

The Dynamics of Investment in Italy, 1951-1967

1. Italian Economic Growth

This article examines the overall trend of investment in Italy from 1951 onward in relation to the trend of the other parameters of the country's economic growth, to the targets set out in the National Economic Development Plan 1966-70, and to financing problems (1).

In order to evaluate investment trends, one must go back to the analysis of the main economic aggregates: Tables 1 and 2 of the Appendix give the figures, at current prices and at constant prices, of the Net National Product (R), depreciation (A), and the Gross National Product (Y); of imports and exports of goods and services; of total resources (Σ); and of expenditure in consumption (C) and investment (I).

GNP (Y) at constant prices increased in the sixteen years from 1951 to 1967 at the cumulative average rate of 5.4 per cent per annum (Tab. 2); since the population increased at the average rate of 0.7 per cent per annum, the average Y per capita rose at the average annual rate of 4.7 per cent. This rate of growth is high when compared with those of the country's other historical periods and of other comparable countries.

2. Current Prices and Constant Prices

The increase of prices during the 16 years complicates analysis of the trend of the National Accounts' aggregates, inasmuch as an important part of the rises was due to the simple nominal increase

of monetary totals. From 1951 to 1967 Y in current lire grew in the proportion of 1 to 4; but when the correction is made for the general rise in implicit prices in the proportion of 1 to 1.7, the growth at constant prices is reduced to the proportion of 1 to 2.35. Nevertheless the qualification of "real" attributed to values at constant prices is misleading. Computation of the aggregates at constant prices introduces a distortion factor, since the price indices differ greatly from one aggregate to another (2). The figures at constant prices are therefore not invariably more meaningful than those at current prices: they are so for certain purposes, but for others they substitute actual values by theoretical values of little significance when it comes to analysing real situations; and the longer the period being examined, the wider becomes the gap (3).

(2) Over the 16 years the average annual increase of prices (Tab. 3) was 2.1 to 2.3 per cent for I and A ; 3.2 to 3.5 per cent for C_0 (private consumption), Y and R ; 6.1 per cent for C' (public consumption); while for imports and exports there was an appreciable fall from 1951 to 1959-61 and a slight rise afterwards. Of course the rise (or fall) of an overall index of prices does not necessarily mean a proportional change in all the individual prices; it can also depend upon a shift in the composition of the aggregate in question, independently of changes in individual prices. This holds good, for example, for imports and exports of goods and services, the structure of which has radically changed over the 16 years.

(3) ISTAT (Central Institute of Statistics), in drawing up the new series of aggregates of the National Accounts (*I conti nazionali dell'Italia, nuova serie, anni 1951-1965*, Supplement of the *Bollettino Mensile di Statistica*, No. 3, March 1966) modified the computation methods at constant prices: "GNP at constant prices, which formerly was obtained as a residual, i.e. as the difference between total expenditure (consumption, investment and exports) and imports at constant prices, has in the new series been calculated directly by proceeding to deflate the value added of the various branches of activity and the total indirect taxes. The value added at constant prices of the various branches of activity has, in its turn, been calculated by the double deflation method (separate deflation of production and of intermediate costs), a method that in the past was used only for a few branches of activity" (*op. cit.*, p. 8).

The method is not immune from criticism: "... The evaluations at constant prices have a limited meaning when the price changes are not due to a general and uniform modification of the purchasing power of money, but to specific factors that modify prices and the terms of trade of economic goods. It was thought that income evaluations at constant prices could be perfected by means of the so-called 'double deflation', i.e. by calculating the value added of the various economic activities on the assumption that prices were constant for both the products obtained and the goods and services used in production. But the very meaning of value added, understood as an increase of value resulting from a transformation process, raises doubts about the logic, when assessing it, of disregarding two of the very elements on which it depends (the prices of goods and services produced; the prices of goods and services used)" (AGOSTINO DE VITA, *Esame comparativo delle contabilità nazionali nei vari paesi*, a Report presented at the First Conference of Studies on National Accounts subjects, Rome, September 29-October 1, 1966, "Stato Sociale", No. 2, February 1967, p. 110).

(1) The reader who is pressed for time can restrict himself to §§ 6, 7, 10, 12, 14 to 17; the Tables in the statistical Appendix may prove more interesting than the text.

3. The Foreign Component

The growth of the Italian economy during the 16 years took place parallel with a rapid expansion of economic relations with abroad: domestic growth and foreign trade expansion sustained each other by turns. Imports and exports of goods and services increased as a whole, in values at current prices, at a slightly faster pace than the national income: their ratios to total resources thus went up from 10 to 12 per cent in the first years to 15 to 16 per cent at the end of the period (Tab. 4) (4).

The liberalization of international trade and the European Common Market certainly played a notable part in this progressive shift of emphasis of the Italian economy towards the foreign sector, a result of which has been to bring the ratios expressing the Italian economy's "foreign component" close to the higher levels ruling in the industrialized countries of the west. Imports have grown for two reasons: the advance made in the standard of living and in consumption, and the rising demand for the raw materials and semi-finished and finished products necessary in the industrial transformation of an expanding economy. The growth of exports, in its turn, has been made possible by increased foreign demand and the capacity of Italian products to compete in foreign markets.

In both cases the growth followed more or less parallel lines during the first seven years, with imports showing a surplus of about 200 milliard lire a year; subsequently exports mounted more rapidly than imports, creating a surplus balance in the years 1958-59; then the position was reversed, and in the years 1960-63 imports increased very rapidly (+120 per cent in four years), in correspondence with an exceptional rise in consumption, the result being the large deficit of 1963. In the last four years the more rapid increase of exports gave rise to a remarkable surplus of about 1,100 milliard lire in 1965 and 1966, which declined to around 800 milliards in 1967.

(4) The increases in those ratios, calculated on values at constant prices, would come out still higher, following the fall in implicit prices from 1951 to 1959-61, in contrast with the price increases for GNP and domestic expenditure. From 1951 to 1967 those ratios moved from 6.9 to 15.6 per cent in the case of imports and from 6.1 to 18.1 per cent for exports. But in this case the trend at constant prices, replacing as it does effective prices by theoretical prices, is less meaningful than that at current prices, which, among other things, expresses the constraint of the balance of payments in each year.

The experience of the last ten years, if the 1963 position is taken to be exceptional, leads to the conclusion that the fundamental trend of the Italian economy has been a notable surplus of exports (of goods and services), which can be attributed to the progress made by the economy's productive structure, to its excellent performance in foreign markets, and to the contribution made by services (tourism, freights, and so on). In other terms, the "foreign component" is negative: the resources disposable for domestic use fall short of total resources by about 2 per cent, which corresponds in financial terms to a net transfer abroad of Italian capital (see § 7 and Tab. 9).

4. The Trade Cycle

Growth has been pretty well continuous in the 16 years: the alternate phases of expansion and recession have been reflected in moderate fluctuations of the growth rates — always positive — of Y at constant prices around the average of the period (Tab. 6). Up to 1958 these shifts remained, in the biennial averages, within a limit of one half of one per cent; in the years 1959-62 there was an appreciable acceleration, with rates more than one percentage point higher than the above average; then in 1964-65 came a serious recession, with rates lower by more than two percentage points; while in 1966-67 there was a return to the average of the period.

The analysis of the absolute changes in the principal aggregates (Tab. 5) shows a relatively parallel trend in the alternate phases of expansion and recession: in the expansionary phases (1953-57, 1959-61, 1966-67), the annual increments of Y , I and A grew together; in the years of recession (1952, 1958, 1964-65) they declined together (5).

The absolute changes in gross investment (I) show far wider cyclical fluctuations than those of Y , with a clear "accelerator" effect: the annual increments grew strongly in the expansionary phases and fell to zero or to negative values in the years of recession. The strongest fluctuation occurred in the recession of 1964-65:

(5) Depreciation does not correspond only to the classical concept of the distribution over time of past investment, but depends in part on the trend of the economic cycle and on the profitability of the firms; it rapidly becomes larger during a boom and slows down during recessions (firms' depreciation became insufficient in 1963-65). The classical distinction between gross investment and net investment, after deduction of depreciation, thus becomes less clear.

during the two years gross investment showed an absolute decrease, at constant prices, of 1,100 milliard lire, and after the recovery of the two following years, it barely regained (in 1967) the level of 1963 (Tab. 2). The ratio I/Y at the end of 1967 still remained, relatively to the national income, below that of the years 1959 to 1964 (Tab. 4 and § 10).

5. Consumption

Domestic disposable resources are distributed between consumption and investment according to the absolute amounts of Tab. 1 and 2 and according to the percentage ratios of Tab. 4 (6). The ratio of consumption to GNP (C/Y) had been falling from over 80 per cent in the first years of the period to 75 per cent in 1961-62, and then became stable at about 77 per cent in the last years. The ratio of I/Y on values at current prices was 20 per cent in the first years, then rose to 24-25 per cent in 1960-63, afterwards declining to 20 per cent in the years 1965-67; as already noted, the cyclical fluctuations of investment are wider than those of GNP (7).

Total consumption C of the National Accounts consists of two addenda, private consumption C^o and public consumption C' . The trend of the two has differed considerably (Tab. 7): public consumption increased a good deal faster than private consumption and than the national income, too; its ratio to total consumption thus rose during the period from 15 to 18 per cent, and at an almost continuous pace (8).

(6) The two ratios C/Y and I/Y , whether at current prices or at constant prices, do not add exactly to unit, since $Y = C + I + \text{exports} - \text{imports}$ (Tables 1 and 2).

(7) In this case, too, the ratios on values at current prices are more meaningful than those on values at constant prices. As the implicit prices of I increased a good deal less than the implicit prices of Y and C (§ 2, footnote 2), the series of the I/Y ratios at constant prices artificially lowers today the values of the initial years, thus showing an increase, during the period as a whole, which does not on the other hand result from the series at current prices. The latter series is more realistic because it expresses the constraint of the equilibrium between resources and expenditure in each year.

(8) We refer to the trend at current prices. The implicit prices of C' rose at a rate double that of those of C^o , 6.1 per cent per annum against an average of 3.2 per cent for the period (Tab. 3), probably as a result of wage increases that were more rapid than increases of prices of goods and services. Once this difference were eliminated, the trend of ratio C'/C at constant prices would indicate an outright decrease (from 20 to 17 per cent, Tab. 7): an unrealistic result in comparison with the trend at current prices, which expresses the constraint of the public finance equilibrium.

The propensities to consume, as ratios of consumption to the net national product R , are calculated in Table 8. Taking private consumption alone, the average propensity C^o/R at current prices gradually declined from the level of 78 to 80 per cent in the first years until it became stabilized at 69 per cent in the 'sixties: correspondingly, the marginal propensity $\Delta C^o/\Delta R$, initially below the average, then became uniform with the average from 1962 onwards, though sharp changes occurred from year to year (9).

