

Chapter 1

KEYNES AND MACROECONOMICS

A Monetary Theory of Production

In some sense, Keynes's *General Theory of Employment, Interest and Money* is macroeconomics and in another, very real, sense modern macroeconomics has gone a long way toward restoring the theory that existed before Keynes wrote and which he thought he had overturned.

All theory is simplification, abstraction, stylisation. Theory does not mirror reality; it extracts the salient features that convey the essence of that reality, the way an artist may use only a few lines to suggest both form and feeling.

Good theories are relevant abstractions, and relevance alters as history moves on. In economics, old theories are seldom wrong; they have just become irrelevant. Surveying the economic theory in which he had been trained, Keynes felt that the theory was not relevant to the world which he knew:

... [W]e lack a monetary theory of production. An economy, which uses money but uses it merely as a neutral link between transactions in real things and real assets and does not allow it to enter into motives or decisions, might be called — for want of a better name — a *real-exchange economy* ... Most treatises on the principles of economics are concerned mainly, if not entirely, with a real-exchange economy; and — which is more peculiar — the same thing is also largely true of most treatises on the theory of money. ... The theory which I desiderate would deal, in contradistinction to this, with an economy in which money plays a part of its own and affects motives and decisions and is, in short, one of the operative factors in the situation, so that the course of events cannot be predicted, either in the long period or in the short, without a knowledge of the behaviour of money between the first state and the last. And it is this which we ought to mean when we speak of a *monetary economy*. ... Everyone would, of course, agree that it is in a monetary economy in my sense of the term that we actually live. ...

Nevertheless it is my belief that the far-reaching and in some respects fundamental differences between the conclusions of a monetary economy and those of the more simplified real-exchange economy have been greatly underestimated by the exponents of the traditional economics; with the result that the machinery of thought with which real-exchange economics has equipped the minds of practitioners in the world of affairs, and also the economists themselves, has led in practice to many erroneous conclusions and policies. The idea that it is comparatively easy to adapt the hypothetical conclusions of a real wage economics to the real world of monetary economics is a mistake. It is extraordinarily difficult to make the adaptation. ... Accordingly I believe that the next task is to work out in some detail a monetary theory of production. ... [T]hat is the task on which I am now occupying myself, in some confidence that I am not wasting my time.

(C.W. XIV, pp. 408–411)

The student might think it extraordinary that a theory of real exchange would be applied to an industrialised nation. One might even think it odd that such a theory would have been constructed in the first place. Consider, however, what sort of economics one would write if one lived in a society which was largely agricultural, in which much domestic trade was not monetised.

A theory of direct exchange of labour-time for 'corn', the representative commodity, would not be unreasonable. Money would enter the picture in the section on international trade. If one's work is good enough, one might capture the minds of succeeding generations so completely that the analysis and habits of mind appropriate to one situation continue to be brought to bear long after the situation to which they are applied has altered enough to require a change of theory. The laws of inertia apply to thought as to the material world.

The economy that Keynes observed was nothing like that. It was a world which, in broad outline, is similar to our own, (though of course there are differences, some of them important). He saw, and so do we, an industrial economy, capitalist¹ in form, with a sophisticated financial system to bridge the gap between the ownership of capital by a few and the need for a broad source of funds to finance that ownership: a monetary, production economy.

Of course, one might think. But what is the fuss about *now*? Surely Keynes succeeded in his task and the issue is settled? No, it is *not* settled. In some bizarre and tragic way, although the result of his efforts is still counted amongst the three or four most important books yet produced in economics, it was, or it has so far been, a waste of time. By three steps, much of the old real-exchange theory has been restored. One wonders what it is that is so deeply appealing about it.

The first, the biggest step was the 'neoclassical synthesis', based on the *IS-LM* framework, in which Keynes's theory was retained in outward form but lost in substance. The three essential behavioural elements are there — the consumption function, the marginal efficiency of capital and liquidity

preference — but they are put together in a framework of simultaneous equations — a method only suitable to the analysis of exchange² — and everything, even the liquidity-preference function, is ‘real’.

