

# Fundamental Errors in Recent Anti-Keynesian Literature

by

ERICH SCHNEIDER

## I.

It is now nearly twenty years since the appearance of Keynes' General Theory of Employment, Interest and Money (1), and this work has now, by the overwhelming majority of economists, been digested and, in many ways, developed. A number of recent publications, show, however, that here and there important misunderstandings are still current with regard to the content and range of Keynes' contribution to economic theory. These misunderstandings are even to be found in the writings of some recognised economists (2), one of whom even goes so far as to formulate the conditions for a « peace formula » between

(1) London, 1936.

(2) I am concerned especially with the following writings:

(a) H. MAYER, *John Maynard Keynes' « Neubegründung » der Wirtschaftstheorie*, in « Lagler-Messner, Wirtschaftliche Entwicklung und soziale Ordnung », Vienna, 1952. This work is an extract from a lecture delivered at Bad Ischl in August 1951, of which a verbatim report has unfortunately not yet appeared. A very brief report has been given by H. RITTERSHAUSEN in the « Frankfurter Allgemeine Zeitung » of 20.9.1951, entitled *Keynes weder Revolution noch Wissenschaft*.

(b) W. RÖPKE, *Civitas Humana, Grundfragen der Gesellschafts- und Wirtschaftsreform*, Erlenbach - Zürich, 1944, p. 333 ff.

(c) W. RÖPKE, *Was lehrt Keynes?*, in « Frankfurter Allgemeine Zeitung » of 27.9.1952.

(d) A. WEBER, *Lord Keynes auf neuen Wegen: Der Kredit als Zaubermittel?*, in « Hauptfragen der Wirtschaftspolitik », Berlin, 1950.

(e) A. WEBER: *New Economics - Revolution oder Konfusion?*, in « Zeitschrift für das gesamte Kreditwesen », 1952.

(f) A. L. HAHN, *The Economics of Illusion*, New York, 1947. A detailed criticism of this book is given in my article *Hahn Contra Keynes* (« Schweizerische Zeitschrift für Volkswirtschaft und Statistik », 1952, p. 395 ff.).

(g) A. L. HAHN, *Die Grundirrtümer in Lord Keynes' General Theory of Employment, Interest and Money*, in « Ordo », Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft, Vol. II, 1949.

(h) A. HUNOLD (editor), *Vollbeschäftigung, Inflation und Planwirtschaft*, Zürich, 1951.

Keynesians and anti-Keynesians! (3). It is therefore essential for us to face up to these misunderstandings, even if we have to discuss matters which for most economists have long ceased to be controversial. The smooth advance of our subject is constantly being obstructed, and a final clarification has become a pressing necessity (4).

## II.

Let us begin with the proposition that the world of economists is today divided into the two hostile camps of « Keynesians » and « anti-Keynesians » (5), or into the representatives of the « New Economics » and the « Old Economics » (6). The inexpert reader who comes across this thesis inevitably must get the impression that these « Old » and « New » Economics are based on articles of faith which can be accepted or rejected according to taste or inclination, and not on scientific theorems which must be regarded as either true or false by anyone capable of logical reasoning. It is again from the same point of view that it is argued that what Keynes contributed was neither a revolution in thought nor a scientific achievement (7), but a « General Confu-

(3) W. RÖPKE, *Was lehrt Keynes?*, in « Frankfurter Allgemeine Zeitung », 27.9.1952.

(4) The complete confusion as to the meaning of Keynes' theory is shown very clearly in the book mentioned above on « Vollbeschäftigung, Inflation und Planwirtschaft ». The editor aimed at publishing a counterblast to Keynes. But he has obviously failed to notice that the article contributed by Lutz, one of the best and most important in the volume, not only in no way contradicts, but is in full agreement with Keynes' theory.

(5) H. MAYER, *op. cit.*

(6) W. RÖPKE, *Was lehrt Keynes?*

(7) See the report by H. Rittershausen of Mayer's lecture mentioned in note (2) above.

sion» (8). Now even the most superficial reader of the General Theory must know that Keynes did not offer the reader a «Weltanschauung» but a *theory*. The book is entitled «General Theory of Employment, Interest and Money», and Keynes describes the question which he intended his theory to answer as follows: «Our present object is to discover what determines at any time the national income of a given economic system and... the amount of its employment» (9). It is to be noticed that Keynes states his objective as being a theory of *employment*, not as has so often wrongly been said — of a theory of *full employment* (10).

The questions we have to ask are: (a) whether Keynes' theory is true or false; (b) whether the theorems developed by Keynes invalidate our previous knowledge or only extend it; and (c) what are the consequences for economic policy which follow from Keynes' theoretical propositions, assuming that these are correct. It is soon clear that questions (a) and (b) can never divide the world of economists into two hostile camps. Anyone maintaining the opposite has never understood the nature of theoretical propositions and theoretical reasoning, and should read W. Eucken's distinguished essay on the use of Economic Theory (11), (*Was leistet die ökonomische Theorie?*). Theoretical propositions are always conditional in the form «If A, then B». If these or those postulates are satisfied, *then* these or those relationships are valid. «Theory» as Lotze said, «is not concerned with what *is* and what *happens*, but tells us what *must* be and what *must* happen *if* particular conditions are satisfied» (12). Theoretical propositions always possess analytical necessity and, under the assumption made, are always either true or false (13). One cannot therefore accept or

reject a theoretical proposition as one may a dogma. One can simply say that a correctly-reasoned theoretical proposition may not be *relevant* at any particular moment because the assumptions from which it is deduced do not coincide with the existing situation (14). This does not mean that the proposition is false, but simply that the proposition, though true, is not relevant. The propositions of the theory of oligopoly are obviously not relevant when conditions of oligopoly do not exist. Nevertheless, they always remain true. Our theoretical tool-boxes consist of logically necessary propositions, only a part of which are relevant at any particular moment.

W. Röpke does not agree with this point of view. Quoting in support J.M. Clark, he argues that «the Keynesian revolution has split political economy into two realms of logic. What is sense in one realm is nonsense in the other» (15). It is true that one of the most important achievements of Keynes consists in the demonstration that for an economy in a condition of full employment different theorems hold good than in an economy with under-employment. Röpke admits this and adds that the mass unemployment of the 30's could not be explained by «the Old Economics», that is, by means of theorems deduced under the assumption of full employment: «In this case a deficiency of "effective demand" was the true cause of mass unemployment which it was the duty of economic policy to remove, and which called for a reversal of sound eco-

(14) Only in this way can any sense be discovered in the strange notion advanced by some writers that Keynes' theory applies only to England and is not applicable to the present German situation (e.g. A. Weber). Whether such statements are correct will have to be considered later.

(15) W. RÖPKE, *Was lehrt Keynes?*

The statement of J. M. Clark to which Röpke refers runs as follows: «For conventional economics the effect of the Keynesian propositions is startling. Its one world *seems* (italics added) to be split into two realms of logic, and the sense of one is the nonsense of the other» (J. M. CLARK, *Alternative to Servitude*, New York, 1948, p. 106). Clark shows by means of some impressive examples that for a world of under-employment different propositions are valid than for a world of full employment. He adds: «The Keynesian formula is a striking antithesis to orthodoxy, where just such a striking antithesis was needed to break through the crust of outworn ideas. It remains for the next generation to fashion a synthesis, both in theory and in policy» (*op. cit.*, pp. 109-110). We recommend especially Chapter IV of Clark's book: *Revolution in Economics: After Keynes What?*

(8) A. HAHN, *op. cit.*; H. MAYER, *op. cit.*

(9) J. M. KEYNES, *General Theory*, etc., p. 247.

(10) Strictly one can only speak of a theory of full employment *policy*. As Keynes was concerned with the means or policies by which full employment could be attained he could be described as having worked out a theory of employment *and* of full employment policy.

(11) W. EUCKEN, *Kapitaltheoretische Untersuchungen*, Jena, 1934.

(12) W. EUCKEN, *op. cit.*

(13) All too truly it may be said that «we are continually disoussing theory in our subject without the faintest grasp of its logical character» (W. EUCKEN, *op. cit.*, p. 29).

nomic thinking (16), and the laying of the main emphasis on expenditure and on "increasing effective demand". It was then the economist's duty to refuse to be frightened by the danger of inflation and not to wait upon previous supplies of saving» (17). Röpke agrees also that there may be cases where an increase in the national debt represents a lesser evil (18). But it is wrong to believe that a different sort of logic operates in the theory of the under-employed economy from that which operates in the theory of the fully-employed economy. The logic is the same in the two cases. It is simply the assumptions from which the theorems are deduced which are different. In Euclidian geometry different propositions are valid than in non-Euclidian geometry, but the logic is the same in the two cases.

Keynes underlined with great precision the differences between a world with full employment and a world with under-employment, and emphasised that the propositions valid in the one case lose their validity in the other. It is quite simply false when Röpke states that Keynes attributed general validity to relationships obtaining in a world of under-employment. Theoretical propositions are always only valid under particular assumptions. Also any further conclusions drawn from these propositions are likewise tied to the original assumptions (19).

There is at most, in the realm of economic theory, *one* sense in which we can speak of «Keynesians» and «non-Keynesians». The theory of employment developed by Keynes uses a special terminology which a majority of economists — but not all — today use. One could therefore describe those economists who reject the Keynesian terminology as «non-Keynesians». But the number of these econo-

(16) By «sound economic theory» Röpke obviously understands those theoretical propositions which are valid in conditions of full employment.

(17) W. RÖPKE, *Was lehrt Keynes?*

(18) W. RÖPKE, *op. cit.*

(19) «Keynes' work is built up... by a very subtle analysis which rests on carefully stated assumptions and which is valid only on these assumptions» (*Besinnung auf J. M. Keynes*, in «Die Zeit», 23.8.1951).

Keynes' theory «is a purely logical contrivance, which proceeds from certain assumed relationships to conclusions which inexorably follow so long as the assumptions are maintained inviolate» (J. H. WILLIAMS, *An Economist's Confessions*, in «American Economic Review», Vol. 42, 1952, p. 6).

mists is getting smaller, and there is very little sense in employing this distinction in this way (20).

