One Hundred Years for One Goal: Centenary Reflections on the Mission of the Magyar Nemzeti Bank*

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This paper pays tribute to the history of the Magyar Nemzeti Bank, which has been working to establish and maintain price and financial stability and to support sustainable growth in the Hungarian economy for the past one hundred years. We seek to find out what the Hungarian economy has looked like from a central bank perspective over the past hundred years. The study thus covers the decisive periods since 1924, encompassing the time between the two world wars, the socialist economic system built up after World War II and the milestones of the era following the regime change. The analysis is primarily intended to draw lessons from history to offer a guideline amid the challenges currently faced. The historical periods show the importance of preserving the independence of the central bank and coordinating the activities of the branches of economic policy, in order to achieve and maintain price and financial stability, support economic development and prepare for future challenges, such as the green transition. Over the past 12 years, the Magyar Nemzeti Bank has gradually opened up opportunities that support the achievement of these goals in the present day and age.

Journal of Economics Literature (JEL) codes: N14, N24, N44, E42

Keywords: economic history, monetary policy, central bank history, Hungarian economy

1. Introduction

This year marks the centenary of the Magyar Nemzeti Bank (the central bank of Hungary, MNB), the independent central bank of Hungary. Its foundation in 1924 did not occur in a period of economic equilibrium: it took place in the midst of great political, economic and social uncertainty. As one of the losers of the 'Great War', Hungary had to integrate into a changing Europe and a new international order,

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now as a smaller, weakly capitalised economy. One key element of this integration was the establishment of an autonomous central bank, which also guaranteed the country's financial sovereignty. According to contemporary evaluations of the situation, the foundation of the central bank was, without a doubt, the first step forward in achieving national goals, both in terms of stimulating the economic life of Hungary and building international alliances.

In his Inaugural Address at the general meeting of the Magyar Nemzeti Bank on 24 May 1924, Minister of Finance Frigyes Korányi emphasised that the central bank "is an instrument and guarantee that our stable currency, which is the cornerstone of our economic life, shall be reinstated to its former glory and that it shall earn the honour that is necessary to restore normal production, to finally eliminate the divergences in the distribution of income and wealth and to bring it back to normal" (Schandl 1924:1). The first independent central bank of the country was thus expected to support the 'health' of the fundamentals required for economic growth and social development by guaranteeing price stability. One hundred years later, this objective still functions as the basis for the MNB's day-to-day central banking operations.

Since 1920, Hungary has been integrated into the global economy as a small, open economy, which – as is the case with other economies with similar characteristics – fundamentally determines the central bank's opportunities and challenges in several dimensions (*Akkaya et al. 2023*). When a major global change – be it an economic and financial crisis or a war between states – forces the country to rebuild its economy, as was the case in 1920, 1945, 1956, 1990 and 2010 in Hungary, the central bank plays a particularly important role. There is no more obvious example of this than the story of the MNB's foundation.

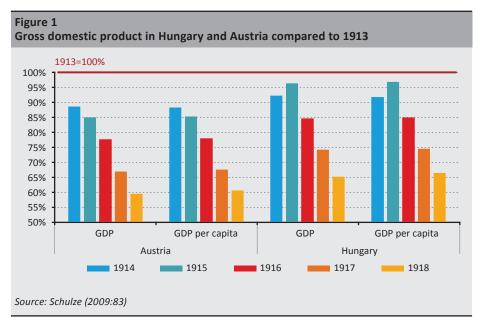
The 1920s saw the creation of a central bank that is considered modern even by today's standards and its integration into the international monetary order of the time. As noted by Sándor Popovics, founding governor of the central bank, the MNB was established "on the basis of principles that have long been elaborated by science and recognised by practice throughout the civilised world, but which must be accompanied by due consideration for the specific interests of our country" (Bácskai 1994). As a result of the spillover effects of global economic problems and the challenges entailed by the reintegration of a truncated country, the 1930s were marked by a series of attempts to address trade, capital flow and later, geopolitical problems. On the central bank side, this implied measures to continue stability programmes, tackle indebtedness, achieve financial stability and guard against increased state expansion. However, the new world war and its aftermath deprived the central bank of its autonomy for a long time to come.

The second major phase relates to the socialist era of the Hungarian economy. By the end of the 1940s, the planned economy system and centralised economic governance had significantly limited the room for manoeuvre, not only for the country but also for the Magyar Nemzeti Bank. The nationalisation policy, which also extended to the banking sector, fundamentally altered the structure of Hungary's banking system. Between 1947 and 1987, a single-tier banking system was in place instead of a two-tier banking system, and the central bank functioned only as an executor of government decisions, primarily in matters related to financial liquidity and intergovernmental credit operations.

The third major phase in the history of the central bank covers the more than three decades since the regime change, which saw the re-establishment of the two-tier banking system and the return to independence. Although this period can be broken down into numerous sub-periods, it should be emphasised that starting from 2013 the MNB has gradually created the opportunities which allow it to support price stability and financial stability, as well as economic growth and the green transition. The period after 2013 was the first time in the last hundred years that convergence took place while equilibrium was also maintained. However, the 2020s brought extraordinary challenges in the form of a pandemic, war and unprecedented inflation. Thanks to successful crisis management by the government and the central bank, economic growth has resumed and important steps have been taken to restore balance. But the work has not stopped, and flexibility and innovation are essential in order to win the coming decades. Bearing in mind the mandate of the Magyar Nemzeti Bank – to ensure price stability, maintain financial stability and support the government's economic policy and its policy related to environmental sustainability – the central bank will continue to support the nation's prosperity through rapid and effective decision-making.

2. Between the two world wars

After the devastation of World War I, the disintegration of the Austro-Hungarian Empire with an internal market of more than 50 million people gave rise to a new situation in Central and Eastern Europe. This process also resulted in fundamental structural changes in the case of Hungary, which, as one of the losers of the war, was reduced to a small and open economy: this implied a new position both in respect of the real economy and the financial sector. By 1918, the volume of gross domestic product (GDP) produced by Hungary had fallen by nearly 35 percentage points compared to 1913, the last year of peace before the war (*Figure 1*). In addition to the war losses, the shackles of the 1920 Trianon peace treaty made recovery even more difficult, increasing the country's international isolation. According to estimates, it was only in 1925 that GDP approached its 1913 level (*Romsics 2017: 388*).