The restoration of the method appropriate to real-exchange theory was the major step, but monetarism provided two more: first, the distinction between consumption and investment, already weakened in *IS-LM* analysis, was virtually obliterated,³ returning us to the ‘corn’ economy; second, the development of ‘rational expectations’, while making the analysis *seem* to deal with uncertainty and forecasting, takes the analysis back almost to the model of perfect certainty; only random errors, which are not forecastable, remain.

In Keynes’s theory, shifts in investment are a major source of disturbance (for good or ill) to the economy. The effect of restoring a theory of undifferentiated output is to remove this source of disturbance, leaving government policy as the main cause of fluctuations. This is a major step toward restoring the theorem, prevalent before Keynes, that the economic system was ‘self-righting’: fluctuations were temporary and self-reversing and the best policy was to leave the economy alone. The introduction of rational expectations reinforces this conclusion, since expenditure plans are no longer based, as Keynes’s investment plans are, on long-range, very uncertain forecasts and government expenditures are nullified in their effect by the knowledge that they are matched by future tax liabilities. We have moved from the economics of Keynes to the ‘economics of Dr. Pangloss’.⁴ The *status quo ante* is virtually restored, and that, I believe, is tragic both for theory and for policy.

How did it happen? Most of the trouble lay, perhaps, in the complexity of the *General Theory* and the desire of interpreters to simplify its message rather than taking pains to understand its complexity. Part of the trouble lies in the fact that the assumptions of today’s real-exchange model are tacit, as they were in the version Keynes attacked. One can thus be fooled by the words one uses — note his remark about the ‘real’ character of *monetary* theory, and I have asserted that the standard textbook theory of output is really a theory of exchange. (One cannot see others’ assumptions clearly if one does not know one’s own. For this reason, we shall pay much attention to *method*.)

So although on some points the world to which Keynes’s theory most closely pertains differs from our own, the difference is far less than the gulf that separates the reality of the modern industrial economy from the nearly-perfectly-certain, one-commodity exchange economy of modern macroeconomics. This fact — it is a fact as I see it — is the *raison d’être* of this book.

Money

Macroeconomics has never really come to terms with money.

(Microeconomics hasn't either.) Few have seen with this kind of clarity what the shift to a monetary theory entails:

[T]he task of monetary theory is a much wider one than is commonly assumed; ... its task is nothing less than to cover a second time the whole field which is treated by pure theory under the assumption of barter, and to investigate what changes in the conclusions of pure theory are made necessary by the introduction of indirect exchange.

(von Hayek, 1935, p. 110)

Money, as is well known, permits the separation of the act of selling goods from the act of purchasing them: that is, indirect exchange. In much economic theory even today this attribute of money is treated as a pure convenience. In such theory the presumption is that the existence of money does nothing to change the nature of transactions; in its absence the same sales would simply take place with greater awkwardness and higher real cost. Relative prices are unchanged; money is neutral. Goods exchange for goods: the real-exchange economy.

Indirect exchange means a separation in time between actions involving real goods. The real value of a sales transaction, therefore, cannot be known for certain. In that sense, every transaction is a speculation (Hicks, 1939) and in the possibility that the gap between transactions may be quite long in aggregate, Marx finds an explanation of the 'crisis'.⁵ Even a theory of a monetary exchange economy can give important results.

Production

Production also, in the nature of things, takes time.

The time-consuming nature of production places upon producers the necessity to make decisions based on an *estimate*, a forecast, of the demand for their product: the goods must be placed on the market before people can buy them, and thus before demand can be known.⁶ The existence of money can enhance the difficulty of making that estimate, for when people save for future purchases, they need not place specific orders even if they know what they will want and when. They can hold money instead, or one of the many claims on future money that a developed financial system provides. This action gives producers no clue as to their future plans.

These are the basic facts which Keynes's theory incorporates, and using them he attacks the prevailing orthodoxy. The attack was at one and the same time a declaration of all-out war and a battle for a specific objective. The specific objective, one manifestation of the prevailing orthodoxy, was the theory of employment. Events determined his specific objective, for while Keynes knew that his theory was a full scale critique of Real-Exchange Economics, the condition of the British economy in the 1930s was too dire to permit a lofty, disengaged approach, even if Keynes's temperament would have allowed it.

