

Some Notes on Inflation in the Czech Republic between 2015 and 2025

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Abstract: The inflationary burden and inflationary potential of a currency can be estimated either by analysing monetary policy and other macroeconomic data, or by using comparative analysis procedures in the case of identifying past inflationary burdens and estimating them on the basis of recent monetary policy actions in the case of future developments. This paper follows the latter method. Data for the Czech koruna compared to the Polish zloty, the Hungarian forint and the euro are used as comparative bases, and the US dollar and the Swiss franc are also examined in a partial way. The paper is designed as a set of notes on the subject. It cannot be seen as a comprehensive analysis based on sufficient research. However, it concludes that the Czech koruna has historically been burdened with an inflationary potential of roughly 0.5 to 1.5 percentage points relative to the major currencies. Thus, with the same monetary policy, inflation on the koruna reaches the higher values described above. The explanation for this phenomenon is historical and relates to the structural fundamentals of the Czech economy.

Keywords: fiscal policy, inflation, monetary policy, quantitative theory of money.

JEL Classification: E31, E52, E62

1 Introduction

This paper is based on the following hypothesis in recognition of the full validity of the quantitative theory of money: the development of inflation in different countries may show considerable deviations from the development in other countries, however similar in terms of macroeconomic parameters and monetary policy parameters. Thus, in addition to the aspects described by quantitative theory, there are other aspects that can cause quite significant and long-term differences in inflationary developments in individual countries. By short-term we mean the Friedmanian outlook of six to nine months, and by medium-term we mean a period of up to three or five years, and by long-term we mean phenomena lasting longer than five years.

It should be stressed that this study collects only basic notes and observations on the subject. Both on a general or theoretical level and in the specific case of Czech inflation between 2015 and 2025, a full-fledged analysis would require, firstly, a much larger amount of data collection and, secondly, a considerable amount of calculations.

1.1 Quantitative theory of money

It is well known that the most common expression of the quantity theory of money is the standard transaction equation of exchange in the form

$$M * V = P * T.$$

Of course, we could also use one of the slightly or more different forms of this relationship. It would not make much difference to the following considerations. Indeed, from the point of view of the aim of this study, a discussion of subtle or greater differences and different perspectives within quantitative theory is not very useful.

Irving Fisher published the transaction equation of exchange in 1911 and 1912 (Fisher 1912, pp. 159-164) in a slightly different form, $M*V=p*Q$, but the content is identical. Here, too, M represents the money supply, V represents the velocity of circulation, p represents the price level, and Q represents the quantity of goods available. The detailed differences in the formulations are therefore of little importance. Despite the debate with the Cambridge school (Marshall 1923), despite the changes brought about by Keynes (Keynes 1923) and his later rejection of the quantitative theory of money, and even

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despite the subsequent fusion of Fisher and Keynes by Milton Friedman and the monetarism of the second half of the last century (Friedman 1956, pp. 51-67; Friedman and Schwartz 1963), the basic relationship remains almost untouched: money cannot influence real variables in the long run.

It should be added that the quantitative theory of money was established earlier in broad terms and basic relationships. We can find hints of it in treatises from the sixteenth century, and in a relatively comprehensive form in John Locke (1689, pp. 115-126) and, above all, David Hume (Hume 1752, pp. 28-39). David Ricardo used quantitative theory in a simple form, essentially in accordance with Hume.

Similarly, we will not discuss the various critical perspectives on quantitative theory. That being said, for the purposes of this paper we consider it valid in rough outline.

In the above equation, it represents:

- M the available money stock (or the amount of money held by entities as cash balances),
- V denotes the velocity of money circulation (or the transaction velocity of a monetary unit),
- P is the price level, and finally
- T the number of transactions in the economy (available goods, volume of product).

