Inflation and finance

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Abstract

The study concentrates on the discussion in Hungary about the causes of contemporary inflation: what are the main causes of it and how to rank them. It tries to establish whether the simple methods of monetary policy are appropriate to stop inflation. The method of the study is an overview of recent professional articles and the analysis of the data of Central Statistical Office publications. It concludes that the Hungarian inflation has several internal and external causes: uncovered spending power especially in time of the COVID epidemic, the growing energy prices because of the Ukrainian war, money retention for Hungary in Brussels, the inadequatetiming of monetary policy actions, the role of imbalance of payments and exchange rates evolution – direct and indirect impulses-, the role of inherited state debts and the accumulated wage distortions which is now to correct, and the tax policy which relies mainly on VAT. The conclusion of the study is that only by autonomous monetary policy actions cannot deal with inflation, because the national policy cannot get rid of the international money markets. It is time to change the tax policy for a more structured one relying on the progressive income taxes.
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Introduction

A number of studies have been published on the international experience of the recent inflation flare-up. As international data show that economic output has fallen almost everywhere, the spectre of *stagflation* has emerged: is what happened in the 1970s not happening: stagnation with high inflation? In addition, there is the fundamental question of what has caused inflation, how to stop it, and what the real economic sacrifices are to be made in order to curb it Transitional or permanent GDP decline? What have been the monetary policy responses so far, and what has fiscal policy done? What tools have governments used, mainly in the area of fiscal policy, to curb inflation?

International experience shows that the disinflation has not been accompanied by a lasting real sacrifice[1]. However, it has been shown that a sharp tightening of interest rates has always been necessary to bring down inflation, which has a negative impact on fiscal sustainability. [2] According to one study, "if relative price adjustments are persistent and higher inflation triggers secondary effects, central banks have no choice but to react. Of course, calibrating the response requires a trade-off. Too much and too fast tightening can cause unnecessary damage. But doing too little could force a bigger and more costly tightening later. Higher energy and food prices are putting significant pressure on the cost of living, which could trigger budgetary intervention." (Czeczeli et al., p. 95)

According to a recent IMF (2023) analysis, monetary policy should remain on a tightening path (for now) to restore price stability, and fiscal policy should aim to ease cost-of-living pressures while maintaining a sufficiently tight stance, also consistent with monetary policy[3].

Naturally, everyone here is also interested in analysing today's *domestic inflation*.

Causes of inflation

Europe-record domestic inflation is thought by many to be caused by *high energy prices* as a result of the Russian-Ukrainian war. But it is not just about cost-push inflation. At the same time, the price rise cannot be interpreted as the result of excess demand alone; although, undoubtedly, the outflow of purchasing power has played an important role. The fact is that on the cost side, the government has tried to prevent price increases in the most important areas by interfering in the price system – by administrative means, the so-called price caps. But the retail firms tried to make up for their losses by raising the prices of other products... So inflation rolled on nicely. As an addition, in 2022, nature conspired against the Hungarian economy, as the country was hit by an extreme drought. This has led – directly and indirectly – to higher food prices. Supply prices have also become more expensive at home, and export difficulties have not helped to maintain price stability. Import prices became higher by falling exchange rate....

The key to understand inflation in Hungary, beyond external conditions and natural disasters, lies in the complex interplay between the budget, the balance of payments, the foreign exchange balance, interest rates and the exchange rate.

1 Balázs Spéder – Balázs Vonnák: Inflation shocks and disinflation: stylised facts based on the last 50 years, Hitelintézeti Szemle, Vol. 22 Issue 3, 26–47 September, pp. 26-47

2 CZECZELI VIVIEN – KOLOZSI PÁL PÉTER – KOVÁCS KINGA FLOWER – KUTASI GÁBOR – TORDA SZTELLA: The non-monetary treatment of inflation in EU countries .Fiscal and regulatory responses in the short term to the increase in inflationary pressures in 2022 in EU countries . Külgazdaság March-April 2023

3 (IMF (2023). World Economic Outlook. Update. January 2023. https://www.imf.org/-/media/Files/ Publications/WEO/2023/Update/January/English/text.ashx)

