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The *General Theory* and its reception: Attempts at formulation of long-period theories of employment

SESSION THEMATIQUE C3:

La *Théorie Générale* et son accueil: Tentatives d'élaboration d'une théorie de l'emploi en longue période

Harrod's keynesianism : post or new? Harrod, post ou néo-kéynésien ?

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Summary

Roy Harrod is generally considered as one of the founders of post-keynesianism. This is largely due to his contribution to the so called "Harrod-Domar" model, and his role in the subsequent keynesian/neo-classical debate on growth, and more generally to his pioneer role in the preoccupation for the long-run extensions of effective demand analysis.

Reconsidered in the light of the actual state of keynesian debates, this posture may be questioned. Upon a number of important matters, such as the role of prices in the macroeconomic process, or the analysis of competition, Harrod's position seems nearer (or at least not further) from new-keynesian economics than it is from contemporary post-keynesian analysis.

Reconsidering his personal contributions to business cycle theory and dynamics on one hand, and his comments of Keynes's *General theory*, as well as Keynes' reactions to the initial formulation of his growth model, Harrod seems very unlikely to accept Keynes's contention to found a new "general" theory, grounded on a new monetary analysis. In this last field, he is very close to Hicks's position in "Mr Keynes and the classics" (1937), manifesting the same reluctance to accept the keynesian thesis of independence between the rate of interest and the current level of aggregate savings.

His own contention is to extend traditional theory, and not to found a new one. In his 1934 article about the "Doctrines of imperfect competition", in which he is in search of what we would now call a "general disequilibrium model with imperfect competition", the research agenda sketched by Harrod starts from the basic idea that the endogenous forces raising instability in the economic system must rest in the behaviour of economic agents as expressed in the micro theory of supply and demand.

That makes a strong difference with Keynes, who explicitly refuses any explanation of instability resting on inertia, viscosity or rigidity linked to the functioning of the competitive process.

Thus, it can be argued that Harrod, according both to his critical assessment of the *General theory*, and to his own work on endogenous instability, might be considered as one of the founders of "new keynesianism", in the kind of Stiglitz's, as well as than a forerunner of post-keynesianism, in the "kaleckian" way then explored by Joan Robinson or Hyman Minsky. The ambiguities in the relation between Keynes and Harrod are not specific to this latter. Some of them can be observed in the work of other major keynesian authors, such as Kaldor. What this remark suggests is that the difference between post and neo keynesian programs is rather uncertain, and that this hesitation can be located at the very beginnings of keynesianism, and explains the persistence of many troublesome debates.

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1. Introduction

Roy Harrod is generally considered as one of the founders of post-keynesianism. This is largely due to his contribution to the so called "Harrod-Domar" model, interpreted as a long-period theory of unemployment, and his seminal role in the subsequent keynesian/neo-classical debate on growth, and more generally to his pioneer role in the preoccupation for the long-run extensions of effective demand analysis. As far as it is a major topic in post-keynesian economics, it seems natural to associate Harrod with this branch of keynesianism, rather than with one or another variety of neo-classical synthesis. The fact that he was the first author to bring us a biography of Keynes, that remained a major reference for thirty years¹, contributed to assess this posture.

Reconsidered in the light of the actual state of keynesian debates, this posture may however be questioned. Indeed, the intellectual relationship between Harrod and Keynes is marked by a mutual intent to bring their analysis closer. Each of them contributed to the final formulation of the other's project but, instead of this evident proximity, there still remained an unfilled gap between their respective way of thought.

In section 2, I shall give an account of the difference between Harrod's and Keynes' initial points of departure in their analysis of economic fluctuations, in the early 30's. Upon a number of important matters, such as the role of prices in the macroeconomic process, or the analysis of competition, Harrod's position, in the years preceding the *General Theory*, seems nearer (or at least not further) from new-keynesian economics than it is from contemporary post-keynesian analysis.

