

FIAT MONEY ET PEREAT MUNDUS:
REFLECTIONS ON THE 100th
ANNIVERSARY OF THE WEIMAR
HYPERINFLATION

BERNARDO FERRERO*

Fecha de recepción: 6 de mayo de 2024

Fecha de aceptación: 14 de junio de 2024

The last few years, marked by pandemics, wars and emergencies of various kinds, have seen on the one hand an enlargement in the ranks of those who call themselves liberals, yet on the other hand, between lockdowns, vaccination requirements and green passes, we have witnessed a continuous and exasperated restriction of individual freedoms, starting with the fundamental freedom of association and disassociation.¹ All this should lead us to reflect not only on the fragility of the democratic-liberal institutions, starting with the parliamentary and constitutional instances themselves, but also to question ourselves on the intrinsic limits of these institutions, creatures of a certain idea of freedom sometimes incapable of combining nature and evolution, justice and utility, theory and history.²

If classical liberalism, “the idea of individual freedom of choice, achieved through the limitation and control of political power”,³

* Universidad Rey Juan Carlos (Madrid, España). Vicedirector de la Revista Académica *StoriaLibera: Rivista di Scienze Storiche e Sociali*.

¹ See, among other works, Jesús Huerta de Soto- Bernardo Ferrero, *Pandemia e dirigismo*, IBL Libri, Torino, 2022.

² The goal of uniting these fields of study has been at the core of Jesus Huerta de Soto’s research program. See his theory of the three levels exposed in Jesús Huerta de Soto, “Conjectural history and beyond”, *Humane Studies Review*, vol. 6, n. 2, 1988-1989, p. 10.

³ Lorenzo Infantino, *Liberalismo*, in *Enciclopedia filosofica*, vol. 7, Bompiani, Milano 2006, p. 6380, ora in L. Infantino, *Individualismo, mercato e storia delle idee*, Rubbettino, Soveria Mannelli, 2008, p. 307.

has been a philosophical conundrum in Europe, we owe this largely to the importation of 'economic Germanism'⁴ first and the spread of Hegelianism, especially through the political philosophy of the Benedetto Croce's, the Salvador of Madariaga's and the Gregorio Marañón's, later.⁵ Both phenomena contributed to the delimitation of an abstract and hypostatic ideology of freedom that ended up placing trust no longer in institutions but purely in what philosopher Carlo Antoni called the "activities of the spirit".⁶ The outcome of this process was an artificial and harmful dichotomy between between political liberty and economic liberty, which in the Italian landscape materialized in the well-known polemic between *liberalismo* and *liberism*. Artificial because, as Luigi Einaudi recognized albeit too timidly⁷ in his diatribe with Benedetto Croce, there can be no political freedom where the market and competition, both based on private property and free trade, are suppressed by public authorities.⁸ Harmful, because without the right and necessary recognition of its objective component, the inviolability of the human person, libertarianism disengages itself from reality thus betraying its ideal and transforming itself into an ideology — that is, into a thought that no longer claims to be judged by the nature of things but to judge and (re)create that nature. With momentous consequences for the moral order and human liberty for, as the intellectual historian Don Beniamino Di Martino has extensively documented,⁹ it is in this concept and

⁴ Francesco Ferrara, *Il germanesimo economico in Italia*, «Nuova Antologia», agosto 1984, ora in F. Ferrara, *Opere complete*, Bancaria Editrice, Roma 1972, p. 566.

⁵ See Raimondo Cubeddu, *La cultura liberale in Italia*, Rubbettino, Soveria Mannelli 2021, pp. 243-254; Jesus Huerta de Soto, "Principios del liberalismo", en *La Gran Enciclopedia de España*, 1999.

⁶ Carlo Antoni, "Una polemica illustre", *Il Mondo*, February 15, 1955.

⁷ According to the economist Francesco Forte Einaudi's criticism of Croce did not go beyond certain points as the economist from Turin did not fundamentally disagree with Croce's Hegelian-like paradigm. See Francesco Forte, *L'economia liberale di Luigi Einaudi*, Olschki, Firenze 2009, pp. 193-221.

⁸ On the debate between Einaudi and Croce on the relationship between economic and political institutions, see Paolo Solar (edited by), Benedetto Croce and Luigi Einaudi, *Liberismo e liberalismo*, Riccardo Ricciardi Editore, Milano-Napoli, 1957.

⁹ See Beniamino Di Martino, *Stretto nel Fascio. Nazi-fascismo contro l'individuo*, Monolateral, Dallas, Texas 2022, p. 48-49;

type of rationalistic thinking, rather than in its numerous and always partial historical manifestations, that one finds the ultimate root of that “absolute evil” or “theoretical evil” which, in the eyes of Augusto Del Noce, marks the essence of political modernity as well as its crisis and suicide.¹⁰ Already in the early seventies the Italian philosopher noticed how the common root of the dissolution of our times was exemplified by the monopolization of the political discourse by the dirty “fascists” and pure “anti-fascists”. Although apparently at war the latter were/are from a philosophical level symmetrical movements, acquainted as were their intellectual leaders- Giovanni Gentile on the one hand and Antonio Gramsci on the other- by the deep-rooted goal of liberating culture from all forms of transcendent, metaphysical and religious values in the name of immanence and revolutionary atheism.¹¹

Freedom, therefore, cannot be understood in a spiritualistic fashion, that is at the margins either of its economic and temporal dimension and apart from those institutions that make it possible and alive.¹² The social institution *par excellence* in this sense is money. In addition to protecting consumer sovereignty, money, by serving as unitary tool for economic calculation, enables individuals to integrate themselves in the horizontal and vertical social division of labor, as well as to give meaning, definition and direction to their property and the fruits of their labor. Slightly over one hundred years from the Great Weimar inflation, it may be useful to trace the process that led from the founding of the *Reichsbank* to

¹⁰ See Augusto Del Noce, *The Crisis of Modernity*, McGill Queens University, Kingston, Canada, 2015; *Rivoluzione, Risorgimento, Tradizione*, Giuffrè, Milano, 1993; *Il suicidio della Rivoluzione*, Rusconi, Milano, 1978.

¹¹ See Augusto Del Noce, *Fascismo e antifascismo. Errori della cultura*, Leonardo, Milano, 1995.

¹² Among those who, within the spectrum of European classical liberalism, understood this aspect we should mention the late professor Antonio Martino. President of the Mont-Pelerin Society (1988-1990), Minister of Foreign Affairs (1994-1995) and Minister of Defense (2001-2006), Martino was a student of Milton Friedman. Notwithstanding the latter, however, he was noticeably more radical than his teacher and significantly more “Austrian-friendly” on a variety of issues. In fact, he was once acknowledged by Murray Rothbard as Berlusconi’s “Austro-libertarian economist”. See the essay by Bernardo Ferrero, “Antonio Martino e la rivoluzione liberale in Italia”, *StoriaLibera. Rivista di scienze storiche e sociali*, anno VIII, n. 16, 2022, pp. 166-172.

the demonetization of the mark. Besides revealing the political origin and revolutionary nature of the inflationary process, the Weimar episode provides a clear lesson for both the present and future of libertarianism on the need to accompany its policy goals with a philosophical and categorical counterrevolution.

1. The German Monetary System and the *Reichsbank*

The how and the why of the Great Weimar Inflation inevitably takes us back to the second half of the “long century”, the 19th century.¹³ The establishment of the Reichsbank on 1 June 1876 can only be understood as part of the process that led Prussia, under the leadership of Kaiser Wilhelm I, to absorb the German confederation and become leader in the affairs of the Reich. The central administrative powers were left to the member states, and, among the latter, Prussia was the richest, largest and most densely populated of all. It was to be the Reich’s center of gravity during both the Bismarckian and republican phases. As history would repeatedly illustrate dominating Prussia, culturally and politically, ultimately meant dominating the entire Reich. As Ludwig von Mises noted: “Prussia was the largest and richest member state; its population was the most numerous; it was the Reich’s center of gravity, or, properly speaking, the Reich. The fact that the conservative party had dominated Prussia had given the conservatives hegemony over imperial Germany. The fact that the Social Democrats ruled Prussia under the Weimar Republic made them paramount in the republican Reich. When Chancellor Papen’s coup d’état of July 20, 1932, overthrew the socialist regime in Prussia, the struggle for the Reich was virtually decided”.¹⁴

¹³ This formula was coined by the English historian Eric Hobsbawm. The 19th century, in the eyes of the latter, was the long century because it began thematically in Paris, in 1789, and ended in 1914 with the outbreak of the Great War. *Par contre* the 20th century, according to the English historian, was a short century, beginning in 1914 with World War I and ending in 1989, with the fall of the Berlin Wall and the demise of real, soviet-style socialism.

¹⁴ Ludwig von Mises, *Omnipotent government: The Rise of Total State and Total War*, New Rochelle, NY, Arlington House, 1969 (1944), p. 218.

The *Reichsbank* was, not coincidentally, conceived based on the Prussian Bank, which, on behalf of the Kingdom of Prussia, had already been in charge of regulating the circulation of money since the middle of the century, providing, in cases of emergency, the credit necessary to “lift” the national economy. This, for example, happened in 1866 when, at a delicate time for national finances, several issue banks limited or even suspended their banknote purchases, and the Prussian bank intervened by lending support for transactions, both cash and credit. Both the latter and the crisis of some ten years earlier, in 1857, instilled in the minds of the intelligentsia and the political class the conviction —with disastrous future consequences— that it was necessary to place the monetary system in the hands of a single command center, capable of standardizing and regulating the issue of banknotes.¹⁵

In the run-up to the political unification of Germany, however, the monetary system, despite having seven different coinage systems and thirty-one banks of issue (*Notenbanken*) capable of issuing their own banknotes in twenty-two independent states, was light years away from a genuine free banking regime. The problem with this set-up lay not in the excess of “liberalism” but in the unfortunate cocktail of rigid legislative interventionism on the one hand — the banks of issue, for example, had to have a government concession in order to be established and operate and could not extend beyond the borders of their own jurisdiction — and the poor circulation of gold coins on the other — with the exception of Bremen, the rest of the states remained anchored to the silver standard. All this created the conditions for an artificial overproduction, under many names, of paper money and the proliferation of fractional reserve notes: a practice that led the various issuers of banknotes to over-expand credit and to immobilize demand deposits in ever more ambitious, risky and less-credit worthy investment projects, thus laying the foundations for a series of economic recessions and financial crises.¹⁶ The fact, moreover, that

¹⁵ See National Monetary Commission, *The Reichsbank, 1876-1900*, Government Printing Office, Washington 1910, pp. 18-20.

¹⁶ For a general outlook on the financial crises that struck the European continent throughout 19th century ever seven to ten years- in 1819, 1825, 1836, 1847, 1857, 1866,

branch expansion was limited hampered genuine credit intermediation while at the same time enhancing the fragility of the overall banking system. Financial institutions became much less diversified than otherwise which meant greater exposition to business fluctuations and business cycles accruing locally. On top of this these regulations on branch banking lessened the natural, free market limit on credit expansion since they made the interbank clearing system work less effectively. A concentration of malinvestments in the banks' balance sheet ensued.¹⁷

With the constitution of the empire, signed on 16 April 1871, the supervision and legislation on minting, weights and measures; the formulation of rules for the issuing of paper money and the regulation of banking became official prerogatives of the Reich, while with the imperial act promulgated on 30 April 1874, Article 18 of the Coinage Act was recognized. Promoted by the Reichstag on July 9, 1873, the latter provided for the replacement of federal paper money with a new imperial paper money, to be completed by 1 January 1876. Thus came the Bank Act of 14 March 1875, which, in its twelfth section, recognized the foundation of a central bank with an initial capital of 120,000,000 Marks (40,000 shares worth 3,000 Marks each), with the function of regulating the circulation of money throughout the empire, facilitating payments and utilizing the available capital. In performing this task, the Reichsbank was under the close supervision and guidance of the imperial regime, which supervised through a council of curators (*Curatorium*).¹⁸ Furthermore, and as a demonstration of its true political nature, the Reichsbank, under the supervision of the regime, was to administer the empire's budget and pay a portion of the net profits to the treasury. In return it was to enjoy certain exclusive rights, including the full power to open branches abroad with tax

1873, 1882, 1890-92- see Jesus Huerta de Soto, *Money, Bank Credit and Economic Cycles*, Ludwig von Mises Institute, Auburn, Alabama, 2012 [1998], pp. 482-486.

¹⁷ Similar problems ensued in the United States during the pre-civil war free banking era which lasted from the late 1830's until 1861. Given these flaws rather than calling it a genuine free-banking regime the economist Vera C. Smith referred to it as a banking system based on "decentralization without freedom". Vera C. Smith, *The Rationale of Central Banking*, P.S. King & Son, London, 1936, p. 36.