The case is different with regard to question (c). Here, a decision depends not on processes of logic but on the subjective inclinations, impressions and wishes of the individual. Here, but only here, can we really speak of a division between economists. Keynes himself has, as we shall examine later, drawn particular conclusions for economic policy from his theoretical propositions, in accordance with his own particular inclinations and values. These consequences, of course, have not got the character of logical necessity, and he himself simply regarded them as one particular *possibility*, as is clear from the title of Chapter XXIV of the General Theory: «Concluding Notes on the Social Philosophy towards which the General Theory *might* lead» (italics added). One may accept these conclusions and the economic policies they represent, or one can reject them. *In this sense* one may speak of «Keynesians», or «anti-Keynesians», but it must be noticed that this distinction only makes sense on the plane of economic policy and not on that of theoretical analysis. As I have said elsewhere (21), one must distinguish very precisely between Keynes' theoretical analysis and the consequences for economic policy drawn by Keynes. A rejection of the latter does not imply a rejection of the former (22), as has often been forgotten in recent discussions. The antipathy with which Keynes' conclusions for economic policy are met is often carried over against Keynesian theory. As J.H. Williams has rightly said: «Few laymen could have known much about Ricardo's Theory of Value and Distribution, any more than most laymen today (who like to divide us all into "Keynesians" and "anti-Keynesians") have any understanding of the

(20) In spite of all his other objections, A. Hahn, in a lecture at Frankfurt, proposes that German economists should, in the interests of a better understanding, make use of the Keynesian terminology generally adopted in other countries. (See the report in the «Düsseldorfer Handelsblatt» of 1.7.1949).

(21) *The Problems of Full Employment, Verhandlungen auf der Tagung des Vereins für Sozialpolitik in Bad Pyrmont*, 1950, Berlin, 1950, pp. 29-30.

(22) See also A. H. HANSEN, *The Influence of Keynesian Thinking in the United States*, in «Weltwirtschaftliches Archiv», Vol. 69, No. 1.

Keynesian system, *but base their bias, for or against, solely on what they conceive to be the policy implications*» (23).

Recent German discussions provide many illustrations. The thesis that «Keynesism» is identical with «Inflationism» (Röpke), is one example of this kind of fallacious argument. This amounts to saying that to apply the propositions of Keynes' theory necessarily leads to an inflationary economic policy. Another illustration is the proposition that Keynes' theory leads directly to a centrally-controlled and centrally-administered economy. But it is absurd to suggest that a theoretical proposition provable by means of logical processes can necessarily lead to any particular measure of economic policy (24). As «The Economist» of 27/1/1951 has remarked: «His (Keynes') economic analysis did not arrive automatically at inflationary conclusions; it is a two-way street». The propositions of Keynesian theory are, like other theoretical propositions, not tied to any political creed. As W. Fellner has rightly said, any one who supports a policy of direct controls with a reference to the General Theory «is reading between the lines, or at best is placing more emphasis on certain specific statements in the book than on others... It is possible to construct a highway from Keynesian analysis to certain varieties of socialism... Yet it must be emphasised that Keynes himself did not build this highway... It is possible also to construct a bridge from Keynesian analysis to policies of a very different sort, which are geared to the wage-price level as well as to the level of employment... To say that Keynes advocated a policy of this sort would be no less arbitrary than to say that he built a highway to socialism... The truth of the matter is that the Keynesian theory stops short of this dilemma» (25).

Keynes certainly recognized that involuntary unemployment is not only a disaster to

those who suffer from it, but also that the future of the free market economy depends essentially on whether it is possible to stabilise employment at a high level within the framework of this economic system. This conviction is surely shared today by every intelligent and responsible supporter of the free market economy (26). But Keynes did not believe that involuntary unemployment can simply be abolished by bringing into being a competitive economic order, however precisely this may be functioning. Keynes would certainly have rejected completely propositions like the following, just because he was a liberal (27): «Let us establish a free and genuine competitive order internally and externally, and then the problem of employment will solve itself. It is the destruction of competition by monopoly and by the intervention of the state which betrays the market economy and causes unemployment» (28). There is simply no truth in Röpke's view that Keynes and his followers regarded as obsolete and irrelevant the workings of the price mechanism as a method of regulating the economy (29). But he knew that the price mechanism is not enough to ensure a relatively stable and high level of employment, even if the state were to establish a competitive economic order in which the formation of prices came about under free atomistic competition. He was, on the other hand, convinced that a policy of another kind, namely a combination of monetary and fiscal measures, was necessary in order to solve the

(26) Per Jacobsson, for example, writes: «There can be no doubt that in future no economic system will be considered satisfactory which does not provide a fairly high level of employment». (*Problems of Employment*, in «Vierteljahresberichte der Skandinaviska Banken», Vol. 33, No. 3, 1952).

(27) V. MUTHESIUS, *Der Mythos der Keynesianismus*, in «Frankfurter Allgemeine Zeitung», 30.8.1952.

(28) Even Röpke admits: «In spite of all his criticisms of the capitalist system he never became a socialist, but always remained a liberal» («Neue Zürcher Zeitung», 5.5.1946). Anyone who doubts that Keynes was anything but an ardent supporter of a free economic system should read his letter to Hayek concerning the latter's book *The Road to Serfdom*. (Printed in R. F. HARROD, *Life of J. M. Keynes*, London, 1950, pp. 436-7). Concerning this letter a writer in the *Deutsche Zeitung* remarked: «If those who oppose "interventionist" policies would learn to write about Keynesians as Keynes wrote about the opponents of "interventionism" it would be a great gain from the point of view of the climate in which economic policy is discussed».

(29) W. RÖPKE, *Was lehrt Keynes?*

(23) J. H. WILLIAMS, *op. cit.*, p. 4 (italics added).

(24) Cf. for example, Röpke: «Practical experience has shown that it (Keynesian theory) has become one of the main pillars... of contemporary inflationary - collectivist policies». (See RÖPKE, *Was lehrt Keynes?*). Hahn also argues: «The planner's basic attitude is distinctly an application of Keynes' General Theory» (*The Economics of Illusion*, New York, 1949).

(25) W. FELLNER, *The Robertsonian Evolution*, in «American Economic Review», 1952, pp. 277-8.

problem of employment in a market economy. He differed from other economists who favoured the free market economy simply in the measures which he supported to this end: «There are few economists today who favour unadulterated laissez-faire. But about the kind and degree of intervention there is endless debate» (30). It is at this point that opinions differ, and that the contrast between Keynesians and anti-Keynesians is justified. *But we cannot emphasise too strongly that the ends of economic policy as seen by Keynes were the same as those of Adam Smith and Eucken: the preserving and securing of the market economy* (31). We shall have more to say on this subject later.

### III.

Let us turn now to the real achievement of Keynes, that is his discovery of the determinants of national income. His problem was, as we have already said, «to discover what determines at any time the national income of a given economic system and ... the amount of its employment». He tells us precisely what he understands by «a given economic system»: «We take as given the existing skill and quantity of available labour, the existing quality and quantity of available equipment, the existing technique, the degree of competition, the tastes and habits of the consumer, the disutility of different intensities of labour

(30) J. H. WILLIAMS, *op. cit.*

(31) «But with all the differences in method and construction in the economic thought of Eucken and that found in the theoretical work of Keynesians, the last lecture of the series which discusses the development of German economic thought in the twentieth century, convinces me that there is little real difference in the social philosophy of many Keynesians and that of the Euckenkreis» (A. T. PRACOCK, in «Weltwirtschaftliches Archiv», Vol. 68, 1952. The lecture by Eucken referred to above is the last in the volume *Our Unsuccessful Age, Five Lectures on Economic Policy*, London, 1951).

F. Neumark also rightly maintains: «It is a mistake only explicable on grounds of ignorance or blindness made by most opponents of these (i.e. Keynes' monetary and fiscal) policies, when they argue that the proponents of Keynesian policies are out for a sort of "cold socialisation", or a revolutionary transformation of our most important economic and social institutions, even though this is only to take place by stages. In fact, the exact opposite is the case, for Keynesian policies are advocated as necessary because it is held that only by their means can we preserve what is worthy and capable of preservation in our existing institutions». (*Grundsätze und Arten der Haushaltsführung und Finanzbedarfdeckung*, in «Handbuch der Finanzwissenschaft», Vol. I, 1952, p. 657).

and of the activities of supervision and organisation, as well as the social structure including the forces, other than our variables set forth below, which determine the distribution of the national income. This does not mean that we assume these factors to be constant; but merely that, in this place and context, we are not considering or taking into account the effects and consequences of changes in them» (32).

These assumptions which underlie the entire Keynesian model must be carefully observed. Many misunderstandings can be traced to a neglect of them. In particular, when we have carefully examined these assumptions it will be at once clear that the Keynesian theory is a theory of «the short period», that is, a period in which net investment is so small in comparison with the initial stock of capital that only the income effect of investment is relevant, while the effect on productive capacity, that is, the fact that investment increases productive capacity, can be neglected. Keynes' construction can, therefore, explain the fluctuations of income and employment in the trade cycle, but not the long-term changes in the trend of income and employment. For this, other analysis is necessary which, as is well known, has been the subject of recent research. Anyone who has followed these developments will recognise that not only would they have been virtually impossible without the Keynesian theory, but that they directly build on that theory (33).

We must also notice that Keynesian analysis is limited to a closed economy without economic activity on the part of the State. The problems of the influence of the balance of payments and of the economic activity of the level of income and employment are treated in the General Theory. The discussion of these problems belongs to post-Keynesian development, which is again a direct continuation of Keynes' work. One only needs to compare the standard work on international trade of the year 1932 (G. Haberler, *International Trade*) with the latest account by J. E. Meade (*The*

(32) J. M. KEYNES, *op. cit.*, p. 245.

(33) A very instructive treatment of this subject is to be found in the article, shortly to appear in «Weltwirtschaftliches Archiv», by G. BOMBACH, *Zur Theorie des wirtschaftlichen Wachstums*.

*Balance of Payments*, London, 1950) in order to see what decisive advances have been made under Keynes' influence. As for public finance, one has only to compare any account of that subject from the year 1932 with, for example, that of F. Neumark (*Grundsätze und Arten der Haushaltführung und Finanzbedarfsdeckung*, in the new *Handbuch der Finanzwissenschaft*, Tübingen, 1952) in order to perceive the difference.

