

# Financial Problems and Currency Exchange Rates in the Eastern Part of the Tripartite Kingdom of Hungary

Ulrich Attila

*University of Nyíregyháza\**

## Abstract

Following the Ottoman conquest, the Kingdom of Hungary was divided into three parts: the remaining Royal Hungary, the Ottoman-occupied territories, and Transylvania, a division that brought numerous economic challenges. In 1567, the Szepes Chamber was established with the aim of administratively and financially supervising the eastern regions of the remaining kingdom. Throughout the 17th century, the region experienced significant economic challenges, including major wars, the budgetary crisis of the Ottoman Empire, the growing resistance against the Habsburgs in Hungary, armed conflicts, and ultimately the Rákóczi War of Independence. These events led to an increasing financial instability. Inflation and speculation became rampant, further exacerbated by the dual system of calculating the forint within the Royal Hungarian Chamber's administration between 1659 and 1711, which burdened the daily lives of the population. The influx of a wide variety of circulating coins – differing in origin and quality – created many opportunities for profiteering, which became widespread by the end of the 17th century. For all of the above, this century offers a wealth of intriguing topics for researchers that we intend to explore and present in this study.

*Keywords:* budgetary crisis, monetary instability, speculation, historical currency names, exchange rate, currency fluctuation, Szepes Chamber.

## 1. Introduction

Following the establishment of the Szepes Chamber in 1567 whose mission was to oversee the territorial and financial administration of the northern and east-

\* ORCID ID 0009-0008-4989-1867, University of Nyíregyháza, Department of History and Philosophy.

ern parts of the Kingdom of Hungary, the remaining territories of the Kingdom were divided into Lower and Upper Hungary. Although the Hungarian Chamber retained supervisory authority over the Szepes Chamber, the latter maintained significant autonomy<sup>1</sup>. In fact, during the 17th century, its military and economic role expanded considerably.

The discovery of the New World in 1492 had a profound effect on the European economy, including that of the Kingdom of Hungary, particularly through the massive influx of gold and silver. The continuous warfare of the ensuing centuries (mainly the 16th and 17th) brought economic instability, inflation, and price increases<sup>2</sup>. In Hungary, these international developments coincided with the kingdom's division into three parts: the reduced Hungarian Kingdom, the Ottoman-occupied territories, and the Principality of Transylvania. Although trade routes were not completely cut off, they were redirected and became less dependable. Despite significant cattle trade flowing westward through Ottoman territories, by the end of the 17th century depopulation reached critical levels<sup>3</sup>. On the other hand, the rising prices of agricultural goods benefited not only the nobility and a limited urban middle class but also the peasantry.

A specific phenomenon in the region was the speculative trade in circulating coinage. Because of the Ottoman Empire's economic difficulties, coins commanded higher prices within the Ottoman territory. This systematic outflow of currency resulted in a shortage of money in the areas under the Szepes Chamber's authority. Speculation reached considerable proportions, as evidenced by multiple sources.

These conditions, especially price increases, marked the beginning of a new monetary era: the Thaler Age. The introduction of large silver coins (thalers) was soon followed by the minting of heavier gold coins. As more silver than gold flowed into Europe, the relative value of silver to gold declined, eventually devaluing silver – particularly lower-quality silver coins – in favour of gold<sup>4</sup>.

<sup>1</sup> Szűcs, Jenő, *A Szepesi Kamarai levéltár 1567-1813* (Budapest 1990).

<sup>2</sup> Fernand Braudel, *Anyagi kultúra, gazdaság és kapitalizmus a XV-XVIII. században* (A mindennapi élet struktúrái) (Budapest 1985), p. 437. Géza, Pálffy, *Hungary between Two Empires, 1526-1711*. Bloomington (IN), Indiana University Press (2021), here see pp. 177-184.

<sup>3</sup> Ember, Győző, *Magyarország nyugati külkereskedelme a XVI. század közepén* (Budapest, 1988).

<sup>4</sup> Buza, János, "A tallér és az aranyforint árfolyama, valamint szerepe a pénzforgalomban Magyarország török uralom alatti területén a XVII. században (Nagykőrös 1622-1682)", in *Történelmi Szemle* 20, no. 1, 1977, pp. 73-106.

In the rapidly expanding trade economy, national currencies circulated freely, often at unique exchange rates, a phenomenon well documented in the Ottoman territories, particularly regarding Dutch lion thalers<sup>5</sup>. Due to the inconsistencies in market-based exchange values, both local counties and Habsburg authorities attempted to intervene with regulations. Traders, money-changers, and market participants were expected to operate according to official exchange rate limits (*limitatio*). These discrepancies, made coins with high gold or silver content more desirable and gave them a distinct *agio* (premium), whereas inferior coins were accepted at a discount, further fuelling speculation as it was the case for example, with the Hungarian 6 and 15 kreuzer denominations in the 1680s.

Even without a detailed price history analysis, it is evident that debased coins caused not only individual financial losses but also contributed significantly to inflationary tendencies. The 16th-century “price revolution” – which extended well into the 17th century – had its roots in this process. Inflation, initially affecting agricultural products, generated significant income for producers. In Hungary, alongside cattle, wine was the most important export commodity, making nobles, burghers, and even peasants who traded in these goods the financial winners of inflation. Western European markets paid a substantial premium for Hungarian goods (e.g. wine, cattle)<sup>6</sup>. However, this trend reversed by the mid-17th century in the case of cattle, and by the century’s end for wine. The deterioration in the terms of trade was characterised by sharp price increases in manufactured goods, which further sustained inflation<sup>7</sup>.

In the territory of the Szepes Chamber, the 1659 monetary reform of Emperor Leopold I inadvertently exacerbated economic instability. Two parallel exchange rates developed for the forint, coinciding with the emergence of the Kuruc<sup>8</sup> movement and eventually with Hungary’s first and longest-lasting war

<sup>5</sup> Buza, János, “Az oroszlanos tallérok árfolyama es szerepe Magyarország pénzforgalmában”, in *Numizmatika Közöny*, 1981-82, pp. 89-99.

<sup>6</sup> See Ulrich, Attila, The Rákóczi family’s estate wine production, wine trade, and wine prices at the end of the 17th century, [https://ehes.org/wp/EHES\\_278.pdf](https://ehes.org/wp/EHES_278.pdf) (2025.06.21).

<sup>7</sup> Zimányi, Vera, *Magyarország az európai gazdaságban 1600-1650 (Értekezések a történeti tudományok köréből 80)* (Budapest 1976), hereafter Zimányi 1976.

<sup>8</sup> The term Kuruc referred to the anti-Habsburg insurgent soldiers in the Kingdom of Hungary during the late 17th and early 18th centuries. These irregular troops played a prominent role in several uprisings against Habsburg rule, most notably during the War of

of independence: the Rákóczi War of Independence (1703-1711). The following pages presents a summary of the effects of these events on exchange rates, monetary trade, and speculation.

## **2. Major Monetary Crises in the 17th Century in the eastern part of the Hungarian Kingdom**

The crisis-prone 17th century was further destabilised by war. Almost every European royal court operated under significant budget deficits, financing their courts and wars through loans at a standard 6% interest rate. This led to the collapse of many noble families engaged in finance – including the German Wesers, the military contractor and imperial general Wallenstein, and the Hungarian mining magnate Thurzó family – due to unpaid royal debts. Their bankruptcies were not caused by poor investment strategies (as war remained the most profitable enterprise), but from debtor states' unwillingness to repay<sup>9</sup>.

The outbreak of the Thirty Years' War triggered Europe's most severe monetary crisis between 1619 and 1623 – the Kipper und Wipperzeit – originated in the Holy Roman Empire. The war needs brought a massive demand for military pay, yet gold and silver production could not keep pace. The shortfall was addressed through the debasement of silver coinage: due to the abundance of copper in Europe, mint authorities drastically reduced the silver content of coins with the so-called Kipper coins, with a minimal intrinsic value, that quickly led to a loss of public confidence<sup>10</sup>.

Independence led by Prince Francis II Rákóczi (1703-1711), commonly known as the Rákóczi Uprising. The Kuruc forces were primarily composed of disenfranchised nobles, peasants, and soldiers, and were opposed by the imperial forces known as the Labanc.

<sup>9</sup> Jean Bérenger, "A Habsburg hatalom gazdasági alapjai a XVII. század végén", in *Európa és a Rákóczi-szabadságharc*, Benda Kálmán ed. (Budapest 1980) (hereafter Bérenger 1980), p. 131. The collapse of the Oppenheimer banking house was also caused by the non-repayment of unpaid bills.

<sup>10</sup> Magyar Nemzeti Levéltár Szabolcs Szatmár Bereg Vármegyei Levéltára (Hungarian National Archives, Szabolcs-Szatmár-Bereg County Archives, hereafter MNL SzSzBmL) IV.1.b. Protocollum 10. kötet (volume) 84. folio. The five-denomination coins, referred to as "base-minted groschen", were "at once sifted out" and were not accepted in Kisvárdá in 1625, save when a certain premium was paid for them.

No issuing authority anticipated the long-term consequences such as inflation, growing speculation, and a general decline in living standards. While the crisis impoverished much of the population, some profited – especially debtors who repaid their obligations in depreciated Kipper currency. Despite having to pay slightly more in nominal terms, they benefited because Kipper money was so distrusted that it could rarely be spent at face value – yet could be mixed into payments involving large sums. This occurred during negotiations over the estate of Tarcal, where despite the use of high-value coins (gold and good-quality silver thalers), Bethlen included in the transaction 8,775 florins' worth of small, depreciated currency. The Rákóczi family, despite being aware of the worthless nature of the 5 denars coins and dubious groschen issues, had no choice but to accept the deal<sup>11</sup>.

