"CORPORATE CONTROL, SOCIAL CHOICE AND CAPITAL ACCUMULATION: AN ASYMMETRICAL CHOICE APPROACH"

by

Christos N. Pitelis *

Number 241.

November, 1983

ABSTRACT

An asymmetrical choice approach is followed to analyse the link between corporate control, social choice and capital accumulation; based on the explicit recognition of the existence of differenct classes in modern capitalist economies. It is argued that all existing attempts to explore the issue are insufficient in that they are based on a classless- or classes do not matter-framework. We suggest that corporate decisions with regard to retentions do constrain the possibilities of choice over the consumption-saving patterns, of all - but a controlling subset of the owners - classes of the economy. Under plausible assumptions this acts beneficially on potential capital accumulation: a phenomenon due to, and being a specific characteristic of, todays large joint stock companies.

*Thanks are due to Keith Cowling, Roger Sugden and Athina Zervoyianni for discussion and comments on earlier drafts: to Mark Harrison for comments: to Marcus Miller and Paul Stoneman for discussion and criticism: finally to participants of an Industrial Economics Workshop at Warwick.

1. Introduction and Overview

Is there a link between corporate control and individuals' choice over their consumption-saving patterns? Further, how does this link - if any - affect capital accumulation ? These are the two questions to which we address ourselves in this paper.

Previous attempts to analyse the issue can be broadly classified in three categories.[1/] The neoclassical, the managerialist, and the radical approach.

There is no single, homogeneous answer to be found in the neoclassical tradition. For Solow (1967), for example, neither corporate decisions on retention policies constrain individuals' choices nor is there a link between such decisions and capital accumulation: for simply, effective control of firms is with all shareholders. Both the retention ratio and the private saving ratio will, then, be a reflection of all shareholders' preferences.

For Modigliani (1970), the possibility that firms are management controlled - or otherwise - is allowed, albeit implicitly: by allowing the retention ratic not to reflect all individuals' preferences. In such a case though, it is argued that individuals consciously following a strategy of intertemporal utility maximisation over their consumption-saving patterns, will realise that their total-corporate plus personal-savings, exceed the level they would have chosen to have, if in control of firms, and try to compensate for corporate retentions' increases by sufficiently reducing their personal savings. Under certain assumptions, perfect substitutability between corporate and personal savings will be possible, which will result in the private saving ratio being the reflection of all shareholders' preferences.

Harrod (1948), allows some flexibility to both the retention ratio and the private saving ratio, albeit he is not clear as to which conditions should be satisfied for imperfect substitutability to be observed. His views, however, are very interesting in that they anticipated the managerialist attack.

The two crucial positions with which managerialists wage their attack are (i) the divorce between ownership and control position, where control is with managers, and (ii) the idea that managers-controllers and (the rest of) shareholders may be maximising utility functions with (some) different independent variables. The implication is that, if managers have a preference for a higher retention ratio than shareholders, the observed retention ratio will not reflect all shareholders' preferences, but only managers' (see e.g. Galbraith, 1967). Moreover, if less than perfect substitutability between retentions and personal savings is possible on the part of the shareholders, as Marris (1967) posits, the aggregate saving ratio too, will not reflect all shareholders' preferences. The role of corporate control on capital accumulation becomes, then, crucial , in that a transition from owners' to managers' controlled firms, increases the private saving ratio, i.e. money capital accumulation.

In the radical tradition, Marglin (1975,a,b), wages a strong attack on the neoclassicals. He suggests that individuals have hardly any personal savings at all, which, under some assumptions, makes any substitutability improbable. Both the retention ratio and the private saving ratio then, will not reflect all individuals' preferences. The posited independence between corporate and personal savings further highlights the strong link between the location of control of firms, consumers' choice and capital accumulation.

The common feature of all the previous approaches is their reliance on a classless (neoclassicals and managerialists), or classes do not matter (Marglin), framework. This substantially constrains their capability to provide correct answers to the issue in hand.

In the next section, we attempt to substantiate the above arguments. In section 3i we handle the problem by following an 'asymmetrical choice' approach, explicitly based on the recognition of the existence of different classes in the economy. In 3ii, we examine the empirical evidence available. In 4 the impact of the joint stock company on capital accumulation is analysed. The paper concludes with a summary.

