

Bresciani Turrone and the Devaluation of the German Mark

1.

When in 1902, after taking his university degree, Costantino Bresciani Turrone attended Gustav von Schmoller's lectures and seminars in Berlin, the eminent German economist was at the apogee of his fame, and his "living force", to use Schumpeter's expression,¹ was at its maximum. Brilliant young men from many countries, on both shores of the Atlantic, came to participate in his seminars, and Schmoller dedicated to them the material that would later be collected in his *Grundrisse*, which soon became the foundation stone of the teaching of political economy in Germany.

Neither condemning nor exalting any single theory or body of doctrine, Schmoller concluded in this work that no theoretical system could be right for all times and places. Theory had to be checked by the facts, which meant that statistical materials and empirical reality assumed crucial importance in the verification process. Only when both statistics and empirical reality confirmed a hypothesis could it be accepted. Facts and reality, even those of the present, were "history", as indeed were the deductions about the future derived from those facts. As Frederic Lane observed, for Schmoller past, present, and future were all "parts of the unique, irreversible sequence of what has actually happened and what will happen".²

It comes as no surprise to find the imprint of the quantitative emphasis that is so marked in Schmoller in Bresciani Turrone as well. Antonio Gambino rightly points out that "Bresciani Turrone's stay in Germany was useful; through the lectures and the study of Germany's already abundant statistics, as well as in discussion in Schmoller's academic workshops, he began to be persuaded of the importance of empirical and inductive research to accompany theoretical study". As Schmoller had taught him, in the years following his German experience Bresciani Turrone turned to studying "the connections between facts" in order to "proceed back to theory, to improve it, perfect it, make it correspond better to reality or else, if a theory failed to fit the facts, discard it".³

The teachings and the example of Gustav von Schmoller not only inspired the work of Bresciani Turrone but also helped make him part of a major international school of economic thought stretching well beyond the confines of

¹ F. C. Lane, "Some Heirs of Gustav von Schmoller", in *Architects and Craftsmen in History. Festschrift für Abbott Payson Usher* (Tübingen: J.C.B. Mohr (Paul Siebeck), 1956), p. 9.

² *Ibid.*, pp. 11-12.

³ A. Gambino, "Costantino Bresciani Turrone", in *Dizionario Biografico degli Italiani*.

Germany and Italy to embrace the bulk of the advanced world. Here, alongside Schumpeter we find not only Spiethoff, Sombart, Eucken, Simiand, and others, but also Edwin F. Gay and Wesley Mitchell, future founders of the U. S. National Bureau of Economic Research.

2.

Bresciani Turrone's interest in statistics – that is, the quantitative signs of history – runs through the vast majority of his writings, but it is especially evident in his masterful *Teoria dell'Inflazione*, on the vicissitudes of the German mark from 1914 to 1923.

The events he witnessed in Berlin were indeed of extraordinary interest. This emerges clearly enough in his 1931 remark that “Thanks to the depreciation of the mark, a vast range of experience, partly novel, opened up before the economist”. But it is visible, above all, in his recognition that the same phenomenon – the devaluation of the currency – varies in form and gives rise to diverse effects depending on whether the economic and social structure of the country involved is simple or complex. It is worth mentioning, in passing, that this reference to social and not merely economic reality ties in directly with Schmoller, whose *Grundrisse* had stressed that social organizations and the *Zeitgeist* – i. e., cultural, moral and spiritual factors – were essential elements in historical and hence economic, evolution.

Bresciani Turrone classed as taking place in simple economic structures the great inflations in America at the time of the Revolutionary War, in Argentina at the end of the nineteenth century, in Austria during the Austro-Prussian War in 1866 and after 1914, and in Russia during the Crimean War and after 1914.

