

THE GOLD STANDARD IN AUSTRIA-HUNGARY

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Fecha de recepción: 15 de abril de 2022

Fecha de aceptación: 3 de junio de 2022

Resumen: Al tratar de descifrar la razón por la cual Austria-Hungría, en particular su capital Viena, fue un punto de acceso a la innovación, la cultura, la ciencia y las actividades intelectuales alrededor del año 1900, el sistema monetario de la época, el patrón oro, que duró de 1892 a 1914, debe reconocerse como un factor fundamental. Este sistema monetario era una versión del patrón oro clásico, que Austria-Hungría compartía con América del Norte y otros países europeos. Este artículo recopila literatura y datos sobre las circunstancias que dieron lugar a la transición de Austria-Hungría a un patrón oro, el debate que siguió, las contribuciones clave de Carl Menger a este debate y la posterior implementación y curso de este sistema, junto con las ventajas y desventajas que tenía.

Palabras clave: Historia Económica; Pensamiento Económico; Política Monetaria.

Clasificación JEL: B13; B53; E5; N13.

Abstract: When trying to decipher the reason why Austria-Hungary, in particular its capital Vienna, was such a hotspot of innovation, culture, science, and intellectual pursuits around the year 1900, the monetary system of the time, the gold standard, which lasted from 1892 to 1914, should be recognized as a foundational factor. This monetary system was a version of the classical gold standard, which Austria-Hungary shared with North American and other European countries. This paper gathers literature and data on the circumstances that gave rise to Austria-Hungary's transition to a gold standard, the debate that ensued, the key contributions of Carl Menger to this debate, and the subsequent implementation and course of this system, along with the advantages and disadvantages it had.

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Keywords: Economic History; Economic Thought; Monetary Policy.

JEL Classification: B13; B53; E5; N13.

I. INTRODUCTION

The popular Austrian writer Stefan Zweig (1881-1942) wrote the following in his memoirs about his childhood in Austria-Hungary:

“If I try to find some useful phrase to sum up the time of my childhood and youth before the First World War, I hope I can put it most succinctly by calling it the Golden Age of Security. [...] Our currency, the Austrian crown, circulated in the form of shiny gold coins, thus vouching for its own immutability. Everyone knew how much he owned and what his income was, what was allowed and what was not. Everything had its norm, its correct measurement and weight. If you had wealth, you could work out precisely how much interest it would earn you every year [...]”¹

The childhood he was describing was the age of the classical gold standard in Austria-Hungary, a government run monetary system based on gold, with a fractional reserve system permeating the central and commercial banks. In relation to the ideal of a gold standard it was lacking. However, in relation to the system immediately before and especially after, it was a tranquil monetary system that laid the foundation for a world akin to what Zweig remembered. Contrary to famous claims that this gold standard was “a barbarous relic”² or an age of “golden instability,”³ on the contrary, rather this civilizational relic marked a time of golden stability and prosperity.

This article, after a brief clarification of the term “gold standard,” gives an overview of this monetary system in Austria-Hungary,

¹ Zweig (1942), p. 23.

² Keynes (1923), p. 138.

³ Krugman (2012).

looking at the story before its implementation, the debate that was held and guided by Carl Menger's monetary work, and finally the reality of the monetary order underlined by various depicted indicators.

II.

THE GENUINE VERSUS THE PSEUDO GOLD STANDARD

It is not always clear what is meant when a "gold standard" monetary system is referred to. The monetary system of Austria-Hungary from 1892 to World War I is usually referred to as such a system, however, there are different definitions of what constitutes a gold standard. The *Oxford Dictionary* (2020) defines the gold standard as "the system [...] by which the value of a currency was defined in terms of gold, for which the currency could be exchanged." However, Austrian School economists disagree with this definition. The definition mentioned in the dictionary and the monetary system, which is explained in this paper, refers to what Salerno⁴ terms the "gold price rule," a system that integrates gold into a government fiat money system as a medium to improve monetary policy, a system that takes the involvement of government in the production of money for granted. Salerno explains:

"According to this view, the monetary system is or ought to be deliberately and rationally constructed so as to promote as efficiently as possible the attainment of the various macro-policy goals sought by government planners. These policy goals are formulated and ranked in accordance with criteria that are developed independently of, and often in conflict with, the valuations and choices of market participants as these are expressed in the pattern of prices and quantities that spontaneously emerge in the free-market economy. From this standpoint, the degree to which a particular monetary policy is judged to be "optimal" depends on the extent to which it succeeds in altering the spontaneous microeconomic processes of

⁴ Salerno (2010), p. 365.

the economy to yield macro-statistical outcomes that are consistent with the planners' chosen policy goals."⁵

This shall be referred to as a pseudo gold standard.

On the other hand, there is the genuine gold standard, which is a market phenomenon. Money, as Carl Menger argued, is a phenomenon resulting from market forces, and since the term "gold standard" just refers to the fact that gold is the most marketable good, i.e., money in a given region (or the world), it does not make sense to say that it is a government institution, the term "gold standard" defines a reality where gold is money. Milton Friedman explains: "A real, honest-to-God gold standard [...] would be one in which gold was literally money, and money literally gold, under which transactions would literally be made in terms either of the yellow metal itself, or of pieces of paper that were 100 per cent warehouse certificates for gold."⁶ Salerno further elaborates:

"Under the quintessential hard-money regime, therefore, the money-supply process is totally privatized. The mining, minting, certification, and warehousing of the commodity money are undertaken by private firms competing for profits in an entirely unrestricted and unregulated market. The money supply consists of gold in various shapes and weight denominations and claims to gold, in the form of paper notes or checkable demand deposits, that are accepted in monetary transactions as a substitute for the physical commodity money."⁷

This would be a genuine gold standard that contrasts the gold standard discussed in this paper, however, a pseudo gold standard can lean in its nature more to the former or try to imitate the latter. This article shows that within the studied time frame (1892 until 1914) the system in Austria-Hungary was very much informed by the nature of the latter, due to its inception and the understanding of the origin, quality, and purpose of money, to which Carl Menger played an important educational role.

⁵ Salerno (2010), pp. 368-369.

⁶ Friedman (1976), p. 34, cited in Salerno (2010), p. 356.

⁷ Salerno (2010), p. 357.

III.

THE MONETARY ORDER BEFORE THE GOLD STANDARD

From the 16th Century to the gold standard of 1892 Austria went through various metal and paper currencies, from the *Florin* (international name) or *Gulden*/Guilder (local name) to the paper *Wiener Währung*/Viennese Currency *Florin*, to the silver version of the *Wiener Währung Florin* or *Konventionsmünze*/Conventional Coin), and then to the silver and paper *Österreichische Währung*/Austrian Currency *Florin* (see an overview of the currencies in Table 1). Flandreau and Komlos⁸ call the monetary order before the gold standard, the one of the Austrian Currency, a “[p]aper money dragging a silver anchor.”⁹ This Austrian monetary system was characterized by fluctuations (as is also indicated by the exchange rate of the Austrian silver currency shown in Figure 1, at least until the Austrian-Hungarian Compromise of 1867). The newly established dual Austro-Hungarian Monarchy formed a silver standard in 1867 and tried to form a gold standard briefly in the 1870s, however, this was inconvertible because of the wars fought by Emperor Franz Joseph to defend Austrian hegemony in Central Europe, which were financed through debt and with the taxation of paper money inflation, therefore paper currency exceeded the stored metal currency. However, the devastating military defeats at the hands of Prussia and Italy brought this inflationary time to an end — for the time being — and the Austrian Monarchy signed an agreement with France, which aimed to pave the way for a gold coin standard, where on March 9, 1870 4- and 8-unit gold trade coin *Florins* were minted, which had the same gold content as the 10- and 20-unit French gold coin *Francs*. At the time the spirit “favored universalism, and the liberals on the Continent were dreaming of a monetary union for Europe, perhaps for the world.”¹⁰ However, reality did not match the ideal, convertibility was never reached, and therefore the paper Austrian currency continued to “float” above the silver metal money.

