; Attinasi and Metelli, 2016). However, the time required for repricing also slows down the decline in the implicit interest rate once it

5 In line with this, the IMF, when assessing the sustainability of public debt, also starts from the rate and extent to which changes in financing conditions (such as interest rates) increase or decrease the budget's interest expenditure (IMF, 2013).

has increased, as high-yielding government securities issued during periods of high inflation raise the average interest rate until their maturity.

Instead of providing a further theoretical explanation of these relationships, the study uses the example of Hungary to show how the sharp rise in price levels in 2022 facilitated the reduction of the public debt ratio in that year, and how the resulting increase in primary expenditure, and especially interest expenditure, narrowed the scope for Hungarian fiscal policy to meet the public debt rule. The data makes it even more obvious that inflation exacerbates indebtedness and slows down economic growth in the medium term.

The calculations were performed using Hungarian data, but nevertheless the conclusions that can be drawn based on empirical facts are relevant for all countries that use the debt/GDP ratio as an indicator of their indebtedness.

Methodology and databases

The starting point of the analysis is Hungary's Convergence Program for 2022-26 (hereinafter: CP2022), which was published by the Hungarian Government in April 2022. In it, the government forecasted 8.9 percent inflation (HICP) for 2022, while inflation actually jumped to 15.3 percent in 2022.

In the following, we will capture the budgetary effects of higher-than-expected, soaring inflation as the deviation of actual budget revenue, expenditure and deficit data from the figures forecasted in CP2022. The deviation of actual data from the forecast could of course not only be caused by higher-than-expected inflation, but the surge in inflation directly or indirectly decisively influenced the deviation of budgetary processes from the forecast.

The use of the CP2022 data was justified by several factors. On the one hand, these data are determined according to the ESA (European System of Accounts) methodology, and therefore they are also suitable for international comparison. On the other hand, they contain budget data as a percentage of GDP, so they are also easily comparable with each other. To understand them, it is not necessary to know the size of the Hungarian public finances or the exchange rate of the Hungarian currency, the forint. An additional advantage is that convergence programs are official and public documents of the Hungarian Government, so when working with these data, the criticism that the analyst's own estimates contain distortions cannot arise.

Another important methodological element of the study is that it uses the GDP deflator, not the consumer price index, to examine the direct impact of price increases on the development of the public debt ratio. The methodological reason for this is that the denominator of the public debt ratio is nominal GDP, to which the directly related price index is the GDP deflator. According to Eurostat's definition, the GDP deflator is an implicit price index that is the ratio of the aggregate at current prices to the aggregate at constant prices, i.e. it directly expresses the relationship between nominal and real GDP. (Eurostat,

n.d.). On the other hand, the use of the GDP deflator in the study is also justified by the economic content of the indicator. The analysis of the European Central Bank states that the GDP deflator measures the price level change of a wider range of domestically produced final goods and services, thus including price movements of investments, government consumption and net exports in addition to household consumption. In contrast, the consumer price index uses a narrower, consumer basket-based approach (ECB, 2016).

The difference between the consumer price index and the GDP deflator can be particularly significant in periods when the government also uses administrative means to curb inflation. Several such measures were in force in Hungary during the period under review, such as price caps on certain foods, fuel price caps, and regulation of household energy prices. These measures directly mitigated the price increase reflected in the consumer price index but did not necessarily fully translate into changes in the price level of the economy as a whole. For this reason, the GDP deflator is a more suitable indicator for quantifying how the increase in the price level affects the denominator of the public debt ratio.

However, it is still appropriate to discuss the relationship between inflation and the public debt ratio in the article, since inflation is the target function of both economic policy and monetary policy. For example, the government has taken measures to curb inflation, the interest rate on government securities for households has been adjusted to inflation, and when determining the key interest rate, the Monetary Council has taken inflation and not the GDP deflator into account. Therefore, the study conceptually examines the relationship between inflation and the government debt ratio but empirically uses the GDP deflator to quantify the direct price effect on nominal GDP.

Results

Short-term budgetary effects of the sudden price increase

CP2022 contained a forecast of 5.7 percent for the GDP deflator in 2022 and a forecast of 7.3 percent for the 2023 value. In contrast, the GDP deflator actually jumped to 14.0 percent in 2022 and then rose to 15.0 percent in 2023.

