The Economics of John Hicks

SELECTED AND WITH AN INTRODUCTION BY DIETER HELM

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Introduction

The essays that are included in this book are a selection from those that have been written by John Hicks over the last half-century. His economics has been predominantly, but not entirely, theoretical. His theories have nevertheless been constructed with an eye to application; he has continually been asking himself, What is this piece of theory for? He has accordingly been willing to work in many departments of theory, and on each of them he has made his mark. They include demand theory, the formulation of modern welfare economics, general equilibrium, monetary theory, growth theory and the theory of the cycle. His reformulation of the core of Keynes' *General Theory* is a familiar element in economic teaching.

Nevertheless, despite the breadth of his contribution, there is no Hicksian theory in the same way as one can speak of a Ricardian or Marxian theory. He has always moved on, never satisfied with his theory, always conscious of improvements and of different angles with which a problem could be viewed, and always conscious of changing institutions with the passage of time. What, however, is common to his work is the Hicksian method. It is not obviously a constant, yet the careful reader may detect it. And for the modern economist it is a method which is in danger of being lost, at least temporarily. In essence it is in the shaping of tools to be specific to the problem at hand.

There has not as yet been a spate of articles on Hicksian economics. Comments are mainly to be found in reviews of his work, and in specific theoretical developments. Furthermore, many such comments on Hicks' overall contribution, rather than individual responses to books, have been, to a certain degree, misguided to the extent that they have looked for and searched out disunity in the implications of the various Hicksian theories, rather than focusing on the method. The earlier work culminating in *Value and Capital* and divided off by the Second World War has been compared and contrasted with the work of his later post-war years, and writers have frequently been concerned to defend one or the other, but not both.

In the process rather gross simplifications and aggregations have been made, without due attention being directed towards the complex changes and alterations. Alternatively, reviewers have concentrated on those areas which suit their own opinions, and ignored other areas of Hicks' work more hostile to themselves.

Perhaps it is too early to place Hicks within the framework of the history of economic thought; perhaps the controversies should be allowed to settle. Yet one has the feeling that it will never be so, that his ideas have been and remain so central to economic theory that the disputes will go on indefinitely. But the one aspect which should be brought to more general attention is the diversity of Hicks' subject matter and the characteristic approach mentioned above. It is surprising that many students are aware only of his contribution to a specific area – to Keynesian economics, or welfare, or demand theory as examples – but not to others. Few students are now aware for example of the pioneering papers on real-income measurements. Many welfare economists know little of the Hicksian theory (or rather theories) of the demand for money. In part this reflects the direction towards specialisation within the subject.

This selection represents an attempt to bring that diversity of interest together within a single volume. In this introduction, some of the breadth of the contribution is presented, in chronological fashion, as well as a flavour of the methodological considerations.

Hicks' first work pre-dated his consumer theory by several years. In the tradition of the late 1920s when economic theory had not really gained the prominence that it has today, he began by looking at an industrial case study, which was published as 'Wage Fixing in the Building Industry' in 1928. It formed the non-theoretical background material for his first book, *A Theory of Wages* (1932). It was under the influence of Lionel Robbins at the LSE that he turned to theory, and in the theoretical discussion of wages he presented the production function and associated marginal productivity theory, a traditional view about which he was later to have severe doubts. The book represented a curious mixture of early influences; first Pigou, then Walras and finally Hayek. The results in the book were modified in his 'Wages and Interest' paper, which appeared just prior to Keynes' *General Theory* in 1935. This paper addressed a non-Keynesian question: it considered what would happen if real wages, rather than money wages, changed. The relation between the book and the article is not straightforwardly obvious, and this relation represented a difficulty to which Hicks returned much later, armed with various growth models and his 'Methods of Dynamic Analysis', in the 1963 commentary to the second edition of the *Theory of*

Wages, and in his *Crisis in Keynesian Economics*. The issue turns on whether a change in real wages leads to a positive or negative change in the interest rate (real); the book being concerned with the long-run effects and the article with the short-period effects.

