

ON THE GENERAL THEORY

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Abstract

This is an introduction to a facsimile edition of the first edition of the General Theory that is being published by Verlag Wirtschaft und Finanzen, Dusseldorf, West Germany. The General Theory is placed in the context of the economic developments of the period during which it was written. Its central message is identified as the theory of effective demand in which changes in the level of income act as the force which equilibrates aggregate demand and supply. Brief discussions follow with respect to criticisms of the past years that have stemmed from monetarism and from the new classical macroeconomics.

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In our profession, Keynes (who was a man of many parts²) is known primarily for his contributions to monetary theory. These were embodied in his interwar trilogy, which began with his Tract on Monetary Reform (1923), in which he expounded the quantity theory tradition that he had inherited from his teachers, Marshall and Pigou, at Cambridge; continued with his two-volume Treatise on Money (henceforth, Treatise), in which -- still an advocate of the quantity theory -- he supplemented the comparative-statics properties of this theory with a Wicksellian dynamic analysis of the interaction between the rate of interest and the price level -- an analysis which Keynes carried on by means of his so-called "fundamental equations for the value of money"; and concluded with his General Theory of Employment, Interest and Money (henceforth, General Theory or GT). This was the revolutionary work (as Klein in his classic 1947 study so rightly termed it) which he wrote under the constant stimulus and criticism of his colleagues and students -- and with which he changed the face of monetary theory, laid the foundation for its development into macroeconomic theory, and defined the analytical framework and research program of this theory for decades to come.

It is frequently said that the General Theory was the product of the mass unemployment of the 1930s. This, however, is a half-truth: for it fails to take account of the fact that Britain of the 1920s (unlike the United States and most European countries at that time) was also suffering

from a severe and prolonged unemployment. The point, however, is that this unemployment did not in Kuhn's (1970, chs. 6-8) term³ constitute an "anomaly" or "puzzle" for the prevailing theory, which explained unemployment as the consequence of too high a wage rate: indeed, this was the explanation Keynes himself advanced in his Economic Consequences of Mr. Churchill (1925). Specifically, he explained that the return of Britain to the gold standard in April 1925 at prewar parity had overvalued the pound relative to the existing level of money wages, and it was this that had generated unemployment, first in the export industries and then elsewhere. Thus, in theory, the way to restore full employment was to reduce money wages; but in practice, the resistance of labor made such a policy impossible to carry out, thus making it necessary to adopt alternative policies (JMK IX, pp. 208-12, 227-29). And in his 1930 Treatise (II, pp. 162-65) Keynes repeated this analysis.⁴

In contrast, the unemployment of the early 1930s created doubts about the existing theory not only because of the persistence and worsening of unemployment, but because it constituted an anomaly for this theory, and this for two reasons. First, unemployment had become a worldwide phenomenon, and so could not be explained as the result of the specific circumstances of Britain. Second, and this was a point to which Keynes alluded in the General Theory (p. 9), money wages in the early 1930s had fallen sharply in the United States, but to no avail insofar as unemployment was concerned.⁵ True, the price level had fallen even more. But this too was part of the anomaly that concerned Keynes: namely, that labor controlled only its money wage and might not have any way of reducing its real wage (GT, p. 13). Thus the unemployment of the 1930s was of a kind which the classical theory could not explain and which, therefore, called for a new theory.

The nature of this new theory -- the central message of the General Theory -- was identified by Keynes in a 1936 letter to Roy Harrod (reproduced in JMK XIV, p. 85) as his theory of effective demand; and he went on to emphasize that a crucial element of this theory was "the psychological law that, when income increases, the gap between income and consumption will increase" -- i.e., that the marginal propensity to consume is less than unity. That this is the central message of the book is also clear from the preface to it, in which Keynes tells us that, in contrast with his Treatise (whose primary concern was the interaction between the rate of interest and the price level), his new work is "primarily a study of the forces which determine changes in the scale of output and employment as a whole"; gives chapter 3 of "Book I: Introduction" the title "The Principle of Effective Demand" and presents in it a "summary of the theory of employment" that he will develop in the book (GT, p. 27); and devotes most of the remaining chapters of the General Theory to this development.