Table 1 summarizes the government forecasts contained in the CP2022 regarding the development of budget processes for 2022 and 2023, and what the actual data showed in comparison.

Table 1: CP2022 forecasts and their actual development in 2022 and 2023 (data in percentage of GDP)

Appellation	2022. year		2023. year	
	Forecast	Forecast – facts for 2022	Forecast	Forecast – facts for 2022
Total revenue of the government sector	41,1	1,8	41,8	1,0
Total expenditure of the government sector	46,0	3,1	45,1	4,6
Total deficit of the government sector	4,9	1,3	3,5	3,5
Primary deficit of the government sector	2,2	1,2	0,5	1,8
Interest expenditure of the government sector	2,7	0,1	3,0	1,7
Public debt index %	76,1	-2,0	73,8	-0,5

Source: Own compilation based on KP2022 KSH STADAT 21.1.1.17 and KSH EDP report (2026)

The data in Table 1 clearly show that the budgetary effects of soaring and then remaining high price increases can be compared to the atrocities committed in the large bed of Procrustes. It is true that price increases increased budget revenues, but the extent of this did not even come close to the increase in expenditures, and consequently the government sector deficit increased significantly. In 2022, this was primarily caused by the increase in the primary deficit. In 2023, however, the increase in interest expenditures was the main reason why the government sector deficit doubled compared to the KP2022 forecast. The fiscal consolidation outlined in CP2022 (a rapid reduction in the government sector deficit) turned into the opposite in 2023, with the government sector deficit amounting to 7.0 percent of GDP.

It is useful to review which types of budget expenditure have primarily increased (in proportion to nominal GDP) as a result of the soaring inflation[6]. The data in Table 2 will help with this. We have also included the actual data for 2024 and 2025 in the table, because they clearly illustrate that inflation has permanently increased certain types of budget expenditures.

6 Since nominal GDP grew by 18.7 percent in 2022 and 14.1 percent in 2023, expenditures that did not increase in proportion to nominal GDP also increased extremely dynamically in terms of amount.

Table 2: Difference between the Government sector expenditure forecast by CP2022 and the actual expenditure, for 2022, 2023, 2024 and 2025 (in % of GDP)

Government expenditure (% of the GDP)	2022. year		2023. year		2024. year		2025. year	
	fore-cast	fact – forecast	fore-cast	fact - forecast	fore-cast	fact - forecast	fore-cast	fact - forecast
Compensation of employees (D.1)	10,9	**-0,6**	9,7	**0,1**	9,5	**0,8**	8,8	**1,9**
Intermediate consumption (P.2)	7,3	**1,3**	7,4	**1,4**	6,8	**1,7**	6,7	**1,8**
Social payments	12,5	**-0,8**	12,1	**-0,1**	11,7	**0,3**	11,2	**0,8**
Subsidies (D.3)	1,1	**0,7**	1,1	**1,6**	1,0	**1,2**	0,9	**1,2**
Gross fixed capital formation (P.51)	5,3	**0,0**	5,6	**-0,2**	6,2	**-1,8**	6,1	**-2,3**
Capital transfers (D.9)	2,8	**-0,1**	4,1	**-2,3**	3,6	**-2,1**	3,3	**-1,6**
Other expenditures	3,5	**2,2**	2,1	**2,5**	1,8	**1,9**	2,0	**2,6**
Interest expenditure (D.41)	2,7	**0,1**	3,0	**1,7**	3,0	**1,9**	2,8	**1,0**
Total expenditure	**46,1**	**3,0**	**45,1**	**4,6**	**43,6**	**3,7**	**41,8**	**5,5**

Source: KP 2022, KSH STADAT 21.1.1.17 and EDP report (2026)

The last row of Table 2 shows that total government expenditure increased significantly (by 3.0 percentage points) in 2022, compared to the CP2022 projections. The positive deviation affected most types of budget expenditure. Gross fixed capital formation and capital transfer expenditure remained essentially unchanged as a percentage of GDP. Only budget expenditure on employee compensation and social benefits decreased as a percentage of GDP. This can be explained by the fact that the budget did not have sufficient revenues to fully adjust public sector wage increases and social benefits to inflation. However, the lower wage increase was only a temporary saving, as wage increases in the private sector followed inflation and sooner or later public sector wages had to catch up with private sector wages to avoid aggravating the public sector labor shortage. The data in the table show that the correction took place in both 2024 and 2025. In 2022, interest expenditure barely increased as a percentage of GDP. Its growth accelerated in 2023, then increased even further (to 4.9% of GDP) in 2024, and then decreased to 3.8% of GDP by 2025, but was still 1.0 percentage point higher than the level projected by CP2022.

