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KALECKI AND KEYNES REVISITED

George R. FEIWEL

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I

In a biographical sketch of Alfred Marshall written in 1942, Keynes (1963, pp. 140–1)—who in this instance appeared to have been thinking more of himself than of Marshall—contemplated the essential qualities of character, understanding and approach that are the ingredients of greatness in economists:

> The study of economics does not seem to require any specialised gifts of an unusually high order. Is it not, intellectually regarded, a very easy subject compared with the higher branches of philosophy and pure science? Yet good, or even competent, economists are the rarest of birds. An easy subject, at which very few excel! The paradox finds its explanation, perhaps, in that the master-economist must possess a rare *combination* of gifts. He must reach a high standard in several different directions and must combine talents not often found together. He must be mathematician, historian, statesman, philosopher—in some degree. He must understand symbols and speak in words. He must contemplate the particular in terms of the general, and touch abstract and concrete in the same flight of thought. He must study the present in the light of the past for the purposes of the future. No part of man's nature

> or his institutions must lie entirely outside his regard. He must be purposeful and disinterested in a simultaneous mood; as aloof and incorruptible as an artist, yet sometimes as near the earth as a politician.

If I may quote myself (1975, p. viii), in my biography of Kalecki, I applied this quotation to Kalecki as follows:

> This is a formidable list; and although it is doubtful that all of the requirements have ever been united in one person, some of them were Kalecki's most striking attributes. He did indeed possess a rare combination of gifts. He was not a historian by predisposition, but he had a perception for the economic process in motion and how one sequence develops from the preceding ones. First and foremost he was an essentially original thinker, with an unusual ability to identify and address himself to the most relevant problems. He could forge new tools for the solution of a problem or adapt existing ones. He certainly qualified as a mathematician and philosopher and even as a statesman in the sense that his motivation always was toward solving important public issues. Still another aspect of the Keynes ideal was probably Kalecki's greatest gift: His analytical power and almost a genius for effective simplification permitted him to move easily and quickly from the highly abstract to the earthily practical. In sum, he was a political economist par excellence. And he was absolutely incorruptible, as his life and his former colleagues will attest.

Keynes and Kalecki came from two radically diverse social, cultural, and economic strata. They differed in almost as many aspects as can distinguish men: background, social position, education, experience, political outlook, and not the least in predisposition and temperament. However, certain similarities linked these two men who, in a world crisis, miles part, under divergent circumstances, unbeknown to each other, and with a different technical apparatus, came to fairly similar conclusions.

Both men were fond of arguing and controversies. Both were conscious of their extraordinary intellectual powers and did not suffer fools gladly. Both used wit to great advantage and the depth of their thoughts were often revealed in humour. Both appeared to be arrogant—but that was all in the eyes of the beholder. Austin Robinson (1975, p. 11) defends Keynes: "He was easier to argue with than many who have entrenched themselves in doctrinal positions today. He was more patient and more prepared to meet argument and to face the difficulties of someone who differed from him." In many respects the image of Kalecki comes to mind (see Feiwel, 1975, pp. 3–17) when one reads Joan Robinson's (1978, pp. xi–xii) perceptive characterization of Keynes:

> It is difficult to convey an impression of Keynes to someone who did not know him. In the world, he was considered arrogant and harsh; this was because he loved to put a pin into any pompous balloon that he encountered.

> With us in Cambridge he was far more harsh. He had exacting standards but withal he was warm-hearted and generous. He was conscious of being far more intelligent than nearly everyone whom he met, but that was just a fact; he had no need to puff himself up. He had a sense of absolute values; he was willing to argue with anyone on the merits of the case in hand; he could be ferociously obstinate but it never occurred to him to use his authority and eminence to crush a younger disputant and he was ready to take an interest in fresh ideas wherever they came from.

II

In the natural sciences the question of multiple discovery is not a new one. In the social sciences, however, it is not so common. As Joan Robinson (1976, p. 28) points out:

> In the natural sciences it is common enough for the same discovery to come almost simultaneously from two independent sources. As a subject develops it throws up a new problem and two equally original minds find the same answer, which turns out to be validated by further work. In the history of economic thought, there is one notable example of this phenomenon, the discovery of the theory of employment by Maynard Keynes and Michal Kalecki. In the social sciences, experiments are not made in laboratories but thrown up by history. The problem to which both Keynes and Kalecki were searching for a answer was the breakdown of the market economy in the great depression of the 1930s.

Merton reminds us that the pages of history of science are littered with countless instances of similar discoveries made by scientists working without contact with one another. These are sometimes made almost simultaneously and sometimes years apart but unbeknown to each other. This suggests that the discoveries are fated when the prerequistic knowledge and tools have accumulated and when a number of scientists focus on a problem propelled to the forefront of their attention by emerging social needs and/or by developments within the discipline. Thus multiple discoveries are brought about as a result of scientists' responses to similar social and intellectual forces that influence all of them. In fact, he claims there should be nothing remarkable in such a development. On the contrary, this is the dominant pattern and it is the single discoveries that require explanation.

While in the case of Kalecki and Keynes the catastrophic manifestations of the Great Depression and the helplessness of then orthodox economics to explain the problems were similar, the intellectual stimuli and the available toolboxes were different. Both of these provide clues to the similarities and differences in their theories and policy implications. The real question is not of Kalecki's priority of publication but that in certain essential aspects his construct is superior to Keynes's.

As I have argued elsewhere (Feiwel, 1975), Kalecki and Keynes were not rival

inventors. Indeed, in some respects the architectonic contributions of these two scholars are complementary and not competitive. It has taken a long time for the economics profession to acknowledge this coincidental discovery. Indeed, some economists still do not recognize it.

As far as it is possible to summarize a complex analytical system such as Kalecki, in a few words, the gist is that in the 1930s, outside any world center of learning and without any formal education in economics, Michal Kalecki independently discovered the most essential ingredients that went into the making of what came to be known as the Keynesian revolution. In addition to integrating the theories of aggregate output, price, and distribution, Kalecki's system was dynamic. Indeed, Kalecki's theory of dynamics and fluctuations and its partition between profits and wages is more general than the Keynesian system and more relevant to the present day. Kalecki avoided the distinction between micro and macro theories. He constructed his macroeconomic model on the basis of a more realistic theory of the firm that incorporated imperfect competition and income distribution as integral parts of his analysis. He elucidated the dynamic properties of the economic process and dealt with an open economy.

Reflecting on the 'striking and interesting differences' between Kalecki's and Keynes's theories, approaches, and presentation, Johansen (1978, p. 160) emphasized the basic fact 'that Kalecki developed, in some respects in a more advanced form, some of the basic elements of "Keynesian" macroeconomics before Keynes, while on the other hand Keynes's exposition had a much greater impact and still takes the central position in most expositions of macroeconomic theory.' On the question of Kalecki's priority of publication, Johansen (p. 160) claimed that it is equally legitimate to turn the argument around 'and say that it was one of Keynes's greatest achievements to rediscover independently, some of Kalecki's main macroeconomic ideas so shortly after Kalecki himself.' Harry Johnson (1978, pp. 158–9) also speaks of Kalecki's priority of publication 'in some respects theoretically superior to Keynes's *General Theory*,' but Kalecki 'was unfortunate enough to publish in Polish, his native language, and doubly unfortunate in that, when he finally arrived in Cambridge, he proved to lack all the social and cultural graces necessary for acceptance in the British academic system and establishment—graces with which Keynes was super-abundantly endowed.'

