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POST KEYNESIANISM: QUITE WRONG AND/OR NOTHING NEW?

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> Those who are stronly wedded to .... "the classical theory", will fluctuate .... between a belief that I am quite wrong and a belief that I am saying nothing new.
>
> (J. M. Keyes, *The General Theory*, p.v)

I

1. My aim in this paper is to attempt to give an overview of, and to sieve out some of the more grandiose claims made for, the body of thought which comes under the general heading of post Keynesianism. I start by saying that I certainly do not think that the approaches that come under the heading of post Keynesianism, though they provide important and substantial insights, have yet reached a coherent steady state. Indeed, the people who come in under this umbrella are a heterogeneous lot, sometimes only combined by a dislike of orthodox or neoclassical economics, all brands, or, at least, their conception of it (them). A characteristic of some post Keynesian writers – no names, no pack drill – is that their positive contributions are superior to their presentation of, and knowledge of, the work of the people which they are attacking and which they are attempting to supersede. Nevertheless, there are enough common strands running through the writings of these people to make it worthwhile to try and pick them out. (In the references at the end of the paper I list the principal sources for this survey essay.)

II

2. First, let me list the main contributors. I start in the U.S.A., not because this is where the movement necessarily originated but because its members are now numerically the strongest, grouped around the *Journal of Post Keynesian Economics* which is enthusiastically and aggressively edited by Paul Davidson and Sidney Weintraub. The U.S. group has its roots firmly planted in Keynesian soil, especially Keynes of the *Treatise* (1931, V, VI) and the *General Theory* (1936, VII) and also the papers that grew out of the *General Theory* – "The General Theory of Employment", (1937a, XIV), "Alternative Theories of the Rate of Interest", (1937b, XIV), "The Theory of the Rate of Interest", (1937c, XIV), and *How to Pay for the War* (1940, XXII). Together with Keynes's influence is also Marshall's, especially his theoretical methods – supply and demand analysis, his way of handling time – which influenced Keynes as well.

3. Davidson and Weintraub are two important names – Davidson especially for his monetary theory, Weintraub for his provision of a

theory of activity and distribution and his (thoroughly Keynesian) stress on the central importance of the money-wage, its level and rate of change, for the functioning of the entire system. Davidson's pupil, Jan Kregel, is also very important, not only for his contributions which are amongst the most substantial and useful, but also because he has strong links with the U.K.–Italian subset and because he tries to built a bridge between these two often unsympathetic groups. Unsympathetic: because, on the one hand, most of the Americans do not want to know about the Classical-Marxian roots which come to the other strands through Piero Sraffa, Pierangelo Garegnani and Krishna Bharadwaj and also through Michal Kalecki and Joan Robinson. On the other hand, the Italian members in particular do not wish to be associated with some of the more, to them, neoclassical vestiges of Keynes's thought, especially in Chapter 17 of the *General Theory,* which is crucial to the structure of the American post Keynesians. (In Chapter 17, Keynes attempted to show how the essential and peculiar properties of money, together with his monetary theory of the rate of interest, were capable of producing an under employment equilibrium.) Again, in the United States, we must mention Hyman Minsky (1975, 1978) for his challenging interpretation of the *General Theory* as an endogenous cyclical process, the outcome of interrelationships between real and monetary factors, and also for his greater tolerance, because of his early Marxist sympathies, towards a Classical-Marxist input into the construction of alternative approaches to orthodoxy. We should also mention the contributions of Donald Harris because he perhaps more than anyone else has been able to combine the Classicals and Marx with Keynes, Kalecki, Robinson, Kaldor and Harrod into a comprehensive framework (see my review, Harcourt (1980), of his 1978 book, Harris (1978)).

4. Now we move to Europe, specifically to Cambridge, England and to Italy. We discuss two strands which are intertwined, though not altogether comfortably. First, there is Sraffa whose life's work has been devoted to a rehabilitation of the Classical method and approach, in particular, to what Garegnani (among others) has called the surplus approach to value and distribution. Around this core there can be placed theories of output and employment as a whole and also theories of growth. (The most comprehensive account of modern classicism, with which is combined a description of its historical roots and a comparison with neoclassical general equilibrium theory, is Vivian Walsh and Harvey Gram's *Classical and Neoclassical Theories of General Equilibrium,* 1980). The method is one which is concerned with the characteristics of long-period positions – those centres of gravitation which in the Classical schema are the chief explanators of the levels of market prices and their movements over time and which result from those elements at work in an economic system which can be regarded as dominant and persistent. To this group, Keynes's revolutionary contribution *must* be a theory of the *long-period* levels of output and employment (around which actual levels would oscillate) to be placed alongside the theories of natural

prices – prices of production in Marx's terms, long-period normal prices in Marshall's. "(B)y long-period is meant not that which occurs in a long period of time but ... that which is determined by the dominant forces of the system within a period when those are constant or changing but slowly" (Eatwell, 1979, p.4). A good example of this point of view in the *General Theory* is Keynes's definition of "the long-period employment corresponding to a [given] state of expectation". Keynes (1936, VII, p.48) writes:

