

# Monetary Stability and Economic Development in Italy, 1946-1960 (\*)

I. Features of the development process between 1946 and 1960: open inflation in 1946 and 1947; alternating periods of stability and mild inflationary pressures from 1948 to date. - II. Plan of the study. - III. The permanent bulwarks against inflation set up in the years 1947 to 1949. - IV. Their effectiveness in checking demand inflation. - V. Requisites for reconciling economic development with monetary stability in relation to the cost of labour. - VI. The attainment of these requisites in Italy. - VII. The means whereby the equilibrium between saving and investment was reached at steadily rising levels. - VIII. The process of income and liquidity-creation.

I. At the end of the war the Italian banking system showed an excess of liquidity in the form of central-bank deposits and Treasury bills. This excess liquidity was activated by a marked resumption of demand for credit from the spring of 1946 on. The elasticity of supply of goods, however, was high only in two branches of industry — engineering and textiles. This was due, in the case of the former, to the expansion of productive capacity during the war and, in that of the latter, to a production surplus resulting from the stagnation of demand. In the sector of primary products (food-stuffs, raw materials), on the other hand, and in that of basic industrial goods (fuel, electricity, steel, cement), the elasticity of domestic supply was very low. The development of an inflationary process in 1946-1947, despite considerable unemployment and unused capacity in some sections of industry, may be attributed to the existence of these disequilibria.

The courses open to economic policy in a situation of this kind, in order to increase the utilization of productive factors without aggravating price inflation, could not be adopted in Italy at that

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time: the instruments and pre-conditions for an effective and discriminating control of consumption and investment did not exist, and neither exports nor exchange reserves were sufficient to finance an adequate volume of imports.

Inflation was brought to an end in the autumn of 1947, when the monetary authorities blocked the excess liquidity of the banks by the introduction of a system of obligatory reserves. The desired effect upon business expectations and upon public confidence was achieved, and the velocity of circulation of money (1) fell abruptly. The period of adjustment, characterized by a pause in the growth of production, lasted only a few months.

The halting of inflation was followed by thirteen years of satisfactory monetary stability (1948-1960; *vide* Graph I). Notwithstanding the rise due to the Korean war, the index of wholesale prices was, at the end of 1960, 4% lower than the 1948 average.

In marked contrast with the movements of wholesale prices, the cost of living index rose by 40% between 1948 and 1960, and the implicit price deflator of the National Product went up in the same period by 32% — i.e. at an annual rate of 2.3%.

The inflationary element which is apparent in these two indices was "administered" to the extent that their rise was due to upward adjustments in prices in certain controlled sectors, including rents, public utility charges and the cost of government services (wages and salaries of government servants). The prices of the goods and services produced by such sectors were effectively controlled and as a result shared only to a very limited extent in the general upward price movement of the war and early post-war years.

In part the inflationary element was also due to the smaller gains in productivity in the service sector. When productivity lags in some sectors, market adjustment forces may bring about (a) a relative reduction in personal incomes in the sectors concerned, or (b) a rise in relative prices in favour of these sectors, and as a consequence the maintenance of the existing balance between individual rewards, a balance supported by the tendency towards imitation within social groups. In the case under consideration, the forces making for adjustment would seem to have tended principally towards (b) on account of certain factors favouring this

(1) I am encouraged to use this concept after reading Sir Dennis Robertson's comments on the Radcliffe Report (*The Banker*, December 1959).

solution, viz.: 1) Whereas the wholesale prices of industrial goods showed some tendency to fall, retail prices were "sticky" downwards, any cyclical price rise being thus transformed into a permanent one. 2) The demand for labour on the part of foreign countries (emigration) and of manufacturing industry reduced the pressure of supply in the sector acting as a buffer — principally, that is, in tertiary activities: transport and communications, distribution, the professions, finance, and the civil service, national or local (2).

It should, however, be noted in this context that the apparent rise in consumer prices was partly due to an improvement in the quality of goods and services supplied which is not reflected in the statistics.

In certain periods, inflationary pressures originated abroad and in the effects of the sliding scale. This point is discussed in section VIII below.

The National Product almost doubled in twelve years, having risen, at constant prices, from 100 in 1947 to 194 in 1959 — at an annual rate of growth of 5.7%. The variation between the average annual rate of the first half of the period (5.8% in 1947-1953) and that of the second (5.6% in 1953-1959) is within the limits of approximation of the statistical data. The National Product expanded further by 6.8% in 1960.

The proportion of national income devoted to gross investment increased during the period, and at the same time the balance of payments on current account improved, and even registered a surplus in 1958 and 1959. The proportion of additional income devoted to investment rose to a maximum in the four-year period 1954-1957, when it accounted for approximately one-third of the gross increase in income. There was a radical change in the employment of a part of this additional income in 1958-1959, when, instead of being invested, it went to improve the external balance. The table below gives a summary of the changes which took place.

During the period, employment in the non-agricultural sector rose by over 30%; this rise was preceded and accompanied by a better utilization of labour in remunerative employment — that is, by a reduction in under-employment. Towards the end of the

(2) V. in this connection: P. SYLOS LABINI, "Prezzi relativi e sviluppo", *Giornale degli economisti*, May-June 1957; C. SERRI, "Componenti strutturali del costo della vita", *Bancaria*, November 1958; Id., *Produttività e prezzi nel processo di sviluppo. L'esperienza italiana 1950-1957*, SVIMEZ, 1959.

period the absorption of labour both at home and abroad considerably exceeded the increase in the number of new hands coming onto the market as a result of the increase in population. This is clearly

(As a percentage of gross national product)

	Gross Investment (1)	Net Investment (2)	Foreign Balance for Goods and Services (3)	Net National Saving (4) = (2) + (3)
1948 - 1951	19.8	10.8	- 1.8	9.0
1952 - 1955	21.2	11.9	- 2.7	9.2
1956 - 1957	23.1	13.6	- 1.5	12.1
1958 - 1959	22.6	13.2	1.3	14.5
1960	24.9	15.0	0.1	15.1

shown in the noticeable fall in the number of statistically recorded unemployed.

II. Italy thus achieved thirteen years of reasonable monetary stability, together with a high and constant rate of growth, which brought with it an improvement in the level of employment.

With good reason, this achievement has attracted the attention of many Italian as well as foreign economists; in spite of the difficulties caused by frequently incomplete statistics, they have sought to pinpoint the distinguishing features of Italy's development process and have used her experience in order to define more closely the relationships between monetary stability and economic development (3).