Harry Johnson—another 'outsider' who did not feel well accepted in the Cambridge of the 1950s, and whose interpretation may, for that reason, be unfavourably slanted—sheds further light on the Keynes-Kalecki relationship. He (1978, p. 159) relates a story whose validity he himself questions 'that Keynes could have found a position for Kalecki in Cambridge (as he had done earlier for Sraffa), but chose not to do so, on the grounds that Kalecki's personality was too different from the conventional for Cambridge to swallow.' And Johnson (p. 159) continues:

> The irony is that, through Joan Robinson, Kalecki rather than Keynes

> shaped postwar Cambridge's 'Keynesian economics'. There is another ironical possibility, that had Kalecki been kept in Cambridge, he would have developed an economics far more relevant to, and capable of handling, Britain's postwar economic difficulties than 'Keynesian economics' as it developed at Cambridge, and more specifically at the Institute of Statistics at Oxford. My reason for thinking this is that, on the one occasion on which I met him in Cambridge (he being *en route* back to Poland), Kalecki delivered a lecture on inflation that employed a simple quantity theory of money together with expectations about the future trend of prices—and which met with a reception from his former admirers so hostile that he was discouraged from publishing it.

One of the first to give due credit to Kalecki was L. R. Klein—the author of *The Keynesian Revolution*—who in a review of Harrod's biography of Keynes pointed out that, 'after having re-examined Kalecki's theory of the business cycle, I have decided that he actually created a system that contains everything of importance in the Keynesian system, in addition to other contributions' (Klein 1951, p. 447).

Joan Robinson (1965, p. 95) has many times emphasized that 'Kalecki's claim to priority of publication is indisputable.' But more than that, she has frequently underlined that 'in several respects, Kalecki's version is more robust than Keynes's (Robinson, 1979, p. 187). In her Ely Lecture to the American Economic Association she (1973, p. 97) reminded us that

> Keynes himself was not very much interested in the theory of value and distribution. Kalecki produced a more coherent version of the General Theory, which brought imperfect competition into the analysis and emphasised the influence of investment on the share of profits. Kalecki's version was in some ways more truly a *general* theory than Keynes'.

In the fall of 1936 Kalecki met Keynes. Joan Robinson (who as a woman was not a member of the Political Economy Club, founded by Keynes in 1909, which met in his rooms at King's College on alternate Mondays) was especially invited to introduce Kalecki who gave a talk in October 1936—a session presided by Keynes.

How much or how little Keynes was told about Kalecki and his work, the reasons behind that, and whether Keynes was willing to listen will forever remain a mystery. Kalecki himself did not bring the fact of the priority of his publication to Keynes's attention. Shortly before his death, Kalecki admitted to me that he did not regret not having done it himself. He considered that it was up to Keynes's disciples to have brought the matter of Kalecki's priority of publication to Keynes's attention. In fact, he acknowledged that Keynes's worldwide reputation and academic and intellectual standing probably contributed significantly to the preparation and acceptance of the Keynesian revolution. But being human, Kalecki undoubtedly resented being relegated to the ranks of Keynes's interpreters. Any creative work is a part of its author, and we all seek some form of

recognition for what we do.

Shortly before his death Kalecki recalled that he was then a poor Polish Jew in need of a job, while Keynes was concerned with finding historical analogies to his discovery. He was comparing himself to Newton and searching for reasons why they were both misunderstood.

In a letter (16 September (no year; probably 1936), courtesy of Mrs. Ada Kalecki) Joan Robinson wrote to Kalecki: 'I cannot delay to tell you what a pleasure it is to me to be arguing with someone who is making an advance upon Keynes instead of endlessly disputing with people who have not understood the elementary points. I am now working on a book [1937, 1949] in which "Disguised Unemployment" will reappear, with a number of essays making applications of the General Theory to various problems (including international trade). I think you are one of the ten people in Europe who will understand what I am trying to do.' Kalecki drew Joan Robinson's attention to his 1935 article, for in the same letter she wrote: 'Your *Econometrica* article makes me ashamed. We ought to have welcomed you long ago as a kindered spirit. Unfortunately mathematics is an insuperable obstacle for me, and I never turned to the statement at the end. It must be rather annoying for you to see all this fuss being made over Keynes when so little notice was taken of your contribution.'

As Joan Robinson (1979, p. 187) remembers it:

> When Kalecki came to Cambridge in 1936, we told Keynes about him, but he was not much impressed. His own ideas were in full spate (he was thinking about rewriting the *General Theory* in a completely different way) and he had not patience with anyone else's. He picked on a phrase in the *Econometrica* paper that seemed to him too 'monetarist', though in fact it contained a point of view which he later came to himself. Keynes did not sympathize with Kalecki's political presuppositions and by background and temperament they could not have been further apart. I commented on this once, saying 'oil and vinegar would not mix'. Some critic objected that they are mixed every day, but that needs constant stirring. Neither of these two characters was easy to stir. However, Keynes took the trouble to get a research project set up to provide Kalecki with a job. (This was just before the war and nothing much came of it.)
>
> Although Michal behaved in public with a kind of scholarly dignity which is nowadays all too rare, he was naturally disappointed at lack of recognition. He said to me once: 'In the economics profession, no one notices the difference between good work and rubbish.' (I have been disappointed by this myself.)

Keynes was a product of Eaton and Cambridge with a tinge of Bloomsbury. He was born into the privileged upper class of the stable and secure British Empire of the latter part of the nineteenth century. He was brought up in the intellectual atmosphere of Cambridge, where his father, Joan Neville Keynes, taught logic and

political economy. His early youth was spent in the enlightened reformist environment of his parents and his friends. By contrast, Kalecki was born into hostile surroundings and financial insecurity. He was born a Jew in a country where there was overt anti-Semitism. He was born a Pole while the country was partitioned among three foreign powers. His early childhood was spent under Russian tsarist occupation. From the very beginning—whereas Keynes's life was well ordered and in accord with the elements, so to speak—Kalecki had to battle an inimical world. Whereas Keynes had observed the havoc wrought by business downturns, the suffering and misery of the unemployed, and the sheer waste of idle resources, Kalecki knew the misery at first hand.

This is not the place to recount Kalecki's life (see Feiwel 1975, pp. 21–6, 237–40, 293–301, 447–55). But to those of us who believe that biography matters to the understanding of a person's work, a background sketch may be helpful. Born in the industrial city of Lodz, Poland in 1899, Kalecki studied engineering. Before he graduated he sustained one of the first serious hardships and privations that were to plague his life. His father lost his job and the young Kalecki permanently interrupted his studies and sought full-time employment. This, though seemingly a blow to his career, was a distinct gain for economics.

Times were hard in post-Versailles Poland. Jobs were not plentiful. Kalecki tried his hand at economic journalism and in the next few years produced a long series of painstakingly researched and documented articles concerned mainly with market analyses for particular goods. Later, in the employment of the Research Institute of Business Cycles and Prices, he cooperated in studies of Polish national income.

This training in detailed empirical studies, combined with extraordinary theoretical insights, acute mathematical abilities, political astuteness, a social consciousness, served him in good stead when in 1933 he published his outline of a business cycle theory *Proba teorii koniunktury* (Kalecki 1966)—one of the most original and fundamental economic studies of the twentieth century, even if it was not recognized as such at the time and for many years to come. He presented the theory's basic outlines to the sophisticated audience of the newly formed International Econometrics Association in October, 1933 (Kalecki, 1935). But there was still no sign that the world at large had recognized the impact of what the obscure Polish economist had to say. After all he wrote either in Polish (1933) [1966] or in mathematics (1935) neither of which was *lingua franca* for economists at the time.