¹⁸ See National Monetary Commission, *The Reichsbank, 1876-1900*, p. 25-35.

exemption, the setting of discount rates at a preferential level and the direct purchase and sale of government bonds.¹⁹ As the years went by, the number of independent issuing institutions declined, from thirty-three in 1875 to only seven in 1910,²⁰ and the Reichsbank, as its liquidity injections in the crises of 1901 and 1907 show, increasingly assumed the function of lender of last resort.²¹

2. The Anchor of the Gold Standard

Theoretically, the central bank was obliged to pay a 5% tax on every note issued in excess of the stipulated limit (*Notenkontingent*) and the duty to respect certain liquidity parameters: one third of the notes issued had to be covered by precious metals (gold and silver) and the remaining two thirds by short-term, highly “liquid” commercial debts, what used to be called real-bills. These, however, were only nominal impediments. The only real limit to inflationary claims came from outside: the classical gold standard. In vogue from about the middle of the 19th century to 1914, Germany had adhered to it in 1871 and, as economists Michael Bordo, Bernard Eschweiler and Ronald MacDonald have illustrated, its central bank- albeit with some sporadic exceptions- had stuck to its “rules of the game”.²² What this meant, in short, was that the German political authorities, throughout the second half of the 19th century, stuck by and large to their promises of specie redemption without “flexibly” manipulating the “publicly announced” gold parity. This, to be sure, was not done out of benevolence but rather in order to enhance Germany’s institutional “rating” vis a vis for-

¹⁹ K.R. Bopp, *Reichsbank Operations, 1876-1914*, Federal Reserve Bank of Philadelphia, 1953, p. 17.

²⁰ National Monetary Commission, *The Reichsbank, 1876-1900*, cit., p. 38.

²¹ Perhaps it would be more correct to speak of a classical justification of the central bank, as expounded most famously by Walter Bagehot, *Lombard Street: A Description of the Money Market*, White Crane Publishing, London 2017 (1873).

²² See M. Bordo- B. Eschweiler, *Rules, Discretion, and Central Bank Independence: The German Experience 1880-1989*, «Working Paper», n. 1994-02, 1993, pp. 5-12; M.D. Bordo-R. MacDonald, *Violations of the “Rules of the Game” and the credibility of the Classical Gold Standard, 1880-1914*, «NBER Working Paper», n. 6115, July 1997, pp. 2-7.

eign investors and especially the international community. Embracing the classical gold standard was not without costs for the political class. It meant bringing restraint to its public finances and transparency to its accounts. For a young nation like the German one, however, that needed to boost its political capital this cost, at least in the short to medium run, seemed to be outweighed by the benefits that from derived from a commitment to transparency and parsimony: greater international cooperation and integration in world capital markets.

The crux of the matter was that the classical gold standard was an international standard, grounded in a commodity that was ultimately traceable to the market. For this reason, as Murray Rothbard realized, all reference to the gold standard's "rules of the games" involve a misrepresentation of what is at stake and thus a confusion of government's role and responsibility in the monetary sphere: "This standard argument [...] completely misconceives the role and function of the gold standard and governmental responsibility under it. The gold standard is not some sort of "game," to be played among several countries according to some mythical "rules." Gold is simply the monetary medium, and the duty of government is to leave the people free to do with the gold as they see fit".²³ Similarly observed the German economist Hans Sennholz: "There are no "rules of the game," no arbitrary rules which people must learn to observe. It is a social institution that is controlled by inexorable economic law".²⁴

The restraint associated with the gold standard came precisely from the reality of convertibility, which in the medium and long term prevented both the government and the central bank from significantly and persistently manipulating the supply, distribution and value of money that the market determined through the coordination of consumer demand with producer's supply. The production of gold, which is by nature a scarce, durable, portable, homogenous, easily recognizable and highly divisible commodity

²³ Murray N. Rothbard, *America's Great Depression*, Ludwig von Mises Institute, Auburn, Alabama, 2000 [1963], p. 148.

²⁴ Hans Sennholz, *Inflation, or Gold Standard?*, Bramble MiniBooks, 1973, p. 43.

exhibiting an intense and widely distributed industrial demand,²⁵ was economized via economic calculation in the form of profit and loss, just like all other commodities. This meant that the money market by the so-called law of costs, which states that “in the long run the market price of freely reproducible goods tends to equal the costs of production”.²⁶ Grounded ultimately in the marginal, subjective valuations of consumers, this law assured that even when new ore reserves were sporadically discovered,²⁷ non-specific factors of production would be allocated toward gold mining, refining and coinage only if and up to the point where their specific discounted marginal revenue product, appraised in terms of nominal gold ounces, outweighed their market prices- the monetary expression of the expected, foregone consumer want-satisfaction derived from their employment in alternative lines of production.²⁸ According to Ludwig von Mises the fact that the stock of the general medium of exchange depended on an external factor like “the vicissitudes of gold production” and “upon the profitability of producing gold” was not a defect of the gold standard, but rather “its main excellence.”²⁹

The reason why the authorities could not have a lasting impact was because of an almost automatic re-adjusting and reversing mechanism that was inbuilt in the classical gold standard: the price specie flow mechanism. This process found its first theoretical and historical account in Richard Cantillon’s *Essaie* as the Irish economist analyzed the sequential consequences on prices and the inter-spatial allocations of resources of an excessive abundance of specie introduced in a gold-based economy and was later elucidated by

²⁵ On the qualitative characteristics of a market-produced commodity money, see William Stanley Jevons, *Money and the Mechanism of Exchange*, Appleton, New York, 1882, p. 31.

²⁶ Hans Sennholz, “No Shortage of Gold”, *Foundation for Economic Education*, September 1 1973.

²⁷ An example being the gold discoveries in California (1848) and Australia (1851), or the ones between 1896 and 1914.

²⁸ On the dynamics of this process, see also Lawrence H. White, *The Theory of Monetary Institutions*, Blackwell publishers Inc, Massachusetts, 1999, pp. 26-50.

²⁹ Ludwig von Mises, *Human Action. A Treatise on Economics*, The Ludwig von Mises Institute, Auburn, Alabama, 1998, p. 471.

David Hume in his 1752 “Of the Balance of Trade”.³⁰ An increase in unbacked notes and/or “circulation credit”³¹ on the part of the Germany authorities created the following dynamics: inflation of the domestic money stock, internal increase in nominal incomes and aggregate prices, deficit in the balance of payments, outflow of gold from the national coffers, loss of confidence among depositors, rise in the interest rate to attract funds, credit restriction, economic crisis and a return of the money supply largely to its original level.³² The gold standard thus stabilized exchange rates, equilibrated balance of payments, anchored the expected purchasing power of money and allowed interest rates to ultimately settle at their natural rate.³³ The Hungarian-born economist and financier, Melchior Palyi, calculated that in the space of about half a century, from 1864 to 1914, as a result of the institutional stability that the gold standard guaranteed to economic actors, real long-term investments rose from less than 6 billion to over 70 billion dollars.³⁴ Above all, however, was the fact that this world-wide commodity money regime by limiting the Reich’s ability to engage in money induced deficit finance and deficit spending, obstructed political dirigisme. Precisely because of this restrictive property classical liberals such as Eugen Richter considered gold as “sacrosanct”.³⁵

³⁰ Richard Cantillon, *Essay on the Nature of Trade in General*, Liberty Fund, Indianapolis, 2015 [1755], pp. 76-78; David Hume, *Essays: Moral, Political and Literary*, Liberty Classics, Indianapolis, 1985, pp. 281-327.

³¹ Coined by Ludwig von Mises in 1912, this term indicates an extension of bank credit unbacked by real, voluntary savings. See Ludwig von Mises, *The Theory of Money and Credit*, Ludwig von Mises Institute, Auburn, AL 2009 (1912), pp. 268-275.

³² For an analysis of this automatic mechanism related to the workings of the classical gold standard see, among other works, Murray N. Rothbard, *What has Government done to our money?* Ludwig von Mises Institute, Auburn, AL 2010 (1963), pp. 89-92; Joseph T. Salerno, “Gold Standards: True and False”, *Cato Journal*, vol. 3, No. I, Spring 1983, pp. 249-258; Robert P. Murphy, *Understanding Money Mechanics*, Ludwig von Mises Institute, Auburn, AL 2021, pp. 27-32.

³³ To always keep in mind is that except during periods of large-scale national or international warfare- the French Revolutionary and Napoleonic wars (1792-1815), the war of 1812, the war of southern secession (1861-1865) and WWI (1914-1918)- from the Industrial Revolution until the beginning of WWII prices smoothly yet constantly decreased as a result of real productivity increases outstripping the supply of commodity money.

³⁴ M. Palyi, *The Twilight of Gold, 1914-1936*, p. 3.

³⁵ M. Palyi, *The Twilight of Gold, 1914-1936*, Henry Regnery, Chicago 1972, p. 6.

3. The Great War and Paper Money: Inflation as Policy and Veil

Many liberals of the time, such as Ludwig Bamberger, underestimated however the original sins of the classical gold standard. Created by a series of governmental acts and managed by a monopolistic banking system, nothing really prevented nation states, caught into a crisis or emergency scenario, from ultimately centralizing their gold reserves, abandoning the gold parity and suspend specie redemption. The naivety of the classical liberals was revealed on the 31st of July 1914, when the Reichsbank, ten days before the assassination of Archduke Franz Ferdinand and his wife Sophie, after centralizing the nation's gold reserves in June, accompanied by the central banks of the other belligerent countries, performed the revolutionary act of suspending gold convertibility in order to- as Luigi Einaudi put it- freely "groan the note press".³⁶ Such a practice, it must be said, was not new. It had been tried various times in the past- France and England in the aftermath of the French Revolution (1789-1821) or in the United and Confederate States during the American War of Southern Secession (1861-1865), just to mention two of the many cases. At the same time, however, this particular disengagement from gold on the eve of WWI was, in its extent and its political, economic and social consequences, of unprecedented importance. With the advent of the Great War central banks became systematically "subservient to the fiscal needs of their respective governments".³⁷ As Edwin Cannan, who used the following expression with reference to the sterling, pointed out: the world became the scene of a veritable "diarrhea of banknotes".³⁸ Germany was not to be outdone. A week after the suspension of the mark-gold parity, on 4 August 1914, the Reichstag issued a series of measures that allowed the treasury to issue war bonds forcing the central bank to buy them. This monetization of the debt immediately caused the money in circulation to

³⁶ L. Einaudi, *La guerra e l'unità europea*, il Mulino, Bologna 1986 (1944), p. 132.

³⁷ R.P. Murphy, *Understanding Money Mechanics*, Ludwig von Mises Institute, Auburn AL 2021, p. 39.

³⁸ Edwin Cannan, *Money: its connexion with rising and falling prices*, P.S. King & Son, LTD, Westminster 1932, p. vii.

explode. Already by the end of August, money production had increased by two billion marks, and it only grew from there. From 8.7 billion in 1914, the money supply rose to 10.05 billion in 1915, 12.3 billion in 1916, 18.5 billion in 1917, and in 1918 to 33.1 billion marks.³⁹ Wholesale prices, too, increased, by about 140%, while the dollar price of the mark halved: from 4.21 in 1914 to 8.28 marks per dollar in 1919.⁴⁰

The devaluation of the mark had thus a political origin. Even an easy money advocate like John Maynard Keynes, looking back at the conflict in its aftermath, realized that through the inflationary process governments had managed to confiscate an important share of the national wealth as embodied in private output, albeit secretly, arbitrarily and unnoticed.⁴¹ What Keynes, however, along with other established economists- including pre-Keynesians or classicals like Arthur Cecil Pigou and Lionel Robbins-⁴² wrongfully assumed was that government war control in the form of inflationary finance was an unavoidable element of the international conflict. From a public finance perspective, however, as Joseph Schumpeter, Edwin Cannan and Ludwig von Mises pointed out at the time, the war effort might just as well have been financed through conscription ("the blood tax"⁴³ in misesian parlance), taxation, government borrowing or a combination of the above, without any need for recurring to the printing press.⁴⁴ The resources that governments, through indirect

³⁹ Costantino Bresciani-Turroni, *The Economics of Inflation. A Study of Currency Depreciation in Post-War Germany*, G. Allen & Unwin Ltd, London 1937 (1931), p. 162.

⁴⁰ Richard M. Ebeling, *The Lasting Legacies of World War I: Big Government, Paper Money and Inflation*, «Economic Education Bulletin-American Institute of Economic Research», vol. XLVIII, n. 11, november 2008, p. 5.

⁴¹ J.M. Keynes, *The Economic Consequences of the Peace*, now in *The Collected Writings of John Maynard Keynes*, vol. 2. Macmillan, London 1971 (1919), pp. 148-149.

⁴² See Arthur Cecil Pigou, *The Political Economy of War*, Macmillan, New York, 1941; Lionel Robbins, *The Economic Problem in Peace and War: Some Reflections on Objectives and Mechanisms*, Macmillan, London, 1950.

⁴³ Ludwig von Mises, *Nation, State and Economy: Contributions to the Politics and History of Our Time*, New York University Press, New York, 1983 [1919], p. 198.

