

BANCA NAZIONALE DEL LAVORO
QUARTERLY REVIEW



ROME

BANCA NAZIONALE DEL LAVORO

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Condensed Statement of Condition, June 30th, 1947

LIABILITIES	(Lire)	ASSETS	
Capital	1,150,000,000.—	Cash, Balances with Banks & Money at Call	24,442,958,372.40
Ordinary Reserve Fund	205,000,000.—	Bills receivable & Treasury Bills	21,464,892,702.36
	1,355,000,000.—	Government Securities, Bonds and other Securities	1,744,431,632.75
Deposits & Current Accounts (including Balance of Profit and Loss)	78,658,197,515.55	Contango, Advances on Securities & Loans	47,052,068,617.59
Cheques in circulation (<i>assegni circolari</i>)	7,627,299,760.35	Sundry Accounts	1,013,566,203.41
Bills for collection	2,146,027,277.35	Premises	104,758,302.15
Guarantees & Acceptances for A/C of Customers	5,070,754,243.47	Furniture & Fixtures	1.—
Sundry Accounts	4,646,481,378.56	Customers' Liability for Guarantees & Acceptances	5,070,754,243.47
Staff individual Retirement Accounts	1,081,331,541.05		100,893,430,075.13
Unearned Discount & other unearned Income	308,278,358.80	Securities deposited by Third Parties	19,185,311,343.65
	100,893,430,075.13	Special guaranteed Accounts	11,618,214.65
Depositors of Securities	19,185,311,343.65	Staff Assistance & Retirement Fund - Securities deposited by the Bank as guarantee	663,476,657.—
Accounts guaranteeing special Accounts	11,618,214.65		120,753,836,290.43
Bank's Securities guaranteeing Staff Assistance and Retirement Fund	663,476,657.—		
	120,753,836,290.43		

AUTONOMOUS SECTIONS FOR SPECIAL CREDITS

AUTONOMOUS SECTION FOR MORTGAGE CREDIT

Aggregate Capital and Reserves L. 93,630,830.30

AUTONOMOUS SECTION FOR HOTEL AND TOURIST CREDIT

Aggregate Capital and Reserves L. 193,758,147.80

AUTONOMOUS SECTION FOR CINEMA CREDIT

Aggregate Capital and Reserves L. 325,154,214.05

SUMMARY

Prof. Corrado Gini discusses once more in an article "On National Income" his views on the subject as it presents itself in pathological periods, and as seen more especially in the light of post-war experiences. From the statistical-theoretical angle where practical interests and economic inquiries converge and bring into focus the real problems of income, consumption, savings, investments, and their mutual relations, we find that even the most subtle premises of methodology need to be studied when framing plans for solving the problems of present day reconstruction and taxation. English-speaking students of such questions will note with interest the references Gini makes to Pigou's recent work on "Income" and the restatement of the opinions Gini himself had occasion to sustain before the Royal Statistical Society in London in 1939.

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Prof. Guglielmo Tagliacarne examines and compares the recent developments arising from the depreciation of the lira as affecting the "Cost of Living, Salaries, Consumption, and the Situation of the Italian Middle Classes". He calls attention to some disturbances of social importance caused by recent inflationary phenomena in Italy; more especially to the erosion of real wages and the tendency to level down remuneration, a tendency leading to serious disruptions in the status of some of the most valuable categories of the Italian middle classes.

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In "Italian Tax Policy" Prof. Cesare Cosciani makes a reasoned survey of the intricate net-work of fiscal measures taken by the Italian Government in the last few years. This study, with its references to the several laws and special measures, will be useful to the reader desirous of information on the superstructures added to the Italian tax system as a result of the war, on the impediments placed in its way by inflationary forces, on the steps and the provisions taken to offset them, on the reasons for their success or failure, on the progress so far made in spite of the many difficulties, on the principal problems that still have to be solved. This is an aspect of Italian reconstruction now entering on a decisive phase with the application of the capital levy and with the expected beginning of the work for a general fiscal reform.

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Two articles—by Prof. Amedeo Gambino and by Dr. Marcello Mancini—and an editorial survey illustrate some banking problems now being much discussed in Italy in view of their reactions on national finance, economic recovery, and the monetary situation. Substantially, the aim of these discussions is to find the means of conciliating

the needs of the Treasury with those of the business world and to secure a more systematic credit policy to be inserted as part of a general plan for blocking inflation.

In the first article, "*The Italian Money Market and the Financing of the Treasury*", Dr. Mancini outlines the contribution made by the Italian banking system to financing the Treasury, and the devices and the circumstances that favoured its development. The business revival, by competing for bank loans, has of late weakened to a marked degree the position of the Treasury. This has given rise to new problems and to a proposal for a system of reserve requirements which would assure the Treasury a steady flow of funds during this critical period.

In the second article, Prof. Gambino makes a specific analysis of "*Recent Developments in Banking Activity in Italy*". He emphasises the exceptional intensity and rapidity of the variations that have occurred, above all since the first quarter of 1946, in the expansion of both bank credits and bank deposits. Considering this experience within the framework of notions now generally accepted, he expresses the opinion that the expansion of bank money, favoured by an active credit policy, has contributed to accentuate in Italy the inflation due to the growth in the volume of note circulation. This period of easy money has been followed by one of financial stringency, calling attention to the need of securing a better co-ordination and smoother working of the credit control mechanism.