Section 3 will be devoted to Harrod's interpretation of Keynes' *General Theory*. In his reactions to Keynes' *General Theory*, represented both by his correspondence with Keynes, and his two articles "Mr Keynes and traditional theory" (1937) and "Keynes, the Economist" (1947), along with his later *Life of Keynes* (1951), he seems very unlikely to accept Keynes' contention to found a new "general" theory, grounded on a new monetary analysis. In this last field, he is very close to Hicks's position as expressed in "Mr Keynes and the classics" (1937), manifesting the same reluctance to accept the keynesian thesis of independence between the rate of interest and the current level of aggregate savings.

In section 4, I shall examine some of the difficulties arising from the harroddian vision of dynamics, and its interpretation as an "extension" of Keynes to the long run.

¹ Surpassed only recently with the works of Donald Moggridge and Robert Skidelsky.

2. Harrod and Keynes before the *General Theory*

At the time when Keynes already believed he was "*writing a book on economic theory which will largely revolutionise (...) the way the world think about economic problems*"², Harrod's contention, in his early writings on competition, profit and wages³ was to extend traditional theory, and not to found a new one. This is very clear in his 1934 article about the "Doctrines of imperfect competition", in which he is clearly in search of what we would now call a "general disequilibrium model with imperfect competition". The research agenda sketched out by Harrod starts from the basic idea that the endogenous forces raising instability in the economic system must rest in the behaviour of economic agents as expressed in the micro theory of supply and demand. That makes a strong difference with Keynes, who explicitly refuses any explanation of instability resting on inertia, viscosity or rigidity linked to the functioning of the competitive process.

The difference between Harrod and Keynes is still clearer if we consider the current state of Keynesian debates. It is striking how Harrod's posture looks alike the attitude of new Keynesian economists. He is in search of an endogenous explanation of economic fluctuations, and thinks, just as new Keynesians do, that the endogenous forces raising instability must rest in the behaviour of economic agents such as they can be established by the micro theory of demand and supply. What he has in mind is the behaviour of supply and prices of goods in a world of imperfect competition. The new Keynesians have extended this view to the behaviour of credit, of labour supply, etc. But the agenda is roughly the same. Everything is originated in the working of the price mechanism.

Indeed, according to Harrod himself, Keynes "*departs from old orthodoxy in holding that the failure of the system to move to a position of full activity is not primarily due to friction, rigidity, immobility or to phenomena essentially connected with the trade cycle*" (1947, p. 69). Keynes involves in his refusal the exogenous shocks, like monetary or technological ones, which are excluded by Harrod as well from his explanation of instability. But he also runs out any kind of inertia, viscosity or rigidity linked to the competitive process. Under-employment is independent of price-adjustments quality, which is not the case for the "young" Harrod, nor for modern new Keynesians. The *General Theory* is certainly inconsistent with a Walrasian model of perfect

² Letter to George Bernard Shaw, 1st January 1935, CW13, p. 492.

³ Compiled in Harrod (1952).

competition, but the imperfection of competition cannot be considered *as the cause* of unemployment. For Harrod, on the contrary, the "*generalized theory of value*", in an imperfect competition framework, "*provides a rational explanation of the relatively greater contraction and relatively smaller fall of prices (...) in a trade recession*". "*The growth of importance of decreasing cost industries (...) may well have been the principal factor making for an increase in the severity of trade oscillation, first after the industrial revolution, and secondly in very recent times*" (ie the 20s and 30s) (1934, pp. 467-468).

We can consider with Besomi (1995-b) that Harrod is on the way suggested by Sraffa in his famous articles upon the "Laws of return". The matter is the scope and method of the pure theory of value. Harrod, along with Chamberlin and Robinson, is one of the first investigators of one of the way suggested by Sraffa, namely imperfect competition.⁴

What interests Harrod with imperfect competition is that it leads to a vision of market equilibrium as a highly unstable situation. His view is that trade cycle theory should rest upon a concept of endogenous instability as a process rising from the very forces of the market adjustment mechanism.