Very simply, according to the quantity theory of money, prices are a function of the money supply. If output is constant and money becomes scarce, the solution is not to change output but to change the price level. The latter will move exactly so that the equation once again expresses the equilibrium state. However, the process of finding equilibrium will be somewhat delayed beyond the change itself; prices will choose a certain reaction time. Logically, then, it should also be the case that, given roughly the same changes in output, similar changes in the money supply, and the same change in the velocity of circulation, the evolution of the price level should (with exaggeration, anywhere in the world) be the same relative to the original level. This necessarily implies, among other things, that the level of the original levels is irrelevant. What matters is the change, not the level of the base. This is an important comment in relation to the rather common notion of the need for less developed countries to "catch up" with developed countries, a notion that, while logical on its face, is clearly false. In other words: The desired effect of finding stability in output and productivity growth could be achieved by means other than inflation.

Empirically, at least, we suspect that there are some processes taking place in the real world where, in addition to the quantitative theory, it is necessary to supplement their explanation with further reasoning. At least the examples within the euro area, and indeed throughout its entire lifetime, raise considerable suspicions. We will deal with them later. However, let us stipulate that this will not be a full-fledged research, but only a comparison based on general data. This will include data for the Czech Republic and a comparison with some other countries.

It is therefore appropriate to add to the hypothesis stated at the beginning of the study. This supplement is the assumption that the overall economic environment, the economic system of each country, each state, has many different parameters that are capable of generating long-term asymmetries in the evolution of the price level and, therefore, in the evolution of inflation (consumer prices, but in a sense also producer prices and, consequently, the GDP deflator).

1.2 External shocks and fundamental differences versus systemic price instability

Let us now assume that both parts of the hypothesis are true. That is, first, that there are asymmetries in changes in the level of consumer prices even between otherwise comparable countries, even in the long run, and second, that these asymmetries are due to systemic circumstances within the economies of these countries.

The second part could be explained in other ways. For example, external shocks leading to cost pressures on producers could be such an explanation. However, we consider this attempt to be doomed to failure. Let us imagine a situation of an external price shock. First, a rise in price and a consequent fall in output, or a rise in price and a subsequent offsetting of this rise by an increase in the amount of money available, does not contradict the quantity theory. On the contrary, it confirms it. But then it should necessarily be the case that, given the fact that external shocks affect similar countries with similar intensity and timing, their effects will also be similar. However, and here we have fresh possibilities of comparison at hand thanks to the pandemic and its rupture into the energy crisis, this could be challenged quite successfully.

There is a second explanation for the different trends in price levels, which may be the different settings of the bases of these levels. However, it is already mentioned above that the basis is irrelevant from the point of view of quantitative theory. If we translate this into inflation in the Czech environment in the 1990s: the first transformation inflationary years were inevitable, as the sharp price increases were triggered by tax changes (primarily the abolition of the negative image tax on a number of commodities) and exchange rate changes (devaluation of the koruna), which, with the liberalisation of trade

(including foreign trade) and the change in the ratio of available goods (the growth of the share of imported product in household consumption), led to an inevitable price eruption. However, any further inflation above the usual level of Western European countries, which was often explained as "price level catching-up", no longer had this objective basis. The convergence of price levels in the Czech Republic and in the developed countries, as ascertained through exchange rates, did not have to have an inflationary solution; it could have had an exchange rate solution.

However, using the Czech Republic as an example and comparing it with other countries, we will show certain differences in the price level, differences that are very long-lasting and persistent despite changes in output. Although the other parameters already mentioned cannot be described as identical or very similar in the context of this comparison, we will propose that the different evolution of price levels is related to a phenomenon we will call inflation potential. In the context of this paper, this term is used to refer to the propensity of a currency, or more precisely of the economic environment, to behave inflationary, i.e. to raise consumer prices. It can also be summarised as systemic price instability. On the issue of the historical burden of asymmetries and imbalances on the Czech economy, see Kislingrová (2023).

We then use comparative analyses of data from different countries to make a basic assessment of whether it is indeed possible to find long-run divergent price level paths in some of these countries given relatively identical changes in important parameters.

2 Methods

As a basic source of information, we will first use Eurostat data on inflation (in relation to the above equation it is P), data from the same source on output growth (T) and fiscal government deficits (influenced by M), and then data from individual central banks on the development of key interest rates (also influenced by M). By comparing them analytically, mainly on the basis of trends, we will be able to evaluate the relationships of specific data for individual countries or regions, i.e. to make an appropriate comparison.