> "If we suppose a state of expectation to continue for a sufficient length of time for the effect on employment to have worked itself out so completely that there is ... no piece of employment going on which would not have taken place if the new state of expectation had always existed, the steady level of employment thus attained may be called the long-period employment corresponding to that state of expectation. It follows that, although expectation may change so frequently that the actual level of employment has never had time to reach the long-period employment corresponding to the existing state of expectation, nevertheless every state of expectation has its definite corresponding level of long-period employment."

Keynes is applying here to the theory of employment, a lesson learnt from his teacher, Marshall, concerning the theory of price: "a normal price ... [is] the price which any one set of conditions tends to produce" (Marshall, 1920, 1961, p.371).[1]

5. It is interesting to note that Meltzer gives a similar interpretation of Keynes in his recent article, Meltzer (1981) – that Keynes was providing a theory of a long-period under-employment equilibrium level of employment and activity, though obviously Meltzer comes at the question from a different starting point and his ideological purposes and policy implications are very different to those of the group under discussion. A key quote for all these writers is from p.254 of the *General Theory.*

> "[W]e oscillate, avoiding the gravest extremes of fluctuation in employment and in prices in both directions round an intermediate position appreciably below full employment and appreciably above the minimum employment a decline below which would endanger life.
>
> But we must not conclude that the mean position thus determined by "natural" tendencies, namely, by those tendencies which are likely to persist, failing measures expressly designed to correct them, is, therefore, established by laws of necessity."

Apart from Sraffa himself (for an evaluation of Sraffa's contributions, see Harcourt (1981b)), the most important names here are Garegnani, Pasinetti, Krishna Bharadwaj and, in Cambridge itself, John Eatwell and Murray Milgate.[2]

6. Uncomfortable allies of this group are Joan Robinson and the Robinsonians, especially A. (Tom) Asimakopulos in Canada and her Australian fans – Keith Frearson, Peter Groenewegen, David Clark, Joseph Halevi, Bruce McFarlane, Peter Riach, Geoff Harcourt, see Peter Groenewegen's paper on radical economics in Australia, Groenewegen (1979). Joan Robinson's and Richard Kahn's interpretation of Keynes's purposes and methods differ considerably from the interpretation of this other group, though through the influence of Kalecki, Joan Robinson *does* wish to reach over the hundred or so years interim of neoclassical economics in order to graft the modern developments by Keynes, Kalecki and Sraffa onto Marx and the Classical economists, especially Ricardo, see her recent paper with Amit Bhaduri, Bhaduri and Robinson (1980). Her slogan is "history versus equilibrium" which she, at least now, takes to be the methodological revolution in Keynes's work and which makes her very partial to Kalecki's view that it is the short period where the action is and that the long period has no independent existence, being nothing but the growth out of a succession in short periods: "the long-run trend is but a slowly changing component of a chain of short-period situations ... no independent entity" (Kalecki, 1971, p.165). Indeed, Joan Robinson's definition of long-period *equilibrium* goes even further: "The short period is here and now, with concrete stocks of the means of production in existence. Incompatibilities in the situation ... will determine what happens next. Long-period equilibrium is not at some date in the future: it is an imaginary state of affairs in which there are no incompatabilities in the existing situation, here and now" (Joan Robinson, 1965, p.101).

