

Considerations on the dynamics of the Italian inflation

by
GIULIO PIETRANERA

1. — The inflation accompanying the war was one of the smaller preoccupations of the man in the street in Italy. At the moment of the liberation he did not yet recognize the lineaments of a true inflation in the vicissitudes of the quantity of currency emitted, prices, and the national debt. All had been accepted as a necessary calamity, a natural phenomenon, against which it was vain to resist. Doesn't war always mean inflation? The type of inflation feared was that expected by minds untutored in modern advanced monetary theory and still impressed by the deluge of marks in Germany which was regarded, until the more recent examples, as the crowning jewel in the history of monetary disasters. Because of this impli-

citly-held popular distinction between phases of inflation the Italian population still dared to affirm at the end of 1945, "We have not yet had inflation", and even dared to wonder, "Will there be an inflation?"

Such naive queries should be taken as an indication of the motives prompting the public at that period with consequent effect on the inflation of the lira. We believe that a simple, detailed exposition of the facts, problems, opinions and tendencies concerning the Italian situation would be justified even after the interesting and accurate studies which have appeared abroad, especially as a means of bringing statistical data up-to-date, of evaluating the current opinion, of rendering precise those aspects little noted, overlooked or inexactly observed.

Part I - Inflation of the Lira, 1939-1945

2. — The Italian national debt from 1938 to 1945 increased by 814.8 milliard lire, 341 milliard of which was in new issues of paper currency, and currency emitted swelled to about twenty times the 1939 quantity.

This quantitative expansion of the public debt is in itself very significant, but the qualitative transformation is of more significance. The components of this debt as of the end of 1945 were as follows (in milliards of lire) (1):

Funded debt	53
Redeemable debt	279
Treasury note currency	7
Floating debt (including bank currency)	616
	955

(1) Data taken from information supplied to the Consultative Assembly (Consulta), 22 Jan. 1946. For a more detailed break-down of the debt see Appendix, Table A, p. 53.

The increase, comparing 31 Dec. data of 1945 with those of 1938, has been to 5.7 times for the redeemable debt (Treasury Bonds — *Buoni del Tesoro Poliennali* — included in this category, increased to 11.8 times their 1938 volume), to 3.5 times for Treasury notes, to 17.11 times for the floating debt (within which 16.3 for Ordinary Treasury Bonds — *Buoni del Tesoro ordinari* — 114.74 for advances from the Banca d'Italia, and 4.22 for interest-bearing current accounts at savings and loan banks and other banking institutions) (2).

The floating debt, particularly the advances of the Banca d'Italia, served the financial needs of the war years. A percentage of floating debt of that magnitude indubitably constitutes

(2) Increase of the various categories calculated from data in Appendix, Table A, p. 53.

the most dangerous element in the whole monetary situation. It is inflation in a latent form.

A revealing sidelight on the increases of the floating debt and especially of the net issue of banknotes is given by a comparison between the increase of currency emitted and the excess of Treasury payments over receipts. The 29 March 1946 Report of the Governor of the Banca d'Italia gives the following data:

TREASURY RECOURSE TO THE FINANCIAL MARKET
(in millions of lire)

Fiscal year beginning 1 July	Currency in circulation as of last day of period	Currency added to circulation	Excess of Treasury payments over receipts	Ratio, currency added to excess payments %
1938-39	19,411	—	—	—
1939-40	27,142	7,731	20,251	38
1940-41	35,674	8,532	62,229	13
1941-42	54,957	19,283	73,707	26
1942-43	91,402	36,445	83,692	44
Total 1943-45	288,588	197,186	390,889	50
30/6-30/9/45	283,182	5,406	35,070	—

3. — The story of the increase in the public debt should be placed in the context of the general trends of the economy, and in particular should be related to the new dynamics of production, prices, and income. Starting with this point of view two broad phases of the process may be distinguished since the beginning of the war period.

The first phase may be said to start in 1938, a year of intense preparation for war, and to continue through 1945. This phase in turn may be subdivided in two periods; from 1938 till the summer of 1943 and from then till the end of 1945.

The second broad phase may be taken as beginning with the first post-war year — 1946.

In speaking of the A-M lire we shall consider particularly the period from August, 1943, when the Allies landed in Italy and issuance of A-M lire began till April, 1945, when North Italy was also liberated.

In order to obtain a clearer understanding of the situation that will be described below we present the following tables summarizing the most significant data as of dates which give the most typical picture of the inflationary process in the lire.

Date	Total public debt (000,000 lire)	Currency emitted (000,000 lire) (a)	Free market price in lire		
			per gram gold (b)	per dollar (c)	per pound sterling (c)
1938 average	140.1	20,722	26	33	88.76
31 Aug. 1943	405.8 (d)	122,680	138	100	361
31 Dec. 1945	955	389,899	822	790	1,102
30 June 1946	1,066.6	402,500	633	375	1,065
30 Sept. "	—	439,300	955	512	1,461
31 Dec. "	1,066.169	472,600 (e)	1,020	635	1,760

(a) Banknotes, Treasury notes, and A-M lire.

(b) Rapporto della Commissione Economica all'Assemblea Consultante - II. *Problemi monetari e commercio estero* - Table E.

(c) *Ibid.*, Table F - (d) 30 June 1943 - (e) 10 Dec. 1946. Unofficial figure. 31 Dec. 1946 official figure 505,822.

INDICES OF TOTAL PUBLIC DEBT, TOTAL CURRENCY, WHOLESALE PRICES, FREE MARKET PRICES OF GOLD AND FOREIGN CURRENCIES, COST OF LIVING AND COST OF FOODSTUFFS
(1938=100)

Date	Total Public Debt	Currency emitted	Wholesale prices	Price of gold	Free market currency price		Cost of living	
					£ paper	\$	Total	Food only
31 Aug. 1943	289	594	450	530	452	456	400-500	600-700
31 Dec. 1945	681	1,881	3,300	3,849	2,046	1,102	2,400-2800	3,150
30 June 1946	761	1,942	3,000	2,435	1,630	1,196	2,500	3,400
30 Sept. "	—	2,119	3,200	3,637	2,225	1,641	2,400	3,100
31 Dec. "	789	2,280	4,400	4,000	2,760	1,977	3,800	4,600

First phase: First period, 1938 - Aug. 1943.

4. — By the end of 1945 currency emitted had grown approximately twentyfold since 1938. Wholesale prices had in the same period climbed to a point 33 times as high, cost of foodstuff 31 1/2 times. The free price of gold was up to 38 1/2 times, the dollar 20, the Swiss franc 30, and the unit paper sterling 11 (3).

A twentyfold currency increase coupled with a reduction in the volume of business to about 2/3 pre-war would allow the price level to reach a new equilibrium about 30 times higher than the original. The increase that actually occurred, about 33 times, leads one instantly to think of a controlled inflation.

If one considers the progressive dwindling of supplies of consumer goods and raw materials, the restrictions operating on foreign supplies, the forced increase of autarchy during the war with costs rising at an ever-increasing rate, the atomization of the country and the internal market, the war-time destruction including the disintegration of the transport systems, one must admit that the inflation potential until this period was practically inoperative and that the parallel variations of currency volume in circulation, internal prices, and exchange rates justify classifying the Italian monetary situation as "a controlled inflation": (4)

It certainly could not be denied that as of the end of 1945 this "control" existed in at least the most important sectors affecting the purchasing power of the lire, the domestic wholesale market and the consumer market, which determines the cost of living.

But at the end of 1945, it would be more logical to speak of "inflation-s" and of "lire", so many were the means followed by the inflation and so diverse were the fates of the lira in the various sectors of the economy: with wholesale prices, retail prices, food costs, cost of living, gold price official rate, gold price free market, official rates of exchange, free market rates of exchange, prices of foreign mer-

chandise; also the hoarded lira and the lira rapidly circulating, A.M.G. lire, bank-issued lira and Government-issued lira, banking price of the lira, lira of export and of import, lira for this merchandise and lira for that. The controls which brake the inflation in some sectors are missing in others as the cycle develops by the process of simultaneous resistances and new inflationary pressures, of retreats and of new advances.

The factors to be evaluated are almost legion. What is to be said of the tremendous hoarding which occurred, and, on the other hand, of the changed velocity of the goods in circulation, a concept so difficult to state mathematically? What was the relative weight of sight deposits in the war-finance process? What is to be said of the velocity of currency circulation, always a matter of opinion, and of the special velocity of the Allied Military lire?

From all these elusive factors and their interplay arise the situations of devaluation or further currency decline and in such situations may be built up an inflation potential which may burst out with the fall of a simple psychological barrier.

At any rate, it may be said that this inflation was controlled, but this control may not be claimed as a success of the Government's "monetary circuit" technique, the technique used to close the inflationary gap. The effects of the "monetary circuit" have been poor. In fact, the negative devices that were employed to resist the rise of prices — limitation of consumption, price ceilings, blocking of investments, forced savings, etc. — had no sensible economic effects then, and given the particular situation of the time, could not have had any. Of necessity the rationing that accompanied price control was a modest contribution to the bare subsistence level of the great mass of consumers, and by 1945 the lack of success of price control is evidenced by the 4,000 point gap between the indices of Government prices for products turned over to the Government under its compulsory pooling program and the black market free prices of those agricultural food products, and by the enormous differences between prices of goods bought with ration tickets and the same goods on the black market.

As, for understandable reasons, the real yields of ordinary taxes progressively declined, all possible methods were used to rake in currency out of circulation by means of public loans. The items of particular interest in their effect on the inflationary gap are the redeemable debt including the long-term Treasury notes (*Redimibili* and *Buoni poliennali*), ordinary Treasury bonds (*Buoni del Tesoro Ordinari*), and interest-bearing current accounts. The sum of 474 milliards re-absorbed from circulation by the Treasury in the period 1939-45, or 55% of the total increase in the public debt of that period, gives an idea of the efforts made by the Treasury.

The modest results of the monetary attempts in Italy can be better appreciated when compared with the Anglo-Saxon countries. It has been calculated that the ratio of Treasury receipts (public loans and taxes) to the total currency stabilized by England and the United States has oscillated between 7 and 13 times the maximum of the six war years. These results were aided by public loans, which increased from 3 to 5 times, but above all by the tax raises, receipts of which increased 3 to 6 times, that were possible under a financial organization notably superior to the Italian one.

In Italy the corresponding index at the end of 1945 scarcely reached 1.6 times the total emission of the Banca d'Italia and 1.18 times the total currency emitted (including A-M lire). Even by adding the amounts raked in by the banks and turned over to the Banca d'Italia to be placed at the disposal of the Treasury, the index of double the total circulation would still not be attained.

5. — Despite all this, at the end of the war inflation had not yet started on its feared spiral. By and large, and ignoring the interdependence of the factors, it can be said that in the period prior to the Armistice devaluation of the lira was due solely to the steady pressure exerted by new emissions of currency; but from the Armistice on the scarcity of goods and the dislocations of the entire economic

and financial system superseded the printing press as the chief cause of inflation.

This is a significant change in the character of the inflation, a change which justifies the division of the war years into two distinct periods.

6. — A ten-day report of the Banca d'Italia gave the situation as of 31 Aug. 1943 as follows: banknote circulation 113.614 milliards; A-M lire 2.065 milliards; a total circulation of 115.680 milliards to which must be added the approximately 7 milliards of currency issued by the State.

As of the same date the indices of the devaluation of the currency stood as follows with respect to 1938: wholesale prices had increased 4.5 times, food costs according to the official statistics using legal prices by 114%, while using black market prices they had increased 7 times. Less drastic, however, was the rise in the total cost of living because of the blocking of rents and the prices of public services, etc. On the other hand, the flight to "hard goods" had not yet become very pronounced; in fact, compared to the official rates fine gold had risen not more than 5 or 6 times and dollars and pounds sterling but 4 times (5).

As for production during that period, the decrease is not very easily indicated by an over-all index. It may be estimated, however, that agricultural production fell by 25% and industrial by perhaps a bit more. According to one reliable index Italian industrial production set at 1938=100 had increased to 108.7 in 1940, and then gradually declined reaching 65.7 in April 1943 (6).

A decrease of 1/3 or 1/4 in production cannot explain a price rise fluctuating at about 6 to 7 times. Given the moderate increase in the quantity of the active monetary factors the devaluation of the lira may with good basis be laid to an increase in the quantity of the currency of about 5 times.

(5) For basic data and calculation see Appendix, Tables B, C, E and G.

(6) Data furnished by Alessandro Molinari (UNRRA). For individual indices of production see Table G.

(3) For calculations see Appendix, Tables B, C and E.

(4) "Relazione della Sotto Commissione per i problemi monetari e commercio estero", Vol. III of the "Rapporto della Commissione Economica", p. 24.

First phase: Second period, Aug. 1943 - end of 1945.

7. — At the end of 1945 the total currency in circulation was 389.8 milliardi, of which 206 milliard, had been issued by the Banca d'Italia, 7.8 milliard by the State, and 86 milliard by the Allied Military Government.

Wholesale prices, which from a base of 100 in 1938 had climbed to 500 in Aug. 1943, had in the sixteen succeeding months now being considered increased at an accelerating rate reaching about 3300 in Dec. 1945. From August 1943, therefore, they had gained 2800 points. The rise of food costs was 2700 points, of the dollar 2500, and of the pound sterling about 1200.

If we consider the production statistics we see how grave was the decline from 1938 to 1945. The following percentages of the decline of real income can be considered not far from the truth (7):

Agriculture	59.6 %
Industry	25.0 "
Commerce	43.3 "
Construction	85.0 "
Professional	25.4 "

The real value of the over-all Italian production had decreased by 50%.

Reduced to such straits, production and business activity, or the lack of them, became of prime importance in the inflationary process. The indices of agricultural and industrial production, reduced as shown above, and the even greater contraction of foreign commerce easily prove it by themselves. If one considers the cumulative consequences of these reductions this conclusion seems even more inescapable.

The decline in total real income and its impact upon the lira is more exactly understood if we remember how impressive was the war-time destruction of the national wealth, the dislocation of the normal trade and financial network, the paralysis of transport, and the regional gluts and deficiencies of goods, and

(7) *Congiuntura Economica*, Nov. 1946, n. 9, p. 7; Coppola D'Anna, « Il reddito nazionale italiano nel 1945 ».

in a word, the frightful ruin of the economic system producing real goods in terms of real value. War damages amounted to 3,029 milliardi of 1946 lire, corresponding to \$ 13,462 million (at the official commercial rate of lire 225 = \$ 1). Considering that the national wealth was placed at 675 milliardi in 1938 (8) and therefore at more than 15,000 milliardi in terms of their 1946 purchasing power, a reasonably good estimate of the damaged suffered under World War II would be about 20 per cent of the national wealth in 1938. Examination of the individual sectors, industries, and services gives an idea of the fractures and economic paralysis undergone by the Italian economy. Table I in the Appendix estimating these damages in official dollar values is included for this purpose.

8. — The "business" and "material goods" factor having been briefly considered we may center our attention on the monetary one, which at least as first approximation, may be limited to the currency issued on German-controlled territory and that of the Allied Military Government inasmuch as the issues of the Banca d'Italia in the liberated territory amounted to scarcely 1% (9). Sixty-one per

(8) Francesco Coppola D'Anna: *La Ricostruzione Economica e il suo Finanziamento*, p. 55. Ed. Rizzoli.

