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12 Keynes and Marx: some points of contact

Andy Denis

Introduction

Keynes and Marx approach their investigation of the economy and, specifically, of economic crisis, from two different angles. Analytically, Marx approaches the issue via an analysis of the inner nature of capital, and his focus of attention is the production of value and surplus value. Keynes starts from the analysis of the capitalist economy as a totality, and concentrates his research on the barriers to production inherent in the sphere of realisation and exchange of products. These differences of approach and emphasis should not however be exaggerated. Indeed it is not unreasonable to regard Marx as pre-eminently a monetary theorist. The legacy of both is a monetary theory of production, and their differences of approach, however profound in other respects, do not necessarily imply any fundamental difference regarding the nature of the economy they were studying. The purpose of this chapter is to indicate in Keynes’s work a series of hints and allusions to a broader, but unelaborated, analytical framework, within which Keynes evidently conceived his work as being set, and which displays points of contact with Marx’s vision. It is not at all intended to suggest that Keynes was a Marxian economist, or that Marx anticipated the work of Keynes, nor does it enter into any discussion as to the value of Marx’s and Keynes’s approaches.

The motivation for writing the paper lies in the contributions of a number of writers who contend that Marx and Keynes are utterly opposed and share no common ground whatever. Two salient examples of this tendency are Paul Mattick’s (1969) Marx and Keynes. The limits of the mixed economy, and Geoff Pilling’s (1986) The Crisis of Keynesian Economics. A Marxist view. A more recent example is Nick Potts (2013) ‘Keynesian Economics: In Search of Unnatural Stability’. In my view these accounts are profoundly wrong, and mislead researchers influenced by both Marx and Keynes as to the significance of the contributions of both. A contrary view is expressed in a series of working papers by Alan Freeman, including Freeman (2015a; 2015b), and in some of the references therein.

There is a substantial literature on the relationship between Marx and Keynes, of which the two versions of Claudio Sardoni’s book (Sardoni 1987, 2011), and Peter Kenway’s paper (Kenway 1980) may be mentioned as particularly worthy of attention. Tsouelfidis’s discussion of the tendency of the rate of profit to fall, and of overaccumulation in Marx and Keynes (Tsouelfidis 2005), is also helpful. The purpose of the present chapter is thus to add to existing literature by pointing out a number of points of contact between the approaches of Marx and Keynes. Denis (2002) sets out the historical context within which Keynes situates his analysis of capitalism, and the historically limited role that he ascribed to that mode of production. Limitations of space preclude revisiting those topics here, other than to summarise as follows. For Keynes, the historical significance of capitalism is that it forms the period of transition between two great historical eras, those of scarcity and of abundance. This transition is achieved by the accumulation of capital. Once capital has become abundant, we reach the quasi-stationary state, in which its owners are unable to exploit the scarcity value of capital to extract a yield. Denis (2002) sets out the passages in works by Keynes in which these ideas are developed. For more on this point, see Chick and Freeman (201?).

The remainder of the chapter proceeds by examining, in the next Section, the labour theory of value adopted by Keynes. Focusing on Section 2 of Chapter 16 of The General Theory,
‘Sundry observations on the nature of capital’, the chapter argues that, not only does Keynes adopt a labour theory of value, but his account also contains concepts corresponding to Marx’s organic composition of capital, and prices of production. Then Marx’s and Keynes’s versions of the theory of the tendency for the rate of profit to fall are set out in the third Section. A strong case is made that they are closely interlinked. Marx’s law of the tendency of the rate of profit to fall depends on the expulsion of living labour while Keynes’s declining marginal efficiency of capital depends on the progressive elimination of the workers’ demand for output. The final Section concludes.

