

GIORGIO FUÀ

NOTES ON ITALIAN
ECONOMIC GROWTH 1861-1964

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FOREWORD

The Social Science Research Council (New York) is sponsoring a program of studies of the economic growth of industrialized countries, for which funds have been granted by the Ford Foundation. The program, directed by professors Moses Abramovitz and Simon Kunznets, covers seven countries among which Italy.

I am the co-ordinator of the study regarding Italy, which is being carried on by a team centered on the Faculty of Economics of Ancona. It has been found advisable to submit some of our provisional results to the criticism of a wider audience before they are remoulded into a book. A few papers by my colleagues have already been published, some in « La Scuola in Azione »; and I am now submitting in the present booklet my provisional conclusions on two points, namely the long term changes in output and factor input (including new estimates of output at constant prices by industry of origin, of private and government saving, of net stock of equipment), and the interpretation of the accelerated growth of output after the second world war. On these points, as on other ones, I have learnt a lot from the discussions with all members of the SSRC program; but my heaviest debt is to professor Ornello Vitali for his invaluable statistical work.

Previous versions of the present work have been submitted, respectively, to the Social Science Research Council conference on economic growth (Saltsjöbaden, July 1965); to the General conference of the International Association for Research in Income and Wealth (Lom, September 1965); and to a meeting of the « gruppo di ricerca per lo studio dei problemi economici » of Consiglio Nazionale delle Ricerche (Rome, November 1965).

GIORGIO FUÀ

Ancona, Faculty of Economics, November 1965.

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I. THE GROWTH OF OUTPUT, 1861-1964

1. GROWTH OF GROSS DOMESTIC PRODUCT (GDP).

1.1. *Private product and government services.*

A good starting point for this summary analysis is to examine the behaviour of the two main components of domestic product: the private product and the government services.

As for the latter, I shall consider for the moment being the conventional measure of output at constant prices, which amounts to taking productivity of government employees of any given grade as constant (1).

The behaviour of the two components mentioned (see chart A) is very different and it seems that at any rate in the period around 1885 up to the end of the second world war government services tended to rise at a faster rate than private product.

Anyway, due to the slight incidence of the government component, the GDP curve follows closely that of private product, moving away from it only in the war years. The distance is hardly noticeable in 1866, but is very great in the first world war and also appreciable in the years of fascist military policy (especially after 1936) and the second world war. In all these cases the large-scale recruitment of personnel by the state is expressed in a more rapid rise in GDP than in private product (in some years the latter even decreases), and subsequent demobilization is expressed in the opposite sense.

However, the sum total including private and government product at constant prices is of dubious significance because of

(1) Alternative measures will be dealt with in the statistical appendix, *Notes on methods*, point 1. 3.

the above-mentioned snag that the usual method of calculating value added at constant prices in the government sector gives rise to a weighted index of employment rather than an index of the real volume of services rendered (2).

I shall, therefore, concern myself hereafter only with private product which, as we have seen, shows almost the same shifts as GDP except in the war years.

1.2. *The main phases of development of private product.*

The behaviour of total value added (at constant prices) in the private sector shows the following phases.

There is a slow increase up to 1897 (compound annual rate 0.7 %) (3).

A more rapid increase follows after 1897 and up to the eve of the first world war, but it slows down slightly after the 1907 crisis (compound annual rate for the 1897-1913 period 2.7 %).

The increase continues in the early war years, but is succeeded by a decline after 1916. After 1921, the pre-war level having been reached again, a phase of expansion follows. Expansion proceeds at a rapid rate up to 1925, is interrupted by the crisis following revaluation and that of 1929, but goes ahead again around 1934, partly as a result of fascist military policy. The rates at the beginning and end of this period are so high that for the 1920-1938 period as a whole, in spite of the pause in the middle, the compound rate reaches 2.3 %.

The second world war brings about a striking drop (indeed GDP begins to fall already in 1940, before Italy entered the war).

But the pre-war level is reached again around 1949, and then follows an unprecedented expansion. The compound rate from

(2) As regards the similar snag in measuring private « miscellaneous services », which fortunately only slightly affect the total of private product, see below.

(3) This and the following rates are calculated on three-year averages centered on the first and last year of each period concerned.

1949 to 1963 is 6.3 %, and it is only in 1964 that expansion slows down. The only comparison with this rate, maintained over a period of fifteen years (after four years of rehabilitation at even faster rates) is to be found in the brief phase of extremely rapid growth from 1921 to 1925.

It is worth noting that the periods of most intense growth in Italy, pointed to above, coincide with periods of prosperity in the world economy. This applies not only to the expansion periods following respectively the first world war, the great depression, and the second world war, but apparently to the Italian « take-off » after 1897 too. According to Schumpeter, the « Third (Neo-Mercantilist) Kondratieff » was starting just at that time: « ... a significant 'break in trends' occurred about 1897 — few people will deny that; there is even not much doubt to cloud the exact date... » (4).

1.3. *Behaviour of agriculture, industry and services.*

I shall start with *services* (considered here as a whole until such time as they are analysed), which can be dealt with more quickly. They follow, with slight fluctuations, the behaviour of total private product (see chart B). This is not surprising, as it may be said that their growth is mainly a reflection of the growth of agricultural and industrial production, rather than an independent factor.

Agriculture, with marked but short waves, which are explained by natural factors (these fluctuations seem to be less marked in the growth period following the second world war), shows the following basic movements.

Output is stationary or only slightly growing up to about 1897 (compound rate 0.4 %).

There is an appreciable rate of increase (2 %) from 1897 up to the eve of the first world war.

(4) J. SCHUMPETER, *Business cycles*, New York 1939, vol. I, p. 397.

A depression during the war is followed by some years of rapid recovery, but this comes to a halt in 1923 at a level only slightly higher than the pre-war maximum. Agriculture then fluctuates around this level until 1939, when it suffers a serious setback. Thus from 1920 to 1938 the compound rate of increase is barely 1.0 %, and from 1897 to 1938 1.1 %.

It is not until 1951 that the 1938-1939 level is reached again; after that growth continues at a steady rate (compound rate from 1959 to 1963, 2.1 %), though not appreciably above that of the 1897-1913 period.

Industry, in spite of fluctuations, shows a clear tendency to increase until about 1887, followed by a depression. The contrasting movements of agricultural production mean that these two phases of industrial production are not expressed in a similar behaviour of the whole private product.

On the other hand, from 1896-1898 to the beginning of the first world war the rapid growth of industry (over 4 % per year), matched by the more moderate increase in agriculture, is the dominating factor of the growth of private product (and this continues until 1915, when agricultural production is already on the decline). The picture is the same in all subsequent periods: it is the ups and downs of industrial development that determine, even if the contours are smudged due to the component of inertia introduced by agriculture, the phases of total private product described above.

In conclusion, from 1896-1898 onwards the behaviour of private product (and therefore, except for the intervals, that of domestic product) is an only slightly attenuated reflection of the behaviour of industrial production. The latter is in turn formed mainly by the behaviour of manufacturing industries.

1.4. *Behaviour of the various sectors of industry.*

There is no need to dwell at any length on *manufacturing* because, as just mentioned, it is its preponderant weight which

affects the behaviour of industry as a whole. Its phases may therefore be identified with those already described; chart C clearly shows how near and how closely parallel the two curves are.

Mining, on the other hand, shows a very different behaviour. Growing at first at a moderate rate, with a maximum in 1905, it then declines (the sulphur crisis), after which it fluctuates at a low level until the second half of the Thirties. It then gets a tremendous boost, explained by the policy of autarchy, reaching a maximum in 1942 when all other industries were on the decline as a result of the war. After the war-time collapse, there is a new phase of rapid growth (which, however, begins to slow down after 1957), due this time mainly to the discovery of new reserves of natural gas.

Construction shows throughout the century under review its characteristic long waves (with turning points, however, which do not always coincide with those of private product), with an overall rising trend more or less the same as that of manufacturing. It too entered a phase of rapid development after the last war, with an unprecedented growth rate (11.8 % per year).

The *electricity, gas and water* industry — mainly accounted for by electricity, still in its infancy at the end of the nineteenth century — shows on the other hand a much more rapid rising trend than that of manufacturing up to the last world war, with relatively few fluctuations. Since the war its growth rate has been lower (7.9 % per year) than for 1897-1938, which would appear normal for an industry which is now reaching maturity.

1.5. *Behaviour of the various tertiary sectors.*

The behaviour of the five main sectors is depicted in chart D.

Since the product (at constant prices) of *internal trade* (wholesale and retail) has been calculated as proportional to the physical volume of private consumption (after deduction of farmers' own consumption) it is found to show a slower long-term

growth, with much less marked fluctuations, than domestic product. The tendency of government to take an increasing share of national income, and of firms and families to save an increasing proportion of the income remaining at their disposal, is an explanation of the first fact, since this tendency is only slightly compensated by the tendency for farmers' own consumption to decrease (due to the progressive disappearance or modernization of a peasant economy). And the fact that fluctuations in income mainly affect saving rather than consumption explains the second.

The services rendered by the *ownership of dwellings*, being proportionate to the stock of housing, on which new entries and retirements in each year have only a minor effect, shows only insignificant fluctuations. The long-term trend is towards increase, but slower than that of GDP and barely in proportion to population. It is only since the last war — which, by the way, caused through destruction a temporary decline in the stock of housing — that the increase (2 % per year) is considerably more in proportion to population. However, this is one of the cases in which our calculations (based on the number of rooms without taking account of quality) probably understate the development that has taken place.

Transportation and communication show a much faster long-term growth than private product up to the second world war, corresponding to the transition from a peasant to an industrial economy and the formation of a national market. Fluctuations in this sector follow closely those of domestic product. Since the war the tendency of this sector to develop much more quickly than domestic product seems to be in abeyance, but this may be due to a statistical illusion (growth of transport fleets owned by industrial firms).

Banking and insurance too show a basic tendency to grow much more quickly than domestic product. In this case the tendency was still more marked after the second world war. There seems to be no connection between fluctuations of this sector and those of domestic product, but it may be that the fluctuations

shown by the banking and insurance figures before the last war are the result of defects in our statistics.

The item *miscellaneous services* is included in order not to leave a blank, but does not deserve much attention because the method of valuation adopted gives — in the best of cases (i.e. if the calculations are correct) — a similar result to that criticized above in speaking of the government sector. That is to say, the figures given are an index of employment (weighted according to skills and grades) and not an index of the volume of services rendered.

1.6. *Relative contribution to the growth of total private product by the various sectors of activity.*

Further back I have spoken of manufacturing as the pilot factor in general growth because it can be considered as a «leading» factor (in contrast to services, which are mainly «led») and because it has shown a succession of clearly marked growth phases (in contrast to the rather sluggish behaviour of agriculture).

To this qualitative comment should be added that the increment in the value added of industry represented a large and, as time went on, strongly increasing percentage of the increment in the value added of the whole of the private sector (see table 10). The percentage for industry as a whole (measured at constant prices) rose from 31 % in 1862-1897 to 64 % in 1949-1963; that of manufacturing from 27 % to 49 %. It should be noted that more than half this 49 % was contributed by two manufacturing sectors only, engineering and chemicals (including petroleum processing).

1.7. *Behaviour of prices.*

From 1861 to today the general level of prices, if measured by the index implicit in the calculation of gross private product,

rose over 400 times. But most of the increase occurred in direct relation to the world wars. The Italian economy's phases of rapid growth took place generally without the accompaniment of inflationary phenomena. The 1897-1909, 1921-1924 and 1951-1961 periods were periods of practically stable prices. Price strains appeared only at the end of them which seem to have played a role in the subsequent slowing down of growth. It was only the phase of rapid growth associated with fascist military policy that took place in an inflationary climate (it is worth stressing that this phase differs from those mentioned above as being the only one in which the growth of GDP was largely due to increase in government services rather than in private product).

As regards relative prices, it would take too long to review in detail the appreciable fluctuations between 1861 and the second world war, spotlighted by table 7. It is, however, important to note the clear long-term trend to a shift in the relative price structure in favour of mining (increasing costs and protection), ownership of dwellings (the rush to towns) and internal trade (an increase in employment out of all proportion to the volume of business), and against electricity (big reduction in costs). The relative position of manufacturing fluctuates around a stationary level.

After the last war the behaviour of mining is reversed, due to the lower relative costs and prices of petroleum and natural gas and the gradual abandonment of uncompetitive lines. There is also an appreciable shift in relative prices at the expense of manufacturing (reduction in costs connected with growth) and banking (big increase in the volume of transactions per occupied person). In contrast, there is a big price shift in favour of construction while the shift in favour of ownership of dwellings gathers new impetus (after the temporary reversal caused by rent restriction), and the shift in favour of internal trade continues. The position of electricity, on the other hand, appears to have become stabilized.

2. LABOUR.

2.1. *Active population.*

The demographic factors affecting labour supply have already been thoroughly dealt with in a book by another member of our team (5), and require no further treatment here. I shall therefore start from an estimate of active population and of its industrial break-down at different dates, which is shown in table 11.

It appears that aggregate active population increased in the 1881-1951 period at a compound annual rate of about 0.3 % i.e. considerably less than total population which increased at a rate of about 0.7 %. From 1951 to 1961 active population was practically stationary.

As regards individual sectors of activity, the number of active persons has been steadily increasing from 1881 to today only in electricity, internal trade and government. While the case of electricity is easily explained on the ground stated in point 1.4 above, the two latter sectors stand out as those which have chronically attracted redundant labour by offering it decent, though eventually unproductive, jobs.

In industry taken as a whole active population increased appreciably (annual rate 1.5 %) from 1901 to 1911, and again from 1921 to today; the rate of increase exceeded 2 % in the 1951-1961 decade.

2.2. *Output per active person.*

Value added (at constant prices) per active person increased considerably during the 1897-1913 expansion period (compound annual rate 2.7 %), and again during the expansion periods in the Twenties and late Thirties. Including the depression years, however, the compound annual rate of increase from 1920 to 1938 was quite low (1.3 %). For the 1897-1938 period

(5) M. LIVI-BACCI, *I fattori demografici dello sviluppo economico italiano*, Roma 1965.

considered as a whole the annual increase in labour productivity averaged 1.6 % (see details in tables 15 and 16).

The increase from 1897 to 1938 was rather more in industry (1.9 %) than in agriculture (1.2 %), and insignificant or negative in tertiary sectors with the exception of transportation.

The increase in output per active person was associated with declining participation rates (mainly among older and younger people), and therefore it resulted in a considerably lower increase in income per head of population (see table 17).

After the second world war, a large expansion of demand (which will be commented upon in the second part of the present booklet) was accompanied by two changes which substantially contributed to increasing output per active person. On the one hand, the proportion of unemployed and casually employed persons in the labour force — which was exceptionally high soon after the war — dramatically declined, while the proportion of those regularly employed increased, as shown in table 13. On the other hand there was, as mentioned above, a massive outflow of surplus labour from agriculture and an inflow into industry, where the rapid expansion of capacity, favoured by plentiful labour supply, favoured in its turn productivity (see part II, point 2.1.).

As a result, output per active person greatly increased in all sectors. Compound annual rates of increase from 1949 to 1963 are 6.3 % for agriculture, 7.2 % for industry in the aggregate, and 6.6 % for the economy as a whole if we refer to the official census figures of active (*de jure*) population; they appear only slightly lower if we choose to refer to the estimates of (*de facto*) labour force as defined in ISTAT sample surveys.

Thus, the Italian post-war experience compares very favourably with that of most Western countries. A United Nations survey (6), which shows rates for the 1949-1959 period, puts

(6) United Nations, *Economic survey of Europe in 1961, Part. 2: Some factors in economics growth in Europe during the 1950s*, Geneva 1964, chapter II.

Italy second — together with Austria and after Western Germany — in a list including 20 European countries, the U.S.A. and Canada.

3. CAPITAL

3.1. *Saving and investment.*

Gross domestic saving, expressed as a percentage of GNP, stood at a very low level (around 9 %) before 1897 (see details in table 18). It rose to around 16 % during the 1897-1913 expansion period. After the drop due to the first world war, it recovered its previous peak level in the booming Twenties, fell off during the depressed early Thirties, and reached a new peak (18 %) in the 1935-1939 boom period. After a new drop due to the second world war there was a steady rise from 18 % in 1950-1954 to the unprecedented level of 24 % in 1959-1962.

It would appear, therefore, that high saving ratios have always been associated with high rates of increase in GNP, which could be explained on various grounds.

It would also appear that the unprecedented growth of GNP in recent years has been associated with a propensity to save far exceeding any previous record, but this statement requires further qualification.

Indeed, the propensity to save out of private disposable income in 1959-1962 did not, according to table 18, reach the 1935-1939 level and only slightly exceeded the 1914-1923 level. What is unprecedented in recent years is not the level of private propensity to save, but the proportion of total saving contributed by the government sector. This proportion greatly increased (due both to the increased share of government revenue in GNP and to the increased propensity of government to save), accounting

for 24 % of total domestic saving from 1950 to 1962. This is not, however, an extraordinary level in post-war Europe (7).

It should be noted that the increase in public saving was to a considerable extent devoted to financing investment of firms and families (housing) through loans, grants, etc., rather than to direct government investment. Sums devoted to the former purpose from 1955 to 1963 exceeded by about one-fifth those devoted to the latter.

According to ISTAT data (shown in tables 19 and 20) domestic asset formation considerably exceeded domestic saving, and was therefore financed to a large extent by net borrowing from the rest of the world, only in the critical period of political unification up to 1870, in the 1885-1890 period, and again in connection with the two world wars. Net lending to the rest of the world took impressive proportions (if ISTAT data can be trusted) in the 1894-1906 period, and has been significant also in 1958-1962.

The ratio of gross domestic asset formation to GNP in the years since 1950 looks exceptionally high if compared with previous Italian experience, but it is not such according to present international standards (8).

The composition of gross domestic asset formation underwent considerable changes in time (see tables 21 and 22). There has been a long-term trend to increase in the percentage of total investment devoted to equipment, which has risen from an average of 37 % in the 1861-1896 period to 46 % in 1897-1913 and to 51 % in 1920-1938. After the last war, in connection with the house-building boom, the percentage share of equipment

(7) See U.N., op. cit., ch. IV, table 6.

Some authors have suggested that in Italy as well as in a few other countries government saving may have been somewhat overstated by official statistics referring to recent years, due to a new trend of window dressing in government budgets. This suggestion is plausible, but it seems unlikely that the correction required would be such as to cancel the whole increase in the national saving ratio above pre-war peak levels.

(8) Italy ranks tenth in the U.N. list of 22 Western countries, op. cit., ch. II, table 7.

fell back below the level prevailing before the first world war. The 1950-1964 average was 43 %.

3.2. *Capital:output ratio.*

The *incremental* capital:output ratio shows, of course, considerable changes in time, being lowest in periods of most rapid growth and lowest of all in the latest period. Italy indeed ranks among the Western countries showing the lowest ICOR during the Fifties (9).

The above holds true if ICOR is calculated on total product, as well as if it is calculated on product per worker, and this is not surprising. The association between high rates of growth and low ICOR is, in fact, easily explained on many grounds, of which the following two seem especially important. First, technical progress is largely of the « embodied » type, and the greater the rate of growth, the greater the rate of gross investment and the lower, therefore, the average age (and the more up-to-date the average composition) of the capital stock. Second, rapid growth reduces the risk of misallocation and under-utilization of capacity.

As for the *average* capital:output ratio, our knowledge is still defective. The capital stock series published by Barberi leads to the conclusion that the ratio has been on the decline since the second half of the nineteenth century; but a revised valuation, which is now being completed, may well lead to a different result. One component part of our new estimate, that concerning the stock of equipment (net of retirements), is shown in tables 21 and 22. It is found that the ratio of the stock of equipment to gross private product has been on the increase from the turn of the century (0.59 in 1897-1907) to the eve of the last war (1.31 in 1937-1939), but has somewhat declined in recent years (1.15 in 1960-1963).