Figure 1 reproduces the familiar "Keynesian-cross" diagram which has served to transmit the central message of the General Theory to generations

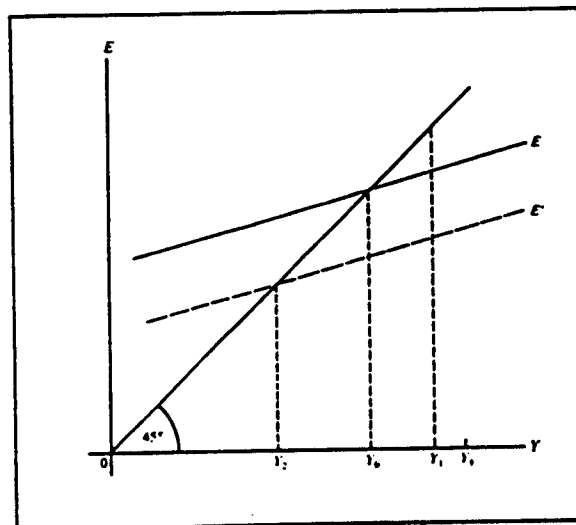


Figure 1

of economics students.⁶ I wish, however, to refine the usual analysis which accompanies this diagram in one respect. In particular, what I mean by the theory of effective demand is not only that the intersection of the aggregate-demand curve $E = F(Y)$ with the 45° line determines equilibrium real output Y_0 at a level that may be below that of full employment Y_F ; not only (as Leijonhufvud [1968] has also emphasized) that disequilibrium between aggregate demand and supply causes a change in output and not price; but also (and this is the distinctively novel feature) that the change in output (and hence income) itself acts as an equilibrating force. That is, if the economy is in a state of excess aggregate supply at (say) the level of output Y_1 , then the resulting decline in output, and hence income, will depress supply more than demand and thus eventually bring the economy to equilibrium at Y_0 . Or, in terms of the equivalent savings - investment equilibrium condition, the decline in income will decrease savings while leaving investment unchanged, and thus eventually eliminate the excess of savings over investment that exists at Y_1 . In Keynes' words, "The novelty in my treatment of saving and investment consists, not in my maintaining their necessary aggregate equality, but in the proposition that it is, not the rate of interest, but the level of incomes which (in conjunction with certain other factors) ensures this equality" (1937, p. 211; cf. also GT, p. 31, lines 16-23; p. 179, lines 2-6). In more formal terms (which, like the diagram, Keynes did not use), the theory of effective demand is concerned not only with the mathematical solution of the equilibrium equation $F(Y) = Y$, but with demonstrating the stability of this equilibrium as determined by the dynamic adjustment equation $dY/dt = \phi[F(Y) - Y]$, where $\phi' > 0$.

Correspondingly, as Keynes emphasizes in his letter to Harrod and elsewhere, a crucial assumption of his (Keynes') analysis is that the

marginal propensity to consume is less than unity, which in turn implies that the marginal propensity to save is greater than zero. For, if the marginal propensity to consume were equal to unity, no equilibrating mechanism would be activated by the decline in output. Specifically, as income (output) decreased, spending would decrease by exactly the same amount, so that any initial difference between aggregate demand and supply would remain unchanged. Alternatively, as income decreased, the initial excess of desired saving over investment would remain unchanged. Thus the system would be unstable.

This, then, is the major novelty of the General Theory and its central message: the theory of effective demand as a theory which depends on the equilibrating effect of the decline in output itself to explain why "the economic system may find itself in stable equilibrium with N [employment] at a level below full employment, namely at the level given by the intersection of the aggregate demand function with the aggregate supply function" (GT, p. 30). Here was an explanation of the "paradox of poverty in the midst of plenty" (ibid.) that then beset the Western world.

The foregoing analysis has been the stuff of introductory textbooks in economics for so many years that it is difficult today to conceive of the intellectual shock wave that it first created. This shock -- the radically different conceptual framework that the General Theory required of the profession -- was due in good part to the very notion of an aggregate demand curve. For one of the points that had been greatly emphasized in Marshall's Principles -- which then still served as a basic text -- was that the demand function for a good could be defined only under the assumption of "ceteris paribus". Indeed, in order to insure that this assumption was fulfilled in practice, the more punctilious economists of those days were only willing to

speak of the demand function for a good the total expenditure on which was small, so that variations in these expenditures as price varied would not significantly affect what Marshall called the "marginal utility of money" (i.e., the marginal utility of money expenditures: see *ibid.*, Book III, chs. iii and vi). How then could one validly speak of a demand function for the aggregate of all goods? How was it possible in such a case for "other things to be held constant"? And even if this problem could be solved, how was it possible to talk about a demand for aggregate output as a whole that was in some way conceptually different from actual aggregate income, as if national income expended could somehow differ from national income received?

That is the way of science: that new ideas which at first seem strange and controversial ultimately percolate down to the textbooks and become commonplace.

