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70 Years of the Hungarian Forint

SUMMARY: In the 20th century, Hungary suffered two previously unprecedented hyperinflations, as a consequence of the two world wars. We may rightly refer to the devastating effects of war with respect to their emergence, however, in both cases the country had to face severe economic and financial problems, although different in nature, which not only enhanced inflation, but at the same time encumbered the attempts made for mitigation and currency stabilisation. While the introduction of the pengő, as new currency, was preceded by huge territorial losses and population decline, as well as by the loss of national assets up to 85–90%, the introduction of the forint, as new currency, witnessed a country destroyed both economically and physically, and deprived of 40% of its national assets.

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Inflation – made to serve war – started to rise gradually as of the spring of 1938. It completely disrupted market supply in favour of wartime production and at the expense of consumer goods. The robust growth in military expenditures, and the concurrent decline in consumables almost led to the complete disruption of the domestic market by 1944. The financial burdens resulting from the German occupation of Hungary starting on 19 March 1944 further aggravated the country's financial equilibrium.[1] The provisioning of and supplies given, without any consideration, to the occupying troops placed a financial burden of exactly 2 billion pengős in cash on the National Bank of Hungary.[2]

BACKGROUND

According to experts, the worst war damages were suffered by private households, the manufacturing industry, the agricultural and transport sectors, as a result of which supplies to the urban population became critically low, to the extent that even prevented the introduction of rationing. In the absence of resources and export possibilities, no substantive imports could be envisaged, as the gold and foreign currency reserves of the National Bank of Hungary were taken by the retreating occupiers, and the return of such reserves was not even discussed at the time and was completely uncertain. Transitional assistance, amounting to USD 30 million, was provided by the Soviet Union in the form of an approximately 1-year loan. Without proper tax bases, the so-called Debrecen government could not realise revenues, while an *"unprecedented race commenced between prices and wages."*[3] No substantive improvement resulted from the ban introduced on the import of pengős, or later from the overprinting of bank notes, while foreign exchange restrictions failed due to the absence of supervisory bodies.

As the usual result of inflation-related expectations, direct exchanges of goods, and tac-

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itly approved sales based on foreign currencies and gold became widespread.[4] Although desperate "money printing" was launched, it only fuelled inflation even further, and did nothing to curtail it, as a consequence of which domestically printed paper currency was forced out of circulation. Monetary and the related administrative regulatory practices, enforced through money supply, were rendered impossible by all this. Consequently, the efforts aimed at the quotation of certain foreign currencies also remained unsuccessful.

One of the important characteristics of hyperinflation is that it deprives the state of appropriate budgetary revenues, as the purchasing power of fiscal revenues converges to zero during the period of tax declaration, levying and payment of taxes. *"To eliminate this effect, the tax pengő was introduced on 1 January 1946 as an accounting unit intended for the purpose of valorising tax payments…" "The value of the tax pengő in relation to the »regular« pengő was determined daily based on retail price changes of the previous day expressed in »regular« pengő."*[5] The tax pengő was generally accepted as legal tender, which was demonstrated by the fact that financial institutions, similarly to the National Bank of Hungary, opened and accepted fixed deposits based on tax pengő, and used it as an accounting unit in interbank transactions, as well as for discounting and re-discounting bills of exchange, and was even used for the purpose of issuing state notes. Due to the steep devaluation of the pengő, state notes took over the role of legal tender, almost completely forcing bank notes out of circulation.[6]

Obviously, all this was not sufficient to stop inflation, which was rising gradually, but at a swift rate, eventually leading to the complete disruption of the price system.[7] Although the government made attempts to regulate the price of certain industrial and food products, these attempts remained fruitless due to the stupendous shortage of supply. Moreover, there was growing tension between the rural and urban population, and the government did not have sufficient intervention stocks to resolve the situation. The sight of "bundle packs" and the phenomenon of "non-equivalent exchange" of goods *(urban residents put their valuables in bundles and travelled to rural regions to exchange those for food)* became widely known, and put urban residents into a disadvantageous situation.

