Keynes on the Marginal Efficiency of Capital and the Great Depression

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ABSTRACT

This paper argues that Keynes's analysis of the marginal efficiency of capital is consistent with the principle of effective demand and is, in this sense, characteristically different from the related classical or neoclassical conceptualisations. Furthermore, the notion of the marginal efficiency of capital is used not only as an explanation of the short term fluctuations in the level of economic activity but also as an interpretation of more serious long term fluctuations such as that of the great depression. Finally, some of Keynes's economic policy proposals are critically evaluated.

Key Words: Marginal efficiency of capital, effective demand, great depression
JEL Classification: B10, B12, B13 B22, B41

1. Introduction

The question of the long-run prospects of profitability and its association with the stage of the economy looms large in the works of the major economists of the past. Keynes's analysis of profitability (encapsulated in his notion of the marginal efficiency of capital) and its evolution, although sketchy, is nevertheless consistent with his fundamental principle about the causal priority of investment over saving and is in this sense innovative and characteristically different to both the classical and also the neoclassical analyses. Keynes uses his notion of the marginal efficiency of capital (henceforth MEC) not only as an explanation of the short term fluctuations in the level of economic activity, but as an interpretation of more serious long term fluctuations such as that of the great depression. In addition, Keynes proposes specific economic policies in an effort to prolong the expansionary stage of the economy and, at the same time, mitigate the adverse economic effects of depressions.

The remainder of the paper is organized as follows. Section 2 presents and critically evaluates Keynes's argument on the MEC. Section 3 explains why a sustained fall in the MEC may lead to an economic crisis. Section 4 deals with economic policy issues and the last Section presents a summary and some concluding remarks.

2. Keynes's Theory of the Falling MEC

Keynes's analysis of profitability and its evolution is mainly described in chapters 11 and 12 of the *General Theory*, where investment, the most volatile component of his theory of effective demand, depends on the MEC in conjunction to the long term interest rate. Specifically, Keynes argues that when an entrepreneur buys investment goods in reality he buys the right to a series of future incomes that he expects to earn (during the useful lifetime of the capital good) by selling the product after the subtraction of current expenses. More specifically, Keynes defines «the marginal efficiency of capital as being equal to that rate of discount which would make the present value of the series of annuities given by the returns expected from the capital asset during its life just equal to its supply price» (*GT*, 135). He further notes that the supply price of the capital good should not be confused with its current price, but rather with the «price which would just induce a manufacturer newly to produce an additional unit of such assets, *i.e.*, what is sometimes called its *replacement cost*» (*GT*, 135). Clearly, the definition of the MEC depends on expected and not on current or past profits and also these expected profits of a project are not evaluated against a stock of capital but rather against the flow of capital, that is, the increment of the existing capital stock, in particular the price of new equipment investment.[1] Thus Keynes notes that the MEC «depends on the rate of return expected to be obtainable on money if it were invested in a newly produced asset; not on the historical result of what an investment has yielded on its original cost if we look back on its record after its life is over» (*GT*, 135).

It is interesting to note that the assumption of expected returns is absolutely necessary to Keynes in order to be consistent with his overall theory of effective demand, according to which the decisions to invest determine saving. If Keynes had assumed current or past profits instead of expected in his definition of the MEC, then he would have essentially accepted that saving determines investment.

[1] This is the reason why Pasinetti (1997, 207) approves Abba Lerner's use of the term marginal efficiency of investment instead of capital. Eisner (1997, 196) although in agreement with Lerner nevertheless prefers to maintain both terms. In this paper we opted for the term MEC although we know that Keynes refers to the flow of investment and not the stock of capital (see also Chick, 1983, ch. 6; LeRoy, 1983 and Asimakopoulos, 1991, ch. 4).

