

Old and New Problems about National Income and National Wealth

by
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In all scientific research the ideal method has at its basis the strict definition of the expressions used in making the enquiry, after which investigations, comparisons, and deductions are made.

But in practice the mode of procedure is often other. Except in the case of purely theoretical research, based on new notions, the enquiries usually start by using expressions already current and of which no strict definition is given. Indeed, the definitions that are given of the expressions when starting the enquiry, possess that degree of accuracy that suffices for practical purposes, and are therefore somewhat vague, as they take no account of those possibilities that do not usually arise in the course of the special enquiry undertaken.

Later on, when the enquiries have multiplied and it is necessary to compare results in time and space, one perceives that the data do not seem to have a really satisfactory degree of comparability, and an endeavour is made to overcome this drawback. This leads to a revision of the notions long in use at the bases of the enquiries; they are generalised or differentiated and subjected to strict definitions.

Interesting theoretical problems then arise, whose solution leads us to realise the intimate causes of the lack of comparability of the data, and very often these causes are eliminated to meet the practical purposes at issue.

This is just what has happened in the case of the enquiries into income and national wealth.

The *empirical stage* of the estimates has made way for a *critical-comparative stage*, and lastly to a *logical stage*. After the first world war this development had made more progress in the case of national wealth and had found — if I am not mistaken — its final expressions in some writings of ours (1).

(1) See more especially the articles *Sulle valutazioni della ricchezza nazionale*, in « Giornale degli Economisti e Rivista di Statistica », July 1919, and *La ricchezza dell'Italia*, in « Supplemento economico del Tempo », Rome, 20 April 1920 (both reprinted in *Problemi sociologici della guerra*, Zanichelli, Bologna, 1921); *La guerra e la ricchezza nazionale*, in « Economia »,

On the other hand, the enquiry had made comparatively little progress in the case of income, and it was with a view to obtaining progress in this direction that in 1930 a Committee on income and wealth was set up within the International Institute of Statistics. This Committee however never met and had therefore to carry on its work by correspondence, and thus the contributions it made to this study were rather the fruit of individual than of collective efforts. Nevertheless, they had led to considerable progress towards a logical treatment of the matter (2).

Trieste, July-August, 1924 (translated into German under the title *Untersuchungen über den Einfluss des Krieges auf das Volksvermögen*, 60 Jahr, Heft 2, 1924); the paper *A comparison of the Wealth and National Income of several important Nations (Italy, France, Belgium, United Kingdom and United States) before and after the War*, Rome, Provveditorato Generale dello Stato, 1925; the lecture on *La ricchezza comparata delle nazioni*, in « Atti della R. Accademia di Scienze, Lettere ed Arti di Padova » (opening speech of the academic year 1925-26), reprinted in « Nuova Antologia », Rome, 16 August, 1926. The paper *Sur les fondements des évaluations de la richesse nationale* was written during the second world war but was only published after its close in the « Revue de l'Institut Int. de Stat. », 1945. An Italian edition was published soon after in the « Giornale degli Economisti » in two articles: *Obiezioni economiche alle valutazioni della ricchezza nazionale*, March-April, 1946, and *Significato economico delle valutazioni della ricchezza nazionale*, May-June, 1946, followed by a Spanish translation under the title *Fundamentos de las valuaciones de la riqueza nacional*, in « El trimestre Economico », Mexico, Vol. XIV, No. 3, October-December, 1947. Another French translation was made of the Italian edition — without being submitted to the Author — and published by the « Bureau de Statistique et d'Etudes Financières du Ministère des Finances » in the volume « L'Actualité économique et financière à l'étranger », Paris, May, 1948.

(2) The Committee was set up, at the suggestion of the writer, at the XIXth Session of the International Institute of Statistics (Tokio, 1930) as the result of a memorandum entitled *La determinazione della ricchezza e del reddito delle nazioni nel dopoguerra e il loro confronto col periodo prebellico*, published in « Bulletin de l'Institut Inter. de Statistique », Tome XXV, 3me Livr., pp. 368 et seq. The members of the Committee were G. Colson, F. von Fellner, J. Landmann, E. Mahaim, W. C. Mitchell, J. Stamp, J. A. Vandellos, C. A. Verrijn Stuart, E. Wagemann, W. Winkler, and C. Gini, Reporter, of whom only the last three are still living. A report

After the second world war, chiefly thanks to the work of international bodies or of national bodies whose work they encouraged and coordinated, a new and striking mass of material has been brought together, at first collected on empirical lines, and later

on with critical and comparative purposes, and today the work is spreading in space and tracing back in time, raising or reviving theoretical problems to which this article, and some others that may follow, wish to make a contribution.

THE MASK OF GOVERNMENT (*)

Among the questions concerning the wealth and income of nations one of the most discussed is that of the relations between services or goods of State or public corporations and those of private persons.

The solution of such questions will be facilitated by bearing in mind that the Govern-

ment and the other public bodies are only the agents of the citizens, that they are not profit making concerns, and that their task is only that of transferring goods or services from some citizens to others, or at most that of preserving, developing and enlarging some categories of goods with a view to using the

in French and Italian entitled *Di alcune circostanze che nei tempi moderni tendono a far apparire l'incremento del reddito maggiore del vero* was submitted by the Reporter on behalf of the Committee to the XXIII Session of the Inst. Int. de Stat. (London 1934), and published in the XXVIIIth volume, Part II, of the Bulletin of the Int. Institute of Stat., pp. 248 et seq. It took into consideration not only the observations of the several members of the Committee, but also a manuscript memorandum entitled *Volksvermögen und Volkseinkommen in der internationalen Statistik (Vorschlag einer zwischenstaatlichen Regelung)* by Dr. PAUL SMUTNY, of the Statistical Bureau of Czechoslovakia. I do not know whether this memorandum has since been published. The observations then sent in by Prof. Landmann were certainly published in an article entitled *Vergleichbarkeit des Vorkriegs- und Gegenwartsschätzungen der Volksvermögen u. Volkseinkommen*, published under his name and that of Dr. G. COLM, in « Allgerm. Stat. Arch. », Band 22, 1932.

The advisability of arranging for periodical meetings of the Committee so as to allow of an exchange of views among the members, instead of carrying on the work by correspondence only, was pointed out by the Reporter and by Prof. v. Fellner, of the Committee, as also by the President of the Section of Economic Statistics, Prof. RAPPARD, at the London meeting, but without effect. (See « Bull. de l'Inst. de Stat. », Tome XXVIII, 1ère Livraison, pp. 103-104).

The Reporter took up these studies again after the second World War in a lecture *Intorno al reddito e alla capacità di pagamento dell'Italia nell'ora presente*, delivered at the Faculty of Economic and Commercial Sciences of Rome and published in « Economia e Commercio », year I, No. IV, 1946. A Spanish translation under the title *Acerca de la renta y capacidad de pago de Italia en la hora presente* was published in the « Anales de la Academia de Ciencias Economicas » Series II, Vol. IV, No. 3, Buenos Aires, 1947. This was followed by the article *On National Income*, in the « Banca Nazionale del Lavoro Quarterly Review », No. 2, July 1947, translated into Spanish, first under the title *Cuestioner sobre el ingreso*, in « Investigaciones Economicas », Mexico, Tome VII, No. 4, 1947, and later on under the title *Cuestiones sobre la renta*, in « Anales de Economia », Madrid, Vol. VIII, No. 31, 1950, and summarised under the title *The National Dividend and Net Production* in the Proceedings of the XXV Session of the Int. Inst. of Statistics (Proceedings of the Int. Statistical Con-