The disorganised nature of public finances and of the population's income situation evidently hindered the reconstruction of the country started with great determination. However, an extraordinary situation evolved. Despite the unprecedented level of hyperinflation, the country's pace of recovery considerably exceeded expectations. *"Inflation is the most trying tax burden and imposes the most imperious austerity measures. Bridges and railways were rebuilt, houses, factories and workshops were reroofed through the inflation taxes collected and at the cost of depriving masses of food and of decreasing their standard of living. Without inflation, tax payers would have never been willing and able to undertake the burdens required for the enormous investment and reconstruction works realised in the form of increased tax rates. Perhaps, this is the deeper meaning, and even solace, of inflation-stricken economy, no matter how tragic it is."*[8]

The above mentioned facts are underpinned by the 1946 annual report of the National Bank of Hungary, which stated that *"during the course of the 1945/46 financial year, the performance of the Hungarian economy greatly improved, despite the escalating rate of inflation. The acreages for crop came close to their regular size, although did not actually reach their previous size. The livestock population started to grow again, the production level of coal mines improved significantly, and the recovery of the technical capacity of the industrial sector progressed at a fast pace."*

PREPARING FOR AND IMPLEMENTATION OF STABILISATION

The coalition government established at the end of 1945, replacing the previous interim government, declared the need for economic consolidation, and the creation of a new, stable and durable domestic currency within the framework thereof. Accordingly, a Reconstruction Committee[9] was established in May for developing the conditions of the forthcoming monetary reform and for creating a durable domestic currency, the essential general and economic conditions of which were deemed to be acceptable by the summer of 1946. According to contemporary expectations, the gross national income was to reach 50% of its pre-war level by that time, including the agricultural sector, which was thought to potentially even reach 70–80% of its productivity in 1938, with particular regard to cereals and root crops. Pig and poultry populations were also recovering at great pace.

Naturally, industrial productivity needed a longer time to recover, but the necessary raw materials and labour force were available to match its limited capacity. However, significant difficulties were to be overcome in transportation, the recovery of which set serious challenges for those concerned.

With regard to the foregoing, consumables were started to be supplied in greater volumes and stockpiling was commenced (primarily of agricultural tools and machinery, clothing products, lighting devices, medicinal products, textiles, industrial products etc.) at the turn of the years 1945–1946, in preparation for the start date of stabilisation launched later on.

"The experts of the National Bank of Hungary prepared an internal study as early as in March 1946 in relation to the accession of the country to the International Monetary Fund and the International Bank for Reconstruction and Development, both established under the framework of the Bretton-Woods Agreement, and for the purpose of compiling the necessary application for inclusion and for meeting the related requirements."[10] Knowing the historical circumstances, unfortunately the use or publication of that study was rendered impossible.

The role and opinions of actively functioning civic and middle-class political parties were gradually pushed into the background; and in contrast with their aspiration, according to which international loans should have been used for implementing a successful stabilisation programme; the recommendation made by the Reconstruction Committee established by the Hungarian Communist Party in March 1946 was implemented instead, declaring that a new domestic currency can be successfully established based on domestic resources.

In addition to intensifying the stockpiling activity in preparation for the stabilisation programme, coal mines were nationalised, major industrial companies, and later on financial institutions were taken under control, and a significant loan, under the collateral of CHF 15.1 million, was taken out from the National Bank of Hungary. In addition, in terms of foreign trading, a state-owned joint-stock company was given a highly important role. A shift was made to establish a controlled economy, within the framework of which a National Material and Price Control Office was set up, and after the nationalisation of coal mines, further steps were taken to take heavy industrial companies and financial institutions into "state control". It was a decisive factor in the successful implementation of the stabilisation programme that the Council of Foreign Ministers in Paris adopted a decision on the repatriation of the USD 32 million gold reserve owned by the National Bank of Hungary, that was taken to some Western European country by the fleeing Arrow Cross government.

With the help of the measures taken in the interest of creating the prerequisites of the stabilisation programme in the 18-month period prior to its commencement, a new currency was introduced on 1 August 1946 – according to the decision of the Hungarian government – for managing domestic and international cash transactions. Several proposals were made regarding the name of the new currency ("máriás", "libertás" etc.), however, the intention to observe traditions seemed to be decisive when the "forint" was chosen, which had already proved to be a successful currency during the reigns of *King Charles I of Hungary, King Louis I of Hungary and in the eras* of *Rákóczi* and *Kossuth*. The fractional currency was given the customary name "fillér", in the spirit of continuity.

