Kalecki's Economics Today

Edited by
Zdzislaw L. Sadowski and
Adam Szeworski

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Kalecki's Economics Today

Michal Kalecki was a Polish economist who independently discovered many of the key concepts of what is now identified as Keynesian theory. His contribution to macroeconomics was late in being acknowledged, but his work can be seen to have resounding influence on some of today's economic problems.

The analyses presented in this book serve to scrutinize Kalecki's theories and show both their significance for explaining the working of modern economies and the areas that need adaptation to changed circumstances. Crucial issues in the present world economy covered in this book include:

- the pattern of cyclical recession and financial crises
- historically high levels of unemployment and poverty
- neoliberal economic policies

With contributions from such scholars as Philip Arestis, Malcolm Sawyer and Jan Toporowski, this impressive book will interest students and researchers involved in economic policy, macroeconomics and the history of economic thought.

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Preface

The chapters contained in this book were originally papers presented at the Conference in commemoration of the 100th anniversary of the birth of Michal Kalecki. The Conference was organized by the Polish Economic Society and took place in Warsaw, at the site of the Polish Academy of Sciences, on 27–8 September 1999. Some of the papers were revised before inclusion in this book. This is indicated whenever applicable.

Michal Kalecki was unquestionably one of the great economic minds of the twentieth century. The original idea of the Conference was to bring together an international group of renowned economists known for having devoted much of their academic work to the study of Kalecki's ideas related both to theory and policy, in order to arrive at an assessment of the relevance of these ideas to the modern world which changed so very significantly since his times. This presupposed taking up such issues as that of the role of financial markets and of liberalization of capital flows – the basic factors which brought about substantial changes in the working of present day capitalism – with the purpose of trying to identify their influence on economic growth, unemployment and income distribution. Interestingly, in spite of the fact that such issues could not have been dealt with by Kalecki, as they emerged only after his death, the discussions at the conference revealed in Kalecki's theories much relevance for the world of today.

In preparing the book, the editors felt that it should make interesting reading to those willing to follow and compare the differing approaches of individual contributors, who all seem to consider themselves in a sense Kaleckians, but remain fully independent in their own thinking.

Acknowledgements

The editors, while thanking all the contributors for their cooperation and understanding, want also to acknowledge with appreciation the contributions made at the 1999 Warsaw Conference by participants who are not represented in the present volume because the subject of their papers as presented at the Conference, though of much interest, went beyond the immediate scope of this book. These were: Lord John Eatwell, President of King's College, Cambridge; Stanislaw Gomulka of the London School of Economics and Political Science (whose paper was published elsewhere); Noemi Levy-Orlik of the National University of Mexico; Soltan S. Dzarasov of the Russian Academy of Sciences; and Marcin Wyczalkowski, former Senior Adviser of the International Monetary Fund, now retired.

Acknowledgements have also to be addressed to those participants who only took active part in the discussions without presenting papers, among whom a notable place must belong to Paul Streeten from USA, Gabriele Pastrello from Italy, as well as to Jerzy Osiatynski, the editor of the much appreciated *Collected Works of Michal Kalecki*.

Apart from what is mentioned in the notes, individual contributors expressed in their chapters specific acknowledgements which should be quoted here. Tracy Mott thanked especially Philip Arestis and Amit Bhaduri for helpful comments and suggestions, some of which he used in revising the original draft of his chapter, of course absolving them of any responsibility for what he has done with their suggestions. Jerry Courvisanos gave special thanks to Julio López for his comments on an earlier version of his chapter, while keeping all responsibility to himself.

Needless to say, special acknowledgements have to be addressed to the Polish Economic Society for the initiative and organization of the Conference which brought about valuable analytical material largely presented in this book.

