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Thriftiness, Growth and the Post-Keynesian Tradition*

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In a series of papers, Asimakopulos has argued that the post-Keynesian view of investment and saving is more complex than Keynes' simple paradox of thrift. In some circumstances, and in particular when the economy has reached the inflation barrier, an increase in the propensity to save has favourable effects on the inducement to accumulate, as was shown by post-Keynesians such as Robinson and Kahn.

It is recalled that another post-Keynesian model, that of Kaldor's neo-Pasinetti theorem, could also lead to an orthodox interpretation of the role of thriftiness. However, it is shown that when these models have been cleared of their neoclassical ingredients, Keynes' paradox of thrift remains.

Dans une série d'articles, Asimakopulos a prétendu que l'approche post-keynésienne vis-à-vis de l'épargne et l'investissement ne pouvait être réduite au simple paradoxe de l'épargne de Keynes. Sous certaines conditions, en particulier lorsque l'économie atteint la barrière inflationniste, un accroissement de la propension à épargner aurait des effets bénéfiques sur le taux d'accumulation, ainsi que l'ont fait remarquer des auteurs post-keynésiens, tels Robinson et Kahn.

Il est rappelé qu'un autre modèle post-keynésien, celui relié au théorème néo-Pasinetti de Kaldor, se prête à une interprétation orthodoxe du rôle de l'épargne. Cependant, il est démontré que lorsqu'on évacue de ces modèles leurs éléments néoclassiques, le paradoxe de l'épargne de Keynes reste intact.

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INTRODUCTION

In a previous issue of the present series *Monnaie et production*, an article by the translator of Keynes' *General Theory*, Jean de Largentaye (1988), recalls the deep-seated obsession of orthodoxy with the benefits generated by savings. At a time when pre-Keynesian ideas are gaining ground among economists and politicians, two articles by Asimakopulos (1983, 1986), a well-known post-Keynesian, have provoked quite a controversy. Besides the use of some arcane arguments, which have sometimes generated equally obscure critiques, Asimakopulos' objective is clear : the sometimes beneficial and causal role of savings must be reinstated. This is not only a point of rhetoric. Asimakopulos (1986b) has also argued along similar lines in a piece written for the Royal Commission on the Development Prospects for Canada. More than academia is of concern. Economic policies are also at stakes.

It seems that the message that Asimakopulos desires to get across is of a threefold nature : (i) Keynes's assertion that the economy can never become congested through a shortage of saving is false when the income multiplier has not fully worked itself out; (ii) there are circumstances where a higher propensity to save would promote growth, even when the economy is not at full employment; (iii) this view has been defended in the past by post-Keynesian authors, and to deny it is to ignore the post-Keynedian tradition. It is my opinion that the responses to the first point given by Jan Kregel (1986) and Paul Davidson (1986) are sufficiently illuminating. What these two authors show is that Asimakopulos implicitly assumes an increase in the liquidity preference of households, as underwriters attempt to sell new long-term bonds before the multiplier has come into operation (Kregel, 1986, p. 96; Davidson, 1986, p. 108). The latter is confirmed by Asimakopulos who, to support his case, uses a 1939 article of Nicholas Kaldor, in which it was assumed that "firms obtained long-term finance for their increased investment, before undertaking those investments, through the sale of bonds in the capital market" (Asimakopulos, 1986, p. 83).

In the following, I would like to take up the last two elements of Asimakopulos' message. In particular, I would like to ascertain to what extent one can find elements in the post-Keynesian literature, past or more recent, that would support Asimakopulos' contentions.

1. A Keynesian Tradition of Thriftiness?

Asimakopulos (1986, p. 87-9) basically identifies three circumstances where higher thriftiness may promote growth. These are Robinson's "inflation barrier", trade deficits, and government deficits.