The inflation that struck Germany in the decade following 1914 was quite another matter. Here, an enormous depreciation had afflicted “the currency of a state with a population of 62 million, highly developed industry, a complex, advanced economic and social structure, intensive domestic commerce and close ties with the world market, in which that state was one of the principal purchasers of foodstuffs and raw materials and a still formidable competitor in exports of manufactures”. Hence, in view of Germany's complex economic and social structure, “the effects of the depreciation of the currency would necessarily be much more variegated and complex and the disruption of domestic economic and social arrangements and international trade much more profound than was the case in earlier inflations involving more simply structured economies”.⁵ Actually, if facts and events were necessarily the foundation of any sound economic history and analysis, these facts, as Schmoller had repeatedly

⁴ F. C. Lane, *op. cit.*, p. 12.

⁵ C. Bresciani Turrone, *Teoria dell'inflazione. Studio del deprezzamento monetario nella Germania del dopoguerra 1914-1923*, F. C. Rosati (ed.), (Milan: Giuffrè, 1978), pp. xxi-xxii.

stressed, are not always and exclusively captured in statistics. Equally significant was the analysis of institutions and of economic and financial mechanisms.

3.

Before going into the method of study he used and the theoretical conclusions he drew from German monetary history from 1914 to 1923, it is worth noting that the broad outlines of the history of the mark followed by Bresciani Turrone in his reconstruction are perfectly unexceptionable. A gradual loss of purchasing power during World War I was followed by a sharp devaluation in 1919; next came a period of relative stability until the second half of 1921 – a pattern not dissimilar, on the whole, to that found in many other European countries.

Then the situation degenerated. Starting in the second half of 1921 European monetary history divides into two distinct parts – Western and Eastern. The mark fell into the latter group, which also comprised the Austrian and Hungarian crowns, the Polish mark, and the Russian ruble. All these currencies depreciated swiftly, but it was the German mark which plummeted fastest, especially after the autumn of 1921, reaching a paroxysm of devaluation in November 1923.

4.

Obviously in choosing to study the history of the German inflation Bresciani Turrone was significantly influenced by his lengthy stays in Germany between 1920 and 1929, first with the Berlin staff of the War Reparations Commission, then as head of the German export control board instituted in 1921 by the Guarantee Committee, and finally as economic adviser to the agent-general for reparations. But can it be seriously maintained that the kind of analysis he has left us is only the fruit of fortuitous circumstance? Is it not rather the product of the kind of study and thought that only a man like Bresciani Turrone could have achieved, and did achieve? For that matter, innumerable economists, German and foreign alike, lived through those years in Germany, but no other has left a record of the dramatic events that they witnessed as thorough and as profound as that of Bresciani Turrone.

In fact, if Bresciani Turrone was stimulated to a unique root-and-branch analysis of German hyperinflation, it was because no one else had his ability to grasp that the phenomenon was pregnant with much greater significance than ordinary observers were capable of noting. As Lionel Robbins noted, Bresciani Turrone saw that "mishaps to the body politic, like those to the physical body, often make possible observations that would be impossible under normal circumstances".⁶ Thus, one had to take advantage of the exceptional.

⁶ L. Robbins, "Preface" to C. Bresciani Turrone, *The Economics of Inflation* (London: Allen & Unwin, 1937).

What he had had the chance to see, in fact, was a unique case. No other currency during and after World War I was so well suited to act as "guinea pig" for an analysis of inflation that could go beyond the particular case to offer a more general explanation of this complex phenomenon. Lionel Robbins was undoubtedly right, in fact, in calling the German inflation between 1914 and 1923 "one of the most salient episodes in the history of the twentieth century", responsible for a good part of the economic and political woes of his generation (he wrote in 1937), including, at least in part, the financial convulsions of 1929, which disrupted the international credit system. In Robbins eyes, Hitler was the "adopted child of inflation". Indeed, an understanding of Germany's hyperinflation was indispensable to full comprehension of the situation in Europe not only in 1914-23 but also in the thirties. "If we want to plan for greater stability in the future", Robbins added, "we need to learn to avoid the mistakes that gave rise to that inflation ... For as regards the depreciation of the mark, there is practically no area of dynamic economic theory that is not illuminated by an examination of its sinister manifestations".⁷

5.

