

A Review of Keynes' Criticisms on the Methodology Developed by Kalecki

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This paper is an attempt to understand Keynes' criticism on methodological approaches developed by Kalecki. Its motivation is based on the fact that the nature of economic theorizing has relatively been paid little attention. The paper will trace the reasons for Keynes' hostility to Kalecki's approach, which will be located in differences in method between the two economists. It will be argued that the differences can probably best be understood in terms of the concepts developed by Kuhn and Lakatos in their analysis of the history and method of sciences.

I. Introduction

This paper is an attempt to understand Keynes' criticism on methodological approaches developed by Kalecki. It is true that the nature of economic theorizing has relatively been paid little attention.

In particular, this paper will attempt to trace the reasons for Keynes' hostility

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to Kalecki's approach, which will be located in differences in method between Keynes and Kalecki. To illustrate some of their differences, a brief indication of the flavor of Keynes' criticisms of Kalecki's work will be given. In his role as an editor of *the Economic Journal*, Keynes made comments on several papers submitted by Kalecki. In a letter to Joan Robinson, he writes ;

Here is Kalecki's article. As I said to the other night, after a highly rational introduction of a couple of pages my first impression is that it becomes high, almost delirious nonsense.¹⁾ So I am of the opinion that the article is pretentious, misleading, inconclusive and perhaps wrong, I would rather have cheese to a weight equal to the paper it would occupy in 5,000 copies of the Journal.²⁾

These are very strong words, and it is important to examine the exact nature of Keynes' criticism. Before doing so, it will be useful to try to make some summary statements about the methodological difference between Keynes and Kalecki. In particular, it will be argued that the differences between Keynes and Kalecki can probably best be understood in terms of the concepts developed by Kuhn and Lakatos in their analysis of the history and method of science.³⁾

II. Keynes' Conceptual Frameworks

In this section we are concerned not with Keynes' actual method, but rather with his methodological prescriptions. In other words, we are concerned with his

1) Keynes [15] p. 829.

2) Keynes [15] p. 836.

3) See Kuhn [17], Lakatos [18].

view on what is the appropriate method for economics, rather than whether his work conformed to that method.

In examining Keynes' approach, it is important to distinguish between Keynes the polemicist writing for a predominantly non-academic audience, and Keynes the pure theorist writing specifically for an academic audience. This distinction is both more important and more sharply defined for Keynes than it is for Kalecki. Most commentators agree that Keynes was much more at ease (and at his best) with the former;

Keynes was far happier writing for a non-academic audience ... His popular and other non-academic writings were unlaboured, in contrast to the elements of strain and torture that entered into his academic writing.⁴⁾

They further stress the distinction for Keynes between theoretical and practical economics;

Keynes always emphasised the need to keep clear the distinction between theoretical issues and policy.⁵⁾

Nevertheless it should be noted that Keynes always argued that theory and practice should be consistent. For his polemical writings, Keynes tended to adopt a much more flexible and pragmatic approach than in his scientific work, in which he felt bound by what he saw as certain methodological imperatives. The distinction can easily be verified by comparing the style and method of his major academic works, *The General Theory of Employment, Interest and Money*⁶⁾ and *A Treatise on Money* with his other writings.

4) Kahn [4] p. 77.

5) Moggridge [21] p. 76.

6) Hereafter cited as *the General Theory*.

The distinction, for Keynes, between academic and polemical work involved certain methodological prescriptions for the former, related to the generality and precision of the argument.⁷⁾ Two related prescriptions which run through his methodological comments, both on his own writings and on that of other economists, and first the importance of stating all the relevant assumptions, and secondly the stress on the generality of arguments. The interrelation occurs because, by stating all the assumptions it is possible to evaluate both the generality of the analysis and the circumstances in which it is applicable. In other words, by stating the assumptions of the analysis, it is easier to ascertain the conditions under which it will be applicable; that is, to ascertain the domain over which it is relevant. This is also true of Keynes' concern with the definition of variables and the choice of units. Here, precision in conceptions can be seen as an important determinant in establishing where the theory was to apply. It is also important to distinguish between assumptions which limit the analysis to special cases which are unlikely to fall, for theoretical reasons, in a general theoretical model; and assumptions which limit the analysis to an empirically unlikely case. Keynes was interested in both these, but stressed the importance of the first for theoretical work. For Keynes, a priori theorizing was confirmed or called into question on the basis of experience.⁸⁾ By contrast, Kalecki was more interested in the second type of assumption.

