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# CONCEPTS OF INCOME AND WELFARE—IN ADVANCED AND UNDER-DEVELOPED SOCIETIES—WITH SPECIAL REFERENCE TO THE INTERCOMPARABILITY OF NATIONAL INCOME AGGREGATES[1]

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## I. DIFFERENCES IN SOCIAL OBJECTIVES AND IDEALS

IN this paper I propose to discuss certain conceptual problems concerning the meaning of income and product in under-developed countries which have confronted investigators endeavouring to compare national income aggregates of advanced societies with similar calculations attempted for so-called under-developed or pre-industrial communities.

At the outset I wish to record the benefit I have received from the work of Professor Simon Kuznets on this question, particularly from his valuable paper on 'National Income and Industrial Structure'.[2] This paper exhibits the impasse which confronts national income calculators when they endeavour to compare income aggregates for developed and under-developed societies – or as Professor Kuznets calls them, 'industrial and pre-industrial' countries; by which he denotes, 'on the one hand, an economy dominated by business enterprises, using advanced industrial techniques and ordinarily with a large proportion of its population in large cities; and, on the other hand, an economy in which a large part of production is within the family and rural community, a minor share of resources is devoted to advanced industrial production and a minor part of its population lives in cities'.

The crux of the difficulty of definition arises from the fact that

[1] This paper originally formed part of a larger one submitted to the 1951 meeting of the International Association for Research in Income and Wealth. In the course of writing the paper I was led beyond the strict confines of the subject set for discussion at the conference and found myself dealing with certain semantic and philosophical issues. This portion of the paper it was felt could be more conveniently published separately. (Cf. Psychic and Accounting Concepts of Income and Welfare, *Oxford Economic Papers – 1952*.) The remaining portion of the original paper which is here presented has therefore been suitably revised. Summary references to the original paper have been included and certain new material has been incorporated.

[2] Read before the Washington Meeting of the Econometric Society in September 1947; *Econometrica*, Vol. 17, Supplement, July 1949.

as between, and even within, developed and under-developed societies there are great differences in the range of activities to which a highly refined accounting concept of income can be applied.

The problem with which I am here concerned, however, arises not merely as a result of different technical methods of organizing production – for example, in business enterprises and market economies as opposed to authoritarian, family or subsistence economies – but has its origin rather in the different objectives and ideals which consciously or unconsciously dominate the communities whose individual and social economic activities are being compared. In the last resort it is these historical and traditional factors, and not merely the state of technique and organization, which are the basic cause of differences in the nature and form of the 'income' produced by them.

The creation of income takes place within a social framework and a social situation. What 'income' is and how it is valued is determined by the social circumstances and surroundings in which the individual finds himself. Thus, the attempt by the individual to obtain what we may call 'income' is an attempt to achieve a social purpose. It is not merely, if at all, to create a set of individual values or obtain an 'individual income stream'. It is not the solo act of a Robinson Crusoe marooned on an island; even Robinson Crusoe cannot be regarded as acting merely according to the dictates of his own appetites, for he brought with him from the society to which he belonged not only a stock of capital goods but, far more important, a set of values, ideals and objectives.

The creation of 'income' is of a piece with social communication; our actions are not determined in isolation but depend also on the influence we wish to exert upon others and which their activities in turn exert upon us. Just as physical production depends on social co-operation so the symbolism according to which it is regulated is socially determined.

To take an imaginary example; in a community of absolute pagans, he that wishes to build a temple to the deity would be engaged upon a social act of persuasion, and he could not engage upon it unless his views had gained sufficient acceptance to bring about social co-operation; therefore to pursue an ideal in isolation is to cut oneself off from the community and from social life. The 'satisfaction' derived from an individual's acts or thoughts in complete isolation has no social significance, and there is no way of measuring it.