**Keynes’s labour theory of value**

Like Marx, and classical political economy as a whole, Keynes adopts a labour theory of value (Dillard 1948, pp. 195-6, 333; Dillard 1984, pp. 429-30). Dillard’s lament, nearly 70 years ago, that ‘Keynes’s labor theory of value … has been virtually ignored in voluminous discussions about Keynes and his work’ (Dillard 1984, p. 429) is, alas, no less warranted today. According to Keynes

> It is much preferable to speak of capital as having a yield … than as being *productive* … everything is *produced* by labour, aided by … technique, by natural resources … and by the results of past labour embodied in assets … It is preferable to regard labour … as the sole factor of production, operating in a given environment of technique, natural resources, capital equipment and effective demand (Keynes [1936b] 1973, pp. 213-4, emphasis in original).

This passage implicitly adopts a position on the nature of surplus value, providing an interpretative key for the analysis of other passages. Everything is produced by labour, and the yield on capital consists of a part of the money value of the products of labour, which accrues, not to the labourers, but to the owners of capital, owing to ‘the cumulative oppressive power of the capitalists to exploit the scarcity value of capital (ibid., p. 376). Yield must therefore consist of the product of unpaid labour, surplus labour; it is therefore necessarily equivalent, although Keynes does not say this, to surplus value in Marx’s sense.

Keynes, moreover, in the passage cited, acknowledges labour as the foundation of value, but, like Marx, he does not proceed from that to identify price as equal, or even proportional, to the quantity of labour embodied in the commodity. Firstly, we should note, he is not speaking of concrete labour, the labour actually performed, but abstract labour, labour which has been made homogeneous: ‘quantities of employment … can be made [strictly homogeneous] … by taking an hour’s employment of ordinary labour as our unit and weighting an hour’s employment of special labour in proportion to remuneration’ (ibid., p. 41). Hence the value of an asset depends, not on the quantity of actual labour performed in its manufacture, but on that of homogeneous, ‘ordinary’ labour – or ‘simple average labour’, as Marx terms it (Marx [1867] 1977, p. 51) – embodied in it.

Even this quantity of homogeneous labour, however, does not directly determine the exchange value of the product. The argument in *The General Theory* (Keynes [1936b] 1973, pp. 213-7) is that, since only present labour, and not past labour ‘embodied in assets’, produces value (ibid., p. 213), more ‘roundabout’ processes, since they have a higher proportion of assets to labour, will have a lower yield per value unit of capital equipment. This proportion of assets to labour is precisely what Marx calls the organic composition of capital. Keynes expresses it as the proportion ‘between the amount of labour employed in
making machines and the amount which will be employed in using them’ (*ibid.*, p. 214), and as ‘the quantity of labour embodied in roundabout processes’ used in conjunction with ‘a given labour force’ (*ibid.*). Hence the significance, in *The General Theory*, of the term ‘roundaboutness’, due to Böhm-Bawerk and much used by Austrian economists: for Keynes it refers to the value relation between past and present labour, the organic composition of capital. The greater the value of past labour, embodied in assets, relative to present labour, the more ‘roundabout’ is the process, and the higher the organic composition.

Keynes immediately links this ratio between present and past labour with another: ‘The ultimate quantity of value … relatively to the quantity of labour employed’ (*ibid.*). ‘The ultimate quantity of value’ is the value of the product, or output, and ‘the quantity of labour employed’ he has just said is that employed in making machines, plus that employed in using them. For Marx, this is the value of the total capital, constant plus variable. ‘The ultimate quantity of value’ must therefore be equal to the labour cost of producing it, the replacement cost of the assets used up, and the yield to the owners of the capital assets – in Marxian terms, variable capital, constant capital consumed, and surplus value (v+c+s). The normal expression in Marxian economics for the rate of profit is surplus value over constant plus variable capital (s/(c+v)). The ratio between the ‘ultimate quantity of value’ and ‘the quantity of labour employed’ is the ratio between c+v+s and c+v. Clearly, from the Marxian standpoint, this ratio is another expression for the rate of profit, and will behave in exactly the same way as that rate, declining in the long run – assuming a tendency of the rate of profit to fall – not towards zero, but unity.