Keynes enjoyed what was probably the best education that the British Empire could provide. After seven years at St. Faith's in Cambridge, he was enrolled at Eton. The next step was King's College, Cambridge. At the university he first specialized in mathematics, although his field of interest was very broad. Only later in his studies did he become attracted to economics and imbibed the Cambridge school under Alfred Marshall and A. C. Pigou. Kalecki's formal education was in engineering, where he got a solid grounding in mathematics. In economics he was

self-taught. He had read Tugan-Baranovsky, Marx, and Rosa Luxemburg. In contrast with Keynes, who was well steeped in certain aspects of classical and neoclassical economics (but was quite ahistorical in his outlook as a scholar), Kalecki observed the phenomena of modern capitalism with a fresh mind unencumbered by traditional modes of thought. In a way, the new economics came much earlier to Kalecki who started from Marx's reproduction schemes. A large part of the *General Theory* is concerned with shedding the shackles of past heresies. Apparently, for many years, Keynes was constantly grappling with the constraining effect of inculcated fallacies. In developing the theory of effective demand, Kalecki did not have to wrestle with this devil—it simply did not exist for him.

Kalecki's career as an economist had a very humble start. One of the frist temporary jobs he found was a credit inquiry. Later he undertook painstaking statistical studies of commodity markets and a large-scale study of Polish national income. His career as an economic theoretician was begun by close observation of life. In this sense also the new economics came easier to him than to Keynes. yet both men had a genius for the realities of life. They had an uncanny insight into how things actually work and a keen theoretical mind to extract the essence and the tendencies.

But the two men differed considerably in their style and approach to economic theory. Kalecki's argument is couched in mathematical form. His style is 'terse and to the point. He is near to the optimum from the point of view of communicating his ideas clearly and efficiently' (Johansen, 1978, p. 162). Keynes's *General Theory* on the other hand, aroused much controversy at the time of its publication, not only because of the novelty of what he had to say, but also because it left much room for interpretation. To this day, more than fifty years after its publication there is continuing the sometimes growing controversy about what Keynes actually meant. Johansen (1978, p. 162) claims quite appropriately that there should 'hardly ever arise any great controversy about what Kalecki actually meant.'

In 1936 Kalecki traveled to Sweden on a Rockefeller Foundation Fellowship to make contact with the Swedish economists who were working along similar lines. It is there that he first read the just published *General Theory*. Later he admitted that it was an eerie felling, reading his own thoughts expressed by someone else.

Thereafter Kalecki traveled to England and made contact with Keynes's entourage (in particular Joan Robinson, Richard Kahn and Piero Sraffa). Joan Robinson (1979, p. 186) remembers that soon after the publication of her 'Disguised Unemployment' (1936) she "received a letter, evidently from a foreigner visiting England, who said that he was interested in my article as it was close to some work of his own. I thought this very strange. Who could claim to be doing work that was close to this—the first fruits of the Keynesian revolution? When Michal Kalecki turned up, I was still more astonished. He cared little for party manners or small talk and plunged directly into the subject. He was perfectly

familiar with out brand new ideas and he had invented for himself some of Keynes's fanciful concepts, such as the device of burying bank notes in bottles and setting off a boom in mining them. As we talked, I felt like a character in a Pirandello plays, I could not tell whether it was I who was speaking or he. But he could challenge a weak point in Keynes's formulation and quickly subdued my feeble attempt to defend it." Keynes was a 'versatile polymath... intimate both of "Bloomsbury" and of those that inhabit the corridors of power' (Austin Robinson, 1975, p. 9).

By contrast, Kalecki revolved in a much narrower circle. He was not the wordly man that Keynes was. His overriding passion in life was social justice, full employment, and an adequate and growing living standard for all. Both men were astute and sharp observers and commentators of the political and social scene of our age.

As Keynes said, his *General Theory* "is moderately conservative in its implications" (Keynes 1936, p. 377). In politics, Keynes was a "pragmatic" English liberal. Kalecki was always by far more radical. Keynes was certainly not a radical. He wanted to preserve capitalism and realized that, in order to do that, it needed reforming. The basic idea is conservative—that of preserving the existing order of free private enterprise. The approach is liberal—that of the socially conscious observer of the evils of his time whose aim is only to reform the existing order so as to make it function better, more humanely.

Kalecki's political position underwent some shifts under the influence of contemporary developments: (1) In his original articles on the business cycle, Kalecki pointed out very forcefully the absurdities and waste of the capitalist system. He showed how the creation of effective demand by investment could be the very reason for the ensuing slump simply because these investments are useful. He pondered over the paradox of a system where useless investments would be more beneficial. (2) During World War II, Kalecki seems to have been caught by the prevailing expectations that a more just world emerge from the holocaust. His writings indicate that he inclined toward reform of the capitalist system. His masterful "Three Ways to Full Employment" (1944) is still a valid and timely reform blueprint. But he was skeptical and predicted the emergence of the political business cycle. (3) Kalecki was thoroughly distillusioned by the experience of postwar capitalism. He denounced and repudiated creation of effective demand and an increased living standard by military production. His disappointment was made evident in his refusal to write a second edition of his full-employment essay. Would Keynes have approved the modern methods of creating effective demand? No one really knows.

II

Reflecting on the puzzle that the imperfect competition revolution had no bearing on the Keynesian revolution when both of them took place at about the

same time and at the same place and both involved at least some of the same *dramatis personae* (Kahn, Robinson, and Sraffa), Tobin (1981, p. 207) notes

> Keynes's uncritical acceptance of the neoclassical competitive model. By assuming that firms are price takers in auction markets rather than price setters in monopolistic competition or oligopoly, he made it harder to sustain his vision of persistent disequilibrium, with failures of coordination, communication, and adjustment. Imperfect competition was the other revolution in economics in the 1930s; one of its sites was Keynes's Cambridge, and two of its agents, Joan Robinson and Sraffa, were in his group. Yet for some mysterious reason the two revolutions were never meshed.

Keynes concentrated his attack on the macroeconomic failure of the system, but did not challenge the established price and distribution theories. Yet he (1936, p. 292) complained of the dichotomy in traditional teaching between the so-called Volume I of Principles of Economics concerned with price theory and Volume II concerned with theory of money.

At the time the standard Pigovian teaching was that, under competitive conditions, the firm produces output at the level where marginal cost equals price as long as the latter exceeds average prime cost. Therefore, any operating plant is operating at full capacity. Yet during the depression almost all plants were operating below capacity while prices were not falling to equal prime cost. Joan Robinson (1979, p. 188) reports that the concept of marginal revenue was introduced as an explanation of this phenomenon, but Keynes did not use it. He brought in the idea of 'user cost' (loss of value of equipment when it is used rather than remaining idle) as a means for reconciling the concept of competition with the empirical evidence that even during a depression a profit margin was a part of the supply price. This idea did not catch on and did not become part of the post war Keynesian tradition. Surely Keynes was aware of the imperfections of competition in the real world, nevertheless in *General Theory* he chose to battle orthodoxy on what he considered the most important grounds, disregarding the theory of value.

Joan Robinson realized that whatever else Keynes provided, his propensity to leave orthodoxy alone in matters of value theory may lead up a wrong alley. (Keynes 'carried a good deal of Marshallian luggage with him and never thoroughly unpacked it to throw out the clothes he could not wear' (Joan Robinson, 1962, p. 79). She was aware that her *Economics of Imperfect Competition* was not a great improvement. She had nothing effective to put in its place. Thus Kalecki provided her with the answer for which she was grouping. For her Kalecki's integration of imperfect competition and theory of employment (in fact, his entire approach) was the 'joker in the pack' of the Keynesian revolution.

One of the differences between Keynes and Kalecki is that the latter aimed at providing a macrodistribution theory on firmer foundations of a more plausible theory of the firm; in brining the strength of the forces of market imperfection, or degree of monopoly (a term he later regretted), in touch not only with the mode of

behaviour and pricing policy of the firm and process of price formation in an industry, but in incorporating forces of market imperfection in this model of the economy as a whole; and in demonstrating that the intensity of the degree of monopoly is pertinent to the determination of distributive shares and thus closely tied in with the theory of effective demand and Kalecki's conception about the typical state of underutilization of productive resources in capitalist economy.