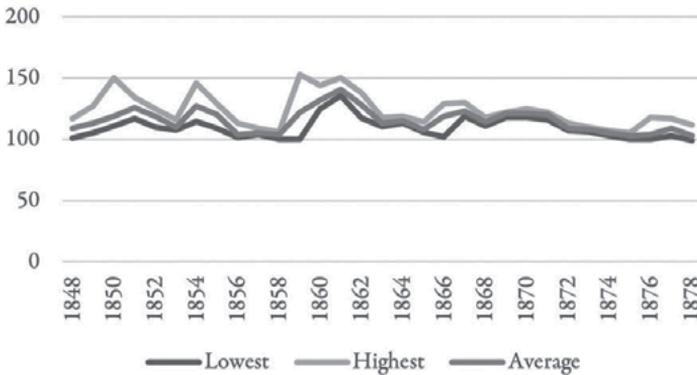
⁸ Flandreau & Komlos (2002), pp. 293-320.

⁹ Flandreau & Komlos (2002), p. 295.

¹⁰ Flandreau & Komlos (2002), p. 296.

TABLE 1. AUSTRIAN CURRENCIES & MONETARY UNITS¹¹

From 1500s	1 fl. (<i>Florin/Gulden/Guilder</i>) to 60 kr. (<i>Kreuzer</i>)
From 1812	1 fl. W. W. (<i>Wiener Wahrung</i>) to 60 kr., paper money
From 1819	250 fl. W. W. correspond to 100 fl. C. M. (<i>Konventionsmunze, silver</i>)
From 1857	105 fl. . W. (<i>sterreichische Wahrung</i>) = 100 fl. C. M., 1 fl. . W. = 100 K. . W. (<i>Kreuzer, sterreichische Wahrung</i>)
From 1892	2 K. (<i>Kronen/Crowns</i>) = 1 fl. . W., 1 K. = 100 h (<i>Heller</i>)
From 1925	1 S. (<i>Schilling</i>) = 10,000 K.
From 2002	1  (Euro) = 100 Euro Cent

FIGURE 1. SILVER EXCHANGE RATE ON THE VIENNA STOCK EXCHANGE, 1848-1879 (IN AUSTRIAN FACE-VALUE COINS)¹²

However, in the 1870s the states of North America and Europe did manage to replace their silver monetary systems with a gold standard of sorts, leaving Austria-Hungary behind with its silver floating currency. This monetary shift caused the general silver price to fall and silver to move into Austria-Hungary¹³. As a

¹¹ Chaloupek et al. (1991), p. 595 (adapted from original table).

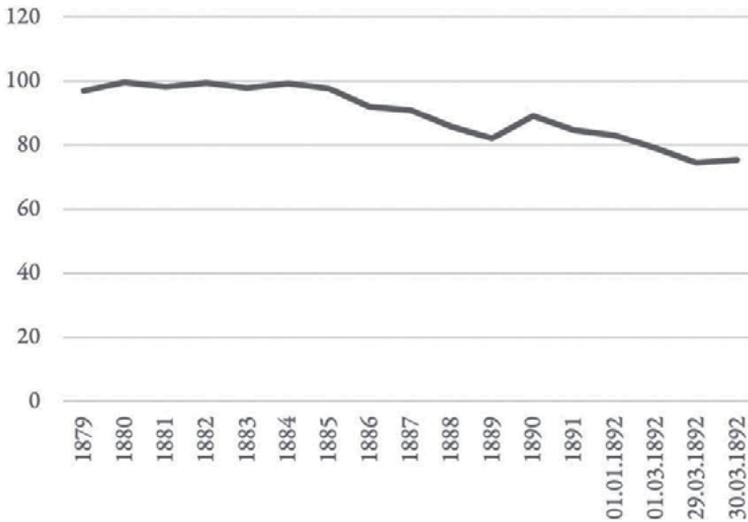
¹² Menger (1936), p. 129 (adapted from original table).

¹³ Ebeling (2012), p. xxxii.

countermeasure to this development, in order to stabilize the currency and shield from the great influx of new silver, in 1879 the Austrian National Bank stopped letting private individuals coin their silver in the mints¹⁴. However, this intervention had economically predictable adverse effects, in that the paper florin started to rise in value against the silver and the value of the silver fell also, in relation to gold (as can be seen in Figures 2-4).

In light of this monetary disorder eventually came the desire to follow suit and also consider switching to a gold standard, and so the debate on the gold standard commenced in Austria-Hungary.

FIGURE 2. PRICE OF SILVER BULLION 1879-30.03.1892
(IN KR. Ö. W.)¹⁵



¹⁴ Mandello (1893), p. 477.

¹⁵ Menger (1936), pp. 135-136 (adapted from original table).

FIGURE 3. YEARLY AVERAGE VALUE OF 1 SILVER GULDEN & 2 GOLD MARK (IN KR. Ö. W.), 1879-05.1892¹⁶

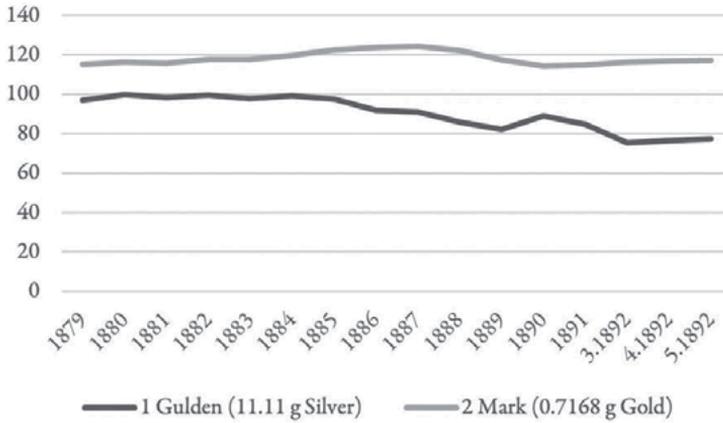


FIGURE 4. VALUE RATIO BETWEEN GOLD & SILVER 1871-04.1892¹⁷



¹⁶ Menger (1936), p. 147 (adapted from original table).

¹⁷ Menger (1936), p. 158 (adapted from original table).

IV.
THE CURRENCY COMMISSION
OF 1892 ON THE GOLD STANDARD

The founder of the Austrian School of economics, Carl Menger (1840-1921), explained in his foundational work *Principles of Economics*¹⁸ how money is the result of the actions of individuals in society and not the result of a plan by a central governing authority. It is in the interest of individuals to exchange less marketable goods for more marketable, durable, and divisible goods. Individuals have sought this most marketable good, throughout history it has changed, but as trade became global and economies grew together, a global most marketable good was discovered. This search is a discovery process initially driven by individual interests and actions, and not developed through coordinated agreement, and furthermore not necessarily or primarily in consideration of the broader public good or interest, and without legislative force (besides the necessary protection of private property rights). Individuals exchange less marketable goods for more marketable goods to exchange them for other present or future less marketable goods.

Further, Menger pointed out that the most marketable good, i.e., commodity money, must have a valuable function to people next to the sole function as a medium of exchange. However, when an industrial metal is chosen and established as money, economizing people often forget about the character of the money as an industrial metal and only notice its character as a medium of exchange. Therefore, even when the metal itself is no longer valued, the metal can still function as a medium of exchange, viz., money can be regarded by people as a mere token. However, if the metal were never to have had industrial qualities, then it would never be accepted as money in the first place, at least no strong enough custom would develop¹⁹. Menger makes the point that was later elaborated on by Ludwig von Mises and called the “regression theorem”:

¹⁸ Menger (1871), pp. 257-262.