Historical Background

All books are products of their place and time. And the place and time that stand as background to the *General Theory* are extraordinary. The time, the early 1930s;⁷ the place, Cambridge. These influenced both the form and the content of the book.

First, form. Styles change. Economics today is couched in a technical (or seemingly technical) language, infiltrated by mathematics. The *General Theory* is almost entirely verbal. Words whose meanings were taken as given were those in agreed usage in Cambridge at the time. There were other words, whose meaning is now (wrongly, I think) taken as agreed, which were even then (and there) the subject of heated controversy — saving, for example. A full understanding of the book, to which I do not lay claim, requires a knowledge of the particular language current in that closely-knit group of economists amongst whom Keynes was working. At the least, one must be alert to the ‘fallacy of common language’⁸ and the need to exercise interpretive imagination. Cambridge Economics was (and still is) a distinct intellectual tradition. The reader of the *General Theory* must make a translation from the language of Cambridge in the 1930s to the language of the present.

More important, content. It is necessary to view the *General Theory* in the context of history, both the history of the British economy and the history of economic thought. The *General Theory* is a direct reaction to established doctrine. A famous passage in Keynes’s preface describes the book as:

a long struggle of escape ... — a struggle of escape from habitual modes of thought and expression The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify ... into every corner of our minds.

(*G.T.* p.viii)

I cannot possibly give a full exposition of macroeconomic theory as it existed before Keynes,⁹ much less list the contents of Keynes’s mind before he began the train of thought that resulted in this work.¹⁰ But a sketch of the more important ideas is in order, for his opposition to the prevailing orthodoxy shapes the entire argument. It is an orthodoxy which has by no means died, though it has changed its form slightly.¹¹

Keynes was anxious to refute a particular manifestation of orthodox theory, namely Say’s Law and the theorem which derives from it: that involuntary unemployment is impossible. This was hard to believe in Britain in the early 1930s, when Keynes began working on his new ideas.

From 1921, when reasonable data became available, rates of unemployment in the UK were not a pretty sight. The percentage of insured workers unemployed was 15.6 per cent in that year. It fell to 9.7 per cent in 1927 and reached its peak of 22.1 per cent in 1932: 2.8 million people. The registered unemployed numbered over two million until late 1935.

These are data for the country as a whole; they are given in full in Table

Table 1.1
Wages, Prices and Unemployment in Interwar Britain

<i>Year</i>	<i>Average Weekly Wage Rate 1958 = 100</i>	<i>Retail Prices 1958 = 100</i>	<i>Real Wage Index</i>	<i>Unemployment per cent</i>
	(1)	(2)	(1) ÷ (2)	(4)
1920	(47)*	58	(0.81)	2.5
1921	(46)	53	(0.87)	15.6
1922	(36)	43	(0.84)	14.3
1923	(32)	41	(0.78)	11.7
1924	32	41	0.78	10.3
1925	32	41	0.78	11.3
1926	32	40	0.80	12.5
1927	32	39	0.82	9.7
1928	32	39	0.82	10.8
1929	32	39	0.82	10.4
1930	32	37	0.86	16.0
1931	31	35	0.89	21.3
1932	31	34	0.91	22.1
1933	30	33	0.91	19.9
1934	30	33	0.91	16.7
1935	31	34	0.91	15.5
1936	31	35	0.89	13.1
1937	33	36	0.92	10.8
1938	34	37	0.92	12.9

Source: London and Cambridge Economic Service, *Key Statistics of the British Economy, 1900–1962*, Table F.

* Brackets indicate 'particularly rough' estimates.

1.1. Regional data make terrifying reading.

So when Keynes was writing, a depressed economy had been a familiar feature of the UK for a very long time, for particular reasons — some would say for *one* particular reason: a determination to restore the gold standard in Britain at the pre-war rate of exchange. If this was to happen, prices and costs had to be brought down to levels consistent with those in the United States, at the prewar exchange rate. To achieve this, deliberately deflationary policies were pursued. Once achieved (in 1925) the overvalued rate did its own work: the deflation continued partly because exports were too expensive, thus depressing sales and income.