The paramount influence of social situations is well illustrated by the experience of colonial administrators. Individual Africans, for example, who have attained to a high standard of technical proficiency when trained as agriculturists in a modern environment have, on returning to their own tribal community, 'forgotten' or abstained from applying what they have learnt. They break off contact with the market economy because they are afraid of being isolated from or incurring the ill-will of their fellows should they practice modern methods. They are happier to use again the methods of their forefathers and to be at one with the objectives of the community to which they again desire to belong.

What is the significance of this type of behaviour? Is it not the renunciation by such people of the objectives and ideals which dominate, or are assumed to dominate, advanced societies, and in particular of the concept of income in which they are expressed, such as the ideal of maximizing the net flow of individual money income? And is it not a renunciation of the accounting symbolism on which the European economy in the West is generally based?

It is this symbolism which expresses the system of value coefficients which, as Ragnar Frisch has shown,[1] must be established by 'some sort of convention' which in itself is an axiomatic datum without which the sectional – or national –

[1] As an example of such a system of value coefficients he writes:

'We may take the market prices of the goods. We may specify the concept of market prices further by saying that it should be prices actually paid by the buyer. With this specification – and with certain supplementary conventions for such items as the product of housewives' work or other products of the household – it will in most actual cases be clearly defined what sums should go into the basic magnitudes. This definition becomes a meaningful one because in order to define the value concept used we have had recourse to some criterion outside the ecocirc-system itself. We have established the definition by referring to the concrete facts *surrounding each individual payment. We may, if we wish, establish* the value definition by some other sort of convention, for instance, by an elaborate system of social valuations or socially determined priority figures, etc., but in all cases we must postulate some system of value coefficients before the basic concepts get a meaning.' *Attempt at Clarification of Certain National Income Concepts*, Stencil Memo, 8th October 1949, University Institute of Economics, Oslo.

accounting streams with which we may be concerned have no meaning. As he rightly stresses, all the definitional equations of the ecocirc-system hold good 'whatever the system of value coefficients used, *provided only that the same system is applied throughout* (my italics). Our problem, however, arises precisely because we are dealing with different value systems and conventions. And thus the concept of abstract welfare has and is being used as a bridge, but in my opinion an inadequate bridge between different welfare systems.

Mr. Colin Clark, criticizing the view of some modern theoretical economists that it is impossible to compare the level of income between two communities,[1] argues that exponents of this view, 'do not realize what an intellectual anarchy they will let loose if their theories are adopted'. 'Deprive economics of the concept of welfare,' he writes, 'and what have you left? Nothing; except possibly the theory of the trade cycle where all values may be capable of expression in money terms without the introduction of the concept of welfare.' He does not hesitate to make 'comparisons of economic welfare of different times, places, and groups of people', and writes:

> To compare, for instance, the real value of $0.795 produced per hour worked in U.S.A. in 1929, and 1.28 Rm. or $0.305 at par of exchange produced per hour worked in Germany in the same year, we must take account of the actual quantities of goods and services produced, or, in other words, what the money will buy. The average American over that period spent his income in a certain way, purchasing certain quantities of goods and services. If he had gone to Germany and had set out to purchase exactly the same goods and services, he would have found that they were 0.9 per cent cheaper in the aggregate than in his own country. The German with his income purchased certain goods and services, by no means in the same proportion as the American. He spent much less of his income on motor cars and rent, and much more on food.
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> The German going to America and purchasing the goods and services which he was accustomed to consume would find that they were 19.8 per cent dearer. In comparing the real value of incomes in the two countries we must, therefore, allow something between 19.8 and 0.9 per cent for the difference in purchasing power of money.

[1] C. Colin Clark, *The Conditions of Economic Progress*, 2nd edition, London, Macmillan, 1951, pp. 16–17.

He then discusses Fisher's and Pigou's well-known formulae for doing this.