(9) See U.N., op. cit., ch. II, tables 6, 7, 16 and 17.

II. AN INTERPRETATION OF THE ACCELERATED GROWTH AFTER THE SECOND WORLD WAR

1. FOUR BASIC FACTORS OF GROWTH.

Part I of this booklet has shown that the growth of the Italian economy has considerably speeded up after the second world war. The pace of development recorded is quite remarkable not only if compared with previous Italian experience, but also according to contemporary international standards. From 1950, when her post-war reconstruction had already been concluded, until 1961 Italy enjoyed indeed an increase in production and productivity which, like that of the other defeated countries, Japan and Germany, largely exceeded the average for market economies.

In this part I am trying to outline a global interpretation of the Italian phenomenon, as distinct from the analysis of the individual causes and mechanisms of growth peculiar to each economic sector, which can be found in other papers produced by our research team.

As soon as we set out to look for one single or a few really basic factors of growth, we find that four stand out as having been of paramount importance in the Italian case. Two of them are time-honoured features of the Italian economy, which after the war became even more pronounced than in previous decades:

1) Italy was still backward in the use of the best known technology in the world, which meant that a jump in productivity could be made once the barriers to assimilation of such technology had been overcome (« the advantage of being a late-comer »).

Italian technical backwardness, if measured by the ratio of American to Italian output per worker in manufacturing, appears to have been somewhat reduced from the end of the nineteenth century until the first world war but to have subsequently been aggravated again, reaching its worst point at the end of the last war.

2) There were plentiful reserves of unutilized or under-utilized manpower. This means that, even with the technology already applied in Italy, a considerable increase in production was possible (provided the necessary investment was made) by drawing on unemployed labour and by shifting labour from unrewarding to rewarding activities. These unused margins of labour potential were always substantial in Italy (the ratio of industrial employment to population in working age brackets, which was and still is much lower than in the advanced countries, provides an indication); but after the mixing up of population caused by the war, after the demobilization, after the collapse of previous political, social and economic structures, they became more apparent and mobile, and exerted a greater pressure on the labour market. The unemployment figures were higher after the war than ever before.

Let me now turn to two factors which made their first appearance after the last war:

3) There was an outburst of entrepreneurship, which can be at least partly explained as a result of the defeat (there is a significant parallelism with Germany, and possibly with Japan). The imperial ideology of Fascism, which had contributed to delaying the growth in Italy of a bourgeois class interested in producing wealth, had at last collapsed. So had the autarchic, corporative economic policy, leaving businessmen without the previous enervating certainty of government support and government interference, to look for new ways. In this situation the lesson of American business was keenly studied (with the help of ERP aid), and later on the establishment of the European Common Market, through the adaptation it required from Italian

businessmen and the new contacts it offered them, stimulated new ideas.

4) Italy became integrated in the expanding world market. Most countries participated in the exceptional growth of world trade after the war, but the change was greater for Italy than for almost any other country. This applies both to imports which, with the reversal of the previous long lasting protectionist trend, rose in few years to a percentage of GNP twice as high as pre-war, and to exports which increased by almost one half as a percentage of total world exports (see table 23). This had profound repercussions on the economy which will be dealt with presently.

2. THE INTERPLAY OF THE FOUR FACTORS.

2.1. *The growth of capacity to produce.*

The joint occurrence of a technological backlog, a plentiful labour reserve and lively entrepreneurship made possible a substantial expansion of productive capacity provided the necessary saving was found for financing investment. The supply of saving, on the other hand, was likely to expand as soon as production started growing, and more in proportion to it (due to the well-known effects of changes in the level of national income, strengthened in the Italian case by wage restraint due to the plentiful labour supply), which was in fact what happened.

The potential for increasing production, once growth had started, would be strengthened by the favourable influence that growth itself exerts on productivity by lowering the average age of capital and reducing the evils of misallocation and under-utilization. A further, and very important, contribution to increasing productivity and production was provided by the integration of Italy into the world market: on the one hand supplies of energy sources, raw materials, and above all equipment previously not available in the right quality and quantity could

at last be imported by Italian firms; on the other uncongenial production lines (such as coalmining, wheat-growing, etc.) began to be discouraged by foreign competition, while more congenial ones expanded under the pull of foreign demand.

Finally, the increase in GDP measured at constant prices per occupied person may also have been favoured by the fact (which has however to be better ascertained) that most shifts in the production structure which were required by specialization due to foreign trade and by changes in the pattern of domestic consumption were from decreasing or constant, to increasing return industries (10).

Ability to increase production in the face of an expansion of demand at rewarding prices can therefore be explained, but I have still to explain what forces made demand grow as fast as it actually did.

2.2. *The role of government and of private consumption in the growth of total demand.*

Central and local government, and social security institutions, provided an autonomous contribution to the expansion of total demand by greatly increasing their expenditure on goods and services, but at the same time put a brake on the increase in private disposable income, and consequently in private consumption expenditure, by aggravating the burden of taxation (net of current transfer payments). The balance between these two countervailing actions of fiscal policy seems to have been only mildly expansionary (11).

(10) The role of the economies of scale in explaining the high rates of growth in post-war Italy (in conformity with Allyn Young's model) has been stressed by P.N. ROSENSTEIN-RODAN. See pp. 161-163 of his paper in V.A., *Il progresso tecnologico e la società italiana*, vol. I, Milano 1962.

(11) See some calculations in my article *Influenza del bilancio pubblico sulla formazione della domanda in Italia, 1955-1963*, *Moneta e credito*, March 1965.

The above merely refers to changes in the overall size of taxation and of expenditure on goods and services. Changes in structure may also have exerted some indirect expansionary influence, mainly through the provision of incentives to private investors.

Turning now to the propensity to consume of the private sector taken as a whole, we find until 1960 a declining trend, which can be explained both through the rapid growth of real income, and through the plentiful labour supply, which helped in keeping the proportion of wages to profits comparatively low. Therefore changes in aggregate private consumption did not offer any *autonomous* contribution to the growth of total demand, but rather the reverse, though of course the growth of private consumption *resulting from* increased production provided a major outlet for such an increase in production, once the latter was stimulated by autonomous factors.

On the other hand, changes in the composition (as opposed to changes in the overall level) of consumption provided an indirect contribution to the rise of total demand by stimulating investment, as will be seen presently.

2.3. *The role of private investment and foreign trade in the growth of total demand.*

Private investment stands out as a major factor in the post-war growth of total demand. The query is what induced people to start and continue for many years expanding capacity more in proportion to domestic consumers' demand. Various factors may have played a role, among them the opportunities for profitable investment offered, as just mentioned, by the changing pattern of consumers' demand (e.g. pressing demand for new houses in large towns, though there were vacant houses in the countryside; and for motor cars, while capacity was left idle in the textile industry) (12); the undertaking of long-term development

(12) In other words, gross fixed investment cannot fall below

projects, with public support, by state-owned firms (petroleum, steel, motorways, etc.); the tax facilities granted to investment in general and to the ploughing back of profits in particular; and so on and so forth, ending with Keynes' « animal spirits ».

The major explanation of the protracted investment boom is, however, probably to be found in foreign trade developments, to which I now turn.

Trade liberalization, as mentioned above, resulted in a tremendously increased propensity to import. At the same time, however, expanding world demand favoured exports, which were given additional impetus by improved competitiveness. The latter was largely due to wage restraint, which enabled Italian producers to sell at lower prices than foreign competitors (13), though at the same time enjoying such profits as required for providing inducement to, and finance for, further expansion. As a result of export developments, despite the rising propensity to import, the trade balance tended to improve — both on commodity and on service account — until 1959 (see table 24).

The favourable influence exerted on national product by the growth of exports, through its multiplier effect, largely outweighed the unfavourable influence exerted by the decrease in the multiplier due to increased propensity to import (14).

zero (apart from export of second hand equipment), which sets a limit to the fall of the rate of investment in industries facing a contraction of demand, while there is no corresponding limit to the growth of investment in industries facing an expansion of demand. Therefore when rapid shifts occur in the composition of a given amount of demand, the positive accelerator effect in expanding sectors is likely to be stronger (apart from any inter-sectoral difference in capital requirements per unit of output) than the negative accelerator effect in contracting sectors.

(13) There were also important cases in which the success of Italian exports was due to convenient delivery terms.

(14) Making for the 1950-1961 period an analysis similar to that made in my article *Influenza del bilancio pubblico*, cit., the following results are found as concerns the role played by foreign trade developments in the growth of total demand.

(a) If investment, government receipts and expenditures, and private propensity to consume had stood at their 1950 level (here provis-

This tells, however, only one part of the story. Even when the *direct* effects (as defined above) of an expansion of foreign trade just offset each other, the combined increase in exports and in propensity to import, though not by itself a net addition to total demand, may *indirectly* cause such an addition because it involves a shift in the composition of demand which is likely to call forth additional investment.

Moreover, import liberalization stimulated investment in two other ways. On the one hand, imports provided the input which made it profitable to start or expand various lines of production (e.g. the availability of Middle East crude oil made it profitable to invest in refining capacity for export, and that of American machinery to invest in the modernization of many industries). On the other hand, the challenge of foreign competition in the home market following liberalization (and, later on, the establishment of the European Common Market) compelled Italian firms to invest in modernization for survival. Both motives appear to have acted powerfully in post-war Italy.

In conclusion, there seems to have been an important asymmetry in the influence exerted by foreign trade on investment. The growth of exports did, of course, favour — via the accelerator — investment, which thus reinforced the direct expansive effect of exports; but the growth of imports also favoured — in different ways — investment, which thus

ionally estimated, as concerns propensity to consume, at 0.87), and only exports and propensity to import had increased as they actually did, this would have caused from 1950 to 1961 an increase of 7,384 billions current lire in GNP at market prices.

(b) If, on the other hand, investment, government receipts and expenditures, and private propensity to consume had changed as they actually did, but exports and propensity to import had stood at their 1950 level, GNP in 1961 would have been 4,562 billions lower than its actual level.

It is not surprising that numerical results differ according to whether the question is approached from viewpoint (a) or (b). From both viewpoints, however, the net favourable effect of changes in foreign trade appears to be quite big and to account for a large share (ranging from over one third to over one half) of the actual increase in GNP, which was 13,283 billions.

counteracted the direct restrictive effect of imports. Therefore the expansion of foreign trade was responsible for originating a considerable increase in investment, and in this indirect way provided an additional contribution to the expansion of total demand.

The process described worked cumulatively. The expansion of demand depended in the last resort on improved competitiveness, caused by the fact that the ratio of increase in wages to increase in productivity was lower in Italy than in most other countries (15). But in turn the expansion of total demand and of investment in particular speeded up the increase in productivity and made it possible, therefore, further to improve competitiveness while letting wages increase at a pace quicker than in most other countries. This process also provided, as already mentioned, adequate profits out of which to finance the continuous expansion of investment.

At the same time the reassuring balance of trade in goods and services, together with a steady net inflow of transfer payments from abroad (chiefly foreign aid at the beginning, and emigrants' remittances later on), made the monetary authorities feel easy. Until 1963, therefore, Italy was spared the « stop-go » experience from which other countries suffered in the same period.

2.4. *A note on the « miracle ».*

It is worth noting how different the story would have been, had not integration into the world market and plentiful labour supply occurred together. Either factor indeed, if not combined

(15) See table 25, showing that wage costs per unit of output moved more favourably in Italy than in other major trading countries, except Japan.

Note that the table is based on statistics of earnings, because those of employment costs inclusive of social security contributions are not available for all countries covered. It is likely that, if employment costs in the latter sense were considered, Italian gains in competitiveness would appear a little smaller.

with the other one, might have hampered, rather than favoured, growth.

Many people in the early Fifties actually warned that liberalization would make expansion more difficult, because of imports outrunning exports with a consequent drain on total demand, not to speak of balance of payments troubles. It was plentiful labour supply, by causing wage restraint for many years, that made such fears appear misplaced. On the one hand, increased competitiveness enabled Italian producers greatly to expand exports, and not to lose to imports more ground than they actually did. On the other hand, wage restraint acted as a brake on the expansion of private consumption, which has to be covered to a large extent by imports, due to inelasticity of domestic agricultural production. How much this matters was shown in 1963, when a strong increase in wages and in consumption was accompanied by a tremendous jump in imports of meat and other commodities.

But plentiful labour supply without integration into the world market might also have obstructed growth, because the ensuing wage restraint would have only resulted in a slower expansion of demand, as was apparently the case in previous periods of Italian history. Private investment cannot indeed be expected to expand spontaneously in a market where private consumption is stagnating and the stimuli of foreign demand and foreign competition are lacking. Of course, public expenditure (as was the case on the eve of the last war), or public planning of private investment could in principle fill the gap, but this was not likely to occur in Italy at the time.

3. CRISIS OF THE GROWTH MECHANISM.

As growth went on, the most readily available labour reserve was progressively absorbed, though of course other huge reserves not yet pressing on the market remained untapped.

Skilled labour had always been scarce, but in the late Fifties shortage of unskilled labour also began being felt in industrial centres. Firms requiring additional manpower started bidding up wages, and around 1960 a marked wage-drift was under way. Soon the improved bargaining position of labour unions resulted into wage claims far exceeding productivity increases. Wage rates in industry rose by 11 per cent in 1962, and considerably more in subsequent years, also due to the cumulative action of the sliding scale system in force.

European integration also played a role in the wage boom that brought expansion to an end, as it did in the foreign trade and investment boom that had been supporting it. It did so in two ways: by favouring emigration which acted until 1961 as a powerful drain on Italian labour reserve, and by the demonstration effect exerted on Italian workers by European earning standards.

It is worth noting that the change over from a buyers' to a sellers' market for labour coincided with a leftward shift in the government. The latter fact has probably to be considered as a reflex of the former, rather than — as superficial observers tended to think — the prime cause of the wage boom and of the slowing down of growth.

In connection with the wage boom, the propensity to consume of the private sector taken as a whole, which had declined until then, steeply rose in 1962 and 1963. At the same time there was a marked worsening in the competitive position of Italy vis-à-vis the rest of the world as concerns unit labour costs, which was partly reflected in prices. All this led to a serious deterioration in the balance of trade, through imports gathering momentum while exports rather tended to decelerate.

The monetary authorities helped for a while the economy to meet the mounting wage bill by expanding credit in the full amount required. In 1963, however, when the balance of payments deficit rose to appalling proportions, they felt it their duty to bring the situation under control. Therefore credit was

expanded in a smaller amount than required to finance full employment after allowing for the loss of domestic liquidity due to the foreign payments deficit.

As no offsetting changes took place on the front of public expenditure and taxation, there was a slow down in the growth of investment (turning in 1964 into actual decline) and production. By 1964 industrial employment was not expanding any more, short time was widespread, unemployment was on the increase again: the labour market had turned back into a buyers' market. As a result, the previous trend for actual earnings to increase faster than wage rates was reversed. At the same time, there was a marked fall in the propensity to consume, which seems to be largely due to the passing away of the previous euphoria in the masses (though also policy measures discouraging the purchase of consumer's durables played a role).

All this caused an actual decline in imports, while exports went on increasing faster than might have been expected on the basis of comparative unit labour costs. Apparently Italian producers, starved of domestic outlets, offered the most convenient delivery terms, and made their best efforts (eventually accepting lower margins) in order to secure foreign customers. Thus in 1964 the balance of current payments could close again with a surplus, the second highest since the war.

The monetary cure had reached its aim.

4. WHAT NOW?

The balance of payments crisis was overcome by putting a brake on growth. Now the declared aim of government policy is to revive growth, and such a revival is not unlikely, but it is also likely that it would soon lead to renewed pressure to raise Italian earnings up to top European levels. While employment costs (including social security contributions) are today among the highest in Europe, take-home pay is still comparatively

low (16). Wage claims out of any proportion with productivity increases might therefore be expected again as soon as the labour market turns back into a sellers' market. Therefore export competitiveness might be weakened, and this — combined with increased imports due to revived growth — would end by causing new balance of payments troubles, which in their turn would call back monetary restrictions and unemployment.

Is stop-go to become an ordinary experience for Italy? How can this be avoided?

Foreign trade policy measures cannot solve the problem. Import restrictions and export subsidies are ruled out by the international agreements in which Italy participates. The competitiveness of Italian exports could of course be improved by removing some deficiencies in Italian marketing and financial organization which are affecting them, but such improvements cannot be relied on for offsetting large price differentials. Borrowing agreements may be useful for financing additional domestic investment through continuous moderate deficits in the balance of current payments, but do not exempt the recipient country from the task of preserving competitiveness, lacking which deficits would rise to unmanageable proportions.

Thus, the problem will be solved only if the ratio of increase in employment costs to increase in productivity can be kept lower, or at least not higher in Italy than in the bulk of trading countries. This should be achieved while letting real earnings rise faster in Italy than in richer European countries, so as progressively to narrow the present gap. Otherwise Italy would end by losing to emigration too large a share of her best workers.

In view of the ambitious aim stated above the following points come under consideration.

First of all, there is plenty of room for improvements in the present Italian investment policy. Productivity increases have been heavily concentrated in few large firms belonging to a limited

(16) See C. VANNUTELLI, *Il costo del lavoro in Italia e nei paesi della CEE*, Moneta e credito, December 1964.

number of branches, which is a normal occurrence in countries that have just begun to adopt new technologies. This is reflected in the fact that over 40 % of Italian exports is supplied by less than 100 firms (17). Most of these have by now made the best use of the latest technology known in the world, and cannot therefore be expected to go on increasing productivity as fast as before, while there is room for tremendous progress in thousands of other firms, provided an appropriate policy supplies them with the finance and the technical assistance they have lacked until now.

The allocation of finance between different types of expenditure also requires re-examination. For instance, the share devoted in the last decade to education and training, and to research, seems to have been lower than desirable for fostering competitiveness, and that devoted to investment in housing of the expensive type higher.

A further, very important contribution to increasing competitiveness might come from improved organization in the government sector, whose present inefficiency results (through red tape and disproportion between taxes raised and services rendered) in higher costs for private business.

On the other hand, much has still to be done in order that each lira spent by firms on employment costs provides maximum satisfaction to employees. The first point to be re-examined under this heading is the present state of social charges which (with regard to non agricultural firms) absorb a higher fraction of total employment costs in Italy than in any country. There is already a trend to shift the finance of social security from contribution assessed on wages to general taxation, and to correct the major inefficiencies and wastes inherent in the present system of social security expenditure. But also the overall size of social

(17) In 1963 firms exporting over 5 billions lire each were 59 and accounted for 38 % of total exports; firms exporting over 3 billions were 97 and accounted for 43 % of total exports; firms exporting over 100 millions were about 3.600 and accounted for 86 % of total exports.

Note that the total number of firms operating in Italy is about 6 millions, of which about 600.000 are manufacturing firms.

security expenditure, as compared with national wage bill, might be worth questioning.

A second point is the long lasting trend for the cost of living to increase faster than wholesale industrial prices, mainly due to increases in retail margins, in the rents of dwellings, and to a lesser extent in agricultural prices (the same, by the way, happens in many other countries). However, a sustained growth of industrial employment should provide the opportunity of removing present overcrowding and inefficiency in agriculture and distribution, thus leading to lower retail margins and making a lower protection of agricultural prices acceptable. Moreover, the government seems to intend to enforce measures for alleviating urban congestion and for speeding up rationalization in house-building. If all this really materializes, the above mentioned trend in relative prices would at last subside, and industrial workers would be enabled to draw higher satisfaction from any given amount of industrial product paid to them as wage.

