Inflation, Stabilization and Economic Recovery in Italy After the War: Vera Lutz's Assessment *

The plan of this paper is as follows: Section I contains an overview of economic developments in Italy between the end of the war and the stabilization measures of September 1947 in order to provide a concise factual background to the examination of Vera Lutz's analysis of this period. In Section II the main elements of Vera Lutz's analytical framework at the beginning of the 1950s' are briefly recalled. Section III is specifically devoted to a review of her critical assessment of Italy's immediate postwar experience and of the policies adopted, especially in the monetary and balance-of-payments areas. Some concluding remarks are presented in Section IV.

I. Main features of Italy's postwar economic development

I.1. The aftermath of the war

When Northern Italy was liberated from German occupation late in the spring of 1945 the economic situation was very serious. The greatest damage had been done in the period after July 1943 when the allied troops, after landing in Sicily, had inched their way up through the peninsula against stubborn German resistance. The severing of the links between north and south and the virtual stoppage of imports of oil, coal and primary commodities had progressively brought industrial production in the north ¹ to a near standstill and had severely affected

¹ It may be recalled that the only mineral-producing regions were located in central and

insular Italy.

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agricultural output because of the gradual drying-up of supplies of quality seeds and fertilizers; moreover, in 1945 these difficulties were exacerbated by drought. It is estimated that real GNP fell in 1945 to about one-half the level recorded in 1938, with industrial, agricultural and tertiary output at around 25, 60 and 70 per cent respectively of their pre-war levels. The capital stock, on the other hand, was hit less severely: available estimates suggest that between one-tenth and one-fifth of the 1938 capital stock was destroyed or irreparably damaged during the war.

The decline in real production over the period 1943-45 was accompanied by a monetary explosion: in particular, the currency in circulation more than trebled between end-July 1943 and end-April 1945. Nearly two-thirds of the increase occurred in the regions under German control, and about one-third was accounted for by the issue of allied military currency (amlire) in the rest of the country. However, the immediate inflationary effect of war finance was far more pronounced in the south than in the north.

The amount of monetary creation in relation to real production was not dissimilar in the south and the north over the whole period considered here; but, in the south it was heavily concentrated in the period immediately following the Allies' invasion. Secondly, a growing share of declining agricultural output in the south was being consumed on the farm itself and never found its way into monetary channels. Thirdly, and most importantly, the administrative machinery suffered directly in the south from the effects of the fighting. These factors made it impossible to maintain price controls in the south, where inflation was virulent and virtually unchecked. In the north, on the other hand, price controls were easier to apply and inflationary manifestations were to a large extent repressed. Thus, between mid-43 and April 1945 prices of foodstuffs showed an almost eightfold increase in Rome, while in Milan they increased by approximately half as much. On average, it is estimated that consumer prices in Italy nearly trebled between 1938 and 1943, but then showed a ninefold increase from 1943 to 1945. Altogether the consumer price index with base 1938=1 had climbed to 24 by 1945.

However, the rate of inflation showed signs of moderating from the second half of 1945. Two main factors were involved. On the one hand, real output surged ahead: GNP increased by about 60 per cent between 1945 and 1946, while industrial production more than doubled. On the other hand, inflationary expectations subsided: the steep increase of the

recent past was seen largely as an upshot of the war itself and the news of American subsidies played an equally positive rôle.

At the end of 1945 De Gasperi — the leading figure of the Christian Democratic party — became Prime Minister of a national coalition with representatives of all the centre-left parties — from the liberals to the communists. Thus, while a liberal exponent held the key Treasury Ministry, working in close contact with the Banca d'Italia (led by another liberal, Einaudi), the Finance post was given to a communist. This lack of a cohesive leadership was to play a crucial rôle in the shaping of economic policy in the immediate aftermath of the war. A major debate arose concerning the timeliness of a monetary reform involving the withdrawal of all existing currency in circulation and its replacement with new notes. This scheme had originally been devised before the end of the war as a precaution against the monetary chaos that would have followed German note-issuing activity on Banca d'Italia printing presses. However, when this danger did not materialise, the reform retained support both as a means of draining the economy of a very substantial amount of excess base-liquidity, thereby halting the momentum of inflation, and as a way of extending an extraordinary wealth tax to liquid assets, the latter proposal stemming from the left-wing parties in the government coalition.

The debate over monetary reform was in fact the tip of a major discordance among the coalition parties concerning the very structure and general economic philosophy of liberated Italy. The parties on the left pressed for a policy of state intervention, supported by price controls and subsidies, taxation of wealth and a general reform of the fiscal system, laying greater emphasis on direct taxation ² with more progressive rates, and, finally, an increase in domestic demand centred on government expenditure in order to reduce unemployment. The liberal party, on the other hand, insisted on a thorough dismantling of the fascist economy, a return to market mechanisms and to "orthodox" monetary and fiscal policies. Thus, to some extent, the issue of monetary reform acquired a symbolic significance.