6. Public and Private Saving

The National Accounts, in the section relating to capital formation, calculate total net national saving as a difference by deducting total consumption C from the net national product R , that is, $S = R - C$ (Tab. 9) (10). Total net saving falls into two parts, public saving and private saving. Public saving S' is found by deducting from the public administration revenue (taxation receipts, transfers and income from capital) the expenditures (public consumption, interest and transfers). Private saving S^o is found as a difference by deducting public saving from total saving, that is, $S^o = S - S'$ (11).

Total net national saving S (in the figures at current prices) showed considerable increases from 1953 to 1962 (Tab. 10), averaging out at 16 per cent per annum; after the 1963 standstill, the annual increase was more modest, reaching 6.7 per cent per annum in the years 1963-67, a coefficient below that of the other aggregates, at current prices (Tab. 1).

The two components, private saving S^o (constituting at least four-fifths of the total), and public saving S' differed greatly in their trends.

Private saving S^o , at current prices increased in the proportion of 1 to 5.6 in the 16 years, which was far greater than the growth in the proportion of 1 to 4 of the net and the gross national product. After eliminating the increase that took place in prices, assumed as corresponding to that of the implicit prices of R , there remains, at

(9) Due to exceptional circumstances, as in 1952, 1956 and 1963, and perhaps also to the inadequacy of basic data.

(10) In addition to the net current transfers with abroad, which however represent less than one-hundredth part of R (Tab. 9).

(11) Here we cannot dwell too long upon methodological questions, and we take the figures at their face value; in any case, the values are the less meaningful the more roundabout is the calculation procedure.

constant prices, an average annual rate of increase of 7.7 per cent, far greater than that of Y (Tab. 6). Thus the ratio S^o/R (Tab. 11) rose from less than 10 per cent at the beginning of the period to about 14 per cent in the years 1959-62; after a decline in 1963-64, it rose again in 1965-66, and then returned in 1967 to 14 per cent (12).

In the case of public saving S' the trend was different: starting from ratios below 1 per cent of R at the beginning of the period, it rose to ratios of about 3 per cent in the years 1956-59 and of about 4 per cent in the years 1960-64, but it slumped to less than 1 per cent in 1965-66, following the deterioration in the situation of public finances, and rose again to only 2 per cent in 1967 (offset, however, by the decline in private saving mentioned above) (13).

(12) In 1967 net private saving diminished at current prices compared with the previous year (Tab. 10); and allowing for price increase, it is also lower than the 1965 amount at constant prices. A diminution of net private saving curbs new investment and is therefore a factor of disequilibrium and strain in an expanding economy, open to economic relations with abroad.

(13) The *National Economic Plan for the Five-years 1966-70* (Official Gazette, August 14, 1967) gives the following overall evaluations for the five years, at constant prices of 1963 in milliards of lire: total gross saving 43,230 milliards (of which 16,600 milliards for depreciation) consisting of public saving 5,130 milliards and private saving, as a difference, 38,100 milliards (Tables 4 and 5 of the Plan). In order to compare these five-year figures with the annual data, they must first of all be sub-divided into the five years: as a crude approximation, simply dividing by 5, or a little better, conceding everywhere annual increments at constant prices of 5 per cent per annum, that is, applying rounded off indices in the ratios 90: 95: 100: 105: 110. We would thus obtain the following forecasts for the individual years (index numbers and milliards of lire at 1963 prices, rounded off to 100 milliards):

	1966	1967	1968	1969	1970	Total
Index numbers	90 0.18	95 0.19	100 0.20	105 0.21	110 0.22	500 1.00
Gross saving:						
public	900	1,000	1,000	1,100	1,100	5,100
private	6,900	7,200	7,600	8,000	8,400	38,100
Total	7,800	8,200	8,600	9,100	9,500	43,200
less depreciation	3,000	3,150	3,300	3,500	3,650	16,600
= net saving	4,800	5,050	5,300	5,600	5,850	26,600

If these forecasts are compared with the 1966-67 trend (Tab. 10), the main divergence is in public saving: allowing, on the one hand, for the difference between net and gross saving (which plays little part in this case) and on the other, for the 16 per cent price increase from 1963 to 1967 (Tab. 3), public saving achieved in 1966-67 is about a half of what was forecast; nor does the state of public finance give rise to favourable prospects during the three years 1968-70. The figures of total net saving and total gross saving correspond roughly with the Plan's forecasts, allowing for the price increase: however, the decline in net private saving in 1967 (see previous footnote) introduces a new element of uncertainty, linked with questions of the general orientation of national economic policy, which here we are not going into.

The global propensity to save σ is the ratio of total net national saving $S = S^o + S'$, as related to Net National Product R , that is $\sigma = S/R$. Table 11 gives the series of these ratios: after the abnormally low levels of the first four years, the ratio S/R climbed to about 18 per cent in 1960-62, then fell to 16 per cent from 1963 onwards.

Adopting a wider definition, the propensity to save can be related to the ratio between the gross values, $s = (S + A)/(R + A) = (S + A)/Y$ (14). The ratios are notably higher than those of S/R (Tab. 11) (15), but the trend is roughly parallel: a low level in the first four years, next an increase up to 25 to 26 per cent in the years 1959-62, then a decline to about 23 per cent from 1963 onwards.

7. Net and Gross Investment

Domestic disposable saving, again according to the National Accounts, is given by net national saving, after adding or deducting the balance of capital movements with the rest of the world. This balance was positive (net indebtedness) in the first years of the period, and then became negative (net credit) for important amounts in the last three years, when net disposable domestic saving represented from 73 to 82 per cent of net national saving (Tab. 9). This net disposable domestic saving corresponds in national accounting to net investment J ; by adding depreciation to this, we obtain gross investment $I = J + A$.

Net investment J grew more rapidly than R up to 1963, but declined considerably in 1964 and 1965. After the recovery of the following two years, in 1967 it reached again the 1963 figure at current prices (Tab. 9), but at constant prices it was still 12 per cent below that total. The ratio J/R rose from 11 per cent at the beginning of the period to 18 per cent in 1962-63, but then fell again to 12 to 13 per cent (Tab. 11).

(14) This would be a complement to the unit of the propensity to consume (total) if the "foreign component" (§ 3) were zero, if, that is, imports and exports of goods and services were to offset each other. In that case, and regardless of trade cycle swings, it would be $Y = C + I$ (§ 5) and $s = I/Y$.

(15) By definition, $S < R$, therefore $S/R < 1$; adding the same quantity A to both the terms of the ratio,

$$\frac{S}{R} < \frac{S+A}{R+A} < 1.$$

Depreciation A increased in the first years at a slower rate than R ; then it kept pace with the latter's increase, except for the cyclical fluctuations of the annual increments already noted (§ 4). The ratio A/R , after registering 11 per cent at the start, then became stabilized at 9.6 per cent (Tab. 11).

Thus net investment I (that is, new investment in the macro-economic sense), which was barely higher than depreciation A (Tab. 9 and 11) in the first years of the period, afterwards climbed to almost twice the amount of A in 1963, but in the years 1965-67 fell to a level that exceeded A only by a third or a quarter. Yet the general conditions of a rapidly progressing economic system call for new investment that should largely exceed the depreciation of past investment, and to such an extent that the ratio I/I should be at least 62 to 65 per cent instead of the 58 per cent of 1967.

Global gross investment I of the National Accounts rose at current prices from about 2,100 milliard lire in 1951 to about 7,500 milliards in 1963; it declined in the following two years and returned to about 7,500 milliards in 1966 and to about 8,600 milliards in 1967 (Tab. 1 and 9).

The rise of the implicit prices of I was much below that of the other aggregates up to 1961 (Tab. 3). There was thus a fall in the relative prices of capital goods: the benefit of the greater productivity that resulted from the increasing efficiency of production went partly to users of capital goods. But from 1962 onwards the implicit prices of I increased almost to the same extent as those of Y . Over the 16 years as a whole, the average annual increases were, respectively, 2.1 per cent and 3.4 per cent (Tab. 3).

For a comparison of the trend of I in relation to the other aggregates, the series at constant prices are therefore more meaningful than those at current prices. At constant prices (Tab. 2) the amount rose from about 2,500 milliard lire in 1951 to about 7,500 milliards in 1963; the subsequent decline comes out greater than when current prices are used, and in 1967 I barely returned to the 7,500 milliards of 1963.

As already noted, the cyclical changes of I are far wider than those of Y : Tables 5 and 6 show substantial increases in the expansionary stages (1953-57, 1959-61, 1967), and an appreciable slackening of the rate of growth, and even absolute decreases during the slump years (1952, 1958, 1964-65).

During the 16 years as a whole, I increased at the average rate of 7.0 per cent per annum at constant prices, higher than the rate of Y ; but the absolute decrease of 1964-65 virtually nullified the progress made in the last four years (Tab. 2) (16).

The ratio I/Y at constant prices (Tab. 4) climbed from 16 per cent at the beginning of the period to 24 per cent in 1961-63, then declined to 20 per cent. Up to 1963 the Italian ratio I/Y (at current prices) came out higher than the analogous ratio for the six EEC countries as a whole, but then it fell to a lower level (Tab. 12).

8. Global Incremental Capital-Output Ratios

The Incremental Capital-Output Ratios (ICOR.s) compare annual investment with the greater income that results from it; among other things, their object is to measure the global economic efficiency of investment (17). Statistically they take the form $k = I/\Delta Y$, that is, the coefficient is the lower the higher is the increase of Y per unit of I , i.e. the higher is investment's global economic efficiency.

Two kinds of statistical difficulties are encountered when it comes to determining definitely such coefficients (18). The first is the considerable variability from year to year: given the fluctuations due to the general economic cycle and to other fortuitous factors, the ratios $I/\Delta Y$ calculated year by year and comparing the investment of each year with the increase of income from that year to the next, i.e., $I_0/(Y_1 - Y_0)$, give results that are extremely variable

(16) Index numbers of I at constant prices, from the data of Table 2, base 1963=100:

1961	1962	1963	1964	1965	1966	1967
86	93	100	92	85	90	100

(17) A. GRAZIANI has examined the concepts on which ascertainment of these coefficients is based (*Il rapporto capitale-prodotto nell'economia italiana: aspetti teorici e risultati statistici*, "Giornale degli Economisti", April 1961, p. 211 ff.). They can be used fundamentally for three functions: (a) as a planning instrument, to estimate the amount of I necessary to obtain a given ΔY ; (b) as an index of the productive structure's efficiency, but with a certain amount of caution, since total productivity comprises various factors besides I ; (c) as a criterion for choosing investments, but with important limitations.