¹⁹ Menger (1871), p. 320.

“[T]he demand for a medium of exchange is the composite of two partial demands: the demand displayed by the intention to use it in consumption and production and that displayed by the intention to use it as a medium of exchange. With regard to modern metallic money one speaks of the industrial demand and of the monetary demand.”²⁰

In Menger’s 1889 essay “The Purchasing Power of the Austrian Guilder” he restates his value theory explaining the purchasing power of money. Also, he hints at a quantity theory of money, pointing out that ideally a currency’s quantity should be stable, in order to prevent price inflation:

“It is no inconceivable endeavor, when in the spontaneous course of things price modifying influences result from the manipulation of the circulating quantity of money, in particular from token money, to put an end to this kind of influence on the prices of goods, and to create such a currency, which would be in this sense stable in value.”²¹

However, he doesn’t go into further detail. At the time, Menger was alarmed that the purchasing power of the Austrian Guilder exceeded the metal value of the coin’s silver. Menger explained that this was the result of the government closing the mint in 1879, meaning that no additional silver would be minted into coins. This gave the Guilder “rarity value,” therefore the purchasing power of the Guilder rose, while the value of silver decreased. Menger wrote that “[f]ree silver coinage would have prevented the discrepancy between the value of bullion and coinage,” however “under the present, artificially created conditions, the purchasing power of the Austrian Guilder is determined by the relationship between the circulating media and the public demand for such media.”²² This regulation on unlimited coinage had unintended consequences. Menger found this “rarity value” of the Austrian Guilder very problematic, since from 1879 the purchasing power was

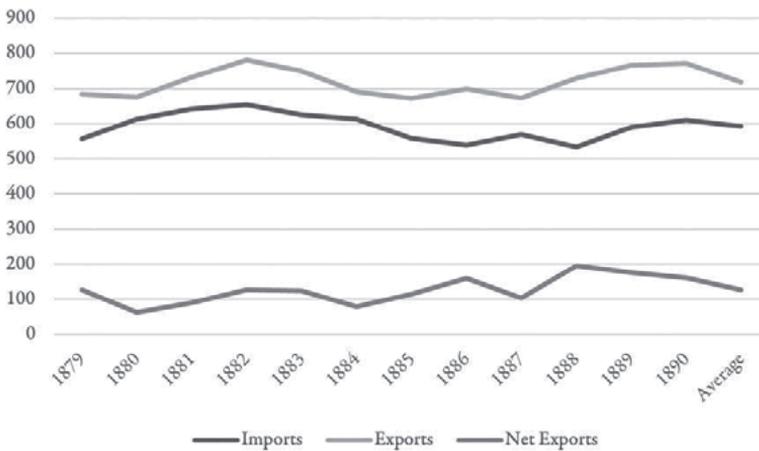
²⁰ Mises (1940), pp. 405-206.

²¹ Menger (1936), p. 86 (own translation of original in German).

²² Menger (1936), p. 121 (own translation of original in German).

fluctuating considerably (as shown above). Its fictitious value made it vulnerable to every change in economic activity, it was, as mentioned, “floating in mid-air”. Since its purchasing power was so far from the metal value, no foreign money entered the country, and no Guilders left the country (also contributing to a trade surplus as can be seen in Figure 5).

FIGURE 5. IMPORTS & EXPORTS IN MILLIONS OF GULDEN Ö. W.²³



In his 1892 essay “Contributions to the Currency Issue,” Menger further elaborated that the forced limitation of coinage caused the exchange rates between foreign currencies and the Guilders to fluctuate continually, which made calculation for commerce and foreign trade unreliable, turning it rather into currency speculation. In addition, Menger criticized that with such a monetary system where the coinage is arbitrarily regulated, there always lies the danger that coinage may be resumed, causing a devaluation of the currency, and therein further disrupting financial markets. Finally, such a fluctuating currency is more vulnerable to all kinds of crises, which may lead to it falling in value in comparison to

²³ Menger (1936), p. 202 (adapted from original table).

gold and even silver. However, he saw the greatest danger in that silver would continue to depreciate, thus gauging the discrepancy between the Guilder's purchasing power and the value of the silver metal and therein further exasperating its vulnerability. Ultimately, Menger's worries about the Austrian currency reflected his main anxiety about the dependence of the Austrian National Bank and its policies on the policies of the state, since too often had the Austrian state financed deficits through the national bank²⁴.

With Menger's concern over a "float in mid-air"-currency, he was the forerunner or "grandfather" of modern Austrian monetary theory, by laying the foundation with his subjective value theory, which was carried on by his disciples Eugen von Böhm-Bawerk and Friedrich von Wieser, until Ludwig von Mises²⁵ (and to a lesser but more popular extent Friedrich von Hayek²⁶) comprehensively expounded these implied theories.

As the tutor of Archduke Rudolf and the most celebrated Austrian economist, Menger had considerable influence on economic affairs in general and on the currency commission in particular. The year of the currency reform, 1892, led Menger to a large number of publications. He wrote the articles "On Our Currency," his "Contributions to the Currency Issue," and about a "Transition to a Gold Currency." In these writings one can recognize him as a very devoted advocate of a gold standard.

Menger saw the gold standard as the monetary order of civilized nations. He saw gold as the money of the modern economic age, an age of massive exchanges of commodities, and gold held the stable and suitable purchasing power. He saw its properties as the needed anchor in moments of crisis. Its characteristics fulfilled the best criteria for money and the least favorable characteristics to be misused by special interest groups:

"[I]t is all the more important to emphasize that gold is the right medium of exchange for our age, not because it serves the interests

²⁴ Menger (1936), pp. 138-141.

²⁵ Mises (1912).

²⁶ Hayek (1929 & 1932)

of certain groups, but because it renders the services of money in a most useful, secure, and expedient manner."²⁷

Menger realized that gold not only had excellent properties, was inexpensive to mint, difficult to counterfeit, easy to transport, durable, etc., but it was also the money of Austria-Hungary's trade partners and neighbors, therefore the adaption of a gold standard would offer the advantages of full parity.

Why did the trade partners start using gold? Hülsmann explains that "network externalities" came into play e.g. Great Britain, the country with the largest capital market at the time, used gold as money. Also, since Russia and Austria stopped paying in silver, they encouraged the circulation of gold. Also, he adds, silver is less suitable for fractional reserve banks wanting to hinder bank runs by cooperating with each other, i.e., providing liquidity when needed, which was easier with gold due to the lower transportation costs than silver²⁸.

However, Menger also saw what he found to be two interlinked problems with the adoption of gold: the tendency for gold's exchange rate to appreciate worldwide and in particular the likely appreciation of the exchange rate due to the currency reform itself. Menger rejected the old argument against the gold standard, which stated that the quantity of newly mined gold would not be sufficient to foster the growing needs of business (a view widely still perpetuated until today²⁹). He pointed out that this would just cause the purchasing power of the gold to rise, but it would not rid gold of its function as a medium of exchange. Nevertheless, he also worried that the currency reform would bring about an appreciation of the value of gold and therefore cause the prices of goods and the wage rates to decline in all the countries that were under the gold standard, and this would change the creditor-debtor relationship in favor of the creditors and in disfavor to the debtors. Therefore, he suggested to issue silver coins as a subsidiary currency, hinder the minting of small denominations of gold coins, establish an interna-

²⁷ Menger (1936), pp. 154-155 (own translation of original in German).

²⁸ Hülsmann (2008b), p. 210.