Finally, labour scarcity needs not be so acute as to cause excessive wage pressure, if labour reserves still latent are offered a better chance of coming to the market. To give an idea of the magnitude and location of these untapped reserves, let me just point to the fact that at the last census only 7 % of the population in working age in Southern Italy (which accounted for 36 % of total Italian population in working age) was engaged in more or less regular industrial activities (i.e. those covered by the industrial census), while the corresponding percentage for Lombardia was 32 %. Some regions in Central Italy did not fare much better than the South. As long as industrial growth was heavily concentrated in few northern (and central) regions, it could make its appeal felt by a fraction only of population in other region; moreover the massive inter-regional migrations of manpower required by this pattern of development raised increasing difficulties due to urban congestion and social frictions. A speeding up of the dissemination of industry in backward regions

— which is in government plans — will make it easier to draw on potential labour reserves.

All points made in previous paragraphs boil down into the statement that the ability of the Italian industry to compete in the world market will depend not only on improved efficiency inside each individual exporting firm, but also on improved efficiency of the Italian economic system taken as a whole. Under both headings the margins still left for improvement are tremendous, and therefore all depends on the ability to carry out the appropriate policies.

STATISTICAL APPENDIX

NOTES ON METHODS

1. GDP BY INDUSTRIAL ORIGIN.

1.1. 1861-1592.

For the years before 1950 ISTAT has published the series of domestic product by industrial origin only at current prices (18).

ISTAT started from an analytical valuation for 1938 and worked out an estimate for the other years as follows:

- for agriculture, industry (except Public Works construction), transportation and communication, and ownership of dwellings, taking as a basis indicators of the physical volume of production (or of services rendered), pricing it and introducing where possible a similar valuation of input;

- for banking and insurance, taking as a basis the volume of transactions (in current money) and assuming a constant ratio between such volume and the value added;

- for internal trade and miscellaneous private services, taking as a basis the number of persons engaged and an assumption of average earnings;

- for the government sector valuations were taken from government accounts (*idem* for Public Works construction).

It is only for its tables of national product and expenditure

(18) Istituto Centrale di Statistica, *Annali di statistica*, Series VIII, vol. 9, Rome 1957.

(national income, depreciation and imports on the one hand and private consumption, public consumption, gross investment by type of assets and exports on the other) that ISTAT has published valuations at constant prices as well. The estimate of consumption and investment is largely based on the calculation of available supplies, and therefore depends in the last resort largely on the figures of physical volume of production mentioned above.

We felt it was worth trying, starting from the same figures and supplementing them where possible and useful, to calculate the product series at constant prices by industrial origin.

The method adopted was the following:

— for agriculture, a calculation of physical output and an estimate of expenses in physical terms (the sources are the same as those available to ISTAT);

— for industry, transportation and communication, and ownership of dwellings, it was assumed that value added was proportional to physical output (also estimated from sources available to ISTAT);

— for banking and insurance, it was assumed that value added was proportional to the volume of transactions deflated by the average of wholesale and retail price indices;

— for internal trade, it was assumed that value added was proportional to private consumption at constant prices net of (estimated) farmers' own consumption;

— for miscellaneous private services an attempt was made to calculate, working back from ISTAT valuation, a weighted index of labour input, similar to that for the government sector, but results were doubtful. Therefore no attention should be paid to the behaviour of this particular sector, which fortunately only affects the total slightly;

— for government, it was assumed that value added was proportional to the number of persons employed, weighted

according to grade. This estimate was arrived at from the ISTAT valuation of value added at current prices, deflated by a salaries index (constant weights). Alternative measures of government's output will be submitted below (see point 1.3).

The results obtained (table 1) should not be much less reliable than ISTAT valuations at current prices, except for the government sector and miscellaneous private services.

Table 3 gives the necessary indications for working out all main aggregates (GDP at market prices, etc.) from value added. We find that net national product at market prices, worked out from our figures, differs in most years only very slightly from that calculated by ISTAT starting from the expenditure side. Only in 1908, 1910, 1940-1942 and 1945-1946 the difference is of the order of 5 %; and only in 1918-1922 and 1949-1952 does it approach or exceed 10 %.

The cause of the difference could not be found, due to the reticence of ISTAT in making available the details of its calculations. In any case we feel there is no reason to think that ISTAT's net national product at constant prices is more reliable than ours.

1.2. 1950-1964.

From 1950 onwards ISTAT published detailed series of national product at current and constant prices, by industrial origin and expenditure sector (19).

As regards the valuations at constant prices it was thought advisable to rectify those for internal trade and for banking and insurance.

(19) A subdivision into three geographical areas is also available from 1951 onwards. See Istituto Centrale di Statistica, *Annali di statistica*, Series VIII, vol. 12, Rome 1960, and Comitato dei Ministri per il Mezzogiorno, *Relazione sulla attività di coordinamento*, published annually.

ISTAT calculated value added in internal trade in such a way that it varies approximately in proportion to supplies available for domestic use (i.e. consumption plus investment). We on the other hand have assumed that it varied in proportion to private consumption (ISTAT valuation at constant prices) net of farmers' own consumption (estimated by us as a share, decreasing in time, of agricultural production) as was done for the 1861-1952 series. The difference in results, as far as long-term increment is concerned, is modest: the 1964 index (1950 = 100) is 216 for our valuation and 220 for that of ISTAT. For shorter time intervals, however, appreciable differences are found.

For banking and insurance ISTAT calculated value added at constant prices in such a way that the resulting deflator roughly equals the salary index; this means a very low increase (which reflects only the increase in the average grade of employees) in value added at constant prices per person engaged, only slightly higher than that for the government sector. We on the other hand have assumed that value added in banking varied in proportion to the total volume of loans and investments shown in the balance sheets of banks and specialized banking institutions, deflated (as in the case of the 1861-1952 series) by the simple arithmetical average of the wholesale and retail price indices. An analogous calculation was made for insurance firms, taking as a basis the annual inflow of premiums.

The value added at 1954 prices of the banking and insurance sector resulting from our calculation has, of course, an entirely different behaviour from, and rises much more than, that resulting from the ISTAT calculation. Our 1964 index (1950 = 100) is 612 whereas ISTAT's is 180.

While our corrections are important for the purpose of the analysis of real production and of productivity in the individual branches, especially in the case of banking, on the other hand they hardly affect the calculation of the total product of the economy.

Total value added (without adjustments) according to our calculation does not differ much from that according to ISTAT calculation. Our 1964 index (1950 = 100) is 230 and ISTAT's 221.

In total private product (adjusted for banking services) the difference practically disappears, as it emerges from the last two columns of table 4, because our correction of the value added of banking and insurance — which is the factor with the biggest difference — is offset by an equal correction in the opposite sense as concerns the item « adjustments ».

1.3. *An experiment with alternative concepts of « constant prices » for government services.*

I need not repeat how unsatisfactory the conventional concept is. An ideal solution would be to replace it by some analytical measure of the quantity of services rendered by the government, which would include such elements as attendance and proficiency in schools, etc. This may be no unattainable target in the long run (20), but is certainly beyond what can be aimed to in the present study of Italian economic growth.

I therefore turn to the more modest task of experimenting with alternative concepts which, though much inferior to the ideal one, do not seem to be cruder than that conventionally used.

The table which follows shows the numerical results obtained by applying four alternative concepts:

— *Concept A* (the conventional concept)

assumes that physical product per government employee of any given grade is constant.

(20) Attempts to measure productivity in public services have already been made by some authors, e.g. G. ARDANT, *Technique de l'Etat - De la productivité du secteur public*, Paris 1953.

— *Concept B*

assumes that the ratio of the physical product per government employee to the physical product per person engaged in the private sector is constant.

— *Concept C*

assumes that the ratio of the aggregate physical product of the government sector to the aggregate physical product of the private sector is constant.

— *Concept D*

assumes that the ratio of the aggregate physical product of the government sector to that of the private sector in any year is the same as that found by comparing the corresponding magnitudes at current prices. The index of government output at constant prices is therefore equal to the index of government output at current prices divided by the implicit price index of the private product.

It appears that the different concepts applied lead to widely differing results. Differences are so large as seriously to affect the measure of national product at constant prices. For instance if concept B, C or D is adopted instead of concept A, gross domestic product at market prices shows from 1913 to 1920 a decline of around 5 % instead of an increase of 5 %, and from 1949 to 1963 an increase of 130-140 — instead of 120 % (21).

2. LABOUR.

Only sporadic information is available on the number of persons engaged and on working hours up to the second world

(21) These rates are calculated on three-year averages centered on the years mentioned.

General government: percentage change in value added at constant prices and in number of persons engaged.

	Value added				Value added per person engaged				Persons engaged
	A	B	C	D	A	B	C	D	
<i>1938 prices</i>									
1897-1913	99	102	54	110	52	45	18	60	31
1913-1920	104	14	— 3	— 1	68	— 6	— 20	— 18	21
1920-1938	31	82	50	130	3	43	18	81	27
1938-1949	— 11	37	6	— 21	— 31	7	— 18	— 39	29
<i>1954 prices</i>									
1949-1963	57	171	146	293	25	117	97	214	25

war; we are trying to build up a series of estimates, but we are not yet satisfied our results (22).

Therefore in the present booklet I had to use just such a measure of the labour supply as is found in the « active population » recorded by population censuses.

The active population figures shown in table 11 have been obtained by adjusting original census data for territorial changes and for changes in the dividing line between « active » and « non active », and in industrial classification: the common standard adopted is that of the 1951 census. Data from 1881 to 1936 refer to *de facto* population; but unfortunately for 1951 and 1961 ISTAT published active population figures on a *de jure* basis only, and these had to be used in table 11. It is estimated that total active *de facto* population in 1951 was approximately 280,000 units less than the corresponding *de jure* figure.

For recent years, there are official analyses of the composition and utilization of the « labour force », based on periodical sample surveys; these can be carried back to 1950 by using SVIMEZ estimates based on the same definitions. The resulting picture is shown in table 13.

It has to be pointed out that the estimates of « labour force » do not move in line with the census figures of « active population »: from 1951 to 1961 the former increases by 407,000, while the latter decreases by 58,000. After allowing for differences in definition, there seems to be some inconsistency on this point, and research for clearing it up is under way. The margin of error, however, cannot be so large as to affect the following conclusions:

- the number of person working or willing to work did not change substantially in the 1951-1961 period (the average yearly change, if any, was in the range of ± 2 per thousand);

- there were considerable changes in the percentages of

(22) Meanwhile let me point to the estimates published by A. MADDISON, *Economic growth in the West*, Twentieth Century Fund, New York 1964.

labour supply unemployed, casually employed, and regularly employed, and these are shown with sufficient approximation by table 13.

3. CAPITAL.

3.1. *Saving.*

As regards capital formation, from the aspect of sources of finance ISTAT makes from 1861 to today only a distinction between the three items « net saving », « depreciation » and « net borrowing from the rest of the world ».

From 1955 onwards, however, the consolidated accounts of central and local government published in the *Relazione Generale* show gross saving by the government sector (23).

We have tried to make a similar calculation for all years from 1861 (table 18) based on an analysis of the original accounts (unfortunately drawn up according to administrative and not economic classifications) of central and local government and of social security institutions — an analysis which was necessarily rather rough. It was, however, cheering to find that the results obtained by this rough analysis for recent years did not differ very much from those obtained for these years on the basis of the consolidated accounts (economic classification) in the *Relazione Generale*.

3.2. *Investment and stock of capital.*

The figures of investment used in this booklet are those of ISTAT. While from 1950 onwards ISTAT has published a more

(23) Some difficulties due to changes in the limits of the concept of government sector in successive issues of the *Relazione Generale* can be overcome as shown in my article *Influenza del bilancio pubblico* mentioned above.

detailed break-down of investment by type of asset than I am showing in table 22, for the previous period official statistics distinguish only four types, one of which is « plant and equipment ». In table 21 « equipment » has been separated from firms' buildings by assuming (a rather crude assumption indeed) that the latter were always 28.7 % of the total value of plant and equipment, as found in recent years (24).

As regards the stock of capital, there are so far no official figures. There is, however, a number of estimates made by various experts by different methods for individual pre-war years (25). Starting from some of these and applying the perpetual inventory method and also taking into account capital gains and losses (mainly war damage), B. Barberi reconstructed a series of firms' capital (including land) net of depreciation from 1874 onwards; for recent years he also used the capitalization of income method (26). Barberi's estimates have been supplemented by A. Giannone (*op. cit.*) for the years 1938 and 1961 only, to take account of stocks, government's assets, and consumers' durables and semi-durables; and by C. Righi in an unpublished paper showing reproducible fixed capital from 1900 to 1961.

A weak point in Barberi-Giannone-Righi estimates is their dependance on, or at least their consistency with, ISTAT depreciation figures. If all the valuations of depreciation are purely conventional, that of ISTAT is more questionable than others, and seems to be overstated, at least as concerns recent years (27).

(24) A revised estimate will be published soon.

(25) There is a good review of these in F. COPPOLA D'ANNA, *Popolazione reddito e finanze pubbliche dell'Italia dal 1860 ad oggi*, Rome 1946 (pp. 43-53) and in A. GIANNONE, *Valutazioni della ricchezza nazionale italiana negli ultimi cinquant'anni*, Moneta e credito, March 1964.

(26) B. BARBERI, *Aspetti statistici nelle teorie dello sviluppo economico*, L'industria, 1960, n. 3, especially pp. 334-345; idem, *Aspetti dinamici e strutturali di un secolo di sviluppo economico dell'Italia*, in A. FANFANI and others, *L'economia italiana dal 1861 al 1961*, Milan 1961, especially pp. 675-683; Istituto Centrale di Statistica, *Cento anni di sviluppo economico e sociale dell'Italia (1861-1961)*, Rome, pp. 29-35.

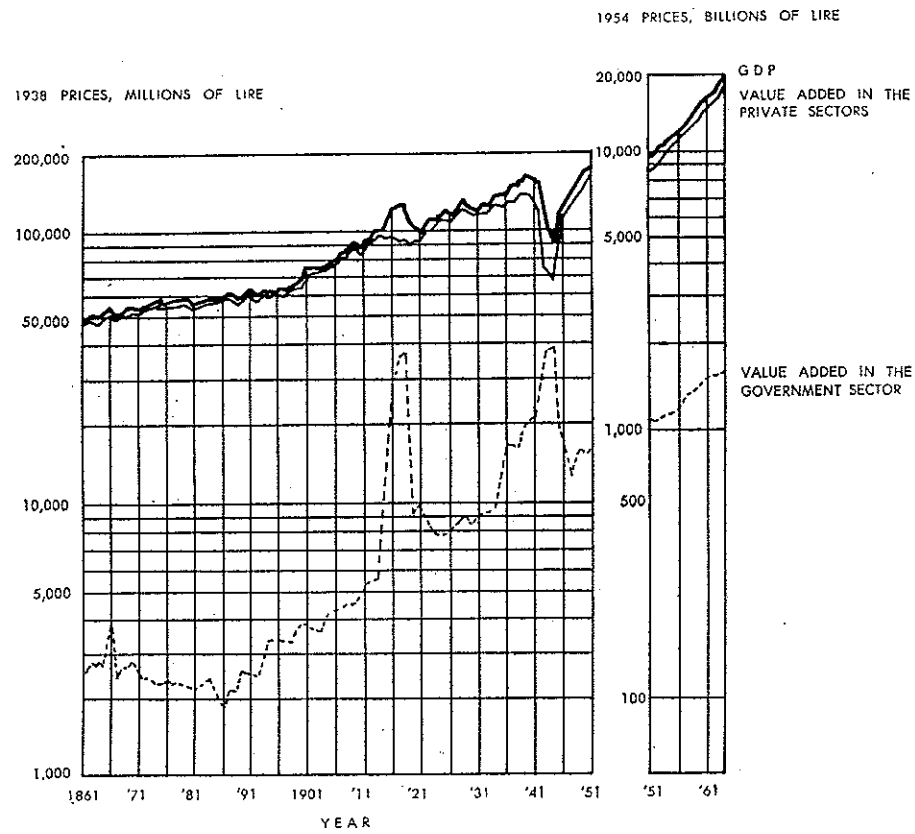
(27) The ratio of depreciation to GNP as shown in OECD national accounts for 1955-1962 is one tenth higher in Italy than in

We are therefore working at a new estimate of depreciation, and of capital stock. As a first step, tables 21 and 22 show a provisional series of the stock of equipment net of retirements, calculated by taking gross annual investment in equipment as shown in the same tables, and by assuming that each piece of equipment is scrapped after 15 years. Account has been taken of advanced retirements due to the destruction caused by the second world war, which were estimated at 20 billions lire (1938 prices) (28), of which one sixth in 1942, one third in 1943, the same in 1944, and one sixth in 1945. Destruction caused by the first world war was considered negligible.

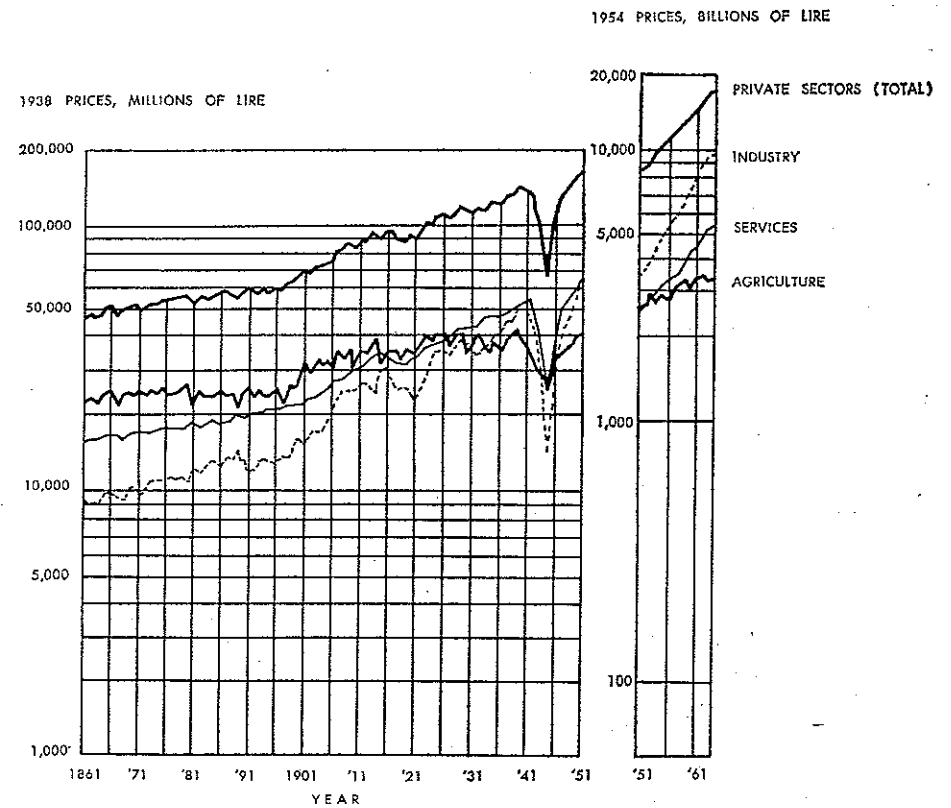
European member countries combined, which contrasts with current opinion about comparative capital intensity and comparative capital structure.

(28) This figure is consistent with the estimates given in the official document *Lo sviluppo dell'economia italiana nel quadro della ricostruzione e della cooperazione europea* issued by Comitato Interministeriale per la Ricostruzione, Rome 1952 (pp. 3 et seq.), according to which aggregate losses of « plant and equipment » were 30 millions lire.