Shortly after this European crisis subsided, a new one emerged from the periphery – namely from the Ottoman Empire, which was already in decline. Until the early 1640s, the empire had pursued a restrictive, deflationary monetary policy that created a widespread shortage of money posing a fundamental problem not only because of the Ottoman military presence but also due to its role as a significant trading partner<sup>12</sup>. To alleviate the shortage, the empire be-

<sup>11</sup> Gábor Bethlen, Prince of Transylvania, the Thurzó family, and the Rákóczi family engaged in lengthy negotiations over the ownership of the estates in the Hegyalja region. Determined to acquire the market town at all costs, Bethlen dispatched none other than the Lord Lieutenant of Zemplén County, Menyhért Alaghy, to Tarcal on the 1st of August, 1622, to negotiate its redemption. During the ensuing discussions, a deposit of 80,000 florins was offered; however, the Rákóczi family – with full justification – argued that the value of money had depreciated since 1599, and therefore demanded a higher amount than what was proposed. While in 1599 gold had been worth 170 denars and a thaler 100 denars, by 1622 – during the time of the Kipper and Wipper inflation crisis – the value of gold had dropped to approximately 6 florins, and the thaler to around 4 florins. Magyar Nemzeti Levéltár, Magyar Kamara Archívuma (Hungarian National Archives, Archives of the Hungarian Chamber) E. 158. Neo-regestrata Acta (hereafter MNL NRA) Fasc. 719. No. 42. - On July 30, 1625, Gabriel Bethlen, Prince of Transylvania, paid György Rákóczi the sum owed to him for Tarcal, amounting to a total of 42,975 florins. The composition of the payment was as follows: 10,000 Körmöc gold coins (30,000 florins), 2,000 thalers (4,300 florins), 5-denars groschen worth 1,475 florins, other groschen totaling 5,700 florins, and various other coins valued at 1,500 florins. MNL NRA Fasc. 719. No. 46.

<sup>12</sup> Buza, János, “Az Oszmán Birodalom monetáris válságának magyarországi hatása”, in *Numizmatika és Társtudományok III*, Ulrich Attila (ed.) (Nyíregyháza 1999), pp. 229-243, here see pp. 229-230. Vahid Yousefi - Kóbori, Judit, Az oszmán-török birodalom pénztörténete, in *Valóság* no. 2, 2014, pp. 16-32.

gan purchasing foreign currencies at rates far above their actual value. This artificially induced monetary demand triggered inflation across the region. In response, a new reform was launched in January 1640, resulting in the minting of a high-quality akçe<sup>13</sup>. Although promising, the reform destabilised existing overvalued exchange rates, leading to the devaluation of silver whereas gold coins, which retained their consistent metal content, were unaffected<sup>14</sup>.

The drop in silver's value had far-reaching effects on the Ottoman economy. Due to the extensiveness of the empire's economic model, it could not increase silver production volumes. The resulting devaluation spread to economically linked regions, including the Kingdom of Hungary with severe economic consequences on the autonomous parts of Hungary, and especially the Ottoman-occupied territories (Hódoltság in Hungarian). Major financial centres such as Venice, Genoa, Spain, and the Netherlands, all engaged in monetary trade with the Ottomans, suffered losses in the silver market. The monetary crisis also disrupted the trade of goods.

Following speculative price increases in Ottoman-controlled markets, the exchange rate of both thalers and gold coins reached 200 and 400 denars, respectively, in Szabolcs and Szatmár counties. "Since among the Turks the value of gold and thalers hath been greatly driven up, so that one piece of gold is rated at four florins, and one thaler at two florins, yea, perhaps they must needs be exchanged even according to the highland valuation". And thus he continued: "that under the pretext of such gains, good coin might be carried forth from His Majesty's dominion into his own provinces, and in its stead he might introduce base and less current money; wherefore it hath been enjoined upon us that, concerning such exchangers of gold and thalers, we should exercise diligent watchfulness"<sup>15</sup>. North of the Tisza River, however, thalers retained

<sup>13</sup> Şevket Pamuk, *A monetary history of the Ottoman Empire* (Cambridge University Press, Cambridge 2000), pp. 19-20.

<sup>14</sup> Buza, János, "Törökkori pénzértékviszonyok egy Gömör megyei tanuvallatás tükrében", in *Numizmatikai Közlöny*, 1985-86, pp. 61-65.

<sup>15</sup> MNL SzSzBmLt IV.1.b. Fasc. 84. No. 109, 1666. The impact of the Turkish currency revaluation was felt immediately in the counties of Szabolcs and Szatmár, as well as in Transylvania; however, in Zemplén County, it was no longer discernible. This is closely related to the degree of Ottoman influence and dependence within the region. For exchange rates, see for example MNL SzSzBmLt IV.1.b. Fasc. 119. No. 90, without year "Four hundred florins for two hundred thalers". Thus, the value of the thaler was 200 denars.

their chamber-assigned value of 180 denars<sup>16</sup>. Although not definitively confirmed, it is likely that local prices rose due to devaluation, though this was not reflected in county-level price regulations due to their official, fixed nature.

During the 17th century, the primary monetary policy issue in the Kingdom of Hungary was the determination – and especially the maintenance – of stable exchange rates. This challenge was complicated by the continuous influx of debased foreign coins (primarily Polish and Polish-style issues). Speculation and trade drove higher-value coins (gold, thalers) out of the southern parts of the Szepes Chamber's authority and away from Ottoman borderlands<sup>17</sup>.

The defining economic problem for Hungary was the reversal of the “price revolution” with falling agricultural prices and increasingly expensive industrial goods. This shift in the terms of trade significantly contributed to Hungary's economic lag and the entrenchment of its feudal structures<sup>18</sup>. Nonetheless, unique local circumstances in the Szepes Chamber's region – such as the proximity to the Tokaj wine district, trade routes connecting Transylvania with Poland and Western Europe, and a significant cattle trade – initially alleviated some of the economic difficulties. By the latter half of the 17th century, however, these advantages eroded. Hungary's exports declined precisely as the economies of Sweden, Denmark, and the Netherlands were strengthening<sup>19</sup>. Jean Bérenger's comparative analysis of Western European, Austrian, and Hungarian prices underscores this trend. A comparison of grain and wine prices reveals a correlated pattern, shaped by broader European economic and political developments. Bérenger identifies the following economic phases: stagnation (1645-1659), inflation and political instability followed by stability (1665-1675), high volatility (1678-1693), and slow, continuous price increases (1693-1700)<sup>20</sup>.

<sup>16</sup> Horváth Tibor Antal, “A tallér értékváltozása Magyarországon 1542-1700 között”, in *Numizmatikai Közlöny*, 1963-64, pp. 25-50 (hereafter Horváth 1964).

<sup>17</sup> H. Balázs, Éva, *Jobbágylevelek* (Budapest 1951), p. 73. “His Worship the vicecomes did write unto us, bidding that we should send one thaler per gate, which was demanded for the envoys. Yet we could not send the said thaler, for no thaler was to be had; rather did we send coin in its stead unto His Worship, but he returned the money, and sent word that it must needs be a thaler”.

<sup>18</sup> Zimányi 1976.

<sup>19</sup> Jan de Vries, *Economy of Europe an Age of Crisis 1600-1750* (Cambridge University Press, Cambridge 1976), pp. 108-109.

<sup>20</sup> Bérenger 1980, pp. 122-124.

### 3. The Monetary Reform of Leopold I

All monarchs naturally sought to resolve the previously mentioned budgetary crisis, but it was only after the accession of Leopold I (1657-1705) that significant and comprehensive reforms were implemented. As Austrian Emperor and King of Hungary, Leopold I established for the first time the exchange rate between Austrian and Hungarian currencies, in Article 72 of the 1659 Hungarian laws envisaging that “in accordance with the fineness and value of the Viennese groschen, three-kreuzer or five-denar groschen were to be minted in sufficient quantity”<sup>21</sup>.

From this point on, a new problem emerged: 1 kreuzer became equivalent to 2 denars, conflicting with the previous accounting system where 2 kreuzers equalled 3 denars. Although this change improved currency conversion and facilitated the exchange between Austrian and German monies, it caused significant confusion when a comparison was made between the old Hungarian accounting forint – where 1 groschen equalled 5 denars and 20 groschen equalled 1 forint – and the new accounting forint, in which 1 groschen equalled 6 denars, making the base unit of account 120 denars. This marked the emergence of a new concept in Hungarian monetary history: financial division<sup>22</sup>.

From this time onward, territories in Western Hungary under the Hungarian Chamber used an accounting rate of 150 denars per thaler and 300 denars per gold coin. In Northern and Eastern Hungary, by contrast, the prevailing rates were 180 denars per thaler and 360 denars per gold forint. Even without detailed analysis, it is clear that this dual system created serious difficulties for the kingdom until it was solved in 1711<sup>23</sup>.

This inconsistency – being a tangible factor in everyday financial transactions – caused considerable harm to the populations of the two regions. It is noteworthy that the ratio between the two accounting thaler values was 1.2, the same as the difference between the Hungarian and the Rhenish florin. This

<sup>21</sup> *Magyar Törvénytár 1657-1740 évi Törvényczikkek*. Márkus Dezső (ed.) (Budapest 1900). See here pp. 177-179.

<sup>22</sup> Huszár, Lajos, “Pozsonyi Forint - Kassai Forint”, in *Numizmatikai Közlöny*, 1979-80, pp. 59-61.

<sup>23</sup> For exchange rates, see Ulrich, Attila, “Pénzügyi megosztottság a magyar királyságban a 17. század második felében”, in *Numizmatika és társtudományok IV*. Torbágyi Melinda (ed.) (Budapest 2002), pp. 117-119 (hereafter Ulrich 2002).

discrepancy became customary in actual trade practices, as it made a significant difference whether prices or currency exchanges were calculated in Hungarian or Rhenish florins<sup>24</sup>. One must also consider and again emphasise the fact that at the time, a wide variety of foreign coins circulated even in the territory of the Szepes Chamber, and in many cases, even identifying these coins or determining their precious metal content posed significant challenges. This led to profiteering with currencies.