With respect to the last case, Asimakopulos states that "[Large government deficits] raise fears about future interest rates... A higher propensity to save, given the expected government deficits, may ease fears about future long-term interest rates, and thus facilitate the provision of long-term finance for investment in the present" (1986b, p. 308). Note that Asimakopulos uses a terminology that is consistent with *psychological* crowding-out only. As a consequence of expectations based on a model of the loanable funds type, the public is led to believe that a reduced imbalance between fiscal deficit and private saving would diminish interest rates : "[When] large projected government deficits raise concern over the balance between expected savings and the demand for long-term finance, an increase in the propensity to save would ease financial constraints and allow higher investment" (Asimakopulos, 1986, p. 89)

Going back to Keynes, one can certaintly assert that there is a tradition on the impact of beliefs, fears, concerns or expectations on real variables in the economy. Although Keynes was opposed to the Treasury view and its crowding-out effect, he recognized that increased government expenditures might lead to increased rates of interest, resulting from "confused psychology" (1936, p. 120). As a consequence, he also recognized that government deficits could provoke perverse effects by diminishing financial confidence and animal spirits (1972, p. 353). But this only reasserts the fact that long-term rates of interest are a highly psychological and conventional phenomenon (Keynes, 1936, p. 203), and that the perception of the importance of the government deficit by the general public is part of this convention. Asimakopulos, however, appears to be telling a different story. Is he claiming that, in addition to the money supply statistics of which monetarists keep a record, the public is also keeping track of the statistics on propensities to save? If the public believes that higher planned savings will relieve pressures on capital markets, then they must adhere to some kind of loanable funds theory (Terzi, 1986-87, p. 188).

Asimakopulos himself seems to hold the view that increased domestic savings will stop long-term interest rates from rising "when domestic savings are insufficient to finance increased investment... because of the resulting trade deficits" (Asimakopulos, 1986, p. 88). The problem here

however is not the lack of savings. The public may *"save until they are blue in the face, without alleviating the problem in the least"*. What matters is that the public reduces its consumption of imported goods. If the public were to increase savings by reducing its consumption of domestically-produced goods only, the trade deficit would remain the same. The problem is with the capacity of the country to produce goods that are desired by both local and foreign consumers. This has been neatly summarized by Thirlwall's (1982) formula, $g = x/m$. The constrained rate of growth of an open economy equals the rate of growth of exports divided by the propensity to import. An increased propensity to save will not foster growth in this case since imports can take the form of consumption as well as of production goods, a fact noted by Robinson (1956, 53).

2. A Robinsonian Tradition of Thriftiness?

Asimakopulos is thus only left with the case proposed by Joan Robinson, the inflation barrier[1]. Of course, the fact that she is the one who proposed such an analysis does not make it necessarily right, and we may question it. For the moment, we may note that Joan Robinson indeed did sometimes support the idea that a higher level of thriftiness was conducive to higher rates of accumulation, both with and without full employment. Several passages of her main works can be found that support this effect in the case of the inflation barrier, *i.e.*, when workers refuse to have their real wages squeezed out by a higher rate of profit, induced by a higher rate of growth. In her *Accumulation of Capital*, one can find :

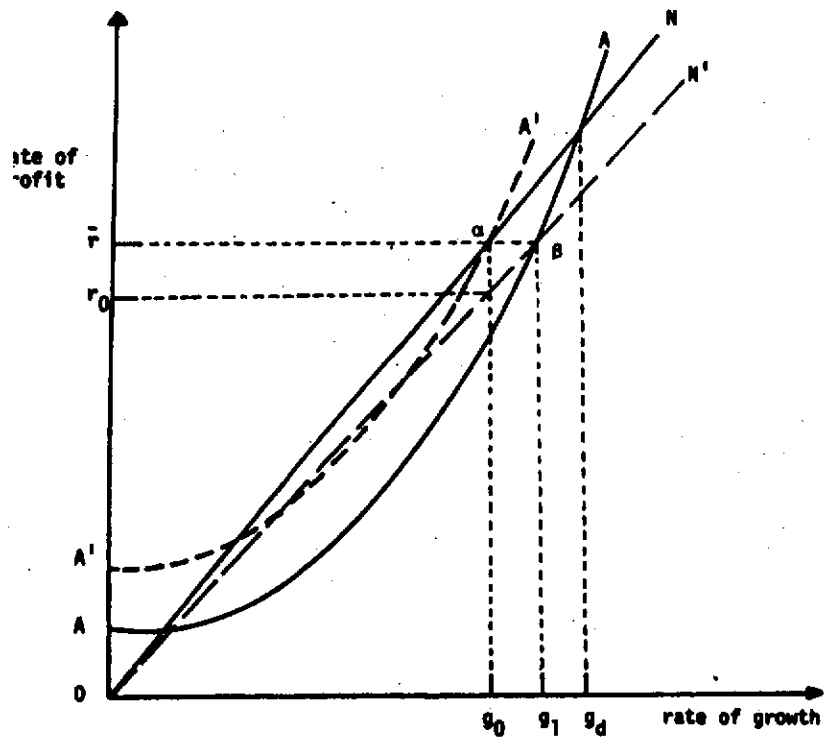
"In any given situation, the lower the level of expenditure on consumption by rentiers the further out the inflation barrier lies, and the higher the rate of accumulation that is possible. When entrepreneurs, taken as a whole, are aiming at a high rate of accumulation and are held in check only by the inflation barrier, the more thrifty everyone is the better it suits them" (1956, 53-54).