Although the MEC depends on expected and not realized profits, which of course are fraught with uncertainty, Keynes was, nevertheless, absolutely certain about the falling MEC schedule, that he did not feel that there is a need for any detailed analysis. The gist of his argument on the falling MEC is contained in just a single paragraph which we cite in toto: «If there is an increased investment in any given type of capital during any period of time, the marginal efficiency of that type of capital will diminish as the investment in it is increased, partly because the prospective yield will fall as the supply of that type of capital is increased, and partly because, as a rule, pressure on the facilities for producing that type of capital will cause its supply price to increase; the second of these factors being usually the more important in producing equilibrium in the short run, but the longer the period in view the more does the first factor takes its place. Thus for each type of capital we can built up a schedule, showing by how much investment in it will have to increase within the period, 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. We shall call this the investment demand–schedule; or, alternatively, the schedule of marginal efficiency of capital» (*GT*, 136).

In the above succinctly written paragraph there are two intertwined arguments concerning the falling profitability. The first refers to short run and the supply side of the market, where the investment expenditures of a firm imply that competition with other firms over resources gets more intense. However, the supply of resources is given in the short run; as a consequence, their price increases and profits decrease for each of the competing firms. Hence, Keynes assumes inverted L-shape unit cost curves, which imply that as competition gets more intense firms are bound to operate at the increasing part of their unit cost curves. For example, he notes «[...] in the short period supply price usually increases with increasing output, on account either of the physical fact of diminishing returns or the tendency of the cost-unit to rise in terms of money when output increases (*GT*, 328). This argument, as Keynes notes, works more effectively in the short run and weakens with the passage of time inasmuch investment expands the capacity to produce.

The long run argument refers to the demand side of the economy. Hence, Keynes's idea is that as a firm increases its investment and expands its output, it would become extremely difficult to keep its sales growing at the going price. Its sales can grow *pari passu* with its productive capacity only if the firm reduces its selling price. Consequently, expected profits fall and so does the MEC. It is important to stress, once again, that the supply and demand arguments in Keynes are not mutually exclusive; on the contrary, they may complement each other thereby reinforcing his overall argument for a falling MEC (Eatwell, 1989).

For the total economy, we simply add the behaviour of individual firms. Since for each particular firm there is an inverse relationship between the MEC and investment it follows that this is true for the economy as a whole. It is important to point out that for Keynes the fall of the MEC, in and of itself, does not automatically imply a reduction in investment expenditures. Everything depends on whether or not the rate of interest on loans is lower than the MEC. If for some reason the rate of interest is kept below the MEC, then there always exists an investment motive despite the falling MEC. This is the reason why Keynes, in chapter 24 of the *General Theory*, argues for the «euthanasia of rentiers», which can be achieved as the rate of interest approximates zero.

Keynes's analysis of falling profitability is too brief and certainly does not contain the subtleties that one finds, for example, in the classical economists. This, however, by no means implies that there are no important insights and innovations. In fact, Keynes in chapter 11 of the *General Theory* has some original contributions such as that the MEC is based on expected profits from current investment and the notion of uncertainty, a view which is consistent with the idea that the arrow of causality is running from investment to saving. The importance of these points, however, has passed unnoticed even by Keynes's major commentators (*e.g*., Dillard, 1948, ch. 7, Hansen, 1953, ch. 5 and Asimakopoulos, 1991, ch. 4). Keynes must also be blamed for that since he underestimates, in at least two instances, his own contributions by crediting the definition of the MEC to Irving Fisher. The first is in the *General Theory* (140-1) and the second in 1937 in Fisher's festschrift (*Collected Writings* XIV, 101). The similarity, however, is only superficial and reminiscent of Keynes's style to find precursors of his views. For example, Keynes (*GT*, ch. 23) refers to Malthus as the precursor of the theory of effective demand, and to Fisher as the precursor of the MEC. We know that neither Malthus nor Fisher share Keynes's view of investment determining saving and that the equality of saving and investment comes about through variations in output. This view of Keynes is characteristically different to Fisher's and the neoclassical economists who posited that the equality of full employment saving and investment is brought about by variations in the rate of interest. Furthermore, an identification of Keynes's theory of the MEC with that of Fisher's, as Garegnani (1978-1979) has pointed out, leads to two inconsistencies: first Fisher's expected profits are determined by marginal productivities of capital and labour; and second Fisher's «MEC» presupposes full employment of both capital and labour. An argument that *prima facie* contradicts the quintessence of the *General Theory* according to which the cause of unemployment is the lack of adequate effective demand and that the price system left to its own devices cannot generate full employment.