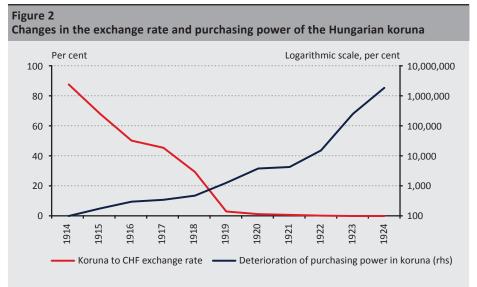


As a consequence of the Trianon peace treaty, Hungary retained only 40 per cent of its former national income and around 55 per cent of its industrial capacity (Fellner 1930). While a significant part of the manufacturing sector remained in the truncated part of the country, the raw material base was trapped in the severed parts. More than 60 per cent of the railway and public road network, more than one half of the domestic manufacturing industry and a major part of arable lands for agricultural crops ended up outside the borders of the country (Virág 2020). After the collapse of the Monarchy, Hungary not only faced the loss of a smoothly functioning economic and monetary union, it was also excluded from international capital flows.

For Hungarian economic policy, the problem of the rising cost of living and the financing needs of the structural change simultaneously became pressing issues. As uncertainties surrounding reparation obligations made foreign credit impossible to obtain, policymakers relied on internal resources (mainly tax increases) to plan for stabilisation.

However, the persistent rise in price levels worked against stabilisation. This was a direct result of the fact that the Austro-Hungarian Bank's war-financing policy had already triggered inflation during World War I. By October 1918, the cost of living in the Monarchy had surged to 1,589 per cent of the level recorded in July 1914. The amount of money in circulation rose by 1,167 per cent between the two periods. At the same time, in October 1918 the ore reserve was only 24 per cent of its level recorded in July 1914, while by the autumn of 1918, the exchange rate of the koruna against the Swiss franc had fallen to 42 per cent of its summer 1914 value (*Schulze 2009:100*).

The situation inherited was subsequently aggravated in Hungary by the aggressive, highly inflationary credit policy of the early 1920s, which was intended to get the country back on its feet and support the necessary economic restructuring. This led to hyperinflation and the complete depreciation of the koruna by the summer of 1923 (*Figure 2*). In view of the continuing rise in prices, restoring the balance of public finances became the most urgent priority (*Pogány 2023*).



Note: Changes in the purchasing value of the koruna based on food prices (based on the weekly food requirements of a working family of five) (Pogány 2023:84)

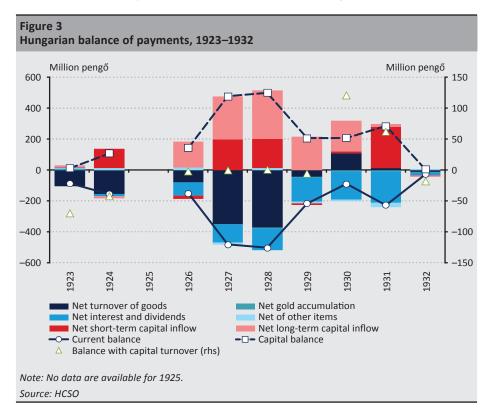
Source: Pogány (2023) and relevant data from the Statistical Yearbook of Hungary

Attempts at stabilisation based purely on internal resources failed. Hyperinflation led to a desperate economic situation, and it soon became clear to the Bethlen government that Hungary needed help from the international community (*Radnóti 1926*). Eventually, thanks to the substantial support of the Bank of England secured through the personal intervention of central bank governor Sándor Popovics, the League of Nations Loan Agreement laid the foundations for successful stabilisation (*Péteri 1985*). The resolution programme called for stringent monetary, fiscal and currency reforms. One of the most important conditions of the programme was the operation of an autonomous, independent central bank, which in practice commenced on 24 June 1924 (*Popovics 1924*).

Thanks to the monetary and fiscal consolidation that followed the MNB's foundation and the inflow of foreign currency resources into the country under the League of Nations Loan Agreement, stabilisation was extremely rapid. Due to budgetary adjustments, the general government was in surplus by 1925, the trade balance

improved and the rapid increase in consumer prices quickly dropped off (*Botos 1999*). The exchange rate of the koruna stabilised, and in parallel, a currency reform was conducted, which resulted in the introduction of the new Hungarian currency, the pengő, on 1 January 1927. Like the koruna, the pengő was pegged to the exchange rate of the pound sterling (*Popovics 1929*).

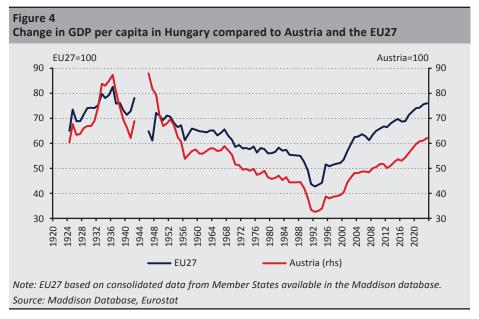
However, in addition to replacing the old currency, central bank governor Sándor Popovics also wanted to put an end to the practice of taking recourse to central bank credit as a means of replacing the working capital lost during the war. Popovics saw this as inflationary and hence extremely damaging for the economy. Early on, he warned the government to be cautious about relying on foreign loans in consideration of their purpose (*Schlett 2014*). The MNB's main concern in this regard was that the majority of foreign loans was being used for consumption rather than for investment to increase competitiveness (*Ferber 1983*). This was confirmed by the capital and current account data, which indicated that the latter's persistent deficit was covered by the inflows of loans at the time (*Figure 3*).



Indeed, in the second half of the 1920s, the Hungarian market opened up to the inflow of Western credit, as aptly demonstrated by the balance sheet total of commercial banks. Data from the relevant yearbooks of the Hungarian Central Statistical Office (HCSO) show that between 1925 and 1929 the assets of the credit institution sector more than tripled from 1.9 billion pengő to 6.1 billion pengő. Credit expansion was significant, while the process of internal capital accumulation remained well below its potential, with the Hungarian economy mainly fuelled by short-term foreign loans (*Réti 2011*). MNB officials expressed concern about the growing portfolio of loans with a maturity of less than a year, recognising early on that a strengthening of domestic lending flows would be desirable. Although the interest rate level was gradually lowered at the time, the tight exchange rate policy in place due to the gold standard regime in effect limited the monetary authority's room for manoeuvre (*Pogány 2003*).