(9) The assertion of William O. Grampp in his article "The Italian Lira 1938-1945", published in the *Journal of Political Economy*, Aug. 1946, p. 45, does not seem acceptable to us even though stated in general terms. According to him the march of inflation had been stalled simply because the Salerno Government, lacking the mechanical means of printing the paper, was forced to severely curtail its programed emission of notes. It is true that the State presses were located in territory still occupied by the Germans, but it is also true, on theoretical reasoning, that the lack of technical means for producing one of the instruments of inflation cannot stop the process nor hinder the elements of the equation of exchange; the arresting of the movement of one element will be compensated for by activity of the other elements. And in fact the Salerno Government did make use of the expedient adopted in 1942 to meet a temporary deficiency of currency: they instituted *conti correnti vincolati* (special time accounts set up by the Banca d'Italia, for which a special interest rate was allowed as the waiting period set was a matter of months. Banks and other large private and public bodies were invited to become depositors), increasing them from 18.5 milliardi at the end of 1944 to 120.1 as of 31 Dec. 1945. To these should also be added the 11.6 milliardi in current "sight" accounts. Thus the decrease in currency emission was largely and promptly nullified from 1 Jan. 1943 to 31 Dec. 1945, by a 254 milliard increase of deposits in credit institutions, or 51%.

cent of the new currency of the period was issued by the Germans and the pseudo-republic, 37.8% was of Allied origin.

The impact of the emissions of the pseudo-republic was enormous: "The responsibility for the major part of the currency increase that took place in Italy is the German's and his neo-fascist supporters" (10).

This enormous inflationistic pressure was alleviated in some measure by the slowing-down of the velocity of circulation which took place in many areas and important sectors of the market dominated by the German lira. Hoarding was, in fact, notable in the agricultural zone of North Italy, offsetting and without doubt more than compensating for the increased velocity of the lira caused by speculators who in the same zone were converting to "hard goods".

We will go into more detail below on the more reliable opinions as to the extent of this hoarding of currency. For the moment, accepting the conservative figure of 25% as of the end of 1945, we will compare it with the restrained rise in the prices of gold and the foreign hard currencies to evaluate the effects of that hoarding and to study the proportions binding it to the increase of the currency emitted (11).

9. — The Allied Military lire in circulation at the end of 1945 amounted to 86,028 millions with 16,821 millions more in the safes of the Banca d'Italia. An index can be constructed of the ratio between the circulation of the civil and Allied Military lira (12):

(10) *Relazione del Prof. Einaudi all'adunanza generale ordinaria dei partecipanti della Banca d'Italia (anno 1945)*. (Einaudi Report to the General Meeting of the Banca d'Italia), p. 73.

(11) It is further necessary to note that the shortage of means of payment due to hoarding and the evacuation of cities was met by an emergency emission of bank checks signed and certified by the banks (*assegni circolari*). More than 11 milliard lire were circulating in the North at the time of the liberation but by 1945 had been reduced to 5 milliard. (*Relazione del Prof. Einaudi all'adunanza, etc.*, p. 25).

(12) The total figures are taken from the "Relazione del Prof. Einaudi all'adunanza... etc.", pp. 68-69.

Date	(in millions)			
	Civil lire in circulation	A-M lire	Total	% A-M lire to total
31/ 8/43	113,615	2,065	115,680	1.78
31/12/43	156,632	17,853	174,485	10.23
31/ 5/44	183,417	32,627	216,044	15.10
31/12/44	248,544	63,841	312,385	20.46
30/ 4/45	283,931	76,730	360,661	21.27
31/12/45	296,021	86,028	382,049	22.51

The financial burden of the A-M lire was one the necessary consequences of the war and from Italy's point of view a moral liability, but a liability it was and it should not be underestimated as has sometimes been done (13).

It is not necessary to study the circulation processes of the A-M lira in all its forms and with all its consequences; it is sufficient to arrive at an approximate measure of its immediate impulse toward inflation. As was well noted by the Governor of the Banca d'Italia: "In respect to the increase in circulation that took place in the liberated areas it should be cautioned that the proportion between the notes issued by the Banca d'Italia and those of the Allied Military do not directly reflect the respective weights resulting from the exigencies of the Italian Administration and those of the Allies. It is enough to remember that of the A-M lire issue 6 to 7 milliardi were for anticipations to Italian public bodies and therefore covered expenses which otherwise would have had to be met by the Italian Treasury; and that in payment for the A-M lire spent out of their pay by the American troops the Italian Treasury has received credits which until now have reached \$ 140 million and which can result in a withdrawal of notes when used to im-

(13) As, for example, in the above cited article of William D. Grampp in which he states, "In the inflationary process, however, the issue of military currency was not an important element". It is unfortunate that this article, evidencing so much interest in the Italian scene, perhaps because of the difficulties of the moment it was written, was not accurate in its data, particularly in its calculations as to the volume of bank deposits and the data on the circulation of the civil lira notes.

port merchandise which will be sold for the Treasury's own profit" (14).

But beyond the long-run pressure of the A-M lire during the whole period when inflation remained under control it is interesting to know, if only approximately, the immediate impact, which was of course softened by the following factors:

a) Remittances abroad by the Allied troops out of their pay. (Mr. Grampp estimates them as 1/3 or at maximum 3/4 of the total sums paid. We have no idea, however, as to how such a high estimate was reached, especially the second).

b) Remittances abroad by the Allied troops out of the receipts of the illegal sale of Allied property. By common knowledge such receipts were considerable, but is difficult to believe, considering the psychological climate in which sales took place, that a considerable part of the receipts were saved and remitted abroad.

c) Expenditure of A-M lire by the Allied troops for purchase and use of Allied-supplied services: post office, bars, etc. The modest scope of such expenditures makes it difficult to believe that they were very heavy.

On the other side of the A-M lire balance sheet, counteracting the lire which by not immediately entering into circulation had no immediate inflationary effects, are other elements which seem to us of considerable importance and of which Grampp takes no account. It is necessary to consider not only the sums paid to the troops but also the other egresses of military lire which subsequently burdened the market:

- 1) Salaries paid to Italian workers at Allied administered ports and factories;
- 2) Purchases by the Allied administration of raw materials and services;
- 3) Compensation for requisitions, indemnities, etc.

The expenditures of A-M lire occurred mostly in the zones and regions in which the velocity of money is usually very high. And no doubt the notably high pay of the Allied

(14) See "Relazione...", pp. 72-3, cited above in footnote.

troops and the psychological climate exaggerated this velocity (15). It is true that, as noted by Grampp, resistance to this new money by the Italian, that is, the receivers, was not great. But it is also true that it was this money they tended to dispose of first and so further increased its velocity; also, for understandable reasons, this money was not used for hoarding, especially in agricultural zones. It will also be remembered that counterfeiting was frequent and considerable, generating a diffused sense of fear and suspicion.

With these considerations in mind we may now introduce and evaluate the other factors in the problem to arrive at an answer on inflation and on its elements.

10. — What about hoarding? Opinion and estimates have varied greatly on the subject. The total has been estimated as approximately a quarter of the currency emitted with the following division suggested among social groups:

Agricultural	40 %
Commercial, black market	30 %
" legal	20 %
Other holders	10 %
Total	100 %

It may therefore be taken that the active currency at the end of 1945 amounted to 300 milliardi (16).

(15) In connection with expenditures in A-M lire, Guido Jung, ex-Minister of Finance, aptly replied as follows to the questions put by the Economic Commission of the Ministry for the Constituent Assembly: "During July and August 1943 a daily newspaper in Sicily cost 60 centimes of a lira. The American soldiers casually handed over a 10-lire note and never demanded the change. In fact, 10-lire at the occupation exchange rate corresponded to 10 hundredths of a dollar, or a "dime", the smallest coin given for alms in the United States. All occupation troops paid correspondingly for their purchases: for wines, liquors, foods, stockings of self-styled silk, umbrellas, handkerchiefs, textiles, souvenirs of every variety to be sent to wives and girl friends in the home country, where all these items were rationed; and always new impulses were given to the inflation machine." "Rapporto della Commissione economica", III - Appendix, pag. 238.

(16) It is significant that the trend toward currency of higher denomination, which correlates with the necessity for the use of higher denominations, has indicated an entirely different pattern from that of emissions. This demonstrates the degree

What can be said of the velocity of goods? Conjectures and reliable estimates have arrived at the conclusion that the velocity of goods has on the whole remained at its pre-war level. It is true that the commodities dealt with in clandestine trade changed hands considerably more than is usual, but because of the lower production especially of foodstuffs it is also true that the portion withheld by the producers for their own use increased enormously and was thus deducted from commerce. It cannot, therefore, be far wrong to say that a certain compensation has taken place. There is also to be considered the already mentioned strong contraction in foreign trade.

What can be said of the changes in the destinations of "sight" deposits and their new velocity? Mr. Grampp, in the article cited, considers the entire volume of Italian time deposits, which he calculated had by May 1945 increased to 315 milliardi for ordinary credit banks and to 330 milliardi for Postal Savings banks (17). Working on these figures, which we regret to say are completely in error, Mr. Grampp continues to observe that all bank deposits were at the disposal of the Treasury. They were the fountains from which the Treasury, through the Banca d'Italia drew to place its securities as they were issued.

The nature of the *conti correnti vincolati* (see footnote 9 above) of the credit institutions tied to the Banca d'Italia, which as of 31 Dec. 1945 amounted to 120 milliardi, was described as follows by the Governor of the Banca d'Italia: "As is known, the institution of these *conti correnti vincolati* serves two needs: to gather into the State Treasury the

to which the inflation remained potential only and the effects of hoarding. The average denomination increased from lire 164.77 in 1938 to only lire 276.07 in 1944. (The above data and opinions are taken from an investigation of the Economic Commission of the Ministry for the Constituent Assembly. Rapporto III, *Problemi Monetari*, Appendix, p. 33).

(17) These data have been taken from a table in the above-cited article by Mr. Grampp. This table does not agree with the data of the Istituto Centrale di Statistica and the Banca d'Italia covering the same period of time. The reasons for the disagreement are not easily traced since it is not precisely stated by what particular groupings Mr. Grampp arrived at his summarizing statistics. Certainly his figure of 330 milliard lire postal savings is incomprehensible, and the suspicion of an error seems legitimate.

largest possible amount of fiduciary funds and at the same time to offer the credit institutions a remunerative investment with interest paid by the Treasury without relinquishing the liquidity of the investment, a liquidity which the banks recognize as deriving from the offices of the Central Bank" (18).

To determine the exact importance of demand deposits in the total monetary picture the variations in the destinations and velocity of those deposits should be followed through all the period under consideration. However, given the economic conditions in Italy within the dates here being considered, we believe the more correct method would be to evaluate the inflationary effect only of currency, excluding the complete volume of demand deposits which, added to the currency in circulation, constitutes the "money" of twentieth-century economics.

Several conditions were lacking to make demand deposits a significant part of the total money in those years. Above all, the inflation potential of bank money was weakened, and weakened in unequal sectors during the period of years considered, because of the strong contraction of trade and the habit now become general of paying in cash rather than checks or *giro conto*.

Also the sums held as cash reserves by the various credit institutions varied considerably during these years and therefore varying amounts would have to be subtracted from the total money figure.

There is a final statistical difficulty: the deposit data are not on a consistent basis for the entire period either because the number of institutions covered varied (19) or because new criteria of selection of basic information were adopted after the Armistice.

There is also little reason to attempt to fill further gaps in the calculation of "total money" by including the mass of bank checks (*vaglia cambiari*), which except for the 1944-45 temporary emergency growth of *assegni circolari straordinari* (see footnote 11) as partial

(18) See "Relazione..." cited, p. 81.

(19) Monthly Bulletin of the Servizio Studi Economici of the Banca d'Italia, n. 6, 7, 8; p. 30.

adjustment for the increase in hoarding, grew more or less apace with the mass of bank-issued currency.

It would be just as difficult to arrive at acceptable estimates of the effects of the changed destinations of demand deposits with their new relative velocities on the inflationary situation. With every passing year the quantities and percents invested in favor of the Treasury increased while private investment declined. The above-cited Report of the Governor of the Banca d'Italia exhaustively documents this movement:

"On considering the destination of the funds collected, a decrease is observed in the traditional investments in commerce and real goods of 9.4 milliardi by the end of 1944, followed by an increase of 160.7 milliardi to the end of 1945" (20). If one further allows for the diminished purchasing power of the lira as measured by the rise in wholesale prices, this decrease in the use of such funds for real investment purposes is even more evident (21).

Date [30 June]	Total Fiduciary Deposits [000,000 lire]	Bank Com- mercial invest- ments [000,000 lire]	Purchasing Power of the Lire based on wholesale Prices [1938 = 100]	Real-value of	
				Deposits	Investments
1942	74,818	79.4	65.83	100	100
1943	84,216	67.0	38.17	65.27	48.92
1944	138,353	73.9	11.21	31.49	15.84
1945	240,609	160.7	3	14.66	9.22

Under such conditions a calculation of the consequences of this displacement of investment funds from private to Treasury control on the velocity of money and bank deposits within the current dynamics of prices would be highly desirable, even if it could be done only roughly. But confronted with the impossibility of following through a calculation of this type we may either advance the hypo-

(20) *Op. cit.*, p. 31.

(21) The bank investments included in the table given in the text are: bills on hand (*portafoglio*), advances (*anticipazioni*), current accounts (*conti correnti*), correspondence accounts (*conti di corrispondenza*), contangoes (*riporti*), and loans (*mutui*). *Ibid.*, p. 30.

thesis of a compensation by rising public investment for the declining private or at least omit the inflationistic pressure of sight deposits.

We are now at a position where it would be useful to summarize the points we have covered:

a) By the end of 1945 the currency in circulation amounted to about 400 milliardi.

b) We have not been able to draw any conclusions as to changes caused by the volume of checks in the new inflationary milieu.

c) We have reason to believe that on the whole the velocity of goods did not change.

d) We are constrained to disregard the displacements, both quantitative and qualitative, that took place in the "sight" bank deposits.

e) The extent of the hoarding that took place may be estimated at approximately a fourth of total currency emitted.

f) It may therefore be inferred that there

were 300 milliardi, a 15-fold increase over 1938, in active currency to meet the varying increases in prices.

g) Wholesale prices increased about 30-fold, the cost of living 34-38 times, foodstuffs 31 times, free market price of gold 38 times, black market exchange of the dollar 20 times.

h) And all this with business reduced to two-thirds of the pre-war level.

i) The conclusion thus seems legitimate that there exists a certain correlation, and yet as the same time an inflationary tension, between currency prices and exchange rates. The inflation, it is true, was "controlled"

but it broke out at many points, presenting all the symptoms.

A clear picture of the phenomenon would naturally require a precise notion of the velocity of money, a concept as valuable as it is difficult to value. Among the opinions current on this matter particularly interesting are some of those expressed during the investigations of the Economic Commission for the Constituent Assembly. The ex-Minister of finance Guido Jung replied: "The velocity of circulation was greatly reduced by hoarding, but even more so by the sluggishness in the economic life of the country, by the reduced volume of trade, the hoarding of goods cornered and concealed for speculative purposes and financed by an inflation of bank credit. However, one has the sensation that in bringing the velocity back to normal the present volume of currency would support a far higher level of economic activity".

Mr Jung's reference to the cornering and concealment of speculative goods is particularly striking because, whether denying or admitting the inflation, the mind recalls the famous sophisms of Helferich, Havenstein, and Wolf — sophisms in which, during the most acute devaluation of the German mark that had ever been experienced, they proved that in Germany there was no inflation. The opinion then prevailing in Germany was that Germany was suffering less than any other country, except Italy, from inflation; indeed, there inflation had decreased in 1921-22, while in the other countries even with the deflation politics they were following the situation was steadily worsening (22).

