Inflation in History*

Pál Péter Kolozsi

One of the most pressing economic policy challenges of our time is the need to break the persistence of inflation, since sustainable convergence is not conceivable without price stability. In addition to theories, experience gained from the real economy may well become a weapon in the fight against inflation. It was this consideration that inspired the conference entitled "*Inflation in History*" organised by the Rubicon Institute together with the Research Institute of Competitiveness and Economy of the University of Public Service at the Ludovika campus on 17 June 2023. With contributions from both historians and economists, this interdisciplinary conference examined the most relevant and enlightening inflationary periods in history spanning from ancient Rome through the Middle Ages and Early Modern times right up to the 20th century.

What means have been used to curb inflation throughout history? What methods proved successful and which ones failed to deliver results? What did the depreciation of the currency mean in the Roman Empire or at the time of the French Revolution? And how was this phenomenon tackled in Hungary during the Horthy period and later in the aftermath of the Second World War? The participating scholars delved into the aforementioned questions in eight lectures. The first speaker of the conference was Géza Sebestyén, Head of the Center for Economic Policy at Mathias Corvinus Collegium and Associate Professor at Corvinus University of Budapest, who delivered a lecture entitled "Inflation as a Financial Phenomenon". By way of introduction, Sebestyén reviewed the essential tenets of the economic literature on the causes of inflation and then went on to discuss the context of the present inflationary data, explaining that the current inflation is essentially a supplyside phenomenon and its origins can be traced to the war between Ukraine and Russia. He emphasised that idiosyncratic factors also need to be taken into account in the analysis of inflationary data (such as the influence of the phase-out of petrol price caps on the Hungarian indicators), as well as the fact that in comparing the current inflation rates geographical location has a striking significance – inflation is highest in the countries in Europe that are situated closest to the military conflict. This confirms the importance of the supply side.

^{*} The papers in this issue contain the views of the authors which are not necessarily the same as the official views of the Magyar Nemzeti Bank.

Pál Péter Kolozsi: Magyar Nemzeti Bank, Director; John Von Neumann University, Associate Professor. Email: kolozsip@mnb.hu

György Németh, classical scholar, former Head of the Department of Ancient History at Eötvös Loránd University and professor, gave a lecture with the title "Inflation in the Roman Empire: Diocletian's Edict on Prices". The professor explained how silver coins lost value from Augustus to Diocletian and what characterised the economic crisis that developed in the 3rd century in the Roman Empire. The Emperor Diocletian, who as a military man believed in the power of orders and regulations and was not particularly educated, chose a course of action that was without precedent: he prescribed maximum prices for virtually all goods available for sale at the time. The Edict on Maximum Prices, which is an exceptionally important historical source as it provides a minutely detailed picture of the economy and relative prices in the early 4th century Roman Empire, did not achieve its desired objective because the dread of the death penalty prescribed for violators of the edict emptied the marketplaces and drove prices to sky high levels. In contrast to the failure of price regulation, Diocletian also made a successful financial policy decision on monetary reform – this was the time when the gold coin called *solidus* was first minted. This coin remained in use for centuries, first in Rome and later also in Byzantium.

In her lecture, *Boglárka Weisz*, Head of the "Momentum" Hungarian Economic History Research Team of the Hungarian Academy of Sciences, journeyed through the topics of the medieval monetary system and of gold hunger from Saint Stephen's *denarius* to the *moneta nova* issued by King Louis II. She gave a detailed account of the history of gold mining in Hungary, of the rise of the gold mining towns, the measures taken to prevent the outflow of gold from the country and of the construction of the Hungarian monetary system based on the gold florin and the silver denarius. The scholar delivered a case study of the problem of mine water inflow afflicting Hungarian gold mines in the second half of the 15th century, which offers an early but excellent example of the connection between financial affairs and technical innovation. The lecture described the water lifting devices suitable for handling the water inflow and unsuccessful schemes designed by János Thurzó to deal with this problem.

In the closing lecture of the morning session, *Péter Hahner*, Director General of the Rubicon Institute, spoke about the role played by the *assignats* (paper money) in the French Revolution. He argued that while we often think that crises obviously lead to revolutions, it is also possible that certain revolutions consciously bring about crises with which to steer political processes in certain directions, for instance, in the direction of terror. In Dr Hahner's opinion, it is useful to start the economic analysis of the French Revolution with the question of France's sovereign debt. He argued that the "the French monarchy collapsed when it decided to pay its debts" because the government could not risk the tax increases necessary for managing the high national debt while bankruptcy appeared as an unacceptably dishonourable

option (even though it eventually came to pass in 1797). It was in these constrained financial circumstances that Talleyrand, who later became a renowned statesman, made his recommendation according to which the state should take over the functions of the Church, and then in turn sell the Church Lands, the proceeds of which could finance the state debt and expenditures. Finally, the "solution" was that the state issued interest-bearing securities (bonds), in possession of which, as promised by the issuers, the confiscated Church assets could be purchased in the future. These were the assignats, which, within a short time, turned into paper money. Already at that time, Talleyrand and du Pont de Nemours, a well-known economist of the period who was influenced by Adam Smith's ideas, warned against the inflationary dangers of issuing unbacked fiat (paper) money. Yet, their words of warning went unheeded. The currency issue was effectively uncontrolled which led to hyperinflation. A law passed in 1793 that capped prices was suspended in 1795, allowing the unchecked resumption of price increases. Inflation finally came to an end in 1803 when Napoleon introduced the Franc Germinal – the assignats had practically lost all their value by that time.