⁴⁴ See Joseph Schumpeter, "The Crisis of the Tax State", in Richard Swedberg (edited by), *The Economics and Sociology of Capitalism*, Princeton University Press, Princeton, 1991 pp. 118-119; Edwin Cannan, *An Economist's Protest*, Adelphi, New York, 1928, p. 100; Ludwig von Mises, *Nation, State and Economy: Contributions to the Politics and History of Our Time*, pp. 197-204.

currency debasement, had squeezed out of the private economy in order to 'vertically' redirect the capital structure toward the production of present goods for war needs- tanks, bombs, artillery shells, ready-made weapons but also foodstuff etc.- could have been obtained, to the same extent, from directly squeezing producers and/ or capital markets. "By the issue of paper money", Mises lucidly highlighted, "not one cannon, not one grenade more was produced than could have been produced even without putting the printing press into operation. After all, war is waged not with "money" but with the goods that are acquired for money."⁴⁵

Notwithstanding the economic logic of the above, however, financing the war effort- expected initially to end relatively soon- with either direct taxation- income and capital levies- or traditional deficit financing had it's drawbacks in terms of political expediency. Not only would the citizenry have directly sensed the heavy weight of war socialism and government involvement directly onto their shoulder with the added burden of unequivocal bureaucratic invasion,⁴⁶ but most importantly the entrepreneurs, especially those working in the higher stages of production, equipped with double-entry bookkeeping and engaging in economic calculation on the basis of money prices would have had a direct perception and an immediate quantitative understanding of the ongoing capital consumption and thus of the plummeting of living standards caused by the intensification of the war, with market interest rates quickly and severely adjusting upward, capital markets swiftly drying up, profits disappearing and a wave of business bankruptcies ensuing. All these market signals, however, were distorted and obfuscated by monetary inflation, veiled over as it were, which the process of economic retrogression last longer and without much discontent. As Joseph T. Salerno writes: "the inflationary process is indispensable for masking the capital decumulation crisis precipitated by war mobilization, which

⁴⁵ Ludwig von Mises, *Nation, State and Economy: Contributions to the Politics and History of Our Time*, p. 188.

⁴⁶ We are not saying that this perceived disutility was not present. It was indeed. Yet it would have been even greater and much more difficult to endure had the entire war effort been paid with these non-inflationary methods of finance.

would otherwise be swiftly revealed to one and all by monetary calculation. In the absence of the veil cast over real economic processes by inflation, skyrocketing interest rates, plummeting stock and bond markets, and pandemic business bankruptcies and bank runs—not to mention the levying of confiscatory kinds and levels of taxation—would serve to rapidly and significantly dampen the public's enthusiasm for the alleged glories of war".⁴⁷

The above reasoning explains why the German political elites, like the rest of the major western powers, embarked on a policy of inflationism. It would be wrong, or at least incomplete, nonetheless to consider it merely a policy dictated by bureaucratic or political consideration. A significant part of the German *intelligentsia* and business elite purposefully defended and promoted these very same policies. Friedrich Bendixen, for example, probably the most influential banker from Hamburg at the time, explicitly identified inflation as an extractive policy equivalent to taxation. Compared to the latter, however, being a more roundabout process of extraction it had the definite advantage of masking the intrusiveness of the state and the potential for externalizing responsibility when push comes to shove: "Only in taxation do people perceive the arbitrary incursions of the state; the movement of prices, on the other hand, seems sometimes the result of the sordid machinations of merchants, more often a dispensation that, like frost and hail, mankind must simply accept. The statesman's opportunity lies in appreciating this mental disposition".⁴⁸

4. From debt-monetization to the *Flucht in die Sachwerte*: Inflation as Revolution

Thinking, based on past experience, that the economic and monetary oscillations accompanying were embedded in an exceptional

⁴⁷ Joseph T. Salerno, "War and the Money Machine: Concealing the Costs of War Beneath the Veil of Inflation", in John Denson (edited by), *The Costs of War: America's Pyrrhic Victories*, Transaction Publishers, New Brunswick, 1999, pp. 452-453.

⁴⁸ Cited in C.L. Holtfreich, *The German Inflation 1914-1923: Causes and Effects in International Perspective*, Walter de Gruyter, New York 1986, p. 153.

situation and therefore that prices would soon fall with the end of the war, domestic and international operators cushioned the devaluation process of the mark by increasing the demand for it.⁴⁹ “When the British troops first went to Cologne”, Edwin Cannan told the British Association in 1921, “they bought German marks because they saw that the mark was “lower than usual”. It is known that many milliards of the depreciated currencies are held by foreigners. Such holding is, of course, a pure addition to the usual demand for currency, and tends to maintain its value for a time.”⁵⁰ Another factor that added intensity to the demand for money was the greater uncertainty that plagued the citizenry at the beginning of the conflict and which caused them to keep on average higher cash balances. The value of money, as Ludwig von Mises and Benjamin Anderson had explained in their respective critiques of Irving Fisher’s fallacious proto-monetarism,⁵¹ tends to vary inversely with respect to its supply, but neither symmetrically nor proportionally: it always incorporates the needs, judgements and subjective evaluations of economic agents, as well as their expectations regarding the future purchasing power of the monetary unit.⁵²

“If, in its incessant search for revenue,” observed Murray Rothbard, “the government sees a seemingly innocuous method of raising money without causing much inflation, it will cling to it.”⁵³ Instead of balancing the public accounts and restricting the amount of liquidity issued, in fact, in the aftermath of the November revolution the socialist party, fooled by the free meal of low inflation, leveraged the central bank to finance a whole series of social policies. From 1914 to 1923, an average of only 15% of expenditure was covered by taxes, and as prices rose, the situation worsened, due to the

⁴⁹ Gustave Cassel, *Money and Foreign Exchanges after 1914*, London 1922, p. 39.

⁵⁰ Edwin Cannan, “The Application of the Theoretical Apparatus of Supply and Demand to Units of Currency”, *The Economic Journal*, Vol. 31, No. 124, December 1921, p. 457.

⁵¹ See Irving Fisher, *The Purchasing Power of Money: Its Determination and Relation to Credit, Interest, and Crisis*, Macmillan, New York 1911.

⁵² See Ludwig von Mises, *The Theory of Money and Credit*, pp. 124-151; B. Anderson, *The Value of Money*, Macmillan, New York 1917, pp. 154-171.

⁵³ M.N. Rothbard, *The Mystery of Banking*, Ludwig von Mises Institute, Auburn, AL, 2008 (1983), p. 69.

continuous decrease in the real value of income. Towards the end of October 1923, ordinary state revenue was only 0.8 per cent. The invasion of the Rhineland on the 11th of January 1923 by French troops convinced that Germany was delaying coal deliveries, and the ensuing “passive resistance” financed by the issuing of new liquidity and carried out by Chancellor Cuno, gave further impetus to this process.

From the summer of 1922, however, the entire nation began to understand the connection between monetary circulation, the *Devisen* index and the general movement of prices. In this period, recalls the German economic historian Gustave Stolper, “daily dollar rates took the place of the weather as a topic of conversation”.⁵⁴ Economic agents began to economize the money they received by selling it in exchange for all kinds of non-monetary goods as well as for gold and especially foreign currencies, which commonly served as substitute currencies.⁵⁵ Not only did prices and exchange rates rise, as would have been predictable by the quantity theorists, but their augmentation was even greater than the increase in the money stock. Between January 1922 and July 1923 banknotes increased 378 times, while wholesale prices increased 2,038 times.⁵⁶

In November 1923, the money supply reached 400,000,000,000,000 marks, while the exchange rate against the dollar reached 4.2 trillion. The third phase of the inflationary process had been entered, the *Flucht in die Sachwerte* (flight into real values). Convinced by then that there would be no end to the printing of banknotes, consumers exchanged the mark for anything and everything and at any price, while many producers—especially farmers—refused *en masse* to give up goods or services in exchange for pieces of paper. Instead of the mark, various traders calculated using foreign currencies or sometimes real goods, even kilowatt hours of electricity.⁵⁷ The consequence was the disintegration of the division of labor, the impoverishment of the middle classes, the de-capitaliza-

⁵⁴ Gustave Stolper, *German Economy, 1870-1940*, Routledge, New York 2018, p. 152.

⁵⁵ Milton Friedman, *Money Mischief: Episodes in Monetary History*, Mariner Books, Boston, 1994, p. 11.

⁵⁶ Thomas J. Sargent, *The End of Four Big Inflations*, in R.E. Hall, *Inflation: Causes and Effects*, University of Chicago Press, Chicago 1982, p. 82.

⁵⁷ Leland Yeager, *Experiences with Stopping Inflation*, American Enterprise Institute, Washington 1981, p. 57.

tion of the productive structure. This phenomenon was part and parcel of a more general scenario of catallactic revolution, of miscalculation and misdirection, as the inflationary process caused continuous erratic swings in the price and wage structure, in the relation of revenues and costs, profits and incomes, interest rates and rents that completely disorganized economic and social life.

As in the case of Austria,⁵⁸ this process of continuous and uneven price increases that came as a result of inflationary tensions, led a significant part of German industry to build up insufficient replacement reserves which was a major source of wealth destruction. As accounting became disentangled from economic fundamentals, capital gains turned into capital drains. From indicators of economizing investment accounting practices turned into avenues for “masqueraded” unproductive consumption.⁵⁹ Part of this capital consumption was reflected in an extension of what Hans-Hermann Hoppe has described as “the structure of mal-production”⁶⁰. Formal increases in producer goods ultimately proved to be more a question of “an extension of plant rather than an intensification of production and a perfecting of technical methods”⁶¹ denoting the fact that what Walther Rathenau- foreign minister of the Republic between February and June 1922- had praised as “economic duchies” were actually “parasitic duchies”, causing net losses in terms of economic efficiency and coordination. The latter became evident as the real wages of laborers and the purchasing power of consumers

⁵⁸ For a succinct yet incisive description of the Austrian Inflation, see Richard Ebeling, “Lessons from the Great Austrian Inflation”, *The Daily Bell*, May 13, 2014.

⁵⁹ The first one to point out this phenomenon was Ludwig von Mises during the interwar period, when he was a senior economic analysis to the Vienna Chamber of Commerce. It would later be expanded upon by Fritz Machlup in his analysis of capital consumption in post-war Austria: “Profits due to an increasing price level are only fictitious profits. If they are consumed, capital is consumed. This is one of the effects of inflation upon capital [...] Making and consuming fictitious profits was, probably, the most frequent method of consuming capital in Austria”. Fritz Machlup, “The Consumption of Capital in Austria”, *The Review of Economic Statistics*, 1934, p. 16.

⁶⁰ Hans-Hermann Hoppe, “The Economics and Sociology of Taxation”, in Hans-Hermann Hoppe, *The Economics and Ethics of Private Property*, Auburn, Alabama, Ludwig von Mises Institute, 2006, p. 41, n. 7.

⁶¹ Costantino Bresciani-Turroni, *The Economics of Inflation. A Study of Currency Depreciation in Post-War Germany*, p. 220.

fell into depression, causing a decline in work ethic and a general standstill in productive innovation as entrepreneurs, especially those closet to consumption, stimulated by the so-called *Ricardo effect*, were led to over-exploit labor, revert to less-capital intensive production methods and produce a bundle of lower-quality outputs.⁶² The process of capital decumulation and the retrogressing economy that followed found a clear numerical expression in the index of industrial production which in just one year, between 1922 and 1923, had fallen from 70 to 46.⁶³ As an example instead of how inflationary tensions decreased the quality of overall output Bresciani-Turroni pointed to “the reappearance in the streets of Berlin of old and rickety carriages in the place of the taxis”, the latter having “become too expensive for the public”.⁶⁴

The restoration of order, at least in the monetary sphere, finally came on the 20th of November 1923, with the sudden death of Havenstein and the rise of Hjalmar Schacht as president of the central bank. Schacht introduced a new currency indirectly linked to gold, the Rentenmark, and to restore confidence in the monetary unit, he stopped the monetization of public debt.

⁶² The Ricardo effect refers to the relationship between the level of real wages and interest on the one hand and the marginal rate of investment between (perishable) labor and (durable, labor-saving) capital goods on the other. It was first set out by David Ricardo in 1817, in his *On the Principles of Political Economy and Taxation*, and was further refined and applied to business cycle theory by Friedrich von Hayek starting in 1939, in his essay *Profits, Interest and Investment*. On this theme see David Ricardo, “On the Principles of Political Economy and Taxation”, in Piero Sraffa and M.H. Dobbs (edited by) *The Works and Correspondence of David Ricardo*, vol.1, Cambridge University, Cambridge, 1982 [1817], p. 395; Friedrich von Hayek, “Profits, Interest and Investment” and *Other Essays on the Theory of Industrial Fluctuations*, Routledge, London, 1939, p. 39; Friedrich von Hayek, “The Ricardo Effect”, *Economica*, vol. 34, no. 2, May 1942, pp. 127-152; Friedrich von Hayek, “Three Elucidations of the Ricardo Effect”, *Journal of Political Economy*, vol. 77, no. 2, 1979, pp.; Laurence S. Moss and Karen I. Vaughn, “Hayek’s Ricardo Effect: A Second Look,” *History of Political Economy*, vol. 18, no. 4, 1986, pp. 545-565; Jesus Huerta de Soto, *Money, Bank Credit and Economic Cycles*, pp. 329-332.

⁶³ Gerald Feldman, *The Great Disorder: Politics, Economics and Society in the German Inflation 1914-1924*, Oxford University Press, Oxford, 1977, p. 838.

⁶⁴ Costantino Bresciani-Turroni, *The Economics of Inflation. A Study of Currency Depreciation in Post-War Germany*, p. 220.