As for the marginal productivity theory of value and distribution, Keynes ruled out such a theory from his overall perspective of the way in which the actual capitalist economy works. For example, in the 1933 draft of several chapters of the *General Theory* Keynes (*Collected Writings* XIII) introduces the distinction between a *real exchange economy* and a *monetary economy*. In the latter the presence of fiat money radically changes the law of production with respect to the former, that is, the real exchange or barter economy of classical and neoclassical economics. More specifically, Keynes resorts to the distinction initially introduced by Marx between the simple commodity production (Keynes's *real exchange economy*) in which products are exchanged for the sake of consumption and a capitalist (Keynes's *monetary*) economy, where production of commodities is for the sake of profit in monetary terms. This transition to the monetary economy involves the presence of fiat money which radically changes the laws of production of the classical theory: «The classical theory supposes that the readiness of the entrepreneur to start up a productive process depends on the amount of value in terms of product which he expects to fall to his share; *i.e*. that only an expectation of more *product* for himself will induce him to offer more employment. But in an entrepreneur economy this is a wrong analysis of the nature of business calculation. 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. The explanation of this is evident. The employment of factors of production to increase output involves the entrepreneur in the disbursement, not of product, but of money» (*Collected Writings* XXIX, 82). Keynes, a few years latter in the *General Theory* continues to assume a monetary economy and explicitly rules out the marginal productivity as this can be judged from the following: «If capital becomes less scarce, the excess yield will diminish, without its having become less productive—at least in the physical sense […] the only reason why an asset offers a prospect of yielding during its life services having an aggregate value greater than its initial price is because it is scarce […]» (*GT*, 213).[2]

It has been argued (Dimand, 1995) that Keynes perhaps was not aware of all the details of Fisher's analysis and that maybe he just did not find it appropriate to explain their conceptual differences in a book honouring Fisher's contributions. We know that Keynes disregarded Fisher's notion of the «MEC» in his lectures, at a time as early as 1934 (Dimand, 1995, 257) and that he admitted, in his correspondence with Harrod (August, 27 and 30, 1936), that his definition of the

[2] Garegnani (1977-1978) lamented that the MEC is the «Trojan Horse» of the price of capital goods through which the marginal productivity theory of distribution will undermine Keynes's theory of effective demand. Keynes however disconnected his notion of the MEC from the marginal productivity theory of income distribution, unless the economy is in its stationary state. For example he notes: «The ordinary theory of distribution, where it is assumed that capital is getting now its marginal productivity (in some sense or other), is only valid in a stationary state. The aggregate current return to capital has no direct relationship to its marginal efficiency; whilst its current return at the margin of production (*i.e*. the return to capital which enters into the supply price of output) is its marginal user cost, which also has no close connection with its marginal efficiency» (*GT*, 139). For a related view see Minsky (1975, 96), while Pasinetti (1997, 218)

MEC is quite different from the works of classical economists and that it was «vital for his analysis» a concept that he devised «last of all, after an immense lot of muddling and many drafts» (*Collected Writings* XIV, 85).

Thus, although Keynes did not really present an analytically coherent argument, his desire for pragmatism led him to the conclusion that the MEC schedule was much lower in the 1930s than in the nineteenth century. There is no doubt that Keynes thought of the falling MEC as an already accomplished fact: «Today and presumably for the future the schedule of the marginal efficiency of capital is, for a variety of reasons, much lower than it was in the nineteenth century» (*GT*, 308). Hence, Keynes essentially adopts Smith's idea that the rate of interest, as a rule of thumb, can give us an approximate idea of both the level of the rate of profit and the direction of its long-term movement. Since in Keynes's time there were no national income accounts and certainly no time series data on profits and investment,[3] it seems that he was led to this conclusion by observing the evolution of the rate of interest, exactly as Smith did in his own time.[4] For example, in the *General Theory* (ch. 16, 219) Keynes presents estimates of the long run average interest rate in the range of 2 to 2 ½ per cent, which is in fact equal to our estimates of the average interest rate on consols for the period 1900-1936, whereas for the entire nineteenth century the average interest rate on consols was around 4 per cent.[5] There is no doubt that Keynes was aware of both the limitations of his theoretical analysis and the need to be backed up by empirical evidence. For example he notes: «To develop the thesis [on the falling MEC] would occupy a book rather than a chapter, and would require a close examination of facts» (*GT*, 313).

argues that Garegnani's critique of the MEC is misplaced.