²⁹ White (2021).

tional clearing house, and other credit and clearing organizations. Menger hoped this would make the transition to a gold standard less prone to abrupt deflation³⁰.

In 1892, the Austro-Hungarian government held “currency enquete commissions,” where they invited 35 experts to discuss issues concerning the currency reform. Menger was a prominent one of them³¹. He was invited to testify before the committee of the secretary of the Austro-Hungarian treasury in March, and there answered the following five questions³²:

First question: What should be the standard of the currency system? Menger recommended the adoption of the gold standard. However, he warned again to be careful to not disrupt the international gold market by causing the purchasing power of gold to rise. He recommended introducing currency redemption not until a few years, after the government had acquired enough gold without disturbing the metal market. In addition, he added the arguments that foreign trade, in the current system, was a speculative endeavor, that Austria was isolated in financial affairs, had a higher interest rate, and above all he was worried about the discrepancy between the Guilder and the value of its silver content and how the government reduces the wealth of its citizens by 20 or even 50 percent by issuing millions of Guilder treasury notes.

Second question: If it should be gold, should a quantity of silver coins be permitted, and what quantity? Menger saw no problem in permitting silver coins aside gold coins, as long as they were not issued excessively, because in such a case Gresham’s law (bad money crowds out good money when their exchange rates are set artificially) would come into effect, especially if the exchange rate of the two was fixed. But he adds, there is another law:

“The good money, which is necessary for a country’s commerce, gives the circulating bad money its value. The gold determines the

³⁰ Sennholz (1992), pp. 25-28.

³¹ Chaloupek (2003), p. 5.

³² Menger (1936), pp. 225-286; K.-k. Hof- und Staatsdruckerei (1892), pp. 197-223, 269-271.

value of the money circulating along it as long as the quantity of the bad money is subjected to a tight quota.”³³

A seemingly pragmatic sounding Menger goes on to explain the different kinds of currency used along gold currency under gold standard systems with a metaphorical (not literal) “gold-plated” currency:

“The European gold currencies remind one of gold-plated goods. They are nevertheless not to be disparaged. Money doesn’t exist for luxury. A gold-plated good at first renders the same services as genuine goods as long as the plating is solid. If a gold currency is plated so solidly that it can survive the corrosive acid of a commercial crisis or even the fire test of a war, then nothing can be said against it. In its center is a nucleus of solid paper, covered by a layer of subsidiary coins, covered by yet another thin layer of silver coins, and finally, over it all, a solid layer of gold. If we keep it that way we have a very useful gold currency. There are no pure gold currencies in Europe, only gold-plated currencies, even in England. Let us not be too demanding.”³⁴

The metaphor meant to dampen gold absolutists — gold is and was the standard implemented, but silver and token coins, and paper currencies and other paper assets were to be tolerated and are natural, even necessary, for everyday exchanges, in line with his vision of an organic order.

Third question: Should it be permissible to issue a quantity of fully redeemable, non-interest-bearing treasury notes, and under what conditions? Menger also didn’t mind the government issuing obligations, with the condition that the issuance does not exceed 10 percent of government revenues i.e., 90-100 million Guilders, and the notes must be redeemable at any time, however not made to legal tender.

Fourth question: What should be the ratio of conversion of the silver Guilder to gold? Menger thought this was a matter of justice, it was important to him not to cause anyone advantages at the

³³ Menger (1936), p. 247 (own translation of original German).

³⁴ Menger (1936), p. 247 (own translation of original German).

costs of others. He answered that during a currency reform an owner of present money should get so many quantities of the new money as he would be able to buy with the present money on his own. Also, debt issued at the old currency must be denominated at the “present rate” of the new currency. As Menger answered to the second question, silver coins may have a fixed exchange rate to the gold coins if a limited quantity of the silver coins are made and also a high quality is maintained.

Fifth question: What should be the currency unit? Menger was against joining the French franc or German mark system, and wanted to preserve the old Guilder as currency, in addition to adding a new half-Guilder. Also, he warned that the mint should heed to make the coins too small or large, so as the public would not accept them — the Guilder was the ideal gold currency in his view.

After Menger’s and other deliberations concluded in the Spring, the implementation would follow in the Fall of the same year.

V.

THE IMPLEMENTATION OF THE GOLD STANDARD

In August 1892, five months after Menger’s testimony at the currency commission, the currency reform was undertaken. The set exchange rate of one Guilder, or two new Crowns, was 2.10027 French francs and the date for gold redemption was set to 1896 or 1897 or earlier. Julius Mandello, from the Budapest University and Ministry of Finance in Hungary, wrote, one year after the implementation of the Austro-Hungarian gold standard:

“The country has some hundred millions of florins of paper money, state notes, not covered by any metal, and being by law a legal tender. The first part of the currency reform consists in the abolition of this paper money, and in beginning and continuing to pay cash, or metal money, for the state’s notes. As a second part of the currency reform, but very closely connected with the first part, is a change of the currency system.”³⁵

³⁵ Mandello (1893), p. 477.

At the early stage the reform went well, as soon as the new Crown currency was enacted, gold from South Africa and especially the USA was entering Austria-Hungary. However, just as Menger feared, the exchange rate for Gold rose by three percent, and the Guilder fell to a discount, therefore gold purchases by the national bank were suspended, and with that the goal to redeem currency for gold moved to the future. This for a time made the Austro-Hungarian gold standard a *Golddevisenwährung*, a pseudo/gold exchange standard. More precisely: a form of gold standard where a country using it has neither a gold currency in circulation nor reserves held in gold for external transactions, but instead keeps its reserves mostly in the currency and securities of another country which is on the gold standard. Both sterling and dollars have been reserve currencies.

Menger explained that the government's rushing to convert their funds into gold lead to this. Also, the introduction of gold as money made the interest rates go down, which enabled the public in Austria-Hungary to consume more, which in turn led to rising interest rates, rising gold prices, and the further falling of the value of the silver Guilder. Although, the date for redemption of currency was pushed into the future, the national bank continued buying gold, which aggravated the situation. Menger frowned upon this and criticized the institutions involved for being inconsistent in their undertaking and not following the plan:

"In fact one could get the impression that the great and complicated reform work lacked consistent leadership, that everyone proceeded on his own account, the governments of both Austria and Hungary, the central bank, and the gold-purchase syndicate, that each one sought to excel the other in "success stories." Thereby all precautions were thrown to the wind."³⁶

Also, since the national bank bought most of its gold from the domestic market, it drained it, further increasing the premium on gold within Austria-Hungary. Menger was upset with the sloppy way the government dealt with the further process of the reform

³⁶ Menger (1936), p. 320, translation by Sennholz (1992), p. 32.

since he saw the greatest evil in volatile exchange rates. Although the whole reform was an interventionist undertaking, Menger always seemed to have stressed that it must be done with an attentive consideration of the spontaneous order, adjustments can be made, but not too abrupt and drastic, and after they are implemented the spontaneous order should be left to adjust itself: "For a healing of the evil we must now wait for favorable conditions, for the gradual healing powers of natural forces that are effective also in economic life."³⁷

The next section will outline the overall distinguished qualities of the gold standard, despite its imperfect implementation.