In 2023, the total expenditure of the government sector as a percentage of GDP increased by 4.6 percentage points compared to the CP2022 forecast. Current consumption, subsidies, other expenditure and interest costs increased significantly as a percentage of GDP. These are the budget expenditures that typically have a small multiplicative effect. Their increase was a direct consequence of inflation. In contrast, gross fixed capital formation expenditure and capital transfer expenditure, which in principle have a significant multiplicative effect, decreased significantly as a percentage of GDP. This is mainly because the government was forced to restrain these expenditures. Consequently, the redistribution rate, which increased significantly due to inflation, had only a small additive effect on economic growth. The same relationship can be observed in 2024 and 2025. In the latter year, the GDP-proportional value of gross fixed capital formation was already 2.3 percentage points lower than the value forecast in CP2022. The figures indicate that inflation has (in Hungary during the analyzed period) a slowing effect on economic growth, which has moderated the impact of inflation on nominal GDP growth.

Returning to our analogy, we can say that by 2023, inflation had greatly increased three types of expenditure (current consumption, subsidies, and interest payments) as a proportion of GDP, i.e., it had "stretched out these three limbs" like a modern Procrustes. In addition, it had "twisted the arm" of a fourth (employee wages).

However, the Hungarian economy was still "suffering" in a large Procrustes bed in 2022 and 2023, so the risk of non-compliance with the public debt rule, although visible[7], still seemed remote. The public debt ratio decreased by far more than forecast in 2022, as the value of the GDP deflator became nearly three times higher than forecast, and this increased the denominator of the public debt ratio by a greater extent than the approximately 25 percent (1.3 percentage point) increase in the government sector deficit. In 2023, the high GDP deflator made it possible to reduce the public debt ratio despite the fact that the government sector deficit doubled compared to what was forecast in CP2022.

The question arises as to why the price increase in 2022 did not lead to a similar increase in the public debt ratio? The data in Table 3 help answer this question. In addition to the public debt ratio and the implicit interest rate, the table contains data on the two other factors in proportion to GDP that most determine the change in the numerator of the public debt ratio. One is the primary deficit of the government sector, the second is the development of interest expenditures. (In addition to these, other factors also influence the public debt ratio, the most significant of which is the revaluation of foreign currency debt due to changes in the exchange rate of the forint, but several other items also fall into this category.)

7 See Pulay (2024), which is an edited version of a conference presentation given on 23 February 2023.

The table shows that in 2022 the primary deficit increased by 1.2 percentage points compared to the forecast in CP2022, but the higher-than-planned increase in interest expenditure contributed only 0.1 percentage points. Why? Because the implicit interest rate on public debt increased only modestly in 2022, from 3.7 percent to 4.4 percent, despite the soaring inflation. What is behind this?

Table 3: Deviations of the public debt ratio, primary balance and interest expenditure from CP2022 forecasts, and the actual implicit interest rate on the debt stock, 2022–2025 (percentage points and percent)

Appellation	2022.		2023.		2024.		2025.	
	forecast of CP2022	fact	forecast of CP2022	fact	forecast of CP2022	fact	forecast of CP2022	fact
Change of the public debt index	-0,7	-2,1	-2,3	-0,8	-3,4	0,2	-3,5	1,1
Primary balance	-2,2	-3,4	-0,5	-2,3	0,5	-0,2	1,3	-0,9
Interest expenditure	2,7	2,8	3,0	4,7	3,0	4,9	2,8	3,8
Implicit interest rate	3,7	4,4	4,3	7,2	4,3	7,2	4,3	5,3