Introduction

A note on the changing approaches to Kalecki's ideas in the world literature

Adam Szeworski

Michal Kalecki, the eminent Polish economist, died in Warsaw in the seventy-first year of his life, on 17 April 1970. His intellectual legacy includes writings on all the three main types of economies characteristic of the world of the twentieth century, i.e. the capitalist, the socialist, and the less developed economies. These writings were brought together and expertly commented upon by J. Osiatyński in the *Collected Works of Michal Kalecki*, edited in Polish in 1979–88 and translated into English in 1990–7. Expressed in numbers this legacy contains about 550 items – books, articles, reviews, notes, etc. – all of them meticulously enumerated by the editor, for the period of 1927–87, in the bibliographic annex to the last of the seven volumes of those *Works*.

It is interesting to note that a considerable part of these writings – at least 80 items – was published after Kalecki's death. From among these only 18 were reprints in Polish (including single volumes of *Collected Works*), while the rest was composed of reprints or translations in English (22), Spanish (17), Italian (9), Portuguese (6) as well as Japanese, Turkish and Tai. The actual number has been still growing owing to new reprints or translations which have continued to appear in different parts of the world.

Still more numerous and fast growing in numbers after Kalecki's death have been various publications referring to his theory. For instance, at least 250 such publications in English were registered since 1971 in the international database of Silver Platter Information, Inc., *EconLit 1969–2001* which is far from complete. These numbers should be looked at against the relatively weak diffusion of the knowledge of Kalecki's scientific achievement during his lifetime. In fact, his economic theory (not always correctly understood), and even his name, were known internationally mainly to a rather narrow circle of British economists connected with the universities of Cambridge and Oxford, where he had been active from a few years before the world war until its end, and to some other economists who had had the opportunity to meet him in later years, during his work for the International Labour Office in Geneva and for the United Nations in New York, preceding his coming back to Poland in 1955.

It is unquestionably unusual that such an abundance of publications, including Kalecki's own writings and those of various other authors referring to his theory, appeared during more than thirty years which elapsed since his death and kept appearing at a relatively high annual rate over the last two decades. The causes of this phenomenon deserve perhaps a closer look. An important explanatory factor seems to be the spreading of interest in his economic theory in the less developed countries. While economists of developed countries expressed growing interest in the relevance of his views on the capitalist economy in the changing conditions of the real world, the interests of those of the less developed countries, particularly in Latin America, but also in India, were focused primarily around his contribution to the theory of economic planning and development economics. As a result, it seems justified to talk of a worldwide posthumous discovery of Kalecki as an independent original theorist.

Let us, however, say first a few words on the reasons for that 'delay' in the scientific career of the man counted today by many renowned authors among the most eminent economists of the past century. These reasons, as explored by some authors, seem to have been rightly summarized in the phrase that 'Kalecki was not born at the right time, did not live in the right place and did not write in the right language'.

Indeed, his earliest innovative outline of the modern theory of effective demand, presented in his *Essay on the Business Cycle Theory*, was published by a research institute in Warsaw in Polish, already in 1933. It was not accessible to English readers until in 1966, when its English translation, together with five other important essays on related issues, appeared in his *Studies in the Theory of Business Cycles, 1933–1939*. The book was edited with the introduction of Joan Robinson who already earlier had underlined the publication date of that *Essay* which preceded Keynes' *General Theory* by a couple of years. This gave rise to the discussion on the possible priority claim of Kalecki to the fatherhood of the modern theory of effective demand, commonly attributed to J.M. Keynes, as well as to another discussion on the superiority of his theory over that of Keynes, claimed by a large part of the present day post-Keynesians.

For the rest of his lifetime there was no essential change in Kalecki's position in the economic profession. Although his three main books, in which his earlier outlined theory was successively developed to its final form, i.e. *Essays in the Theory of Economic Fluctuations* (1939), *Studies in Economic Dynamics* (1943) and *Theory of Economic Dynamics* (1954), were all published in England, the significance of his theory remained known to and understood by a rather limited number of economists. In general, due to its apparent similarity to the Keynes' *General Theory*, which was enthusiastically praised and extolled in the early post-war decades, and, on the other hand, due to the Marxian ingredients in his theory, he was commonly counted among the left-Keynesians.