2. Corporate Control, Social Choice and Capital Accumulation: The Contestants.

There are two requirements to be satisfied, for managerialists to be able to provide different implications from neoclassicals, on the issue in hand; firstly that managers control the firms. This is based on the assumption that the extent of the dilution of shareholding (ownership) in todays corporations disallows all owners from exercising effective control of firms. Secondly, that managers exhibit a stronger preference for corporate retentions - i.e. the proportion of profits not paid back to shareholders as dividends - , than any other (group of) shareholders. This is based on the idea that, for corporate retentions to increase, shareholders should abstain from current consumption. In our consuming society - another major premise of managerialists - such an abstention will constrain shareholders from exhibiting a strong preference for retentions; (although some preference is to be expected, due to expected capital gains and tax advantages).

Such an abstention, however, is not required on the part of managers. Therefore, and given the latters' control over corporations, observed corporate retentions are expected to be higher than the ones desired from the ordinary shareholders: of course, under the proviso that corporate retentions are either an independent argument of managers' utility function or they act through one or more of its arguments.

The satisfaction of this proviso is the missing link in managerialism. When found the loop is closed. Managers control, impose their preferences over shareholders and corporate retentions increase. Moreover private savings - money capital accumulation-increase, provided that there is not perfect substitutability between corporate retentions on the one hand and personal savings on the other; that is provided that increases in the former are not exactly compensated by reductions in the latter.

For managerialists, finding the missing link was not too difficult a task. As far back as 1937, Kalecki (see his 1971 collection) was strongly arguing for the existence of a preference on the part of the controlling group of the firms, for internal finance; chiefly due to the risks associated with external borrowing. We only have to substitute managers - the new controllers - for Kalecki's controlling group - capitalists - , and here we are. Indeed both Marris (1967, p. 199) and Galbraith (1967) did it. The latter is a very rhetorical manner too. "Control of the supply of savings is strategic for industrial planning .... . Apart from the normal disadvantages of an uncertain price, there is a danger that under some circumstances supply will not be forthcoming at an acceptable price. This will be at the precise moment when misfortune or miscalculation has made the need more urgent ... . Money carries with it the special right to know and even to suggest, how it is used. The dilutes the authority of the planning unit." (ibid pp. 55-56)

There are other reasons too why managers will be expected to express a preference for corporate retentions. As Marris (1967) observes, the latter have an accelerating impact on the growth rate of managers' bonuses (ibid p. 69). Finally, tax advantages, that is the use of a lower tax rate for retained earnings than dividends on the part of the tax authorities. (See Baran and Sweezy, 1966, p. 33, for the U.S. and Hay and Morris, 1979, for the U.K.).

On the substitutability issue managerialists had to fight a rather harder battle. In analyzing the possibility of imperfect substitutability - what he was calling the 'partly restricted' case - Marris (1967) finds the issue "controversial ... (but) of such importance as to deserve further argument" (ibid p. 293). Indeed, while for the neoclassicals the problem is, one way or another, clear, Marris provides hardly any satisfactory reason for his conclusion "that under the actual circumstances of both today and yesterday, long run variations in the retention ratio must cause long run variations in the national propensity ot save (in the same direction, of course, but smaller in magnitude), even when distributive shares are held constant." (p. 295)

Consistent with his reasoning though - and managerialists' in general - is Lambrinides' (1972) exposition. To him managerialists' preference for the imperfect substitutability case would be based on the following scenario. _Ex-ante_ shareholders exhibit no preference for retentions at all. They would be perfectly happy to receive all profits as dividends, and consume them. _Ex-post_, however, they realise that managers' strategies on retentions have beneficial effects on them too: i.e. capital gains and tax advantages. As a result, if capable, shareholders will compensate only for the _ex-post_ difference between the actual and the desired on their part, level of retentions. That is, neither the _ex-post_ retention ratio nor the _ex-post_ private savings ratio, will reflect the _ex-ante_ preferences of the shareholders. Moreover, they will reflect the _ex-post_ preferences of the shareholders, only if perfect substitutability is possible. If not, neither the _ex-ante_ nor the _ex-post_ preferences of the shareholders will be reflected. The important point however, is that even if the _ex-post_ preferences of the shareholders are satisfied their _ex-ante_ preferences are not, that is managers' policies induce an _ex-post_ flexibility on the private propensity to save, i.e. give managers an ability to increase it, subject, of course, to constraints, associated with the market valuation of shares and the related risk of takeover raids.

