

BEYOND THE IS/LM DEVICE: WAS KEYNES A HICKSIAN?*

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In 1980, Hicks felt some explanation was needed to clarify the IS/LM apparatus which he had suggested some four decades earlier and ever since it has continued to animate academic discussions.¹ Controversies about the usefulness of such a device and whether it is a fair interpretation of Keynes' **General Theory** are still going on (see, for example, Leijonhufvud (1983, 1984), Solow (1984)).²

We believe that the various interpretations of the IS/LM construct are not simply a matter of technical disagreement. They involve a much more fundamental methodological issue that relates to different schools of economic thought. To shed some light on these on-going discussions, we propose to go back to the 1930's writings and inquire how the IS/LM device came into being. The main proposition of this essay is that Hicks had completed his theoretical formulation before the publication of Keynes' **General Theory**; subsequently Hicks interpreted Keynes within his own set of general equilibrium constructs, which were eventually published in **Value and Capital**. Thus, Hicks was never a Keynesian in the sense of the Keynesian theory later built on the basis of his own IS/LM construction. In the 30's, Hicks made a little effort to understand Keynes though he compared Keynes' analysis with his own, which he thought superior.

This essay presents some arguments as to why Hicks' analysis must be reinterpreted on its own ground. We shall begin by relating how, in the intense atmosphere of the thirties, Hicks progressed with his own work. We shall then explain how Hicks' training as a neo-Walrasian inculcated a method which was incompatible with Keynes' approach, even though there seemed to be some understanding between himself and Keynes at that time.³ We shall then discuss how the concepts of money, interest, expectations and the 'week period device', appeared well before **Value and Capital**. We shall explain how Hicks tried to show that Keynes' notion of expectations and equilibrium, as well as Keynes' work expressed in the IS/LM perspective, are to be found in his 1935 "Wages and Interest" paper.

WHERE HAVE ALL THESE IDEAS COME FROM?

Intense discussions took place around Cambridge in the early thirties. R.F. Kahn, and J.E. Meade, P. Sraffa, C.H.P. Gifford, Joan Robinson, and several others formed a 'circle' which met weekly for discussion of the **Treatise**.⁴ At the same time there was a symposium on "increasing returns and representative firm" with discussions led by Harrod, Robertson, Shove, Sraffa and many others.⁵ Meanwhile, in London, Robbins was promoting Swedish and German literature, while Hayek had just published **Prices and**

Production and Myrdal in Sweden was developing the first economics of expectations. Myrdal's essay,⁶ published in Sweden in 1931, was translated by Hayek into German in 1933. When Hayek arrived at the London School of Economics in the summer of 1931, he had Myrdal's essay on his reading list. Keynes and Sraffa were very critical of Hayek's **Prices and Production**, the "controversy...was a sharp one...these polemics temporary caused a widening of the gulf between Cambridge and London."⁷ In short, none of the participants in these discussions were working in isolation. The ideas were discussed in groups, and spread quickly either by written text or by word of mouth. Dennis Robertson was aware of what was going on and, in particular, was directly or indirectly participating in most of the debates. "By the end of 1934 the first draft of **The General Theory of Employment, Interest and Money** was complete....The first proofs were sent to Mr. D.H. Robertson."⁸ It should be stressed that Robertson was familiar with Hayek's work and that Robertson and Hicks had formed a friendship:

I first met him when he gave a paper at L.S.E., in the summer of 1930, but our real meeting was in Vienna in the following September....After that we never lost touch; it was most important to me to have someone to consult outside of the L.S.E. circle. (E.P., p. 136)

Whether or not he had planned it, Hicks was certainly kept informed, in his discussion with Robertson, of the main issues being considered at Cambridge and elsewhere. To disassociate his work from Keynes', Hicks emphasized, in his Preface, that most of the ideas of **V.C.** were conceived between 1930 and 1935, **V.C.**, p. vi), implying that most of his work was already under way before **The General Theory** appeared.⁹

Why was Hicks so precise on this matter? Harrod mentioned that the first draft of Keynes' **General Theory** was given to Robertson in 1934. It was also in December of 1934, that a copy of "A Suggestion for Simplifying the Theory of Money"¹⁰ was sent to Keynes. In the summer of that same year, Erick Lindahl visited the London School of Economics to present the Swedish theory which Shackle described as the

...monetary theory which Wicksell evolved from suggestions of Ricardo, and which Lindahl clarified and to which Myrdal gave the vital spark by his distinction of the two temporal viewpoints ex-ante and ex-post, and to which he gave a brilliant elegance and logical rigour,...devised with the very purpose of analysing the conditions of equality of total monetary demand and supply of the general output of goods of all sorts. He had also, of course, the purpose of studying the implications of nonfulfillment of these conditions.¹¹