As far as his native country, Poland, is concerned, his theoretical work was also scarcely known, and limited mainly to the older, pre-war generation of economists. In the post-war period his name was not even mentioned in academic textbooks of political economy owing to his imputed Keynesianism and his dissent from the official Marxist–Leninist theory of the socialist economy. A certain change in this regard took place only in the early 1970s – as it may be judged from references in writings of various authors to Kalecki's theory – owing to the posthumous edition in England of two books containing reprints of his essays or chapters of his books, selected by himself as his main contribution to economic theory, i.e. *Selected Essays on the Dynamics of the Capitalist Economy* (1971) and *Selected Essays on the Economic Growth of the Socialist and the Mixed Economy* (1972).

But the real breakthrough in his position seems to have finally taken place owing to the English edition of his *Collected Works*, whose seven volumes appearing successively in 1990–7 were reviewed by competent well-known economists in the widely read English periodicals.

In the meantime, two important factors have contributed to that essential change. The first of them was, without any doubt, the fundamental discussion which developed inside the Keynesian school as a result of growing dissatisfaction with Keynesian policies and the related criticism of the underlying theory; these were deemed responsible for the wave of inflation which came upon the world economy in the 1970s. In this connection, much interest went to Kalecki's theory which was found to compete with orthodox Keynesianism. As a result of many comparative studies it has been finally recognized – at least by those known later as post-Keynesians – as superior in many aspects to the original theory of Keynes, and consequently adopted and integrated into their research programme, to become finally the central body of their revised theory.

The other closely related factor which largely contributed to the diffusion of Kalecki's theory and its advance to the present position in economics at the world level, were two periodicals, the *Cambridge Journal of Economics* and the *Journal of Post Keynesian Economics*, founded respectively in 1977 and 1978 which in their statements of purposes declared explicitly their adherence to Kaleckian theory. In the case of the former it was said that the source of the adopted position was 'the belief that the economic approach rooted in the traditions of Marx, Kalecki and Keynes has much to contribute to the understanding and treatment of current economic and social issues . . .' Similarly, founders of the *Journal of Post Keynesian Economics* laid stress on innovative theoretical work that could shed a fresh light on contemporary economic problems. This was specified by Joan Robinson in the conclusion of her leading article in the first issue of the *Journal*:

> We now have a general framework of long and short period analysis which enables us to bring the insights of Marx, Keynes and Kalecki into coherent form and apply them to the contemporary scene.

In fact, the annals of both periodicals, representative of the post-Keynesian

School in Britain and the USA respectively, have been plentiful of articles, notes on, and references to, the Kalecki's writings.

The growing interest in Kalecki's theory has been reflected particularly in the number of books, individual and collective, or special issues of periodicals devoted to the discussion of its contents and relevance to the changing economic conditions. At least some of them deserve to be mentioned here.

The first, in chronological order, was the special issue of the *Oxford Bulletin of Economics and Statistics*, No. 1, 1977, containing commemorative essays of seven former collaborators of Kalecki. The next, responding specifically to the growing interest in less developed countries in Kalecki's writings on economic planning, was the collection of his essays in the volume edited by J. Toporowski in 1986, entitled *Selected Essays on Economic Planning.*

Of particular importance are the collective volumes which appeared successively. First, *Kalecki's Relevance Today*, edited by M. Sebastiani in 1989, containing the collection of 19 papers presented to the symposium held at the University of Perugia in 1986 which was intended 'to mirror the variety of arguments treated by Kalecki, as well as the diversity of the scientific circles which are interested in his thought'. Second, *Michal Kalecki (1899–1970)*, the collection of 15 previously published papers of various authors on the influential work of Kalecki, edited by M. Blaug in 1992. Next, edited by J. King in 1996 *An Alternative Macroeconomic Theory: The Kaleckian Model and Post-Keynesian Economics*, a collection of papers of nine authors who survey the principal components of Kalecki's theoretical system and promote his claim to recognition as a dominant influence on modern non-neoclassical economic thought. Finally, *The Legacy of Michal Kalecki*, two volumes edited by M. Sawyer in 1999, comprising 55 previously published papers relating to the work of M. Kalecki, including 11 papers by Kalecki himself, and 44 papers which explore, develop and/or evaluate his work.