(3) On this point the following articles are of particular interest: E. C. SIMPSON, "Inflation, deflation and employment in Italy", *Review of Economic Studies*, vol. XVII, n. 44, 1949-50; P. SARACENO, "Business fluctuations in the Italian economy", in *The Business cycles in the post-war world*, International Economic Association, London, 1955; B. FOA, "The Italian economy: growth factors and bottlenecks", *Banca Nazionale del Lavoro Quarterly Review*, October-December 1953; V. C. LUTZ, "Some characteristics of Italian economic development, 1950-1955", *Ibid.*, December 1956; G. ACKLEY, "The 'Keynesian' analysis of Italian economic problems", *Ibid.*, September 1957; F. di FENIZIO, "Development and short cycles in Italy between 1950 and 1957", *L'industria*, July-September 1957; V. C. LUTZ, "The growth process in a 'dual' economic system", *Banca Nazionale del Lavoro Quarterly Review*, September 1958.

The purpose of this article is to examine the aims and methods of the monetary policy followed (4) (Sections III and IV) and the basic conditions which have made it possible to preserve monetary stability and at the same time achieve a high rate of growth (V to VII). A short description of the two related processes of income and liquidity creation is presented in the last Section (VIII).

III. The main defences of monetary stability were set up in the two years between the autumn of 1947 and that of 1949. They were threefold: (a) the regulation of bank liquidity; (b) restrictions on Treasury recourse to the Central Bank and on parliamentary powers as regards government expenditure; and (c) replenishment of the gold and foreign exchange reserve.

(a) The stabilization measures of 1947 are linked with the name of Luigi Einaudi. He became Governor of the Bank of Italy in January 1945 and Vice-President of the Council of Ministers and Minister of the Budget in May 1947. In his new capacity, he at once proceeded to implement the stabilization programme, the main lines of which he had defined as Governor of the Bank. In July an interministerial committee for credit policy was set up, and the power of bank inspection which the Banking Law of 1936 had assigned to a ministerial body was restored to the Bank of Italy. In August the committee introduced a system of obligatory bank reserves which was intended to mop up the remaining excess liquidity of the commercial banks.

Overall compulsory reserve requirements were fixed at approximately 25% of deposits and have not since been altered; they were extended to cover Savings Banks in 1958. But the banks, of their own initiative, have from time to time varied (as the law permits) the proportion held in Treasury bills and deposits with the Central Bank. In addition Treasury Bonds with a term exceeding one year were made ineligible for use as reserves in 1953. Lastly, the Central Bank has varied (over a range from 100% to nil)

(4) A more complete analysis of this subject is to be found in "Monetary Developments in Italy from the war economy to limited convertibility", *Banca Nazionale del Lavoro Quarterly Review*, December 1958.

A masterly exposition of the technique of monetary control was made by the former Governor of the Bank of Italy, D. MENICHELLA, in "The contribution of the banking system to monetary equilibrium and economic stability: Italian experience", *Banca Nazionale del Lavoro Quarterly Review*, January-June 1956.

the proportion of obligatory deposits transferred to the Government by its own investments in Treasury Bills. These three variations were not mainly intended to regulate liquidity in order to meet the needs of the business cycle: the use made so far in Italy of obligatory reserves has been rather to channel to the public sector a considerable proportion of the expansion of bank credit.

The part directly played by the Central Bank in the creation of bank liquidity (and therefore in helping the banks to meet their obligatory reserve requirements) was confined in the main to meeting seasonal needs, with the one important exception of the rediscounting of cereals stock-pile paper within the limits allowed by the law. No other right of automatic access to the Central Bank was granted, either in the form of rediscount ceilings or in that of preferential treatment of certain kinds of paper. Italy was probably impelled to adopt this degree of severity in her monetary policy by the pre-war experience of the inflationary effects inherent in privileged recourse to the Central Bank.

(b) By the legislative decrees of December 1947 and May 1948, the Treasury was forbidden to seek advances from the Central Bank unless empowered to do so, for specific amounts, by a special appropriating law. The Treasury was, however, allowed a degree of cash elasticity by means of overdraft facilities on the current account which it maintains with the Central Bank. But the Treasury debit balance may not at any time exceed an amount equal to 15% of the expenditure provided for in the current section (*parte effettiva*) of the Government budget.

The Republican Constitution came into force at the beginning of 1948. Professors Einaudi and Vanoni had, during the deliberations of the Constituent Assembly (of which they were both members), proposed a formula for the limitation of Parliamentary initiative in matters of expenditure. The rule was set down in article 81 of the Constitution that "The finance bill cannot impose new taxes or provide for new expenditure. Any other law which entails new or increased expenditure must specify the means by which that expenditure is to be met".

(c) At the end of November 1947 the exchange rate was raised from 350 to 575 lire to the dollar. The new exchange rate made ample allowance for the depreciation of the lira caused by the price inflation which had taken place up till September 1947 and had

been brought to an end only two months before the new rate was set. This rate, as well as a liquidity squeeze, led to the expansion of exports and to the repatriation of capital.

Various factors were responsible for the increase in foreign exchange holdings in 1948. Following the restoration of monetary stability, speculative demand for stockpiling petered out. The stagnation of production during the first few months following devaluation reduced current import needs. A considerable volume of imports was made available free under the Marshall Plan or by means of credits from the Argentine Government and the Export-Import Bank. Net sales of foreign exchange to the Central Bank began to make themselves felt as one of the factors permitting internal liquidity to rise to the level which was demanded by the public now that price stability had been restored.

The government budget deficit, however, continued to be the main liquidity-creating factor during 1948.

In 1949 massive imports of foreign goods were made available as grants-in-aid to the Italian Government, which released them for sale on the market, thereby generating a strong deflationary effect. The upshot was an expansion of exports to which external factors also contributed and especially the overvaluation of the pound sterling up to the end of September. All in all, the net accumulation of gold and foreign exchange reached 368 million dollars over the year and was the main factor in broadening the credit base. By the end of the year the foreign exchange holdings stood at 900 million dollars.

IV. The effectiveness of the basic monetary measures discussed in the preceding section was strengthened by the adoption of various subsidiary provisions, which pertain to monetary tactics rather than strategy. Such provisions have been analyzed by Governor Menichella, who was principally responsible for their implementation, in the work cited in foot-note 4. We would note here in particular:

— The requirement of an express authorization by the Bank of Italy for the extension of credits exceeding one-fifth of the capital (including reserves) of the lending bank. The assessment of the banker's risk remains the responsibility of the lender; the Central Bank's decisions are based on its view of the general credit situation and of the purpose of the intended loan. It would appear that the Bank has (occasionally rather than systematically) used this

means of control in order to avoid the use of bank credit for the financing of fixed plant (except for preliminary financing when it is agreed that it will be covered later by recourse to the capital market) or for speculative stock-piling.