7. A prominent issue which is currently being debated between these two groups is the operational significance of the concept of a centre of gravitation in the analysis of movements over time of modern capitalist economies, see Harcourt (1981a). The differing views on Keynes are to be found in recent issues of the *Cambridge Journal of Economics*, and now, in the papers from the Conference at the Villa Manin in September 1981. There, Kregel and Garegnani clashed over the significance of Chapter 17 of the *General Theory* for the theory of effective demand in the long period – and whether we need a theory of effective demand for the long period, see also Eatwell (1979).[3]

8. I should also mention that post-war work of Nicholas Kaldor, who is a group by himself, and the Cambridge Economic Policy Group led by Wynne Godley and Francis Cripps.[4] I have not the space to say much about them in this paper, but at the level of policy in particular, they are a very important influence and, of course, Kaldor's theoretical

contributions are remarkable. Moreover, with his unique blend of theory and policy, including his involvement in policy, he probably more than anyone else carries on Keynes's roles in Cambridge, certainly with the breadth and volume of his papers, not to mention his membership of the House of Lords. Just as in the United States the *JKPE* has been the outlet for the writings of the American post Keynesians, so the *Cambridge Journal of Economics* is the outlet for those of the English, European group – of course, the pages of neither are confined to any particular nationality but the "lines" of each are determined by these two groups in their respective countries.

III

9. So much for background and personalities: now for some characteristics. At the deepest level of analysis, the following points stand out. First, there is a preoccupation with time and how it should be modelled. Now, obviously, this is common to all economics, but I mention it because the motivation of these groups, especially the Americans and Joan Robinson, derives from it, particularly in relation to their dissatisfaction with what they conceive to be the orthodox way of handling time. The latter often seems to be to reduce it to the same dimensions as space, i.e., to smuggle back in the equivalent of an assumption of perfect foresight or to model 'as if' there were perfect foresight, the latest example of which is the approach of the "rational expectations" school. One of the ironies of modern economics has been the declining star of John Hicks, as far as the profession in general assesses his later contributions, just when some of us have thought that he has been getting better and better! (See the independently written but very similar reviews, style and elegance apart, of his last collection of essays, Hicks (1977), by Axel Leijonhufvud (1979) and myself (1979a) in the *Journal of Economic Literature* and the *Economic Journal* respectively.) These reactions are in large part due to Hicks's changing views on how to model time, which have moved more and more towards those of Joan Robinson in particular, as Hicks himself has acknowledged.

10. Joan Robinson has attacked the neoclassical pendulum analogies of equilibrium in so far as they have been applied to an ongoing economy in which the past is gone and the present stands between it and a future which is uncertain and unknown – and yet to come: witness her famous remark about time running at right angles from a point on the blackboard. Here Keynes in his 1937 *Quarterly Journal of Economics* article is very influential: "We simply do not know" (1937a, XIV, p.144). "I accuse the classical economic theory of being itself one of these pretty, polite techniques which tries to deal with the present by abstracting from the fact that we know very little about the future" (1937a, XIV, p.115). Nevertheless decisions have to be made now and so rules of thumb, practical modes of behaviour, must be devised which just because they

have to be based on expectations which can come badly unstuck may prove to be very unstable bases. In fact post Keynesians in recent years have become fond of distinguishing between neoclassical rational behaviour, which implicitly or explicitly includes perfect foresight, "perfectly informed about the future as well as the past", as Victoria Chick (1978, p.1, n.2) puts it, and Marshall's common sense behaviour, "reasonableness" in Robert Clower's term, that is to say, acting sensibly with given information – "one's (limited) knowledge" (Chick, 1978, p.1, n.2). G.L.S. Shackle has as much as anyone and more than most, illuminated our understanding of this crucial aspect of Keynes's central message. To quote him directly:

> "[I]nvestment is a highly hazardous business, a gambling question, for the businessman at the time of his decision does not know whether he will make profits or not, especially in future years. In these circumstances, businessmen are swayed by the current state of the news and can lose their nerve, keep their money in the bank and so unemployment starts – it's as simple as that."
>
> (In Harcourt, 1981c, p.141)

11. Allied with these views is a stress which goes back to the Classicals but which was picked up again by Keynes, the sequence nature of production in a money using economy whereby the bulk of production is in anticipation of future sales and so employment is offered *ahead* of the validation by sales of the production that results from the employment. (I have a copy of a physics research student's notes of Keynes's 1933 lectures in which, in the second lecture, he quotes with approval Marx's sequence, M – C – M'. And in a recent issue of the *JPKE* (Summer, 1981), Roy Rotheim takes up this point in his discussion of Keynes's distinction, which did not survive to the final draft of the *General Theory*, between the co-operative economy, the neutral economy and the monetary or entrepreneur economy. In the last, a *general* state of unemployment could emerge, as it could not in the former two, because of fluctuations in effective demand which themselves are a monetary phenomena, see Rotheim, 1981, pp.574–83). Chick is very good on this in her 1978 paper where, whatever you may think of her critique of Clower, the positive contributions are illuminating: "The *General Theory* presents a model of a *production* economy, using *money*, moving through *time*, subject to *uncertainty* and the possibility of *error*" (p.5).