In 1946, after protracted and ultimately abortive negotiations with the United States concerning the printing of the new notes in America, the Banca d'Italia began the printing work — both in its own and in private presses — in Italy. By the end of June it had already accumulat-

² The share of direct taxes in total fiscal revenue fell from 24 per cent in the fiscal year 1938-39 to 15 per cent in 1947-48.

ed some Lit. 300 milliard of new notes against the adoption of the reform. However, in the summer it was discovered that the original films used in the lithographic printing process had been reproduced by workers in one of the private printing firms. As a result, all the preparatory work was rendered futile and the Banca d'Italia had to return to the study of different notes. It is difficult to evaluate the importance of this incident in the abandonment of monetary reform. But time certainly worked against the reformers. The political balance was changing, additionally, since inflation was again accelerating, direct taxation of liquid assets would hardly have been conducive to fiscal equity. The project of bringing down prices by sterilising existing monetary holdings was thus effectively abandoned. This became obvious when the official support price of wheat to farmers for the 1946-47 harvest was set at Lit. 2,700 for 100 kilos, which was over 20 times the pre-war price, i.e. more than twice the increase to which officially controlled prices had been kept. The question of the political price of wheat also became related to the control of liquidity. While the organisations pooling wheat were paying a support price to farmers of Lit. 2,700 per 100 kilos, their resale price to mills was still being kept at Lit. 900. To cover the difference the pooling organisations issued bills, which had to be rediscounted by the Banca d'Italia pending government refunds, and thus played a significant part in the creation of basic liquidity.

However, the danger of the emerging situation did not lie mainly in the creation of new liquidity. It stemmed also from the very high ratios of reserves to deposits in the banking system and of cash to deposits in the hands of the public, a structure inherited from the war. With the gradual return of confidence and the immediate reconstruction boom, the running-down of these two ratios was a major factor in the unleashing of fresh inflationary pressures in 1947. To gauge the significance of what was taking place, it may be recalled that between end-45 and end-September 47 the currency-deposit ratio fell from 91 to 65 per cent, while the banks' reserve-deposit ratio more than halved, from 47 to 22 per cent. As a result, while the amount of high-powered money rose by 42 per cent over this period, M, doubled: the multiplier increased from 1,34 to 1,89.

The expansion in real output was no longer sufficient to contain inflation: inflationary expectations revived again and the income velocity of money increased sharply. The lively demand for credit, the attempted flight from money and the price-wage spiral resulted in steep price rises: the consumer price index showed a gain of 60 per cent between 1946 and 1947, after a rise of only 18 per cent between 1945 and 1946. Another consequence of the inflationary climate was the rapid running-down of the small stock of foreign exchange earned in the second half of 1946: during the second half of 1947 dollar reserves were virtually exhausted.

I.2 The stabilization measures of September 1947

In June 1947 Einaudi became Deputy Prime Minister and Minister for the Budget in the fourth government coalition led by De Gasperi, the first since the end of the war without communist participation. The Budget Ministry had been created ad personam, in order to give Einaudi the overall supervision of economic policy. Menichella, the Director General of the Banca d'Italia, became the de-facto Governor until August 1948, when Einaudi was elected President of the Republic and he received the official appointment as Governor. The struggle between the two different approaches to economic policy mentioned above had come to an end and was not resumed as a matter of practical importance throughout the fifties.

For an evaluation of the stabilization measures adopted in September 1947, it should be observed that the economic system had, by means of inflation, been effectively allowed to more than reabsorb the excess monetary holdings inherited from the war. Indeed, real GNP was approximately the same in 1938 and in 1947, while currency had expanded 37-fold, M, was 34 times larger and a broad monetary aggregate had grown to 20 times its size in 1938. But the GNP deflator with base 1938=1 had reached 41 in 1947, while the consumer price index came to 46.3 Thus, the stabilization measures hardly implied any actual monetary restriction. Rather they acted as a catalyst, accelerating the recessionary tendencies which were already evident as the boom gradually wore itself out. The creation of high-powered money was largely under control, and the forces making for increases in the multiplier were steadily losing momentum. Indeed, between the second

³ An important consequence of this unrestrained inflation was that it virtually eliminated the burden of public debt. Public debt, which had represented nearly a year's GNP in 1938, had fallen to less than a quarter of GNP in 1947. To put these figures in perspective, it may be recalled that at the end of the war public debt in the United Kingdom and the United States amounted to roughly three years' and more than one year's GNP, respectively. As a result, the servicing of the debt did not act as a constraint on economic policy in Italy in the 1950s: long-term interest rates were generally above international levels and were allowed to move with a certain amount of freedom.

and third quarters of 1947 the currency/deposit ratio began to edge upwards, thus putting further pressure on the already tight liquidity situation of the banks.

Banca Nazionale del Lavoro

Already in the first months of 1947 the Banca d'Italia had sought government approval for a scheme of reserve requirements for the banking system, to replace the existing regulations, which had fallen into disuse during the war years. These measures, however, became operative only from the end of September 1947, when they put an effective constraint on further increases in the process of credit expansion.4

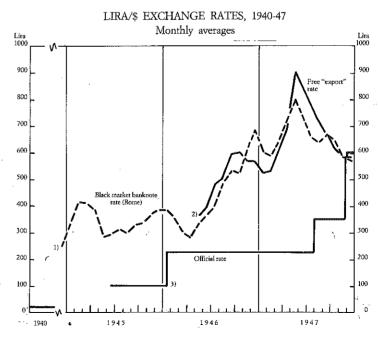
The stabilization measures had a powerful psychological impact, which resulted in increased liquidity preference and a decline in the velocity of money. Also, thanks to ample imports of food products, the balance between monetary demand and supply changed rapidly; the speculative positions built up during the inflationary wave of 1946-47 had to be abandoned and this added to the supply of goods. Both wholesale and consumer prices indices fell: at the end of 1949 they were 14 and 7 per cent lower respectively than in September 1947. The recessionary phase turned out to be quite serious and prolonged. Real GNP rose at an annual rate of only about 6 per cent in 1948 and 1949. Industrial production fell in the first half of 1948 and registered only a relatively modest and hesitant rise in 1949. Employment in manufacturing showed no increase between 1948 and 1949, and a very serious situation developed in the labour market with nearly two million registered unemployed and disguised unemployment on a massive scale.