[3] The national income and product accounts data for the years up until the first decades of the twentieth century were created mostly retrospectively and after the publication of the *General Theory*, which essentially created both the need for such data as well as the conceptual framework for the estimation of variables such as income, investment, consumption, saving, *etc*.

[4] Clearly, Keynes regarded the rate of interest and the rate of profit (or the MEC) as distinct and strictly separate economic categories. In fact, Keynes criticized those economists (like Mises and Hayek) of «confusing the marginal efficiency of capital with the rate of interest» (*GT*, 191-3 for a related analysis see also 173-4).

[5] Data on the real interest rate on consols come from Global Financial Data (www.globalfinancialdata.com).

3. Falling MEC and the Depression

The growing unemployment in Great Britain in the 1920s, which was converted to mass unemployment during the Great Depression of the 1930s made Keynes to redirect his intellectual efforts from monetary issues to those of unemployment. In his pamphlet *Can Lloyd George Do It?* (1929)—jointly written with Henderson—Keynes supported Lloyd George in the 1929 general election in advocating debt-financed public works as a means to reduce unemployment. The lack of an adequate theoretical backing of his thesis favouring public works led Keynes to the development of his *General Theory*. Thus, it has been argued that the *General Theory* would not have been written without the great depression; or in other words, the *General Theory* needed the great depression as much as the great depression needed the *General Theory*. In fact, Keynes follows a whole tradition of major economists who regarded that falling profitability, past a point, leads the economy to its depression stage. More specifically, Keynes (*GT* ch. 22) uses the analytical framework of chapters 11 and 12 in order to explain the occurrence and the regularity of business fluctuations («trade cycles») of various lengths, depending on the durability of fixed capital, and also to provide an explanation of the depression of the 1930s. Thus, Keynes's analysis is not restricted to short run business cycles around a stable, albeit lower than the full employment level of output, but rather it is general enough to include cycles of long duration, which lead to breakdowns of the magnitude and importance of the depression in the 1930s. Unlike the neoclassical economists of his time, who despite the fact that their theory did not include the occurrence of depressions as a systematic phenomenon; nevertheless, they were eager to provide policy proposals. Keynes, by contrast, not only provided a theoretical explanation of the occurrences of economic crises, but also his policy proposals were derived from his theoretical foundations. It is interesting to note that Keynes is consistent in his views over the years and in the *General Theory* (chs. 19, 22, 23, *inter alia*) discusses on the consequences of various policy proposals.

The following quotation from the *Treatise of Money* is quite revealing of Keynes's outlook towards economic cycles: «I find myself in strong sympathy with the school of writers—Tugan-Baranovski, Hull, Spiethoff and Schumpeter—of which Tugan-Baranovski was the first and most original, and especially with the form which the theory takes in the works of Tugan-Baranovski himself […]. The fault of Tugan-Baranovski lay in his holding […] that savings can in some way accumulate during depressions in an uninvested form […] and also in his suggesting that this failure of savings to become materialised in investment at a steady rate is due to the unequal distribution of wealth instead of to Schumpeter's 'innovations' in conjunction with a failure of the banking system to respond in such a way as to preserve the desirable degree of stability» (Keynes, 1930, 2, 100-101). Keynes displays consistency in his views over the years as this can be judged by a text that he wrote as early as 1912, when he stated that «[a]fter a crisis there is probably too little fixed capital; hence large profits for what there is; hence the creation of more fixed capital with the expectation of equal profits; hence creation of too much fixed capital» (Keynes papers UA/6/21/12, quoted in Barnett, 2001, 461). Hence, Keynes points out two kinds of disproportionalities the first between investment in fixed capital which falls short of (expected) profits; a disproportionality which is resolved through economic expansion. The second of fixed investment in excess of (expected) profits, a disproportinality which, this time, is resolved through an economic crisis. The same idea is repeated in the *General Theory*, where for example he notes «at the outset of the slump there is probably much capital of which the marginal efficiency has become negligible or even negative» (*GT*, 317-8)