— The authorization of a ministerial committee which is necessary for capital issues, be they in the form of corporate shares or debentures or of debentures floated by institutions specializing in industrial credit. Treasury authorization is required for the placing of loans abroad.

The coordinated application of these controls has been aimed at steering industrial enterprises towards the right balance among the various forms of external financing for their investment needs, namely among the issue of shares or debentures, long- or medium-term borrowing from industrial credit institutions, and borrowing from commercial banks.

— Control over the volume and conditions of loans to banks out of official foreign exchange holdings.

— The use of regulatory powers and of "moral suasion" in matters such as the limits to be observed by the banks in seeking and using short-term foreign funds.

— The issue of government bonds, both long and medium-term, effected from time to time in amounts which are related to the market's liquidity position. These issues partly discharge the function which elsewhere devolves on open market operations. They are raised by bank syndicates over which the Bank of Italy presides.

Although the Central Bank availed itself of these manifold possibilities of intervening, the policy of monetary stability continued on the whole to be pivoted on the measures that had been taken in 1947-1949 and which proved sufficient to stand up to the impact of domestic and international developments.

It has already been pointed out that the obligatory reserve requirements laid down in 1947 have remained unchanged. It should be added that a systematic open market policy has not been pursued and that the official discount-rate was not changed for eight years in a row (April 1950 - June 1958).

At first sight, it may appear somewhat paradoxical that a monetary policy with such unsophisticated means at its disposal and so sparing of its interventions should have met with a larger measure

of success than others equipped with far more flexible and elaborate tools. In order to clarify this apparent paradox, it is perhaps necessary to consider a number of points, which involve a broadening of the discussion from the conditions governing the supply of money to cover those governing general economic equilibrium.

(a) Among the former, a preponderant responsibility for the monetary difficulties of many countries — and particularly of those suffering from repressed inflation — must be attributed to the large volume of liquidity, and of monetizable public debt, left over from the war. In the case of Italy, however, the National Debt was almost completely wiped out by inflation, and the excess bank liquidity which existed in the spring of 1946 was largely mopped up by the burst of inflation in May 1946 - September 1947. What remained of it was thereafter absorbed by the introduction of obligatory reserves.

The small size of the public debt has mitigated the problem of its management. Budgetary deficits have mainly been financed by the continuous issue of one-year Treasury Notes and by their voluntary conversion into medium-term bonds by funding operations which have generally taken place at yearly intervals.

The relative ease with which these issues were taken up must be attributed to the need to build up afresh the financial assets destroyed by the inflation — a need which first showed itself with regard to the more liquid assets (bank-notes and sight-deposits), and thereafter spread to savings-bank deposits, money-market paper and capital market securities.

The total recorded value of financial assets (bank-notes, deposits, shares and securities) increased from 3,300 billion lire in December 1947 to 32,000 billions in December 1960: that is to say, from 54% of the Gross National Product in 1947 to 170% in 1960.

(b) During the period under consideration, both the commercial banks and the Central Bank took up government securities by investing obligatory reserves. They were, however, mainly placed outside the banking system. The demand for business credit, indeed, was so strong that the banks devoted nearly all their available resources to meeting it, after complying with their reserve obligations. As a result, the risk of monetization of government securities, held by the banks over and above the compulsory reserve requirements, arose only at times of large liquidity creation, namely in 1952, when the

Treasury deficit was expanded under conditions of slight economic recession, and in 1958-1959, two years marked by large acquisitions of gold and foreign exchange.

Some resort to Central Bank credit was also had by the Government through the gaps left open by the 1947-1948 legislation, namely the re-discount of bills drawn on cereal stocks (losses in respect of which are ultimately borne by the Treasury), special advances for fixed sums authorized by *ad hoc* appropriating legislation, and overdrafts on current account. Such borrowing has, however, been kept within moderate limits, both by reason of the ample opportunities of raising money on the capital market and of the constant downward tendency of the budget deficit with the steady increase in receipts, particularly after 1952-1953. Receipts other than loans in fact rose during the thirteen years of stability, from 850 billion lire in the financial year 1947/48 to 3,600 billions for 1959/60, and the proportion of expenditure covered by these receipts grew from 81% in 1952/53 to 94% in 1959/60.

(c) Once the two objectives of monetary stabilization and the rebuilding of the gold and exchange reserves had been attained (between 1947 and 1949), the Government concentrated on economic development, in particular in the South. The *Cassa per il Mezzogiorno*, a State development agency responsible for a special programme of public works, was established in 1950. In 1954, a ten-year development plan was formulated (and presented to OEEC). This plan was named after Professor Vanoni, the then Minister of the Budget.

After the outbreak of the Korean War, and especially during the first half of 1951, speculative stock-piling of imported goods and the deterioration in the terms of trade (due both to a rise in f.o.b. prices and to an increase in freight rates) resulted in some loss of exchange reserves, which was, however, eased by the incurring of a debit balance within the European Payments Union.

The situation was reversed in the second half of the year, particularly as a result of a boom in textile exports. This led the Government to embark upon a programme of far-reaching trade liberalization.

The trade balance deteriorated again in 1952-1953 owing to a rise in internal expenditure and to more specific factors making for a large increase in imports. The expenditure of the *Cassa per il Mezzogiorno*, which had been limited in its early stages, attained sub-

stantial dimensions in 1952-1953. Other factors contributing to the increase of domestic expenditure during these two years included the use of lira counterpart funds accruing from Marshall Aid, government expenditure on public works and the incentive programme initiated in July 1952. The volume of imports increased owing both to trade liberalization in 1951 and to government financing of imports of machinery; exports, on the contrary, were adversely affected by the end of the post-Korea boom (of which the textile industry had been the main beneficiary in Italy) and by the reintroduction of import quotas by France, as well as by the United Kingdom and other countries in the sterling area. These fluctuations in the balance of payments vindicated the policy of giving priority to the rebuilding of foreign exchange reserves over the expansion of national expenditure, since, by cushioning the impact of changes in the foreign balance, the external reserves allowed import liberalization and the expansion in investment to proceed smoothly. It is a well known fact that in certain other countries the pace of advance in both directions was more uneven, the state of the foreign balance often acting as a constraint.

V. Empirical research has so far made only a modest contribution to ascertaining the relations between monetary stability and growth.

In recent articles, two economists of the Federal Reserve Board, Marget and Furth, have attacked the line of thought that inclines to inflation, and which is expounded in the United Nations *World Economic Surveys* and in the works of the late S. Slichter. They think that the experience of numerous countries at different stages of economic development shows some negative correlation between the rate of inflation and the rate of growth (5).