If the theory of wages was one major component of his work prior to the publication of Keynes' *General Theory*, the general problem of the theory of value was perhaps the most important. It is the theoretical issue that still confronts all who come to economics: why do people attach the value to the things that they do? The Classical political economists had sought for an explanation in terms of costs and supply; their successors in terms of demand, and of preferences. Thus the focus had shifted towards exchange, and away from the Classics' concern with production and distribution. Indeed without the labour theory of value, it is quite difficult to consider value exclusively based on production. The cost approach to value, as opposed to technical efficiency, is unworkable. The insight which Hicks brought to value theory was comprehensive, and consisted of three stages - the 'Theory of Value' papers written with Roy Allen in 1934, *Value and Capital* in 1939, and *A Revision of Demand Theory* in 1956. In the first and most important of these contributions (essay one), there were in particular two advances: (a) the demonstration that the elasticity of substitution used in production theory by Joan Robinson had a parallel in consumer theory, and (2) the distinction of the income and substitution effects and the presentation of the fundamental formula clear of any reference to cardinal utility.

That Pareto had already managed to dispense with cardinality, and that Slutsky had already (though unknown to Hicks) derived results similar to Hicks and Allen does not detract from the importance of their papers. It is perhaps sometimes difficult for the modern student to see just how important the removal of cardinality was. Producing a similar result with one less assumption may be rather abstract; yet without that advance modern demand theory would have been much more objectionable. As Hicks put it in *Value and Capital*: 'Thus we can translate the marginal utility theory into terms of indifference curves; but, having done that, we have accomplished something more remarkable than a mere translation' (p. 17). Substitution and income effects could be identified without recourse to measurable utility. Indifference curves could be used to represent preferences, and the marginal method retained by the use of a ratio of marginal utilities, rather than an abstract cardinal marginal utility. The question, What would have to be true of preferences in order that stable downward sloping demand curves could be derived from them?, is the central

issue of the theory of demand, and to demonstrate formally that an assumption deemed to be both necessary and at the same time so informationally demanding as to be unrealistic, was in fact redundant to the derivation of that result, was of unique importance. Interpersonal comparisons, rejected by Robbins,[1] were naturally untenable to an ordinalist.

The method of the margin had been in use for a long time – since Jevons, Walras and Menger independently set in motion the so-called marginal resolution of the 1870s. What Hicks achieved was a demonstration of just how powerful that method was. For although Hicks takes Marshall's consumer theory, employs Pareto's ordinal assumption, and then rigorously works out the implications, it is important to note that his development and orientation was not Marshallian, as Keynes' was, though he was careful to point out the relation between his own theory and that of Marshall. For Hicks, the line ran from Pareto to Walras and Edgeworth, a very different tradition, but one associated with the Robbins Circle[2] at LSE in the late 1920s and early 1930s. This group, the only one of which Hicks was ever a member, developed with the appointment of Lionel Robbins as Head of Department in 1929, and, besides Hicks, included amongst its members Allen, Sayers, Kaldor, Lerner, Shackle as well as Marian Bowley and his future wife, Ursula Webb. Hayek arrived somewhat later, though his impact on the group was, next to Robbins, the most profound. It was while a member of the Robbins Circle in the 1930s that Hicks produced most of his micro-theoretic work. He realised the power of his method, and its scope. One year after his famous 'Theory of Value' papers with Allen, he saw that the theory of money was amenable to the same method. To modern eyes, the two are somewhat apart – the one an issue in micro-economics, the other of macro. Yet it should be remembered that to value theorists of the eighteenth, nineteenth and early twentieth centuries, to explain the 'value' of something was intimately linked to explaining the *money* value at which it exchanged. A theory of money was naturally related to the more fundamental theory of value. Indeed as early as Adam Smith, in the first book of the *Wealth of Nations*, we find just this combination.

The background to this first paper on money, 'A Suggestion for Simplifying the Theory of Money' (essay 7 below), is, however, not

[1] Robbins gives his reasons explicitly in 'Interpersonal Comparisons of Utility', *EJ* (1938).

[2] See on the history of the group, as yet surprisingly little researched, Hicks himself 'The LSE group' in *Wealth and Welfare, CEET* I (1981), and Robbins *Autobiography of an Economist* (1971).

confined to the theory of value; Hicks had already written on the theory of risk, and on the theory of cycles. The paper suggests how one might use the same methodology as in value theory, but for both macro and micro behaviour. Hicks had never been keen on the divide, and to that extent the modern debate of the 1960s and 1970s on 'microfoundations' was out of tune with his work. To the extent that there was a reconciliation to be effected, Hicks was already addressing it in the 1930s, though from an individual point of view. Indeed what the 'Simplifying' paper does is to take the central concepts of his utility theory and apply them, with careful modifications, to the theory of money.