Keynes argues that ‘The ultimate quantity of value will not increase indefinitely, relative to the quantity of labour employed, as the processes adopted become more roundabout’ (*ibid.*). ‘With a given labour force there is a definite limit to the quantity of labour embodied in roundabout processes which can be used to advantage … even if physical efficiency is still increasing’ (*ibid.*). For an individual process, or industry, considered by itself, continued capital accumulation will be retarded, even where physical efficiency is still increasing, by the fall in the rate of profit in that industry which increasing roundaboutness would entail. In other words, the criterion of profitability constitutes a barrier to the accumulation of capital: continued accumulation of capital in any branch of production is prematurely retarded by the requirement that the assets should render their owners a yield. When current labour is replaced by machinery, by past labour embodied in assets, a lower yield would be expected, as only present labour produces anything. This can only be countered by withdrawal of capital from that industry, forcing the price to rise.

In Marx’s theory, the products of processes involving a higher organic composition of capital would, if sold at their values, yield a lower than average rate of profit, as only labour is productive of value, but an increasing organic composition means that labour is being expelled from the industry. The rate of profit is (tendentially) equalised for every process by the withdrawal of capital from such high-organic-composition processes, that is, by the expedient of allowing supply of the product of that process to fall relatively to demand until the point is reached where the price is high enough above its labour value to yield the average rate of profit. This price – which deviates systematically from labour value – Marx calls the price of production; it is equal to the cost of production plus a proportion of it equal to the average rate of profit.

But this is exactly the procedure Keynes adopts to explain ‘why various kinds of services and facilities are expensive relatively to the quantity of labour involved’ (*ibid.*, p. 215), why, that
is, the price of a good may deviate persistently from its labour value. Keynes’s answer is that such goods may be produced under conditions of an adverse organic composition of capital, that is, proportion of past to present labour, and hence must be kept relatively scarce. ‘Not all labour’, Keynes writes, ‘is accomplished in equally agreeable attendent circumstances; and conditions of equilibrium require that articles produced in less agreeable attendent circumstances must be kept sufficiently scarce to command a higher price’ (ibid.) – where, by ‘agreeable’, he means ‘characterised by smelliness, risk or the lapse of time’. But this ‘lapse of time’ is exactly what he has been discussing under the rubric of roundaboutness. Hence the ‘higher price’, which Keynes says is required for goods produced by more roundabout methods, is the exact equivalent of Marx’s price of production.

The law of the tendency of the rate of profit to fall in Marx and Keynes

The falling rate of profit

Marx regarded the law of the tendency of the rate of profit to fall as ‘in every respect the most important law of modern political economy’ (Marx [1857] 1973: p. 748). There is a voluminous literature, which space precludes us from discussing here. One of the best brief statements of the law I am aware of may be found in Pilling (1986, p. 79). Adopting the notation mentioned above, if c/v (organic composition of capital) rises faster than s/v (rate of surplus value), then the rate of profit will fall. s/v cannot rise fast enough to offset c/v because of the introduction of machinery (Marx [1867] 1977: pp. 365-71, 383-4).

Machinery, which displaces workers in the industry where it is employed, transfers that labour to the industry making the machines. But it is always the case that the labour employed in making, and maintaining, a machine is less than that displaced by it; otherwise there would be no point in the substitution, from the capitalist’s point of view (Marx [1862b] 1972, p. 441). With every improvement in technology, therefore, the quantity of circulating constant capital, particularly raw materials, converted into commodities, per person hour, is increased. This implies, firstly, similar increases in both the rate of surplus value and the organic composition of capital. The rate of surplus value increases because labour has been made more efficient, reducing the necessary part of the working day; and the organic composition has been increased because more raw materials are now transformed into output by each worker. Secondly, however, there is a net increase in the proportion between fixed constant capital and variable capital – machines have replaced workers. In other words, the increase of the organic composition of capital consists of (1) an increase in the ratio of circulating constant capital (raw materials, power, etc) to variable capital, which is on average balanced by an offsetting increase in the rate of surplus value, and (2) an increase in the ratio of fixed constant capital (machinery) to variable capital, which is not so balanced. Every improvement in technique based on replacing workers by machines therefore results in two increases in composition, only one of which is offset (on average) by an equal increase in exploitation. A tendency for the rate of profit to fall is therefore inevitably associated with industrial capitalism, in Marx’s view, because composition (c/v) must rise faster than exploitation (s/v).