In itself the above mentioned ability does not imply that a crucial role is played by managers with regard to the capital accumulation issue. To say so, what is required is the further proposition that in their absence no other societal group exists which would be willing to undertake such a role - save enough, for the maintainance of the capitalist mode of production to be warranted. Why is that? Managerialists answer by another attack on the neoclassical orthodoxy. What for traditional microeconomic textbooks on consumer theory (see e.g. Green, 1971) is taken to be a curiosum - that is to say advertising and the selling strategies of the firms - finds in managerialists its apotheosis. Consumers preferences are effectively controlled by Madison Avenue, that is they are too malleable to be relied upon for such important issues as capital accumulation. In Galbraith's (1967) flowery language, then, it follows that "it would be highly inconsistent for a society which so values consumption, and so relentlessly presses its claims, to rely on consumers, through their savings, for its capital.... In a society which so emphasises consumption and so needs capital the decision to save should obviously be removed from the consumer and exercised by other authority: (ibid, p. 55): which in modern capitalist societies is done "In the main by the management of a few hundered corporations." (ibid, p. 57).

In the face of it the managerialists' alternative appears to bear hardly any similarity to neoclassicism. In fact where the latter see perfect harmony, managerialists see hierarchical control in neoclassicists' assumption of perfect knowledge on the part of all consumers they see the malleability of the latters' preferences. However, if one wants to go a bit deeper, the managerialists' differences from the neoclassical orthodoxy become much less obvious.

For one, neoclassicals' rejection of the connection between hierarchical control over corporations and consumers' choice is consistent with their more general idea of a classless society: and there is hardly any hint and/or evidence in the managerialist literature that managers are considered to be a new class.

Regarding, therefore, the existence of classes issue, the two theories are in broad agreement: they both reject the idea that a specific, and in principle identifiable, subset of shareholders exists, - namely the biggest of the share-holders - , whose ownership stake could - at least in principle - warrant their control too, over the means of production.

This question is simply assumed away by managerialists. They firstly subsume the capitalist class in the dubious terms "share-holders". Then, they proceed to analyze the issue of control by use of ad-hoc measures. Thus the possibility of a capitalist class exhibiting a stronger preference for retentions than managers disappears, simply because such a class no longer exists. Also the reason why capitalists have stopped performing the function of capital accumulation and - they too - consume all their income, does not have to be examined, for the same reason.

The assuming away of a capitalist class, gives rise to the next manager-ialist assumption; i.e. that managers control the corporations. Both these assumptions, however, can be examined synchronously by focusing on the issue of control. First, let us examine what is arguably the most radical alternative to the neoclassical view of the world - Marglin's (1975, a,b) approach.

Marglin's sharp difference from the managerialists, stems from the explicit recognition on his part of the existence of classes and 'class interests' (1975a, p.22). Moreover he explicitly attacks the question in hand- the impact of the location of control on firms, on social choice and capital accumulation, and particularly the substitutability issue, which in the managerialist literature was only inadequately treated by Marris (1967). His attack on the neoclassical approach is powerful too, since he is able to show its ill-based foundation, not only on theoretical grounds, but also by succeeding in indicating that a rather simple 'growth of incomes' model of the consumption function can perform at least equally well as the most elaborate of the orthodox models[2/] that is the Friedmanite

Permanent Income Hypothesis and the Life Cycle Hypothesis of Brumberg, Ando and Modigliani (see Mayer, 1972, for an interesting exposition, and econometric testing and comparisons of the two models).

A more detailed analysis of Marglin's views, however, shows that he fails to break away from the managerialist neo-orthodoxy[3/]; since in every single idea of any substance advanced by managerialists, Marglin has a similar view. But let us examine this proposition in some detail.

The crucial elements of managerialism, to which we have already referred can be summarised as follows. Firstly, there is a separation of ownership from control in todays large corporations and control is with managers. Secondly, managers' utility is strongly correlated with corporate retentions. Thirdly, we are living in a "consuming society" where all consumers tend to consume all their income. As a result, fourthly, the rest of the shareholders-owners do not have a preference for corporate retentions as strong as the one managers have. It follows, fifthly, that no perfect substitutability exists between corporate retentions on the one hand and personal savings on the other; which results in the crucial role managers are assumed to have on capital accumulation.