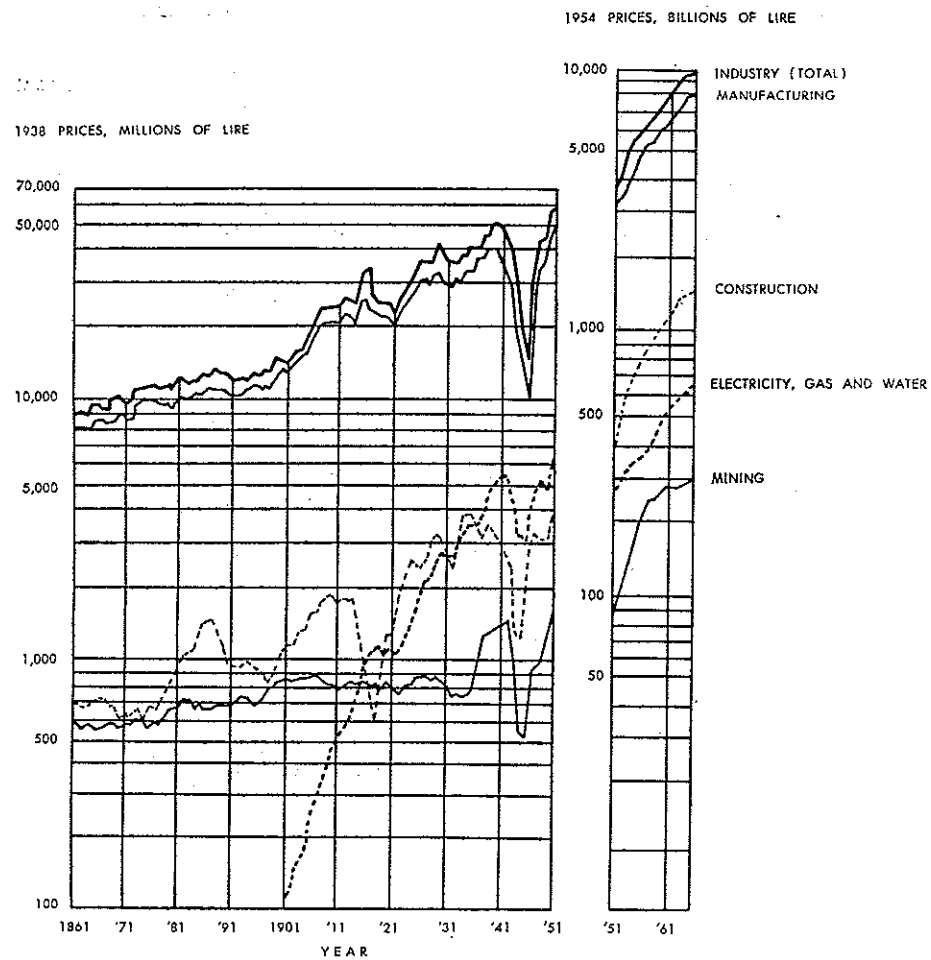
A - GROSS DOMESTIC PRODUCT (OECD definition)



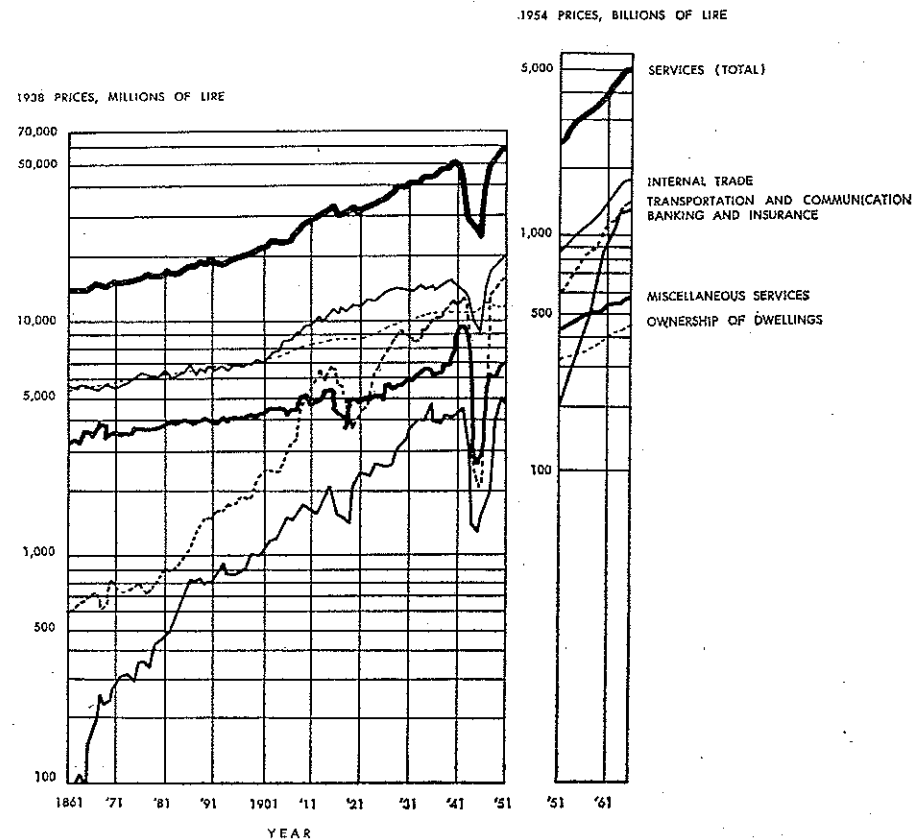
B - VALUE ADDED IN PRIVATE SECTORS



C - VALUE ADDED IN INDUSTRY



D - VALUE ADDED IN SERVICES



1. Value added at 1938 prices, 11 sectors, 1861-1952. New valuation.
millions of lire

Year	Agri- culture forestry and fishing	Industry				Private services					Govern- ment	Total value added (without adjust- ments)
		Mining	Manu- facturing	Con- struction	Electri- city, gas and water	Transport- ation and commu- nication	Internal trade	Banking and insurance	Miscel- laneous	Owner- ship of dwellings		
1861	22,919	605	7,858	696	6	587	5,674	61	3,275	5,452	2,532	49,665
1862	23,718	535	7,858	681	6	618	5,609	79	3,337	5,486	2,808	50,735
1863	23,832	554	7,858	674	6	670	5,626	115	3,266	5,519	2,750	49,870
1864	23,760	528	7,858	687	9	690	5,638	94	3,520	5,553	2,846	51,203
1865	25,103	539	8,606	722	9	721	5,690	169	3,545	5,587	2,776	53,467
1866	25,894	548	8,606	718	12	711	5,722	187	3,770	5,621	4,051	55,840
1867	22,850	562	8,232	677	12	587	5,642	207	3,978	5,688	2,647	51,082
1868	24,795	560	8,232	662	15	618	5,401	268	3,847	5,722	2,744	52,864
1869	22,533	557	8,980	659	15	783	5,545	245	3,340	5,767	2,744	53,968
1870	25,097	541	9,354	558	18	834	5,722	254	3,521	5,801	2,923	54,623
1871	25,504	553	8,606	627	17	742	5,626	292	3,625	5,846	2,744	54,182
1872	24,848	573	8,980	614	19	721	5,770	306	3,571	5,880	2,422	53,704
1873	26,033	604	9,728	665	21	731	5,802	311	3,577	5,914	2,445	55,831
1874	25,485	587	10,103	589	22	773	6,076	299	3,588	5,947	2,346	55,815
1875	26,617	559	10,103	668	24	803	6,140	353	3,776	5,981	2,325	57,349
1876	25,740	591	10,103	652	26	773	6,317	358	3,748	6,015	2,366	56,689
1877	25,703	589	10,103	700	27	711	6,413	348	3,749	6,049	2,233	56,625
1878	26,141	609	9,728	756	28	793	6,285	385	3,833	6,105	2,170	58,833
1879	26,629	651	9,728	810	28	824	6,156	427	3,873	6,206	2,170	57,446
1880	27,854	648	9,354	882	30	886	5,947	450	3,873	6,274	2,143	58,273
1881	23,143	666	10,477	945	31	906	6,622	482	3,887	6,330	2,114	58,547
1882	26,592	700	10,103	1,021	34	906	6,011	497	3,938	6,330	2,215	58,347
1883	25,328	701	10,477	1,071	35	927	6,268	545	3,980	6,398	2,274	58,014
1884	25,206	679	10,851	1,156	39	979	6,397	632	4,046	6,454	2,350	58,719
1885	25,034	684	11,225	1,279	39	1,061	6,847	707	4,074	6,533	1,941	59,424
1886	26,801	657	10,851	1,355	38	1,082	6,381	767	3,970	6,612	1,975	60,489
1887	25,650	647	11,599	1,396	42	1,246	6,686	847	4,000	6,680	2,072	60,865
1888	25,256	665	11,225	1,301	43	1,349	6,510	833	4,074	6,747	2,239	60,242
1889	22,917	664	11,225	1,182	45	1,411	6,879	849	4,072	6,792	2,285	58,321
1890	26,813	666	11,225	1,011	52	1,422	6,895	818	4,079	6,849	2,590	62,420
1891	28,280	688	10,477	942	53	1,483	6,783	836	3,991	6,905	2,540	62,978

1 (continued). Value added at 1938 prices, 11 sectors, 1861-1952. New valuation.
millions of lire

Year	Agri- culture, forestry and fishing	Industry				Private services					Govern- ment	Total value added (without adjust- ments)
		Mining	Manu- facturing	Con- struction	Electri- city, gas and water	Transport- ation and commu- nication	Internal trade	Banking and insurance	Miscel- laneous	Own- ership of dwellings		
1892	25,206	728	10,477	942	53	1,566	6,944	863	4,009	6,950	2,515	60,553
1893	27,553	722	10,477	993	59	1,576	6,670	962	4,063	6,995	2,540	62,610
1894	25,503	712	11,225	974	59	1,669	6,911	872	4,058	7,040	2,843	61,866
1895	25,782	684	11,599	936	53	1,669	7,040	852	4,093	7,085	3,358	63,151
1896	27,159	722	11,225	895	64	1,803	7,008	869	4,025	7,141	3,389	64,300
1897	23,943	781	11,599	841	73	1,772	7,265	890	4,059	7,198	3,301	61,722
1898	27,848	790	11,599	854	77	1,998	6,976	957	4,083	7,254	3,352	65,737
1899	27,222	834	12,348	942	90	2,174	7,217	1,022	4,177	7,322	3,332	66,642
1900	29,341	829	13,844	942	96	2,277	7,410	1,016	4,139	7,389	3,813	71,210
1901	32,978	844	13,470	1,119	115	2,400	7,233	1,042	4,286	7,479	3,912	74,858
1902	29,881	831	14,593	1,112	135	2,493	7,779	1,124	4,460	7,558	3,802	73,788
1903	31,904	861	14,967	1,204	163	2,472	7,844	1,160	4,452	7,637	3,678	76,342
1904	30,912	875	15,341	1,257	177	2,586	8,069	1,238	4,462	7,738	3,754	79,045
1905	31,478	890	16,089	1,443	192	2,843	8,278	1,340	4,505	7,840	4,147	79,045
1906	30,690	860	17,586	1,727	238	3,235	8,712	1,409	4,271	7,941	4,228	80,717
1907	35,961	837	19,457	1,727	304	3,286	8,921	1,502	4,484	8,042	4,265	88,786
1908	33,302	814	19,457	1,790	334	3,647	9,483	1,554	4,613	8,144	4,408	88,688
1909	36,711	799	20,579	1,818	395	4,738	9,483	1,688	5,255	8,234	4,468	94,158
1910	30,971	800	20,579	1,906	452	5,006	9,737	1,792	5,230	8,324	4,696	99,480
1911	35,460	788	20,954	1,875	522	5,624	9,837	1,793	4,759	8,392	5,071	94,590
1912	34,291	814	22,450	1,875	580	6,170	10,367	1,751	4,943	8,459	5,462	101,570
1913	38,448	822	22,076	1,862	623	6,706	10,662	1,786	5,148	8,549	5,588	100,994
1914	35,221	810	20,954	1,875	739	5,913	10,480	2,131	5,443	8,628	5,388	100,994
1915	32,144	848	20,954	1,875	841	6,513	11,139	1,902	5,553	8,673	5,462	113,264
1916	34,545	832	27,689	1,875	841	6,513	11,139	1,902	5,553	8,673	5,462	113,264
1917	34,412	812	24,321	1,875	712	6,913	10,978	1,701	4,938	8,696	5,707	124,939
1918	35,222	821	27,689	1,875	585	5,707	10,978	1,659	3,952	8,707	5,707	128,557
1919	32,911	774	22,824	1,418	1,066	5,393	11,508	1,596	3,586	8,707	5,707	128,557
1920	35,048	834	22,076	1,418	1,106	5,313	11,531	2,066	5,125	8,730	5,707	130,081
1921	34,252	765	20,205	1,386	1,075	4,316	12,167	2,179	5,069	8,763	9,516	102,265
1922	36,325	711	22,824	1,809	1,154	4,862	12,553	2,463	4,917	8,808	10,259	100,388
											9,253	103,941

1 (continued). Value added at 1938 prices, II sectors, 1861-1952. New valuation.

millions of lire

Year	Agri- culture, forestry and fishing	Industry				Private services					Govern- ment	Total value added (without adjust- ments)
		Mining	Manu- facturing	Con- struction	Electri- city, gas and water	Transport- ation and communi- cation	Internal trade	Banking and insurance	Miscel- laneous	Owner- ship of dwellings		
1923	39,673	808	24,695	2,121	1,345	5,923	12,838	2,417	5,094	8,955	8,365	112,254
1924	37,874	818	27,314	2,366	1,531	6,366	12,939	2,565	5,136	9,068	7,959	113,936
1925	40,261	869	31,056	2,596	1,810	6,747	13,389	2,622	5,162	9,203	7,831	121,546
1926	40,361	879	31,056	2,650	2,097	7,025	13,726	2,530	5,010	9,327	8,045	121,546
1927	36,730	877	29,934	2,577	2,177	7,726	14,353	2,657	5,612	9,417	8,222	120,706
1928	39,830	850	32,927	2,675	2,407	8,395	14,578	2,907	5,673	9,518	8,350	123,610
1929	41,332	887	33,675	3,047	2,596	8,900	14,835	3,080	5,485	9,676	8,275	132,788
1930	36,795	869	31,804	3,176	2,806	8,467	14,868	3,268	5,625	9,856	8,576	126,110
1931	38,222	800	28,811	2,804	2,729	8,066	14,273	3,775	6,120	10,014	9,151	124,765
1932	41,735	750	28,811	2,606	2,754	7,633	15,109	3,999	6,128	10,149	9,330	128,392
1933	37,663	760	30,682	2,804	3,002	7,643	15,109	4,461	6,760	10,284	9,516	127,911
1934	35,707	752	29,934	3,179	3,231	9,281	14,884	4,740	6,759	10,464	9,885	128,453
1935	35,908	772	32,179	3,885	3,579	9,333	14,980	3,926	6,447	10,712	13,885	139,647
1936	35,298	834	32,179	3,885	3,602	10,280	14,755	3,969	6,118	10,949	17,661	149,963
1937	35,780	997	37,417	3,507	3,817	10,270	15,510	3,969	6,118	11,129	17,449	149,963
1938	40,138	1,120	37,417	3,151	4,057	10,303	16,073	4,035	6,208	11,264	17,449	149,963
1939	42,110	1,192	40,785	3,498	4,833	11,959	16,250	4,142	6,845	11,308	18,611	151,091
1940	39,735	1,205	41,159	3,375	5,224	12,825	16,411	4,134	7,061	11,478	18,611	151,091
1941	38,259	1,245	38,540	3,301	5,222	12,093	15,366	4,453	7,889	11,501	20,094	162,701
1942	34,068	1,309	33,301	2,707	4,440	14,267	14,530	4,791	10,251	11,512	20,942	160,909
1943	29,639	1,017	25,818	2,067	4,484	6,933	12,312	3,567	8,082	11,444	26,423	158,588
1944	28,607	569	15,715	1,207	3,187	2,606	9,113	1,497	2,782	11,343	38,176	143,539
1945	26,960	539	10,851	1,125	3,108	2,091	9,113	1,048	2,589	11,354	22,816	116,894
1946	33,140	747	26,566	2,866	4,384	4,429	12,569	1,822	3,967	12,300	91,594	119,918
1947	35,053	963	34,049	3,368	5,079	14,071	15,462	2,157	5,814	11,816	17,108	140,610
1948	38,409	1,014	36,294	3,176	5,377	14,679	17,166	2,975	6,131	11,636	14,778	149,247
1949	39,845	1,193	40,036	3,186	4,888	15,153	18,404	4,106	6,083	11,636	16,777	159,871
1950	39,845	1,392	46,023	3,598	5,755	16,760	19,384	5,151	6,888	11,737	16,477	173,010
1951	42,404	1,671	52,384	3,932	6,860	17,306	20,202	5,863	7,105	11,895	17,571	185,210
1952	42,213	2,037	54,255	4,547	7,279	18,140	21,216	5,603	7,429	12,075	17,526	192,320

2. Value added at 1954 prices, II sectors, 1950-1964. Revision of ISTAT valuation.

millions of lire

Year	Agri- culture, forestry and fishing	Industry				Private services					Govern- ment	Total value added (without adjust- ments)
		Mining	Manu- facturing	Con- struction	Electri- city, gas and water	Transport- ation and communi- cation	Internal trade	Banking and insurance	Miscel- laneous	Owner- ship of dwellings		
1950	2,391	67	2,452	284	230	546	820	199	427	317	1,037	8,770
1951	2,502	82	2,802	353	269	598	861	213	433	321	1,067	9,501
1952	2,551	99	2,872	451	282	628	903	257	441	325	1,054	9,863
1953	2,848	117	3,153	556	298	676	974	302	454	329	1,085	10,792
1954	2,666	132	3,503	632	320	713	1,011	348	465	335	1,120	11,245
1955	2,830	158	3,818	700	339	768	1,048	394	475	342	1,151	12,023
1956	2,782	206	4,063	731	355	814	1,102	444	485	349	1,183	12,514
1957	2,774	231	4,344	822	368	851	1,156	481	494	359	1,245	13,125
1958	3,134	237	4,508	882	401	878	1,183	528	502	368	1,365	13,986
1959	3,217	253	5,041	968	430	913	1,257	619	514	377	1,392	14,981
1960	3,055	267	5,755	1,012	484	1,002	1,360	741	538	386	1,462	16,062
1961	3,281	284	6,336	1,108	534	1,079	1,474	876	552	395	1,558	17,477
1962	3,320	278	6,894	1,202	566	1,162	1,601	1,028	560	405	1,559	18,575
1963	3,262	272	7,549	1,310	620	1,253	1,769	1,123	568	416	1,579	19,721
1964	3,268	289	7,617	1,359	658	1,293	1,831	1,217	586	430	1,630	20,178

3. GDP and other aggregates at 1938 prices, 1861-1952. Comparison of new valuation with ISTAT's original valuation.

millions of lire

Year	Total value added	Adjustments		Depreciation (1)		Net factor income from abroad	Net transfers from abroad	Indirect taxes	GDP at market prices (OECD definition)	NNI at factor cost (OECD definition)	NNI at market prices (new valuation according to ISTAT definition)	NNI at market prices (original valuation)
		Banking services	General services provided by government to enterprises	Private sector	Government sector							
1861	49,665	61	2,583	2,105	50	307	6	2,703	52,307	47,142	47,262	47,408
1862	50,735	79	2,856	2,188	61	423	6	2,834	53,490	47,984	47,982	49,078
1863	49,870	109	2,778	2,132	61	510	6	3,022	52,783	47,058	47,302	47,934
1864	51,203	94	2,874	2,213	60	588	6	3,777	54,886	48,248	49,151	49,134
1865	53,467	157	2,832	2,286	60	729	14	4,791	58,101	50,368	52,327	50,673
1866	55,840	170	4,132	2,449	81	729	12	4,997	60,667	52,411	53,276	52,732
1867	51,082	190	2,700	2,270	53	2,323	11	3,108	54,000	47,851	48,259	49,079
1868	52,864	247	2,799	2,332	56	2,388	15	3,556	56,173	49,551	50,308	50,390
1869	53,968	218	2,799	2,478	60	2,538	19	3,524	57,274	50,531	51,256	51,816
1870	54,623	226	2,981	2,472	61	2,533	18	3,315	57,712	51,282	51,616	51,662
1871	54,182	260	2,799	2,623	58	2,681	16	3,475	57,997	50,588	51,264	52,292
1872	53,704	275	2,470	2,600	52	2,632	15	3,112	56,541	50,290	50,932	52,002
1873	55,831	272	2,469	2,782	50	2,832	18	2,872	58,425	52,456	52,839	54,250
1874	57,349	311	2,393	2,703	49	2,787	18	3,004	58,547	52,602	53,213	53,154
1875	56,689	318	2,413	2,705	49	2,794	26	3,841	60,879	54,237	55,706	55,317
1876	56,635	306	2,278	2,836	55	2,891	27	3,915	60,286	53,572	55,074	54,964
1877	57,446	376	2,213	2,870	53	2,862	28	3,844	60,083	53,270	54,756	55,179
1878	58,273	396	2,079	2,990	53	2,923	29	3,793	61,070	53,436	55,067	55,615
1879	55,347	419	1,945	2,924	61	2,985	31	4,037	59,440	54,607	55,715	57,777
1880	58,347	437	2,038	3,138	62	3,200	39	4,312	59,440	54,607	55,715	57,851
1881	58,347	437	2,038	3,138	62	3,200	38	4,208	62,118	54,212	54,212	54,557
1882	58,014	480	2,092	3,156	70	3,226	46	4,471	62,005	54,020	56,309	56,798
1883	58,014	480	2,092	3,156	70	3,226	46	4,471	62,005	54,020	56,309	56,798
1884	58,789	544	2,162	3,224	71	3,295	42	4,994	63,239	54,559	57,391	57,328

(1) ISTAT's original valuation. We intend to publish a revised valuation soon.