This example, I suggest, exposes the hidden assumption on which Colin Clark is working; namely, that either an American in Germany or a German in America could spend his income *as if* the fact that he was from a different society would not affect the purposes for which he desires or spends income. It may of course be argued that the social objectives of Germans and Americans are, on the whole, similar; that a German can adapt himself relatively easily to the American way of life when he goes to America and vice versa. But when comparing developed and under-developed, or industrial and pre-industrial, societies this argument is quite unreal. An American prepared to live in China as the Chinese do might be able to obtain specific goods and services more cheaply than these could be obtained in America. But if he wishes to live there as an American the position might be quite different. And the real question – which Colin Clark does not face – is: Are we comparing 'income' in terms of the American or the Chinese *way of life* when we make such calculations? For, obviously, the experience of isolated, 'atomized' individuals living in foreign communities is of no comparative interest whatsoever.

Professor Kuznets no doubt had this point in mind when he quoted Colin Clark's figures showing that more than half the population of pre-industrial countries receive a per capita income of less than $40 international units, and asked: 'Could people live in the United States during 1925–34 for several years on an income substantially below $40 per capita?' 'The answer,' he thought, 'would be "yes", if they were sufficiently wealthy to have lots of possessions to sell, sufficiently lucky to have rich relations or sufficiently bold to rob other people. The one-third to one-half of the pre-industrial population of the world would scarcely be in that position; and if we assume that all they have produced and could consume per capita was less than 40 international units for several years, the conclusion would be all would be dead by now.' He is led to infer, therefore, '(a) either that the estimates, even after the customary adjustments for comparability with industrial countries, are still deficient in omitting many goods produced in pre-industrial countries; or (b) in fact the whole complex of goods produced and consumed is so different that we cannot establish any equivalence of the type represented by Mr. Clark's international units.'[1]

## II. LIMITATIONS OF THE INCOME CONCEPT

It is the thesis of this paper that these difficulties of comparison are due on the one hand to a fundamental dichotomy in the meaning which we ascribe to national income aggregates in advanced money economies, and on the other hand to unwarranted assumptions concerning the nature and measurability of 'income' in the less developed societies with which we endeavour to make, or enforce, national income comparisons. First it is necessary to draw attention to the peculiar concept of income which governs what might be called the symbolism of economic activity in economic literature (though not necessarily always in the minds of the real economic actors themselves) in the advanced and complex money economies of the modern world.

That symbolism consists in the belief that the members of such societies are engaged in creating, and strive to increase, and indeed to maximize, certain individual abstract psychological entities called utilities, or satisfactions which reside in, or take the form of individual states of consciousness. According to this view income which an individual receives is in the last resort a mental experience – an event in the mind of the individual concerned. This mental experience, it is alleged, cannot be measured or observed directly, but changes in it can be said to be indicated and measured by changes in the publicly and recorded valuations of those goods and services which are

[1] Professor Kuznets adds: 'The form in which the question was raised – how it is possible for a large proportion of the population in pre-industrial countries to survive on an income that produced, for several years, less than the equivalent of $40 per year – obviously reflects my bias as a member of an industrial society. Personal experience and observation tell me that such an annual product is well below the starvation level. But were I a member of a pre-industrial society I might well have asked how it is possible for the majority of the population in the United States to dispose of as much as $500 per year, or whatever its equivalent would be in international units of rupees or yuan. Especially, on being told that of this huge income less than 10 per cent is saved for net additions to capital stock, I might ask how the population manages to consume so much – given the limited amount of food one can eat, clothes one can wear, or houses one can inhabit. And a suspicion similar to that voiced above could be entertained, namely, that these income figures for industrial countries must include many categories of items that are *not* included in income as ordinarily conceived in pre-industrial countries; and that the whole pattern of consumption and living in industrial countries is so different as to explain the ease with which these *huge quantities* of goods are produced and especially consumed.'

exchanged against, or can be expressed in terms of, money. It is my thesis that this view of income as ultimately a psychological entity residing in the minds of individuals, changes in the magnitude of which entity can be reflected in national income aggregates, is fallacious. At this point, however, I merely wish to stress that even if this mental symbolism were to be found to be an accurate portrayal of reality in 'advanced' societies I would argue that it had little or no parallel in the social and economic life of most of the inhabitants of the 'under-developed' countries of the world. In the economically 'backward' communities economic activity cannot possibly be regarded as governed by highly refined individual choices, or abstract evaluations, directed towards increasing individual mental satisfactions. For the most part these peoples are engaged in narrow economic pursuits determined by the pressure of the environment from which they have consciously, or unconsciously, as yet learned only how to wring a precarious existence in accordance with those traditional social and economic precepts to which they cling for guidance. To speak in their case of the creation of income in a monetary, a psychological, or even an individual sense is to apply a foreign symbolism to express or to account for activities which are not conducted in terms of it, and cannot be expressed by it.