12. It is from these factors that we get the Robinsonian version: the concentration on the importance of the short period and the insistence that long-period equilibrium is imaginary – though long-period and short-period decisions come together at this particular juncture in time. Asimakopulos perhaps more than anyone else has made all this very clear. He is always careful to list what is given (including the institutions and social relationships of the economy to be modelled, see, for

example, his paper on Marshall and Wicksell, Asimakopulos, 1978), what length of time he has in mind (see, for example, the opening pages of his 1974 paper with John Burbidge on tax incidence in the short period), and, of course, he utilises Keynes's central analytical contribution of a balance between injections and leakages, with the investment dog wagging a saving tail (see James Meade in the Milo Keynes collection, Meade, 1975) rather than the other way around, as used to be thought and supply siders still would have us think.

13. Associated also with this last point is a distinction, which both Chick and Paul Davidson make (see Davidson, 1980, p.153), namely, that neoclassical equilibrium is concerned with market clearing prices, "a point where supply equals demand", whereas Keynes's concept concerns rest states, "a point of rest: forces leading to change are either absent or countervailing" (Chick, 1978, p.17). Markets, in particular, labour markets, may not clear in the neoclassical sense but there is nothing which can effectively be done about this by those most intimately concerned, the wage-earners, because those who make decisions about prices, employment and investment are not able to get signals from the system which suggest to them that they ought to change *their* behaviour. "If firms [get] all the labour they require and sell all their output at the price they set, all their expectations have been met ... no reason to change their plans ... Households ... [may] *like* to sell more labour ... but they have no power to effect a change ... [T]he setting of wages is up to the firms ... Households have no means of informing firms that demand could be stronger if employment were higher" (Chick, 1978, p.18).

IV

14. The next main point, which follows from the above, is the importance of social relationships and institutions in post Keynesian theory. The principal variable of post Keynesian analysis is not the isolated economic agent so beloved of orthodoxy. This is true even of those orthodox economists who are apart from the mainstream, for example, Clower, Leijonhufvud, who, of course, have made important contributions to our reassessment of Keynes and to our assessment of *how* our economies work and could be made to function better. Post Keynesians, following the Classical tradition, look at the behaviour of groups (classes) and their functions in capitalist economies. Thus, running through Kalecki's version of the main propositions of the *General Theory* is a simple theory of distribution and employment in the short run, summed up in the phrase "workers spend what they earn and capitalists earn what they spend".

15. Joan Robinson (1977, pp.7–17) has provided a neat exposition of this and I digress to present it here, using the simplest case of no

consumption by rentiers, no saving by workers and no overseas or government sectors. Then the National Accounts are:

$$C + I \equiv E$$

$$W + \Pi \equiv Y$$

$$E \equiv Y$$

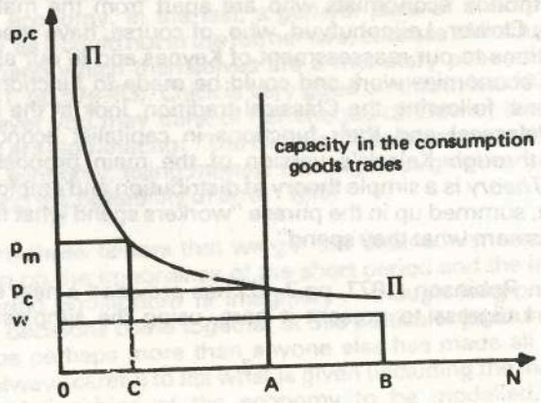
$$C \equiv W$$

$$I \equiv \Pi$$

For Kalecki's reasons – "capitalists may decide to .... invest more in a given period than in a preceding one, but they cannot decide to earn more .... therefore, their investment .... decisions .... determine profits, ... not vice versa" (Kalecki, 1971, pp.78–79) – $I \rightarrow \Pi$.

16. Now consider the following diagram in which costs and prices are measured on the vertical axis, total employment in the consumption and investment goods sectors, on the horizontal axis, see Figure 1. We assume that the marginal product of direct labour in the short run is constant up to capacity in the consumption goods trades (the reverse L shaped marginal cost curve) and that investment (*in real terms*) is given for the period we are considering and requires AB of the available work force.