Keynes' concern with searching out the assumptions underlying arguments is evident from many sources. Austin Robinson has discussed the importance of searching for the hidden assumption in meetings of the Political Economy Club.⁹⁾ Volumes XII, XIII, XIV and XXIX of Keynes' Collected Writings

7) Before our detailed examination of Keynes' approach, it is important to note that what is important here is his approach as he saw it. There are many examples where Keynes does not keep within his own methodological prescriptions.

8) O'Donnell [22] pp. 161~165.

9) Robinson [25] p. 60.

abound in his comments on the underlying or implicit assumptions in the work of other economists. For example, he wrote to Hayek, in February 1932;

I am left with the feeling that I seldom know, when I read stuff, exactly what simplified assumptions you introduce or what effect it would have on the argument if these simplified assumptions were to be removed.¹⁰⁾

Further examples are the similar comments in his discussion of a paper submitted by Pigou to *the Economic Journal*.¹¹⁾ In a letter to Kahn during this correspondence Keynes wrote;

Many thanks for sending me a copy of the Prof's new book. As in the case of Dennis, when it comes to practise, there is really extremely little between us. Why do they insist on maintaining theories from which their own practical conclusions cannot possibly follow? It is a sort of society for the Preservation of Ancient Monuments.¹²⁾

In this letter, as Moggridge has pointed out, Keynes was emphasizing the inconsistency between Pigou and Robertson's theoretical premises and their policy conclusions.¹³⁾ In other words, he was trying to show that these conclusions, in fact, needed to be derived from a different set of assumptions from these underlying Pigou and Robertson's analysis. So it can be seen that it was important for Keynes for policy conclusions to be consistent with the theory.

In addition there are many comments by Keynes in his capacity as editor of *the Economic Journal* on papers submitted to it. In particular, his attempts at

10) Keynes [12] p. 265.

11) Keynes [13] pp. 234~268.

12) Keynes [13] p. 259.

13) Moggridge [21] p. 62.

trying to identify any substantial implicit assumptions as well as his stress on stating all of these assumptions is very obvious. His lengthy correspondence with Harrod, who had submitted a draft of his "An essay in dynamic Theory" provides many good examples.¹⁴⁾

Before continuing the central theme, it will be useful to establish exactly what Keynes meant by calling his analysis in *the General Theory* more general than that of his predecessors. Keynes is sometimes ambiguous in defining exactly what he means by general, and his reasons for arguing that his analysis is the more general. The implication from the first chapter of *the General Theory* is that Keynes' analysis is applicable over a larger frame of reference, due to the greater generality of his postulates, so that the classical theory was only applicable at full employment, it did not deal adequately with the behavior of the economic system as a whole, it required a state of definite and constant expectations and it was not readily applicable to the case where money wages were fixed.¹⁵⁾

Given the importance of generality for Keynes' method, it is not surprising the stressed the generality of his analysis. Keynes' concern with the generality of economic theories is a theme which runs through his work. This was related to his attitude to assumptions as he was especially critical of these assumptions which limited the generality of an argument. In a letter to Pigou, Keynes wrote;

These special assumptions make it possible, of course, to reduce it to a simple form without losing anything. On the other hand, it is really the general case one has to consider, and that it seems to me would be very difficult to treat along these lines.¹⁶⁾

14) Keynes [13] pp. 323~346.

15) Keynes [13] p. 106, 276.

16) Keynes [13] p. 267.

Keynes' criticism here focuses on Pigou's use of assumptions which limit the analysis to a theoretical special case arguing that it would be difficult to generalize. Similarly, when he made what he regarded as his major break from his predecessors in *the General Theory*, it was because he felt that their analysis lacked generality.