In an editorial "*Survey of the Italian Monetary Situation*", the conclusions of Prof. Gambino and Dr. Mancini are summed up with some further indications and are completed by a brief glance at other important factors affecting the situation.

The Banca Nazionale del Lavoro assumes no responsibility for opinions or facts stated by authors whose contributions are published in the present Review.

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Stabilimento A. Staderini - Roma, Via Crescenzo 2

On National Income

by

CORRADO GINI

I. — *The National Dividend and Net Production.*

The studies on national income made during and since the last war, have been characterised not only nor more especially in Italy, but also and no less in foreign countries, by discussions on the concept of income and its content, discussions which may at first sight strike one as mere theoretical subtleties, but which are really, even if viewed from a practical standpoint, of fundamental importance.

But—we may be tempted to ask—did not these men of science who have so long racked their brains to express in lire or dollars, in marks or pounds, in crown or francs, the national incomes of their countries, know what they were about? Now that they feel the need of defining the meaning of their calculations, they are faced by essential divergencies.

As a matter of fact it almost always happens that a science accepts at first a current terminology, without enquiring too closely into its meaning, and it is only later on, as the need is gradually felt, that it proceeds to accurate distinctions.

But in the case of the concept of national income, discussions are due above all to the fact that the point at issue relates to a notion introduced to describe the normal operation of the economic activity of a society and unable to adjust itself to the pathological conditions of war and the post-war period without making essential elucidations, qualifications and distinctions.

As commonly understood, the income of a country is represented by the steady flow of goods received during a year by the nation,

which remain available, after providing for the reintegration of the capital. This flow consists both of material objects (goods in the strict meaning of the word) and services. Reintegration refers both to the productive goods on which future income directly depends, and to goods for immediate enjoyment, which can always be exchanged for productive goods, and which therefore form a reserve of the productive apparatus. Reintegration is necessary to assure that continuity of the income which is one of its essential characteristics.

Under normal conditions this reintegration may be considered as represented by production costs, and the income thus practically coincides with net production. This does not mean that other liabilities in addition to production costs may not occur, such as losses and physical deterioration affecting goods which do not contribute to production or even affecting goods which contribute to production but are independent of it, as also the depreciation of plants and instruments and of consumption goods caused by the general progress of technique or by discoveries made in other countries or by changes in consumer tastes. But under normal conditions they are presumed to be offset, even if only approximately, by advantages, likewise independent of the productive activities of the nation, such as the appreciations which, more especially in the case of the natural resources at the disposal of the nation, arise from the discoveries and technical improvements of other countries, and those which, in the case of consumption goods and, indirectly, in that of production goods, arise from a larger request, due to fashion and also those which occur in the course of time—as, for instance, in the case of forests and trees—, independently of any human labour.

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In abnormal times, whether favourable or unfavourable, matters stand otherwise.

I have already had occasion to say, after the other war—and the expression was well received—that the measurement of the national income is like the weighing of bodies, which can only be done directly under static conditions. The obstacles in the way of so doing arise, however, not only from the difficulty of determining the prices and quantity of the individual products, to which I then specifically referred, but also, and in some cases yet more, from the difficulty of taking into due account and appraising those factors of income which are foreign to production, when such factors acquire decisive importance.

When a population is in a period of rapid development which confers value on the available goods, or in periods when geographical discoveries of great importance open new outlets to national economy, or in countries in which a persistent lowering of the level of the waters is constantly making new lands available to the farmers, or when a progressive improvement of the climate increases the fertility of the cultivated land and the extension of the area suited to cultivation, or when huge war booty or tribute from dependent territories flow constantly toward a victorious country, as occurred in the case of ancient Rome or of Spain at the beginning of the modern era, the national income may largely exceed net production.

Viceversa, when the population of a country declines, or when its usual export markets or sources of raw materials are closed to it, or when climatic, telluric, maritime or volcanic agencies progressively eat into the cultivated area or reduce its yield, or when wars and internal struggles bleed the nation, the national income may remain far below net production.

The advisability, when determining the national income, of taking into account occasional contributions or losses such as war booty or tribute secured once for all, or, viceversa, an indemnity which has to be paid once for all, or the losses caused by a war or a revolution or a cataclysm, may seem more doubtful.

It may be objected that the aforesaid active or passive items, which are foreign to production, should be considered not as income but as capital items. Now, there can be no doubt that they refer to the capital account; but that account is not independent of the income account. Items cannot be passed to the former if the latter has not first been balanced, as is explicitly noted in the definition of income above given. From this, indeed, we deduce that a preliminary condition for computing income is the reintegration of capital. Therefore, any loss must be repaired before the assets obtained from production can be computed to income, while the occasional contributions that increase the capital, indirectly affect income in so much as they offset the liabilities inherent to production, and to the extent to which they offset them they make it possible to dispense with the need of making the usual deductions from gross production in order to reckon net income.