The reasoning which led Keynes to his solution of his problem is fundamentally simple. In a closed economy without economic activity by the State, the national income is by definition always equal to the sum of consumption and investment, whether we regard these quantities in real or in monetary terms. If we denote consumption with C, investment with I, and national income with Y, then the following definitional equation holds good:

$$[1] \quad Y = C + I.$$

Now real consumption is a function of real income, or what comes to the same thing, consumption in money terms is, with a given level of prices, a function of money income:

$$[2] \quad C = C(Y).$$

Further, investment, real or monetary, is, with given expectations of profit, a function of the rate of interest (Keynes assumed for the sake of simplicity that only a single rate of interest exists in the economy, that is, only a single kind of interest-bearing claims):

$$[3] \quad I = I(i).$$

Function [2], the so-called consumption function, expresses the propensity to consume of households, and function [3], the so-called investment function, expresses the propensity to invest by entrepreneurs. Functions [2] and [3], therefore, relate to the modes of behaviour of households and entrepreneurs.

Between the four variables E, C, I and i three relations obtain, which can be reduced to a relation between two variables if we rewrite [1] with the aid of [2] and [3], in the following form:

$$[4] \quad Y = C(Y) + I(i).$$

Our problem therefore possesses a single degree of freedom. We assume that the level of the rate of interest is determined by the banking system, and then relation [4] determines the equilibrium level of income — either real income, or money income at the ruling prices. Equation [4] may also be interpreted in the following way: with a given rate of interest and a given propensity to consume, the equilibrium level of income must be at such a level that consumption out of this income plus investment is exactly equal to this equilibrium level of income or, what is to say the same thing, that voluntary saving is equal to voluntary (or intended) investment.

Relation [4], of which we have just given the economic interpretation, is Keynes' answer, reduced to the simplest terms, to the question as to how, at any point of time, national income and employment are determined in a closed economy without State activity. All the rest is by way of support and elaboration. In particular, the so-called «liquidity» theory of interest is not an essential part of the *core* of Keynes' theory of employment. The liquidity theory of interest comes in if we wish to assume that the level of the rate of interest is not exogenously determined, but is itself a variable which has to be explained. We have then in addition to equations [1] and [3] the further equation:

$$[5] \quad \alpha(Y, i) = M.$$

On the left side we have the demand for money for transaction and speculative purposes represented as a function of Y and i, while M represents the quantity of money existing in the economy. But we must notice that the addition of equation [5] not only increases the number of equations by 1 but also the number of variables by 1. The quantity of money is introduced as a new variable. The Keynesian model has as before a single degree of freedom. One can therefore now ask how Y, I and i are determined with a given quantity of money fixed by the banking system. But one can also, more realistically, ask how Y, and M are determined with the *rate of interest* fixed by the banking system.

This construction, as far as we have developed it up to now, gives a static explanation

of the equilibrium values of particular variables. For any essential understanding we must ask how the equilibrium values behave with changes in data, that is, we must carry out a comparative-static analysis. We must, for example, examine with the aid of relation [4] how income varies *coeteris paribus* with a change in the rate of interest or a change in the propensities to consume or invest. Such a comparative static analysis leads us to the well-known theorems which make up the central content of the General Theory. On the assumptions set out these theorems are unassailable. It is simply incomprehensible how Hans Mayer can come to the conclusion: «It (the Keynesian system) is above all not a system in the usual sense of a logically uncontradictory combination of partial relationships and partial truths brought together in a comprehensive view of the problems as a whole» (34). On the contrary, the Keynesian system is as logically free from contradictions as the system of Walras. It is, in fact, a very simple consistent system (35).

What may be the subject of controversy are simply the assumptions and nature of the Keynesian model. Some writers (Mayer and Röpke) have raised basic doubts against the use of macro-economic quantities and relationships. Such quantities are, according to Mayer, concepts «which because they are made up of unhomogeneous and therefore unsummable phenomena cannot be significantly brought together in a total or aggregate» (36). Therefore, the Keynesian analysis is «a peculiar kind of theory which has nothing in common with what has previously been described as theory» (37). In fact, the macro-economic method of treatment is a regression: «The whole progress of economic theory up to now has coincided with the abandonment of the global or macro-economic treatment and the basing of theory on elementary, given, and directly experienced phenomena» (38). Furthermore, Keynes' construction suffers because it

(34) H. MAYER, *op. cit.*, p. 42.

(35) J. H. WILLIAMS (*op. cit.*, p. 6) describes this system as follows: «In its essentials, the Keynesian system, like almost any consistent theory, is simple».

(36) H. MAYER, *op. cit.*, p. 41.

(37) *Op. cit.*, pp. 41-2.

(38) *Op. cit.*, p. 50.

uses the problematic concept of «equilibrium» which is one of the «fetishes of economic theory» (39).

Now it is quite certain that the concept of equilibrium was not introduced by Keynes. It is as old as economic science itself. The whole of economic theory from Adam Smith to Ricardo, Mill, Walras, and Marshall, down to modern times, gives this concept a central place. No theoretical economist up to now has disputed the significance of equilibrium analysis for the understanding of economic phenomena. This is, of course, not to say that the analysis of *processes* is not just as, or even more, important. But economic theory cannot get on without equilibrium analysis. Mayer must stand alone in maintaining that economic theory has up to now been pursuing a «fetish».

Similarly, Keynes is, of course, not the originator of macro-economic analysis. This, too, is as old as economic theory. The Physiocrats employed it with great virtuosity, as did the English classics. One could, in fact, say that the economic thought of the classics is predominantly macro-economic. Only with Walras, Marshall and the Austrian school is there a trend to micro-economic analysis, or to a total analysis based on micro-economic concepts, which attains to its most masterly perfection in the work of Walras. To see this development as a definite step forward as compared with the classical total analysis on a macro-economic basis, is, surely, only true within limits. *Each of the two methods of treatment has its advantages and disadvantages, and both therefore, must be cultivated and applied.* As contrasted with the neglect of macro-economic relationships since Marshall and Walras, the renaissance of Keynes may be seen as a return to the modes of thought of the classical economists (40), and at the same time as an important advance in the practical relevance of economic theory.

Macro-economic analysis permits of economic relationships being surveyed in their broad lines, while certainly leaving the details

(39) *Op. cit.*, p. 41.

(40) «It seems to me that Keynes to a large measure has reverted to the early classical in the respect that he took a large view of the broad forces influencing the economy» (A. H. HANSEN, *op. cit.*, p. 6).

out of account. Micro-economic analysis, on the other hand, penetrates to the actions of individual subjects, the total analysis of which has to work with such a large number of variables that it cannot provide practical and applicable results and is not capable of quantitative treatment. Especially if we are interested in practically applicable theorems, macro-economic analysis will always be more significant. Anyone concerned with economic policy has to think in macro-economic terms (41). In particular, all theories of the trade cycle up to now have been macro-economic theories. Provided that one remains conscious of the limitations of macro-economic analysis it can be an extremely valuable and useful tool. Röpke has lately come to this conclusion that the macro-economic treatment has its advantages, and he now believes that analysis in terms of macro-economic quantities has been refined by the methods of the « New Economics » (42). Previously he was one of the most vigorous opponents of such methods (43). But he is still wrong in thinking that Keynes believed that analysis in terms of the aggregate quantities of the economic circulation (« Kreislauf ») was the only method and the only one worth cultivating in the long run, and that Keynes claimed that his method and theory should be the exclusive and dominating ones (44). One is compelled to ask where on earth Keynes ever said that? In all his writings I have not been able to find even the faintest hint of such exclusive claims. I know also of no follower of his who has made such a claim. Micro-economic analysis will, as Keynes never contested, always preserve its significance alongside macro-economic analysis.

How far one wishes to go in constructing aggregate concepts will depend, of course, on the particular problem. The larger the aggregates, the cruder the picture of the relationships involved. Anyone who criticises the Keynesian model for using too crude aggregates simply has to refine them into partial aggregates. This is to increase the number of vari-

(41) See E. SCHNEIDER, *Einführung in die Wirtschaftstheorie*, Part I, 3rd edit., pp. 53-5; also W. LAUTENBACH, *Zins, Kredit und Produktion*, Tübingen, 1952, p. 5 ff.

(42) W. RÖPKE, *Was lehrt Keynes?*

(43) W. RÖPKE, *Civitas Humana*, op. cit., p. 343 ff.

(44) W. RÖPKE, *Was lehrt Keynes?*

ables and equations, and relationships previously obscure will then become apparent. The Keynesian model will not lose its value. But the great advantage of this model consists mainly in its simplicity, comprehensiveness, and its possibilities of development (45). It is, of course, wrong for Mayer to hold that aggregation cannot significantly be carried out because unhomogeneous and unsummable phenomena are being brought together in a total aggregate. Does he mean that national income, total consumption, total investment, profit, contractual incomes are all senseless aggregates? Then any statistical year-book would be a collection of senseless figures. Any aggregate quantity is, of course, the sum of similar partial quantities, and macro-economic functions can always be constructed and conceived as the sum of micro-economic functions.

If one derives, for example, the consumption function ( $C=C(Y)$ ) from individual demand functions, then this aggregation implies a constant distribution of income or a particular relationship between individual incomes and the national income. The consumption function can also be interpreted in another way, as quite independent of individual consumption functions, that is, as an assumption, statistically expressed, about the behaviour of a group or groups. But in whatever way the consumption function is interpreted, the question always remains as to *what* income it is which determines consumption (the actual present income, the income expected in the next period, or an average of the income expected over several periods); and the question also remains as to whether income is the sole determinant of consumption. We cannot here discuss these problems at length. Since the appearance of the General Theory they have been the subject of various detailed studies.

(45) « Simplification of our theoretical set-up is being welcomed primarily because simple set-ups yield, or seem to yield, simple results of real or putative practical value. Keynes' model does so without any statistics. But the real thing to aim at is not quantitative theory — all economic theory is quantitative by nature — but numerical theory: the highest ambition of the economist is to be able to figure out developments from any given state of the economic system. And this goal that seemed so far off, now seems to be brought within reach, within easy reach even, by Keynes' analytic scheme ». (J. SCHUMPETER, *Keynes and Statistics*, in « The Review of Economic Statistics », 1946, p. 196).