Generality of a model is only part of Keynes' methodological prescription. In an important letter to Harrod, Keynes outlined what he felt was the essential method of economics;

It seems to me that economics is a branch of logic, a way of thinking ... Economics is a science of thinking in terms of models joined to the art of choosing models which are relevant to the contemporary world ... Progress in economics consists almost entirely in a progressive improvement in the choice of models.¹⁷⁾

In other words, Keynes' position seems to be that economics is about deriving general models. Of the large range of possible general models, the object of economics is to choose those which are more realistic or have greater bearing on practical problems. So economic theory, due to its generality, is only useful when applied to practical problems.¹⁸⁾ To do so, one needs to bring in institutional and similar considerations to make it more applicable to a specific reality, which is very much the position which Keynes imputes, with approval, to Marshall in his biographical essay;

The master-economist ... must contemplate the particular in terms of the general ... Marshall ... arrived very early at the point of view that the bare bones of economic theory are not worth much in themselves and do not

17) Keynes [13] p. 296.

18) See the letters by Keynes quoted in Moggridge [21] pp. 57~58.

carry one far in the direction of useful practical conclusions. The whole point lies in applying them to the interpretation of current economic life.¹⁹⁾

Although Keynes separates theory from practise, as has been observed, he does require them to be consistent. However, they are applied at different levels of vigour reflecting their different levels of abstraction. Furthermore, for Keynes theoretical work was important for the light that it shed on policy considerations. Keynes' views on the abstractness and generality of the correct method for economics are not surprising given his early training as a mathematician, and his interest in philosophy.²⁰⁾

Before concluding this discussion of Keynes' method, attention must be paid to the major formative influence on Keynes' economic thought, that of his teacher, Alfred Marshall, the great synthesiser. Marshall's *Principles* was a very rich mixture of both theory and empirical observations. However, a central feature was an attempt to construct a general theory of economic behavior in which the classics and Jevons were special cases. This theory was an attempt at making economics logical and rigorous and was concerned with equilibrium in different time periods (analytical and calendar). This is especially true of Book5: "The General Relations of Demand, Supply and Value", which is the section of the *Principles* which Marshall regarded as containing the essence of his message. As Marshall wrote in the preface to the first edition of the *Principles*;

The general theory of the equilibrium of demand and supply is a Fundamental Idea running through the frames of all the various parts of the central problem of Distribution and Exchange.²¹⁾

19) Keynes [10] p. 173, 196.

20) For an excellent account of the importance of Keynes' philosophy for all aspects of his thought, see O'Donnell [22].

21) Marshall [20] p. viii.

Keynes worked within the Marshallian tradition, and the method and framework of all his theoretical work, including *the General Theory* are very Marshallian, although there is a change of emphasis from Marshall's concern with the long run to Keynes' concern with the short run. In his major economic works preceding *the General Theory*, Keynes saw himself as mainly restating or extending Marshallian theory.

In *the General theory*, the tools were neoclassical, with emphasis on maximizing individuals and profit-maximizing firms²²⁾ in an uncertain world, in a Marshallian short period, and utilizing partial equilibrium supply and demand analysis. Keynes accepted the basic framework of Marshallian analysis; but amended these aspects of the specific theories which he thought were incorrect,²³⁾ and added his own insights and mode of reasoning on how reasonable people behave in an uncertain environment.²⁴⁾ Kaldor has likened Keynes' contribution to a builder adding an extra floor or balcony, here or there, while preserving the preexisting building [Marshallian doctrine].²⁵⁾ In particular he maintained the importance of supply and demand analysis, extending it to the supply and demand for output as a whole. However, he also added to the theory, and to Marshall's analysis of the roles of institutions, parts which represented institutional aspects associated with his perceptions of capitalist economies, especially those associated with his perception of capitalist economies, especially these associated with the role of money and other aspects of the financial sector, and with the labor market. It is not, however, our intention to present yet another interpretation of *the General Theory*. As was stated earlier, for our

22) The role of profit maximizing firms is explicitly recognized by Keynes in his definition of the effective demand. See p. 25, p. 56 and p. 77.

23) Some examples are Keynes' integration of the monetary and real sectors, and the analysis of consumption and investment.

24) Harcourt [3] p. 10.

25) Kaldor [5] p. 6.

purpose what is relevant are Keynes' views on the correct method for economists, rather than the actual methods he employed.

III. Kalecki's Conceptual Frameworks

By way of comparison with the discussion of Keynes, this section will briefly highlight the key roles which institutions play in Kalecki's work. Unfortunately far fewer of Kalecki's writings are available in English than Keynes'. Very little of his correspondence has been published as yet, and there is not very much specially devoted to questions of method.