If the data move in the same or different relationships in the short and medium term, this may not (in line with quantitative theory) mean anything systemically significant. As has already been pointed out, in such limited periods (for various reasons) the theory partly resigns (in agreement with monetarists and Keynesians) to literal validity, since reality may be affected by a number of specific circumstances insufficiently captured by the variables included in the equation. However, over periods longer than five years, the trends in the movement of the price level should be consistent with the parameters, i.e. the equation should show an equilibrium found equal to that achieved in the real world.

However, the initial assumption of the paper, based on empirical observations, was that we would find some differences here as well. This is what happened (see below), so we will try to interpret them. The paths of this interpretation will be twofold. As is clear from what has been shown so far, there is no underlying basis for V (circulation velocity) in the data examined. This is a rather difficult variable to capture, the evolution of which can be revealed by such data as the volume of new credit in the economy or the ratio of credit extended relative to savings accumulated. That is, credit money issuance. The velocity of circulation is sometimes (mistakenly) assumed to be a constant. But then it would have no meaning in the transaction equation of exchange, because it would not enter into equilibrium in any way. Thus, the discussion of V is the first route to interpretation. The second is then to consider other influences that stand on their own outside the concepts with which quantitative theory works. These we collectively call the inflationary potential.

3 Research results

We will now attempt to briefly summarize the main findings from the data collection and analysis.

3.1. International inflation comparison

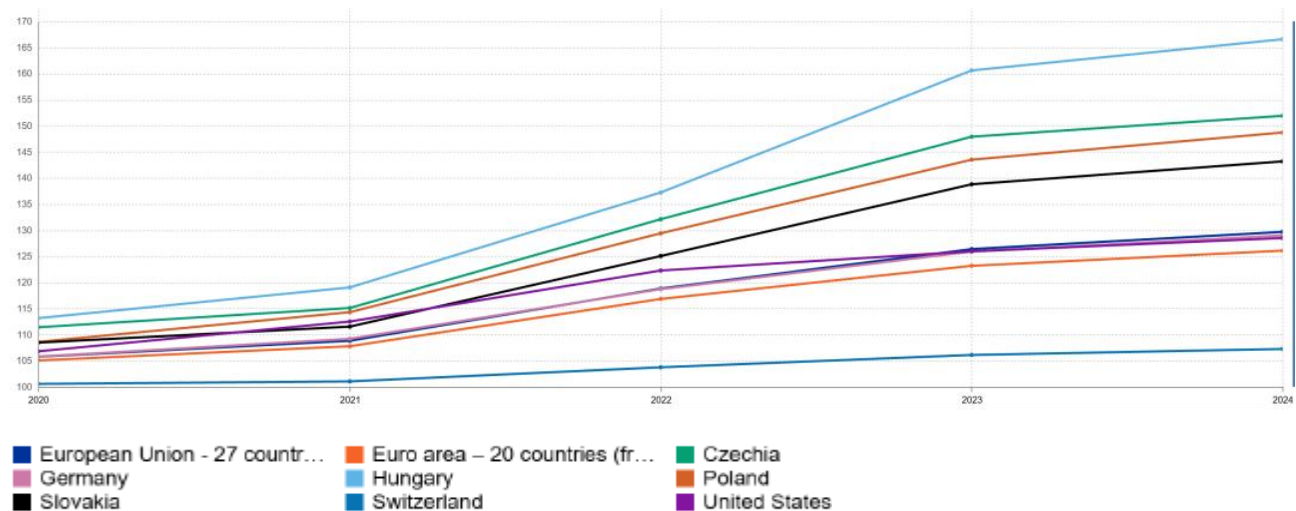
The key information base for us will be the evolution of the price level in the countries we want to compare. These are firstly the Czech Republic, which is the focus of our interest. Next, we will look at the European Union as a whole and the euro area as a whole, while in parallel we will also monitor data for Germany and Slovakia as countries that are close geographically and economically, but are nevertheless included in the euro area. Similarly, the chart shows data for Poland and Hungary, close trading partners, but with their own currencies. For a broader comparison, the graph also includes curves showing price level changes in Switzerland and the United States.