The declining marginal efficiency of capital

By the ‘marginal efficiency of capital’ (MEC), Keynes means ‘the increment of value due to the employment of one more value unit of capital’ (Keynes [1936b] 1973, p. 138). This, in Marxian terms, is the ratio of surplus value to constant capital (s/c in Marx’s notation) for the
marginal unit of capital. Now if the yield of the marginal unit of capital must be the yield of every unit of capital in equilibrium, then Keynes’s MEC corresponds to Marx’s average or general rate of profit. The two are not quite the same thing. Marx’s rate of profit would be designated as \( s/(c+v) \), while Keynes’s marginal efficiency of capital would be \( s/c \). But as capital accumulates, \( c/v \) (composition) rises, and hence \( s/(c+v) \) (profitability) approaches asymptotically to \( s/c \) (marginal efficiency). Changes in marginal efficiency, \( s/c \), would have identical causes and consequences to those in the rate of profit, \( s/(c+v) \).

Keynes sets out the basis for his conception of the declining MEC early in Chapter 11 of the *General Theory*: ‘the marginal efficiency of [any given] type of capital will diminish as the investment in it is increased’ (*ibid.*, p. 136). This is ‘partly because the prospective yield will fall as that type of capital is increased, and partly because … pressure on the facilities for producing that type of capital will cause its supply price to increase’. We can then aggregate, in Keynes’s view, from the individual kind of capital asset to total capital:

for each type of capital we can build up a schedule, showing by how much investment in it will have to increase … in order that its marginal efficiency should fall to any given figure. We can then aggregate these schedules for all the different types of capital, so as to provide a schedule relating the rate of aggregate investment to the corresponding marginal efficiency of capital in general which that rate of investment will establish … the rate of investment will be pushed to the point on the investment demand-schedule where the marginal efficiency of capital in general is equal to the market rate of interest (*ibid.*, pp. 136-7)

Capital accumulation must, therefore, tend to bring about a decline in the MEC. But this passage is for him uncharacteristic in the willingness it displays to aggregate – without stopping to consider whether what is true of the part is necessarily, therefore, true of the whole. A particular issue concerns technical progress\(^3\) in the form of mechanisation, which expels labour from the production process. The manner in which Keynes expresses himself has led to misunderstanding: he sometimes seems to exclude technical change, implying that that technical change may offset the tendency of the MEC to decline (Chick 1983, p. 345). Hicks argued in a review of *The General Theory* that

if the number of kinds of capital goods was fixed, then it would be very reasonable to suppose that the yields from each kind of good would diminish as the number of goods of that kind increased. But if the number of kinds is not fixed, then it seems very possible that the invention of new kinds may be stimulated by the increase in productive power; and this might put off the decline almost indefinitely (Hicks 1936, p. 252).

There was a brief correspondence on this between Keynes and Hicks. Keynes denied being ‘conscious of having assumed that invention is nil’ (Keynes [1936c] 1973, p. 72). There was also a correspondence between Hawtrey and Keynes during 1935-36 about the same issue. Again, this was concluded by Keynes saying that ‘at the level of abstraction in which I am writing’ no different treatment is required, whether one assumed away invention (capital widening), or assumed inventions to take place (capital deepening) (Keynes [1936a] 1973, p. 629).