When combined with 'Wages and Interest' it can be seen that Hicks had, by 1935, and prior to Keynes' *General Theory*, reached his theoretical position with respect to the issue which was to divide Keynes from Robertson; the loanable funds and demand for money determination of the interest rate, and the relation between these two approaches. Indeed by 1935 Hicks already had three key components of his monetary theory: (1) the balance-sheet method, (2) that the choice of assets is one between probability distributions, and (3) that transactions costs are significant. Hicks' liquidity motive was not the same as that of Keynes' (even in his *Treatise on Money* formulation), because while the latter approach depended primarily on uncertainty, for Hicks transactions costs and their marginal impact on choice are also included. It was not well worked out in the 'Simplifying' paper; but it was there, and its presence is important to an understanding of his reaction to the *General Theory*. It was not until the 'Two Triads' that the theory was fully articulated, of which more below.

He had this work behind him when the *General Theory* appeared. His reaction to it has become part of the received tradition, and was accepted by Keynes and many, but by no means all, of his followers.[3] He was uniquely placed to interpret Keynes. He was not of the classical tradition which Keynes portrayed in such an uncompromising and crude formulation in the opening chapter of the *General Theory*. He understood value theory, he had worked on the labour market and the behaviour of wages, he had written with much originality on money, interest, risk and cycles, and he had already read and reviewed Myrdal's *Monetary Equilibrium* (1934). Most of all he faced what was and remains an undoubtedly difficult, confused and 'impressionistic' book with a clear analytical mind.

[3] For example, in Harrod's *Life of Keynes* (1951), Hicks receives one obscure footnote only. Since Hicks' interpretation has already become a standard one, this is odd in the extreme!

In his first published comment, 'The General Theory: A First Impression', he states at the outset the differing temptations (into which many subsequently fell) in approaching the book, and chose a typically Hicksian approach. He wrote:

> The reviewer of this book is beset by two contrary temptations. On the one hand, he can accept directly Mr Keynes' elaborate disquisition about his own theory, and its place in the development of economics; praising or blaming the alleged more than Jevonian revolution. Or, on the other hand, he can concentrate upon investigating these disquisitions, and tracing (perhaps) a pleasing degree of continuity and tradition, surviving the revolution from the *ancien régime*. But it seems better to avoid such questions, and try to consider the new theory on its merits.

What did Hicks make of the new theory in his first attempts at reviewing it? Analytically he broke down its components in a fashion that would enable the Keynesian theory to be compared and contrasted with the position that it purported to attack, the Classical view. That is the origin of the famous, or perhaps infamous, *IS–LM* diagram of the second review, 'Mr Keynes and the Classics' (essay 8 below). The *IS–LM* framework was the tool of such a comparison; it is an expository device. It did not and does not represent Hicks' view; in this regard the 'Simplifying' paper is much more his.

From the first, Hicks did not accept the generality which Keynes claimed for his theory. Indeed if we were to do so, the *IS–LM* framework would not capture the analytical differences between Keynes and the Classics. Again in the 'First Impression' he writes:

> The new theory is a theory of employment, in so far as the problem of employment and unemployment is the most urgent practical problem to which this sort of theoretical improvement is relevant. It is a theory of output in general *vis-à-vis* Marshall, who took into account many of the sorts of complications which concern Mr. Keynes, but took them into account only with reference to a single industry. It is a theory of shifting equilibrium *vis-à-vis* the static or stationary theories of general equilibrium, such as those of Ricardo, Bohm-Bawerk or Pareto. It is a theory of money, in so far as it includes monetary theory, bringing money out of its isolated position as a separate subject into an integral relation with general economics.