For the purpose of determining income, and for several other purposes also, a national community is considered to be like a company with its shareholders, its business partners, and other participants who make it a contribution both of capital and labour. The "national dividend" or "social dividend" is the name usually given to income in British economic literature. It is not a merely formal analogy; indeed it is difficult to see how a human community productive of income could be properly described by any other word than "company". The word "community" is evidently too general. One cannot, on the other hand, speak of population, nor of country, nor of State, as each of those words stresses one factor (respectively the demographic, the territorial, the juridical) which is not essential, while the economic factor, which is essential, is precisely stressed by the word "company".

Now, the question that presents itself in the case of income is matched by a similar question that presents itself for all company dividends: it may indeed be said that the former is only a special case of the latter. And in the case of the latter the point is unanimously solved both by theory and by practice.

One cannot indeed speak of distributing a company dividend unless there has been a real

profit, i.e. a credit balance, and, if the company's capital or reserves have been drawn on, they must be reintegrated before proceeding to the distribution of a dividend. This distribution is often suspended and the net proceeds used for the reintegration of the company's capital, and sometimes not only for one year but for as many years as may be required to allow of complete reintegration.

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Those writers who have refused to accept these coherent deductions from the definition of income, and who have preferred to deduce income from net production, even in pathological periods, have soon found themselves involved in inextricable difficulties.

An instance of this is offered in one of his recent works by Pigou (1) who must at once admit the need of taking into account not only the costs of production but also the wear and tear of plant due to lapse of time even when not in use, and of the losses it suffers from accidental causes such as fire. He suggests as a practical solution that the depletions of capital against which business men insure themselves formally or informally, but not others, should be deducted from gross income before net income is reckoned. But business men insure against all possible losses, including those arising from war, such as submarine action and bombardments.

Another difficulty Pigou has to meet is that of the cost for maintaining intact the human capital, that is to say of the production costs of labour force — and of this we shall speak further on. And a third arises from the depreciation of plants and of stocks of goods in dealers' hand, due, apart from any physical wear and tear, to obsolescence consequent to technical improvements or the altered taste of the consumers. To meet the latter, Pigou suggests that no variation be made in the valuation of capital and income as long as the material remains physically intact, and to take account of its obsolescence under the heading of depreciation only when the material is

(1) A. C. PIGOU: *Income. An Introduction to Economics*. London, Macmillan, 1946.

thrown out and discarded, this discarding being equivalent to wear and tear; but this solution is obviously unsatisfactory as it would lead to maintaining intact the valuation placed on the capital and income, when they are, as a matter of fact, depreciated. The author himself, moreover, ends by admitting the differences of opinion existing on this matter and observes that, after all, definitions are, as a rule, dictated by convenience, so that one cannot say that a definition is more accurate than another, but only that it is more convenient.

It is precisely by respecting this wise remark that we are led to recognize the need of drawing a net distinction between net production and national income in the sense of social dividend, as the identification of the one idea with the other presents, from a practical point of view, dangers on which I have had occasion elsewhere to throw light (2).

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Referring to the problems now weighing on our country, I then considered another objection.

It may be said that, when the capital of a commercial company is impoverished or destroyed, it need not necessarily be reconstituted; the company may very well reduce its capital or dissolve and reorganise on a more limited basis. Therefore, as our former Italy has lost the war, she may be wound up and a new, more modest, and poorer Italy may be set up in her place, resigned to the losses suffered.

But such a manner of considering the problem—I replied—is fundamentally mistaken.

The old organicist school—in spite of its many exaggerations and sometimes puerile artificialities—had one great merit, which redeemed all its faults, that of having shown the indissoluble tie which binds together the several organs and apparatus and the several functions of our modern society, in such wise that one of them cannot be destroyed or injured with-

(2) See the lecture *Intorno al reddito e alla capacità di pagamento dell'Italia nell'ora presente*, published in "Economia e Commercio", N. 4, Rome, 1946. Spanish translation in "Anales de la Academia de Ciencias Económicas", Series 2ª, Vol. IV (No. 3), Buenos Aires, 1946.

out endangering the operation of the whole system. This is a truth which has been taken up again and developed by the neo-organicist school with special reference to the civilised peoples, applied by the functionalist school to primitive societies, and extended by the ecological concept to all communities of living beings.

Nations are not, indeed, like commercial companies, the artificial creations of man; they are organisms deeply rooted in history, and have their vital exigencies and characteristics. They either live and gradually reform their capital, or they cannot reform it and they die. What, should we say of a doctor who, when treating a patient who has lost half his weight during an illness, were to calculate his need of food without taking into consideration the need of making up for his loss of weight? In the case of nations, I have already noted on another occasion that the curves of the growth of wealth of modern countries, if considered over intervals that are not too short, reveal a movement practically independent of the wars each country has fought and show no substantial difference as between countries that have fought most often and those which have been almost entirely exempt from war. Such countries are those which have survived in the struggle for life and which, after each war, have reconstituted, more or less easily, or more or less laboriously, their wealth. Those that have been unable to do so have disappeared from the stage of history.

Italy had at last reached—at no very high level indeed—her economic equilibrium, as determined by her territory, her climate, the number and quality of her inhabitants. The territorial amputations to which she is now compelled to submit—painful and unjust and certainly injurious as they are—will not however be able to modify fundamentally those conditions (just as they were not fundamentally modified by the territorial aggrandizements, more conspicuous than the present amputations, that followed the victory of 1918) and she will recover her equilibrium at a level not essentially diverse when her national capital will have been substantially reintegrated.