Between 1930 and 1936, many things were happening, as described in Shackle's **The Years of High Theory**. One could not rely solely on written evidence to clarify who first said what. Too many discussions were going on, and when a large group is involved it is very difficult to pin down the origins of ideas with precision. As far as Hicks was concerned, although he maintained unfamiliarity with the **Treatise**, when writing the first draft of his 1935 "A Suggestion for Simplifying the Theory of Money", he did

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remark "there is nothing about Keynes in this first draft, but when I showed it to Barrett Whale, he replied, 'that sounds like the **Treatise on Money**'. So at that point (but not earlier), I did go to the **Treatise**." (E.P., p. 141) However, Hicks discussed his paper with Robertson, who presumably knew too much about the **Treatise** not to allude to it. This first draft "was never published," but "I have a copy with a comment on it by Dennis dated November 30, 1932." (E.P., p. 137) Two years later third version of "Simplifying" was sent to Keynes, who liked it because apparently there were some things in Hicks' monetary approach with which he agreed, which perhaps led him to invite Hicks to review his **General Theory**. Hicks again asserted that "I knew no more of the details until I was asked, very much to my surprise, to review the **General Theory** for the **Economic Journal** (on its publication in January of 1936)." (E.P., p. 142) We thus suspect that Hicks was so immersed in his own ideas that he was oblivious of the discussions of Keynes' work.

What we are driving at is that when major theoretical issues are at stake the central ideas belong to the process and to the environment from which the theory evolves. This does not mean that authors do not contribute to the process, but rather that the only specific attribution which can be made to a particular person is a particular work. Hicks captured this perspective when he wrote that

...ideas on which this book is based...were not by any means entirely my own ideas; they came into being by a sort of social process...Those whom I remember particularly as having contributed were Mr. R.G.D. Allen, Mr. Kaldor, Mr. Lerner, Professor Hayek, Dr. Rosenstein-Rodan... (V.C., p. vi)

Despite all these coincidences of dates and events, we believe that although evidently impressed by Keynes, and attracted by the Swedish theory, and also being an admirer of the Lausanne school, Hicks had his own non-Keynesian way of looking at economic theory.

WHY THE BELIEF THAT HICKS WAS A FOLLOWER OF KEYNES?

Keynes' strong personality, and the fact that he chose Hicks to be the first reviewer of **The General Theory**, gave Hicks tremendous recognition in the discipline. At the same time, the unfortunate timing of the publication of V.C. with respect to **The General Theory**, and perhaps more importantly, Hicks' interpretation of **The General Theory**, misled many to believing that he was a "whole-hearted Keynesian". To a later generation, Hicks was often presented as a follower, and as an interpreter of Keynes which prevented him from being seen as a man who wanted to provide his own general theory, different from Keynes'.

We think that although Hicks was impressed and very respectful of Keynes, he was moving in his own direction and developing his own General Theory of Income, Interest and Money which he preferred to call V.C.: value to emphasize that he was interested in prices; capital to show that there was a link between time and production. V.C. was supposed to be a theory of an economic process in time, which took into consideration 'micro', as well as 'macro' aspects of the theory of value, production, income,

interest and money. It may be interpreted as including Keynes' general theory as a special case (see V.C., pp. 197-98). Concerning the treatment of expectations he said, "I have thought it desirable to mark a division between my general discussion of the method of expectations, on the one hand, and what I have to say about Mr. Keynes' more special theory on the other." (K.T.E., p. 242) Unlike Keynes, Hicks approached his theory in a traditional manner without introducing new concepts and methods. His first task was to try to understand what Walras, Marshall, Edgeworth, Pareto, Wicksell, Böhm-Bawerk and many other neo-classicists had written. He then organized their ideas in a more general form and, finally, undertook to complete this form with the newly developed tools, whenever he thought they were necessary. In his general manner of approaching economics, Hicks was neither a follower of Keynes nor against him; his interpretations, however, generated much discussion.

HOW HICKS PREPARED FOR VALUE AND CAPITAL

His study of the labour market prompted Hicks to give further consideration to three main concepts - money, capital and expectations. Even though capital, money and expectations are complementary, they appeared in different circumstances; for example, while writing his theory of wages, Hicks lectured on 'risk', and subsequently published an article in 1931¹² in which he emphasized the dependence of profit on uncertainty. This led him to the 1933 E.T.C. article which linked money to uncertainty and argued that monetary theory did not belong to an equilibrium theory. This paper later became his famous "A Suggestion for Simplifying the Theory of Money" which constituted the beginning of his monetary theory.