It is interesting to contrast this method of approaching the new book with those of others. Note three approaches in particular. One, led by Pigou, attempted to show how the old could in fact be preserved and buttressed against Keynes' attack. It tried to show that there was in fact nothing general about the 'general' theory, that it remained an

interesting special case with inflexible or 'sticky' wages. While Hicks was prepared to accept that the 'general theory' was not general, equally he was not prepared to accept that the Classical position was either, and attempted, with the *IS-LM* framework, to provide a means of capturing both. The Pigouvians, however, wanted to reduce Keynes to a special case of their own theory. A second reaction took one aspect, namely the uncertainty surrounding the formation of expectations, as *the* theory, and neglected the rest. These so-called 'chapter 12 Keynesians' chose this chapter ('The State of Long Term Expectation'), which was inconsistent with the rest of the book, and developed it. In doing so they developed what at least some have seen as a nihilistic theory, whereas Hicks argued that since future events were unpredictable, one should employ the expectations formed about these variables as given data. In this he anticipated recent interpretations of Keynes,[4] that expectations are assumed to be exogenous.[5] The uncertainty theorists failed to perceive the inconsistency of the 'general theory'. The third approach has been relatively neglected. In the 1930s much debate centered not so much on the Classics' response, but on the relative merits of Hayek's theory as against that of Keynes. In his lectures on *Prices and Production* Hayek had considered an Austrian model in perfect foresight equilibrium except for the money market, which was allowed to deviate from its equilibrium levels. Policy could, however, be directed towards restoring equilibrium in that one deviant market, thereby rendering money neutral.

Hicks' approach took the essential component theories, and attempted to see what would happen if they were put together into a general framework. In order to do so, the Hicksian 'week' is introduced, which is not quite the same as the Keynesian short period, in that it is more restrictive. The Hicksian week assumes an equilibrium, a temporary equilibrium. A particular type of market separability is also assumed, and the diagram which has become so universal arises out of a mathematically convenient exposition. But as Hicks later realised, that temptation has not had uniquely good consequences. He returned later in a series of stages to say some fairly critical things about his own construction. Indeed he was to regard it as his own

[4] See for example Begg, D. *Rational Expectations, Wage Rigidity, Involuntary Unemployment, OEP* (1982), developing rational expectations models of Keynes' theory. Hicks, for other reasons, would not endorse the rational expectations approach.

[5] Keynes theory of probability admitted many kinds of uncertainty and hence both numerical and non-numerical probabilities. Hicks cut through all this by assuming the simplest case - exogeneity.

albatross.[6] His mind moved on, while the profession remained surprisingly static. The *IS-LM* framework was, as we pointed out above, a tool of exposition, not Hicks' theory. Alan Coddington expressed Hicks' position as two fold:[7]

> We see Hicks as both one of the most severe critics of Keynes' own analysis *and* as one of the most rigorous and persistent of those who have tried to refine and strengthen the basic ideas that emerged from the controversy instigated by Keynes.

The continual revisiting of the *General Theory* occupied much of Hicks' post-war work. In particular he returned to a restatement of the Classics' position in his paper 'The Classics Again', in *Critical Essays in Monetary Theory*, and attempted to gain a more continuous view of theoretical development and change in his reflective article on 'Monetary Theory and History' in *EP*. He argued at this later stage that it is the short-run classical view, rather than the longer-run general equilibrium model, to which the *General Theory* should be compared. The revisiting also reflected his renewed concern with the alternative theories of Wicksell and Hayek.

With the *General Theory* behind him, what may be regarded as his greatest work, *Value and Capital*, was completed and published in 1939. It was perhaps an odd time to produce a book like that, but the contents represented 'unfinished business'.[8] In a manner which the *General Theory* of Keynes had failed to achieve, Hicks tried in this book to bring the strands of this thought together. It was more successful intellectually – it laid the foundations for general equilibrium theory and its mathematical exposition in the post-war period by Samuelson, Arrow, McKenzie and Debreu – and it made his name; in the sense that it stands as one of the central books of twentieth-century economics. As Harrod wrote in 1939:[9]

> Professor Hicks, his place in the first rank of economic theorists long since secure, establishes by this volume his claim to admission to a narrow circle – the economists with a distinctive and distinguished style of writing. Take up any page of Pigou, Macgregor, Keynes, Robertson; you do not need to be told the author. And, henceforth, I think that Hicks' manner will be unmistakable.

[6] See '*IS-LM*: an explanation', essay 10 below.

[7] Coddington, A. 'Hicks and Keynesian Economics', *JEL* (1979).

[8] Hicks wrote in the Preface to First edition: 'The ideas on which this book is based were conceived at the London School of Economics during the years 1930–5.'

[9] *EJ*, p. 294, Review.