In this context, particular mention should be made of the empirical studies which have been carried out in England by A. J. Brown, Dow and Dicks-Mireaux on the relations between

(5) A. W. MARGET, "Inflation: some lessons of recent foreign experience", communication to the annual meeting of the American Economic Association, 8 December 1959, *American Economic Review*, May 1960; J. H. FURTH, "On United Nations economics", *World Politics*, vol. XII, n. 2, January 1960; S. H. SLICHTER, "On the side of inflation", *Harvard Business Review*, vol. 35, n. 5, September-October 1957; by the same author see also "Slow inflation: an inescapable cost of maximum growth rate", statement before the Joint Economic Committee of the Economic Report on 20 March 1959, *Commercial and Financial Chronicle*, 26 March 1959.

the movements of wages and those of prices and employment (6). Such studies confirm the asymmetrical nature of these relationships: wages are sticky in periods of recession when prices and employment are declining, while under conditions of nearly full employment they catch up on any previous increase in the cost of living, and are very elastic with respect to the demand for labour. But, in addition to the two variables — the cost of living and the demand for labour — the equation of the movement of wages in the circumstances described shows a constant. This implies that, even if the cost of living were stable and there were no excess demand for labour, wages would rise over time. Dicks-Mireaux and Dow have estimated this constant at  $2\frac{1}{2}\%$  per annum for the period 1946-1956 in the United Kingdom.

Their finding could be of crucial importance in defining the requisites for the reconciliation of full employment and monetary stability and is worth testing for other free-enterprise economies. In the model described above, this reconciliation would seem possible only when the increase in productivity is great enough to offset the permanently inflationary effects inherent in wage negotiations. Whereas certain writers regard monetary stability, and others inflation, as underlying economic development, in the model discussed above the causal relationship is reversed, price movements being determined by the extent to which the rate of development (in real terms) can offset the constant term in the wage equation. (The monetary effect may, however, along with the prime factors of the process, determine the subsequent rate of development.)

The same conclusion is perhaps reached by applying a different interpretative model — proposed by Kaldor (7). In his model, investment — and hence development — depends upon the maintenance of a margin in the rate of profit over the interest rate, this margin being a direct function of the rate of growth in monetary terms of the national product. Factor availability may be sufficient to permit a growth of income in real terms large enough to establish such a margin. When, however, it is not adequate for this pur-

(6) A. J. BROWN, *The great inflation: 1939-1951*, Oxford 1955; J. C. R. DOW, "Analysis of the generation of price inflation. A study of cost and price changes in the United Kingdom, 1946-1954", *Oxford Economic Papers*, October 1956; L. A. DICKS-MIREAUX and J. C. R. DOW, "The determinants of wage inflation: United Kingdom 1945-56", *Journal of the Royal Statistical Society, A (General)*, vol. 122, 1959, p. 2.

(7) "A Model of economic growth", *Economic Journal*, December 1957.

pose, a degree of inflation sufficient to create the necessary increase of income in monetary terms must be accepted. The conflict between monetary stability and growth which this implies is all the more likely to arise, the more unfavourable the conditions of economic equilibrium, mainly as regards the *availability of real resources*, the *supply of labour* and the *productivity of additional amounts of capital and labour*.

VI. The theoretical models just mentioned suggest lines of analysis and interpretative criteria which yield satisfactory results when applied to Italy's experience over the past fifteen years.

(a) The availability of real productive resources improved in more than one way:

1) Defeat and inflation permitted a substantial reduction in the Government's burden in respect of defence, colonies and servicing the National Debt. In the three financial years 1936/37 to 1938/39, expenditure under these heads averaged 66% of total budgetary expenditure; it averaged 25% between 1948/49 and 1958/59. In the case of expenditure for the colonies and defence, this saving implied a release of real resources (including much needed managers and skilled workers) for productive employment.

2) Over the past few years, substantial mineral resources (natural gas, petroleum, potassium deposits) have been discovered and harnessed to industrial uses.

3) The history of the past forty years in Europe provides many examples of periods of slack production connected with balance of payments difficulties. At the root of such difficulties there were factors which varied from country to country — a decline in important export flows, a misdirected foreign exchange policy, and so on. Of a more general nature, however, were the difficulties of the ten years which witnessed the disintegration of the international economic system — extending from the collapse of the gold exchange standard to the outbreak of the Second World War. The latter developments hit Italy particularly hard. The Government of the time, in its usual mood of bellicose nationalism, attempted unsuccessfully to overcome the external difficulties by a policy of economic self-sufficiency, undeterred by the dearth of national resources available to replace imports.

After the end of the Second World War, a combination of favourable circumstances helped to release the Italian economy from the strait-jacket of its balance of payments deficit. These factors are so well known as to require only cursory mention.

The slash in military expenditure entailed the disappearance of some onerous import requirements, for example, metals and crude oil. A large amount of productive capacity in the engineering and textile industries, which had hitherto been absorbed by military procurement, was released for export production. Some of the new items manufactured were a great success on foreign markets. A huge amount of raw and semi-manufactured materials which could be embodied in exports was provided free by the United States. Engineering exports moved steadily forward, while textile exports flourished in periods when foreign demand was high (1951).

The loosening of the ties between certain European countries and their colonies gave Italy a better chance of obtaining a footing, both as an exporter and as a contractor, in areas previously subject to preferential measures. The progressive unfettering of world trade from quantitative restrictions has allowed trade relations to be determined as in former days mainly by consumer preferences, both on the domestic and on the international level. The growth of income has oriented consumer choices towards the non-essential and quality products in agriculture, industry and handicrafts, for which, by reason of her natural and social environment as well as her economic structure, Italy is often highly competitive.

The invisible balance has also benefited from the easing of travel restrictions. Italy has been host to ever-increasing numbers of tourists, and there has been substantial emigration of Italian labour to full employment countries.

(b) In the ten years 1951 to 1960, the supply of labour (employed and jobless) increased by about 2.2 million units, of which 800,000 were absorbed by net emigration. The growth of non-agricultural employment attained 2.9 million units, which were drawn from the additional supply of labour (the 1.4 millions that did not emigrate), from the reduction in agricultural employment (900 thousand), and from the pool of unemployed (600 thousand) (8).

(8) The above data are derived from a study by SVIMEZ on the growth of employment in Italy from 1950 to 1957 (Rome, 1959) and from official documents for the years 1958-1960.

The ample labour supply undoubtedly exerted a restraining influence upon wages. Lack of response to aggressive Union policies on the part of the organized workers was only one of the factors making for moderation; the absence of a Trade Union monopoly and the financial weakness of the Unions also worked in that direction. A concurring influence of a more general nature is to be found in the country's industrial structure.