The related government decree specified the gold content of the new currency, the monetary standard of which per unit was set at 0.0757 g of gold, therefore, the price of one kilogram of fine gold was HUF 13,210, [11] and consequently, based on the gold parity, the following rates were determined: USD 1.00 was equivalent to HUF 11.74, while GBP 1.00 was equivalent to HUF 29.35. At the same time, the relation between the forint and the pengő was also specified: HUF 1.00 = 0.28766 pengő, calculated at the value prevailing in 1938.

Naturally, during the course of the stabilisation programme, the set of denominations of the new currency also had to be determined. Accordingly, the denominations of the new coins and bank notes were determined by applying the binary-decimal system (triplet) that proved to be working well for the pengő.[12] At the time of the stabilisation programme, 10 and 100 forint bank notes, as well as 2, 10 and 20 fillér coins, and 1 and 2 forint metal coins and 5 forint silver coins were issued.[13]

As a consequence of the pengő's annulment, the opening balance of the National Bank of Hungary as at 1 August 1946 was started with zero bank notes, however, it maintained the quotations related to USD, CHF and SEK, and in the case of foreign exchanges, the quotations relevant for New York, London, Paris, Zürich, Stockholm, Copenhagen and Oslo.

The centralised economic governance, increasingly shifting towards the introduction of planned economy, tried to maintain the undoubted success of the stabilisation programme by introducing rationing, land distribution, and later on by the forceful establishment of cooperatives, fixed official prices etc. However, no real market equilibrium could be attained, as demand for food, quite understandably, significantly exceeded the demand for industrial products and services, as a consequence of which the purchasing power of the forint declined by approximately 40% in three years. In addition to the foregoing, there is no doubt that *"wages started to increase, and unemployment was eliminated. According to various estimations, the gross national income reached the level prevalent in 1938 by the years 1948–1949."*[14]

In addition to economic difficulties, the price level was also negatively affected by certain politically driven decisions, which for the most part were contradictory to the principles of supply and demand. The concept, based on which multiplicators of 4.2 and only 3.4 were applied to the prices of industrial and agricultural products in 1938, respectively, was doomed to fail to begin with, as it increased the price scissor of industrial-agricultural products to 24% from a previous 10%. However, due to the understandably high demand for agricultural products, the pre-war conditions were quickly reached again leading to a significant increase in the general price level. These resulted in a continued price increase in the industrial sector.

Price rises brought about significant cash flow growth, which was intended to be restricted by the central bank by applying a cap on bank notes in the value of HUF 1 billion, complemented by the issue of coins equivalent to HUF 70 million. These measures proved to be more or less successful, because bank note circulation, according to experts, approached the otherwise justified level only at around the end of 1949.

According to subject matter experts, five time periods can be distinguished in the history of forint, as a currency, although these periods are specified and classified based on somewhat different aspects. The time periods are as follows:

- reconstruction period following the stabilisation programme (1945−1951);
- the period between the "year of the turn" (1952) and the introduction and evolution of the planned economy (1967);
- attempt at establishing and properly applying a "new economic mechanism" (1968–1989);
- the time period between the "change of the political regime" (1989) and the global financial crisis (2003–2009); and finally
- the time period following the global financial crisis up to this day.

RECONSTRUCTION PERIOD

In the given political situation , it was evident that power would be concentrated in the hands of the Hungarian Communist Party, which led to the proclamation of a three-year national plan on the first anniversary of the stabilisation programme. This plan was announced to be completed after two years and five months, in 1949. The gross national income roughly reached the level prevalent in 1938, but as the plan was primarily aimed at the reconstruction of heavy industry, it substantially modified the structure of the economy. As a consequence, the general price level increased by 35 per cent, food prices rose by 60 per cent, while the rate of price increase in the case of manufactured products was 14 per cent.