What has Marglin to say on this? On the first question he says: "the rate of capital formation remains reasonably high in capitalist societies because hierarchical organisation permits a relatively small number of individuals to decide how much the rest of us will save. If, by contrast, savings decisions were left to individuals - whether capitalists or workers - accumulation of productive capital ..... would come to a virtual standstill". (1975, p. 20). Who are these individuals? "Modern corporate management" says Marglin which "obliges workers as well as nominal owners of capital to provide for their collective future ..." (ibid. p. 22). It appears, therefore, that on the ownership-control issue Marglin is with managerialists in arguing that managers and not (other group(s) of) shareholders control firms.

But is it managers who have a strong preference for corporate retentions? Definitely so. "It is undoubtedly more realistic to interpret corporate savings decisions in terms of managers' perceptions of their own interest: managerial power, security, prestige, and income are all furthered by plowing back earnings". (ibid p. 23).

What about the managerialists' views about other groups' preferences for corporate retentions and the consuming society idea? They are undoubtedly correct. Because "households tend to spend whatever income they can lay their hands on. Households do not save, by and large and on the average, except inadvertently - when their incomes are rising faster than they can adjust their spending." (ibid p. 22).

With near zero 'disequilibrium' personal savings, it follows that households will be hardly capable of achieving any compensation at all for increases in corporate retentions. That is "there is no systematic relationship (specifically no inverse relationship) between corporate savings and personal savings" (Marglin, 1975b, p. 10).

With the above - rather strong - statement, we see that Marglin effectively advances a new hypothesis - the independence (add-on or complementarity hypothesis. This way he 'differentiates' himself from the managerialist position, but not without cost. Since such a position effectively assumes that individuals are either constrained or unwilling to borrow and/or exhaust their posibilities in borrowing - a position very difficult to substantiate indeed. And Marglin's "casual empiricism |which| suggests ... that the overwhelming majority limit their borrowing to the expenses of their education and the basic necessities of life", (Marglin, 1975a, p. 35), in his graduate students' behaviour, example, could hardly be generalised to encompass the righest strata of the society, as he, himself, recognises elsewhere. (Marglin, 1975b, p. 10).

The conclusion is that Marglin's attempt to provide a radical alternative to the question in hand is hardly an advancement of the managerialist neo-orthodoxy. When the existence of classes and 'class interests'(see Marglin,1975a,note 8,p.22), is recognised, this is only done to immediately disappear under the weight of a classless, overriding, overwhelming, and irresistable consumption mania. And the independence hypothesis is at the best a clever application of Galbraith's preaching to Marris' analysis and at worst an undue generalisation of a behaviour which could only be meaningfully attributed to those individuals of the lowest income strata. Still, his views have gained widespread acceptance in the radical circles, albeit not always uncritically. (See, e.g. Cowling, 1982).

It comes as no surprise that Lambrinides (1972) traces most of Marglin's ideas on this issue in the managerialist and the neo-Keynesian writings, particularly so in Kaldor's (1960, 1966). Thus the idea of the 'managerialist saving function', i.e. one which considers savings propensities by individuals on the one hand, and corporations, on the other, claims a paradoxical degree of generality in the agreement of managerialists, neo-Keynesian Kaldor, and radical Marglin.

Assuming, however, we have made clear the insecure foundations of the Marglinian approach and its essential similarity to managerialism which in itself is in broad agreement with neoclassicism, at least in the most important idea of classes - what next?

To answer this question we need to answer the questions raised earlier on. That is, whether a capitalist class exists and controls todays large corporations. Marglin has given a positive answer to the first part of the question only. However, managerialists' assumption that managers control is unfounded too; both on theoretical grounds and the available empirics.

On the theoretical validity Pitelis and Sugden (1983), for example, have argued that an evolutionary approach to the theory of the firm would result in inversing the direction of causality used by managerialists in assessing the location of control - that is from an ad-hoc minimum shareholding percentage held by an individual, institution or cohesive group, to control - and imply that a subset of owners is till in control.

One, however, hardly needs to go that far. The managerialists' positions can be disproved even into their own framework, provided that the latter is used properly: i.e. kinship networks, interlocking directorates, secrecy based methods of control, etc. are taken into account in assessing the ad-hoc shareholding percentages.