To build a realistic theory, Kalecki explained how industrial prices are formed by mark-ups on costs and distinguished between 'cost-determined' and 'demand-determined' prices. The intensity of the 'degree of monopoly' (together with other distributional factors) is a key for the determination of macrodistribution. The distributional factors are essentially pertinent to effective demand and to fluctuations in aggregate output and utilization of resources. Kalecki's theory of profits is based on the principle that wage-earners do not save, but spend what they get, and that entrepreneurs get what they spend. Thus entrepreneurs' profits are governed by their propensity to invest and consume and not the other way round. His model not only describes a wider range of economic phenomena, but also presents the economic process in motion (i.e. how one sequence develops from the preceding ones). The model encompasses long-term dynamics, the capacity effects of investments, and some supply considerations. This model provides a starting point for understanding the contemporary problems of simultaneous occurrence of inflation and recession.

Kalecki made the important distinction between 'cost-determined' and 'demand-determined' prices, some aspects o which are similar to the fix-flex price distinction made by Hicks (1965, ch. 7; 1974, pp. 23–8) and prominently featured in Okun (1981, pp. 21–2 and passim).

One of the essential differences of Kalecki's theory is his novel approach to the microeconomic behaviour of the firm and changed assumptions about the shape of costs curves; the firm's price policy; relevant rates of output; and capacity underutilization. Kalecki proceeded from an unorthodox concept of the theory of the firm. He assumed surplus capacity as a typical phenomenon in manufacturing and perfect competition rather the exception in the economic system as a whole. He then focused attention on the firm's price-*making* opportunities and constraints and the policy decisions that the entrepreneurs actually have to make about prices and other forms of non-price competition and labour contracts under various types of imperfect markets.

To build a realistic theory of distribution, Kalecki offered an explanation how prices in fact are formed by mark-up on prime costs. This use of mark-up to cover overheads is very important then; though it involves monopoly poer, it is not synonymous with it. Kalecki has devised a new way of tackling a formidable problem.

Kalecki's theory is a great oversimplification of reality, but its strength lies in clearing the path to identification of crucial forces. Despite its classifications as a monopoly theory of distribution, Kalecki's distribution theory is broader than this

term implies. His pioneering integration of imperfect competition and macrodynamic strands of analysis is perhaps one of his most original contributions.

Reacting to the *General Theory* in 1937, Ohlin observed that 'Keynes does not seem to me to have been radical enough in freeing himself from the conventional assumptions. When reading his book one sometimes wonders whether he never discussed imperfect competition with Mrs. Robinson' (Keynes, 1973b, p. 196). Keynes appeared not to have realized where Ohlin was driving. He (1973b, p. 190) replied: 'The reference to imperfect competition is very perplexing. I cannot see how on earth it comes in. Mrs. Robinson, I may mention, read my proofs without discovering any connection.' The cross currents between the two revolutions might not have been as strong as we might be led to imagine with more than fifty years' hindsight. Sir Austin Robinson (1977, p. 27) recalls 'some of us were more involved in one and some of us in the other.'

Joan Robinson (1976, p. 28) suggested that Keynes 'did not accept the perfect competition of the textbooks, but some vague old-fashioned notion of competition that he never formulated explicitly.' One may also note that in the *General Theory* (p. 245) Keynes speaks of 'the degree of competition' among other things that should not be assumed as constant. Perhaps in his letter of 25 November 1932 (Keynes 1973, p. 866) to Harold Macmillan (to whom he recommended Joan Robinson's book for publication) we may find further clues to Keynes's attitude to imperfect competition

> There has been a very considerable development of the theory of value in the last five years, starting from the basis laid by Marshall and Pigou. The nature of these developments can only be ascertained at the present time by studying a number of scattered articles, largely in *The Economic Journal*, but also in America and Germany. These articles are generally concerned with particular points and rather assume a knowledge of the technique employed and the general character of the diagrammatic methods in use. At present there is no convenient place where anyone who is interested in these developments can either find a clear statement of the nature of modern technique, or a summary of the recent work on the subject. Mrs. Robinson aims at filling this gap, and in my opinion she has done it very well. she would claim, I think, that she has done more than this, namely that she has cleared up a number of obscure and doubtful points, and has made some important contributions of her own to the whole matter. I think that the book does indeed contain a number of discussions which are more or less new; on the other hand I should hesitate a little to stress too much the originality of the work. It appears to me to be predominantly a discussion of the development of ideas which have been started by others, and which are not widely current, not only for learned articles, but in oral discussion at Cambridge and Oxford. She is, in a sense, taking the cream off a new movement which has not yet

found its own expositor in print.

Perhaps his acceptance of some of the 'classical postulates' was tactical only. Perhaps he was not comfortable with the strand of imperfect competition developed by Joan Robinson (1933, 1969).

Keynes' attitude towards received price theory was ambivalent. Indeed, as Shove quipped, the trouble with Keynes was that he did not take the twenty minutes necessary to master the theory of value (Joan Robinson, 1962, p. 79). 'Keynes inherited from Marshall the notion of rising short-period marginal costs but this is inessential' (Joan Robinson, 1962, p. 79). In fact, 'the theory of markets was in need of a Keynesian revolution just as much as the theory of employment' (1979, p. 52). Elsewhere Joan Robinson (p. 17) added that 'Keynes intended to bring the theory of prices back from Volume II, Money to Volume I, the Principles of Economics, but Michal Kalecki... made a greater contribution than Keynes himself to carrying this programme forward.'

IV

Ricardo was concerned with the distribution of the product of the earth between the classes of the community. Leaving rent aside, this is the question of the relative shares of wages and profits in net national income (Joan Robinson, 1979, p. 212).

Kalecki's theory of distribution of the national product between wages and profits derives genealogically from the Ricardian tradition. His theory is not merely a deviation or departure from the neoclassical marginal productivity theory. He simply never started from it.

Kalecki's theory of profits is based on the principle that wage-earners do not save, but spend what they get, and that enterpreneurs get what they spend. Thus, capitalists' profits are governed by their propensity to invest and consume and not the other way around. As a result of the rise in the degree of monopoly, the relative share of profits in income increases only by lowering the relative share of labour. The distribution determinants will affect not the real profits that will remain the same, but rather the real wages and salaries, effective demand, employment and the level of utilization of capacity. A rise in the degree of monopoly entails a rise in the profit/national income ratio, but real total profits do not change, since they continue to be determined by past investment decisions. With constant investment, there is the same total amount of profits (saving). While profits remain unyielding, the real wages and real national product will decline purely because of a fall in effective demand for wage goods, with a consequent fall in output and employment in the sector producing wage goods. Thus national income will contract just so much that the higher percentage share of profits in output renders an unchanged absolute amount of profits. Here the salient point is that shifts in the distribution of income take place not by way of increase in profits, but through a mechanism of decline in national income. The clue is that with a given level of

output and income, an increse in the degree of monopoly and thus a shift from wages to profits will produce a rise in underutilization of productive capacity.

We should note Kalecki's distinctive treatment of saving (consumption) propensities—so different from Keynes. To wit, Kalecki's treatment is based on behaviour patterns of classes, rather than on a questionable 'fundamental psychological law.' In retrospect Lord Kahn (1984, p. 134) admits that Keynes's 'treatment suffers from a defect that no distinction is drawn between saving out of profits and out of wages.'

The emphasis Kalecki placed on distribution of income between wages and profits (and the different propensities to save and consume associated with each class of income earners) had a major influence on Joan Robinson's work, particularly in her *Accumulation of Capital* (1956, 1966). In fact, Solow and Stiglitz (1968, p. 537), referring to what they call the 'Cambridge theory of distribution' ('argued, in slightly different ways, by Nicholas Kaldor,... Joan Robinson, and Luigi Pasinetti'), point out that 'in that theory the distribution of income is made to depend primarily or exclusively on the different propensities to spend and save wage income and profits.'