Keynes with the *Treatise* and his other works available does not need to repeat these ideas in any detail in the *General Theory*, where he reiterates that the MEC «is of fundamental importance because it is mainly through this factor (much more than through the rate of interest) that the expectation of the future influences the present» (*GT*, 145) and that the business cycle «is mainly due to the way in which the marginal efficiency of capital fluctuates» (*GT*, 313).[6] Keynes further argues that the downturn comes because of pessimism about the future of

[6] Minsky (1975) argues that there is overlap between the *Treatise* and the *General Theory* «for they are both attempts to explain much of the same set of observations» (Minsky, 1975, 111, see also *GT*, 319).

the MEC: «The disillusion comes because doubts suddenly arise concerning the reliability of the perspective yield, perhaps because the current yield shows signs of falling off, as the stock of newly produced durable goods, steadily increases […]. Once doubt begins it spreads rapidly» (*GT*, 317). This is why in the immediate aftermath of the onset of a major depression, such as that of 1929, monetary policy may be ineffective as an instrument for overcoming crises; the idea is that the crisis is not caused by rising interest rates but rather the other way around. The cause of crisis is identified with the fall in the MEC and the negative expectations that are formed about it. If entrepreneurs' profit expectations become pessimistic (as in the case of a major depression) then any level of interest rate will be perceived as too high. Similarly, in the financial sector of the economy even excessively high interest rates might not be high enough to sway potential lenders to part with their liquidity by granting new loans for the fear of default risk.

Keynes (*GT*, 315-7) argued that investment spending depends on the difference between the subjective expected profitability and the objective long term rate of interest and that the crises are caused by a falling profitability which past a point leads to discouragement of investment since additional investment creates fewer profits than expected. More specifically, Keynes notes: «For the term overinvestment is ambiguous. It may refer to investments which are destined to disappoint the expectations which prompted them or for which there is no use in conditions of full employment, or it may indicate a state of affairs where every kind of capital goods is so abundant that there is no new investment which is expected, even in conditions of full employment, to earn in the course of its life more than its replacement cost. It is only the latter state of affairs which is one of over-investment strictly speaking, in the sense of any further investment would be a sheer waste of resources» (*GT*, 321).

Clearly, Keynes's concern is with the growth of investment, which past a point leads to the stagnation of profits thereby rendering redundant the new investment spending. For this reason, Keynes argues that this situation must be postponed if not avoided altogether, and the method to achieving this goal is, certainly, not by increasing interest rates. His idea is that high interest rates discourage all investment and so some investment may be absolutely necessary for the normal growth of the economy. Furthermore, for Keynes the level of investment, is, almost never enough for the attainment of the full employment of labour. Keynes's philosophy is that the «right remedy for the trade cycle is not to be found in abolishing booms and thus keeping us permanently in a semi slump; but in abolishing slumps and thus keeping us permanently in a quasi-boom» (*GT*, 322). He was also critical to those economists that thought that if investment exceeds saving this discrepancy must be eliminated by raising the interest rate (*GT*, 327-8).