What was the "real value" of the circulating media in Italy at the end of 1945? Was

(22) Costantino Bresciani-Turroni, *Le vicende del marco tedesco* (Università Bocconi, Milano, 1931) p. 212: "The reasoning on which the would-be demonstration was based offers an example of an interesting economic sophism. The nominal value of the paper money issued, it was said, was certainly enormous; but the 'real' value, i.e., the value obtained by converting the mass of notes into gold at the current exchange rate, was much lower than the total value of the money circulating in Germany prior to the war. For example, on the 7th of August, 1923, the total issued amounted 62,338 milliardi of paper marks. But on the same day one gold mark was worth 783,000 of paper. The 'real' value, the 'intrinsic' value of the paper money in circulation was scarcely 80 million gold marks! How could one hold that there was 'inflation' in Germany?"

the necessary and sufficient condition in existence to again support the famous sophism? Had the velocity of the currency yet gone into the whirlpool rhythm of the collapse?

The two problems of "strictly real money" and velocity of circulation are connected. The "real value" of the quantity of paper money circulating is the ratio of that quantity to the price index. The ratio between the new (and increased) velocity and the former velocity is equal to the ratio between the original quantity of money and the real value of the inflated paper money, and this ratio is our index of changes in the velocity of circulation.

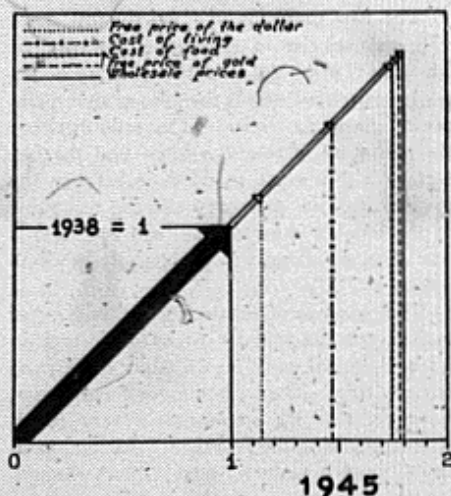
This method of measuring the velocity of money was adopted by Bresciani-Turroni in his well-known work on the paper mark from 1913 to 1923. The author himself recognizes, however, that his attempt is a very rough system requiring the postulate "that the quantity of goods remain constant". Notwithstanding this, the indices that may be derived are exceedingly significant.

11. — With the guidance of the calculations of Bresciani-Turroni we can now examine the situation of the Italian lira. Taking the 1938 quantity of 22 milliard lire as base and the end of 1945 quantity of 390 milliardi as the point of interest, let us calculate the "real value" and the index of variation of velocity as based on the most typical price indices:

REAL VALUE OF CURRENCY IN CIRCULATION AND VARIATION IN THE VELOCITY OF CIRCULATION, 1945

Type of price index	Index (1938=1)	Real value of currency (milliard lire) (1938 = = 22)	Velocity index (1938=1)
Wholesale prices	33	12.19	1.80
Cost of living	26	15	1.47
Cost of food	31	12.58	1.75
Dollar, free market price	20.26	19.25	1.14
" official price	5.21	74.86	0.26
Gold, free market price	31.72	12.30	1.79
" official price	5.26	74.14	0.30
Prices of U. S. goods based on official exchange	7.98	53.57	0.41
Prices of U. S. goods based on the free exchange	25.92	15.05	1.46

The following graph shows the close relation between some types of price indices and the velocity index:



These velocity indices despite their approximate nature as discussed above do permit some diagnostic conclusions. Those indices which fall below unity have no significance, being derived from the artificial price indices of official gold price, official dollar exchange, and level of U. S. prices as per official exchange rates. At most, by asserting a comparatively small amount of inflation in Italy, they imply a high degree of devaluation abroad.

The maximum velocity indices are obtained with the indices of wholesale price and free market gold price (1.80 and 1.79 respectively). Only the second is an index of noteworthy significance, as the velocity index is based on the hypothesis that "the quantity of goods remains constant" and we know that in fact the quantity diminished by about 50 per cent, necessitating an appropriate reduction in the velocity index. The indices based on prices of free market gold, foodstuffs, and the U. S. level at the free exchange rate (1.79, 1.47, 1.46 respectively) make more sense. Speaking generally, these indices are a "very rough measure of the degree of confidence the population had in their national currency

and the psychological crises it was going through" (23).

Analogously the variations in the "confidence" in the Italian lira from 1938 to 1946 are shown in the graph at p. 31.

Given the above it may again be asked: Is a parallel possible between the Great Inflation of Germany and the inflation of Italy today even if only broadly indicative?

The political and economic structures of the Weimar and Italian republics are not too different to be classified under the same economic system provided this system is broadly enough defined. This granted, it may be recalled that the typical indices of the German hyper-inflation showed a certain time trend during the downfall of the mark with the following velocity indices roughly measuring the element "confidence" (24):

	July	Aug.	Sept.	Oct.	Nov.	Dec.
Autumn, 1921			1.31	1.48	1.88	1.70
Summer, 1922	2.97	4.57	5.18	6.99	9.01	

It is immediately apparent that none of the Italian indices (25) approaches the German ones nor follows their rhythm of increase.

However, for Italy the indices of 1.79, 1.14, and 1.75 based on the free exchange rate of gold, free price of the dollar and price of foodstuffs respectively do have considerable significance.

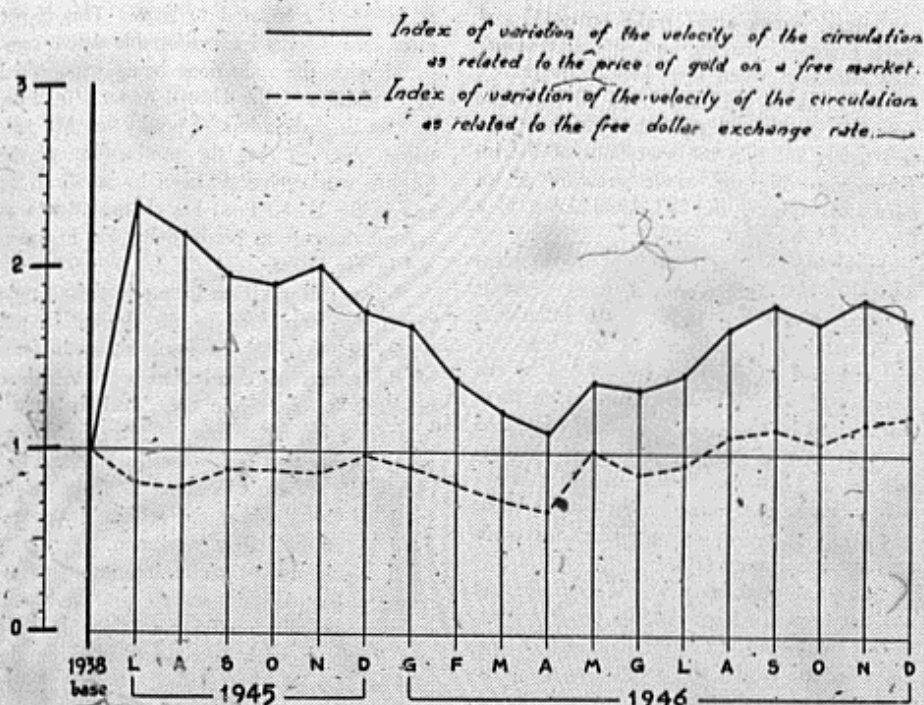
Bresciani-Turroni's three distinct stages in the Great Inflation of the mark may be recalled (26). During the first and longest the revaluation is above all a proportion with the quantity of paper money emitted. Then the influence of the new emissions is intensified by the increase in velocity, the return of the national money from abroad, and dis-hoarding. Finally, the third stage is characterized by the

(23) Bresciani-Turroni, *ibid.*, p. 224. We repeat, these calculations on the velocity of circulation are extremely difficult and the results obtained approximative. In this connection as noted a specialist in the field as Mr. Luigi Amoroso expresses scepticism of the criteria adopted to calculate indices of the prices in force in the immediate aftermath of the war.

(24) The indices calculated by Bresciani-Turroni are based on wholesale price indices with 1913 = 100.

(25) See p. 24, above.

(26) Bresciani-Turroni, *ibid.*, pp. 227-28.



replacement of the national money by foreign currencies and by other means of payment.

If we attempt an analogy between the Italian situation and the German one we may say that the inflation of the lira at the end of 1945 had stopped at the first stage although including two aspects characteristic of the second, and that the inflation had not run its full course. In fact if we consider the configuration from 1938 to the summer of 1943 the increase in the velocity of the currency is notable only in two sectors, that of the free price of gold and perhaps that of the cost of foodstuffs.

One sees in this period, moreover, that the hoarded lire are still being jealously conserved and the lowness of production is still due to the war and enforced autarchy rather than the characteristic drop in production derived from the disorganization of accentuated inflation. Certainly foreign currency has not begun to replace the lira in circulation. Italy

was definitely however in the first phase and in some points had advanced into the second especially as regards hoarding of gold and savings in the form of goods, especially foodstuffs.

Finally we will remember that the "real value" of the quantity of lire emitted as calculated using the free exchange rate index of the dollar was much greater than that of the mark during its first critical and alarming phase in the autumn of 1922. And the velocity index was 6.99 for the mark compared to 1.14 for the lira.

Note on the lowering of the middle classes.

12. — If we now consider the economic situation in the "real" terms and ignoring the losses and profits of the war, we may isolate and observe the machinery by which an inflation operates, comprehend its specific character and the mechanics of its operation.

"Real" goods and "real" terms of contracts exercise a striking and well understandable attraction when men believe themselves on the brink of inflation. And all the more attractive are these "real" things to one who sees before his eyes the operations of the inflation upsetting the whole structure of society and bringing the individual down to a lower level.

Surveying the "real" side of the problem what elements were produced, what elements changed in the first stage of the inflation?

A national income cut in half was one real result of an economy embarrassed by the damages of war. On agriculture alone there was a drop of about 60% in 1945 compared to 1938: 55.2% grain, 51.1 rice, 47.3 maize, 54.8 rye, 44.3 oats, 54.6 barley, 28.6 dried beans, 50.8 potatoes, 55.2 tomatoes, 12.3 sugar beets, 36.5 hemp, 41.7 olive oil, 75.7 wine, 81.6 oranges, and 67.2 lemons (27).

Industrial production at the end of 1945 was not even one-fourth of the pre-war level. In this connection see Appendix, Table F and Table G, which give the declines in the principal types of production (28).

One element of comfort, however, was provided by the fact that industrial capacity had suffered but a small percent during the war, perhaps 6 or 8 percent. The reduced production and the same time the difficulties of recovery were mostly due to the reduced production and supply of raw materials (the availability of coal alone dropped more than 50%), to bottlenecks in transport (358 milliards of damages to the railroad system), and to the reduced volume of foreign trade (29). To this should be added the no less notable reduction in labor productivity, which is of particular importance.

This last reduction is from a certain point of view of vital interest. It appears that in Italy the productivity of labor has decreased

(27) Source of data: UNRRA Italian Mission, *Italy's Economy in 1947*.

(28) Appendix, page

(29) *Ibid.* From this report we have drawn the data on the per capita special trade (in dollars June 1946) up to 1942. From 1933 to 1942 imports dropped \$ 16.10 per capita to \$ 13.03; exports rose from \$ 11.71 to \$ 14.22.

25 or 30% compared to 1938. This is not much and is indeed a comfortable datum compared with the reductions being experienced in England and the United States. In a debate on English industrial production Mr. Lytton observed that the productivity of the English worker has declined by 20 to 30%; and in the U. S., Ford has claimed that a 30 percent decrease in productivity was experienced in his plants.

When this decrease in productivity (25-30 percent) is compared to the decline in real wages (about 60%) the result shows in favor of the efforts of the Italian worker, whose productivity, one might say, "had the right" to a reduction of at least 50%. If one considers further that real wages in England had meanwhile advanced by about 20% one might speak of the absolute and relative hyper-productivity of the Italian workman.

It would be especially interesting to attempt a comparison between pre- and post-war income distribution conditions in Italy and England, with special attention on the middle and laboring classes. It is precisely in this upheaval of the social stratification that inflation transforms and sets new bases for the social relations.

The pyramid of so-called "earned incomes" in Italy in 1938 rested on a tremendously large base rising by few gradations to a slender point. The incomes of the professional, commercial and non-laborer employees (including 3,100,000 recipients) especially followed this distribution (30):

(30) These data include 1,000,000 office workers, distributed as follows:

Above lire	50,000	3,100
	40,000	12,200
	30,000	34,600
	20,000	141,600
	10,000	541,500
Less than	10,000	458,500
Total number		1,000,000

(Data expanded by the Centro per la Statistica Aziendale in Florence - Index, n. 5 p. 4).

	Annual income in lire	Number of recipients
above	100,000	26,000
	80,000	36,500
	60,000	54,000
	50,000	70,000
	40,000	94,000
	30,000	149,000
	20,000	334,000
	10,000	1,064,000
Less than	10,000	2,036,000
Total number		3,100,000

The 7 or 8 million recipients of the laboring classes, farm and non-farm, are concentrated in the "below 10,000" category with slight infiltration into the income groups immediately above.

The war and the devaluation profoundly altered the shape of the income pyramid. Despite the lack of up-to-date statistics we may be sure that the alteration decreased the numbers in the upper strata, depressing those whose incomes were fixed to broaden the base even more. The base subsistence of this huge mass at the base of the pyramid has been wrested from the distribution of rationed foodstuffs and recourse to free and black markets. A rough attempt to compare prices and incomes of the 10 millions of persons and their families in Italy and in England may give an idea of their relative living conditions.

In England the system of food rationing and price controls effectively covered the entire food requirement. This lack of comparability of the conditions of expenditure make the attempt to identify the transformations in Italian and English real income very difficult. It is known that in Italy expenditures at controlled prices amount to some 10% of the total expenditures for foodstuffs, and given the present conditions of the country it is not probable that this small figure could be raised by much. Indeed, it is in the nature of a public contribution to assure at least the barest minimum subsistence to the great mass of indigent persons. Thus, for example, in December 1945 the average ration-card holder could purchase through controlled channels 857.8 calories daily, covering 35.7% of his

normal minimum requirements (the percentage had been 31 for the previous January) (31). The remainder was available only through free and black markets and only at free and black market prices. The crushing weight of this situation on the middle and working classes is the translation into "real terms" of the indices of cost of living and real income.

The national index of foodstuffs (calculated using official prices for rationed quantities and actual prices for non-rationed requirements) had by December 1945 climbed to 3156 compared with 1938=100. The index of the total cost of living lagged behind somewhat for several reasons: blocking and control of public service rates the maximum of which (gas) increased 14 times and the minimum ("fixed" electric light services) doubled, blocking of rents, etc. and could be placed at 24 to 2800. Living costs for the middle classes in particular (the class which is of special interest in the middle brackets of the income pyramid) had by the end of 1945 reached 26.59 times their 1938 level: 39.29 times for the cost of food and 15.30 for the other types of expenditures.

The wages and incomes of the middle class (32) had meanwhile increased to a far less extent. The paycheck of the private employee had increased 6 to 8 times, of the government white-collar worker 5 to 6 times; in all, the real incomes of these groups had decreased by almost 3/4 and 5/6 respectively. Recalling that the national income was reduced to about 45 percent, we see that these groups find themselves worse off than the average by a good 20%.