VI. THE UPSIDES OF THE GOLD STANDARD

The reform did have an effect on the exchange rates for four years, with the gold appreciation, which Menger lamented so much, however after those four years, at the end of 1896, they very much stabilized until World War I. The fluctuations of the first four years are also relativized in relation to the fluctuations that preceded the currency reform (shown in Figures 6, 7, and 8), which were much more dramatic. The initial fluctuations and subsequent stabilization shine in an even brighter light when compared to the fluctuations of present-day paper/digital money (as e.g., seen in Figure 9). A further stark rise of Austrian government securities to the level of German securities also coincided with the implementation of the gold standard (see Figure 10). Also, the CPI inflation was very low with four episodes of growth deflation (see Figure 11), there were hardly any budget deficits, stable interest rates (see Figure 12), and state debt was reduced radically from the time of implementation (see Figure 13). Furthermore, from 1892 until 1913 the Austrian economy grew continuously without interruption (see Figure 14), industrial production sped up further (see Figure 15) enabling higher average wages (see Figure 16) and a shorter work week (see Figure 17), leaving more time for leisure (the basis of

³⁷ Menger (1936), p. 324, translation by Sennholz (1992), p. 33.

culture³⁸), and further promoting exponential population growth until before World War I (see Figure 18).

Nevertheless, economic historians such as Wysocki³⁹ and Mason⁴⁰ lament that Austria-Hungary grew comparably slower than the other Western economies, allegedly due to a lack of credit, e.g., Mason writes: "It must be remembered, however, that capital for investment in industry had never been forthcoming in Austria or Hungary." However, in the next sentence he admits: "Furthermore, at least in the decade before the war, there seems to have been a fairly uniform rate of industrial development in all parts of the Empire."⁴¹ and adds:

"But to be relatively backward in comparison with the advanced Western economies is not the same thing as being stagnant. Austro-Hungarian growth rates were respectable, if not of "take-off" proportions. Austria's total industrial product increased at an average rate of 3.6 per cent during the years 1880-1913, while Hungary's industrial product increased by about 4.5 percent. During the last prewar decade economic progress was considerable and, according to some estimates, remarkably uniform throughout the Empire. It is difficult to avoid the suspicion that much comment by historians on the economic performance of Austria-Hungary has been coloured by the knowledge of its political collapse. For contemporary observers its last decade was one of progress and optimism, at least in economic affairs."⁴²

Indeed, the data speak for themselves. The official use of gold as money brought the inherent advantages of gold with it, it being the best medium of exchange up until then. The people dealt less with un-backed paper currency, face value and diluted silver coins, but with a much-cherished global material and currency, however, people didn't deal exclusively with gold currency, the former currencies were still used in a limited way in day-to-day exchanges, especially

³⁸ Pieper (1948).

³⁹ Brusatti et al. (1973).

⁴⁰ Mason (1997).

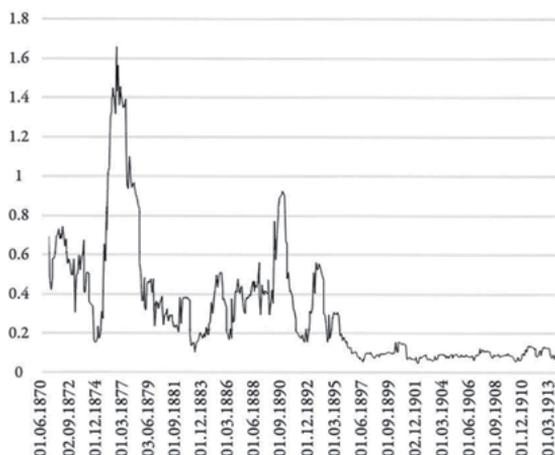
⁴¹ Mason (1997), p. 47.

⁴² Mason (1997), pp. 51-52.

for smaller payments, as mentioned and approved by Menger at the currency commission. Indeed, it turned out that countries such as Austria-Hungary had less physical gold coins in circulation and more paper notes, when compared to Great Britain, Germany, France, and the United States. All countries, including Austria-Hungary, of course, also had foreign (gold) coins and notes (privately or publicly issued) circulating within their borders (countries such as Switzerland had primarily foreign circulating currency), due to the metal value, redeemability, or legal tender status⁴³.

In any case, gold was the currency of the great economies and therefore the citizens of Austria-Hungary could participate more smoothly in the extended division of labor, which enabled a foundation for prosperity, which further built the foundation for the prospering of the creative and intellectual spirits in Austria-Hungary and especially in Vienna. However, the seeds of civilizational destruction were already hidden in the times, and the gold standard was not spared from imperfections, as outlined in the following section.

FIGURE 6. FLORIN-CROWN/GERMAN MARK EXCHANGE RATE VOLATILITY, 1870-1914⁴⁴



⁴³ Gallarotti (1995), pp. 23-24.

⁴⁴ Flandreau & Komlos (2002), p. 314 (adapted from original figure).

FIGURE 7: FLORIN-CROWN/GERMAN MARK EXCHANGE RATE, 1870-1914⁴⁵

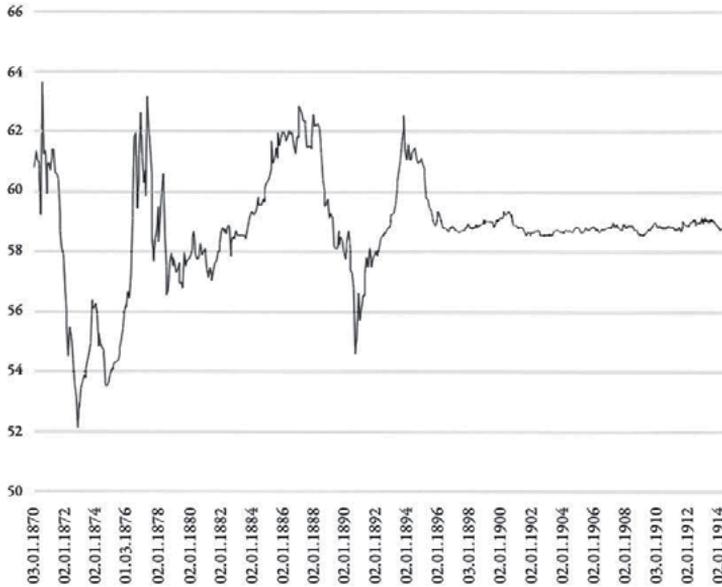
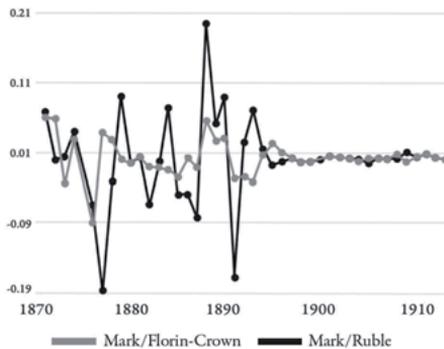


FIGURE 8. ANNUAL RATE OF CHANGE OF GERMAN MARK/FLORIN-CROWN & GERMAN MARK/RUSSIAN RUBLE EXCHANGE RATES, 1871-1913⁴⁶



⁴⁵ Flandreau & Komlos (2002), p. 317 (adapted from original figure).

⁴⁶ Good (1994), p. 213 (adapted from original figure).