Interestingly, and characteristically of the Hungarian context, the old accounting system remained in use in Western Hungary, while the new system spread more widely in the east. This was most likely due to the aforementioned economic disparities: after 1686, the eastern regions sank into a deepening crisis, and not only foreign currencies but also foreign accounting systems became entrenched in the southern parts of the Chamber<sup>25</sup>. For example, in Eperjes (present-day Prešov in Slovakia), the 1674 Polish decree extended to Upper Hungary, set the value of the Polish poltura at 2.5 denars, even though this measure was unenforceable in practice, as Gáspár Hain, the chronicler of the town of Lőcse (today's Levoča in Slovakia) wrote: "in the middle of the Polish towns in the Szepes region, this could not be carried out"<sup>26</sup>.

<sup>24</sup> In a letter and instruction dated 1699, addressed by Francis II Rákóczi to his steward in Tokaj, we read the following: "that the greater *lucrum* (that is, profit upon the wines) might thereby be gained, its sale – albeit at the time of the bargain it may well appear fair – should by no means be understood or contracted in Rhenish florins instead of Hungarian florins". Thus, discrepancies can be observed between the accounting value of the Hungarian and the Rhenish florin, which – despite earlier attempts at standardisation – likely resulted in a *disagio* in actual payments. Disagio is a loss due to exchange difference.

<sup>25</sup> The causes of the economic crisis in the eastern region were rooted in the increasing burdens resulting from the wars of liberation against the Ottomans (such as larger tax levies and military quartering), the unfolding political events and uprisings (including the confiscations following the Wesselényi Conspiracy, the establishment of Thököly's state, the Hegyalja uprising, and later the Rákóczi War of Independence), as well as the consequent rise in poverty and depopulation that progressed in direct proportion to these developments.

<sup>26</sup> Hain, Gáspár, *Szepességi avagy lőcsi krónika a kedves utókor számára* (Budapest 1988), p. 376. Despite the stability of the exchange rates, the Chamber exchanged the submitted Polish coinage at a lower rate, causing significant losses to the town's inhabitants. Later, the Chamber itself remitted 400 florins from the consumption tax in compensation.

In 1707, in Upper Hungary, the accounting value of the poltura remained 3 denars<sup>27</sup>. In 1606, in Galgóc (Lower Hungary, present-day Hlohovec in Slovakia), along with a 150-denar thaler rate, the poltura was valued at 2.5 denars<sup>28</sup>. As a counterexample, in Érsekújvár (present-day Nové Zámky in Slovakia) in the same year, the thaler was valued at 180 denars, and the poltura at 3 denars<sup>29</sup>. Even the Károlyi noble family, made of influential eastern magnates, used the 3-denar poltura rate in Pozsony (present-day Bratislava in Slovakia)<sup>30</sup>.

Thus, the intense commercial traffic from the Szepes Chamber region toward Poland (including wine, grain, livestock, and products from Transylvanian trade), and the resulting inflow of foreign currencies and their exchange rates, exerted a stronger and more practical influence on everyday economic life than the numerous decrees issued from above, which often remained ineffective. This was primarily due to the power of currency trade and inflow, the presence of human manipulation, and the circumvention of county-level regulations<sup>31</sup>.

Thus, the sharp divergence in currency exchange rates between the administrative territories of the Hungarian Chamber and the Szepes Chamber had already become apparent by the late 1660s, but it was from the early 1670s that it began to cause serious economic and everyday difficulties clearly reflecting in the increasing number of monetary decrees issued by Emperor Leopold I during this period. A charter from 1676 already reveals the issues stemming

<sup>27</sup> Magyar Nemzeti Levéltár Borsod-Abaúj-Zemplén Vármegyei Levéltár Sátoraljaújhelyi Fiókleveztára (Hungarian National Archives, County Archives of Borsod-Abaúj-Zemplén, Branch Archives of Sátoraljaújhely, hereafter MNL ZmLt), MNL ZmLt V.42. Tokaj, 38. doboz (archival box), 1707. According to the municipal account records, the perceptor of Tokaj accounted for two groschen – one valued at 10 polturas and the other at 30 polturas – for a total of 1 florin and 20 denars. When recalculated, this implies a valuation of 3 denars per poltura.

<sup>28</sup> MNL NRA Fasc. 231. No. 18. 1660, *Galgócz*.

<sup>29</sup> MNL NRA Fasc. 231. No. 19. 1660, Érsekújvár. For the value of the poltura as 3 denars, see Bodor, Imre, Magyarország aprópénzei a XVII század második felében, in *Numizmatikai Közlemény*, 1973-1974, pp. 61-67, here see p. 64. 1 poltura = 0,5 groschen = 1,5 kreuzer.

<sup>30</sup> A nagy-károlyi gróf Károlyi család oklevéltára. A család megbízásából kiadja gróf Károlyi Tibor. Sajtó alá rendezi Géresi Kálmán (ed.), IV. kötet (volume). Oklevelek és levelezések 1600-1700 (Budapest 1887) (hereafter Károlyi), CCVIII 1674. 1 forint was calculated as 33 polturas and 1 denar.

<sup>31</sup> Ulrich 2002, pp. 115-116.

from Article 72 of the 1659 Diet. At this point, the value of the 5- and 6-denár groschen coins had become an accepted reality, which created significant problems especially when calculating the value of the Hungarian florin denominated at 20 groschen<sup>32</sup>.

These financial problems were further exacerbated by the wave of property confiscations that began in 1670, affecting a considerable number of nobles in eastern Hungary. This, in turn, gave rise to the Kuruc movement, which first manifested in the uprising led by Imre Thököly, and later played a role in the expulsion of the Ottomans from the territory of the Kingdom of Hungary, ultimately culminating in the Rákóczi War of Independence.

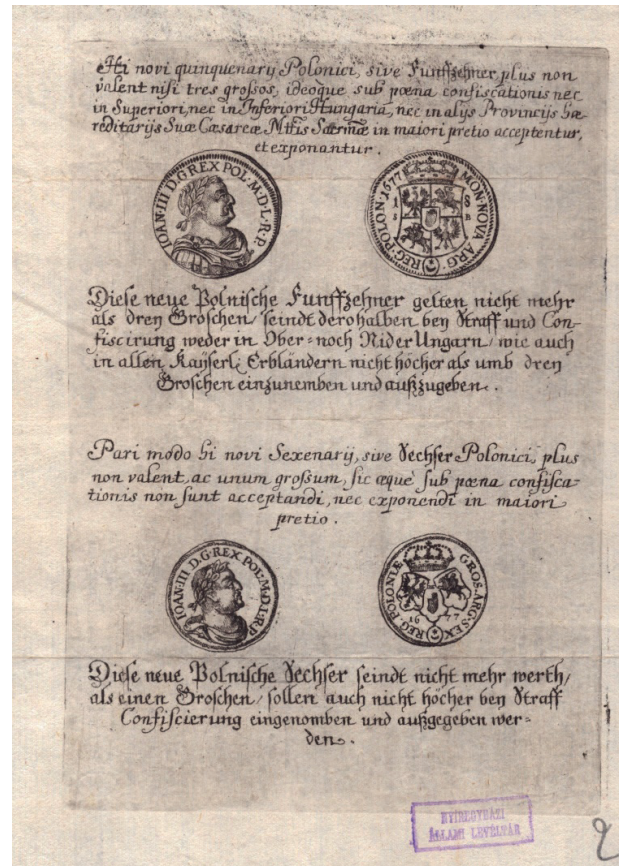
Returning to the monetary decrees, the economic crisis appears to have deepened significantly by the 1690s, when royal edicts regulating the exchange rates of various circulating coins began to be issued annually. These included Polish 3-groschen pieces, “quinquenarius” or 18-groschen coins, guldiners or florin, quarter thalers, and various Bavarian, urban, and Dutch gold coins. Also subject to regulation were the two-groschen coins of Michael Apafi, Prince of Transylvania, and copper test coinages issued to cover miners’ wages. Authorities also sought to curb the fraudulent practices of Greek and Turkish merchants, who exploited the differences in exchange rates for profit through currency arbitrage<sup>33</sup>.

One point recurs in nearly every charter: they emphasise the growing discrepancy in exchange rate calculations between the two regions of the Kingdom of Hungary. As many of these documents state, this divergence caused considerable harm to the “inhabitants of the kingdom” and especially to the poor.

<sup>32</sup> MNL SzSzBmLt IV.1.b. Fasc. 94. No. 105. 1676.

<sup>33</sup> For the relevant sources, see MNL SzSzBmLt IV.1.b. Fasc 91. No 2. and 3. 1673, Fasc. 94. No. 105. 1676., Fasc. 95. No. 74., 1677, Fasc. 98. No. 59. 1680., Fasc. 100. No. 98. 1682., Fasc. 103. No. 77. 1685., Fasc. 104. No. 43. and 44. 1686., Fasc. 111. No. 73., No. 75. and 76. 1693., Fasc 114. No. 3. 1696., Fasc. 115. No. 77. 1697., Fasc. 1. No. 132. 1700.

Figure 1. Illustration from the 1678 decree annex, depicting the debased Polish 18- and 6-groschen coins<sup>34</sup>.



#### 4. The Real Crisis: Financial Turmoil During the Rákóczi War of Independence (1703-1711)

One of the greatest inflationary crises in Hungarian economic and monetary history occurred during the Rákóczi War of Independence<sup>35</sup>. The war, the country's isolation, and the severe shortage of currency, which threatened both internal and external trade, forced Prince Francis II Rákóczi to issue a curren-

<sup>34</sup> MNL SzSzBmLt. IV.1.b. Fasc. 96. No. 105. 1678.

<sup>35</sup> Ulrich, Attila, Gazdasági örökség, spekuláció, kiútkeresés a Rákóczi-szabadságharc alatt, in *Századok* 146, no. 4, 2012, pp. 799-813.

cy that was foreign to the previous system: the copper poltura. Copper depreciated rapidly, even in comparison with silver, leading to the hoarding (thesaurisation) of precious metal coins or their sale at significant profit.

