

Keynes and Marx

by

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I. Introduction

Soon after the publication of *The General Theory*, Keynes manifested his dissatisfaction with the ‘final product’ of the intellectual process which had started in 1931-32 and he stated an intention to re-cast his ideas in a clearer and more satisfactory way. Joan Robinson thought that starting from Marx, rather than orthodox economics, would have saved Keynes ‘a lot of trouble’ (1964: 96). The object of this chapter is to inquire into the possibility that Keynes could have re-written *The General Theory* by giving Marx more attention and more credit than he did in the 1936 edition of the book.

The interest in this issue does not derive, however, from any evidence that Keynes changed his opinion of Marx after 1936: it remained highly critical. Such interest rather derives from the fact that, in the quest for a clearer formulation of his fundamental ideas, Keynes, in my opinion, could have chosen to go, at least partly, ‘back’ to the approach that he had followed earlier on in the process which led to the publication of *The General Theory*. In fact, at a relatively early stage (1933) of this process, Keynes’s analysis of a capitalist economy and his critique of the orthodox view had come close to Marx’s approach.

Keynes soon abandoned his 1933 approach and, in *The General Theory*, he formulated the critique of orthodox economics in a different way from Marx. In the chapter, I argue that the reason for the change may be found in the fact that the economic theory criticised by Keynes was significantly different from the Ricardian theory to which Marx referred. In particular, a satisfactory criticism of the marginalist version of Say’s Law and its implications required the development of some theoretical issues that Marx was not compelled to take into consideration.

After a brief exposition of those aspects of Marx’s analysis that could be fruitfully developed along Keynesian lines (section II), the paper proceeds by looking at Keynes’s general opinion of Marx before, in and after *The General Theory* (section III). Section IV deals with Keynes’s analysis in 1933 by pointing out the similarities with Marx. The possible reasons why Keynes abandoned this analytical approach are examined and discussed in section V. Finally, section VI looks at the evolution of Keynes’s ideas after 1936 and his dissatisfaction with *The General Theory*. In particular, attention is focused on the relationship between Keynes’s position in his 1937 articles and his position in 1933.

A general conclusion of the chapter is that it seems quite unlikely that Keynes, in re-casting his ideas more clearly, would have explicitly taken Marx into more serious consideration. However, he could have come closer to Marx by partly returning to his previous approach, the main merit of which was that of providing a lucid and concise analysis of the basic laws of the functioning of a capitalist economy and a critique of the orthodox view which was aimed at its very foundations.

II. Marx's theory of effective demand and the critique of Say's Law

Joan Robinson's conviction that Keynes should have started from Marx derived from her comparison between Keynes's and Kalecki's theories of effective demand. She held that Kalecki offered more general and more robust results than Keynes because he had the advantage of being little influenced by orthodox economics and well acquainted with Marx. One of the factors that, for Joan Robinson, made Kalecki's theory of effective demand more satisfactory than Keynes's was that the former started from the Marxian schemes of reproduction.¹

Marx expressed the essential characteristic of the capitalist process of production and circulation with the formula

$$M - C - M' \quad 1$$

The objective of capitalist entrepreneurs is to produce and sell goods in order to obtain more money than they advanced to buy means of production and hire workers. In other words, they produce in order to make money profits.

Two relevant analytical issues stem from this. On the one hand, Marx set out to study the conditions under which the capitalist thrust to produce for profits can give rise to an orderly process of production, circulation and growth; on the other hand, he analysed how the same capitalist drive for profits can lead to crises, characterised by a general overproduction of commodities and unemployment of labour. Marx developed his analysis of social circulation in the second book of *Das Kapital* (1956) through his schemes of reproduction. The problem of crises was analysed, above all, in the second volume of *Theories of Surplus-Value* (1968), where Marx criticised Ricardo's theory, which denied the possibility of general overproduction crises being due to an insufficient level of effective demand.

Let us look at Marx's schemes by concentrating on the monetary aspects of his analysis² and by considering an economy in which there are only two sectors (the consumption-goods sector and the investment-goods sector) and only two classes (capitalists and workers). Commodities exchange according to their values (embodied labour); money is gold, so that prices of commodities are expressed in terms of the value of gold. The price of the i -th commodity is

$$p_i = \frac{v_i}{v_g} \quad 2$$

where v_i and v_g denote the value of a unit of the i -th commodity and of a unit of gold respectively.

The exchange ratios of commodities cannot be correctly expressed in terms of the quantity of embodied labour; here, however, it is useful to maintain this hypothesis in order to show that it does not imply any necessary contradiction with the rejection of Say's Law.³ Let us first consider a case of simple reproduction in which both workers' and capitalists' marginal propensity to consume is equal to one. The process at the

¹ 'Kahn, at the 'circus' where we discussed the *Treatise* in 1931, explained the problem of saving and investment by imagining a cordon round the capital-good industries and then studying the trade between them and the consumption-good industries: he was struggling to rediscover Marx's schema. Kalecki began at that point' (Robinson 1964: 95-6).

² The monetary aspects of Marx's schemes of reproduction have been usually overlooked. Rosa Luxemburg's work is one of the few exceptions (see Luxemburg 1963, chapters IV-IX). For a more detailed exposition of Marx's schemes see Sardoni 1981 and 1989.

³ As we shall see later on, Keynes was probably induced to think that Marx's analysis was contradictory partly because Marx accepted the labour theory of value.

macroeconomic level can be depicted by using a slightly modified version of the formula (1) above:⁴

$$M - \frac{C}{V} \dots P \dots \frac{C'}{V} - M' \quad 3$$

The capitalist class, in order to buy means of production and labour-force (C), advances a money capital M , V being the velocity of circulation of money; MV is the monetary value of C . Through the process of production (P) capitalists produce commodities (C') which embody a larger amount of labour than C . Capitalists can transform the total output C' into money and realise all the labour embodied in it if all produced commodities are sold at their prices $p_i = v_i/v_g$. Given the velocity of circulation of money, V , the monetary value of C' must be $M'V > MV$ and $(M' - M)V$ is the monetary value of the total surplus, that is, the monetary value of capitalists' aggregate profits. $M' > M$ is the amount of money which is required to make it possible to sell all produced commodities at their prices p_i . Thus, at the end of the process the capitalist class draws from circulation an amount of money M' which is larger than the amount advanced.

Marx argued that this additional quantity of money, $(M' - M)$, necessarily comes from the capitalist class itself which throws money into circulation to finance its consumption: 'it is the capitalist class itself that throws the money into circulation which serves for the realisation of the surplus-value incorporated in the commodities. But, *nota bene*, it does not throw it into circulation as advanced money, hence not as capital. It spends it as a means of purchase for its individual consumption' (Marx 1956: 338-9).⁵

At the end of each period, the capitalist class gets back the total amount of money advanced and, hence, also the money advanced to buy the social surplus. But where can capitalist initially find this additional money? Marx's answer is that the additional money is already in the hands of the capitalist class in the form of money hoards.⁶ Marx assumed that capitalists own a quantity of money, M_t , which is equal to or larger than M' (Marx 1956: 477). Only the amount M is used to buy means of production and hire the labour force at the beginning of the period; the quantity $(M_t - M)$ remains hoarded. But, in order for the social surplus ($C' - C$) to be sold, money has to be dishoarded and thrown into circulation.