(18) Regarding problems connected with the economic interpretation of coefficients calculated on large aggregates like I and Y , see § 13.

and therefore awkward to use; besides, a part of investment in a given year reveals its impact on Y only after some years. The coefficients ought therefore to be calculated for periods of several years (but with the limitations mentioned below).

The other statistical difficulty is the increase of prices and its diverse intensity as regards I and Y . The coefficients in question compare I for a given year with Y for subsequent years; in times of price increase, the ratios at current prices therefore introduce a systematic error: the values of Y , at the denominator of the fraction, are nominally increased more than the values of I , and the difference is aggravated by the circumstance that the increase of Y 's implicit prices is, according to the Italian experience, more rapid than that of I 's implicit prices (Tab. 3). Those ratios regarding values at current prices are therefore distorted downwards, i.e. they indicate per unit of I an increase of Y greater than the real increase.

Consequently the coefficients are more meaningful if calculated at constant prices; besides, in the case of periods that go beyond a few years, there is a risk of introducing new distortions, owing to the practical impossibility of eliminating evenly the price increase of I and Y .

We have therefore omitted from Table 13 the coefficients calculated on periods of a single year, but we have limited ourselves to giving the calculations for periods of two and four years, without going further (19). Clearly, the variability of the coefficients over time diminishes the longer the period examined.

Strictly speaking, in making the comparison one should take the net investment J (in relation to the net national product R) instead of gross investment I (in relation to GNP Y). But, for practical reasons, international economic literature takes the gross investment, since in many countries reliable statistics on J do not

(19) That is, for two-year periods

$$k_t = \frac{I_{t-2} + I_{t-1}}{Y_t - Y_{t-2}}; \text{ and for four-year periods}$$

$$k_t = \frac{I_{t-4} + I_{t-3} + I_{t-2} + I_{t-1}}{Y_t - Y_{t-4}}$$

(20) Experience shows that ΔA is important relatively to I (between one-third and a half, see Table 9), while ΔA is small relatively to ΔY (less than one-tenth, see Tab. 5). Therefore, passing from $\frac{I}{\Delta Y}$ to $\frac{I-A}{\Delta Y - \Delta A} = \frac{I}{\Delta R}$ the decrease relative to the numerator is larger than to the denominator, and the value of the fraction diminishes.

exist. In the Italian case, it is possible to calculate the coefficients $k = I/\Delta Y$ and $x = J/\Delta R$ separately, as in Table 13. The series of the coefficients $J/\Delta R$ is by definition far lower than the other, even though it retains a roughly parallel trend (20).

Table 13 shows that the coefficients $I/\Delta Y$ at constant prices have an average value of about 4.0, that is, 25 of greater annual gross income per 100 of gross investment; and the coefficients $J/\Delta R$, again at constant prices, an average value of 2.7, that is, 37 of greater net income per 100 of net investment (21).

It is by no means easy to give an unequivocal interpretation of the trend of the coefficients k and x during the 16 years. To restrict ourselves to the coefficients at constant prices, both start in 1953 from the minimum level for the whole period, rise until 1957, reaching the average value of the period, fall a little up to 1961, then rise again in the following four years to reach in 1965 a far higher level than the average, and fall once again in 1966-67.

The low initial levels of the coefficients k and x would, strictly speaking, seem to signify that investment had an overall efficiency higher than the average for the period, while the rise in the years 1953-57 would indicate a decrease of this overall efficiency: both are far from easy to explain, the more so that the increase in employment, an exogenous factor as far as the coefficients in question are concerned, only came subsequently. The fall of the coefficients from 1957 to 1961 and the increase in the overall efficiency of investment may be explained by the general progress of productive activity and employment and by the simultaneous shift of manpower from agriculture to the industrial and tertiary sectors; the increases of the coefficients in the following four years are probably due to the slowdown in income growth, while the new decline in 1966-67 to below-average levels is related to the resumption of economic expansion (22).

This analysis will be resumed farther on in connection with the coefficients by sectors (§ 13).

(21) A. GRAZIANI, *op. cit.*, indicated for the period 1950-59 coefficients almost equal: k = about 4 and x = about 2.5, again at constant prices (but with slightly different elements for eliminating the price rise).

(22) The impact of the fall in investment in 1964-65 is seen, according to the formulas given above, after two or four years.

9. Growth Model

Taking the coefficients s (propensity to save, § 6) and k (incremental coefficients of capital, § 8) as a base, one can reconstruct *ex post* the growth pattern model of the Italian economy for the period 1951-67, disregarding the year-to-year changes.

$$\text{Since } Y_t = Y_0 + \Delta Y_t; \Delta Y_t = \frac{I}{k} I_0; I_0 = sY_0;$$

$$\text{we obtain } Y_t = Y_0 + \frac{s}{k} Y_0 = \left(1 + \frac{s}{k}\right) Y_0;$$

$$\text{and in general } Y_t = \left(1 + \frac{s}{k}\right)^t Y_0;$$

where $\frac{s}{k}$ expresses the annual unit rate of increase of Y .

Taking from Table 11 the average value of $s = (S + A)/Y = 22.4$ per cent; and from Table 13 the two average values of k at current prices and at constant prices 2.41 and 3.95, we obtain (with a somewhat imprecise presentation of the calculation): at current

$$\text{prices } \frac{s}{k} = \frac{0.224}{2.41} = 9.2 \text{ per cent per annum, and at constant prices}$$

$$\frac{s}{k} = \frac{0.224}{3.95} = 5.8 \text{ per cent per annum, which correspond closely to the average annual rates of increase of } Y \text{ of Table 6.}$$

Similarly, with the coefficients based on the net values σ and x , that is, $R_t = \left(1 + \frac{\sigma}{x}\right)^t R_0$, and taking from Table 11 the average value of $\sigma = S/R = 14.5$ per cent, and from Table 13 the two average values of x at current prices and at constant prices 1.58 and 2.70,

$$\text{we obtain: at current prices, } \frac{\sigma}{x} = \frac{0.145}{1.58} = 9.2 \text{ per cent per annum,}$$

$$\text{and at constant prices, } \frac{\sigma}{x} = \frac{0.145}{2.70} = 5.5 \text{ per cent per annum, both}$$

equal to the average annual rates of increase of R of Tables 1 and 2.

The fall of I in 1964-65 (23) clearly conditions the growth prospects of Y in the years 1968 onwards, though in a way difficult

(23) See Tab. 2 and index numbers in footnote 16.

to quantify. In the four-year period 1964-67 I at constant prices reached an average of about 6,860 milliard lire per annum; assuming that the coefficient k is equal to the average of the 16 years, that is, about 4.0 (Tab. 13), we should obtain, according to $\Delta Y = I/k$ (and to the limited extent to which the coefficients k can be used for forecasts) a growth of Y at constant prices of 6,860: 4 = 1,715 milliard lire per annum, equal to 4.8 per cent. A more rapid growth would imply a coefficient k lower than the average of the 16 years (and far lower than that of the last four years) and/or a revival of investment such as to offset within a short time the contraction of 1964-65.

10. Fulfilment of the Development Plan

The already mentioned National Economic Plan provides some estimates on investment over its five-year period (First part, Chapter II, § 11 and Tab. 3). It makes a distinction between what it terms "directly productive investment" and social investment. For the five years as a whole, directly productive investment is estimated, at constant prices, at 24,880 milliard lire (agriculture 4,880 milliards, industry and services 18,500 milliards and stock-building 1,500 milliards) and social investment at 17,950 milliard lire (railways, telecommunications, houses and public works); a total investment of 42,830 milliard lire.

GROSS INVESTMENT: THE PLAN'S ESTIMATES AND ACTUAL FIGURES 1966-67
(at constant prices; (a) directly productive investment; (b) social investment)

	1966	1967	1968	1969	1970	Total
	<i>Plan's Estimates</i>					
(a)	4,480	4,720	4,980	5,230	5,470	24,880
(b)	3,230	3,410	3,590	3,770	3,950	17,950
Total	7,710	8,130	8,570	9,000	9,420	42,830
	<i>Actual figures</i>					
(a)	3,632	4,182	?	?	?	?
(b)	3,098	3,302	?	?	?	?
Total	6,730	7,484	?	?	?	?

In order to verify to what extent the Plan (which gives only overall figures for the five-year period) is being fulfilled by comparing its targets with the effective trend in the years 1966 and 1967 (see the 1967 General Report, Tab. 50), it is first of all necessary to subdivide the Plan's estimates over the five years; this has been done in the following Table, using the method already indicated above in § 6, footnote 13 (i.e. applying to the five years the indices 0.18, 0.19, 0.20, 0.21, 0.22; total 1.00).

Comparing what has been accomplished with the Plan's estimates, it is seen that directly productive investment lagged very considerably behind the Plan: —19 per cent in 1966 and —12 per cent in 1967; the lag in social investment is slighter, —3 per cent. Altogether in the two years, *I* at constant prices totalled 14,200 milliard lire, or 10 per cent less than the 15,800 milliards of the Plan; the 1,600 milliards less at constant prices are equivalent to about 1,800 milliards at 1967 prices. The structure of overall investment worsened, since the above minus-difference related primarily to investments having a higher efficiency in terms of income.

11. Product by Sectors

The quantities so far examined are very global values, resulting as they do from the aggregation of heterogeneous categories. Data for product and investment exist for larger sectors, but their classifications do not correspond exactly.

In the case of product, the National Accounts do not give a classification by sectors of *Y*, Gross National Product at market prices, but only of "Gross Domestic Product at factor cost", which we will indicate by *Y** (24). This is broken down by the National Accounts into four large sectors: agriculture, forestry and fisheries (25) indus-

(24) The two values are linked with each other by the following statistical relation: *Y**, plus net income from abroad, equals GNP at factor cost; plus indirect taxes, less subsidies to production, equals *Y*.

Net income from abroad represents relatively modest values: from 16 milliard lire in 1951 (equivalent to 0.2 per cent of *Y*) it rose progressively to 248 milliards in 1967 (0.6 per cent of *Y*). The indirect taxes and the subsidies to production represent, instead, an important fraction of *Y*: they moved up, respectively, from 1,118 and 104 milliards in 1951 (10 per cent and 1 per cent of *Y*) to 5,509 and 671 milliards in 1967 (13 per cent and 1.6 per cent of *Y*).

(25) Divided into the three sectors of agriculture, forestry and fisheries. The gross product for each of them derives from the difference between marketable gross production and purchases of goods and services.

trial activities, divided into industries in a narrow sense (26) and construction; tertiary activities (27); public administration.

The annual values of the different categories of *Y** at constant prices (28) are contained in Table 14. Altogether *Y** rose in the 16 years at an annual average of 5.1 per cent, slightly less than the 5.4 per cent of *Y* (29). Among the various sectors, industry registered the most rapid increase (7.5%), followed by the tertiary sector (5%), public administration (3.1%) and agriculture (2.3%). Thus industry's quota of the total climbed in the 16 years from 30 to 42 per cent (30).