The economic burden of the newly aspiring Hungarian state was significantly increased by the constant maintenance of a large military force. Rákóczi's regime struggled with a chronic shortage of precious metals, especially silver. Although the country received some silver coins via foreign trade, growing military expenditures (on cloth, saltpetre, gunpowder, steel, weapons, and, of course, soldiers' pay) and hoarding led to the rapid withdrawal of silver from circulation, resulting in an acute monetary shortage.

As early as late 1703, the prince initiated independent coinage (minting silver polturas), but large-scale coin issuance began only in 1704. New Hungarian coins included gold florins, silver guldiners (florins), short-lived silver polturas (1703-1704), and copper coins (1, X, and XX polturas). According to sources, due to the unclear status of Hungarian sovereignty, even silver coins were received with distrust abroad<sup>36</sup>.

Domestically, however, these new coins were initially well-received and trusted. But as the economic situation deteriorated and the shortage of money intensified, copper coinage began. Rákóczi initially intended to issue only 2,000,000 florins worth of copper coins, but was unable to adhere to this limit. The resulting mass minting of copper coins triggered two processes: the devaluation of copper currency and inflation.

By 1705, copper coins were increasingly rejected in everyday transactions, making them almost unusable for payment, and currency exchange became loss-inducing – a major issue at the time. The citizens of Kecskemet generally travelled to Upper Hungary to exchange currency. On their journeys, they routinely carried copper coins, which were readily accepted by officials of the Royal Chamber. In 1706, however, they suffered considerable losses on two such occasions involving the exchange of copper money. On the first occasion, out of approximately 1,000 thalers' worth of copper small change, they managed to convert only 586 thalers and 2 groschen, for which they received 111 gold coins and 14 Rhenish florins. However, the Greek merchants to whom they attempted to pay with the exchanged gold refused to accept it at the same

<sup>36</sup> Bánkúti, Imre, "II. Rákóczi Ferenc rézpénzeinek gazdasági és társadalmi vonatkozásai", in *Numizmatikai Közlöny*, 1979-1980, pp. 77-79, Bánkúti, Imre, "II. Rákóczi Ferenc pénzverésének gazdasági háttere", in *Numizmatikai Közlöny*, 1983-1984, pp. 61-63 (here see p. 61).

rate it had been converted for. On this transaction, their loss amounted to 31 thalers and 1 groschen. Later that same year, upon returning from another trip, they suffered an even greater loss, totalling 460 thalers and 2 groschen<sup>37</sup>.

There were exceptions: merchant cities with strong financial reserves, whose silver supplies remained stable, did not suffer as severely from the spread of copper currency. Nevertheless, even these centres incurred substantial losses in currency exchange. In one letter, the prince analysed the domestic situation in detail. Rákóczi's words are bitter but reveal the prevailing conditions clearly:

Some of our unworthy countrymen, who selfishly look only to their own lonely gain and care little for the advancement and prosperity of our common cause, have especially shown their godless and deceitful tricks in trying to hinder the continuation of the copper poltura in accordance with the resolution of Kassa. Furthermore, they have even tampered with the proper and justly observed value of silver coins according to their own free will, disregarding the shortage of white money (silver currency) in our country, accepting or rejecting it as they see fit<sup>38</sup>.

Merchants, especially Greek traders<sup>39</sup>, played a key role in this manipulation of money. While they initially accepted and exchanged the copper coins, they did so well below face value. They did the same with precious metal coins. In 1707, the Economic Council discussed the currency exchange practices and manipulations of foreign merchants. Those trading in gunpowder, saltpetre, and steel gave only 4 florins for gold coins, despite the official rate being 6 florins. Greek traders dealing in everyday goods also followed this practice, thereby inflicting great losses on the population.

Indeed, this profiteering by Greek traders gained numerous imitators among the populace: "It has often been observed that Turkish traders, with great contempt for the interests of the nation, labour and act in various ways to

<sup>37</sup> Iványosi Szabó, Tibor, "A rézpénz forgalmának és értékváltozásának alakulása a Rákóczi szabadságharc idején", in *Numizmatikai Közlöny*, 1977-1978 (hereafter Iványosi 1978), pp. 95-104 (here see p. 96).

<sup>38</sup> MNL SzSzBmLt IV.1.b. Fasc. 9. No. 26., May 11, 1708. Berzék.

<sup>39</sup> From the second half of the 17th century onward, merchants increasingly arrived from the territories of the Ottoman Empire. In the eastern part of the Szepes Chamber's jurisdiction - particularly in the Tokaj region and its surroundings - these traders were predominantly of Greek origin.

obstruct the redemption of the copper money minted for the benefit of the country, thus opening the door for similar conduct among the population”<sup>40</sup>. The situation became so untenable that the prince personally addressed the issue, issuing a decree in 1707 banning the import and export of copper money<sup>41</sup>.

The sources provide many examples of speculative practices involving currency. One such instance can be found in a letter by Rákóczi dated May 11, 1708, from Berzék, in which he wrote: “We understand that certain inhabitants of the country, even in the circulation of silver money, practice discrimination, thereby causing no small confusion in the country. Therefore, silver currency should be circulated just as it was in earlier times”<sup>42</sup>.

## 5. Further Cases of Copper Coin Speculation: The Reception and Effects of Copper Currency and Inflation

We have already encountered several examples illustrating speculation involving copper coins and public attitudes toward them. Let us now consider additional cases that further demonstrate the relationship between copper currency and inflation, the popularity of copper coins, and their reception in local contexts.

Before delving into these instances, it is important to highlight a crucial aspect. In buying and selling transactions, buyers paying with copper coins clearly benefited more than sellers, making the purchase of real estate or land with “kongó”<sup>43</sup> a highly profitable investment. A compelling example of this is the prolonged dispute in Tolcsva between Erzsébet Sóki, widow of János Tornyai, and Márton Csoma.

<sup>40</sup> Magyar Nemzeti Levéltár, G 29. A Rákóczi szabadságharc levéltára (Hungarian National Archives, G 29. Archive of the Rákóczi War of Independence, hereafter: MNL G 29.) 89. csomó, June 28, 1706.

<sup>41</sup> MNL G 29. 89. csomó. March 4, 1706. “His Serene Highness, our Gracious Lord and Commander-in-Chief, ...doth command that... the officers of the *Thirtieth Customs*, especially those stationed at the borders, shall neither permit the exportation of copper coin from the Kingdom, nor – most particularly – its importation thereinto”.

<sup>42</sup> MNL SzSzBmLt IV.1.b. Fasc. 9. No. 26., May 11, 1708. Berzék.

<sup>43</sup> The copper coins (polturas) were mockingly referred to as “kongó”, a nickname alluding to the hollow, ringing sound they made – unlike the clear, metallic ring of precious metal coins.

Mrs. Tornyai attempted to settle her debt to Csoma on three occasions, but he consistently refused her payments because she intended to pay in copper<sup>44</sup>.

The nobility of Szabolcs County, in a complaint addressed to the Zemplén County, highlighted several issues, including high prices and conflicts among local inhabitants: “according to the current course of copper money, both domestically produced goods and materials imported from abroad have reached unprecedented prices, and this has led, or is bound to lead, too much confusion among the inhabitants of the country”<sup>45</sup>.

The noble assembly of Szabolcs County also proposed a solution: the establishment of “fair” prices, and a determination of the real value of goods involved in sales and purchases. In a letter dated 1705 Gergely Kálnássy expressed this position complaining about the fact that his copper currency was not accepted. Moreover, because he wanted to pay with “kongó”, the price of silver thalers was increased. As he wrote: “Due to the desire to purchase more cheaply, I was compelled to bargain in white money”<sup>46</sup>.

Even Prince Francis II Rákóczi himself acknowledged that the introduction of copper currency had produced serious problems. In one of his letters written after the Diet of Ónod, he wrote: “not only the discontent arising from the unpaid state of our armies, but also the utter disgrace to which copper money has now been reduced, is becoming glaringly evident”<sup>47</sup>.

The deterioration of the economic performance, the unrestricted minting of copper coins, and various manipulative practices all contributed to the escalation of inflation after 1705<sup>48</sup>. This not only caused a rise in prices, but also led to significant changes in the value of different currencies. By 1705, copper coins were worth only 50-60% of their official state-assigned value; by 1707, this had dropped to a mere 25%. Although Rákóczi made an attempt to stabilise the currency’s value – for instance, by issuing counter-signed copper pol-

<sup>44</sup> MNL ZmLt V.43. Tolcsva nagyközség iratai (Records of the Large Village of Tolcsva), Protokollum I. kötet (volume), May 11, 1707.

<sup>45</sup> MNL ZmLt IV.1001./b. Fasc. 204. No. 545, March 22, 1706. Ibrony.

<sup>46</sup> MNL ZmLt IV.1001./b. Fasc. 204. No. 542, March 6, 1705. Szécsény.

<sup>47</sup> MNL ZmLt IV.1001./b. 21. kötet, August 3, 1707. Munkács.

<sup>48</sup> As late as 1704, records show that one thaler was calculated at 30 groschen. Recalculating this at a standard value of 6 denars w groschen, the thaler thus equaled 180 denars (i.e., 1 florin and 80 denars), a valuation that closely resembles the monetary rates in effect at the end of the 17th century. e.g., MNL G. 29. 80. csomó, Letter of Ferenc Darvas, Chief Military Commissary, January 9, 1704. Tokaj.

turas – this effort failed and inevitably led to the cessation of copper coin production.

This step, however, did not prevent a broader shift in the relative values of silver small-change, silver value coins (thalers, florins, guldens), and gold coins. Of course, these official rates applied to high-quality Hungarian and Austrian imperial coinage, the value of lower-quality coins declined far more sharply<sup>49</sup>. The major losses were caused by the influx of low-quality foreign coinage, which depreciated most rapidly.

As previously noted, even though the state imposed fixed currency values, local market rates often diverged, shaped by regional economic conditions. During the period of Hungary's tripartite division, a deliberate trade of gold and thalers developed toward Ottoman-controlled areas, where as early as the 1670s, a single gold coin could easily fetch six florins<sup>50</sup>.