These developments were accompanied by a consolidation of the external value of the lira after the slide recorded up to 1947, and a substantial build-up of gold and foreign exchange reserves. Standing at less than \$ 200 million in September 1947, the latter had reached \$ 900 million by the end of 1949. Foreign assistance and workers' remittances played a crucial rôle in accounting for these overall balance-of-payments surpluses, but a major turnround occurred in the balance on goods and services, which shifted from a deficit of \$ 390 million in 1947 to a small surplus in 1948 and one of \$ 115 million in 1949. Imports showed only very modest rises while exports jumped from \$880 million in 1947 to \$1,420 million in 1949.

The slide in the external value of the lira during the war can be gauged from black-market quotations (see Chart 1). The official exchange rate in terms of the US dollar had remained formally constant at the pre-war level of Lit. 19 per US dollar until June 1945, when it was adjusted to Lit. 100. But in the black market the rate had reached about Lit. 250 per dollar as early as December 1944, and by June 1945 it was around Lit. 300 per dollar. Between mid-1945 and April-1946, concurrently with the abatement of inflationary forces referred to above and the consequent temporary return of confidence, there was a temporary lull in exchange markets, with the lira losing comparatively little ground in the black market. The result was a narrowing of the gap between the black-market and the official quotation, which had been adjusted in January to the more realistic rate of Lit. 225 per dollar.

CHART 1

35



1) Dec. 1944. 2) Beginning 10th May 1946. 3) Since 17th Jan. 1946, 100 lire + 125% premium.

⁴ The measures prescribed that banks should set aside either 20 per cent of their deposits in excess of ten times their capital and reserves or an amount equal to 15 per cent of their total deposits, whichever was smaller. Moreover, 40 per cent of any increase in deposits that occurred after 1st October 1947 had to be set aside in the same way, so long as the total of "frozen" funds did not exceed 25 per cent of total deposits. These funds were either to be invested in government (or government-guaranteed) securities or held as blocked (interest-bearing) cash deposits at the Banca d'Italia or the Treasury. The eligibility of non-high-powered assets to fulfil reserve obligations enabled banks to evade restrictions on the creation of monetary base by satisfying reserve requirements with securities. This did in fact take place to some extent between 1949 and 1952. At the beginning of 1953 the loophole was closed by admitting monetary base assets only in fulfilment of reserve requirements.

37

This induced the authorities to allow exporters to negotiate 50 per cent of the foreign exchange that they earned in a "free export market", where demand was insured by importers of "non-essential" goods.⁵ In this way, a third market for the lira came into being. However, with the renewed sharp acceleration of inflation (see p. 32) the lira began to fall again rapidly in the exchange markets. By May 1947 it had reached lows of Lit. 906 and 833 to the dollar in the free export and black markets respectively. It remained at low levels during the summer months, but then, as liquidity tightened and stabilization measures were applied, it regained some of the ground lost.

By end-1947 rates in all three markets had reached approximately the level of around Lit. 600 to the dollar. The Italian Exchange Office began to intervene in the free export market and from then onwards the rate was stabilised at the official-market level, which eventually led to the formal disappearance of the free export-market rate.

The Einaudi approach had thus proved highly successful in "saving" the lira: for a long period the lira was to figure as a strong currency. When the pound sterling was devalued by 30 per cent vis-à-vis the dollar in 1949, the depreciation of the lira was limited to 8 per cent. The new lira-dollar parity was fixed at Lit. 625 = US \$ 1, a rate which was to be maintained until the Smithsonian realignment.⁶

II. The interaction of real and monetary factors in the determination of output and employment

II.1 The background

It is not the task of this paper to offer a comprehensive assessment of Vera Lutz's analytical framework. It appears indeed to the present writer that this underwent a constant, if gradual, evolution in the light of the lessons drawn from the academic circles she belonged to and from the empirical experience acquired. In the latter respect, her interest in

⁵ "Essential" goods were purchased by converting lire at the official exchange rate.

Italy no doubt shaped her special interest in the employment problem. As to the former, three strands of influence can be identified: the neoclassical "liberal" approach of the LSE during the 1930s — which was dominated by Robbins and Hayek; the "Soziale Marktwirtschaft" school developed by Walter Eucken in Freiburg, where she went after marrying Friedrich (who was at the time an assistant to Professor Eucken); the Princeton group, whose leading figures were Haberler and Nurkse.

Four theoretical works can be taken to represent Vera Lutz's analytical reference framework at the beginning of the 1950's: "Wage Rates, Credit Expansion and Employment" (1950), *The Theory of Investment of the Firm* (1951); "Old and New Instruments of Credit Control" (1951) and "Real and Monetary Factors in the Determination of Employment Levels" (1952). (The first two works were coauthored with Friedrich.)

The importance of *The Theory of Investment of the Firm* ⁸ for our present purposes can be summarized in three points: first, the rejection of simplistic "Keynesian" models which neglected the sensitivity of investment to expected returns, and notably to interest rates; second, the significance of the structure of expected profit rates for the investment process, which must also be examined at the micro level in order to assess its impact upon employment; ⁹ third, the interaction between monetary and real factors which intrinsically follows from investment decisions that depend upon monetary interest rates.