12. Investment by Sectors

The classification by sectors of gross investment is, as already noted, somewhat different from that of the gross product. The National Accounts provide two classifications of gross fixed domestic investment (31): one for sectors of use, in six sectors (32), the other by type of product, in five categories (33).

(26) Divided into mining; manufacturing; electrical, gas and water. The gross product of the manufacturing industries, which forms about 90 per cent of the total, is in its turn indicated separately in the following categories: foodstuffs and related products; tobacco; textiles; clothing and footwear; hides and leather; wood and furniture; metallurgical; engineering; transport; non-metalliferous minerals; chemicals and related products; paper, rubber, printing; miscellaneous.

(27) Divided into trade and public entertainment (trade; hotels and public entertainment); transport and communications (transport; communications); banking and insurance (credit and financial activities; insurance); miscellaneous services; buildings.

(28) For the sake of brevity we omit the analysis of the figures at current prices.

(29) Because indirect taxes, the chief difference between *Y* and *Y**, have increased more than proportionally (see footnote 24).

(30) The trend from year to year of *Y** by sectors (the figures for which we do not give, for the sake of brevity) roughly follows the trend of general economic conditions already noted in § 4; the slowdowns in 1958 and 1964-65 affected industry (in a narrow sense), and to a lesser extent the tertiary sector; the pronounced slowdowns in the years 1959-60 and 1964-66, which displayed some discrepancies in relation to the general trend, the construction industry; increases and decreases due to autonomous factors, agriculture; a virtually continuous increase, the public administration.

(31) Excluding, that is, changes in stock-building.

(32) Agriculture, forestry and fisheries; industrial activities; transport and communications; trade, banks, insurance and services; houses; public administration.

(33) Construction, subdivided into houses, non-residential buildings and public works; plant and machinery; transport.

The annual values of the different categories of *I* are contained in Table 15 (34). As already pointed out (§7), the *I* total expanded rapidly from 1951 to 1963, at the rate of 9.5 per cent per annum at constant prices; afterwards the strong contraction of 1964-65 was barely offset by the recovery of 1966-67. The rates of increase should therefore be examined separately for the first 12 years and for the following four years, as in the Table.

Fixed investment in industry had reached in 1963 about 2,500 milliard lire, equivalent to 35 per cent of total fixed investment; after falling to 1,580 milliards in 1965, it rose to only 1,950 milliards, at constant prices, in 1967, or 28 per cent of the total (35). Investment in house-building, about 2,200 milliards in 1963, remained roughly at the same level in 1967, or 32 per cent of the total. In the latter year investment in agriculture accounted for 9 per cent of the total, in transport 10 per cent, in trade 12 per cent, and in the public administration 9 per cent.

13. Incremental Capital-Output Ratios, by Sectors

We now return to the computation, this time by sectors, of the ICOR.s made globally in § 8, using as a base the Y^* and *I* data by sectors, at constant prices, of Tables 14 and 15, introducing several adjustments (36). The results are shown in Table 16 (37).

(34) For the sake of brevity we follow only the first of the two classifications and only the series at constant prices.

(35) However, the roughly 500 milliard lire of changes in stocks mainly represent work in progress. At any rate, the 1964-65 fall in investment had a particularly adverse impact on the industrial sector, nor has it yet been made good by the subsequent recovery: the 1967 total mentioned above is, at constant prices, still 20 per cent below that of 1963, and in this case it is gross investment, i.e. inclusive of depreciation. "If depreciation is excluded from the calculation, the difference between the levels of the two years is far more pronounced, as the net investment of 1967 is proportionally less than one-half in value and little more than one-third in quantity compared with that of 1963". (BANK OF ITALY, *Annual Report*, May 1968, p. 114).

(36) These are the adjustments made necessary where the classification of Y^* (Tab. 14) and the first of the two classification of *I* (Tab. 15) do not correspond: in the case of industry in a narrow sense, construction, and tertiary activities, we have re-calculated comparable data Y^* and *I*, following a procedure that we omit here. However, as statistical documentation stands today, these ICOR.s by sectors are less reliable than the overall ICOR.s.

(37) The coefficients are calculated on periods of two years (see § 8 above) and of four years in the case of agriculture, given the extreme variability from year to year (which also persists in the four-yearly averages of the Table).

The ICOR.s on the total, with cyclical fluctuations similar to those already noted in § 8, have an average value of 4.5 (compared with 4.0 for $I/\Delta Y$) (38). Of the various sectors, agriculture has an average ICOR of 6.6, far higher than the total value, and this illustrates the lower average yield from investments in the sector. The ICOR in the tertiary sector, averaging 6.7, is equally high, and difficult to interpret, given the sector's extremely heterogeneous structure, which includes, among other things, buildings. In the case of the public administration the coefficient 4.2 is average. For industry as a whole the coefficient is 2.6: to keep within the limits of the meaning of these calculations, the average yield of investment in industry, in a broad sense, is therefore 70 per cent higher than the average for all sectors. In its turn, industry in a narrow sense (which, among other things, excludes non-residential buildings) shows an average ICOR of 1.5, that is, a yield of 70 per cent higher than for industry in a broad sense; nevertheless, as already noted, the validity of the base definitions is suspect.

14. ICOR.s and the National Development Plan

The National Economic Plan estimates the bulk of investment, industry and services, at 20,750 milliard lire (39) by multiplying the increase in Y^* forecast for 1970 in those sectors ($4,850 + 1,860 = 6,710$ milliards at constant prices) by an ICOR of 3.1: "the choice of this ratio was suggested by the modifications foreseen in the productive structure, taking into account the Italian experience of the past decade and the ratios prevalent in the economically developed countries" (40).

Our Table 16 shows ICOR averages of 2.6 for industry and 6.7 for services; an average weighted according to the respective Y^* .s of 1967 (41) gives an overall ICOR for the two sectors of 4.4 (equi-

(38) Mainly because Y^* , at the denominator of the ICOR.s, is lower than *Y* owing to the amount of indirect taxes; and secondly because the values Y^* exclude changes in stocks.

(39) Including 2,230 milliard lire for investment in railways, telecommunications and urban transport.

(40) For agriculture, the directly productive investment of 4,880 milliard lire "has been estimated in a direct and analytical way taking into account the production targets and investment programmes already defined". For social investment, the figure of 17,950 milliards is simply given without demonstration (first part, Chap. II, §§11 and 12).

(41) A questionable method, from the statistical standpoint; but in practice the risk of error is limited, as the two sectors together form three-quarters of Y^* (Tab. 14).

valent to the average for all the sectors). The relative difference between 3.1 and 4.4 is very big indeed: it means that I ought to be 40 per cent larger for a given Y^* , or alternatively that Y^* ought to be 30 per cent smaller for a given I . But the only reasonable conclusion to be reached is that any estimate based solely on these coefficients is likely to be extremely weak.

15. Financing of Investment

At the stage reached by statistical data today, a hiatus exists between the elaboration of data given in the National Accounts for saving and investment and the corresponding figures relating to financing: savings formation in its different patterns and financing sources of investment. It is not therefore possible to reconcile National Accounts figures with the available data on financing: the greatest difficulties are encountered when it comes to defining the public sector, to assessing the financial flows between the latter and the private sector, and to ascertaining directly the savings invested directly by individuals and net and gross self-financing, that is, including or excluding depreciation.

The Bank of Italy gives figures, on the sources of financing in the public sector, which have been repeatedly changed in the course of years. The total amount of private investment from 1964 to 1966 is found as a difference (deducting from I the public sector investment). The Bank also estimates the share of the different forms of financing (security issues, medium- and long-term credit, financing by the public sector), and the important balancing item (gross self-financing, saving directly invested by individuals, and the net balance of short-term transactions with banks) is again found by difference. For the years 1966-67, the two sets of figures have been unified in a table that is split into three categories: (a) public sector, (b) ENEL-ENI-IRI-EFIM groups, (c) "other sectors". Since it is impossible to make up homogeneous series, we give in three separate tables the public sector's investment and its financing for 1964-67 (Tab. 17), the private sector's for 1964-66 (Tab. 18), and the 1966-67 statistics for the above sectors (b) and (c) (Tab. 19).

The public sector's total investment (Tab. 17) moved up from about 1,100 milliard lire in 1964 to about 1,250 milliards in each of the three following years, remaining roughly stationary at con-

stant prices. The public sector's financial requirements were approximately double the amount of its investment, owing to net transfers on capital account and to net credits conceded. On the financing side, gross public saving, already insufficient in 1964 to cover gross investment, became a negative figure in 1965 and 1966, while the modest positive amount in 1967 hardly exceeded the deficit of the two previous years. The public sector therefore had to incur debts for large sums that exceeded investment — about 1,300 milliard lire in 1964, 2,100 in 1965, 2,600 in 1966 and 2,000 in 1967, a total of about 8,000 milliard lire in the four years. About 2,900 milliards took the form of short-term debts (1,000 milliards annually in 1964-1965, with a drop to about 400 milliards in 1966-67) and 5,200 milliards were long-term debts (with a ceiling of 2,100 milliards in 1966 and a decline to 1,500 milliards in 1967).

As to the financing of investment outside the public sector, reference must be made, as already noted, to two separate sets of statistics for the three-year period 1964-66 and for the two-year period 1966-67 (Tables 18 and 19) (42). Total investment, after the decline from 1963 to 1964 (see Tab. 15), again fell from 1964 to 1965; the recovery of 1966 and 1967 brought it back to the 1963 figure (43).

The financing of this investment (44) was partly covered by the sector's own available funds (gross saving, including self-financing) for an amount that was almost unchanged from 1964 to 1966 (Tab. 18) and from 1966 to 1967 (Tab. 19). In the case of external financing, long-term borrowing (loans and security issues) moved down from about 2,200 milliards in 1964 to about 2,000 milliards in 1965-66 and up to 2,500 milliards in 1967; and in this last year short-term borrowing, too, rose to about 1,900 milliard lire (45).

(42) The first refers to "private" investment calculated, as already stated, as a difference; the second refers to investment by households and firms and the ENEL, etc., groups.

(43) In industry, at constant prices, the 1967 investment is still below 1963, see above Table 15.

(44) The more complete data for 1966-67 take into consideration coverage of the entire financial requirements, for investment and for "financial assets" (bank deposits, other credits, etc.), allowing for the transfers on capital account from the public sector (Tab. 19).