There are significant similarities and differences among the various contributions to the Cambridge theory of distribution and growth. Going into the particulars here would take us too much afield. For our purposes it is probably fair to observe that at Joan Robinson's hands the theory is essentially Kaleckian (see, for example, 1960, 1975, pp. 145–58)—that is, Kalecki creatively adapted and amended. Kalecki's influence on Kaldor is a sensitive issue and not a part of this tale.

Of interest here is the comment by Luigi Pasinetti (1961–2, 1974, p. 99), (then with Kaldor at King's College) who extended Kaldor's theory. Pasinetti seems to object to Kaldor's reference to his theory as Keynesian and reminds us that 'more than Keynes, a notable precursor of Kaldor is perhaps Michal Kalecki.'

Kalecki (1971, pp. 80–81) clarifies the role of factors determining the distribution of income in the theory of profits.

Given that profits are determined by capitalists' consumption and investment, it is the workers' income (equal here to workers' consumption) which is determined by the 'distribution factors.' In this way capitalists' consumption and investment conjointly with the 'distribution factors' determine the workers' consumption and consequently the national output and employment. The national output will be pushed up to the point where profits carved out of it in accordance with the 'distribution factors' are equal to the sum of capitalists' consumption and investment.

Kalecki stressed that the equality between saving and investment is independent of the level of the interest rate, which in the classical economic theory was considered as the factor equilibrating saving and investment (in contrast to the

Keynesian approach in which the equilibrating mechanism is through a variation of income). Here Kalecki and Keynes had the same idea, but Kalecki made it more dependent on class stratification.

In the 1930s, Kalecki (1966, p. 46) argued that, if at some time the entrepreneurs' optimism rises, their investment activity and thus employment in that sector will expand. The resulting increase in income and consumption of labor will, in turn, be accompanied by an expansion of output of the wage-goods sector. The aggregate output 'will expand to the point where profits will be higher by an amount equal to the value of additional investment— if it is assumed that capitalists' consumption remains unchanged'. But if entrepreneurs' consumption spending expands also, owing to enlarged incomes, the rise in profits will be correspondingly augmented. In any output (income) will be 'finally pushed up to the point where the increase in profits will be equal to the increase in expenditures on investment and capitalists' consumption.' What would be the sources for financing expansion of investment if capitalists do not simultaneously reduce their consumption and release some spending power for investment activity? 'It may sound paradoxical, but according to the above, investment is 'financed by itself.' In summary form, in Kalecki's (1966, p. 14) words:

> Capitalists, as a whole, determine their own profits by the extent of their investment and personal consumption. In a way they are "masters of their fate;" but how they "master" it is determined by objective factors, so that fluctuations of profits appear after all to be unavoidable.

V

From the very beginning one of the strengths of Kalecki's business cycle model was its deep roots in observable reality—the set from which he erects a rigorous, solvable theoretical model in the mathematical mode.

Essentially Keynes's *General Theory* dealt not only with a static model, but it was concerned explicitly with the fundamentally Marshallian short-run situation. Kahn (1984, p. 123) testifies that in the *General Theory* there is 'little study of the effects of accumulation with the passage of time as the result of investment.'

Indeed, Keynes's assumption of the existing quality and quantity of available plant and equipment and existing techniques is very restrictive. Capital accumulation and innovations are of key importance of explaining the process of development.

In contrast to Keynes's *General Theory* couched in a static framework, Kalecki's model is explicitly dynamic (short period dynamics in the sense of the trade cycle theory): it shows economic processes in motion, how present events are the result of preceding development, and they, in turn, condition future development. The model encompasses long-run dynamics and the capacity effects of investments and some other supply considerations.

Economic dynamics means different things to different people. What it is and is not is an unresolved bone of contention. As Samuelson (1947, p. 311) quipped: 'Often in the writings of economist the words "dynamic" and "static" are used as nothing more than synonyms for good and bad, realistic and unrealistic, simple and complex. We damn another man's theory by terming it static, and advertise our own by calling it dynamic.'

Whatever else it may mean, economic dynamics attempts to explain the laws of motion and change of a system. In dynamic theory time appears in a most essential way. The system is evolving: present events are the result of preceding developments; they, in turn, contribute to the further development of the system. It is thus that a dynamic process arises (see Kalecki 1943a, p. 80). Samuelson (1947, p. 335) noted that 'of all branches of dynamics the one which has received the greatest attention is that dealing with the fluctuations in employment, income, and general business activity.' And for good reason. Without a study of economic dynamics.

> three is little possibility of presenting a reasonably realistic description of such phenomena as speculation, cyclical fluctuations, and secular growth. In addition, dynamic process analysis is an enormously flexible mode of thought, both for pinning down the implications of various hypotheses and for investigating new possibilities (Samuelson, 1966, p. 612).

Economic dynamics aims, *inter alia*, to explain the movement and change in economic magnitudes; that is, for the purposes at hand, the pervasive fluctuations and long-run growth (transformation) in the development of (non) capitalist (or variants thereof) economies.

The literature abounds with treatments of fluctuations separately from growth (traditional trade cycle theory). There is also a strand that attempts to integrate growth and fluctuations. Initially, Kalecki's work fell into the pure (trendless) trade cycle theory. In his later work, however, he tried to avoid splitting the argument into the pure cycle and trend compartments and sought to advance theory towards a unified approach:

> I myself approached this problem in my *Theory of Economic Dynamics* and my "Observations on the Theory of Growth" in a manner which now I do not consider entirely satisfactory: I started from developing a theory of the "pure business cycle" in a stationary economy, and at a later stage I modified the respective equations to get the trend into the picture. By this separation of short-period and long-run influences I missed certain repercussions of technical progress which affect the dynamic process as a whole. I shall now try to avoid splitting my argument into two stages just as much as applying the approach of moving equilibrium to the problem of growth (Kalecki, 1971, pp. 165–6).

Kalecki's pioneering and distinct theory of cyclical fluctuations belongs to the

family of maintained (periodic swinging motions that neither peter out nor explode), macrodynamic, mathematical (econometric) models of the economic system.

Mathematical or econometric theories of business cycles tend to focus attention on systematic oscillations that spring from the internal structure of the economic mechanism and attempt to explain how the fluctuating process is produced from the response of the mechanism to changes in exogenous variables; i.e., how the economic mechanism responds and adapts itself to the random succession of changes in data. With very few exceptions, all satisfactory explanations are neither purely exogenous nor pure endogenous (Samuelson 1947, pp. 340 ff.).

Cycle theory faces a fundamental difficulty in demonstrating that the oscillations are of a non-dying and a non-exploding variety. The difficulty may be escaped by departing from a purely endogenous model and treating the actual process as a result of the operation of the self-generating mechanism and external impulses—as Kalecki does in his later work.

In Kalecki's original model (in a closed economy, without government demand), investment determines the level of economic activity. Indeed, 'a happy feature of Kalecki's system is the fact that he places capital goods production in the center. A very remarkable feature is that the very small number of variables included is sufficient to get a closed system' (Tinbergen 1935, pp. 269–70). Fluctuations in investment engender the corresponding fluctuations in aggregate economic activity. It is the volatile fluctuations in investment that generally dominate the ups and downs in econmic activity. The accent is on the acute variability of investment, which varies relatively more than consumption. That is, aggregate output (income, expediture) and consumption show smaller relative fluctuations than investment activity. Kalecki approached the problem essentially by establishing two basic relations based on: (1) the impact of effective demand generated by investment upon profit and national income; and (2) the determinants of investment decision. If fluctuations in investment cause fluctuations in economic activity, what determines investment? This is the theory question that preccupied Kalecki most of his life.