A study has shown[4] that domestic demand has increased significantly since the Fidesz government came to power in 2010, mainly due to a surge in household credit. This was reflected in a marked increase in housing and car purchases. Family policy, the existence of discounts on housing and purchases, and car buying, have all played a part in the outflow of money. Since budget expenditure could not in principle be increased significantly because of the 3 percent deficit limit, there was little scope for wage increases in sectors financed by the budget, especially not for major corrections that should be the result of decades of inherited problems. However, by keeping the lending rate low, the government has made it possible to maintain and even expand consumption. Not only in the budget-financed sector, but in general, in the productive sector, too. In the corporate sector, significant wage increases took place in the 2010s for market reasons, mainly due to labour market tensions and labour shortages. This has caused an increase in purchasing power and, among other things, a *strong disconnect* between the two types of sector (the wages of the budgetary and the productive sectors).

In the meantime, for pensions financed from the budget, indexation in line with inflation ensured that their purchasing power was maintained. (After all, the autonomy of the social security fund was practically abolished, and the payment of contributions by companies was turned into a social contribution, a tax-like item. Since the so-called Swiss indexation was discarded after 2010, the average increase in the wage level had no impact on pensions. (The Swiss indexation was also influenced by inflation and average wage growth.) But with 13th month pensions, it was possible to show that the real value of pensions increased *beyond* the level of purchasing power. What is undoubtedly true. But the disconnect between pensions and average wages has increased... This has become a particular problem for low pensions, in inflationary times.

The economy continued to grow dynamically in the second half of the decade. Low interest rates have helped this, and so there has not been a major supply-side shortfall on the domestic side. However, a significant part of consumer demand is also directed towards imported goods. How the forint exchange rate develops is therefore important. Because if it deteriorates, it will have an inflationary effect on imports. But in the meantime, the Covid epidemic came along.

Monetary policy reactions

If we look at the time since 2010, it is essential to highlight this period. Then, as in the rest of the world, purchasing power flowed into the economy out of proportion to output. Dynamizing the economy by expanding demand through borrowing, while certainly unorthodox method, is not at all a Hungarian invention, nor is it

4 Ákos Fellner : Unorthodox economic policy has failed. https://utodaink-jovoje.hu/gazdasag/az_unorthodoxia_kudarca.pdf

exceptional. *This has also been applied by developed market economies*, America leading the way.[5] A Hungarian study cited above, however, found that high domestic inflation was mainly caused by artificially inflated demand.

Hungarian economic policy after 2010 was generally described as unorthodox because it went against the IMF's usual balance of payments proposals. The latter is always about austerity and cutting the budget deficit. After 2010, the government was keen to avoid the IMF's forced requirements and tried to minimise dependence on external financial markets. Avoid the pressure to formulate economic policy according to IMF guidelines. This is why the IMF contract signed by the Bajnai government was cancelled. This allowed the government to introduce sectoral taxes at the beginning of the decade which the IMF would hardly have allowed – in the spirit of IMF conditionality.

It was an important part of the government's programme that, if this was unavoidable, the budget should be primarily indebted in forint, owed to the domestic population, thus reducing the need for external debt financing. (This policy has been successful.)

However, countries that are indebted in foreign currencies and need to refinance their external debt on an ongoing basis must pay particular attention to the evolution of their fiscal balance. Indeed, the budget deficit is definitely a concern for foreign creditors. This in turn *makes* borrowing by countries in deficit much *more expensive*. The interest on the public debt has to be paid from the current budget, which could further increase the *deficit*, and should therefore be avoided. Most lenders only look at a few details at first when setting the interest rate terms on a government loan; but *this is* for sure what they look at..