Italy is characterized by the co-existence of a multitude of enterprises of very different sizes and degrees of efficiency in all fields of industrial activity (and even in numerous commercial and service activities). There are also very wide regional differentials of income. In such circumstances, minimum negotiated wages tend to be settled at levels that will not weigh too heavily upon the less efficient enterprises, and to be therefore below the wage rates actually paid in economic areas (regions or enterprises) where productivity is higher. (It should be noted, however, that the scope of the previous remark is limited by the provision often made in national labour contracts for a certain degree of regional differentiation). A policy of moderation in wage negotiations tends to be self-perpetuating, as it leads to the growth of employment and thereby of per-family income, and to price stability. The extensive application of the sliding-scale to wages also seems to have favoured this policy of moderation.

(c) The widespread influence of technical progress must of course be mentioned. Italy, in terms of technical progress in the development of peace-time goods, had lagged behind because of the war; but she caught up when she reestablished contacts with the flow of ideas and goods on a world wide scale.

In many cases, the change-over from war- to peace-time production afforded a chance to apply new techniques and to enter new fields of production. These new or rapidly developing industries include the petro-chemical (plastics, detergents, synthetic rubber and fibres) and electronic industries, some branches of engineering (scooters, office-machines, household durables) and the pharmaceutical industry (anti-biotics).

The transfer of factors of production from declining to expanding industries was assisted by the highly diversified structure of industry in the developed regions and particularly in Lombardy.



(d) In the analysis so far, care has been taken not to include among the prime movers of the development economic magnitudes which are in fact determined, to some extent, by the process itself.

The variables discussed under the three preceding heads may be considered as autonomous. The changes in the availability of real resources described under (a) were due to political factors affecting the volume and structure of Government expenditure, to mineral discoveries and again to political as well as to external economic influences affecting the foreign balance. Variations arising from saving in the private sector, which as such are related to the growth of income, were not considered. The changes in the labour supply listed under (b) were essentially governed by the natural increase in population. Innovations mentioned under (c) may be considered partly as a function of time, partly as the result of outside influences.

To pursue our sketchy description of the development process, attention should now be directed to such factors as are partly determined by the process itself, but in turn help to give it a cumulative nature. Increases in labour productivity brought about by changes in factor proportions belong to this class.

(i). The relation between the volume of production and the quantity of a factor (capital or labour) used in the process of production is often considered as an index or as a measure of the productivity of that factor. One thereby neglects the contribution of the other factor. Additional units of one factor result in a less than proportional increase in production: thus, the productivity of additional units of the factor, as measured above, decreases. For example, an increase in investment, while labour remains constant, results in a fall in the productivity of capital (the capital-output ratio rises) and in an increase in that of labour (9).

(ii). If we take two countries with different amounts of capital per worker, other things being equal:

— Given equal ratios of gross investment to national product, the ratio of net investment to national product is higher in the poorer country (where depreciation is lower).

(9) Among recent studies seeking to determine empirically the variations in production as a function of the three factors — labour, capital and organization — mention must be made of that made for Norway by O. AUKRUST, "Investment and economic growth", *Productivity Measurement Review*, February 1959.

— Given an equal ratio of net investment to national product, the ratio of net investment to national wealth is higher in the poor country, and therefore the rate of growth of its national product is also higher.

— The rate of growth will be the same if the ratios of net investment to national wealth in the two countries are in the same proportion to the respective amounts of capital per worker.

In the light of these relationships, the Italian situation may be described as follows:

Under (i), Italy is, like Japan, Austria and Germany, one of the countries in which the employment of both capital and labour has increased greatly during the last ten years. In these four countries, the increase in total employment has been accompanied by a noticeable shift from agricultural to non-agricultural employment, and in particular to the high-productivity manufacturing sector. These countries have shown the highest growth-rates attained in the non-communist world over the decade (10).

With regard to (ii) above, Italy was to be classed, at the start of the reconstruction period (and to a lesser extent today), among the countries with a relatively small endowment of capital per worker. It would therefore have been sufficient for her (as for Japan and Austria) to maintain a rate of net investment *lower* than that of richer countries in order to develop at the same rate as they — though keeping the same relative lag. A rate of net investment just *equal* to that of richer countries would have been sufficient to allow her to catch up completely in the long run. In fact, Italy, Austria and Japan achieved *higher* rates of gross investment and therefore *much higher* rates of net investment than the richer countries (with the exception of Germany). These examples seem to suggest that a rapid development towards similar economic levels is under way in industrialized countries.

(e) The growth process is characterized by a *shift in marginal demand* from foodstuffs to manufactured goods. In the most advanced stages of development, services assume a growing import-

(10) See in this context the report of the Bank for International Settlements for the financial year 1959/60 (XXX), chapter II, where, among other questions, the influence of the nature of investments upon productivity is discussed.

ance — as evidenced by the United States today. Agriculture (under Italian conditions) and services (as a general rule) permit smaller increases in productivity than manufacturing, where the expansion of the market makes it possible to reap the benefits of mass-production. Italy finds herself at present in the intermediate stage where the orientation of marginal demand towards manufactured goods permits the relative expansion of those segments of industry where the fall in costs, as the volume of output increases, is particularly rapid.

The growth factors discussed under (d) and (e) are not autonomous like those treated under (a), (b) and (c). The relative growth of the high-productivity areas discussed under (d) was obtained by means of high levels of investment. Productivity per worker in the steel industry, for example, doubled in five years, between 1953 and 1958, owing to very large additions to capital. The same pattern was repeated, more or less, in the automobile industry.

It must therefore be concluded that the factors outlined under (a), (b) and (c) set in motion a process of growth which, in turn, gave rise to the factors discussed under (d) and (e) and, in particular, to an increase in saving and investment such as to render it self-supporting.

In the public sector, the initial stimulus was applied directly to investment by means of a transfer of resources previously devoted to unproductive uses. In the private sector, the process was less straightforward; the massive contribution from abroad of raw materials, foodstuffs, fuel (and also of vehicles and machinery) allowed a rapid resumption of the production cycle. The propensity to consume did not keep in step with the growth of income, and savings rose. This tendency was encouraged after 1947 by monetary stability — and conversely.

VII. Western countries have repeatedly, particularly since the First World War, suffered from under-employment of resources even outside cyclical downswings. This has been due to maladjustments between the various parts of the economy. There may, for instance, be 1) under-utilization of the production potential on account of balance of payments difficulties due to the exchange rate being too high; 2) underemployment of resources due to restrictive monetary policies aimed at checking cost inflation, or to maladjustments between labour productivity and wage rates; 3) under-employment

of resources, or a slackening in the rate of capital formation, due to frustrated saving arising from a low investment propensity.