According to Keynes investment spending should be encouraged to continue until the attainment of «full investment», that is, the point where the MEC is zero. Only past this point, we have overinvestment, in the «strict sense», that is to say, any additional investment would lower the MEC to a negative figure. As a consequence, there would be no incentives to invest for there are no extra profits. The following quotation that refers to the crisis of 1930s is particularly revealing of his view of the actual crisis mechanism: «It would be absurd to assert of the United States in 1929 the existence of over-investment in the strict sense. The true state of affairs was of a different character. New investment during the previous five years had been, indeed, on so enormous a scale in the aggregate that the prospective yield of further additional was, coolly considered, falling rapidly» (*GT*, 323). Hence, Keynes posits that the onset of crisis was in the year 1929, when the US economy reached a saturation point, in the sense that new investment could no longer generate rising profits, and that this situation, he explains, was not yet of the overinvestment of the strict sense type, since there were possibilities for postponing the occurrence of overinvestment (in the loose sense of the term) through policies that would stimulate effective demand and keep capital accumulation going. Of course, overinvestment in the strict sense is inevitable in Keynes's analysis, but its occurrence can be postponed through long run policies that are accompanied by appropriate institutional changes and not just the usual mix of short run fiscal and monetary policies.

4. Economic Policies

Keynes in his analysis of overinvestment in the loose sense of the term accepts the existing institutional arrangements and the associated distribution of income. For Keynes, the widespread unemployment stems from the failure of the market system to generate enough effective demand and not from the malfunction of the price mechanism. During depressions there is a deficiency of effective demand, which must be made up by increasing investment demand. In fact, having to choose between the two constituent components of effective demand, Keynes stresses the primacy of investment over consumption expenditures. His rationale is that there is always room for more investment which by creating incomes can also increase the demand for consumption (*GT*, 325). This does not mean that he did not think that consumption demand can be affected directly through policies aiming at increasing the propensity to consume. The reason is that despite the increase in investment expenditures, full employment is extremely difficult to attain, and if attained it is difficult to maintain with the existing propensity to consume. Consequently, Keynes favoured policies aiming at promoting investment spending provided that the propensity to consume ought to increase somewhat more than that required to match the increase in investment (*GT*, 325).

Keynes was also critical of the efforts of monetary authorities in the case of the upturn of the business cycle to fight over-optimism by raising the interest rate. He argued that the change the business climate from euphoria to pessimism would lead to the discouragement of all investment spending including of some which might be useful and absolutely necessary. The failure of higher interest rates to control a booming economy led Keynes to the idea of income redistribution policies as a way to reduced the MEC and slow down overinvestment. In fact, he pointed out that «even if overinvestment in this [loose] sense was a normal characteristic of the boom, the remedy would not lie in clapping on a high rate of interest which would probably deter some useful investments and might further diminish the propensity to consume, but in taking drastic steps, by redistributing incomes or otherwise, to stimulate the propensity to consume» (*GT*, 321). The rationale for such a policy is to keep the boom going, albeit at a lower rate in the effort to avoid a certain slump that would be caused by overinvestment in the loose sense of the term.

It is important to stress at this juncture that Keynes's views of depression must also take into account the link between the MEC and the liquidity preference, and this because as he noted «the dismay and uncertainty as to the future which accompanies a collapse in the MEC naturally precipitates a sharp increase in liquidity preference» (*GT*, 316). Under these circumstances, monetary policy as an instrument to drive down the interest rate in the effort to increase profitability might be ineffective for two reasons: First, because of the «liquidity trap», which raises the possibility that «after the interest rate has fallen to a certain level, liquidity preference may become absolute in the sense that almost everyone prefers cash to holding a debt which yields so low a rate of interest» (*GT*, 207).[7] Second, «the intermediate costs of bringing the borrower and ultimate lender together, and the allowance for risk, especially for moral risk, which the lender requires over and above the pure rate of interest» (*GT*, 208). The implication is that even though the monetary authority manages to reduce the rate of interest at a level near zero, nevertheless the cost of intermediation augmented to include a risk premium to compensate the lenders' for the possibility of borrowers' default makes the effective interest rate higher than the nominal achieved through the appropriate monetary policy.[8]

Keynes argued that the drastic fall in the MEC also tends to reduce the propensity to consume; the idea is that the stock market is adversely affected, which discourages consumption expenditures. This effect becomes more severe in a «stock minded public» (*GT*, 319) as in the USA, where the fall in the stock market lowers the propensity to consume which in turn precipitates the fall in the MEC.