As noted earlier, the method used by Bresciani Turrone in his study of the great German inflation was heavily influenced by Schmoller. Certainly, Bresciani Turrone's work makes abundant, and fundamental, use of statistical and other data. Yet it cannot be said that the kind of study made, the way in which he took up the method, or his conclusions reflect a slavish imitation of Schmoller and his school.

Bresciani Turrone's account of the hyperinflation that struck down the German mark, in fact, omits any Weberian search for ideal types, any effort *à la* Spiethoff to construct "real types". Nor does he even follow the model set forth by Eucken, who maintained that history and theory must remain perfectly distinct, that economic history must do no more than furnish a description of specific situations in terms such that, by applying economic theory to that known history, the course of economic events can be satisfactorily explained.⁸

Instead, the type of analysis carried out by Bresciani Turrone is more comparable with that of Schumpeter, who held, despite the partial influence of Spiethoff, that before constructing any theoretical model one must perceive the set of correlated phenomena one intends to analyze. That is to say, in Schumpeter's own words, "this set of perceptions and pre-scientific analyses should stimulate the scholar's vision or intuition". And here it is clear that Spiethoff's "real types" would be determined by the initial choice or "vision", by certain relationships deemed more essential than others. And such a

⁷ *Ibid.*

⁸ W. Eucken, *Foundations of Economics*.

choice or "vision" necessarily precedes any study in pure theory, just as it precedes any analysis of historical situations.⁹

What method, ultimately, did Bresciani Turrone actually follow? Was his treatment of the subject not preceded by a choice or "vision"? Did he not write that "the investigation of the causes of the depreciation of the German mark must be preceded by an analysis of the statistics concerning the issue of paper marks, the variations in short-term debt, the exchange rate and the prices of the different types of goods"?¹⁰ As a matter of fact, the point of departure of his analysis is the entire set of these relations, expressed statistically. If the first chapter traces the exchange rate of the mark and price changes from 1914 to 1923, the overall examination as it proceeds broadens the field of study and the schema of interrelationships – analyzing the correlations between budget deficit, inflation, and depreciation of the mark; looking at the divergence between the domestic and external value of the mark; investigating the correlation between total value and the volume of paper money in circulation; studying the incidence of the depreciation of the mark on economic output; noting its effects on Germany's foreign trade and the movement of industrial share prices during the paper hyperinflation; and tracing events through the monetary reform of November 1923 and the crisis that came in the wake of monetary stabilization.

From this brief summary, it is evident that Bresciani Turrone's approach was much broader in scope than a strictly technical monetary analysis. Rather, while treating monetary matters amply and perspicaciously, he placed the question of the money supply and its variations in the context of the overall productive, commercial and financial situation of the country and recorded the nature and extent of the consequences.

6.

In tracing the course of the various phenomena examined, Bresciani Turrone drew heavily on the wealth of statistical data available, but he also referred to the variety of legislative and regulatory provisions governing the various sectors of the German economy, including the monetary. Nor did he neglect the increasing body of German and non-German literature on the issue, that was built up both contemporary to the events observed and subsequently.

Not only did he naturally make ample use of Schacht; he also gave close attention to the writings, including magazine and newspaper pieces, of the most eminent German scholars of the day, and to the most significant or influential foreign explanations, French, English, and American. It must be acknowledged, in a word, that Bresciani Turrone's treatment of the German in-

⁹ J. A. Schumpeter, "Science and Ideology", *American Economic Review*, Vol. xxxix (1949), pp. 350 *et seq.*; see also F.C. Lane, *op. cit.*, pp. 21 *et seq.*

¹⁰ C. Bresciani Turrone, *op. cit.*, p. 4.

flation was conducted with the scrupulous honesty and impartiality that were his hallmark. Other aspects of his work, however, are of key importance here.