The novelty of the foregoing analysis at the time that Keynes presented it can also be seen by contrasting it with the one he himself had presented only a few years earlier in the Treatise. Here -- in his famous "parable of the banana plantation" -- Keynes considered an economy in an initial state of full employment in which a "thrift campaign" is initiated. In the analytical framework of the General Theory as represented by Figure 1, such an increase in savings would be represented by a downward shift of the aggregate-demand curve in Figure 1 to E' ; and the resulting decline in output would then cause a corresponding decline in the amount consumed (as well as in the amount saved) until a new equilibrium is necessarily reached at Y_2 (cf. GT, pp. 82-5, 183-84). In the Treatise, however, Keynes applied his "fundamental equations for the value of money" to conclude that the resulting increased savings, unmatched by increased investment, will generate a downward spiral of employment, wages, and output; and that

there will be no position of equilibrium until either (a) all production ceases and the entire population starves to death, or (b) the thrift campaign is called off or peters out as a result of the growing poverty; or (c) investment is stimulated by some means or other so that its cost no longer lags behind the rate of saving. [Treatise I, pp. 159-60]

Though we should not take this first alternative seriously (a clear example of Keynes' propensity to shock his readers), the fact remains that none of these alternatives indicates that Keynes of the Treatise understood that the decline in output itself acts directly as a systematic endogenous equilibrating force. Instead equilibrium is restored either by an exogenous decrease in savings or an exogenous increase in investments.

Figure 1 (the "Keynesian-cross") depicts the essence of the theory of effective demand as presented in Book I of the General Theory under the explicit simplifying assumptions of a constant level of investment (which presupposes a constant rate of interest) and a constant money wage-rate (GT, pp. 27-29). After elaborating on the various components of this simplified version of this theory in Books II and III, Keynes proceeds in Book IV to drop the assumption of a constant rate of interest and to explain its determination by means of his theories of liquidity preference and the marginal efficiency of capital, respectively. His theory at this point of the book is most conveniently represented by Hicks' (1937) famous IS-LM diagram, which explains the determination of the equilibrium levels of income and the rate of interest as the result of the interaction between the markets for commodities and money balances.

Finally, in chapter 19 of Book V, Keynes drops the assumption of a constant money-wage rate and analyzes the effects of a decline in it. His basic argument in this chapter is that a decline in money wages (which in

practice would, because of the resistance of workers, take place only very slowly: GT, p. 267; see also ibid., pp. 9, 251, 303) can increase the level of employment only by first increasing the level of effective demand; that the primary way it can generate such an increase is through its effect in increasing the quantity of money in terms of wage units, thereby decreasing the rate of interest and stimulating investment; that accordingly the policy of attempting to eliminate unemployment by reducing money wages is equivalent to a policy of attempting to do so by increasing the quantity of money at an unchanged wage rate and is accordingly subject to the limitations as the latter: namely, that a moderate change "may exert an inadequate influence over the long-term rate of interest," while an immoderate one (even if it were practicable) "may offset its other advantages by its disturbing effect on confidence" (GT, p. 266-67). Hence Keynes' major conclusion -- and indeed the negative component of his central message -- that "the economic system cannot be made self-adjusting along these lines" (GT, p. 267).

Thus chapter 19 is the climax of the General Theory: it applies the analysis of the earlier chapters to demonstrate the basic proposition proclaimed at the beginning of the book: namely that, contrary to the "classical" view, "a willingness on the part of labour to accept lower money-wages is not necessarily a remedy for unemployment" -- a claim that Keynes had promised would be "fully elucidated ... in Chapter 19" (GT, p. 18; see also bottom of p. 11).

Correspondingly, the analysis of chapter 19 provides the explanation of Keynes' oft-cited enigmatic statement at the beginning of the General Theory that "there may exist no expedient by which labour as a whole can reduce its real wage to a given figure by making revised money bargains with the entre-

preneurs" (GT, p. 13, italics in original). For while in chapter 2 of the General Theory Keynes rejected the "second classical postulate" that "the utility of the wage when a given volume of labour is employed is equal to the marginal disutility of that amount of employment" (which postulate means that workers supply all the labor that they would like to at any given real wage rate and are thus on their supply curve: i.e., that full employment always exists), he accepted the first one that "the wage is equal to the marginal product of labour" (which means that entrepreneurs are always on their demand curve for labor). And he also accepted the "classical" law of diminishing returns, which implies that "the real wage earned by a unit of labor has a unique (inverse) correlation with the volume of employment" (GT, pp. 5, 17). Thus if a reduction in money wages does not succeed in affecting the level of effective demand, it will also not affect the level of output, hence the level of labor input, hence the marginal product of labor, and hence the real wage rate.