In conclusion, a letter from the Economic Council dated September 13, 1707, stated that henceforth, Hungarian gold coins would be valued at 5 Hungarian florins and 4 denars, whereas foreign gold coins would be accepted at 4 Rhenish florins (equivalent to 4 Hungarian florins and 80 denars)<sup>51</sup>. This significant reduction in the price of gold coins clearly represented a response by the economic leadership to the decisions made at the Diet of Ónod. Rákóczi himself also made efforts to regulate the exchange rate of silver coins, but throughout the remainder of the War of Independence, the state was unable to resolve its fundamental economic problems. A viable solution only became possible

<sup>49</sup> Iványosi 1978, p. 98. In the taxation practices of the citizens of Kecskemét, the following value ratios were in effect: if someone was unable to pay 2 silver thalers, they could instead pay in copper coinage to the value of 10 thalers. At the rate of 3 thalers and 2 groschen, this amounted to 16 “copper thalers”.

<sup>50</sup> Iványosi Szabó, Tibor, “Az aranyforint forgalma Kecskeméten 1662-1711”, in *Numizmatikai Közlöny*, 1979-1980 (hereafter Iványosi 1979-80), pp. 63-76 (here see p. 75). For the gold prices in Kecskemét during the War of Independence, see pp. 74-75.

<sup>51</sup> MNL SzSzBmLt IV.1.b. Fasc. 9. No. 26., May 11, 1708. Berzék. “From among the aforementioned silver coins, the value of any one thereof shall, in like manner as previously – before the House of Austria commenced its present course of proceedings concerning this matter – be regarded according to the devalued rate then observed. So now likewise, without further dispute or contention, let the same value be observed and upheld, namely: the florin-denominated coins of the Imperial Princes, as well as the fifteen-kreuzer pieces of the Dukes of Bavaria and the Bishop of Olomouc, shall be accepted – without any fault-finding whatsoever – in accordance with the value attributed to the equivalent coins of the Austrian House”.

after the cessation of the armed conflict and the re-establishment of commercial relations<sup>52</sup>.

The severe crisis in financial administration during the Rákóczi War of Independence is best reflected in the exceptionally high exchange rates – levels otherwise seen only briefly during the Kipper- und Wipperzeit. These inflated rates resulted in widespread price increases (inflation) and a deterioration in living conditions. Naturally, the primary victims of this situation were ordinary people, who, due to their social standing, could not take advantage of the speculative opportunities that emerged during this turbulent monetary period. The gravity of the monetary crisis emerges from the fact that barely a month after the surrender at Majtény, the Szepes Chamber received – and promptly issued – an order to revalue the groschen, reducing its value from six denars to five. This reflects a deliberate effort by the Habsburg administration to curb the excessively high exchange rates that had emerged.

The currency valuations and overall financial conditions that developed during the eight-year-long conflict paint a picture of a state struggling with severe systemic issues, one largely unable to address the challenges posed by its geopolitical isolation. Indeed, the disruption of centuries-old trade networks and the resulting contraction of monetary inflows, together with the shortage of precious metals, would have seriously affected even a more advanced and resilient economy.

Despite the failure of Prince Rákóczi and his financial experts to implement successful long-term reforms, it is significant that the state never collapsed financially. Considering the constraints under which it operated, this in itself must be regarded as a remarkable achievement.

## **6. Selected Circulating Coins and Exchange Rates. Changes in the Value of Gold and Thaler Currency (1620-1700)**

Among the full-value currencies of the period, the circulation of gold and thalers reflects a particular situation: as archaeological evidence suggests they did not circulate in massive quantities in Szabolcs County. However, written sources – such as mortgage contracts, wills, and inventories – attest to their presence in

<sup>52</sup> MNL SzSzBmLt IV.1.b. Fasc.12. No. 27., June 4, 1711. Kassa, External addressing to the Estates of Szabolcs County.

large numbers due to practices of hoarding (thesaurisation). It should also be noted that in certain cases, especially in the case of the thaler, and to a lesser extent the gold forint, these coins were also used as units of account alongside or instead of the commonly used Hungarian forint. One source from 1647 describes the pledged property as follows: “Briberi Melith Anna Mária... mortgages a portion of the land called Szent György, located in Szabolcs County, for 70 thalers in old silver coins, which equals 126 Hungarian florins”<sup>53</sup>. Sources consistently show that, unlike gold coins, thalers were sometimes problematic, mainly because of the silver’s devaluation relative to gold. Nevertheless, both gold and thalers remained the primary foundation for hoarding across the two centuries<sup>54</sup>.

Various denominations of the gold forint are found in the sources, including formal, pagan, and ten-ducat types, as well as terms such as “old gold forint”, Lysimachus, “tenfold gold”, “gold thaler”, and “broad gold”<sup>55</sup>. In contrast, thalers raised more concerns, mainly due to the depreciation of silver compared to gold. Written records have preserved multiple instances of this issue. In Eastern part of the Szepes Chamber, thalers in circulation included imperial, formal, grazer (gréci in Hungarian), Polish (with swords), French (gall), lion thalers, and solidus thalers<sup>56</sup>. The latter did not represent a distinct type but

<sup>53</sup> MNL SzSzBmLt. XV/19. A Briberi Melith család levéltára (The Archives of the Briberi Melith Family) 1647. Anna Mária Melith, wife of Zsigmond Nyáry, mortgaged her share of the Szent György puszta estate to the chief judge of Debrecen. “Seventy thalers in old silver specie, which maketh 126 Hungarian florins”. According to the source, the thaler was calculated at 180 denars.

<sup>54</sup> K. Kivanc Karaman, Sevket Pamuk and Secil Yildirim-Karaman, “Money and monetary stability in Europe, 1300-1914”, *Journal of Monetary Economics*, vol. 115, 2020, pp. 279-300.

<sup>55</sup> Ulrich, Attila, “Szabolcs és Szatmár vármegyék 16-17. századi pénzforgalma levéltári források és pénzleletek alapján”, in *Szabolcs-Szatmár-Beregi Levéltári Évkönyv*, 11, 1995, pp. 21-28. See the gold of the Turk. MNL SzSzBMLt. IV.1.b. Fasc. 25. No. 7. 1607. “One pagan gold coin... In a small chest belonging to the son, one golden coin of pagan make... pagan gold No. 5”. Concerning the names of the ten-gold dukats MNL SzSzBMLt. IV.1.b. Fasc. 57. No.7. 1639. “A thousand in golden thalers... paid in ready coin”. MNL SzSzBMLt. IV.1.b. Fasc. 25. No. 7. 1607. “One thaler-wide piece of gold, No. 2”.

<sup>56</sup> Mention of thaler names: Imperial and Frech MNL SzSzBMLt. IV.1.B... Fasc. 104. No. 2., 43., 44. Grazer MNL SzSzBMLt. IV.1.b. Prot. 12. 1659. fol. 125. “Forasmuch as Master András Kemény hath given unto us most fair Grecz thalers at the time of redemption, we are bound to render likewise such thalers and therewith redeem the same”. Lion thaler MNL SzSzBMLt. IV.1.b. Fasc. 25. No. 7. 1607. Polish sword thaler Horváth 1964, p. 39. 1643. aug. 29. Ibrány. Its value was 180 denars, which corresponded to the exchange rate of the imperial thalers.

rather referred to high-quality, intact silver thalers. Solidus thalers appear in local records only once: “cui vero viatico et expensis solidi tallerus 400”<sup>57</sup>.

Despite the wide variety of small change (minor coins) in circulation throughout the 16th and 17th centuries, Szabolcs sources have preserved relatively little information about them. Groschen coins, however, are found in large numbers in hoards, especially among the so-called “monetae polonicae” (Polish-type coinage), including half, full, and multiple units. The sources mention the following groschen types: new, three-denars, denars imperial, debased, five-denars, white, foreign double, and coins issued by Gábor Bethlen<sup>58</sup>. The volatility of groschen values posed difficulties in the 16th and 17th centuries – white groschen in the 1610s and five-penny groschen after 1625 disrupted monetary circulation<sup>59</sup>.

Ottoman coins, referred to as “pagan money” (e.g., gold, akçe, and para), circulated in copious quantities around the turn of the 16th and 17th centuries and, like most coin types, became the object of thesaurisation practices<sup>60</sup>. In 17th-century inventories, akçes appear frequently – both as decorative elements and hoarded valuables. Turkish gold coins (funduk, altin) were almost equal in value to Hungarian gold coins, due to their high gold content and fine craftsmanship. The hoarding of “pagan money” indicates a significant influx of these coins at the end of the 16th and the beginning of the 17th century; they subsequently disappear from the sources, likely due to the Ottoman Empire’s economic difficulties and the resulting severe debasement of the akçe<sup>61</sup>.

<sup>57</sup> MNL SzSzBmLt. IV.1.b. Prot. XI. 1646. Fol. 127.

<sup>58</sup> MNL SzSzBmLt Prot. X. 1625. Fol. 84. MNL SzSzBmLt IV.1.b. Fasc. 31. No. 3. 1613. “Let the white groschen be taken away or set down”. MNL SzSzBmLt IV.1.b. Fasc.34. No.6. 1616. Some examples of small coin names: new coin, tree-denars coin, emperor coin, bad coin, grochsen of Gabriel Bethlen. See Károlyi III, p. 225, p. 421.

<sup>59</sup> Ulrich, Attila, “Török hódoltság Szabolcsban a XVII. században”, in *A nyíregyházi Jósa András Múzeum Évkönyve*, 1999, pp. 329-341.

<sup>60</sup> Károlyi III, p. 422, “a silver-gilt vessel for pagan coin”. MNL SzSzBmLt IV.1.b. Fasc. 25. No. 7., 1607. “One pagan money circlet... one little silver-gilt jug with pagan coin... in the third chest, pagan monies... in one son’s little chest, in one son’s possession, pagan coin gilded with gold”.