Only if the surplus at its value is sold can capitalists realise their full money profits. In a case of simple reproduction, the whole surplus must be consumed by capitalists; therefore its monetary value, i.e. the monetary value of aggregate profits, is determined by the additional amount of money that capitalists throw into circulation to finance their consumption. In other words, aggregate profits are determined by capitalists' consumption decisions which, in turn, imply a decision to reduce their levels of money hoards. The capitalist class decides on its consumption before the actual realisation of profits; such decisions are based on expected values, namely on

⁴ Here the velocity of circulation of money as a medium of exchange, V , is explicitly considered.

⁵ That the money required for the realisation of capitalists' surplus has to be advanced by capitalists themselves is not paradoxical: 'For there are only two classes: the working class disposing only of its labour-power, and the capitalist class, which has a monopoly of the social means of production and money. It would rather be a paradox if the working class were to advance in the first instance from its own resources the money required for the realisation of the surplus-value contained in the commodities' (Marx 1956: 425).

⁶ In the first book of *Das Kapital* (1954: 134-41), Marx had argued that the existence of money hoards is a necessary requisite for a smooth process of circulation. See also Sardoni 1991: 223-4.

expected profits. The capitalist, ‘advances to himself ... money in anticipation of surplus-value still to be snatched by him; but in doing so he also advances a circulating medium for the realisation of surplus value to be realised later’. How much is advanced depends on the ‘customary or estimated revenue’ (Marx 1956: 424).

In a case of expanded reproduction, the analysis is similar. The produced surplus may be sold and money profits realised if capitalists throw additional money into circulation. But, in expanded reproduction, not all the surplus may be consumed; it must be at least partly used to expand the scale of production. Therefore, part of the additional money put into circulation, say $(M' - M)_i$, is now spent on investment goods by capitalists and another part, say $(M' - M)_c$, is spent on consumption goods.⁷ The value of total profits is

$$[(M' - M)_i + (M' - M)_c]V = (M' - M)V \quad 4$$

The monetary value of aggregate profits is the same as in the case of simple reproduction but profits now depend on two sets of decisions by capitalists: their investment and consumption decisions. In general, therefore, aggregate profits depend on capitalists’ expenditure decisions which, in turn, imply a decision to reduce the level of money hoards.

There is, however, a significant difference between simple and expanded reproduction. In so far as simple reproduction is considered, the required amount of additional money $(M' - M)$ does not change over time since the produced surplus is necessarily constant. When expanded reproduction is considered, the surplus is growing over time and, consequently, a growing quantity of additional money is required to allow aggregate demand to keep pace with aggregate supply and aggregate monetary profits to grow. For Marx, The additional quantity of money may come from three different sources:

- an increase in the velocity of circulation (a greater economy in the use of circulating money);
- a decrease in capitalists’ liquidity preference (the transformation of money hoards into circulating money);
- an increase in the supply of money (increased production of gold) (see Marx 1956: 349-50).

Let us concentrate on the last two possibilities. To transform hoards into circulating money corresponds to a decrease in capitalists’ liquidity preference, capitalists as a whole must be willing to reduce their liquidity position. However, considering hoards and capitalists’ propensity to throw them into circulation cannot represent a fully satisfactory solution in the case of expanded reproduction. If the quantity of money (gold) is given, dishoarding can represent only a temporary solution. If accumulation and growth proceed, the existing money hoards will be exhausted, and this leads to the conclusion that accumulation and growth must stop because of scarcity of money unless the velocity of circulation keeps on growing indefinitely. In order to avoid this conclusion, it is necessary to allow for the possibility of increases in the total supply of money, the third case considered by Marx. If the capitalists’ liquidity preference, the prices of commodities and the velocity of circulation of money as a medium of exchange do not change, the process of expanded reproduction can proceed if the supply of money grows at the same rate as the value of total production. If the

⁷ The capitalists’ marginal propensity to consume must be less than 1, while the workers’ propensity is still equal to one.

capitalists' liquidity preference were to rise, while V remains constant, the increase in the supply of money would not imply the full realisation of the growing surplus produced.

Both in the case of simple reproduction and in the case of expanded reproduction, if capitalists decide to advance an additional quantity of money $(M'' - M) < (M' - M)$, the level of aggregate profits would be negatively affected: aggregate monetary demand $(M + M'')V$ would fall short of aggregate supply ($C' = M'V$) and either stocks of commodities would pile up or the prices of commodities would decrease. In any case, aggregate profits would be decreased. Their monetary value is $(M'' - M)V$ which is less than $(M' - M)V$, the monetary value of aggregate profits when all commodities are sold at their prices p_i .

The situation depicted above is a case of general overproduction of commodities due to an insufficient level of demand. Marx dealt with the problem of crises by starting from criticising Ricardo, who had held that general gluts are impossible, that is to say that Say's Law holds. In Marx's analysis a general overproduction crisis is caused by an increase in the capitalists' propensity to hoard that amounts to a shift of aggregate demand from commodities to money:

the supply of all commodities can be greater than the demand for all commodities, since the demand for the general commodity, money, exchange-value, is greater than the demand for all particular commodities, in other words the motive to turn the commodity into money, to realise its exchange-value, prevails over the motive to transform the commodity again into use-value. (Marx 1968: 505)

Aggregate demand falls short of aggregate supply and the economy suffers the simultaneous existence of unused productive capacity and unemployed labour.

The crucial question is why the capitalist class should increase its propensity to hoard. The answer is in the analysis of the motives for production and accumulation which characterise the behaviour of capitalist entrepreneurs. Entrepreneurs do not simply produce commodities in order to satisfy, directly or indirectly, their own needs; they start production and investment processes in order to make profits. The capitalist mode of production is a *monetary economy* in which production and investment processes are started in order to make profits.

In reproduction, just as in the accumulation of capital, it is not only a question of replacing the *same* quantity of use-values of which capital consists, ... but of replacing the value of the capital advanced along with the usual rate of profit (surplus-value). If, therefore, ... the market prices of the commodities ... fall far below their cost-prices, the reproduction of capital is curtailed as far as possible. Accumulation, however, stagnates even more. Surplus-value amassed in the form of money ... could only be transformed into capital at a loss. It therefore lies idle as a hoard in the banks or in the form of credit money, which in essence makes no difference at all. (Marx 1968: 494)

Marx's concept of the capitalist mode of production is such that all relevant decisions of capitalists must be based on expectations. Capitalists make production and investment decisions within a market framework which cannot be known with certainty. The division of labour itself prevents any individual firm from knowing with certainty the market for its commodities. Thus, each firm has to make its decisions in an uncertain framework. Whenever capitalists expect that production and investment will give rise to 'insufficient' profits, they do not advance money to buy the means of production and hire workers; instead they prefer to keep money idle, hoarded.