I must at this point emphasize that though I maintain the validity of IS-LM as an interpretation of the General Theory, I reject two contentions that have frequently been made about it in this connection: namely, the contentions that the validity of the argument of the General Theory is crucially dependent on the assumptions of absolute wage rigidity and/or the "liquidity trap" (for the loci classici of these contentions, see Hicks 1937 article itself and especially Modigliani 1944). The first of these contentions is refuted by Keynes' analysis in chapter 19 discussed above. Furthermore, were the General Theory to depend on the assumption of wage rigidity, there would be no novelty to its message: for the fact that such a rigidity can generate unemployment was a commonplace of classical economics. Indeed, Keynes began the General Theory (p. 16) with a rejection of this

explanation of involuntary unemployment. Needless to say, this does not mean that Keynes went to the opposite extreme of assuming wages to be perfectly flexible. Instead, his view of the real world was that "moderate changes in employment are not associated with very great changes in money-wages" (GT, p. 251). At the same time, Keynes emphasizes that there exists an "asymmetry" between the respective degrees of upward and downward wage flexibility: that, in particular, "workers are disposed to resist a reduction in their money-rewards, and that there is no corresponding motive to resist an increase" (GT, p. 303). Insofar as the "liquidity trap" is concerned, here we have Keynes' own statement that "whilst this limiting case might become practically important in the future, I know of no example of it hitherto" (GT, p. 207).

Both of the foregoing contentions stem from the mistaken attempt to interpret the General Theory as being concerned with a position of "unemployment equilibrium" in the fullest sense of the term. For by definition there cannot be a state of long-run unemployment equilibrium in the sense that nothing in the system tends to change unless wages are rigid. Alternatively, if money wages are not rigid, then a necessary condition for equilibrium -- in the sense of the level of unemployment remaining constant over time -- is that the rate of interest remain constant; and a necessary condition for the rate of interest to remain constant in the face of an ever-declining money-wage and hence ever-increasing real quantity of money is that the economy be caught in the "liquidity trap". Once however we view the General Theory as being concerned with a succession of short-term Marshallian equilibrium positions as essentially described in its chapter 19, then neither of the foregoing assumptions is necessary.

Thus in the strict sense of the term, the General Theory is, to my mind, a theory of unemployment disequilibrium: it analyzes the dynamic workings of an economy in which money wages and hence the rate of interest may be slowly falling, but in which "chronic unemployment" (GT, p. 249) nevertheless continues to prevail, albeit with an intensity that may be changing over time (cf. Patinkin, 1956, chs. XIII:1, XIV:1, and Supplementary Note K:3, reproduced unchanged in the 1965 edition; 1976a, pp. 113-19).

This interpretation would seem to be in contradiction to Keynes' emphasis that one of his major accomplishments in this book was to have demonstrated the possible existence of "unemployment equilibrium" (GT, pp. 30, 242-3). I would like to suggest that the answer lies in a letter that Keynes wrote to Roy Harrod in August 1935, in reply to the latter's criticism that Keynes's discussions of the classical position were carried out in an unduly polemical style that exaggerated the differences between the two positions. In Keynes's words:

the general effect of your reaction ... is to make me feel that my assault on the classical school ought to be intensified rather than abated. My motive is, of course, not in order to get read. But it may be needed in order to get understood. I am frightfully afraid of the tendency, of which I see some signs in you, to appear to accept my constructive part and to find some accommodation between this and deeply cherished views which would in fact only be possible if my constructive part has been partially misunderstood. That is to say, I expect a great deal of what I write to be water off a duck's back. I am certain that it will be water off a duck's back unless I am sufficiently strong in my criticism to force the classicals to make rejoinders. I want, so to speak, to raise a dust: because it is only out of the controversy that will arise that what I am saying will get understood. [JMK XIII, p. 548; italics in original]

And what could "raise more dust" than a seemingly frontal attack on the "deeply cherished" classical proposition that there could not exist a state of unemployment equilibrium? Conversely, what could be more easily "accommodated" within the classical framework than the statement that a sharp

decline in aggregate demand would, despite the resulting decline in the wage-unit, generate a prolonged period of involuntary unemployment and hence disequilibrium, but that true equilibrium would obtain only in a state of full employment?

Though the major concern of the General Theory is theory and not policy, its view on the latter is unmistakably, albeit most briefly, set out. Since one cannot depend on the "self-adjusting character of the economic system" (GT, p. 257) to assure full employment, the government must undertake the responsibility for doing so by itself carrying out or subsidizing investment in order to assure the necessary level of aggregate demand. This is all that Keynes meant in his oft-quoted statement that "a somewhat comprehensive socialisation of investment will prove the only means of securing an approximation to full employment" (GT, pp. 164, 378).

In this connection I would like to emphasize three frequent misconceptions about Keynes' policy views. First, the General Theory advocates fiscal policy not as an alternative to monetary policy, but as one to be used together with it. Second, in sharp contrast with present-day monetarists, Keynes -- in the General Theory as in the Treatise -- meant by "monetary policy" a policy whose target variable is, not the quantity of money, but the rate of interest. Third, as hinted in the preceding paragraph, Keynes restricted the role of government to that of assuring full employment by proper monetary and fiscal policy; once this was achieved, the composition and distribution of this full-employment output could be left to be determined by market forces (GT, pp. 378-79; see also his posthumously

published 1946 article on "The Balance of Payments in the United States").