Small, open countries cannot finance *their external debts* with their own currency, like the world currency- country, the USA. If savings in their own currency are not sufficient to cover the budget deficit in an economy, they need foreign funding. And then interest on foreign loans must be paid continuously in foreign currency and repaid in foreign currency. The increase in the budget deficit will therefore lead to higher external demand for credit. Currency shortages force countries into desperate currency chasing, which *worsens the exchange rate of the currency*. If the *external trade balance* disappears, and if other foreign currency inflows (e.g. EU money due to us is not forthcoming, or tourism is down because of the epidemic), the currency deficit will particularly hurt our currency. At the same time, we also have to deliver transfers in foreign currency in addition to imports (e.g. our EU contribution...) So we need foreign currency! In the case of a vanishing external asset, this also forces foreign borrowing. In turn, imported inflation rises through exchange rate depreciation! Leading to raise interest rates, because of inflation... A vicious circle!

If interest rates are rising on the international financial markets anyway – as the fight against inflation is already underway elsewhere – the domestic market can hardly be left behind. The National Bank cannot afford to stop raising interest rates

5 Raghuram Rajan: Fault lines . Princeton University Press, 2010 https://doi.org/10.1515 .

abroad, because that would be "financial suicide," said the MNB's management. If there is no increase, even domestic money, if it is convertible, will be converted into foreign currency by many people, because it pays more to hold it. Or they keep their foreign currency earnings abroad... And new (renewed) foreign loans are expensive. The cost of borrowing abroad is skyrocketing. Therefore, interest rates should also be raised at home. Higher interest rates in forint, on the other hand, threaten domestic borrowers and domestic private debtors. (Many people in our country have housing loans...) The increase in domestic interest rates, on the other hand, reduces consumption, *which reduces VAT revenues*. And VAT is the most important revenue of our budget! *The deficit is growing* again. Which, as we have seen, makes foreign creditors nervous. So the loan is more expensive. Once again we are in the vicious circle... There is almost no good solution!

What should a government do if it is concerned about the livelihoods of the most deprived layers (and the political consequences of this?) Which risk is to take: *keeping domestic interest rates low*, which makes foreign financing more expensive (and this of course has a knock-on effect on the domestic fiscal situation, since foreign currency interest rates are paid by the budget), or *raising interest rates to* make domestic financing more expensive? The latter, while providing some assurance to foreign creditors and halting the fall in the exchange rate, will *cause a loss of VAT revenue* to the budget through a fall in consumption? So, indirectly, again, it worsens the imbalance, it increases the deficit...[6]

There is also a historical reason for the persistent inflationary pressures and excess demand. The post-war communist takeover resulted in low wages for intellectuals; (and it is this disproportionality that the government *must* inevitably address just *today*.[7])

What is it all about? The concept was developed by István Varga when the forint was introduced: the authority setting prices and wages was based on wage data from the 1938 peace year. These were reduced by multipliers for war losses, to provide a standard of living for those on wages and salaries. However, at the suggestion of the Communist Party, the multipliers were differentiated by strata: workers' wages were multiplied by 0.8, and the intellectuals' by 0.5...[8] The wages of the intellectuals were disproportionately depressed. This should have been corrected over time, but the preparations for World War III in the 1950s and the sharp conflict between reformers and dogmatists in the 1960s were the obstacles. Then, in the 1970s, the accumulated foreign debt became an additional obstacle. The latter has hardly allowed for the creation of free resources in the budget that would have made it possible to make a meaningful adjustment *to the salaries of* these large groups of people financed from

6 Kata Botos: The circles of truth https://utodaink-jovoje.hu/gazdasag/bk_igazsag_korei.pdf

7 See Kata Botos on this: Inflation. https://utodaink-jovoje.hu/gazdasag/inflacio_tortenelmi_szalak.pdf

8 Mányó- Váróczy Violetta PHD thesis :"István Varga the science organizer and economic politician" (2016)

the budget. This did *not* happen *after the regime change*, partly for similar reasons. We have made a desperate effort to meet our external debts so that the newly elected, new democratic government does not collapse. Perhaps the few very good years after 2010 would have provided an opportunity for a correction, but the government then preferred to stabilise the development of export sectors and attract foreign capital. It has given significant budgetary support for such purposes. In addition, the demographic problems identified have meant that family policy has also required significant spending.