"When a high level of employment is in any case being maintained by investment, extra consumption by rentiers is harmful to the workers in the short run (by lowering real wages), and if it goes so far as to cause a danger of inflation which is checked by curtailing investment, it is harmful in the future also, because it retards accumulation" (1956, 272).

In another passage, Robinson (1956, 238) explains the mechanism at work to curtail investment : monetary authorities simply set a high

level of interest rates whenever inflation threatens. If one assumes that this reaction function of the central bank is cast in stone, one can indeed relate lower propensities to save to higher rates of interest and lower rates of growth. Indeed, it is possible to claim, as Asimakopulos does, that there is a certain tradition in post-Keynesian writings to the effect that the standard Keynesian causal sequence could be reversed, or that higher propensities to save could induce beneficial effects. Indeed, in a later work, Robinson neatly summarizes her views of the inflation barrier : "When it is the real wage which limits the rate of growth, greater thriftiness makes more investment possible in a perfectly straightforward and unambiguous sense" (1962, p. 63). This is consistent with Richard Kahn's claim that in this situation, "thrift can now be regarded as an influence on the rate of growth... greater thriftiness means a higher rate of growth" (1972, p. 202).

Diagram I



The mechanism at work in the case of the inflation barrier may be represented graphically on Diagram I. Curve AA represents the relationship between the rate of profit required to induce a given rate of growth. The shape of the curve depends on animal spirits, which here incorporate financial conditions (Robinson, 1962, 43). Line ON represents the realized rates of growth and rates of profit, given by the Cambridge equation, $r = g/s_p$. The equilibrium position, if there were no inflation barrier, would be given by the *desired* rate of growth, g_d. There is however a minimum acceptable real-wage rate which, at a given propensity to consume out of profits, corresponds to a fixed rate of profit on the wage/profit frontier. At this maximum rate of profit $\bar{r}$, firms would be willing to accumulate at rate g_1, but they can only do so at rate g_0. Any attempt to grow at a rate above g_0 creates a conflict over the distribution of the surplus and generates inflation. According to Robinson (1962, p. 60, 72), inflation may bring about policies of restraint. The effect of these policies is to dampen animal spirits and to shift the AA curve to $A'A'$. The equilibrium would be given by point α, with the new desired rate of growth equal to g_0.

Asimakopulos, Kahn and Robinson are telling us that if instead the degree of thriftiness (s_p) had been sufficiently higher, no such restraint would have been necessary. The Cambridge equation would have shifted down to ON', and with the initial animal spirits (AA), the equilibrium desired rate of growth would have been higher, at g_1 (point β). Is it thus legitimate for Asimakopulos to state that "when the urge to accumulate is high and inflationary pressures are strong... an increase in the propensity to save would ease financial constraints" (1986, p. 89)?

Two restrictions may be relevant. First, when Robinson describes the role of thriftiness, as one can read from the quotes above, she is very careful to emphasize that she is conducting her argument in terms of "thriftiness *being* higher or lower, rather than rising or falling" (1962, p. 60). Kahn concludes with similar warnings (1972, p. 206-7). Their analysis was set in logical time, not historical time. Note that Asimakopulos in the sentence quoted at the end of the above paragraph does not appear to be so cautious : he speaks of an *increase* in the propensity to save, leading the uncareful reader to think that the analysis presented is necessarily valid in historical time. This may not be of consequence when only tradition is being ascertained, but it may be misleading when the analysis is presented with policy implications (Asimakopulos, 1986b, p. 333)[2].