(45) For reasons of space, we have not examined the financing of investment by means of long-term loans by special credit institutes. The medium- and long-term transactions of these institutes rose in absolute value by 1,015 milliard lire in 1966 and 1,438 milliards in 1967, reaching a total of 10,048 milliards. The special institutes for credit to industry and for public works are increasing their subsidized loans (at an average rate of interest almost 4 percentage points below the market rate): the ratio of this subsidized credit to total loans

Even with such heterogeneous data, some trends can be seen fairly clearly: the revival, still sluggish, of public and private investment after the drop of 1964-65; in the public sector, the inadequate formation of savings and the growing recourse to indebtedness; in the private sector, the decreasing importance of self-financing and a growing recourse to external sources, including short-term borrowing (46).

16. The Capital Market

The growing resort to external resources for financing both public and private investment is reflected in the increased amount of security issues, especially of the fixed-interest-bearing type (bonds and Treasury bills) (Tab. 20). Up to 1958 the total amount of net security issues kept at about 4 per cent of GNP and 15 to 20 per cent of gross investment. In the following years net issues increased more quickly than GNP and investment, giving a ratio of 6 to 7 per cent of *Y* and of 24 to 32 per cent of *I*. The 1966 peak of 3,300 milliard lire (equivalent to 8.6 per cent of *Y* and 44 per cent of *I*) was followed by a fall in 1967 to 2,800 milliards. The increase was attributable exclusively to net issues of fixed-interest-bearing securities, amounting to 2,800 milliards in 1966 and 2,400 milliards in 1967: equity issues, from 1960 onwards, were stationary around 400 to 500 milliard lire per annum (47).

Security issues in Italy in the last two years have been higher than those in the German Federal Republic and far greater than those in France. The ratio to *Y* (6.8 per cent in Italy in 1967)

rose from 37.5 per cent at the end of 1964 to 45.2 per cent at the end of 1967 (2,916 milliards out a total of 6,447 milliards); and it is bound to rise still further, given the commitments that were outstanding at the end of 1967 (BANK OF ITALY, *Annual Report*, May 1968, pp. 225-231).

(46) In this connection, I would refer readers to my *Economia dell'investimento*, Milan, Giuffrè, 1967, § 713 *et seqq.*

(47) The net issues of fixed-interest securities foreseen for 1968 (on the basis of the public expenditure plan for the same year and of the financing requests made to the special credit institutes) amount to about 3,200 milliard lire, higher than the maximum peak of 1966: of that total, about 2,000 milliards come from the public sector and the remainder from the special credit institutes. "It would not be desirable however to increase total issues in 1968 to more than 3,000 milliard lire net": a higher amount, bearing in mind the capacity of the banking system and the public to take up new issues, would risk compromising domestic financial equilibrium (BANK OF ITALY, *Annual Report*, May 1968, pp. 351-2).

was far higher than the 3.8 per cent for the European Economic Community as a whole. (Bank of Italy, *Annual Report*, May 1968, Appendix, Table aD1).

From 1959 onwards, net issues of fixed-interest securities related mainly to three categories (Tab. 21): bonds of special credit institutes, which rose almost continuously up to about 1,000 milliard lire in 1967; government securities (and bonds for the Treasury), altogether 3,200 milliard lire in the last three years; and bonds of the ENEL-ENI-IRI groups, between 300 and 500 milliard lire per annum from 1963 onwards. The net bond issues of private companies fell to very moderate figures (48).

The total amount of fixed-interest securities at the end of 1967 reached about 18,400 milliard lire (Tab. 21); the four categories mentioned above contributed, respectively, 42 per cent, 35 per cent, 16 per cent and 7 per cent of this amount.

A growing share of the increased volume of fixed-interest security issues was subscribed by banks and other financial intermediaries. In the three years 1959-61 the public (individuals and companies) had subscribed two-thirds of such security issues (Tab. 22), while banks and other financial intermediaries subscribed the remaining third. In the following three years 1962-65 the situation was reversed: the share subscribed by the public dropped to less than one-third, while financial intermediaries took up more than two-thirds of the growing volume of new issues. In 1966 and 1967 the situation began to return to normal, though the banks and the Bank of Italy again had to subscribe not far short of half of the new issues.

The total amount of fixed-interest securities at nominal value rose from about 6,800 milliard lire at the end of 1961 to about 18,500 milliards at the end of 1967 (Tab. 23); the part held by financial intermediaries mounted from year to year, exceeding half of the total (49). In the case of shares, the drop in quotations exceeded the moderate figures of new issues; the total amount, at

(48) Loans from special credit institutes and compensation payments made by ENEL have become of greater importance for private firms.

(49) At the end of 1967 the commercial banks were holding fixed-interest securities (excluding Treasury bills) to the amount of 2,908 milliard lire, equivalent to 14.6 per cent of their deposits; the savings banks, 3,497 milliards (48%); a total of 6,405 milliards (24%) for the banks in general (*ibid.*, Table aO8).

market values, fell altogether during the same period from about 20,800 milliard lire to 16,900 milliards, held almost entirely by individuals and companies and to a growing extent by foreign investors.

17. Financing and the Five-year Plan

Total investment indicated in the above plan consists of 37,360 milliard lire of private investment and 5,470 milliards of public administration investment, a total of 42,830 milliards (see § 10 above); the amounts given are at constant 1963 prices.

According to the Plan (First part, Chapter II, § 14 and Tab. 5) the corresponding flows of funds are put at:

— gross saving, private sector 38,100 milliard lire, public administration 5,150 milliards, total 43,230 milliards (50), equivalent to the total investment;

— transfers in capital account from the public administration to the private sector, 5,910 milliards;

— in the opposite direction, public administration recourse to the market (loan issues, etc.), 6,250 milliard lire.

The resources would therefore be:

— for the private sector, $38,100 + 5,190 - 6,250 = 37,040$ milliard lire (50);

— for the public sector, $5,130 - 5,910 + 6,250 = 5,470$ milliard lire; both figures equivalent to the above-mentioned amounts of investment.

The domestic sources of financing are put at: for the public sector 4,680 milliard lire (51); for the private sector, 19,000 milliards;

(50) The difference of $43,230 - 42,830 = 400$ milliards corresponds to the estimated current external surplus; the same applies to the equal subsequent difference $37,040 - 37,360 = 400$.

(51) Due to a question of statistical classification, the autonomous government agencies are excluded from the "public administration" and included in the "public sector". The Plan estimates investment for those enterprises over the five years at 1,200 milliard lire and the deficit for the current part at 450 milliards (*ibid.*, § 14, footnote 10, Tab. 6 and § 17). Thus investment for the "public sector" rises to $5,470 + 1,200 = 6,670$ milliards, and the gross saving forecast falls to $5,130 - 450 = 4,680$ milliard lire.

in all 23,680 milliard lire. As a difference with regard to requirements (investment after deducting transfers from the public sector to the private sector) recourse to the monetary and capital market would be: for the public sector 7,900 milliard lire, and for the private sector 11,650 milliards (*ibid.*, Tab. 6).

As to the attainment of the Plan, it must first of all be recalled (see § 10 above) that the 1966 and 1967 investments have lagged behind the Plan to an amount of about 1,600 milliards at constant prices.

From the financing standpoint, the main difference lies in public saving, which has fallen to a few hundred milliards instead of reaching the 2,000 milliards forecast, as already mentioned in § 6. Correspondingly, the public sector's indebtedness has been far higher than the Plan's forecast: 4,600 milliards in the two years 1966-67 (see Table 17) and another 2,000 milliards estimated for 1968 (§ 16, footnote 47), a sum total of 6,600 milliard lire for the first three years, as against the 7,900 milliards (at constant prices) forecast for the entire five years.

Conversely, the public sector's gross direct investment in 1966-67 — about 1,250 milliard lire per annum at current prices — fell very little short of the Plan's estimate of 6,670 milliards at constant prices for the five-year-period (52); in the same way the public administration's transfers to the private sector (see Tab. 17, lines 2 and 3) reached in 1966-67 1,000 to 1,200 milliard lire per annum, corresponding roughly to the 5,910 milliards indicated in the Plan for the five-year period.

In the case of the private sector, our examination must be limited to a summary comparison of the overall figures, to avoid adding to the length of these notes. We would again recall that investment in 1966-67 was lagging behind the Plan (§ 10). Gross saving (Tab. 19) was stationary in 1967 at about 8,800 milliard lire at current prices, i.e. about 7,600 milliards at constant prices, which corresponds approximately to the 38,100 milliards indicated in the Plan for the five-year-period; but the growing indebtedness (§ 16

(52) Here we examine only the financial problem, without going fully into the question of whether the public sector investment indicated by the Plan may or may not be regarded as adequate in quantity and quality in relation to the targets set for Italy's economic and social progress.

and Tab. 19), 6,000 milliards in the two-year-period 1966-67, largely exceeded the Plan's forecast of 11,650 milliards at constant prices for the five-year-period (53).

* * *

The numerous quantitative relationships worked out in this study would hardly lend themselves to a synthesis. During the 16 years, investment has grown as a component part of the cumulative process that has marked the progress registered in the general development of the Italian economy. But in recent years various symptoms of imbalance have appeared: an amount of investment that is still inadequate to ensure growth stability, and distortions in the financing process. These are factors the causal analysis of which would go beyond the scope of this study, but which in any case do not appear easy to resolve. Nor does the Five-year National Plan, with its uncertain bases, throw much light on the subject.

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(53) We repeat that in this paragraph we limit ourselves to the financing of investments. If the investment falls short of what is desirable — with or without a growth programme — negative reactions will result; but the financing problem as such is made less difficult (at least in the short term); and vice versa.

APPENDIX

Foreword. The National Accounts data (Tables 1 to 11, 14 and 15) are drawn from the following sources: for the years 1951-63, from ISTAT, *I conti nazionali dell'Italia, nuova serie, anni 1951-1965*, Supplement to the Bollettino Mensile di Statistica, No. 3, March 1966; for the years 1964-1967, from the *Relazioni generali sulla situazione economica del paese*, March 30, 1967 and March 30, 1968, taking into account the slight rectifications, based in every case on ISTAT figures, made in each of them to data for previous years. The financial data (Tables 17 to 23) are taken from the *Annual Reports* of the Bank of Italy.

Except where otherwise indicated, the absolute data are in milliards of lire, at current prices; the words "at constant prices" indicate milliards of lire at 1963 prices.

The following abbreviations have been adopted:

R = Net National Product

A = depreciation

Y = R + A = Gross National Product at market prices

C = consumption = C^o private consumption + C' public consumption

S = net national saving = S^o + S' as above

I = gross investment

J = I - A = net investment

Imp., Exp. = imports and exports of goods and services

Σ = Y + Imp. = total resources

= C + I + Exp. = total expenditure

ΔY, ΔI, etc. = absolute changes (in milliards of lire) of Y, I, etc. in each year compared with the previous year

d = average annual compound rate of change from 1951 to 1967, or other period indicated, in per cent.