3 (continued). GDP and other aggregates at 1938 prices, 1861-1952. Comparison of new valuation with ISTAT's original valuation.

millions of lire

Year	Total value added	Adjustments		Depreciation (1)		Net factor income from abroad	Net transfers from abroad	Indirect taxes	GDP at market prices (OECD definition)	NNI at factor cost (OECD definition)	NNI at market prices (new valuation according to ISTAT definition)	NNI at market prices (original valuation)
		Banking services	General services provided by government to enterprises	Private sector	Government sector							
1885	59,424	601	2,193	3,301	59	3,360	40	4,891	63,714	54,982	57,680	57,258
1886	60,489	644	2,133	3,559	61	3,620	45	4,711	64,556	55,739	58,317	59,223
1887	60,865	703	2,238	3,395	64	3,659	55	5,356	65,518	55,785	58,903	58,795
1888	60,242	691	2,418	3,555	69	3,542	60	5,640	65,191	55,216	58,438	58,612
1889	58,321	713	2,491	3,469	73	3,698	56	5,345	62,953	53,828	56,682	56,169
1890	62,420	671	2,331	3,619	79	3,763	61	4,950	66,699	57,753	60,372	60,200
1891	62,978	686	2,235	3,688	75	3,667	165	4,646	66,938	58,454	60,865	61,896
1892	60,553	699	2,213	3,589	78	3,725	168	4,802	64,656	56,012	58,601	58,909
1893	62,610	779	2,261	3,687	85	3,722	159	4,809	66,312	57,242	60,394	60,805
1894	61,866	706	2,502	3,637	85	3,811	145	5,152	67,637	58,721	61,345	61,423
1895	63,151	690	2,576	3,803	90	3,893	167	5,483	69,079	59,961	61,345	62,480
1896	64,300	704	2,542	3,594	82	3,676	184	5,291	69,906	57,785	60,534	60,139
1897	61,722	775	2,509	3,890	79	3,915	202	4,944	69,906	57,785	60,534	60,139
1898	65,737	818	2,566	3,890	79	3,915	240	5,133	70,957	62,786	64,227	64,752
1899	71,210	803	2,856	4,111	96	4,207	251	5,539	75,946	67,392	70,148	65,575
1900	74,858	823	2,775	4,484	98	4,582	379	5,770	79,805	71,574	74,488	68,942
1901	73,788	877	2,685	4,633	102	4,737	411	5,908	79,136	70,253	73,703	71,570
1902	76,342	905	2,775	4,794	103	4,897	395	5,908	81,345	72,425	75,648	74,554
1903	76,342	905	2,775	4,794	103	4,897	390	5,912	81,345	72,425	75,648	74,554
1904	76,490	969	2,740	4,912	110	5,022	572	6,477	84,490	76,104	79,037	78,051
1905	79,045	1,032	2,944	5,026	116	5,142	587	6,477	84,490	76,104	79,037	78,051
1906	80,717	1,085	2,960	5,325	113	5,438	587	7,007	86,639	77,653	81,700	79,159

(1) ISTAT's original valuation. We intend to publish a revised valuation soon.

3 (continued). GDP and other aggregates at 1938 prices, 1861-1952. Comparison of new valuation with ISTAT's original valuation.

millions of lire

Year	Total value added	Adjustments		Depreciation (1)			Net factor income from abroad	Indirect taxes	GDP at market prices (OECD definition)	NNI at factor cost (OECD definition)	NNI at market prices (new valuation according to ISTAT definition)	NNI at market prices (ISTAT's original valuation)
		Banking services	General services provided by government to enterprises	Private sector	Government sector	Total						
1907	88,786	1,156	2,986	5,952	105	6,057	2,811	6,365	93,995	84,384	87,763	86,869
1908	88,688	1,197	3,130	5,972	113	6,085	2,489	7,072	94,563	83,893	87,837	83,893
1909	84,168	1,300	3,172	6,291	113	6,406	2,164	7,246	100,114	83,626	92,700	89,503
1910	89,480	1,362	3,475	6,245	135	6,380	2,708	7,576	95,694	84,446	93,547	83,680
1911	94,990	1,361	4,108	6,574	142	6,716	2,743	7,139	101,768	89,656	93,687	90,376
1912	97,192	1,349	4,489	6,888	149	7,037	2,604	7,936	103,779	91,410	94,857	91,469
1913	101,670	1,411	4,526	7,129	151	7,280	2,906	8,257	108,516	95,885	99,616	94,608
1914	100,994	1,662	6,776	6,968	237	7,205	1,860	7,480	106,812	93,987	94,691	92,033
1915	113,264	1,465	15,387	7,431	361	7,792	362	7,543	119,342	104,369	96,325	93,216
1916	124,939	1,293	28,192	7,432	401	7,833	148	9,804	133,450	115,961	97,573	94,728
1917	128,557	1,225	40,505	6,727	354	7,081	55	10,026	137,358	120,306	89,827	91,559
1918	130,081	1,149	54,108	6,337	335	6,672	407	9,252	138,184	121,853	76,997	89,454
1919	110,330	1,529	34,553	6,686	234	6,920	2,017	8,943	117,744	103,898	78,288	89,445
1920	102,265	1,612	16,938	6,958	122	7,080	2,672	8,609	109,262	96,245	87,916	83,956
1921	105,388	1,789	13,417	7,014	145	7,161	1,886	8,197	113,159	98,287	83,877	102,709
1922	112,254	1,764	8,867	7,207	138	8,345	1,750	9,007	120,343	103,927	104,913	107,796
1923	113,936	1,847	7,800	8,552	135	8,687	1,920	9,853	122,502	103,322	107,935	108,622
1924	121,546	1,888	7,361	9,587	126	9,273	2,127	8,903	128,561	112,062	113,406	114,419
1925	122,706	1,822	6,919	9,708	124	9,832	2,091	9,182	130,066	113,143	115,406	115,272
1926	120,232	1,913	6,989	9,987	145	10,132	1,396	12,156	130,475	109,583	114,750	113,904
1927	128,610	2,064	6,903	11,092	172	11,264	1,505	12,498	139,044	116,787	122,382	112,390
1928	132,788	2,125	6,864	11,575	189	11,764	1,589	12,692	143,355	120,488	126,316	124,621

(1) ISTAT's original valuation. We intend to publish a revised valuation soon.

3 (continued). GDP and other aggregates at 1938 prices, 1861-1952. Comparison of new valuation with ISTAT's original valuation.

millions of lire

Year	Total value added	Adjustments		Depreciation (1)			Net factor income from abroad	Indirect taxes	GDP at market prices (OECD definition)	NNI at factor cost (OECD definition)	NNI at market prices (new valuation according to ISTAT definition)	NNI at market prices (ISTAT's original valuation)
		Banking services	General services provided by government to enterprises	Private sector	Government sector	Total						
1930	126,110	2,255	6,432	11,501	203	11,704	1,760	13,894	137,749	113,911	121,373	116,024
1931	124,765	2,529	7,321	10,942	217	11,159	1,749	15,877	138,113	111,826	120,382	116,019
1932	128,392	2,730	7,464	11,525	246	11,771	400	16,006	141,668	114,291	122,833	120,575
1933	127,911	2,720	7,708	11,850	263	12,113	33	16,114	141,305	113,111	121,517	119,369
1934	128,453	2,989	7,840	12,206	266	12,472	339	16,217	141,681	113,112	121,489	118,523
1935	139,647	3,176	9,303	13,533	367	13,900	18	15,916	152,673	123,589	129,202	129,672
1936	139,816	2,630	12,539	13,657	447	14,104	346	15,487	153,117	123,186	126,134	128,280
1937	149,963	2,659	12,563	14,105	421	14,547	458	15,813	165,053	133,173	137,877	137,995
1938	151,001	2,700	12,842	14,479	421	14,900	228	16,752	165,053	133,173	137,877	137,995
1939	161,613	3,024	12,842	14,702	483	16,185	52	18,201	176,790	142,291	147,650	146,115
1940	160,909	2,935	13,463	15,166	480	16,185	113	15,274	175,040	142,291	147,650	146,115
1941	158,588	3,066	13,822	14,855	521	15,376	—	15,770	173,617	142,471	144,419	135,140
1942	143,539	2,283	25,578	10,812	674	11,486	—	14,235	169,757	140,926	137,722	139,852
1943	143,539	2,283	25,578	10,812	674	11,486	—	14,235	169,757	140,926	137,722	139,852
1944	116,894	952	25,401	6,147	442	6,589	—	4,637	150,766	129,770	138,589	88,729
1945	91,594	671	14,602	4,842	215	5,057	—	5,374	96,297	83,866	70,638	71,509
1946	119,918	1,385	11,120	10,210	155	10,365	—	7,624	126,157	108,168	104,672	111,836
1947	140,610	1,726	7,795	13,576	92	13,668	142	10,472	149,356	125,358	128,035	127,235
1948	149,247	2,290	7,918	13,676	156	13,832	284	15,622	162,579	133,409	141,113	135,029
1949	159,871	3,161	8,859	14,443	235	14,678	292	20,044	176,574	142,324	153,509	145,021
1950	173,010	4,069	15,680	15,680	328	16,008	263	22,558	191,499	153,186	171,295	154,705
1951	186,210	3,743	5,974	17,064	412	17,476	267	25,073	207,540	165,258	184,357	164,983
1952	197,320	4,258	7,186	17,453	437	17,870	380	26,663	214,725	170,572	190,049	168,120

(1) ISTAT's original valuation. We intend to publish a revised valuation soon.

4. GDP and other aggregates at 1954 prices, 1950-1964. Comparison of revised valuation with ISTAT's original valuation.
millions of lire

Year	Total value added	Adjustments		Depreciation (1)		Net factor income from abroad	Indirect taxes	GDP at market prices (OECD definition)	NNI at factor cost (OECD definition)	NNI at market prices (new valuation according to ISTAT definition)	NNI at market prices (ISTAT's original valuation)
		Banking services	General services provided by government to enterprises	Private sector	Government sector	Total					
1950	8,770	131	231	917	19	936	1,341	9,980	7,717	8,827	8,879
1951	9,501	134	298	1,002	24	1,026	1,362	10,729	8,532	9,416	9,485
1952	9,863	180	392	1,035	26	1,061	1,381	11,064	8,638	9,627	9,658
1953	10,792	228	391	1,093	27	1,120	1,265	11,829	9,472	10,346	10,360
1954	11,245	283	461	1,150	29	1,179	1,506	12,468	9,803	10,848	10,848
1955	12,023	319	445	1,242	30	1,272	1,598	13,302	10,448	11,601	11,588
1956	12,514	406	419	1,325	32	1,357	1,680	13,788	10,779	12,040	12,056
1957	13,125	478	420	1,400	33	1,433	1,968	14,615	11,267	12,815	12,847
1958	13,986	542	489	1,459	34	1,493	1,833	15,277	12,006	13,350	13,389
1959	14,981	626	436	1,574	36	1,610	2,036	16,391	12,825	14,425	14,478
1960	16,062	758	345	1,720	37	1,757	2,145	17,449	13,662	15,422	15,501
1961	17,477	901	454	1,864	40	1,904	2,446	19,022	14,759	16,751	16,844
1962	18,575	1,049	410	1,969	44	2,013	3,434	20,960	15,614	18,638	18,716
1963	19,721	1,136	479	2,097	47	2,144	3,515	22,100	16,538	19,574	19,636
1964	20,178	1,178	436	2,147	48	2,195	3,708	22,708	16,933	20,205	20,228

(1) ISTAT's original valuation. We intend to publish a revised valuation soon.

5. Implicit price indices (1), 10 private sectors, 1961-1952. New valuation.

Year	Agri- culture, forestry and fishing	Industry				Private services					Gross private product (after adjustment for banking services)
		Mining	Manu- facturing	Con- struction	Electric- ity, gas and water	Transport- ation and communi- cation	Internal trade	Banking and insurance	Miscel- laneous	Owner- ship of dwellings	
1961	18.61	5.45	16.25	26.15	83.33	16.52	8.20	19.67	18.90	7.78	15.65
1962	19.42	5.98	15.79	26.38	100.00	17.80	8.50	18.99	19.00	7.75	16.12
1963	17.84	6.50	13.21	25.37	100.00	17.46	8.02	18.26	18.40	7.74	15.06
1964	17.34	6.25	15.50	25.62	77.78	17.54	8.36	18.09	17.90	7.71	14.93
1965	16.68	6.31	14.91	25.07	77.78	18.17	8.24	17.75	17.60	7.70	14.54
1966	17.53	7.30	16.38	27.02	66.67	20.68	10.22	18.18	17.80	8.38	15.63
1967	19.26	8.01	16.68	28.21	75.00	27.43	11.17	18.36	18.20	8.38	16.49
1968	21.09	9.46	16.57	29.00	66.67	27.67	11.79	18.36	19.00	7.35	17.66
1969	19.97	9.87	16.43	26.25	66.67	23.88	10.01	18.78	19.40	7.16	16.80
1970	19.53	9.43	15.85	25.93	61.11	23.02	10.38	18.90	19.40	7.79	16.55
1971	19.94	9.22	16.22	29.03	70.59	23.44	12.51	19.52	20.00	7.61	17.23
1972	23.12	9.60	17.58	32.08	68.42	33.43	13.57	21.57	22.60	7.50	19.35
1973	26.00	10.93	18.70	31.53	66.67	33.43	13.57	21.57	23.90	7.61	19.35
1974	24.78	12.44	16.88	34.13	68.18	35.29	14.32	22.83	24.50	7.62	20.22
1975	19.23	11.99	16.22	29.79	66.67	32.00	12.54	20.11	21.00	7.69	17.05
1976	19.75	11.51	16.16	28.07	65.38	34.38	12.74	20.39	22.20	7.86	17.34
1977	22.98	11.21	18.26	29.29	66.67	37.27	13.05	22.13	23.10	8.40	19.47
1978	21.23	11.00	17.08	28.57	67.86	33.42	13.11	21.30	22.20	8.40	18.36
1979	20.47	11.37	15.47	27.28	67.86	33.98	13.40	20.61	22.00	8.62	18.36
1980	21.51	13.12	15.63	29.82	66.67	34.20	14.38	21.11	22.80	8.80	17.79
1981	20.74	13.66	15.12	29.52	67.74	34.88	12.47	19.71	21.30	8.99	17.58
1982	20.90	13.43	15.81	29.19	64.71	34.66	12.59	19.72	20.10	9.35	18.16
1983	19.61	14.27	14.55	28.29	65.71	35.81	12.73	18.72	20.80	9.54	16.59
1984	18.84	13.25	13.88	27.77	64.10	35.44	12.43	18.20	19.70	9.72	17.69
1985	20.95	12.13	13.88	29.16	66.67	33.74	11.99	18.81	20.20	9.94	18.14
1986	20.91	11.42	15.57	28.41	71.05	34.38	12.95	18.90	20.10	10.07	16.62
1987	18.64	10.82	14.08	26.58	71.43	32.18	12.95	18.30	20.40	10.23	16.61
1988	18.46	10.83	13.81	26.59	72.09	30.69	13.26	18.61	20.70	10.31	17.40
1989	20.20	10.99	14.90	27.24	75.56	29.70	13.65	19.20	21.40	10.34	17.85
1990	20.45	13.36	15.10	28.78	69.23	29.11	14.34	19.50	21.40	10.33	18.58
1991	21.68	14.68	14.97	29.19	75.47	27.92	14.34	19.50	21.40	10.33	18.58

(1) Ratio of value added at constant prices (table 1) to value added at current prices (ISTAT).

5 (continued). *Implicit price indices (1), 10 private sectors, 1861-1952. New valuation.*

Year	Agriculture, forestry and fishing	Industry				Private services					Gross private product (after adjustment for banking services)
		Mining	Manufacturing	Construction	Electricity, gas and water	Transportation and communication	Internal trade	Banking and insurance	Miscellaneous	Ownership of dwellings	
1892	19.59	13.32	14.57	28.56	83.02	26.69	13.95	19.00	21.20	10.46	17.31
1893	18.73	11.50	14.73	27.39	79.66	26.46	14.36	18.19	20.70	10.52	17.02
1894	18.83	10.39	13.51	26.39	84.75	25.04	13.79	17.89	20.60	10.61	16.60
1895	19.37	9.80	13.91	25.75	103.77	25.52	13.59	18.31	20.50	10.57	16.87
1896	18.27	10.25	14.22	25.70	89.06	24.18	13.91	18.30	20.40	10.55	16.50
1897	19.25	11.52	13.70	25.68	84.95	25.23	13.52	18.09	20.40	10.91	16.70
1898	21.05	12.41	13.85	25.76	87.01	22.92	14.23	18.39	20.50	10.85	17.78
1899	20.51	14.27	14.62	25.27	88.21	21.74	13.76	18.49	20.20	10.82	17.52
1900	20.51	13.15	13.90	25.83	80.21	21.74	13.59	18.90	20.30	11.19	17.43
1901	18.63	13.39	14.43	26.18	66.96	21.54	13.87	18.51	20.30	11.11	16.89
1902	17.66	13.24	14.08	26.44	63.70	21.54	13.87	18.51	20.20	11.10	16.25
1903	19.67	13.59	13.87	26.58	58.90	22.90	14.09	18.71	20.80	11.30	17.26
1904	19.64	13.71	13.30	25.86	55.93	23.36	13.86	18.50	21.00	11.31	17.07
1905	20.43	15.23	14.92	23.14	50.84	21.36	14.18	19.30	21.40	11.34	17.01
1906	20.52	15.41	16.60	23.57	45.39	22.03	15.29	20.51	22.50	11.20	17.63
1907	19.21	15.11	15.57	22.07	42.53	19.10	16.17	19.91	21.60	11.51	16.44
1908	19.98	14.89	15.92	23.21	40.93	18.80	16.13	20.20	22.20	11.97	18.05
1909	22.74	16.88	17.19	21.96	39.83	17.75	17.06	21.31	22.80	13.07	19.59
1910	23.91	18.06	17.58	23.95	38.28	18.10	16.98	22.10	23.00	13.38	20.12
1911	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97
1912	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97
1913	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97
1914	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97
1915	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97
1916	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97
1917	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97
1918	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97
1919	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97
1920	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97
1921	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97
1922	22.65	18.49	17.89	24.97	39.97	17.58	18.21	21.89	23.00	13.78	19.97

(1) Ratio of value added at constant prices (table 1) to value added at current prices (ISTAT).