We must accept the justification for demand expansion with a social policy background. Still, it should be noted that during the spring 2022 elections, and in the years leading up to them, there was quite a lot of purchasing power flowing out of the economy. And Covid, followed by the cuts in rents for all after the outbreak of the war, and the "fuel price cap", limited the ability of demand to adjust to high energy prices, i.e. to fall. So inflation has accelerated.

Some saw the critical point as the MNB's delay in starting to raise interest rates.[9]

The previously low "interest rate environment" has inflated purchasing power, which has had an inflationary effect. Inflation in Hungary started to rise already in 2015. However, the rate cuts since 2012 continued into 2016, when inflation was already higher than the base rate. Both the Eastern European EU countries and the ECB started raising interest rates slightly earlier, in the summer of 2022. The MNB did not raise interest rates until the end of September, but then it raised them higher than anyone else. However, the correction starting in summer 2022, or September in our case, was no longer sufficient to stop inflation. But it was good for something; (as we shall see.)

Why has the National Bank kept interest rates low a little longer than necessary? Presumably because the government expected this to help economic operators' activity and production, and thus not to reduce the consumption of the (otherwise indebted) population. However, the lesson that the international environment cannot be confronted in interest rate policy has been well learned by the MNB, soon. Hence the very drastic increase in autumn 2022. The latter is due to the psychology of international financial markets, a phenomenon that has a huge impact on the financial sphere. It must be seen that a very large wave of speculation has been launched against Hungary in 2022, ("Along with sharks, all kinds of animals are trying to take big bites out of the fish that is floundering"). In contrast, the MNB was forced to defend the forint by raising the "emergency interest rate".

The war between Russia and Ukraine has further worsened our financial situation. Our balance of payments deteriorated particularly sharply from 2019 onwards, but then in 2022, and this increased inflation. The withholding of money from Brussels, which is hardly arguably linked to the punishment of our attitude on several issues, has been a particular problem for the balance of payments. This creates a foreign exchange deficit, not simply a forint deficit... The foreign exchange deficit has a strong impact on inflation through the deterioration of the forint exchange

9 L Footnote 4

rate. In our case, the foreign exchange deficit is explicitly manifested – not only indirectly – in the deterioration of the budget deficit measured in forint. The cost of loans, which the budget pays, is rising. (And austerity measures are always necessary to reduce deficits.[10])

If the government cannot correct it through fiscal means, then, in an open, small economy, inflation can hardly be brought down by raising interest rates alone. In particular, if the balance of payments is seriously in deficit. The inflationary impact will be felt directly and indirectly through the exchange rate. In our open, small economy, while the deterioration of the balance of payments *directly* increases inflation through the exchange rate fall, by making imports more expensive, the balance of payments deficit requires foreign borrowing, which will result in interest rates remaining high. This is also what the country is forced to do in order to demonstrate an anti-inflationary monetary policy and to obtain some reasonably priced foreign credit. This *indirectly* increases inflation.

Without understanding the foreign exchange issues, there is no adequate explanation for inflation. Without a clear understanding of international finance, the finances of a small open economy are not to understand and so its economic policy cannot be formulated intelligently! We, as a small open economy, have only as an option to adjust in the international system. Economics is modeled on large closed economies. (We are not the only ones who see it this way, but also the developing countries, who have a big problem with the free flow of capital and the volatility of dollar interest rates.)

The principle of *full convertibility of the* Bretton Woods financial system is not really a viable option in today's world economy. Sándor Lámfalussy wrote in his book published in 2008 that *this should be forgotten*. [11] One cannot accept as scripture, as a stone tablet, the current IMF rules! (Generations of economists grew up in it...) But you cannot ignore the opinion of such a serious Hungarian financial expert! It is time to understand – including economic policy makers – the importance of this issue: convertibility! This is not an original idea of the author: today, in the international literature, many serious experts criticise the current international financial system, saying that full convertibility is only applicable to developed countries. Developing, indebted countries suffer a lot from hectic capital flows.