It is a rigorous book, taking the maximising principle through its paces. The first part of the book, on consumer behaviour and general equilibrium, is essentially static, and works out in the tradition of Walras and Pareto the ordinal theory of demand and the static general equilibrium model. The second part derives more from the tradition of Myrdal and Lindahl and represents Hicks' first full attempt at the theory of dynamics. However, in so far as the assumption of instantaneous adjustment is restrictive, in an important sense this first attempt fails to be fully 'in time' and was to be later more fully dynamised.

Value and Capital is sometimes misrepresented as an attempt to bridge the gap between micro and macro propositions, in a comparison between it and the *General Theory*. However, a much more reasonable interpretation would be as an attempt to bridge the gap between statics and dynamics, and in particular to extend static methods to dynamic cases. Just as consumer theory had been unrealistic in employing cardinality assumptions, so economic theory was in general unrealistic in being 'out of time'. *Value and Capital* should be perceived more as an attempt to drop the latter assumption. Dynamics[10] is defined here as economic theory under which 'every quantity must be dated' (p. 115, 1st edn). For Hicks, consumer theory in particular (but also production and monetary theory) is always a micro theory[11] in as much as it is given an optimising foundation based ultimately on individualistic explanation. Methodological objections to the practice of econometrics, best expressed for consumer theory in his *A Revision of Demand Theory* (1956), imply that the standard of judgement as to the realism of a theory must reduce to some kind of intuition, reminiscent of Hayek's view as expressed in 'Economics and Knowledge'.[12] Maximising behaviour is a characteristic for Hicks of the making of choices; in that sense it is *a priori* true, but its truth is also argued to derive

[10] Harrod offers a different definition in 'An essay in dynamic theory' as an economic theory of the constant and varying rate of change, (*EJ*, 1939). Hicks was later to combine the two versions in *A Contribution to The Theory of the Trade Cycle* drawing on Harrod's relationship between the accelerator and the multiplier. The problem with the Harrod approach, but not with Hicks', is that on Harrod's definition there is no room for short- and long-run periods; yet these represent very real problems for decision-makers. Harrod then has, on this definition, no period, and avoids precisely the problem of linking the periods together.

[11] Hicks has no macro consumption function as Friedman has, though of course he spawned it. See essay 2 below.

[12] *Economica* (1937), pp. 33–54; reprinted in his *Individualism and Economic Order* (1948).

from intuitive appeal. There can be no micro/macro distinction for Hicks: macro propositions cannot be allowed to float without foundation. He is never to be found picking out observations, in the manner of Keynes, such as 'a man's habitual habits having first claim on his income' or, in the long run, 'as a rule, a greater proportion of income (will be) saved as real income increases', without first deriving the result from simple principles. These have to be explained within the framework of rational behaviour. *Value and Capital* is completed by a mathematical appendix in which the amenability of the arguments in the book to this type of reasoning is demonstrated. But it is more than that; mathematical argument is used to prove the generality of the propositions to n commodities. It is the appendix where Hicks demonstrates the general equilibrium method to its full potential.

But *Value and Capital* should not be read as an uncritical exercise in the foundation of general equilibrium. Hicks was well aware of its limitations, and well aware of the cost of imposing the required assumptions. In discussing the fundamental problem of increasing returns to scale, he recognises that: 'it seems to be agreed that this situation has to be met by sacrificing the assumption of perfect competition' (p. 83), since the introduction of monopoly elements raises price above marginal cost. But he goes on to point out that:

> it has to be recognised that a general abandonment of the assumption of perfect competition, must have very destructive consequences for economic theory. Under monopoly the stability conditions become indeterminate; and the basis on which economic laws can be constructed is therefore shorn away. (pp. 83-4)

It is worth quoting at length the arguments which Hicks uses to defend the continuing use of his assumption:

> It is, I believe, only possible to save anything from this wreck - and it must be remembered that the threatened wreckage is that of the greater part of general equilibrium theory - if we can assume that the markets confronting most of the firms with which we shall be dealing do not differ very greatly from perfectly competitive markets. If we can suppose that the percentages by which prices exceed marginal costs are neither very large nor very variable, and if we can suppose (what is largely a consequence of the first assumption) that *marginal* costs do generally increase with output at the point of equilibrium (diminishing marginal costs being rare), then the laws of an economic system working under perfect competition will not be appreciably varied in a system which contains widespread elements of monopoly. At least, this get away seems well worth trying. We must be aware, however, that we are taking a dangerous step, and probably limiting to a serious extent the problems with which our subsequent

analysis will be fitted to deal. Personally, however, I doubt if most of the problems we shall have to exclude for this reason are capable of much useful analysis by the methods of economic theory.