The negative consequences of adverse lending developments, the global fall in agricultural prices and the drastic decline in capital flows were amplified amid the pass-through of the global economic crisis. The period of the three-day bank holiday, temporary capital restrictions, the suspension of the stock market, prolonged deflation and a substantial slump in international trade changed the leeway of economic and financial policy. Through the Financial Institute Center, domestic supervision and control provided a higher degree of prudence compared to regional trading partners (*Varga 2016*), but in the first half of the 1930s the central bank had its plate full cleaning up the balance sheets of credit institutions overwhelmed by defaulting liabilities, managing insolvency and restoring the confidence of depositors who had fled the sector. That notwithstanding, based on the yearbooks of the HCSO, the volume of lending and deposit-taking recovered only slowly over the decade as a whole.

The Hungarian economy was thus in a desperate situation on several fronts. The traditional buyers of Hungarian grain began to adopt protectionist policies, and in the meantime cheap US grain appeared on the global market as a competitor. Due to global economic conditions, international banks withdrew their loans to Hungary, and the central bank's reserves had to be used to repay the earlier loans. Falling domestic incomes and rising unemployment resulted in a sharp fall in domestic consumption (*Virág 2020*). Nominal GDP per capita continued to rise, but while it had grown at an annual rate of four per cent on average in the 1920s, it only grew by an average of 1.5 per cent annually in the 1930s. Hungary's level of development relative to Austria also rose gradually until the outbreak of World War II (*Figure 4*).



From the second half of the 1930s, the pre-World War II arms race and the recovery of global trade chains led to renewed strengthening of the national economy, but the gradual erosion of the international gold standard regime and the relative scarcity of resources for fiscal policy created the need for the central bank to provide financing for government investment by increasing the central bank's turnover of treasury notes. This was despite the fact that the MNB was protected from the purchase of government debt by strict rules in its Memorandum of Association, in compliance with the idea of central bank independence. As a result, by 1937 the level of internal debt had doubled relative to 1931 (*Botos 1999*).

Thus, from the second half of the 1930s, industrial development came to the forefront of the government's economic policy (*Germuska 2012*). The best-known financing scheme of the era was the Győr Armaments Programme for armaments and infrastructure development. However, this also marked the beginning of a gradual merging of fiscal and monetary policy powers and as a result, the issuing of banknotes became nearly the exclusive privilege of government will. The financial burden of the armaments programme, followed by the unsecured financing of World War II, together with the massive destruction of national wealth and the collapse of the financial system resulted in the second largest hyperinflation in the world (*Siklos 1991*).

3. Suspension of central bank independence under socialism

The material losses in World War II amounted to around 22 billion pengő calculated at 1938 values (*Virág 2016:12*). Including human and social sacrifices, Hungary's war losses were more than four times the gross domestic product of 1938–1939 (*Virág 2020:74*). The balance between the supply and demand for goods collapsed, public debt ballooned again, government revenues fell and were once again substituted by unsecured banknote issuance. All of this led to a considerable depreciation of the currency from July 1945 for 13 months.

The Hungarian hyperinflation finally broke the world record on 10 July 1946 when, despite the application of regulated prices, the daily money depreciation reached 349 per cent, which meant that prices practically doubled every 11 hours (*Virág 2016:20*). Consequently, a new currency, the forint was introduced on 1 August 1946, which was an important component in the reconstruction of the country. In addition to the new currency, inflation also needed to be contained through price and wage reforms, adequate stockholding and effective implementation of the general government resolution programme. Indeed, the introduction of the forint did not automatically mean that price level increases were fully contained: prices continued to rise because of the size of the general government deficit and the shortage of goods. In mid-1948, average food prices were almost 60 per cent higher than two years earlier (*Marton 2012:379*).

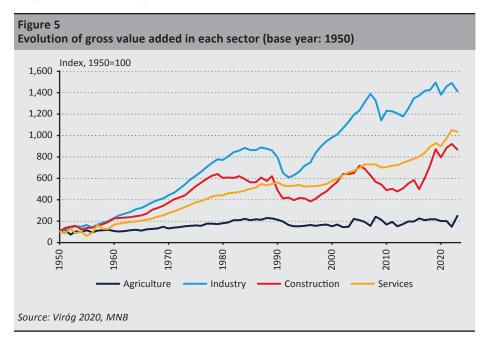
One important difference relative to the post-World War I stabilisation programme was that the post-World War II reconstruction was carried out without major foreign borrowing. The first stage of the reconstruction involved a three-year plan launched in the year following the introduction of the forint, the main achievements of which were higher wages and lower unemployment. It should be noted, however, that a major contributor to the stabilisation was the fact that during the World War II, as the Soviet Red Army was approaching, in January 1945 the staff of the Magyar Nemzeti Bank evacuated 30 tonnes of gold, the central bank's substantial amount of foreign currency reserves and many other valuables to Austria by train. Once in the US zone of occupation, the US army seized the gold, the return of which in June 1946 established social confidence in monetary stabilisation.

Destabilising state control after the loss of World War II led to the establishment of a single-party communist dictatorship in 1949. At the end of 1947 the nationalisation process, which had begun earlier, reached financial institutions and as part of this process the Magyar Nemzeti Bank was also taken over by the state. With nationalisation, the classical central banking era in the history of the MNB came to an end in the first half of 1948. Within the framework of the one-tier banking system established by the 1947 legislation, the MNB assumed the function of commercial

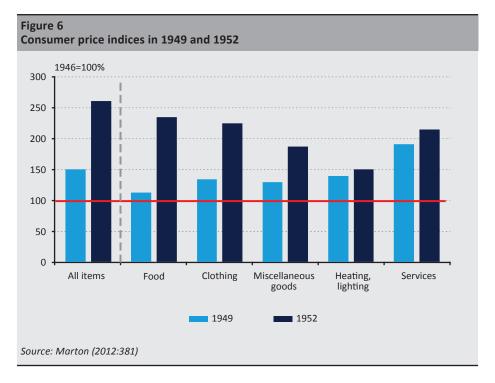
banks as well, although specialised financial institutions were also set up for the purpose of profile cleaning.