The Hungarian economy is highly open; the share of imports is very high. The exchange rate of the forint thus plays a key role in domestic price developments. The foreign exchange deficit, which is worsening the exchange rate, has been increased by the considerable amount of money that,- as we have pointed out -, the EU has withheld and not paid out, even though we were due it. This has weighed heavily on the forint. And the weak forint has been a major driver of inflation.

10 Kata Botos: What is Ákos Fellner right about – and what is he wrong about?: https://utodaink-jovoje.hu/gazdasag/fellner_akos_igaza.pdf

11 Sándor Lámfalussy: Financial crises in developing countries Academic Publishing House, 2008

The characteristics of fiscal policy

But there is another specific feature of the Hungarian financial system. *The Hungarian tax structure is inflation-prone*, due to the high weight of consumption taxes. This is mainly the case when consumption falls. But as we have seen, high deficits make borrowing more expensive. So, it seems that it takes more than monetary instruments to bring it down. *Fiscal policy should also be restructured.*

Another problem with the high inflation in Hungary so far is that, while we have excellent agricultural conditions, we had the highest food price inflation in Europe last year. Our food prices are among the highest in the world... This is shocking, as is why our food industry has fallen so significantly.

On the supply side, the largely foreign-owned domestic food industry and retail sector has necessarily limited domestic catch-up with demand. Food production is now insufficient in many areas. Onions, potatoes, beans, peas, garlic, which used to be produced at home, are now imported. Foreign-owned food chains import large quantities of foreign food! This has led to a significant fall in domestic production... But in a currency deficient environment, as we have seen, the forint is depreciating and imports are becoming more expensive. So are food imports. All of this is fuelling inflation.

Let's take a closer look at how inflation is related to fiscal policy.

What does statistics show?

Since 2000, budget revenue growth has exceeded GDP growth in almost every year. The trend that started earlier has continued over the last four cycles: by 2010, GDP had risen to 212% compared to 2000, while the budget was slightly higher, at 230%. In 2021, GDP will have increased to 397% compared to 2000 and budget revenues to 471%[12]. In 2021, GDP increased to only 187% compared *to 2010*, while the revenue side of the budget increased to 205%.

In 2010, the ratio of the budget to GDP was around 25%.After 2010, it rose to around 33% in 2013 and has stabilised between 33% and 34% thereafter. From the budget, the budget income from enterprises has fallen from 13% in 2010 to 9-10%. (stood at 11% in 2021.)

As regards the budget deficit: in 2021, using 2000 as a benchmark, the deficit has increased to 1268%, while budget revenues have increased to only 471%. Between 2000 and 2010, the deficit still increased in *proportion to* revenue, but then in 2021 (compared to 2010) the deficit increased to 558 and revenue increased to only 205%. And the deficit always depends on the growth of revenue and expenditure. Expenditure has therefore increased, but revenue growth has lagged behind, as explained above. This double effect has led to a sharp increase in the deficit. . (This of course included the drop in income due to the fall in production in the Covid period, and the large outflow of money for socio-political reasons.)

12 The data quoted below are the figures from the pocketbook of theKSH for the given years

If we reflect on these figures, we can see that *economic policy* from a fiscal point of view has *been, and still is*, essentially based *on VAT revenues* from demand growth. In recent years, the government *has eased* the burden on business organisations in a number of ways (and reduced the tax burden for citizens). So that they have more money to spend!

We can see that, benefiting from the favourable international interest rate environment in 2014-2019 (which obviously reduced the interest servicing burden on the budget relatively), it has sought to raise the interest rate of producer organisations. The tax revenues during this period were not used to cover sectoral wage inequalities, but to further encourage and reduce the burden on business enterprises. The reduction in the tax burden has of course caused some loss of revenue in the budget. (The expectation of "higher turnover – lower tax burden" has not materialised; this is shown by the fact that the growth in revenues, as we have seen, has lagged behind the growth rate of the deficit as shown above. To repeat: Covid – epidemic spending and other factors such as spending before the elections – also played a role in the deficit.) In the end, the result of all this was a *massive deficit* in the budget! And this must be financed!