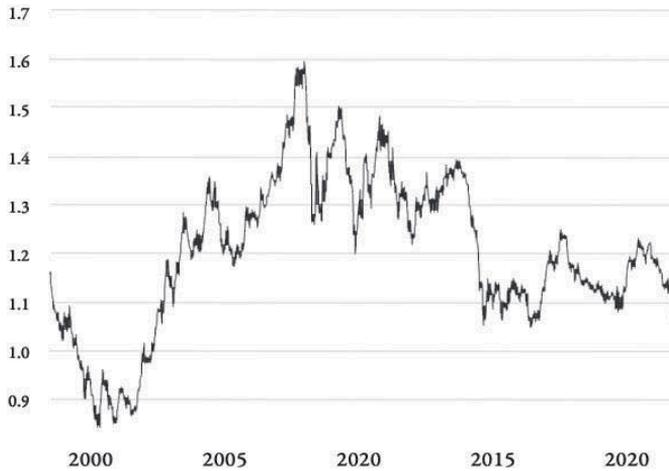
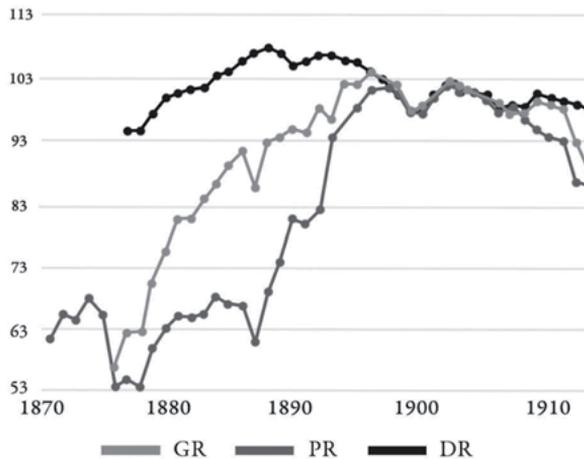
FIGURE 9. EURO/US DOLLAR EXCHANGE RATE, 1999-2021⁴⁷FIGURE 10. AUSTRIAN & GERMAN GOVERNMENT SECURITIES PRICES IN THE GERMAN CAPITAL MARKETS, 1870-1914 (GR: AUSTRIAN GOLD RENTE; PR: AUSTRIAN PAPER RENTE; DR: GERMAN REICH 4% BONDS)⁴⁸⁴⁷ Macrotrends (2021).⁴⁸ Good (1994), p. 215 (adapted from original figure).

FIGURE 11. CPI INFLATION IN AUSTRIA⁴⁹

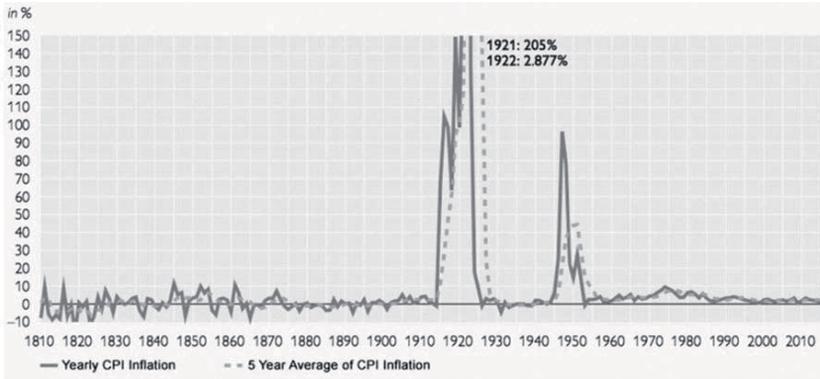
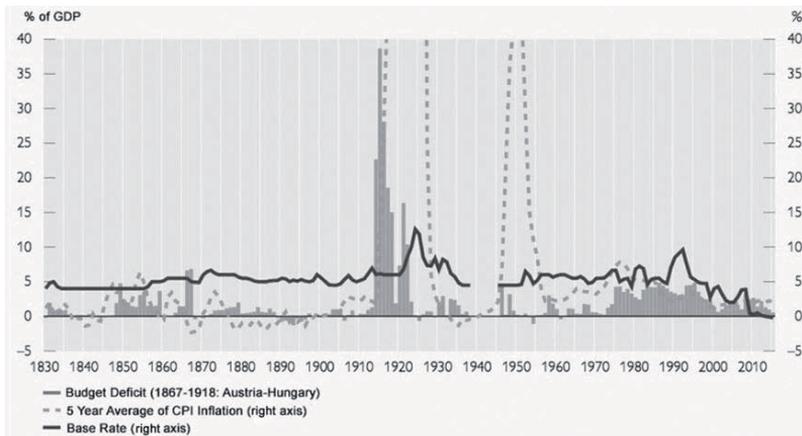


FIGURE 12. BUDGET DEFICIT, BASE RATES, AND INFLATION⁵⁰



⁴⁹ Prammer et al. (2016), p. 95 (adapted from original figure).

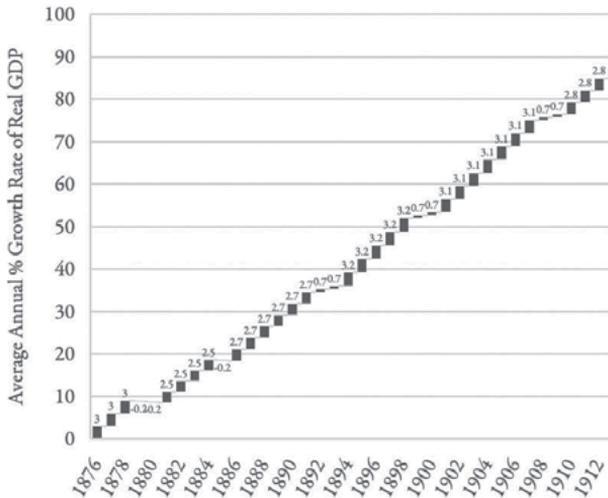
⁵⁰ Prammer et al. (2016), p. 96 (adapted from original figure). Mises writes in 1910 (p. 117):

“After more than a century of chronic budget deficits, about twenty years ago Austria succeeded in reestablishing a balance in its public finances. From 1889 to 1909 the national accounts generally showed a surplus. The situation changed again in 1908, and the estimate for 1909 predicted a deficit, which could be converted into an apparent surplus of 60,000 crowns only by the introduction of a fictitious entry of 29 million crowns. The budget for 1910 already openly admits to a deficit.”

FIGURE 13. STATE DEBT, 1830-1918 (% OF GDP)⁵¹



FIGURE 14. GROWTH RATE OF AUSTRIAN ECONOMY, 1876-1913⁵²



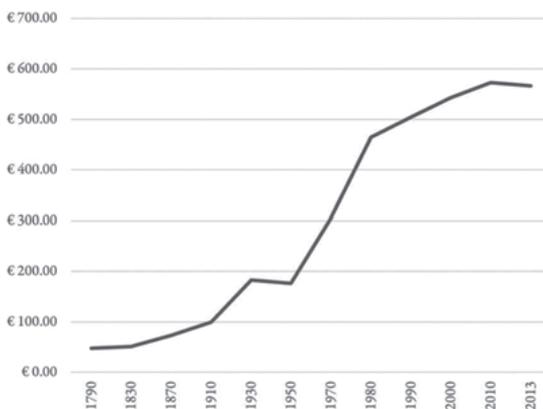
⁵¹ Prammer et al. (2016), p. 88 (adapted from original figure).

⁵² Matis (1972), p. 332 (adapted from original table).