The preliminary mechanism of business fluctuations can be explained in terms of the mutual interaction of the two principal determinants that induce investment: (1) the stimulating effect of higher income on investment; and (2) the depressing effect of growth of productive capacity in view of the distinctive relation between investment and the stock of capital (investment decisions once converted into the form of actual investments enlarge the stock of productive capital), and vice versa. "We see that the question, 'What causes periodical crises?' could be answered shortly: the fact that investment is not only produced but also producing." Investment viewed in its income-generating capacity 'is the source of prosperity, and every increase of it improves business and stimulates a further rise of investment.' Simultaneously, however, additional capital equipment adds to productive capacity and as soon as it is put into operation it competes with the

stock of equipment of older vintage. 'The tragedy of investment is that it causes crisis because it is useful. Doubtless many people will consider this theory paradoxical. But it is not the theory which is paradoxical, but its subject—the capitalist economy' (Kalecki 1939, pp. 148–49).

It should be emphasized that Kalecki's development of his theory of business cycles (over a period of more than thirty-five years), starting from his original 1933 contributions in Polish (1966), and the many revisions thereof as discussed in Feiwel (1975, Chs. 5 and 6), has undergone a number of significant alterations. Here we can do no more than highlight the reformulations and modification he made as he sought to bring the model closer to reality. Where his earlier writings were clearly influenced by the severity of the experience in the early 1930s, in the subsequent development of the argument, he made allowances for the relative weak impact of the capital destruction effect. He introduced a certain 'corrective'—a trend factor that shifts investment upward as the cycle continues. In a growing economy investment fluctuates along the long-run trend line. Innovations raise the prospects of profit, thus stimulating investment and engendering an ascending trend. Innovation becomes another weighty factor in the determination of the investment function, together with the change in the rate of profit, the rate of change in the stock of capital and the 'internal' gross savings (depreciation and undistributed profits) of firms.

Kalecki aimed at developing a theory integrating growth and cyclical processes. He advanced an original, provocative, but somewhat sketchy theory of long-run development trends, the determinants both of trend and cycle. Innovation plays a cardinal role in transforming the static system subject to fluctuations (cyclical fluctuation around the zero level of capital accumulation) into one subject to growth trend. Kalecki emphasized that he failed to see why the business-cycle approach should be abolished in studying the process of economic development. He now approached the growth rate at a given time as a phenomenon deeply rooted in past economic, social, and technological development of the system where as throughout his work, the current state is the result of the preceding developments and contributes, in turn, to the future long-run development of the economy. The two basic relations in the approach to business cycles: (i) the impact of effective demand generated by investment on profits and national income, and (ii) the determination of investment function by the level and the rate of change in income or expenditures, should be so formulated as to yield the trend *cum* business-cycle phenomenon. Such a task is incomparably more exacting than the pure business-cycle model. But the results of such inquiry are closer to the reality of the process of development. The approach of 'mechanistic' theory is based often on such indefensible assumptions as a constant long-run rate of utilization of capacity. However, for Kalecki, the difficulty of the task should not be an excuse for disregarding this approach which seems to be the only one for a realistic analysis of the dynamics of a capitalist economy.

Soon after the publication of the *General Theory*, Kalecki (1936) reviewed it in

the leading economics journal in Poland (the organ of the Polish Economics Association). He hailed it as 'undoubtedly a turning point in the history of economics.' He viewed the book as divided into two essential parts: (1) determination of short-run equilibrium, restricted by given productive capacity and a given level of investment (per unit of time); and (2) determination of the size of investment. He considered that Keynes solved the first question quite satisfactorily though Kalecki had some reservations about the lack of rigor and explicitness in exposition. Moreover, Kalecki questioned the route by which Keynes arrived at his solution and presented an alternative way of doing so—a way that was essentially his own, although he did not refer to his 1933 or 1935 publications. With reference to the second part, Kalecki questioned not the exposition but, more seriously, the analytical construct itself.

In Lord Kahn's (1984, p. 142) retrospective on the *General Theory*, he emphasizes that

> The major achievement of the *General Theory* is twofold. First, there is the conception of Effective Demand which, given the conditions of supply, determines the level of output and employment. Second, there is the determination of the rate of investment. While lower than the rate of consumption, this is the constituent of Effective Demand which is mainly responsible for fluctuations, and also for demand being often chronically under low—as well as, on occasion, unduly high.

It is in this manner that Kahn (1984, p. 142) explains why 'the determination of the rate of investment is the subject to which... the bulk of the *General Theory* is devoted.' Kahn (1984, pp. 145, 148) agrees that, although the subject matter is the most important in the *General Theory*, Chapter 11 on the MEC is one of the most confused. Also, Keynes exaggerates the importance of the risk-free role of interest as an influence on the rate of investment. Kahn (p. 159) argues that 'Keynes' insistence on the overwhelming importance of expectations, highly subject to risk and uncertainty, was one of his biggest contributions.' This is also the aspect that Joan Robinson has continually emphasized and that has imbued her post *General Theory* work.

Kalecki brought into the argument the fact that there are distinct limits to the financing of investment at a given rate of interest; i.e., the problem of availability of finance. The outside finance that a firm can secure is largely determined by the amount of capital owned by the firm. Kalecki viewed the limitation of the size of the firm by the availability of entrepreneurial capital as going to the very heart of the capitalist system, which cannot be ignored in the theory of investment decisions. One of the important determinants of such decisions is the accumulation of firms' capital out of current profits (generated by investment in the past). Profit influences the investment-demand function not only by providing a motive to do so, but also by providing the means to be able to perform such an act. Investment decisions are related to the firm's 'internal' accumulation of gross savings. These

savings allow the firm to make new investments without facing the problems of the limited capital market or 'increasing risk.'

VI

Kalecki was a phenomenon. It is his architectonic contributions to the great intellectual upheaval (in some measure correctly) associated with Keynes' name, but going far beyond the Kenesian revolution on the planes of economic theory and policy, that are gaining belated and welcome recognition. A real compliment to a great scholar is paid when his work is taken seriously and critically even if the criticism is in part misguided. Advances in science or economics are not along straight ascending trend line and more often they resemble a growth cycle.

It has always been my contention that the question of Kalecki's anticipation of Keynes is of lesser importance than that of the superiority of the Kaleckian construct over the Keynesian one in several crucial aspects. However, since the main theme of Don Patinkin's reflective and controversial *Anticipations of the General Theory* is, as the title indicates, the question of anticipation, we shall pause here briefly on some of the questions raised by him as to Kalecki's priority of publication over Keynes. That much of the argument depends on the frame of reference used by Patinkin is inarguable. His standpoint is certainly coloured by his own (evolving) interpretation of the essence of the 'central message' of the *General Theory*—an interpretation that I dare say is a narrow one. In a most scholarly fashion Patinkin (1982, p. 81) admits to that: 'I must admit that my definition has sometimes been criticized as too narrow. This may be true.' One can understand that Patinkin takes Keynes's *General Theory* as a yardstick for measuring Kalecki's performance. To many of us, however (no matter how much we admire Keynes's historical achievement), it is just as legitimate and useful to take Kalecki's achievement as a yardstick to measure Keynes's performance, as Johansen (1978) has pointed out—a view also held by Joan Robinson among others.

If one confines oneself to the questionable comparison of the extent to which Kalecki anticipated the specific analytical innovation of the *General Theory*, one can only repeat after Patinkin (p. 5) that there is no unanimity of answer to the question of what that innovation was. 'Clearly the broader the specification of the innovative contribution of the *General Theory* the greater the likelihood of finding this contribution anticipated.' Patinkin expects to disarm his critics by allowing that a broader interpretation of the Keynesian message is acceptable. He (p. 81) points out, however, that via this route,

> if it is enough to speak in general terms about aggregate demand and supply, then... Keynes' 1933 *Means to Prosperity*. Wickswell's 1906 *Lectures*, and perhaps even Malthus' writings almost a century before that constitute the General Theory. Alternatively, if the General Theory can be identified even

> with an imprecision description of the way a decrease in output decreases saving until it is brought to equality with investment, then Keynes' discovery of it should be dated with his 1931 Harris lecture... And if the General Theory is the proposition that an increase in investment generates an equal amount of saving, then... this theory was first presented in an imprecise form by Keynes in his 1929 *Can Lloyd George Do It*? and was then rigorously developed by Richard Kahn in his celebrated 1931 multiplier article.