In this period, as people found themselves short of cash, the population tried to get rid of their accumulated reserves of gold and foreign currencies, as these were not suitable for fully replacing the legal tender, which was made even more difficult by the almost complete isolation from the rest of the world.

The nationalisation of financial institutions belonging to the first curia, and then later that of the rest of the financial institutions, as well as the concentration of cash flow and lending monopolies in a single hand (MNB) projected the complete dispossession of financial affairs by as early as the end of 1948. The elimination of the independence of commercial banks or their incorporation into the National Bank of Hungary, created an institutional entity that included central bank and commercial bank functions in a single organisational framework. A centralised, one-tier, executive type banking system was created by maintaining its currency issue (emission), cash flow, lending and foreign currency monopolies, and demarcated the room for manoeuvre in terms of the domestic currency and for its customers.

In 1951, at the start of the second year of the first five-year plan launched on 1 January 1950, a regulation was adopted to plan the amount of cash placed into circulation, with a view to diverting a part of the increasing cash flow transactions to the settlement transactions.

In December 1951, a general price and wage reform programme was launched and rationing was abolished, and the disproportionateness of these measures is reflected by the fact that the general price level and the wages were increased by 40 and roughly 20 per cent, respectively, which cut the forint's purchasing power by nearly 60 per cent compared to its status at the time of the stabilisation programme. This action reallocated significant incomes from the population to the stretched and lopsided economic policy of socialist industrialisation.[15]

"THE YEAR OF THE TURN" AND ITS CONSEQUENCES

The previously inflexible planning scheme applied to currency issue was repealed with the introduction of the socialist planned economy system in 1952, and it was replaced by a practice used by the Soviet Union: treasury planning, which in certain aspects was less stringent, however, still remained inflexible to a certain extent.

The domestic economic structure (in line with the recurring slogan of "the country of iron and steel") determined the financing of nationalised companies, which were required to abide by the planning and target-driven scheme and to be compliant with hedging and expiry principle, and all this resulted in unlimited spending of cash by making references to the above principles. The fact that the organisation of the National Bank of Hungary was only able to follow the premature, rushed changes introduced to the monetary and credit system with certain delay also contributed to the above.

At the same time, unprecedented austerity was demonstrated with respect to cash flow, on the one hand due to the continuous fear of inflation, and on the other hand due to the reason that cash flow between money owners (primarily companies and institutions) were intended to be directed to bank accounts. In the latter case, at first cash payments were capped at HUF 100, which was later increased to HUF 500, which proved to be so desipient that even the National Bank of Hungary declared it unreasonable and exaggerated on multiple occasions.

The continual growth of cash flow necessitated the issuing of new bank notes in higher denominations and accordingly, 50-forint bank notes were issued in 1953. It was a typical of this time period that prices did not change substantively, or in certain cases even decreased, despite an evident increase in the volume of goods and services. In my personal opinion, the then emerging pervasive insolvency played a significant role in the above mentioned situation. Neither financial governance, nor the one-tier banking system was able to effectively manage this insolvency. Although the MNB simplified the scheme of treasury planning, extended new versions of cashless accounting methods (planned payment, letter of credit, immediate collection of debt, settlement cheque, etc. systems), and abolished forceful lending, it was not able to prevent the escalation of payment problems.

The deficiencies of the one-tier banking system became increasingly accentuated in this period, which were attempted to be offset by establishing additional state-owned banks and by the continued organisational decentralisation of the National Bank of Hungary.

The military acts of the Hungarian Revolution of 1956 caused severe human losses and material damages. Production levels declined, the budget turned into deficit, consumption significantly exceeded previous levels, however, supplies declined substantially. Inflation came within close proximity again, and it took almost two years to overcome this problem.[16] Solvent demand for agricultural products increased in excess of supply, and for the first (and actually the last) time in the 20th century, a price scissor of agricultural vs. industrial products emerged in 1955.