Some of Keynes' original formulations have been shown to be untenable, for example his proposition as to the stability of the consumption function. It has also been shown that the consumption function cannot always be expressed in the simple form  $C(Y)$ , but that expected changes in income and other factors must be taken into account (46). But it must be remembered that the introduction of new variables into the consumption function also implies the introduction of new variables into the demand functions as used by Walras. The macro-economic consumption function is the exact counterpart of the micro-economic individual demand function of the Walrasian type. It represents the individual consumption of a period as a function of the ruling prices of goods and of the income of the same period. The summing of individual demand functions, or consumption functions, of the Walrasian type, gives us the Keynesian consumption function.

It should be obvious that macro-economic analysis is an instrument which is not simply applicable to a particular kind of economic system. The proposition of Mayer that the global method is more convenient for planners, and the opinion of Röpke that operating with « collective » quantities leads directly to collectivism, are simply absurd. The Physiocrats were no planners; and a statistical handbook surely does not of itself prepare the way for collectivism. In any case, the consumption function, that is, the function which describes the dependence of consumption on the variables which determine it, remains as one of the essential pillars of the theory of income and employment (47). The Keynesian form of the function  $C(Y)$  is to be regarded as a simple first approximation.

Mayer also criticises the Keynesian system

(46) We refer the reader to: *Five Views on the Consumption Function*, in « The Review of Economic Statistics », 1946, p. 197 ff.; A.H. HANSEN, *Business Cycles and National Income*, New York, 1951, Chap. 10; T.M. BROWN, *Habit Persistence and Lags in Consumer Behaviour*, in « Econometrica », Vol. 20, 1952, p. 355 ff.

(47) Mayer has clearly overlooked the entire discussion about the Consumption Function. Otherwise he would not have been able to maintain the completely mistaken point of view that the Consumption Function — the main pillar of the Keynesian system — has been shown to be simply « the illusion of a pillar » (op. cit., p. 48).

for being purely static: « Keynes did not succeed, as he apparently thought he did, in constructing a dynamic system (to use the modern catchword), but particular dynamic elements in his work, in particular in his theory of expectations, are in direct contradiction to his fundamentally static system » (48). It is true that Keynes' analysis is formally a comparative-static analysis and that Keynes himself did not make his system dynamic, although his verbal arguments often have a thoroughly dynamic character. But it is not too difficult explicitly to « dynamise » his system, and this has already been well advanced. Moreover, the knowledge obtained by his comparative-static analysis remains of the highest importance.

Mayer also believes that the Keynesian system fails « to determine the end of the economy as a whole as the optimal satisfaction of human needs, as was done by the Austrian school, Marshall, Pigou and others. To make full employment the end is to confuse means and ends. The end must be the meeting of needs by the creation of income » (49). Can Mayer seriously believe that Keynes would have disagreed?

Mayer also goes wrong when he argues that Keynes' attention is devoted almost exclusively to the sphere of money and credit and that he has little sense of the « real » processes involving goods and services (50). Such a mistaken judgement can only be based on an insufficient study of Keynes' work. For in fact the opposite is the case. Not only did Keynes not overlook or neglect the « real » processes, but rather he was the first to study the mutual interaction of « real » and monetary processes: « Nobody before him, as far as I know, had brought all the relevant factors, real and monetary at once, together in a single formal scheme, through which their interplay could be coherently investigated » (51).

(48) H. MAYER, op. cit., p. 52. « Dynamic » is not, as Mayer believes, simply a slogan but a term describing a certain kind of analysis. Mayer, here too, makes the common mistake of holding that the introduction of expectations suffices to make a theory dynamic. A clear understanding is obtainable from G. HABERLER, *Prosperität und Depression*, Bern, 1948, p. 241.

(49) H. MAYER, op. cit., p. 51.

(50) H. MAYER, op. cit., p. 51.

(51) A. C. PIGOU, *Keynes' General Theory*, London, 1950, p. 65.

## IV.

Let us turn now to some of the details of Keynes' analysis which are still the subject of misunderstanding. It is said that « Keynes did not succeed in reconciling free competition with the existence of unemployment » (52); that rather an equilibrium condition with under-employment can only occur with rigid wages and not « in the empirically most frequent case of flexible wages ». In the first place, flexible wages, upwards and downwards, have for a long time not been « the empirically most frequent case ». The assumption which corresponds today with the real world is that wages are only freely alterable upwards. But let us assume that wage-rates are alterable upwards and downwards. The question now arises as to whether the system can settle in a condition of under-employment. Keynes examined this problem in great detail. It is wrong to suggest, as Hahn has suggested, that Keynes in his analysis always used the assumption of constant wage rates. In his Chapter XIX (Changes in Money Wages) and XXI (The Theory of Prices) Keynes studied in detail the effects of a general change in wage-rates on employment and prices, and the question as to whether involuntary unemployment can be removed by a *general* wage reduction. All the main points raised by this problem have already been touched on by Keynes himself (53). In contrast with the classical thesis that with complete flexibility of wages upwards and downwards unemployment can never exist, and that in a free market economy full employment will always come about (54), Keynes comes to the conclusion that « there is no ground for the belief that a flexible wage policy is capable of maintaining a state of continuous full employment... The economic system cannot be made self-adjusting along these lines » (55). Keynes' argument has been repeatedly confirmed by more recent study. L. G. Reynolds comes to the conclusion in a

recent paper: « It is possible to construct several quite plausible models in which a once-for-all cut in money wage rates would yield a new equilibrium position with a higher level of employment. Second, it is doubtful whether such an equilibrium would be approached very rapidly, or even approached at all, because of repercussions set up by the initial wage cut; *i.e.*, failure of other data to remain constant as they must do in equilibrium reasoning. Third, the issue is not of much practical importance anyway because real demand can be increased more quickly and with less social strife by monetary and fiscal measures. Blanket wage reductions, even if feasible, would not be a very useful prescription for depression unemployment » (56).

It is, therefore, incorrect that the Keynesian theorem as to the possibility of under-employment in a free market economy depends necessarily on the assumption of rigid wages (57).

## V.

Equally unfortunate misunderstandings can also be found repeated in discussions of saving and investment, or saving and investing, and the role of the rate of interest. Hahn, for example, continues to maintain « the conservative opinion that saving does not reduce effective demand » (*op. cit.*, p. 92), that « saving creates its own investment opportunities » (p. 99 and 102), and that « saving... does not create unemployment » (p. 103). As for the classical economists, the problem « of filling the gap between saving and investment » does not exist for Hahn (p. 186). He assumes that voluntary saving out of a particular national income is automatically adjusted by means of the rate of interest with voluntary investment

(56) L. G. REYNOLDS, *Wages in the Business Cycle*, in « American Economic Review Papers and Proceedings », 1951, Vol. 42, 1952, pp. 85-6. The economic effects of rising money wage-rates are also examined in detail in this work. See also D. PATINKIN, *Price Flexibility and Full Employment*, in « American Economic Review », Vol. 38, 1948.

(57) See D. PATINKIN, *op. cit.*; O. LANGE, *Price Flexibility and Employment*, Bloomington, 1944; F. MODIGLIANI, *Liquidity Preference and the Theory of Interest and Money*, in « *Econometrica* », Vol. 13, 1944; J. TOBIN, *Money Wage-Rates and Employment*, in « *The New Economics* » (ed. by S. Harris), New York, 1947, p. 572 ff.

(52) H. MAYER, *op. cit.*, p. 45.

(53) See A. H. HANSEN, *Monetary Theory and Fiscal Policy*, Chapter 8, Wages and Prices, New York, 1949.

(54) A. Hahn remarks, for example: « If wages were adjusted downwards, under-employment... would disappear and, incidentally, aggregate wages would increase » (*op. cit.*, pp. 141-2).

(55) *General Theory etc.*, p. 267.

of an equal quantity. It is one of the most important conclusions of recent theory that the classical mechanism of the interest rate is not always effective, and that, when this mechanism is not effective, the balancing of voluntary saving and voluntary investment comes about by means of changes in income. If more is saved from a particular level of income, corresponding with a particular level of employment, than entrepreneurs voluntarily invest, then a process of contraction is started which continues to reduce income until saving corresponds with the level of voluntary investment. *It is in this emphasis on the effects on income that the decisive differences between the new theory and the classical theory exist as to the conditions of disequilibrium being removable by changes in prices (or price effects) with employment unchanged.* A. H. Hansen is completely correct when he states: « The "income effect" on total realised savings was formerly not understood. It is impossible to go back over the pronouncements of statesmen in this period, or even the writing of economists, without being profoundly impressed with the fact that erroneous policies sprang from a preoccupation with "price effects" and a failure to recognise income effects » (58). If one compares, for example, the theory of international trade before 1936 with the theory as it is today, one can see the profound changes which have come about by taking into account such « income effects ».

It is equally incomprehensible how some writers still fail to perceive that in a closed economy without economic activity by the State, investment at the end of any particular period, however long, must necessarily be exactly equal to saving, that is, that the total actual saving in the economy is identical with the total actual investment (59). If one defines the actual saving of the year 1952 as the difference between the income and the consumption of the year 1952, then it follows from

(58) A. H. HANSEN, *The Influence of Keynesian Thinking in the United States*, p. 10.

(59) See A. FORSTMANN, *Geld und Kredit*, Göttingen, 1952, p. 383 ff. A. Weber agrees with Forstmann when he writes: « The famous Keynesian equality of savings and investment has been proved false » (A. WEBER, *New Economics, Revolution oder Konfusion*, in « *Zeitschrift für das gesamte Kreditwesen* », 1952, p. 413).

the definition of income as the sum of consumption and investment that saving in 1952 was exactly equal to investment in 1952. In saving and investment we, of course, include both the intended and the unintended saving and investment.

This *ex post* proposition must not be confused with the theorem that a lasting increase in intended investment by a particular amount will lead necessarily to an increase in income, the marginal propensity to consume being less than 1, so long as voluntary saving from this level of income is exactly equal to the intended level of investment. The equation:

$$I_{vol.} + I_{invol.} = S_{vol.} + S_{invol.}$$

is an *identity* and always holds good. The equation:

$$I_{vol.} = S_{vol.}$$

is, on the other hand, an *equilibrium condition*, and only holds good in a condition of macro-economic equilibrium.