In "Wage Rates, Credit Expansion and Employment", published in this *Review*, no. 14, 1950, Friedrich and Vera Lutz refute the notion of the "degenerated" version of Keynes' theory, whereby increased effective monetary demand can always cure unemployment, by indicating that what is important is the movement in *relative* levels of prices and wages, as Keynes himself had clearly indicated.

⁶ It may be of interest to note that between 1938 and 1949 the GNP deflators (1938 = 1) had climbed to 48 in Italy and to 1.8 in the United States, but the exchange rate had soared from Lit. 19 to Lit. 625 per dollar. The dollar had thus undergone a 32-fold appreciation, while relative prices in Italy had increased 27-fold.

⁷ But where the ferments of the Keynesian revolution were discussed by a group of young economists — John Hicks, Nicholas Kaldor, Maurice Allen, Abba Lerner, Arthur Lewis and Ursula Webb (later Lady Hicks).

⁸ In writing this book Vera Lutz was no doubt able to put to good use the work she had done with Hayek when she helped him in the final editing of his book on *The Pure Theory of Capital*; see R. GIULIANI GUSMAN, "Ricerche per una bio-bibliografia di Vera C. Lutz", typescript, 1982, p. 9.

⁹ These points, and their implications, for development policies in Italy are examined in the present issue of this *Review* by A. GRAZIANI.

II.2 The macromodel

Vera Lutz returns to these problems in a more comprehensive form in "Real and Monetary Factors....", published in May 1952, in the *Quarterly Journal of Economics*, but written in Rome.

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The dichotomy between relative and absolute price theory and the neutrality of money were the hallmarks of both classical and neoclassical monetary theories. Keynes's attack was centered on the demonstration of the inadequacy of the assumption of the real value theory that the economic system would automatically tend towards full employment of resources. His underemployment model relied however on nominal wage rigidity and/or insufficient interest rate elasticities in the saving and investment functions, account being taken of the rôle of expectations and uncertainty.

At the beginning of the 1950's Haberler, Scitovsky, Metzler, and Patinkin began to tackle the problem in a different way. First, they showed the intrinsic weakness of the traditional approach: on the one hand, this relied on the validity of Say's Law, thereby automatically excluding the influence of money on spending, but, on the other, it relied on monetary schemes which were formulated in terms of either cash-balance mechanics or interest rate adjustments in the saving-investment schedules; clearly in both instances money did play a rôle in explaining spending. Second, the connection between wealth and the determination of savings and consumption (i.e. between stocks and flows), following the work by Pigou, was beginning to be reinstated as a crucial element in the economic adjustment process.

Vera Lutz's paper represents a significant, if relatively little known, contribution to the debate, with two main novel features. She starts by writing the traditional representation of the Keynesian model in the Hicks-Modigliani stylised form. Her main concern is with the possible alternative formulations of the wage function; in particular, in addition to the classical and Keynesian formulations (the real wage rate equals the marginal productivity of labour, and the nominal wage rate is constant, respectively) she also introduces for the first time a third form of the equation, based on the assumption of real wage rigidity, which she justifies as follows:

"It is becoming increasingly apparent from the rapid spread in many countries of wage contracts which tie money wage rates to the price level (cost of living index) that the third form is the one which we must seriously consider as being relevant for practical purposes today" (p. 255).

The implications of this assumption are worked out analytically in the case of both perfect and imperfect competition in the product market, with a view to showing the fallacy of much of the literature on full-employment, which argued that an increase in aggregate money demand was synonymous with an increase in aggregate real demand so long as unemployment existed. Thus she is able to conclude that:

"when the real wage is fixed, a policy of monetary expansion is not much more likely to be an answer to the unemployment problem when imperfect competition prevails in the product market than when perfect competition prevails.... It appears that the only remedy adequate to the present case is a direct attack on the elements of monopoly power in both the labour and the product markets" (p. 262).

The second important novel feature of her paper is the treatment of the savings function. Here she points to the intrinsic logical weakness of the IS-LM paradigm when it does not take into account the interaction between stocks and flows in consumption/saving behaviour.

Specifically she argues that the traditional formulation of the saving function, whereby real savings are made to depend solely on real income and the rate of interest, neglects the effects brought about by variations in the level of real cash balances, as determined by the liquidity preference equation.

"It is in fact only by taking account of the so-called "Pigou effect" (i.e. the effect, on consumption, of the level of total real assets) that we are able for any given real income to link up the choice between consumption and the acquisition of assets in general on the one hand, with the choice between the two forms of assets (earning and non-earning assets respectively) on the other. The above argument is simply one way of expressing the general untenability of the Classical dichotomy between the real and monetary factors to which much attention has been given in the recent literature".

The analysis is further enriched by considering a second factor which makes real saving dependent on monetary factors: this operates when the private sector of the economy has a significant amount of long-term debt fixed in money terms. We note here that Vera Lutz is taking in this respect a different line from that adopted in much modern theory. The preservation of the Pigou effect when money is no longer of the commodity type, but is instead primarily created against private and public debt has been sought in much of the recent literature by assuming that government debt is regarded as net wealth, even though it is owed by the public to itself. Vera Lutz ignores this case, consistently

with her model, where no specific attention is devoted to the working of the public sector and to public debt.¹⁰

It is on the basis of this analytical scheme that she reaches two main conclusions: (i) the real factors of the economy cannot be isolated from the monetary factors. The latter will affect the real savings schedule through their effects on the real value of existing assets and liabilities, (ii) given the "modern" tendency for collective bargaining to determine the real instead of the money wage rate, an increase in aggregate money demand cannot by itself combat unemployment.