Source: Own compilation based on CP2022 and Eurostat gov_10a_main (2026)

Note: the implicit interest rate is own calculation based on Eurostat gov 10a main (2026)

In line with the general points made above the Hungarian public debt is also financed by bonds with different maturities, partly fixed and partly variable interest rates (and to a lesser extent loans). Consequently, during the period of increasing inflation, the implicit interest rate on public debt rose more slowly than inflation, as the interest rate on fixed-interest bonds did not change, and the interest rate on longer-term bonds typically rose less than inflation. However, government bonds issued during times of high inflation had to provide a high yield, otherwise no one would have bought them. This was especially the case for retail government securities, which the population began to redeem en masse in the fall of 2022, as their yield was far below inflation. In parallel with the redemption, the population began to buy those series of government securities whose yield exceeded the prevailing inflation rate, which significantly increased the budget's interest expenditure over the next three years. The implicit interest rate on Hungarian public debt increased by 2.8 percentage points in 2023.

The spillover effects of the 2022 spike in inflation in 2024 and 2025 - How does Procrustes shrink his victim to fit into the smaller bed?

In 2024, inflation, and in parallel the GDP deflator, declined extremely rapidly, while the implicit interest rate continued to rise. This had two effects

that posed a serious challenge for fiscal policy. First, the GDP deflator and the implicit interest rate became very close to each other (the GDP deflator was only 0.4 percentage points higher than the implicit interest rate), i.e. the comfortable situation in which the government debt ratio could be reduced even with a significant primary deficit was eliminated. Second, interest expenditure continued to increase, significantly worsening the balance of the public sector. As a result of these two effects, in order to comply with the public debt rule, the primary deficit of the public sector had to be eliminated, and even a positive primary balance had to be achieved. In addition, the acceleration of economic growth could also have contributed to the reduction of the public debt ratio.

The government was also aware of this challenge. Therefore, in the Convergence Program of Hungary 2023-2027 (CP2023), it expected that the primary balance of the government sector would become positive in 2024 and then in 2025 as well, and that the GDP volume would grow by 4 percent. In the spring of 2024, it became clear that the 4 percent GDP growth in 2024 was unrealistic. Therefore, in April 2024, in the Convergence Program of Hungary 2024-2028 (CP2024), the government expected "only" 2.5 percent economic growth for 2024, but set a positive primary balance target (0.4% of GDP). However, optimism remained regarding 2025, i.e. the forecast of 4.1 percent GDP growth. If this had been achieved, a zero primary balance would have been sufficient to reduce the government debt ratio.

First, we examine the consequences of efforts to improve the primary balance, namely which types of expenditure were reduced in relative terms, as a percentage of the GDP in connection with the improvement in the primary balance. Table 4 contains the data necessary for this analysis.

Table 4: Actual general government expenditure in 2023–2025 and changes between years (as a percentage of GDP and in percentage points)

Type of expenditure	2023	2024	2025	2024–2023 difference	2025–2024 difference	2025–2023 difference
	fact	fact	fact			
Compensation of employees (D.1)	9,8	10,3	10,7	0,6	0,4	0,9
Intermediate consumption (P.2)	8,8	8,5	8,5	-0,3	0,0	-0,3
Social payments	12,0	12,0	12,0	0,0	0,0	0,0
Subsidies (D.3)	2,7	2,2	2,1	-0,6	0,0	-0,6
Gross fixed capital formation (P.51)	5,4	4,4	3,8	-1,0	-0,6	-1,6
Capital transfers (D.9)	1,8	1,5	1,7	-0,3	0,3	0,0
Other expenditure	4,6	3,7	4,6	-0,9	1,0	0,0
Primary expenditure total	45,0	42,4	43,5	-2,6	1,0	-1,6

Type of expenditure	2023	2024	2025	2024–2023 difference	2025–2024 difference	2025–2023 difference
	fact	fact	fact			
Interest expenditure (D.41)	4,7	4,9	3,8	0,2	-1,1	-0,9
Total expenditure	49,7	47,3	47,3	-2,4	-0,1	-2,5

Source: KP 2022, KSH STADAT 21.1.1.17 and EDP report (2026)

Table 4 shows that between 2023 and 2024, the primary expenditure of the government sector decreased by 2.6 percentage points. The so-called other expenditure decreased the most. Little is known about their internal composition. In addition, the proportional value of expenditure on gross fixed capital formation and capital transfers to GDP continued to decrease. Thanks to the decrease in energy prices, it was possible to reduce the subsidies introduced in 2022 due to the surge in energy prices.