Only by taking account of these fundamental characteristics of the capitalist mode of production can we explain why the capitalists' propensity to hoard may increase and

trigger off a general overproduction of commodities. Marx criticised Ricardo for abstracting from these essential aspects in analysing a capitalist economy.

All the objections which Ricardo and others raise against overproduction etc. rest on the fact that they regard bourgeois production either as a mode of production in which no distinction exists between purchase and sale - direct barter - or as social production, implying that society, as if according to a plan, distributes its means of production and productive forces in the degree and measure which is required for the fulfilment of the various social needs, so that each sphere of production receives the quota of social capital required to satisfy the corresponding need. (Marx 1968: 529)

According to Ricardo, the production and sale of commodities generates an income which is either spent on consumption or saved. What is saved is, however, spent: it is invested to employ additional workers. In Ricardo's world, for every sale there is a corresponding purchase, so that production and investment cannot be limited by insufficient effective demand. In this context, money is merely a device to make the exchange of commodities simpler. Money income is never kept idle; people do not draw any utility from holding money idle. For Ricardo, exchange through money is not conceptually different from barter: 'Productions are always bought by productions, as by service; money is only the medium by which the exchange is effected' (Ricardo 1951: 291-2).

By allowing for the possibility that money is kept idle, Marx pointed out that a capitalist economy is essentially different from a barter economy; Say's Law ceases to be valid and general overproduction crises become *possible*. Further, by pointing out that capitalist production is carried out in order to make profits, Marx explained why the capitalist class may wish to keep money idle. Whenever capitalist producers expect that production and investment are not profitable, they keep money idle; this causes overproduction of commodities and unemployment of labour. The possibility to keep money idle, to hoard it, gives capitalist entrepreneurs the 'freedom' not to promote economic growth when it does not coincide with their private interests. Capitalist producers are not forced to act always in favour of the general interest.

Although Marx did not go beyond offering some interesting insights and suggestions,⁸ his analysis can be enriched and generalised by introducing credit and the banking system. Once the financial sector is taken into consideration, the capitalist class is divided into two sectors: industrial and financial capitalists. Furthermore, the banks' liquidity preference becomes a crucial variable. In particular, an increase in the propensity to hoard of banks means that they are less willing to make their position less liquid by lending to industrial entrepreneurs. Changes in banks' liquidity preference may determine changes in the rate of interest or in the volume of loans at a given rate. In both cases, capitalists' expenditure will be affected. Thus, the level of aggregate profits in a growing economy depends on two sets of decisions: expenditure decisions by industrial capitalists and financing decisions by the banking system. In order that growing aggregate profits be realised, the banking system as a whole must be willing initially to make its position less liquid.

Before turning to consider Keynes's position, two final observations concerning Marx's analysis are in order. First, it is worth stressing that, here, we have dealt only

⁸ Marx was very interested in the working of the banking system and in the analysis of the factors which determine the rate of interest, but he did not succeed in providing a fully developed study of these issues. On Marx's analysis of the banking system see Marx 1959: 338-613. For a more detailed exposition of Marx's analysis of the role of banks during a crisis see also Sardoni 1987: 47-8 and 78-83.

with Marx's analysis of the *possibility* of crises.⁹ The reason why attention was focused on the possibility of crises is that we can find analogies between Marx's and Keynes's analyses only with respect to this aspect; their explanations of how such a possibility becomes actual are significantly different.¹⁰ Second, although the demand for idle money plays an important role in his theory, Marx did not develop the analysis of the relation between changes in the demand for idle money and changes in the rate of interest. Furthermore, he did not pay much attention to the relation between the rate of interest and investment decisions. Changes in the propensity to hoard have a direct effect on the demand for commodities and labour and, hence, on their prices while investment decisions are essentially governed by other factors, for example expected profits, competition and technical innovations.

III. Keynes's opinion of Marx

If the problem of the relationship between Keynes and Marx were to be based only on Keynes's explicit position on Marx's economics, any question concerning Keynes's possible attitude toward Marx in a revised edition of *The General Theory* would be easy to answer: he would never have changed his highly negative opinion of Marx.

Keynes was not a scholar of Marx. In a letter to George Bernard Shaw of 1934 (KCW/XXVIII: 38), he said that he had 'looked into' *Das Kapital* and that he would read it again if Shaw promised to do the same. As there is no evidence that Shaw so promised, Keynes probably only 'looked' into Marx's book once.¹¹ Keynes's knowledge of Marx's economics was mainly based on secondary literature rather than on a direct acquaintance with the original writings of Marx. Joan Robinson was convinced that Keynes 'never managed to read Marx' (1973: ix) and that, in any case, he 'could never make head or tail of Marx' (1964: 96)¹² This, however, did not prevent Keynes from issuing trenchant judgements on Marx's economics both in *The General Theory* and before and after its publication.

In *The General Theory*, the book which was to 'knock away' Marxism,¹³ Marx is quoted only three times. The first quotation, in a footnote (KCW/VII: 3n), is concerned with the definition of 'classical economics',¹⁴ the other two quotations are more relevant but neither is very flattering to Marx. In criticising his predecessors for having

⁹ Marx was very careful to distinguish between the possibility and the actual occurrence of crises due to imbalances between supply and demand: '... factors which explain the possibility of crises by no means explain their actual occurrence' (Marx 1968: 502).

¹⁰ The main difference is that, for Marx, an imbalance between aggregate demand and supply inevitably gives rise to a general overproduction crisis whereas, for Keynes, it can also yield an 'underemployment equilibrium'. I have dealt with this issue in Sardoni 1987 (in particular, chapters 4, 5 and 7).

¹¹ In another letter to Shaw (January 1, 1935), Keynes wrote that he had read the Marx-Engels correspondence, which did not lead him to change his mind on Marx (KCW/XXVIII: 42).

¹² Recently, Twheatt (1983) and Behrens (1985) have argued that Keynes's acquaintance with Marx's work was greater than usually admitted. However, neither of them seems to provide enough evidence to disprove Joan Robinson's opinion.

¹³ In 1935, Keynes wrote to G. B. Shaw: 'To understand my state of mind ... you have to know that I believe myself to be writing a book on economic theory, which will largely revolutionise ... the way the world thinks about economic problems. When my theory has been duly assimilated and mixed with politics and feelings and passions, I can't predict what the final upshot will be in its effect on action and affairs. But there will be a great change, and, in particular, the Ricardian foundations of Marxism will be knocked away' (KCW/XXVIII: 42).