By far the greater part of the activities of such societies are directed to the production of goods and services to satisfy the 'concrete' needs of immediate or seasonal consumption; and not in any sense to the creation of 'rights' to goods and services or 'values' in the abstract: such as the right to an abstract stream of 'income' in an accounting or property sense. That is why we meet so frequently with the well-known phenomenon that, when particular goods or services in such communities are traded against money, production is not necessarily stimulated by higher prices for them, or by higher rewards to labour. On the contrary, higher prices may result in a falling off in effort and production because what stimulates the people concerned to effort is the achievement of particular limited purposes – purposes which are socially determined by custom and tradition. In such societies money is a 'good' among other goods which has limited uses. What money is, and the rôle it plays, is always an expression of the institutional arrangements of society as a whole – a truth often forgotten even in 'advanced' societies. The accumulation of money, as for example in societies where the possession of it can do little to affect the willingness, or ability, of persons to alter traditional patterns of economic activity (as when, *inter alia*, it cannot be used to acquire land or property rights or other resources, or to attract labour to other than traditionally determined purposes), is of little use to the individual. It does not necessarily even yield him increased security, since this is subject to social forces which the possession of money does not necessarily control.

The main point which, I submit, emerges from an examination of economic activity in most under-developed societies is that these activities cannot be expressed adequately by highly abstract concepts of individual income in accounting or monetary terms. To attempt to do so is to do violence to the governing principles of social organization and evaluation in them – just as one would do violence to the values created and represented by family life if one were to try to express them only in terms of the 'income' yielded to each of its members: for its mutual co-operant activity cannot be regarded as based only on the desire to magnify the individual satisfactions or utilities of each of its members, or their money income.

But even if (as is not the case) the *major* part of the activities of under-developed societies were, in fact, conducted on the basis of a highly complex accounting and monetary symbolism it would still, I believe, be fallacious to endeavour to compare income aggregates as between different societies. To make this attempt implies that the process of measuring the national income is something more than that strictly accounting procedure which, of necessity, can refer only to the accounts and value relationships set up within any one society. It implies that back and behind these objectively recorded accounting relations there is something else – some composite of abstract private values – which constitutes the ultimate satisfaction, or welfare, of all the individuals within a society. It implies that, although we cannot compare the different objective goods and services which flow from the greatly varying economic activities of different societies, we can, nevertheless, meaningfully compare the shadow-world of abstract private subjective values, which the consumption or possession of these goods and services is alleged to create in the minds of individuals. Thus it is implied that national income aggregates are comparable precisely because, in the last resort, these aggregates supposedly give rise to abstract ultimate values (e.g. experiences of satisfaction, or welfare) in the minds of individuals: abstract values which are dissociated from the accident of time and place, and from the social matrix in which everything else is so obviously, and so unavoidably, embedded.

It is my view that this whole concept of the national dividend as, on the one hand, consisting in a series of measurable events (goods and services) which, on the other hand, have a counterpart in, and throw light on, a second series of events in the states of consciousness, or minds of individuals, rests on a category mistake. It is one of those types of mistake which arise from representing facts 'as if they belong to one logical type or category . . . when they actually belong to another'. In the article previously referred to[1] I gave one of Professor Ryle's illustrations of such a mistake which is worth quoting here in full as follows:

> A foreigner visiting Oxford or Cambridge for the first time is shown a number of colleges, libraries, playing fields, museums, scientific departments and administrative offices. He then asks, 'But where is the University? I have seen where the members of the Colleges live, where the Registrar works, where the scientists experiment and the rest. But I have not yet seen the University in which reside the work the members of your University.' It has then to be explained to him that the University is not another collateral institution, some ulterior counterpart to the colleges, laboratories, and offices which he has seen. The University is just the way in which all that he has already seen is organized. When they are seen and when their co-ordination is understood, the University has been seen. His mistake lay in his innocent assumption that it was correct to speak of Christ Church, the Bodelian Library, the Ashmolean Museum, *and* the University, to speak, that is as if 'the University stood for an extra member of the class of which these other units are members. He was mistakenly allocating the University to the same category as that to which the other institutions belong.[2]

The point of this illustration is to direct attention to the fact that when we add up the 'net values' which society ascribes to

[1] Psychic and Accounting Concepts of Income and Welfare, *Oxford Economic Papers*, February, 1952.

[2] Gilbert Ryle, *The Concept of Mind*, Hutchinson's University Library, 1949, p. 16. I am greatly indebted not only to the book, but to Professor Ryle personally for valuable suggestions.

certain events or happenings (goods and services) we are simply measuring certain parts of the whole society's activities just as if we were describing different *parts* of the whole university. But it is as wrong to regard these goods and services as *causing* the welfare of society (as, for example, Pigou appears to have done)[1] as it would be to regard the different buildings as *causing* the university. The university is not the counterpart to its teachers and buildings; nor is society's welfare a *counterpart* of its goods and services.

In other words, when we have recorded an increase in the 'income' of a society by measuring certain goods and services we cannot logically regard this increase as indicating a further increase in something else called 'welfare', or collective 'satisfaction' or 'utility' allegedly being 'enjoyed' by the society. By definition we have already identified this 'welfare', and the like, in terms of the very goods and services which we have measured. The welfare of society is just the pattern in which *all* its activities are organized and when we 'measure' one part of those activities we cannot regard this part as yielding some counterpart of welfare elsewhere.

It is precisely because these welfare patterns in societies differ so widely and, as it were, determine what is regarded as 'income', that 'income' in one of them will be so different from, and incapable of comparison with, what is 'income' in another. The mere evaluation of goods and services designated as 'income' in the one, does not necessarily express or indicate anything which can be compared to them in the other – except these very goods and services themselves. The comparison of these, however, fails completely to indicate their relative importance in the value pattern of life and activity in the different societies of which they form a part. In other words, end products

[1] I have analysed what appear to me to be the logical shortcomings of Pigou's welfare concept in the article already referred to. Therein I have also compared it to Irving Fisher's concept of 'psychic income'. What is 'welfare' or 'economic welfare' to Pigou was 'psychic or enjoyment income' to Irving Fisher. The latter was at pains to equate 'ultimate income' to 'the psychic experience of the individual mind' – a *private process of observing* (and privately measuring) these *inner* events of enjoyment: the counterpart of real income – a counterpart located in the 'mind' of the observer. To Fisher it is as if, while eating my dinner, I am observing, recording or reporting to myself on the 'agreeable sensation' and experience of eating it; and it is as if I calculate or measure my *net* psychic income by not only continually observing, recording, and reporting on 'agreeable sensations' – if that is possible – but also by observing and reporting on accompanying disagreeable ones (such as those which Fisher calls the 'labour pains' involved in earning income), and deducting the latter from the former.

in the form of goods and services do not tell us the meaning which the society in question ascribes to their production, and to their use.

In one society a large part of the buildings of the government may house a gendarmerie used for the purpose of maintaining the people in slavery, in another society they may house an élite endeavouring to educate the people to freedom. How can one compare the 'income' of government servants in these two societies – or the net value of the building construction itself?

It is logically fallacious to try to evaluate economic activities in different societies for comparative purposes by valuing merely the end product of those activities. To do this is to overlook that the value of the product is but a part, and possibly a very insignificant part, of the activity which gives rise to it.