Patinkin discards several broader interpretations of what constitutes the major contribution of the *General Theory* (see pp. 6–7). He considers the 'central message' of the *General Theory* to be the explanation of a state of unemployment equilibrium in a capitalist economy. More specifically, he illustrates his argument by the familiar 45° diagram (see p. 10). He (p. 9) contends that what he means by the theory of effective demand is 'not only that intersection of the aggregate demand curve... with the 45° line determines equilibrium real output at a level that may be below that of full employment...; not only that disequilibrium between aggregate demand and supply causes a change in output and not price; but also (and this is the distinctively novel feature) that the change in output (and hence income) itself acts as an equilibrating force. That is, if the economy is in a state of excess aggregate supply... then the resulting decline in output, and hence income, will depress supply more than demand and thus eventually bring the economy to equilibrium'. Patinkin admits that Keynes did not use this diagram which is adapted from a 1939 article by Samuelson (1966, p. 1115). Neither did Keynes use Patinkin's more formal interpretation of Keynes's 'central message.' To wit, that 'the theory of effective demand is concerned not only with the mathematical solution of the equilibrium equation... but with demonstrating the stability of this equilibrium as determined by the dynamic adjustment equation' (Patinkin 1982, p. 10).

By narrowing down to such an extent the central message of a theory, Patinkin reduces the possibility of multiple discoveries to almost nought even in the natural sciences. Indeed, Patinkin's central message is that multiple discoveries, if they do occur at all, are exceedingly rare. He (pp. 4 and 91–2) cites, for example, the case of Joan Robinson and Chamberlin as one where an alleged multiple discovery was not one at all. However though, Chamberlin's monopolistic competition differed in many respects form Joan Robinson's imperfect competition, the reader of both could be forgiven for drawing similar conclusions and for generally treating them almost interchangeably.

Patinkin (p. 14) argues that the primary concern of the *General Theory* is the explanation of equilibrium at less than full employment. For him (p. 70) 'the central message of Kalecki's 1933 booklet is in any event cycle and not a state of continued low-level employment,' and that Kalecki's 'central message is in any event concerned with the analysis not of output, but of investment.' As I have emphasized, Kalecki's approach to the theory of effective demand is through the

theory of the business cycle where investment and its variability play a central role. While one of Keynes's distinct contributions was the focus on the variability of investment as crucially affecting effective demand (and the *General Theory* is full of insights on the cases and consequences of this variability), it may be argued that even in his initial 1933 publication Kalecki went deeper into the determinants of this determinant. Kalecki addressed himself to the repercussions of fluctuations of investment on output. An elaboration of these arguments can be found in Kalecki's analysis of policies to alleviate depressions, what he called creating synthetic prosperity.

Indeed, it is legitimate to claim, as Asimakopulos (1983, p. 519) does, that Patinkin's interpretation of the theory of effective demand as explaining the factors determining the equilibrium level of employment and its stability at a given rate of investment is, at best, an incomplete statement of the *General Theory's* central message. But as we shall presently see the narrowness of Patinkin's interpretation of Keynes's central message does not depend only on Patinkin's neglect of the variability of investment.

Like many other scholars, Kalecki tended to deal with and emphasize one crucial point at a time. His 1933 essay does not focus on what Patinkin considers to be the central message of the *General Theory*, although certain passages in Kalecki's presentation could be interpreted as representing the crux of the notion. Patinkin (1982, pp. 67–8) does quote some of these passages, though he disclaims that on the basis of these passages one could grant Kalecki independent and prior discovery of Patinkin's narrow conception of the essence of the *General Theory*.

Patinkin (p. 71) acknowledges that in a 1935 article (translated and rupublished as "The Mechanism of the Business Upswing" in Kalecki 1966, (pp. 26–33) published in *Polska Gospodarcza*, Kalecki explained the Keynesian equilibrating mechanism. But Patinkin would not grant Kalecki independent and prior discovery of this narrow conception of the central message of the *General Theory* primrily because Kalecki advanced his argument in a non-professional journal and above all because 'this theme of unemployment equilibrium receives little if any attention in Kalecki's professional writings during the pre-*General Theory* period' (p. 72). It cannot be overemphasized that Kalecki's writings are terse and laconic. He zeroed in on one subject at a time and seldom tackled the same subject unless it was to present a new approach (as in the case of the investment function). Patinkin eloquently presents the practice of repetition of the same theme, with different variations as in music, as a touchstone for finding the central message of a price of scholarly writing. This was not Kalecki's style. Indeed, his writings are exemplary in their non-repetition in the best tradition of editors' advice to neophyte writers. Moreover, on the issues of independent discovery and anticipation, to get a complete picture of Kalecki's contributions until 1936, one should take into account the entire body of his work until the date, particularly including the articles published in non-academic journals, especially those he later selected for translation and inclusion in the 1966 edition. One should remember that Kalecki

was then not an academic economist. He earned his living as a researcher and as an economic journalist. Publication in *Polska Gospodarcza* provided him with a supplement to his relatively meagre income. He also wrote for different independent socialist periodicals which provided him with an outlet for his political views.

At this juncture it bears repeating that, unlike Keynes, Kalecki was not trained in the economic orthodoxies prevailing in the 1930s in the major seats of Western academia. The narrowness of Keynes's training and attitudes to economics need not detain us here. However, the approach in the focus of the *General Theory* has to be understood in the light of the tradition from which Keynes came, the particular brand of orthodoxy he was trying to escape, and the mold in which his readers' minds were cast. On the other hand, Kalecki, as we know, was a neophyte in economics who by 1930 had been exposed primarily to Rosa Luxemburg, Tugan Baranovsky, and Marx. It should be remembered that tradition stressed the business-cycle approach and the strategic role of the volatility of investment. It seems to me that, under these circumstances, it is a misunderstanding to analyze Kalecki's pre-1936 writings through the prism of neoclassical equilibrium analysis. True, Kalecki does not explicitly use the concept of equilibrium in his 1933 essay, yet it is present implicitly as is a concept of the multiplier somewhat different from Kahn's. The latter is particularly elaborated in Kalecki's policy articles, especially in his illuminating paper on foreign trade (reprinted in 1966, pp. 16–25).

If one were to insist on the dubious necessity of finding Keynes's short period underemployment equilibrium in Kalecki (1933) one could go the route of reconstructing the national income flow in both Keynes and Kalecki, deriving basically the same theory of effective demand, differences in specifications of workers' and capitalists' propensities to save and consume notwithstanding (see Osiatynski 1985, pp. 100–102).

VII

As Kalecki himself noted in his 1936 review of the *General Theory*, Keynes's book represents a revolutionary landmark in the history of economics, but the approach is static. Kalecki's approach is dynamic. He considers an evolving system that consists of a cumulative series of short periods that succeed each other. Whatever the achievements and shortcomings of his dynamic approach, Kalecki's pre-1936 writings take us several steps beyond Keynes. On a purely analytical plane, one could perhaps argue that the *General Theory* represents to some extent a special case of Kalecki's more general construct. Patinkin (1982, p. 78) himself can be interpreted to lend support to this statement when he says that 'Kalecki's theory indicates one of the ways of extending the Keynesian system so as to provide a theory of the business cycle.' In the sense that Kalecki's construct is more general, Joan Robinson's generalization of the general theory draws on Kalecki's construct.