The socialist period was characterised by a centralised credit policy, the centralisation of payment transactions and planned foreign exchange management (*Botos – Botos 2004*). The MNB's monetary policy was expected to support investment, the Cold War-era forced military development and agricultural restructuring. The central bank's role in implementing all of this was purely administrative. During these years, central and commercial banking functions were supplemented by powers of an official nature. This triple intertwining was most evident in the management of foreign exchange (*Bozó 2000*).

By the early 1950s, the liquidation of the capitalist economy was complete. Under the socialist economic arrangements, given state ownership and total state control, the real needs of the market were completely relegated to the background. The government embarked on massive industrial and military projects. The main purpose of the first five-year plan launched in 1950 was to transform Hungary from an agricultural into an industrial economy. The results were soon visible on the production side (*Figure 5*).



During the industrialisation process, however, price levels rose again (*Figure 6*), while real wages declined. The problem was addressed by the centralised system of socialist planned economy, introduced in 1952, which ensured the stability of consumer prices until 1968 (*Marton 2012*).



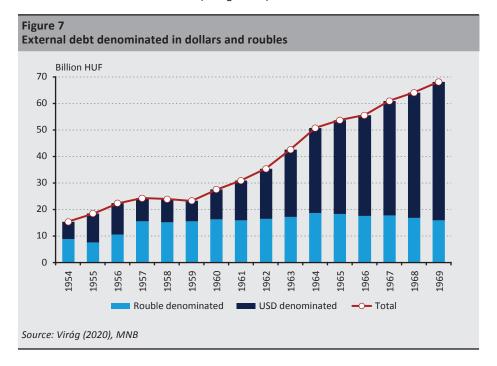
Overall, the economy's performance doubled in real terms during the 1950s, but growth was subject to continuous and extreme fluctuations due to a series of policy shifts, investment cycles, fluctuations in agricultural production and the 1956 revolution and its aftermath (*Virág 2020*).

After the revolution, the socialist regime's main declared goal was to raise living standards and develop infrastructure to meet the needs of the population (*Berényi 1974*). To this end, in the 1960s the regime relaxed its rigid restrictions, which first had an impact on agriculture. Agriculture was re-collectivised with backyard farming connected to large farming operations. There was also a change in the market of industrial goods: after the developments in heavy industry, there was a shift to light industry and the food industry. For the central bank, the centrally planned socialist

economy was characterised by the preparation of a national credit plan, which the MNB outlined on the basis of quarterly management plans reflecting working capital needs (*Botos – Botos 2004*).

In the period between the 1956 revolution and the economic reform of 1968, the MNB was able to carry out its tasks with greater autonomy than in the initial socialist system. In parallel, the retrenchment of administrative functions commenced, and there was a shift towards commercial banking. As regards foreign exchange management, there was a significant increase in turnover, coupled with the commencement of the country's indebtedness, the gradual depletion of gold reserves and the introduction of the dual exchange rate regime – trade and non-trade (*Virág 2020*).

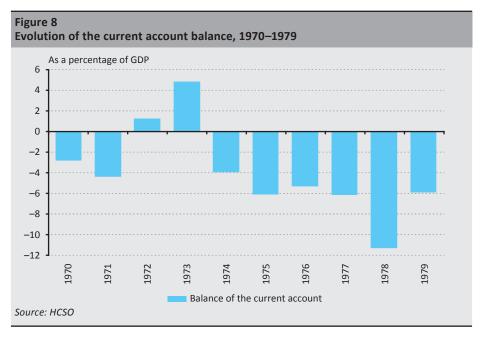
The rise in living standards was accompanied by an increase in the share of dollar imports, including short-term loans (*Figure 7*). Despite the high level of industrialisation, the surge in imports caused specifically by the rise in living standards could not be covered by exports due to structural problems, and consequently the trade balance was also in deficit (*Földes 1995*). It became obvious that, in spite of the forced investment projects, the economic expansion and consumption boom did not proceed according to plan: from 1957, borrowing became a permanent item in other government revenue. Since foreign loans were exclusively injected into the economy by the MNB from the 1960s, the central bank balance sheet also transformed (*Viráq 2020*).



The political leadership came to a difficult decision point: should it continue the strict centrally planned economy or implement a turnaround that promised to be more effective. The introduction of the New Economic Mechanism (NEM) on 1 January 1968 made planned management more flexible and ushered in the era of indirect regulators. As regards the Magyar Nemzeti Bank, it was proposed the year before to separate the central banking, foreign exchange, lending and account management activities of the central bank. The draft also included bringing the central bank under the direct supervision of the government and giving it the power to mint coins. Under the proposal, the first legal requirement for the central bank was to ensure the stability of the value of the forint. Overall, the reforms of the NEM did not change the structure of the banking system or the role of the MNB (Botos – Botos 2004).

The measures introduced in 1968 were not sufficient to maintain the policy of raising living standards financed by credit. This was brought into sharp focus in the wake of the oil crises of the 1970s. The 1970s brought extraordinary and lasting changes at the global level, which also affected the Hungarian economy. The decade began with the collapse of the international financial system established at Bretton Woods in 1944, when the United States suspended the convertibility of the dollar into gold in 1971. Two years later, the fourth Arab—Israeli (Yom Kippur) war broke out and the Arab states of OPEC imposed an oil embargo on countries supporting Israel, leading to a massive surge in energy prices. The first oil crisis was followed by a period of stagflation in Western economies, and in 1979 the Iranian revolution led to a sharp, renewed rise in oil prices. The post-World War II boom period was over.

Hungary's external market opportunities deteriorated amid rising commodity and energy prices. Its important trading partner, the Federal Republic of Germany, sold its products at a higher price, whereas the Soviet leadership refused to accept the planned price increase in Hungary (*Botos – Botos 2004*). Deteriorating terms of trade gave rise to a significant external imbalance from the middle of the decade (*Figure 8*).