¹⁴ As is well known, Keynes also included Marshall, Edgeworth and Pigou among the classical economists. In order to avoid confusion the term classical in the Keynesian sense is, from now on, always in inverted commas.

ignored the principle of effective demand, Keynes noted that the ‘great puzzle of Effective Demand’ had vanished from economics since Malthus and only kept on living furtively in the ‘underworlds’ of Marx, Gesell and Major Douglas (KCW/VII: 32). In chapter 23, Keynes expressed his conviction that the future will learn more from Gesell than Marx; Gesell had tried to establish an ‘anti-Marxian socialism’ based on the rejection of the classical hypotheses that Marx had instead accepted (KCW/VII: 355).

These opinions are consistent with Keynes’s opinions expressed both before and after *The General Theory*. Keynes always held that Marx’s economic doctrine was flawed by serious logical contradictions although, sometimes, it may have contained interesting intuitions. In 1925, he wrote that Marx’s *Das Kapital*, the bible of Communism, was an ‘obsolete economic textbook’ which was ‘not only scientifically erroneous but without interest or application for the modern world’ (KCW/IX: 258). In 1934, Keynes wrote to George Bernard Shaw that his feelings about *Das Kapital* were the same as his feelings about the *Koran*; its ‘dreary, out-of-date, academic controversialising’ was ‘extraordinarily unsuitable’ to give inspiration to so many people and ‘its contemporary *economic* value (apart from occasional but inconclusive and discontinuous flashes of insight) is *nil*’ (KCW/XXVIII: 38). Finally, in 1942, after having read Joan Robinson’s book on Marx’s economics (Robinson 1942), Keynes had ‘the feeling which I had before on less evidence, that he had a penetrating and original flair but was a very poor thinker indeed’ (letter to Joan Robinson of August 20, 1942; quoted in Moggridge 1992: 470).

IV. Keynes’s *entrepreneur economy*

If we consider the more specific issues of effective demand and the critique of Say’s law, Keynes’s opinion on the importance of Marx’s contribution may have been negatively influenced by a book on trade cycles and value theory, written by McCracken in 1933. McCracken may have convinced Keynes that Marx’s critique of Say’s Law was inconsistent with his acceptance of the labour theory of value. Paradoxically, Joan Robinson may also have influenced Keynes’s negative judgement of Marx. Joan Robinson’s conviction that starting from Marx would have helped Keynes came quite late in the evolution of her thought (1964) and after she had been in close contact with Kalecki. Earlier on, Joan Robinson was convinced that Marx was contradictory in his rejection of Say’s Law, since he considered it as inapplicable only during crises (see, e.g., Robinson 1942: 43-51 and Robinson 1952: 79). It was only in 1953 that Joan Robinson became convinced that, for Marx, Say’s Law never holds (see Robinson 1953: 264; see also Sardoni 1987: 66).

However, there is a stage in the development of Keynes’s ideas in which he came rather close to Marx’s critique of Say’s Law. The basic elements of Keynes’s critique of Say’s Law in 1933 are also at the core of Marx’s analysis. When in 1933, Keynes drafted several chapters of the book which was to become *The General Theory*; in particular, he wrote a draft of the second and third chapters where the critique of the ‘classical’ doctrine and Say’s Law is based on the distinction between a *co-operative economy*, a *neutral economy*,¹⁵ and an *entrepreneur* (or *monetary*) *economy*, that is, the capitalist economy in which ‘we actually live’.¹⁶ In this context, Keynes explicitly referred to Marx’s analysis and recognised that the latter, starting from the formula $M -$

¹⁵ On the notion of neutral economy, see section V below.

¹⁶ On the analytical importance of Keynes’s 1933 drafts, see also Rotheim (1981) and Tarshis (1989).

$C - M'$, had pointed out the essential characteristic of capitalist economies which makes it possible to deal correctly with the issue of effective demand.

A co-operative economy, even though money is used for exchanges, is basically equivalent to a barter economy where the factors of production are rewarded by a share of the real output. Insofar as factors of production are rewarded in agreed proportions, money is only a 'transitory convenience' which is used to buy a predetermined share of the output.¹⁷ The same analytical results can be obtained even if less restrictive assumptions are made. If some factors do not use all their rewards to buy a share of current output but employ part of them to buy a share of pre-existing wealth, full employment is still attained, provided that the sellers of pre-existing wealth use, in turn, their proceeds to buy current output (KCW/XXIX: 77). The latter is an economy in which income may be spent on goods or saved by factors. Nevertheless, what is saved is spent, that is to say, all that is saved is invested.

For Keynes, 'classical economists' could hold that Say's Law applies and that full employment is ensured by assuming that capitalist economies behave *as if* they were co-operative economies. But capitalist economies are essentially different (KCW/XXIX: 78-9). Capitalist entrepreneurs start productive processes in order to earn a monetary profit, and not in order to produce more goods and employ more labour:

An entrepreneur is interested, not in the amount of product, but in the amount of money which will fall to his share. He will increase his output if by so doing he expects to increase his money profit, even though this profit represents a smaller quantity of product than before. (KCW/XXIX: 82)

Entrepreneurs will direct money to production if they expect that to be profitable (in terms of money). If production is expected to be unprofitable, money is kept idle. As a result, less employment is offered by entrepreneurs: 'The choice ... in deciding whether or not to offer employment is a choice between using money in this way or in some other way *or not using it at all*' (KCW/XXIX: 82; emphasis added).

Money is not current output, so that if the demand for it increases, while the demand for current output declines, there will be a decrease in employment. Money is the best store of value:

Money in terms of which the factors of production are remunerated will 'keep' more readily than output which they are being remunerated to produce, so that the need of entrepreneurs to sell, if they are to avoid a running loss, is more pressing than the need of recipients of income to spend. This is the case because it is a characteristic of finished goods, which are neither consumed nor used but carried in stock, that they incur substantial carrying charges for storage, risk and deterioration, so that they are yielding a negative return for so long as they are held; whereas such expenses are reduced to a minimum approaching zero in the case of money. (KCW/XXIX: 86)¹⁸

The characteristics of money are such that buyers are not pressed to convert money into goods and entrepreneurs find it convenient to keep money instead of producing goods when they expect that demand will not be sufficient to make their production profitable. It is for these reasons that, in a capitalist economy, effective demand is likely to be insufficient to ensure the full-employment level of output (KCW/XXIX: 86-7).

¹⁷ 'It is not necessary that the factors should receive their shares of the output in kind in the first instance; - the position is substantially the same if they are paid in money, provided they all of them accept the money merely as a temporary convenience, with a view to spending the whole of it forthwith on purchasing such part of current output as they choose' (KCW/XXIX: 76-7).

¹⁸ Keynes is here clearly referring to what he later was to call the 'essential properties of money' (KCW/VII: 222-44).