ferences, Vol. III, Part B, Washington, 1947). The lecture on the *Comparabilità nel tempo e nello spazio delle valutazioni del reddito nazionale*, given in the following year at the request of the Italian General Confederation of Industry, was published in the « Rivista di Politica Economica », March 1948, and reprinted, with a bibliographical appendix, in the volume *Finanza pubblica contemporanea*, Bari, Laterza, 1949. It was also submitted to the « Congrès Int. de Comptabilité » (Paris, 1948) and published in French in the Proceedings of the Congress and also by the Review « Economic appliqué », Paris, January-March, 1949, and in Spanish in the « Revista Int. de Sociologia », Vol. VII, No. 26-27, April-September, 1949. A fuller article had appeared in the « Banca Nazionale del Lavoro, Quarterly Review », April 1948, No. 5, entitled *The Content and Use of Estimates of the National Income*. An Italian edition of this was included in the volume *Studi sul reddito nazionale*, published by the Central Institute of Statistics « Annali di Statistica », Series VIII, Vol. II, Rome, 1950). This contains some additional matter and a note *Sulla valutazione dei generi di diretto consumo*, presented at the IVth meeting (June 15, 1949) of the Italian Committee for the study of income and wealth, and published in Italian in the Proceedings of that Committee (« Rivista di Politica Economica », January 1950), in English in the « Banca Nazionale del Lavoro, Quarterly Review », April-June, 1949, No. 9, and in Spanish in « De Economia », Madrid, No. 9, May-June, 1950. Another special point was dealt with in the note *Dell'importanza della pratica finanziaria per alcune moderne questioni sul reddito*, in « Archivio Finanziario », Padua, Vol. I, 1950.

The chief conclusions reached by these studies, along with some directions for future enquiries, are summarised in a report entitled *National Income Estimates*, presented by the Reporter of the Committee and published in the « Revue de l'Inst. Int. de Stat. », 1949, No. 3/4. This report, with a few variations, was also the subject of a lecture given in September 1949 at the request of the University of Oslo, and of a speech on *Le valutazioni del reddito nazionale*, delivered at the opening of the IXth scientific meeting of the Società Italiana di Statistica (7-8 June, 1950).

(*) Lecture given at the Seminary organized at Calcutta by the International Institute of Statistics, 19th-21st December 1951.

This article will be followed in the next issue by another paper on *The Minimum Common Denominator*, by the same author.

income obtained therefore for the benefit of the citizens themselves.

In judging which of these goods or services should be included in the reckoning of national wealth and income in addition to the goods or services of private persons, and which should be excluded, it will be helpful for us to imagine that the citizens hold the goods or themselves operate the economic services today entrusted to public bodies (1), thus removing — so to say — from the face of the national economy the mask of Government.

When that mask is removed, matters that seemed intricate and of which contradictory solutions had been offered, become uniformly clear.

* * *

One of these questions relates to public securities. Should they or should they not be included in the calculation of private wealth? Many reply in the negative as they think that, by including them, wealth would be fictitiously increased unless they be at the same time deducted from the calculation of public wealth.

Leaving aside for the time being the question of estimating public wealth, let us examine the matter of the inclusion of public securities in private wealth.

Setting aside the action of the Government or other public bodies, we find private persons who have made loans to group of others citizens forming a Commune or a larger territorial unit, often a State. It makes no difference whether the individual security holder is or is not a member of Commune or a State or other territorial unit.

The debtor groups have contracted a liability to pay interest to the security holders at a rate stated on the credit certificate in the amount and for the time and with the modalities also specified on it. The credit certificate thus acquires a value, and is negotiable, and therefore directly or indirectly exchangeable with goods of any other kind. If those goods are included in the calculation of national

wealth why should not the securities that can be exchanged for them also be included therein? (2).

Moreover, the debtor group adopts a plan for meeting its liabilities for the interest payments agreed on, distributing the charge among its members by levying the requisite amounts from their incomes, both unearned — or, more correctly speaking, incomes from capital assets — and earned incomes or, we might say, from personal or human assets.

In so far as the levy is made on incomes derived from capital assets, the exchange value of those assets is proportionately reduced. An estate of which the owner only receives 9/10ths of the income while 1/10th is levied to pay the interest due to the bearers of public securities is evidently only worth 9/10ths of the value it would have if all the 10/10ths of the income were at the disposal of the owner.

The same holds good of the value of personal assets, *i.e.* of the human productive apparatus which produces earned incomes, with this difference that its value is not assessed — except in countries where slavery exists — at its exchange value but at the capitalisation of the earned income on which, in the last resort, depends also the exchange value of capital assets.

Levies on incomes derived from capital assets or on earned incomes when duly capitalised, therefore measure the reduction in value of the capital or personal assets caused by the

(2) See on this point the volume *L'ammontare e la composizione della ricchezza delle nazioni*, Turin, Bocca, 1914, pp. 17-21, and the article *Sulle valutazioni della ricchezza nazionale* in « *Giornale degli Economisti e Rivista di Statistica* », July, 1919, reprinted in *Problemi sociologici della guerra*, Zanichelli, Bologna, 1921, more especially at § 7, pp. 344-350. L. EINAUDI is led to similar conclusions in the communication *La inclusione del debito pubblico nella valutazione della ricchezza delle nazioni* (The inclusion of the public debt in assessments of the wealth of nations), presented in English with an introduction in Italian and a summary in French, to the XXII Session of the Int. Institute of Statistics (London, 1934) and published in the « *Bull. de l'Inst. Int. de Stat.* », Volume XXVIII, 2ème Livr., 1935, pp. 270-279, afterwards reprinted in Italian in *Saggi sul risparmio e l'imposta*, Turin, Einaudi, 1941, pp. 317-330. See also the remarks on this matter by G. PIETRA in the debate that followed the aforesaid communication by Prof. EINAUDI, as well as the report by Prof. GINI, and the communication of Prof. MITCHELL and Prof. KUNZETS, also on the assessment of the national income, in « *Bull. de l'Inst. Int. de Stat.* », Vol. XXVIII, 2ème Livr., pp. 102-104.

(1) This criterion has already been suggested in the report on *National Income Estimates* in the « *Review of the Int. Stat. Institute, 1949* », No. 3/4, pp. 124-125.

interest payments on public securities, while the interest instalments paid with those levies, when capitalised, measure the addition to the other sources of wealth represented by said securities. Apart from quantities of second order the two items offset one another (3).

Therefore if, in the calculation of private wealth personal assets, estimated by capitalising the net earned income, be added to capital assets, estimated at their commercial value, it is obvious that the amount represented by public securities should be included in private wealth, as it is offset by the reduced value of capital and personal assets on which the interest charges weigh.

It may however be remarked that personal assets are not generally included in the calculation of national wealth which is limited to the estimation of capital assets. What conclusions may we draw from this fact?

It is impossible to distinguish public securities whose interest payments are met out of levies on earned income from those for which the said payments are levied on income from capital assets. The revenue obtained from those two tax brackets are merged and cannot be identified separately. And even were it possible to distinguish them and to identify the securities according to the source from which their respective interest payments come, it is difficult to see how it would be possible to treat on a different basis securities that are materially identical and receive the same amount of interest. It is therefore evident that if one of the categories be included in the calculation of wealth, the other must be also, nor is there any reason why one or other of the two categories of public securities should be excluded while all other securities are included.

Therefore, all public securities should be included in the calculation of wealth, even if

(3) Reference is here made not only to the expenses on administration and suchlike, on the one hand, and, on the other, to the possible productive investments of the sums levied, but also to the fact that the levies may also weigh on the properties of public bodies whose services are beneficial not to the capital nor to the personal assets of the citizens, but whose purpose is the direct satisfaction of their needs. See on this matter the article quoted, *Sulle valutazioni della ricchezza nazionale*, in « *Problemi sociologici della guerra* », pp. 346-348, and more especially p. 347, note (3).

that calculation be limited to capital assets. If they (public securities) are not matched by a corresponding reduction in the values of the capital assets, this happens because, in so far as the interest on them is paid from earned income, they represent a « *materialisation* » of personal assets. Such a materialisation takes place not only in the case of public securities, but of all credits when the instalments of interest and perhaps also of the sinking fund payments on the debt, are provided by the taxation of earned income (4).