The latter is the last and most comprehensive collection of reviews and opinions on Kalecki's work. It is worthwhile to quote the summary of its contents to show the broad range of the main areas of interest in his work. It is composed of nine parts. In Volume One the first part devoted to general issues is followed by:

- ii Effective demand, investment, profits and distribution of income;
- iii Pricing and the degree of monopoly;
- iv Cycles and growth; and
- v Political economy of full employment.

In Volume Two we find the following subjects:

- vi Money and finance;
- vii Taxation;
- viii Socialism; and
- ix Development.

From among other collective editions of this kind due notice should be given to the special issue of the *Review of Political Economy*, Vol. 11(3), 1999, comprising 10 essays in commemoration of the 100th anniversary of Kalecki's birth.

The present book is a follow-up of this succession of previous publications which is intended to shed some fresh light on a selection of crucial issues of the contemporary world economy in both its economic and social aspects. The ground for this discussion is provided again by the theories of Michal Kalecki, whose characteristic feature was his high sensitivity to social aspects of the economic mechanism and for whom the primary concern of economic theory and policy was unemployment. It is interesting that this is exactly what seems to be increasingly relevant in the greatly changed economic system of today. Various contributions contained in this book help to explain the reasons.

Part I

The overview

1 Kalecki and Keynes revisited

Two original approaches to demand-determined income – and much more besides

D. Mario Nuti

Introduction

In 1962–3 I had the privilege of attending Michal Kalecki's lectures at the Warsaw Higher School of Planning and Statistics (SGPiS), as it then was, on the dynamics of a capitalist economy. From Warsaw I moved directly to King's College, Cambridge, where I often heard Joan Robinson speak of Michal Kalecki as the man who had discovered the General Theory before Keynes, as she also fully acknowledged in print (1952, 1964, 1966a, 1976) and in correspondence with Kalecki. Such a generous recognition was put forward also by some few others, such as Oskar Lange (1939) and Lawrence Klein. Kalecki's pre-1936 writings 'created a system that contains everything of importance in the Keynesian system' (Klein 1951: 447); Klein (1975) makes the even stronger statement that 'Kalecki's greatest achievement, among many, was undoubtedly his *complete* anticipation of Keynes' *General Theory*' (emphasis added; see also Klein 1964, 1966). No recognition ever came from Keynes, or from any of his close associates such as Richard Kahn. Apparently Kalecki had sent to Keynes, before the *General Theory* was published, a German version of his 1933 paper on the business cycle, which Keynes returned to him with a note explaining that he did not know German[1] – others of Keynes' immediate circle certainly did and the resources of the College and of the University make this a curious response; it rankled then and it still rankles today. In 1937 Joan Robinson wrote to Kalecki: 'It must be rather annoying for you to see all this fuss being made over Keynes when so little notice was taken of your own contribution' (reproduced in Patinkin 1982).

In his 1936 review of the *General Theory*, Kalecki was the first to claim similarity of, and priority in, discovery for his 1933 essay: 'The statement that investments determine the total size of output, I have proved in a manner similar to Keynes in *An Essay on the Theory of the Business Cycle* (Institute of Research on Business Cycles and Prices, Warsaw 1933), pp. 114–16' (Kalecki 1936: 268). He also wrote: 'I pointed out the independence of changes in output from shift in nominal wages also in the *Essay on the Theory of the Business Cycle* (1933)' (1936: 260). But he did so in two footnotes, and in another extremely discreet and concise claim in his Introduction to Kalecki (1971): 'The first part includes three papers published in 1933, 1934 and 1935 in Polish before Keynes' *General Theory* appeared, and containing, I believe, its essentials'. Otherwise he never pressed the point. I believe he was much too proud to feel the need to assert it and a claim not spontaneously and universally accepted could only diminish his greatness. After Kalecki's death, Don Patinkin (1982) denied that Kalecki could be credited with anticipating Keynes' *General Theory*: 'Kalecki came significantly closer to the *General Theory* than did the Stockholm School. . . . At the same time, I cannot accept such claims [as those of Klein and Joan Robinson]'.