First of all is his reasoned account, on the basis of the German literature, of the explanations given by the Germans themselves of the inflation that turned their country's economic life upside down. For, as was only to be expected, in the face of this massive inflation there was no agreement on the causes.

Bresciani Turrone recalled that "throughout the entire period of inflation the theory espoused by the Reichsbank, by the entire series of governments, by the top bankers, the leading industrialists,¹¹ and high civil servants, as well as by much of the press, was that the devaluation of the mark depended solely and exclusively on the balance-of-payments deficit. The deficit was attributed, during the war, to the excess of imports over exports; it was then allegedly aggravated, in peacetime, by the excessive burden of the German economy imposed by the Treaty of Versailles. This view was put forward vigorously in a number of writings by Helfferich, for one, but it was not the only explanation offered. Another, originating mainly in academic circles, was that the inflation of the paper currency directly affected internal prices and the exchange rate. This was the position of such economists as Liefmann, Schlesinger, Pohle, Beckerath, Terhalle, and Lansburgh.

The academic world itself was divided, however. A part of it espoused the balance-of-payments explanation while also maintaining a third view, one that denied any causal relationship between the increase in the volume of paper money and the external depreciation of the currency. This was a position, as Bresciani Turrone acutely observed, that was inclined to oppose the quantity theory of money with a qualitative – or better still sociological – theory, stressing that, in evaluating monetary flows, one needed to "comprise the entire economic structure".¹²

The theory that the devaluation of the currency stemmed from the government budget deficit, which was advocated most forcefully by English academics and the British representative on the Reparations Commission and the Guarantee Committee, was hotly contested in a number of quarters in Germany. It was argued in rebuttal that the budget deficit was the consequence of the external depreciation of the mark. It should be pointed out, in this regard, that this was the prevailing view in the press and in official circles, and it enjoyed support from such American economists as Williams, who argued that "the plausibility of a theory moving from the balance of payments and the exchange rate to the general price level and the expanded issue of paper money appears definitively established".¹³

¹¹ On the interests and the actions of a key sector of basic industry, see G. D. Feldmann, *Iron and Steel in the German Inflation, 1916-1923*, (Princeton, N.J.: Princeton University Press, 1977), especially pp. 56 *et seq.*, 130 *et seq.*, 160 *et seq.*, 210 *et seq.*. This work fully bears out Bresciani Turrone's conclusions concerning the large industrialists.

¹² C. Bresciani Turrone, *op.cit.*, p. 25 *et seq.*

¹³ Williams, *The Theory of International Price* (1926).

Faced with this variety of interpretations, most of which, however, appeared to assign the immediate responsibility for the depreciation of the currency to reparations payments, one naturally asks oneself what "vision" Bresciani Turrone adopted, i.e. what systems of interrelations he based his approach on. From this standpoint, his position was very close to the English one.

Basing his conclusions on the figures provided by the government budgets, which included the eight war-bond issues, Bresciani Turrone asserted that "scarcely an eighth of Germany's expenditures during the war was covered by ordinary revenues"; for the rest, the Reich used this technique: 1) issued Treasury bonds; 2) discounted them at the Reichsbank; 3) put the revenues from this operation in circulation, fueling an inflation that manifested itself immediately only in part, a part remaining latent for some time.

In Bresciani Turrone's view, in short, "the method the German government used to finance the war consisted in consolidating its short-term debt by periodic bond issues. This could not last, and by the autumn of 1916 it was already showing signs of wear and tear in that, from then on, the bond issues never reached the full amount of the short-term debt. In September 1918, with the war's end imminent, when needs were particularly pressing, the war-bond issue fell 40 billion paper marks short of the amount of short-term debt. If currency in circulation did not expand in proportion, this was because about half of the Treasury bonds were held by banks and other large private firms.