Soon after **The Theory of Wages** was published, Hicks produced three papers on the Lausanne School.¹³ The ambiguity of Walrasian and Paretian notions of equilibrium led him to consider a **disequilibrium** analysis and the question of dynamics. Pareto's hint that interest is the "price of transformation over time," plus Hicks' knowledge about the Austrian roundabout method of production, were the main elements of his capital theory. "Expectations" were mentioned occasionally, but his general theory of expectations was delayed until 1935 (his W.I.). By the end of 1935, then, Hicks had all the ingredients he needed to write V.C..

Elaboration on these three interrelated theoretical issues is necessary.

The first relates to equilibrium and the Lausanne school. To familiarize English-speaking economists with the Lausanne School, Hicks wrote:

it is the object of Walras' and Pareto's equations to determine that system of prices which can exist in an economic system (with given population, given tastes, given abilities, given knowledge and given stocks of capital and land), without any single individual, as consumer or labourer or capitalist or entrepreneur, having any incentive whatever to do anything else than go on doing what he has done in the past. And the way by which these conditions are reduced to a system of equations, is by taking each

individual, one by one, and finding what he will prefer to do at any given set of prices. And if a system of prices can be found at which the preferences of all the individuals in the community are consistent, the community is in equilibrium at those prices....But at the equilibrium system of prices, no one has any incentive to change, and so the equilibrium can go on. (M.P.P.V, p. 84)

The representation of the Lausanne School infuriated Henry Schulz, who thought Hicks was doing harm to marginal productivity theory.¹⁴ In reply, Hicks made his proposition clearer, saying:

nothing could have been further from my intention, for indeed there are few economists whom I admire more than I do the masters of Lausanne...Nevertheless, I am disturbed to find that in the twenty years which have elapsed since Pareto ceased his major contributions to economic theory, the tree which he planted has thrived so little.¹⁵

This disclosed what was to be Hicks' objective, and how he would proceed. Like the Lausanne School, Hicks used equations of supply and demand based on preferences to represent the price system of an economy. This encompassed production and exchange activities of consumers and entrepreneurs as well as the distribution aspect (L.W., p. 343-44). The analysis was carried out in terms of single units, and then generalized from individuals to communities. Equilibrium was based on consistency of individuals' choices. Past and future were treated alike.

Obviously, this was only a simplification which both the Lausanne School and Hicks clearly recognized. The notion of equilibrium is among the first difficulties Hicks faced. Neither Walras nor Pareto were precise in their definitions of this concept. According to Hicks, Pareto said "economic equilibrium is a state which would be maintained indefinitely if there were no change in the conditions in which it is observed." (E.T.C., p. 523) In terms of the exchange it was indeed not very clear. Equilibrium, said Hicks, could have been viewed in two ways: either exchange takes place "until a point is reached at which no further voluntary exchange is possible between any two parties," (E.T.C., p. 524) and this equilibrium would be maintained indefinitely, or there may be exchange "under unchanging conditions of demand and supply, which can be maintained indefinitely so that there is no need to sell tomorrow at prices different from those attained today." (E.T.C., p. 524)

In the first interpretation of equilibrium, the exchange takes place at bargaining prices, and the equilibrium is reached when exchange ceases, whereas in the second, exchange takes place at the determined equilibrium price, a situation which is maintained indefinitely. There is, thus, a distinction between these two interpretations of the equilibrium, and adopting one or the other makes a big difference in the dynamic analysis. Again, according to Hicks, Walras' work contained the same ambiguity.¹⁶ Hicks notes that

what, however, Walras does not make really clear is whether any exchanges do or do not actually take place at the prices

originally proposed, when those prices are not equilibrium prices. If there is no actual exchange until the equilibrium prices are reached by bidding, then Walras' argument is beyond reproach on the score of logical consistency, though it may be called unrealistic. But if such exchanges do take place, then, in general, the final equilibrium prices will be affected by them. (L.W., p. 342)

Hicks himself clearly distinguished the two interpretations of equilibrium. In terms of Walras' system of equations, depending on whether one understands equilibrium in the first or in the second sense, one can have reality without logical consistency, or have logical consistency which does not correspond to any reality.

A second point requiring elaboration relates to the premise of perfect foresight and disequilibrium. Faced with this dilemma concerning the meaning of equilibrium, one of Hicks' first aims was to try to reconcile the theoretical logical consistency of Walras' system with the manner in which exchange takes place by bidding. When equilibrium is understood to relate to transactions taking place at equilibrium prices, Lausanne School equations yield a stationary state model. For Hicks, the idea of a stationary state was not satisfactory. To approach reality, one ought to consider current and future prices, and "once we drop the assumption of Stationary Equilibrium, present and future prices are no longer equal." (E.T.C., p. 526) From a technical viewpoint, by introducing the assumption of an unknown future, Hicks' system had more variables than equations. This obviously presented difficulties in terms of a solution. Hicks suggested that,

...a given period of time over which wants and resources change in a manner that is foreseen. This whole period can be divided into subperiods, each so short that the movement of prices within it can be neglected. (E.T.C., p. 525)