A certain African tribe lives entirely off the blood and milk of living cattle. The tribe despises all other activities than roaming with the cattle over wide pasture areas. There is no way of evaluating these peculiar end products (blood and milk) and comparing them with say the 'net value' of milk, or meat produced elsewhere. To this African society, living with its cattle is as important as the sustenance yielded by them. The activity and the end product are inseparably embedded together in its social status system, its habits, and its ways of thought, and so far nothing has weaned them away from this peculiar welfare pattern.

It follows, therefore, that attempts to 'impute' values to goods and services in an economically under-developed community, on the basis of assumed market values existing in a more advanced community in order to enable artificial comparisons of income aggregates between the two, is a highly questionable procedure. It is, indeed, difficult to see what meaning can be ascribed to statistical aggregates so obtained. To say, for example, that the 'income' from the production of maize in a Central African province which does not trade maize can, for comparative purposes, be calculated by 'imputing' the value of the same quantity of maize (or equivalent food products) in another society, is to force a comparison in which the term 'income' is no longer restricted to its accounting sense but carries with it a connotation like that of psychic income which I have been criticizing. For the fundamental fact remains that we do not know the relation of the 'value of maize' in such a society to the rest of its system of values.

### III. RAPID CHANGES IN ENVIRONMENT

It is not only the fact that a very limited range of the activities of pre-industrial societies may be covered by accounting symbolisms of any kind that makes comparison with more advanced societies difficult. There is the further important consideration that the pre-industrial societies are, in most cases, undergoing rapid transition. They are in a process of disintegration; rapid changes are occurring in their way of life and in their social value systems; members of the society are becoming attached to modern money economies in which the value systems are entirely different. How can one compare the income of 'individuals' or 'groups' at different times when they have been subject to such changes? How can one attempt to assess whether the pre-industrial community is 'better off' when, as in South Africa, for example, it has undergone a rapid process of urbanization, and has been integrated into a modern economy in a quite different social framework?

As I have endeavoured to show, the very question is in itself illegitimate. The income which we record for such groups in the modern environment portrays only the new objectively recorded relations between them and others. But such statistical and accounting records tell us nothing of interest concerning the value of the system which has been destroyed as compared with the one which has taken its place.

In my opinion, frank recognition of the limitations inherent in any system of national income calculations or social accounts would have beneficial consequences; it would focus attention on the fact that it is illegitimate to make the *a priori* assumption that an increase in the aggregates arrived at by such calculations have, in themselves, any significance for social action. It would emphasize, on the contrary, that any system of social accounts is but a device for portraying limited relations within the field of social action covered by them, and that the activities so covered may have relatively little importance in relation to social objectives as a whole. Thus one of the main tasks which now confront economists, statisticians, and sociologists emerges more clearly, namely, to determine which factors constitute the welfare pattern – rather than to stop short at comparing symbols which do not adequately portray it. Only thus will it be possible to clarify the relation between activities which can and those which cannot be subsumed under a system of accounts. Only in this way can a system of accounts be brought into meaningful relation with the welfare system and pattern of society as a whole.

This is of particular importance in under-developed or pre-industrial societies undergoing rapid change, for such change, signifying as it does a change not only in technical organization but in value systems, lays upon the society in question the urgent burden of experimentation as to the new forms or ways of life which must take the place of those habit patterns in which welfare was previously incorporated. The social system of accounts or body of statistical data, to be meaningful, must be closely integrated with detailed studies yielding wider economic and sociological data for specific purposes, designed to reflect the changing social framework, as well as the activities it incorporates. Such a statistical system must at all times aim mainly at portraying certain limited economic and social relationships, covering relatively brief periods of time, and intended to clarify the relationships themselves. No system of accounts and no statistical calculations can in themselves yield aggregates which will obviate the need for detailed individual and social decision as to the activities which society should pursue or the social framework within which they should be conducted.

Indeed, as Professor Kuznets has written, 'The ease with which national income comparisons, among countries with differing industrial and social structures, are currently made may largely be due to the shallowness of our knowledge and of our willingness to stay on the surface of social phenomena.'