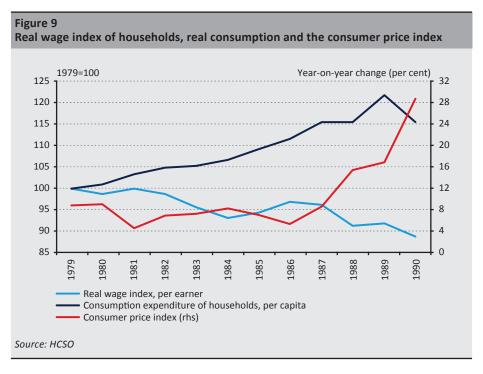


In the 1970s, economic policy was faced with the dilemma that in order to increase production, investment was needed and had to be financed, but this diverted resources away from raising living standards, which was also an important objective, since this was essentially where the political system derived its legitimacy. Thus, borrowing and the country's indebtedness in foreign currency commenced. By 1979, Hungary found itself in a debt trap: the only way to cover the interest on its loans outstanding was to borrow again (*Mong 2012*). The currency composition of external debt itself raised the debt, as Hungary borrowed in currencies the interest rates of which were initially low but later increased, while their exchange rates also appreciated (e.g. Swiss franc or Japanese yen); therefore, Hungary's debt service also increased (*Szalai 2024*).

Hungary wanted to join the International Monetary Fund (IMF) as early as during the reform efforts of the late 1960s, and the growing debt burden in the 1970s strengthened the need for membership even more. Membership would have provided the means for the convertibility of the currency and thus open management, as well as credit opportunities. The application for membership was finally submitted in 1981 and Hungary became a member of the IMF a year later. However, by this time, insolvency was the primary thing to avoid and accordingly, the Hungarian leadership borrowed from the German government and a consortium of the Bank for International Settlements (BIS) and US banks even before accession (Botos – Botos 2004; Mong 2012).

In the 1980s, the neoliberal political and economic trend strengthened, particularly in the United States and the United Kingdom, and called for interest rate rises and austerity to curb inflation. In 1979, Paul Volcker took over the leadership of the Federal Reserve and substantial monetary tightening took place, leading to falling inflation in the United States. At the same time, high interest rates resulted in an increase in debt servicing; consequently, the 'Volcker shock' at the beginning of the decade contributed to debt crises in numerous emerging countries.

In Hungary, economic policy was aimed at restoring the external balance, but maintaining living standards also remained important. Another priority was to maintain economic openness and accordingly, the goal was to restore the external balance by stimulating exports rather than restricting imports. At the same time, the export structure was outdated; thus, in order to correct the trade deficit, domestic demand had to be restrained. Investment decreased, while, even with declining real wages, consumption had remained stable thanks to public transfers, then started to increase again (*Figure 9*; *P. Kiss 2020a*).



Although the IMF loan in 1982 was only a temporary solution to the financing problems, it reduced the need for radical reforms: consequently, indebtedness continued in the second half of the decade and Hungary had to rely on the IMF's assistance again in 1987 (*Mong 2012*). The external indebtedness process that had commenced during the socialist period left a disastrous legacy, and continued to be a problem even after regime change.

Unusually for the Central and Eastern European conditions of the time, the MNB financed attempts to restore the economic balance by borrowing abroad and issuing bonds. In parallel with its international borrowing, the central bank built up a network of representative offices in major financial hubs around the world. Through the MNB, there was constant communication with the economic and financial leadership of developed countries, and it was partly thanks to this circumstance that Hungary became a member of the International Monetary Fund and the World Bank Group in 1982. From the second half of the 1980s, the Magyar Nemzeti Bank gradually returned to classical central banking activities. This process was supported by the political decision in December 1984 to separate the central bank and commercial banking functions within the MNB and to start preparations for the establishment of a two-tier banking system. The banking system was eventually transformed on 1 January 1987. However, this did not mean that the MNB regained its full independence: it became the bank of the state, subject to the control of the Chairman of the Council of Ministers. The MNB's tasks were defined as controlling the money supply and facilitating the achievement of the government's economic policy goals (Bozó 2000).

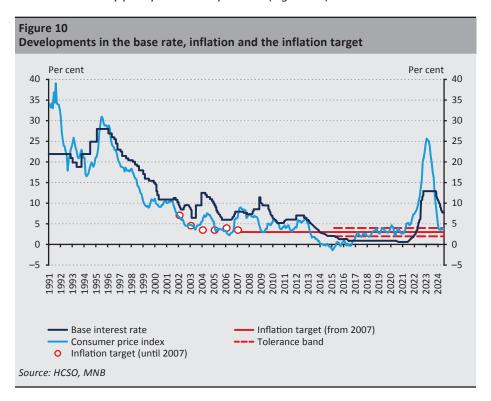
4. Transition to a market economy

By the 1980s, the Soviet Union also found itself in a predicament. Party General Secretary Mikhail Gorbachev announced *perestroika*, marking the commencement of economic and social reforms, which ultimately contributed to the downfall of the communist system and the break-up of the Soviet Union. The transition to a market economy became inevitable in the countries of the Eastern Bloc. Although preparations for the reforms had started even earlier in Hungary, the transition period brought extraordinary difficulties. One of the most serious problems was the erosion of reserves as foreign investors withdrew their deposits. In 1990, the amount of reserves barely exceeded two months of Hungary's import requirements (*MNB* 1991). In the early 1990s, the transformation of the economic structure led to a sharp fall in GDP, accompanied by an increase in inflation, unemployment and public debt. The collapse of the CMEA markets was yet another difficulty. By opening up to the West, some domestic exports were redirected, but the orientation also had negative side effects, as the first Gulf War temporarily increased the price of oil, and the inflationary impact of German reunification necessitated an interest

rate increase. As a consequence, by 1993 a recession took hold in Hungary's new export markets (*P. Kiss 2020b*).

Adopted in 1991, the Act on the Magyar Nemzeti Bank restored the independence of the MNB, defined the place of the monetary authority in the market economy system, and declared that the MNB was accountable to Parliament and not subordinate to the government. At the same time, the Act also stated that one of the MNB's tasks was to support the government's economic policy using monetary policy instruments and to protect the internal and external purchasing power of the national currency, thus implicitly pursuing the objective of price stability.

The Magyar Nemzeti Bank took action to alleviate the current account deficit and increase competitiveness through its exchange rate policy measures. The exchange rate was fixed within a narrow band and was periodically devalued against a predetermined basket of currencies (*Jakab – Szapáry 1998*). As time went on, exchange rate adjustments became increasingly more frequent, and by 1995 the 80-per cent devaluation gave rise to considerable unpredictability and a surge in inflation. Other determinants of price level developments included the abandonment of previously applied regulated prices and the lifting of price caps on food, energy, alcohol and tobacco. In order to reduce inflation, the Magyar Nemzeti Bank raised its key policy rate to 28 per cent (*Figure 10*).