Undoubtedly, viewed from the standpoint of the liabilities incurred, there are some important differences between the case of public securities and that of private credit certificates. On the one hand, private debts less frequently acquire — in the form of pledges or mortgages — the nature of a real debt and are more generally of a personal description, whereas the liabilities incurred by private persons as a result of public indebtedness are very largely of a real description — in as much as they are charged to income arising from capital assets (and it is only the remainder that acquires a personal character in as much as it is charged

(4) On this « *materialisation* » see our communication presented to the XIX Session of the International Institute of Statistics (Tokio, 1930), entitled *La determinazione della ricchezza e del reddito delle nazioni nel dopoguerra e il loro confronto col periodo prebellico*, published in the *Bull. de l'Inst. Int. de Stat.*, Tome XXV, and the communication above cited by L. EINAUDI to the XXVIII Session of the same Institute (London, 1934), and also the remarks, already referred to, of G. PIETRA. See also the article *Sur les fondements des évaluations de la richesse nationale*, 3ème Partie: *L'évaluation des capitaux personnels*, in « *Revue de l'Inst. Int. de Stat.* », 1945, pp. 54-57, and the Italian edition in « *Giornale degli Economisti* », May-June 1946, entitled *Significato economico delle valutazioni della ricchezza nazionale*, pp. 309-313. In said communication EINAUDI, though he does not use the expression « *materialisation* » of personal assets, set forth a substantially similar theory to that contained in our communication presented at Tokio, and he concludes in favor of the inclusion in the estimate of national wealth of all public debt securities, while, in a previous article *Del cosiddetto prelievo dell'imposta e dei suoi effetti sulla valutazione del reddito e della ricchezza di un paese*, published in « *Riforma Sociale* », May-June 1929, and also reprinted in the already mentioned *Saggi sul risparmio e l'imposta* (pp. 297-314), he considered that the total amount of public securities should be added to private wealth only if, under that heading, were included not only capital assets but also personal assets. Should the latter category not be included, he considered — while realising the practical difficulty of such a calculation — that the quota of the public debt whose service weighs on earned incomes should also, for the sake of symmetry, be excluded. See the aforesaid *Saggi*, pp. 327-330 and p. 311.

to earned income). On the other hand, in private debit-credit relations, each creditor is matched by a clearly defined debtor — either an individual or a corporation — who is personally responsible, while in the case of the public securities the credit of each bearer is refracted and dispersed over an indeterminate mass of debtors through the State or other public bodies that undertake the task of meeting the service of the debt and procuring adequate pecuniary means for this purpose. If the mask of Government be removed from the face of the national economy, we perceive that these differences, important from other points of view, alter nothing for the purposes of the estimate of national wealth.

It is conceivable that the materialisation of personal capital might be carried to a point when it would absorb all earned incomes. The workers who would thus have mortgaged the whole proceeds of their labour would be reduced to a new — even if attenuated — form of slavery under which they would indeed be free to select the form of activity they would pursue, but all the proceeds of that activity would be tied up. Let us not deceive ourselves: the larger the portion of earned income absorbed by the levies made by public bodies or by private creditors, the nearer we approach to such a state of slavery.

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Let us now consider public wealth.

For a long time most writers in ascertaining the amount of national wealth have generally reckoned, among the assets, the exchange value or, in its absence, the cost of the national property or capital assets of public bodies, and, among the liabilities, the amount of the public debt. In the case of most nations the liabilities greatly exceeded the assets (5).

If the mask of Government be removed from the face of the national economy, the conclusions reached are very different.

What we have already said about the inclusion of public securities in the calculation of national wealth has shown that in this field the part played by public bodies is that of

redistributing. They have at one time collected from certain individuals certain given funds, and have delivered, as recognition of the debt, securities for like amounts. They have spent the said funds to the advantage of the community or else they have distributed them to certain other individuals, or among all of them. Likewise, they now levy from all individuals or from certain ones the amounts needed for paying the interest due to the bearers of the securities. By so doing the public bodies add nothing and deduct nothing either from private or from national wealth, and there would therefore seem to be no reason why national debts should be reckoned among the liabilities.

Nor, on the other hand, does it seem justifiable to reckon, among the assets, national properties or capital assets, nor does it seem justifiable, for the purposes we are now considering, to differentiate, as some have done in the past, between the two (6).

The uses of the former group (national property) are indeed directly advantageous to the community; those of the latter (capital assets) only indirectly by means of the proceeds the public bodies obtain from them, but, whether directly or indirectly, it is always the community that benefits by them. Take the case of a landed estate. If it were not for Government and other public bodies, the private citizen would have to provide — as is indeed the case in some countries — for many needs, such as enclosing it within walls for its protection, garrisoning it, providing it with bridges and water supply, with the services of courriers to keep in touch with the outside world. But, instead, the land-owner is associated with other land-owners and obtains, by the payment of his share, policemen who guarantee inland safety, national armies that guarantee external safety, aqueducts that bring water supplies, railways or highways, provincial and communal roads, postal and telegraphic services, etc. But all the assets with which the public bodies provide for these and the other services, such as the army and the police with all the equipment and buildings they require, the aqueducts, railways, roads, bridges and other constructions, the system of

(5) See *L'ammontare e la composizione*, etc., pp. 9-12.

(6) See *L'ammontare e la composizione*, etc., pp. 15-16.

postal and telegraphic communications, and so forth, are but the appendix of private property.

The private land-owner is entitled to these services, and if he sells his land he implicitly sells with it his rights to make use of the said services; it may be said that he sells his share of ownership of the public assets with which he is endowed.

It might therefore be said that, as the balance-sheet of national wealth does not show a liability for the public debts, so likewise it does not show assets of its own represented by national properties or capitals. The value of the public wealth is zero (7).

Account should however be taken in a second approximation of the fact that the benefits conferred by national properties and capital assets of public bodies are not limited to the capital assets of the citizens, but are extended also to their persons.

The national militias and the police forces protect not only the property of the citizens, but their persons; aqueducts and streets and means of communication not only increase the value of private property, but they make life easier and more profitable and pleasant.

Then, in calculating the wealth formed by private fortunes, we should, to ascertain the national wealth, add the share of the national properties and capital assets of public bodies that is of benefit not to private property, but to the persons of the citizens (8). This share is, of course, and ideal one, for, generally speaking, it is the same properties belonging to public bodies that on the one hand are beneficial to private property and on the other to the persons of the citizens; it is moreover no easy matter to identify this share.

In a third approximation, when considering the personal benefits conferred by the assets belonging to public bodies, a distinction should be drawn between the part that goes to the benefit of human productive equipment and that which goes to the benefit of human equipment for consumption, in other words,

(7) See *L'ammontare e la composizione*, etc., p. 16.

(8) See again *L'ammontare e la composizione*, etc., pp. 16-17. We should add, to the national properties and the capital assets of the Government and the public bodies, the capitalised yield of the taxes in so far as it is invested in public services of exclusively personal utility. On this point also, see *L'ammontare e la composizione*, etc., p. 18.

between the part that leads to an increase of earned incomes and therefore adds to the value of the personal assets of the nation and that whose only effect is to procure greater physical, intellectual, or moral satisfactions, but without making any noticeable addition to production (9).

To the first group belong, for instance, external defence and internal safety in as much as they are helpful to the development of productive human activities; to the second the satisfactions the citizens obtain from museums, art-galleries, artistic monuments, historical relics, and from the whole system of religious organisation.