II.3 Monetary control

"The inflationary trend which has, with short interruptions, characterised not only the war but also the post-war years, has made a large part of the world increasingly conscious of the dangers of its continuation. In some quarters the argument has been put forward that it is impossible for any individual country to combat inflation, because the inflation is imported from abroad. This argument is open to objection on two grounds. First, each country is in danger of imposing a locally engendered inflation on top of the external one. Secondly, although it is true that at least in countries whose real terms of trade are deteriorating some internal price rise cannot be avoided, it is not true that because one or more countries are inflating, others are bound to import that inflation to the full. For they have the alternative of restraining the rise in their local price levels and eventually revaluing their currencies upwards in terms of the currencies of the countries which are inflating, or are inflating most rapidly. The task of combatting inflation is therefore one for which each country should feel individually responsible, even failing the achievement of the still more desirable objective, namely that a whole group of countries make a common effort towards following an anti-inflationary policy".

It is with these extraordinarily modern words that Vera Lutz begins her paper on "Old and New Instruments of Credit Control", which she prepared for the First International Credit Conference, held in Rome in October 1951.

Here again the current relevance of her analysis is striking. She forcefully puts the case for quantitative control of the monetary base by the central bank, and for indirect control of the money stock, by accepting the necessary consequences in terms of interest rate levels and fluctuations.

She is especially critical of the policies adopted in the U.K. and the U.S., where monetary control was replaced by interest rate control, with a view to reducing the cost of servicing the public debt. This led to the monetization of part of the debt and ultimately to endogenous financing of the inflationary pressures which developed in the economy.

She also rejects the arguments put forward by disciples of the banking school and maintains that the central bank must also avoid any direct link whereby banks can transform their assets into monetary base automatically and at their will.

She examines the various devices of direct quantitative and qualitative control of credit creation in detail and shows their inadequacies, partly in terms of the inefficiencies they impose upon the macrosystem. Specific importance is attached in this respect to the sensitivity of saving to real interest rates. She thus concludes by drawing attention to the responsibility of each central bank in ensuring that the creation of base money is kept under control so as to prevent the financing of inflationary shocks.

These brief notes will, I hope, suffice to show the novelty and the importance of her approach today, although they cannot do justice to the richness and sophistication of Vera Lutz's theoretical reference framework when she devoted her attention to a critical assessment of Italy's immediate postwar period.

III. Vera Lutz and Italy's postwar economic problems

III.1 Inflation and stabilization

An illuminating introduction to inflation and stabilization in Italy after World War II is provided by Vera Lutz in her comparative survey of developments in the United Kingdom, Germany and Italy, which is contained in a mimeographed paper she wrote in 1952 entitled "The Record of Inflation: European Experience since 1939".¹¹ The policy

Here again my guess is that she wrote the model with the Italian economy especially in mind: in Italy inflation practically wiped out Government debt.

¹¹ Vera Lutz wrote three main papers on the immediate Italian postwar experience: "Monetary and Foreign Exchange Policy in Italy", the First Princeton Essay (written with Friedrich), Princeton 1950; Chapter VIII of H. ELLIS's book on *The Economics of Freedom*, entitled "Italy: Economic Recovery and Development", New York, 1950 and the mimeo mentioned in the text, written in 1951.

options to deal with the monetary financing of the war are set out as follows:

"The United Kingdom, Germany and Italy all found themselves at the end of the war — and indeed this was the experience almost everywhere — with a larger total volume of money (currency plus bank deposits) in existence than was compatible with the existing price and income levels, and/or with excess cash reserves in the banking system on the basis of which new loans, and therefore new deposit money, could be created. That is to say, because of the physical limitations on the freedom to spend and invest which had prevailed during the war years, not all of the increased money supply (and/or of the cash reserves of the banks) had yet been absorbed by the economic system in the form of an open inflation. In all these cases, then, there was an element of suppressed inflation which threatened to become open unless something were done to prevent that from happening. There were three main types of solution for this situation. The first was to allow the price and income levels to adjust themselves upwards to conformity with the new level of the money supply, i.e. to allow an open inflation to take place. The second was to cut down the level of the money supply to proportions appropriate to the existing price and income levels. The third was to raise production to a level corresponding to the existing levels of the money supply, prices and incomes, relying on the use of physical controls to hold down the volume of spending during the interval before this production level was reached. In all cases, of course, it was necessary, if the existing problem was not to be magnified, or if new problems of the same kind were not to be created in the future, to prevent further inflationary increases in the volume of money from taking place.

In the United Kingdom the solution adopted was broadly speaking the third, i.e. it was hoped to absorb the excess purchasing power by the increase in the output of goods while in the meantime retaining the physical controls over consumption and investment. In Italy the first solution was adopted: the excess liquidity was absorbed by the economic system through an open inflation, until in September 1947 stabilization was achieved. In Germany the second solution was adopted: part of the amount of money outstanding was destroyed through the currency reform of June 1948" (pp. 1-2).

In the paper she indicated why, in her opinion, the British solution was the worst one. The excessively high domestic demand, maintained by the surplus monetary balances and the continued strains on the balance of payments were accompanied by stifling controls, which in particular impeded the necessary structural shifts of workers within the economy, for fear that any break in the existing wage structure might set in motion demands for all-round rises and hence a wage-price spiral.