NATIONAL ACCOUNTS

Tab. I

Years	Resources				Σ	Expenditure		
	R	A	Y	Imp.		C	I	Exp.
1951	9,467	1,032	10,499	1,435	11,934	8,553	2,095	1,286
1952	10,174	1,115	11,289	1,562	12,851	9,529	2,132	1,190
1953	11,334	1,152	12,486	1,658	14,144	10,314	2,445	1,385
1954	12,123	1,201	13,324	1,649	14,973	10,821	2,650	1,502
1955	13,359	1,282	14,641	1,843	16,484	11,605	3,184	1,695
1956	14,526	1,382	15,908	2,167	18,075	12,676	3,417	1,982
1957	15,555	1,526	17,081	2,539	19,620	13,404	3,801	2,415
1958	16,733	1,607	18,340	2,319	20,659	14,293	3,891	2,475
1959	17,732	1,705	19,437	2,437	21,874	14,892	4,233	2,749
1960	19,219	1,852	21,071	3,340	24,411	15,989	5,068	3,354
1961	21,308	2,055	23,363	3,750	27,113	17,515	5,760	3,838
1962	24,053	2,277	26,330	4,368	30,698	19,859	6,531	4,308
1963	27,622	2,571	30,193	5,438	35,631	23,382	7,496	4,753
1964	30,187	2,890	33,077	5,293	38,370	25,477	7,407	5,486
1965	32,528	3,120	35,648	5,435	41,083	27,507	6,974	6,602
1966	35,124	3,369	38,493	6,317	44,810	29,873	7,540	7,397
1967	38,203	3,646	41,849	7,108	48,957	32,401	8,615	7,941
d	+9.2	+8.2	+9.1	+10.5	+9.2	+8.7	+9.2	+12.1

TAB. 2

NATIONAL ACCOUNTS, AT CONSTANT PRICES

Years	Resources				Σ	Expenditure		
	R	A	Y	Imp.		C	I	Exp.
1951	14,058	1,312	15,370	1,141	16,511	12,962	2,537	1,012
1952	14,685	1,361	16,046	1,268	17,314	13,725	2,590	999
1953	15,851	1,415	17,266	1,445	18,711	14,500	2,984	1,227
1954	16,451	1,489	17,940	1,494	19,434	14,820	3,277	1,337
1955	17,542	1,562	19,104	1,641	20,745	15,373	3,883	1,489
1956	18,320	1,649	19,969	1,875	21,844	16,013	4,081	1,750
1957	19,302	1,743	21,045	2,088	23,133	16,603	4,388	2,142
1958	20,241	1,839	22,080	2,170	24,250	17,315	4,517	2,418
1959	21,536	1,976	23,512	2,426	25,938	18,114	4,960	2,864
1960	22,883	2,110	24,993	3,330	28,323	19,118	5,801	3,404
1961	24,670	2,275	26,945	3,818	30,763	20,363	6,443	3,957
1962	26,178	2,440	28,618	4,443	33,061	21,606	7,010	4,445
1963	27,622	2,571	30,193	5,438	35,631	23,382	7,496	4,753
1964	28,323	2,711	31,034	5,162	36,196	24,010	6,880	5,306
1965	29,249	2,915	32,164	5,259	37,423	24,700	6,349	6,374
1966	30,913	3,096	34,009	5,922	39,991	26,047	6,730	7,214
1967	32,711	3,290	36,001	6,612	42,613	27,480	7,484	7,649
d	+5.4	+5.9	+5.4	+11.6	+6.1	+4.8	+7.0	+13.5

TAB. 3

INDEX NUMBERS OF IMPLICIT PRICES

(ratios of the values of Tab. 1 at current prices to the values of Tab. 2 at constant prices, base 1963 = 100)

Years	Resources				Expenditure			
	R	A	Y	Imp.	C ^o	C'	I	Exp.
1951	67.5	77.5	68.4	125.8	70.5	48.0	82.7	126.0
1952	69.3	82.0	70.2	123.5	73.5	52.3	82.2	119.1
1953	71.5	79.0	72.3	114.7	75.0	53.7	82.2	113.0
1954	73.7	80.7	74.4	110.0	76.7	57.2	81.0	112.6
1955	76.1	82.0	76.7	112.0	79.0	60.7	81.9	113.9
1956	79.4	83.5	79.8	115.5	82.0	64.1	83.8	113.2
1957	80.6	87.8	81.0	121.5	83.8	66.9	86.8	113.2
1958	82.8	87.5	83.1	108.0	85.7	69.6	86.0	103.0
1959	82.5	86.4	82.8	100.6	84.6	70.9	85.3	95.9
1960	84.0	87.8	84.4	100.3	85.7	74.4	87.4	98.5
1961	86.4	89.4	86.7	98.4	88.0	77.6	89.5	97.2
1962	92.0	93.2	92.0	98.6	93.4	86.0	93.2	97.2
1963	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1964	106.5	106.6	106.6	102.2	105.6	108.7	107.6	103.4
1965	111.1	107.8	110.8	103.1	110.0	118.4	109.6	103.0
1966	113.7	108.8	113.2	104.0	113.5	122.1	111.6	102.6
1967	116.9	111.1	116.2	107.9	116.1	124.4	115.1	103.9
d	+3.5	+2.3	+3.4	-1.0	+3.2	+6.1	+2.1	-1.2

TAB. 4

RATIOS $IMP./\Sigma$, $EXP./\Sigma$, C/Y , I/Y
(percentage ratios on the respective values of Tables 1 and 2;
(a) = at current prices; (b) = at constant prices)

Years	$IMP./\Sigma$	$EXP./\Sigma$	C/Y		I/Y	
	(a)	(a)	(a)	(b)	(a)	(b)
1951	12.0	10.8	81.5	84.5	19.9	16.5
1952	12.2	9.3	84.5	85.6	18.9	16.2
1953	11.7	9.8	82.8	84.3	19.6	17.4
1954	11.0	10.0	81.0	82.6	19.8	18.2
1955	11.2	10.3	79.1	80.4	21.7	20.3
1956	12.0	11.0	79.6	80.4	21.4	20.4
1957	13.0	12.3	76.7	79.0	21.8	20.8
1958	11.2	11.9	78.0	78.6	21.2	20.4
1959	11.2	12.6	76.8	77.3	21.8	21.2
1960	13.7	13.7	76.0	76.6	24.0	23.2
1961	13.8	14.1	74.1	75.5	24.3	23.9
1962	14.2	14.1	75.5	75.5	24.9	24.5
1963	15.2	13.3	77.3	77.3	24.8	24.8
1964	13.8	14.3	77.0	77.6	22.4	22.2
1965	13.6	16.1	77.1	76.6	19.7	19.9
1966	14.1	16.6	77.6	76.5	19.6	19.9
1967	14.5	16.3	77.3	76.5	20.6	20.8
Average:	—	—	—	—	21.6	21.0

ABSOLUTE CHANGES IN SOME AGGREGATES
COMPARED WITH THE PREVIOUS YEAR

(differences on the respective values of Tables 1 and 2)

TAB. 5

Years	at current prices				at constant prices			
	ΔR	ΔA	ΔY	ΔI	ΔR	ΔA	ΔY	ΔI
1952	+ 707	+ 83	+ 790	+ 37	+ 627	+ 49	+ 676	+ 53
1953	+1,160	+ 37	+1,197	+ 313	+1,166	+ 54	+1,220	+ 394
1954	+ 789	+ 49	+ 838	+ 205	+ 600	+ 74	+ 674	+ 293
1955	+1,236	+ 81	+1,317	+ 534	+1,091	+ 73	+1,164	+ 606
1956	+1,167	+100	+1,267	+ 233	+ 778	+ 87	+ 865	+198
1957	+1,029	+144	+1,173	+ 384	+ 982	+ 94	+1,076	+307
1958	+1,178	+ 81	+1,259	+ 90	+ 939	+ 96	+1,035	+129
1959	+ 999	+ 98	+1,097	+ 342	+1,295	+137	+1,432	+443
1960	+1,487	+147	+1,634	+ 835	+1,347	+134	+1,481	+841
1961	+2,089	+203	+2,292	+ 692	+1,787	+165	+1,952	+642
1962	+2,745	+222	+2,967	+ 771	+1,508	+165	+1,673	+567
1963	+3,569	+294	+3,863	+ 965	+1,444	+131	+1,575	+486
1964	+2,565	+319	+2,884	- 89	+ 701	+140	+ 841	-616
1965	+2,341	+230	+2,571	- 433	+ 926	+204	+1,130	-531
1966	+2,596	+249	+2,845	+ 566	+1,664	+181	+1,845	+381
1967	+3,079	+277	+3,356	+1,075	+1,798	+194	+1,992	+754
Total	28,736	2,614	31,350	6,520	18,653	1,978	20,631	4,947

TAB. 6

ANNUAL RATES OF CHANGE IN SOME AGGREGATES
(percentage ratios of the values of Tab. 5 to those of Tables 1 and 2)

Years	dY current prices	Implicit prices of Y	dY	dC°	dC'	dC	dI
			At constant prices				
1952	+ 7.5	+2.6	+4.4	+6.4	+4.2	+5.9	+ 5.2
1953	+10.3	+2.9	+7.5	+6.5	+2.2	+5.6	+15.1
1954	+ 6.7	+2.9	+3.9	+1.7	+4.3	+2.2	+ 9.8
1955	+ 9.9	+3.1	+6.5	+4.2	+1.7	+3.7	+18.5
1956	+ 8.6	+4.0	+4.5	+4.3	+3.4	+4.2	+10.3
1957	+ 7.4	+1.8	+5.4	+4.2	+1.7	+3.7	+ 7.6
1958	+ 7.4	+2.5	+4.9	+4.0	+5.5	+4.3	+ 3.0
1959	+ 6.0	-0.4	+6.5	+4.6	+4.4	+4.6	+ 9.8
1960	+ 8.4	+2.0	+6.3	+5.9	+4.0	+5.5	+17.0
1961	+10.8	+2.7	+7.8	+6.9	+4.8	+6.5	+11.0
1962	+12.8	+6.1	+6.2	+6.2	+5.3	+6.1	+ 8.8
1963	+14.7	+8.7	+5.5	+8.9	+5.1	+8.2	+ 6.9
1964	+ 9.6	+6.6	+2.8	+2.5	+3.4	+2.6	- 8.2
1965	+ 7.5	+3.9	+3.5	+2.2	+3.6	+2.4	- 7.5
1966	+ 7.9	+2.0	+5.5	+5.6	+3.6	+5.3	+ 6.1
1967	+ 8.7	+2.1	+5.9	+6.1	+2.4	+5.5	+11.2
d	+ 9.1	+3.4	+5.4	+5.0	+3.7	+4.8	+ 7.0