As has been well documented, Kalecki's intellectual roots were in the Marxist conceptual framework rather than in the orthodox economics of the time. One of the fundamental principles of analysis of this tradition lies in the historical materialist conception of man as a social agent, with society and institutions shaped by the underlying productive forces, but, at the same time influencing the nature of the interaction of people with important feedbacks.²⁶⁾ For Kalecki this manifested itself in the belief that;

The institutional framework of a social system is a basic element of its economic dynamics.²⁷⁾

As a result Kalecki did not subscribe to a general theory with modifications to allow some role for institutions and social phenomena, but instead incorporated these into the essence of his models. It is therefore no surprise to learn that Kalecki's analysis of capitalist, socialist and developing economies are

26) Kalecki [7] p. 233.

27) Kalecki [8] p. 233.

fundamentally different, reflecting the differing institutional frameworks of these economies, as well as other differing characteristics. It is not surprising that in many important features Kalecki's work differed from that of Marx, partly reflecting the evolution of capitalism and its institutions since Marx's time.²⁸⁾

As professor Lipinski, Director of the Polish Research Institute of Business Cycles and Prices at the time Kalecki commenced his career as a professional economist there, has observed, when Kalecki began his career as a theorist, he directed this efforts towards the observations of economic life itself.²⁹⁾

His theorizing was usually directed towards the explanation of real world phenomena which he regarded as important, and his abstractions and assumptions were related concrete conditions of the world he sought to explain.³⁰⁾

For Kalecki, as for Keynes, economic theories should be a guide for understanding societies, and not abstractions for their own sake;

There thus arises a situation which is not infrequent in the history of economic thought: theories are being created which raise problems of great interest but are not very conducive to understanding what actually happened, is happening or should be happening.³¹⁾

Kalecki's method was that of an applied statistician in incorporating and approximating those features and institutions of the economy/society being analysed which he saw as being fundamental.³²⁾ In his analysis of modern

28) Sawyer [28] Chapter 8, Dobb [1] pp. 269~270.

29) Lipinski [19] p. 69.

30) Sawyer [28] p. 147.

31) Kalecki [8] p. 311.

32) Harcourt has characterized Kalecki's approach as the art of making models which contain the fundamentals, and simplifications which make little difference in principle or in practise.

capitalism, for example, he started from assumptions based on observations, similar to Kaldor's stylized facts, that is, he started from particulars. For Kalecki these were part of the conditions of modern capitalism, so there was no need to derive them from a general theory although changes in the base or superstructure would change the nature of the relationship between economic variables. They were obvious. Kaldor has described this method as follows;

[C]ontrary to the prevailing trend, one should subordinate deduction to induction, and discover the empirical regularities first, whether through a study of statistics or through special inquiries ... One should also seek the most reasonable explanation capable of accounting for these 'facts', independently of whether they fit into the general framework of received theory or not.

I called them 'stylized facts' ... we do not imply that any of these 'facts' are invariably true in every conceivable instance but that they are true in the broad majority of observed cases in a sufficient number of cases to call for an explanation that would account for them.

In comparison with high-sounding principles of the great systematizers, this kind of inductive-deductive theorizing may appear pedestrian. But it is far more likely to lead to a better understanding of how capitalist economies work than the all-embracing principles of the great system-builders who, in the field of economics at any rate, are more likely to obstruct the progress of knowledge than to promote it.³³⁾

This is also an excellent description of Kalecki's method. Different types of society or different stages in the development of a given society will yield different stylized facts and hence require different explanations. For this reason, Kalecki is critical of the development of general theories;

33) Kaldor [5] pp. 8~9.

There is a tendency in western economics — which shows at present considerable interest in the theory of economic growth — to deal with something like a general theory of growth working on models fairly remote from the realities of the present capitalist, socialist or mixed economies.³⁴⁾

This view of Kalecki's method is similar to Joan Robinson's description of Marx;

[A]ny modern neoclassical economist sets up a 'model' on arbitrarily constructed assumptions, and then applies 'results' from it to current affairs, without even trying to pretend that the assumptions conform to reality. Marx did not work that way. He was peering into the world around him, trying to understand its mode of operation. His theory formalized what he believed to be the case. He did not 'construct' his beliefs from his theory.³⁵⁾

In addition, Kalecki was not as concerned as Keynes was with precision in definition of terms or in the choice of units. For example, instead of the complicated discussions about the meaning and definitions of consumption and investment in Book 2 of *the General Theory*, Kalecki merely distinguishes capitalists' and workers' consumption, and investment in fixed capital goods and in inventories.