5. The Myth of Velocity and the Inflationary Cycle

In order to stay clear of confusion the cause of the rapid depreciation of the mark, above and beyond the monetary inflation, was not to be found in a mysterious increase in the “velocity of money” as is commonly referred to in the literature, but in the reality that the subjective value attributed to the monetary unit, expressed in a constantly decreasing demand to hold real balances, declined both more rapidly and more intensely than the increase in money issuance. As a result a rather paradoxical situation ensued where the more the monetary and financial authorities inflated the nominal quantity of money units the greater the deflation of the real money supply, which led precisely to that generalized shortage of liquidity which their very policies- grounded on spurious chartalist and cameralistic reasoning- were supposed to avoid and counteract at all costs.⁶⁵

Even economic historians of the stature of Gustave Stolper and Costantino Bresciani-Turroni, notwithstanding the great merits of their praxeological and historical analysis of this period, fell victim to this typical monetarist fallacy of ascribing ever increasing diminutions in purchasing power to money changing hands more rapidly. Following in their footsteps was, not surprisingly, Milton Friedman who, in accounting for the “German hyperinflation after World War I”, stressed that in its last phase “hand-to-hand money increased at the average rate of more than 300% a month for more than a year, and so did prices”.⁶⁶ If this increase in hand-to-hand money, however, were a determining causal factor of the above mentioned price oscillations, then by the same token one could just as well appeal to the increase in “hand-to hand goods” since money is always exchanged against goods.⁶⁷ The price of money is a “goods-price” corresponding to the inverse of the price of all the

⁶⁵ See Henry Hazlitt, “Lessons of the German Inflation”, *Foundation for Economic Education*, December 1 1976.

⁶⁶ Milton Friedman, *Money Mischief: Episodes in Monetary History*, p. 194.

⁶⁷ Even in the case where money is channeled through the time market- the production structure and/or the credit market- it is exchanged against goods, albeit we would be talking of future goods or of title to future goods.

array of heterogenous commodities that are exchanged against it, thus implying that these two dimensions are synchronous and inseparably tied. Yet one realizes straight away that reasoning in these terms obfuscates the causal factors at work- nobody would explain the prices of goods on account of their more or less rapid circulation —and completely ignores the driving force of money. Not to mention the essence of the inflationary cycle and it's revolutionary dynamics.

An increase in the rate of purchases and thus in the velocity of money circulation can reasonably be accompanied just as much by a decreasing "price level" as by an increasing one. This is what, for instance, may occur following the upper turn of the business cycle- an example being what happened in the speculative collapse after the stock market crash of October 1929- when an increase in exchanges occurred side by side with a radical deflation of asset and factor prices and thus a decrease of the price level.⁶⁸ The implication then, as Henry Hazlitt noted, is that an increased "velocity of circulation is not, in itself even a contributing cause of higher commodity prices. It is not even a link in the chain of causation [...] The value of money does not decline because its velocity of circulation has increased [...] Velocity of circulation is a result, not a cause. It is commonly a passive resultant of changes in people's relative valuations of money and goods".⁶⁹ For this reason, as Ludwig von Mises underlined, by appealing to "the spurious notion of velocity of circulation" the mathematical economists of the neo-classical school- monetarists included- are implicitly representing the market price system not as a causal genetic structure resulting from a web of individual human actions and interactions, but

⁶⁸ For a thorough analysis and critique of this concept based on the Austrian valuation and cash holdings approaches, see Henry Hazlitt, "The Velocity of Circulation", in Nicholas B. Beales and L. Aubrey Drewry, Jr (edited by), *Money, the Market, and the State*, University of George Press, Athens, 1968, pp. 35-44.

⁶⁹ Henry Hazlitt, "The Velocity of Circulation", pp. 43-44. From this Hazlitt draws the following conclusion: "Monetary theory would gain immensely if the concept of an independent or causal velocity of circulation were completely abandoned. The valuation approach, and the cash holdings approach, are sufficient to explain the problems involved". Henry Hazlitt, "The Velocity of Circulation", p. 44.

rather as an engine fashioned “according to the patterns of mechanics”.⁷⁰

All accounts of inflation must begin with a realistic conception of the market, and particularly of the market for money. Money is not a “barren metal” or a sterile “veil” that obfuscates the fundamentals of the real economy: the dominant view from the “classical” economists- John Locke, Adam Smith, David Ricardo and John Stuart Mill-⁷¹ all the way to Dennis H. Robertson, John Hicks and John Maynard Keynes.⁷² Money is an economic good in it’s own right. Born as a highly useful and saleable market-produced commodity through an entrepreneurial, competitive and evolutionary process devoted to overcome the inefficiencies of direct exchange- related fundamentally to the uncertainties and inconveniences associated with the constant requirement for double coincidences of wants among trading partners- money serves as the general and commonly accepted medium of exchange.⁷³ Yet precisely for this reason it cannot, by the same token, be compared to “the oil of a machine” or to a “lubricant” as was done, among others, by Arthur Cecil Pigou.⁷⁴

While categorically distinguishable from both consumer goods and producer goods, both of which are used up in the entrepreneurial process of economizing scarce resources with alternative uses, in order to fulfill its media of exchange function across time and space- facilitating the eventual and most economic acquisition of the widest range of consumer and producer goods- each and

⁷⁰ Ludwig von Mises, *Human Action. A Treatise on Economics*, p. 396.

⁷¹ John Locke, *Some Considerations of the Consequences of the Lowering of Interest*, 1691, p. 36; Adam Smith, *The Wealth of Nations*, Cannan Edition, Vol. I, p. 303; David Ricardo, *The High Price of Bullion: a proof of the depreciation of banknotes*, William Blackwood Edinburgh, 1811 [1810]; John Stuart Mill, *Principles*, Book III, Ch. viii, section 3.

⁷² See Dennis H. Robertson, *Money*, The University of Chicago Press, Chicago, 1964 [1922] pp. 25-26; John Hicks, “A Suggestion for Simplifying the Theory of Money,” 1935, reprinted in *AEA Readings in Monetary Theory*, The Blakinston Company, New York, 1951; John Maynard Keynes, *The General Theory of Employment, Interest and Money*, Harcourt, Brace, and World, New York, 1964 [1936], p. 210.

⁷³ See Carl Menger, “On the Origin of Money”, *Economic Journal*, June 1892, pp. 239-255; Gerald P. O’Driscoll, “Money: Menger’s Evolutionary Theory,” *History of Political Economy*, No. 18, 1986, pp. 601-616.

⁷⁴ See Arthur Cecil Pigou, *The Veil of Money*, Macmillan, London, 1949, pp. 24-27.

every unit of money never “moves” but is and must always be even while physically in the process of passing from one hand to another or of being transported from place to place- under somebody’s control, integrating his cash balance. “Every piece of money”, Ludwig von Mises emphasized, “is owned by one of the members of the market economy. The transfer of money from the control of one actor into that of another is temporally immediate and continuous. There is no fraction of time in between in which the money is not a part of an individual’s or a firm’s cash holding, but just in “circulation”. It is unsound to distinguish between circulating and idle money.”⁷⁵ Indeed if one were to literally abide by

⁷⁵ Ludwig von Mises, *Human Action. A Treatise on Economics*, p. 399. Interestingly the above passage indicates an important evolution in Mises’s monetary thought compared to some of his earlier remarks. Back in 1912, for instance, in his first great treatise the Austrian economist seemed to oscillate toward the traditional “barren metal” view of money: “How is it possible to use sums of money, even without lending them, so that they yield an income? There can be no doubt about the answers to these questions. Money is an acquisitive instrument only when it is exchanged for some other economic good [...] Money that is lying ‘idle’, that is money that is not exchanged for other goods, is not a part of capital; it produces no fruit”. Ludwig von Mises, *The Theory of Money and Credit*, The Ludwig von Mises Institute, Auburn, Alabama, 2009 [1912], pp. 89-90. While Mises is correct in pointing out that money, qua medium of exchange, is not directly transformed into lower-order goods but must first be exchanged against higher-order goods for it to yield a pecuniary, interest-bearing income, it does not follow from this that “money that is not exchanged for other goods [...] produces no fruit”. If money “withheld” from acquiring instrumental goods produced no fruit, in fact, it would be difficult to explain why in the regular course of business one observes firms investing part of their wealth in maintaining and at times even accumulating monetary assets (e.g. increasing “money in the till”). Following the praxeological and intersubjectively ascertainable notion of “demonstrated preference”, which is at the core both of economic analysis and welfare economics, the fact that such a phenomenon indeed occurs indicates not only that “idle money” is deemed fruitful but that its accumulation is judged, on the margin, to be the most fruitful investment compared to the alternatives foregone (ownership of consumer goods and/or producer goods). Or to put it in other words, by holding onto cash firms demonstrate that demanding real money balances, precisely on account of their apparent “idleness” are, in light of the uncertain and ever changing conditions of the market, deemed the most fruitful means to efficiently steward the overall present and future productive capacity of their individual economies. One could thus argue that the categorical distinction between producer goods and media of exchange lies in the fact that the latter, unlike the former, are deemed value-productive uniquely on account of their ever-lasting “idleness”. On demonstrated preference and its implications for welfare economics, see Murray N. Rothbard, “Toward a Reconstruction of

such a distinction, as was suggested in America most prominently by Irving Fisher, one would have to conclude- as William H. Hutt once put it- "that money is always idle; for the transfer of money must be regarded as instantaneous!"⁷⁶ In such a scenario, though, money's use and demand would evaporate along with money itself. That this is not the case must lead one to recognize the temporal dimension and dynamic force of money, for although valued ultimately for re-exchange, the control therefore endows the owner with a presently felt satisfaction in the form of availability services that the holder enjoys until that propitious moment is entrepreneurially grasped and executed.⁷⁷ Again in Hutt's words: "although money is always held (except perhaps by misers) with a view to its being ultimately passed on to others, the act of passing it is merely the culmination of a service (technical or speculative) which it has been rendering to the possessor. Indeed, the transfer itself occupies a mere moment whilst the services which flow from the possession of money are continuous over time. The essence of all these services is availability".⁷⁸ In a real sense, following Howard S. Ellis,

Utility and Welfare Economics", in Mary Sennholz (edited by), *On Freedom and Free Enterprise*, Van Nostrand, Los Angeles, 1956, pp. 224-225; 250-253.

⁷⁶ William H. Hutt, "The Yield from Money Held", in M. Sennholz (edited by), *On Freedom and Free Enterprise*, Van Nostrand, Los Angeles, 1956, p. 214.

⁷⁷ Murray Rothbard noted how this forward looking, temporal dimension embedded in the media of exchange function explains the present usefulness of the money stock: "It is true [...] that the only use for money is in exchange. From this, however, it must not be inferred, as some writers have done, that this exchange must be immediate. Indeed, the reason that a reservation demand for money exists and cash balances are kept is that the individual is keeping money in reserve for future exchanges. That is the function of a cash balance- to wait for a propitious time to make an exchange." Rothbard then concludes: "if no one is willing to keep a cash balance longer than instantaneously, there will be no money held and no use for a money stock". Murray N. Rothbard, *Man, Economy and State: A Treatise on Economic Principles*, Ludwig von Mises Institute, Auburn, Alabama, 2009 [1967], p. 767.

⁷⁸ William H. Hutt, "The Yield from Money Held", in M. Sennholz (edited by), *On Freedom and Free Enterprise*, Van Nostrand, Los Angeles, 1956, p. 213. Misers, it must be said, do not strictly speaking represent an exception for in that case money, which is functionally a medium of exchange, is demanded rather as a consumer good. The effect their activity has on the economy, however, are not for this reason problematic for human welfare. Quite the contrary. Their activity would increase the satisfaction of the misers themselves while their greater demand for money on account of its non-monetary uses would put downward pressure on the general array of prices, free

one can affirm that it is these very same acts of money transfer that terminate the flow of services rendered by the cash balance.⁷⁹ What, moreover, renders the availability services constitutive of the universal medium of exchange valuable for the actor is the constant flux of day to day market activity and thus the fundamental reality of ineradicable uncertainty of the future, especially relating to the timing, terms and location of future exchange requirements and opportunities. Being money the most widely salable commodity, cash holdings are value-productive to the extent that, as Hans Hermann Hoppe succinctly put it, they are “‘yielders of certainty’ in an uncertain world”.⁸⁰ A fact that was already enunciated by Richard Cantillon when he observed that: “Any number of miserly and fearful people bury and hoard cash for periods of time that lay be quite lengthy. Any number of landlords, entrepreneurs and others always keep some cash in their

otherwise unavailable goods for the community of non-misers to use, enhance the real money balances of consumers and lift the economic prospects of money savers. To conclude, in fact, that all the above is “unproductive” would require (1) substituting an unscientific and arbitrarily constructed social utility function for the reality-based subjective, demonstrated preference principle and (2) ignoring the economizing, price-coordinated monetary adjustment process that the free market constantly produces in response to and in anticipation of changes in the relative valuations of money and goods. One of the best accounts of the productive services rendered by the miser has been given to us by Walter Block: “The miser may want his money not for later spending, not to bridge the gap between expenditures and payments, but rather for the pure joy of holding cash balances. How can the economist, educated in the utility maximization tradition, characterize joy as sterile? Art lovers who hoard rare paintings and sculptures are not characterized as engaging in a sterile enterprise. People who own dogs and cats, solely for the purpose of enjoyment and not investment, are not described as engaging in sterile activity. We benefit from lowered price levels, which result from it. Tastes differ among people, and what is sterile for one person may be far from sterile for another. The miser’s hoarding of large cash balances can only be considered heroic. We benefit from lowered price levels, which result from it. The money which we have and are willing to spend becomes more valuable, enabling the purchaser to buy more with the same amount of money. Far from being harmful to society, the miser is a benefactor, increasing our buying power each time he engages in hoarding.” Walter Block, *Defending the Undefendable*, Ludwig von Mises Institute, Auburn, Alabama, 2018 (1976), p. 115.