To give a few instances, at different periods of time both Italy and the United Kingdom suffered from under-utilization of productive capacity due to balance of payments difficulties (condition 1). This state of affairs as well as the under-employment of resources arising from cost-inflation would seem to some extent to apply to the United States today (condition 2). But, as was shown above, neither situation applied to Italy during the fifties. Permanent unemployment was in the past, and to a lesser extent is in the present, characteristic of Italy, and especially of the South.

Condition 3, namely an excess supply of saving, seems to be of no real importance except in the case of mature economies or of those where the habit of hoarding is widespread, neither of which was the case in Italy in the fifties. It does not seem idle to ask, however, why the growing propensity to save (discussed at the end of the previous section) did not set a deflationary spiral in motion. In other words, how could saving and investment be equated at steadily rising levels making possible the increasing utilization of the under-employed factor. Among the mechanisms which brought about this desirable result the following ones may be mentioned:

(a) The public sector invested an amount much larger than its own saving, as measured by the excess of current receipts over current expenditure, contracting debts to the private sector *via* the capital market and the banks. Approximately one-quarter of the over-all increase in financial assets, other than shares, during the thirteen years 1948 to 1960 (4,600 billion lire in a total of 18,100 billions) was made up of borrowing by the central government.

(b) As was already observed, the progressive liberalization of world trade and the state of creeping inflation which were outstanding features of the international scene after World War II fostered Italian exports. As a result, and owing to the contribution of foreign aid and capital (the latter mainly in the form of direct investment and long-term loans), Italy's gold and foreign exchange holdings have gone up since 1947 by an amount equivalent to roughly 1,500 billion lire. The inflow of capital was particularly large in the years 1948, 1958 and 1959. During the years 1958 to 1960 the country was a net exporter of goods and services. The year 1949 witnessed an accumulation of government claims on the Central Bank

in the form of credit balances accruing from the counterpart funds of Marshall aid. In 1958 and the first half of 1959, the rate of investment sagged. The year 1959 as a whole was again marked by the building-up of Treasury deposits at the Central Bank.

It seems clear that economic relations with the rest of the world have served to neutralize the deflationary pressures of occasional excesses of government receipts (from taxation, external aid, and long-term loans) over expenditure and of reductions in the volume of fixed investment and the level of stocks (11). Under the regulations in force during the period under consideration, foreign currencies were surrendered to the Central Bank at fixed exchange rates. As a result the reflationary effect of net currency inflows was felt both on the profits and the activity levels of firms for which a weakening of internal demand could be offset by the expansion of exports, and upon banks, which, as their liquid reserves grew, were encouraged to expand credit.

(c) One tenth of the growth of Central Bank assets between 1948 and 1960 was due to the increase of claims on the government: the other nine tenths was due to the acquisition of exchange reserves (see table below). This growth became the basis for the expansion of credit by the commercial banks, which was mainly directed to the private sector, and which proceeded without interruption over the period, engendering an equivalent investment expenditure, with multiplier effects on the flow of profits and other incomes. It was only in some phases of the cycle (1951-1952) that the elasticity of supply was unable to satisfy the additional demand and that the gap between the two caused a rise in prices and net imports.

(d) Undistributed company profits are as a rule invested either in the business itself or in those of associated firms. The problem of the possible deflationary effect of a dissociation between saving and investment decisions, therefore, applies principally to the non-cor-

(11) The possibilities of using external demand to compensate for a slackening in home demand will diminish as the interdependence of economies increases, since cyclical swings affecting a given country will spread with greater rapidity beyond its boundaries. It might be argued that the greater stability of economic development in Europe in comparison with the United States over the last decade was also due to the degree of economic integration between countries being smaller than between regions, and allowing of a greater variety of expansionary and contractionary impulses being simultaneously exerted.

porate sector. But in the Italian economy there exists a large area in which savings are neither strictly corporate nor strictly personal. This is the area of family businesses and partnerships, in which savings of a mixed nature (part personal, part business) are, to some extent at least, invested in the saver's own business, be it agricultural, commercial or industrial.

(e) In the households' sector there has been a flow of investments for house purchase, financed either by direct saving on the part of the buyer or by borrowing. In the thirteen years between 1948 and 1960, investment in houses accounted for 23% of gross investment: the volume of mortgage bonds outstanding increased by 670 billion lire, equal to 4% of the total recorded formation of financial assets, as defined under a), above.

OUTSTANDING CREDITS OF THE BANKING SYSTEM BY ECONOMIC SECTORS  
(Billion lire, position at the end of the year)

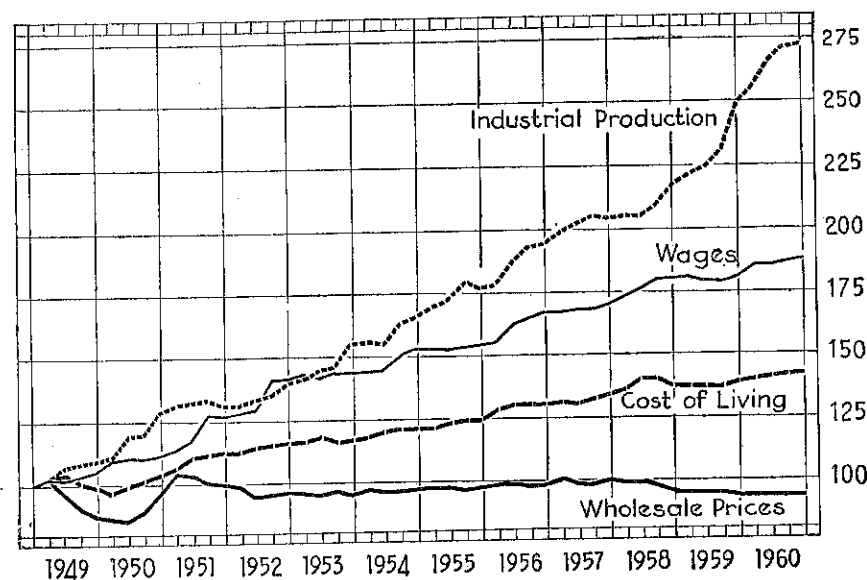
Debtors	Bank of Italy		Other banks		Total for all banks	
	1948	1960	1948	1960	1948	1960
Banks . . . . .	56	72	-56	-72	—	—
Public Sector . . . . .	947	1,168	406	2,187	1,353	3,355
Private Sector . . . . .	48	47	1,080	7,957	1,128	8,004
Other Countries . . . . .	174	2,069	—	98	174	2,167
Total . . . . .	1,225	3,356	1,430	10,170	2,655	13,526

(f) Over the last three years, during which a balance of payments surplus on current account was achieved, the average rate of interest has fallen from 7.3% to 5.3% on government bonds and from 7.3% to 5.6% on debentures issued by houses specializing in industrial credit.