The *global* slump appeared later, as America too suffered depression,

aided or precipitated by the Wall Street collapse of 1929.¹² Between 1929 and the trough in 1933, net national product in current prices fell by more than 50 per cent, in constant prices by more than a third.¹³ Unemployment rose from 3.2 per cent in 1929 to 23.6 per cent at the trough: nearly 13 million people.¹⁴ Banks failed, and the depositors were not insured. None of this did anything for world trade: America, a major source of demand, had fallen on hard times.

Pre-Keynesian economists had seen slumps and financial collapses before, and had theories of business fluctuations. But they supposed that the system, like a well-built boat, would without undue delay right itself. What was new was the *persistence* of the slump. And it is from this perspective that Keynes's demonstration of the possibility of underemployment equilibrium should be understood.¹⁵ It is a theorem which has got lost in the resurgence of neoclassical theory and concentration on Keynes's policy conclusions.

The Self-Righting Economy

Economists in the 1930s had a different world-view from those brought up after the war. The fundamental vision of economic systems was that they tended toward stability. This vision was embodied in the theory of the stationary state. Around a stable level of performance there were cycles and irregular aberrations due to special factors such as crop failures.¹⁶ Today we think of growth as the norm, with fluctuations around a rising trend. It is hard for us to understand their way of thinking.

Unemployment was seen as a consequence of the fluctuations around the stable norm. The exogenous fluctuations were not predictable but the cycles were amenable to analysis. Explanations of unemployment therefore were part of the theory of the trade cycle.

Fluctuations are by their nature transitory. It was a central tenet of pre-Keynesian orthodoxy that there could never emerge for any substantial period of time a general excess supply of output (a 'general glut'). Industry might need to slacken temporarily in order to adjust to some change in the pattern of demand. This would create 'frictional' unemployment as workers looked for new jobs — clearly only a transitory phenomenon.

The Classical presumption was that labour would not offer itself for employment if it did not wish to use the income so obtained to purchase what it had produced. This is the simplest version of Say's Law.¹⁷ The other strand of the argument is that flexible prices are always able to eliminate excess demands or supplies — in this case an excess supply of labour. Thus the cause or causes of unemployment, and steps which might be taken to alleviate or correct it, were not questions of much interest to the Classical economists; they were chiefly concerned with the long run, not transitory fluctuations.

If an excess demand or supply is to be eliminated, whether by policy or by 'natural forces', it is plausible to look to the own-price to do it. The own-

price of labour time is the 'real wage': the purchasing power, in terms of wage goods, of the money wage. The prices of wage goods are set as the outcome of a wide range of economic activities, with no direct link to the process of obtaining or agreeing to take a job. Hence attention becomes focused on the money wage as the adjusting variable. At any point of time, in any case, a change in the money wage *is* a change in the real wage.

So it is appealing to argue, that since unemployment meant that there must be an excess supply of labour, its price was too high. The wage, in terms of what it would buy, was higher than that necessary to obtain the work force actually employed; the real wage being greater than the marginal disutility of work, additional people sought work. When wages fell, as they were confidently expected to do, the disequilibrium situation would normally correct itself: the lower wages would simultaneously reduce the numbers of those seeking work and make it profitable to offer more jobs.

Belief in the automaticity of such an adjustment mechanism was challenged by the events in the UK of the 1920s and 30s.

Money wages fell drastically between 1920 and 1923¹⁸ and real wages fell markedly less as a consequence of the government's deliberate policy of deflation in preparation for a return to the gold standard. It is plain from Table 1.1 that deflation of demand had more influence on unemployment rates than deflation of wages. After 1922, money wages steadied for eight years and fell only 6 per cent from 1930 to the trough in 1933–34. Real wages during this period, for those lucky enough to keep their jobs, were actually rising. (Observe column (2) of Table 1.1 carefully. It is difficult these days to take in the fact that prices can actually fall.)

Theory and Policy

The persistence of unemployment made it clear that something needed to be done. A good deal of the discussion¹⁹ involved the question of whether the real wage was too high. Pigou believed this (1927), but was less sure that a policy to reduce the real wage could be carried through.

There are two ways for real wages to fall — either money wages fall or prices rise. On the face of it, either ought to work. Lower money wages mean lower costs to firms and cheaper labour ought to be more employable. And there is a certain logic to the view that disequilibrium in the labour market should be eliminated by altering the own-price of labour.