By the middle of the decade, financing the public debt resulting from the persistent government deficit had become increasingly expensive. Thus, under pressure from the International Monetary Fund and the markets, economic policy introduced a programme of rapid expenditure cuts and tax increases ('Bokros package').1 As part of its exchange rate policy, the central bank switched to a crawling peg regime from 1995. This implied a pre-announced pace of the depreciation of the forint, with the central bank and the government setting the pace of the depreciation. This provided a predictable nominal exchange rate, adjusted to the expected inflation rate, and the currency was allowed to float freely within a certain band (±2.25 per cent). The exchange rate band determined the short-term interest rate level expected by investors, and the central bank reacted flexibly to changes in the foreign exchange market in order to increase the room for manoeuvre of the interest rate policy, as indeed, under the crawling peg regime the central bank intervenes only at the two edges of the band and does not alter the exchange rate when it moves within the band (Jakab - Szapáry 1998). This enabled the economy to avoid an immediate change in the forint interest rates expected by foreign investors and helped to maintain economic equilibrium. The crawling peg exchange rate regime proved to be effective in reducing inflation.

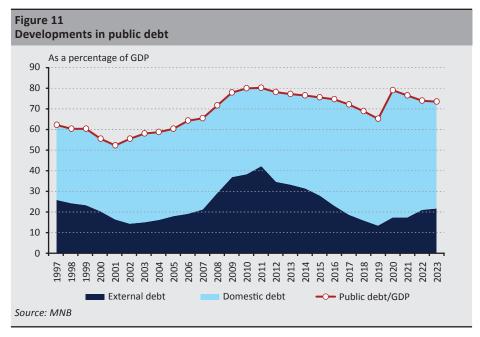
The change in the exchange rate policy was the only appropriate element of the Bokros programme. The convergence that had started after the regime change came to a halt during the shock therapy. The fiscal austerity measures gave rise to high unemployment, falling real incomes, a considerable restraint of domestic demand and a spike in inflation (*Matolcsy 1997*). Economic policy struggled to address the crisis as it was faced with high public debt and reduced fiscal revenues. While the Bokros programme reduced the deficit, lowering inflation was a more protracted process. It was only in 1999 that the consumer price index fell to 10 per cent (*Figure 10*). It was only later, after the introduction of inflation targeting, that it was successfully reduced to lower levels. At heavy social costs, the economic crisis ended by 1997, and by the end of the decade, the convergence expected from the transition to a market economy began, thanks to growth-stimulating economic policy measures.

In 2001, the main objective of the MNB was to maintain price stability rather than the external balance: inflation targeting was introduced, while the central bank also maintained the widened intervention band (± 15 per cent). With the introduction of the new monetary system, the forint became an internationally convertible currency,

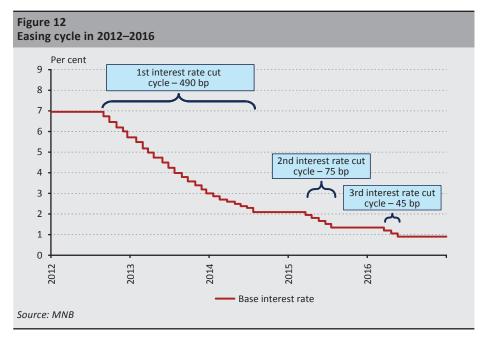
¹ The programme was named after Lajos Bokros, Minister of Finance at the time.

and the pegged foreign exchange regime that had been in place consistently since July 1931 was discontinued; in other words, the independent central bank abolished the longest-standing state-controlled exchange rate regime in the world. However, the new monetary regime was far from operating seamlessly. On the one hand, following the change of government in 2002, irresponsible fiscal policy gave rise to supply and demand-side inflationary pressures (*Szapáry 2006*), and attempts to reduce the growing fiscal deficit proved ineffective. On the other hand, the inflation target was often in conflict with the intervention band as monetary policy focused on the exchange rate rather than the inflation target when the edge of the band was breached. In addition, foreign currency-denominated loans to households hampered the effective functioning of monetary transmission. The major interest rate differentials between forint and foreign currency loans, fierce competition between banks, an inadequate regulatory environment and limited financial literacy all contributed to the rise in foreign currency lending to households.

Although economic growth continued, substantial imbalances had built up, rendering convergence unsustainable. Public debt began to increase rapidly after 2002 (Figure 11), the current account deficit widened, the unemployment rate rose and the MNB had to keep interest rates high in order to reduce inflation, which encouraged borrowing in foreign currencies, primarily in Swiss francs. All of these factors contributed to the predicament that Hungary faced even before the global financial crisis of 2008. Although the government attempted to carry out a fiscal adjustment in 2006, this was unsuccessful as the package was essentially composed of revenue-based austerity measures that did not address structural problems. Therefore, the crisis hit Hungary in a very vulnerable state. The government bond market and the foreign currency liquidity of the banking sector were also on the verge of collapse. In response, the MNB raised its key policy rate by 300 basis points, buying time until a credit agreement with the International Monetary Fund was reached, which eased the crisis. As a result of policy mistakes in the years preceding the crisis, both fiscal policy and monetary policy had little room for manoeuvre, and accordingly, the crisis was not properly managed. Hungary needed external assistance from the IMF and the European Commission, which reduced the sovereignty of Hungary's economic policy.



Having addressed the acute phase of the crisis, monetary policy should have implemented a strong easing cycle. However, this was hindered by a number of factors, such as the banking and debt crises in southern European countries in 2010–2011, and widespread foreign currency lending. Besides financial instability, the latter implied that a strong easing cycle and the resulting weakening of the forint would have negatively affected the income of foreign currency borrowers. The solution to the problem, the conversion of foreign currency loans to forint, was only implemented years later, after the monetary policy changeover in 2013. Thus, during the crisis, the MNB's ability to help the real economy recover was limited. The turning point came with the 2012 'whatever it takes' speech by then European Central Bank (ECB) President Mario Draghi (Draghi 2012), the ECB's new Outright Monetary Transactions (OMT) asset purchase instrument and the Fed's new round of quantitative easing, which together calmed markets and also reduced the Hungarian risk premium. As a result, the Monetary Council, together with its new members, was able to start its cycle of interest rate cuts in August 2012, which lasted for almost four years (Figure 12).