Workmen's wages have risen 10 to 20 times over pre-war, and thus their real income has been reduced by 3/5 leaving them also in a condition below the national average of the reduced income.

Varying forms of non-wage compensation must however be remembered, for they represented to the manufacturer a social charge of an additional 40% of his wages bill.

(31) Monthly Bulletin of the Servizio Studi Economici of the Banca d'Italia, n. 1 (Nov.-Dec. 1945 - Jan. 1946).

(32) Included in the middle class in the investigation by Prof. Livi being cited are the professional classes business men, and white-collar groups.

To arrive at more precise conclusions it would be necessary to consider the facts, hidden and discounted in a general index of living costs, of *a*) the high relative proportion of food purchases — which rose most — in the budgets of the lower-income groups, and *b*) the large amount of unemployment (33) glutting the labor market and weighing on the budget both of the State and of the workman's family.

In sum, the fact that the large mass of wage-earners found themselves below the reduced average income shows in itself the increased inequality of income distribution. The displacement of the income groups, the diminution in numbers at the upper and middle sections of the pyramid are evidenced not only by these calculations but by the large decrease in consumption during the war years.

The Italian people in 1938 spent about 109 milliard lire for consumption. Taking this as 100, in 1945 their consumption in 1938 lire had been reduced to 73.8 after slight (7.7 milliard) betterment over 1944.

Following is the breakdown of consumption expenditures in Ital and England, and it may be recalled that the higher proportion spent for foodstuffs by the Italian population is evidence of their more modest standard of living:

	England		Italy	
	1938	1945	1938	1945
Food	36.28	38.45	56.4	65.4
Clothing and furnishings	17.61	11.55	13.9	6.8
Housing, light and heating	16.53	19.69	9.7	12.6
Transport and communication	4.53	6.87	6.8	5.0
Various, incl. taxes and imposts	25.05	23.64	13.2	10.2
	100.0	100.0	100.0	100.0

(33) The Ministry of Labor gave the following as the unemployment situation at the end of 1945:

Agriculture	284,852
Industry	709,365
Commerce	118,470
Other	212,076
	1,324,763

These figures are only approximate as the Ministry, upon process of reorganizing its services in that period.

Another index of the decrease in consumption may be taken from the situation in various cities, as, for instance, Milan. The decrease in various foodstuffs from 1938 to 1945, correcting for population change, was as follows (34):

Meat	35 %
Poultry	35 %
Eggs	33 %
Fish	43 %
Milk	63 %
Fruit	63 %
Vegetables	53 %
Wine	50 %

The gravity of this decline in consumption is further shown by the decline in calories consumed, a decline which is even more striking when it is noted that Italy's "normal" consumption is low compared to other countries. Expressed in terms of daily man-units, the pre-war was as follows:

Germany	4,090	calories
England	3,894	"
France	3,644	"
Italy	3,200	"

In 1945 the average daily per-capita calorie consumption, including rationed, non-rationed, and black market purchases in terms of calories had been almost halved in Italy (35).

16. — On the the whole the lowering of the central layers of the pyramid and the enlargement of its base must have been considerable in Italy, much more, from what may be calculated approximately and what may be inferred, than occurred in England (36).

The decline in savings is one of the most significant indices of the change. The real income of Italy in 1938 permitted a total sav-

(34) These figures are based on the amount of foodstuffs introduced into Milan. They were provided by the I.S.E. (*Istituto di Studi Economici*), Roma.

(35) *Italy's Economy in 1947*, p. 108.

(36) Because of the lack of statistical information in Italy it has been impossible to present a direct comparison of the pre- and post-war distributions of income in Italy and England.

ing of 5 milliard lire; in 1945 it entailed a dis-saving of 4 milliards (37).

Individual holdings of the national wealth were in large part liquidated and the savings of the middle class were particularly hard hit as may be seen by their relative pre- and post-war holdings.

The former ratio of currency to deposits had gone through its characteristic expansion, from an index of 37 in 1938, to 92 in 1945 (after having been up to 121 in 1943 and 122 in 1944). If in particular we consider the typical forms of savings used by the middle classes we arrive at even more noteworthy results.

At the end of 1938 the deposits at ordinary savings banks were 18,3492 milliards; on 30 Sept. 1946 they were 122.1231. Deflating this by the cost of living of the middle classes compared to 1938 the purchasing power of the 1946 deposits becomes about 4 1/2 milliards, 1938 lira. If one considers further that living standards of these people had through a series of privations measured in years been reduced by 80 %, the reduction in their savings of only 85 % give reason to appreciate their capacity for sacrifice. But that which is hidden under the statistics, even if they are extremely analytical, is the slow conversion of the family wealth, even the most necessary and dearest items, into foods, a minimum of clothing, and medicine. In every town clearing houses of gold were organized, more squalid but more necessary than those of the Ethiopian war; and by this method, through special middlemen, the gold and valuables flowed into the hands of those who had the means to seek "a secure investment". Only centuries of servitude, interrupted by brief periods of European florescence between 1861 and 1915, and resumed in all its harshness and horror until this latest catastrophe, can explain the endurance of the Italian people in such a black year as 1944.

To valueate, even if only in an indicative way, the lowering of the middle classes in Italy, the economic life of the millions of per-

(37) Bruno Rossi Ragaizi, "Redditi e consumi della popolazione italiana negli anni 1944-45 e aprile 1946", *Congresso Economico*, p. 7 ff.

sons in the base and central sections of the pyramid may be considered.

At the base there were 2,036,000 wage-earners and their families with less than 10,000 lire in the year 1938. To live at the same standard in 1945 they should have had 300,000; actually they had approximately 70,000. If we take the middle group, that from 10,000 to 50,000, we find 994,000 recipients with their families receiving in 1938 an average of about 30,000; the same standard of living today would require about 900,000, whereas, on the average they have no more than 240,000 available (38).

This lowering of the middle classes and the altering of the income distribution become more evident if we compare prices in London and Rome (39).

Average British wages were 121.4 shillings per week per adult person (about 5,400 lire) (40) in June 1945; by the end of 1945, they had increased about 10 % raising the average to about 6,000 lire a week.

Italian wages may be roughly placed at not more than 2,000 a week. Deflating these earnings by the cost of living, which in England was at 122 at the end of 1944 (for Aug. 1939=100) while in Italy it increased about 30 times during a salary increase of 11 or 12 times, we arrive at a 60 % decrease in the real salaries of the Italian middle class (41).

(38) We have calculated an index of total living cost of the middle classes, which, with 1938=100, was at 2993.4 at the end of Dec. 1945 (practically 30). This index was calculated by the Centro per la Statistica Aziendale di Firenze.

(39) Figures from the Centro per la Statistica Aziendale di Firenze. Prices for the month of May 1946. They have been converted on the basis of exchange-rate £ 1=900 lire.

(40) Ministry of Labour Gazette, Feb. 1946.

(41) A comparison of indices in London and Rome, considering for the latter also black market prices, yields significant results. The following table is taken from the "Circolare di informazioni" of the Centro per la Statistica Aziendale di Firenze (Prices as of May 1946; exchange rate £ 1=900 lire).

	In lire per kilogram	
	London	Rome
Bread	18.75	23
Wheat flour	20.70	—
Bacon	126.00	4
Sugar	33.00	163
Milk (per liter)	39.70	30
Butter	165.20	—
Potatoes	11.00	—
Eggs (per unit)	7.50	—
		Bl. market
		140
		160
		470
		1,000
		50
		650
		34
		16

The same Centro per la Statistica Aziendale of Florence from Jan. 1945 on has been calculating an index of the cost of living of the middle class. According to this index the purchasing power of the lire moved from 1 in 1938 to 3.8 in Jan. 1945 to 3.4 in December of the same year; a slight increase during the

summer months culminating in an index of 3.7 in August and September was short-lived. In December 1946 the index was down to 3, in February 1947 had fallen to 2.7. These indices are presented in Table M of the Appendix.

Part II - The Inflation in 1946 and the Economic Emergency.

17. — The recovery of industrial production during 1946 was notable. But it is difficult to assess the direction, the magnitude of this recovery and above all the extent to which it was a healthy and permanent gain in the sectors in which it operated. However, it is evident that from a level of 25% in January 1946 compared to 100 in 1939, overall production had moved up to 59% by September. But in the final months of 1946 and in January 1947 many types of production were forced to cut down their output for lack of coal and hydro-electric power.

Despite the technical obstacles, the tightness of transport and the shortage of raw material, overall production increased 64% from January to April and again 34% from April to July. In part this rise in the general index is also due to the considerable recovery in the agricultural sector by the end of 1946 (42).

The quantity of currency emitted (as contrasted to money) remained practically stable the first 4 months of the year (from 382.6 to

(42) According to data published in the *Globo* (18-3-47) agricultural production by 1946 was up to 70-75% of the average of the last pre-war years (1936-1939).

1946: INDICES OF OVER-ALL PRODUCTION AND WHOLESALE PRICES; EMITTED CURRENCY; FREE PRICES OF GOLD AND FOREIGN CURRENCY (a)

Month	Over-all Production (1939=100)	Emitted Money (b) milliard lire (end. of month)	Wholesale prices (1938=100)	Free market prices in lire			
				per gm gold	per \$	per £	per Swiss franc
January	25.08	382.6	3404	775	382	1117	122
February	26.59	385.2	3401	634	350	1040	106
March	32.44	392.0	3184	564	304	869	98
April	41.24	390.9	3087	525	281	793	89
May	42.29	393.3	2985	690	333	920	106
June	53.44	402.5	2965	653	366	1057	122
July	55.53	414.8	2949	710	401	1222	123
August	53.68	425.1	3016	846	484	1368	133
September	59.34	439.3	3209	947	512	1461	168
October	57	452.9	3595	940	507	1427	167
November	52	465.3	3999	1012	565	1651	189
December	—	512.1	4416	1078	653	1825	199

(a) Centro per la Statistica Aziendale di Firenze.

(b) Includes Bank notes, Treasury notes, and A-M lire.

390.0 milliards); only after April did it resume its expansionary movement reaching 445.3 milliards by the end of August, a 20% increase over 31 December 1945. Until the end of April, it may be presumed, occurred a period of watchful waiting, a slowing down in the velocity of money and speculative transactions; but the rapidity of turn-over of merchandise increased markedly as a result of the increasing unification of the market and improved means of transport (43).

From January to April the free market price of gold dropped by more than a third. The drop in the free exchange rates of the more important foreign currencies, as seen from the preceding table, was also notable though slightly less. But by May, however, the upward movement was resumed.

As for prices, at the beginning of 1946 wholesale prices were 34 times their 1938 level. The first 6 months there was an appreciable drop of about 15%, but the increase in the second half year quickly wiped out the improvement, prices rising by about 50% so that the level at the end of 1946 stood at 44 times the 1938 base.

The stability of the quantity of emitted currency, the decrease in the velocity of money seeking "refuge goods", and the increase in the velocity of circulation of merchandise delimit the elements of the problem for the first half of the year, confronting what in the final analysis are the monetary elements with the "real" ones, the former remaining practically unchanged, the latter increasing greatly.

At first sight the reasons for a decline in the wholesale price index of only 15% are not evident, especially considering that the prospects during these months were of a continued and prolonged fall in prices.

18. — The forces restraining the fall in prices were multiple. Foremost was the ex-

(43) For the railroads alone from 31-7-45 to the end of April 1946 track in operation increased 27%, traction units in operation 54.7%; average turn-around (that is, number of freight cars times number of days in that time period divided by number of effective voyages) decreased from 12 days 13 hours in Oct. '45 to 11 days 14 hours in March '46, indicating a more intense utilization.

port of the new industrial production, a production which was not a mere recovery to peace-time conditions but an entirely new impulse to make up the dearth of goods or the disappearance of goods in foreign markets caused by the labor unrest in production centers once our competitors. The domestic market in these six months remained practically inactive, all new production being disposed of outside our boundaries (44). This explains in large part the steady conduct of prices.

It may also be observed that this first six months was in every sector of the economy a period of watchful waiting, waiting to see the direction the market would take in capital goods, consumer goods, and supplies in general.

In contrast to the stability of currency, credit activity expanded notably in this period, an expansion which to some extent worked against the downward tendency of prices. From the 1st of January to the 1st of July the volume of loans of the 365 banks which administer about 99% of all the deposits in the country increased by about 41% (from 160,664 to 226,960 milliards) while availabilities increased only 11% (from 189,435 to 211,820).

19. — By the second half of the year the emergency had assumed a much different character. Despite the still increasing velocity of goods (45), the negative elements, those producing inflation, were indubitably prevailing.

The general index of industrial production rose from 55.53 in July to 59.34 in September; and then, as was above noted, began to fall below the July level.

The currency emitted also began to rise. From May to October the monthly increase was about 12 milliards, bringing the total increase

(44) Evidence of this is given by the foreign trade statistics: in millions of lire, imports increased from 3,385 in January to 7,458 in June; exports from 751 in January to 4,340 in June. The comparatively greater increase in exports is noteworthy. See Appendix, table O.

(45) Index of tonnage carried by rail increased from 58 in June to 63 in October; maritime tonnage unloaded, 32 in June, 35 in November; maritime tonnage loaded, 16 in June, 17 in November; volume of retail sales corrected for price changes, 100 in June, 151 in October, 119 in November. These indices were calculated by the Centro per la Statistica Aziendale of Florence.

market is short of breath; and the rapidity with which revenue receipts are increasing seems to them deceptive, resembling too much the flight of a shadow; and lastly there are some who consider that an endeavour to act on the national budget as also on the balance of payments is too reminiscent of what is known in other branches of activity as "calming" (controlling) market phenomena, and that the present phase of the depreciation of the lira coincides so fully with Italy's

deformed economic structure that more radical reforms have become necessary which will act on the economic and social forces now at work. All, however, share the idea that psychological factors have great influence at so delicate a moment. And what better antidote can there be than the words, so learned and so full of confidence, which have been uttered by the man who directs the Bank of Issue itself?

G. P.

ITALIAN PUBLIC DEBT (1)
(in milliards of lire)

Table A

	31.XII.36	30.VI.43	end VI.45	31.XII.45	31.X.46 (2)
Consols	52.9	52.9	51.9	51.9	52.9
Redeemable:	49.3	178.1	206.3	279	278.2
Long-term Treasury bills	(20.1)	(134.4)	(163.3)	(216)	
Treasury notes	1.9	5.9	7.3	7	7.3
Floating debt:	36.0	168.9	581.4	616	676.3
Ordinary Treasury bills	(11.0)	(54.5)	(157.7)	(179)	(264.8)
Advances of the Bank of Italy	(3.0)	(59.9)	(130.7)	(134)	(343.0)
Interest bearing current accounts at the Cassa DD. PP. and other Institutes	(22.0)	(54.5)	(93.0)	(93)	(169.0)
Grand Total	140.1	405.8	847.9	955	1115.2

(1) Source: Report of the Economic Commission presented to the Constituent Assembly - Monetary problems and foreign trade - p. 42.

(2) Source: Bank of Italy.