The added value of personal assets consequent on the growth of earned incomes is reckoned in the calculation of private wealth by those who include them therein; in such cases it would obviously be a duplication to add to private wealth the share of public wealth to which that increase is due.

But even those who exclude personal assets from their calculations of private wealth cannot neglect the said additional value even if it should not bring about an increase in capital assets. It may be said that the said quota of national properties and capital assets belonging to public bodies is thus *personalised* (10).

Just as capital assets are increased by a phenomenon we have described as « *materialisation* », when earned income is curtailed to pay interest on public securities which are thus made valuable, so capital assets are reduced by a phenomenon that may be described as « *personalisation* » when earned income is increased by the benefits the workers obtain from the services rendered by the national properties and capital assets belonging to public bodies.

The conclusion to which we come is that not all the benefits, duly capitalised, that the citizens obtain from these public assets should be added to privately owned wealth in calculat-

(9) The assets of those bodies whose income is distributed annually among the members of the community, as happens (or happened) in some of the Communes of Upper Friuli, should be treated in the same way as the assets of public bodies whose services or proceeds go to the benefit of the human equipment for consumption. See *L'ammontare e la composizione*, etc., p. 16.

(10) See *Sur les fondements*, etc., p. 55, and *Significato economico*, etc., p. 310.

ing the national wealth, but only that part that is advantageous to the human equipment for consumption while that part that is advantageous to the human productive equipment should be excluded. This means that such public utilities as parks and public gardens and artistic landscapes should be included in so far as they are not matched by an increase in the value of the neighbouring lands and buildings; so also should be included the utilities arising from free public entertainments from artistic and scientific collections and historical monuments (except for that part which assists professional training), from educational and vocational utilities of a cultural, moral, or religious character but with no profit earning objects in view. Therefore, in all countries a more or less important share of the properties owned by public bodies, but always in all cases a positive quantity, should be added to privately owned wealth in calculating the national wealth.

Even if this share can only be measured approximately, and if even an approximate measurement is impossible, this conclusion would nevertheless represent a decisive advance in estimating national wealth as compared to the traditional procedure which consisted in adding to private wealth the totality of the national properties and capital assets belonging to public bodies, while deducting therefrom the amount of the public indebtedness. As matter of fact, in many countries that traditional system did not lead to an increase but to a reduction (sometimes by conspicuous amounts) of private wealth for the purpose of ascertaining national wealth.

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The solution of the question of public wealth we have reached, is preliminary to the discussion of the question relating to public expenditure.

Students are still discussing whether all public expenditures should be held to correspond to services not included in the calculation of private incomes and should therefore be added to them with a view to ascertaining the national income, or whether they should not be added to those incomes in as much as they

represent production costs without which private incomes could not be earned, and should therefore be considered as already included in them. The latter opinion was formulated by me in 1934 (11), and little by little has been widely accepted. It has also given rise in several countries to estimates of the two groups of expenditure which show that the objection raised that it would be practically impossible to draw a distinction between those two groups, was groundless.

A more thorough study of the question may be made if we remove from the face of the national economy the mask of Government. This will lead us also to qualify some of the conclusions.

But, to avoid all misunderstandings, when trying to solve the question of public expenditure, we should first define the extent and the sources of public revenues.

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Public revenues may arise either from the proceeds of public properties (incomes from capital assets or obtained by their alienation, incomes from the national properties) or from taxes levied on private income or assets, essentially in the form of direct and indirect taxes, or from foreign or domestic loans, or from inflation. Inflation indeed *per se* procures no entries for the State but enables it not to pay (or rather to make fictitious payments) for the goods or services it receives.

To avoid duplications and complications it is advisable to represent these receipts as dis-

(11) This idea is expressed in the report *Di alcune circostanze che nei tempi moderni tendono a far apparire l'incremento del reddito nazionale maggiore del vero* (Italian text and French translation) presented to the XXII Session of the Inst. Int. de Stat. (London, 1934) and published in Volume XXVIII, 2 Livr. of the Bull. dell'Inst. Int. de Stat., 1935 (pp. 248 ed seq.) as well as in the debate on the report *Methods used in different Countries for Estimating the National Income*, presented by J. C. STAMP, on the occasion of the centenary of the Royal Society of Statistics of London (« Journal of the R. Stat. Society of London », 1934, Part III).

For subsequent agreements and disagreements and for the estimates made of the two groups of expenses, see our article *The content and use of Estimates of the National Income*, in « Banca Nazionale del Lavoro Quarterly Review », Rome, No. 5, April, 1948, pp. 288-292, and the Italian edition in *Studi sul reddito nazionale*, published by the Central Institute of Statistics of Italy, « Annali di Statistica », Series VIII, Vol. III, 1950, pp. 30-37.

tinct from those of which private incomes consist. This is evident in the case of the proceeds from public assets; it is evident for direct taxes in as much as individual incomes are reckoned net of them (12). It is also evident in the case of indirect taxes that weigh on production and are deducted before calculating the incomes of the producers; it may seem less evident in the case of indirect taxes that weigh on consumption as they do not cut into the nominal incomes of the producers. But these taxes raise the prices of consumption goods and therefore the general price level, and they thus reduce real as compared to the nominal private income. Likewise inflation does not apparently cut into the private income, as producers receive the price of the goods and services that they sell to the State: but, as a matter of fact, it curtails that income through the general rise of the price level which has the effect of reducing the purchasing power of the owners of money, and therefore the real private income. Internal and external loans in themselves are only a form of *do ut des* which in itself does not alter the incomes of private persons; their effect in raising or reducing private incomes will depend on the use made of them as of all other sources of revenue; it will depend on whether the increase of private wealth obtained by the use of the proceeds of the loan is greater or smaller than the curtailment caused by the service of the debts incurred.

We must therefore preface the following analysis of expenses by saying, in the first place, that private incomes are here understood to be estimated net of taxation — and this is done by deducting direct taxes from the assessed individual incomes, but not deducting from them indirect taxes (already automatically deducted) that weigh on production or consumption — and that, in the second place, in making the estimate, due account be taken of the general price level.

* * *

The receipts of public bodies may be assigned to:

(12) Why this should be done is clearly explained in the article cited by EINAUDI, *Del cosiddetto prelievo dell'imposta*, etc., p. 311.

(a) the upkeep, repair, amortisation or renewal of public assets — national properties or capital assets;

(b) the increase of the aforesaid public assets;

(c) the upkeep, repair, amortisation or renewal of private assets;

(d) the increase of private assets;

(e) the facilitation of private production, by procuring the producers services of an instrumental character;

(f) providing private services of a final description.

The expenses referred to under letters (a) and (b) are made for public assets and do not interfere with private wealth.

As it is generally recognised that in ascertaining income the cost of the maintenance of the capital is deducted, the expenses mentioned under letter (a) should not be entered as an increase of income.

On the other hand, the expenses under letter (b) represent an investment to the direct or indirect benefit of private wealth, of which, as we have seen, public properties are an appendix, and they should therefore be added to private incomes to obtain the national income.

These groups of expenses may acquire notable importance, more especially at certain periods.

There are some public assets, such as armaments, for which the outlays on upkeep and repair are huge, and which nevertheless, especially in dynamic periods, rapidly become obsolescent and have to be amortised and renewed over a short period of time. In the case also of public gardens, roads, bridges, and canals, upkeep is a heavy expense: and, if it is neglected or badly attended to, the consequent depreciation of public assets must be deducted from private incomes in assessing the national income. This is an item which in time of war or of prolonged depression may acquire decisive importance.

On the other hand, in periods of reconstruction, expenditure for restoring public assets that are destroyed or damaged acquires decisive importance as do also, in periods of rapid progress, the costs of improvements or enlargements. We need only think of the

radical improvements of the road and railway systems in recent decades.