FIGURE 15. INDUSTRIAL PRODUCTION IN AUSTRIA (MILLIONS OF CROWNS, 1913 PRICES)⁵³

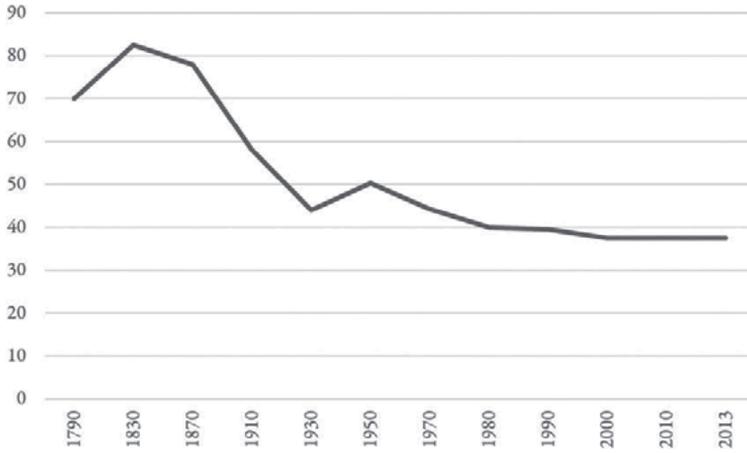
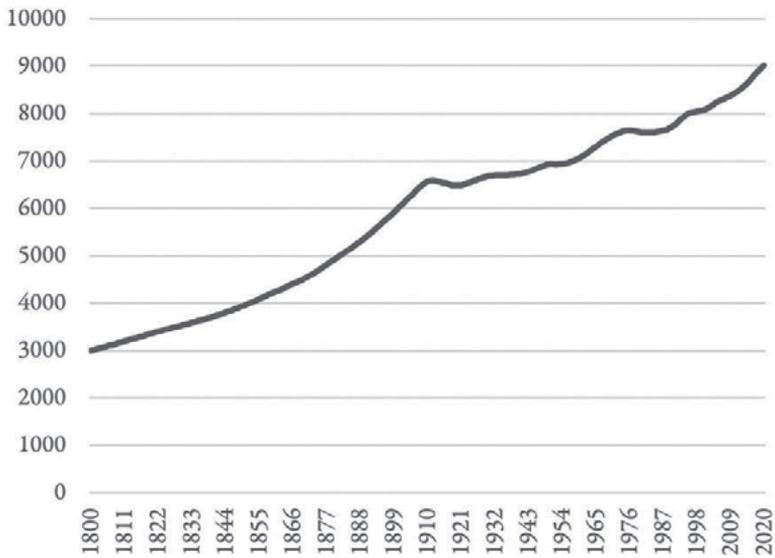


FIGURE 16. REAL WAGES PER WEEK (2013 EUROS)⁵⁴



⁵³ Good (1984), p. 259 (adapted from original table).

⁵⁴ Sandgruber (2013), *Teil VIII, Geldeinheiten und Umrechnungen* (adapted from original table).

FIGURE 17. WORKING HOURS PER WEEK⁵⁵FIGURE 18. POPULATION GROWTH OF AUSTRIA (IN 1,000'S)⁵⁶

⁵⁵ Sandgruber (2013).

⁵⁶ Statista (2022a).

VII. THE DOWNSIDES OF THE GOLD STANDARD

The critiques of the gold standard in Austria-Hungary are numerous: as mentioned, on a lighter side, a bit of exchange rate volatility existed, although in light of the past and especially future volatility, this should hardly be considered a downside. A more serious critique should be the temporary failure to introduce resumption of bank notes into gold. Even though the National Bank officially decided to exchange bank notes into gold coins from 1901, they did so at their discretion, i.e., they retained the freedom to suspend resumption whenever they wanted to. However, to the relief of the National Bank, the public was so accustomed and/or trusting in the Austro-Hungarian National Bank that hardly any bank notes were exchanged into gold, they even continued to indicate preference for the small-denominated bank notes. This fact made the Austro-Hungarian gold standard a *de facto* or shadow, rather than a real gold standard⁵⁷. Also, relatedly, neither the national bank nor the private banks were fully backing their banknotes (see Figure 19) and deposits, however, compared to the time after the beginning of World War I (see Figure 20) and today (see Figure 21) they certainly had an astounding backing (the end of Eugen von Böhm-Bawerk's terms as finance minister, between 1895 and 1904⁵⁸, marked almost full backing). The gold standard was more a reinforcer of this fractional reserve system.

The National Bank not only permitted fractional reserves under its own roof, but it also tolerated it at commercial banks, it even encouraged it, by functioning as a "lender of last resort." Through cooperation amongst each other, the bankers could postpone the crises that were the inevitable result of this practice. The gold standard was not a system that had inflation totally in check. Hülsmann⁵⁹ argues that this fault would have eventually led to the self-destruction of the monetary system if World War I wouldn't

⁵⁷ Flandreau & Komlos (2002).

⁵⁸ Fritz (2003), pp. 95-99.

⁵⁹ Hülsmann (2008b), pp. 211-213.

have done away with it in advance. Also, the gold standard, due to the demonetization of silver, created considerable deflation from 1873-96. Not that deflation per se is harmful, as today is dominantly thought⁶⁰, on the contrary, in most cases it is the natural result of a growing economy with a stable money supply⁶¹, however, in the case of deflation as a result of government intervention (confiscation/regulation) market forces are suspended and some market participants come to harm⁶², this is also what Menger lamented.

The speculation bubble heated by the emperor's hosting of the hyped and ultimately unsuccessful world exhibition and the subsequent "great crash" of 1875 marked the start of the Austro-Hungarian welfare state: from 1870 to 1914, the number of public servants in Cisleithania grew from 80,000 to 400,000. In Vienna, the number of municipal servants increased between 1873 and 1900 from 2,000 to 30,000⁶³ — a troubling development that was foreboding what was to come and a development that was resistant to the relatively stable but manipulatable monetary system. Menger's efforts as an economist and particularly in the currency debate were always driven by the desire to preserve (the liberal) Austria-Hungary, therefore he promoted peaceful cooperation, individual freedom, and what he thought to be sound money, given the circumstances. However, most of his countrymen by then were in favor of government privileges, authority, and credit expansion — a development that was also resistant to his efforts⁶⁴. In light of the impending catastrophe that World War I came to be, on July 31, 1914 the Austro-Hungarian National Bank, in order to finance what was to come, again suspended the redemption of bank notes for gold and repealed all laws putting a cap on monetary expansion and therein ending the "age of security," as Zweig called it, before descending into the economic and moral abyss of World War I⁶⁵.

⁶⁰ Bernanke & James (1991).

⁶¹ Bagus (2016); Hülsmann (2008b); Salerno (2003); Selgin (1997).

⁶² Salerno (2003), pp. 96-99.

⁶³ Schulak & Unterköfler (2011), p. 6.

⁶⁴ Sennholz (1992), p. 33.

⁶⁵ Jetschgo & Chaloupek (2004), pp. 98-99.

FIGURE 19. GOLD RESERVES & MONETARY BASE, 1896-1913⁶⁶

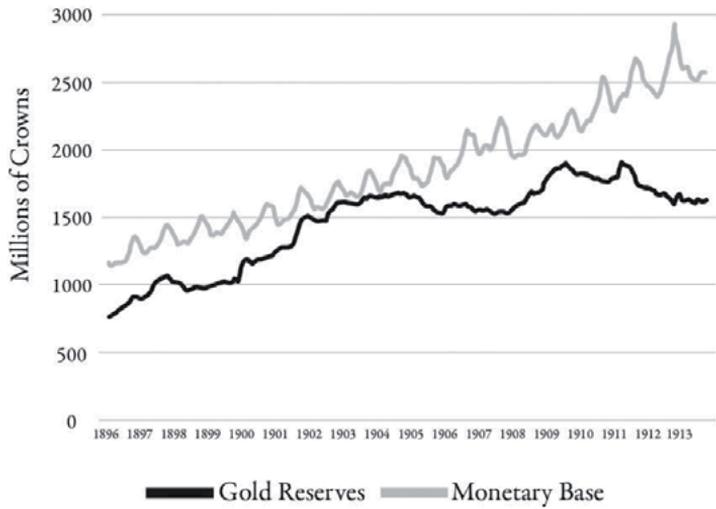
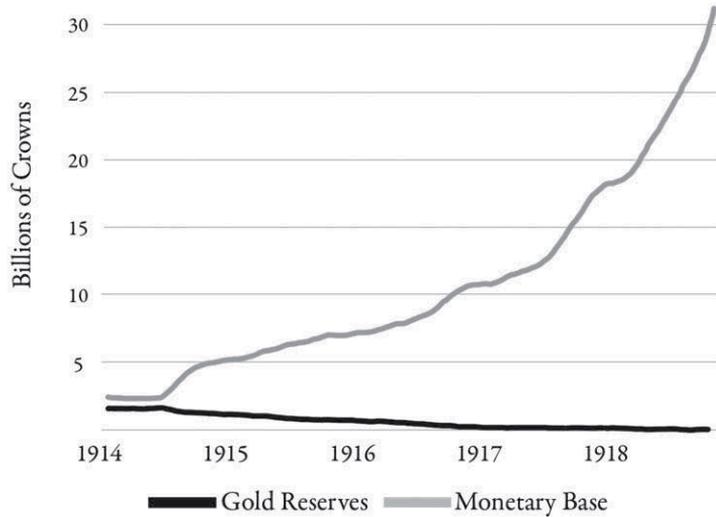