It is in the description of how an entrepreneur economy functions that Keynes referred to Marx's formula $M - C - M'$,

The distinction between a co-operative economy and an entrepreneur economy bears some relation to a pregnant observation made by Karl Marx, - though the subsequent use to which he put was highly illogical. He pointed out that the nature of production in the actual world is not, as economists seem often to suppose, a case of $C-M-C'$, i. e., of exchanging commodity (or effort). That may be the standpoint of the private consumer. But it is not the attitude of *business*, which is the case of $M-C-M'$, i. e., of parting with money for commodity (or effort) in order to obtain more money. (KCW/XXIX: 81)

Keynes did not explain why he regarded Marx's theoretical developments as illogical, but his reference to a book on value theory and trade cycles by McCracken (1933) may explain what he meant. McCracken had argued that Marx's attempt to explain general overproduction crises due to a deficiency of effective demand was contradictory with his acceptance of the labour theory of value, as the latter implies the impossibility to have a general overproduction of commodities.¹⁹

However, we have seen in section II that accepting the labour theory of value does not necessarily imply accepting Say's Law. In order that the law hold it is also necessary to assume that money is demanded only as a means of circulation and that it is never kept idle in the form of hoards. In Marx's analytical framework, if the capitalists' liquidity preference increases because of pessimistic expectations concerning profits, effective demand falls short of aggregate supply and a general overproduction of commodities occurs. It is only in Ricardo's framework that the possibility to demand idle money is assumed away.

Thus, from this point of view, Marx's analysis shows significant similarities to Keynes's. Both criticised their respective predecessors for having treated capitalist economies as if they were essentially the same as barter (or co-operative) economies. Say's Law applies in an economy in which money is only a medium of exchange, a 'transitory convenience'. But in a capitalist economy money is also used as a store of value. The profitability of production and investment is the essential factor determining how money is used. If capitalists' expectations concerning profitability are pessimistic, the demand for idle money rises while the demand for goods and labour decreases. An increase in the demand for money is different from an increase in the demand for any other good. A larger demand for money determines a smaller demand for other goods and, hence, a decrease in the demand for labour. In fact, the increased demand for money gives rise to no increase (or no significant increase) in the level of employment in the production of money.

There is another element in common between Marx's approach and Keynes's critique in 1933. In both cases the critique of Say's Law is carried out within an analytical context in which neither the banking system nor the rate of interest play a role. It is capitalist entrepreneurs themselves who decide either to use money to produce and invest or to keep it idle. In other words, demand for idle money is directly determined by expected profits and not by expectations concerning the rate of interest

¹⁹ 'It cannot be made too emphatic, that if value increases with quantity, the purchasing power increases with quantity, so there would always be demand if production were properly proportioned, and any evidence of lack of demand for any particular commodity gives automatic proof that demand exists for commodities that are not available. ... Under the embodied labour theory of value, labour would still have wages sufficient for subsistence and reproduction, which was all that was possible under the Capitalistic Regime, and the more wares left in the hands of the employers the greater their wealth would be, so how could an increase in supply decrease the price?' (McCracken 1933: 55).

which, in turn, plays a role in investment decisions. As I shall argue in the next section, the fact that, in 1933, Keynes did not deal with the relation between the demand for idle money and the rate of interest may be one of the factors which induced him to develop his analysis further and to turn away from Marx's approach.

V. From the 1933 draft to *The General Theory*

By mid-1934, Keynes had abandoned his previous approach to the critique of Say's Law. In April, he had written to Kahn: 'I have been making rather extensive changes in the early chapters of my book' (KCW/XIII: 422). In a table of contents, written before the first proofs of *The General Theory* (October 1934), the chapters on the distinction between a co-operative and an entrepreneur economy had disappeared (KCW/XIII: 423-4).

In the letter to Kahn, 'classical' economists are no longer criticised for having assumed that a capitalist economy behaves like a co-operative economy, but for the assumption that aggregate demand is always equal to aggregate supply: 'The fundamental assumption of the classical theory, "supply creates its own demand", is that $OW = OP$ whatever the level of O , so that effective demand is incapable of setting a limit to employment which consequently depends on the relation between marginal product in wage-good industries and marginal disutility of employment' (KCW/XIII: 422).²⁰ In *The General Theory*, Keynes followed the same line: 'the classical theory assumes ... that the aggregate demand price (or proceeds) always accommodates itself to the aggregate supply price'; this inevitably leads to full employment because of competition among entrepreneurs: 'Say's Law, that the aggregate demand price of output as a whole is equal to its aggregate supply price for all volumes of output, is equivalent to the proposition that there is no obstacle to full employment' (KCW/VII: 26). Although Keynes still observed that the 'classical' assumption concerning the equality between aggregate supply and demand prices could be derived by assuming that a capitalist economy is essentially equivalent to a barter economy (KCW/VII: 20), the fundamental distinction between a co-operative economy and a capitalist economy ceased to play a central role. In my opinion, the basic reason why Keynes abandoned his previous line of criticism is because he was referring to a version of Say's Law which differed from the Ricardian version criticised by Marx.

In 1933, Keynes, like Marx, had criticised his predecessors for having assumed that a capitalist economy behaves like a barter economy. But Marx had an 'advantage' over Keynes - he could easily refer to Ricardo's explicit statements that a monetary capitalist economy is essentially the same as a barter economy and that all that is saved is always invested. Keynes, instead, found it much more difficult to point out passages from Marshall's or Pigou's works where equivalent statements were made as clearly and explicitly as those by Ricardo. After quoting a passage from Marshall's *Pure Theory of Domestic Values*, where it is explicitly said that all is saved is necessarily invested, Keynes had to admit that it was difficult to find similar passages from Marshall's later work or in Pigou: 'The doctrine is never stated to-day in this crude form' (KCW/VII: 19; see also KCW/XXIX: 78-9 and KCW/XIII: 410).

Keynes had to deal with an interpretation of Say's Law that was not only less 'crude' but that also implied that the economy tends to a full-employment equilibrium,

²⁰ W is marginal prime cost, O is output and P is the expected selling price. In Keynes's theory, ' $OW \neq OP$ for all values of O , and entrepreneurs have to choose a value of O for which it is equal; - otherwise the equality of price and marginal prime cost is infringed. This is the real starting point of everything' (KCW/XIII: 422-3).

an implication which was foreign to classical political economy. The acceptance of Say's Law by Ricardo - and other classical economists - implied only that, in a country, any amount of capital can be used without facing any obstacle on the demand side (Ricardo 1951: 290), but this did not mean that the economy experiences full employment of *labour*.

If Say's Law is to imply full employment, it is necessary to assume that there is a process of wage adjustment which induces capitalist firms to vary their demand for labour as the wage varies in response to changes in the level of unemployment. Moreover, the functioning of such a process would require that another mechanism be at work: for every change in the level of employment (and income) there must be an adjustment process that brings investment and saving back to equality, namely variations of the interest rate. Ricardo never thought of such mechanisms; he simply assumed that all that is saved is invested.