In order to facilitate comparison with the discussion of Keynes in the previous section, it would have been useful to consider Kalecki's equivalent of *the General Theory*. However, there is no equivalent work for Kalecki, there is a certain continuity which runs through his analysis of capitalism.

Kalecki's main criticism of the orthodox analysis was not aimed at the lack of generality of its premises, but rather at their lack of realism, unlike Keynes who considered both important. This has partially been noted above, but it is a

34) Kalecki [8] p. 311.

35) Robinson [26] p. 25.

recurring theme throughout Kalecki's comments. So, for example, he criticises the reliance on perfect competition;

A world in which the degree of monopoly determines the distribution of national income is a world far removed from the pattern of free competition. Monopoly appears to be deeply rooted in the nature of the capitalist system; free competition, as an assumption, may be useful in the first stage of certain investigations, but as a description of the normal state of capitalist economy it is mainly a myth.³⁶⁾

'Perfect competition' ... is a most unrealistic assumption not only for the present phase of capitalism but even for the so called competitive capitalist economy of past centuries: surely this competition was always in general very imperfect. Perfect competition when its actual status of a handy model is forgotten becomes a dangerous myth.³⁷⁾

By comparison, Kalecki's analysis of the manufacturing sector, certainly in his works after 1938, started with the assumptions of oligopolistic pricing and excess capacity, despite numerous reformulations of the actual models.³⁸⁾

Kalecki also made criticisms, similar to those of Keynes, based on the fallacy of composition of orthodox economics in deriving conclusions related to the economy as a whole based on individual experience. Kalecki, like Keynes, rejected the role of the rate of interest in equilibrating saving and investment, but argued instead that they were equated by changes in the level and distribution of income caused by changes in the level of investment.

Kalecki's analysis was always in terms of classes — workers and capitalists — with the implication that the main determinant of people's economic relations

36) Kalecki [6] pp. 40~41.

37) Kalecki [9] p. 158.

38) See, for example, Kalecki [8] p. 312, Kriesler [16] Chapters 4~6.

was their role in production, and the constraints on their activities which this implied. So workers are assumed to have a passive role, consuming all their income, while capitalists make investment, saving and consumption decisions influencing employment and prices. In other words the classes are associated with different types of economic activity.³⁹⁾ This may be compared with Keynes who focussed on individual behavior in his analysis of consumption behavior. Keynes did, however, allow for the fact that income from different factors are associated with different marginal propensities to consume.⁴⁰⁾ As a result, in Kalecki's work, the distribution of income is an important determinant of the level of income via, *inter alia*, its influence on the level of consumption. If wages are mainly consumed, while capitalists consume, save and invest, then changes in income and employment, according to Kalecki, also result from changes in distribution to from changes in capitalist expenditure decisions.

In his brief discussion of some aspects of Kalecki's analysis two important points emerge. The first is Kalecki's concern with the realism of the analysis and his hostility towards general models. His method was that of looking at the world and attempting to incorporate what he saw as the starting point of his analysis. In other words, his conceptual framework laid stress on uncovering the major institutions of a particular society, and using the particulars of those as his starting point. Therefore, the starting point of his analysis can be seen to be very different from that of Keynes, whose starting point was within the general Marshallian framework. To get to Kalecki's particular starting points from this general framework would have required many assumptions which simply were not relevant for Kalecki's framework.

39) Sawyer [28] pp. 188 ~ 189, 192 ~ 193. Kalecki allowed a role for trade unions to influence the markup and hence real wages.

40) Keynes [11] p. 262, [12] p. 269, 391.

IV. Keynes' Comments on Kalecki's Work

Having briefly outlined Keynes' and Kalecki's general views about the nature of economic theorizing, some further insights may be derived from a consideration of Keynes' views of Kalecki's work. As noted in the introduction to this paper, Keynes in his role as editor of *the Economic Journal*, commented on at least three papers of Kalecki's between 1937 and 1942.⁴¹⁾ Keynes' most frequent criticism of Kalecki, which emerges in all his comments, in the accusation that Kalecki is not stating all his assumptions, and that his conclusions only hold under very unrealistic assumptions. To take some examples, Keynes criticized Kalecki's use of sectoral models, his discussion of the investment and consumption decisions of capitalists, and his use of the analysis of imperfectly competitive sectors.