According to Bresciani Turrone, the end of the war brought no change whatever in this policy. The government budget continued to accumulate enormous deficits and its short-term debt continued to expand, with the consequences noted. "It would still have been possible to save the mark between February 1920 and May 1921", argued Bresciani Turrone, "if the successive German governments had taken vigorous measures to restore the budget to balance instead of constantly discounting Treasury bonds with the Reichsbank, because in 1920 the costs of meeting the Versailles Treaty obligations were not so elevated as to explain the budget deficit".¹³ But thanks to party-political differences, it proved impossible to introduce fiscal reform to make existing taxes productive and find new sources of revenue from which to finance the reparations payments.

There was little point in forced loans, especially once it was decided that they could be paid of in paper marks; nor was there anything to be gained by authorizing the payment of indirect taxes in paper money, when its conversion into gold marks was set at a fixed rate. The result was that confidence in the currency declined again, speculation against the mark was renewed, and the exchange rate plunged once more in mid-1922. The hedge currency was the dollar, which helped drive its rate still higher.

¹³ C. Bresciani Turrone, *op. cit.*, p. 45.

From that summer on, Bresciani Turrone acknowledged, the budget deficit was aggravated by the external depreciation of the mark. "The depreciation of the mark, which had initially been the consequence of the disarray of the public finances, was by now a potent cause of their disorder and degeneration. Also, the losses made by the state railways were aggravated, because prices were not raised in proportion to the depreciation of the mark, while costs rose rapidly".¹⁵

The coup de grace was the disastrous decision to finance the passive resistance to the occupation of the Ruhr by printing paper money. Thus, argued Bresciani Turrone, "German financial policy was a fundamental factor in the final step in the depreciation of the mark as well".¹⁶

7.

Bresciani Turrone did not end with this critical retracing of the story of the German mark from 1914 to its demise in 1923. He went on to draw some necessary lessons relating to the revenues and expenditures of the state and more particularly to German financial policy. The pages in which he put forward this analysis are of the greatest interest and are now part of the theoretical baggage of any economic treatise on inflation or public finance, as far as the impact of monetary debasement on the government deficit is concerned.¹⁷ His recounting of the policy followed by the Reichsbank is of great interest. He highlights its errors in interpreting monetary phenomena, its excessive submissiveness to the groups in power, its tardy and ineffective measures,¹⁸ the effects of devaluation on the balance of trade, emphasizing the diverse behaviour of inelastic and elastic imports and exports.¹⁹ He assesses the role of speculation, which he denies can be decisive, in that it can only act in the presence of specific conditions.²⁰ He includes an analysis of social factors influencing inflation. This wide-ranging analysis takes up an entire chapter, with an exhaustive, sophisticated, fascinating treatment of the issue, with a wealth of comparisons and reflections. It is not only a great clarification of a complex phenomenon that affects the entire society but also an invaluable aid to understanding the relations between the economy and society.²¹

8.

Even through the book is studded, indeed permeated, with data, facts, political actions, institutions, and economic and financial behaviour and mecha-

¹⁵ *Ibid.*, p. 52.

¹⁶ *Ibid.*, p. 53.

¹⁷ *Ibid.*, pp. 54 *et seq.*

¹⁸ *Ibid.*, p. 69-79.

¹⁹ *Ibid.*, pp. 80 *et seq.*

²⁰ *Ibid.*, p. 104.

²¹ *Ibid.*, pp. 349 *et seq.*

nisms, which are its foundations and the basis of its effective, illuminating historical account, Bresciani Turrone's work remains a work of great theoretical value. This emerges, not only in the choice, the "vision", of the schema used to approach the problem, but also, and above all, in the wealth of arguments, theorems, and corollaries from economic theory found throughout the volume and in its conclusion. Actually, the entire work represents an empirical check on the quantity theory of money.