To understand the graph accurately, it should be noted that it is based on a comparison of developments up to 2024 with a baseline, which as a value of 100 is the average of 2015. While this is a comparison that does not make it very convenient to track year-on-year changes, it is ideal for projecting long-term (in this case 10-year) trends.

Another important feature is that the curves show the growth of the price level loaded over time. Thus, for the 2024 data, we see the total change over the whole period, although for better resolution and greater illustrative power the graphs themselves only show curves from 2020 onwards.

However, what does the graph actually show us: The country with the dramatically highest headline inflation within the group is Hungary by a wide margin, followed by the Czech Republic by a considerable margin, with Poland catching up quite dynamically in 2023 and 2024. Then Slovakia follows, still with a very high inflation rate, ahead of the rest of the sample. Substantially lower data are reported by the United States, wedged between the European Union and the euro area, with the EU achieving slightly higher price inflation during the years under review. In contrast, Switzerland comes out almost uninflated (compared to the rest) over the period.

Figure 1 HICP – annual data (average index and rate of change, 100 = 2015)



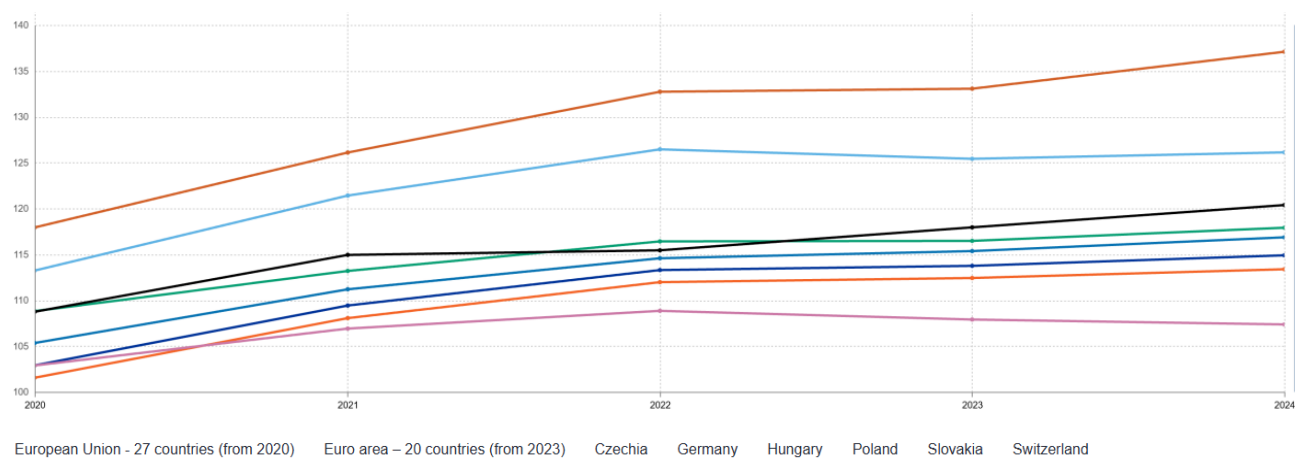
Source: Eurostat, https://ec.europa.eu/eurostat/databrowser/view/prc_hicp_aind/default/line?lang=en&category=prc.prc_hicp

The graph seems to indicate that there is convergence of price levels, calculated through the exchange rate value of domestic currencies, within the surveyed countries. In fact, it would be too easy to assess it in this straightforward way. Firstly, it is questionable why there should be such a divergence between Hungary and Slovakia, which are, moreover, neighbouring countries, and it would be similarly problematic to explain the disparities between Switzerland and Germany or the euro area as a whole.

3.2. Comparison of GDP development

Another comparison relevant for comparing the evolution of price levels is the evolution of product, i.e. the volume of available goods in some models. These concepts should not be confused, but they are indicators of the same facts.