FIGURE 1



17. The consumption spending of the investment trades workers constitutes the total profits of the consumption goods trades. Whatever the employment in the latter, they get their costs (which are wage costs for the sector as a whole) back from the spending of the consumption good workers. Π Π is a rectangular hyperbola which subtends the area w.AB, where w is the money-wage and AB is total employment in the investment goods trades. w.AB is, of course, the profits of the consumption goods trades. If there were competitive forces in price setting, a price of 0pc would tend to be set with accompanying full employment of the existing stock of capital goods in the consumption goods trades, OA employment of the work force and profit per unit of employment of wpc. However, if, as Kalecki argues, there is administered pricing in the consumption goods trades – his degree of monopoly theory – and those with discretion do not set a price of Opc but, say, a higher one of Opm, there will be unemployment of CA, basically because the real wage of the workers is *lower* than in the first situation. The money-wage is the same but the price is higher because of the higher amount of profit per unit of employment, wpm.

18. The prices of the capital goods and the profits of the investment goods trades are not explicitly determined in this model. However, as investment expenditure in real terms is fixed in the model, whatever process determines the mark-up in the investment goods trades will ensure that the money expenditure on investment goods will cover the wage costs and the total profits implied by the size of the mark-up.[5]

19. The above analysis leads up to a consideration of the microeconomic foundations of post Keynesian macroeconomics, a vital part of their contribution, especially with the recent emphasis in modern orthodox economics on the importance of microeconomic foundations, with the accusation added that neither the post Keynesians nor the Keynesians have other than *ad hoc* foundations, if any at all. We should also note in passing that there are as well *macroeconomic* foundations of microeconomics. This is the meaning of Marx's schemes of reproduction and the modern versions of them by Kalecki, Joan Robinson, Harrod (without knowing it) and others, for example, Pasinetti – "[The theory] is macroeconomic because it could not be otherwise" (Sen, 1970, p.109). If decision-makers do not make decisions which are consistent with *overall* social and technical constraints we are liable to get a crisis situation – Harris has a fine paper on this, see Harris (1975), and it is one of Joan Robinson's major themes, which has often been misunderstood when her Golden Ages have been taken to the descriptive rather than the mythical benchmarks which their very name implies.

20. Returning to our main theme, the seminal work is again Kalecki's – the notion that a model of a capitalist economy can be split into two sectors, one, the raw materials producing sector where Marshallian-type supply and demand pricing rules, the other, the "manufacturing" sector

(it is obviously more than this) where because individual firms, or at least the price leader(s), have discretion and because of oligopolistic interdependence, mark-up pricing rules. (This has been refined in one variant as the normal cost pricing hypothesis of Neild (1963), Godley and Nordhaus (1972) among many others.) Associated with these hypotheses are, as we have seen, the stylised facts of reverse L shaped cost curves in the short run. In Kalecki, the mark-up is determined by the degree of monopoly in each industry and overall, though Kalecki never solved satisfactorily what he meant by an industry – neither has anyone else – nor the aggregation problem for the economy as a whole, that is to say, how to move from the degree of monopoly for each industry to the degree of monopoly for the economy as a whole.[6] In the more recent versions of this Kaleckian contribution, the mark-up has been taken either as constant (in the normal cost pricing hypothesis, perhaps in order to bring in a target rate of return, the size of which is determined by the macroeconomic characteristics of the system – here Marx is relevant) or, in another variant, as determined by the financial needs of the firms for investment expenditure. The most developed examples of the latter are Adrian Wood's 1975 book (Ball developed essentially the same argument in 1964), Alfred Eichner's work, which culminated in his 1976 book and, I like to think anyway, Harcourt and Kenyon (1976), where we introduce vintages into the analysis.[7]

21. The distinction between the two forms of pricing has been taken up by Kaldor and Hicks, the former for his model of growth and distribution in the world economy, the latter in his flex price, fix price dichotomy which he used, for example, in his Mills Memorial lecture, Hicks, (1976), to illuminate recent inflationary experiences in the capitalist world. As far as the fix price sector is concerned all variants have in common the rejection of profit-maximising, at least in its simplest forms, partly for reasons associated with oligopolistic interdependence. In so far as we are concerned with the distribution aspects of the theory, there are two major objections: "the complementarity of inputs ... precludes the estimation of marginal products for individual inputs; and the inability to define ... a demand curve for individual firms means that marginal revenue product curves cannot be estimated" (Asimakopulos, 1980–81, p.164).[8] Burbidge in writing about post Keynesian approaches to international trade, see Eichner (ed.), 1979, pp.139–50, also makes use of the distinction when classifying different countries according to the characteristics of their traded goods.