5. A stable and independent central bank in a changing world

2013 brought a radical change both in the independence of the central bank and the unfolding of the central bank's set of objectives. The central bank was given a macroprudential mandate, and the new Act on the Magyar Nemzeti Bank added financial stability to the central bank's objectives. This brought the MNB's competence in line with the global trend of increasing central bank involvement in ensuring the stability of the financial system following the great financial crisis of 2007. In 2013, the Hungarian Financial Supervisory Authority (HFSA) was merged into the MNB, which enabled the central bank to manage risks faster and more effectively, strengthening the resilience of the financial system.

Following the recovery from the crisis, economic policy took a new direction. The previous unsustainable growth model, which was based on external debt, was replaced by reforms that supported employment, investment and export growth. The era of irresponsible fiscal spending was over, and the tax regime was restructured to encourage employment and entrepreneurship (*Matolcsy 2015*). Outstanding debt was on the decline. Household real income and savings started to grow. The formula for success was achieving equilibrium and growth simultaneously, underpinned by an economic policy vision of labour as the primary source of income. Most of the structural reforms were implemented at the beginning of the decade, between 2010 and 2013. Restoring the fiscal balance was supported by a complete overhaul of the revenue structure of the general government, shifting

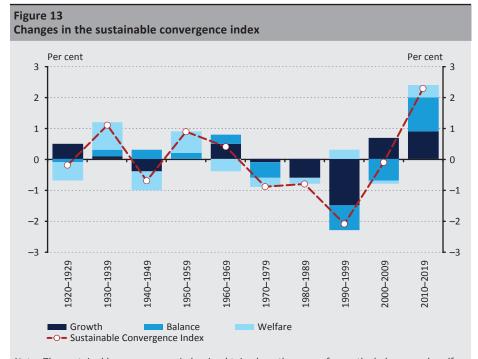
the tax regime from taxes on labour and capital to taxes on consumption, and introducing sectoral special taxes to achieve a more proportionate distribution of tax burdens. The reforms of the Széll Kálmán plans reduced fiscal expenditure while supporting an increase in labour market activity. The adoption of the 'work not aid' principle not only helped to balance the budget but also to raise employment to historically high levels, creating nearly 1 million new jobs. Successful budgetary consolidation and labour-based economic policies put the Hungarian economy on the path of convergence, laying the foundations for the monetary policy and credit turnaround of 2013 (*Matolcsy – Palotai 2016*).

Drawing the lessons from the crisis, the MNB also launched a number of programmes to stabilise the financial system and stimulate economic growth. The Funding for Growth Scheme was intended to stimulate lending to the small and medium-sized enterprise (SME) sector. The Self-Financing Programme encouraged the banking sector to hold long-term liquid securities instead of central bank deposits by changing the monetary policy toolkit. The increased demand for forintdenominated securities by domestic banking participants enabled the Government Debt Management Agency (ÁKK) to convert foreign currency debt into forints, thus helping to reduce Hungary's external financial vulnerability (Matolcsy - Palotai 2019). Implemented jointly with the government, the conversion of foreign currency household loans into forint strengthened the domestic financial system and monetary transmission, while the cycles of interest rate cuts provided strong support to the real economy without jeopardising price stability. The measures contributed to the fact that growth was accompanied by the normalisation of financial intermediation and a remarkable decline in external vulnerabilities; moreover, price stability also proved to be enduring. For the first time since the regime change, the MNB achieved its primary objective of ensuring price stability on a sustained basis in the second half of the 2010s. While European countries were threatened by the emergence of a deflationary environment in the post-2008 crisis period of balance sheet adjustments, the MNB kept average inflation at the 3-per cent target with great precision between the beginning of 2017 and the end of 2020. During the period, inflation was within the ±1 per cent tolerance band for 44 out of 48 months. This was also an exceptional result by international standards (Matolcsy 2022).

Moreover, the MNB developed a competitiveness package to support the country's sustainable convergence. The economic policy turnaround has paid off, with convergence resuming, this time while maintaining balance. During the period, economic growth consistently exceeded the EU average. Between 2013 and 2019, Hungary's GDP grew by 3.8 per cent annually on average, 2 percentage points higher than the average growth rate in the European Union. The accelerating economic growth was achieved in a balanced structure. The investment rate in Hungary also rose at an outstanding pace compared to the EU; in addition, the country's export

market share also increased. Meanwhile, the current account was in surplus or close to balance. Growth was supported by a favourable financing environment. Thanks to the Self-Financing Programme, the conversion of foreign currency loans to forint and macroprudential measures, the banking system's exposure to foreign funding was reduced significantly, shifting the financing of the economy towards domestic funds (*Kuti – Simon 2024*).

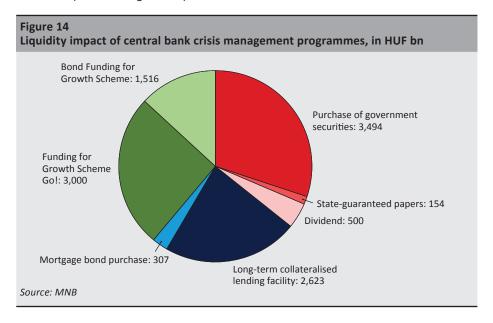
The Hungarian economy's performance reached historical heights in the 2010s. Although the country had experienced periods of growth from time to time in the previous century, they typically came at the expense of the financial balance, and only in a few cases did they represent progress towards reaching the level of development of Western European countries. By contrast, for the first time in the turbulent century following the Trianon peace treaty, Hungary embarked on a path of balance, growth and convergence simultaneously between 2010 and 2019 (*Figure 13*). Thus, the economic policy turnaround carried out with the MNB performing a key role brought about the most successful decade of the Hungarian economy in the last hundred years (*Balázs – Soós 2020*).



Note: The sustainable convergence index is obtained as the sum of growth, balance and welfare components. Each time series is standardised. Growth: difference between the average change in domestic GDP and the average change in GDP per capita relative to Austria. Balance: the absolute distance of inflation from the target, change in the current account balance and the change in the debt-to-GDP ratio. (The change in inflation and the debt ratio have opposite signs.) Welfare: life expectancy and change in the number of rooms per person.