Nor is it any use to say that there are many

countries in the world poorer than Italy which are yet living and vital. Indeed each nation, like each organism, has its own equilibrium. There are sound and robust persons who normally weight 50 kgs.; this does not mean that an individual who normally weights 80 kgs. can reduce his weight to 50. His organism cannot live at a weight of 50 kgs., and, if temporarily reduced to that weight by illness or starvation, he will either recover his equilibrium within a short period or he will die.

The above considerations are not without practical consequences for the present conditions of Italy.

The first practical consequence is that reconstruction should be the first and foremost thought of the Government and should have priority over all its other preoccupations. It is now evident that, as it now is, the national organism cannot live. The economic balance, though slowly improving, is still a deficit one, as production is not sufficient to offset consumption, and so long as the economic balance-sheet closes with a deficit it is vain to hope that the financial balance-sheet can be rehabilitated. Under present conditions, the immediate care of the Government should be directed not to improving the financial balance-sheet, exhausting more and more by excessive taxation, or yet worse by capital levies, the economic balance sheet,—such an improvement can never be anything but deceptive and, in the most favourable hypothesis, temporary—but to give once more to the country its normal productive power by repairing, even if at the cost of further financial sacrifices, the losses suffered. It may be that, if this is not done, the restoration of the equilibrium will only be delayed, but it may be that our economic organism will be unable to stand the strain and will disintegrate—and we all feel that this possibility is far from being a mere fantastic supposition.

The second practical consequence is that to consider to-day, under these conditions, the possibility of paying indemnities or reparations to foreign countries in another form than that of the surrender of materials which do not

yield an income, is a pure delusion. And the victorious and creditor countries must convince themselves that such action would be equivalent to killing the goose in the anxiety to get at the egg.

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But,—it may be said—if there cannot be a dividend before the capital is reintegrated, the net product, before being assigned to consumption should be used in its totality to reintegrate the national capital. Now, how is it possible to entertain the idea that the population, while awaiting the reconstruction of this capital, should remain without supplies of food, clothing, dwellings? Would not this be the practical consequence of the above stated notion and one which clearly shows that it is unacceptable?

No, it is not—comes the answer—if human beings are considered as a capital asset along with the movable and immovable capital of the country, and if therefore the expenses incurred for food, clothing, shelter, professional education of the people are deducted under the heading of working expenses or amortisation costs from gross production in reckoning the net.

Pigou disputes this deduction—and this is the second of his considerations on which I promised to return—and he points out that, even if man-power were not availed of for production, the cost of its maintenance would have to be met in the main, and consequently the wear and tear of human beings, that otherwise would be allowed to take place, should be reckoned as a capital loss having nothing to do with income.

It is easy to observe that not only in the case of human beings but in that of all plants productive of power, the costs—differing in this from what happens in the case of plants productive of material objects—continue whether the power produced be used or not, nor does this provide a reason for not deducting such costs from gross production when reckoning net production. Therefore, the fact that the cost of operating electric power-plants is not substantially reduced by the fact that the power is not utilised would not appear to be

a good reason for not including such costs in those of production. But a still closer analogy can be found in the case of draft animals which, precisely as in the case of human workers, continue to consume, even if a little less, when their energy is not used, whereas if they were not suitably fed and sheltered they would depreciate, entailing a loss of capital. And yet closer is the analogy in the case of slaves. A former slave owner, like a modern breeder of cattle, or horses, or dogs, or sheep, or camels, would have been or would be amazed should anyone, arguing as Pigou does, have tried to convince him that the food and shelter, and may be the cost of blankets and other protective clothing, should not have been reckoned in the costs of breeding or operating.

It is therefore clear to any one who reflects on the matter that, if one wishes to proceed correctly and coherently, one must deduct from gross production, along with working expenses and those for the amortisation of movable and inamovable capital goods, also the analogous expenses incurred for the human capital, so as to obtain the real net production, which should be that part of gross production annually allocated for expenditure on optional consumption, or else saved.

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The practical consequences of this dissertation may be summed up in the conclusion that the portion of production, available for optional consumption and for savings should now be wholly devoted to reconstruction, rather than to any other form of accumulation or to optional consumption.

Today, unfortunately we see that just the opposite is occurring in Italy.

Cinemas and theatres are crowded and new ones are constantly being opened; sea-side and holiday resorts are full to overflowing; masses of people attend sporting competitions and a still larger mass are anxiously awaiting the results. Their anxiety is not a disinterested one, as new forms of betting are being devised which yield sums that may strike one as a crazy. The multiplication of legal games is matched by that of illegal ones. Of crops,

those of the grape and the tobacco plant are some of the most profitable and they are therefore being enlarged. All these forms of production entail a growing waste of activity, and therefore of wealth, at the very moment when the need of its rational employment would be most urgent. And no employment could be more rational at the present time than that on reconstruction. The State, unable or incapable of taking direct action in this matter, should at least have the possibility, as it has the duty and the interest, of directing the activity and the wealth of the country towards reconstruction; but instead, allured by the greater ease with which it can tax such wasteful activities and collect the taxes on them, far from opposing, it encourages them, following in this field also, which is of such vital importance, that line of least resistance which in Italy has been and is the characteristic feature of the unfortunate post-war policies.