V

22. The Kaleckian underpinings are also relevant for the recent debates in Australia about the real wage overhang (the alleged tendency for the real wage to increase at a faster rate than productivity), as Peter Riach has pointed out. Riach took exception to the simple minded view that higher

real wages *caused* unemployment in Australia and still are doing so – the Pigouvian revival in the Treasury and at the ANU through Max Corden. Riach responded first (with Graham Richards) in their paper on the lessons of the Cameron experiment in 1979, and now in his paper to the recent (August, 1981) Political Economy Conference in Adelaide, "Labour-hiring in Post-Keynesian Economics", Riach (1981), in which he sketched in the supply side response in post Keynesian theory – "An explicit account of the labour-hiring decision in a ... world where price and quantity may be postively related" (p.4). (Kurt Rothschild as well as Kalecki and Joan Robinson should take a bow here).[9]

23. The implication for labour of the product market behaviour which we sketched above is that "reduction in real wages is *not* necessary to seduce the entrepreneur into increasing employment. Once the real wage has been determined, along with the profit margin, the representative firm's input of labour is determined solely by aggregate demand in the product market ... Instead of price and quantity being the simultaneous outcome of the Marshallian scissors, the real wage and employment ... are determined by separate forces ... It is not meaningful to talk of a 'labour market' in the traditional sense of an arena in which trading between buyer and seller establishes a market-clearing equilibrium price. There is no price which establishes a state of rest – output and employment are fluid in response to changes in demand, without any need for a real wage change" (pp.7–8). Riach's approach reflects the "horses for courses" approach of post Keynesian theory – a number of outcomes are possible, depending upon concrete situations and circumstances, rather than the simple, slightly dogmatic views which follow from the universalist nature of much modern neoclassical theory – the sort of theory which allows people to give advice as they step off the plane, as Eric Russell used to put it, see Russell (1978, p.199). Thus, additional labour *can* be hired in a situation of higher real wages – but there is no functional relationship between the two variables, because wages and employment are controlled by independent forces. The move is not "from one equilibrium to another ... rather [it is] a process taking place over historical time" (p.8).

VI

24. I want finally to mention two more characteristics: first, the role of money in post Keynesian analysis. Here I think (apart from Keynes, of course) the outstanding contributions are by Davidson and Minsky, see also Basil Moore in Eichner (ed.), 1979. Davidson has amalgamated the analysis of the *Treatise* and the *General Theory* in terms of Marshallian supply and demand analysis of spot and future markets to describe the determination of investment expenditure and the cost and availability of finance. The same contrast between spot and future markets (and their respective prices) is used by Davidson (and Kregel) to illuminate the

analysis of Chapter 17 of the *General Theory* where, again, they argue that the real forces associated with the accumulation of capital goods and the monetary forces determining the rate of interest come together. The vital clues are the peculiar and essential properties of money, or rather, liquidity, which Keynes developed in embryonic form in his 1933 lectures (see Rotheim's 1981 paper), whereby under-employment equilibrium is possible because switching demand from goods to money does not necessarily create compensating employment opportunities. This is because liquid assets have two essential properties – negligible elasticities of production and substitution.[10]

25. Minsky takes the argument even further to produce an endogenous cycle theory as a result of the interaction between real and monetary factors. His views are summarised in the following three quotes from his works:

> "What we have is the bare bones of a model in which the path of income, in the sense of the aggregate budget constraint depends crucially upon two phenomena: the determination of total investment demand and the external financing of investment through monetary changes. Thus, it is the views of businessmen and bankers about the appropriate financial relations that call the tune for aggregate demand and employment. These views are volatile, responding to the past of the economy, and they change as the economy transits among the various types of behaviour (boom, crisis, debt-deflation, stagnation, and relatively steady expansion) which characterize the performance of capitalism." (Minsky, 1975, p.136).

> "A capitalist economy ... is characterized by two sets of relative prices, one of the current output and the other of capital assets. Prices of capital assets depend upon current views of future profit (quasi-rent) flows and the current subjective value placed upon the insurance against uncertainty embodied in money or quick cash: these current views depend upon the expectations that are held about the longer run development of the economy. The prices of current output are based upon current views of near term demand conditions and current knowledge of money wage rates. Thus, the price of current output – and the employment offered in producing output – depend upon shorter run expectations." (Minsky, 1978, pp.4–5).