At the same time, Keynes is exploring an other way, we can label as the "monetary track", consisting in reassessing the thesis unsuccessfully argued in the *Treatise*, according to which the default of adjustment of the rate of interest, due to monetary behaviours "on the money-demand side", impede that the level of activity ensure full-employment.

3. Harrod and Keynes' *General Theory*

3.1 Harrod and Keynes on the "classical" theory

Harrod was - along with Hawtrey, Robertson, Joan Robinson and Richard Kahn. - among the few economists to whom Keynes set proofs of the manuscript of the *General Theory*. What appears from their resulting correspondance of 1935 is that Harrod accepts Keynes criticism of the "postulates" of the theory of employment, but firmly refuses to go along with him in his critics of the classical doctrine of interest. As he recalls in his *Life of John Maynard Keynes* (1951), "*my main endeavour was to mitigate his attack on the "classical" school. I agreed with him that there was a woeful gap in the traditional theory*

⁴ Sraffa suggests two other ways : the return to Ricardo, he personally explored later, and the general equilibrium analysis. We must notice that he gravely under-stated the fructfulness of this latter way Harrod, Keynes and others British economists of that time followed Sraffa's appreciation. In these years, general equilibrium theory was only accepted by German economists

of unemployment and that the root of the matter was an incorrect theory of interest; where I differed was in regard to his allegation that the traditionnal theory of interest did not make sense. It seemed to me that this was pushing his criticism too far, would make too much dust and would give rise to irrelevant controversies" (Harrod 1951, p. 522-523).

The argument between them turns around the indeterminacy of the interest rate, alleged by Keynes, in what he calls the classical theory. For Harrod, "*such a criticism is bound to seem unfair, and I believe it is unfair*" (CW13, p. 546), which led Keynes to write him: "*your reaction (...) make me feel that my assault on the classical school ought to be intensified rather than abated*" (CW13, p. 548).

But there is one basic criticism of the standard marshallian view on which they accord themselves: the interest rate cannot be uniquely determined by saving and investment unless the level of income is known. Harrod explicitly expresses this criticism as a refusal of the *ceteris paribus* clause. Partial equilibrium on the capital market cannot be considered as a "general" theory of interest.

Keynes alleged that the classical theory had no explanation of income. But this argument - refused by Harrod - is not acceptable, if adressed to modern neo-classical theory. General equilibrium analysis does give account of what it is.

Keynes seems to have in mind an other argument, expressed as logical inconsistency, or overdetermination. But, as was noticed by many commentators of chapter 14 of *General Theory*, and first of all by Harrod, the "classical" theory of interest is rather inconsistant ... with Keynes' own conception, than victim of an internal contradiction.⁵ This external criticism, by which Keynes simply opposes his own view to the traditionnal one, involves two points :

- the first one is the reversal of the causal link between saving and investment. But this argument is rather confusing for, strictly speaking, saving does not determine investment in neo-classical theory, at least if we consider its "general" version, the walrasian one. This is only true of very peculiar versions of it, such as Hayek's one, and also of classical "ricardian" views of the relationship between profit and investment.

- the second point is the "monetary" character of interest, in Keynes' view, as opposed to the "real" interest of the "classical" view. There again, Harrod is not as "monetarian" as Keynes is.

Finally, Harrod and J. M. Keynes can be opposed in the following way : Harrod refuses to follow Keynes on the ground of an alleged "logical inconsistency" of

⁵ Which is the only substantial meaning that can be attributed to the contention that "without bringing in liquidity preference the position of equilibrium is entirely indeterminate" (CW13, p. 551).

traditionnal theory, and does not accept Keynes' "purely monetary" view ; he agrees that the monetary rate of interest influences the level of activity, but maintains that it is necessary to elaborate a fonctionnal relationship between the amount of savings and the rate of interest, *ie* to establish a link between saving and the "law of demand".⁶

He nonetheless accepts the idea of a causal relationship from investment to savings, and thus stands half the way between Keynes and "the classicals". As we shall see in section 4, Harrod's dynamics likely stands in of such an "intermediate" position, the viability of which must be questioned.