As a theoretical matter, Keynes questioned the validity of generalising the results of a single-market, partial-equilibrium approach to an aggregate such as 'the labour market'. Changes in real wages can be expected to have repercussions on other parts of the system and to be affected by variables which at first sight seem rather remote. One cannot look at the labour market in isolation.

As a practical matter, he argued that a policy of encouraging wage-

reduction would not be as useful as the partial-equilibrium approach suggests and might even be counterproductive.

Keynes therefore proposed a radical change in perspective to one enquiring into the *causes* of changes in wages and prices. The components are the level of demand and costs, where labour income figures in both.

From this new perspective comes the astonishing conclusion that the chief cause of unemployment is not so much that the real wage is too high, but that the *rate of interest* is too high. What an implausible thing to say. What relationship could there possibly be between unemployment, the most human of problems, and the rate of interest, the driest of economic variables? That is a major theme of the *General Theory*. It derives directly from the clash of theory and events in the 1920s and 30s, and the new theory produced, in turn, the new policy prescriptions which are all many people understand by 'Keynesianism'.

Concentration on the immediate historical antecedents of the *General Theory* is not intended to suggest that the relevance of the theory is restricted to that time or to periods of unemployment generally. There would be insufficient justification for paying so much attention to it if this were true. In many ways it is 'depression economics' — ways which are often extremely subtle, ways which this book is at pains to point out, so that modifications may be made where necessary. But its scope is far broader than the short-period analysis of unemployment, as it is often characterised. It embodies a theory of cyclical fluctuations and their long-term consequences. Its analysis can be turned to the problem of inflation as well as depression.

Time, Uncertainty, Money and Say's Law

It is not, however, in the length of the list of problems to which the *General Theory* can be applied that the measure of its power lies. The primary purpose of the *General Theory*, and the chief justification for describing its message as a Revolution, was its destruction of Say's Law, the idea that there was no reason for production to stop short of the full-employment level and therefore unemployment was only a transitory phenomenon.

Keynes used money as the instrument to break Say's Law — or so, at any rate, it appears. It is in his insistence on a realistic basis to the theory of employment — labour is paid a money wage and can only *estimate* its real value — that he is most explicit about the repercussions for Say's Law. In reality, Keynes breaks Say's Law at *all* the points where households and firms interact — in the market for labour, through the saving-investment nexus, and in the market for output — and it is not really money that causes the trouble, but time — the sheer fact that commitments are based on *future* demands, costs and prices. These cannot be known for certain, but

commitments must be made regardless.

The necessity for commitment is just as pressing in an economy that gets along without much use of money, and penalties for unwise production commitments are equally or more unpleasant. Money, in contrast, gives the *impression* of a fairly certain claim on resources. This illusion of security or liquidity heightens problems created by essential uncertainty by acting to disguise that uncertainty, to some degree, from market participants.

Money and delayed claims on money also give little indication of future wants.²⁰

The philosophical niceties of pinpointing exactly what it was that broke Say's Law — money, time or uncertainty — were not really Keynes's concern. He was interested more in the disease of a particular economy, an industrial economy in which all three were present, and he took this reality as his starting point. The introduction of any one of them would have constituted a break with classical and neoclassical theory.

Money has been chosen as the culprit partly due to Keynes's own emphasis. He was writing, throughout, about an economy that was intensely monetary. All transactions with which he was concerned involve the use of money. That is not to say that barter, gifts and unpaid labour are of no economic significance; it is just that those transactions do not play a significant role in the problem at hand — the nature of the relations between producers and consumers, hirers and the hired, borrowers and lenders, and how those relations can create a situation which, while unsatisfactory to practically everyone, can be sustained virtually indefinitely.