Another item which in some countries and on some occasions has acquired importance is that of public loans made to other Governments or to private foreign borrowers.

The two groups of public expenditure, (a) and (b) have not been the object of special consideration by the writers on the estimation of income. The reason for this perhaps depends on the fact that as they do not imply an interference of public assets with private wealth, they do not raise theoretical questions whose solution gives rise to discussion.

The third group of expenses has also been left in the shade. It covers costs incurred for preventing or limiting fires, landslips, avalanches, floods, soil erosion, the spread of dunes, and so forth, and for the repair of damages caused by them or other unavoidable and irreducible calamities such as earthquakes, tidal waves, hurricanes.

This is an important group. If it has been neglected this is probably because it has been confused with group (e) — expenses incurred to facilitate private production. But a distinction should really be drawn between them, as the maintenance of properties is indeed a necessary though not sufficient condition for production, and also because that maintenance may refer not only to instrumental but also to final goods.

It is hardly necessary to say that expenses belonging to this group like those of group (a) — and for the same reason — should not be entered as an increase of income and that, if the maintenance of private properties is not properly attended to, the depreciation of the national wealth consequent thereon should be deducted from receipts when assessing the national income (13).

The problems arising from the last three groups (d), (e), and (f) are particularly debat-

able and are indeed debated; it is in seeking for their solution that it is particularly helpful to remove from the face of the national economy the mask of Government.

Let us suppose that neither the Government nor local Government bodies exist, and that therefore there are neither rates, taxes or duties, nor public assets. Let us suppose that these assets are distributed *pro rata* or possessed jointly by the citizens, who therefore would themselves provide for the services now provided by the Government and the other public bodies.

The expenses now defrayed by those public bodies which increase the private assets (cat. d) are in first place those assigned for the service of the public debt and for doles to the unemployed.

If the Government and local Government bodies did not exist, the citizens would have to make these payments themselves, drawing them from their receipts. That is to say that they would transfer a part of their receipts to the bearers of the debt securities, and to the unemployed. In the hypothesis that private income is reckoned net of such levies (as we have supposed that it is reckoned net of taxes) the cost of the service of the debt and of unemployment doles would be reckoned as being part of the income of those receiving the said payments. Therefore, when it is commonly said that expenses incurred for transfers (which are the principal item of category d) should not be added to private incomes, the solution suggested is in keeping only with the hypothesis that the sums transferred are already included in private incomes as receipts obtained by the recipients.

This is the solution accepted by many but not by all writers in the case of the interest on public debts. The solution is in keeping with that above upheld in the case of private wealth, according to which public securities should be included therein.

In the case of unemployment doles, they are not generally held to be income received by those thus subsidised as it is considered that they do not correspond to any service rendered or goods produced, and so the expenses incurred by the Government and other public bodies

on this account should be added to private income.

All this supposes that the doles are considered — as they are generally considered and as I think they must be — as charitable donations. But the solution would be different if they were looked upon as an insurance premium against social disorders, and therefore as a necessary condition for the operation of the machinery of production, in which case they would come under the expenses of group (e), of which we shall speak below.

Public expenditures that increase the value of private properties and therefore come under letter (d), are also those incurred by the Government for reabsorbing paper money when done by withdrawing from circulation the money paid by the citizens to settle tax or other liabilities, and not by compulsory levies.

Deflation is indeed beneficial to the holders of money, while the losses of creditors are matched by the gain of debtors. If, in estimating income, account is taken, as it should be, of the price level, and if gains independent of productive activity have to be included in the incomes of individuals, just as losses arising from all kinds of causes should be deducted therefrom, then the gains of the holders of money will have to be included in the estimate of private incomes, and nothing will have to be added to them in estimating the national income.

Public expenses considered under letter (e), whose purpose is to facilitate private production, are production expenses which contribute to the formation of private incomes, and as such should not be added to the latter.

If, having removed from the face of the national economy the mask of Government, we suppose that the citizens attend themselves to disbursing the above expenses, they would already have been met them during the process of production, and that part of income which, when the Government and public bodies exist, is subsequently levied by them to cover the expenses under consideration, would never have arisen.

A specious objection has been raised. The private producer — it is said — who profits by these public outlays, will sell the product at a lower price than that at which he would

have sold it if those expenses had not been made. The price will be lower by precisely the amount of the public outlays made in its favor and that the producer will therefore save. Private incomes will therefore be lowered by the amount of public expenditure described as production expenditure, which should therefore be added to those incomes in assessing the national income (14).

This conclusion fails to take into account the circumstance that if the price of the products were to be lowered by the amount of those public outlays, the general price level would also be lowered by that amount, and therefore real income would be proportionately lowered as compared to nominal income. Therefore, nominally, private income is found to be reduced by the contribution to private production represented by the public expenditures of group (d), but the real income is unaffected thereby.

This situation matches the one we considered above, which arises from the levying of indirect taxes. These do not reduce the nominal private income, but, by raising prices, they reduce the real one. On the contrary, public contributions to private production reduce the nominal private income, but, by lowering the price level, they leave the real income unchanged.

Group (e) expenses, which are those incurred for production, acquire very great importance for the economic life of the nation, and account for a conspicuous part the outgoings in the budget of local government bodies and more especially in the national budget. How much expensive, indeed, would production not be for private enterprise if deprived of means of external and internal defence, of railway, road, postal, telephonic and telegraphic communications; if without the administration of civil and penal justice, without water supplies, health services, professional and vocational education, and the many other services rendered it by the Government and other public bodies?

(14) See in the *Discussion of the New Department of Commerce Income Series* (in « Review of Economics and Statistics », Harvard University, Vol. XXX, No. 3, August 1948, pp. 150-197) the article *Objectives of National Income Measurement: A Reply to Professor Kuznets*, by Messrs GILBERT, LASZI, DENISON and SCHWARTZ (see more especially, p. 185).

(13) See on this matter the article cited *The Content and Use*, etc., § 11, pp. 292-295, and the Italian edition in *Studi sul reddito nazionale*, § 12, pp. 37-41. For the importance this deduction may have under some circumstances, see the lecture *Intorno al reddito e alla capacità di pagamento dell'Italia nell'ora presente*, published in « Economia e Commercio », Rome, No. 4, 1946, and translated into Spanish in the « Anales de la Academia de Ciencias Economicas », Series 2a, Vol. IV, No. 3, Buenos Aires, 1946.

We agree that it is often a difficult task to separate this instrumental function of the public outlays considered under letter (e) from the ultimate function of the same outlays considered under letter (f), of which we shall soon speak, and that for some items it is indeed impossible to do so. In their case, therefore, recourse must necessarily be had to some agreed formulas, admitting for instance (as is done by the writers who have dealt with this matter) that military expenses should be credited half to the protection of production and half to that of the person; but what can be done is sufficient to show that the importance of letter (e) expenses is such that their addition to private income would lead to an over-statement that cannot be neglected and that could not be excused now that its bearing has once been recognised. The calculations made in the United States and in Italy show, for instance, that letter (e) expenses may be considered equivalent in the United States to nearly half of those of letter (f) and in the case of Italy as exceeding them (15).

The ratio between the two groups of expenditures varies with the greater or lesser intervention of the Government and other public bodies in the economic life of the nation, it varies for the several departments and at different times (15).

That the outlays of group (f) should be added to private income cannot be doubted, for they correspond to services rendered to the person more than do those coming under the heading of private incomes.

To this group belong the outlays on cultural education, public health, relief work, public entertainments, the protection of the personal safety and freedom of the citizens, population policies etc.

It might however be objected that these services are rendered through the civil servants, which sometimes discharge them in full, so that, if the wages and salaries of public employees and workers be included in the calculation of private income, nothing should be added thereto on their account when estimating the national income.