> "Businesses offer employment and thus product output on the basis of the profits they expect to earn by using labor and the existing capital assets to produce and distribute consumption and investment output. In production and distribution, demand for labor to use with existing capital assets depends upon what Keynes identified as "short run expectations" ... In addition to deciding how to use existing capacity, business has to decide whether and how to expand capacity. Whereas the utilization of existing capacity is determined by price, cost and therefore by profit expectations over a relatively short run (six months, one or two years) the decision to expand capacity is determined by profit expectations over a much longer time horizon...
>
> Investment demand is financed in a different manner than consumption demand. It is true that in a world with consumer credit, banks and financial relations affect consumption demand, but consumer demand mainly depends upon (wage) income ... while investment ... depends upon the conditions under which short and long time external finance are available. Thus the demand for investment ouput is affected by the long run expectations not only of businessmen but also of the financial community." (Minsky, 1978, pp.8–9).

26. The different forces determining consumption good prices as compared to those determining capital good prices date back to the *Treatise* where Keynes distinguished between available and unavailable goods, and profits and incomes inflation, the latter distinction being related to the former. In a sense Minsky is spelling out what is implied in the methods of the *General Theory*, methods which have been so well documented by Kregel in his 1976 *Economic Journal* article, Kregel (1976). There he pointed out that Keynes had three models running through the *General Theory* and the papers that followed it. The purposes of these models were, first, to make the central point about effective demand unhampered by puzzles about how or if the economy could actually get to such a level, and then, secondly, to bring in further complications in order to analyse the happenings in an economy over time. As early as 1923 Keynes was arguing that economists set themselves "too easy ... a task" if they did not do this even though he was still, then, a quantity theorist. (Indeed, he still *thought* he was in the *Treatise* even though by then he had producecd a theory of sectoral price levels which was inconsistent with the quantity theory.) Let me quote what Keynes actually said since most of us are only familiar with one sentence:

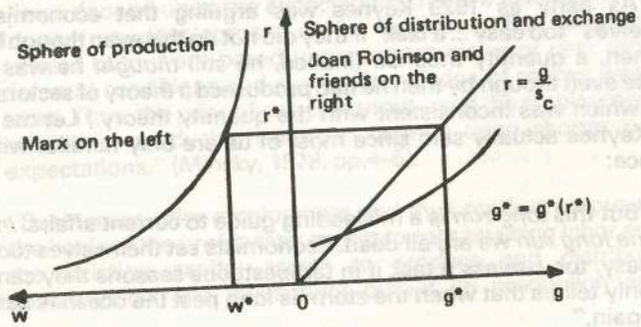
> "But this *long run* is a misleading guide to current affairs. *In the long run* we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean is flat again."
>
> (1923, IV, p.65)

VII

27. The quote above brings us back to the last issue which I wish to emphasize: the methodological debates between Davidson, Sidney Weintraub and, on this issue, the Robinsonians, on the one hand, and the Sraffians, on the other hand, which concern this long run. The latter group, especially Garegnani, worry about concentration on the short run because it gives over much emphasis to the importance of expectations so that definite results might not be possible (this, of course, might be a strength), and sustained and dominant forces are dismissed, or, at least, played down. In particular, the surplus approach to value and distribution will not get a role because supply and demand (or its variant in marginal utility theory) will explain value and distribution. Furthermore, they fear that if Chapter 17 is made the central part of post Keynesian analysis, the investment theory, at least that coming from Keynes himself, is subject to the critique of the capital theory debates whereby well-behaved relationships between capital and the rate of profits, and investment and the rate of profits, are not able to be established, see Garegnani (1978, 1979). So we have the recent vigorous debates between Garegnani and Kregel, and Garegnani and Joan Robinson, over these issues.

28. As I have argued elsewhere, see Harcourt (1981a), the issue turns partly on whether centres of a gravitation can be regarded as operational concepts in a model of a modern capitalist economy with oligopolistic market structures and in which rapid technical advances are occuring. Garegnani's point is that there is enough stability in the dominant forces, in particular, the dominant tehniques, to make the concept operational and thus the surplus approach applicable, at least as a framework within which the other issues can be set. I think that Bhaduri and Joan Robinson (1980) come close to accepting this when they graft Kalecki's analysis onto Sraffa's. Certainly Harris has made a good fist of doing this, at least as a first approximation, with his models of crises with Marx on the left and Joan Robinson, Kaldor, Kalecki and Harrod on the right, see Harris (1975).