Source: MNB based on Eurostat, HCSO, Maddison and Faragó (2011)

The 2020s presented the central bank with unprecedented challenges in the form of a pandemic, a drastic rise in energy prices and global inflation materialising in the wake of the Russia–Ukraine war. The years preceding the outbreak of the coronavirus pandemic were characterised by a period of growth with balance maintained. Hungary had robust resilience, stable fundamentals and sufficient room for policy manoeuvre to successfully manage the crisis (*Matolcsy 2021*). In order to stop the spread of the virus, governments around the world decided to suspend or restrict a significant part of economic activity. In this exceptional situation, businesses and the public both needed support. The central bank had to ensure, first and foremost, financial market stability and liquidity of adequate maturity for economic participants (*Matolcsy 2021*). The MNB provided more than HUF 11,000 billion in targeted measures to support crisis management (*Figure 14*), which may have increased domestic GDP by 10 percentage points between 2020 and 2024 (*Kuti – Balogh 2023*).



The success of the period preceding the pandemic is underlined by the fact that Hungary managed to reach its pre-crisis performance in only six quarters after the crisis, whereas this took six years after 2008. Pre-pandemic successes are also reflected in the increased resilience of the banking system. The financial sector remained stable throughout the challenging early years of the 2020s. Banks have sufficient lending capacity and thus the country was able to avoid a long, creditless recovery period (*Matolcsy 2021*).

The government bond market remained stable despite rising deficits and public debt, with the MNB's measures playing an important role in this achievement. The central bank launched a government bond purchase programme and provided the banking system with a fixed-rate credit facility. This ensured stability and enabled the state to raise funds at low interest rates for a long period of time (*Kuti – Simon 2024*).

The global economy had barely recovered from the crisis arising from the COVID-19 pandemic when inflation started to rise suddenly and sharply, and central banks had to react. The MNB was one of the first central banks in the world to start monetary tightening, which was later justified not only by inflationary developments but also by external imbalances and adverse financial market developments. By September 2022, the market environment exhibited a considerable improvement; consequently, the central bank decided to end its largest consecutive cycle of base rate hikes since 1990. However, this was followed by a series of negative events that put domestic assets under almost unprecedented pressure for a period of two weeks. There was news of gas supplies through Ukraine being cut off, the Nord Stream pipeline was blown up, gas prices skyrocketed, capital flight from emerging markets commenced, the risk environment deteriorated and turbulence in foreign exchange markets led to a steep depreciation of the forint. In order to restore financial stability, the Magyar Nemzeti Bank took extraordinary measures on 14 October 2022. In a single step, it raised the effective policy rate by 500 basis points and announced that it was ready to provide energy trading companies the foreign currency liquidity needed to cover the energy balance from its own foreign exchange reserves (Kuti 2023). As a result of the MNB's measures in autumn 2022, the stability of domestic financial markets and the risk perception of Hungary improved on a sustained basis. The stable market environment created an adequate basis for sustained disinflation, which is an essential condition for sustainable growth.

At present, it appears that the interest rate hikes by the world's central banks have broken the upward trend in inflation, and the MNB's well-timed tightening and successful handling of the October 2022 crisis enabled inflation to return to the tolerance band around the inflation target in 2024; restoring price stability was now within reach. However, it cannot be said that the fight against inflation is over; cautious and patient monetary policy is still needed to achieve the inflation target in a sustainable manner.

Today, economic systems around the world are being reshaped by numerous megatrends. The digital and green transition creates extraordinary opportunities for all participants of the economy, but also poses significant challenges. Climate change is an increasingly serious problem, threatening the fulfilment of the central bank's mandate for price stability and financial stability through inflationary impacts on food and energy prices and damage from extreme weather (*Kolozsi et al. 2022*).

Recognising the importance of these risks, in May 2021 Hungary's Parliament gave the Magyar Nemzeti Bank a green mandate to support the government's environmental sustainability policy, complementing the scope of its tasks secondary to achieving and maintaining price stability. The amendment was followed shortly afterwards by a revision of the MNB's toolkit to take into consideration the aspects of green transition and thus sustainable growth. The benefits of artificial intelligence are being exploited in a growing number of areas, but its widespread use makes it inevitable to pay greater attention to cybersecurity. Unfavourable demographic trends pose serious challenges to labour markets, as well as health and social care systems. During the coronavirus pandemic, debts increased, also limiting the room for manoeuvre in fiscal and monetary policy. Recent years have seen the escalation of geopolitical tensions and the outbreak of wars, which may generate difficulties for a small, open economy through supply chain effects. The functioning of the economy cannot be isolated from political and social processes; it is therefore essential to monitor events, assess them properly and react effectively (Balogh et al. 2024).

6. Conclusions

While the megatrends shaping the global economy are visible, one important lesson from the early years of the 2020s is that another shock can come at any time, which means that the central bank of a small, open economy must be in a constant state of alert. This requires a great deal of ammunition. As Sándor Popovics said in December 1933, when there were lively debates not only in Hungary but also on international economic forums about how to get out of the Great Depression, "give room for expertise and knowledge" (Popovics 1933:1). The Magyar Nemzeti Bank continues to bear this in mind, with the goal of using the knowledge and experience accumulated in the institution to provide effective responses to the challenges arising in implementing the central bank's mandate. In the current era of geopolitical risks, the green and digital twin transition, demographic turnaround and rising debt ratios, ensuring price stability remains the main objective of the central bank.

This historical review gives a glimpse of the numerous challenges that the Magyar Nemzeti Bank has faced in its century-long history, be it periods of war, economic crises or the structural changes brought about by the advance of globalisation and European integration. These experiences have confirmed the MNB's ability to adapt to changing circumstances while striving to maintain and restore the stability of the Hungarian economy. The mandates of the MNB and the hierarchy thereof clearly define the central bank's tasks and the scope of action available to the MNB. Hungary's central bank will be able to make the greatest contribution to the success and sustainable convergence of the Hungarian economy if it fulfils these

mandates and achieves its objectives, and it can operate most effectively when it is independent.

Lessons from the past also underline that flexibility and the ability to innovate are essential to successfully face future challenges. These last 100 years have demonstrated that economic stability and the soundness of the financial system are the cornerstones of a nation's long-term prosperity. The central bank will continue to focus on maintaining these in the future.

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