The evidence along these lines, summarised in Scott (1979), is conclusive beyond reasonable doubt. In Francis (1980) more recent evidence can be found. The emerging conclusion is that capitalists are, by and large, still in control of today's large corporations. Managers are either capitalists themselves or the latters' functionaries. The 'managerial revolution' has neither taken place nor is it expected to.

The conclusion must be that theories that rely on a classless - or classes do not matter - analysis of the issue in hand, and attempt to view savings decisions in terms of all households on the one hand and corporations - run by impartial, impersonal and neutral technocrats - on the other, are always going to capture, at best, the most superficial parts only of reality.

For a more fruitful analysis one has to recognise the obvious: that corporations and other legal entities of this type did not, do not and are never going to have an independent existence. They (appear to) live, only through, and for, those who have created them. Anything else than that can only find its place in the realm of metaphysics.

It is a great virtue of Baran and Sweezy's (1966) analysis, that although they have essentially submitted, themselves, to the then seemingly conclusive evidence provided by the managerialists, [4] they have never gone as far as positing that firms rather than (groups of) individuals do the savings. Thus although "the special managerial interest in a low pay-out rate does exist and is undoubtedly important, ... this makes managers the allies of the very largest stockholders for whom a minimum pay-out rate is also a desideratum. The reason of course is that the very rich save a large part of their incomes in any case, and it is to their advantage for the corporations in which they own stock to do the savings for them rather than pay out dividends from which to do their own savings". (ibid, p. 47, emphasis added).

Thus, capitalists save via their corporations in pursuit of their interests, and not corporations on behalf of households - capitalists and workers alike. And it is far from being a matter of 'semantics' whether the one or the other is the case: because as we have been trying to show, in effect the two are mutually exclusive.

It follows that a comprehensive approach to the existing link between the location of control on firms and social choice, should explicitly recognize the existence of different classes, and examine the effects of their - potentially different - behaviour on the issue in hand.

Such an attempt is made in the next section. We firstly examine the behaviour of capitalists. Then wage earners, and finally introduce in the picture a 'middle class' to see how it modifies the previous analysis. Pending a more specifically of its own name, the analysis will be called one of 'asymmetrical choice' [5/] to highlight the asymmetry in the possibilities of choice each group possesses, as shaped-determined, by their (degree of) control, or lack thereof, over corporations.

3. Corporate Control and Social Choice.

3.i: An Asymmetrical Choice Approach.

The idea that the 'controlling' group of the firms - capitalists - takes the strategic decisions has the obvious implication: that, excluding exceptional cases,[6/] and on the aggregate,[7/] this group's decisions with regard to their consumption-savings patterns are not constrained by the retention policies of the firms, since it is they who take them.

To make the above clear, consider the following scenario. In every specific period, say t-1 , the 'controlling group' will control the profits of the firms, defined in the aggregate to be distributed (dividends), plus undistributed (retentions) profits, plus rent and interest. In the same period the group in question decide on their consumption-savings patterns, that is they decide on the part of their income (aggregate profits), which they will consume and/or save. Let us suppose that this decision is completed in the same period.

In period t we observe the effects of the completed decision, namely a part of the 'controlling group's' income in the form of savings and the other in the form of consumption. The part, however, saved will have taken either of two forms, that is i) personal savings,

and/or ii) corporate retentions (i.e. business savings).

The implication is that, by definition, observed corporate retentions in every specific period t , is the part of the 'controlling group's' income which it has decided to save within the corporation. More generally they are simply a form of the 'controlling group's' savings.

To further stress the point, what we observe, therefore, is the result of two successive decisions - albeit not necessarily separated in time. Firstly, what part of income will be consumed and what will be saved. Secondly, what part of the income saved will take the form of corporate savings and what part the form of personal savings.

The implication of the above analysis, is that, as soon as the above process, has been completed, for the group in hand actuality is simply the realisation of their past decisions. That is for the 'controlling group' there is no reason whatsoever that, say, increases in corporate savings will be followed by offsetting reductions in personal savings, assuming such a thing does exist. If a bigger part of their income has been decided to be consumed ex ante - period t-1 - , this would have happened, and accordingly ex post retentions - period t - would have simply not been increased.