I do not deceive myself that the voice—unfortunately an isolated one—of a man of study will avail to modify a whole tendency and to stop the avalanche, but I should feel that I was failing to perform my duty were I not on this occasion also to speak with absolute frankness.

II. — The materialistic concept and the functional concept of income.

The current definition of income above referred to lends itself to criticism. It is indeed inclusive of heterogeneous elements: goods in the strict meaning of the word, bodies, i.e., material objects, on the one hand; services on the other. Nor is this all; it entails, at least so it would seem at first sight, a duplication. For material goods are such in so far as they are suited to render us services; their value, indeed, is nothing else than the sum of services duly discounted that is expected from them. Now, while in our estimate of the material goods annually produced and included in income, we compute the present value of the services they will render in successive years and sometimes in the year itself, we shall also compute in the income the value of the future services

they will render in the future. Thus, a house, which is added in the course of the year to house property capital, is part of the income; but we compute in the income also the rent for the house which may in some cases be obtained in that very year, and in any case in the following years.

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To avoid such duplication two solutions have been suggested, matched by two heterodox definitions—each more restricted than the current one—of income.

One of these definitions would make income include only material goods; income, that is to say, is represented by the annual increase of wealth.

According to the other, income is represented by services only, services—of course—provided both by material goods and by persons.

The first concept is that proposed by Fellenner and accepted by all, or nearly all, the Hungarian statisticians (3); it has been called the "materialistic" concept of income.

The second may be called a "functional" concept of income; it is the concept suggested by Irving Fisher (4), but—withstanding the eminence of its author and the skill with which he presents it, it has not had a following. In the debate held before the Royal Statistical Society of London in 1934 (5) on the measurement of income, on the occasion of the first centenary of the Society, neither the reporter, Sir Josiah Stamp, nor those who took part in the discussion, ever took this concept into consideration.

But with a little good will, we find that both these concepts can lead to generalisations,

(3) F. V. FELLNER: *Die Schätzung des Volkseinkommens*. "Bulletin de l'Institut International de Statistique" Tome XIV, 3me Livraison, p. 109 et seq.; *Das Volkseinkommen Österreichs und Ungarn*, "Statistische Monatschrift", XXI Jahrgang, 1917.

(4) *The Nature of Capital and Income*, New York, Macmillan, 1919.

(5) See *Methods Used in Different Countries for Estimating National Income*—a discussion opened by Sir J. C. Stamp "Journal of the Royal Statistical Society", part III, 1934, and *A Discussion on Methods Used in Different Countries for Estimating National Income*, continued by Prof. A. L. Bowley and others, *Ibidem*, Part I, 1935. — A single extract was made of the Report and the discussion by the R. Stat. Soc. of London.

and can thus be brought back to the current concept.

Services are indeed exchangeable, either directly or by means of money, for material goods. They can therefore be considered potential, material goods and, for economic purposes, can be held equal to real material goods.

On the other hand, the value of material goods arises, as has been said, from the sum of the present value of their future services. They are—it may be said—potential services and can, for economic purposes, be held equal to real present services.

Income may, therefore, be defined as the sum of effective and potential material goods produced within the year, or also as the sum of effective and potential services—the latter being duly discounted—on which the community can count in the course of the year. And the two definitions—the materialistic and the functional—are thus found to coincide with the current definition of income.

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As to the apparently heterogeneous character of the elements entering into the current definition of income, it may be eliminated by introducing, side by side with the concept of "static" goods, i.e. of useful or rather desired bodies, the concept of "dynamic" goods, i.e. of useful or rather desired events (6). These desired events consist in the modifications which we wish, in material bodies or in persons. Modifications of material bodies are the material objects produced during the year and forming one of the component parts of the income; modifications of the said material goods, or of our persons, are also the services—real or personal respectively—flowing during the year which form the other component part of income. It should be added that the modifications considered are not modifications as compared to the preexisting condition, but as

compared to a condition which would have existed had the event not occurred; thus the real service which the dwelling house renders us, or the personal service rendered us by the doctor, are directed to preserving the preexisting conditions of our organism, but they modify the conditions which would have arisen had we not been able to avail ourselves of the services considered.

Income may thus be defined as the ensemble of the desired events which occur in a unit of time. If we add that these events must have an exchange value, we pass on from the broader—hedonistic—concept of income to the narrower—economic—one, usually considered by political economy and which is at the basis of the statistical computation of income.

In opposition to the materialistic and functional concepts of income we may call this the "transformist" concept.

It should be noted that every desired event which has an exchange value, is or may be a receipt. If the notion of "receipt" be extended to cover not only actual but also potential receipts, the definition just given of income will become equivalent to that of receipt (net of course of costs) from which the notion of income is historically derived, as is shown by the etymology of the word (*Einkommen*, income), by which it is designated in several languages. It is thus made evident that the determination of the income obtained, by the so called real method through the valuation of desired events, cannot but coincide, when all events are taken into due account and double computations are avoided, with the determination obtained by the personal method of considering the sum total of the net receipts of the several recipients.