As a side note I will argue that while Kalecki and Keynes have in common a theory of national income determination based on effective demand and driven by investment, and the important policy implications that descend from it, each of them followed a distinctive intellectual route, used very different building blocks and covered distinctly different additional ground. It is not a question of establishing priority in discovery, but of crediting both of them with equally original, central contributions to modern macroeconomic theory.

Different departures

Kalecki's and Keynes' personal backgrounds were very different (on Kalecki's biography see Kowalik 1964). Both knew from direct and personal experience the cyclical nature of capitalist economies, but from different viewpoints. Kalecki was the son of a manufacturing entrepreneur who went bankrupt, and was therefore familiar with the world of production, the investment process and the risk of investing in production on borrowed money. Keynes came from an upper-middle-class family and had direct operational experience as a civil servant and as a financial investor who operated daily in the financial markets, on behalf of King's College and for himself (sometimes more successfully than at other times; he died rich, but he was close to ruin more than once).

Their intellectual formation was also very different. Kalecki was an engineer who lacked the financial means to complete his university degree, was versed in the mathematics of difference and differential equations, a self-taught economist who had not been influenced by the kind of conventional economic theory against which Keynes rebelled and campaigned. He made little use of choice theory and marginalist thinking. He was influenced by Marx's reproduction schemes, by the class categories of people and incomes (capitalists and workers, profits and wages) typical of the Marxian and English classical tradition, by Rosa Luxembourg and Tugan-Baranowsky. He had worked with Ludwik Landau on the construction of Polish national income statistics. Keynes was a mathematician who specialized in probability theory, which like Frank Knight he found useless in the assessment of business risk. He had an Eton and Cambridge education. He was taught economics by Pigou and Marshall against whom he reacted.

The very titles of their main works display the main differences in their approaches and concerns. Keynes had a theory of employment based on interest and money, Kalecki laid bare the dynamics of capitalist motion.

Common features in approach and propositions

Both Kalecki and Keynes disregarded the role of money wages in labour employment, regarding real wages as determined by producers' price setting; indeed they were both prepared to contemplate even a possible direct rather than inverse relationship between employment and wages. Both followed a bold, macroeconomic and aggregate approach to the theory of national income and employment determination, taking national income identities as their starting points. Both regarded investment demand as the driving force of the capitalist system and assigned a crucial role to government expenditure in macroeconomic policy to supplement investment and net exports when national income was in under-employment equilibrium, regarded as the normal state of the world. But similarities end here. Their investment and consumption functions were different; different too was the theory of interest and the role of monetary policy; the spillover effects of their theories led to important and original developments in entirely different areas of economic investigation.

Investment functions

Kalecki had a very complex view of the investment process, distinguishing between investment orders, investment output and actual deliveries of investment goods. Investment orders depend on the ratio of profits to the capital stock, and the long term interest rate. Thus for Kalecki, contrary to Keynes' approach, investment profitability is not a marginal concept derived from discounting prospective cash flows, but a current average ratio projected into the future. Such ratio is an increasing function of the degree of utilization of productive capacity – thus making Kalecki's investment function behave as a flexible accelerator or capital-stock adjustment equation. Short-term interest rate does not matter as much as in Keynes because for Kalecki the rate affecting investment is the long-term rate, which moves more sluggishly than short-term rates, and because increasing risk from the use of borrowed money, and the ensuing danger of bankruptcy, soon stops investment even at low interest rates. Current investment output is the result of lagged past decisions; investment deliveries raise (lower) the capital stock according to whether they exceed (fall short of) the equipment going out of use, feeding back onto current profitability and new investment orders. Expectations play no role, other than in current average profit rate being projected into the future.

For Keynes, on the contrary, current investment depends on both the marginal efficiency of investment – i.e. the internal rate of return on prospective investment projects, ordered in terms of decreasing efficiency – and current interest rate. The marginal efficiency of investment is something which exists solely in the minds of entrepreneurs, it embodies their 'animal spirits' and is subject to sudden changes according to 'the state of the news'. Instead of the long-term interest rate being mildly affected by the current rate, as in Kalecki, for Keynes the current rate depends on expectations about the future normal rate of interest to which the current rate tends to revert (i.e. the interest rate 'hangs from its bootstraps').