TAB. 7

PRIVATE AND PUBLIC CONSUMPTION

Years	at current prices				at constant prices			
	private C°	public C'	C = C° + C'	C'/C %	private C°	public C'	C = C° + C'	C'/C %
1951	7,309	1,244	8,553	14.6	10,365	2,597	12,962	20.0
1952	8,116	1,413	9,529	14.8	11,019	2,706	13,725	20.5
1953	8,832	1,482	10,314	14.9	11,735	2,765	14,500	19.1
1954	9,173	1,648	10,821	15.2	11,936	2,884	14,820	19.3
1955	9,830	1,775	11,605	15.3	12,439	2,934	15,373	19.1
1956	10,735	1,941	12,676	15.3	12,980	3,033	16,013	18.9
1957	11,344	2,060	13,404	15.4	13,518	3,085	16,603	18.6
1958	12,034	2,259	14,293	15.8	14,061	3,254	17,315	18.8
1959	12,476	2,416	14,892	16.2	14,718	3,396	18,114	18.8
1960	13,366	2,623	15,989	16.4	15,585	3,533	19,118	18.4
1961	14,643	2,872	17,515	16.4	16,660	3,703	20,363	18.7
1962	16,510	3,349	19,859	16.9	17,704	3,902	21,606	18.1
1963	19,281	4,101	23,382	17.3	19,281	4,101	23,382	17.6
1964	20,869	4,608	25,477	18.8	19,771	4,239	24,010	17.6
1965	22,324	5,183	27,507	18.9	20,304	4,396	24,700	17.8
1966	24,332	5,541	29,873	18.7	21,495	4,552	26,047	17.6
1967	26,593	5,808	32,401	17.9	22,807	4,663	27,470	17.0

TAB. 8

PROPENSITIES TO CONSUME
(C/R % ratios of the values of Tab. 7 to those of Tables 1 and 2;
(a) = at current prices; (b) = at constant prices)

Years	Private consumption				Public consump- tion (a)	Total consumption (a)	
	(a)		(b)			average	marginal
	average	marginal	average	marginal			
1951	76.5	—	73.8	—	13.0	89.5	—
1952	80.0	114	75.5	104	13.6	93.6	138
1953	77.8	64	74.4	61	13.1	91.0	68
1954	75.6	43	72.6	34	13.7	89.4	64
1955	73.4	53	71.0	46	13.3	86.7	63
1956	73.8	77	70.8	70	13.4	87.1	92
1957	73.0	59	70.3	55	13.2	86.2	69
1958	72.0	59	69.5	58	13.4	85.4	76
1959	70.3	44	68.5	51	13.6	84.0	60
1960	69.5	60	68.0	64	13.7	83.2	74
1961	68.8	61	67.6	60	13.5	82.2	73
1962	68.7	68	67.6	69	13.9	82.5	86
1963	69.7	78	69.7	108	14.9	84.5	99
1964	69.3	62	69.8	70	15.3	84.5	82
1965	68.5	60	69.0	48	16.0	84.6	85
1966	69.1	77	69.3	73	15.8	84.8	91
1967	69.6	73	69.7	73	15.2	84.8	82

CAPITAL FORMATION ACCOUNT

$$(R - C \pm \text{Transf.} = S; S \pm \text{Mov.} = I; I + A = D)$$

Years	R	C	Transf. (1)	S	Mov. (2)	I	A	D
1951	9,467	8,553	+ 58	972	+ 91	1,063	1,032	2,095
1952	10,174	9,529	+ 45	690	+ 327	1,017	1,115	2,132
1953	11,334	10,314	+ 78	1,098	+ 195	1,293	1,152	2,445
1954	12,123	10,821	+ 76	1,378	+ 71	1,449	1,201	2,650
1955	13,359	11,605	+ 87	1,841	+ 61	1,902	1,282	3,184
1956	14,526	12,676	+115	1,965	+ 70	2,035	1,382	3,417
1957	15,555	13,404	+160	2,311	- 36	2,275	1,526	3,801
1958	16,733	14,293	+194	2,634	- 350	2,284	1,607	3,891
1959	17,732	14,892	+170	3,010	- 482	2,528	1,705	4,233
1960	19,219	15,989	+181	3,411	- 195	3,216	1,852	5,068
1961	21,308	17,515	+228	4,021	- 316	3,705	2,055	5,760
1962	24,053	19,859	+245	4,439	- 185	4,254	2,277	6,531
1963	27,622	23,382	+235	4,475	+ 450	4,925	2,571	7,496
1964	30,187	25,477	+211	4,921	- 404	4,517	2,890	7,407
1965	32,528	27,507	+237	5,258	-1,404	3,854	3,120	6,974
1966	35,124	29,873	+272	5,523	-1,352	4,171	3,369	7,540
1967	38,203	32,401	+264	6,066	-1,097	4,969	3,646	8,615

(1) net current transfers abroad (+ indebtedness, - credit).

(2) net capital movements abroad (+ indebtedness, - credit).

NET AND GROSS NATIONAL SAVING

TAB. 10

Years	Net saving			ΔS	A	Gross saving S+A
	Private sector S°	Public Admin. S'	Total S=S°+S'			
1951	932	40	972	—	1,032	2,004
1952	671	19	690	-282	1,115	1,805
1953	904	194	1,098	+408	1,152	2,250
1954	1,135	243	1,378	+280	1,201	2,579
1955	1,594	247	1,841	+463	1,282	3,123
1956	1,549	416	1,965	+124	1,382	3,347
1957	1,763	548	2,311	+346	1,526	3,837
1958	2,167	467	2,634	+323	1,607	4,241
1959	2,544	466	3,010	+376	1,705	4,715
1960	2,680	731	3,411	+401	1,852	5,263
1961	3,076	945	4,021	+610	2,055	6,076
1962	3,432	1,007	4,439	+418	2,277	6,716
1963	3,502	973	4,475	+36	2,571	7,046
1964	3,765	1,156	4,921	+446	2,890	7,811
1965	5,082	176	5,258	+337	3,120	8,378
1966	5,417	106	5,523	+265	3,369	8,892
1967	5,276	790	6,066	+543	3,646	9,712

RATIOS S/R , I/R , A/R , $(S+A)/Y$
(percentage ratios on the values of Tables 1, 9 and 10)

TAB. 11

Years	S°/R	S'/R	$\sigma=S/R$	I/R	A/R	$\frac{s}{(S+A)/Y}$
1952	6.5	0.2	6.8	10.0	11.0	16.0
1953	8.0	1.7	9.8	11.4	10.2	18.0
1954	9.4	2.0	11.4	11.9	9.9	19.4
1955	12.0	1.9	13.8	14.2	9.6	21.3
1956	10.6	2.9	13.5	14.0	9.5	21.7
1957	11.4	3.5	14.9	14.6	9.8	22.4
1958	13.0	2.8	15.7	13.6	9.6	23.1
1959	14.3	2.6	17.0	14.3	9.6	25.6
1960	13.9	3.8	17.7	16.8	9.6	25.0
1961	14.4	4.4	18.9	17.4	9.6	26.0
1962	14.3	4.2	18.4	17.7	9.4	25.6
1963	12.7	3.5	16.2	17.8	9.3	23.4
1964	12.5	3.8	16.3	15.0	9.6	23.6
1965	15.6	0.7	16.2	11.9	9.6	23.6
1966	15.4	0.4	15.8	11.9	9.6	23.2
1967	13.8	2.1	15.9	13.0	9.5	23.2
Average	—	—	14.5	—	—	22.4

I/Y RATIOS, E.E.C., AND ITALY

TAB. 12

(for the E.E.C. data, E.E.C. STATISTICAL OFFICE, *National Accounts 1957-66*, Brussels 1967, p. 50, and estimates for 1967 from the *Quarterly Report 1957/4*, in milliards of dollars at current prices; for Italy, Tab. 4, current prices)

Years	E. E. C.			Italy I/Y %
	Y milliards of \$	I milliards of \$	I/Y %	
1957	150	31.3	20.8	21.8
1958	157	32.2	20.6	21.2
1959	167	35.1	21.0	21.8
1960	188	40.6	21.6	24.0
1961	209	47.0	22.5	24.3
1962	230	52.8	23.0	24.9
1963	253	58.1	23.0	24.8
1964	279	65.6	23.5	22.4
1965	301	69.5	23.1	19.7
1966	322	73.4	22.8	19.6
1967	330	74.1	21.8	20.6

GLOBAL INCREMENTAL CAPITAL-OUTPUT RATIOS

TAB. 13

(calculated on the values of Tables 1, 2 and 9; periods t covering 2 and 4 years;
(a) at current prices; (b) at constant prices)

Years	$k=I/\Delta Y$				$\alpha=I/\Delta R$			
	(a)		(b)		(a)		(b)	
	$t=2$	$t=4$	$t=2$	$t=4$	$t=2$	$t=4$	$t=2$	$t=4$
1953	2.13	—	2.70	—	1.15	—	1.37	—
1954	2.23	—	2.95	—	1.19	—	1.59	—
1955	2.35	2.26	3.40	3.05	1.36	1.24	1.98	1.67
1956	2.26	2.26	3.53	3.26	1.39	1.30	2.10	1.91
1957	2.70	2.55	4.05	3.77	1.79	1.58	2.71	2.35
1958	2.96	2.60	4.00	3.78	1.95	1.67	2.64	2.42
1959	3.25	2.97	3.60	3.82	2.10	1.94	2.50	2.52
1960	2.96	2.96	3.24	3.58	1.94	1.95	2.14	2.36
1961	2.37	2.71	3.12	3.33	1.61	1.79	2.13	2.23
1962	2.06	2.36	3.37	3.32	1.43	1.61	2.38	2.28
1963	1.80	2.02	4.17	3.63	1.26	1.39	2.96	2.53
1964	2.08	2.07	6.00	4.43	1.50	1.46	4.42	3.20
1965	2.77	2.22	7.50	5.40	1.95	1.56	5.65	3.92
1966	2.70	2.40	4.72	5.27	1.70	1.59	2.94	3.62
1967	2.34	2.53	3.42	4.25	1.42	1.65	1.98	3.18
Averages	2.41		3.95		1.58		2.70	