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We have thus coordinated the antagonistic concepts of income and we have also eliminated the heterogeneous character of its several elements. But we have not eliminated the duplication, or apparent duplication, above pointed out. That difficulty indeed remains. Every modification of durable material goods has indeed an exchange value in so far as

(6) For the concept of static and dynamic goods see C. GIER, *Sur les fondements des évaluations de la richesse nationale*, in "Revue de l'Inst. de Statistique", 1943, and *Obiezioni economiche alle valutazioni della ricchezza nazionale*, in "Giornale degli Economisti", March-April, 1946.

further modifications of material goods or of persons are foreseen as a result thereof, modifications desired by individuals and appreciated by the market, and, if we include the value of that first modification in our estimate of income, we should not include the value of these others except to the extent in which the latter are not included in the former.

Now it is indeed true that in estimating the value of the desired modifications arising from material goods, we also estimate the value of the desired modifications, to which they will give rise in the future, with a discount and not integrally, but in order to avoid duplication we should, when the foreseen modifications occur, estimate only the value of the part discounted and not their whole value.

What is the answer of the economist and the statistician? The answer is that the economist describes and the statistician measures human conduct, but neither of them can or should attempt to modify it.

Human psychology is undeniably so constituted that we enjoy things twice over, first through expectation and then through realisation. The farmer tastes in advance the pleasure he will derive from the fruit crops ripening on his farm or from the money he will receive for them. Therefore he is attached to his farm and appreciates it at its full worth; but, when the fruit has ripened, he would certainly consider anyone eccentric who should come to him and say, "just at the time he was enjoying a ripe peach: "you cannot enjoy it, because you have already discounted the pleasure it will give you when you appreciated the value of your farm". Enjoying the ripe peach he undoubtedly experiences pleasure—and all the economist can do is to note the fact; just as he undoubtedly experienced pleasure when he was looking forward to the crop—and this also the economist can only register as a fact.

When the utility expected from durable material goods consists in the production of other durable material goods, the case is one not of duplication but of multiplication. The new vein of ore in the mine which is discovered acquires value from the expectation of the mineral which will be extracted from it; which

in its turn will acquire value from the expectation of the instruments to be made from it; in their turn these instruments will acquire value from the expectation of the buildings, or the machinery, or the furniture they will be instrumental in making, or of the game they will be instrumental in shooting.

The conclusion we come to is that wealth is multiplied by expectation.

It is a conclusion of fundamental practical importance. In the midst of the most abundant natural resources, primitive man is poor because he is unable to foresee their utility. On the other hand, the more clearly a civilised man can foresee the future utilisation of the goods at his disposal, the richer he will be. Hence the economic importance of social order depends not only, and not so much, on the fact that it facilitates the production of new goods, but also and above all on the fact that it confers value on pre-existing goods and on those of new production. In periods of uncertainty as to the future, the remuneration paid to work increases as compared to the value of capital, and some may be inclined to ascribe this to a fuller recognition of the importance of work and rejoice at it as a symptom of social progress. This is a mere delusion. In such periods work is far from yielding more; on the contrary, as a rule, it yields much less; what does lower is the value of capital as a result of uncertainty as to the future. If wealth were expressed in working units—i.e. if it were expressed in terms of the value of a product obtained by a normal worker in a given unit of time,—after all the most plausible standard of measurement—it would be found that in such periods society is enormously impoverished. Each of us can draw conclusions from this as to the present situation.

III. — *Nazionale Income and Taxation.*

The growing burden of taxation brings once more to the fore with heightened interest, the question—no new one but one not yet solved to the general satisfaction—whether taxes should or should not be included in the national income.

The question was considered in 1934, on the occasion of the XXII session of the International Institute of Statistics and of the centenary of the Royal Statistical Society of London.

In calculating individual income it had been customary in the past not to deduct the taxes levied on them, considering them as the equivalent of the services rendered gratuitously to citizens by the State, and comparable to the wage paid by a master to his servant, to the cost of the railway ticket for which the traveller pays to make an excursion, and so forth.

This theory was set forth by W. C. Mitchell and S. Kuznets in a communication, *Current problems in measurement of National Income*, submitted at the aforesaid session of the International Institute of Statistics (7), and by Professors Landmann and Wagemann in their observations which, as members of the Committee on wealth and income set up by the Institute, they communicated to me with a view to the report which, as reporter of the Committee, I had to make on the subject, as also by Colson, another member of that Committee, in his *Cours d'Economie Politique*, to which he called my attention for the purposes of the aforesaid report.

From the point of view we are here considering, the procedure, which consists in calculating private individual incomes net of taxation, but including in the national income all State expenditure on goods and services, is only a variant of the above, although, from the practical stand point, it may present advantages to which Mitchell and Kuznets called attention.

At the basis of this procedure, as of the other, lies indeed the admission that all State services represent for the citizens a source of well-being which makes an addition to the other sources of income.

I made a stand against this point of view in the preliminary report *On some circumstances that in modern times tend to make the increase of national income appear larger than it really is*, which as Reporter to the Committee, I submitted at the aforesaid session (8).

(7) See "Bulletin de l'Institut Intern. de Statistique", Vol. XXVIII, 2nd number, 1935, p. 280 et seq.