3.2 *The monetary theory of interest*

In line with his refusal of Keynes' radicalism against the marshallian theory of interest, Harrod doesn't put many emphasis on the monetary theory of interest

For Keynes, as Harrod points out, *"the theory of interest is (...) the central point in his scheme"*. There is unemployment because the "level of interest rates" is *"inconsistent with full activity. But this wrong rate of interest, as we may call it, is not itself a rigidity or inflexibility. It is natural, durable, and, in a certain sense in the free system inevitable"* (1947, p. 69). For Harrod, this point *"seems to lack the generality"* required for a point supposed to found *"a revolution in fundamental economic theory"*. The only thing established by Keynes is that *"the rate of interest is more intimately connected with the numeraire than the price of any other factor of production"* (1937, p. 604). Harrod recognizes it as an *"immense advance"* for applied monetary theory, but not as a real analytical novelty : *"it is not really a new piece. The old theory presupposed that income velocity of circulation was somehow determined. But precisely how was a mystery. Thus the old theory assumed that there was a piece there but did not state exactly what it was. Keynes' innovation may thus be regarded as a precise definition of the old piece"* (Ibid.).

Harrod doesn't approve either Keynes' intents to reconstruct a pre-classical tradition, from which he could claim the inheritance. In reaction to the "Notes on mercantilism and the usury laws" which will become chapter 23 of the *General Theory*, about the mercantilist doctrine, he considered that *"the common sense was embodied in a hopelessly confused notion of economic system as a whole. I think you are inclined to rationalise isolated pieces of common sense too much, and to suggest that they were part of a coherent system of thought."* (CW13, p. 555).

⁶ In lecture two of *Towards a Dynamic Economics* (Harrod 1948, pp. 35-62), he expresses this relationship in terms very similar to further Friedman's permanent income hypothesis.

Where Keynes sees in the history of monetary theory a secular fight between two opposed traditions, Harrod advocates for the unity of economics : *"It is that suggestion which seems to me give the impression of the hopeless sterility of economics, swaying to and fro between two schools"* (Ibid.).⁷

3.3 *The General Theory as a general equilibrium model*

On the whole, the *General Theory* doesn't achieve *"a revolution in fundamental economic theory"*, but only *"a readjustment and a shift of emphasis"* (Ibid) in the field of general theorizing. As Young (1987) emphasized it, Harrod's paper of 1937 on "Mr Keynes and traditional theory" is very similar to John Hicks' famous "Mr Keynes and the classics". Harrod explicitly interprets the *General theory* as formulated in a general equilibrium framework.⁸ *"The mutual interdependency of the whole system remains"*, as well as *"the short-cuts indispensable to thinking particular problems"*(1937, p. 602). Keynes changed the form in which the system is written, not its analytical foundations. *"(...) the Keynesian scheme consisted in essence in a set of new definitions and a re-classification"* (1951, p. 533), whose importance is that *"by taking up these special points, he (Keynes) could completely reorganise the whole system of economic concepts required for the consideration of the level of output as a whole. A small clue made possible a mighty revolution in all our terms of thought about this subject. Classification in economics, as in biology, is crucial to the scientific structure"*(1951, p. 535).

The "new conceptual framework" is obtained by a rearrangement of existing elements: the same variables are determined by distinct factors in Keynes' and in the classical tradition, but the number of markets involved is the same ; it is only the causal chain of events that is modified, so that an other story can be told.