Despite the many criticisms and discussions of the General Theory that followed its publication (cf., e.g., the review articles by Harrod, Hicks, Leontief, Lerner, Meade, Pigou, Viner et al. reprinted in Lekachman, 1964 and Wood, 1983), its basic analytical structure not only remained intact, but also defined the research program for both theoretical and empirical macroeconomics for decades to come. Truly a scientific achievement of the first order. The past two decades, however, have seen the emergence of basic criticisms of Keynesian economics from the viewpoint of both theory and policy. But before turning to these criticisms, let me first briefly indicate three important extensions that have been made of Keynesian economics in the years since World War II.

The first such extension was to growth theory. It was only natural that during the depression years of the 1930s few economists (and Keynes was no exception) were concerned with this problem. But when in the 1950s and 1960s economic growth became a major concern, the analytical framework of the General Theory served as the point of departure for many of the growth models which were then developed. In this context it is interesting to note the transformation that took place over the years in the attitude toward saving: whereas the spirit of the General Theory hovers over the early contributions by Harrod (1939) and Domar (1946), which regard the increase in potential savings generated by increasing income as a threat to full employment, and growth as the means (via the acceleration principle) of generating the level of investment necessary for absorbing these savings and thus eliminating this threat, the later contributions regard savings as a socially desirable act which provides the crucially necessary financing for the additional

investment required for growth. Correspondingly, growth was transformed from being a means to an end to being an end in itself.

The second extension was to an open economy. Both before and after the General Theory -- both in the Tract (1923) and Treatise (1930), on the one hand, and in the discussions toward the end of World War II which led to the Bretton Woods agreement, on the other -- Keynes played a major role in dealing both theoretically and practically with the problems of international trade, finance, and reserves in a world of fixed exchange rates and relatively free trade. There is, however, practically no reference to these problems in the General Theory. The explanation of this fact lies in the situation that prevailed in the Western world during the period that the General Theory was being written. In particular, this was the new world ushered in by England's abandonment of the gold standard in 1931: a world of flexible exchange rates and/or severe restrictions on the flow of international trade, in which the aforementioned problems had accordingly largely lost their relevance. Correspondingly, the analysis of the General Theory is carried out almost entirely on the implicit assumption of a closed economy.

The generalization of the General Theory to an open economy began almost immediately after its publication with Joan Robinson's well-known 1937 essay on "Beggar-My-Neighbour Remedies for Unemployment." The opening statement of this essay is that "an increase in the balance of trade is equivalent to an increase in investment" and therefore has a similar multiplier effect on the equilibrium levels of income and employment. Shortly afterwards, Machlup (1939, pp. 21-2) took account of the effect on the multiplier of the "leakage into imports" generated by the increase in income. But several years were to pass before account was also taken of the effects on income and interest, via their effect on the domestic money supply, of international capital

movements. Indeed, even though this question had been analyzed by Meade in 1951, and by Mundell and Fleming in the early 1960s, it was only in the 1970s, when such capital movements became of great importance in a Western world in which a regime of flexible exchange rates had replaced one of fixed rates, that this analysis was fully integrated into Keynesian economics. In terms of Hicks' famous diagram, one can thus roughly say that the extension of the General Theory to an open economy occurred in two stages: first, in taking account of such openness on the IS curve; second, and significantly later, in also doing so with respect to the LM curve. In any event, Keynesian economics today is unmistakably open macroeconomics in the fullest sense of the term.

The third extension was to problems of inflation. Here too was a problem that was of great interest to Keynes both before and after the General Theory. However, undoubtedly because of the deflationary conditions that then prevailed, it was not of much concern in that book, though Keynes did emphasize the undesirability of "great instability of prices" (GT, p. 269). More generally, and in sharp contrast with the Treatise (whose central message revolved about the "fundamental equations for the value of money": see Patinkin 1976a, chs. 4-5), Keynes stated that, "the Theory of Prices falls into its proper place as a matter which is subsidiary to our general theory" (GT, p. 32).

In the case of inflation, Keynes himself, in his later How to Pay for the War (1940), played an important role in extending the analysis of the General Theory to one aspect of the problem, namely, demand inflation. I should also note that a recurrent theme of the General Theory (pp. 173, 249, 253, 296 and 301) is that as the level of employment in an economy increases as a result of an increase in effective demand, the money wage rate begins

to rise even before full employment is reached with consequent upward pressure on prices. In this theme there is some adumbration of the post-World War II discussions of cost inflation generated by wage increases. It might also be interpreted as something of an adumbration of one aspect of the later Phillips-curve analysis: namely the coexistence of inflation and unemployment (Phillips, 1958).