BANK TREASURY AND AM-LIRE CURRENCY CIRCULATION - CURRENCY CIRCULATION INDEX
(end of years' figures, in millions lire)

Table B

Years	Bank of Italy currency circulation	Treasury notes (1)	Silver coins (2)	Cash moneys		Nominal moneys (5)	Total	Am-lire circulation	Grand Total	Index 1929=100
				paper (3)	nickel (4)					
1928	17,495.4	161.0	1,263.8	—	351.0	143.9	1,919.7	—	19,215.1	102
1929	16,774.3	80.0	1,493.3	—	351.0	147.3	2,071.6	—	18,845.9	100
1930	15,680.5	—	1,634.3	—	351.0	150.1	2,135.4	—	17,815.9	95
1931	14,294.8	—	1,635.1	—	351.0	152.2	2,138.3	—	16,433.1	87
1932	13,672.0	—	1,635.1	—	351.0	153.4	2,139.5	—	15,811.5	84
1933	13,243.3	—	1,635.1	—	351.0	155.4	2,141.5	—	15,384.8	82
1934	13,145.3	—	1,635.1	—	351.0	157.8	2,143.9	—	15,289.2	81
1935	16,296.5	647.0	1,635.1	—	351.0	159.5	2,792.6	—	19,089.1	101
1936	16,525.1	1,305.6	1,634.4	—	261.8	157.8	3,359.6	—	19,884.7	106
1937	17,468.1	1,350.0	1,273.3	—	261.2	159.5	3,044.0	—	20,512.1	109
1938	18,955.5	1,896.0	1,260.2	—	261.2	162.5	3,539.9	—	2,495.4	119
1939	24,432.2	2,447.7	1,217.9	—	275.5	171.9	4,113.0	—	28,545.2	151
1940	31,396.0	2,557.5 (6)	819.3	340.9	179.4	201.8	4,098.9	—	35,494.9	188
1941	49,609.3	3,503.7 (6)	819.3	646.6	121.4	223.8	5,314.8	—	54,924.1	291
1942	73,320.3	4,680.0 (7)	12.0	777.1	128.7	247.4	5,845.2	—	79,165.5	420
1943	196,631.6	5,536.6 (7)	12.0	800.0	142.9	296.7	6,748.3	17,853.9	181,235.7	961
1944	248,643.3	5,536.6 (7)	12.0	800.0	142.9	297.3	6,748.3	61,841.3	319,233.9	1695
1945	296,021.0	6,258.8 (7)	12.0	1,080.3	142.9	297.3	7,760.3	86,028.9	389,810.2	2068
1946 January	290,510.7	7,659.0	—	—	—	—	—	—	298,169.7	1582
February	283,045.6	"	—	—	—	—	—	83,428.1	380,132.7	2017
March	291,747.2	"	—	—	—	—	—	92,456.3	391,862.5	2079
April	291,639.6	"	—	—	—	—	—	91,541.0	390,839.6	2074
May	293,592.5	"	—	—	—	—	—	91,981.5	393,233.0	2087
June	300,369.0	"	—	—	—	—	—	94,332.9	402,360.9	2135
July	311,125.2	"	—	—	—	—	—	96,373.4	415,157.6	2203
August	324,825.7	"	—	—	—	—	—	92,885.2	425,359.9	2257
September	341,163.7	"	—	—	—	—	—	90,795.9	439,618.6	2333
October	357,885.0	"	—	—	—	—	—	87,634.0	453,214.0	2405
November	371,863.0	"	—	—	—	—	—	86,067.0	465,589.0	2471
December	377,230.0	7,459	—	—	—	—	—	87,822.0	512,711.0	2721
1947 January	406,067.0	7,659	—	—	—	—	—	81,324.0	497,050.0	2637
February	412,068.0	7,659	—	—	—	—	—	83,886.0	503,613.0	2672

(1) 5 and 10 lire.

(2) From 1914 to 1917: lire 1 and 2; from 1927: lire 5, 10 and 20.

(3) Lire 1 and 2; from 1940: Treasury notes.

(4) Lire 1 and 2; from 1940: nickel and acmonial.

(5) Lire 0.50 and 0.20 (nickel) and lire 0.10 and 0.05 (bronze); from 1939: 0.50 and 0.20 acmonial.

(6) Not taking into account 398.6 millions of silver coins (lire 10 and 20) taken away from circulation or prescribed.

(7) Not taking into account silver coins (lire 5, 10, 20) taken away from circulation.

Sources: Bank of Italy. The indices of the last column have been calculated by us.

the whole field of recovery by small and slow steps of partial or relative progress, accompanied by considerable and more or less unavoidable errors.

The recent bold rehabilitation of the Hun-

garian currency, which required a profound transformation in the social and economic structure of the nation, offers an alternative solution the general rejection of which is rich in warnings and instructive comparisons.

NOTE ON THE REPORT READ BY PROF. LUIGI EINAUDI TO THE GENERAL MEETING OF SHAREHOLDERS OF THE BANCA D'ITALIA ON DECEMBER 31, 1947.

The report of the Governor of the Banca d'Italia, Prof. Einaudi, is always awaited with great interest as affording one of the widest and at the same time one of the most detailed surveys that Italian economic literature can offer, and this year it has naturally been expected with more than usual eagerness.

The serious situation now existing in Italy, which gives rise to so many rumours, either pessimistic or optimistic, but rarely of such authority, leads men of all parties and all tendencies to hasten to consult the thick volume of which the proofs have just been published (1).

It may therefore be of interest to run over the Report, stopping to consider those points where the words of the Governor clearly reflect the views of Einaudi the economist. Special consideration should thus be given to the observations on the participation of Italy in the Bretton Woods Agreement, and on the condition on which the possibility of balancing our budget of foreign payments depends, and here prospects are certainly less unfavourable than they were a year ago. Consideration should be given to the long and able analysis of our commercial agreements and of the foreign exchange market, which enables the reader to see the working of the invisible economic "logos" which, under new forms of agreement and of exchange relations, is tending to unify the market and the prices of foreign bills. We should pause at length to study the examination of "Banks and Bourses", calling special attention to the new system suggested to the Ministry of Finance and of the Treasury for assuring to the Treasury a certain surplus of deposits and providing it with a more effective instrument for action than the bank rate.

The curiosity and anxiety of the reader, intensified by the rapid progress of inflation, are satisfied more especially by the "Final Considerations".

Faced by the possibility of the collapse of the lira, Prof. Einaudi seems for the moment to set aside his official position of Governor of the Bank and, as an old patriot, address himself to the Country directly, with a frankness which is not free from some controversial touches:

"On more than one occasion in the last few

months and days the newspapers have enquired: what is the Governor of the Bank of Italy doing? What is that man doing who goes on repeating to-day his old exclamation of 1920: smash the press which prints the bank-notes, but who continues endlessly signing notes of the interminable W series?" (2). And he uses "words inspired by a feeling of guilt and responsibility" to assert "that the Treasury of the State has no direct responsibility for the increase of the circulation". (3)

How then has that increase of the circulation arisen which, since the end of May 1946 until January 1947, has led to the printing of 103,817 million lire?

The responsibility does not lie with the Treasury. The debt of the Treasury to the Bank has increased over the period mentioned by only 797 million lire, i.e. in a ratio of little more than 1 per mil. Nor does the responsibility lie with the Banca d'Italia which in its capacity as a bank transacting credit operations has withdrawn from circulation 2,750 million lire.

Whose then is the fault? As a hypothesis, the Governor ascribes it first of all "to that mysterious entity whom the ancients called Fate" (4).

The increase of 103,817 millions in the circulation can be more than explained by the disbursements of notes which "fate" has imposed on us. They can be summed up as follows:

Payments to the Allies	L. 10,658,000,000
Rediscounts for the commodity pools	" 31,377,000,000
Purchase of foreign exchange	" 27,607,000,000
Repayment of tied bank deposits	" 34,461,000,000
Reduction of the credit balance Treasury	" 4,556,000,000
Total	L. 108,659,000,000

No one can deny the unavoidable nature of these disbursements. "We had no choice; we had either to increase the note circulation or create economic chaos" (5); but if it was fatal that the Banca d'Italia should increase so considerably the note circulation, it was not Fate which forced it to do so; but a series of circumstances which are clearly specified and identified.

(2) Report, page 246.

(3) Report, page 214.

(4) Report, page 215.

(5) Report, page 223.

(1) Banca d'Italia - Adunanza generale ordinaria dei partecipanti - tenuta in Roma il giorno 31 marzo 1947. Tipografia della Banca d'Italia - Roma.

It is indeed necessary "to look and see what lies behind the necessity which has compelled the Banca d'Italia to issue in seven months and twenty days notes for no less a sum than 104 milliards of lire" (6).

The English-speaking reader can now appreciate the inflationary effect of the policy of compulsory commodity pools and of the political price of bread by reading a very clear article written by Prof. Einaudi himself (7); he will thus be able to make his own generalization and to ascertain that a general cause has been responsible for the inflation of the note issues: they have been made without cover.

The notes put into circulation to meet the cost of the political price do not return, because the bread is consumed and the consumer pay their debt consuming the bread, but it is the Treasury which pays the difference in price. It is indeed true that notes have also been printed to make payments to the Allies and to purchase foreign exchange from exporters, but by so doing corresponding counter-items in appreciated foreign exchange are credited to Italy; and their inflationary pressure on prices should therefore only be temporary.

And this would really be the case provided two conditions were operating: the foreign exchange thus secured should be collected in the form of purchases of essential commodities, and the proceeds obtained therefrom should be used to reimburse the lira advances made by the Bank of Issue. By this means the circuit—lira—foreign exchange—foreign commodities—lire, would be established.

But this circuit does not really work. The foreign goods purchased with the foreign exchange are not always essential; moreover, they are frequently sold at political instead of economic prices; and lastly it may be that the lire collected by their sale are not reimbursed to the Bank which advanced them, but are used to meet current expenditure.

In this way the Governor of the Banca d'Italia has not only clearly shown the lack of responsibility of the Bank of Issue for the increase of the circulation but has pointed out what are undoubtedly some of the causes of the depreciation which is related to the fact that the above-described circuit does not work.

The general situation responsible for the process of inflation still has to be considered. Prof. Einaudi, a distinguished supporter of free trade and the principles of orthodox finance, ascribes it to something less ancient and less tremendous than dreadful "fate"; he ascribes it to the deficit of the national budget.

"The means for avoiding it are known. There are no miraculous remedies for finance" (8). The means are substantially two: taxes and loans. A wise use of these means, which first contains and then wipes

out the deficit, is sufficient—the Governor said—to arrest the onward rush of inflation.

Italy is still far from that fearful moment when every new note issue is vain, and no longer is of any advantage to the Treasury. The Governor still has confidence: "We know—he stated—that the end of the lira must not come".

The fate of the lira depends to some extent on the respective speed of six runners in the race, whose velocity may be shown by the following index numbers:

	1 st half	2 nd half	December
Direct payments	196	196	196
Total of direct and indirect payments	100	118	144
Revenue receipts	100	153	—
Means supplied by the financial market	100	81	—
Note circulation	100	116	132
Wholesale prices	100	122	141

The dreaded runner who causes so much trouble, is that known as wholesale prices; his race is encouraged by payments and the note circulation. He is indirectly encouraged by the reduced strength of the means supplied by the money market (loans and current accounts). The only hope lies in the galloping pace of revenue receipts.

The Governor of the Banca d'Italia is a man of tried and manifold experience. The present deficit is a huge one, 610 milliard lire. But the deficit—which were nevertheless wiped out of past times were even more alarming, as is seen if we reduce the figures to present day lire:

1918-19	729 milliards
1919-20	330 "
1920-21	520 "
1921-22	465 "

We must remember the example set by our fathers: "It does not require a very great effort of will to leave the path that leads to the flowery banks of inflation. We need only do once more what was done by the men of the past generation" (9).

In Italy, and not in Italy only, all have listened with deference to the voice of a Master, a voice which—carrying the weight of authority as it does—is nevertheless only one of the many in the discordant chorus of the would-be reconstructors.

Undoubtedly there are some who do not accept the Governor's diagnosis of the illness or the remedies he proposes; there are some who point out that the famous runners of the race lend themselves mutual assistance, and they note with anxiety that the money

(6) Report, page 223.

(7) LUIGI EINAUDI: *Currency circulation and compulsory wheat pools* - Banco di Roma - *Review of the Economic Conditions in Italy*, N° 2 - March, 1947.

(8) Report, page 231.

(9) Report, page 247.

pound sterling which lasted almost a century is a counterpole which needs no comment.

From such a comprehensive point of view the problem of the inflation of the lira ceases being one of finance or simple economics but becomes a sociological problem; or an economic one, yes, but now understood in a more profoundly dynamic and structural sense. It is not without point to remember—and this consideration recalls by contrast the limitation included in the quote "at least in this country"—that while in England inflation theories have been rather late in coming and were therefore opposed and considered heretical, in Italy the sociological theories of inflation have had such eminent and radical sustainers as Pareto and Gini.

36. — The social and economic disequilibrium at the root of the inflationistic process were so evident in Germany during the devaluation of the mark beginning in 1914 and in other countries of retarded capitalistic development that they are common knowledge by now, and the difficulty of obtaining information consists in selecting from among the plethora of texts and citations which exist.

The words of Wagner, written 86 years ago, are well worth repeating and have in fact been a preferred text of students of the great inflations that took place under historical conditions analogous to those of the Russian ruble: "Powerful groups are interested in maintaining the agio and even increasing it. If measures are taken for the rehabilitation of the currency the powerful party of the protectionists will oppose them with all the means at its disposal. Bankers and industrialist are in agreement. This was proven every time in Austria during the numerous attempts made to rehabilitate the currency; the same occurred in Russia in 1862. In the United States the attempt to curtail the agio was fought with real fanaticism. The opponents of paper money are called traitors and on the payroll of a foreign government in the rebuttals of the selfish industrialists" (55).

Naturally the social and economic picture

(55) *Russische Papierwährung*, p. 105.

of the inflation and anti-inflation forces in Italy is different from the above. There are no groups or interests that openly support the inflation, but accusations and retorts have not been lacking to indicate that the possibility of a monetary policy being impelled toward inflation is arising. A liberal like Minister Corbino, who has followed the policy of braking the emission of currency and paring expenses to the bone while—according to his numerous critics—closing his eyes to factors much more menacing to the Italian structure in this emergency, has sometimes specifically accused the Communists and some groups of manufacturers and businessmen of being supporters of the inflation (56).

Such an opinion, especially if taken literally, may cause a certain perplexity. While it is true that of his day Lenin wrote, "The most effective means of provoking the collapse of a society is that of burying its money", present day communism is much more democratic in form and could hardly countenance ends of this type especially in a political situation like the Italian one where it shares with other political parties the responsibilities of governing. It would be more just to observe that the antagonistic relations born of the present inflation and its latent future are deeply rooted in the social and political structure of the Italian economy; it would be misleading to seek out their antagonism individually or to materialize them within this or that industrial group or social class or political party.

If we examine the details of the Italian economic or financial situation certain real factors are apparent which almost independently of the particular wills of individuals or groups do not exclude the probability of an inflationistic solution. Above all, there is the imposing national debt, already devaluated through inflation by as much as 98% (57) which continues to become more troublesome and more burdensome even in the face of a

(56) Statement of Corbino to the press on 2 Sept., 1946.