"Direct action" — i.e. budgetary policy, controls over private investment, physical controls, price controls, wage restraints and inter-

est rate support policies — was resorted to in order to check excess demand and inflationary manifestations. The costs in terms of efficiency and delays in structural adjustment were patently excessive in Vera Lutz's eyes. In the light of her analytical model, which, as we have seen, stressed the intimate links between spending and the level of real wealth, she clearly preferred the drastic, surgical operation of either a short-lived open inflation or a monetary reform.

It is interesting to note that in her eyes the 1946-47 inflation had to be viewed as a deliberate, if painful, policy choice. This is made explicit in the Ellis book. She argued (p. 306) that the Government rejected as impracticable the idea of a monetary reform, and was thus left with two alternatives: either it could try to suppress the excess purchasing power by strict rationing and controls, or it could allow it to be absorbed through the rise in prices and incomes. The first of these remaining alternatives was also rejected, because of the disadvantages it would have had in constraining the economy into a dirigistic straitjacket. ¹² Inflation was thus the only way left to achieve rapid adjustment. ¹³ The upward movement in prices was in a sense inevitable, and she consequently argued that the two factors which gave rise to inflation were to some extent no more than a trigger.

In the first place, banks were left at the end of the war in an extremely liquid position and could thus finance the surge in demand for loans, which rapidly built up in 1946, and was accentuated as prices began to rise because of expectations of continuing inflation. The second factor was represented by the extremely large budget deficit, which was mainly financed through creation of new monetary base.

Vera Lutz indicated, however, that the structure of the public accounts was far less weak than appeared at first sight. In the first place, expenditures were swollen by large cash outlays for investment pur-

¹² M. DE CECCO ("Sulla politica di stabilizzazione del 1947" in Saggi di Politica Monetaria, Giuffrè, Milano, 1968) is among the leading critics of the Government choices of that period. In particular, he believes that Einaudi and his collaborators, in their fight against inflation, before the stabilization, neglected the rôle of the credit multiplier in explaining credit creation, by concentrating on the rôle of the expansion of the monetary base (pp. 128-29).

It is clear that in Vera Lutz's eyes this is an irrelevant point, since to some extent an inflationary process had to take place.

¹³ It is interesting to recall here that Keynes had expressed a not dissimilar view on this question, with specific reference to French experience in the 1920s. "Repudiation of the national debt is a departure from financial virtue so extreme and so dangerous as not to be undertaken but in the last emergency. We are left, therefore, by a process of exclusion of alternatives, with one exit only — a rise of internal prices". See J.M. KEYNES, "The French Franc" in *Essays in Persuasion* MacMillan, St. Martin's Press for the Royal Economic Society, Cambridge, 1972.

poses, which were not necessarily of a recurrent nature and were in any case "absolute prerequisites for the revival of the rest of the economy". 14 Second, during the period June 1946-September 1947 the special wheat bills for financing the collection of crops, discounted with the Banca d'Italia, represented both a significant element of the deficit and especially a threat to monetary stability because of the immediate pressure on monetary base creation. This factor, however, lost importance in 1948 when subsidies on wheat were removed. 15 Indeed, after a bulge in the financial year 1947-48, when the budget deficit increased to some Lit, 800 billion, it contracted in 1948-49 to Lit. 440 billion and to less than Lit. 200 billion in 1949-50: in relation to GNP the deficit declined gradually from nearly 30% in 1944-45 to some 3% in 1950-51, as can be seen in Chart 2.16

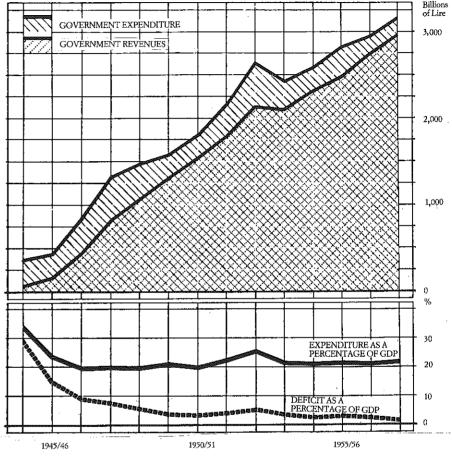
The overall stabilization plan of 1947 was thus regarded by Vera Lutz as a two-pronged action, which she attributed primarily to Einaudi and Menichella (Italy: Recovery and Development, p. 314). The first part consisted of the measures of monetary control on new credit and money flows based on overall quantitative methods rather than on "selective controls".

An integral part of this process was the rescinding of the automatic links between monetary base creation and the budget deficit. In addition to the already mentioned question of the wheat bills, a decree of December 1947 ruled that no new advances to the Treasury could be financed by the Banca d'Italia without a specific law. In May 1948 a ceiling was set on the indebtedness of the Treasury on its current account with the Banca d'Italia (15% of budget expenditure). Finally in 1948 the new Constitution of the Italian Republic was enacted; at the initiative of professors Einaudi and Vanoni an article (art. 81) was introduced with the specific purpose of curbing Parliamentary initiative in terms of spending.¹⁷

¹⁴ This, by the way, indicates that Vera Lutz's dislike for simplistic expansionary government policies referred to the method of artificially raising money incomes through transfer payments.

16 P. BAFFI, "Monetary Developments in Italy from the War Economy to Limited Convertibility (1935-1958)", in this Review, no. 47, December 1958, p. 423, Chart 5.