In the decade which followed Phillips' presentation of his empirically-based curve, the inference that Keynesian economists drew from it was the inverse one: namely, that there was a tradeoff between the rate of inflation and the rate of unemployment, and that by increasing the former, one could decrease the latter (cf., e.g., Samuelson and Solow 1960). As is well-known, Friedman (1968b) and Phelps (1967, 1972) subsequently and quite rightly criticized this inference on the grounds that workers are concerned with their real, and not nominal, wage, so that the position of the Phillips curve depends on their price expectations (the expectations-augmented Phillips curve). Correspondingly, as these expectations are adjusted to the rate of inflation, the tradeoff disappears and the economy returns to the "natural rate of unemployment", which is the term that Friedman coined to denote what had hitherto been called "frictional unemployment", and which is accordingly the rate that corresponds to "full employment".

What must, however, be emphasized is that though this has generally been the long-run effect of inflation, there has generally also been a prolonged short-run period during which a tradeoff has taken place. Thus the expectations-augmented Phillips curve can be incorporated into the Keynesian system as interpreted above: namely, as a dynamic system whose level of unemployment varies over time.

In this connection I would like to point out that the term "natural rate of unemployment" (which has long since become established in the literature) is misleading: for it has the connotation of a rate that is "naturally" -- that is, in the natural course of events, and without too much difficulty -- established by the automatic workings of the economic system. But this implications is at variance with the empirical evidence of prolonged periods of unemployment at rates significantly higher than the one that would result from frictional unemployment alone (cf., e.g., Murphy and Topel, 1987). Thus the term "natural rate of unemployment" begs the basic policy question which Keynes raised in the General Theory: namely, whether one can in practice rely on the "self-adjusting quality of the economic system" for the achievement of full employment, a question which (for reasons exposted in chapter 19 of the book) Keynes answered in the negative.

During the first two decades after World War II, Keynesian economics became increasingly accepted and by the end of the 1950s it reigned supreme in both theory and practice. The policies it advocated resulted in the United States in low rates of unemployment and inflation, and high rates of growth. This situation changed sharply in the early 1970s, at which time the economy began to experience what was a contradiction to the teachings of Keynesian economics: high rates of both unemployment and inflation, or what was frequently called "stagflation". This was the basic cause of a "crisis in Keynesian economics" which in turn generated basic criticisms of both its premises and conclusions.

I have already discussed the way in which those criticisms manifested themselves in connection with the Phillips curve. There are two other major criticisms that I would now like to comment upon briefly: namely, those that have emanated from monetarism and from the rational-expectations

approach, respectively.

With respect to policy, the claim of monetarism has been that the functional relation between the quantity of money and the level of national income (the velocity of circulation) is more stable than that between government spending and national income (the multiplier), and that accordingly monetary policy whose target variable was the quantity of money was preferable to fiscal policy. The validity of this claim is thus crucially dependent on the stability of the demand curve for money in the real world. Though empirical studies showed that such stability did exist for many years in the United States, this has not been the case since the mid-1970s (see, e.g., Judd and Scadding, 1982; Roley, 1985; and references there cited).

Over the years, there has been a narrowing of the distance between Keynesians and monetarists as the former -- undoubtedly under the influence of the latter, as well as of the force of contemporary economic developments -- have attached more importance to the role of the quantity of money in both theory and practice. (I must, however, remind the reader that Keynes himself continued to attach great importance to monetary policy -- in his sense of the term -- even in the General Theory: see above.) From this viewpoint, one can rightly say that (except for the real-business-cycle theorists) "we are all monetarists now". But to this I must immediately add that from the viewpoint of the theory of the demand for money, "we are all Keynesians" -- not only now, but since the beginnings of the "monetarist counterrevolution" as marked by Friedman's 1956 article. For though Friedman based his views in that article (as well in his 1968 encyclopedia article) on what he called "a reformulation of the quantity theory" -- and what has come to be called "the modern quantity theory" -- this "reformula-

tion" is more closely related to Keynes' liquidity-preference theory than to the traditional quantity theory (Patinkin 1969, 1972, 1974).

Might I also observe that today there seems to be fairly wide agreement that Keynesianism and monetarism share another characteristic: namely, that neither has provided an adequate explanation of, and corresponding policy proposals for, the macroeconomic problems of unemployment and/or inflation of recent years. Thus what we have really been confronted with in these years is not only a "crisis in Keynesian economics", but a "crisis in macroeconomics".

Let me finally make a few remarks about "the new classical macroeconomics".⁷ Here I must distinguish between two of its aspects: the assumption of rational expectations and the assumption of market equilibrium. While I feel that in the hands of some of its advocates the assumption of rational expectations has led to irrational extremes (e.g., the short-run vertical Phillips curve; more generally, the complete neutrality of anticipated policy), it rightly emphasizes the point that government policy is not exogenous to the economy; that agents do form expectations with respect to it, and especially with respect to its credibility; and that these most rational expectations have an important influence on the success with which such policies can be carried out. I should, however, point out that this is a valid criticism not only of Keynesian policy proposals, but of practically all proposals that preceded the "rational-expectations revolution". And much the same can be said for the criticism that has been based on the danger that the purposes of policy can be thwarted by destabilizing lags, a danger that has been analyzed and rightly emphasized by Friedman in his influential 1961 article. In brief, the economic realities of the past two decades, and the theoretical

developments which they stimulated, have dispelled what we now see to be the naiveté of the earlier approach to policy that characterized our profession as a whole. And this should be cause for humility with respect to the approaches that are today being espoused.