Against the opinion of some economists that the German inflation showed not only the limitations but also the erroneous conclusions of that theory, and against Mitchell's argument that, in case of serious inflation, the business world creates a new currency or devises methods for employing the existing one more fully, Bresciani Turrone held to the view that the "German events" demonstrated "the fundamental importance of the quantity of money issued by the government in determining the level of domestic prices and the external value of the currency".²²

Starting from the thesis that a currency's value depends less on its coverage by precious metals than on the quantity in circulation, Bresciani Turrone held that, "by limiting the issue of marks the Reichsbank could at any time have arrested further depreciation of the currency, despite transitory fluctuations". The fact is, he added, that "every time the Reichsbank's actions produced a relative scarcity of means of payment, manufacturers and merchants were forced to sell some of their foreign exchange in the market and the exchange rate of the mark improved".²³

An advocate of the quantity theory, Bresciani Turrone reaffirmed the Ricardian concept that "the limitation of the quantity of money is one of the conditions of economic equilibrium", an axiom that he considered confirmed in full by the German experience. Germany's inflation had shown "that, if led astray by the mistaken idea that an issue of banknotes in response to commercial demand is justifiable, the central bank fails to set any limits on the printing of paper money, prices will continue to soar to astronomical levels".²⁴

In response to critics who argued that the second factor in the exchange equation, namely the velocity of circulation, is not subject to control, Bresciani Turrone affirmed that "the velocity of circulation is bound up with the habits of consumers" and that these habits ordinarily change only very slowly; while "any number of instances show that, if governments and central banks stand firm and refuse to expand the issue of paper money, the crisis of confidence is weathered, the exchange rate returns to its former levels, and the accelerated speed of circulation turns out to be only temporary".²⁵

²² *Ibid.*, p. 504.

²³ *Ibid.*, pp. 505-506.

²⁴ *Ibid.*, p. 507.

²⁵ *Ibid.*, p. 508.

It should come as no surprise that his defence of the quantity theory led Bresciani Turrone to see the point of departure for economic reconstruction not in the end of the inflation but in the stabilization of the mark. What, he asked polemically, had been the use of the inflation anyway? If German output expanded in terms of sheer quantity during the years of inflation, there was absolutely no progress in terms of the quality of its capital equipment. There was no technical advance in industry and no gain in productivity. Inflation had postponed but not averted the slump, which came afterwards all the same. At first inflation had stimulated production, thanks to the divergence between domestic and external prices, but it eventually had a damaging impact, disrupting and restricting exports and putting millions out of work.

In his view, the quantity theory of money was buoyed by the fact that, in the German experience, inflation had wiped out savings, blocked budget reform, sapped incalculable moral and intellectual values and provoked a highly disruptive social revolution, concentrating wealth in the hands of a few and reducing millions to poverty. "Inflation", he commented, "was the painful pre-occupation and the constant torment of countless families. It poisoned the German people, spreading throughout all the classes of society the spirit of speculation and turning them away from productive labour, and it was the cause of unending moral and political turmoil". He concluded that, in the wake of the great inflation, it was "easily comprehensible that the recollection of the grim years between 1919 and 1923 weighed on the German people like a nightmare".²⁶ That same nightmare pervades the entire volume, a kind of warning from Bresciani Turrone to future generations to which we cannot remain indifferent.²⁷

²⁶ *Ibid.*, pp. 510-511.

²⁷ A. Gambino, "La politica monetaria e creditizia negli scritti di Costantino Bresciani Turrone", *Studi Economici*, Vol. XX, Nos. 3-4, May-Aug. 1965, p. 200, rightly observes that thanks to the experience of the German inflation, which he lived through and studied, Bresciani Turrone developed a "congenital" and "profound aversion to any and all forms of inflation" and "felt himself duty-bound to combat not only open inflation but also repressed or creeping inflation; not only demand-pull inflation caused by an excessive money supply but also cost-push inflation caused by lack of an appropriate incomes policy".

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