"The intellectual background and events of the 1956 Revolution left their imprints on the thinking of financiers" … "and a series of studies were published analysing issues such as" … "the questions related to the credit relations between the central bank and the central budget,

the importance of interest policy, the timeliness of the modernisation of the banking system and organisation etc."[17]

By having regard to the above, the government felt that the time had come to perform a "one-off" producers' price arrangement in 1959, which initially sparked further price rises, as if demonstrating the failure of overallocation. At the same time, however, as a result of some "liberalisation" in foreign trading, the government was yet again forced to reconsider its economic and foreign exchange policies, and had to harmonise the relation between the external and internal value of the forint, which however necessitated a fundamentally new approach.

ATTEMPT AT ESTABLISHING AND PROPERLY APPLYING A "NEW ECONOMIC MECHANISM"

In the middle of 1966, the party leadership adopted a decision on the marketisation of the country's economy, with a view to curtailing centralised management by giving priority to a more active role for the market. As a result of the "reform" programme launched on 1 January 1968

- *"the role of central planning declined, while corporate independence gained momentum in terms of production and capital expenditures;*
- *in parallel with officially regulated prices, the prices of certain products were allowed to be established by actual market demand;*
- *the centrally administered wage system was replaced by a more flexible regulatory framework, managed by the companies under certain limitations."*[18]

As a result of the measures implemented, the previous predominance of fixed prices was undoubtedly mitigated, however, prices and wages became "downwardly rigid", which in turn required the implementation of a complicated state-managed reimbursement system. Accordingly, the expectation that the application of differentiated state subsidies may prevent the upward price adjustment effects of the international and domestic markets failed, despite the fact that the room for manoeuvre granted to economic organisations was undoubtedly extended. The difficulties were further intensified by a certain "inward turn" that intended to develop domestic prices by using manipulated import prices.

In the meantime, sharp changes emerged in the world market, namely, the prices of energy sources and raw materials soared in 1973, to which Hungary failed to adjust, what is more, the forint was revalued which, while preventing the exploitation of import substitution possibilities, also limited our export possibilities. As a consequence, Hungary, as an "inward-looking country" (as termed by international literature), emerged as a loser from this particular crisis situation.

The gradual decline of the country's economic equilibrium peaked in 1978, which was further aggravated by another international economic crisis in 1979 which was even more severe than the previous one. The introduction of pricing reflecting real market prices and price ratios became inevitable. As was functioning as an "outward-looking country", complying with world market prices and price ratios and adapting a related price mechanism. To this end, solvent demand had to be restricted, a new foreign exchange policy had to be developed, and the country had to join international organisations and acknowledge the actual purchasing power of our domestic currency. Unfortunately, Hungary failed to develop functions that would have been sufficient in promoting export, restricting import and protecting domestic price levels, the combination of which could have shown a more favourable overall picture to foreign markets.

FROM THE CHANGE OF THE POLITICAL REGIME TO THE GLOBAL FINANCIAL CRISIS

The first half of the 1980s was still characterised by successive price rises, as an accompaniment to long-awaited and imminent social, economic and political changes. The changes in the ownership structure also impacted the economic structure, primarily after the appearance of foreign capital. As income inequalities intensified, production, employment and as a result income levels took a downward turn. Consequently, the measurement and assessment of the inflation of the domestic currency became significantly more complex than before, as a result of the altered price, wage and foreign exchange policies and practices.[19]

After the change of the political regime, the forint as currency endured one of the hardest periods of its history in terms of its purchasing power in light of its 20 per cent devaluation and a decline in GDP. During this time period, inflation surged to double digits, and it peaked at 35% in 1991. The government tried to mitigate the impacts of the global financial crisis sparked off by the "Gulf War", however, these actions failed to bring about even a temporary remission, and inflation continued to remain high, the same as it was at the onset of the 1990s. This thwarted the government's expectations in terms of economic growth, which was reflected by the continued devaluation of the forint. The measures taken for promoting export and for regulating consumption and public finances, as well as the application of the crawling peg regime to the forint all proved to be painful, but eventually effective actions, as the subsequent "Asian, Russian and then South-American financial recessions were all unable to substantially affect its foundations."[20]

The impacts of the economic recession affecting the time period from the year 2000 through to 2002 were more moderate than before, as the increase of the general price level remained under 10 per cent. This was also favourable from the aspect of Hungary's expected accession the European Union. However, from the end of 2003, inflation necessitated less intensive, but additional price adjustments, due to the unavoidable upward effects of the second Gulf War on prices. Naturally, these measures had an unfavourable effect on the external value of the forint.