Our country now has one of the largest budget deficits in the region. (In the EU, only the Italian deficit is larger, at 8%, and the Romanian deficit is the same as ours, at 6.2%.) In 2022, the government debt to GDP ratio was only 73%, which does not seem high compared to the more indebted Western countries. Unfortunately, however, most EU members are having euro (and have debts in euros), but we have the HUF, we have a significant amount of debt in foreign currency. This makes the situation even more delicate. As much as we have the advantage of not having adopted the euro and thus being freer in our exchange rate policy, we now have the disadvantage of being vulnerable to forced foreign borrowing and international speculation.

The need to resort to foreign sources of financing because of the currency deficit is therefore a major burden on fiscal policy. The *international financial markets are watching the budget deficit, which* should be kept under control *.* Unfortunately, (as we have seen), Hungarian fiscal policy relies much more heavily on sales taxes for revenue than in most countries. (We have seen that VAT is the highest in our country. In contrast, we are among the lowest income taxes.) Corporate tax has been falling steadily since the 2010s. This tax structure is favourable in a "peacetime" of rapid economic growth, but is particularly disadvantageous in a crisis. High sales taxes are pushing up the price level. As they are linked to consumption, the deficit increases when consumption falls. It is understandable, therefore, that the government wants to use every means at its disposal to increase the incomes of those strata that will necessarily use them for consumption (from falling incomes...) Hence the many social subsidies, and of course the government's desire to reduce the burden of inflation on them.

Monetary policy cannot take over all these tasks. There, the responsibility is primarily for the country's foreign exchange position; and this is mainly manifested in interest rate policy... However, the rise in interest rates is not only a problem for producers, but also restricts the consumption of heavily indebted Hungarian families (due to housing loans). This obviously worries the government further. So here is the downside of the Hungarian "separate passenger" solution. *This is an incentive to rethink tax policy*.

It would therefore seem that the "Hungarian model" will need to be modified in the wake of the 2022 inflation surge. The Economist estimates that there is little prospect of a future decline in world interest rates over the next decade.[13]

Even if we hope that the foreign exchange shortage will ease sooner or later, partly as a result of the withholding of benefits in Brussels, higher interest rates will permanently reduce the consumption potential of Hungarian households. It is therefore worthwhile for fiscal policymakers to consider changing the structure of Hungarian taxation. In many other ways, this would also mean a fairer burden-sharing for the society.

In summary

The brief overview of our monetary and fiscal policy highlighted the sources of current inflation in Hungary. We can conclude that both demand and supply side, demand pull and cost push effects have played a role in the stalling of Hungarian inflation. Significant non-power outflows (e.g. Covid) and external economic conditions (energy price deflation), as well as natural problems (drought), have also contributed. Subsidies that interfere with market conditions (price caps) and the corporate price policies that circumvent them are also responsible for the surge in inflation, especially in 2022. But the issue is strongly linked to the evolution of our balance of payments, as we are forced to pay for budget deficits by borrowing externally. This is partly because domestic savings are limited, but also because we need foreign currency specifically to finance our foreign currency bills, and we do not get what we are entitled to from Brussels. Our demand for foreign exchange depresses the exchange rate of the forint, and through this (through imports) affects inflation. But the budget deficit is largely the result of our tax policy, which relies heavily on consumption. If it falls, tax revenues fall proportionally; the deficit increases. This has a negative impact on the interest rate conditions for foreign financing. It also has a further impact on the balance of payments. Unfortunately, we cannot decouple forint interest rates from international interest rate trends. (When we ripped it up, the exchange rate fell radically.) So, if we cannot stimulate consumption with low interest rates (and it seems that we cannot expect low interest rates in the near future in the international interest rate environment), the tax structure will have to be rethought. Making income taxes progressive could help to provide the necessary resources. The near future does not promise low international interest rates, so we have to be prepared for that.

13 On October 18th the ten-year Treasury yield, which incorporates long-term expectations for interest rates and was below 1% as recently as 2021, hit 4.9%, its highest since 2007. The 30-year Treasury yield crossed 5% the same day. (The Economist, Briefing 2023, Nov 2.)

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