A. Weber remarks with reference to Forstmann's analysis that « the proposition that every investment creates the necessary saving in the sense of a genuine (or voluntary) saving can be shown to be false » (*op. cit.*, p. 414). We can only say that such a proposition has never been put forward by Keynes or any other writer. The equality of investment and « genuine » saving only comes about through time by the operation of the multiplier process. It is also incorrect when Weber argues in this connection that in Keynes' analysis there is « implicitly no place for the processes of inflation and deflation, just as for Keynes there can be neither profit nor loss in the economy as a whole » (*op. cit.*, p. 414). It is well known that the analysis of processes of deflation and inflation has a central place in Keynes' work, although in the *General Theory* the study of inflationary processes is comparatively in the background as contrasted with deflationary processes. It is in his work on « *How to Pay for the War* » (London, 1940) that we find a detailed treatment of inflation by the same tools of analysis as Keynes had earlier applied to processes of deflation. Of course, the profits and losses of entrepreneurs

in the economy as a whole play a decisive part in Keynes' work, though more so in his Treatise on Money than in his General Theory. But even if it is not explicitly set out in the model in the General Theory, it is easy to see that profits and losses have a part to play if one divides total saving into the saving of non-entrepreneurs and the saving of entrepreneurs. It then holds *ex post* for every period:

$$I = S_{\text{non-e}} + S_e$$

or:

$$S_e = I - S_{\text{non-e}}$$

It is in this form that the Keynesian investment equation appeared in the Treatise on Money. From this equation it follows that if non-entrepreneurs do not save:

$$S_e = I.$$

In this special case investment will always be equal to the unconsumed part of total profit. There can be no doubt that the distinction between the incomes of entrepreneurs and of non-entrepreneurs, and between the consumption and saving of the two groups, gives us a deeper understanding of the mechanism by which an increase in the propensity to consume works itself out in the economic system. Keynes clearly understood this, as can be seen in his preface to the German translation of his Treatise on Money. He says there: « If wind-fall profits and losses are included in income (as Keynes did not include them in the Treatise)... and if saving is regarded as the excess of income so defined over consumption spending, then it follows that saving is in all cases exactly equal to the value of current investment. That is, the volume of total savings ceases to be an independent factor. Its level can no longer be affected by the independent decisions of the different receivers of income and by their decisions as to the quantity of their income which they consume. It depends rather on the level of current investment ». Keynes at this time found this to be a paradox (60). But one can see very plainly here, and at other

(60) J. M. KEYNES, *Vom Gelde (A Treatise on Money)*, München und Leipzig, 1932, p. x.

places in his Treatise (61), how he was already then wrestling with problems which he only fully clarified in the General Theory. It is clear also how right Keynes was when he remarked in the Preface to the General Theory: « What in my own mind is a natural evolution in a line of thought which I have been pursuing for several years, may sometimes strike the reader as a confusing change of view ». We can explain Keynes' failure to retain in the General Theory the distinction between the savings of entrepreneurs and non-entrepreneurs simply by the fact that his theorems did not require this distinction. The model was more simple, though, of course, certain relationships were no longer explicit. In this respect the model constructed by C. Föhl in his profound and illuminating work (*Geldschöpfung und Wirtschaftskreislauf*, Munich & Leipzig, 1937) is superior to the simpler construction of Keynes (62).

To conclude these remarks on the equation  $I=S$  we shall make two points:

(a) The equation holds only *ex post* in a closed economy without economic activity by the State. In an open economy with econ-

(61) See KEYNES, *op. cit.*, pp. 477-8.

(62) This book is the greatest German achievement in the last 25 years in the field of monetary theory, and has not found among German economists even a fraction of the attention it deserves. The author of this work, quite independently from, but almost simultaneously with Keynes, and starting from his Treatise, developed a theory of employment which not only was in complete agreement with the conclusions of Keynes, but has the advantage of greater clarity and rigour in its reasoning. Keynes' model only achieved a precise mathematical formulation in the works of Harrod, Hicks, Lange, and Meade, and only then were Keynes' intentions fully clarified. On the other hand, Föhl's work, thanks to its mathematical reasoning and precision, was clear from the start. Professor K. Philip of Copenhagen, reviewing Harrod's life of Keynes, has recently written in the paper « Politiken » of 5.12.1952 as follows: « Föhl so mastered Keynes' Treatise on Money that he came to think along the same lines as Keynes, and without ever having communicated with him, published at the same time as the General Theory a book which says, on many essential points, the same as Keynes says. Where Keynes was sharply critical and colloquial in tone, Föhl reasoned with geometrical precision and German thoroughness. Keynes was world famous... but Föhl was scarcely known even among his fellow-countrymen and today has been forgotten ». The work of Föhl, which is by no means second to the General Theory in significance, ought to be rediscovered by economists and studied in detail. Föhl wrote a short summary of his essential ideas in two articles in the « Nordisk Tidsskrift for Teknisk Økonomi », 1941, under the titles, « Kinematik und Dynamik des Wirtschaftskreislaufs », and « Die Erhaltung der Vollbeschäftigung ».

omic activity by the State, the equation is replaced by the following:

$$S = I_{\text{priv.}} + (Ex - Im) + (G - T),$$

where Ex stands for exports, Im for imports, T for the tax receipts of the State, G the expenditure of the State on goods and services plus transfer payments by the State and plus subsidies. This equation is, of course, one of the foundations of all social accounting (63).

(b) The  $I-S$  relation is not absolutely necessary for the theory of income and employment. All the relationships can be just as well expressed by using consumption (or the consumption function) instead of saving (or the saving function) (64).

## VI.

Closely connected with these confusions about the relation between saving and investing is the thesis that Keynes branded saving as a vice and encouraged the public to spend wastefully. Röpke, for example, writes: « It is one thing to discover a number of problems relating to the process of saving not previously investigated, but it is not possible without serious consequences to destroy in men the idea that they are doing right if they save from their income and build a reserve for themselves and their descendants instead of using up the whole of it » (65). But where did Keynes ever say that saving is *always and in all circumstances* economically disastrous? I know of no passage in all his works where he even hints at such a conclusion. What he really said was this: *in conditions of under-*

(63) See E. SCHNEIDER, *Einführung in die Wirtschaftstheorie*, Vol. III, 1952, pp. 188-9.

(64) *Op. cit.*, pp. 108-9.

(65) W. RÖPKE, *Was lehrt Keynes?* Röpke writes in the same article that one cannot « recommend in particular cases to parliaments and public opinion that saving and economy are virtues, while generally condemning them as stupid and harmful... Not to realise this is typical of those with purely intellectual constructions who forget social realities in their concern with the integral calculus ». But what have Keynes' constructions to do with the integral calculus, nothing of which appears anywhere in the whole of Keynes' book? Surely those guilty of forgetting economic realities are those who treat the condition of full employment as always automatically realised in free-market economies.

*employment at all stages of the process of production*, appeals to save more will only result in a further fall in the national income and in employment. A rise in the national income and in employment can, with a given propensity to consume, only be obtained by additional investment and for the carrying out of this investment *no previous voluntary saving is necessary*.

The validity of this proposition is no longer the subject of controversy and would probably not be contested even by Röpke. Keynes has never denied that in a state of full employment an expansion of investment presupposes a *previous* increase in the propensity to save, if an inflationary process is not to result. But here we see clearly the distinction between a world with under-employment and a world of full-employment. What holds good for the one does not necessarily hold good for the other (66). By a world of under-employment we mean here one where there is general involuntary unemployment *with the apparatus of production otherwise intact*. So-called structural unemployment, that is involuntary unemployment which arises because some parts of the apparatus of production have been destroyed, or because an economy in a state of full employment has suddenly from outside received a new stream of workers able and willing to work, does not come under the definition of involuntary unemployment. In this case, the credits necessary for the additional invest-

(66) For example, V. MUTHESIUS, in his article *Der Mythos des Keynesianismus*, (« Frankfurter Allgemeine Zeitung », 30.8.1952) states that Keynes' theory implies a contempt for saving and produces as principal witness A. P. LERNER, quoting from his article *La théorie générale de M. Keynes*, in « Revue Internationale du Travail », Vol. 34, 1937: « C'est par une faute logique de généralisation — faute d'ailleurs répandue — qu'on estime que l'épargne, puisqu'elle enrichit l'individu, ne saurait manquer de profiter à la Collectivité ». Muthesius has misunderstood Lerner, who was obviously only concerned with the simple proposition that what may be good or right from the individual's point of view cannot be applied forthwith to the economy as a whole. It is clear that Adam Smith's fallacy is very difficult finally to stamp out: (« What is prudence in the conduct of every private family can scarce be folly in that of a great kingdom », *Wealth of Nations*, Book IV, Chap. 2).

N. Johannsen who anticipated the entire savings-investment analysis of Keynes, saw these relationships correctly. The second part of his book, *Die Steuer der Zukunft* (Berlin, 1913), which is headed « Business Depressions », has on the title page a picture with the caption beneath « Saving and its offspring, prosperity and poverty ». See also W. LAUTENBACH, *op. cit.*, Section I.

ment must correspond with an equal voluntary saving, if an inflationary process is not to result (67). Keynes would never have contested this, though happily he had no reason to examine these cases. In his General Theory, he wanted simply to direct the attention of economists to those theorems which hold good in a world of general under-employment with the apparatus of production intact, and which had previously been neglected. But he was hardly guilty of any exclusive emphasis on these kinds of problem. On the contrary, it is those critics who are wrong who hold that the national income can *only* be increased if there has previously been some voluntary act of saving, and who hold this proposition as a *generally* valid theorem.

## VII.

I turn now to a misunderstanding which brings us to the question as to whether the General Theory is really « general » or only a special theory valid for particular cases. H. Mayer, in the course of his recent lecture, thought that he could bring down the Keynesian theory by denying the proposition that the marginal propensity to consume can generally be regarded as lying between 0 and 1:

(1) « Anyone earning a bare subsistence wage and receiving a small addition to his income will, in this situation, spend the entire increase on consumption ».

(2) « If he receives a larger increase, then higher tastes and cultural needs will arise, which are in principle unlimited. There is therefore no guarantee that any of the increase will be saved... The so-called law propounded by Keynes is, therefore, psychologically and economically false. In my own country we battle desperately with the exact opposite of the Keynesian law, that is, with a preponderance of consumption even when there is a rising income » (68).