To sum up, the two-way adjustment between saving and investment took place at high levels owing to a number of mechanisms: direct investment on the part of companies, small firms and individuals, an excess of investment on the part of the public sector, and the fall in the rate of interest. During 1958, 1959, and the first half of 1960 a large export balance has assured the continuity of the process of income growth, in spite of a tendency for saving to outrun investment.

VIII. To help the reader get a comprehensive picture of the period under review, two graphs are presented in this final section (12). In graph 1, it has been thought proper to use as a base 1948, namely the first post-stabilization year. For price series, the use of 1947 would have been misleading. To illustrate: because of the rapid price rise during the first nine months of 1947, the implicit price index of the national product showed an increase of

INDICES OF PRICES, WAGES AND INDUSTRIAL PRODUCTION  
(1948=100)



12% between 1947 and 1948, although, in fact, the tendency of prices during 1948 was downwards.

During the twelve years 1949 to 1960, about seven-tenths of the growth of the National Product at current prices was due to an increase in volume, and the remaining three tenths to the rise in prices. The real growth element was more stable than the inflationary element; and a slight negative correlation between the two, reducing the fluctuations in the total movement at current prices, is discernible. The three average annual rates of growth and their respective mean deviations (given in brackets) are: for

(12) The two graphs are the work of Dr. A. Occhiuto, to whom the author is also greatly indebted for his comments on this paper.

the national product at current prices 8.3 (2.0); for the real component 5.8 (1.4); for the inflationary component 2.3 (1.4).

The inflationary element was high for the years 1950 (4.1%), 1951 (8.4%) and 1956 (3%), and was also considerable in 1958 (2.4%). In the first two years mentioned, this was due to the Korean war. In 1956 and 1958, bad harvests affected the wage-price spiral. Indeed, given the widespread use of the sliding scale, temporary rises in the price of food-products cause rises in wages and are thus incorporated in industrial costs. In this case, the products concerned were mainly non-staples (olive oil, wine, fruit, vegetables), the markets for which are more susceptible to changes in domestic crops, as they are less easily stabilized by imports. Thus to the price-increasing factors which were mentioned in section I as exerting a continuous influence throughout the period (upward adjustments in administered prices, increasing cost of commercial services), there should be added certain other factors which exerted only a temporary influence: the extension to Italy (under the present system of fixed exchange rates) of the effects of the Suez and Korea crises, and bad weather, reflected in higher prices as a result of a wage-fixing mechanism which is over-sensitive to chance reductions in supply.

But the recent evolution of the balance of payments situation shows that, as a whole, inflationary pressures have perhaps been weaker in Italy than elsewhere, and in the long run have been just sufficient to prevent currency appreciation from becoming an issue (13).

(13) In September 1949, Italy devalued by 8%, changing the exchange rate from 575 to 625 lire to the US dollar: the lira was therefore devalued by less than the currencies of other European countries on the average. The rate has not since been changed, and has recently been declared as parity to the International Monetary Fund.

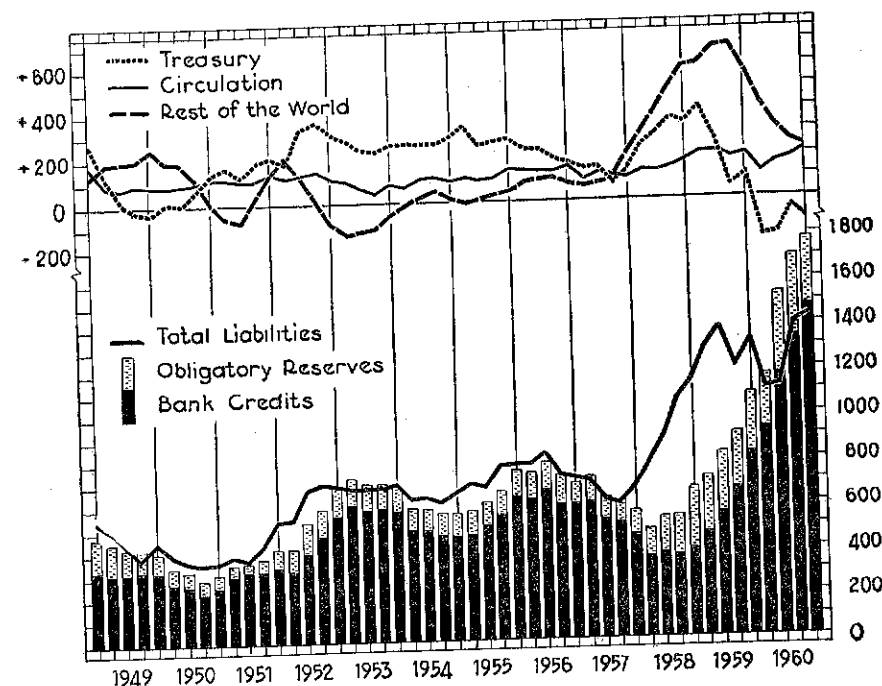
Italian monetary policy has avoided the risk of inflationary developments which, under fixed exchange rates, would lead even temporarily to an over-valuation of the lira. This preoccupation rests in part on a conception of the relations between external stability and growth which would seem to have been recently confirmed once again by the experience of one or two leading industrial countries.

Over-valuation is likely to hamper exports and hence the financing of imported supplies. Should factor mobility be such as not to permit of the necessary shift of sales and supplies to the domestic market, there would be a fall in the level of activity below that dictated by available capacity. In a country such as Italy, heavily dependent upon external trade, such a disorder of the system (although it would not indicate a basic excess of demand over resources) could spell the end of the development process.

In the present structure of exchange rates and prices throughout the world, we are faced with the paradox of a steel shortage in Europe, which finds no relief in the existence of excess capacity in the United States.

The changing monetary picture is reflected in the price movement (chart 1) as well as in the shifts occurring over time between domestic and external factors of liquidity creation (chart 2).