(57) By the middle of 1945, even assuming prices stabilized at only one-tenth of their pre-war value, the Government had already applied an indirect real tax of over 90% of the 1938 public debt. See *Il Tempo*, Rome 17 Aug. 1945. "I danni di guerra", by E. Corbino.

possible future revaluation of the currency. Moreover, the vital necessity of exporting and the enormous potential demand for investment funds to rebuild obsolete plant and to carry on public works find themselves up against a greatly reduced quantity of real savings. The total annual real investment is greatly below the requirements to repair war damages or the necessities of the population and industry. Indeed, the year 1945 brought with it a negative saving or net disinvestment of about 4 milliard. Time deposits, as corrected by the index of wholesale prices, by 1945 had been reduced to 39.9% of 1938. During the first seven months of 1946 the growth in savings, on the same base, was about 7 milliard (210.6 milliard lire 1946) as compared to 1.8 milliard during the same period 1938. But the total savings in terms of purchasing power had been reduced to 1/3 of 1938 (58).

The curb which the lack of real savings imposes on the reconstruction and industrial expansion is made graver by the potential flexibility of nominal wages and by the still unsolved dilemma inherent in the necessity for aiding the masses of unemployed and the desirability of balancing the budget. One must add that in the period of continuous inflation from 1913 to the end of 1946 during which the lira lost 99.5% of its original value, a network of vested inflationary interests and speculative positions has been woven, making ever more difficult the rehabilitation that would signify a completely new national economic life. Monetary rehabilitation therefore may rest in obedience for a long time until the fortuitous circumstances for its concrete realization present themselves. The history of inflation in countries of belated capitalistic development has shown at least one thing: currency stabilization has often preceded reconstruction and rehabilitation not because it was an essential condition but because at a certain moment equilibrium had been reached between the interests for and those against inflation. It might be noted that sometimes this equilibrium is reached after inflation has run its full course, no longer serves

particular groups, but wreaks its damage on the whole society.

37. — On the other hand it is very difficult for the outsider to judge the economic conditions in Italy and their relation to inflation. It is too easy to arrive at negative or unwarranted opinions, to speak of the political emergency which has led the peninsula on to dangerous roads and has made defense of the lira impossible, or to write as did the Milan correspondent of the *Zuercher Zeitung* towards the end of November 1946:

"The economic situation in Italy today is considerably better than at the end of April 1945; but it is undoubtedly less good than it could have been if instead of a contradictory and indecisive economic policy it had followed a monetary, revenue, and commercial policy based on the authority of the State, conscious of the ends it had to achieve, and inaccessible to interested influences" (59).

Observation of this type, not fully substantiated by a profound understanding of the life and necessities in Italy are frequently repeated by Italian critics of the Government. One easily forgets that it was only in 1945 that Italy began her democratic life, began slowly and painfully, by a means perhaps even more painful than economic reconstruction itself. While it is a commonplace to say that political life and equilibrium have their price, it seems necessary to repeat it in face of the professional distortions of certain experts in things economic. One must remember that the economic and political life being attained and renewed today in Italy is a result of struggle and trials which after all are healthful and beneficial as compared with the universal silence and calm of the dictatorship preceding and the economic ruin that accompanied it even in times of general relative prosperity.

If inflation is a process, especially in Italy where it embraces the whole organic structure of economic and political and social life, rehabilitation can only be conceived of as an apparently discontinuous series advancing in

(59) *Neue Zürcher Zeitung*, 21 Nov. 1946, "Die Entwicklung der italienischen Nachkriegswirtschaft".

(58) *Rivista di Politica Economica*, Feb. 1947, p. 242.

balanced and foreign payments and receipts put in equilibrium. Well now, the monetary experiences during and especially in the years immediately after the first World War if they have not substantially altered have certainly somewhat modified this conception. That is, they have demonstrated that a sharp separation cannot be made between basic conditions and offshoots, between cause and effect.

"It is assuredly true that the monetary troubles of a country are the consequences of the war-created financial difficulties and of all the other vicissitudes that have overthrown the previous balance of foreign payments; but it is also true that while depreciation continues the monetary difficulty reacts back on the causes originating it, intensifying them so that while it remains exact to say that monetary stabilization cannot be achieved without at the same time reestablishing balance in the Government budget and in foreign payments, on the other hand it becomes equally justifiable to claim that monetary stabilization is the basis of recovery of the national economy, which recovery will then have among its consequences the balancing of foreign payments. In other words we have here an example of the interdependence found in all economic phenomena, and which must always be kept in mind when formulating plans of economic policy. And it is precisely this interdependence of phenomena which constitutes the enormous difficulty of economic policy in whatever field it is being considered.

"The practical lessons for Italy which I would like to draw from these general considerations are the following: It would perhaps be fatal for our country if in the expectation that the conditions basic to monetary stabilization will appear of themselves we allow matters to slide and evade putting into practice an energetic monetary policy. During the waiting for reestablishment of the conditions on which monetary stabilization in the last analysis depends, we must not relax but must do our utmost to bring an active monetary policy into operation".

34 — It is interesting to observe how elsewhere, especially in England, the purely monetary and financial aspect of inflation is being

much less dwelt upon, while much more emphasized are the "real" premises that condition the feared event.

"Never in our history has the danger of inflation loomed larger", Lord Cherwell warned the House of Lords last May. Nevertheless the researches of the English economists have not been directed toward the risks of classic inflation, which floods the market with means of payment. They have not dwelt upon the "importunity of the buyer" which follows an exaggerated emission of currency or hurried dis-hoarding, but rather upon the "voracity of the seller" resulting from rising costs of production and the influence of such real factors as the scarcity of raw materials, decline in the productivity of labor, increase in nominal wages though real ones have declined, etc.

The most ruinous phase of inflation is considered only as a distant and even improbable danger. It could materialize only if the holders of currency and other means of payment should all decide upon an orgy of spending, putting an unexpected sky rocket under prices. From experience the English have not seriously worried about such an eventually, telling themselves as the writer in the *Economist*, "It has never happened—at least in this country—and it is not very likely to happen in the near future" (53).

35 — The kernel of the Italian problem might be detected in the phrase "at least in this country". England, like all the countries of early and highly-developed capitalism, never experienced those most acute phases of inflation which in modern times have elsewhere transformed whole economic and social structures.

Italy, however, may be included among the broad grouping of countries in which the Industrial Revolution came late, and in which, as in Germany, czarist Russia, and the old Austro-Hungarian empire, there was continued need of the instrument of inflation to transform the economic organization into the capitalistic industrial pattern, and in which, by a com-

(53) *The Economist*, n. 5361, May 5, 1946, "The Risk of Inflation".

plementary growth, the banking system did not follow the classic English pattern of a institution for deposit and discount but became an institution for financing and long term credit.

The development of productive capacity and of the Italian industrial structure according to the usual capitalistic methods required a large concentration of financial means from the beginning of Italy's existence as a unified state. Unable to depend upon an influx of spontaneous savings that would keep pace with the vast and growing needs of the productive organization, Italian industry has been bound to the banking system through-out the course of its history; thus the ordinary credit banks have had a notable say in industrial development.

Against such a background it is well understandable how rescues, state intervention, and fiat currency have been normal occurrences; and their extent and importance have so increased as to change the periodic problem of rehabilitating the currency into the complex one of banking reform, new financing methods, and above all of a complete overhauling of the economic structure.

This evolution culminated in 1933 in the creation of the Institute of Industrial Reconstruction (I.R.I.) which following the reorganization of the three large Italian banks found itself in possession of the major shipyards, almost the whole mercantile fleet, and the four major national metallurgical works (54).

The credit and finance system in Italy revealed its intrinsic weakness in its reaction to the crises following the first World War. The shock of inflation and the crises resulting from disinvestment and post-war reconversion, which

in other countries with different historical and local conditions were gradually overcome, in Italy set in motion and reinforced the potentially inflationary basis of the national economic development and provoked such crises as to radically change the structure of the credit system and to alter the entire economic structure of the country.

A certain chronic monetary instability, evidenced by the recurrent crises and reform, has therefore been a continuing evil in Italy, or, perhaps, a necessity and an instrument of growth that might appear indispensable to arrive at Italy's present stage of industrial advancement. The very beginning of her unified political life resulted in a deficit, which grew until the famous balancing of the budget in 1866, with which the name of Quintino Sella is connected. By 1882, this had again given way to unbalance. Only by the end of the century was Italy able to enjoy a period of relative financial prosperity, which lasted until the Lybian War of 1911-12.

The fiat money of 1866 was nominally in force for 15 years, until 1881, and actually for 17, until 1883. From then until the great crisis of 1893 a series of executive and legislative provisions continually enlarged the limits put on the volume of bank currency, *de facto* if not *de jure* continuing the use of fiat money. In 1893 these banknotes were made convertible to metal money or Government notes on sight and to bearer, but the convertibility into metallic currency was very soon suspended, a suspension which lasted until after the first World War.

The relation of this "normal" state of fiat money and increasing emissions to the development of Italian industry and growing protectionism are well known and easily understood on purely theoretical grounds. A parallel economic and sociological study of other countries late in developing the modern industrial structure, especially a study connecting the analogous positions in the developments, would be very interesting; it would, however, be interwoven with facts already many times reported and at least in macroscopic form easily detected. The golden age of the

(54) "... On the occasion of the founding of this body the three banks taken over by I.R.I. (Banca Commerciale, Credito Italiano, Banco di Roma) with 12 milliards of lire in the most varied types of industrial real estate as against a capital investment of 1.4 milliards and 14 milliards in deposits and current accounts were in possession of the major Italian shipyards (which had constructed 78 % of the tonnage of the mercantile fleet, 94 % of the surface military fleet, and 72 % of the submarines); they controlled the four major national metallurgical plants (producing 75 % of the total pig iron, 45 % of the unfinished steel); 90 % of the Italian mercantile fleet". - Rapporto della Commissione Economica presentato all'Assemblea Costituente, Industria, I Relazione, p. 115.

absorb the unemployed and raise production to the highest possible level.

This financio-economic objective in the last analysis must be based on a social structural reform of such a nature as to demand a more or less radical change in the basic conditions whence originate the inflation and the disequilibrium.

Within the frame of such prospects and such economic and financial objectives the other projects of currency change and the extraordinary tax on private wealth should be evaluated.

The currency change was projected and studied when analogous measures were being adopted in other countries and was at first primarily considered to protect the currency, preventing counterfeiting and influx of lire notes from Germany, and for statistical and financial purposes of determining the liquid availabilities. As a subordinate but much discussed purpose it was thought to lower the denominations of the currency turned in for exchange.

Technical difficulties added themselves to the growing untimeliness of this remedy, making it more and more unusable. The affirmation preceding the last public loan that it was certain to be adopted is quite disputable as concerns the sincerity that was behind it, and only psychological reasons of propagandizing for the loan can explain it. By the beginning of 1947 uncertainty changed to con-

Part IV - *Tendencies and opinions on the recovery of the Lira.*

32. — When in 1938 he reviewed the English translation of Bresciani Turrone's *The Economics of Inflation*, D. H. Robertson very justly observed: "For not only did these new notes directly provide continuous fuel for the flight of capital over the exchanges; the key to the whole causal tangle must be sought in the consideration that, as the event ultimately proved, the whole complex cumulative process could at any time have been stopped and reversed if the determination of the authorities

to restore the public finances and control the money supply had been placed beyond a doubt" (50).

As for the extraordinary tax on private wealth, the press was full of it after the armistice and during the early months particularly of the Parri Government when Minister of Finance Scoccimarro outlined a plan whose main lines gradually became public knowledge. This part, which Minister Scoccimarro had wanted to present to the Government as early as the autumn of 1945, would have levied a progressive personal tax on persons whose wealth was over 2 million lire net. After much discussion and cross-planning the plan in March 1947 seems to have been put in definitive form and was ready for examination by the Government. Exempting all valuations of less than 2 million the tax rate ranged from 3.4% for a tax base of up to 5 millions to a maximum of 50% for a base greater than 200 millions.

31. — Today the following urgent questions must be answered: has the recovery process allowed action against inflation by purely monetary means and prior to a general economic re-ordering or has it shown the convenience of accompanying measures especially aimed at expanding the productivity of the economy and decreasing unemployment, or, finally, has it demonstrated the necessity of changing more or less radically the social substructure that conditions the development of inflation?

to restore the public finances and control the money supply had been placed beyond a doubt" (51).

Only those who have not looked at the devaluation experiences of the German mark, the Austrian krone, and other currencies whose

(50) The decision to not effect the currency change was finally decided by a decree setting up the Extraordinary Tax on private fortunes.

(51) D. H. Robertson: "Essays in monetary theory", XIII. Six Reviews, pag. 182.

analogous falls were intensively studied in the aftermath of the first World War are irresistibly driven to asking: why the Italian authorities do not establish the conditions that will allow the restoration of the lira? Naturally this question will be put forward only by those who have considered the damages, economic and social, which inflation wreaks on society in general. In Germany and Austria after the first World War the most obvious and classical anti-inflationary expedients, both monetary and fiscal, were all continually being announced, discussed, invoked, rejected — and never realized. It seemed as if the monetary authorities of whom Mr Robertson speaks were either powerless or else had no real desire to act.

An analogous experience is taking place in Italy according to not only the public but to many financial experts and persons who for whatever reason are concerned in the inflationary path being followed by the lira.

This viewpoint, however, may be seen to embody a certain relative optimism. The monetary situation seems ever restrainable and ever curable; to put the economic house again in order one needs only apply strict financial measures to bring the budget into balance, and other classic remedies. Thus the monetary authorities are held responsible and invested with considerable power; they are conceived as being detached from the socio-economic organism as compounded at this particular historical conjuncture but yet equipped to operate upon the economic forces moving within it. This conception is accompanied by a type of public formula after the April '46 rise in production, which was accompanied by inflation, which began spreading effectively, and which goes somewhat as follows: "No more issuing of paper money. The finances must be put in order. We must conduct ourselves according to the tried and true rules of economics. This will take care of speculation, inflation, and black markets, and we will return to normalcy".

33. — This tendency toward considering inflation as a problem of financial unbalance with secondary cause the often contradictory exigencies of the different industrial and social

groups has rarely, among those who have studied the problem most intently, taken the simplified aspect implied in the above formula.

In a certain sense it has been superseded by the more modern empirical conceptions of what measures should be adopted for the rehabilitation of the currency, which conceptions rest, it is true, on the classical necessary conditions — balancing the Government budget and balancing the foreign trade balance of payments. But while they still give considerable weight to the purely monetary factor they deny possibility of independence between premise and consequences, between causes and effects. Particularly interesting deduction on currency and on foreign exchange rates are drawn from this viewpoint. Prof. Costantino Bresciani-Turrone, interrogated by the Economic Commission of the Ministry of the Constituent Assembly, restated his well-known views on the devaluation of the lira, which we quote in part as follow for the convenience of the English-speaking reader (2):

"I will begin by recalling to your memories that by tradition beginning long before the first World War the monetary disorders of a country were conceived of as a symptom of a much deeper disturbance. Monetary phenomena, it was said, are the outcropping of economic phenomena; they have deep roots which will have to be followed through if we want to establish order in the monetary phenomena.

"In other words it was said: Currency stabilization after a more or less lengthy period of financial troubles cannot be accomplished without first satisfying certain basic conditions — balancing the State finances and re-establishing equilibrium in the balance of foreign trade payments. These are the two necessary pre-conditions of monetary stabilization, without which, it was generally believed, it would be vain to hope for monetary stabilization without first passing through a long period in which the two necessary pre-conditions are achieved, i.e., the State finances are

(2) Rapporto della Commissione Economica presentata all'Assemblea Costituente, III, *Problemi Monetari e Commercio Estero*, Appendix, p. 86 and p. 87.

least within certain limits expansion of the currency is inevitable.