(15) For the results of these calculations, see the article cited *The Content and Use*, etc., pp. 289-291 and the Italian edition pp. 32-36.

To show that this solution is unacceptable, it need only be remarked that in this way public employees and wage-workers would be treated, for the purpose of estimating the national income, on the same footing as the unemployed.

Let K stand for the amount of the personal services rendered by the Government to citizens through the services of public employees and wage-workers. If we remove the mask of Government from economic exchanges, we shall find that the amount K , instead of passing through Government hands, will be levied straight by the group a of income-holders from the goods they produce for an amount R , and passed on to another group of citizens b (many of whom overlap with group a) while $R-K$ remains the amount of goods at the disposal of group a of income-holders. Group b in its turn passes on the goods of the K amount to another group of citizens whom we will call c , in exchange for certain services that said group renders them.

Thus, to the $R-K$ incomes of private persons reckoned net of the levies, twice the K amount should be added, once as representing the goods produced by the a group and passed on by them to group b , and by the latter to group c which has the enjoyment of such goods, and the other for the services produced by group c and which they render to group b which has the enjoyment thereof.

The public expenditures under letter (f) will therefore be added to private incomes estimated net of taxes, but inclusive of the salaries and wages of Government employees and of those in the service of other public bodies (16).

* * *

In all this reasoning on public expenditure we have accepted the narrow notion of wealth which takes into account only capital assets and excludes human assets, and the extensive notion of income that include also the maintenance costs of the workers.

(16) EINAUDI also comes by other ways to the same conclusion, *i. e.* that « we should add to the net incomes of the other tax-payers the net income of the government officials, the creditors and other dependents of the State ». See the article, already cited, *Del cosiddetto prelievo* etc., p. 311.

Were human capital to be included in the notion of wealth — and such an inclusion is desirable for various theoretical and practical considerations set forth elsewhere (17) — maintenance costs would have to be deducted from the receipts, in so far as they are considered as production costs of the workers of the human capital and they should be broadly understood as inclusive not only of the maintenance costs of the workers on active service, but also as those for their families, necessary if the workers who depreciate, age and die are to be replaced.

On the other hand, an addition — of less importance — should be made to income in the cost of countries with a growing population, as the growth of human capital must be included in its estimate.

This leads, on the one hand to an increase in the amount of wealth, which thus includes in addition to capital assets also human assets, and on the other hand, to a decrease in the amount of income, which is thus limited to the increase shown by capital assets and human assets and to luxury consumptions or any optional items contained in useful and essential consumptions.

(17) See the first of our articles *Sul problema finanziario del dopoguerra*, published in the « Supplemento economico del Tempo », of January 3, 1919, footnote (2), corresponding to footnote (2) on page 9 of the pamphlet of the same title in which the paper republished the articles in question (Stabilimento Poligrafico Editoriale Romano, Via della Pilotta, 11, Rome, 1919). See also the article, already cited, *Sulle valutazioni della ricchezza nazionale*, reprinted in « Problemi sociologici della guerra », p. 351, and that, also cited, *Sur les fondements de la richesse nationale*, p. 54 et seq., or, in the Italian edition, *Significato economico delle valutazioni della ricchezza nazionale*, p. 309 et seq.

This leads also to modify the classifications we have made of public expenditures.

Doles to the unemployed should no longer be considered as transfers, which belong to group (d), but they should be classified under group (c), as their purpose is to conserve human capital.

Expenses incurred for a demographic policy, as well as those for the protection of the safety of the person, for public health services, for relief and welfare, etc., should no longer be grouped under (f), as intended to render personal services to the citizens, but they also should be grouped under (c), in as much as they are intended to preserve human capital, and under (d) in so far as they are intended to promote the growth of that capital.

For the part which belong to group (c) such expenses, together with doles to the unemployed, should not be added to the incomes of private persons. Only the part which belongs to group (d) should be added.

Group (f) would be limited to those services which not only do not increase production, but also do not develop the productive equipment of the population, *i. e.* to the expenses incurred for artistic and cultural education, amusements and entertainments, religious worship, the operation of museums, art-galleries, parks, and so forth.

Only such expenses should be added to the incomes of private persons. It cannot be denied that such a solution is logical, as it is evidently natural to place on the same footing expenses that increase private production directly, and those that increase it indirectly, by developing the productive equipment of the population.

STATISTICAL APPENDIX

ITALIAN BUDGET SUMMARY (milliards of lire)

Table A

Financial year beginning 1st July	Revenue (a)		Expenditure (a)				Deficit (-)		% of revenue to expenditure	
	Assessed	Collected	Obligated	Paid out			Obligated	Cash	Assessments and obligations	Cash
				On year account	Arrears	Total				
1938-39	31	...	43	...	...	...	12	...	...	...
1946-47	687	668	1,235	716	158	874	549	206	55.6	76.4
1947-48	1,028	822	1,813	1,016	311	1,327	785	205	56.7	61.9
1948-49	1,060	1,020	1,617	1,034	406	1,440	557	420	65.6	70.8
1949-50	1,793	1,603	1,985	1,200	487	1,687	192	84	90.3	95.0
1950-51	1,923	1,617	2,194	1,216	560	1,776	271	159	87.6	91.0
1951-52 (b)	1,488	—	1,884	—	—	—	356	—	—	—
July-October 1951	521	485	652	380	148	528	131	43	79.9	91.9

(a) Current revenue and expenditure and movement of capital.

(b) Estimates at October 31, 1951.

Source: Conto riassuntivo del Tesoro.

CURRENT REVENUE, BY MAJOR SOURCES (a)

Table B

Sources	1938-39		1948-49		1949-50		1950-51		1951-52 (b)		Index numbers, 1938-39=1
	millions of lire	% of total	millions of lire	% of total	millions of lire	% of total	millions of lire	% of total	millions of lire	% of total	
I. Revenue from Taxation											
Direct taxes	6,504.7	27.2	210,115.9	20.8	326,616.0	22.6	296,262	17.7	261,960.0	18.0	40.2
Indirect taxes on transactions (c)	6,042.5	21.8	357,276.1	35.2	387,615.7	26.7	464,712	27.7	444,904.0	30.6	73.6
Custom duties and Consumption taxes	6,380.3	23.2	201,298.5	19.8	250,431.6	17.3	297,160	17.7	298,970.0	20.5	46.8
Consumption taxes on State monopolized products	3,580.0	13.0	178,281.2	17.6	211,828.1	14.6	228,003	13.6	224,380.0	15.5	62.6
Lotteries	543.6	2.3	12,651.5	1.2	18,061.6	1.2	25,029	1.5	21,600.0	1.5	39.7
Sundry revenues	2,885.2	10.5	35,392.6	3.5	45,869.6	3.2	50,935	3.0	86,091.9	5.9	29.8
II. Revenue from Lira-Fund	—	—	13,754.4	1.3	196,699.9	13.6	301,939	18.1	102,000.0	7.0	—
III. Other revenue (d)	644.3	2.0	6,554.0	0.6	11,387.3	0.8	12,123	0.7	14,865.3	1.0	23.0
Total	27,575.6	100.0	1,015,324.4	100.0	1,448,509.8	100.0	1,676,163	100.0	1,454,771.2	100.0	—
Index numbers, 1938-39=1	1		39.7		56.6		60.8		56.8		

(a) Revenue assessed in the period, on the basis of the assessments at the end of each financial year; (b) Estimates; (c) Turnover tax (which accounts for about 60% of the group), taxation on successions, stamp duty, etc.; (d) Net income from the national estate and from autonomous public corporations (railways, postal services, etc.).

Source: Conto riassuntivo del Tesoro.