Figure 2 GDP – annual data (average index and rate of change, 100 = 2015)



Source: Eurostat, https://ec.europa.eu/eurostat/databrowser/view/nama_10_gdp_custom_18431848/default/line?lang=en

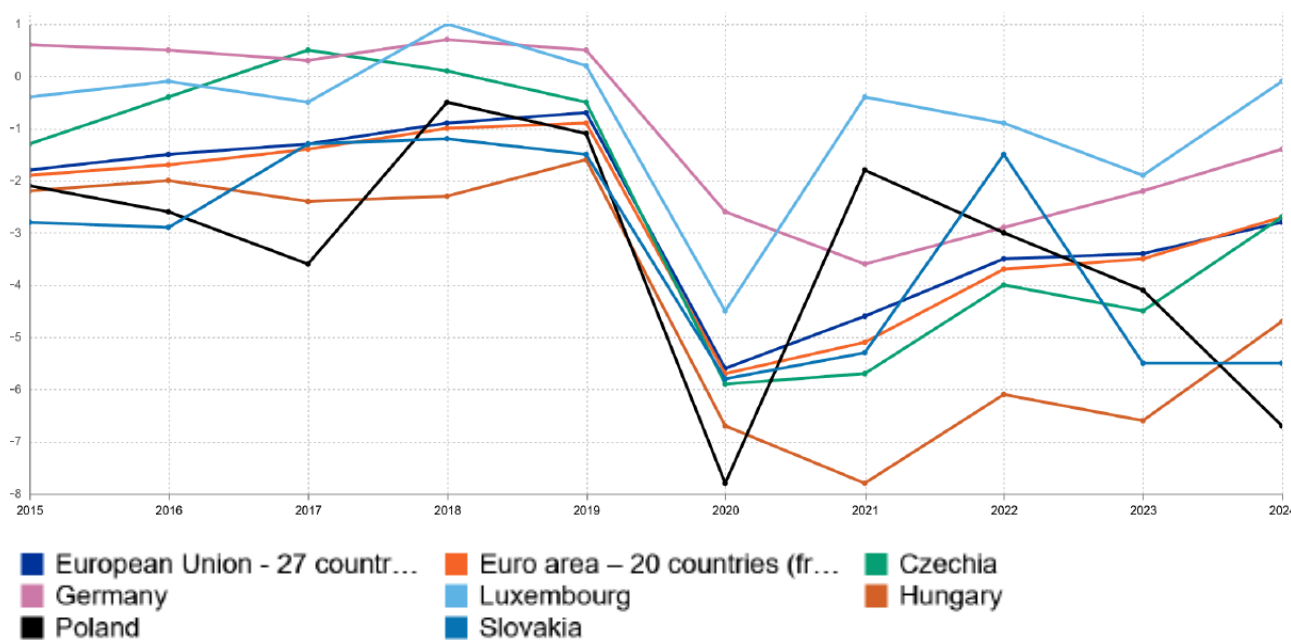
The second chart describes the change in gross domestic product for the same countries, again with a base of 2015 = 100. In this sense, the inflation and GDP curves in Graph 1 and Graph 2 are compatible. At first glance, some trends cannot be missed. First of all, an apparently successful anti-inflationary policy (although in this case not necessarily associated with a hawkish monetary policy) does not necessarily hinder economic growth, as the data for Switzerland show. The high Hungarian inflation is accompanied by relatively rapid output growth, but at first glance there is a disparity in the way price increases and output growth have taken place. The sharpest price increases correspond to a period of economic stagnation. The Hungarian economy (compared to 2015, it should be stressed) maintained growth in the metallic period, but completely failed in the energy crisis era. The chart also shows the demise of the German economy, and perhaps the German economic model, in an exceptionally illustrative way. The level of economic growth is quite tragic, which probably cannot be much offset by relatively low inflation.

Much more similar comments could be gathered, but without more data it is impossible to assess the situation of individual countries. What will be important is the extent to which the fiscal policies of individual countries have helped growth and inflation.

3.3. Deficits and rates

It is undeniable that the growth of debt (of the state, institutions, enterprises, citizens) promotes higher economic growth. After all, it finances consumption. But of course, this comes at a price. The growth of debt (the deficit of the state budget is, in the logic of the matter, practically necessarily covered by debt) means at the same time the next higher than necessary tax burden, unquestionably boosting inflation and, with it, increasing the inflation tax. This is a term used in the Czech environment (unfortunately) only rarely and, if so, in discussions that are more technical than usual. More on the topic, for example, Mach (2003).