Consider first Keynes' criticism of Kalecki's use of sectoral models and the related distinction between the economic activities of workers and capitalists, discussed in the previous section. In February 1937, Kalecki submitted a paper to *the Economic Journal* titled "A Theory of Commodity, Income and Capital Taxation". In his comments on it, Keynes referred to an assumption which he regarded as being implicit in the argument, but also unrealistic;

I think it would be advisable ... to make quite explicit your assumption that the consumption of capitalists is entirely directed to goods other than wage goods.⁴²⁾

Kalecki according to his response, rewrote the paper making this assumption

41) Keynes [15] pp. 789~798, 829~841.

42) Keynes [15] p. 790.

explicit and also considering the effects of it not being fulfilled. Keynes, still not satisfied, argued that Kalecki's analysis would not permit any possibility of production substitution between the workers and the capitalist's consumption sectors — a hopelessly unrealistic assumption. Kalecki, while seeming to acquiesce, nevertheless argued that this problem is not so important in reality because capitalists consumption of these wage goods on which taxes are raised and which are a small part of total consumption of them do not interfere much with the process examined. Keynes' final reply is illuminating as he distinguished his comments as editor from those as a private critic. As an editor;

The only essential is that you should state your assumptions quite fully and quite clearly.⁴³⁾

While, as a private critic, Keynes felt that these implausible assumptions are not required for the main conclusions and they very much impair the generality of Kalecki's argument.⁴⁴⁾

Encapsulated in this discussion is the essence of the difference in approaches of the two men, outlined in previous sections. For Kalecki, the applied statistician, approximation based on empirical observation is a reasonable procedure, while for Keynes, as has been observed above, the generality of an argument and the precision of the terminology are always of great importance. This distinction between Keynes and Kalecki is very similar to that noted by Tsuru with respect to Keynes and Marx;

43) Keynes [15] p. 796.

44) It is interesting to note that Kahn, in discussions of the *Treatise of the circus*, explained the problem of saving and investment in a similar manner to that used here by Kalecki, and objected to by Keynes (Robinson [27] p. 96).

One of the significant difference in the methodological character of aggregates between Marx and Keynes lies in the direction in which abstraction is carried out. Marx's intension [and also Kalecki's] was to represent, as simply as possible, the specific interrelation of aggregates which is characteristic of capitalism, whereas Keynesian aggregates do not necessarily concern themselves with the specificity of capitalism.⁴⁵⁾

The final criticism by Keynes which will be considered relates to Kalecki's assumptions of the imperfectly competitive nature of modern capitalist economies. In particular, Keynes found Kalecki's analysis of mark-up pricing and of the existence of general underutilized capacity in the manufacturing sectors of modern capitalist economies difficult to accept, especially with respect to long-run analysis.

The correspondence relating to Kalecki's paper "A Theorem on Technical Progress" is particularly revealing of Keynes' attitude. None of the correspondence between Keynes and Kalecki is available, only that between Keynes, Joan Robinson and Kaldor.⁴⁶⁾ In the letter to Joan Robinson, referred to in the introduction, Keynes, after dismissing Kalecki's paper as high almost delirious nonsense, makes his customary comment;

I am ready to believe that there are assumptions in relation to which his conclusions are correct. But so many of them are latent and tacit that no-one could say, I should have thought, whether he had proved his proposition. Indeed I do not feel perfectly sure whether the hypotheses may not be self-contradictory.⁴⁷⁾

45) Tsuru [30] p. 336.

46) This is, Perhaps, why Keynes seems to be more extravagant and dismissive in his comments than normal.

47) Keynes [15] p. 829.

In particular, he asks;

Is it not rather odd when dealing with long-run problems' to start with the assumption that all firms are always working below capacity.⁴⁸⁾

Joan Robinson replied that under-capacity was a normal result of the theory of imperfect competition. This, however, did not impress Keynes;

For I am still innocent enough to be bewildered by the idea that the assumption of all firms always working below capacity is consistent with 'a long-run problem'. To tell me that 'as for under-capacity working that is part of the usual pack of tricks of imperfect competition' does not carry me any further. For publication in the Journal an article must pass beyond the stage of esoteric abracadabra.⁴⁹⁾

He also criticized Kalecki's method of taking artificial which have no possible relation to reality.⁵⁰⁾ Joan Robinson defended the analysis of imperfect competition against Keynes' criticism by pointing out that it is in all the textbooks now, and demonstrating why, even in full equilibrium, there would be surplus capacity. In his response, Keynes indicated that his criticisms were not aimed at the theory of imperfect competition, per se, but rather at Kalecki's tacit inclusion of the analysis without showing the relevant consequences.