ITALIAN DOMESTIC PUBLIC DEBT (milliards of lire - Index Numbers, 1938=100)

Table C

End of period	Consolidated and others		Redeemable debt		Floating debt				Treasury notes	Total of domestic public debt		
	A-mount	I. N.	A-mount	I. N.	Treasury bills	Interest bearing current accounts of Italy	Advances by the Bank of Italy	Total		Amount	I. N.	
								Amount				I. N.
1938 - June	53	100	49	100	9	20	1	30	100	1.5	133.5	100
1947 - "	53	100	429	875	279	188	366	833	2,777	6.9	1,321.9	990
1948 - "	53	100	419	855	483	295	473	1,251	4,170	7.1	1,730.1	1,296
1949 - "	53	100	392	800	744	479	470	1,693	5,643	8.4	2,146.4	1,608
1950 - " (a)	53	100	586	1,196	719	628	490	1,837	6,123	9.0	2,486.0	1,862
1951 - "	53	100	691	1,410	820	744	471	2,035	6,783	9.0	2,788.0	2,088
" - July	53	100	691	1,410	823	770	471	2,064	6,880	9.0	2,817.0	2,110
" - August	53	100	691	1,410	835	760	471	2,066	6,887	10.0	2,820.0	2,112
" - September	53	100	687	1,402	860	771	471	2,102	7,007	10.0	2,852.0	2,136
" - October	53	100	687	1,402	871	752	471	2,094	6,980	10.0	2,844.0	2,130
" - November	53	100	687	1,402	865	746	471	2,082	6,940	10.0	2,832.0	2,121

(a) Rectified.

Source: Conto riassuntivo del Tesoro.

CIRCULATION OF THE BANK OF ITALY: NOTES, DEMAND DRAFTS, CHEQUES AND OTHER SIGHT DEBTS (milliards of lire)

Table D

End of period	Notes	Demand drafts, cheques and other sight debts	Total circulation	Changes
1947 - December	788.1	16.2	804.3	—
1948 - "	963.0	17.5	980.5	+ 176.2
1949 - "	1,048.2	14.6	1,062.8	+ 82.3
1950 - "	1,165.2	18.7	1,183.9	+ 120.9
1951 - "	1,291.8	14.6	1,306.4	+ 122.5

Source: Bollettino of the Bank of Italy.

FACTORS AFFECTING THE CIRCULATION OF THE BANK OF ITALY

Table E

December 1947 - December 1948		December 1948 - December 1949	
	milliards of lire		milliards of lire
Factors increasing the money circulation		Factors increasing the money circulation	
Increase in:		Increase in:	
gold and cash in hand	1.0	gold and cash in hand	3.4
balances abroad	4.4	balances abroad	3.4
credits to clients	9.2	credits to clients	49.5
credits to Government	157.0	credits to Government	34.1
sundry debtors (*)	161.4	sundry debtors (*)	255.0
sundry accounts (assets)	10.0	sundry accounts (assets)	4.0
Total	343.0	Total	349.4
Factors decreasing the money circulation		Factors decreasing the money circulation	
Increase in:		Increase in:	
free and fixed deposits	92.8	free and fixed deposits	141.5
Lira Counterpart Fund	58.2	Lira Counterpart Fund	101.3
sundry accounts (liabilities)	15.8	sundry accounts (liabilities)	24.3
Total	166.8	Total	267.1
Net increase of the circulation	176.2	Net increase of the circulation	82.3
December 1949 - December 1950		December 1950 - December 1951	
	milliards of lire		milliards of lire
Factors increasing the money circulation		Factors increasing the money circulation	
Increase in:		Increase in:	
gold and cash in hand	0.2	balances abroad	8.7
balances abroad	7.3	sundry debtors (*)	215.2
credits to clients	50.3	Total	223.9
sundry debtors (*)	60.0	Factors decreasing the money circulation	
Decrease in: Lira Counterpart Fund	124.5	Decrease in:	
Total	242.3	gold and cash in hand	0.2
Factors decreasing the money circulation		credits to Government	18.5
Decrease in:		credits to clients	9.6
credits to Government	105.7	sundry accounts (assets)	3.2
sundry accounts (assets)	0.1	Increase in:	
free and fixed deposits	2.1	free and fixed deposits	7.9
Treasury current account	3.1	Treasury current account	59.9
sundry accounts (liabilities)	10.4	Lira Counterpart Fund	1.5
Total	121.4	sundry accounts (liabilities)	0.5
Net increase of the circulation	120.9	Total	101.4
		Net increase of the circulation	122.5

(*) Mainly, export credits.

Source: Bollettino of the Bank of Italy.

NATIONAL INDEX OF LIVING COST

(1938=100)

Table M

Year or month	All Items	Foodstuffs	Clothing	Heating and lighting	Housing	Miscellaneous
1948 - December	4,917	6,149	5,810	3,069	399	4,387
1949 - December	4,753	5,719	5,845	3,464	574	4,502
1950 - March	4,682	5,658	5,650	3,429	595	4,586
June	4,823	5,888	5,544	3,418	595	4,585
September	5,007	6,090	5,693	3,495	869	4,641
December	5,009	6,014	6,252	3,602	897	4,739
1951 - March	5,199	6,105	7,065	3,665	1,258	5,070
June	5,394	6,412	7,108	3,687	1,260	5,108
July	5,392	6,366	7,048	3,707	1,259	5,410
August	5,373	6,333	6,983	3,728	1,265	5,432
September	5,371	6,330	6,923	3,766	1,265	5,435
October	5,386	6,338	6,896	3,870	1,267	5,468
November	5,420	6,379	6,877	3,930	1,279	5,506

Source: Bollettino Mensile di Statistica.

WAGES AND SALARIES IN ITALY

(gross retributions - inclusive of family allowances)

(Index Numbers, 1938=100)

Table N

Categories	1949 Dec.	1950 Dec.	1951					
			June	July	August	Sept.	Oct.	Novemb.
Industry:								
Specialized workers	4,590	5,239	5,590	5,827	5,870	5,872	5,872	..
Skilled workers	5,252	5,786	6,126	6,414	6,460	6,460	6,460	..
Ordinary workers and semi-skilled labourers	5,662	6,113	6,482	6,800	6,849	6,848	6,848	..
Labourers	6,163	6,536	6,940	7,300	7,365	7,364	7,364	..
General index of Industry	5,471	5,962	6,329	6,638	6,684	6,685	6,685	6,685
Land Transport	5,299	5,811	6,218	6,505	6,589	6,589	6,589	6,589
Government Civil Employees:								
Group A (a)	2,851	3,373	3,373	3,373	3,373	3,373	3,373	..
Group B (b)	3,424	3,424	3,424	3,424	3,424	3,424	3,424	..
Group C (c)	3,947	4,223	4,223	4,223	4,223	4,223	4,223	..
Subordinate staff	4,679	4,928	4,928	4,928	4,928	4,928	4,928	..
General Index of Government Civil Employees	3,533	3,936	3,936	3,936	3,936	3,936	3,936	3,936

(a) Administrative grade; (b) Executive grade; (c) Clerical grade.

Source: Bollettino Mensile di Statistica.

POPULATION AND HOUSING IN ITALY (a)

Table O

	21/4/1931 (b)	4/11/1951 (b)	Increase	
			absolute figures	%
Population	40,660,718	46,887,470	6,226,752	15.3
Dwellings (units)	9,070,521	11,232,812	2,162,291	23.8
Rooms (units) (c)	30,985,735	35,461,466	4,475,731	14.4
Persons per room	1.31	1.32	—	—

(a) Recently an official census has been made in Italy by the Central Institute of Statistics, reflecting the population and housing situation at 4/11/51. Provisional and synthetical figures are here given.