Consumption functions

For Kalecki consumption behaviour differs among income categories: capitalists' consumption consists of a fairly stable amount which is constant over the cycle, as capitalists are constrained by their entire wealth and not by current income; they also consume a small – if any – share of current profits. Workers are presumed to consume all they earn. It follows that the marginal propensity to consume c can be approximated by the share of wages in national income, and indeed Kalecki's multiplier – which he seldom uses – is expressed as $1/(1 -$ wage share$)$ instead of the conventional Kahn–Keynes $1/(1 - c)$.

For Keynes, aggregate consumption depends primarily on aggregate income, regardless of its distribution, which comes into play in post-Keynesian (one should certainly say post-Kaleckian) income distribution theory (see below).

The basic models

For Kalecki:

$Y = C + I$	where $Y =$ GDP; $C =$ Consumption; $I =$ Gross investment
$Y = W + P$	where $W =$ Wages; $P =$ Profits
$C = Cc + Cw$	where $Cc =$ capitalists' consumption; $Cw =$ workers' consumption
$Cc = A$	or $Cc = A + b.P$ where $A =$ constant and b is a small fraction;
$Cw = W$	
$A + W + I = W + P$	
$P = A + I$	

Thus profits are determined by capitalists' (fairly constant) consumption and (variable, indeed cyclical) investment expenditure. A fall of money wages would leave demand unchanged if prices fell by the same proportion, and would result in a demand fall and therefore income fall if prices were rigid. Kalecki (1934) specifically considered an open economy in which exports played the same role as investment in driving demand and employment, while government expenditure was viewed as 'domestic exports', with imports as leakages and – *ceteris paribus* – a trade balance deterioration arising from an increase in government expenditure.

Investment decisions Id are a function of average profit ratio and long-term interest rate:

$Id = Id(ltr, P/Y)$ where ltr = long-term interest rate
$P/Y = \mathrm{f}(Y/K)$ where K = capital stock

For Keynes:

$I = I(r)$ r = interest rate
$M = L(r, Y)$ M = money supply, L = money demand
$C = B + c.Y$ B = constant, c = marginal propensity to consume

'For Keynes prices are determined by money wages, investment is determined by the interest rate and the marginal efficiency of capital, the interest rate is determined by liquidity preference' (Joan Robinson). Lower money wages – as in Kalecki – do not necessarily promote employment unless they are accompanied by higher investment, which in Keynes might occur through their impact on the real quantity of money and therefore the interest rate.

For Keynes the central position is taken by the interest rate, as confirmed by the *General Theory*'s full title. He is under the influence of Sraffa (*General Theory*, ch. 17, plus the convention of measuring income and money in wage units).

We are confronted with similar conclusions originally and independently drawn, arising from different starting points, different intellectual and technical backgrounds, different values and above all different building blocks, i.e. different theories of aggregate consumption, investment and the role of money. There is sustained originality in both; there is a very great deal that we can find in Kalecki that is not in Keynes, and vice versa. It is inappropriate to regard them as in competition for the same achievements.

Exclusive originalities

Kalecki has a theory of distribution, reviewed above. Indeed he has two distribution theories, the other depending on the aggregate degree of monopoly or aggregate mark-up although, as Nicholas Kaldor used to say, this is not satisfactory: for every product a mark-up theory of prices must specify price leadership criteria (in which enterprise's costs matter), the relevant degree of capacity utilization (costs varying with it) and the mark-up determination. Keynes neither has nor needs a theory of distribution. What is known as the neo- or post-Keynesian distribution theory is actually a neo-Kaleckian reformulation of Kalecki's first theory of distribution, with profit share instead of absolute profits and a more flexible hypothesis about the magnitudes of propensities to save out of profits and out of wages.