Subsequently, in 2025, compared to the previous year, the proportional value of expenditure on gross fixed capital formation to GDP decreased further, while expenditure on capital transfers, employee benefits and other expenditure increased slightly. Overall, in 2025, primary expenditure increased by 1.0 percentage points, while interest expenditure decreased by the same amount, so the proportional value of total expenditure to GDP did not change significantly compared to 2024. Unfortunately, however, the failure to further improve the primary balance meant that - also due to the unfavorable development of other factors - the public debt ratio increased significantly in 2025, and the public debt rule was not met.

In summary, we can conclude that Procrustes did a thorough job even during the period of disinflation, severely cutting their budget expenditures, and taking the largest chunks from the very expenditures that could have served to accelerate economic growth.

Given the above, it is not surprising that the government's forecasts of a rapid increase in economic growth in 2024 and 2025 did not come true either. We now know, what, in 2023 and 2024 could only be described as a risk that the government's expectations regarding economic growth were extremely optimistic[8]. They did not take into account that the 2022-2023 inflation shock forced businesses to cut back on their investments and households to cut back on their consumption, even after inflation had subsided. They also underestimated the impact that relatively less was allocated from the state budget for investments and investment support. The lack of economic growth, together with other negative factors, led to an increase in the public debt ratio in 2024 and 2025. Table 5 summarizes the developments in the factors most influencing the public debt ratio.

8 The Fiscal Council and several think tanks have also warned that there are risks to achieving the projected dynamic growth. See the Fiscal Council's opinion on Hungary's draft budgets for 2024 and 2025 (Fiscal Council, 2023, 2024).

Table 5: Development of the most important factors affecting the public debt ratio between 2022–2025

Appellation	2022. year	2023. year	2024. year	2025. year
Real GDP growth %	4,2	-0,8	07	0,4
GDP deflator (%)	14,0	15,0	7,6	6,3
Nominal GDP growth %	18,7	14,1	8,3	6,8
General government primary balance % of GDP	-3,4	-2,3	-0,2	-0,9
General government balance % of GDP	-6,2	-7,0	-5,1	-4,7
Implicit interest rate (%)	4,4	7,2	7,2	5,3
implicit interest rate /GDP-deflator	0,3	0,5	0,9	0,8
Public debt index %	**74,1**	**73,3**	**73,5**	**74,6**
Change of the Public debt index compared to the previous year (percentage point)	**-2,1**	**-0,8**	**0,2**	**1,1**

Source: KSH STADAT 21.1.1.1., 21.2.1.2., KSH EDP report (2026), own calculation and editing based on Eurostat gov_10a_main (2026)

Note: the implicit interest rate is own calculation based on Eurostat gov 10a main (2026)

Based on the data in the table, the following connections can be highlighted.

- The 2022-2023 inflation shock pushed the Hungarian economy onto a stagnant path from 2023.
- The implicit interest rate on public debt approached the value of the GDP deflator by 2024, and as a result, the ratio of the two indicators contributed only very modestly to the decrease in the public debt ratio.
- The primary balance of the government sector showed a serious deficit in 2022 - primarily due to high inflation. Although the primary balance improved in the following years, the increase in interest expenditure and its subsequent high level led to only a small improvement in the government sector balance, and due to the high deficit – and some other factors – in 2024 and 2025, public debt grew faster than nominal GDP.

Conclusions

Inflation can rightly be compared to Procrustes, as it can present a favorable picture of fiscal processes in the short term with the promise of rapid debt reduction. Rapid growth in nominal GDP can temporarily reduce the government debt-to-GDP ratio, while the budget deficit and nominal levels of government debt may continue to increase. However, this effect cannot be considered a permanent or cost-free debt reduction mechanism.