5 (continued). *Implicit price indices (1), 10 private sectors, 1861-1952. New valuation.*

Year	Agriculture, forestry and fishing	Industry				Private services					Gross private product (after adjustment for banking services)
		Mining	Manufacturing	Construction	Electricity, gas and water	Transportation and communication	Internal trade	Banking and insurance	Miscellaneous	Ownership of dwellings	
1923	110.11	90.10	111.70	123.95	102.60	95.96	97.49	104.22	94.80	48.27	101.88
1924	105.19	104.03	118.84	117.79	102.81	110.23	101.08	105.50	98.09	43.82	103.10
1925	131.58	133.95	132.39	136.63	99.23	132.76	110.27	118.38	110.19	63.47	122.24
1926	143.00	141.07	131.66	137.92	100.24	137.10	117.87	124.11	118.90	67.99	128.12
1927	122.31	124.29	108.37	123.59	111.71	123.52	115.44	108.69	108.70	65.51	111.89
1928	117.12	127.88	98.27	111.93	110.51	110.82	106.43	102.79	100.71	65.68	104.83
1929	110.10	122.21	93.13	125.34	107.05	111.06	102.74	101.20	102.30	69.66	101.30
1930	92.69	113.35	86.17	130.10	102.78	110.16	101.83	94.40	99.09	74.41	93.54
1931	76.08	77.25	77.25	124.86	106.56	101.20	97.41	83.89	89.49	70.97	83.97
1932	74.07	83.87	70.50	116.50	105.81	95.13	93.66	80.09	87.21	69.96	79.16
1933	65.70	76.45	67.68	107.61	104.26	72.19	89.63	74.29	82.00	69.08	73.70
1934	68.51	78.59	68.40	108.81	100.99	80.31	88.67	71.40	77.80	69.49	74.20
1935	76.39	84.84	71.45	107.00	94.10	85.53	88.57	75.30	77.42	71.72	78.03
1936	80.85	91.85	82.34	102.68	97.00	91.66	95.95	82.50	84.80	80.81	84.98
1937	94.72	100.30	91.18	101.20	101.07	100.00	100.00	93.20	92.91	95.22	93.82
1938	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1939	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1940	130.11	147.47	119.71	124.56	92.92	110.96	113.86	104.39	104.40	98.91	103.18
1941	184.79	150.12	132.89	125.00	96.67	119.96	126.97	121.79	121.89	98.13	121.46
1942	315.47	154.62	153.04	143.07	101.64	145.86	136.91	138.40	141.01	97.85	143.04
1943	1,379.13	199.31	263.29	224.04	97.73	268.82	251.02	157.80	163.00	91.57	189.01
1944	1,379.13	352.55	724.72	564.79	109.26	478.13	438.89	1,036.67	273.30	92.02	320.22
1945	2,475.67	1,183.49	2,036.41	1,732.71	109.26	1,623.67	1,438.99	2,225.57	1,214.56	92.84	1,818.61
1946	3,886.54	3,346.72	2,894.68	3,603.60	361.39	1,896.59	2,044.71	2,854.01	2,392.20	153.36	1,664.73
1947	6,110.75	4,984.42	5,236.57	4,988.12	729.93	1,898.91	2,044.71	4,867.87	2,823.29	167.89	2,720.24
1948	6,175.48	5,522.68	5,593.21	6,234.26	1,673.56	1,989.91	3,828.74	4,867.87	4,573.16	1,007.11	4,363.79
1949	5,360.72	5,783.74	5,452.59	6,183.30	2,659.48	2,677.29	3,856.46	5,142.86	4,844.23	1,160.19	4,674.11
1950	5,606.72	5,783.74	5,452.59	6,183.30	3,089.20	2,890.52	3,732.52	4,915.34	4,915.34	1,349.26	4,492.86
1951	5,499.48	6,044.28	5,275.62	6,670.37	3,370.98	3,085.64	3,732.52	4,872.84	4,849.01	1,533.61	4,559.81
1952	5,571.74	5,498.28	5,737.72	8,775.02	3,640.61	3,285.56	4,095.97	5,407.82	5,545.83	2,283.71	4,963.17

(1) Ratio of value added at constant prices (table 1) to value added at current prices (ISTAT).

6. Implicit prices indices (1), 10 private sectors, 1950-1964. Revision of ISTAT valuation.

Year	Agri- culture, forestry and fishing	Industry				Private services					Gross private product (after adjustment for banking services)
		Mining	Manu- facturing	Con- struction	Electri- city, gas and water	Transport- ation and commu- nication	Internal trade	Banking and insurance	Miscel- laneous	Owner- ship of dwellings	
1950	92.43	125.37	99.02	84.51	84.35	87.73	88.66	126.13	78.22	56.78	91.45
1951	93.21	123.17	111.13	86.69	84.39	89.30	91.99	124.41	87.30	71.34	97.27
1952	92.20	113.13	108.39	88.47	93.97	94.90	96.23	117.90	93.42	84.92	98.09
1953	94.03	99.15	104.82	96.04	98.66	98.37	95.48	106.29	96.92	94.53	98.51
1954	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1955	99.65	97.47	99.95	108.00	100.88	104.04	102.77	98.22	106.95	111.99	101.54
1956	98.35	87.86	100.02	114.50	101.69	110.44	108.08	97.52	112.99	142.69	104.32
1957	102.27	84.42	100.41	118.98	102.45	113.04	111.16	101.66	118.42	170.75	107.63
1958	96.08	77.64	102.09	121.54	99.75	115.38	117.84	97.73	125.10	207.34	108.90
1959	94.28	74.70	98.93	121.59	101.86	117.74	118.70	89.01	128.40	216.98	107.71
1960	97.97	73.03	98.49	126.09	102.27	121.96	119.71	85.43	133.27	241.71	110.01
1961	103.54	70.42	99.43	129.06	101.87	124.84	119.81	82.08	138.59	254.18	112.24
1962	110.21	71.94	102.16	142.93	106.89	130.81	122.42	79.77	146.79	295.31	117.98
1963	114.01	81.25	108.86	154.27	109.52	137.67	130.36	83.79	167.43	332.45	125.51
1964	121.30	88.24	115.43	172.41	110.33	140.14	140.20	87.10	184.00	350.23	133.62

(1) Ratio of value added at constant prices (table 2) to value added at current prices (ISTAT).

7. Ratio of the implicit price index of each sector to the price index of gross private product, 1861-1952.

Year	Agri- culture, forestry and fishing	Industry				Private services				
		Mining	Manu- facturing	Con- struction	Electricity, gas and water	Transport- ation and commu- nication	Internal trade	Banking and insurance	Miscel- laneous	Ownership of dwellings
1861	118.91	34.82	103.83	167.09	532.46	105.56	52.40	125.69	120.77	49.71
1862	120.47	37.10	97.95	164.89	620.35	110.42	52.73	117.89	117.87	48.08
1863	118.46	43.16	101.00	168.46	664.01	115.94	53.25	121.25	122.18	51.39
1864	116.14	41.86	103.82	171.60	520.96	117.48	55.99	121.17	119.89	51.64
1865	114.72	43.40	102.54	172.42	534.94	124.97	56.67	122.08	121.05	52.96
1866	112.16	46.71	104.80	172.87	426.55	132.31	65.39	116.31	113.88	53.61
1867	116.80	48.57	101.15	171.07	454.82	166.34	67.74	109.85	110.37	44.57
1868	119.42	53.57	93.83	164.21	377.52	156.68	66.76	109.85	107.59	41.05
1869	118.87	58.75	97.80	156.25	396.85	142.14	59.38	111.79	113.69	42.62
1870	118.01	56.98	95.77	157.04	269.24	139.09	62.72	114.20	117.22	47.07
1871	115.73	53.51	94.14	168.49	509.69	165.06	72.61	113.29	116.08	44.17
1872	119.48	49.61	100.85	165.79	353.59	172.76	70.13	111.47	116.80	38.76
1873	122.30	51.41	87.96	157.71	313.59	165.99	67.36	107.38	112.42	35.79
1874	122.55	61.52	83.48	168.79	337.19	164.44	69.54	114.14	121.17	37.69
1875	112.79	70.32	95.19	174.72	391.03	187.68	73.55	117.95	123.17	45.10
1876	113.90	66.38	93.20	161.88	377.05	197.69	73.47	117.59	128.03	45.33
1877	118.03	57.58	93.79	150.44	342.42	191.42	71.41	116.01	120.92	45.75
1878	115.63	59.91	93.03	155.61	369.60	182.03	75.32	115.85	123.67	48.45
1879	115.06	63.91	86.96	153.34	381.45	191.01	71.41	115.85	120.95	46.68
1880	115.70	69.60	82.92	158.20	353.69	181.43	76.29	111.99	120.95	46.68
1881	117.98	77.70	86.01	167.92	385.32	198.41	70.93	112.12	121.16	51.14
1882	115.09	73.95	87.06	160.74	356.33	190.86	74.83	108.59	114.54	50.61
1883	114.54	83.55	84.99	165.25	383.82	209.17	74.96	109.35	117.41	54.61
1884	113.80	79.87	83.66	167.39	386.38	215.62	74.92	109.70	118.75	57.50
1885	118.43	68.57	84.74	164.84	376.88	190.73	77.68	106.53	114.19	54.55
1886	115.27	62.95	83.83	156.62	391.68	189.53	74.64	104.19	111.36	54.80
1887	112.15	65.10	84.72	159.08	429.78	193.62	77.92	110.11	120.94	60.59
1888	111.14	65.20	83.14	160.08	434.02	184.77	82.84	112.04	122.82	61.59
1889	116.09	63.16	85.65	156.55	434.25	170.69	75.86	110.34	118.97	59.25
1890	114.57	74.85	84.59	161.23	387.84	163.08	76.47	110.92	119.89	57.93

7 (continued). Ratio of the implicit price index of each sector to the price index of gross private product, 1861-1952.

Year	Agriculture, forestry and fishing	Industry				Private services				
		Mining	Manufacturing	Construction	Electricity, gas and water	Transportation and communication	Internal trade	Banking and insurance	Miscellaneous	Ownership of dwellings
1891	116.68	79.01	80.57	157.10	406.19	150.27	77.18	104.95	115.18	55.60
1892	113.17	76.95	84.17	164.99	479.61	154.19	80.59	109.76	122.47	60.43
1893	110.05	67.57	86.55	160.93	468.04	155.46	84.37	106.87	121.62	61.81
1894	113.43	62.59	81.39	158.98	510.54	150.84	83.07	107.77	124.10	63.92
1895	114.82	58.09	82.45	152.64	615.12	151.27	80.56	108.54	121.52	62.66
1896	110.73	62.12	86.18	155.76	539.76	146.55	84.30	110.91	123.64	63.94
1897	115.27	68.98	82.04	153.77	508.56	151.08	80.96	108.32	122.16	65.33
1898	118.39	69.80	77.90	144.88	489.37	128.91	80.03	103.43	115.30	61.02
1899	117.07	81.45	83.45	144.24	469.29	124.20	78.54	105.54	115.30	61.76
1900	110.30	75.44	79.75	148.19	460.18	124.73	77.97	108.43	116.47	64.20
1901	117.67	79.28	85.44	155.00	396.45	123.86	84.55	111.96	120.19	65.78
1902	108.68	81.48	86.65	162.71	392.55	132.58	85.35	113.91	124.31	68.31
1903	113.96	80.36	80.36	154.00	341.25	132.68	81.63	108.40	120.51	65.47
1904	115.06	80.52	77.91	151.49	327.65	136.85	81.20	108.38	123.02	66.26
1905	112.70	81.89	82.48	144.62	336.80	136.92	80.13	110.58	123.46	66.67
1906	115.88	86.39	84.63	131.25	288.97	131.16	80.43	109.47	121.38	63.53
1907	124.82	93.73	100.97	143.37	276.10	134.09	93.00	124.76	136.86	70.01
1908	109.46	86.10	88.72	125.76	247.86	135.78	83.13	115.16	126.50	67.12
1909	110.69	88.20	88.20	128.59	235.62	105.82	89.58	108.02	118.72	66.32
1910	116.47	84.22	86.26	127.11	218.88	100.53	86.26	108.02	119.67	65.35
1911	118.08	86.17	87.75	112.10	203.42	90.61	87.09	108.78	116.39	66.72
1912	113.42	89.76	87.03	119.04	190.26	89.96	84.39	109.84	114.31	66.50
1913	112.62	92.59	88.03	125.04	200.15	88.03	91.19	109.61	115.17	69.00
1914	125.82	88.87	88.87	127.97	172.78	92.25	91.85	106.31	144.26	69.25
1915	123.82	89.59	86.86	149.06	125.92	80.56	84.81	113.94	109.92	72.03
1916	122.56	91.68	98.32	140.25	58.24	77.51	81.72	113.48	101.28	58.53
1917	119.37	90.90	111.16	122.97	48.18	67.18	78.39	115.08	99.93	46.25
1918	125.65	80.99	113.06	149.84	41.97	55.64	69.80	123.70	102.86	33.87
1919	125.57	72.92	101.75	124.54	38.92	92.51	85.81	109.21	87.06	34.20
1920	128.42	93.58	107.69	114.21	46.77	74.04	75.61	104.38	83.29	27.40

7 (continued). Ratio of the implicit price index of each sector to the price index of gross private product, 1861-1952.

Year	Agriculture, forestry and fishing	Industry				Private services				
		Mining	Manufacturing	Construction	Electricity, gas and water	Transportation and communication	Internal trade	Banking and insurance	Miscellaneous	Ownership of dwellings
1921	121.90	80.40	96.43	140.41	67.33	85.55	99.42	100.72	93.03	34.26
1922	113.83	83.09	105.51	133.82	86.34	86.17	98.67	101.32	92.91	39.10
1923	108.08	88.44	109.64	211.66	100.71	94.19	95.69	102.30	93.05	47.38
1924	102.03	100.90	115.27	114.25	99.72	106.92	98.04	102.33	95.14	42.50
1925	107.64	109.58	108.30	111.77	81.18	108.61	90.21	96.84	90.14	51.92
1926	111.61	110.11	102.76	107.65	78.24	107.01	92.00	96.87	92.80	53.07
1927	109.31	111.08	96.85	110.46	98.84	110.39	103.17	97.14	97.15	58.55
1928	111.72	121.99	93.74	106.77	105.42	105.71	101.53	98.05	96.07	62.55
1929	108.69	120.64	91.93	123.73	105.68	109.63	101.42	99.90	100.99	68.77
1930	99.09	121.18	92.12	139.09	109.88	117.77	108.86	100.92	105.93	79.55
1931	92.99	115.82	92.00	148.70	126.90	120.52	116.01	99.91	106.57	84.52
1932	93.57	93.52	89.06	147.17	133.67	120.17	118.32	101.18	110.17	88.38
1933	89.15	103.73	91.83	147.64	131.47	110.81	120.53	100.80	111.26	93.73
1934	92.33	105.92	92.18	145.03	136.11	97.29	120.88	96.23	104.85	93.65
1935	97.90	108.73	91.57	137.13	120.39	102.92	113.64	96.50	99.22	91.91
1936	95.14	108.08	96.89	120.83	114.14	100.41	112.91	97.08	99.79	93.09
1937	100.96	106.91	97.19	107.87	107.73	97.70	101.15	99.34	99.03	101.49
1938	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00
1939	100.84	102.94	97.38	101.30	92.62	97.41	100.35	101.17	101.18	95.86
1940	107.12	121.41	98.56	102.55	76.50	91.36	111.81	100.27	100.35	80.79
1941	129.19	104.95	92.90	87.39	67.58	93.59	88.77	96.76	98.58	68.41
1942	166.91	81.81	80.97	75.69	53.77	77.17	85.13	83.49	86.24	48.45
1943	174.61	62.24	82.22	69.96	30.52	83.95	78.39	83.49	85.35	28.74
1944	168.47	43.07	88.53	68.99	13.35	58.41	56.06	126.64	148.37	11.34
1945	148.71	71.09	122.33	104.08	21.71	97.53	57.12	133.69	143.70	9.21
1946	142.88	123.03	106.41	132.47	26.83	45.60	75.17	104.92	103.79	22.71
1947	140.03	114.22	120.00	114.31	38.35	65.72	82.51	111.55	104.84	23.08
1948	132.12	118.13	133.38	133.38	56.90	57.28	82.51	110.03	103.64	24.82
1949	119.32	128.73	121.36	137.63	68.76	64.34	83.08	112.21	109.40	30.03
1950	122.96	132.34	115.70	146.29	73.93	62.68	82.25	106.87	108.67	33.63
1951	112.33	123.46	121.42	138.96	67.59	66.20	80.01	111.33	108.67	39.32
1952	112.26	110.78	115.61	176.80	73.35	66.20	82.53	108.96	111.74	46.05

8. Ratio of the implicit price index of each sector to the price index of gross private product, 1950-1964.

Year	Industry					Private services				
	Agriculture, forestry and fishing	Mining	Manufacturing	Construction	Electricity, gas and water	Transportation and communication	Internal trade	Banking and insurance	Miscellaneous	Ownership of dwellings
1950	101.07	137.09	108.28	92.41	92.24	95.93	96.95	137.92	85.53	62.09
1951	95.83	126.63	114.25	89.13	86.76	91.81	94.57	127.91	89.75	73.34
1952	94.00	115.34	110.50	90.20	95.80	96.75	98.11	120.20	95.24	86.58
1953	95.46	100.66	106.41	97.50	100.16	99.87	96.93	107.91	98.39	95.97
1954	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1955	98.15	96.00	98.44	106.37	99.36	102.47	101.22	96.74	105.34	110.30
1956	94.28	75.60	95.88	109.76	97.48	105.87	103.61	93.48	108.31	136.78
1957	95.03	78.44	93.30	110.56	95.20	105.04	103.29	94.46	110.04	158.66
1958	88.23	71.30	93.75	111.61	91.60	105.95	108.21	89.75	114.88	190.40
1959	87.54	69.36	91.86	112.90	94.58	109.32	110.21	82.65	119.22	201.47
1960	89.05	66.38	89.53	114.62	92.96	110.86	108.82	77.66	121.14	219.71
1961	92.25	62.74	88.59	114.99	90.77	111.23	106.75	73.13	123.48	263.12
1962	93.41	60.98	86.59	121.15	90.60	110.87	103.76	67.61	124.42	250.30
1963	90.84	64.74	86.74	122.92	82.27	109.70	103.87	66.76	133.41	264.90
1964	90.78	66.04	86.39	129.03	82.57	104.88	104.93	65.19	137.71	262.11

9. Annual (percentage) rates of change in the value added at constant prices, 11 sectors, 1862-1963 (1).

Period	Industry				Private services					Gross private product (after adjustment for banking services)	Government	GDP (OECD definition)	
	Agriculture, forestry and fishing	Mining	Manufacturing	Construction	Electricity, gas and water	Transportation and communication	Internal trade	Banking and insurance	Miscellaneous				Ownership of dwellings
Intervals between population censuses													
1881-1901	0.9	1.1	1.7	0.7	6.6	5.0	0.9	4.1	0.5	0.8	1.1	2.9	1.2
1901-1911	0.9	-0.4	4.3	5.5	16.2	8.9	2.9	5.3	1.5	1.2	2.5	3.1	2.5
1911-1921	0.5	-0.4	0.2	-1.9	7.9	-2.3	2.1	2.9	0.1	0.7	0.5	6.6	0.9
1921-1931	1.0	0.5	3.2	6.4	9.5	6.2	1.8	4.5	1.5	1.3	2.3	-0.7	2.1
1931-1936	-0.5	1.5	2.6	5.5	5.8	4.4	0.7	2.7	1.9	1.8	1.5	12.6	2.5
1936-1951	0.6	4.6	2.7	0.5	4.0	3.8	2.0	1.4	0.7	0.6	1.8	0.3	1.7
1951-1961	2.6	12.8	8.9	11.8	7.3	6.2	5.6	14.7	2.4	2.1	6.2	3.8	6.0
Main phases of growth													
1862-1897	0.4	0.9	1.1	0.7	7.4	3.2	0.7	7.0	0.6	0.8	0.7	0.6	0.7
1897-1913	2.0	0.4	4.1	5.0	14.8	7.9	2.4	4.7	1.5	1.1	2.7	4.4	2.8
1920-1938	0.8	0.5	2.2	4.1	4.5	4.2	1.2	1.4	0.6	0.5	2.3	-2.4	2.2
1897-1938	1.0	0.3	2.6	2.9	9.0	3.7	1.8	1.2	0.8	0.7	2.2	2.2	2.2
1949-1963	2.1	11.9	9.1	11.8	7.9	6.8	5.8	15.0	2.7	2.0	6.3	3.3	6.0

(1) Compound rates calculated on three-year averages centered on the first and last year of each period considered.