By knowing beforehand, what the demand and supply would be in each sub-period, he could determine the corresponding prices "without expectations ever being mistaken." He called this equilibrium perfect foresight and "Disequilibrium is the Disappointment of Expectations." (E.T.C., p. 526) Very cautiously he added,

such a dynamic equilibrium is obviously still far from being a description of reality. It does nevertheless serve as a model of a perfectly working economic system...such a perfect Equilibrium is never attainable. The actual disequilibrium may be compared with the idealized state of dynamic equilibrium to give us a way of assessing the extent or degree of disequilibrium. (E.T.C., p. 526)

This method of comparing two visions of the world is characteristic of Hicks' approach. Comparison of a hypothetical situation with the actual one is the essence of his economic dynamics.

Finally, we consider Hicks' monetary theory. The following quotations capture the essentials of his theory:

it is only to meet uncertain future payments that a stock of money is necessary. If the date and amount of future payments are absolutely certain, money does not need to be held in order to meet it. (E.T.C., p. 527);

and with respect to equilibrium he believed,

...monetary theory, in the strict sense, falls outside equilibrium theory. Since the use of money is closely connected with imperfect foresight, it needs to be analysed in association with the theory of Risk. (E.T.C., p. 529)

This approach to money is consistent with dynamic economics. Hence, every time Hicks dealt with a static, stationary or even progressive equilibrium, it can be assumed that there was perfect foresight, so that no money is held.

We have briefly presented the concepts of equilibrium, perfect foresight, money and Hicks' understanding of the Lausanne School prior to his V.C.. an attempt to integrate some of his own contributions into a more general model can be found in his W.I. paper of 1935. Hicks viewed W.I. as a first sketch of what was to become the 'dynamics' model of V.C., (A.E., p. 140).

DYNAMICS AND EXPECTATIONS

Hicks was very interested in the phenomenon of price determination.

On each market day these ... prices have to be determined," (W.I., p. 458)...These demands and supplies are simply the resultants of the actions of individual entrepreneurs, labourers and rentiers; so that in order to discover the principles governing them, we have to examine the position of the representative entrepreneur, a representative labourer, and a representative rather respectively. (W.I., p. 459)

His analysis thus began by considering a single unit at a time. The behavior of the economy he envisioned was governed by consumption and production. Decisions to consume depended on the preferences of entrepreneurs, labourers and rentiers as well as on present and expected future relative prices. Production on the other hand, depended upon profitability. Entrepreneurs' estimates of the value of net assets depend partly on current prices and partly on expected prices "these latter rates (prices) are pure estimates." (W.I., p. 460)

Allowing for some variability in the coefficients of production, and using the usual neo-classical maximization rules, he said,

...the marginal productivity conditions are therefore enough to determine the production plan...Like the marginal productivity conditions of static theory, our present marginal productivity conditions are only a means to an end. What we want to discover from them is the way in which the firms' production plan will be

affected by changes in the prices and price anticipations which govern it...changes with which we are concerned are purely hypothetical changes. We are still on our first Monday; we are examining the differences between the production plan actually adopted and that which would have been adopted if prices or price anticipations had been different. (W.I., pp. 461-62)

It could not have been said more simply than this. Walras' fixed coefficient of production assumption was dropped; time was introduced in terms of two periods, present and future, even though he was only concerned with the current week. Hicks analysed the effects of various changes on the production plan. We should mention that only one price was allowed to change at a time, the others remaining constant. The dynamic aspect of W.I. model consisted of looking at purely notional changes and comparing them to the production plan which was actually adopted. This is similar to the degree of disequilibrium noted above (p. 8).

In W.I. paper, Hicks considered a simple bread model which was expressed in real terms. Not much was said about capital. Money was mentioned briefly at the end and its introduction did not seem to have really affected his bread model. Hicks did not elaborate on the impact of introducing money except to raise some questions and assumed that, "they do not look unanswerable." (W.I., p. 468)

However, since Hicks was only concerned with the study of a single period and furthermore since his 'week' period was assumed to be in equilibrium the role of money in the model and the dynamic aspect of his analysis become dubious. Money, he earlier said, did not belong to the equilibrium theory, whereas now it is discussed together with equilibrium concepts. The week period device is designed in such a way as to ignore all changes and assumed perfect foresight in a particular way; individuals acted as if their expectatins were right. Hicks' dynamics is reduced to a comparison of different equilibrium states when prices are different. Indeed the main ideas of W.I. will be integrated into V.C. and Hicks was progressing step by step toward a more formal General Equilibrium model.