The significance of the issue is as follows. If Keynes is abstracting from technical change, if he is assuming capital widening, then the accumulation of capital is a mere increase in the
scale of capitalist operations without any revolutionising of the process of production; this extensive accumulation, as Marx would call it, is a simple increase in the number or size of enterprises (or both), with the additional capital operating on the basis of the same technique, the same organic composition, as the original capital. If, however, Keynes is including inventions in his theory, then he is talking about the opposite, capital deepening, or intensive accumulation. This applies, not to size or number of enterprises, but to the degree of capitalisation of enterprises, the extent to which labour is replaced by fixed constant capital.

Regarding the micro side, the kinds of capital assets, we must be talking about capital widening, as Hicks makes clear in the passage above. The MEC of the individual asset falls because the supply of the good produced with its aid expands relatively to demand, reducing prices. It is true that by hiring factors, additional revenues are created and hence additional demand, but that demand is for the most part not for the product of this industry. Permitting capital deepening would allow the decline of the MEC to be offset. Turning to the MEC of capital assets in general, however, this argument cannot be used. Capital widening at the level of the economy as a whole requires unemployed factors, or it would not be possible to expand production using the same techniques, the same ratio of labour to capital assets. And production would add as much to aggregate demand as to aggregate supply, so there would be no reason for the MEC to decline. Capital deepening, however, would reduce costs per unit of output by replacing labour by machinery – consequently reducing the demand created by that productive activity relative to the supply that it created, causing prices to fall, leading to a fall in the MEC.

It seems, therefore, that the declining MEC for individual assets and for capital as a whole are driven by different factors – a declining MEC for a particular kind of capital asset must be due to capital widening, while a declining MEC in general must be due to capital deepening – and one cannot establish the macro by aggregating the micro in the manner that Keynes suggests. As soon as you start to aggregate, you violate the *ceteris paribus* conditions on which the MEC schedules for the individual assets were constructed in the first place.

This correction – using Keynes’s own insight into the need to avoid fallacies of composition – brings Keynes’s theoretical vision all the closer to that of Marx, who argued that

> the necessary tendency of capital to raise [the *productive force*] to the utmost in order to increase relative surplus time … thereby decreases necessary labour time, hence the worker’s exchange capacity … To the same degree as the mass of products grow, so grows the difficulty of realising the labour time contained in them – because the demands made on consumption rise (Marx [1857] 1973, p. 422, emphasis in original; see also Marx [1862a] 1969, p. 492, and Marx [1862b] 1972, p. 335).

As Dillard (1984, p. 428) notes, ‘Marx integrates technological change into his central model. Keynes’s failure to do so is one of the major shortcomings of his theory. His theory of unemployment would have been strengthened if he had learned from Marx about modelling technological unemployment’.

These two versions of the tendency of the rate of profit to fall are thus complementary – neither is more right than the other. The rate of profit falls because machines replace workers; on the one side, the lost value-creating power of the expelled labour reduces the ability of the owner of each unit of capital to use its possession to extract surplus value; on the other the lost purchasing power of the expelled workers brings down the demand price for output and
hence the profitability of capital. Unit output as a whole exchanges at its value; loss of value-creating power reduces its value, loss of purchasing power its price. They are two aspects of the same process, two sides of the same coin. In both cases the role of machinery is vital: it is machinery which displaces workers and hence prevents (a) their labour, leading to the fall in the rate of profit, and (b) their consumption, leading to a fall in the marginal efficiency of capital. Marx bases himself on the fact that only human production, not machinery, can create value; Keynes bases himself on the fact that only human consumption, not capital equipment, can confirm the value so created by consuming it. In this sense

consumption … is the sole end and object of all economic activity …. New capital investment can only take place … if future expenditure and consumption is expected to increase. Each time we secure today’s equilibrium by increased investment we are aggravating the difficulty of securing equilibrium tomorrow … capital is not a self-subsistent entity existing apart from consumption (Keynes [1936b] 1973, pp. 104-6).