Kalecki has a theory of cycles, indeed a number of theories of cycles that are increasingly refined over the years (including a theory of political business cycles) culminating with the approaches further developed by Nicholas Kaldor and by R.M. Goodwin. Keynes' model is compatible with business cycles and – with the addition of an accelerator or other ingredients – can be and has been turned (beginning with Paul Samuelson and Roy Harrod) into a theory of cycles. But Kalecki had a theory of cycles of his own, driven by investment demand, as early as 1933; he also had growth solutions as special cases of his cycle models.

Finally, Kalecki exercised his talent in diverse other areas of economic research, primarily development theory and economic planning, both in less-developed countries and in centrally planned socialist economies. In particular, his theory of the socialist economy was a strong denunciation of its excessive propensity to invest – excessive with respect to non-inflationary conditions, to population willingness to abstain from consumption for future gains, to the sustainability of income and consumption growth (see Nuti 1989). Had Soviet and central–east-European leaders heeded Kalecki's advice the history of the last 15–20 years in the socialist block would have been very different.

Keynes has a theory of expectations – sometimes self-fulfilling, sometimes self-falsifying (in the Preface to a reprint of the *General Theory* he wrote that if he ever were to re-write it he would distinguish carefully between the two cases). Expectations – he explains – are important because demand for future goods does not have to be expressed in current markets. Today we would say that markets are incomplete (most forward/future markets are missing) and in any case sequential (i.e. even if futures markets were complete, one would not have to transact in them today for markets reopen daily, indeed never close in the global economy). The volatility of expectations is a major ingredient of his approach, and a key to the understanding of his view of financial markets.

At the same time, fairly simple 'reversionary' expectations govern for Keynes the medium-long normal level of the interest rate, which is the foundation of liquidity preference. Right or wrong, relevant or irrelevant at the end of this century, this is a great original feature and a cornerstone of Keynes' theory of effective demand: the notion of money as a potential 'bottomless pit' absorbing purchasing power which otherwise would be expressed as demand for current goods. An intriguing attempt to link the monetary interest rate to real 'own' interest rates for commodities can be found in the controversial chapter 17 of the *General Theory*.

Finally Keynes, like Kalecki, made diverse contributions to other areas of economic theory and policy, before and after the *General Theory*, from fiscal policy to the shaping of the international monetary system.

Patinkin (1982) argues that Kalecki did not use the marginal method, the multiplier and the notion of under-employment equilibrium, did not consider money markets and did not seek to integrate value and monetary theory. That Kalecki – like post-Keynesians – used marginal notions only sparingly should not be regarded as a defect. He did use the multiplier, but in a different formulation (see above) consistent with his own consumption theory; he was interested in the impact of investment not only on demand but also and primarily on capacity; besides, the multiplier was Kahn's (1931) and not Keynes' creation. Kalecki was more interested in economic dynamics than in the comparative statics of income determination, which he however obtained as a by-product of his dynamic models. Kalecki did not consider financial markets as fully as Keynes, nor did he attempt to integrate value and monetary theory, but his merits were to develop macroeconomic dynamics and to integrate it with distribution theory, while Keynes did not attempt either. It is equally immaterial to criticize Keynes for no theory of distribution, of economic cycles and growth. While Kalecki should not be credited with the '*complete* anticipation of the *General Theory*' (Klein 1975; emphasis added), certainly Kalecki's remarks about anticipating Keynes' relationship between money wages and employment and 'the statement that investments determine the total size of output' are the most admirably restrained and understated of claims. The significant intersection of the sets of their original contributions to the determination of employment and income, and their different, original and fundamental contributions in so many other areas, place Kalecki and Keynes as the founding fathers of modern macroeconomic theory.

In the last 20 years economic theory and policy have been dominated by what Joan Robinson called 'pre-Keynesian economics after Keynes'. The recent international financial crises, the undeniable cyclical patterns of world development, whether or not synchronized, the widespread delusion that ending world unemployment is just a matter of enforcing wage flexibility, demonstrate fully the continued relevance of Keynesian and Kaleckian propositions. The time has come for a joint revival.

Note

1 Personal communication from Mrs Ada Kalecka.