⁷⁹ Howard S. Ellis, *German Monetary Theory, 1905-1933*, Harvard University Press, Cambridge, Massachusetts, 1934, p. 109.

⁸⁰ Hans Hermann Hoppe, “The Yield from Money Held Reconsidered”, *Mises Daily Articles*, May 14, 2009.

pockets or safes to meet unforeseen contingencies and so as not to run out of money [...] No one likes to spend just to the last penny or to have an empty purse. People are happy to receive a new supply of money before paying a debt, even if they already have the money".⁸¹

Money's value, rather than depending on "circulation", arises then out of market participant's subjective evaluations, assessments and preferences for the continuous services- availability of present, instantaneously serviceable, real purchasing power- that money qua universal medium of exchange is expected- in light of the price information of the most recent past that, through a specific anticipative understanding (*verstehen*), economic agents entrepreneurially project into the future- to render to its owners-holders relative to those of non-money assets. These services, which constitute money's unique productivity, are thus presupposed by the number of transactions, since they must be entrepreneurially appraised and marginally evaluated before any settled 'transfer' can possibly take place.⁸²

During the interwar years the above analysis was generally ignored by the German economists. It was nevertheless present in the economics profession. Aside from the Austrians, one the most perceptive economists in this sense was Edwin Cannan, an instrumental figure in safeguarding the body of liberal thought in the aftermath of WWI, not only with his writings⁸³ but also by his training a circle of pupils at LSE- Sir Theodore Gregory, Lionel Robbins, F.C. Benham, W.H. Hutt- which prepared the ground for

⁸¹ Richard Cantillon, *Essay on the Nature of Trade in General*, Liberty Fund, Indianapolis, 2015 [1755], p. 68.

⁸² The strength of the subjective cash balance approach is such that even it's detractors, like the already mentioned Bresciani-Turroni, had to end up admitting the inadequacies of the equation of exchange based on the concept of velocity: "It is true [...] that the phenomenon has been explained sometimes in a manner not altogether correct. It is inaccurate to say that prices increase more rapidly than the quantity of money because the velocity of circulation increases". Costantino Bresciani-Turroni, *The Economics of Inflation. A Study of Currency Depreciation in Post-War Germany*, p. 181.

⁸³ See, in particular, the collected eleven papers present in Edwin Cannan, *The Economic Outlook*, T. Fisher Unwin, London, 1912 and the already referenced Edwin Cannan, *An Economist's Protest*, 1927.

the reception of Mises's ideas in England.⁸⁴ In addressing the British Association in Edinburgh in 1921 the LSE economist unintentionally resolved some common misconceptions regarding the money relation some about 15 years before Keynes's "General Theory". For he correctly noted that just like in the house market, where the relevant price-determining factor, given a certain stock, is the demand for occupation, the relevant factor in the monetary adjustment process is not the demand for transaction properly speaking but the demand to hold: "we must think of the demand for currency as being furnished, not by the number or amount of transactions, but by the ability and willingness of persons to hold currency [...] more transactions for money-more purchases and sales of commodities and services-may in a sense be said to involve increase of demand for money, but in the corresponding sense it may be said to involve an equal increase of supply of money; the two things cancel. The demand which is important for our purpose is the demand for currency, not to pay away again immediately, but to hold."⁸⁵

The demand to hold money did not reflect a desire for mere money units but rather a demonstrated preference to hold onto a given purchasing power. This, Cannan reason, implied that the market, constantly adjusting the purchasing power of money to the desired level of real cash balances (*encaisse désirée* or *Kassenbestand*), would be willing and able to absorb excess supplies of money, thus extending money demand, only at higher "price levels", i.e. at a lower purchasing power of money.⁸⁶ Yet it would be wrong, he emphasized, to look at the money relation merely from

⁸⁴ Hayek also mentions F.W. Paish who, while not being technically a student of Cannan, belonged ultimately to the same circle. See Friedrich von Hayek, "The Transmission of the Ideals of Economic Freedom", *Econ Journal Watch*, vol. 9, no. 2, May 2012 [1951], pp. 163-169.

⁸⁵ Edwin Cannan, "The Application of the Theoretical Apparatus of Supply and Demand to Units of Currency", pp. 453-454.

⁸⁶ Following Henry Sidgwick, Cannan distinguished between an increase in demand and an extension of demand. The former implies a (present) price-independent change in valuation of the monetary unit, or a change in the entire demand schedule for money. The latter, instead, indicates a price-dependent change in the quantity of money holdings or a movement across the given demand schedule for money. Today's neoclassical economists would refer to the difference between an increase in

the point of view of statics, as exhibiting constant proportionality or “unit elasticity”. Indeed if this relationship were as mechanical as the proponents of the quantity theory professed then “issuers of legal tender could go on buying goods and services with new issues indefinitely”.⁸⁷ This, however, was not in line with the historical record: “Experiences seems to show that the unit of a currency falls to zero in value long before the supply of the currency reaches infinity, and believers in the doctrine have been unable to explain why.”⁸⁸

Once money’s driving force and non-pecuniary productivity are taken account of the dynamics of the inflationary cycle are suddenly unveiled. For as soon as market participants expect the money supply to continuously increase into the future, which implies persistent capital losses from cash holding, human intelligence immediately discount money’s qualitative deterioration into the present, initiating a process that, if unchecked, is bound to end in demonetization and hyperinflation: “human intelligence anticipates what is coming. When it is seen that the value of currency is steadily falling, people see that it is more profitable to hold goods than currency, the demand for currency fails to extend in proportion to the enlargement of the supply, and its value consequently falls more rapidly. The issuer very likely redoubles his efforts to keep up with the fall by issuing new currency at a still more rapidly increasing rate, but all to no purpose—he is bound to lose the race and the reason is that the elasticity of demand is less than unity.”⁸⁹ This was exactly what occurred in Weimar Germany, as an increasing number businessmen who up to then had accumulated money profits saw their incomes squeezed as costs adjusted faster, and what ultimately awaits a sustained commitment to inflationism. As

demand (a rightward shift of demand curve for money) and an increase in quantity demanded (a rightward movement along the given demand curve for money).

⁸⁷ Edwin Cannan, “The Application of the Theoretical Apparatus of Supply and Demand to Units of Currency”, p. 459. With the term “doctrine” Cannan alludes to the mechanistic quantity theory of money.

⁸⁸ Edwin Cannan, “The Application of the Theoretical Apparatus of Supply and Demand to Units of Currency”, p. 460.

⁸⁹ *Ibidem*.

another perceptive, pre-Keynesian economist of the interwar period, Luigi Einaudi, noted: "In the last stages of the German devaluation, industrialists did not have time to sell their products that the wages and salaries of their employees had already risen and sometimes faster [...] Inflation, from whatever source, reproduces and multiplies. Existing money is not enough for current needs. New paper money is needed. When this is issued, prices fatally rise; and the existing money again becomes insufficient for the needs, having grown according to the increased prices. The longer the process continues, the more insufficient the circulation becomes."⁹⁰

6. From the Revolution of Prices to the Revolution of Man: Inflation as destructionism

The market, which until then had been an orderly process of social cooperation, turned suddenly into a game of chance. A financial jungle devoid of all rationality. This phenomenon had enormous and nefarious consequences not only for the allocation of resources, but for the health and vibrancy of the entire social fabric. It has been a central contention of subjectivist economics, at least since Menger and Mises, that the economic principle applies not to the content of the ends but to general scarcity condition of the human actor: "The economic principle is a general principle of rational action, and not a specific principle of such action as forms the subject of economic inquiry. The economic principle directs all rational action, all action capable of becoming the subject matter of a science [...] the provision of material goods serves not only those ends which are usually termed economic, but also many other ends [...] A theory of rational action must conceive such action as unitary."⁹¹ Hampering the market

⁹⁰ Luigi Einaudi, "Gli affari buoni fanno la moneta buona?", *Corriere della Sera*, July 22 1925, now in Luigi Einaudi, *Cronache economiche e politiche di un trentennio (1893-1925)*, vol. VIII, Einaudi, Torino, 1965, pp. 380-381.

⁹¹ Ludwig von Mises, *Socialism: An Economic and Sociological Analysis*, The Ludwig von Mises Institute, Auburn, Alabama, 2015 [1922], pp. 111-112.

process, therefore, sets in motion wide-ranging consequences that surpass by far in importance and scope the mere production and distribution of material goods.

From the revolution of prices initiated by the monetary and credit expansions to the revolution of man the step was short. As prices got continuously distorted and as the constant deterioration of the value of money impinged on the market in radical yet unpredictable ways, economic calculation, the social and economic compass, became ever more difficult. This meant that laborers, landowners, capitalists and entrepreneurs began to have problems in assessing their genuine incomes, rents, interest returns and available capital. All businessmen, amidst the continual and very profound changes in the value of the monetary unit, encountered severe difficulties in evaluating costs and prices, and thereby in engaging in rational, value-creative production. These inefficiencies, again, were especially felt in the intermediate stages of the capital structure, for in order to demand productive factors and plan appropriately for the successful realization of their enterprises, capitalists producing business structures, machinery and raw materials had to take account of long-term output prices and interest rates, which by definition a hyperinflation made impossible. As a consequence of the radical shortening of the time horizon for productive activity, these entrepreneurs saw themselves forced to disinvest and switch toward the production of consumer demand in the nearest future- consumer services and retail trade- or engage in quick, commodity speculation.⁹²

This calculation chaos, which ultimately ended up displacing a great number of workers, along with severing the adaptability of the entire economic system in serving the present and future consumption demands of the public, created a veil over people's participation in the division of labor which became day by day more undefinable, meaningless and deceptive. Moreover as present wealth and its future prospects became almost impossible to assess, the concept of property was soon debased and as a consequence also the status of the property owner lost its substance.

⁹² See Joseph T. Salerno, *Money: Sound and Unsound*, Ludwig von Mises Institute, Auburn, Alabama, 2010 pp. 469- 471.

An identity crisis ensued. "A cynical frivolity," wrote the historian Konrad Heiden, "penetrated into the souls of men; no one knew what they really owned and some men wondered what they really were".⁹³ Similarly recalled the great Austrian writer, Stefan Zweig: "The unemployed stood around by the thousands and shook their fists at the profiteers and foreigners in their luxurious cars who bought whole rows of streets like a box of matches; everyone who could read and write traded, speculated and profited and had a secret sense that they were deceiving themselves and were being deceived by a hidden force which brought about this chaos deliberately in order to liberate the State from its debts and obligations. I have a pretty thorough knowledge of history, but never, to my recollection, has it produced such madness in such gigantic proportions. All values were changed, and not only material ones; the laws of the State were flouted, no tradition, no moral code was respected, Berlin was transformed into the Babylon of the world".⁹⁴

This revolution in values and morals that accompanied the inflationary cycle and its infringement of consumer sovereignty did not leave man and his nature unaffected. To the contrary. It spoiled him of his most intimate and precious individuality. The economic disorder affected his relationship with good and evil, his understanding of virtue and sin, his conception of soul and body, his duties with regards to God and his fellowmen. The result was the triumph of nihilism- nothingness- represented at first by an anti-metaphysics, a negation and theoretical rejection of being, and subsequently by an anti-realism: rejection of the possibility of ever knowing the truth of being. In this way faith in God- the subsistent, necessary being itself (*Ipsum Esse subsistens*, to recall the formula of Saint Thomas Aquinas) and source of nature's order- began to dissipate along with man's conception of his ultimate purpose and *telos* in this life. This led the way to a general state of cultural and historical relativism in which no values seemed to be able of standing the test

⁹³ Cited in Joseph T. Salerno, *Hyperinflation and the Destruction of Human Personality*, «Studia Humana», vol. 2, n. 1, 2013, p. 20.

⁹⁴ Stephan Zweig, *The World of Yesterday*, The University of Nebraska Press, Lincoln, 1943, pp. 312-313.

of time. "Without a metaphysical recognition of the transcendent", explained philosopher Jude Dougherty, "without the recognition of a divine intellect at once the source of nature's order and the fulfillment of human aspiration, reality is construed in pure materialistic terms. Man himself becomes the measure, unaccountable to an objective order. Life itself is empty and without purpose."⁹⁵

This metaphysical disorder that accompanied the monetary chaos did not manifest itself only in the realm of the mind while leaving day to day life and man's earthly endeavors unaffected. As an incarnated spirit all of man's desires, including the most spiritual ones, pass through and are effected by his senses and natural experience. As Saint Bernard of Clairvaux wrote: "since we are carnal and are born of the lust of the flesh, it must be that our desire and our love shall have its beginning in the flesh [...] that was not first which is spiritual but that which is natural; and afterward that which is spiritual (1 Cor. 15. 16)."⁹⁶ What we see, in fact, during the early to mid-1920's, amidst the dissipation of faith in an orderly universe and in an objectively structured human nature, is a disorientation at all levels, including the physical and sexual ones. Orgies, masquerade parties, exotic and sinful activities of all kind- all manifestations of a desire to transgress those boundaries that the inflation had begun undermining at the social and economic level- were the rule of the day. As Zweig recalls: "Even the Rome of Suetonius had never known such orgies as the pervert balls of Berlin, where hundreds of men costumed as women and hundreds of women as men danced under the benevolent eyes of the police. In the collapse of all values a kind of madness gained hold particularly in the bourgeois circles which until then had been unshakeable in their probity. Young girls bragged proudly of their perversion, to be sixteen and still under suspicion of virginity would have been considered a disgrace in any school of Berlin at that time, every girl wanted to be able to tell of her adventures and the more exotic, the better."⁹⁷

⁹⁵ Cited in Thomas E. Woods, Jr. *How the Catholic Church Built Western Civilization*, Regnery Publishing, Inc. Washington D.C., 2005, p. 221.