As well as the general criticisms which Keynes made about Kalecki's tacit assumptions, this exchange is very interesting because of what it reveals about Keynes' attitude to the theory of imperfect competition. Joan Robinson indicates that Keynes has always suspected it of being awful rot.⁵¹⁾ Keynes' neglect of

48) Keynes [15] p. 829.

49) Keynes [15] pp. 830~833.

50) Variants of this criticism appear in almost all of Keynes' comments of the three Kalecki papers referred to above, see Keynes [15] pp. 790~841.

any serious analysis of imperfect competition, especially in *the General Theory*, has been the subject of much speculation on which this exchange between Joan Robinson and Keynes may throw some light. In *the General Theory* Keynes lists, as one of the factors taken as given, the degree of competition, which would seem to indicate that the analysis is compatible with imperfect competition, as long as the degree of imperfection remains constant during the analysis.⁵²⁾ However, many economists argue that, while *the General Theory* may not rely on perfect competition its analysis uses, at least, competition of the Marshallian type, that is, with sufficiently large numbers that both firms and individual economic agents are price-takers and that prices are equal to marginal costs.

The final set of correspondence relating to mainly theoretical works contains Keynes' impressions of Kalecki's 1939 book, *Essays in the Theory of Economic Fluctuations*. In opposition to the unsympathetic views of Kalecki's method, Keynes' response to the book was much more enthusiastic. In a letter to Kalecki, Keynes wrote of the articles of which the book was a compilation;

I get the impression of immensely improved lucidity. I have found them exceedingly clear and intelligible and most agreeable (and almost easy) reading. It will be a most valuable work.⁵³⁾

In a very revealing letter written to Joan Robinson Keynes reiterated his enthusiasm for Kalecki's book. In addition, he seemed to understand the basis of the methodological differences between Kalecki and himself;

I have been reading Kalecki's proofs. Perhaps as a result of your

51) Keynes [15] p. 831.

52) Harcourt [2] pp. 96~97.

53) Patinkin [24] p. 101.

promptings, I find it remarkably lucid and very agreeable, and almost easy reading. I have not compared these articles he is reprinting to see how much he has changed them, and it may be that it is greater familiarity with his ideas that is helping me. At any rate I find his new version enormously easier. His device of making bold, and perhaps precarious, simplifications in his assumptions on the basis of alleged statistics and then beginning his theory (instead of working a theory on general lines and making simplifications afterwards) is very interesting and, if one minds one's step and members where one is, useful and illuminating. The flavor of him is most peculiar — very subtle, very aesthetic and complete within its own field, yet all the same light weight I can't help feeling. But it is an important book, so individual and original that it throws light in new corners.

From a letter from J. M. Keynes to Joan Robinson, 12 January 1939.

In this letter Keynes' assessment of Kalecki's method is entirely consistent with our interpretation. As we saw above, Keynes probably found the book light weight because of its lack of generality. What is interesting is that Keynes seems to have forgotten these comments (or changed his mind again) by 1941. As the discussions of his editorial comments on papers submitted by Kalecki for consideration by *the Economic Journal*, indicate, there appear to be three stages in Keynes' response to Kalecki's work. Keynes' comments in 1939 on Kalecki's *Essays in the Theory of Economic Fluctuations*, a collection of essays half of which had been previously published in English, indicated a much more sympathetic response. Since there was no change in Kalecki's method, and little in the content of the analysis, the explanation must lie in change in Keynes' perceptions perhaps initially induced by arguments from Joan Robinson.

Finally, there is a letter from Keynes praising Kalecki for his paper "Three Ways to Full Employment" in *The Economic of Full Employment*. The foreword to the book makes it clear that it is a polemical manual in the sense that it does not appeal exclusively to the expert economist.⁵⁴) Keynes wrote of

Kalecki's paper;

Your own contribution seems to me most striking and original ... also most beautifully compressed. It is a great comfort to read something so short and so much to the point.⁵⁵⁾

It is difficult to imagine Keynes making these comments if it had been a theoretical piece!