Now it is quite true that Keynes assumed that the marginal propensity to consume al-

(67) See J. R. HICKS, *World Recovery After War*, in « Economic Journal », 1947; and E. PREISER, *Geldschöpfung oder Sparen?*, in « Jahrbuch für Nationalökonomie und Statistik », 1950.

(68) Quoted by H. RITTERSHAUSEN, *op. cit.*

ways lay between 0 and 1. But nothing prevents us from studying within the framework of Keynes' analysis how the results will be affected if the marginal propensity to consume is equal to 1, or is assumed to be greater than 1. If the marginal propensity to consume is greater than 1 then an increase in investment will lead to a non-convergent process of expansion. A convergent process of expansion only occurs if the marginal propensity to consume is smaller than 1. It is true, therefore, that Keynes only considered a particular case which nevertheless can be regarded as the regular case.

That Keynes in his General Theory was interested mainly in special cases becomes particularly clear if we ask how an increase in the propensity to invest affects the level of national income through the general equations [4] and [5], that is, if there is a shift of the investment curve to the right. If we denote the change in the investment function as  $da$ , then the change in the equilibrium level of income, after the process of adjustment has worked itself out, will be given as follows:

$$dy = \frac{1}{\frac{dS}{dy} - \frac{\frac{dI}{di} \cdot \frac{dL}{dy}}{\frac{dL}{di}}} \cdot da$$

This « general multiplier relation » (69) is not discussed by Keynes. The Keynesian investment multiplier is rather the reciprocal of the marginal propensity to save. This multiplier is, however, as can easily be seen, a special case of the general multiplier for the case, that is, when either  $\frac{dI}{di} = 0$  (*i.e.* when investment is perfectly inelastic in relation to the rate of interest), or when  $\frac{dL}{di} = \infty$  (*i.e.* when the demand for money is perfectly elastic in relation to the rate of interest). Keynes in fact only considered two special cases: the case when investment cannot be stimulated by a fall in the rate of interest however large, and

(69) V. E. SCHNEIDER, *Einführung in die Wirtschaftstheorie*, Part III, Tübingen, 1950, pp. 151-2.

the case where an increase in the quantity of money by the banking system does not lead to any change in the rate of interest — two cases which, as is well known, are characteristic of a state of depression (70). Keynes' theory of employment is, therefore, a « special » theory to the extent that Keynes was predominantly interested in these two cases. *But the model we have set out in equations [4] and [5] is, of course, not subject to these limitations. This cannot be sufficiently over-emphasised.* Within the framework of a comparative-static analysis, all conceivable cases can be studied. One can give any conceivable value to the relevant co-efficients measuring the rate of increase of the consumption function, the investment function, or the liquidity function.

It is therefore quite clear that the Keynesian model described by equations [4] and [5] is no way limited in its applicability to the case of a depression. *The Keynesian theory is by no means exclusively a theory of depression, even if its intellectual roots go back to the great depression of the '30's, and even if Keynes was led to the questions he asked and to his apparatus of analysis by the conditions of the '30's and made the world of under-employment the main subject of his analysis.* Even such a leading theoretical economist as J. R. Hicks wrote in 1937 in his well-known article on « Mr. Keynes and the Classics »: « The general theory of employment is the economics of depression » (71). The same author, however, declared in 1945: « The great changes which have taken place in the world since 1936 have provided an opportunity for applying Keynesian analysis to new problems. Some of these new applications considerably modify our view of the theory itself. In 1936 unemployment seemed (at least in England and America) to be the most important of all economic problems. It was therefore quite natural for Keynes to have directed his work at the problem of unemployment. Most of us would at first have agreed that this was its essential significance. I myself in 1937 went so far as to write that the General Theory was the economic theory of depression. We

(70) See J. R. HICKS, *Mr. Keynes and the « Classics »; a suggested interpretation*, in « Econometrica », Vol. V, 1937.

(71) « Econometrica », 1937, p. 155.

now know that this was a mistake. The theory has been considerably reinforced and has gained the support of economists who at first were very sceptical (such as Beveridge and, up to a point, Robbins). We have discovered now that the theory is no less applicable to conditions which are the extreme opposite of depression, those of a boom in an economy mobilised for total war » (72). What Hicks is saying here is now generally accepted. The fact, that an economic theory arises out of a concern with a particular practical problem does not limit its applicability. Nearly all economic theory has been built up out of a concern with the burning questions of the day. Already in his General Theory, Keynes (in Chapter XIX, on The Theory of Prices), set out in full detail why and in what circumstances inflation may set in before full employment is reached. The role of bottlenecks was set out with full clarity (73). As J. H. Williams rightly puts it: « No better analysis could be desired as to why we experienced the inflationary conditions of 1936/37 on a comparatively low level of employment and nothing further would be needed to explain the much more serious inflation of the post-war period » (74). Keynes later in his famous work « *How to Pay for the War, a Radical Plan for the Chancellor of the Exchequer* » (London, 1940), has proved the value of his analysis for the study of processes of inflation in his Chapter IX (Voluntary Saving and the Mechanism of Inflation). The recommendations as to policy which he there advances are completely different from those for the fighting of a depression. As Hansen rightly remarks: « Some superficial critics assume that a Keynesian always wants to spend more, and tax less. That, of course, is completely false. The Keynesian policy is designed to secure a balanced and growing economy with monetary

(72) J. R. HICKS, *La Théorie de Keynes après neuf ans*, in « Revue d'Economie Politique », pp. 1-2 (Italics added). A. Forstmann, with a reference to Hicks' article of 1937, describes Keynes' theory as a theory of depression. He appears to have overlooked this later article by Hicks (v. A. FORSTMANN, *Geld und Kredit*, II Göttingen, 1952, p. 397).

(73) Fritz Meyer's remarks on this question are in full agreement with Keynes' argument. (See his article, *Geldpolitik, Vollbeschäftigung und Wirtschaftsordnung*, in « Ordo », 1948, Vol. I, p. 91 ff.)

(74) *Op. cit.*, p. 7.

equilibrium... Therefore, if there develops an inflationary situation caused either by a large increase in private investment expenditures, or by a necessary increase in governmental expenditures as, for example, in the current defence programme, Keynesian policy aims at curtailment of aggregate demand... So Keynesian economic policy is in fact not one-sided. It is not just expansionist. It is just as applicable for inflationary problems as it is for depression problems». Hansen adds the significant observation: «And, indeed, in World War II the countries that most successfully coped with war inflation attacked the problem in terms of Keynesian analysis» (75).

### VIII.

How is this thoroughly sound observation of Hansen to be reconciled with Röpke's statement that «Keynesism» means «Inflationism» and that all countries which have let themselves be guided by the Keynesian theory — that is, the so-called «full employment countries» — have been caught up in a whirlpool of inflation? According to Röpke, Keynesism is the general theory of a permanently threatening deficiency of demand, which leads to an economic policy which «must be constantly on the alert in order to cover this deficiency and ensure constant full employment». This is, according to Röpke «the real revolution in economic thought attributable to Keynes». It is the theory or ideology which «puts all the emphasis on the fear of deflation, on full employment at any price, on expansion and expenditure». «Keynesism» stands «even at its best always for latent inflationism» (76).

(75) A. H. HANSEN, *The Influence of Keynesian Thinking in the United States*, pp. 10-11.

(76) W. RÖPKE, *Was lehrt Keynes?* Röpke carefully overlooks that inflations have regularly followed wars, long before Keynes. Or was the German inflation after the first world war the spiritual offspring of Keynes?

Röpke's interpretation of Keynes is, of course, to be distinguished from Hahn's statement that in the Keynesian system «output and employment... can only expand if (the amount of money) has been inflated». Hahn's argument is, of course, incorrect. In the Keynesian system an increase in the quantity of money by open market policy can in certain circumstances give rise to an expansion, that is, if the increase in the quantity of money causes a fall in the rate of interest, and this fall in turn an increase in investment. But an expansion is also possi-

We touch here on one of the decisive points in the current misunderstandings of Keynes' theory: that is, *the confusion, or identification, of the Keynesian theory of employment with the so-called «stagnation» thesis*, or with what Johannsen called the thesis of Permanent Depression (77). The Keynesian theory of employment answers the question as to what determines the level of national income and employment in the short period. The «stagnation» thesis is hardly a theory at all, but an unproved and unprovable guess that in mature «capitalist» economies voluntary investment, owing to insufficient profitable outlets, will always lag behind the level of voluntary savings out of full-employment income, and therefore the economy will always be tending to contract or to a state of permanent deflation. Anyone who accepts this thesis does certainly «put all the emphasis on this fear of deflation», and if he wishes to escape from permanent depression must constantly stimulate economic policy in the direction of expansion. The policy of permanent deficit spending is the inevitable result of assuming the stagnation thesis, *but only of the assuming of this thesis* (78). It is the correct economic policy if the stagnation thesis is considered to be valid». But this has nothing whatsoever to do with the Keynesian theory of employment. From the Keynesian theory we can only conclude that *if* there is economic stagnation in a country a policy of expansion is necessary. This cannot be contested. Anyhow, the case of a secular stagnation is at least a theoretically conceivable

ble with the quantity of money remaining constant; (a) if, on certain assumptions, there is a fall of wages which leads to a rise in the propensity to invest; (b) by an increase in the propensity to consume; (c) by an increase in the propensity to invest; (d) by a fall in liquidity preference. (See E. SCHNEIDER, *Hahn Contra Keynes*, in «Schweizerische Zeitschrift für Volkswirtschaft und Statistik», Vol. 88, No. 5, 1952).

(77) The chapter on «Permanent Depression» in Johannsen's book (p. 328 ff) begins as follows: «The key to prosperity in existing conditions lies in the expansion. Can this continue permanently? Can it continue at a steadily increasing rate, or at least without diminishing? If not, the steadily increasing supply of saving cannot find an outlet in the expansion, just as they now cannot do so in normal times. Thus depression is bound to set in the Permanent Depression of the future».