<sup>61</sup> Pávó, Elemér, *Török pénzek a hódoltság kori Magyarországon* (Budapest 1986). Hegyi, Klára, “A török hódoltság pénzforgalma”, in *Numizmatikai Közlöny*, 1987-88, pp. 77-84 (here see p. 79, p. 83.)

The greatest disturbances in the last two decades of the 17th century were caused by the widespread influx of two-thirds thalers (or guldiners) minted in almost every European country. Due to successive reductions in mint standards, these coins significantly damaged economic stability. In 1695, Emperor Leopold set the official exchange rate of the guldiner – also known as the florenarius (florin) – at 52.5 kreuzers (i.e., 105 denars), explicitly stating that this rate must be strictly adhered to in trade<sup>62</sup>. In a summer decree of the same year, the Kassa Chamber set the guldiner's trade value at 35 polturas, citing regulations from 1693<sup>63</sup>. In the early stages of the following year, complaints emerged again about the circulation of florins, and the situation worsened when “local inhabitants and poor people” accepted them only at 8-12 groschen (48-72 denars), even though the official rate was 15 groschen (or 45 kreuzers), equivalent to 90 *denars*<sup>64</sup>.

Some of the most insightful data comes from comparing the exchange rates of different coin types across regions. For example, in 1632, one thaler was worth 180 denars in Szabolcs county (Eastern part of Hungary), compared to 120 in Németújvár (Western part, present-day Güssing in Austria), 125 in Vienna, and 130 in Kismarton (Western part, present-day Eisenstadt in Austria). In 1648, it remained 180 denars in Szabolcs county and Kassa (Eastern part, present-day Košice in Slovakia), but only 150 in Pápa and Pozsony (Western part, present-day Bratislava in Slovakia). By 1663, the rate rose to 200 denars, likely a one-off case. In 1666, after a Turkish-engineered rate increase, it was valued at 2 florins in Szabolcs, 180 in Kassa, and 150 in Transdanubia. In 1672, the thaler traded at 210 in Szabolcs, 180 in Kassa, 150 in Transdanubia, and around 260 denars in Kecskemet (then under Ottoman rule)<sup>65</sup>.

Gold similarly showed diverse pricing. In 1629, one gold coin equalled 4 florins in Szabolcs, 220 denars in Szombathely (Western part), and 250 in

<sup>62</sup> MNL SzSzBmLt. IV.1.b. Fasc. 113. No. 104., 1695. Bécs november 5., “Florenarios autem externos ad sinem... decurrentis... pro Cruciferis quinquaginta duobus cum dimidio ad huc in commercio seu cursu suo reliqui”.

<sup>63</sup> MNL SzSzBmLt. IV.1.b. Fasc. 113. No. 106. July 5, 1695. Kassa.

<sup>64</sup> MNL SzSzBmLt. IV.1.b. Fasc. 114. No. 3., March 3, 1696. Wien, “eiusmodi florenarios, a nonnulli Regnicolis et misera Plebe, duntaxat ad octo, novem, decem, aut undecim et duodecim grossos... Dominus monetarys pro quindecim grossis, sive Cruciferis quadraginta quinque passim erogari”. The quoted text implies the following value ratio: 1 groschen = 6 denars, 1 kreuzer = 2 denars, 1 groschen = 3 kreuzers.

<sup>65</sup> Horváth 1964, pp. 35-45.

Várad (Transylvania, present-day Oradea in Romania). In 1643, it was worth 2 thalers (360 denars) in Szabolcs, 333 in Vienna, and 3 florins in Eperjes (Eastern part, present-day Prešov in Slovakia). By 1660, the rate stood at 3 florins and 60 denars in both Szabolcs and Érsekújvár, while in Bazin (Western part, present-day Pezinok in Slovakia) and Pottendorf it remained at 3 florins. In 1666, the rate was 4 florins in both Szabolcs and Kecskemet, and 360 denars in Zemplén. In 1682 and 1686, the gold coin reached 450 denars in Szabolcs, 490-540 in Kecskemet (1682), and 410-480 (1686), while in Tata it was only 350 denars. The year 1685 was exceptional, with the highest gold values recorded (excluding the Kipper era), likely due to anti-Ottoman military campaigns. That year, gold was valued at 5 florins 50 in Szabolcs, about 6 florins in Kecskemet, and 450 denars in Sárospatak<sup>66</sup>.

## **7. Currency Regulations and Valuations During the Rákóczi War of Independence (1703-1711)**

During the Rákóczi War of Independence, the increasingly deteriorating economic conditions made everyday life as well as state governance significantly more difficult. Throughout the eight years of Hungary's first war of independence, combating inflation became a key concern, being also seen as a means to curb the rapidly growing wave of speculation. The Senate, which effectively governed the affairs of the country, placed great emphasis on addressing economic and financial challenges.

The Senate's resolution of 15 May 1708 naturally included the relative value of minor denominations<sup>67</sup>. The groschen, which played a significant role in currency exchange, were worth 2 silver or white polturas (poltura alba), 3 kreutzers, or 6 denars. Each groschen was equivalent to 3 copper polturas, placing the kreutzer and copper poltura on essentially the same value basis. According to the decree, a groschen equalled 6 denars, a poltura 3 denars, and a kreutzer 2 denars – aligning closely with the general principles of Emperor Leopold's monetary ordinance of 1659.

<sup>66</sup> Horváth, Tibor Antal, "A magyar aranyforint értékváltozása 1490-1700 között", in *Numizmatikai Közlöny*, 1959-60, pp. 40-49 (hereafter Horváth 1960). Recently Buza, János, *Magyarországi és Erdélyi pénzürtékek a 16-17. században* (Budapest 2021), pp. 295-319.

<sup>67</sup> MNL ZmLt IV.1001./b. Fasc. 204. No. 553.

Table 1. Monetary Exchange Rates Set by the Senate on May 15, 1708.

<b>Names of coins</b>	<b>Rhenish florin (RFI)</b>	<b>Hungarian florin (HFI)</b>
Hungarian, Transylvanian, “czikiani” (Zecchini - Venetian) gold dukats	6 RFI	7 Fl 20 denars
Electoral German gold coins, Gold coins of the prince-electors, Gold coins issued by imperial cities, Dutch gold coins	5 RFI 10 groschen	6 Fl 60 denars
French gold dukats	4 RFI	4 Fl 80 denars
Imperial thalers, thalers minted in Graz (“gréci”), French écus, Hungarian thalers, Transylvanian thalers, Saxon thalers	2 RFI 10 groschen	3 Fl
Imperial thalers, thalers minted in Graz (“gréci”), French écus, Hungarian thalers, Transylvanian thalers, Saxon half thalers	1 RFI 5 groschen	1 Fl 50 denars
Imperial thalers, thalers minted in Graz (“gréci”), French écus, Hungarian thalers, Transylvanian thalers, Saxon quarter-thalers	12,5 groschen	75 denars
Spanish, Dutch, “Ursini” (“Bear” thalers), Lion thalers	2 RFI 5 groschen	2 Fl 70 denars
Spanish, Dutch, “Ursini”, Lion half-thalers	1 RFI 2,5 groschen	1 Fl 35 denars
Spanish, Dutch, “Ursini”, Lion quarter-thalers	11 1/4 groschen	67,5 denars
Zolota	1 RFI 10 groschen	1 Fl 80 denars
Guldiner	1 RFI	1 Fl 20 denars
Timpf és Prussian groschen	7 groschen	42 denars
XV kreuzers	6 groschen	36 denars
Bavarian and Brandenburgian groschens	5 groschen	30 denars
VI kreuzer or 7 kreuzers’ groschen	7,5 kreuzer	15 denars
“Suszták” or “qvarternarios”	7 kreuzer	14 denars

The explanatory text accompanying the Senate decree offers additional insights. Gold coins did not exhibit price increases, retaining their high value. However, early signs of inflation appeared in the quarter thalers minted in the “imperial league” (Austrian, Hungarian, Transylvanian, and French), whose exchange rate rose from 10 groschen to 12.5 groschen. There was also a significant increase in the valuation of Spanish, Dutch, “Ursini” and Lion thalers.

Previously realistically valued at 36 groschen due to their lower silver content – though often exchanged at 38 groschen – the decree now set their official rate at a staggering 45 groschen, likely reflecting a severe shortage of thalers. Similarly, the “zolota” minted within the Lion thaler league underwent a steep appreciation, with its new value set at 30 groschen (i.e., 1 Rhenish forint and 10 groschen), equivalent to 5 groschen or 30 denars more than its earlier valuation.

Small denomination coins also appreciated. Timpfs<sup>68</sup> and Prussian (multiple) groschen, formerly valued at 6 groschen, rose to 7 groschen (21 kreutzers or 42 denars). The Hungarian and foreign 15-kreutzer coins, which had already undergone revaluation at the end of the 17th century (adjusted to 17 kreutzers), were now officially counted as 6 groschen or 18 kreutzers. In contrast, certain silver coins such as the guldiners, Bavarian and Brandenburg groschen, six-kreutzer coins, and Polish szóstaks<sup>69</sup> remained unchanged in value.

The decree likely reflected existing market conditions rather than initiating a planned devaluation or inflationary policy. It also highlights the critical financial situation by 1708 and the shortage of silver currency, corroborated by the sharp rise in the value of some coin types.

The official valuations set by the Senate are confirmed by the accounting records of András Kolozsvári, which offer important numismatic data from the War of Independence and align with earlier numismatic research<sup>70</sup>. His records are particularly valuable as they list coin types and values, providing insights into the currency circulation during the war. According to Kolozsvári’s records, the following coins and their values (in Hungarian florins) were recorded<sup>71</sup>:

### 1708

- Körmöcz gold: 7 Fl 20 denars
- Dutch gold: 6 Fl 60 denars
- Gold coin: 6 Fl 30 denars / 6 Fl
- French thaler / Cross thaler: 2 Fl 70 denars
- Thaler and florin coin: 3 Fl
- Silver guldiner: 1 Fl 20 denars
- Six-poltura groschen or Mitzlander: 30 denars

<sup>68</sup> 18-groschen coin, known as the “ort”, the term quinquenarius in Latin sources.