Hicks explicitly admitted that he was influenced by Keynes and said that "the latter half of this book (V.C.) would have been different if I had not had **The General Theory** at my disposal when writing." (V.C., p. 4). Since **The General Theory** appeared before V.C., because of Hicks' involvement in reviewing, it would be wise to begin by attempting to explain how Hicks understood Keynes, and the kind of influence to which he was referring. Is this impact of Keynes any more special than all the other authors who had influenced Hicks?

HICKS ON KEYNES¹⁷

Hicks has never denied the influence of many economists, nor did he deny Keynes's impact on him. With this attitude in mind, Hicks' approach to **The General Theory** was to consider what Keynes had said that was different or similar to what was already known.

Hicks' first reaction to **The General Theory** was to refute its generality; he simply referred to it as the theory of employment. He

accepted that it was a new theory of unemployment; it was a general Marshallian theory of output (not to be confused with the general term in Walras' sense), it was a shifting equilibrium theory, and finally, an integrated monetary theory. Nevertheless it "proclaims the necessary equality of savings and investment." (K.T.E., p. 238) This should be understood not in the static world but in a changing economy, and in, "Mr. Keynes' method - even in a changing economy, supply and demands are equal" where unsold stocks were held over for the future and "current supply is then largely determined by people's willingness to hold goods over for the future, and that depends on their expectations for the future." (K.T.E., p. 239) Hence, it was possible to use equilibrium analysis in a world of disequilibrium. Presenting Keynes' work in this form allowed Hicks to state that it was not a new discovery, but that the Swedish economists and he himself had already looked at the use of this type of equilibrium method in a disequilibrium situation.

The point of the method is that it reintroduces determinateness into a process of change. The output of goods and the employment of labour, together with the whole price-system, are determined over any short period, once the stock of goods existing at the beginning of the period, is given, and once people's expectations of future market conditions are given too...The method is thus an admirable one for analysing the impact effect of disturbing causes. (K.T.E., p. 241)

Keynes' method, thus was similar to the hypothetical changes which he analysed in the "W.I." article. Hicks believed that Keynes' theory of expectations was not quite satisfactory. Hicks made a distinction between his general method of expectations and Keynes' "special theory" of short and long term expectations. Their difference seems similar to that of Marshall and Walras. Hicks wrote

...the modern reader of Walras' *Éléments d'économie politique pure* is struck by its affinity...with that of Marshall...Walras and Marshall go together; and when they separate, it is a difference of interests, rather than of technique, that divides them...they each tell us that Cournot showed them how to use the differential calculus in economics. (L.W., pp. 338-339)

Walras and Marshall used the same methods to analyse economic issues. Hicks went on to explain how Walras' methods of looking at this problem were more general, whereas Marshall confined himself to his partial analysis. According to Hicks, Keynes used Marshall's method and divided his economy into two industries (capital goods and consumer goods). By making the capital industry depend on the long term expectations, Keynes could apply Marshallian analysis to the consumer goods industry. It was, in this sense that Hicks believed that Keynes' theory was not general while his, on the other hand, which was Walrasian, was more general.

ON INTEREST

The Keynes' view of the rate of interest determined in the money market had also been proposed by Hicks who remarked that others had also taken

this view: "This monetary character of interest is, of course no novelty; it has been generally recognized at least since the time of Wickseil." (K.T.E., p. 245) Hicks thought that to determine the interest rate one could use either the loanable funds theory, or "the equation of the demand and the supply for money. If we do this, the equation for loans becomes otiose, automatically following from the rest. 'Savings' and 'Investment' are therefore automatically equal." (K.T.E., p. 246) According to Walras' law, when all the markets, save one, were in equilibrium, the remaining one would be necessarily in equilibrium. Hicks claimed that this was Keynes' method which was also what he himself had done in the 1935 W.I. paper. Whether this was Keynes' intent is not relevant at this stage.

From Hicks' point of view, he and Keynes analysed the same market. In his 1935 model, Hicks had four markets. Keynes' **General Theory**, Hicks observed, had "the market for goods, the market for bonds, and the market for money." (A.E., p. 142) There was also the market for labour. Any one of these four markets could serve as a numeraire; hence its price would be taken to be unity. There are three equations of supply and demand left to determine the corresponding three prices. Except, for the fact that one of the prices was now fixed, Keynes was proceeding in the same way as Hicks. Since there is excess supply in the labour market (supply was greater than demand) it is demand which would effectively be observed.¹⁸ The remaining two prices would be determined by their corresponding equations of supply and demand. Thus Keynes still had supply and demand equality in all three commodity markets, and it automatically followed that the numeraire market was in equilibrium. In Keynes' case, to be more precise, he still had four markets in which to determine two prices and one quantity. To Hicks, the IS-LM device was simply a graphic convenience which,

...could represent that as a three-way model, in which there is just one price (P_D which becomes the rate of interest) that is determined on a flexprice market, and one quantity which plays the part of D_a (demand for labour). (A.E., p. 144)

It appeared that Hicks' objective was quite obvious. According to him, he already had made up his mind on the matters raised in **The General Theory** before its publications. He was very pleased to discover that Keynes was using an equilibrium technique to explain a disequilibrium situation where expectations have a role to play, a method he himself had started to construct. More importantly, from his point of view, he showed that Keynes' theory was only a special case of his own general theory which began with the "Dynamics" paper. We believe that his review of **The General Theory** was written in the hope of strengthening his own position.