Figure 3 Central Government deficit, percentage of gross domestic product (GDP)⁴



Source: Eurostat, https://ec.europa.eu/eurostat/databrowser/view/nama_10_gdp_custom_18435323/default/table

The graph shows very accurately the depth of deficits in recent years (downward direction = larger deficit, balanced budget occurs only at the second upper line of the orientation web). However, it is somewhat opaque and not very suitable

⁴ The attentive reader will notice the difference between the data in the graph and those often reported in the Czech environment. To illustrate, in the chart, the Czech government's two-year deficit for 2020 and 2021 is about 11.5 per cent of GDP; in the Czech environment, a figure closer to 13 per cent is often quoted. The difference is due to what all is included in the deficit. Thus, the higher deficit refers purely to the results of the state budget as such; the chart captures the deficit of the central government and therefore includes some institutions that stand outside the budget as such. In the Czech environment, then, the result is slightly better. On the contrary, it is worse compared to the result of the state and public institutions, where the figures are improved by the surpluses of cities and municipalities.

for further interpretation. Therefore, for an overall comparison of the countries (and groups of countries) over the years in question, we will use the somewhat unorthodox cumulative deficit method.⁵ The result is shown in Table 1.

Even a glance at its last column (Sum) shows that Hungary, followed by Poland and Slovakia, has been pursuing the most diluted fiscal policy throughout the period under review. Despite the usual feeling in Czech public debates, the data for the Czech Republic are moderate in principle and compared to other post-communist countries and better than the EU and euro area average. However, when compared with Germany or Luxembourg, one cannot help but conclude that even so, the approach to state budgets has been relatively irresponsible in relation to the currency and inflation.⁶ In other words, the Czech Republic's fiscal policy in the period in question (in its entirety, it is not an assessment of individual years) was inflationary, albeit more responsible compared to most of its neighbours.

Table 1 Central Government deficit, percentage of gross domestic product (GDP)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	summa
EU - 27 countries	-1,8	-1,5	-1,3	-0,9	-0,7	-5,6	-4,6	-3,5	-3,4	-2,8	-26,1
Euro area - 19 countries	-1,9	-1,7	-1,4	-1,0	-0,9	-5,7	-5,1	-3,8	-3,5	-2,7	-27,7
Czechia	-1,3	-0,4	0,5	0,1	-0,5	-5,9	-5,7	-4,0	-4,5	-2,7	-24,4
Germany	0,6	0,5	0,3	0,7	0,5	-2,6	-3,6	-2,9	-2,2	-1,4	-10,1
Luxembourg	-0,4	-0,1	-0,5	1,0	0,2	-4,5	-0,4	-0,9	-1,9	-0,1	-7,6
Hungary	-2,2	-2,0	-2,4	-2,3	-1,6	-6,7	-7,8	-6,1	-6,6	-4,7	-42,4
Poland	-2,1	-2,6	-3,6	-0,5	-1,1	-7,8	-1,8	-3,0	-4,1	-6,7	-33,3
Slovakia	-2,8	-2,9	-1,3	-1,2	-1,5	-5,8	-5,3	-1,5	-5,5	-5,5	-33,3

Source: Eurostat, https://ec.europa.eu/eurostat/databrowser/view/nama_10_gdp_custom_18435323/default/table, own calculations.

Even more illustrative is a comparison of the percentage of debt to GDP by selected countries and years.

Table 2 Gross debt, General Government, percentage of gross domestic product (GDP)

	2015	2019	difference 2015/19	2021	difference 2019/21	2024	difference 2021/24	difference 2015/2024
EU - 27 countries	85,1	77,4	-7,7	86,8	+9,4	81,0	-6,8	-4,1
Euro area - 19 countries	91,1	83,7	-7,4	93,9	+10,2	87,6	-6,3	-3,5
Czechia	39,5	29,6	-9,9	40,7	+11,1	43,6	+2,9	+4,1
Germany	71,2	58,7	-12,5	68,1	+9,4	62,5	-5,6	-8,7
Luxembourg	21,1	22,3	+1,2	24,2	+1,9	26,3	+2,1	+5,2
Hungary	75,7	65,0	-10,7	76,2	+11,2	73,5	-2,7	-2,2
Poland	51,1	45,2	-5,9	53,0	+1,9	55,3	+2,5	+4,2
Slovakia	51,6	48,0	-3,6	60,2	+12,2	59,3	-0,9	+7,7

Source: Eurostat, https://ec.europa.eu/eurostat/databrowser/view/gov_10dd_edpt1_custom_18469292/default/table, own calculations.