(78) Thus F. Neumark argues that the policy of permanent deficit-spending «rests essentially on the conviction that in economies of a certain type — so-called maturing economies — a structural depression sets in with a lasting tendency to under-employment» (*op. cit.*, p. 639).

one (79), and it may very well be sensible to examine how in these conditions employment can be stabilised at a high level without destroying the foundations of the free market economy. But in the General Theory the stagnation thesis has no central part. The thesis of declining investment opportunities in mature economies is only referred to on the margin of that work (80). What Keynes had to say on that subject is rather by way of illustrating the applications of his theory. The full elaboration of the stagnation thesis as a possibility to be taken seriously into account, and against which to take timely precautions, has not been undertaken by Keynes but mainly by American economists (Hansen, Schumpeter, etc.) (81). We must underline here that a full proof of the actuality of the stagnation thesis has not been produced. It can, on the other hand, be shown, as has been done especially by Terborgh, how many tendencies there are which contradict this thesis (82).

If particular countries after the war, expecting a wave of unemployment, have taken effective expansionist measures and have adopted a policy of full employment, in spite of the fact that the circumstances which they expected have not actually come to pass, then naturally neither the Keynesian theory nor the stagnation thesis can be convicted of having caused the inflations which have come about. These, in fact, have only confirmed the correctness of the Keynesian theory of income. The pre-

(79) F. NEUMARK, *op. cit.*, p. 665.

(80) See A. SWEEZY, *Declining Investment Opportunity*, in «The New Economics», edited by S. Harris, New York, 1947. It is incorrect to say as does J. H. Williams: «The core of the theory (Keynes') is his conclusion that an advanced capitalistic society suffers from a combination of a declining marginal propensity to consume and declining opportunities for investment» (*op. cit.*, p. 6). The essence of Keynes' achievement lies in his answer to the question of the determinants of the level of national income and employment. The policy of permanent deficit-spending follows only from an application of this answer to the case of a «stagnant» economy.

(81) «The peculiar doctrines of economic maturity have been elaborated in this country under the leadership of Dr. Alvin H. Hansen. It is not too seriously misleading to call it an American theory» (G. TERBORGH, *The Bogey of Economic Maturity*, Chicago, 1945, p. 3).

(82) The stagnation thesis, as we have already mentioned, was well-known before Keynes. It was expounded with complete clarity by N. Johannsen — that remarkable anticipator of so many of Keynes' ideas — in his book *Die Steuer der Zukunft und ihre Einwirkung auf geschäftliche Depressionen und volkswirtschaftliche Verhältnisse* (Berlin, 1913).

sent inflations in many countries in the Western world have, of course, nothing to do with the belief in a permanent depression, but follow from the fact that owing to rearmament the effective demand by private individuals and by the State has been in excess of effective supply at the ruling level of prices (83). Anyone who, believing in the stagnation thesis, or for other reasons fearing a future depression, recommends a policy of «full employment» while employment is already at a high level, cannot make Keynes responsible for inflationary consequences. The aim of Keynesian economic policy is «to secure a balanced and growing economy with monetary equilibrium» (84), and the carrying out of this policy requires, according to Keynesian theory, varying measures adjusted to changing economic conditions (85).

### IX.

Keynes «was ever sensitive to the changing conditions of his time and country» (86). Anyone acquainted with his work (87) will very well realise that he was above all the very opposite of a doctrinaire. He knew that there was no panacea valid for all situations which would stabilise employment at a high level whatever the initial conditions in which

(83) If inflation is to be avoided, «Governmental expenditures and private investment must be brought into line with taxes and savings. These are the Keynesian measures... They are not only compatible with the free price system but even necessary for its proper functioning». A. H. HANSEN, *op. cit.*, p. 13. The same point is made by Williams when he writes: «We clearly need a better rounded monetary - fiscal policy... Failing this, we should recognise that the next turn of the road would be toward direct controls, the alternative, in the present context of events, being more careful scrutiny as to the amount of inflationary pressure the economy can tolerate» (*op. cit.*, p. 18).

(84) A. H. HANSEN, *op. cit.*, p. 10.

(85) This policy is identical with that aimed at by the O.E.E.C. countries of maintaining internal financial stability. The assumption of this objective implies that the countries concerned have undertaken to pursue a policy which excludes both inflation and price-increases equally with deflation and the contraction of employment. See, *The Internal Financial Situation in Member and Associated Countries: Report by a Group of Independent Experts*, O.E.E.C., Paris, 1952; also my article *Finanzielle Stabilität als Grundlage* («Frankfurter Allgemeine Zeitung», 4.9.1952); also PER JACOBSSON, *op. cit.*

(86) J. H. WILLIAMS, *op. cit.*, p. 14.

(87) Pigou justly enquires (*op. cit.*, p. 1): «How many Keynesians or, for that matter, anti-Keynesians either, have seriously studied his own book?»

the economy found itself, and that varying monetary and fiscal measures would be necessary. Some writers have drawn the conclusion from this intellectual adaptability of Keynes that at the end of his life he threw over the conclusions of his General Theory and returned to the classical theories. Support is sought for this view in his last posthumous article (88) in which he speaks of «how much modernist stuff, gone wrong and turned sour and silly, is circulating in our system» (89). We can see Keynes' meaning when we put this remark in its context, and I shall therefore quote the relevant paragraphs in extenso:

«I find myself moved, not for the first time, to remind contemporary economists that the classical teaching embodied some permanent truths of great significance, which we are liable to-day to overlook because we associate them with other doctrines which we cannot now accept without much qualification. There are in these matters deep undercurrents at work,

(88) Lord KEYNES, *The Balance of Payments of the U.S.A.*, in «Economic Journal», 1946, p. 172 ff.

(89) *Op. cit.*, p. 186. A. Weber writes: «What we need is a clearly thought out and generally understandable theory, logically constructed on the basis of the facts, which will serve as a guide to economic and social policy. The new theory fails in this respect. Still more completely do the attempts of those Keynesians fail who were accused by the master himself in a famous posthumous essay of unrealistic narrowness, while he himself recommended "the classical medicine"».

A. Forstmann writes: «In his last scientific work, a celebrated essay in the "Economic Journal", he warned against exaggerations of his theory already beginning to be noticeable among his followers. Unfortunately it was not granted that we should have the problems put more or less in their right perspective by the distinguished master himself. If Keynes had been granted a few more years of life, who knows whether he would not have taken a similar path to that of his critic Albert Hahn? Probably he would then have applied to his General Theory the criticism he himself made of his concepts in the Treatise on Money: "Because I no longer require my former terms to express my ideas accurately, I have decided to discard them — with much regret for the confusion which they have caused"» (*op. cit.*, pp. 741-2).

Similarly V. Muthesius in the «Frankfurter Allgemeine Zeitung» of 30.8.1952 writes: «In 1946 Keynes himself complained of the modernistic stuff of some of his followers and pupils and recommended "the classical medicine", in accordance, that is, with the old pre-Keynesian theory and with, of course, a policy of economic freedom».

Is it really still not clear that the Keynesian theory, like the classical theory, is concerned with a market economy and simply analyses different aspects of this market economy? It is, therefore, completely senseless and misguided to contrast the combination of «Classical Theory and a policy of Economic Freedom», on the one hand, with the combination of «Keynesian theory and a policy of Economic Unfreedom», on the other hand.

natural forces, one can call them, or even the invisible hand, which are operating towards equilibrium. If it were not so, we could not have got on even so well as we have for many decades past. The United States is becoming a high-living, high-cost country beyond any previous experience. Unless their internal, as well as their external, economic life is to become paralysed by the Midas touch, they will discover ways of life which, compared with the ways of the less fortunate regions of the world, must tend towards, and not away from, external equilibrium.

Admittedly, if the classical medicine is to work, it is essential that import tariffs and export subsidies should not progressively offset its influence. It is for this reason that one is entitled to draw some provisional comfort from the present mood of the American Administration and, as I judge it, of the American people also, as embodied in the Proposals for Consideration by an International Conference on Trade and Employment. We have here sincere and thorough-going proposals, advanced on behalf of the United States, expressly directed towards creating a system which allows the classical medicine to do its work. It shows how much modernist stuff, gone wrong and turned sour and silly, is circulating in our system, also incongruously mixed, it seems, with age-old poisons, that we should have given so doubtful a welcome to this magnificent, objective approach which a few years ago we should have regarded as offering incredible promise of a better scheme of things.

I must not be misunderstood. I do not suppose that the classical medicine will work by itself or that we can depend on it. We need quicker and less painful aids of which exchange variation and overall import control are the most important. But in the long run these expedients will work better and we shall need them less, if the classical medicine is also at work. And if we reject the medicine from our systems altogether, we may just drift on from expedient to expedient and never get really fit again. The great virtue of the Bretton Woods and Washington proposals, taken in conjunction, is that they marry the use of the necessary expedients to the wholesome long-run doctrine. It is for this reason that,

speaking in the House of Lords, I claimed that «Here is an attempt to use what we have learnt from modern experience and modern analysis, not to defeat, but to implement the wisdom of Adam Smith» (90).

It is quite clear from this passage, and it should hardly have been unclear after a reading of the General Theory, that Keynes has never regarded his theory as a contradiction of previous theory but rather as an expansion and development of it. He intended, with the theorems which he added to our tool box «not to defeat but to implement the wisdom of Adam Smith». The purpose of his work could hardly be described more clearly than in these words. In this last article Keynes wished to remind economists that situations do in fact occur in which the theorems of the classical theory are relevant and that every theoretical proposition only holds good on certain assumptions. There cannot be the least question of Keynes at the end of his life having thrown over the propositions of his General Theory. R. F. Harrod, one of his closest collaborators, and fully acquainted with the origin and development of Keynes' ideas, has written to me about the above passage in Keynes' posthumous article as follows:

«... I can affirm quite categorically that Keynes' views as expressed in the article to which you refer should not be interpreted as a renunciation of his main positions taken up in the General Theory... In so far as the article embodied a change of view it was one about practical possibilities... In his discussions during the war in the United States he was much encouraged by finding how many Americans who were concerned with international economics were already Keynesians, and he therefore began to take quite a different view about practical possibilities. If international economic cooperation could be conducted along the line of Keynesian economics rather than old fashioned economics that would be the ideal solution. He drew hope from the affirmed willingness of many Americans to come his way... At the same time he was much vexed by economists, particularly publicists who claimed to be his disciples and were opposing the work

he was doing in the United States in the British press. This accounts for the words «turned sour and silly». He felt that these writers were presenting a parody of his own views and overlooking his own belief, that his views were reconcilable with many of the wider generalizations of traditional economics». (Italics added; letter of October 24th, 1952).