Secretly they perhaps entertained the suspicion that inflation and the sad state of the budget were symptoms of the economic state of the country, of its underlying social and political conditions, and the historical pattern of the Italian economy. Deficit and inflation therefore would historically be an integral part of the entire system, and little could be done about them through the techniques of pure classical finance.

28. — The first mentioned tendency had such influence on Treasury politics that the change in Ministers during the summer of 1946 from Corbino (Liberal) to Bertone (Democratic Christian) brought no substantial change in practices. The policy might well be said to have been inspired by the statement of Prof. Einaudi before the Constituent Assembly: "In the field of finances there is nothing more that can be invented. All systems and expedients have been tried and re-tried".

The desirable systems and expedients which Italy would have tried were: reorganization of the fiscal organization with consequent rapid increase of ordinary revenues, loans and extraordinary imposts to meet the extraordinary deficit, suspension of currency emission.

These mechanisms for healing the state of the budget were undertaken in the spirit of a rational finance, but were too far removed from the concrete historical reality and the concrete economic and social present: they could not have the results hoped for, although something of a positive nature undoubtedly was achieved.

The reorganization of the revenue offices required overcoming tremendous physical difficulties. During the war 18.5% of the offices had been gravely damaged and 3% totally destroyed: the lack of sheer office space made systematization difficult. The vicissitudes of war also resulted in notable loss of assessments and other documentary material. By the time the liberation came 25% of the personnel was missing and the entire organization was in many ways infected by the 20 years of Fascism.

Within a few months after the beginning of the fiscal year 1945-46, office reorganization and methodical adjustment of imposts raised the receipts by 10 milliardi monthly. In five months alone more than 100 milliardi were collected when the expected figure for the whole year had been only 142 milliardi.

The largest yields came from taxes on business, net monopoly receipts, and direct imposts. The damaging effects of war and of the change in regime operated particularly on the direct imposts, where adjustment was and still is proceeding very slowly, and even more particularly on indirect taxes on consumption.

One source which, according to some schools of opinion, might contribute notably to the recovery of Italian finances has been the so-called "profit of the regime" (48). By December 1946 unfortunately only 190 millions, through agreement and settlements, had materialized, but ex-Minister of the Treasury Scoccimarro foresaw that in 1947 the revenues from this source would reach some tens of milliardi.

The improvement in the budgetary situation proceeded sufficiently satisfactorily as far as post-war burdens are concerned; these were in fact kept within strict limits, which does not seem true for other expenses. The provisional 1946-47 budget provided for (49) a total of 350.875 milliardi for fixed expenses and transformation of capital divided as follows:

	milliardi of lire
Personnel	89.4
Military departments	89.8
Repair of war damages	68.3
Public works and unemployment relief	11.7
Interest on public debt	17.9
Allied Military occupation	12.2
War damage indemnities	8.0
Public education	26.0

The 90 milliardi appropriation for personnel in itself constitutes more than one-quarter

(48) Profits accumulated during the Fascist regime.

(49) These estimates were enormously surpassed during succeeding developments; in February 1947 a total 1946-47 expenditure of 900 milliard was being talked about with a presumed deficit of 600 milliardi.

ter of the total, but if one considers the critical situation of the average government worker no reduction can be argued in this sector.

The expenses incident to war total 112.2 milliardi (repair of war damages, public works and unemployment relief, Allied Military occupation, war damage indemnities). Most of the 68 milliardi appropriated for repair of war damages, 45 milliardi, has been allotted to the repair of the railroads, which are being reorganized in a very satisfactory manner.

On the other hand, considering that the war has been over for some time, one cannot be but perplexed in observing the enormous weight of more or less pure military expenses still being carried:

	milliardi of lire
Ministry of War	56.3
" " the Marine	23.6
" " Aeronautic	9.9
	89.8

The import of this figure becomes all the more heavy when one considers that with 90 milliardi one has not begun to include such items as, for example, pensions for widows and orphans of the military. These figures appear still more impressive when compared with the 8 milliardi planned in war damage indemnities, the 18 milliardi for veterans and the "bombed-out", the approximately 6 milliardi for the Ministry of Justice, the 25 milliardi to Public Works, and the 26 milliardi to Education.

The rigidity of many expenditures, the slow revival of ordinary receipts, and the difficulty of recourse to extraordinary measures have shown that the proposed program of fighting inflation by firm financial measures did not find its necessary premises in this particular background; it finished by finding itself going round in a vicious circle.

This program, in fact, presupposed an economic, social and financial situation that would allow a contraction of expenditures and a rapid and timely increase in ordinary and extraordinary receipts, in short, a situation that was already not suffering from inflation.

29. — According to some, the decisive solution to this financial impasse was to be the Reconstruction Loan in December, 1946. But in reality the results achieved would have been considered most unhappy if the loan actually had the ambitious objective of solving the grave situation of the Treasury; this as of 30 Sept. 1946 was loaded down with 422 milliardi in short-term debts (total of Ordinary Treasury Bonds - *Buoni Ordinari del Tesoro* - and the interest-bearing current accounts opened by banks with the Treasury and those being carried with the Post Offices), of almost 150 milliardi of accrued Government debts over credits, and of a budget deficit which underwent a fearful increase during the final months (610 milliardi as per April 1947 calculations).

If, however, this Loan is considered within the restricted limits intended by the originating circles and the propaganda, beginning with the very name of the Loan, is discounted, the results though modest did come up to expectations: 231 milliardi were collected, 112 in cash and the remainder by conversion of ordinary treasury bonds (*Buoni del Tesoro Ordinario*) and long-term Treasury Bonds (*poliennali*).

Prof. Einaudi, in an interview on 18 January, 1947, justly observed that no one financial operation could bring peace to the Treasury: "... the Treasury must assiduously cultivate the ordinary sources of financing, that is, bank deposits and ordinary Treasury bonds. If the Government makes these types of investments a 'free port' of savings, in 1947 it will see flowing in not less and perhaps more than 20 milliardi a month, and when the proper moment comes it will be possible, as has been done before, to transform a part of the funds so gathered into long-term loans".

30. — In contrast to the optimistic faith in the ordinary sources of funds as a means of tying up the financial situation, other schools of thought seem to be leaning toward the attainment of a finance and a policy of an economy for production which would get the budget into balance through enlarging its scope, linking up receipts and expenditures in order to

interested in economic expansion and a pressure by those who object to being forced to save.

Part III - Distinctive aspects of Italian finance during the inflation period.

24. — Taking into consideration the fact that the Italian economy has often, for reasons inherent in its historical development, assumed the characteristics of an economy whose enterprise is pre-eminently public and that the Italians have always had to devote a large part of the national income to public expenses, one should not be dismayed by the present national debt with all the consequences that it implies, all the more so as that debt seems excessive only if considered at its nominal value.

The inflation has strangely transformed the State's position as a debtor. In 1928-29 the ratio of the national debt to national income was 66%; then this ratio began to swell so that in 1942-43 it presented us with a debt more than 2½ times income. Then, in 1945-46, the devaluation of the monetary yardstick restored the ratio to 65%. The thousand milliards in debts now represent no more than two-thirds of the annual returns of the nation, and expressed in dollars at today's market parity Italy's position as a debtor is half what it was twenty years ago. In the pre-war budgets interest on the public debt held first place; in the budget of 1946-47 it was in second.

The widespread pessimism as to the size of the national debt is therefore unjustified since the nominal increase has been nibbled away by the inflation. But the qualitative aspects of the debt and the particular meaning of the present deficit are justly preoccupying.

25. — The present deficit in the State budget, over and above the real reduction in the national wealth, income and production, and the dislocations and disorganizations of the economic system, could be considered as a battleground between the reappportioning of war expenses and the recovery and reconstruction.

The deficit added in the two fiscal years

And in this clashing and the unstable equilibrium set up about it, inflation continues its march.

1943-44 and 1944-45 totalled 390.89 milliards of lire. The currency emitted between June 1943 and June 1945 was 197.186 milliards, a properly-styled paper money inflation which sufficed to cover 50% of the excess of Treasury payments over receipts. There remained 50%, which 50% was met by subscriptions to ordinary Treasury notes (*Boni del Tesoro Ordinari*), by the proceeds (106 milliards) of the "Solero" Loan of 1943 (47), the increase of Treasury debt, by borrowings from the current accounts maintained by credit institutions with the Banca d'Italia or the Treasury itself; the various means used to cover the remaining 50% were always stages on the road to inflation, pushing off toward the future the problems of the present.

The report on the budget for the year 1945-46 is not yet complete, but the following data, still being refined, may be considered: The total deficit amounted to 332.382 milliards, while the excess of Treasury payments over receipts for the year amounted to 215.405 milliards. A few ideas as to the situation envisaged for 1946-47 will be discussed later.

The growing floating debt at once posed the problem of how to meet the maturity dates and therefore of the eventual necessity of recourse to the printing press. It is theoretically true that the control exercised over the banking system constituted an effective brake on the inflationary expansion; but actually the entire equilibrium of the banking system was at the mercy of unexpected demand, of a tidal wave of panic and of whatsoever political or economic accident.

Above all loomed up the recovery of the nation, implying a sharp competition between public monetary needs and private economic needs for the supply of available capital.

(47) Named after the then Minister of Finance Solero.

26. — The economic costs and the financial costs of the war had already weighed down upon the persons and groups directly struck. It was now time to re-apportion this total cost among the whole population, requiring each to contribute according to the financial principles arising from new political conditions.

But at the same time the recovery of the economy could be undertaken only at a tremendous cost, a cost certainly greater than the real savings of the population under voluntary conditions.

Thus the new-born economy was bequeathed two burdens, the war-time losses and the just-initiated reconstruction. These two burdens are causes of the economic and social conflicts which beset Italy today, with the various social and economic groups attempting to shift the proportions among themselves.

The old road of inflation and the new one that followed after the pause during the first half of 1946 offered the solution most expeditious and at the same time most traditional. All this was quite clear to those who at that time coolly considered the possibility of a full-size inflation.

This danger of an uncontrolled inflation was all the more immanent in that a large part of the government expenditures were still going toward immediate consumption and only a small part were of a productive nature. In fact, in the preliminary budget for 1946-47 three-fourths of the proposed expenditures were for consumption, more than one-fourth going to military Ministries. Of the remaining quarter destined for productive expenditure, 75% was to go toward the rehabilitation of the railroads, public works for the alleviation of unemployment, and the insufficient indemnities paid against the damages of war.

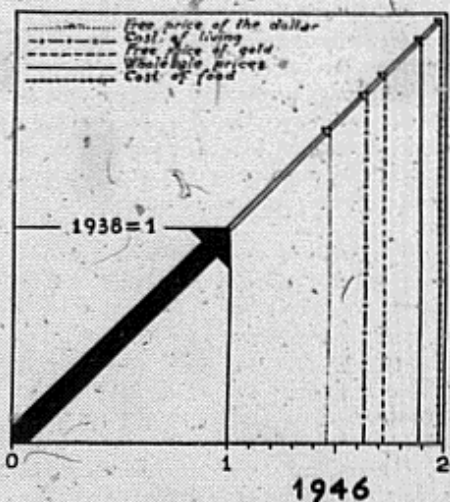
27. — The year 1946, which opened with all the symptoms of an after-war, was characterized by all the pre-occupying problems usually gathered together in the word "reconstruction". According to approximative estimates some-one advanced at the time, only by 1950 could the average Italian citizen hope to regain the income he "enjoyed" in 1913. If

this should prove true Italy will have found herself in the same condition as 37 years ago on the eve of several wars. A penalty of 37 years before being allowed to return to the same starting point! In this simple and extreme form may be expressed the economic and financial costs of war, autarchy, and expansionist politics.

On the subject of reconstruction the diverse tendencies and political outlooks have resulted in divergent points of view. For many "to reconstruct" meant to return the Italian economy as rapidly as possible to the traditional economic equilibrium and balanced finances; the "fan of prices" should close and stabilize at its new median, the budget be stabilized at 300-350 milliards and the exchange rates raised to correspond with their proper level, and the same normalization should be expected of ceilings on rent and rates on public services. Efforts should be made to bring the national budget into balance, especially through a reorganization of the financial administration and through recourse to extraordinary measures; the recovery of production should make itself felt in the absorption of the unemployed and in the decline in the cost of foodstuffs and cost of living. The maximum possible freedom of trade both internal and international compatible with the changing phases of the emergency and the gradual rationalization of free and official prices would help lift the Italian economy out of the quicksands. This approach, however isolates the purely financial mechanism of the inflation, a mechanism which is always manoeuvrable. The adherents reduce the problem to balancing the government budget and encouraging the sources of investment and other living forces of the economy. In short, they re-propose the classic principle of old financial theory, that the problem of the budget is the formal one of bringing it into balance and the balanced budget is the fundamental condition for the cessation of inflation.

Others, inspired by the proposition that inflation constitutes a natural process in economic development, sustained, with greater or less clarity, and more or less publicity, that at

in the first ten months of 1946 to 596 milliards. By the end of 1946, notwithstanding public subscription to the Reconstruction Loan, the total currency had reached 512.4 milliards, a growth of about 30 milliards a month. Velocity of currency also increased in this second half of the year, according to the usual indices.



20. — The net resultant of all the above was that (1938=1) wholesale prices rose from 30.8 in April to 44.1 in December; the cost of living in the same period rose from 26 to 38, of food from 36 to 46 (46).

21. — What were the actions and reactions of the inflationary process as it accompanied

(46) The comparison may again be made between food costs in London and in Rome. (Exchange: £ 1=900):

Data as of the end of December
Figures are lire per kilogram

London	Rome	
	official	free market
Bread	35	27.50
Wheat flour	37.75	115
Bacon	299.65	605
Sugar	—	150
Milk (per liter)	49.15	40
Butter	245.15	900
Potatoes	12.65	40
Eggs (per unit)	12.35	26

the industrial recovery? And which of the classical phases of inflation had we reached?

While the inflation moved apace with the remarkable export recovery (especially of textiles) and industrial conflict, it is a strange fact that it also accompanied the recovery of industrial production. It was around these elements that the Italian economic press have clashed, arriving frequently at contradictory conclusions sometimes even when operating within the same basic philosophy.

The hopes of industrial and commercial expansion and the progress actually realized in some sectors were impeded by many obstacles, some already mentioned: high cost of raw materials and fuel, blocking of lay-offs, resistance of wage-earners to the lowering of their "real" wages, difficulty of attracting sizable amounts of new capital to have sufficient working capital and to reconstruct the damages left by the war, etc.

But the most potent obstacles to industrial expansion were shown to be a) the scarcity of "real" savings, to be divided between the needs of private enterprise, public works, and reconstruction, b) the elasticity of wages, and c) the burden imposed by the Government wage policy and measures against unemployment.

Completing the picture of the antagonistic elements was the ever more appreciated and ever more pressing necessity to restore the Government finances, distributing among all the possible contributors the financial burden of the war.

These in sum are the principal elements to be considered in judging the progress of the inflation.

22. — The recovery of industry and the expansion of credit clashed inevitably and immediately against two obstacles: competition between State and Industry in the division of the available "real" savings and the elasticity of wages.

The tension engendered in the first obstacle first showed itself in the stock exchange boom that began in May 1946. Industrial stocks, which from 1938=100 had risen to 739 in April 1945 (liberation of Italy) had on the

Milan exchange dropped to 324 by the end of April 1946.