Of course, a percentage reduction in debt does not necessarily imply a nominal reduction, so even though government debt measured in this way may be falling, servicing the debt is likely to become increasingly challenging. More importantly, however: The last column essentially distinguishes those countries that have better debt relative to GDP at the end of a given decade and vice versa.⁷

As for rates, we use central bank key rate data for the euro, the Polish zloty, the Hungarian forint and the Czech koruna, while adding basic information on the US dollar and the Swiss franc. Their changes are reported in the following table. Let us note a very interesting circumstance. Countries or areas that can now live quite comfortably with low rates have had this ability throughout the period, regardless of boom or crisis, even to some extent irrespective of the fiscal policies of the respective governments and the evolution of government debt.

⁵ We are aware of the difficulty of adding up the percentage of deficits to GDP in individual years, as these values are of course affected by the volume of GDP at market prices over time. Thus, percentages are added on different bases, which is of course very non-standard. On the other hand, however, this sum shows what is needed for further consideration, namely the degree of fiscal policy easing over the period. Of course, this is without the weighting of individual years and other contexts, which must be taken into account when interpreting the figures.

⁶ In this comparison, Luxembourg is used as a proxy for Switzerland, where data are not available in a comparable structure and obtained by the same method. This is also the case for the United States, which appears in some of the previous data bases.

⁷ Beware of simplistic comparisons between Table 1 and Table 2, it is necessary to perceive the difference between Central and General Government. Further, not necessarily the entire deficit must be covered by debt. Reserves or extra-budgetary resources can be used; for example, some countries do not include one-off government revenues (e.g. from the sale of assets) in budget revenues.

Table 3 Key rate developments (year-end position, 2025 year-end position at end-September)

Měna	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Czech koruna	0,05	0,05	0,50	1,75	2,00	0,25	3,75	7,00	6,75	4,00	3,50
Euro	-0,30	-0,40	-0,40	-0,40	-0,50	-0,50	-0,50	2,00	4,00	3,00	2,00
USD	0,50	0,75	1,50	2,50	1,75	0,25	0,25	4,50	5,50	4,50	4,25
Swiss franc	-0,75	-0,75	-0,75	-0,75	-0,75	-0,75	-0,75	1,00	1,75	0,50	0,00
British pound	0,50	0,50	0,50	0,75	0,75	0,10	0,25	3,50	5,25	4,75	4,00
Polish zloty	1,50	1,50	1,50	1,50	1,50	0,10	1,75	6,75	5,75	5,75	4,75
Hungarian forint	1,35	0,90	0,90	0,90	0,90	0,60	2,40	13,00	10,75	6,50	6,50

Source: ECB, ČNB, SNB, FED, Bank of England, <https://www.lynxbroker.cz/investovani/burzovni-trhy/burzovni-informace/urokove-sazby-centralnich-bank/>

Thus, in addition to the circulation rate issue, we have collected some data on all the items contained in the standard exchange transaction equation. Now comes the necessity to analyse these data and to draw some conclusions from their relationships towards the above hypothesis.

4 Research results

The method of clustering data into related groups was used for comparison. These were then rated separately within each parameter on a scale from 1 (best group in the area) to 5 (negative rating).⁸ The stratification is created only within the group, it has no relation to other countries, which are not discussed here. Data unavailable by structure and method (for example, some data for Switzerland) have been supplemented by using the nearest comparable data.