Latter-day Keynesians have stressed the role of money in the labour market; the inflexibility of money wages is held responsible for Keynes's results. I shall argue that time is the key: that the *General Theory* is a static model of a dynamic process, the process of production. And it is as thoroughly monetary as the economy it attempts to explain. I shall show that the disruption caused by the impossibility, in the nature of things, of striking a real wage bargain is a mirror image of the dislocation caused by untimely attempts to save and by speculative action designed to enhance the value of one's wealth. Keynes's model leads one to conclude that when prices are uncertain, the sheer *fact* of a money-wage bargain could break Say's Law. Inequality of planned saving and investment (whatever that may mean) also breaks Say's Law. Exactly the same mechanism operates in the second case as in the first. The fact that saving takes place by declining to spend *money* on commodities, channelling it into financial assets instead, is just as crucial a fact as is the money-wage bargain.

In its preoccupation with 'real' magnitudes, modern 'Keynesian' macroeconomics has almost completely forgotten that money is also real: in a money economy the pursuit of income, profits and wealth all at some time take monetary form. 'Real' values are in the future, are uncertain, and can surprise.

Articles by the dozen are written wondering why plans of different economic agents fail to mesh. It would be astonishing if they did. The mystery is that the economy, viewed as a whole, does usually exhibit some kind of coherent — though not always attractive — behaviour.

Elaborating these remarks is the task ahead of me. But first we must look at the *method* Keynes used in his analysis, for it is the method which is the most robust of Keynes's creations in the *General Theory*. By understanding the method we stand a chance of retaining or recapturing the capacity to see the relevance of Keynes's reasoning to changed historical circumstances and to adapt it to events not yet foreseen.

Notes

1. The term 'capitalist' is used in a highly emotive fashion in some Marxist literature; however its technical usage refers to ownership of productive capital equipment by a group of persons not co-extensive with the group which works with that equipment to produce the economy's output. One antonym is 'cooperative', denoting a system in which workers jointly own the equipment. There is no obvious label for the state of affairs, only sustainable where the amount of capital is not large, in which every family owns its own means of production. Keynes calls the first an 'entrepreneur economy', the second a 'real-wage' or 'cooperative' economy. (C.W. XXIX, especially pp. 76–87)
2. This fact is acknowledged by Hicks (1980/81), who should know.
3. Brunner refers to this as 'lack of allocative detail'. See, e.g., Brunner (1970).
4. This description of 'the new macroeconomics' is Willem Buiter's (1980).
5. Marx (1867), p. 128.
6. Producing to order is of course an exception to this, an exception which is more important in the capital-goods industries than in industries producing consumer goods, but not in Keynes's view important enough presumably, to require special treatment in the context of a theory of 'output as a whole'.
7. The *General Theory* was published in 1936, but the development of its ideas began as early as 1931. See the articles by Patinkin, Moggridge and Johnson in Patinkin and Leith (1977) and for a first-hand appreciation, browse in C.W. XIII.
8. Usually raised in connection with conversation with English-speaking people from other countries, but equally applicable in this context — 'The past is another country; they do things differently there'. (L.P. Hartley, *The Go-Between*)
9. For guidance, see Sowell (1972 and 1974) and Eshag (1963), as well as C.W. XIII.
10. His *Treatise on Money* (1931) and the early parts of C.W. XIII are the obvious things to consult.
11. The new version of orthodoxy constitutes *my* background, from which I in turn have had a long struggle of escape.

12. Whether the financial crisis caused the American depression of the 1930s or was merely a symptom of the American economy's underlying weakness is still a subject of considerable debate, but is not at issue here.
13. Friedman and Schwartz (1963), p. 2.
14. *Historical Statistics of the United States*, Table D46–47; US Bureau of the Census, *Statistical Abstract, Supplement*.
15. It is not the *only* outcome of Keynes's theory; there is no need to panic. Nor is there any need, by serious economists, to dismiss this analytical conclusion as a 'slogan' (Mayer, 1978).
16. Jevons was not prepared to leave these as random, but connected agricultural fluctuations to cyclical variations in solar activity (sunspots).
17. For a corrective to this simplification see Sowell (1972) and/or Baumol (1977).
18. Moggridge (1969), p. 16, using Routh's data (1965), says by almost 40 per cent. The data in Table 1.1 indicate somewhat less, but quite enough.
19. Hancock (1960) and Winch (1969) give interesting accounts.
20. Compare a bilateral claim on an individual's production of specific commodities which arise. Claims directly on commodities do not commit the creditor to final consumption of those commodities, but from the producer's point of view sales are virtually assured.