TAB. 14

GROSS DOMESTIC PRODUCT, BY SECTORS, AT CONSTANT PRICES

Years	Agri- culture	Industry			Tertiary	Public Admin.	Total
		in narrow sense	con- struction	Total			
1951	2,921	3,410	768	4,178	4,867	2,168	14,134
1952	2,879	3,538	946	4,484	5,046	2,227	14,636
1953	3,182	3,807	1,087	4,894	5,281	2,283	15,640
1954	3,006	4,171	1,190	5,361	5,459	2,317	16,143
1955	3,169	4,531	1,345	5,876	5,780	2,410	17,235
1956	3,171	4,881	1,399	6,280	6,040	2,466	17,957
1957	3,212	5,223	1,537	6,760	6,384	2,553	18,909
1958	3,544	5,391	1,643	7,034	6,591	2,676	19,845
1959	3,658	5,990	1,713	7,703	6,988	2,761	21,110
1960	3,454	6,744	1,784	8,528	7,494	2,853	22,329
1961	3,733	7,380	1,892	9,272	7,882	2,963	23,850
1962	3,674	8,099	2,020	10,119	8,466	3,039	25,298
1963	3,718	8,705	2,106	10,811	8,920	3,162	26,611
1964	3,833	8,896	2,139	11,035	9,210	3,263	27,341
1965	3,957	9,318	2,057	11,375	9,607	3,357	28,296
1966	3,997	10,231	2,063	12,289	10,113	3,483	29,882
1967	4,205	11,190	2,070	13,260	10,666	3,546	31,677
d	+2.3	+7.7	+6.4	+7.5	+5.0	+3.1	+5.1

TAB. 15

GROSS DOMESTIC INVESTMENT, BY SECTORS OF USE, AT CONSTANT PRICES

Years	Fixed Investment							Changes in stocks	Total
	Agri- culture	Industry	Trans- port, etc.	Trade, etc.	Houses	Public Admin.	Total		
1951	241	861	233	185	512	223	2,255	282	2,537
1952	308	920	234	209	633	267	2,571	19	2,590
1953	363	990	265	246	755	310	2,919	65	2,984
1954	400	1,056	318	304	903	286	3,267	10	3,277
1955	435	1,172	332	345	1,091	294	3,669	214	3,883
1956	432	1,269	369	368	1,209	275	3,922	159	4,081
1957	464	1,344	366	411	1,364	316	4,265	123	4,388
1958	470	1,341	361	439	1,408	365	4,384	133	4,517
1959	519	1,414	427	497	1,515	399	4,771	189	4,960
1960	623	1,642	515	582	1,530	474	5,366	435	5,801
1961	606	1,989	553	661	1,671	500	5,980	463	6,443
1962	644	2,248	558	723	1,929	485	6,587	423	7,010
1963	628	2,496	601	785	2,162	478	7,150	346	7,496
1964	532	1,994	585	726	2,292	557	6,686	194	6,880
1965	549	1,580	619	666	2,149	561	6,124	225	6,349
1966	566	1,736	605	718	2,122	583	6,330	400	6,730
1967	615	1,951	714	823	2,209	657	6,969	515	7,484
d:									
1951-63	+8.3	+9.3	+8.2	+12.8	+12.8	+6.5	+10.1	+1.8	+9.5
1963-67	-0.5	-6.0	+4.2	+1.2	+0.5	+8.3	-0.6	+10.5	0

TAB. 16

ICOR.s BY SECTORS
(on the data of Tables 14 and 15 and with various adjustments;
t=4 for agriculture, =2 for the other sectors)

Years	Agriculture	Industry		Tertiary	Public Admin.	Total
		in narrow sense	Total			
1953	—	2.71	2.49	4.84	4.25	3.21
1954	—	1.73	2.18	5.66	6.40	3.65
1955	5.1	1.54	2.09	5.58	4.70	3.87
1956	5.2	1.62	2.43	5.66	4.86	3.82
1957	54.0	1.80	2.76	6.14	3.98	4.52
1958	2.5	2.57	3.48	7.40	2.83	4.34
1959	3.7	1.80	2.85	7.20	3.28	3.94
1960	6.7	0.87	1.85	5.13	4.31	3.68
1961	4.0	0.96	1.95	5.67	4.31	3.70
1962	17.1	1.29	2.28	5.66	5.21	3.82
1963	40.0	1.58	2.75	5.87	4.96	4.56
1964	6.6	3.00	5.15	9.10	4.30	6.72
1965	10.9	3.60	7.90	11.40	5.18	8.50
1966	7.8	1.06	2.83	8.81	4.75	5.26
1967	3.9	0.67	1.76	7.09	6.02	3.73
Average	6.65	1.54	2.60	6.72	4.20	4.46

PUBLIC SECTOR'S INVESTMENT AND ITS FINANCING
(BANK OF ITALY, Annual Reports, May 1966, 1967, 1968)

TAB. 17

	1964	1965	1966	1967
<i>Expenditure:</i>				
Direct investment, gross	1,133	1,246	1,257	1,253
Net transfers in capital account	365	318	542	547
Credits conceded, net (1)	927	378	396	701
Total	2,425	1,942	2,195	2,501
<i>Financing:</i>				
Gross public saving	887	-127	-247	441
External financing	1,374	2,089	2,568	2,040
<i>of which:</i>				
short-term borrowing	911	1,052	437	491
long-term borrowing	463	1,037	2,131	1,549
Adjustments	164	-20	-126	20

(1) Since 1966, "Financial assets".

PRIVATE INVESTMENT AND ITS FINANCING, 1964-66
(*ibid.*, May, 1966, 1967)

TAB. 18

	1964	1965	1966
<i>Expenditure:</i>			
Gross total investment	7,419	6,977	7,532
less: direct investment of public bodies	-1,133	-1,246	-1,277
Gross private investment	6,286	5,731	6,255
<i>Financing:</i>			
Transfers and direct loans to firms by public bodies	426	498	653
Capital market	2,231	2,047	2,048
<i>of which:</i>			
security issues	1,061	1,055	787
medium- and long-term loans	1,170	992	1,261
Gross self-financing, direct investment of savings by individuals and net balance of short-term operations with banks	3,629	3,186	3,554

TAB. 19

PRIVATE INVESTMENT AND ITS FINANCING, 1966-67
(*ibid.*, May 1968, Table T 7; E=ENEL-ENI-IRI-EFIM groups; f., i=other sectors, including households and firms)

	1966			1967		
	E	f., i.	total	E	f., i.	total
Investment	984	5,299	6,283	1,170	6,192	7,362
Net transfers in capital account	-7	-506	-513	-12	-500	-512
Financial assets	110	6,615	6,725	102	6,975	7,077
<i>of which:</i>						
bank deposits	-61	3,096	3,035	28	3,316	3,344
other credits, net	115	3,208	3,323	45	3,420	3,465
shares and equity participations	56	311	367	29	239	268
Total requirements	1,087	11,408	12,495	1,260	12,667	13,927
Gross saving	408	8,731	9,139	474	8,797	9,271
External financing	671	3,014	3,685	806	3,668	4,474
<i>of which:</i>						
short-term borrowing	124	1,565	1,689	153	1,783	1,936
long-term borrowing	437	1,085	1,522	551	1,495	2,046
shares and equity participations	110	364	474	102	390	492
Total financing	1,079	11,745	12,824	1,280	12,465	13,745
Adjustments	8	-337	-329	-20	202	182

NET SECURITY ISSUES
(*ibid.*, May 1968 and previous issues; Y and I from Tab. 1)

TAB. 20

Years	Fixed-interest	Shares	Total	total in %	
				of Y	of I
1951	164	77	241	2.3	11.5
1952	329	76	405	3.6	19.0
1953	378	137	515	4.1	21.1
1954	388	145	533	4.0	20.1
1955	481	144	625	4.3	19.6
1956	402	181	582	3.7	17.0
1957	350	168	518	3.0	13.6
1958	437	222	659	3.6	16.9
1959	736	225	961	4.9	22.7
1960	850	496	1,346	6.4	26.6
1961	931	515	1,445	6.2	25.2
1962	1,088	715	1,803	6.7	27.7
1963	1,087	397	1,485	5.0	20.0
1964	1,454	581	2,036	6.2	27.6
1965	1,971	406	2,377	6.7	34.3
1966	2,826	470	3,296	8.6	44.0
1967	2,414	396	2,809	6.7	32.7

TAB. 21

NET ISSUES OF FIXED-INTEREST SECURITIES, BY TYPES OF BORROWER

(*ibid.*, May 1968, Appendix, Tab. aO2)

- A=Government stock and bonds issued for account of the Treasury and of local authorities
 B=Bonds of special credit institutes
 C=Bonds of the ENEL-ENI-IRI groups and of international institutions
 D=Bonds of private firms

Years	Treasury A	B o n d s				Total
		B	C	D	total	
1960	183	412	59	196	667	850
1961	161	513	130	126	781	931
1962	69	724	89	206	1,019	1,088
1963	-71	775	289	94	1,158	1,087
1964	232	721	469	33	1,222	1,454
1965	663	646	572	68	1,307	1,971
1966	1,576	861	386	3	1,271	2,826
1967	1,010	987	261	156	1,412	2,414
(1)	6,416	7,722	2,964	1,314	12,000	18,417

(1) Total at the end of 1967.

SUBSCRIBERS FOR FIXED-INTEREST SECURITIES

(Ibid., May 1968, Tab. O4; in per cent of total)

Subscribers	1959-61	January 1962- June 1964	July 1964- December 1965	1966	1967
Bank of Italy and Italian Exchange Office	2.3	5.4	4.0	7.1	6.5
Banks (a)	26.6	31.8	55.3	46.3	41.5
Central Post Office Saving Fund (b) .	4.0	31.0	8.2	—1.1	—1.6
Individuals and firms	67.1	31.8	32.5	47.7	53.6
	100	100	100	100	100
Issues (in milliards of lire) (c) . . .	835	1,132	1,847	2,826	2,414

(a) and banking associations

(b) and Social Insurance Funds

(c) total net issues on a yearly basis

COMPOSITION OF SECURITY OWNERSHIP

(Ibid., May 1968, Table O6; end-year data; per cent distribution; total in milliards of lire)

Categories of owners	1961	1962	1963	1964	1965	1966	1967
<i>Fixed-interest securities (1)</i>							
Individuals	58.5	53.4	50.3	45.1	43.8	43.9	44.9
Firms	1.6	1.8	1.7	2.0	1.9	1.8	1.7
Foreign	0.4	0.4	0.4	0.3	0.4	0.3	0.3
Financial intermediaries	39.5	44.4	47.6	52.6	53.9	54.0	53.1
Total	100	100	100	100	100	100	100
Total outstanding at nominal value	6,846	7,990	9,177	10,776	12,917	15,927	18,526
<i>Shares</i>							
Individuals	36.2	38.2	39.5	37.7	34.8	33.4	33.8
Firms	51.7	47.4	43.4	43.5	45.6	46.4	44.9
Foreign	9.9	12.2	15.0	16.9	17.4	17.9	18.9
Financial intermediaries	2.2	2.2	2.1	1.9	2.2	2.3	2.4
Total	100	100	100	100	100	100	100
Total outstanding at market value	20,772	18,984	17,463	14,183	14,973	18,446	16,860

(1) Including certain special securities not included in Tab. 21, to the amount of 109 milliard lire in 1967 (*ibid.*, Tab. aO5).