<sup>69</sup> 6-groschen Polish coin, known as the szóstak.

<sup>70</sup> Horváth 1960, pp. 33-50, and Horváth T.A. 1964, pp. 25-50.

<sup>71</sup> MNL G 29 80. csomó, The financial statement of András Kolozsvári.

- “Máriás” or 15-kreutzer coin: 36 denars
- “Sextax” (Susztak): 42 denars
- Timpf and Polish 6-groschen (szóstak): 14 denars

### 1709

- Hungarian / Körmöcz gold: 7 Fl 20 denars
- Nagybánya and Belgian gold: 6 Fl 60 denars
- Lion thaler: 2 Fl 70 denars
- Imperial / French thaler: 3 Fl
- Half thaler: 1 Fl 50 denars
- Quarter thaler: 75 denars
- Broken guldiner (“zlot”): 1 Fl 20 denars
- “14-poltura” groschen (“sextax”): 42 denars
- 15-penny groschen or VI groschen: 15 denars
- Polish szóstak or 14-penny groschen: 14 denars<sup>72</sup>

In Kolozsvári’s notes, exchange rates were expressed in three formats: in Hungarian denars, and in Rhenish florins, both with elevation (*cum elevatione*) and without elevation (*sine elevatione*). The above-listed values reflect the “elevated” rates. However, the “non-elevated” values were also significant. For instance:

- Körmöcz gold: 5 Fl 10 denars
- Imperial / Cross thalers: 2 Fl 16-17.5 denars
- French thaler: 2 Fl 40 denars
- Guldiner: 1 Fl 2 denars
- 14-poltura groschen: 36 denars
- Mitzlander: 18 denars
- 15-penny groschen: 14 denars
- Polish szóstak: 12 denars

These divergent exchange rates highlight the inconsistency of monetary valuation, and suggest that trade goods priced in lower rates would have been significantly cheaper.

<sup>72</sup> In certain instances, Kolozsvári recorded the monetary amounts in Rhenish florins. For the purpose of conversion, we based our calculations on the accounting thaler set at 60 kreuzers.

Further insights into the contradictory nature of financial practices during the war emerge from the accounts of István Fogarasi. His entry dated 6 October 1708 – nearly five months after the Senate decree – states that “the devaluation of money was based on former values”, thus he recorded the value of his cash holdings according to both previous and newly adjusted valuations. For instance: Hungarian and Italian (Venetian) “czikeny” gold coins, previously valued at 6 RFl (Rheinisch florin – hereafter Rfl) (7 Hungarian Florins – hereafter Hfl – 20 denars), were now counted as 4 RFl 1 groschen (4 Hfl 86 denars). French gold coins dropped from 4 RFl (4 HFl 80 denars) to 3 Fl (3 HFl 60 denars). Dutch gold coins from 5 RFl 30 kreutzers (6 MFl 60 denars) to 4 RFl.

Silver coins also underwent devaluation. 332 Styrian (Gratz) thalers, earlier valued at 830 RFl, were now worth only 664 Fl, meaning their individual valuation dropped from 2 RFl 30 kreutzers (3 HFl) to 2 RFl (2 HFl 40 denars). The Lion and Cross thalers similarly declined, with 5.5 thalers dropping from 11 RFl to 9 RFl, while the guldiners (or “broken florins”), formerly worth 1 RFl (60 kreutzers), fell to 51 kreutzers (1 HFl 20 denars / 1 HFl 2 denars). This represents a devaluation of approximately 20-30%. These trends align with Kolozsvári’s records but contradict the 1708 decree of the Economic Council, revealing that even state authorities often failed to adhere to official valuations and that no uniform exchange system existed, not even at the highest levels.

Additional perspective is offered by the accounting revisions of the Eger Chapter, specifically concerning revenues from the Kecskemét customs office<sup>73</sup>. These revised currency valuations both support and contradict the Senate’s decree, depending on whether the official or local exchange rates were applied. For example: Spanish, Dutch, Lion, and Bear thalers were recorded at 2 HFl 10 denars. Imperial, French, and Cologne thalers at 2 RFl (2 HFl 40 denars) – significantly below the 2 HFl 70 denars to 3 HFl rate specified in the Senate decree.

More striking are the annotations of Márton Pintér Márton, who led the revision. He observed that Spanish Cross and Dutch thalers were accepted “in bundles” at 38 groschen (2 HFl 28 denars), resulting in losses for the Chapter<sup>74</sup>. He also noted that some city-minted thalers were mixed among the more valu-

<sup>73</sup> MNL G 29. 89. csomó. June 17, 1708.

<sup>74</sup> The exchange rate of 38 groschen for Spanish and Dutch thalers corresponds with the Senate’s analysis, in which the rate was likewise set at 36-38 groschen, before eventually being fixed at 45 groschen.

able imperial thalers, even though “respectable individuals did not distinguish between them”. These “Imperial City Thalers” bore the image of the emperor in full stature on one side and a double-headed eagle on the other. Though often accepted at the same value as imperial thalers, in reality, they fetched a lower price. Additional losses occurred with two Bavarian “helmet visord” 20-poltura coins, often traded for only 12 polturas, yet counted at 1.80 HF1, incurring a discrepancy of 60 denars<sup>75</sup>.

Thus, Márton Pintér’s remarks offer undeniable proof of regional variance, the divergence between official and actual exchange rates, and the reality that the value of a coin often depended on the discretion of money changers. These examples underscore the lack of a unified monetary system, further exacerbating the financial instability during the Rákóczi War of Independence.

## 8. The Solution

Following the end of the Rákóczi War of Independence, the process of political, social, and economic consolidation in the Kingdom of Hungary could finally begin<sup>76</sup>.

Emperor and King Joseph, who was ruling at the time, issued a decree that annulled a financial anomaly which had persisted in the country for nearly sixty years. In doing so, he standardised monetary values across the kingdom,

<sup>75</sup> During his review of the coinage, Pintér deemed it necessary to describe the appearance of the civic issues of the Holy Roman Empire: “for among them were observed approximately four thalers struck by Imperial Cities, depicting on one side the emperor in full standing figure, and on the reverse, an eagle”. In his accounts, he made particular reference to Bavarian coins: “among the coins were two Bavarian thalers – so-called ‘armored’ or ‘visor-helmeted’ 20-poltura pieces, featuring a figure wearing a barred helmet – coins which many had accepted at only 12 polturas... yet they were counted here as worth 1.80 florins, resulting in a discrepancy of 60 denars”.

<sup>76</sup> *Magyar Törvénytar 1657-1740 évi Törvényzikkék*, Márkus Dezső (ed.) (Budapest 1900), p. 673. “Act LXVIII of the year 1723 ordained that, in order to prevent harmful disturbances arising from the unequal acceptance of coinage, its circulation and acceptance should be made uniform throughout the entire kingdom and its annexed territories. §1. Nevertheless, despite the provisions of this law, serious disturbances still persist in this regard; therefore, the Royal Lieutenantcy Council is hereby charged with the enforcement of the aforementioned law. §2. Likewise, it shall be within its remit to bring all units of measure into an equal and uniform condition”.

eliminating exchange rate discrepancies between its various regions. This highly significant decree is presented below.

His Majesty, the late and blessedly remembered Leopold, our most gracious Lord and Prince, did on numerous occasions send forth his Royal Patents to the Honourable Noble Counties, likewise to Royal Free Cities and other places, where they were duly published. Therein it was decreed that henceforth, throughout the whole of the Kingdom of Hungary, no person shall presume to accept six Hungarian coins for two polturas, but rather only five Hungarian coins. Just as in Kőrmöcbánya (Kremnitz), so too shall it be in the Noble City of Kassa (Košice), and in the Noble Land of Transylvania. As it was proclaimed, so shall it be observed – both in dealings among men and in acts of giving and receiving.

Now, since no benefit was perceived from the contrary practice, and it bore no useful effect, whereas in certain places five coins were indeed received for two polturas – most notably in Lower Hungary – and elsewhere six coins were taken in and paid out as such, practices which brought great loss and grievance to many, and caused much confusion even in monetary conventions, therefore His Royal Grace, our Lord JOSEPH, of worthy memory, has issued this command: that henceforth, at all mints, five Hungarian coins be paid and received for two polturas.

Thus, to prevent further confusion, losses, and injuries that might arise among many due to such discrepancies, and to establish a just and proper accord throughout the entire Noble Kingdom of Hungary, it is hereby proclaimed: that all Royal Officials and Servants of His Majesty shall ensure this order be observed and upheld under severe penalty – that no one shall dare to accept or pay five Hungarian coins in place of two polturas. From this day forth, let none resist the enforcement of this command, for it resteth upon the will and pleasure of His Royal Majesty<sup>77</sup>.