The main rearrangement⁹ consists in depriving *"concepts such as marginal costs and marginal utility, which were well-tried tools for analysing the levels of output in particular industries or firms"* (1951, p. 535) from any significant role in the

⁷ After Keynes had advised her that *"Roy strongly objects to (this) chapter (...) as a tendentious attempt to glorify imbeciles"*(CW13, p. 650), Joan Robinson writes him *"I hope you won't let Roy intimidate you (... I think it is very important to have it, and (...) I don't think you have overstated matters here"* (CW13, p. 651).

⁸ This proximity between Harrod and Hicks goes to their own theories of the trade cycle, which both rest on the inter-action between the multiplier and the accelerator. Hicks (1950) recognized that Harrod's contemporaries failed to notice the main interesting characteristics of his dynamics when they appeared at first in his 1936 book and 1939 *Essay*, and were deserved attention nearly one decade later, after the publication of Harrod's 1948 book : *"It is quite clear that neither I myself, nor (as far as I know) anyone else, seems to have seen them"* (Hicks 1950, p. 7).

⁹ Carlo Benetti (1996) recently gave a presentation of the *General Theory's* analytical structure in many ways similar to Harrod's.

determination of the aggregate level of output, and formulating the equations of the model in such a way that *"the level of income may be regarded as determined by the complex of considerations expressed in the savings/interest equations, rather than by the whole system of equations"* (1937, p. 597). Thus, the main difference between the classical and keynesian approaches to activity and employment is that in the keynesian book of tales they are made independent of the supply schedules of factors. Breaking the link between the level of real wages and the level of employment seems to him sufficient for opening the way *"for a radical reconstruction"*. *"Your really important and effective criticism of the classical view occurs in Book I"* (where Keynes dismisses, in chapter 2, the labor supply curve). *"No further criticism of the classical system is required. All your subsequent criticism is fussy, irrelevant, dubious, hair-splitting and hair-raising"* (CW13, p. 556).

Harrod is not willing to take literally what Keynes says. Keynes contention that he was extending the theory of "supply and demand" to the money market, and the demand schedules apparatus of his theory of interest, did not help to make things clear. It has a very harroddian (or hicksian) flavour. But, as further debates have shown, it is an unstable analytical compromise. Once this compromise is accepted, the "monetary theory of interest", in which Keynes saw his "startling novelty" vanishes away, because of the impossibility of maintaining the independence between interest and current savings, which is precisely the point on which Harrod is so reluctant to keep aside with Keynes ...

Thus, Harrod can be considered (with Hicks) as one of the founders of the "realistic" interpretation of Keynes, which rests on the neglect of monetary analysis which has long been a characteristic of the "classical synthesis", as well as of the neo-classical synthesis.

Contrary to most other economists, like Hicks, Leontief and others, Harrod doesn't accuse Keynes' "general equilibrium" model of being "special" or incomplete : he doesn't see any missing equation or clue variable.

But he doesn't either give account of the reason why a fall in nominal wages should fail to restore full employment, apart from a particular elasticity of the demand for inactive balances, which is exactly Hicks' account of that story.

4. Harrod after Keynes

Keynes didn't know of the final version of what became the Harrod-Domar model, but he knew the initial version of it, offered by Harrod, and discussed of it with him, as well as of Harrod's going away from a business cycle theory to a growth model. He thus contributed to the final form of the model, in the same way Harrod had contributed, three years before, to the final redaction of the *General Theory*, that is to say by expressing misunderstandings and criticisms first of *The trade cycle* (1936), and then of the "Essay in Dynamic Theory" (1939). In this latter text, published in the *Economic Journal*, whose editor is Keynes, Harrod makes two great steps in the direction of Keynes:

- first, he abandons his project of rooting dynamic theory in the mechanics of prices ;
- second, he adopts Keynes' methodology, by rooting his analysis of cumulative paths of growth (or descent) in a notion of equilibrium.

But Keynes' reaction is very sceptical. He gives notice to Pigou that he should "*not include Harrod's article amongst those which I have accepted because I agree with it !*".¹⁰ Harrod was deceived by this negative reaction. Indeed, he conceives his "Essay" as intent to establish the "axiomatic basis" for a unified framework capable of dealing as well with underemployment problems, as with the trade cycle or, so to say, integrate the *Treatise* with the *General Theory*¹¹ in the same apparatus.