Róbert Hermann, Head of the Doctoral School of History at Károli Gáspár University of the Reformed Church in Hungary, examined the degree to which food price increases may be regarded as principal reasons for the onset of the 1848 Revolution. The speaker provided an overview of the economic and food crises that preceded the revolutions of 1848 in European countries. Virtually the entire continent was affected by the drought and potato blight which occurred during the second half of the 1840s, causing a significant increase in staple food prices, resulting in destitution and social unrest. This was compounded by typhoid fever in the German Confederation, by cholera in Russia and by cattle plague in the Austrian Empire and thus also Hungary. The above factors resulted in general food insecurity by 1847–1848 in practically all parts of the European continent, often threatening the very survival of the lower sections of society. The best known example is that of Ireland, where between 1841 and 1850 the population decreased from 8.2 million to 6.5 million, partly due to the famine, which claimed 700,000 victims, and partly to forced emigration. The gravity of the economic and food crisis is shown by the fact that it also reached the Papal State where the declining number of pilgrimages resulted in significant financial difficulties, including inflation. In summary, Hermann concluded that the increase in food prices provided the right breeding ground for the uprisings, yet political reasons were also necessary as shown by the example of Russia (one of the countries most involved in these events) where political power remained stable, making it possible for Russian troops to participate in the suppression of the Hungarian War of Independence in 1849.

Mihály Nánay, senior research associate at the Rubicon Institute, described how inflation was curbed at the beginning of the Horthy period (early 1920s).

The hyperinflation emerging in the aftermath of the First World War had several reasons, the most important of which were the shortage of goods due to the war, the significant purchasing demand stemming from the army and the printing of money which constituted an estimated 20–50 per cent of GDP. Monthly inflation during the war still "only" amounted to 2–3 per cent. By 1919 the figure was 30 per cent. There was no dispute about the necessity to end the printing of money, yet they did not know what to replace it with. The possibility for foreign loans remained severely restricted for a considerable period of time due to the unresolved status of the country, because of war reparations and the liens connected to the reparations. The crisis could not be contained by tax rises, reduced expenditure or interest rates raised by decree. Three finance ministers, Frigyes Korányi, Lóránt Hegedűs and Tibor Kállay were "consumed" by the crisis management. By 1923-1924, following speculation against the Hungarian crown (currency) and the uprising in Western Hungary, the Hungarian economy descended into hyperinflation, as a result of which, for instance, the price of brown bread, highly important as a staple food, jumped to 23,000 times (!) its former cost. Stabilisation finally came in 1924 when, by significant reductions in state expenditure and general austerity, the establishment of the Central Bank of Hungary (Magyar Nemzeti Bank – MNB) as well as the introduction of the gold crown and later the pengő, not least through borrowing a loan from the League of Nations, the country could overcome the runaway price levels.

The economic adversities faced by Hungary during the 20th century may be well demonstrated by the fact that little more than two decades later the aforementioned hyperinflationary period was followed by yet another episode of hyperinflation. The financial crisis of 1946 also stands out in this sad series of events because the price increases then reached such record levels which no other country has experienced to this day. Károly Szerencsés, Associate Professor at Eötvös Loránd University, explained that the astounding levels of price increases had similar reasons to those that followed the First World War, compounded by the enormous destruction caused by the war as well as plundering. The professor provided a revealing demonstration in an example from everyday life what hyperinflation was like: the price of a glass of beer before WWII was 28 fillers (0.28 pengős), which rose to 15,000 pengős by February 1946. But even this figure appears "small change" compared to the price of 45 billion (!) pengős by June of the same year. Szerencsés argued that the hyperinflation could be explained not only as a spontaneous process, but also as a consciously induced one. An intense political battle was taking place in Hungary during this period in the course of which the devaluation of intellectual work and the destruction of middle-class savings served the purposes of certain political forces, particularly those of the Soviets and of the Communist Party.

The closing lecture of the conference was delivered by Zsuzsanna Borvendég, research associate at the Research Centre for History in the Institute of Hungarian Research, who described the oil price explosions of the 1970s. The crisis arrived in Hungary on a specific calendar day, on 22 July 1979, when János Kádár announced drastic increases in consumer prices. The average increase in food prices was 20 per cent, while fuel prices rose by an average of 34 per cent. This adjustment, resulting in an aggregate inflation of 9 per cent, was a particularly significant change because it ended the era of prosperity driven by low and stable prices that had given legitimacy to János Kádár's government. Borvendég gave a detailed account of the geopolitical changes that led to the oil price explosions of 1973 and 1979 and explained their consequences for Hungary. She pointed out that the cheap Soviet energy sources and the Bucharest price-formation principles which provided stability led to a false sense of security. Yet, as early as 1972, it was revealed that living standards could only be maintained at the cost of deteriorating external balances, while it also became known that the earlier economic data had been doctored. A decision was made according to which price increases could not exceed 2 per cent, the terms of trade continued to deteriorate and price subsidies grew significantly. The first tentative price increases were carried out in 1976, but Kádár got cold feet and promised a 3.5-4 per cent increase in real incomes. However, by 1978 the looming insolvency led to negotiations with the IMF. In her closing argument, the expert from the Institute of Hungarian Research pointed out that, frightened by the ominous example of Poland, the Kádár regime chose the path of indebtedness to foreign lenders.

By examining the subject of inflation, the joint conference of the Rubicon Institute and the Research Institute of Competitiveness and Economy of the University of Public Service focused on an exceptionally important and topical issue of current economic policy. The conference unquestionably provided added value since, as seen from the varied affiliation of the participants, approaching the question of price increases from an interdisciplinary angle and underlining the fact that understanding historical patterns can be particularly important, especially in times of crisis, when earlier models may become less applicable. Interconnected thinking among historians and economists is evidently forward looking in this field and offers a good chance to help us get control of inflation which is Hungary's economic public enemy No. 1 today.