⁹⁶ Saint Bernard of Clairvaux, *On Loving God*, 2021, p. 38.

⁹⁷ Stephan Zweig, *The World of Yesterday*, p. 313.

Just as there is an intimate relationship between soul and body, so there is between the social and the political. The general aversion to what Wilhelm Roepke called “a *buegerliche* social order”⁹⁸ that accompanied the hyperinflation and the stabilization crisis that followed not only delegitimized market oriented institutions and created a demand for a *Machtpolitik* that could finally liquidate the remnants of the old order while at the same re-assembling and re-personalizing the dispossessed and denuded masses, through an almost pantheistic process of direct democratic engagement. Hitler was in his sense an adoptive descendent of the mark’s destruction. As Lionel Robbins wrote some four years after the promulgation of the *Enabling Act* (March 23, 1933): “The depreciation of the mark of 1914-23 [...] is one of the outstanding episodes in the history of the twentieth century. Not only by reason of its magnitude but also by reason of its effects, it looms large on our horizon. It was the most colossal thing of its kind in history: and, next probably to the Great War itself, it must bear responsibility for many of the political and economic difficulties of our generation. It destroyed the wealth of the more solid elements in German society: and it left behind a moral and economic disequilibrium, apt breeding ground for the disasters which have followed. Hitler is the foster-child of the inflation”.⁹⁹

The way in which the inflation disintegrated social capital, causing not only widespread discontent but a generalized sense of humiliation, was best recounted by Stefan Zweig. According to Zweig the sense of humiliation resulting from the evaporation of the mark’s value made the inflation a radically more sinister phenomenon in the eyes of the German people compared to the Great War: “The great majority, the mighty masses, had lost [...] Nothing ever embittered the German people so much-it is’ important to remember this-nothing made them so furious with hate and so ripe for Hitler as the inflation. For the war, murderous as it was, had yet yielded hours of jubilation, with ringing of bells and

⁹⁸ Wilhelm Roepke, “Free Economy and Social Order”, *The Freeman*, January 11 1954.

⁹⁹ Lionel Robbins, “Preface”, to Costantino Bresciani-Turroni, *The Economics of Inflation. A Study of Currency Depreciation in Post-War Germany*, p. 5.

fanfares of victory. And, being an incurably militaristic nation, Germany felt lifted in her pride by her temporary victories; while the inflation served only to make it feel soiled, cheated, and humiliated; a whole generation never forgot or forgave the German Republic for those years and preferred to reinstate its butchers.¹⁰⁰ This explains why in those Hitler assured his voters that he would guarantee, in a pure voluntaristic manner, price stability and that the Weimar episode would not be repeated: "Inflation is lack of discipline [...] I'll see to it that prices remain stable. That's what my storm troopers are for. Woe to those who raise prices. We don't need legislation to deal with them. We'll do that with the party along. You'll see: once our storm troopers visit a shop to set things right- nothing similar will happen second time."¹⁰¹

7. The disaster of the *Kathedersozialisten* and the lesson of Ludwig von Mises

The destruction of the mark took much of the German intelligentsia by surprise. Under the influence of the *étatiste Volkswirt* of the historicists, of the Wagners and Schmollers, key representatives of what, from the minister of finance Karl Helfferich to the president of the central bank Rudolf Havenstein, from the political economist Julius Wolf to monetary historian Karl Elster, argued that the blame for the rise in prices lay with "the machinations of speculators and profiteers and the intrigues of external and internal enemies".¹⁰² Deceived by the fact that from September 1921 to August 1922, the mark's external depreciation had run faster than prices and banknotes, they traced a chain of causality that run from the burdens of reparations to general inflation via exchange rate fluctuations and, with a perverse logic, concluded that only monetary

¹⁰⁰ Stephan Zweig, *The World of Yesterday*, The University of Nebraska Press, Lincoln, 1943, p. 315.

¹⁰¹ Gerald Feldman, *The Great Disorder: Politics, Economics and Society in the German Inflation 1914-1924*, p. 855.

¹⁰² Ludwig von Mises, "The Great German Inflation", *Economica*, n. 36, May 1932, p. 229.

expansion could remedy the rise in prices and keep the economy afloat.¹⁰³ An exposition of this sequence was to be found in Helfferich who in an article in 1922, openly argued that inflation and the depreciating exchange were neither problems of technical economics nor of banking policy, but fundamentally geopolitical, arising from the allies excessive requirement of tributes on the country. Any plans, thereby, to stabilize the mark, he argued a year later in an updated edition of his book *Das Geld*, would not only be sterile but counter-productive, depriving employers and the Reich of the required circulating medium to pay salaries and wages, thus bringing the economic system to a halt.¹⁰⁴ At the heart of this reasoning was a return of mercantilist thinking, which misleadingly and automatically equated an increase in the number of money units and, consequently, in the level nominal spending with an increase in the real, overall funding of productive economic activity.

This view, which considered note-issuing as the last element in a exogenously determined chain of causation, was reconfirmed by the Central Statistical Office in Germany and it found echoes also abroad, especially amidst the economics profession. A point in case was the Harvard economist John Henry Williams who, by employing a standard cost-push analysis, connected reparation burdens to note-issuing.¹⁰⁵ The most striking case, however, was that of Rudolph Havenstein, president of the Reichsbank, who on the 25th of August 1923 announced a real whatever-it-takes: he made it clear that in order to meet the exasperated demand for money, "the most extreme demands were being made on our staff".¹⁰⁶ At that time, Schacht estimated that as many as 1785 machines were busy producing banknotes for the Reichs-

¹⁰³ For an overview, see Thomas M. Humphrey, *Historical Origins of the Cost-Push Fallacy*, «FRB Richmond Economic Quarterly», vol. 84, n. 3, summer 1998, pp. 69-71.

¹⁰⁴ Karl Helfferich, *Das Geld*, Leipzig, C.L. Hirschfeld, 1923 (1910). See also Hans Sennholz, *The Age of Inflation*, Belmont, Massachusetts, Western Islands, 1979, pp. 79-88.

¹⁰⁵ See John Henry Williams, "German Foreign Trade and the Reparations Payments," *Quarterly Journal of Economics*, vol. 36 (May 1922), p. 503.

¹⁰⁶ F.K. Ringer (edited by), *The German Inflation of 1923*, Oxford University Press, New York 1969, p. 96.

bank. However, prices were rising at such a high rate that the supply of banknotes was still insufficient to finance all transactions.¹⁰⁷

While most of the economics profession demonstrated their total intellectual disarmament vis a vis the problems of their day, the Weimar economic and financial debacle did not take the Austrian school economists, and in particular Ludwig von Mises, by surprise. "The great German inflation", one reads in *Omnipotent Government*, "was the result of the monetary doctrines of the socialists of the chair [...] the present author had predicted it in 1912".¹⁰⁸ Since their founding meeting in Eisenach, in October 1872, the socialists of the chair, guided by Gustav Schmoller, Lujo Brentano and Ernst Engel, had set as their central objective the treatment of the social question and the critique of the liberal maxim *laissez-faire and laissez passer*, from the high grounds of a "moral pathos" that would end up putting a cross on all theoretical and scientific endeavors.¹⁰⁹ As Mises sentenced: "Against logic they set moralism, against theory emotional prejudice, against argument the reference to the will of the state".¹¹⁰

If this general attitude on the part of the German historicists had a deleterious impact on economics in general, sterilizing almost all further theoretical inquiries, it took a particularly insidious turn in the field of monetary economics. Here the main focus became that of ignoring, downplaying and at times even mocking the findings and contributions of the "classical economists" and the contributions of the English currency school: from the quantitative theory of money to Say's law of markets, from the "purchasing power parity" doctrine of foreign exchanges to the Price Specie Flow Mechanism. As Mises put it: "The *empirisch-realistische Volkswirt*, who distrusted every" theory "- especially theories imported from abroad-was firmly convinced that both the Quantity Theory and the Theories of

¹⁰⁷ R.L. Hetzel, "German Monetary History in the First Half of the Twentieth Century", *FRB Richmond Economic Quarterly*, vol. 88, n. 1, Winter 2002, pp. 6-7.

¹⁰⁸ L. von Mises, *Omnipotent Government: The Rise of Total State and Total War*, Arlington House, New Rochelle (NY) 1969 (1944), p. 228

¹⁰⁹ Jorg Guido Hülsmann, *Mises: The Last Knight of Liberalism*, Ludwig von Mises Institute, Auburn, Alabama, 2005, pp. 117-118.

¹¹⁰ Ludwig von Mises, "The Myth of the Failure of Capitalism", *Mises Daily Articles*, August 26, 2018 (1932).

the Currency School were nothing but an inexplicable blunder committed by Ricardo and his followers [...] In passing under review the German monetary and banking policy from the outbreak of the war to the catastrophe of 1923, the most startling thing is the absolute ignorance even of the most elementary principles of monetary science on the part of literally all German statesmen, politicians, bankers, journalists and would-be economists".¹¹¹

In February 1923, in an essay written for the *Verein für Sozialpolitik*, Mises had dealt at length with the subject of monetary stabilization, showing, sometimes in prophetic words, the unsustainability of inflationary policies: "Only an irredeemable statist can entertain the hope that a currency, which constantly decreases in value, can be kept in use as money in the long run [...] The phenomena described as frenzied purchases have given us a certain foretaste of how the process will begin. It is possible that we will see it complete".¹¹² Convinced that he could still save Germany from catastrophe, he dismantled the neo-mercantilist fallacies of the *Kathedersozialisten* one by one. In the attempt to save Germany, he would end up saving economics, the science and conscience of the politically impossible.

On the question of reparations, he pointed out that if these had been financed with taxes or through the sale of bonds, the continuous excess demand in relation to foreign currency supply would not have occurred.¹¹³ The deficit in the balance of payments, he also pointed out, could never be a triggering factor, since "the extent of foreign trade depends entirely on prices".¹¹⁴ A similar reasoning applied to the exchange rate, considering its tendency to equal the ratio of the purchasing powers of the respective currencies, themselves determined by their respective money markets, i.e. the relation between the demand to hold money and the stock of the

¹¹¹ Ludwig von Mises, *The Great German Inflation*, «Economica», n. 36, May 1932, pp. 227-228.

¹¹² Ludwig von Mises, *Stabilization of the Monetary Unit- From the Viewpoint of Theory*, in ID., *The Causes of the Economic Crisis*, Ludwig von Mises Institute, Auburn, ALA 2006 (1923), pp. 8-9.

¹¹³ Ludwig von Mises, *Stabilization of the Monetary Unit- From the Viewpoint of Theory*, pp. 35-37.

¹¹⁴ Ludwig von Mises, *Stabilization of the Monetary Unit- From the Viewpoint of Theory*, p. 28.

monetary asset. Speculators, therefore, rather than being the cause of the mark's devaluation, were merely its anticipators. Far from robbing resources and driving up prices, their actions discounted and spread relevant future information through market signals and enabled Germany to save some of its accumulated savings and productive capital. This point would be emphasized by one Mises's most prolific students, Hans Sennholz, in the late 1970's: "When speculators observe or anticipate more inflation and monetary depreciation, they naturally endeavor to sell the depreciating currency and buy goods or foreign exchange that do not depreciate. They are preserving their working capital. Thus, they are promoting not only their own interests but also those of society, which benefits from the preservation of productive capital. The government that is actively destroying the currency is injuring the national interest—successful speculators are safeguarding it".¹¹⁵ Mises, moreover, raised another important point regarding speculators and dealers in currency markets: through the influx of gold and foreign exchange to which their actions had given rise, they put Germany in a position to implement a credible monetary reform without having to go through the painful inefficiencies and uncertainties of barter.¹¹⁶

8. The Ideological roots of Inflationism and the case for counterrevolution

These lessons of Mises offered to us in the Weimar context, while exposed a century ago, remain highly relevant in our times. Today, people are convinced that the cause of inflation is bottlenecks, Putin raising the price of gas, international speculators, when in fact none of these factors can produce a sustained, rising and generalized increase in the price of goods and services.¹¹⁷ Inflation is

¹¹⁵ Hans Sennholz, "Hyperinflation in Germany, 1914-1923", *Mises Daily Articles*, December 26, 2020 [1979].

¹¹⁶ L. von Mises, *Stabilization of the Monetary Unit- From the Viewpoint of Theory* pp. 11-14.