THE EVOLUTION OF THE GOVERNMENT BUDGET FROM 1944/45 TO 1957/58



Source: P. BAFFI, "Monetary Developments in Italy etc.", op. cit., p. 423

As has been indicated above (see p. 36), the corollary to the measures of domestic adjustment was the normalization of the exchange rate structure in November 1947 by raising the level of the free market rate for the US dollar (and the Swiss franc). This is seen by Vera Lutz as desirable and important:

> "The exchange rate for the dollar has been adjusted to the relative price levels of the United States and Italy. Italy made this adjustment earlier than any of the OEEC countries except Belgium, and hence the lira became one of the strongest currencies in Europe" (Italy: Recovery and Development, p. 551).

¹⁵ The abolition can be seen as the outcome of a famous battle fought by Luigi Einaudi immediately after the war to abolish what represented, according to him, a major obstacle to the soundness of public finances. For a dissenting view on these points see M. DE CECCO. op. cit., p. 119.

¹⁷ A specific account of these measures and of their relevance is to be found in BAFFI, op. cit., p. 478, no. 45, and in the essay "Monetary Stability and Economic Development in Italy, 1946-1960", in this Review, no. 56, March 1961. In the latter essay, Baffi identified the pillars on which the restored monetary stability in Italy was based as: (i) the stabilization measures on bank lending; (ii) the regulation of Treasury recourse to monetary base financing and of Parliamentary spending initiative; (iii) the reconstitution of foreign exchange reserves.

CHART 3

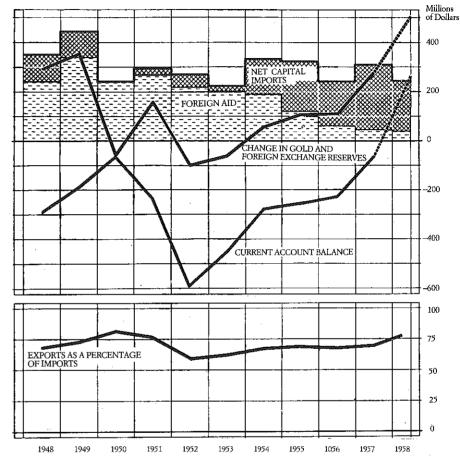
III.2 The argument against reflation

The recession that followed the stabilization, together with the sharp improvement in the balance of payments (see Chart 3) led some critics to argue that the Einaudi cure implied excessive costs in terms of underutilised resources and stunted growth; in any event they pressed for early reflation in 1949, mainly to combat unemployment, which had reached nearly 2 million. A more aggressive credit and investment policy was in fact recommended in February 1949 by the American ECA (European Cooperation Administration) in its country study on Italy. 18 Some indeed maintained that foreign aid was likely to be inversely correlated to the volume of reserves and that Italy was therefore penalised on two scores. This does not seem to be borne out by the facts, 19 but the danger was no doubt a real one, as can be gauged from a letter sent to the New York Times in August 1949 by Professor Friedrich Lutz, in which he argued that the idea of reducing Marshall aid to Italy because of its favourable balance-of-payments position would have implied:

"penalising a country which had done more than most of the other recipient countries to put her own house in order. If those responsible for Italy's economic policy had been less conscientious — if, for example, Italy had embarked on a heavy investment programme in order to absorb at least part of the unemployed, they could have produced a balance-of-payments situation just as critical as that of Great Britain".²⁰

¹⁹ See P. BAFFI, "Monetary Developments in Italy from the War Economy to Limited Convertibility (1935-1958)", *loc. cit.*, p. 449.

BALANCE OF PAYMENTS 1948-JUNE 1958



Source: P. BAFFI, "Monetary Developments in Italy etc.", op. cit., p. 481

Vera Lutz, in the Princeton essay, and in her other studies on this period comes out firmly in favour of the basic soundness and wisdom of the policies pursued by the Italian authorities. Her theoretical reference framework made her extremely sceptical of simplistic "Keynesian" approaches calling for expansionist credit and fiscal policies, with a view to injecting additional effective monetary demand into the system. The main reason why in its crude formulation the *General Theory* model was in her view not applicable to Italy's conditions was to be found in the interaction of (i) the rigidity of average real wages at a level higher

¹⁸ Other participants in the debate included notably: the Bank for International Settlements, in a study prepared by its Monetary and Economic Department, headed at the time by P. JACOBSSON, "Economic and Financial Problems of Italy in the Summer of 1949", September 1949; H.O.HIRSCHMAN, "Inflation and Deflation in Italy", American Economic Review, September 1948; B. FoA, "Monetary Reconstruction in Italy", The Carnegie Endowment for International Peace, New York, 1949; J. KAPLAN, "Economic Stagnation in Italy?", Yale Institute of International Studies, 1949; R. RIGGS, "Italy's Road Back", Report of the Foreign Policy Association, May 1949; E. SIMPSON, "Inflation, Deflation and Employment in Italy", Review of Economic Studies, 1949-50; F. and V. Lutz, "Monetary and Foreign Exchange Policy in Italy", Princeton Study in International Finance No. 1, 1950; C. Bresciani-Turroni, "I provvedimenti del 1947. Due giudizi contrastanti sulla politica economica dell'Italia", in Moneta e Credito, September 1950, pp. 277-82. For later appraisals, beyond those by Vera Lutz, the classic references are PAOLO BAFFI's studies, op. cit.,; see also M. De Cecco, "Uno studio dell'offerta di moneta in Italia, 1946-1964" and "Sulla politica di stabilizzazione del 1947", op. cit., in Saggi di Politica Monetaria, Giuffrè, Milano, 1968, and A. FAZIO, "La politica monetaria in Italia dal 1947 al 1978", Moneta e Credito, September 1979.