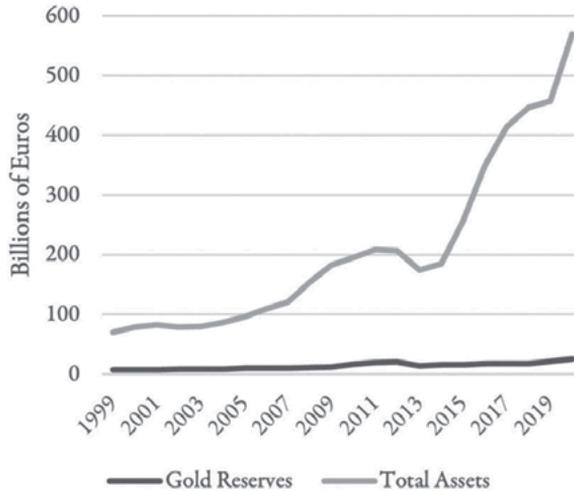
FIGURE 20. GOLD RESERVES & MONETARY BASE, 1914-1919⁶⁷



⁶⁶ Morys (2008), p. 59 (adapted from original figure).

⁶⁷ Jobst & Kernbauer (2016), p. 149 (adapted from original figure).

FIGURE 21. GOLD RESERVES & TOTAL ASSETS OF THE ECB, 1999-2020⁶⁸



VIII. CONCLUSION

Hülsmann aptly summarizes the bitter beauty of the classical gold standard, which Austria-Hungary's gold standard was a part of:

"The glory of the classical gold standard was that it demonstrated, for the last time so far, how a worldwide monetary system could emerge without political scheming and red tape between national governments. They adopted it independently of one another. There was no treaty, no conference, and no negotiation to bring it about. However, [...] even in this respect the classical gold standard was rather imperfect. It did after all not result from the free choice of free citizens, but from the discretion of national governments. It gave the world a common monetary standard — gold — but this standard sprang from the coercive elimination of all alternative monies. Its ultimate effect was, not to give the citizens of the world an efficient monetary system, but to deliver a pretext

⁶⁸ Statista (2022b) & Board of Governors of the Federal Reserve System (2022).

for national governments to finally bring the monetary systems of their countries under their control. The classical gold standard was therefore hardly a bulwark of liberty. It was a crucial breakthrough for the societal scourge of our age — government omnipotence. We have to stress these facts because many advocates of the free market believe the classical gold standard was something like the paradise of monetary systems. This reputation is undeserved. The classical gold standard differed only in degree, not in essence, from its successors, all of which have been widely and deservedly criticized in the literature on our subject.”⁶⁹

However, even if as Hülsmann states, it was only different in degree rather than in essence it made clear that there are dramatic differences between different degrees of government intervention into the monetary system. If nothing else, the Austro-Hungarian gold standard provided a, in relative terms, trusted and largely backed and therefore stable currency, based on largely sound monetary analysis, to its citizens, and therein a reliable means of measurement and saving (for the time) and the extension of the division of labor and its resulting prosperity, peace, and further scientific and cultural flourishing, as Zweig poetically recalled in his memoirs:

“One lived well and easily and without cares in that old Vienna. [...] “Live and let live” was the famous Viennese motto, which today still seems to me more humane than all the categorical imperatives, and it maintained itself throughout all classes. Rich and poor, Czechs and Germans, Jews and Christians, lived peaceably together in spite of occasional chafing, and even the political and social movements were free of the terrible hatred which has penetrated the arteries of our time as a poisonous residue of the First World War. In the old Austria they still strove chivalrously, they abused each other in the news and in the parliament, but at the conclusion of their ciceronian tirades the selfsame representatives sat down together in friendship with a glass of beer or a cup of coffee, and called each other Du [the “familiar” in the German language]. [...] The hatred of country for country, of nation for nation, of one table

⁶⁹ Hülsmann (2008a), p. 213.

for another, did not yet jump at one daily from the newspaper, it did not divide people from people and nations from nations; not yet had every herd and mass feeling become so disgustingly powerful in public life as today. Freedom in one's personal affairs, which is no longer considered comprehensible, was taken for granted. One did not look down upon tolerance as one does today as weakness and softness, but rather praised it as an ethical force. [...] For the genius of Vienna — a specifically musical one — was always that it harmonized all the national and lingual contrasts. Its culture was a synthesis of all Western cultures. Whoever lived there and worked there felt himself free of all confinement and prejudice."⁷⁰

Indeed, “[i]t was sweet to live here, in this atmosphere of spiritual conciliation, and subconsciously every citizen became supernational, cosmopolitan, a citizen of the world.”⁷¹ However, Richard Ebeling concludes similarly poetically that Zweig's fond remembrances of what he calls the golden age of security were “only an illusion,” and that in fact “[...] beneath the surface of tolerance, civility, and cosmopolitanism were all the undercurrents of racial and nationalist bigotry, economic collectivism, and political authoritarianism that poured forth like destructive lava from an exploding volcano during and in the aftermath of the First World War.”⁷² The latter may well be true, however to judge Zweig's recollections of his times as an illusion hardly sees the time in a differentiated way. Vienna as the epicenter of Austria-Hungary wasn't only an economic powerhouse but also a — if not *the* — hotbed of science and the arts, the list of influential thinkers and artists of the time is seemingly endless⁷³. This had surely something to do with the relatively stable monetary order (in comparison to today, *very* stable monetary order), a stability, which the economic historians Flandreau and Komlos also recognize:

“The remarkable achievement of the Dual Monarchy, despite well-known internal political problems which some might have seen as

⁷⁰ Zweig (1942), pp. 24-25.

⁷¹ Zweig (1942), p. 13.

⁷² Ebeling (2012), p. xxviii.

⁷³ Johnston (1972).

natural sources of exchange rate instability is quite fascinating [...]. It is, in fact, amazing, how quickly the credibility of the bank was established after it began to make a serious effort at maintaining the parity of the currency in 1896. One would have thought, that the market would have been more skeptical at accepting its policy at face value, particularly initially. Yet, this was not the case: the bank's credibility was almost immediate, and as a matter of fact, even the Bosnia-Herzegovina or Balkan crises do not seem to have had a major impact on the stability of the currency."⁷⁴

If one would still today understand, as Menger did, what unique qualities gold has that makes it so suitable as a medium of exchange, one would understand why the market was not more skeptical.

Even if the historians of Austrian central banking, Jobst and Kernbauer, explain the success of this era with increased government interference rather than a system relying on gold, they nevertheless cautiously agree that this time was the most successful in the history of Austrian central banking:

"When in 1892, the fundamental decision was made to retire the government paper money and to switch from a silver currency to a gold-backed standard [t]he result was two decades of successful stabilization policy, probably the most satisfying time in the first 100 years of the bank's history."⁷⁵

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⁷⁴ Flandreau & Komlos (2002), p. 319.

⁷⁵ Jobst & Kernbauer (2016), p. 114.

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