¹¹⁷ For a more extensive refutation, see Jesús Huerta de Soto and Bernardo Ferrero, *Pandemia e dirigismo*, pp. 73-76.

a policy, an instrument of revolution and a form- the ultimate one- of destructionism. Mises did not stop, however, at the observation of the monetary origins and repercussions of inflation. The Austrian economist, in fact, was well aware that history does not unravel in jolts or leaps- *historia non facit saltus*- and that beneath the material and catallactic cause and effect relationships that define economic events, even the apparently conjunctural ones, one finds a more fundamental, ideological causality that originates them and that makes them intelligible and meaningful to the actors involves as well as, through *verstehen*, to the social scientist. Wanting to read into the fundamental causes of what was occurring in Weimar, then, he pointed that all inflationary policies are ultimately but an element, an instrument of statism and socialism: "One ignores, perhaps consciously, that the roots of monetary depreciation are ideological in nature [...] The evil is philosophical in nature [...] Inflationism [...] is not an isolated phenomenon. It is just one piece in the overall picture of the politico-economic and socio-philosophical ideas of our time [...] inflationism is an integral part of imperialism, militarism, protectionism, statism and socialism."¹¹⁸ In this way Mises laid the foundations for a new research program in which the a priori, causal-genetic and value-free economics and action for liberalism. Aware of having to eschew both the vices of historicism and those of a myopic view of a certain materialistic liberalism, he called for what we might call a true philosophical-political counter-revolution that should inform all classical-liberals and libertarians of the 21st century: "The belief that we can return to a sound monetary system without making substantial changes to economic policy is a serious mistake. It is first necessary to renounce all inflationary falsehoods. This renunciation, however, cannot last unless it is firmly based on a full and complete divorce of ideology from all imperialist, militarist, protectionist, statist and socialist ideas".¹¹⁹

An ideology divorced from socialism, we might add, would no longer be ideological in its strict, modern meaning. For an Ideology

¹¹⁸ Ludwig von Mises, *Stabilization of the Monetary Unit- From the Viewpoint of Theory*, cit., p. 43.

¹¹⁹ *Ibid*, p. 44.

must not be confused with a neutral set of ideas or structure of thought. What defines it is a particular rationalistic stance, a specific anti-realist attitude which pretends, through an act of will dressed by reason, to transform and remold the natural order, thus freeing the use of violent means: "Ideology is a deformed view of reality, it is a pre-constituted conception of the world that forces on to bend reality according to a scheme that must never be questioned because the artifice cannot withstand the objections that come from reality [...] Ideology is the opposite of reality and sees in it its own enemy to be changed or eliminated".¹²⁰

To re-emerge from its ashes would be the ideal. The ideal of freedom grounded in truth. It is then imperative if one desires such an ideal that, given our times of trouble, disorder and uncertainty, sound money is taken back and that the social as well as moral order that our overlords have inflated away from the common man, the always "forgotten man" as William Graham Sumner cogently pointed out,¹²¹ be reconstructed and restored through a political and philosophical counterrevolution. If it is true that a libertarian turn in our institutions requires a reorganization of our fiduciary monetary order, since a market economy requires a money that is sound and that cannot be inflated *ad libitum* by the powers of the day, it is equally true that a genuine battle against the manipulation of money and credit must necessarily rest on the support of a philosophy and an anthropology- an understanding of things and a conception of man and nature- capable of restoring objective moral value to individual freedom, open competition and private property rights. In this sense it must stand as a counterrevolution to the contemporary dissemination of socialistic and nihilistic tendencies which are concurring toward the formation, in the words of Jorg Guido Hülsmann, of "fiat communities, fiat organizations and fiat societies".¹²²

¹²⁰ Beniamino Di Martino, *Stretto nel Fascio. Nazi-fascismo contro l'individuo*, Monolateral, p. 100.

¹²¹ William Graham Sumner, *What Social Classes Owe to Each Other*, The Caxton Printers, Idaho, 1974 [1883], pp. 116-132.

¹²² Jorg Guido Hülsmann, "On the Renaissance of Socialism", *Procesos de Mercado: Revista Europea de Economía Política*, Vol. XVIII, n. 2, Otoño 2021, p. 15.

The task is surely not an easy one, of course. Yet it's evident difficulty does not, in any way, detract from this goal its urgency and necessity. In order to encourage the optimists and give greater hope to the pessimists, it might be helpful to remember, internalize and generalize the words that more than two centuries ago the father of the counterrevolution, count Joseph de Maistre, wrote to viscount Louis de Bonald- a friend, an ally whom he never met: "It is said: 'There is no longer any way to re-establish the old order of things; even the elements no longer exist. But the elements of all constitutions are men: would there not be absolutely more men in France?'"¹²³

Conflict of interest

The author declares that it has no conflict of interests.

Bibliographical references

- Aycard, M. (1867). *Histoire du Crédit Mobilier: 1852-1867*. A. Bruxelles-Leipzig-Livourne: Lacroix, Verboeckhoven & Co Editeurs
- Anderson, B. (1917). *The Value of Money*. New York: Macmillan.
- (1949). *Economics and the Public Welfare: Financial and Economic History of the United States, 1914-1946*. Princeton: D. Van Nostrand Company, Inc.
- Antoni, C. (1955). "Una polemica illustre". *Il Mondo*, February 15, 1955.
- Bagehot, W. (2017). *Lombard Street: A Description of the Money Market*. London: White Crane Publishing. Originally published in 1873.
- Bartlett, R. (2003). "Serfdom and State Power in Imperial Russia". *European History Quarterly*, 33 (1), 29-64.

¹²³ Joseph de Maistre, "Letter to Viscount de Bonald, the 29-05-1819", in Joseph de Maistre, *Correspondence*, vol. V, 1817-1821, in Joseph de Maistre, *Ouvres Complètes*, Vitte et Perrussel, vol. XIV, Lyon 1886, pp. 168-169.

- Besançon, A. (1988). *The Russian Case*. In J. Baechler, J. Hall, & M. Mann (Eds.), *Europe and the Rise of Capitalism* (pp. 159-168). Oxford: Basil Blackwell.
- Blackbourn, D. (2002). *History of Germany 1780–1918*. Oxford: Blackwell.
- Block, W. (2018). *Defending the Undefendable*. Auburn: The Ludwig von Mises Institute. Originally published in 1976.
- Bopp, K. (1953). *Reichsbank Operations, 1876-1914*. Philadelphia: Federal Reserve Bank of Philadelphia.
- Bordo, M. (1999). *The Gold Standard and Related Regimes: Collected Essays*. Cambridge: Cambridge University Press.
- Bordo, M., & Kydland, F. (1992). "The Gold Standard as a Rule". *Federal Reserve Bank of Cleveland*. Working Paper, No. 9205.
- Bordo, M., & MacDonald, R. (1997). "Violations of the 'Rules of the Game' and the credibility of the Classical Gold Standard, 1880-1914". *NBER*, 6115, pp. 2-7.
- Bresciani-Turroni, C. (1937). *The Economics of Inflation. A Study of Currency Depreciation in Post-War Germany*. London: G. Allen & Unwin Ltd. Originally published in 1931.
- Cagan, P. (1956). The Monetary Dynamics of Hyperinflation. In M. Friedman (Ed.), *Studies in the Quantity Theory of Money* (pp. 25-117). Chicago: University of Chicago Press.
- Cannan, E. (1912). *The Economic Outlook*. London: T. Fisher Unwin.
- (1921). "The Application of the Theoretical Apparatus of Supply and Demand to Units of Currency". *The Economic Journal*, 31 (124), 453-461.
- (1927). *An Economist's Protest*. London: P.S. King & Son.
- (1928). *An Economist's Protest*. New York: Adelphi.
- (1932). *Money: its connexion with rising and falling prices*. Westminster: P.S. King & Son, LTD.
- Cantillon, R. (2015). *Essay on the Nature of Trade in General*. Indianapolis: Liberty Fund. Originally published in 1755.
- Cassel, G. (1922). *Money and Foreign Exchanges after 1914*. New York: Macmillan.
- (1928). "The Rate of Interest, the Bank Rate, and the Stabilization of Prices". *The Quarterly Journal of Economics*, 42 (4), 511-529.
- Croce, B., & Einaudi, L. (1957). *Liberismo e liberalismo*. Milano-Napoli: Riccardo Ricciardi Editore.

- Cubeddu, R. (2021). *La cultura liberale in Italia*. Soveria Mannelli: Rubbettino.
- De Mattei, R. (2024). "Fascismo e antifascismo secondo l'analisi di Augusto Del Noce". *Corrispondenza Romana*, 1 Maggio 2024.
- Del Noce, A. (1967). "Alle origini del concetto di Ideologia", in Augusto Del Noce, *Ideologia e Filosofia*, Brescia: Marcelliana, 75-86.
- (1978). *Il suicidio della Rivoluzione*. Milano: Rusconi.
- (1993). *Rivoluzione, Risorgimento, Tradizione*, Milano: Giuffrè.
- (1995). *Fascismo e antifascismo. Errori della cultura*. Milano: Leonardo.
- (2015). *The Crisis of Modernity*. Kingston: McGill Queens University.
- Detzer, D., Dodig, N., Evans, T., Hein, E., Herr, H., & Prante, F. (2017). *The German Financial System and the Financial and Economic Crisis*. Essen: Springer International Publishing.
- Di Martino, B. (2022). *Stretto nel Fascio. Nazi-fascismo contro l'individuo*. Dallas: Monolateral.
- Ebeling, R. (2008). "The Lasting Legacies of World War I: Big Government, Paper Money and Inflation". *Economic Education Bulletin-American Institute of Economic Research*, 48 (11), 1-8.
- (2023). The Great German and Austrian Inflations, 100 Years Ago. Available online: <https://www.fff.org/explore-freedom/article/the-great-german-and-austrian-inflations-100-years-ago/> (accessed June 12, 2024).
- Einaudi, L. (1925). "Gli affari buoni fanno la moneta buona?". *Corriere della Sera*. Luglio 22 1925.
- (1965). *Cronache economiche e politiche di un trentennio (1893-1925)*. Vol. VIII. Torino: Einaudi. Originally published in 1925.
- (1986). *La guerra e l'unità europea*. Bologna: Il Mulino. Originally published in 1944.
- Ellis, H. (1934). *German Monetary Theory, 1905-1933*. Cambridge: Harvard University Press.
- Eschweiler, B., & Bordo, M. (1993). *Rules, Discretion, and Central Bank Independence: The German Experience 1880-1989*. In P. Siklos (Ed.) (pp. 279-321). New York: Springer.
- Feldenkirchen, W. (2021). *Banking and economic growth: banks and industry in the nineteenth century and their changing relationship*

- during industrialization. In R. Lee (Ed.), *German industry and German industrialization: Essays in German Economic and Business History in the Nineteenth and Twentieth Centuries* (pp. 116-147). London: Routledge.
- Feldman, G. (1977). *The Great Disorder: Politics, Economics and Society in the German Inflation 1914-1924*. Oxford: Oxford University Press.
- (1993). *The Great Disorder: Politics, Economics and Society in the German Inflation 1914-1924*. Oxford: Oxford University Press.
- Ferguson, N. (1995). *Paper and Iron: Hamburg Business and German Politics in the Era of Inflation, 1897-1927*. Cambridge and New York: Cambridge University Press.
- Ferguson, N., & Granville, B. (2000). "Weimar on the Volga: Causes and Consequences of Inflation in 1990s Russia Compared with 1920's Germany". *The Journal of Economic History*, 60 (4), 1061-1087.
- Ferrara, F. (1972). *Opere complete*. Roma: Bancaria Editrice.
- Ferrero, B. (2022). "Antonio Martino e la rivoluzione liberale in Italia". *StoriaLibera. Rivista di scienze storiche e sociali*, 8 (16), 166-172.
- Fisher, I. (1911). *The Purchasing Power of Money: Its Determination and Relation to Credit, Interest, and Crisis*. New York: Macmillan.
- Flandreau, M. (2003). *The Glitter of Gold: France, Bimetallism, and the Emergence of the International Gold Standard, 1848-1873*. Oxford: Oxford University Press.
- Forte, F. (2009). *Leconomia liberale di Luigi Einaudi*. Firenze: Olschki.
- Friedman, M. (1994). *Money Mischief: Episodes in Monetary History*. Boston: Mariner Books.
- Fuller, E., & Whitten, R. (2017). "Keynes and the First World War". *Libertarian Papers*, 9 (1), 1-37.
- Garrison, R. (2003). "The Trouble with Deficit Finance". *The Free Market*, 21 (4), 3-4.
- Gerschenkron, A. (1969). "History of Economic Doctrines and Economic History". *The American Economic Review*, 59 (2), 1-17.
- Hawtrey, R. (1932). *The Art of Central Banking*. London: Longmans.
- Hayek, F. (1939). *Profits, Interest and Investment and Other Essays on the Theory of Industrial Fluctuations*. London: Routledge.
- (1942). "The Ricardo Effect". *Economica*, 34 (2), 127-152.