10. Percentage share of each sector in the increment of the total value added in the private sectors, 1862-1963.

Period	Industry				Private services					
	Agriculture, forestry and fishing	Mining	Manufacturing	Construction	Electricity, gas and water	Transportation and communication	Internal trade	Banking and insurance	Miscellaneous	Ownership of dwellings
Current prices										
1862-1897 ..	28.6	1.8	12.3	1.5	1.9	11.7	17.8	5.1	7.3	12.0
1897-1913 ..	37.3	0.8	26.7	2.9	2.1	8.1	10.2	2.9	4.3	4.7
1920-1938 ..	3.5	1.0	33.3	3.6	6.9	14.3	13.3	3.6	4.4	16.1
1897-1938 ..	28.3	0.8	28.8	2.6	3.3	8.1	12.4	3.1	4.4	8.2
1949-1963 ..	10.5	1.0	37.9	11.8	3.3	8.2	10.4	4.8	4.2	7.9
Constant prices										
1862-1897 ..	24.0	1.5	27.4	1.3	0.5	9.3	11.0	6.2	5.8	13.0
1897-1913 ..	29.5	0.2	31.6	3.1	1.8	13.5	9.8	3.0	3.4	4.1
1920-1938 ..	18.9	0.3	37.9	5.2	4.7	15.8	10.1	2.3	2.0	2.8
1897-1938 ..	22.4	0.2	35.8	3.3	4.0	11.2	13.0	3.4	2.7	4.0
1949-1963 ..	7.9	2.1	48.9	9.6	3.8	7.0	8.9	9.1	1.7	1.0

11. Active population at the dates of the censuses taken from 1881 to 1961, 10 sectors, adjusted census data (1).
thousands of units

Year	Agri- culture, forestry and fishing	Industry					Private services					Govern- ment	Total active popu- lation
		Mining	Manu- facturing	Con- struction	Electri- city, gas and water	Total	Transporta- tion and commu- nication	Internal trade	Banking and insurance	Miscel- laneous	Total		
1881 . .	8,827	61	3,656	595	9	4,321	329	599	8	1,102	2,038	369	15,555
1901 . .	9,741	94	3,197	571	16	3,878	415	783	14	871	2,083	625	16,327
1911 . .	9,389	114	3,637	716	34	4,501	570	857	32	794	2,253	649	16,792
1921 . .	9,962	91	3,511	693	54	4,349	756	1,031	47	744	2,578	878	17,767
1931 . .	9,173	93	4,074	703	57	4,927	735	1,286	104	831	2,956	981	18,037
1936 . .	8,887	120	4,054	988	67	5,229	701	1,520	100	980	3,301	1,073	18,490
1951 . .	8,261	180	4,540	1,473	97	6,290	785	1,653	176	742	3,356	1,670	19,577
1961 . .	5,657	157	5,713	1,880	136	7,886	813	2,274	186	998	4,271	1,705	19,519

(1) From 1881 to 1936, *de facto* population (adjusted for changes in boundaries and for changes in statistical definitions, so as to conform with the definitions used in the 1951 census); for 1951 and 1961 *de jure* population (original census figures; no official figures are available for *de facto* active population). The break-down by activity sector in 1961 has been provisionally estimated on the basis of ISTAT sample survey of the labour force.

12. Annual (percentage) rates of change (1) in active population between censuses, 10 sectors, 1881-1961.

Year	Agriculture, forestry and fishing	Industry				Private services					Government	Total active population	
		Mining	Manufacturing	Construction	Electricity, gas and water	Total	Transportation and communication	Internal trade	Banking and insurance	Miscellaneous			Total
1881-1901	0.5	2.2	-0.7	-0.2	2.9	-0.5	1.2	1.4	2.8	-1.2	0.1	2.7	0.2
1901-1911	-0.4	2.0	1.3	2.3	7.8	1.5	3.2	0.9	8.6	-0.9	0.8	0.4	0.3
1911-1921	0.6	-2.2	-0.4	-0.3	4.7	-0.3	2.9	1.9	3.9	-0.6	1.4	3.1	0.6
1921-1931	-0.8	0.2	1.5	0.1	0.5	1.3	-0.3	2.2	8.3	1.1	1.4	1.1	0.2
1931-1936	-0.6	5.2	-0.1	7.0	3.3	1.2	-0.9	3.4	-0.8	3.4	2.2	1.8	0.5
1936-1951	-0.5	2.7	0.8	2.7	2.5	1.2	0.8	0.6	3.8	-1.8	0.1	3.0	0.4
1951-1961	-3.7	-1.4	2.3	2.5	3.4	2.3	0.4	3.2	0.6	3.0	2.4	0.2	-0.03

(1) Compound rates.

13. Utilization of labour force, 1950-1964 (1).
thousands of units

Year	Labour force		Persons actually working						Persons unemployed or awaiting their first job	
			Total		Persons having a regular occupation		Persons having a casual occupation			
	Annual average	Increase	Annual average	Increase	Annual average	Increase	Annual average	Increase		
1950	20,353	—	18,804	—	16,840	—	1,964	—	1,549	—
1951	20,475	+ 122	18,956	+ 152	17,000	+ 160	1,956	+ 8	1,519	+ 30
1952	20,604	+ 129	19,070	+ 114	17,140	+ 140	1,930	+ 26	1,534	+ 15
1953	20,759	+ 155	19,265	+ 195	17,375	+ 235	1,890	+ 40	1,494	+ 40
1954	20,864	+ 105	19,430	+ 165	17,615	+ 270	1,815	+ 75	1,434	+ 60
1955	20,923	+ 59	19,599	+ 169	17,825	+ 210	1,774	+ 41	1,324	+ 110
1956	20,968	+ 45	19,744	+ 145	18,010	+ 185	1,734	+ 40	1,224	+ 100
1957	21,281	+ 313	20,082	+ 338	18,220	+ 210	1,862	+ 128	1,199	+ 125
1958	21,426	+ 45	20,157	+ 75	18,365	+ 145	1,792	+ 70	1,169	+ 30
1959	21,286	— 40	20,169	+ 12	18,877	+ 512	1,292	+ 500	1,117	+ 52
1960	20,972	— 314	20,136	— 33	19,230	+ 353	906	+ 386	836	— 241
1961	20,882	— 90	20,172	+ 36	19,295	+ 65	877	+ 29	710	— 126
1962	20,561	— 321	19,950	+ 222	19,367	+ 72	583	+ 294	611	— 99
1963	20,134	— 427	19,630	+ 320	19,451	+ 84	179	+ 404	504	— 107
1964	20,130	— 4	19,581	— 109	19,251	—	330	—	549	+ 45

(1) For 1959 - 1964, official results of ISTAT sample surveys of the labour force; for previous years estimates by SYMEZ (1950 - 1957) and by ourselves (1958). All figures refer to *de facto* population.

14. Value added at constant prices per active person at the dates of the censuses, 10 sectors, 1881-1961 (1).

Year	Agri- culture, forestry and fishing	Industry				Private services					Total value added in domestic production		
		Mining	Manu- facturing	Con- struction	Electri- city, gas and water	Total	Transport- ation and commu- nication	Internal trade	Banking and insurance	Miscel- laneous	Government	including services rendered by owner- ship of dwellings	excluding services rendered by owner- ship of dwellings
1938 prices, thousands of lire													
1881 ..	2.93	11.00	2.73	1.59	3.56	2.69	2.73	10.34	59.50	3.54	5.85	3.69	3.29
1901 ..	3.16	8.88	4.37	1.90	7.19	4.13	5.76	9.55	75.79	4.95	6.15	4.49	4.03
1911 ..	3.58	7.03	5.86	2.59	15.24	5.44	9.82	11.64	55.59	6.27	7.84	5.59	5.09
1921 ..	3.53	8.46	6.18	2.22	20.59	5.78	5.85	11.85	50.30	6.77	11.02	5.79	5.29
1931 ..	4.24	8.67	7.32	4.07	48.47	7.36	10.96	11.31	35.44	7.17	9.19	7.01	6.45
1936 ..	4.28	7.23	8.37	3.78	54.72	8.07	14.21	9.92	42.12	6.57	15.22	7.74	7.15
1951 ..	5.02	9.44	11.21	2.73	68.36	10.05	22.17	12.26	28.55	9.62	10.29	9.39	8.78
1954 prices, hundreds of thousands of lire													
1951 ..	3.00	4.61	5.97	2.46	26.80	5.43	7.53	5.21	12.67	5.85	6.31	4.79	4.63
1961 ..	5.69	17.58	11.08	5.89	38.82	10.45	13.30	6.50	47.42	5.51	8.95	8.90	8.70

(1) For value added, we have taken three-year averages centered on census years; for active persons, we have taken the figures referring to the dates of the censuses (table 11).

15. Value added at constant prices per active person at the beginning and end of each major phase of economic growth, 10 sectors, 1897-1963 (1).

Year	Industry					Private services					Total value added in domestic production		
	Agri- culture, forestry and fishing	Mining	Manu- facturing	Con- struction	Electri- city, gas and water	Total	Transport- ation and commu- nication	Internal trade	Banking and insurance	Miscel- laneous	Government	including services rendered by owner- ship of dwellings	excluding services rendered by owner- ship of dwellings
1938 prices, thousands of lire													
1897 ..	2.75	8.78	3.49	1.50	4.73	3.32	4.67	9.49	69.62	4.42	5.80	3.95	3.51
1913 ..	3.79	7.48	6.04	2.63	17.03	5.63	10.32	11.55	53.97	6.60	9.54	5.88	5.38
1920 ..	3.44	8.51	6.16	1.91	20.81	5.71	5.39	11.65	49.69	6.72	15.82	5.90	5.41
1938 ..	4.46	6.80	7.81	2.61	33.70	7.11	11.71	9.49	26.19	5.90	15.41	7.31	6.80
1949 ..	4.58	6.98	9.11	2.36	57.42	8.24	20.07	11.20	24.56	8.23	9.99	8.27	7.67
1954 prices, hundreds of thousands of lire													
1949 ..	2.93	3.37	4.84	1.92	22.69	4.40	6.63	4.81	9.52	5.05	6.38	4.27	4.11
1963 ..	6.86	15.06	12.57	6.29	42.71	11.58	14.17	7.61	54.25	6.32	9.12	10.24	10.02

(1) For value added, we have taken three-year averages centered on the year concerned; for active persons, we have taken rough estimates, based on interpolation or extrapolation of the figures referring to census years.

16. Annual (percentage) rates of change (1) in value added at constant prices per active person, 10 sectors, 1881-1963.

Year	Agri- culture, forestry and fishing	Industry				Private services				Govern- ment	Total value added in domestic production		
		Mining	Manu- facturing	Con- struction	Electri- city, gas and water	Total	Trans- port- ation and commu- nication	Internal trade	Banking and insurance		Miscel- laneous	including services rendered by owner- ship of dwellings	excluding services rendered by owner- ship of dwellings
Intervals between population censuses													
1881-1901	0.4	-1.1	2.4	0.9	3.6	2.2	3.8	-0.4	1.2	1.7	0.3	1.0	1.0
1901-1911	1.3	-2.3	3.0	3.2	7.8	2.8	5.5	2.0	-3.1	2.4	2.5	2.4	2.2
1911-1921	-0.1	1.9	0.5	-1.5	3.1	0.6	-5.0	0.2	-1.0	0.8	3.5	0.4	0.4
1921-1931	1.9	0.3	1.7	6.3	8.9	2.5	6.5	-0.5	-3.4	0.6	-1.8	2.0	1.9
1931-1936	0.2	-3.6	2.7	-1.5	2.5	1.9	5.3	-2.6	3.0	-1.7	10.6	2.1	2.0
1936-1951	1.1	1.8	2.0	-2.1	1.5	1.5	3.0	1.4	-2.6	2.6	-2.6	1.4	1.3
1951-1961	6.6	14.3	6.4	9.1	3.8	6.8	5.9	2.2	14.1	-0.6	3.6	6.5	6.4
Main phases of growth													
1897-1913	2.0	-1.0	3.5	3.6	8.3	3.4	5.1	1.2	-1.6	2.5	3.2	2.7	2.5
1897-1938	1.2	-0.6	2.0	1.4	4.9	1.9	2.3	0.0	-2.4	0.7	2.4	1.6	1.5
1920-1938	1.5	-1.2	1.3	1.8	2.7	1.2	4.4	-1.1	-3.5	-0.7	-0.1	1.3	1.2
1949-1963	6.3	11.3	7.1	8.9	4.6	7.2	5.6	3.3	13.2	1.6	2.6	6.6	6.5

(1) Compound rates

(1) Compound rates.

17. Value added at constant prices per inhabitant, per consuming unit, per head of population in working age, and per active person, 1881-1961.

Year	V.A. per inhabitant (1)	V.A. per consuming unit (2)	V.A. per inhabitant in working age (3)	V.A. per active person (4)
1938 prices, lire				
1881	1,960	2,541	3,126	3,689
1901	2,196	2,896	3,685	4,489
1911	2,630	3,461	4,421	5,591
1921	2,750	3,539	4,436	5,790
1931	3,115	4,006	4,945	7,009
1936	3,384	4,320	5,458	7,742
1951	3,898	4,865	5,959	9,391
1954 prices, thousands of lire				
1951	199	248	304	479
1961	349	430	535	890

- (1) *De facto* population.
(2) Consuming units calculated by M. Livi-BACCI (*I fattori demografici dello sviluppo economico italiano*, Roma 1965, p. 55).
Data refer to *de jure* population.
(3) *De jure* population aged 15-64.
(4) Active population as shown in table 11.

18. Contribution of the private sector and of the government to gross domestic saving at current prices, 1861-1962.
New valuation.

Period (1)	GNP (OECD definition)	Govern-ment's «net receipts» (2)	Gross disposable income of the private sector (a - b)	Gross domestic saving	Gross private saving	Gross government saving	Ratio of private disposable income to GNP (c : a)	Overall propensity to save (d : a)	Private propensity to save (e : c)	Govern-ment's propensity to save (f : b)
	a	b	c	d	e	f	g	h	i	j
				millions of lire						
1861-1873	120,752	7,506.6	113,245.4	8,606.0	12,957.4	—	0.938	0.071	0.114	—
1874-1879	66,510	6,022.7	60,487.3	5,358.0	4,645.3	712.7	0.909	0.081	0.076	0.118
1880-1888	100,059	10,494.9	89,564.1	11,512.0	10,062.1	1,449.9	0.895	0.115	0.112	0.138
1889-1897	104,806	11,377.1	93,428.9	8,667.0	8,169.1	497.9	0.891	0.083	0.087	0.043
1898-1902	66,644	6,122.5	60,521.5	9,683.0	9,628.5	54.5	0.908	0.145	0.159	0.009
1903-1913	198,774	19,978.9	178,795.1	33,101.0	31,020.1	2,080.9	0.899	0.166	0.173	0.104
1914-1923	743,784	61,797.0	681,987.0	18,326.0	137,892.0	—	0.916	0.025	0.202	—
1924-1929	888,940	107,462.3	781,477.7	152,344.0	125,996.7	26,347.3	0.879	0.171	0.161	0.245
1930-1931	248,944	35,708.6	213,235.4	34,491.0	27,863.4	6,627.6	0.856	0.138	0.130	0.186
1932-1934	327,861	40,799.3	287,061.7	44,058.0	50,017.7	—	0.875	0.134	0.174	—
1935-1939	755,491	109,771.3	645,719.7	133,312.0	152,937.7	—	0.855	0.176	0.236	—
				billions of lire						
1940-1945	3,270.8	271.7	2,999.1	— 17.9	348.2	—	0.916	—0.005	0.116	—
1946-1949	24,935.0	3,100.1	21,834.9	3,879.0	3,689.9	189.1	0.876	0.155	0.168	0.061
1950-1954	54,168.0	8,977.9	45,190.1	9,584.0	6,457.1	3,126.9	0.834	0.177	0.142	0.348
1955-1958	61,798.0	9,754.7	52,043.3	12,952.0	10,381.3	2,570.7	0.842	0.209	0.199	0.263
1959-1962	84,942.0	14,689.0	70,253.0	20,675.0	16,071.0	4,604.0	0.827	0.243	0.228	0.313

(1) Periods are chosen in such a way that inside each of them the ratios c/a, d/a, e/c, and f/b do not show major changes.

(2) Current revenue less current transfers (including subsidies, interest on the public debt, etc.) to the private sector. Figures refer to central and local government and social insurance agencies.