Insofar as the assumption of market equilibrium is concerned, this is clearly the antithesis of Keynesian economics and -- except in the tautological sense that "everyone 'wants' to do whatever he is doing at the moment; otherwise he would not do it" (Patinkin, 1956, pp. 211-12; 1965, pp. 313-14) -- is contradicted by the significant levels of unemployment that frequently characterize the real world. The alternative analytical approach (manifested in the interpretation of the General Theory above) is that of market disequilibrium generated by quantity constraints (see Patinkin, 1956, chap. 13; 1965, idem.; Barro and Grossman, 1971 and 1976; Benassy 1987, and references there cited). Indeed, one of the major issues of macroeconomic theory today is the choice between these two approaches.

In this connection I would like to conjecture that, as one who had seen how the most civilized countries of the world had engaged for four long years of stalemated trench warfare in the mutual slaughter of the best of their young men, Keynes was not predisposed to believe in natural forces that always brought agents to generate a mutually beneficial situation. Because of the coordination problem generated by the uncertainty of how others react to our actions, the actual world for Keynes was one that -- in a macroeconomic context -- could readily lead to mutually destructive results of the Prisoner's Dilemma; not to the mutually satisfactory ones of the Walrasian auctioneer.⁸

In this context I would like to make two further observations. First, a recurrent theme of Keynes' writings was that if only economy-wide

coordination could be achieved, a simultaneous equi-proportionate reduction in all wages could be a solution to the problem of unemployment. This theme first appeared in his 1925 Economic Consequences of Mr. Churchill (JMK IX, pp. 211, 228-9), where Keynes explained that a simultaneous 10% reduction in all money wages -- and in this case, in all prices as well -- could in principle effect a devaluation in real terms and thus solve the problem of unemployment that had been created by Britain's return to the gold standard at prewar parity, thus overvaluing the pound. It appears again and repeatedly in the Treatise (I, pp. 141, 151, 244-5, 265, and 281), where a simultaneous equi-proportionate reduction of money wages (prices being held constant) is described as a hypothetical way of reducing real wages and thus eliminating the losses of firms and consequent unemployment. And it also appears in the General Theory (pp. 265, 267, and 269). Indeed, in a passage which reminds one of the basic point of departure many years later of Lucas' 1973 article (that classic of the "new classical macroeconomics") about the practical difficulty that an economic agent faces in deciding whether a change in the price of a good with which he is concerned constitutes a change in its relative price (which calls for a reaction on his part) or whether it is part of a change in the general price level (which, if generated by a monetary expansion, does not), Keynes explained that

any individual or group of individuals, who consent to a reduction of money-wages relatively to others, will suffer a relative reduction in real wages, which is a sufficient justification for them to resist it. On the other hand it would be impracticable to resist every reduction of real wages, due to a change in the purchasing-power of money which affects all workers alike; and in fact reductions of real wages arising in this way are not, as a rule, resisted unless they proceed to an extreme degree. [GT, p. 14, italics in original]

And the same would (in Keynes' view) be true for a reduction in real wages generated by a simultaneous and instantaneous reduction in all money wages.

Furthermore such a reduction would be over before any adverse expectations could be generated.

This was the rationale of Keynes' statement in the General Theory that:

To suppose that a flexible wage policy is a right and proper adjunct of a system which on the whole is one of laissez-faire, is the opposite of the truth. It is only in a highly authoritarian society, where sudden, substantial, all-round changes could be decreed that a flexible wage-policy could function with success. One can imagine it in operation in Italy, Germany or Russia, but not in France, the United States or Great Britain. [GT, p. 269]

The experience of Eastern European countries in the last two decades has shown us that this is a somewhat naive notion of what even a totalitarian government can do. In any event, this passage -- and the context in which it and the other passages cited above appear -- makes it clear that Keynes' purpose was not to advocate wage flexibility as a means of eliminating unemployment, but to provide a "negative proof" of the impracticability of such a policy for a democratic society, which by its very nature cannot enforce the simultaneous economy-wide coordination necessary to achieve this mutually beneficial end.