The critique based on the distinction between logical and historical time not being insurmountable, there is however a second, perhaps much more, fundamental restriction[3]. The case of the inflation barrier rests on the *negative* relationship between the real-wage and the rate of growth. This is evidently true if one assumes that the economy is always on the wage/profit frontier. But it has recently been emphasized by several post-Keynesian economists in the Kaleckian tradition that the level of utilization of capacity is not fixed, and that it is wrong, at least in an analysis that aims at introducing historical time, to assume that there always is full capacity – the neoclassical analysis – or that the utilization of capacity, in long run equilibrium, is always at its normal rate – the Robinsonian analysis (Vianello 1985, 81). Authors such as Rowthorn (1981), Nell (1984), Dutt (1990) have thus reasserted the importance of variations in the level of utilization of capacity. When these variations are taken into account, there may be, as these authors have shown, a positive relationship between the real wage and the rate of growth or employment[4]. This implies, as Dutt (1987, 81) has shown, that higher growth rates may not induce inflationary forces. Rather faster accumulation may defuse inflationary pressures. This effect, which is contrary to the one popularized by the Phillips curve, is not necessarily due to some increased productivity induced by faster capital accumulation. It simply results from the lack of conflict between growth and real wages when capacity is generally not fully utilized[5]. The inflation barrier then does not exist. There is no room left for thriftiness, nor for austerity policies.

3. A Kaldorian Theory of Thriftiness?

In his effort to show that firms are not free to accumulate as they please (independently of the rate of saving), thus establishing some link between his vision of post-Keynesianism and the neoclassical school, Asimakopulos could have quoted Kaldor's neo-Pasinetti theorem (Kaldor, 1966). In this post-Keynesian model, the implicit rate of interest is the mechanism which ensures the equality between the investment decided by firms and aggregate savings (Davidson, 1972, p. 300). It has been argued that within that model, a lower propensity to save on the part of households is generally conducive to a higher implicit rate of interest, a lower valuation ration, and hence a lower rate of accumulation. Let us have a closer look at this possible candidate of thriftiness-driven economy of the post-Keynesian tradition. From Kaldor's model, in which s_h is the constant propensity to save

of households on all types of income, including capital gains, k is the capital-output ratio and g is the exogenous rate of accumulation, the equilibrium (valuation) ratio between the stock of capital valued by the stock market and the value of capital at reproduction prices (Tobin's q ratio) is equal to :

$$v = [(s_h/gk) - s_h]/(1 - s_h)$$

The first derivatives of this equilibrium valuation ratio, with respect to s_h and g are respectively :

$$dv/ds_h = (1 - gk)/gk(1 - s_h)^2 > 0$$
$$dv/dg = -s_h k/(1 - s_h)(gk)^2 < 0$$

Thus we see that a higher rate of accumulation is associated with a lower valuation ratio, and that a higher propensity to save by households requires a higher valuation ratio. The valuation ratio is independent of the retention ratio of firms when the propensity to save of households is independent of the type of income received[6]. If it can be shown that a low valuation ratio can be conducive to low growth rates, then Asimakopulos' presumption that higher propensities to save by households can be favorable to growth will have been demonstrated through this Kaldorian route.

Some arguments may lead to that result. Moore (1973, 543; 1975, 81-2) has argued that a neoclassical type of firm would necessarily behave in a way that would drive the valuation ratio towards unity. This is where share prices are maximized. If the ratio is above one for instance, as a result of a high propensity to save, this will encourage firms to increase their rate of growth. This is because the rate of return on shares is now lower than the rate of profit of the firm on real investment. The implicit rate of interest, *i.e.*, the assumed cost of finance, is lower than the rate of return on investment. On standard Keynesian grounds, this should induce firms to step up investment. If this Fisherian theory of endogenous investment is valid, then indeed one can say that savings promote growth, or, as Asimakopulos (1983, 232) has put it, "that there may be limits, related in some way to the propensity to save, to the extent to which firms are in a position to increase their rate of investment".

Several objections could be levied against this endogenous view of investment. First it can be said that the implicit rate of return on shares is not truly a cost of finance. It is not the money rate of interest and the two rates need not move together. Secondly, it can be argued that firms

do not base their investments on some form of marginal efficiency schedule. Uncertainty being a pervasive phenomenon, firms rely on their expectations of future demand growth to increase their levels of capacity. Asimakopulos (1971) himself has put to the forefront such a view of investment. Within such a context, neither the firms nor the rentiers arbitrage between real and financial assets. Firms do not try to maximize the value of stock market shares. There are no forces "to eliminate persistent differences between rates of return on real assets and rates of return on financial assets" (Moss 1976, 267).