19. Gross domestic asset formation at current and constant (1938) prices, 1861-1952.

Year	Current prices			Price index applying to asset formation (1938 = 100)	Gross domestic asset formation at 1938 prices (millions of lire)
	Gross domestic saving	Net borrowing from the rest of the world	Gross domestic asset formation		
	millions of lire				
1861	247	325	572	19.0	3,017
1862	596	244	840	21.0	4,006
1863	403	255	658	19.5	3,380
1864	472	410	882	18.3	4,804
1865	602	392	994	18.2	5,455
1866	703	262	965	19.0	5,066
1867	605	158	763	19.8	3,861
1868	946	116	1,062	20.7	5,129
1869	944	113	1,057	19.0	5,564
1870	733	95	828	19.3	4,286
1871	972	— 144	828	19.7	4,210
1872	912	— 44	868	21.0	4,131
1873	1,341	— 37	1,373	22.8	6,035
1874	859	182	1,041	24.1	4,311
1875	1,001	20	1,021	21.9	4,671
1876	689	— 58	631	19.6	3,224
1877	801	— 72	873	21.7	4,023
1878	1,012	— 101	911	22.0	4,127
1879	1,028	31	1,059	20.0	5,282
1880	1,592	— 88	1,504	20.8	7,246
1881	702	— 88	614	19.7	3,118
1882	1,620	— 68	1,552	20.6	7,542
1883	1,331	— 72	1,259	20.3	6,194
1884	1,162	— 77	1,239	18.1	6,842
1885	1,224	358	1,582	26.7	5,925
1886	1,622	293	1,915	20.6	9,279
1887	1,069	452	1,521	17.6	8,635
1888	1,259	132	1,391	18.0	7,740
1889	363	195	558	11.8	4,737
1890	1,000	203	1,203	18.6	6,480
1891	1,578	— 26	1,552	22.2	6,983
1892	945	— 58	887	20.1	4,405
1893	1,229	— 39	1,190	17.5	6,784
1894	926	— 202	724	14.8	4,883
1895	875	— 168	707	13.4	5,263
1896	1,118	— 209	909	16.8	5,418
1897	838	— 292	546	17.7	3,077
1898	1,582	— 259	1,323	18.1	7,299
1899	1,633	— 429	1,204	19.6	6,140
1900	2,006	— 192	1,814	20.0	9,049
1901	2,653	— 393	2,260	19.6	11,504
1902	2,061	— 467	1,594	19.2	8,282
1903	2,270	— 414	1,856	17.8	10,417
1904	2,281	— 442	1,839	19.8	9,284
1905	2,631	— 742	1,889	18.9	10,014
1906	2,680	— 550	2,130	19.7	10,790
1907	3,797	— 129	3,668	21.0	17,449
1908	2,839	103	2,942	21.3	13,804

19 (continued). *Gross domestic asset formation at current and constant (1938) prices, 1861-1952.*

Year	Current prices			Price index applying to asset formation (1938 = 100)	Gross domestic asset formation at 1938 prices (millions of lire)
	Gross domestic saving	Net borrowing from the rest of the world	Gross domestic asset formation		
millions of lire					
1909	3,537	217	3,754	20.5	18,347
1910	2,728	— 31	2,697	20.7	13,048
1911	3,666	— 22	3,644	21.4	16,999
1912	3,609	106	3,715	22.2	16,762
1913	4,082	— 95	3,937	21.6	18,434
1914	2,867	— 299	2,568	21.6	11,905
1915	448	913	1,361	25.8	5,284
1916	— 3,307	3,863	556	38.3	1,443
1917	— 7,145	8,731	1,586	101.5	1,563
1918	— 8,546	10,593	2,047	83.6	2,448
1919	— 1,873	7,418	5,545	90.0	6,161
1920	4,080	10,870	14,950	112.8	13,255
1921	5,542	5,039	10,581	116.6	9,073
1922	13,060	2,428	15,488	111.4	13,898
1923	19,456	1,541	20,997	114.4	18,348
1924	24,817	— 386	24,431	126.2	19,359
1925	31,489	1,187	32,676	137.8	23,712
1926	29,277	1,034	30,311	143.9	21,058
1927	21,124	696	21,820	122.0	17,878
1928	26,299	3,252	29,551	109.4	27,011
1929	25,303	2,402	27,705	103.2	26,848
1930	18,007	1,520	19,527	101.1	19,313
1931	18,214	— 1,768	16,446	97.0	16,947
1932	17,127	— 772	16,355	84.0	19,460
1933	13,831	568	14,399	81.4	17,686
1934	14,708	627	15,335	79.8	19,224
1935	21,662	1,590	23,252	79.6	29,211
1936	21,999	— 261	21,738	86.3	25,189
1937	28,293	1,992	30,285	94.0	32,211
1938	28,194	547	28,741	100.0	28,741
1939	34,924	9	34,933	102.5	34,090
1940	29,268	2,880	32,148	123.9	25,943
1941	32,486	— 1,330	31,156	132.3	23,546
1942	26,390	— 176	26,214	144.2	18,185
1943	15,464	2,487	17,951	160.9	11,155
1944	— 27,528	35,579	8,051	101.1	7,965
1945	— 94,058	135,388	41,330	677.3	6,102
billions of lire					
1946	486	144	630	2,548.8	24,717
1947	1,262	355	1,617	4,353.3	37,144
1948	1,353	— 11	1,342	5,132.9	26,145
1949	1,477	— 51	1,426	5,109.8	27,907
1950	1,764	— 114	1,650	5,175.3	31,882
1951	2,117	— 34	2,083	5,819.2	35,795
1952	1,869	— 222	2,091	5,954.2	35,118

20. *Gross domestic asset formation at current and constant (1954) prices, 1950-1964.*

Year	Current prices (billions of lire)			Price index applying to asset formation (1954 = 100)	Gross domestic asset formation at 1954 prices (billions of lire)
	Gross domestic saving	Net borrowing from the rest of the world	Gross domestic asset formation		
1950	1,764	— 114	1,650	88.6	1,862
1951	2,117	— 34	2,083	99.0	2,102
1952	1,869	222	2,091	100.2	2,085
1953	2,148	136	2,284	99.5	2,295
1954	2,444	45	2,489	100.0	2,489
1955	2,912	28	2,940	101.5	2,895
1956	3,097	54	3,151	103.9	3,030
1957	3,540	— 22	3,518	107.3	3,277
1958	3,925	— 349	3,576	107.2	3,336
1959	4,407	— 472	3,935	105.6	3,726
1960	4,955	— 209	4,746	106.8	4,441
1961	5,712	— 318	5,394	109.1	4,941
1962	6,320	— 174	6,146	115.0	5,344
1963	6,428	438	6,866	121.8	6,635
1964	7,090	— 415	6,675	133.7	4,991

21. Gross domestic asset formation by type of asset, 1861-1952, and gross stock of equipment (new valuation) at 1938 prices, 1875-1952.

millions of lire

Year	Gross annual investment						Gross stock of equipment at the end of the year
	Dwellings	Public works	Other construction	Equipment	Change in stocks	Total gross investment	
	(1)	(1)	(2)	(2)	(1)	(1)	(3)
1861	694	1,353	452	1,123	— 605	3,017	—
1862	694	1,272	477	1,186	377	4,006	—
1863	694	1,232	494	1,227	— 267	3,380	—
1864	729	1,217	513	1,274	1,071	4,804	—
1865	763	1,284	535	1,329	1,544	5,455	—
1866	723	1,287	561	1,395	1,100	5,066	—
1867	657	1,225	541	1,343	95	3,861	—
1868	843	968	564	1,400	1,354	5,129	—
1869	911	838	606	1,504	1,705	5,564	—
1870	819	582	593	1,472	820	4,286	—
1871	811	848	587	1,458	506	4,210	—
1872	787	780	632	1,569	363	4,131	—
1873	762	979	637	1,582	2,075	6,035	—
1874	612	886	619	1,537	657	4,311	—
1875	726	921	742	1,845	437	4,671	21,244
1876	762	790	790	1,961	— 1,079	3,224	22,082
1877	967	712	825	2,049	— 530	4,023	22,945
1878	1,045	794	867	2,153	— 732	4,127	23,871
1879	1,094	815	988	2,454	— 69	5,282	25,041
1880	1,255	903	1,008	2,503	— 1,577	7,246	26,225
1881	1,346	1,034	1,012	2,514	— 2,788	3,118	27,344
1882	1,357	1,270	1,027	2,551	— 1,337	7,542	28,552
1883	1,309	1,500	1,025	2,547	— 187	6,194	29,699
1884	1,418	1,671	1,057	2,625	— 71	6,842	30,820
1885	1,652	1,915	1,012	2,515	— 1,169	5,925	31,863
1886	1,761	1,971	1,123	2,791	— 1,633	9,279	33,196
1887	1,544	2,272	1,182	2,938	— 699	8,635	34,565
1888	1,310	2,175	1,180	2,931	— 144	7,740	35,914
1889	1,196	1,961	1,078	2,677	— 2,175	4,737	37,054
1890	1,154	1,510	958	2,381	— 477	6,480	37,590
1891	1,129	1,392	860	2,138	— 1,464	6,983	37,767
1892	991	1,515	875	2,175	— 1,151	4,405	37,893
1893	1,027	1,645	884	2,197	— 1,031	6,784	37,937
1894	967	1,568	950	2,360	— 962	4,883	37,843
1895	1,069	1,280	1,010	2,510	— 606	5,263	37,850
1896	1,183	1,023	996	2,474	— 258	5,418	37,810
1897	1,249	765	1,004	2,494	— 2,435	3,077	37,753
1898	1,274	762	1,024	2,545	— 1,694	7,299	37,751
1899	1,448	728	1,201	2,982	— 219	6,140	38,108
1900	1,640	689	1,323	3,286	— 2,111	9,049	38,879
1901	1,833	839	1,341	3,333	— 4,158	11,504	39,421
1902	1,766	880	1,342	3,335	— 959	8,282	39,818
1903	1,952	927	1,430	3,552	— 2,556	10,417	40,439
1904	2,079	862	1,564	3,884	— 895	9,284	41,646
1905	2,223	1,006	1,939	4,816	— 30	10,014	44,081
1906	2,277	806	2,465	6,123	— 881	10,790	48,066
1907	2,373	898	2,921	7,257	— 4,000	17,449	53,148

(1) ISTAT valuation.

(2) Estimated break-down of ISTAT original valuation of « plant and equipment ». Equipment includes transport equipment. We intend to publish a revised valuation soon.

(3) Stock of equipment (including transport equipment) net of retirements, calculated on the assumption that assets last 15 years.

21 (continued). Gross domestic asset formation by type of asset, 1861-1952, and gross stock of equipment (new valuation) at 1938 prices, 1875-1952.

millions of lire

Year	Gross annual investment						Gross stock of equipment at the end of the year
	Dwellings	Public works	Other construction	Equipment	Change in stocks	Total gross investment	
	(1)	(1)	(2)	(2)	(1)	(1)	(3)
1908	2,102	1,104	3,213	7,982	— 597	13,804	58,933
1909	1,977	1,257	3,281	8,150	— 3,682	18,347	64,723
1910	2,072	1,458	3,307	8,217	— 2,006	13,048	70,430
1911	1,490	1,573	3,356	8,336	— 2,244	16,999	76,292
1912	1,670	1,699	3,347	8,314	— 1,732	16,762	82,112
1913	1,736	1,728	3,206	7,965	— 3,799	18,434	87,532
1914	1,833	1,913	2,969	7,377	— 2,187	11,905	91,927
1915	1,063	1,716	1,858	4,617	— 3,970	5,284	93,258
1916	390	1,166	1,369	3,402	— 4,884	1,443	93,327
1917	343	686	1,519	3,774	— 4,759	1,563	93,766
1918	343	564	1,188	2,952	— 2,599	2,448	93,166
1919	679	1,333	2,198	5,461	— 3,510	6,161	94,743
1920	731	1,502	2,843	7,064	— 1,115	13,255	96,991
1921	858	1,814	2,295	5,702	— 1,596	9,073	96,570
1922	1,420	2,425	2,636	6,550	— 867	13,898	95,863
1923	1,977	2,510	3,116	7,742	— 3,003	18,348	95,623
1924	2,527	1,963	3,986	9,901	— 982	19,359	97,374
1925	2,956	1,436	4,915	12,210	— 2,195	23,712	101,367
1926	2,737	1,762	4,992	12,402	— 835	21,058	105,433
1927	2,180	2,122	4,752	11,806	— 2,982	17,878	108,925
1928	2,255	2,039	5,288	13,137	— 4,292	27,011	114,037
1929	3,467	2,209	5,243	13,025	— 2,904	26,848	119,745
1930	3,861	2,743	4,777	11,867	— 3,935	19,313	126,995
1931	3,507	2,649	3,894	9,673	— 2,776	16,947	133,266
1932	3,050	3,843	3,443	8,554	— 1,570	19,460	138,046
1933	3,003	3,474	3,568	8,864	— 1,223	17,686	143,958
1934	4,024	3,440	3,929	9,761	— 19,30	19,224	148,258
1935	5,542	3,040	5,040	12,520	— 3,069	29,211	153,714
1936	5,333	2,730	5,862	14,562	— 3,298	25,189	162,574
1937	3,924	2,396	6,243	15,511	— 4,137	32,211	171,535
1938	3,101	2,134	6,057	15,046	— 2,403	28,741	178,839
1939	2,864	2,840	6,827	16,960	— 4,599	34,090	185,898
1940	3,122	3,261	6,707	16,663	— 2,810	25,943	190,361
1941	1,530	3,059	6,480	16,100	— 3,623	23,546	194,049
1942	1,420	2,782	5,500	13,665	— 5,182	18,185	192,575
1943	1,090	2,069	4,254	10,569	— 6,827	11,155	183,562
1944	661	1,103	2,562	6,366	— 2,727	7,965	170,902
1945	627	1,291	2,108	5,236	— 3,160	6,102	162,050
1946	1,530	3,959	4,854	12,060	— 2,314	24,717	165,770
1947	1,261	4,175	6,636	16,485	— 8,587	37,144	175,034
1948	1,711	3,460	6,209	15,426	— 661	26,145	182,930
1949	2,043	3,267	6,102	15,160	— 1,335	27,907	189,661
1950	3,112	3,154	6,631	16,473	— 2,512	31,882	194,948
1951	3,491	3,470	7,129	17,709	— 3,996	35,795	199,428
1952	4,326	4,319	7,652	19,011	— 190	35,118	204,261

(1) ISTAT valuation.

(2) Estimated break-down of ISTAT original valuation of « plant and equipment ». Equipment includes transport equipment. We intend to publish a revised valuation soon.

(3) Stock of equipment (including transport equipment) net of retirements, calculated on the assumption that assets last 15 years.

22. *Gross domestic asset formation by type of asset and gross stock of equipment (new valuation) at 1954 prices, 1950-1964.*
billions of lire

Year	Gross annual investment						Gross stock of equipment at the end of the year (2)	
	Dwellings (1)	Public works (1)	Other construction (1)	Equipment		Change in stocks (1)		Total gross investment (1)
				Transport (1)	Other (1)			
1950	288	225	369	243	604	+ 133	1,862	10,024
1951	323	236	446	220	665	+ 212	2,102	10,229
1952	401	294	400	248	752	- 10	2,085	10,500
1953	483	356	366	290	770	+ 30	2,295	10,854
1954	579	352	395	323	809	+ 35	2,489	11,184
1955	791	348	445	322	890	+ 189	2,895	11,606
1956	789	312	504	401	921	+ 103	3,030	12,168
1957	896	336	559	415	990	+ 81	3,277	12,939
1958	918	411	598	377	937	+ 95	3,336	13,767
1959	983	476	681	451	977	+ 158	3,726	14,903
1960	983	514	776	647	1,202	+ 319	4,441	16,494
1961	1,071	543	808	790	1,422	+ 307	4,941	18,086
1962	1,236	478	909	886	1,537	+ 298	5,344	19,661
1963	1,387	491	881	1,005	1,659	+ 212	5,635	21,332
1964	1,454	491	811	773	1,325	+ 137	4,991	22,851

(1) ISTAT valuation.

(1) Stock of equipment (including transport equipment) net of retirements, calculated on the assumption that assets last 15 years.

23. *Indicators of the integration of Italy and of other countries in the world market, 1938-1962.*

Year	Imports of each country expressed as a percentage of her GNP (1)					Exports of each country expressed as a percentage of world exports (2)				
	Italy	Germany (F.R.) (3)	Other European OECD member countries	Japan	United States	Italy	Germany (F.R.) (3)	Other European OECD member countries	Japan	United States
1938	8.9	17.0	18.6	22.1	3.5	2.4	11.0	35.7	4.7	13.0
1950	12.0	14.9	23.4	10.1	4.2	2.1	3.5	29.7	1.5	18.0
1945	13.4	18.0	22.9	10.0	4.6	2.0	7.0	27.3	2.1	16.5
1960	16.8	18.8	22.8	11.6	4.5	2.9	8.9	27.1	3.2	16.0
1962	17.8	18.4	22.9	11.6	4.4	3.3	9.4	27.1	3.5	15.2

(1) Calculation based on national accounts published by OECD (with the exception of Japan). The definition of « imports » used, therefore, includes income payments to the rest of the world. GNP is taken at market prices. For adding up the values referring to « other European OECD member countries » official exchange rates have been used. As concerns Japan, 1938 figures are based on the revised *Hirogoshiki* national accounts; figures for all other years on *Kokumin shotoku kokusho* (E.P.A., Japanese Government, 1962). GNP is taken at factor cost.

(2) Calculation based on UN yearbooks of international trade statistics.

(3) The 1938 figure is estimated so as to include trade between Western and Eastern Germany.

24. *Current transactions with the rest of the world, 1946-1964 (1).*
current prices, billions of lire

Year	Goods F.O.B.			Services			Total on goods and services account		Unilateral transfers (2)			General total
	Credit	Debit	Balance	Credit	Debit	Balance	Balance	Credit	Debit	Balance		
1946	110	229	- 119	15	40	- 25	- 144	—	—	—	- 144	
1947	344	854	- 510	46	149	- 103	- 613	264	6	+ 258	- 355	
1948	619	827	- 208	118	119	—	- 209	247	27	+ 220	+ 11	
1949	642	826	- 184	163	149	+ 14	- 170	258	37	+ 221	+ 51	
1950	750	852	- 102	213	181	+ 32	- 70	231	47	+ 184	+ 114	
1951	1,026	1,197	- 171	253	240	+ 13	- 158	241	49	+ 192	+ 34	
1952	826	1,328	- 466	298	241	+ 57	- 409	212	25	+ 187	+ 222	
1953	921	1,383	- 462	416	294	+ 122	- 340	226	22	+ 204	- 136	
1954	988	1,394	- 406	445	284	+ 161	- 245	210	10	+ 200	- 45	
1955	1,111	1,525	- 414	509	328	+ 181	- 233	215	10	+ 205	- 28	
1956	1,302	1,759	- 457	621	414	+ 207	- 250	208	12	+ 196	- 54	
1957	1,550	2,030	- 480	822	529	+ 293	- 187	149	17	+ 132	- 55	
1958	1,577	1,815	- 238	890	523	+ 367	+ 129	234	13	+ 221	+ 349	
1959	1,788	1,871	- 83	967	580	+ 387	+ 304	185	17	+ 168	+ 472	
1960	2,232	2,628	- 396	1,125	723	+ 402	+ 6	214	11	+ 203	+ 209	
1961	2,564	2,912	- 348	1,306	847	+ 459	+ 111	234	27	+ 207	+ 318	
1962	2,868	3,418	- 550	1,488	946	+ 542	- 8	215	33	+ 182	+ 174	
1963	3,115	4,277	- 1,162	1,730	1,184	+ 546	- 616	201	23	+ 178	- 438	
1964	3,673	4,035	- 362	1,887	1,283	+ 604	+ 242	189	15	+ 174	+ 416	

(1) Based on ISTAT national accounts. Different figures are published by the Bank of Italy.

(2) ISTAT's national accounts used here in contrast with OECD definition, include in transfers such items as donated military equipment.

25. *Index numbers of wage costs (measured both in local currency and in U.S. dollars)*
per unit of manufacturing production in 10 countries, 1949-1962 (1).

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Belgium local currency	89	86	93	98	98	93	89	88	96	100	95	94	97	98
" U.S. "	98	86	93	98	98	93	89	88	96	100	95	94	97	98
Canada local currency	77	79	88	94	96	97	93	96	100	100	100	101	101	101
" U.S. "	73	70	70	93	95	96	91	95	101	100	101	101	96	91
France local currency	63	67	79	92	89	89	88	90	92	100	103	104	106	113
" U.S. "	92	80	95	110	107	107	106	108	104	100	87	88	90	96
Germany local currency	—	85	89	95	90	88	87	92	97	100	101	105	113	122
(Federal Republic) " U.S. "	—	85	89	95	90	88	87	92	97	100	101	105	119	128
Italy local currency	127	112	111	113	107	104	102	103	102	100	91	90	92	99
" U.S. "	139	112	111	113	107	104	102	103	102	100	91	90	92	99
Japan local currency	—	117	111	117	108	106	96	99	96	100	89	83	80	84
" U.S. "	—	117	111	117	108	106	96	99	96	100	89	83	80	84
Netherlands local currency	82	81	86	84	81	89	89	96	103	100	97	100	110	117
" U.S. "	107	81	86	84	81	89	89	96	103	100	97	100	114	123
Sweden local currency	62	61	72	87	86	86	91	96	98	100	99	101	108	104
" U.S. "	80	61	72	87	86	86	91	96	98	100	99	101	108	104
Unit Kingdom local currency	66	66	70	79	79	85	89	96	98	100	100	103	109	112
" U.S. "	88	66	70	79	79	85	89	96	98	100	100	103	109	112
United States (2) local currency	92	90	96	99	100	99	98	98	100	100	98	97	96	95
" U.S. "	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(1) Calculation based on U.N. statistical yearbooks. As concerns Italy, the wage statistics used are those published by the Ministry of Labour. The index of wage costs per unit produced has been calculated as the ratio of the index of hourly earnings to the index of output per man hour with the following exceptions: for Japan we had to take monthly earnings; for Belgium daily earnings and output per man year; for France wage rates. (2) Production workers.