Finally, he dealt in detail with the effects of a fall in money wages and the possibility of curing unemployment and, therefore, leading the economy out of its

[7] It is important to point out that the notion of liquidity trap went to the oblivion in the decades of 1970s and 1980s and resurfaced again in the 1990s.

[8] Minsky (1975) elaborated further Keynes's key ideas of lenders' and borrowers' risk and incorporated them as the principal determinants of investment behaviour.

depression stage. Keynes argued that the fall in money wages works through the MEC, the liquidity preference and the multiplier. It is important to note that in the fall of money wages Keynes recognized an inconsistency in his thesis about the inability of the market system to generate effective demand to the amounts required for the establishment of full employment: «It is, therefore, on the effect of a falling wage- and price level on the demand for money that those who believe in the self-adjusting quality of the economic system must rest the weight of their argument; though I am not aware that they have done so» (*GT*, 266).

Keynes examined three scenarios of the possible effects of a fall in wages during a period of depression (*GT*, ch. 19). First as money wages fall, the price level follows suit and the value of assets (of rich consumers) rises, thereby increasing the marginal propensity to save and lowering the value of the multiplier; on the other hand, the lower incomes decrease the marginal propensity to save and increase the value of the multiplier. The net effect of these two counteracting tendencies is ambiguous and in any case one does not expect any substantial changes in output and employment. Second, as the money wages fall the MEC increases and with that investment and employment, meanwhile the fall in money wages may lead to expectations of a lower price level which may give rise to expectations of a lower MEC, once again it is hard to predict the net effect of these two counteracting movements. Third, the fall in money wages reduces the transaction demand for money and increases the speculative demand for money; thus, the rate of interest falls and stimulates investment spending and so the level of output and employment increase. As a result, one may conjecture that a sufficiently large reduction in money wages may lead to the full employment of labour. Keynes, however, posited that this is only a theoretical result and it is only valid for a moderate fall in money wage which elicit moderate changes in output and employment. A substantial fall in money wages, Keynes argued, might lead to quite opposite results and this because of the chaos that will be created in the economy and the resulting uncertainty would disrupt the systematic relationships among variables: «The chief result of this policy would be to cause a great instability of prices, so violent perhaps as to make business calculations futile in an economic society functioning after a manner of that in which we live» (*GT*, 269). It is important to point out that Keynes does not completely rule out the effectiveness of wage cuts to establish full employment in case of authoritative governments of his time, such as those of Germany, Italy and Russia (*GT*, 269).

4. Concluding Remarks

This paper has argued that Keynes makes expected profitability and its evolution the lynchpin of his analysis of the rhythm of capital accumulation. Keynes's exegesis of the tendency of profitability to fall in the long run, which leads to economic crisis, has been largely misunderstood and its importance has been downplayed in the subsequent literature. However, Keynes following a long tradition of economists adopted the idea of the long run falling profitability, as he expressed it in the movement of the MEC. Moreover, he argued that a declining MEC is internally generated by an economic system, whose motion originates in expected profitability. This is the reason why Keynes was so much interested in the future of the system, and, most of all, the maintenance of its capitalist character.

Keynes's concern is absolutely understood, if we think of the two alternative systems of his time, the national and the soviet type «socialisms». This is the historical context that we should place the exercise of caution with respect to the manipulation of investment, when he arrives at the conclusion that «the duty of ordering the current volume of investment cannot safely be left in private hands» (*GT*, 320). His plea for substantial reforms, with «a gradual disappearance of the rate of return on accumulated wealth» providing «a sensible way of gradually getting rid of many of the objectionable features of capitalism [...]» (*GT*, 221), otherwise the «socialist» alternative would prevail. Keynes's fairly radical conclusions, with today's standards as well as the difficulty of his theoretical arguments for they were not cast in terms of the «habitual modes of thinking», led many of his commentators to the relegation of the notion of the MEC and the associated with it business cycles to secondary importance. However, by ignoring the falling MEC from Keynes's overall theory of effective demand, we are left with an enormous lacuna and, therefore, our understanding of the way in which the system operates, since profitability and its evolution shape both the present and the future of a system in continuous motion.

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