²⁰ F. Lutz, as quoted by P. BAFFI in "Ways and Programmes of Monetary Action in Italy: A Glance at two Decades", in *Verstehen und Gestalten der Wirtschaft* (A Collection of Essays in Honour of F. Lutz), J. Mohr (Paul Siebeck), Tübingen, 1971.

than that at which all labour could be employed, and (ii) the structural (dualistic) nature of Italy's economic system, which implied that practically only one factor of production, labour itself, was unemployed and a large part of that labour, especially in the south, was unskilled.

She thus insisted on the "orthodox" and at that time unfashionable view ²¹ that the key to Italian recovery and prosperity was to be found in restoring and enhancing the public's willingness to save, so as to provide a sound base for the financing of domestic investment, and she thus regarded the basic thrust of Italian economic policy as commendable, and such as would lay the foundations for sustainable growth.²²

She did not however accept the somewhat defeatist line taken by many concerning the problem of unemployment in Italy.²³ The courses of action that she recommended are, I think, well worth recalling:

"First, the encouragement of voluntary private savings as a means of financing the increase in real capital resources which are necessary in order to allow the number of workers who can be employed at a given level of real wages to expand, an aim which can best be reached by continuing the policy of maintaining stability of the lira;

second, the further pursuit of fiscal reforms (aimed especially at reducing tax evasion) as a means of providing additional tax revenues out of which government investment projects may be financed; and

third, an attempt to reduce the degree of monopoly in certain sectors of Italian industry.

The process of absorbing the unemployed can be speeded also by a *fourth* factor: cooperation from the side of organized labour itself. For if while heavy unemployment still prevails the trade unions constantly press not merely for stable real wage rates but for rising real wage rates, the additional capital, and the increased productivity which it makes possible, is likely to be absorbed in whole or in part by the workers who are already employed instead of allowing a larger number to be employed. That is to say the additional capital may be used to augment the capital per head of the existing workers, in order to raise their productivity to a level corresponding to the higher real wage rates, instead of being used to provide capital for new workers" ("The Record of Inflation: European Experience since 1939", pp. 83-84).²⁴

²² To recall, between 1949 and 1960 Italian GNP grew at average yearly rates of 8.3 and 5.8 per cent in nominal and real terms. respectively.

²³ Such as that propounded by C. Bresciani-Turroni, op. cit..

IV. Conclusions

The interaction between monetary and real variables, the connection between stocks and flows, the profound changes experienced by markets off the competitive standard: these are the analytical hallmarks of Vera Lutz's theoretical approach. I can hardly hope in these few pages to have been able to convey the sophistication and the complexity of her models, which she evidently gradually developed having in mind the Italian economy as the background paradigm to be interpreted and explained.

As Hicks pointed out, "Monetary theory is less abstract than most economic theory; it cannot avoid a relation to reality, which in other economic theory is sometimes missing. A large part of the best work on Money is topical...prompted by particular episodes, by particular

experiences of the writer's own time".25

Vera Lutz's analysis of money and interpretation of monetary policy in the aftermath of World War II confirms the validity of this statement: she saw clearly the inadequacy of both the classical models and the "Keynesian" approach for describing an economy such as the Italian one. To be properly appraised, her insistence on the rôle of rigid real wages must be viewed in the light of a dominant opinion which was still under the influence of Keynes's simplifying assumptions designed to interpret the different problems of monetary depression of the 1930s.

Vera Lutz accepted the crucial importance of a stable demand for money function. But she never considered as significant the assumption of a stable velocity; indeed she pointed out that the real demand for liquidity must also be a function of the real value of total assets in the economic system: a point which has only recently begun to be fully recognized in monetary analysis.

Her analytical support for Italy's stabilization policies is extremely lucid and well-argued, and one cannot but admire the rigour with which

²¹ It should be recalled however that these views were consistent with those of illustrious Italian economists of the time, notably Einaudi and Del Vecchio. On these points see F. VICARELLI, "Note in tema di accumulazione di capitale in Italia 1947-63" in Giorgio Lunghini (ed.), Scelte politiche e teorie economiche in Italia, 1945-1978, Einaudi, 1981.

²⁴ In *Italy: Recovery and Development* Vera LUTZ elaborated these general points by specifically drawing attention to the need to overcome certain rigidities in the Italian economy

which enhanced and perpetuated its structural problems: some of her suggestions are also worth recalling here. In addition to the general point on the level and dynamics of average real wages, she explicitly drew attention to the shortcoming of the sliding scale in decreasing the differentials between unskilled and skilled labour. She underlined the need to raise the rates for public utility services, notably for electricity, to levels more nearly in line with those of prices and costs. Finally, she indicated that the gap between borrowing and lending rates of the banks was far too high, and could be substantially reduced.

25 J. Hicks, Critical Essays in Monetary Theory, Oxford, 1967, p. 156.

she applies her analytical model to the interpretation and critical assessment of events which she evidently painstakingly studied and mastered in minute detail.

It is, finally, difficult for an Italian not to end on a sad note. The very fact that Vera Lutz's main policy suggestions on (i) encouraging savings and investment to expand employment; (ii) pursuit of fiscal reforms to reduce tax evasion and finance government capital outlays; (iii) real-wage moderation, to foster investment capable of creating additional capacity, and not merely capital deepening, retain such relevance and validity today shows the need for more rigour and consistence in economic policies and the behaviour of social partners.

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