A variation of the Moore argument is to say that the valuation ratio must be above unity, otherwise firms will attempt to buy each other instead of creating new capacities. This is an argument that can be found in the writings of several post-Keynesian authors (Moss, 1978, 317; Lavoie, 1987, 176; Abraham-Frois, 1989, 137), and even in Keynes[7]. Although there is no Fisherian mechanism of the sort described above, there is a limit to the value that the valuation ratio can take without disrupting the growth of the economy. The valuation ratio can take any value above one, but when below one, firms can acquire on the stock market the producing capacities of their rivals at a cost which is lower than the one at which they can build their own.

The question then arises : if firms predict an overall increase in demand, would they not, in the aggregate, increase output capacity despite low valuation ratios? My response now is that they would. Of course, each firm in the process would attempt to take over its rivals. Still, firms would also buy new capital goods for fear of losing their share of a growing market. Hence, in a "managerial" theory of the firm set within a dynamic theory of effective demand, corporations would be indifferent to the value taken by the valuation ratio[8]. Therefore, Kaldor's neo-Pasinetti model when appropriately set within a post-Keynesian rather than a neoclassical theoretical environment, does not give credence to the belief that a higher degree of thriftiness would provide room for a higher degree of accumulation.

CONCLUSION

Whereas a substantial number of post-Keynesian authors have generally attempted to generalize Keynes' paradox of thrift to long-run situations, Asimakopulos has recently asserted that within the post-Keynesian approach "there is no simple and general causal relation

between investment and saving" (1986b, 330), since under some conditions, "an increase in the propensity to save would ease financial constraints and allow higher investment" (1986, 89).

The above conditions have been identified to be government budget deficits, trade deficits, and the inflation barrier. It was found that indeed, on occasion, post-Keynesian authors, Robinson in particular, reversed the direction of causation between investment and saving and contradicted Keynes' paradox of thrift. It has been argued however that an increase in the propensity to save would not alleviate the problem in the least in any of the three situations mentioned. Furthermore, the more modern post-Keynesian models of growth and distribution relying more explicitly on Kaleckian foundation, can do away with the notion of inflation barrier.

A fourth situation was also considered, that arising out of Kaldor's neo-Pasinetti theorem, where increases in the propensity to save of households would seem to have a potential positive impact on growth. There it was shown that such a possibility relied on a neoclassical view of the firm.

One should thus conclude that, provided one does not tack a neoclassical environment (Phillips curves, marginal efficiency schedules, etc.) to some post-Keynesian models, one cannot find a post-Keynesian tradition leading to the standard mainstream belief that thriftiness by households has favourable effects on investment and growth. Keynes' paradox of thrift remains, in the short run as well as in the long run.

NOTES

1 – This is an argument which cannot be found in the first of Asimakopulos' articles on finance. It was originally used as a rebuttal to Terzi (1986), who appealed to golden age comparisons *à la* Robinson.

2 – When he discusses policy implications, however, Asimakopulos is careful *not* to use the terms "rising", "falling".

3 – It could be argued that at the higher propensity to save, with growth rate g_0, the realized rate of profit would be r_0, which is above the rate of profit required by capitalists at that rate of growth. Despite the initial fall in profitability, firms would still accelerate production, reaching the g_1 growth rate. The traverse from α to β would be feasible from that point of view.

4 – It is somewhat ironic that Asimakopulos, whose (1975) Kaleckian model is often cited as a precursor of the models noted above, would rely on an inflation barrier, the existence of which he indirectly helped to disprove, to support the causal and beneficial role of thrift.

5 – See Blecker (1989) for an interesting analysis of this wage-led growth in an international setting. The positive relationship between real wages and growth is still upheld when firms cut on their markups without the workers attempting to raise labour unit costs.

6 – When the propensities to save depend on the type of income received (Moore 1975, 875), or on the class of the recipient (Lavoie, 1987, 1883), the equilibrium valuation ratio depends on the retention ratio but the derivatives retain their signs.

7 – "Daily reevaluations on the Stock Exchange... inevitably exert a decisive influence on the rate of current investment. For there is no sense in building up a new enterprise at a cost greater than that at which a similar enterprise can be purchased" (Keynes, 1936, 151).

8 – Figures provided by Moore (1975, 878) indeed show that the valuation ratio was below unity in the United States every year between 1947 and 1961, when growth rates were quite high.

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