For sure, Keynes cannot easily understand that one could endeavour to concile the two, so that he first thought that the theory is "*fatally affected by a logical slip in the argument*" (CW14, p. 151). Even after admitting that it is not the case, he still has difficulties to accept the "normative" notion of warranted rate of growth, and that Harrod is not confounding equilibrated growth with full employment. After those misunderstandings (raising from *The trade cycle*) being overpassed in the *Essay*, there remain three fields for discussion : the investment decision, the treatment of time and the conception of dynamics.

4.1 The investment decision

Obviously, Keynes cannot accept easily that investment be an "induced" component of demand, because it ruins one of his main argument against the tendency to self-

¹⁰ Letter to A.C. Pigou of 15 June 1939, in Keynes (1973-b), p. 320.

¹¹ As Harrod stated explicitly (see lecture 3 of *Towards a dynamic economics*, where he writes: "*I suggest that the Treatise may be regarded as his (Keynes) diagnosis of the trade cycle, and the General Theory as his diagnosis of chronic unemployment or under production*" (1948, p. 73).

adjustment towards full-employment. As Shackle noticed, Harrod's model is the first one, posterior to *General Theory*, where "*Keynes's decision to treat investment as autonomous, that is, not explicable by reference to the other variables of the system, was reversed, and investment was made to depend in very simple on the level or the movements of general output*" (1967, p. 267).

Thus, he argues :

- first, that investment and therefore the rate of growth of the capital stock, "is a function of the widely fluctuating state of expectation (for which you substitute "the expectation of a steady growth of consumption", which does not hold in the short period)", and of the interest rate ; Keynes complains that Harrod is "*wrapping up the influence of the rate of interest in the state of technology, and (...) do in passing mention this*" (CW14, p. 321);
- second, that the capital/output ratio is not to be considered as an independant variable in the short run, but as a resultant of the multiplier and the rate of growth, "*dragged at the chariot wheels*" (CW14, p. 178) by those two variables.

Keynes points that "the strength of your approach lies in the idea that R (the capital/output ratio) has, so to speak, a normal long period value which is a function of the rate of interest" (CW14, p. 177), which leads him to object that "*the factors determining th(is) normal value (...) have little or no bearing on the trade cycle*" (Ibid., p. 178).

4.2 Time and motion

The second range of problems raised by Keynes deals with the introduction of time in the model. He first notice that Harrod doesn't pay enough attention to the length of the period, the correct definition for him being "*the interval between new sets of entrepreneurs' decisions*" (CW14, p. 346).

But the mere difficulty for Keynes is to understand how Harrod can discuss the stability properties of a steady growth path, while he is reasoning in a single period. We have something like a dynamics without process. Harrod himself recognized that "*while the equations clearly show the instability of an advancing economy, they do not in themselves provide very good tools for analysing the course of the slump*" (1948, p. 90). It is the device of the ex ante / ex post distinction to escape this difficulty. Otherwise, two ways are offered in order to analyze the "movements", ie according to Harrod's terms "*the succession of events*" (1938).

The first one is to date each variable, and introduce lags in the reactions. But Harrod is rather reluctant to do that. Starting from a position of sharp refusal, he came, in

the *Essay* (probably influenced by Tinbergen in that field¹²), to a more pragmatic position:

"Attempts to construct a dynamic theory have recently been proceeding (...) by the study of time lags between certain adjustments. By the introduction of an appropriate lag the tendency of a system to oscillate can be established. In these studies there is some doubt as to the nature of the trend on which the oscillation is superimposed. Supposing damping measures could be introduced, to counteract the oscillation caused by the lag, would the system be stationary or advancing. At What rate? Dynamic theory in my sense may throw some light upon this.