There can no longer remain any doubt on this subject for anyone who understands the logical character of economic theory and is able to distinguish between the correctness, and the relevance of applicability, of a theory.

If this interpretation of Keynes, which can hardly any longer remain a matter of controversy, has not been obvious from the start, this may be partly because «the publication of the General Theory was in a sense premature. The author evidently felt that he had no time to lose in giving his ideas to the world. Consequently he published them without having given them a fully definitive elaboration or a final form. Perhaps the same thing happened in Keynes' case as happened with the Principles of Ricardo. In the two cases the master left the larger part of the task of working out his ideas to his disciples» (91). For the rest, it may be relevant to compare Keynes' method of presenting his ideas with that of Adam Smith. Schumpeter, in his incomparable account of the *Wealth of Nations* wrote: «He (Adam Smith) discussed political maxims as though they were theorems. A quite different picture is discernible when we see him at the task of theoretical analysis. Then his gaze is directed at the facts and there are only occasional turns of phrase suggestive of a political ideal or a philosophic principle, and these foreign elements never become essential to his argument... The framework of his ideas and their applications is made up of theoretical propositions» (92). These words might be applied word for word to the work of Keynes. Moreover, Keynes often only sketched out his line of thought in its main outlines and left the detailed elab-

(91) J. R. HICKS, *La théorie de Keynes après neuf ans*, p. 1.

(92) J. A. SCHUMPETER, *Epochen der Dogmen- und Methodengeschichte*, Grundriss der Sozialökonomik, Part I, Tübingen, 1914, pp. 52-3.

(90) *Op. cit.*, pp. 185-6 (Italics added). See also R. F. HARROD, *Life of J. M. Keynes*, London, 1951, p. 621.

boration to his readers. When a work is presented in this manner much discussion is necessary in order to set out clearly the theoretical framework and to recognise its content and range (93).

The third and last reason for the misunderstandings of Keynes' theory lies in exaggerations by the master and above all by some of his disciples which have given his work the superficial appearance of being «revolutionary», a quality which in fact it did not possess and which, according to the intentions of the master himself, it was not meant to possess. It is quite understandable that Keynes put special emphasis on the divergences in his approach from that of the classical theory. He wanted to call attention to the inadequacies of the classical theory and to the necessity for a thorough rethinking of the problems of a market economy. It is quite simply incorrect when Mayer writes as follows about the Keynesian theory: «It is presented today, and was originally presented, with most exaggerated claims, as being *the* modern economic theory, "the New Economics". Its "exclusiveness" was especially emphasised, and it was regarded as finally superseding all previous theoretical systems» (94). But who in fact has ever claimed that «it is all in» the General Theory which contains the whole truth on economics and makes a study of all previous works unnecessary? Keynes' theory does not replace the classical theory but it adds something to it and makes it more useful: «Even those who found their bearings before, and on whom the General Theory did not impinge in their formative years, experienced the salutary effects of a fresh breeze. As a prominent American economist put it in a letter to me: «It (the General Theory) did, and does, have something which supplements what our thinking and methods of analysis would otherwise have been. It does not make us Keynesians, it makes us better economists» (95).

Of course, insofar as Keynes added to our knowledge he built on the work of his pre-

(93) See P. A. SAMUELSON, *Lord Keynes and the General Theory*, in «Econometrica», 1946, p. 190. We wish especially to recommend this outstanding essay.

(94) H. MAYER, *op. cit.*, p. 39.

(95) J. A. SCHUMPETER, *J. M. Keynes*, in «Ten Great Economists», New York, 1951, p. 291.

decessors. It can in fact be shown that essential elements in Keynes' theory, down even to details, have been anticipated by previous economists. For example, the whole «savings-investment building block» — as Klein has called it — had already been completely set out in 1908 by Johannsen. Johannsen had also discovered the principle of the multiplier for the determination of income, and had actually given it that name. Wicksell had discovered essential elements of Keynes' theory in his *Interest and Prices* (1898) and later in his *Lectures* (1903). Important discoveries in the same field of problems are owing to D. H. Robertson. As Lange has shown, parts of the liquidity theory of interest can be found in the work of Walras. This theory is, in fact, simply a reformulation of the loanable fund theory of interest for the case where only a single kind of interest-bearing claims exist in the economy (96).

These anticipations, however, relate only to particular elements of Keynes' theory and not to the theory itself. Keynes' original achievement consists in having combined these elements together, added in the Consumption Function, and given us a new analysis which opens up new perspectives and leads to previously unknown theorems. But this creative achievement of Keynes was hardly a revolution: «There merely was evolutionary progress along Wicksellian-Robertsonian-Keynesian lines; and the heritage of the next generation will be just as essentially Robertsonian and Swedish as Keynesian, regardless of what they will choose to call it» (97). Keynes' great theoretical achievement will always remain in the construction of this theoretical apparatus, which has been shown to be extremely fruitful and applicable to the most differing actual conditions. Robbins, in «The Times» of 26/1/1951, has said of this achievement: «It has made an impact on our mode of approach which is lasting». Keynes himself referred to

(96) If different rates of interest exist in an economy their levels cannot be explained by the liquidity theory. See E. SCHNEIDER, *Zur Liquiditätstheorie des Zinses*, in «Weltwirtschaftliches Archiv», Vol. 62, 1949. The same view is taken by W. Fellner: «I do not see how a case can be made for the convenience of the liquidity-preference theory, or some analytical extension of it, if the discussion is concerned with the structure of interest rates» (*op. cit.*, p. 271).

(97) W. FELLNER, *op. cit.*, pp. 267-8.

his difference with the classical theory as a «difference of analysis» (98). This «difference of analysis» has given us an insight into the functioning of the market economy which the classical theory never gave us and never could give us (99).

H. Mayer, on the other hand, regards the Keynesian theory as a misconception and as a crude invasion of the world of economic science (100) «als einen Einbruch der Unbildung in die Welt der Wissenschaft», which must be resisted by every means if «for decades to come, the continuity of intellectual progress is not to be broken, if we are not to be diverted from more profound ways of analysis, if the methods of fruitful research are not to be thrown away» — and also, if disastrous consequences are not to follow for the shape of our economic lives. To an audience which does not know Keynes' work, such a point of view (which can only be based on a deficient knowledge or a deficient understanding), may make some impression. Anyone who has really followed the work of Keynes and the subsequent developments can only say that *the true position is precisely the reverse*. The continuity of economic science will be broken and the way of advance to more fruitful intellectual territory will be cut off, if the classical theory is regarded as the last and final stage of economic thought and the problem of «lapses from full employment» (as Pigou has called it) is treated as non-existent or of only secondary importance. Then, indeed, will economic theory lose its power to shape and direct policy for it will be faced with situations to which it is not applicable. We could, of course, refer to the Great Depression of the '30's as an example. We could, of course,

(98) *General Theory* etc., p. 257. See also p. 297: «The object of our analysis is not to provide a machine, or method of blind manipulation, which will furnish an infallible answer, but to provide ourselves with an organised and orderly method of thinking out particular problems».

(99) «It is thanks above all to the work of J. M. Keynes, the significance of which for theory and policy is scarcely less than Adam Smith's *Wealth of Nations*, that we have today a clearer understanding of the laws of motion of modern economies than was afforded us by the classical liberal theory, and, further, that the study of public finance has again become what at one time it was, and what from its subject and tasks it can claim to be: the central core of political economy». F. NEUMARK, *op. cit.*, p. 621.

(100) Quoted in the report by Rittershausen.

again call attention to Röpke's admission that such a situation could not be properly understood by the old economics. If we today have a better understanding of the market economy than 20 years ago, and are better equipped against the ups and downs of the trade cycle, we owe this to the theoretical achievement of Keynes, which has made economic science again a really effective instrument of policy and a decisive factor in our society. There can be no better proof of the practical value of Keynes' analysis than the fact that it is applied today by representatives of quite different political tendencies.

There can really no longer be differences of opinion on these topics among those who have followed professionally the development of economic theory. Can we really speak of the need for a «peace formula» between representatives of the «New» and the «Old» economics which has still to be worked out? Röpke holds that for such a peace formula two concessions must be made by the representatives of the «New» economics: first, that the «New» economics is today simply a technique of thinking, and secondly, that the Keynesian ideology is responsible for the inflationary tendencies existing in many countries. On the first point we would simply say that the General Theory is a *theory* which sets out the determinants of national income and employment. *A theory is always a technique of thinking*. Schumpeter or Eucken surely made that finally clear. The second point has already been discussed. «Keynesism» as an ideology is here, wrongly, identified with the stagnation thesis, which, as we showed, has nothing to do with Keynes' theory. Where, then, are the points of difference? Is there any longer any sense in speaking of an «Old» and «New» economics where the «New» economics does not contradict the «Old» but only extends it? Economic theory consists (and here we return to the starting point of this paper) in an organon of propositions which are valid under various assumptions, and which are applicable to the extent to which the assumptions correspond with the actual economic situation. Economic propositions are true or false. It is, therefore, only significant to distinguish between false and true theories. What

Keynes did was to add to the already true propositions of economic theory new and true propositions and new techniques of analysis.

These propositions and techniques of analysis must be mastered by all economists. If some people find this difficult for one reason or another, they must remember that in science, as Madame Curie said — the subject is everything and personal elements count for nothing. In our article (in «*der Zeit*» of 23/8/1951) from which we have already quoted, we proposed that «no one should use the name of Keynes who had not, at least in the previous month, carefully studied one of his

theoretical works». If this proposal was adopted, it would contribute much to the removal of the misunderstandings which unfortunately are still to be met with today. The way would then be free for work on the really controversial questions of contemporary economics, questions which to-day reach far beyond the original presentation of Keynes' work, but which cannot be approached without a knowledge of that work (101).

(101) «The new environment of the post-war period has sent us upon a new search for an acceptable "complex of suitabilities"; and Keynes' theory, as theory, is becoming rapidly submerged». (WILLIAMS, *op. cit.*, p. 10).