After Hungary's accession to the European Union, propensity to save increased temporarily, which in turn affected the price trends. Additional favourable effects resulted from the reduced VAT rate. At the same time, the budget deficit, which had become quite significant by then, gave rise to serious concerns, and the signs of recession started to emerge as a consequence of the increasingly unfolding global economic crisis.

The rate of inflation accelerated in Europe, and the European Central Bank (ECB) increased the benchmark interest rate to a seven-year-high, as a result of which the MNB also increased the interest rate drastically, and successfully pre-empted speculations. The price to pay, however, was that the forint weakened significantly, along with other currencies of the region. Another contributing factor was that some of the investors left the region, and import prices rose steeply. At the same time, however, there were increasing indications suggesting that the recession would ease up slightly, and the proclaimed convergence programme latently contributed to the perceived increase in the forint's purchasing power.

THE PERIOD FOLLOWING THE GLOBAL FINANCIAL CRISIS UP TO CURRENT DAY

From the second half of 2009, the impacts of the economic recovery programmes became perceivable. It was a strange contradiction, as international and domestic experts started to recognising these tell-tale signs slowly and with excess caution. At the same time, the EBRD also confirmed the prognosis for Hungary, according to which the domestic GDP is expected to grow, even in the prospect of several years. The MNB's press release of 27 September 2010 stated the following: "It may be established that the recession has come to its end in Hungary as a result of a global economic recovery." However, experts called the attention to the fact that the increasing uncertainty observed in world economy might have an unfavourable effect on the forint, as currency. In their opinion, certain leading European governments fail to properly manage the situation in the aftermath of the financial crisis, when such governments aim to restrict economic growth, and a credit market freeze might arise as a result of their austerity packages, and might lead to a situation of the repeated emergence of "inward-looking" countries.

One of the most important experiences gained from the history of the forint, as currency, is that the benefits of the creeping inflation were applied successfully at the verge of inflationary pressure. This is clearly demonstrated by the change in the consumer price index (previous year = 100.0). *(See Table 1)*[21]

Table 1

CHANGE IN THE CONSUMER PRICE INDEX (PREVIOUS YEAR = 100.0)

2010	104.9
2011	103.9
2012	105.7
2013	101.7
2014	99.8
2015	99.9

It is evident from the data presented above that this moderate inflationary pressure resulting from the financial crisis could only be curbed gradually. Naturally, the emphasis was placed on consumer prices, as their rise until the end of 2012 had been considered as significant. Critical investor sentiments and the indebtedness of the population were also viewed as contributing factors to the above. This also contributed to the fact that the purchasing power of a unit of our domestic currency has been decreasing, although at different rates and modestly, but still continuously, in the past six years. The rate is equivalent to 1.13, in other words this theoretically means that in 2015, for HUF 100 we could buy products – in the broadest sense – (including investment goods, import goods etc.) and services that we could have purchased for HUF 1.13 at the time of the stabilisation programme. This value was HUF 1.30 between 2002 and 2010, which in this respect is equivalent to 11.5 per cent accumulated, i.e. 1.3 per cent annual gross price increase.

The past 70 years of the forint confirms that causes and effects are intertwined, even if with some delay. This is why it is not possible for governments to recognise in a timely manner as to when, where and to what extent interventions are to be made in economic processes. Today, when the population's cash retention has sharply increased – on account of deposit rates dropping into near-negative territory –, siphoning significant funds from credit resources; when an increasing ratio of liabilities is discharged by way of direct cash payments, and state securities are the only real means to be used for the purposes of savings etc., the forint is not only a passive subject of the decline of its purchasing power, but also an active participant thereof. Under these circumstances, the financial intermediary system cannot operate properly. Only a balanced central bank policy would be able to resolve this situation.