High inflation is reflected in the increase in budget expenditures and, with some delay, in the increase in the financing costs of public debt. It is particularly important that not only the increase in inflation, but also its decrease is followed by a delayed correction of the implicit interest rate of public debt, which is why interest expenses remain persistently high even during the period of disinflation. Therefore, further reduction of the public debt ratio increasingly requires an improvement in the primary balance, which may also slow down economic growth through the reduction of budget expenditures.

It is important to emphasize that it is not that high inflation is conducive to reducing the public debt ratio, and low inflation makes this more difficult, but that rising inflation temporarily creates relatively favorable conditions for reducing the public debt ratio, but the effect of the same rising inflation, which worsens the primary balance of the budget, then increases interest expenses and restrains economic growth, makes reducing the public debt ratio more difficult for years.

Based on the results of the study, inflation cannot be considered a sustainable debt reduction tool. Therefore, for economic policy, and within it, fiscal policy, avoiding a spike in inflation is a favorable strategy, as it is futile to rely on inflation's lasting debt-reducing effect.

References

1. Abbas, S. M. A., Belhocine, N., ElGanainy, A., & Horton, M. (2010). A historical public debt database. IMF Working Paper WP/10/245. International Monetary Fund. https://www.imf.org/external/pubs/ft/wp/2010/wp10245.pdf
2. Ancient Greece Reloaded. (n.d.). Procrustes. Retrieved June 9, 2026, from https://www.ancientgreecereloaded.com/files/ancient_greece_reloaded_website/myths_and_stories/procrustes.php
3. Attinasi, M. G., & Metelli, L. (2016). Is fiscal consolidation self-defeating? A panel-VAR analysis for the euro area countries. ECB Working Paper Series, No. 1883. European Central Bank. https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1883.en.pdf
4. Blanchard, O. (2019). Public debt and low interest rates. American Economic Review, 109(4), 1197–1229. https://paulgp.com/speeches/blanchard_2019_aea.pdf
5. Botos, K. (2023). Inflation and finance. Public Finance Quarterly, 69(4), 84–94. https://doi.org/10.35551/PFQ_2023_4_5
6. Briceño, H. R., & Perote, J. (2020). Determinants of the public debt in the eurozone and its sustainability amid the COVID-19 pandemic. Sustainability, 12(16), Article 6456. https://doi.org/10.3390/su12166456
7. Domar, E. D. (1944). The "burden of the debt" and the national income. The American Economic Review, 34(4), 798–827. https://tmypfunam.files.wordpress.com/2013/01/domar-1944.pdf