FIGURE 2



29. On the left hand side of Figure 2 we have the sphere of production. At any moment of time technology and social factors between them allow a particular combination of wages and rates of profits potentially to be established. Here, we suppose the current state of the class struggle dictates a wage of w* which implies that the maximum rate of profits which may be received is r*. On the right-hand side of the diagram, we have the sphere of distribution and exchange. We show, first, in terms of rates of growth of the stock of capital goods, the rate of profits that would be established from the post Keynesian expression, $r = g/s_c$ where s_c is the marginal propensity to save of the capitalists. We also show the accumulation function, $g^* = g^*(r^*)$ – the desired rate of accumulation is a function of the expected rate of profits, for any given financial situation and state of long-term expectations. Provided the economy is within the area bounded by g*, r* and is below $r = g/s_c$, no contradictions arise; but once it is outside here, a variety of crisis situations are created and changes must occur in order to resolve the contradictions which gave rise to them in the first place.

30. I have neither the space nor the time to mention the importance of institutions, see Davidson (1980, pp.162–164), nor Sidney Weintraub's stress (like Keynes's) on the importance of the relative stickiness of the overall money-wage for the stability of the system, nor the important contributions of Josef Steindl (on processes in mature capitalism) and Paolo Sylos-Labini (on pricing in oligopolistic industries). But that does not mean that I regard them as unimportant, only that time is a device to stop everything happening at once, just as space is a device to stop it all happening in Cambridge, see Dharmar Kumar in Harcourt (1969, n. 1, p.369).

FOOTNOTES

* A revised version of a paper given at a Seminar at the Reserve Bank of Australia in Sydney on October 16, 1981. I am indebted to Tom Asimakopulos, Vikas Chitre, Bob Dixon, Bruce McFarlane and the editors of the *Thames Papers* for their comments on a draft of the paper. I refer to the writings of Keynes by giving first, the date of publication and, then, the number of the volume of the *Collected Writings* in which they are to be found.

1. Vikas Chitre has reminded me that this concept of the long period should be distinguished from the concept associated with the secular stagnation thesis of Alvin Hansen and Roy Harrod.
2. For the link between Sraffa and Marx, see Steedman (1977) and my review of Steedman (1977), Harcourt (1979b).
3. Joan Robinson might be surprised to be reminded that she wrote in 1933 (in her report on the state of development of the embryonic *General Theory*) that "it was only with disequilibrium positions that Mr. Keynes was consciously concerned when he wrote the *Treatise*. He failed to notice that he had incidentally evolved a new theory of the *long-period* analysis of output" (Robinson, 1951, p.56).
4. In North America, John Cornwall at Dalhousie has made outstanding contributions by marrying Kaldor's analysis, together with his own substantial inputs, with empirical findings: see Cornwall (1972, 1978).
5. For a fuller account of this sort of model, see Harcourt (1972, Chapter 5, especially pp.205–214; 232–240).
6. Peter Kriesler of Sydney University has written an excellent M.Ec. thesis, Kriesler (1981), on all this.
7. See also, for a very recent, thoughtful contribution, Nina Shapiro (1981).
8. Bob Dixon has pointed out to me that it would be argued that the firms do not need to know their MRs and so on, they just have to keep experimenting with changes in prices and quantities until they observe maximum profits. By implication, at these points, MRs = MCs, but it is by implication, not by conscious calculations of them directly. This argument runs smack bang into Joan Robinson's principal objection to the static method and its inability to handle time, as expressed in the Preface to the second edition of *The Economics of Imperfect Competition*, Robinson (1969). She regards as a "shameless fudge" the notion that businessmen can find the position and shape of their individual demand curves by a process of trial and error which in effect assumes that demand curves stay put" long enough for ... firm[s] to discover [them], and [that] the experiments of raising and lowering ... [prices] ... have ... negligible cost[s] and no reaction upon the behaviour of the [firms'] customers" (Joan Robinson, 1979, p.112).
9. See also the fine paper on "The Labor Market" by Eileen Appelbaum in Eichner (ed.), 1979, pp.100–19.
10. Davidson also (with Hines) pioneered the reawakening of interest in Keynes's finance motive – that an important element of the demand for money is the need for finance to be arranged before extra non-routine expenditure can be undertaken, see Davidson (1965, 1967, 1972); Hines (1971) and Peter R. Smith (1977).

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