(b) In order to make figures comparable, the data referring to the ex-Italian provinces of Fiume, Pola, Trieste and Zara have been excluded from the official figures of 1931 census. The data referring to the province of Gorizia, that was greatly reduced under the Peace Treaty, have been excluded from the official figures both for 1951 and 1931.

(c) The meaning of « room » has been somewhat enlarged in the 1951 census. It is estimated that, had the meaning been the same as in 1931, the ratio of persons per room should have been somewhat more than 1.32 in 1951.

For the post-war housing situation in Italy, see also SALVATORE ALBERTI: *The Housing Problem in Italy*, in this Review, No. 7, October 1948, pp. 441 ff.

ITALIAN INDUSTRIAL PRODUCTION INDEXES (a)

(unadjusted - monthly averages, 1938=100)

Table P

Year or month	General Index	Mining	Manufactures										Electric Power
			Total	Food	Textiles	Lumber	Paper	Metal-lurgy	Engi-neering	Non-metallic ores	Chemicals	Rubber	
1949 - Average	105	90	101	111	96	58	91	85	115	96	105	115	136
1950 - Average	119	101	114	134	103	59	106	105	123	119	121	132	160
1950 - March	121	105	118	135	113	64	109	98	132	125	115	143	148
June	118	93	112	118	95	62	103	111	127	130	119	124	172
September	125	102	120	135	112	61	111	116	130	116	121	146	165
December	129	100	125	171	110	55	110	106	122	119	144	134	164
1951 - March	140	108	135	141	122	62	124	128	138	130	163	171	183
June	138	108	131	133	109	65	112	144	134	132	163	158	193
July	143	124	137	139	110	66	111	144	145	132	171	171	201
August	115	115	106	118	69	53	93	126	92	125	162	95	184
September	137	128	131	130	106	67	114	141	135	128	172	150	186
October	144	143	145	115	119	70	148	148	141	138	172	164	192
November	136	133	129	146	106	65	115	139	124	136	161	130	188

(a) On the problem of index numbers on Italian industrial production, see this Review, No. 16, January-March 1951: *A Note on the Index Numbers of Italian Industrial Production*, by E. D'ELIA, pag. 34; and *National Income, Consumption and Investments in Italy*, pag. 3.

Source: Bollettino Mensile di Statistica.

ITALIAN CONSUMPTION OF SOLID AND LIQUID FUELS ELECTRIC ENERGY AND NATURAL GAS

(bituminous coal equivalent - in thous. of metric tons)

Table Q

	1938	1949	1950	1951 (a)	Index numbers: 1938=100		
					1949	1950	1951 (a)
Coal and lignite m.a.	1,080	840	827	882	77.7	76.5	81.6
Domestic	120	95	91	97	79.1	75.8	80.8
Imported	960	751	736	788	78.2	76.6	82.0
Petroleum products (import.)	371	504	565	713	135.8	152.2	192.1
Electric energy	984	1,012	1,278	1,545	102.8	129.8	157.0
Domestic	879	1,001	1,264	1,531	113.8	143.7	174.1
Imported	15	11	14	14	73.3	93.3	93.3
Natural gas	1	27	63	107	2,700.0	6,300.0	10,700.0
Total (domestic and imported)	2,346	2,389	2,733	3,249	101.8	116.4	138.4

(a) Monthly averages on the basis of the first eight months.

Source: E.C.A. - Special Mission to Italy.

ITALIAN RAILWAY TRAFFIC AND ROLLING-STOCK POSITION (*)

Table R

	1938	1948	1949	1950	1951	Index numbers (1938=100)			
						1948	1949	1950	1951
Total operating network (Km.) (**)	22,955	21,448	21,643	21,632	21,637 (a)	93.4	94.3	94.2	94.2
Steam locomotives units	4,278	2,417	2,340	2,299	2,262 (b)	56	55	54	53
Electric locomotives »	1,348	1,183	1,232	1,239	1,260 (b)	88	91	92	93
Passengers cars »	6,922	4,503	5,109	5,871	6,125 (b)	65	74	85	88
Freight cars »	126,916	97,850	106,937	107,350	109,460 (b)	77	84	84	86
Kilometers trains thousands	130,110	117,618	135,307	151,813	159,876 (c)	90	104	117	123
Passengers kilometers Millions	—	26,470	23,714	23,673	22,380 (c)	—	—	—	—
Ton kilometers of freight »	—	11,179	10,486	11,137	12,420 (c)	—	—	—	—
Railway traffic total product (in millions of lire)	1,612	51,906	69,434	79,537	74,376 (c)	3,240	4,330	4,960	4,613

(a) At the end of July; (b) At the end of August; (c) Annual rate on the basis of the first six months.

(*) For a general picture of the railways problem in Italy in this post-war period, see: GLAUCO DELLA PORTA: *The Railways Problem in Italy*, in this Review, No. 14, July-September 1950, pp. 793 ff.

(**) State railways and leased railways.

Source: Bollettino di Statistica, of the Central Institute of Statistics.

ITALY'S IMPORTS AND EXPORTS, 1950 AND 1951 (first nine months)
(billions of lire)

Table V

Month	1951			1950		
	Imports	Exports	Surplus (+) or Deficit (-)	Imports	Exports	Surplus (+) or Deficit (-)
January	96.80	75.44	- 21.36	75.56	52.82	- 22.74
February	94.83	71.49	- 23.34	73.27	49.27	- 24.00
March	102.17	82.57	- 19.60	83.25	60.64	- 22.61
April	117.57	79.83	- 37.74	66.39	53.64	- 12.75
May	123.69	81.94	- 41.75	74.35	58.69	- 15.66
June	123.98	86.25	- 37.73	78.99	60.27	- 18.72
July	113.27	94.86	- 18.41	84.21	61.08	- 23.13
August	109.59	78.89	- 30.70	63.07	55.82	- 7.25
September	112.83	88.63	- 24.20	59.74	71.55	+ 11.81
<i>Total</i>	994.75	739.90	- 254.83	668.83	523.78	- 145.07

Source: *Statistica del Commercio con l'Estero*.

TOURIST MOVEMENT AND EXPENDITURE IN ITALY, 1937-1951

Table W

	1937	1938	1948	1949	1950	1951 (a)	I Half Year	
							1950	1951
<i>Arrivals by</i>								
train (thousands)	1,468	1,363	843	1,202	1,934	...	668	795
road »	3,376	2,450	628	1,980	2,589	...	894	965
ship »	163	158	51	92	137	...	64	41
air »	11	12	68	127	179	...	81	84
<i>Total</i> »	5,019	3,983	1,590	3,402	4,839	5,323	1,710	1,885
<i>Index Numbers</i>	100	79	31	67	96	106		
<i>Stay</i>								
average per visitor (days)	3.5	3.6	4.4	4.0	3.8	...	...	...
visitors per stay (thousands)	17,371	14,297	6,988	13,482	18,402	...	...	...
<i>Expenditure</i>								
average per day								
per unit (current lire)	152	152	5,750	6,000	6,300	...	...	...
aggregate (millions of current lire)	2,645	2,172	40,199	80,942	116,328	...	...	...

(a) Provisional.

Source: E.N.I.T. (Ente Nazionale Industrie Turistiche).

ITALY'S TOURIST BALANCE OF PAYMENTS, 1937-1950
(millions of lire)

Table Z

Year	Foreign Expenditure in Italy	Italian Expenditure abroad	Surplus	
			millions of lire	% of the Italian External Trade Deficit
1937	2,645	283	2,362	42
1938	2,172	295	1,877	62
1949 (a)	80,942	14,200	66,742	30
1950 (a)	116,328	20,000	96,328	63

(a) Estimates.

Source: E.N.I.T. (Ente Nazionale Industrie Turistiche) and Istituto Centrale di Statistica.