- (1979). “Three Elucidations of the Ricardo Effect”. *Journal of Political Economy*, 77 (2), 275-277.
- (2012). “The Transmission of the Ideals of Economic Freedom”. *Econ Journal Watch*, 9 (2), 163-169. Originally published in 1951.
- Hazlitt, H. (1968). *The Velocity of Circulation*. In N. Beales & L. Drewwry (Eds.), *Money, the Market, and the State* (pp. 35-44). Athens: University of George Press.
- (1976). *Lessons of the German Inflation*. Available online: <https://fee.org/articles/lessons-of-the-german-inflation/> (accessed June 8, 2024).
- (1979). “Gold versus Fractional Reserves”. *The Freeman*, 29 (5), 259-266.
- Helfferrich, C. (1923). *Das Geld*. Leipzig: C.L. Hirschfeld.
- Hetzl, R. (2002). “German Monetary History in the First Half of the Twentieth Century”. *FRB Richmond Economic Quarterly*, 88 (1), 6-7.
- Hicks, J. (1951). *A Suggestion for Simplifying the Theory of Money*. New York: The Blakinston Company. Originally published in 1935.
- Holtfrerich, C. (1986). *The German Inflation 1914-1923: Causes and Effects in International Perspective*. New York: Walter de Gruyter.
- Hoppe, H. (2006). *The Economics and Ethics of Private Property*. Auburn: The Ludwig von Mises Institute.
- (2009). “The Yield from Money Held” Reconsidered. Available online: <https://mises.org/mises-daily/yield-money-held-reconsidered> (accessed June 10, 2024).
- Huerta de Soto, J. (1989). “Conjectural history and beyond”. *Humane Studies Review*, 6 (2), 4-5.
- (1999). Principios del liberalismo. En Anónimo (Ed.), *La Gran Enciclopedia de España* (pp. 5759-5761). Barcelona: Enciclopedia de España, S.A.
- (2012). *Money, Bank Credit and Economic Cycles*. Auburn: Ludwig von Mises Institute. Originally published in 1998.
- Huerta de Soto, J., & Ferrero, B. (2022). *Pandemia e dirigismo*. Torino: IBL Libri.
- Hülsmann, J. (2005). *Mises: The Last Knight of Liberalism*. Auburn: The Ludwig von Mises Institute.
- (2021). “On the Renaissance of Socialism”. *Procesos de Mercado: Revista Europea de Economía Política*, 18 (2), 13-37.

- Hume, D. (1985). *Essays: Moral, Political and Literary*. Indianapolis: Liberty Classics. Originally published in 1777.
- Humphrey, T. (1998). "Historical Origins of the Cost-Push Fallacy". *FRB Richmond Economic Quarterly*, 84 (3), 69-71.
- Hutt, W. (1956). The Yield from Money Held. In M. Sennholz (Ed.), *On Freedom and Free Enterprise* (pp. 196-216). Los Angeles: Van Nostrand.
- Infantino, L. (2006). Liberalismo. In Bompiani (Ed.), *Enciclopedia filosofica*, vol. 7. Milano: Bompiani.
- (2008). *Individualismo, mercato e storia delle idee*. Soveria Mannelli: Rubbettino.
- Jevons, W. (1882). *Money and the Mechanism of Exchange*. New York: D. Appleton & Co.
- Keynes, J. (1964). *The General Theory of Employment, Interest and Money*. New York: Harcourt, Brace, and World. Originally published in 1936.
- (1971). *The Economic Consequences of the Peace*, now in *The Collected Writings of John Maynard Keynes*. Vol. 2. London: Macmillan.
- Locke, J. (1691). *Some Considerations of the Consequences of the Lowering of Interest*. London.
- Machlup, M. (1934). "The Consumption of Capital in Austria". *The Review of Economic Statistics*, 17 (1), 13-19.
- Maistre, J. (1886). *Letter to Viscount de Bonald, the 29-05-1819*. In J. de Maistre (Ed.), *Ouvres Complètes* (pp. 168-169). Lyon : Vitte et Perrussel.
- Mann, Thomas. (1989). *Death in Venice and Seven Other Stories*. Vintage: New York.
- McMaken, R. (2021). How the Classical Gold Standard Fueled the Rise of the State. Available online: <https://mises.org/mises-wire/how-classical-gold-standard-fueled-rise-state> (accessed June 12, 2024).
- Menger, C. (1892). "On the Origin of Money". *Economic Journal*, 2 (6), 239-255.
- Mill, J. (1965). *The Collected Works of John Stuart Mill, Volume III - The Principles of Political Economy with Some of Their Applications to Social Philosophy (Books III-V and Appendices)*. J. Robson (Ed). London: Routledge and Kegan Paul, 1965).

- Mises, L. (1932). "The Great German Inflation". *Economica*, 36, 227-234.
- (1944). *Bureaucracy*. New Haven: Yale University Press.
- (1969). *Omnipotent government: The Rise of Total State and Total War*. New Rochelle, NY: Arlington House. Originally published in 1944.
- (1998a). *Human Action. A Treatise on Economics*. Auburn: The Ludwig von Mises Institute. Originally published in 1949.
- (1998b). *Interventionism: An Economic Analysis*. New York City: The Foundation for Economic Education. Originally published in 1940.
- (2006a). *Marxism Unmasked: From Delusion to Destruction*. New York: Foundation for Economic Education. Originally published in 1952.
- (2006b). *Nation, State and Economy: Contributions to the Politics and History of Our Time*. Auburn: The Ludwig von Mises Institute. Originally published in 1919.
- (2006c). *Stabilization of the Monetary Unit- From the Viewpoint of Theory*. Auburn: The Ludwig von Mises Institute. Originally published in 1923.
- (2007). *Economic Policy. Thoughts for Today and Tomorrow*. Auburn: The Ludwig von Mises Institute. Originally published in 1959.
- (2009). *The Theory of Money and Credit*. Auburn: The Ludwig von Mises Institute. Originally published in 1912.
- (2015). *Socialism: An Economic and Sociological Analysis*. Auburn: The Ludwig von Mises Institute. Originally published in 1922.
- (2023). The Myth of the Failure of Capitalism. Available online: <https://mises.org/mises-daily/myth-failure-capitalism> (accessed June 9, 2024). Article originally published in 1932.
- Moss, L., & Vaughn, K. (1986). "Hayek's Ricardo Effect: A Second Look". *History of Political Economy*, 18 (4), 545-565.
- Murphy, R. (2021). *Understanding Money Mechanics*. Auburn: Ludwig von Mises Institute.
- National Monetary Commission. (1910). *The Reichsbank: 1876-1900*. Washington: Government Printing Office.
- Nolte, E. (1994). *The European Civil War 1917-1945: National Socialism and Bolshevism*. Ciudad de México: Fondo de Cultura Económica.
- Nozick, R. (1974). *Anarchy, State and Utopia*. New York: Basic Books.

- O'Driscoll, G. (1986). "Money: Menger's Evolutionary Theory". *History of Political Economy*, 18, 601-616.
- Olivera, J. (1967). "Money, Prices and Fiscal Lags: A Note on the Dynamics of Inflation". *Banca Nazionale del Lavoro Quarterly Review*, 82, 258-268.
- Palyi, M. (1972). *The Twilight of Gold, 1914-1936*. Chicago: Henry Regnery.
- Pigou, A. (1941). *The Political Economy of War*. New York: Macmillan.
- (1949). *The Veil of Money*. London: Macmillan.
- Pipes, R. (1974). *Russia under the Old Regime*. New York: Charles Scribner's Sons.
- (1992). *Russia's Chance*. Available online: <https://www.commentary.org/articles/richard-pipes-2/russias-chance/> (accessed June 10, 2024).
- Raico, R. (1994). The Theory of Economic Development and the European Miracle. In P. Boettke (Ed.), *The Collapse of Development Planning* (pp. 37-58). New York: New York University Press.
- Ricardo, D. (1811). *The High Price of Bullion: a proof of the depreciation of banknotes*. Edinburgh: William Blackwood Edinburgh.
- (1982). On the Principles of Political Economy and Taxation. In P. Sraffa & M.H. Dobbs (Eds.), *The Works and Correspondence of David Ricardo, Vol.1* (pp. 1-443). Cambridge: Cambridge University. Essay originally published in 1817].
- Ringer, F. (1969). *The German Inflation of 1923*. Oxford: Oxford University Press.
- Ritschl, A. (2005). The Pity of Peace: Germany's Economy at War 1914-1918 and beyond. In S. Broadberry & M. Harrison (Eds.), *The Economics of World War I* (pp. 41-76). Cambridge: Cambridge University Press.
- Robbins, L. (1950). *The Economic Problem in Peace and War: Some Reflections on Objectives and Mechanisms*. London: Macmillan.
- Robertson, D. (1964). *Money*. Chicago: The University of Chicago Press. Originally published in 1922.
- Roepke, W. (1954). "Free Economy and Social Order". *The Freeman*, 4 (8), 271-273.
- Rosenstein-Rodan, P. (1936). "The Coordination of the General Theories of Money and Price". *Economica*, 3 (11), 257-280.

- Rothbard, M. (1956). *Toward a Reconstruction of Utility and Welfare Economics*. In M. Sennholz (Ed.), *On Freedom and Free Enterprise* (pp. 224-253). Los Angeles: Van Nostrand.
- (2000). *America's Great Depression*. Auburn: The Ludwig von Mises Institute. Originally published in 1963.
- (2008). *The Mystery of Banking*. Auburn: The Ludwig von Mises Institute. Originally published in 1983.
- (2009). *Man, Economy and State: A Treatise on Economic Principles*. Auburn: The Ludwig von Mises Institute. Originally published in 1967.
- (2010). *What has Government done to our money?* Auburn: The Ludwig von Mises Institute. Originally published in 1963.
- Saint Bernard of Clairvaux. (2011). *On Loving God*. Rookhope: Aziloth Books.
- Salerno, J. (1983). "Gold Standards: True and False", *Cato Journal*, 3 (1), 249-258.
- (1999). *War and the Money Machine: Concealing the Costs of War Beneath the Veil of Inflation*. In J. Denson (Ed.), *The Costs of War: America's Pyrrhic Victories* (pp. 433-454). New Brunswick: Transaction Publishers.
- (2010). *Money: Sound and Unsound*. Auburn: The Ludwig von Mises Institute.
- (2013). "Hyperinflation and the Destruction of Human Personality". *Studia Humana*, 2 (1), 15-27.
- Sargent, T. (1982). *The End of Four Big Inflations*. In R.E. Hall (Ed.), *Inflation: Causes and Effects* (pp. 41-97). Chicago: University of Chicago Press.
- Schumpeter, J. (1991). *The Crisis of the Tax State*. In R. Swedberg (Ed.), *The Economics and Sociology of Capitalism* (pp. 99-140). Princeton: Princeton University Press.
- Sennholz, H. (1973a). *No Shortage of Gold*. Available online: <https://fee.org/articles/no-shortage-of-gold/> (accessed June 15, 2024).
- (1973b). *Inflation, or Gold Standard?* Lansing: Bramble MiniBooks.
- (1979). *The Age of Inflation*. Belmont: Western Islands.
- (1985). *Money and Freedom*. Grove City: Libertarian Press.

- (2020). Hyperinflation in Germany, 1914-1923. Available online: <https://mises.org/mises-daily/hyperinflation-germany-1914-1923>. Article originally published in 1979.
- Smith, A. (2003). *The Wealth of Nations*. New York: Random House Group. Originally published in 1776.
- Smith, V. (1936). *The Rationale of Central Banking*. London: P.S. King & Son.
- Steinmann-Bucher, A. (1916). *Deutschlands Volksvermögen im Krieg*. Stuttgart: Ferdinand Enke.
- Stolper, G. (2018). *German Economy, 1870-1940*. New York: Routledge.
- Sumner, W. (1974). *What Social Classes Owe to Each Other*. Idaho: The Caxton Printers. Originally published in 1883.
- Tanzi, V. (1977). "Inflation, Real Tax Revenue, and the Case for Inflationary Finance: Theory with an Application to Argentina". *IMF Papers*, 25 (3), 417-451.
- Tilly, R. (1997 [1988]). German industrialization and Gerschenkronian backwardness. In W. Fischer (Ed.), *The economic development of Germany since 1870* (pp. 266-294). Cheltenham: Edward Elgar.
- Tocqueville, A. (1856). *The Old Regime and The Revolution*. New York: Harper & Brother's Publishers.
- Ullmann, H. (2017). Organization of War Economies (Germany). *International Encyclopedia of the First World War*.
- Valuev, p. (1919). *Dnevnik, 1877-1884 (Diary for 1877-1884)*. Petrograd.
- Weber, M. (1978). *Economy and Society: An Outline of Interpretative Sociology*. Berkley-Los Angeles-London: University of California Press. Originally published in 1921.
- White, L. (1999). *The Theory of Monetary Institutions*. Massachusetts: Blackwell publishers Inc.
- Williams, J. (1922). "German Foreign Trade and the Reparations Payments". *Quarterly Journal of Economics*, 36, 482-503.
- Witt, P. (1987). Tax Policies, Tax Assessment and Inflation: Towards a Sociology of Public Finances in the German Inflation, 1914-1923. In P. Witt (Ed.), *Wealth and Taxation in Central Europe. The History and Sociology of Public Finance* (pp. 137-160). Hamburg-New York: Leamington Spa.

- Woods, T. (2005). *How the Catholic Church Built Western Civilization*. Washington, D.C.: Regnery Publishing, Inc.
- Yeager, L. (1981). *Experiences with Stopping Inflation*. Washington: American Enterprise Institute.
- Zweig, S. (1943). *The World of Yesterday*. Lincoln: The University of Nebraska Press.