Inflationary spells occurred during the first year of fighting in Korea (from July 1950 to June 1951), when the whole price and wage system moved up; during the year 1956, the first half of which



This graph is intended to illustrate the liquidity formation arising from the following factors: government borrowing from the banking system (curve "Treasury"); the accretion of gold and foreign exchange to official holdings (curve "Rest of the World"); the expansion of bank credits (the "Credits" columns). The creation of liquidity due to the Treasury and the rest of the world is translated into: (a) the expansion of the note and coin circulation (curve "Circulation"), (b) the formation of obligatory bank reserves (the "Obligatory Reserves" columns), and (c) the formation of free bank reserves (the white area between the tops of the histograms and the curve for total bank liabilities). The graph shows, for each three-monthly period, the changes over the year ending in that period (billion lire).

was marked by a rise in the price of foodstuffs — owing to loss of crops due to frost — and of wages, and the closing months by a rise in wholesale prices due to the Suez affair; and in the first six months of 1958, when both the cost of living and wages rose as a consequence of some poor autumn and winter harvests.

At the start of the Korean war, the banks had no large excess of liquidity; during the inflationary revival which followed, the increase in Central Bank assets caused by bank credit and Treasury financing (14) was in part offset by the deterioration in the balance of payments position. The broadening of the credit base was therefore kept within bounds, and the adjustment between the movement of the volume of money and the more rapid increase in income was accomplished — though not without some difficulty — by means of a rise in the velocity of circulation. As the effect of the credit squeeze made itself felt, interest rates rose rapidly. After June 1951, the situation was reversed; the balance of payments improved, thereby creating abundant liquidity, and the velocity of circulation fell.

In 1956 and 1958, the growth of the Gross National Product was below the trend for the period as a result of a fall in the rate of growth in real terms.

ANNUAL RATE OF GROWTH OF GROSS NATIONAL PRODUCT

Average	in money terms	in real terms	inflationary component
1949-1960	8.3	5.8	2.3
1956	7.3	4.3	3.0
1958	6.4	4.0	2.4

Thus, in neither of these two years did the demand for additional liquidity rise above the trend. As a matter of fact, in 1956 the formation of liquidity was reduced owing to the combined effect of a worsening in the balance of payments and of the decrease in the Budget deficit, which had been noted in every fiscal year since

(14) The curve "Treasury" on the graph includes both long and short-term Treasury borrowing from the Central Bank and other banks. As the Treasury keeps its cash resources only with the former, any investment in government securities on the part of the commercial banks reduces by the same amount their reserves at the Bank of Italy (in the same way as if the securities were sold from the portfolio of the Bank of Italy), as well as the net debt of the Treasury with the Bank. But the banks can hold their obligatory reserves in the form of Treasury bills as well as in deposits with the Bank of Italy; moreover, they may use government bonds as security for advances from the Bank of Italy. For these reasons, it has been thought proper to treat all bank investments in government securities as liquid items.

1952/53. As had already been the case in 1950-1951, the equilibrium between money supply and income was brought about through an increase in the velocity of circulation.

As the recession set in (September 1957), the balance of payments started to show a large surplus; the Treasury too increased its creation of liquidity with a view to stimulating economic activity.

Hence, the supply of liquidity exceeded demand during the short period of the rise in consumer prices and in wages in the first half of 1958. This is clearly shown on the graph: the white area between the tops of the histograms, which represent the annual growth of bank credits and obligatory reserves, and the curve, which indicates the expansion of bank liabilities, measures the formation of the banks' free liquid assets. As can be seen from the graph, this area has remained substantial from the fourth quarter of 1957 to the end of 1959. A part of the excess liquidity formation of that period has been absorbed during 1960.

The rôles played by exchange operations and by government finance in the formation of liquidity over the twelve years is shown in the upper part of the graph (curve "Rest of the World" and curve "Treasury", respectively). A clear scissor movement can be observed between the two curves from 1949 to 1957. On the contrary, during the last three years, the movements in the two curves have been similar. A possible line of explanation of this new development is the following. During 1958 and the first half of 1959, the slowing-down of economic expansion at home acted as a primary factor in weakening the demand for credit and creating an export surplus; as a result of these movements, the banks bought large amounts of Treasury bills, while the Government abstained from pushing its funding operations. Since the second half of 1959, expansion in economic activity has again accelerated, swelling both imports and government revenue.

The creation of liquidity due to balance of payments surpluses also shows a negative correlation with the liquidity created by bank advances, represented in the lower part of the graph. A discussion of the problem of the relations between these three curves lies beyond the scope of this article (15).

(15) For remarks on this point, see the article *Monetary Developments* referred to in foot-note (4).

The "credit multiplier", here defined as the ratio between the potential expansion of bank credit and the expansion in the assets of the Central Bank, increased slowly throughout the period, showing but little responsiveness to changes in the economic situation. In fact, the absorption of bank liquidity through the obligatory reserve mechanism remained almost constant at about 23% of deposits for commercial banks alone, and at 20% for commercial and savings banks together (16). But the absorption due to the increase in the circulation of bank notes (shown by the graph) increased less than proportionally to deposits, and with moderate cyclical variations. In the last phase of a positive balance of payments (1958 and 1959), the potential credit expansion was not fully realized.

The spectacular expansion of productive activity since July 1959 (the index of industrial production has risen by 23 per cent in the eighteen months between July 1959 and January 1961) has proceeded within a framework of monetary stability, although a shortage of skilled labour and a need for new plant are emerging in some sectors of industry.

Under these conditions, the scope for regional planning is greater. An incentive system in the form of preferential taxation and of special credit facilities for factory building in Southern Italy has long been in existence, but the Government has not undertaken any more direct action to influence the location of industry — on the lines followed for example in the United Kingdom, where the choice of sites for new large factories can be said to be negotiated with the government. It is probable that the existence in Italy of a large public sector, and the uncertainty which persists as to the point to which this sector may be extended, do not make for confidence between the Government and private industry; in such circumstances, the Government has been inclined in the past to rely on nationalized enterprises in carrying out regional planning, rather than to try to guide the development of private industry in the direction desired.

Be that as it may, it can safely be said that government activity in the field of public works and in some basic industries (iron and steel, oil), as well as the measures taken in the South by some large private industrial concerns (in the electrical, mining, chemical, pe-

(16) The reserve obligation was only extended to savings banks in 1958.

troleum and cement industries) are laying the foundation for the diversified industrial development of that part of Italy. But public works do not create a permanent flow of income, and basic industries do not yield large wage incomes so much as rewards to capital and enterprise, rewards which are not always spent in the area. Large concerns are of less importance in those segments of manufacturing industry (engineering, textiles, food products) and tertiary activities, in which labour plays a larger part. The growth of industry and the tertiary sector in the South, therefore, depends largely upon the formation of a class of local entrepreneurs and on the development of the technical skills of the population (as well as on the expansion of local markets which, though somewhat laboured, is already under way). In this context, there is ample room for government action aimed at improving the level of general education and vocational training. The Government is, in fact, just now turning its attention to this task, as well as taking direct action to industrialize the South.

PAOLO BAFFI

*Rome*