In referring to Pigou's theory of unemployment, the target *par excellence* of his critique (KCW/VII: 279), Keynes argued: 'it is assumed that the rate of interest always adjusts itself to the schedule of the marginal efficiency of capital in such a way as to preserve full employment. Without this assumption Professor Pigou's analysis breaks down and provides no means of determining what the volume of employment will be' (KCW/VII: 274-5). Keynes always felt the necessity to demonstrate that variations in wages and the interest rate are not such as to ensure the achievement of full employment. He had been dealing with this issue since his 1932 draft chapters of *The General Theory* (KCW/XIII: 381-406). There, after having illustrated his interpretation of how the 'actual world' works, Keynes turned to considering what he regarded as his adversaries' predictable objections. For him, the level of output, and employment, essentially depends on investment but it is not possible

to apply this argument to the real world until we have disposed of two factors, which, in the judgement of traditional doctrine, enter in as equilibrating factors and altogether obviate the necessity of any such conclusion as that which we are propounding. The first of these is the reduction of the rate of wages; and the second is the automatic tendency in such conditions for a reduction in the rate of interest. (KCW/XIII: 388-9)

Also in the 1933 drafts, Keynes devoted his attention to the alleged existence of a mechanism which brings the economy back to full employment whenever it moves away from there. After having defined a co-operative economy and the sort of outcomes that it produces, Keynes pointed out that the same results can be obtained also in an economy where there is a class of entrepreneurs who start productive processes in order to sell the output for money (what Keynes called a *neutral economy*), provided that there exists a mechanism which makes the exchange value of the factors' money incomes always equal, at the aggregate level, to the proportion of output which would have been the factors' share in a co-operative economy (see KCW/XXIX: 78). This mechanism ensures that aggregate expenditure and aggregate cost always 'keep step' and, above all, that any factor that keeps employment at a lower level than full employment is adequately offset (KCW/XXIX: 91).

In *The General Theory* Keynes reached what he regarded as a satisfactory and thorough criticism of the neo-classical analysis of the mechanisms which ensure full employment: a decrease in money-wage rates does not necessarily yield a higher level of employment; the rate of interest, determined by monetary factors, does not work as the equilibrating mechanism of saving and investment. Monetary factors can keep the rate of interest at too high a level to allow enough investment to ensure full employment. This was, for Keynes, a more convincing and satisfactory critique of neo-

classical orthodoxy. The critique was no longer based on the presumption of a tacit assumption that a capitalist economy is essentially the same as a co-operative economy, but it was based on the rejection of the traditional theory of the rate of interest. The rate of interest does not vary in such a way as to ensure $S = I$ at the full-employment level of income.

VI. Keynes's dissatisfaction with *The General Theory*

The General Theory was published in February 1936. As early as August of the same year, Keynes was already convinced that his book required 're-writing and re-casting' and was planning to write some footnotes to the book.²¹ Three years later, in the preface to the French edition of his book, Keynes again expressed the wish to re-write it in a more clear-cut way. Keynes felt particularly dissatisfied with the excessively controversial nature of *The General Theory* which was due to his attempts to escape the old ideas and to the fact that he himself was at the junction point between the old 'classical' generation and the new generation:

[I] have felt myself to be breaking away from ... orthodoxy, to be in strong reaction against it, to be escaping from something, to be gaining an emancipation. And this state of mind on my part is the explanation of certain faults of the book, in particular its controversial note in some passages, and its air of being addressed too much to the holders of a particular point of view and too little *ad urbem et orbem*. I was wanting to convince my own environment and did not address myself with sufficient directness to outside opinion. Now three years later, having grown accustomed to my new skin and having almost forgotten the smell of my old one, I should, if I were writing afresh, endeavour to free myself from this fault and state my own position in a more clear-cut manner. (KCW/VII: xxxi)²²

Keynes never went much beyond manifesting his dissatisfaction and never wrote the above-mentioned footnotes to *The General Theory*,²³ so that there does not exist direct evidence about the way in which he would have revised and improved the book. However, in speculating on Keynes's possible choices we may usefully refer to the articles that he wrote in 1937 after the publication of *The General Theory*: 'The general theory of employment' (KCW/XIV: 109-23); 'Alternative theories of the rate of interest' (KCW/XIV: 201-15); 'The *ex ante* theory of the rate of interest' (KCW/XIV: 215-23).²⁴ In these articles, written to answer a number of criticisms and

²¹ In a letter to Hawtrey of August 31 1936, Keynes wrote: 'I am thinking of producing in the course of the next year or so what might be called *footnotes* to my previous book, dealing with various criticisms and particular points which want carrying further. Of course, in fact, the whole book needs re-writing and re-casting. But I am still not in a sufficiently changed state of mind as yet to be in the position to do that' (KCW/XIV: 47).

²² The controversial nature of *The General Theory* had caused him difficulties and incomprehension even with sympathetic readers like Harrod. See Harrod's letter to Keynes of August 1, 1935 (KCW/XIII: 530-4) and also Hicks's letter of September 2, 1936 (KCW/XIV: 72-4). Keynes's response to Harrod was that 'What some people treat as unnecessarily controversial is really due to the importance in my own mind of what I *used* to believe, and of the moments of transition which were for me personally moments of illumination. You don't feel the weight of the past as I do. ... For experience seems to show that people are divided between the old ones whom nothing will shift and are merely amazed by my attempts to underline the points of transition so vital in my own progress, and the young ones who have not been properly brought up and believe nothing in particular' (KCW/XIV: 85).

²³ Keynes did write a table of contents entitled 'Footnotes to "The General Theory"' (see KCW/XIV: 133-4).

²⁴ Another important article for understanding the evolution of Keynes's ideas after *The General Theory* is 'Relative movements of real wages and output', written in 1939 (KCW/VII: 394-412).

misunderstandings by several commentators and reviewers of *The General Theory*, not only did Keynes re-state analytical points already dealt with at length in 1936; he also introduced, or re-introduced, some aspects which had not been considered in *The General Theory*.

In 'The general theory of employment', Keynes expounded his notion of uncertainty and its difference from other conceptions in the clearest and most concise way,²⁵ he related the demand for money as a store of value to uncertainty about the future²⁶ and showed how these features of the world in which we actually live affect investment, which is therefore subject to fluctuations:

It is not surprising that the volume of investment, thus determined, should fluctuate widely from time to time. For it depends on two sets of judgements about the future, neither of which rests on an adequate or secure foundation - on the propensity to hoard and on opinions of the future yield of capital assets. (KCW/XIV: 118)

In the following two articles, Keynes further elucidated his theory of the rate of interest and he specified his analysis of the demand for money by taking account of the 'finance motive'.²⁷ Moreover, Keynes re-introduced the analysis of the role of the banking system in the determination of the money supply and the rate of interest while, as well known, in *The General Theory* he took the supply of money as exogenously given and did not analyse the role of banks, aspects which were central to his analysis in *A Treatise on Money*. He pointed out:

the transition from a lower to a higher scale of activity involves an increased demand for liquid resources which cannot be met without a rise in the rate of interest, unless the banks are ready to lend more cash or the rest of the public to release more cash at the existing rate of interest. If there is no change in the liquidity position, the public can save *ex ante* and *ex post* and *ex* anything else until they are blue in the face, without alleviating the problem in the least - unless, indeed, the result of their effort is to lower the scale of activity to what it was before.