(...) the attempt to explain the trade cycle by exclusive reference to (lags) is an unnecessary tour de force. The study of the operation of forces maintaining a trend of increase and the study of lags should go together" (1939, p. 255).

This combination led to Samuelson's oscillator and to Hick's (1950) trade cycle model.

The second way is to study the evolutions of technology and savings, in interrelation with the distribution of income, and the rate of profit. It is the Cambridgian way, explored by Kaldor and Robinson, which consists basically in ricardian comparative statics.

Harrod's comparisons between ex ante and ex post positions is an unstable compromise, which could not be maintained.¹³

Is there an other possibility, that could be considered as a "keynesian" view on dynamics? It is what we must now examine, before concluding upon the keynesian flavour of Harrod's model of growth..

4.3 Two notions of dynamics

In his review (1937) of the *General Theory*, Harrod stated that *"the only criticism of Keynes which I venture to offer is that his system is still static"*, because it is exclusively concerned with the determination of the amounts of commodities and factors offered and exchanged in the economy *"so long as the conditions, including anticipations, remain the same"* (1937, pp. 604-605). It would be dynamic only if it included *"the rate of growth of these amounts"* in the causal chain of events. The stress put by Keynes on expectations was nothing more than a mere amendment of traditionnal theory, constituting *"a great*

¹² See Jolink (1996) for an account of Tinbergen's influence on Harrod's conception of dynamics.

¹³ See Kregel (1980) for a "harsh" post-keynesian criticism of Harrod's methodology.

improvement in the definition of marginal productivity", but in no way a touchstone for a reconstruction.

For his part, Keynes doesn't see how growth theory, as a study of the *"moving base of steady progress"*, can offer insights on short-run evolutions, and is not willing to accept the conceptual distinction between questions relating to the actual path (and fluctuations) of activity (trade cycle) and those relating to the level of employment. *"I do not see that (your) theory has any application worth mentioning to the trade cycle"*, given that trade cycle theory is concerned with short period, while the stability of steady growth *"is essentially a long-period problem, and steady growth a long-period conception"* (CW14, p. 173).

As we have seen, Keynes' theory is not dynamic in Harrod's sense because it doesn't include any idea of a "trend". The exogeneity of long run expectations is the form in which this thesis is exposed. But he had in view a theory of "moving equilibriums". Keynesian dynamics would deal with the way a period is connected with its past and future, without any idea of a "natural" position that could eventually be reached by the market mechanism. Keynes ever denied any necessity of conceiving a distinct model ("of the long run") for the treatment of the changes in equilibrium position, considering that the notion of a *"final position of equilibrium"* would make sense only if we consider an economy with a constant state of expectations. In this view, *"the long run trend is but a slowly changing component chain of short period situations ; it has no independent entity"*, as stated by Kalecki (1968). This conception has never been elaborated in formal models. But it is what "post-classical" keynesians¹⁴ seem to aim at. In such a model, which should be something like a model of "financial reproduction" of capital, the only element belonging to the tradition of long period analysis of "tendencies" and "laws of motion" that could be saved is the ricardian (or marxian) analysis of technological unemployment.

5. Conclusion

Thus, it can be argued that Harrod, according both to his critical assessment of the *General theory*, and to his own work on endogenous instability, might be considered as one of the founders of neo-keynesianism, of the Hicks-Samuelson style, rather than a founder of post-keynesianism, in the "kaleckian" way then explored by Joan Robinson or Hyman Minsky.

¹⁴ That is to say those of the post-keynesians who have abandoned the perspective of a "classical" synthesis between short-run keynesian analysis and long-run ricardian theory of accumulation.

The ambiguities in the relation between Keynes and Harrod are not specific to this latter. Some of them can be observed in the work of other major Keynesian authors, such as Kaldor. What this remark suggests is that the difference between post and neo Keynesian programs is rather uncertain, and that this hesitation can be located at the very beginnings of Keynesianism, and explains the persistence of many troublesome debates.

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