Unfortunately the result was not as Hicks had expected; we think that something is wrong with the way that the economic profession interprets Hicks' contribution. From a theoretical point of view: either Hicks missed Keynes' point and consequently misinterpreted him totally, in which case Hicks' argument should have been rejected completely, or (as it seems the case in the profession) having accepted Hicks' argument, it was clear from his writing that it was not Hicks who was Keynesian but Keynes who was Hicksian. It is astonishing that, even lately some persist in saying that "Hicks was, from the late 1930's onward, a wholehearted Keynesian."¹⁹

From this reconstruction of Hicks on Keynes, we can state the following: we believe that Hicks' interpretation of Keynes' theory affected economists' perception of Keynes' general dynamic approach to economics. Hicks made Keynes' theory of expectations and the use of equilibrium resemble that of the Swedish economists, and that of his own. He tried to justify the theory that the interest rate was to be determined in a Walrasian General Equilibrium model, and presented Keynes' work in the IS-LM fashion. He associated Keynes with Marshall and assumed that Marshall's approach was less general than that of Walras. Hicks had made Keynes' analysis appear as a special case of his own General Equilibrium theory. Of course, this is no longer Hicks' stand.²⁰

We have explained how despite the various on-going discussions which took place in Cambridge and despite his friendship with Robertson, Hicks seemed to have in the 30's, developed his own independent framework based, in particular, on the work of Walras and Pareto. In the 30's Hicks made little effort to understand Keynes' contribution but was more concerned to show that Keynes' theory was less general than the theory he proposed.

It seems that the ingredients of his **Wages and Interest** and the ensuring IS/LM construct constitute a technical device which have diverted attention from some fundamental theoretical issues such as the notion of equilibrium, the role of expectations, the distinction between stocks and flows, the notion of money, the implication of price rigidity, the treatment of information and so on. We believe that the way these questions are tackled in the IS/LM framework are methodologically not compatible with Keynes' approach. Lately on more than one occasion Hicks strongly expressed reservations about his IS/LM apparatus and doubted very much whether it could be used to interpret Keynes' theory.

ABBREVIATIONS

"Marginal Productivity and the Principle of Variation" (1932)	M.P.P.V.
"Equilibrium and the Trade Cycle" (1933, 1980)	E.T.C.
"Leon Walras" (1934)	L.W.
"Wages and Interest: The Dynamic Problem" (1935)	W.I.
"Mr. Keynes Theory of Employment" (1936)	K.T.E.
<u>Value and Capital</u> (1939)	V.C.
<u>Economic Perspectives</u> (1977)	E.P.
"IS/LM: an explanation" (1981)	A.E.

All the above articles were reprinted in Hicks' Collected Essays, Cambridge: Harvard University Press, vol. I (1981), vol. II (1982), and vol. III (1983).

FOOTNOTES

- (*) In this paper we are not interested in the technical aspect of the IS/LM diagram. We are mainly concerned with the period which preceded the proposed device and with Hicks' Walrasian preparation which led him to the conception of the IS/LM and to **Value and Capital**. We would like to thank Professors Tom Asimakopulos, E.F. Beach, G. Caravelis, G.C. Harcourt and J.C. Rowley for their comments on the original draft of this paper. I am much indebted to Professor I. Rima for her encouragement and suggestions.
- (1) "IS/LM: An Explanation", **The Journal of Post Keynesian Economics**, 1980, pp. 989-95. See, also, W. Young's book on the origins of the IS-LM (forthcoming).
- (2) A Leijonhufvud, **Information and Coordination** (1981) ch. 8 and "What was the matter with IS/LM?" in J.P. Fitoussi, (ed.) **Modern Macroeconomics**, Oxford (1983). A. Leijonhufvud, "Hicks on Time and Money" and R. Solow, "Mr. Hicks and the Classic", **Hicks' Lecture**, in D.A. Collard and al., (eds) **Economic Theory and Hicksian Themes**, Oxford 1984.
- (3) See Hicks and Keynes correspondance especially Keynes' postcard, dated Dec. 24, 1934 (E.P., p. 142).
- (4) R.F. Harrod, **The Life of J.M. Keynes**, MacMillan, 1951, p. 422.
- (5) In the **Economic Journal** of March 1930.
- (6) Gunnar Myrdal, **Monetary Equilibrium**, William Hodge and Co. Ltd., English translation, 1939.
- (7) R.F. Harrod, **The Life of J.M. Keynes**, op. cit., p. 435-436.