In terms of the substitutability issue the implication so far is that the independence (complementarity or add-on) hypothesis, for the 'controlling group' is true by definition. Moreover this is independent of whether this group exhibits a preference for corporate retentions or not: i.e. savings may be mostly done in the form of personal rather than corporate savings, and this will have no effect on the posited independence between the two. If it does exhibit such a preference, in the limit we may have a situation where all savings take the form of corporate retentions, and personal savings do not exist, by and large, but only as a 'disequilibrium' phenomenon, due to the growth of incomes as in Marglin (1975a) and/or transaction needs, as in Pitelis (1982). Again this will not affect adversely the applicability of the add-on hypothesis, albeit a rationale for the existing preference will now be required. To this we will soon return.

This is the conclusion so far. Corporate decisions, far from being a constraint on the 'controlling group's' preferences are only a reflection of these preferences. That is, for the group in hand, the neoclassical proposition that corporate decisions are a reflection of individuals' preferences, is correct. [8/] Not surprisingly either; [9/] since it is this group that control the corporations. Whether, however, this validity carries over to the behaviour of other groups, or not, we now examine.

Starting from wage earners we may distinguish two categories. That is, wage earners who have part of their income in the form of shares, i.e. wage earners - shareholders, and wage earners who only have personal income, that is, non-shareholders - wage earners. The usefulness of the distinction is this. Namely, for the latter group corporate decisions on retentions have no direct 10/ effect on their consumption - savings patterns. With their income in period t given, increases in the retention ratio in the same period do not have any direct impact on the pursuit of their consumption (savings) - income ratio. Again corporate decisions do not bear directly on their preferences. Notice, however, that this is far from saying that corporate decisions reflect their preferences.

What about the first category? Here the analysis is more interesting. To see that, let us assume that in a certain period t, the retention ratio is set to a level higher than the one desired on the part of wage earners - shareholders. As a result the latter find themselves with a total level of savings higher than the one they would have chosen to have, if they had made the decision with regard to the retention ratio. How do they react? Assuming they have sufficient personal savings and/or they are able and/or willing to exhaust their possibilities with regard to borrowing, they can either reduce their personal savings by a sufficient amount or borrow in order to reach their desired level of consumption. If they do so, the perfect substitutability hypothesis will hold. Albeit the specific retention ratio will not reflect wage earners - shareholders' preferences, the aggregate savings ratio in the economy will. Solow is wrong but Modigliani correct!! The latter's correctness, though, depends crucially on the two assumptions made; that is, the extent of personal savings and borrowing.

Regarding savings, it has always been a common assumption among the classical economists that, due mainly to their subsistence requirements, wage earners' saving propensities will be zero. The same assumption is often met today in the writings of Marxists, neo-Keynesians and neo-Kaleckians, the explicit or implicit justification being the 'social element' of the term 'subsistence'. That is the idea that subsistence is historically and socio-economically defined, and it differs, accordingly from time to time, place to place, economic system to economic system etc. This idea seems plausible. Moreover, the zero propensity to save, on the part of the workers idea, has been justified on empirical grounds too.(See next section).

Acceptance of the zero savings idea has this implication. That for wage earners increases in the part of their savings in the form of corporate retentions will not be substituted by reduction in their (zero) personal savings, unless they can borrow. If not, or if they can borrow but not as much as required, the independence hypothesis will be expected to hold, or the imperfect substitutability hypothesis, respectively. Assuming no borrowing, therefore, corporate retentions will be expected to add-on, on a one to one basis other personal savings, for the group of wage earners-shareholders.

On theoretical grounds, one would expect wage earners to be in the non-shareholding category more often than not; due to their low incomes. This, however, is far from being correct. A big proportion of wage earners in the U.S., the U.K., as well as other advanced capitalist countries today - whether they willingly buy shares, or not - own shares via their participation in private pension funds schemes. (See e.g. Minns, 1980). The above analysis could, therefore, be applied for this group of wage earners.