With hindsight, I suspect the conclusion would be revised. But it is important to realise the context: the alternative was the theory of imperfect competition which debateably did not get the economist very far. Modern theories of oligopoly were not then available, and it should not be forgotten that many of these turned out to be indeterminate. Hicks' requirement then, but perhaps not now, was determinateness of theory.

Much of the subsequent criticism of the neglect of increasing returns not only ignored the defence Hicks used for his perfect competition assumption, but also his attempts at that time to tackle it. For in 1939 his 'Foundations of Welfare Economics' appeared (essay 5 below), explicitly dealing with this issue, and his work on measuring real social income – his Valuation papers (essays 3 and 4 below) – explicitly face this issue by splitting the approach into cost and utility classifications.

Welfare economics had emerged with the marginal or Jevonian 'revolution' as the central concern of applied economics. But the aspects of public policy which it considered were concerned with partial adjustments in the system rather than with aggregate policy. To that extent, not only did Keynes attempt to dispute received theory, but he also tried to change the issues which it had sought to address. Keynes never wrote or concerned himself with the problems of welfare theory in the manner of Pigou. In contrast Hicks (along with Kaldor) did so, and with characteristic brilliance perceived first that the difficulties of Pigou's definitions could be replaced by the employment of the concept of Paretian optimality. Pigou was concerned not with welfare in general, but with a more restricted 'economic welfare' concerned with that which could be included under 'the measuring rod of money'. Hicks, following Pareto, was less restrictive; ordinal theory was built on a set of preferences which obeyed some minimal consistency criteria. It did not matter as it did to Pigou what sort of preferences were included. Later, in 'Preference and Welfare' and 'A Manifesto' (combined as essay 6 below) he was to call the Pigouvian tradition 'welfarist'.[13]

[13] The term welfarist, and its implications for the Paretian tradition, has subsequently been taken up in Amartya Sen's work. See in particular 'Personal Utilities and Public Judgements', *EJ* (1979), and 'Utilitarianism and Welfarism', *Journal of Philosophy* (1979).

Further to the defining of optimality conditions, Hicks also corrected, or rather extended, the Paretian framework to deal with cases where not only 'at least one person was made better off, and nobody worse off' but also where redistribution was involved; where there were both gainers and losers. It was here, in the case of gains from increasing returns to scale that Hicks tackled one of the criticisms of his *Value and Capital* discussed above. In this respect Kaldor and Hicks arrived at virtually the same solution simultaneously. The New Welfare Economics was an ingenious invention, which preserved with it, via the compensation tests, a modified form of the traditional theory. It was itself not complete without the exclusion by assumption of the Scitovsky case or paradox,[14] in which an agent can satisfy the Hicks–Kaldor criterion in both directions. But the road for future welfare economics was set and laid.

The concern with welfare economics and general equilibrium gained Hicks the Nobel Prize much later. But what passes for the subject today is somewhat different from what Hicks thought the subject should concern itself with. Quite recently, in 'The Scope and Status of Welfare Economics' (1975) (essay 10, *CEET* II) he was to point to the essentially Pigouvian tradition of the measurement of the social product, and its place in the Classical (Ricardo–Mill) thought. The difference between himself and Pigou was with what should and what should not be included in the idea of income. Hicks is quite general, Pigou quite specific. Hicks' methods, as with consumer theory, was to search for new foundations with minimal abstraction. And far from deserting theory to pursue issues of policy, the economists' economist tried to reformulate existing theory as he found it.

Until quite recently, in the dominant years of monetary theory and large-scale models, the interest in the status of welfare propositions has been rather a specialised activity. The Keynesian concerns of unemployment and the monetarist concerns with inflation tend to direct attention away from the more theoretical issues. Often it can seem somewhat bewildering to those new to the subject to have to work through welfare theory, rather than going straight to the 'answer'. Defining welfare changes, and defining real income, may seem curiously academic. Yet it cannot be stressed too strongly that many of the propositions about taxation, about allocation, about redistribution and equality, rest precisely on these abstract considerations; fundamentally on the concepts of income and welfare. Hicks never avoids this theoretical primacy; when the problems of cycles and their stabilisation became of practical concern, he re-

[14] For Hicks' comments on Scitovsky see *CEET* III, essay 11.