My second observation is that the above is not intended to deny that the "new classical macroeconomics" has made an important contribution in insisting that we should try to provide a rigorous theoretical explanation of the existence of wage stickiness as well as of long periods of unemployment at levels significantly higher than the frictional one. This remains a problem at the frontiers of research on which much work is now being done.¹⁰

In order to understand why the General Theory had such a revolutionary impact on the profession -- and indeed on the general public -- we must take account of the circumstances that prevailed when it burst on the scene. It

was a time of fear and darkness as the Western world searched desperately for an explanation of the unprecedented and seemingly endless depression that was creating untold misery for millions of unemployed and even threatening the viability of its democratic institutions. Indeed, largely as a result of the widespread social unrest caused by the mass unemployment, a totalitarian government had already taken power in Italy and a far more evil and oppressive one was doing so in Germany. And the appearance of the General Theory in 1936 offered not only an explanation, but also a confident and theoretically-supported prescription for ending depressions within a democratic framework by proper government policies. Thus the General Theory provided an answer not only to a theoretical problem, but to a burning political and social one as well.

At the same time, the fact that the theoretical revolution embodied in the Keynes' General Theory took place concurrently with the Colin Clark-Simon Kuznets revolution in national-income measurement further increased its impact on the profession: for those measurements made possible the quantification of the analytical categories of the General Theory, hence the empirical estimation of its functional relationships, and hence its application to policy problems (Patinkin, 1976b).

Let me finally say that the work over the years of students of Keynes' thought has deepened our understanding of the General Theory, but has also pointed out deficiencies and errors. Some of these are due to stylistic excesses; some are inconsequential mathematical ones; but some are more significant (cf., Patinkin 1987, sec. 10). But even these last should be regarded as the kind that naturally occur in a pioneering work that breaks new ground and develops a radically different analytical framework. We do no service to Keynes' place in the history of economic thought -- and a

fortiori not to the history itself -- by ignoring or trying to explain away these errors. At the same time, they do not change the basic fact that this is the book that made the revolution which has continued to mold our basic ways of thinking about macroeconomic problems. And so the reading of it, at least in part, is an intellectual experience that no aspiring economist even today can afford to forego.

To this I add the following related plea. In reading the General Theory, let us do so in order to acquaint ourselves with one of the classics of our discipline, and, more generally, in order to enjoy the pleasures of intellectual history: not in order to invoke Keynes' alleged authority with respect to further developments in macroeconomic theory. By making a clear distinction between this objective and that of the history of thought we do a service to both: for we then permit the study of Keynes' thought to concern itself not with what Keynes might have said or should have said about current theoretical questions, but with what he actually did say; and we permit the attempts to improve upon the current state of macroeconomic theory to be judged substantively, on their own merits, without confusing the issue with arguments about "what Keynes really meant". As Keynes said in concluding a long and tiresome correspondence in 1938 on a note that some economist had sent him on an aspect of the General Theory, "...the enclosed, as it stands looks to me more like theology than economics! ... I am really driving at something extremely plain and simple which cannot possibly deserve all this exegesis" (JMK XXIX, p. 282).

Footnotes

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¹I have in this essay drawn freely on the material in Patinkin 1976a, 1982, 1984, and 1987, to which the reader is referred for further details. All references to the General Theory are to the present facsimile edition. All other references to Keynes' writings are to the form in which they appear in the relevant volumes (most of which were edited by Donald Moggridge) of the Royal Economic Society's edition of his Collected Writings, referred to henceforth as, e.g., JMK IX, JMK XIII, and so forth. This 30-volume edition -- to paraphrase one of the famous passages of the Treatise (vol. I, p. 125) -- is verily a widow's cruse from which students of the development of Keynes thought will continue to draw materials for years to come, without diminution in the profits of scholarship.

²See the full-length biographies by Harrod (1951), Moggridge (1980), and Skidelsky (1983 and 1989).

³See also Laudan, 1977, ch. 1.

⁴As Hutchison (1968, pp. 277-79) has emphasized, other British economists at the time also distinguished between theory and policy when it came to reducing money wages.

⁵From 1929 to 1933, money wages (as measured by average hourly earnings) fell in the United States by 28 percent (U.S. Department of Commerce, Historical Statistics of the United States, 1960, p. 92).

⁶Though in its use of income instead of employment this diagram differs from the presentation in ch. 3 of the General Theory, it captures its essence.

⁷On this question, see the excellent articles by Peter Howitt (1986a,b).

⁸For a game-theoretic approach that explains how lack of coordination can generate Keynesian unemployment, see Cooper and John (1988) and references there cited. This paper is an example of the "New-Keynesian Revival" which attempts to rationalize the Keynesian theory of unemployment in a way that deals with the criticisms levelled by the "new classical macroeconomics". See Fischer (1988, pp. 315-25) and the references there cited; see also Howitt (1986b).

⁹Keynes made a similar distinction in his Economic Consequences of Mr. Churchill (1925): see JMK IX, p. 211.

¹⁰Cf. the literature cited in the survey articles by Fischer (1988), Mankiw (1988), and Katz (1988).

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