## 9. Conclusion

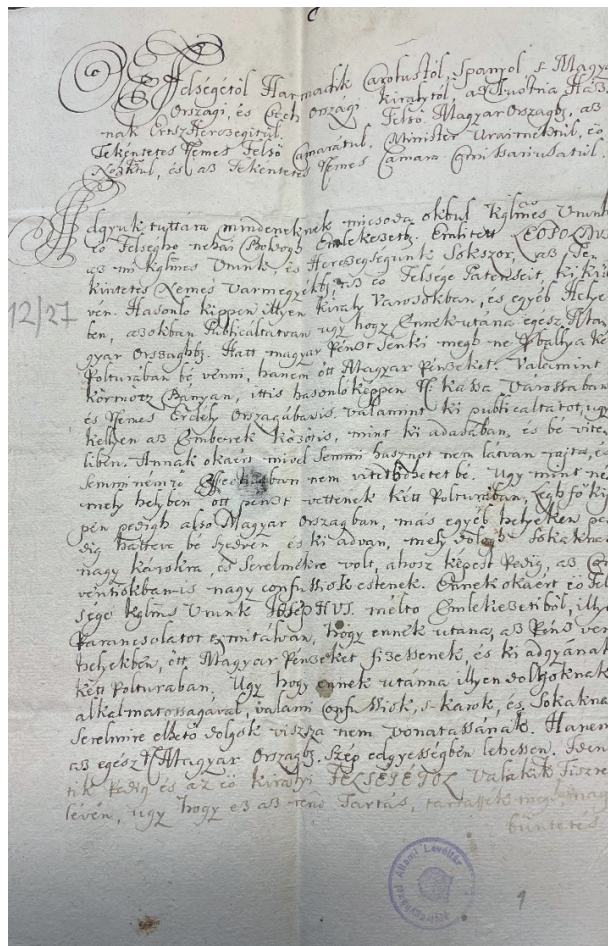
As we have sought to illustrate in our study, within the territory of the Szepes Chamber, the value of gold effectively multiplied from the early 17th century until 1711, followed in turn by the fluctuations of silver thalers. The concurrent circulation of several types of coinage, along with the repeated devaluation of silver currency, likely placed a considerable burden on the population of the time. These silver coins were distinguished not only by name but clearly also in

<sup>77</sup> MNL SzSzBmLt Fasc.12. No. 27. June 4, 1711. Kassa. External addressing to the Estates of Szabolcs County.

everyday monetary transactions. The situation was further complicated by Emperor Leopold's monetary decree of 1659, which, in both fiscal terms and likely in commodity pricing as well, disrupted the financial unity of the remaining territories of the Kingdom of Hungary.

“The fair price of pike, large and small fish, crab, curd, cheese, egg yolk, garlic and red onion, carrot, apple, pear, dried plum, poppy seeds, and other such fruits and related goods shall be set in every place by the town and village judges, according to the value of good money”<sup>78</sup>.

Figure 2. First page of the contemporary Hungarian-language translation of the Imperial and Royal Decree.



<sup>78</sup> MNL SzSzbMlt IV.1.b. Fasc. 84. No. 108. 1666. Price regulation.

These difficulties were exacerbated by the shortage of small change, the scarcity of currency resulting from speculative money trading, and, of course, inflation, which returned cyclically to the Chamber's territory in the wake of successive wars. While in 1660 the exchange rate of the gold forint stood at 360 denars, by the time of the Rákóczi War of Independence in 1705 it had risen to 720, the first class gold dukats (Hungarian, Austrian, Venetian) – effectively doubling in value. This dramatic increase, in addition to the disappearance of gold from circulation, clearly had a strong inflationary effect, especially considering that in this period, one gold coin was generally reckoned to be worth two high-quality (“imperial”) thalers. Similar surges in price occurred during the so-called Kipperzeit (the Kipper period) amid the Thirty Years' War, in the Ottoman-occupied territories from 1660 onward, to some extent during the 1670s, again between 1683 and 1686 during the initial campaigns to expel the Turks, and most prominently during the Rákóczi War of Independence (1703-1711).

The aforementioned imperial and royal decree evidently resolved the issue of the dual accounting standards, bringing order to the monetary system within the Kingdom of Hungary. However, we argue that up to that point, repeated abuses (in money exchange and valuation), the rising cost of living, and broader international economic shifts – such as the falling prices of agricultural products – placed the Kingdom at a growing disadvantage. This trend coincided with a period of renewed economic growth in Western Europe, while in Hungary it led instead to the entrenchment of the feudal service system, increased burdens on the peasantry, and restrictions on their freedom of movement. This economic structure effectively stifled development – an outcome further intensified by the very monetary and financial challenges we have described in this study.

## References

### Bibliography

- A nagy-károlyi gróf Károlyi család oklevéltára. A család megbízásából kiadja gróf Károlyi Tibor. Sajtó alá rendezi Géresi Kálmán (ed.), IV. kötet: Oklevelek és levelezések 1600-1700* (Budapest 1887).
- Bánkúti I., "II. Rákóczi Ferenc pénzverésének gazdasági háttere", in *Numizmatikai Közlöny*, 1983-1984, pp. 61-63.
- Bánkúti I., "II. Rákóczi Ferenc rézpenzeinek gazdasági és társadalmi vonatkozásai", in *Numizmatikai Közlöny*, 1979-1980, pp. 77-79.
- Bérenger J., "A Habsburg hatalom gazdasági alapjai a XVII. század végén", in K. Benda (ed.), *Európa és a Rákóczi-szabadságharc* (Budapest 1980).
- Bodor I., "Magyarország aprópénzei a XVII század második felében", in *Numizmatikai Közlöny*, 1973-1974, pp. 61-67.
- Braudel F., *Anyagi kultúra, gazdaság és kapitalizmus a XV-XVIII. században. A mindennapi élet struktúrái* (Budapest 1985).
- Buza J., "A tallér és az aranyforint árfolyama, valamint szerepe a pénzforgalomban Magyarország török uralom alatti területén a XVII. században (Nagykörös 1622-1682)", in *Történelmi Szemle*, vol. 20, no. 1, 1977, pp. 73-106.
- Buza J., "Az oroszlanos tallérok árfolyama és szerepe Magyarország pénzforgalmában", in *Numizmatikai Közlöny*, 1981-1982, pp. 89-99.
- Buza J., "Az Oszmán Birodalom monetáris válságának magyarországi hatása", in A. Ulrich (ed.), *Numizmatika és Társtudományok*, III (Nyíregyháza 1999), pp. 229-243.
- Buza J., "Törökkori pénzértékviszonyok egy Gömör megyei tanúvallatás tükrében", in *Numizmatikai Közlöny*, 1985-1986, pp. 61-65.
- Buza J., *Magyarországi és Erdélyi pénzértékek a 16-17. században* (Budapest 2021).
- Ember Gy., *Magyarország nyugati külkereskedelme a XVI. század közepén* (Budapest 1988).
- Balázs É.H., *Jobbágylevelek* (Budapest 1951).
- de Vries J., *Economy of Europe in an Age of Crisis, 1600-1750* (Cambridge 1976).
- Hain G., *Szepességi avagy löcsi krónika a kedves utókor számára* (Budapest 1988).
- Horváth T.A., "A tallér értékváltozása Magyarországon 1542-1700 között", in *Numizmatikai Közlöny*, 1963-1964, pp. 25-50.
- Horváth T.A., "A magyar aranyforint értékváltozása 1490-1700 között", in *Numizmatikai Közlöny*, 1959-1960, pp. 40-49.
- Huszár L., "Pozsonyi Forint - Kassai Forint", in *Numizmatikai Közlöny*, 1979-1980, pp. 59-61.
- Iványosi Szabó T., "A rézpenz forgalmának és értékváltozásának alakulása a Rákóczi-szabadságharc idején", in *Numizmatikai Közlöny*, 1977-1978, pp. 95-104.
- Iványosi Szabó T., "Az aranyforint forgalma Kecskeméten 1662-1711", in *Numizmatikai Közlöny*, 1979-1980, pp. 63-76.

- Karaman K.K., Pamuk Ş. and Yildirim-Karaman S., “Money and monetary stability in Europe, 1300-1914”, in *Journal of Monetary Economics*, vol. 115, 2020, pp. 279-300.
- Magyar Törvénytár 1657-1740 évi Törvénycikkek*. M. Dezső (ed.) (Budapest 1900).
- MNL ZmLt V. 43, *Tolcsva nagyközség iratai*.
- Pálffy G., *Hungary between Two Empires, 1526-1711* (Bloomington, IN 2021).
- Pávó E., *Török pénzek a hódoltság kori Magyarországon* (Budapest 1986).
- Hegy K., “A török hódoltság pénzforgalma”, in *Numizmatikai Közlöny*, 1987-1988, pp. 77-84.
- Pamuk Ş., *A Monetary History of the Ottoman Empire* (Cambridge 2000).
- Szücs J., *A Szepesi Kamarai levéltár 1567-1813* (Budapest 1990).
- Ulrich A., “Pénzügyi megosztottság a magyar királyságban a 17. század második felében”, in M. Torbágyi (ed.), *Numizmatika és társtudományok*, IV (Budapest 2002), pp. 117-119.
- Ulrich A., “Szabolcs és Szatmár vármegyék 16-17. századi pénzforgalma levéltári források és pénzletek alapján”, in *Szabolcs-Szatmár-Beregi Levéltári Évkönyv*, vol. 11, 1995, pp. 21-28.
- Ulrich A., “Török hódoltság Szabolcsban a XVII. században”, in *A nyíregyházi Jósza András Múzeum Évkönyve*, 1999, pp. 329-341.
- Ulrich A., “Gazdasági örökség, spekuláció, kiútkeresés a Rákóczi-szabadságharc alatt”, in *Századok*, vol. 146, no. 4, 2012, pp. 799-813.
- Ulrich A., “The Rákóczi family’s estate wine production, wine trade, and wine prices at the end of the 17th century”, EHES Working Paper 278, available at: (accessed 21 June 2025).
- Yousefi V. and Kóbori J., “Az oszmán-török birodalom pénztörténete”, in *Valóság*, no. 2, 2014, pp. 16-32.
- Zimányi V., *Magyarország az európai gazdaságban 1600-1650* (Értekezések a történeti tudományok köréből, 80) (Budapest 1976).

### Archival sources

- MNL ZmLt - Magyar Nemzeti Levéltár Borsod-Abaúj-Zemplén Vármegyei Levéltár Sátoraljaújhelyi Fiókleveletára (Hungarian National Archives, County Archives of Borsod-Abaúj-Zemplén, Branch Archives of Sátoraljaújhely)
- MNL SzSzBmLt - Magyar Nemzeti Levéltár Szabolcs Szatmár Bereg Vármegyei Levéltára - Hungarian National Archives, Szabolcs-Szatmár-Bereg County Archives.
- MNL NRA - Magyar Nemzeti Levéltár, Magyar Kamara Archivuma (Hungarian National Archives, Archives of the Hungarian Chamber) E. 158. Neo-regestrata Acta.
- MNL G 29. - Magyar Nemzeti Levéltár, G 29. A Rákóczi szabadságharc levéltára (Hungarian National Archives, G 29. Archive of the Rákóczi War of Independence).