In connection with the present discussion, it is important to recall that, for Marx, value is set by demand as much as supply, for it is not the labour-time which has gone into the product which constitutes its value, but the socially necessary labour-time. If the labour-time expended on a product, or on output as a whole, is more than the socially-necessary quantity of labour, then each hour’s labour will only count as some fraction of an hour of socially necessary labour, less than one hour in the same proportion as the socially necessary labour time is less than the total labour time expended. The value of a product is not the average labour-time which has gone into producing it, except in the situation where there is an equilibrium in the sense that there is no tendency to increase or decrease the production of the individual product or of total output.

Marx made the point like this:

Every individual article, or every definite quantity of a commodity, may, indeed, contain no more than the socially necessary labour time required for its production, and from this point of view the market value of this entire commodity represents only necessary labour, but if this commodity has been produced in excess of social needs, then so much of the social labour-time is squandered and the mass of the commodity comes to represent a much smaller quantity of social labour in the market than is actually incorporated in it … For this reason these commodities must be sold below their market-value (Marx [1894] 1972, p. 187).

Every round of production (including its share of technical progress) thus reduces demand per unit of capital, such that that demand becomes incapable of justifying the existing level of output: prices fall below ‘market-values’ (by which Marx, counterintuitively, means the quantity of technically necessary labour impounded in the commodity) to their real, underlying social values, incorporating a smaller quantity of profit. On the one hand it might seem that the reduction in demand will only be the same as the degree of cheapening, so it will make no difference, but really it is a cheapening, and a fall in demand, relative to the amount of capital employed, that is, the situation is one where capital has become more abundant, more overproduced, and the marginal efficiency of capital or the rate of profit therefore falls.

The contributions of Marx and Keynes, their theories of the production and realisation processes respectively, should therefore be understood as a unity: ‘the relations of
distribution are only the relations of production seen from a different aspect’ (Marx [1862b] 1972, p. 56). Yet there is a persistent tendency to see them as something separate, and the same barrier to the expansion of capital, appearing differently in one sphere from its appearance in the other, is taken to be a different, additional barrier. This is quite contrary to a conception of Marxian economics which sees the essence of capitalist crises in the tendency of the rate of profit to fall manifesting itself perforce in a crisis of realisation: ‘Overproduction takes place in connection with realisation, not otherwise’ (Marx [1857] 1973, p. 424).

Conclusion

This paper has argued that Marx and Keynes approach the analysis of capitalist economies from distinct standpoints, by starting with the investigation of the production of value and surplus value, and of its realisation, respectively. But that implies complementarity, evidenced in a number of points of contact. Both writers adopt a labour theory of value with prices varying around prices of production, and both affirm a tendency for the rate of profit of capital to fall, underpinned by a tendency for organic composition to rise. The conclusion reached, therefore, is that the thesis that Marx and Keynes are utterly opposed, expounded for example in Pilling (1986), Mattick (1969), and Potts (2013), is incorrect and misleading.

References


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1 This paper draws on my MA dissertation on Marx and Keynes, written in 1988 at Middlesex Polytechnic, and I record here my indebtedness to Geoff Pilling, then Course Leader for the MA in Political Economy. I am most grateful to Victoria Chick, Alan Freeman, Nick Potts, Geoff Tily, Jan Toporowski, and Lefteris Tsoulfidis for comments on an earlier draft.

2 It has been pointed out by a reviewer that Keynes’s declining marginal efficiency of capital appears as a *policy* matter (e.g. in Keynes [1936] 1973, p. 220). But the need for that policy is only introduced because of the institutional problem that the rate of interest cannot fall as rapidly as the MEC. It is the tendential fall in the
MEC that we are discussing here, abstracting from issues raised by the relation between MEC and the rate of interest.

3 A reader notes that, for Keynes, technique is given in the short period (e.g. Keynes [1936] 1973, pp. 17, 214). But the decline of the MEC cannot be a short-period matter. In my reading it is a secular tendency, not even a long-period one in which technique might still be taken as given.