Notes

1 Ernő Huszti: Hiperinfláció és stabilizáció 1945−46 (Hyperinflation and Stabilisation 1945–46). (I–II) Bankszemle. Volume 30. August 1986, Issue 8 pp. 26–33; and Issue 9, pp. 21−27

2 János Hein: Áralakulás. A közgazdaság évkönyve. (Price Trends. Year-Book of Economy.) Közgazdasági Lap- és Könyvkiadó Rt., Budapest, 1947, pp. 329−334

3 All this happened despite the fact that the currency and foreign exchange restrictions adopted during World War II had remained legally unchanged when the ban on the import of pengő was introduced. It should be noted that the overstamping of pengő bank notes somewhat prevented the increased inflationary pressure caused by the inflow of cash from over the country borders, as was the case after World War I.

4 Tamás Bácskai, Ernő Huszti and Péterné Simon: A kaori kagylótól az euróig (From the Cowry Shell to the Euro). Yuki Stúdió, Budapest, 2003

5 József Vágó: Infláció – stabilizáció (Inflation – Stabilisation). Magyar Gazdasági Évkönyv (Hungarian Year-Book of Economy) 1945–1947, Budapest, 1947, pp. 97−127

6 It indicated the rapid inflation of the tax pengő that its purchasing power dropped to 13612th of its value in a single week.

7 The level of real wages did not even reach 11 per cent of the same in 1939 due to the soaring of free market prices.

8 József Vágó: Page 112 of the quoted book

9 Members of the Reconstruction Committee (amongst others) included István Antos, István Friss, Ernő Gerő, László Háy, István Kossa and Zoltán Vas. Dr. Ádám Marton: Infláció, fogyasztói árak Magyarországon a második világháború után I. (Inflation, Consumer Prices in Hungary After World War II, Part I). (1945−1968). Statisztikai Szemle, Volume 90, Issue 5.

10 The Agreement was not ratified by the Soviet Union with reference to the “imperialist aspirations of the USA”, and it also forced Czechoslovakia, being amongst those invited, to refuse its ratification.

11 The monetary unit of the new forint was equivalent to 200 million tax pengős, or to 400,000 quadrillion pengős. See: Dr. Ernő Huszti: Egy valuta története… A forint forgalma a stabilizációtól az euró előszobájáig (The History of a Currency .... The Circulation of the Forint from the Stabilisation to the Ante-Rom to the Euro). L’Harmattan – Zsigmond Király Főiskola (King Zsigmond College), 2011

12 In the binary-decimal triplet, the series of denominations of coins and bank notes are as follows: 1–2–5, 10−20–50, 100–200–500, etc. The notecoin boundary is when the coin with the highest denomination is equivalent to the bank note with the lowest denomination. Please see: Dr. Ernő Huszti and Dr. Sándor Ligeti: A készpénzforgalom címletek szerinti összetételének meghatározása (Determination of the Composition of Cash Denominations). Bankszemle, 1982, No. 11–12

13 It should be noted that at that time, the issue of bank notes fell under the competence of the National Bank of Hungary, whereas coins were issued by the Ministry of Finance.

14 Dr. Ádám Marton: Page 379 of the quoted work

15 A pénzügyi intézményrendszer Magyarországon (System of Financial Institutions in Hungary). Nebuló 2001 Kiadó, Budapest, 2002

[16] Tamás Bácskai, Ernő Huszti and Péterné Simon: Page 360 of the quoted work

[17] A pénzügyi intézményrendszer Magyarországon (System of Financial Institutions in Hungary). Nebuló 2001 Kiadó, Budapest, 2002

[18] Dr. Ádám Marton: Page 389 of the quoted work

[19] The forint's purchasing power decreased by 17.5% between 1989 and 1993; while real wages declined by 15.0%.

[20] Pál Kolozsi – Csaba Lentner: A magyar jegybanki szabályozás és monetáris politika az európai integrációs folyamat tükrében (Hungarian Central Bank Regulation and Monetary Policy in Light of the European Integration Process). In. Pénzpiacok szabályozása Magyarországon (Regulation of Money Markets in Hungary). Budapest, 2006. Akadémiai Kiadó. pp. 36–37 of the quoted work

[21] Statistical data from the Hungarian Central Statistical Office – 3.6.1. Consumer price index (1985)