Patinkin (p. 77) claims that Kalecki's theory 'fails to integrate value theory with monetary theory and is indeed devoid of the marginal analysis on which the former is based.' Kalecki is, indeed, weak in monetary theory, though his discussions are replete with interesting insights on money and particularly on finance. However, one can hardly accept Patinkin's equation of price theory with marginal analysis. Indeed, reliance on orthodox price theory was a weak link in the *General Theory*; one that has spawned a huge body of literature on microfoundations. As we have attempted to show, Kalecki's theory features monopolistic price formation dovetailed with the rest of his construct. His integrated micro-macro approach is one of the most persuasive and fruitful attributes of his theory.

If the institutional framework of a social system fundamentally conditions the system's economic dynamics—a view Kalecki stressed strongly in his last lecture in Cambridge in 1969 and one that permeated his analysis from the start—the explanation of the functioning of the modern monopoly capitalism requires a realistic perception of market power. Kalecki considered perfect competition as a dangerous myth. He used it as an analytical device in combatting opponents, for example, when discussing wage cuts as a route to restoring prosperity or when analyzing the class struggle and income distribution. Thus, one cannot sufficiently stress that Kalecki's overall perception of contemporary capitalism differed essentially from Keynes's, if for no other reason than because of their divergent views on the competitive process, price formation, and distributional conflicts. One should also note that there has been an essential transformation in the character of the capitalist economy since Kalecki and Keynes wrote—a transformation more along the lines of Kalecki's perception than Keynes's. Of course, some of this transformation is directly traceable to the Keynesian revolution and to policies derived more directly from Keynes than from Kalecki. Also, Kalecki lived through a good part of this period of transformation which his postwar analyses reflect.

Both Kalecki's and Keynes's writings reflect the traumatic problems of the Great Depression, although they came to their similar conclusions via different routes and analytical apparatuses. True, even the general economic and social conditions they experienced were somewhat different (to wit, the stagnation of the 1920s in the UK). However, Patinkin seems to misunderstand Kalecki's concern for unemployment (probably due to his lack of a reading knowledge of Polish—not a necessary equipment for an economist).

Whatever inspiration Kalecki derived from Rosa Luxemburg, Tugan Baranovsky, and the Marxian schemes of reproduction, one must emphasize that before he wrote his 1933 essay he understook painstaking analysis of various industries, markets, world business conditions, and national income studies. Hence his theoretical writings are partly a generalization of inductive reasoning. In fact, one of Kalecki's strong points is his construction of a rigorous mathematical model on the basis of carefully observed real phenomena. It is, indeed, a misunderstanding to say that unemployment was not a central theme of Kalecki's work. If I may interject a personal recollection at this point, I remember that when

I was studying Kalecki's writings of the 1930s in preparation for writing my 1975 book, I had the overwhelming impression that he was *obsessed* with unemployment, in the best meaning of the term.

More importantly, however, many of us do not agree that the central message of the *General Theory* is underemployment equilibrium. At best, it is only an effective tool to demonstrate the fundamental and critical role of aggregate effective demand in limiting production and under-utilization of resources and capacity. The absence of a powerful and effective endogenous mechanism to generate and sustain near full utilization of productive potential and the need for government intervention to restore and maintain such near full utilization appears to me to be the central message of Keynes. To put it differently, at least in the macroeconomic sense the system is subject to a major pernicious and conspicuous market failure—a failure that can be repaired by an alternative mix of policies. In the main, Kalecki's central message is the same. His analytical methods and policy conclusions differ from Keynes's, in many ways they are superior, but in general they are complementary rather than substitutes—a subject that is the 'central message' of this paper.

One can appreciate that scholars coming from different traditions might prefer Keynes's treatment over Kalecki's or vice versa. Patinkin (p. 78) even grants that 'Kalecki's theory enables us to make certain improvements on Keynes'.' Similarly Kaleckians should generally admit that the *General Theory* enables us to make certain improvements on Kalecki's construct. However important the question of independent discovery and anticipation may be for doctrinal history and the vested interests of followers, it is far more important to strive to achieve a new synthesis by integrating what is best in Kalecki and Keynes with positive achievements in the more than half century since they wrote.

Thus, to what extent Kalecki actually shared in the historical achievement that was the Keynesian revolution and whether he anticipated Keynes' *General Theory* does not seem to me the real or main issue. What really matters is the distinct scope, quality, and superiority of Kalecki's construct over Keynes'. Due to Keynes' distinguished stature in the academic world; his position in English society; his deservedly high reputation as an accomplished economist, writer, and statesman far beyond the borders of Great Britain; and his very special gifts of perception, formulation and propagation of ideas, the Keynesian revolution is in large measure correctly associated with his name, and the book called *General Theory of Employment, Interest and Money* is an enduring classic and will continue to be a source of creative scholarship and inspiration for generations to come. However, it is only one of the major innovations, along with other contributions to the 'Generalization of the General Theory,' that together develop and modify the great intellectual movement that, in a broader sense, is or should be perceived as the Keynesian revolution. Whatever their differences, both Keynes and Kalecki are shining examples of master economists who contributed to one of the great ideas in intellectual history of economics and used their great theoretical powers to

comprehend economic reality. Moreover they were committed not only to explaining economic reality but sought ways of improvig it. Samuelson spoke of economic theory in another context as "a mistress of even too tempting grace.... When man sets himself the challenge to theorize and *yet stay within the constraint of explaining reality*, the task is much the harder—but how much more satisfying the hunt. At night by the fireside let them who will display their easy tiger skins; for man the greatest quarry of all is the study of man. For what do they know of economics, who political economy do not know?" (1966, pp. 1680–81). Kalecki and Keynes Weltanschauung and theoretical differences undoubtedly coloured their respective policy interpretations and prescriptions.

In the postwar period Kalecki became very bitter about the unethical use of the tools of the Keynesian revolution. In a 1965 address in Mexico City, he expressed deep concern for the fact that the market economies were still intolerably far from reasonably full employment and utilization of capacity. He was particularly concerned about the adverse composition of output. The question that continued to preoccupy him was how to deploy economic resources to enhance welfare which would be more equitably shared among the various strata of society.

Kalecki realized that full-employment policies could be used to reform the capitalist system. He saw the opportunity, but was mindful of the grave political problems and, in 1943, predicted the emergence of the political business cycle. He (1971, pp. 138–45) argued that opposition by the 'leaders of industry' to full employment stimulated by government spending may be expected because of the inherent fear of government interference (in particular opposition, in principle, to government spending generated by budget deficits), opposition to the objects of government spending (particularly to public investments and the subsidizing of consumption), fear of inflationary pressures, opposition to sustained full employment (as against mere prevention of deep depressions), and the dislike of the social and economic changes resulting from the maintenance of full employment (including laxity of workers' discipline). He felt that business cycles in milder form than hitherto would continue and result in some sort of stop-go.

In closing his argument, Kalecki (1943b, pp. 330–31) offered a reformist presumption for preventing the occurrence of political business cycles. Perhaps this prescription was not republished thirty years later because Kalecki had become overly bitter and skeptical about the hopes he had voiced then.

In conclusion, in 1973, in her presidential address to Section F. British Association, Joan Robinson (1979, p. 177) has complained that 'the Keynesian revolution still remains to be made both in teaching economic theory and forming economic policy.' And some years later, she concluded a paper on employment policy (with F. Wilkinson) with these poignant words (1979, p. 208):

> It is ironic that after the technical achievements brought by the age of growth, all we are offered is a return to large-scale unemployment and poverty in the midst of plenty, in an age of frustration. Kalecki was right to be skeptical; the

modern economies have failed to develop the political and social institutions, at either domestic or international level, that are needed to make permanent full employment compatible with capitalism.

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