(8) See *Di alcune circostanze che nei tempi moderni ten-*

This point of view—I observed—is certainly justified in so far as State services do not give rise to an increase of receipts, just as the service of the servant, or the visit to the museum, or the railway trip do not give rise to an increase of receipts. This indeed is very often the case, as when the yield of taxation is applied to works of embellishment or personal services (school meals, free dispensaries, etc.); but in those cases in which the yield of taxation is spent in such wise as to increase receipts both real and personal, or reduce costs, there is duplication as far as this quota is concerned. Now, this happens for that part of State expenditure which is perhaps the most important, such as bounties to production, subsidies to the unemployed, the service of the national debt, most public works (roads, railways, bridges, canals, ports, etc.), in as much as they cause an increase in trade and raise the income of adjacent lands, and the expenditure incurred to guarantee the safety of things and persons.

As regards that part of taxation, the amount of the taxes would be deducted from receipts for the purpose of reckoning income, as it should be considered as a production cost and not as a distribution of income; just as one deducts the cost of the railway ticket when the journey is made not as a pleasure excursion but as a business trip; just as one deducts a tax (for instance, the cost of a licence), if it is a necessary condition for the production of income.

Compulsory contributions, as for instance those to vocational syndicates in the States organised on the corporative system, must of course be considered on the same footing as taxes. Nor can voluntary contributions be considered otherwise for the purposes we are considering. Indeed, the point of importance is not whether they are obligatory or facultative, but whether they have or have not the effect of increasing receipts. Such is not, for instance, the case with subscriptions paid to cultural, sporting or social societies, as the enjoy-

dono a far apparire l'incremento del reddito nazionale maggiore del vero (Italian text and French translation) "Bulletin de l'Institut Intern. de Statist.", Vol. XXVIII, 2nd number, 1935, p. 285 et seq.

ments obtained from them, if they should, theoretically, be computed in income, are not, as a matter of fact, estimated in the calculation of the receipts. It is however the case with the contributions paid to such associations as those for land-reclamation, water conservancy and distribution etc., in as much as the larger incomes from reclaimed lands or estates bordering on water courses or using such waters, to which they give rise, are computed in receipts, and would give rise to evident duplication were the contributions which are the premise for such increases not deducted.

Invited by the Royal Statistical Society of London to set forth, at the meeting held to celebrate the centenary of the Society, my view on Stamp's report on *Methods used in different countries for estimating national income*, I called attention, in my remarks, to this distinction as an essential one, adding that I did not consider it impossible to distinguish in practice between the two categories of taxes though naturally the distinction could only be a rough one (9).

Commenting on the discussion to which his report gave rise, Stamp recognized that the distinction I had drawn would be excellent if one could actually make it, but he expressed the opinion that at most tests it becomes quite indeterminate. I shall return again to this objection.

Meantime, it is interesting to note that ten years later the same question has been raised, again in London, and the same solution I then proposed has been brought forward anew on the Review "Economica" by Mr. E. H. Stern (10) who apparently knew nothing of the reports and communications above referred, submitted to the session of the International Institute of Statistics, nor of Stamp's report and the discussion to which it gave rise before the R. Statistical Society of London (11) —

(9) See the discussion following Stamp's report in "Journal of the R. Stat. Society", Part III, 1939, p. 464 and p. 42 of the extract.

(10) ERNEST H. STERN: *Public Expenditure in the National Income*, Vol. I, n. 38, May, 1943.

(11) Stern quotes instead two works—one preceding the other following that discussion—which support the solution advocated by him and by me: *Das Deutsche Volkseinkommen vor und nach dem Kriege*. Bearbeitet im Reichsamt, Einzel-

and has given rise to interesting controversial notes between the author and Mr. K. W. Rothschild (12).

Among the expenditures made by public bodies Stern draws a distinction—as I did—between those which are in the nature of costs of production and therefore form no part of the net national income—and those that increase the comfort of the nation or supply it with new goods—and as such are part of the net national income.

This distinction was drawn by Stern on the occasion of the publication of the White Papers, Cmd. 6347/1942 and 6438/1943, containing the estimates for those years of the income of the United Kingdom of Great Britain and North Ireland.

Schriften zur Statistik der Deutschen Reichs, N. 24, Berlin, 1932; G. COLM: *Public Revenue and Public Expenditure in National Income*, in vol. I of the *Studies in Income and Wealth*, published by the National Bureau of Economic Research, New York, 1937. The solution I proposed in the 1934 Report was already implicit in the analogous solution mentioned, in relation to the estimates of wealth, in the previous report on *The Determination of the Wealth and National Income in the Post-war Period, and their Comparison with Those of the Pre-war Period*, submitted to the XIX session of the International Institute of Statistics (Tokio, 1930) (Cfr. "Bulletin de l'Institut Intern. de Stat.", Tome XXV, 3rd part, p. 358; and already previously suggested in the volume *L'ammontare e la composizione della ricchezza delle Nazioni*, Turin, Bocca, 1934, pp. 15-17. See also, in this connection, the two essays by L. EINAUDI: *Del cosiddetto prelievo dell'imposta e dei suoi effetti sulla valutazione del reddito e della ricchezza di un paese*, in "Riforma Sociale", May-June 1929, and *La inclusione del debito pubblico nelle valutazioni della ricchezza delle nazioni*, in "Bull. de l'Institut Intern. de Stat.", Vol. XXVIII, Part II, 1935, both reprinted in *Saggi sul risparmio e l'imposta*, Turin, Einaudi, 1941.