This means that, in general, the banks hold the key position in the transition from a lower to a higher scale of activity. If they refuse to relax, the growing congestion of the short-term loan market or the new issue market, as the case may be, will inhibit the improvement, no matter how thrifty the public purpose to be out of their future incomes. (KCW/XIV: 222)

Although Keynes wrote his 1937 articles in order to contrast criticisms, objections and misunderstandings by interpreters of *The General Theory*, a general characteristic of these articles is that his theory is expressed in a clear and concise way by pointing out its essential analytical foundations and by drawing a clear-cut distinction between

²⁵ 'By 'uncertain' knowledge, let me explain, I do not mean merely to distinguish what is known for certain from what is only probable. ... The sense in which I am using the term is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest twenty years hence, or the obsolescence of a new invention, or the position of private wealth owners in the social system in 1970. About these matters there is no scientific basis on which to form any calculable probability whatever. We simply do not know'. But, despite our inability to know the future, we have to make decisions and, therefore, 'behave exactly as we should if we had behind us a good Benthamite calculation of a series of advantages and disadvantages' (KCW/XIV: 113-4).

²⁶ '[O]ur desire to hold money as a store of wealth is a barometer of the degree of our distrust of our own calculations and conventions concerning the future. ... The possession of actual money lulls our disquietude; and the premium which we require to make us part with money is the measure of the degree of our disquietude' (KCW/XIV: 116).

²⁷ 'If by 'credit' we mean 'finance', I have no objection at all to admitting the demand for finance as one of the factors influencing the rate of interest. For 'finance' constitutes ... an additional demand for liquid cash in exchange for a deferred claim. It is, in the literal sense, a demand for money' (KCW/XIV: 209-10).

the positive analytical elements and the criticisms of orthodox economics. These articles represent a valuable indication of the lines along which Keynes could have recast his ideas in a revised edition of *The General Theory*. In this sense it is useful to compare Keynes's post-*General Theory* articles to his 1933 drafts in order to see whether there are common characteristics.

As I have argued above, Keynes abandoned his 1933 approach in order to provide what he regarded as a more satisfactory criticism of his closer predecessors. In doing so, he probably was to a certain extent unable to retain one important characteristic of the 1933 draft. Keynes's 1933 critique of Say's law has the important merit of putting capitalist entrepreneurs' decisions at the centre-stage of his analysis. Aggregate outcomes depend on entrepreneurs' decisions concerning money, production and investment; these decisions are made in the light of the objective to make money profits and not to produce goods as such. This is the fundamental reason why entrepreneurs can decide to keep money idle and the economy can experience unemployment. In this way, the system's degree of liquidity preference is immediately and directly related to entrepreneurs' expectation of profit, which is the driving force in a capitalist economy.

In *The General Theory*, these fundamental elements of Keynes's vision of the capitalist economy do not disappear, but they are presented in a way which may lend itself to interpretations that are far from Keynes's spirit. Investment and production decisions, obviously, are related to entrepreneurs' expectations of profits but the relation between these decisions and the demand for money is more complex than in the 1933 draft. The exogenously given money supply and the liquidity preference of the public in general determine the rate of interest; this, along with entrepreneurs' long-term expectations, determines the level of investment, output and employment. The demand for 'idle money' is no longer directly related to entrepreneurs' expectations concerning profits but to the 'speculative-motive', i.e. 'the object of securing profit from knowing better than the market what the future will bring forth' (KCW/VII: 170).

Keynes's analysis of money demand in *The General Theory* is carried out in a way in which the crucial role of entrepreneurs' drive for profits tends to disappear from the scene. Liquidity preference is explained on the basis of psychological factors and on the basis of financial speculators' behaviour; there are no longer capitalist entrepreneurs whose demand for idle money is related to their aim of maximising profits and represents an immediate alternative to demand for goods and labour-force.

As a consequence of this, Keynes's analysis of money in *The General Theory* lends itself to be interpreted more easily in terms of individuals' portfolio decisions *à la* Tobin (1958): the demand for money is considered as the demand for an asset like all the others (though more liquid) instead of a very special type of demand which can be explained by the inherent nature of capitalist economies.

However, the line of analysis that Keynes adopted in *The General Theory* has also some important advantages. First, in that way, Keynes was able to criticise better those who adopted a 'less crude' version of Say's Law. In fact, in criticising neo-classical economics, it is not sufficient to say that entrepreneurs may not invest and keep money idle; the objection that entrepreneurs would however be induced to invest and produce by variations in wages and the interest rate has to be answered. Keynes's analysis in *The General Theory* seems to respond to this analytical necessity. On the other hand, Keynes's 'less crude' line of analysis in *The General Theory* was dictated not only by the need for a more satisfactory criticism of orthodox economics. Taking account of the existence of organised financial markets is an important analytic element for the

explanation of the working of modern economies. In fact, one of the main drawbacks of the 1933 draft was the lack of an analysis of this important element.

After 1936, Keynes made an important step towards an analysis of modern capitalist economies. In his 1937 articles, the analysis is carried out in such a way as to marry the fact that capitalist entrepreneurs' decisions are the crucial factor determining aggregate outcomes with the fact that money and financial markets are a decisive element of modern economies. While the central role of entrepreneurs' investment decisions is greatly emphasised, at the same time money and financial markets are clearly and explicitly treated as capitalist markets, i.e. markets where the main agents are capitalist entrepreneurs. This is largely due to the fact that Keynes abandoned the 1936 hypothesis of exogenous money and re-introduced banks. Banks are capitalist enterprises like industrial firms and their decisions concerning liquidity are determined by their drive for profits. In this way, capitalist entrepreneurs' decisions and actions play a decisive role also in the determination of the rate of interest and, hence, of investment, output and employment. It is in this sense that the 1933 drafts could have been a useful reference for re-casting Keynes's ideas in a revised edition of *The General Theory*. In these drafts - where Keynes went closer to Marx than ever - the analysis of the problem of effective demand hinges on a clear definition of the essential characteristics of a capitalist economy, where the drive for profits is at the core of all relevant decisions.

If we look at the intellectual process that brought Keynes from *The Treatise on Money* to the publication of *The General Theory*, we see that a characteristic of this process is that, while he, quite early on, perceived and outlined the basic laws of functioning of a capitalist economy, it took him much longer to provide what he considered a satisfactory criticism of orthodox economics. In 1932, for example, Keynes had already pointed out the crucial role of investment in the determination of income and employment but he had not yet provided convincing arguments against the orthodox objections to his analytical conclusions.