Table 4 Comparison of regions and countries

	Czechia	Poland	Hungary	Switzerland	Slovakia	Luxembourg	Germany	Euro area
Inflation	4	4	5	1	4	2	2	2
GDP	3	1	2	3	3	3	5	4
Deficit	3	4	5	1	4	1	2	3
Debt	2	3	4	1	3	1	3	4
Rates	3	4	5	1	2	2	2	2
Results	3,0	3,2	4,2	1,4	3,2	1,8	2,8	3,0

Source: Own calculations.

The higher the figure in the bottom row, the riskier the country is from the point of view of monetary and budgetary stability, taking into account GDP dynamics. Of course, this is a rather crude and rather superficial comparison, but it is nevertheless possible to assume that the hypothesis has been confirmed, at least in general terms.

For example, compare the Czechia and Germany columns. Germany performs better overall, mainly due to low inflation and the possibility of low rates on the euro combined with better deficit data. However, the overall government debt (including its evolution) and, above all, the utterly lacklustre GDP growth are pushing Germany towards instability. Overall, it cannot be said that Germany is more stable when, for example, total debt to GDP is much higher than in the Czech Republic. However, and this is precisely the key point, the Czech National Bank still has to pursue (and historically, not just currently) a much tighter monetary policy to maintain at least a level of inflation that is even within sight of German inflation. In doing so, we have previously rejected as unfounded the theory of a necessary catch-up in price levels.

The same is evident in the comparison with the euro area, especially when compared with Slovakia. Compared to the whole group of euro-paying countries, the data on economic growth, deficits and debt are significantly better on the Czech economy side, yet the long-term inflation of the koruna is higher, with (one could say) a multiply tighter monetary policy (as shown very consistently in Table 3). While this could be temporarily explained by a change in the velocity of circulation, it would hardly be explained in the same way over a ten-year period.

5 Conclusions

All of the procedures and conclusions outlined (it must be emphasized again that these are really only sketches and notes) will need to be reviewed and significantly supplemented in terms of the volume and type of data examined in order to verify them in future research. We are fully aware of the partial nature of the evidence provided. In particular, it would be necessary

⁸ Of course, it would be useful to describe this process in more detail, but the limited space of the paper does not allow it. However, the evaluation can be verified by looking back at the graphs and tables.

to examine in more detail the money supply,⁹ whose representation by fiscal and monetary indicators is necessarily only partial. As highlighted above, the fundamental issue remains the velocity of circulation. We point out before the parenthesis that this problem concerns the whole quantitative theory of money, and that, however much we do not consider the velocity of circulation as a constant (see above), for the present investigation we assume a synchronic evolution of the indicator at least in the countries under study. If we accept this simplification, however, then the velocity of circulation has effectively the same effect on the outcome of the standard transaction equation of exchange as if it were a constant.¹⁰

In any case, however, some quite strong arguments were put forward for continuing to work with the idea that the Czech economy was performing worse in terms of inflation and, through this, necessarily in terms of key interest rate settings than other macroeconomic data and the overall economic set-up would justify. However much this issue needs to be further elaborated, we see a certain inflationary potential within the Czech currency, a certain tendency towards higher inflation. This puts the koruna at a disadvantage compared to more robust and stable currencies, in particular the euro in this comparison.

The reason for the existence of the potential can be widely disputed, and it could certainly be argued that it is a tax on imperfect markets and an imperfect business environment. However, this does not rule out the possibility of a much broader explanation. Of course, the value of inflation potential is a very interesting question. This handicap could be estimated at between 0.5 and 1.5 percentage points. This means that inflation on the koruna (all other parameters being equal) would be higher than on the euro by this amount. The estimate is based on a comparison of the 10-year series of key koruna and euro inflation rates and the 10-year series of euro area inflation, i.e. the relationship between the setting of rates and consumer price developments.

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⁹ However, one of the problems with the monetary stock is the extreme difficulty of correctly distinguishing between data within the euro area (meaning internally) and data comparability externally (with economies outside the euro area). However, this is true for all advanced economies, more precisely for all major fiat currencies, as they have many specificities. Local differences in the structure of financial products, in the financing of the economy (credit versus other external sourcing practices versus investments with some characteristics of credit), among others, pose a problem.

¹⁰ For it is true that, given the same change within the systems being compared, it does not affect the outcome of the comparison.