So far we have concentrated on Keynes' view of Kalecki's method. This is due to the fact that most of the available correspondence contains Keynes' opinions. This lack of comment by Kalecki on Keynes' method, either in published works or in available correspondence is slightly mitigated by the recent translation of Kalecki's review of *the General Theory*. The review concentrates on the theoretical argument, dividing it into two fundamental parts;

- 1) The determination of short period equilibrium with a given production apparatus, once the level of investment (per unit of time) is given.
- 2) The determination of the volume of investment.⁵⁶⁾

After arguing that Keynes satisfactorily solved the first of these, Kalecki reworks the main argument in terms of his own analytical tools. However, Kalecki is unhappy with Keynes' solution to the second part, arguing that it suffers from serious deficiencies.

In his discussion of the determination of short period equilibrium, Kalecki explicitly modifies Keynes' analysis of consumption to incorporate the

54) From Burchardt's foreword to Oxford University Institute of Statistics [23] p. vi, which goes on to say that rigorous technical treatment of the problems has therefore been excluded from the text.

55) Keynes [14] p. 381.

56) Targetti and Kinda-Hass [29] p. 245.

importance of class;

We furthermore presume that workers do not save (nor do they live beyond their means). The saving of workers surely does not play any important role in economic processes, whereas if we take this saving into account, it will obscure some typical characteristics of the functioning of the capitalist economy in general, and above all it makes Keynes' theory less clear.⁵⁷⁾

Now let us assume that the capitalists have a given saving habit; this means that to each level of capitalists' global income ... will correspond a precisely determined distribution of this income between consumption and savings. As a result of the above, each level of global savings corresponds also to a determined level of capitalist consumption.⁵⁸⁾

Elsewhere, the analysis is more Kaleckian than Keynesian, although it reaches the same conclusions.

Kalecki is, however, quite critical of Kalecki's treatment of investment, which yields an equilibrium level of investment;

[I]t is difficult to consider Keynes' solution to the investment to be satisfactory. The reason for this failure lies in an approach which is basically static to a matter which is by its nature dynamic.⁵⁹⁾

So, the main tenet of Kalecki's theoretical criticism of *the General Theory* is based on its static treatment of investment.

On the question of Keynes' method, it is possible to hazard a guess that Kalecki would have been critical of its relevance and its realism, and this is the implication of a letter from Joan Robinson to Kalecki discussing a draft of the

57) Targetti and Kinda-Hass [29] p. 246.

58) Targetti and Kinda-Hass [29] p. 249.

59) Targetti and Kinda-Hass [29] p. 252.

latter's *Essays in the Theory of Economic Fluctuations*, in which she writes; Keynes system, as you say, is unrealistic.⁶⁰⁾

V. Conclusions

We see, then, that many of the methodological differences between Keynes and Kalecki are due to them starting from very different levels of abstraction, from different emphasis on the question of deduction versus induction and from differing views of the importance to generality. In addition, due to their differing frameworks, the assumptions each took for granted differed. In other words, their difference can be seen to reflect differing conceptual frameworks (paradigms or research programmes), which clashed on both the methodological and theoretical levels. Behind Keynes' analysis was a general framework, derived, with substantial modification from Marshall, of the behavior of individuals and firms onto which he grafted simplifying assumptions as well as assumptions reflecting important aspects of modern economies not caught in the more general theory. Kalecki, by contrast, started not from a general theory, but rather from models based on his observations of those institutions and behavioral norms which he thought most important in shaping the dynamics of the economy. With rare exceptions, Keynes was unhappy with Kalecki's method. This was because, to get from Keynes' starting point to Kalecki's, even if it was possible, required many assumptions not relevant for Kalecki, given his very different starting point. In these terms, Keynes' criticisms can be seen to reflect the fact that Kalecki's analysis was not within the same research program or paradigm and so did not share Keynes' hard-core of assumptions. This partly

60) Patinkin [24] p. 95.

explains the difficulties they had co-operating and communicating. The hidden or illicit assumptions are those necessary to bring Kalecki's analysis into contact with the Marshallian research programmes. So, it can be seen that Keynes' treatment of the papers which Kalecki submitted to the *Economic Journal* reflected basic methodological differences.

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