Beginning in May the rise was swift. By the end of June industrial stocks had risen 80 percent over the end of April. Though slightly influenced by speculation, this rise was fundamentally sound, being based on solid industrial plant and equipment and the strong development of exports.

There was not, in this first recovery of the stock market, a strong movement from gold to investment or from foreign currency to stocks. The rise in stocks from April to June (439 to 586) was in fact paralleled by the rise in the price of fine gold (from 525 to 659) and foreign currency (dollar 281 to 366, pound sterling 783 to 1057, Swiss franc 89 to 122), which is different, as we shall see, from what happened in the winter of 1946-47.

The importance of speculation in the stock market rise was shown more by the contango position where rates by the end of August had reached as high as 6 and 7%.

The rise of stock market prices, the speculative tendency, and the accompanying outbreak of public alarm over the inflation were quickly heeded by the Treasury, anxious that a decline in Government bonds might endanger the success of the Reconstruction Loan, then in preparation, and above all worried over the growing favor shown by savers for private as compared to public securities with the consequent shifting of funds that would be kept at the disposition of the Treasury.

Under these circumstances decrees were issued compelling a 25% deposit on stock exchange purchases and levying a tax on industry of 25% of their increase in plant due to revaluation. The provision on revaluation (13 Sept. 1946), which came on the heels of a break in the market, was followed by a drop of 15% in only two days.

Without wishing to judge among the many discussions stirred up by this stock market boom and the measures adopted by the Treasury, it is interesting to note how a simple recovery in investments, even in the absence of other factors, is sufficient to set in motion a potential inflation situation.

But other factors did not lack.

The pressure of wage-earners for an increase in money earnings grew in the course of the year. The total cost of living had increased by 40% during the year, of food-stuff by 31%. The accompanying increases in money wages and the systems adopted to alleviate unemployment intensified the inflationist impulse. But in this field as in others, while it is easy to set up the ideal policy of blocked wages and decreasing prices, in reality it is not easy while the inflation is going strong to convince the wage-earner to renounce a partial equalization of his lost purchasing power when the other social classes will neither renounce the benefits they have reaped from the inflationary situation nor can they be annulled by the Treasury policy.

23. — In the tangle of discussion, tendencies and contrasts the inflation gained ground. It may seem astonishing that the unanimous opposition to inflation and all the efforts applied against it were unsuccessful; but looking at the heart of the intricate situation one is led to wonder whether inflation itself is not a tool.

The increase in currency emitted may in part be justified by the cyclic, emergency, and other factors. Psychological factors cannot have a decisive weight in the long run and must be assessed only for their effectiveness and intrinsic reality. It is rather the economic and political complex of the situation that must be studied, the relations between the social classes and industrial groupings which give rise to the inflation elements: who must save, the point below which real savings are insufficient for the needs of reconstruction and recovery, the effects of voluntary compared to forced savings, the sum which savings must reach to over-top the critical point.

In short the problem has been considered very closely by experts and responsible groups in the economic life of Italy. Perhaps it consists more in the continuous deficit in the State budget and the technical means used to correct it than in the expansion of money and credit, in the clashing of urgent demands for the expenses of the war and the costs of recovery. There is a pressure by those who are

INDICES OF WHOLESALE PRICES

Table C

Date	Agricultural products		Wholesale prices
	Official	Free	
1938	100	100	100
1945 — November	774	4,639	3,718
— December	774	4,789	3,666
1946 — January	774		3,404
— February	774		3,401
— March	774		3,184
— April	774		3,087
— May	774		2,985
— June	774		2,965
— July	2,081	4,361	2,949
— August	2,081		2,616
— September	2,081		3,309
— October	2,081		3,595
— November	2,081		3,999
— December	2,081	5,421	4,416
1947 — January			4,876
— February			4,948

Sources: for agricultural products: 'Bollettino mensile dell'Istituto Centrale di Statistica (Monthly Bulletin of Statistics); for wholesale prices: Centro per la Statistica aziendale di Firenze (Concerns' Statistic Center of Florence)

INDICES OF RETAIL PRICES AND FOODSTUFF COST

Table D

Date	Cost of life (foodstuff)			Retail prices (foodstuff)	
	Italy	Rome	Milan	Rome	Milan
1938	100	100	100	100	100
1944 — 1st quarter	—	1,485	747	1,366	735
— 2nd "	—	3,228	951	2,418	943
— 3rd "	—	2,976	1,039	2,541	1,049
— 4th "	—	3,027	1,444	2,663	1,445
1945 — 1st quarter	—	3,697	2,003	3,345	1,666
— 2nd "	—	3,520	2,472	3,444	2,408
— 3rd "	2,477	2,586	2,992	2,700	2,678
— 4th "	3,080	3,201	3,035	3,165	3,192
1946 — January	3,395	3,288	3,301	3,224	3,306
— February	3,317	3,015	3,100	2,899	3,208
— March	3,413	3,427	3,332	3,012	3,320
— April	3,603	3,296	3,445	3,179	3,283
— May	3,583	3,406	3,319	2,986	4,217
— June	3,404	3,337	3,303	2,866	3,159
— July	2,997	2,883	3,030	2,752	3,156
— August	2,900	2,967	2,802	2,752	3,236
— September	3,139	2,579	2,844	2,802	3,253
— October	3,279	2,949	3,113	3,016	3,628
— November	3,620	3,279	3,473	3,340	4,001
— December	3,664	3,590	3,938	3,623	4,300

Source: Centro per la Statistica aziendale di Firenze (Concerns' Statistic Center of Florence).

INDICES OF PRICES OF GOLD AND OF PAPER CURRENCY

Table E

(on free market)

(1938 = 100)

Date	Prices of gold	Dollar	Pound sterling paper	Swiss franc
1944 — January	—	—	—	—
— February	—	—	—	—
— March	—	—	—	—
— April	3,087	—	845	3,221
— May	3,625	2,311	845	4,186
— June	3,899	2,105	986	3,488
— July	—	2,105	—	—
— August	2,923	—	732	2,791
— September	2,928	1,158	—	2,116
— October	2,867	1,158	704	2,393
— November	2,339	1,053	715	2,003
— December	2,456	—	706	1,884
	2,877	1,079	754	2,000
1945 — January	3,779	1,758	986	2,744
— February	4,818	2,200	1,159	3,581
— March	5,051	2,158	1,234	3,419
— April	5,089	2,005	1,297	3,326
— May	3,882	1,490	901	2,791
— June	4,289	1,532	982	3,651
— July	4,846	1,632	1,039	4,070
— August	4,457	1,563	1,022	3,767
— September	4,355	1,732	1,079	3,349
— October	4,027	1,779	1,060	3,023
— November	4,210	1,942	1,111	3,140
— December	3,849	2,026	1,102	3,000
1946 — January	3,624	2,010	1,258	2,837
— February	2,965	1,842	1,181	2,465
— March	2,632	1,600	979	2,279
— April	2,455	1,478	882	2,069
— May	3,040	1,752	1,036	2,465
— June	3,054	1,926	1,190	2,837
— July	3,320	2,410	1,376	2,860
— August	3,956	2,547	1,541	3,093
— September	4,479	2,694	1,646	3,066
— October	4,396	2,668	1,607	3,883
— November	4,733	2,973	1,860	4,395
— December	5,042	3,436	2,096	4,627
1947 — January	4,260	3,136	1,907	3,076
— February	3,947	3,036	1,951	3,744

Sources: Up to December 1944 "Rapporto della Commissione economica" III - Problemi monetari e commercio estero Table 6, page 46.

QUANTITIES AND INDICES OF PRODUCTION OF THE MAIN INDUSTRIAL BRANCHES

Table F

Branches	Monthly averages		Indices 1938=100
	1938	1945	1945
Mining industry fuel			
Sardinia coal thousands of tons (1)	75.9	46.6	61
Pitch lignite " " "	14.1	9.9	66
Xiloid lignite " " "	58.7	49.2	84
Antracite " " "	11.0	4.5	24
Minerals of:			
Iron thousands of tons	85.5	4.1	5
Aluminium " " "	30.1	0.2	0.7
Lead " " "	5.6	0.3	5
Zinc " " "	16.7	1.2	7
Antimony " " "	0.4	0.2	39
Manganese " " "	4.0	1.3	31
Pyrites " " "	77.5	8.5	11
Sulphur, melted, crude " " "	31.7	6.1	19
Graphite " " "	0.5	0.14	28
Talc " " "	4.5	1.4	31
Rock salt " " "	51.2	3.7	5
Borax acid " " "	0.5	0.2	40
Asphaltroks " " "	21.5	11.5	53
Quicksilver " " "	16.3	7.5	46
Iron and Steel works			
Steel, raw thousands of tons	108.2	27.5	14
Pig iron " " "	72.0	5.0	7
Metallurgy			
Aluminium thousands of tons	2.1	0.35	17
Lead " " "	3.7	0.02	2
Zinc " " "	2.2	0.17	6
Mechanical Engineering			
Passenger cars No	4,914	156	3
Freight cars (light, heavy tanks, vans) " " "	845	423	50
Motorcycles " " "	787	117	15
Motorcars " " "	183	97	54
Goods-railway cars (built) " " "	96	155	235
Building materials industry			
Cement thousands of tons	384.0	44.9	12
Electric, hydraulic and thermic industry			
Electricity millions of kWh.	1,258	941.0	76
Chemical Industry			
Solway soda thousands of tons	29.3	3.4	13
Textile industry			
Rayon yarn thousands of tons	3.8	0.13	3
Cotton yarn " " "	16.9	0.84	5

(1) Metric tons.

Source: UNRRA.

INDICES OF INDUSTRIAL PRODUCTION
(1939=100)

Table G

	General index	Textiles	Minerals	Metallurgy	Building materials	Electricity	Chemicals
January 1946	25.01	29.03	47.79	21.15	33.57	81.62	8.08
February "	26.59	31.74	48.09	21.98	33.95	65.91	10.16
March "	32.44	39.15	50.91	24.90	46.39	75.17	13.23
April "	41.24	48.54	53.45	32.41	48.44	77.09	25.10
May "	49.26	57.72	56.72	40.70	51.99	87.79	33.99
June "	53.44	70.00	51.55	41.39	51.68	88.96	37.78
July "	55.53	64.00	54.22	47.93	64.26	99.93	36.40
August "	53.68	62.00	51.73	43.20	58.35	98.42	42.15
September "	59.58	66.00	53.92	51.83	69.60	103.36	44.48
October "	57.66	64.00	49.04	50.98	67.36	99.18	40.12
November "	52.00	—	—	—	58.64	87.99	32.02
December "	—	—	—	—	—	—	—

Source: Centro per la Statistica aziendale di Firenze (Concerns' Statistic Center of Florence).

COTTON AND ARTIFICIAL FIBRES TEXTILE INDUSTRY PRODUCTION
(metric tons)

Table H

Months	Cotton yarn	Total Cotton-fibro rayon and other	Total artificial textiles
January 1946	2,954	3,272	807
February "	4,252	4,568	1,198
March "	5,745	6,105	1,688
April "	7,510	8,139	2,615
May "	7,588	8,099	3,232
June "	13,426 (1)	14,414 (1)	4,547
July "	9,743	10,433	5,242
August (2) "	8,151	8,809	5,775
September "	10,573	11,647	6,852
October "	10,251	11,461	6,583

(1) 4 weeks per each month, with the exception of June for which the data represent 6 weeks' production.

(2) In this month the year's holidays are falling.

Table I

SUMMARY OF WAR DAMAGE TO CIVILIAN ECONOMY (1)

	Damages before 8 Sept. 1943	Damages after 8 Sept. 1943	Total	Specific coefficients of conversion from a pre-war lira to a today' lira	Value in dollars at the official rate of exchange (225=1) millions
	milliards of lire 1946				
Private houses (damages to farm houses included)	490	490	980	20	4,355.6
Public works:					
Public buildings, churches, institutes	102.8	76.3	179.1		796.0
Roads	23.0	108.7	130.7		580.9
New railways works	—	1.0	1.0		4.4
Non military maritime works	6.5	19.8	26.3		116.9
Hydraulic works, public water utilities, hygienic works, strengthening of built up areas	36.2	47.4	83.6	di. 15 a 19	371.6
Electric lines	3.1	36.4	39.5		175.6
Reclaimings	2.1	15.4	17.5		77.8
Removal of mines, etc.	—	55.0	55.0		244.4
Railways	35.8	322.2	358.0	18.5	1,591.1
State Railways special managements	0.9	8.6	9.5		42.2
Public transport services under lease	4.3	17.1	21.4	12.1	95.1
Means of transport by land (Motocars)	8.5	77.1	85.6	di. 10 a 20	380.4
Post offices and telegraphs	2.6	15.7	18.3	20	81.3
State monopolies	—	27.7	27.7	13.2	123.1
Industry, commerce, mines and quarries	150.1	400.2	550.3	13	2,455.8
Agriculture	15.0	249.3	264.3	13	1,174.7
Merchant fleet	118.0	63.2	18.3	14.4	805.3
<i>Totals</i>	997.9	2,031.1	3,029.0		13,462.2
Works of art			for memory		
Income losses			" "		

(1) Data provided by Alessandro Molinari.

In the preceding table the following items are omitted: navy plants and materials gold reserve, works of art and financial losses. The last have been reckoned as amounting to 166 billion lire, mainly corresponding to: increased charges to social insurance institutes for T.B.C., subsidies to unemployed, pay to families of enlisted men (13.5 billions); paid up or foreseen expenses (100 billions) for veterans and for those who have been damaged by the war; estimated charge (31 billions) for war pensions referring only to the period of "cobelligerency";

booby of valuables and unclaimable credits belonging to several institutions.

These figures mainly correspond, therefore, partly to phenomena of decreased production of wealth and of internal redistribution of wealth and of the national revenue, partly to a financial estimate of human losses.

They give only a very faint idea of what have been the losses of the country in terms of lessened income, of wear and tear of human capital, of hardships in collective and individual life; so that, though deserving to be taken into account, they are not added to the material losses, shown in the table.

Table L

AMOUNT AND PERCENTAGE IMPORTANCE OF TOTAL DESTRUCTIONS AND OF REMOVALS WITH REFERENCES TO THE TOTAL OF DAMAGED AREAS, OF UPROOTED PLANTATIONS, OF DAMAGED WORKS AND OF REMOVAL IN GENERAL.

	Amounts	Percentage
<i>Tilled grounds and plantations</i>		
Common sowed grounds	hectares 430	34 %
Wooden plants sowed grounds	527	38 %
Pastures and meadows	116	43 %
Chestnut trees groves	16	22 %
Woods	76	40 %
Olive trees	7,031	14 %
Vines	172,746	25 %
Fruit trees	6,244	37 %
<i>Buildings and equipment</i>		
Farm houses	cubic metres 39,728	47 %
Stables	" 7,402	57 %
Dunghills	sq. metres 494	38 %
Forage barns	cubic metres 384	52 %
Storehouses	" 3,907	41 %
Lifting machinery	No 2,55	61 %
Diversion works	" 13	62 %
Canals	metres 1,095	18 %
Rural aqueducts	" 535	33 %
Electric power transformation boxes	No 0.8	34 %
Electric lines	metres 1,354	68 %
Oil mills	No 0.8	34 %
Wine cellars	" 14	33 %
Cheese dairies	" 0.2	48 %
Tractors	" 1.5	62 %
Threshing machines	" 1.3	90 %
Other machines	" 86	75 %
Tools and carriages	" 859	69 %

Data taken from "Italy's economy in 1947" issued by UNRRA.