8. Escolano, J. (2010). A practical guide to public debt dynamics, fiscal sustainability, and cyclical adjustment of budgetary aggregates. IMF Technical Notes and Manuals 10/02. International Monetary Fund. https://www.imf.org/external/pubs/ft/tnm/2010/tnm1002.pdf
9. European Central Bank. (2016). What accounts for the recent decoupling between the euro area GDP deflator and the HICP excluding energy and food? Economic Bulletin, Issue 6, Box 5, 46–48. https://www.ecb.europa.eu/pub/pdf/other/eb201606_focus05.en.pdf
10. Eurostat. (2026). Government deficit/surplus, debt and associated data (gov_10dd_edpt1). Retrieved July 9, 2026, from https://ec.europa.eu/eurostat/databrowser/view/gov_10dd_edpt1/default/table?lang=en
11. Eurostat. (n.d.). Gross domestic product (GDP) and main components (output, expenditure and income) (namq_10_gdp). Retrieved March 19, 2026, from https://ec.europa.eu/eurostat/cache/metadata/EN/namq_10_gdp_esms_pt.htm
12. Fukunaga, I., Komatsuzaki, T., & Matsuoka, H. (2019). Inflation and public debt reversals in advanced economies. IMF Working Paper WP/19/297. International Monetary Fund. https://www.imf.org/-/media/files/publications/wp/2019/wpiea2019297-print-pdf.pdf
13. International Monetary Fund. (2013). Staff guidance note for public debt sustainability analysis in market-access countries. International Monetary Fund. https://www.imf.org/external/np/pp/eng/2013/050913.pdf
14. INTOSAI. (2020). GUID 5250: Guidance on the audit of public debt. https://www.issai.org/wp-content/uploads/2020/12/GUID-5250-Guidance-on-the-Audit.pdf
15. Költségvetési Tanács. (2023). A Költségvetési Tanács véleménye Magyarország 2024. évi központi költségvetéséről szóló törvényjavaslat tervezetéről [Opinion of the Fiscal Council on the draft bill on Hungary's central budget for 2024]. Országgyűlés. https://www.parlament.hu/documents/126660/64323598/4-2023.05.23.+A+KT+V%C3%A9lem%C3%A9nye+Magyarorsz%C3%A1g+2024.+%C3%A9vi+k%C3%B6zponti+k%C3%B6lts%C3%A9gvet%C3%A9s%C3%A9r%C5%91l+sz%C3%B3l%C3%B3+t%C3%B6rv%C3%A9nyjavaslat+tervezet%C3%A9r%C5%91l.pdf/1efd34af-a211-1557-6054-0915368ac430?t=1684948388599
16. Költségvetési Tanács. (2024). A Költségvetési Tanács véleménye Magyarország 2025. évi központi költségvetéséről szóló törvényjavaslat tervezetéről [Opinion of the Fiscal Council on the draft bill on Hungary's central budget for 2025]. Országgyűlés. https://www.parlament.hu/documents/d/koltsegvetesi-tanacs/kt-vel-2025-os-koltsegvetes-alairasra
17. Központi Statisztikai Hivatal. (2026). A makrogazdaság főbb adatai, 1995–2024 [Main macroeconomic data, 1995–2024]. STADAT. https://www.ksh.hu/stadat_files/gdp/hu/gdp0001.html
18. Központi Statisztikai Hivatal. (2026). A bruttó hazai termék (GDP) negyedéves volumenindexei [Quarterly volume indices of gross domestic product]. STADAT. https://www.ksh.hu/stadat_files/gdp/hu/gdp0086.html
19. Központi Statisztikai Hivatal. (2026). A kormányzati szektor főbb adatai,

1995–2025 [Main data of the general government sector, 1995–2025]. STADAT. https://www.ksh.hu/stadat_files/gdp/hu/gdp0017.html
20. Központi Statisztikai Hivatal. (2026). Jelentés a kormányzati szektor egyenlegéről és adósságáról: 2026. évi I. EDP-jelentés [Report on the deficit and debt of the general government sector: First EDP report of 2026]. https://www.ksh.hu/s/kiadvanyok/jelentes-a-kormanyzati-szektor-egyenlegerol-es-adossagarol-2026-i-edp-jelentes/index.html
21. Kutasi, G., Czeczeli, V., & Szalai, P. (2024). Inflation, monetary pain, fiscal relief. Public Finance Quarterly, 70(3), 70–86. https://doi.org/10.35551/PFQ_2024_3_4
22. Magyarország Kormánya. (2022). Magyarország konvergencia programja, 2022–2026 [Hungary's convergence programme, 2022–2026]. Magyarország Kormánya. https://kormany.hu/application/documents/8841ff8a-337b-4c51-835a-30256397b3d6/download
23. Magyarország Kormánya. (2023). Magyarország konvergencia programja, 2023–2027 [Hungary's convergence programme, 2023–2027]. Magyarország Kormánya. https://kormany.hu/application/documents/a46ffb75-517c-49ec-8b3e-3c64c893a12b/download
24. Magyarország Kormánya. (2024). Magyarország konvergencia programja, 2024–2028 [Hungary's convergence programme, 2024–2028]. Magyarország Kormánya. https://cdn.kormany.hu/uploads/sheets/d/d0/d01/d01083d8c20e-7821fa71edad692e996.pdf
25. OECD. (2023). General government debt. OECD Data. Retrieved October 31, 2023, from https://data.oecd.org/gga/general-government-debt.htm
26. Pulay, Gy. Z. (2024). Nyertese-e az állam az inflációnak? [Is the state a beneficiary of inflation?]. In R. Kovács, P. Bedekovics, & A. Sükösd (Eds.), Ipar 4.0: Fenntarthatóság és energia [Industry 4.0: Sustainability and energy] (pp. 34–45). Károli Gáspár Református Egyetem, Gazdaságtudományi, Egészségtudományi és Szociális Kar; Patrocinium Kiadó