Colm's work is remarkable and so was the discussion which followed between Professors R. Blough, J. M. Clark, S. Kuznets and N. Newcomer, although they all seemed to know nothing at all of the authors who had dealt with the matter before them. Kuznets in particular expressed the opinion, as Stamp had done, that the distinction referred to, which Colm advocated, could not be carried out in practice. In this connection it should be mentioned that the difference between Government expenditure which increases private revenues and Government expenditure which does not do so, does not seem to coincide with the distinction between Government expenditure beneficial to business and Government expenditure beneficial to individuals as such, a distinction which, in the discussion conducted by Kuznets, is identified with the former. Thus, for instance, all expenditure on professional and vocational education is beneficial to individuals as such and increases their revenues.

(12) K. W. ROTHSCHILD: *Public Expenditure in the National Income: a Note*; ERNEST H. STERN: *Public Expenditure in the National Income: A Reply*; in "Economica", Vol. XI, N. 41, Feb. 1944.

The interpretation given by Stern of the procedure followed by the authors of these estimates and his consequent criticisms, would not seem to be all well founded, if we accept the explanations on the procedure followed given by Mr. Rothschild, who does not, however, contest the good grounds for the objection raised about the double computation. Indeed, Rothschild affirms that the economic statisticians have been aware of this source of error, but faced with the extremely difficult task of dividing Government expenditure into the two above mentioned categories, they have decided to regard all public expenditure on goods and services as falling in the second category and have therefore included it in the national income.

Mr. Stern, in his reply, rightly remarks that no warning as to the possibility of double counting being included in their evaluations was given by the compilers of the White Papers, and he might also have remarked that, even if it be admitted that it is not possible to distinguish between the two categories of expenditure, the solution of considering them all as belonging to the second category would be admissible only on the supposition that the second category was much more important than the first, which in my opinion can be contested. In the passage of my Report above quoted, I was indeed inclined to accept the opposite opinion (i.e. that the first category of expenditure is the one of most importance) nor have I indeed so far found any reason to change this opinion. But Stern thinks, as I thought, that it would not be at all impossible to draw a distinction between the two categories of expenditure, and indeed he quotes a study by R. Nelson and D. Jackson entitled *Allocation of Benefits from Government Expenditure* (13) in which, though for other purposes, the Authors showed in the case of America the possibility of a detailed separation of these expenditures. Stern rightly remarks that the British statisticians are capable of similar computations for their country and of gradually perfecting them, and the same

can be said, in my opinion, for the Italian statisticians: thus I have entrusted to Dr. A. Gianinone, Assistant of the Institute of Statistics of the Rome University, the work of drawing a distinction between the two categories of expenditure in the case of our budget.

Undoubtedly, in many cases the division can only be approximately made (14), but this would not deprive the result of interest and significance. It must also be admitted that some expenditures appertain to both categories and could not be included in their totality in one or other category without falling into error.

This is the case for expenditure on public safety which, in my report above referred to, I included, as Stern now does, in the first group, while one must admit with Rothschild that they belong both to the one and to the other (15). It is more doubtful whether, as he affirms, it is impossible to separate them into two parts, but this is not the place for entering into details on this matter. It need only be remarked in a general way that if it be impossible to classify the global expenditure of some Ministries in one or other category, the task becomes much simpler if we consider one by one the many items of each budget. Thus, for instance, in the case of expenditures allocated for national education, Stern classifies them in general among the expenditures on comfort and only in the case of elementary education or for the training of skilled workmen does he consider that opinions may differ as to whether they belong to the "costs of production" category or to the "comfort" category. It seems to me, on the contrary, evident that all expenditures on education of a professional character should be included in the first category, as they increase the revenues of the individual, and that the only education expenditures which should be entered in the second category are those of a cultural description.

Lastly, it should be noted that, in the case

(14) Cfr. the discussion already mentioned of the Stamp's Report, p. 464 and p. 42 of the extract.

(15) In the above mentioned volume on *L'ammontare e la composizione della ricchezza* I expressed an opinion similar to that of Rothschild, Cfr. p. 16.

(13) Vol. I of the *Studies in Income and Wealth*, published by the National Bureau of Economic Research, New York, 1938.

of some expenditure it is not possible to classify it, that would not make it impossible to arrive, with a margin of error, at a result, and to draw therefrom reliable conclusions on the relative importance of the two groups.

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Stern refers to another important point when he remarks that there are public expenditures that are not annually recurring, but provide services, the benefits of which are carried over a number of successive years. The part of this expenditures which are in the nature of production costs should be deducted not from the national income of the year or years in which they are incurred, but from that or those years which benefit by them, allocating them over these in a degree proportionate to the advantage felt in each year. A ty-

pical example quoted by Stern is that of war expenditure; reconstruction expenditure offers another example. The matter is thus linked up to that dealt with in the first part of this study, *i.e.* the losses inflicted on the national economic apparatus by the war and the need of repairing them before reckoning income. It is not certain that they can be repaired with the net production of one year, nor that, should the size of the losses exceed that of the said net production, the whole net production of the ensuing years should be devoted to repairing them until they are completely restored. It would be quite admissible to have recourse to a loan to be spent on reconstruction, the service and amortisation quotas of which should be deducted from the production of the following years in the measure in which each year feels the benefits of reconstruction, in order to obtain an estimate of the national income.