- (8) Ibid, p. 451-52.
- (9) The essential ideas developed in **Value and Capital** are found in "Marginal Productivity and the Principle of Variation," 1932; "Equilibrium and The Trace Cycle," 1933; "Leon Walras," 1934; and "Wages and Interest: The Dynamic Problem," 1935.
- (10) "A Suggestion for Simplifying the Theory of Money", **Economica**, Feb. 1935, pp. 1-19, constituted what Hicks believed to be his own version of the Liquidity Preference. See his comment in "IS-LM: an Explanation," 1981.
- (11) G.L.S. Shackle, **The Years of High Theory**, Cambridge, 1967, p. 93.
- (12) "The Theory of Uncertainty and Profit," 1931.
- (13) "Marginal Productivity and the Principle of Variation," "A Reconsideration of the Theory of Value," Part I and II, and "Leon Walras," op. cit.
- (14) H. Schulz' comment, **Economica**, 1932, p. 285-296.
- (15) Hicks' reply, op. cit., p. 299.
- (16) in **Éléments d'économie politique pure**, Ed. def. Paris, 1952, p. 44.
- (17) In this section, we try to explain what we believe to be Hicks' interpretation of Keynes' **General Theory**. The fact that we do not elaborate on this interpretation of Keynes does not mean that we necessarily share Hicks' viewpoint.
- (18) In Hicks' words, "The actual amount sold will be equal to the demand or to the supply, whichever is the lower...If it turns out that at these prices $S_a D_a$, it is only D_a that can actually be traded. When calculating S_x and D_x (x for numeraire), we must use this actual D_a for both D_a and S_a . With that substitution, we have $S_x = D_x$, as before", "IS-LM an Explanation," op. cit., p. 143. As we can see, Hicks tried in his interpretation of Keynes to preserve the Walras law, and treated the labour market just like any other commodity market. Whether this was Keynes' intention remains questionable.
- (19) A. Coddington, "Hicks' Contribution to Keynesian Economics." **Journal of Economic Literature**, 1979, p. 971.
- (20) See, for instance, his **Critical Essays**, 1967, p. 154 or his "Some Questions of Time in Economics," 1976, p. 141.