It seems that Keynes's struggle to escape old ideas did not have as much to do with his alternative understanding of the basic and essential characteristics of capitalist economies as with his attempts to develop a general model which was able to stand against the well consolidated orthodox view. A few months after the publication of *The General Theory*, Keynes wrote to Harrod:

To me, the most extraordinary thing regarded historically, is the complete disappearance of the theory of the demand and supply for output as a whole, i.e. the theory of employment, *after* it had been for a quarter of a century the most discussed thing in economics. One of the most important transitions for me, after my *Treatise on Money* had been published, was suddenly realising this. It only came after I had enunciated to myself the psychological law that, when income increases, the gap between income and consumption will increase, - a conclusion of vast importance to my own thinking but not apparently, just like this, to anyone else's. Then, appreciably later, came the notion of interest as being the meaning of liquidity preference, which became quite clear in my mind the moment I thought of it. And last fall, after an immense lot of muddling and many drafts, the proper definition of the marginal efficiency of capital linked up one thing with another. (Letter to Harrod of August 30, 1936; KCW/XIV: 85)²⁸

Keynes's critique started with his perception that the crucial 'flaw' of neo-classical economics was its theory of money, a theory which could not be used to interpret capitalist economies: money is not a transitory convenience and, hence, a capitalist

²⁸ On Keynes's development of a general model after having arrived at his basic conclusions concerning the actual working of the economy see also KCW/XIV: 212.

economy is *essentially* different from a barter economy. But Keynes also realised that this basic criticism had to be complemented by other arguments which were based on more solid textual evidence. In 1933, Keynes's general model was not developed in full detail: the analysis of the demand for liquidity was not fully elaborated; the theory of the rate of interest and the notion of marginal efficiency of capital were only outlined. This made Keynes's critique of Say's Law not solid enough to withstand the expected neo-classical objections. In accomplishing the task of providing a more satisfactory criticism of neo-classical economics, Keynes parted from Marx.

However, Keynes eventually became dissatisfied with his 'final product', the book published in 1936. We do not know how Keynes could have re-written *The General Theory*, but his 1937 articles provide interesting insights and suggestions. In these articles, Keynes illustrated the fundamental elements of his analysis of a capitalist economy. In particular, he strongly stressed the fact that entrepreneurs' investment decisions are the crucial factor in the determination of income and employment and their fluctuations. Investment depends on the rate of interest which, in turn, is determined by the supply of and the demand for money, which are no longer variables that, like in *The General Theory*, simply depend on monetary authorities and on the liquidity preference of the public in general; banks now play a crucial role. Banks are capitalist enterprises like industrial firms; therefore capitalist entrepreneurs' decisions and actions in general come to play a decisive role in the working of capitalist economies.

Thus, in this sense, Keynes could have re-written *The General Theory* by 'returning', at least partly, to his earlier approach, where the role of capitalist entrepreneurs was given the centre-stage in the analysis of the world in which we actually live and the concern for the critique of the neo-classical model was less obtrusive. However, allowing for the possibility that Keynes could have gone back to his previous line of criticism does not imply that he would have explicitly re-considered Marx's contributions and arrived at a more favourable opinion of him. Keynes's ideological aversion to Marxism and his poor knowledge of Marx's original contributions seem to be strong arguments against the possibility that Keynes could have changed his mind about Marx's economics. For a more favourable attitude towards Marx's analysis of the capitalist process and his critique of Say's law, we have to wait for the later opinions of Joan Robinson, the disciple of Keynes who was the one most exposed to Kalecki's influence.

References

- Behrens, R. (1985) 'What Keynes knew about Marx' *Studi Economici*, no. 26: 3-14.
- Caravale, G. A. (ed.) (1991, *Marx and Modern Economic Analysis*, 2 vols., Aldershot: Edward Elgar.
- Keynes, J. M. (1971-89) *The Collected Writings of John Maynard Keynes* (KCW), vols. I-XXX (edited by D. Moggridge), London: Macmillan.
- Luxemburg, R. (1963) *The Accumulation of Capital*, London: Routledge & Kegan Paul.
- Marx, K. (1954) *Capital, Book I*, Moscow: Progress Publishers.
- Marx, K. (1956) *Capital, Book II*, Moscow: Progress Publishers.
- Marx, K. (1959) *Capital, Book III*, Moscow: Progress Publishers.
- Marx, K. (1968) *Theories of Surplus-Value, Part II*, Moscow: Progress Publishers.
- McCracken, H. L. (1933) *Value Theory and Business Cycles*, New York: Falcon Press.

- Moggridge, D. E. (1992) *Maynard Keynes. An Economist's Biography*, London: Routledge.
- Pheby, J. (ed.) (1989) *New Directions in Post Keynesian Economics*, Aldershot: Edward Elgar.
- Ricardo, D. (1951-73) *Works and Correspondence of David Ricardo*, 11 vols. (edited by Sraffa, P. and Dobb. M.), Cambridge: Cambridge University Press.
- Robinson, J. V. (1942) *An Essay on Marxian Economics* (2nd ed. 1966), London: Macmillan.
- Robinson, J. V. (1952) 'The model of an expanding economy'. Reprinted in Robinson 1975a: 74-87.
- Robinson, J. V. (1953) *On Re-Reading Marx*. Reprinted in Robinson 1989: 247-68.
- Robinson, J. V. (1964) 'Kalecki and Keynes'. Reprinted in Robinson 1975b: 92-9.
- Robinson, J. V. (1975a) *Collected Economic Papers, Vol. II*, 2nd edition, Oxford: Basil Blackwell.
- Robinson, J. V. (1975b) *Collected Economic Papers, vol. III*, 2nd edition, Oxford: Basil Blackwell.
- Robinson, J. V., (ed.) (1973) *After Keynes*, Oxford: Basil Blackwell.
- Rotheim, R. J. (1981) 'Keynes' monetary theory of value (1933), *Journal of Post Keynesian Economics* 4: 568-85.
- Sardoni, C. (1981) 'Multisectoral models of balanced growth and the Marxian schemes of expanded reproduction', *Australian Economic Papers* 20: 383-97.
- Sardoni, C. (1987) *Marx and Keynes on Economic Recession*, Brighton, Sussex: Wheatsheaf Books.
- Sardoni, C. (1989) 'Some aspects of Kalecki's theory of profits: its relationship to Marx's schemes of reproduction', in Sebastiani (1989: 206-19).
- Sardoni, C. (1991) 'Marx and Keynes: the critique of Say's Law', in Caravale (1991, vol. II: 219-39).
- Sebastiani, M., (ed.) (1989) *Kalecki's Relevance Today*, London: Macmillan.
- Tarshis, L. (1989) 'Keynes's co-operative economy & his aggregate supply function', in Pheby (1989).
- Tobin, J. (1958) 'Liquidity preference as behavior towards risk', *Review of Economic Studies* 25: 65-86.
- Thweatt, W. O. (1983) 'Keynes on Marx's *Das Kapital*', *History of Political Economy* 15: 617-20.