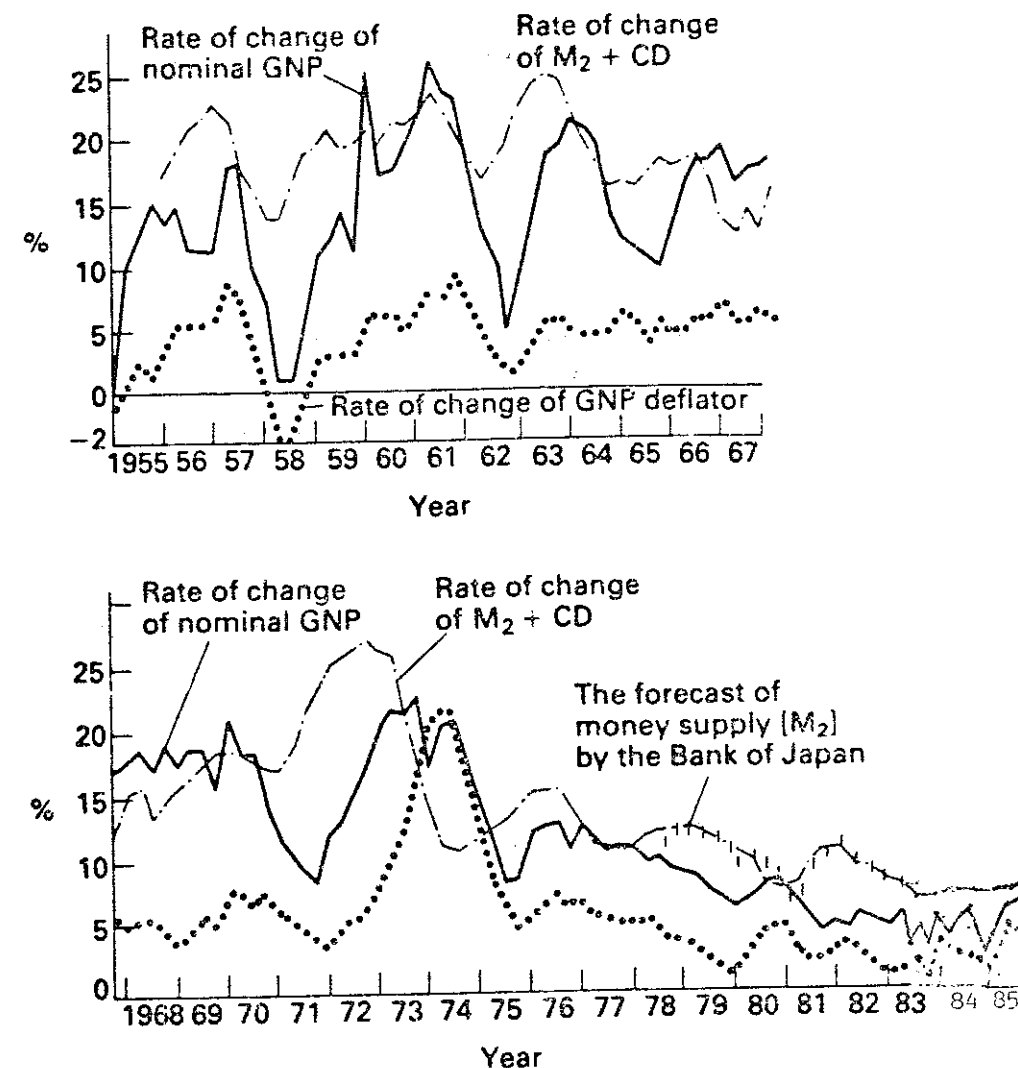


Fig. 2: The growth rate of money supply

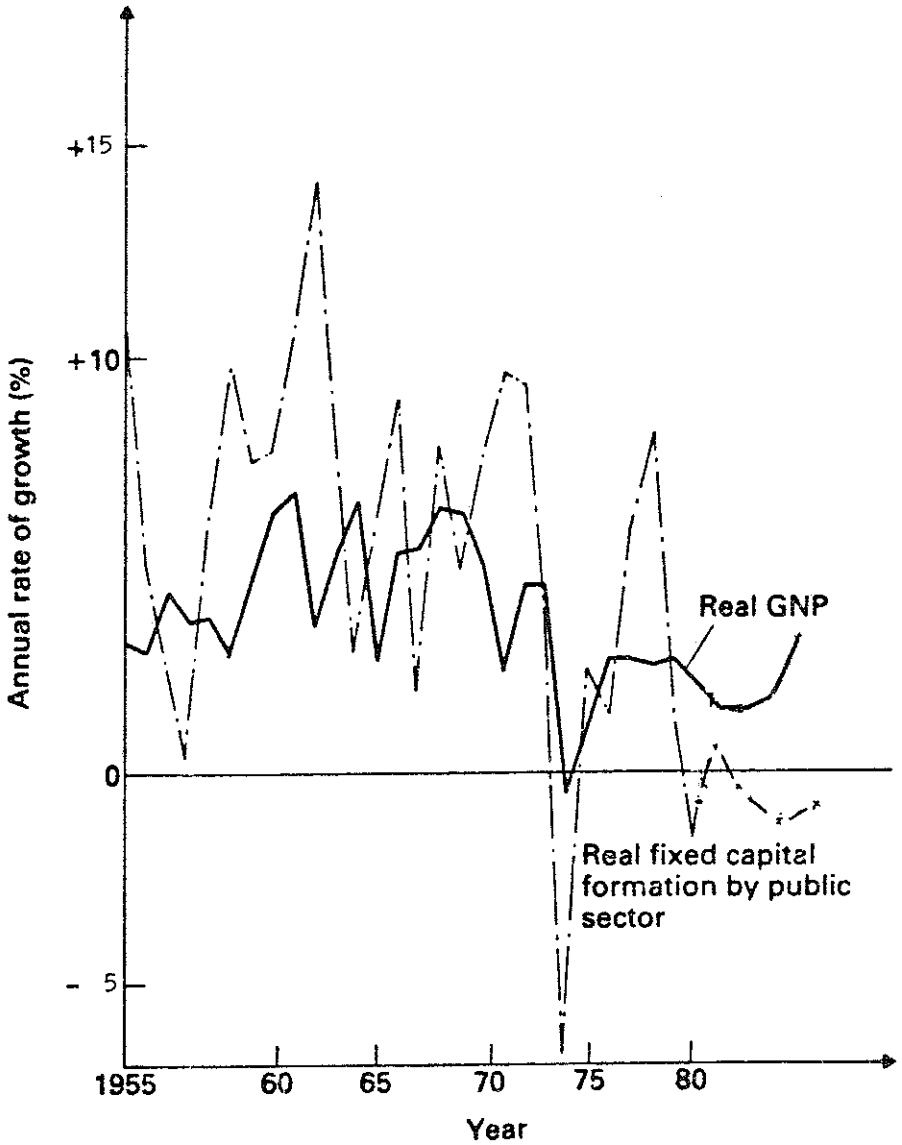


Fig. 1: The relationship between the annual rate of growth, real GNP and real fixed capital formation