How is this picture modified by the introduction of a middle class? By the definition of the 'controlling group' we adopted, such a class will not have any control on corporations but only via their ability to affect the controlling group's decisions. By definition again, their income will be lower than that of the controlling group's but in all probability well above subsistence needs, however defined. The savings which they will have, will be either in the form of personal savings or in the form of retentions, or both. In the case when they have some savings in the form of retentions and the controlling group sets a retention ratio higher than the one they would have chosen, they will try to compensate for that by reducing their personal savings and/or borrowing. In case they have all their savings in corporate form, they will only be able to achieve compensation by borrowing. If they are constrained and/or unwilling to sufficiently borrow, the aggregate saving ratio will increase. In effect both the retention ratio and the aggregate saving ratio will not reflect their preferences. The imperfect substitutability hypothesis will be the most likely candidate. Managerialists are right. Both neoclassicals and Marglin are wrong.

We conclude that, the neoclassical idea that the location of control on firms, is not a binding constraint to individuals' choices, is correct only for those who exercise this control - i.e. the 'controlling group'. It is incorrect for wage earners and middle classes (small shareholders). Regarding the last two groups, Marglin's and managerialists' analyses respectively, appear to be closer to reality. All three approaches, however, are wrong in attempting to generalize their conclusions for all societal groups.

A comprehensive analysis should take into account the different classes of a society and carry the analysis for each of them separately.

Such an analysis of this paper has led us to the following conclusions. 1: For the controlling group corporate decisions do not constrain their preferences, simply because they, themselves, take them. For them, the independence hypothesis is correct by definition. 2: For wage earners, if not shareholders, corporate decisions on retentions are directly irrelevant on their preferences but they, by no means, always reflect them. For wage earners - shareholders, corporate retentions act as a form of obligatory savings, and provided they do not have personal savings or access to borrowing, the independence hypothesis will hold true again. 3: For middle classes the same reasoning applies as for wage earners - shareholders. The difference being, the level of their respective personal savings and/or their access to borrowing.

From the above, it would appear that empirical testing of the alternative hypotheses should support the imperfect substitutability for the middle classes and wage earners - shareholders, and the independence hypothesis for the controlling group and non shareholders-wage earners. That is, the result by use of aggregate data would be expected to be dependent on the size of the middle classes and wage earners - shareholders and the extent of their shareholding. In general the larger they are the more possible it will be that aggregate data would support the imperfect substitutability argument. Under our assumptions in a two classes (capitalists - non shareholders-wage earners) world, we would only observe independence between corporate retentions and personal savings but exactly how lower than one will be the coefficient in question when middle classes are also included, can only be found empirically.

3ii: The Empirical Evidence

Two types of evidence may be used to test the questions in hand; i) indirect evidence, such as trying to assess and/or show that individuals (or groups of individuals) by and large do not save and that they are wholly or partly constrained in borrowing; and ii) direct evidence, that is the

Marglin (1975a) confined his attention to the first category. By use of U.S. time series, he showed that excluding most contractual elements from the definition of personal disposable income - i.e. corporate retentions and pension funds - the aggregate propensity to consume will be equal to one; that is no personal savings will exist in the economy, but only as a disequilibrium phenomenon. A similar exercise was repeated with the use of U.K. time series, by Pearce and Thomas (1981); with a definition of personal disposable income similar to Marglin's, they found an aggregate propensity to save very close to zero. Although none of these studies has taken account of different types of incomes, their findings can be disaggregated, and taken to hold true for each type of income recipients too.

From the host of other studies on the propensity to consume or save, none is particularly useful since they all use the official definition of personal disposable income, which includes pension funds and thus biases the propensity to save upwards (see Pearce and Thomas, 1981, and Pitelis, 1982, for surveys and discussion).

The usefulness of the above findings, in our framework, is that they highlight the difficulties associated with the argument that wage earners and small shareholders attempt to achieve substitutability by manipulating their personal savings. They leave open, however, the possibility of borrowing.

This last mentioned possibility has received less than adequate treatment in the existing literature. It would appear from our previous analysis that for the (group of) individuals for which Marglin's 'casual empiricism' could be justified - i.e. no borrowing to be undertaken on their part specifically for the purposes of compensating for increases in corporate retentions - that is to say non-shareholders wage earners, the problem does not exist at all, since this group does not own shares. For wage earners - shareholders and middle classes, we would not go as far as assuming no borrowing on their part.

The important point, however, is this. Even if a detailed analysis of each group's possibilities to borrow and/or exact levels of borrowing was undertaken, and if more evidence was available to support the zero aggregate propensity to save proposition, this would only be indicative of the extent of aggregate substitutability. It would by no means reveal the exact degree of substitutability. The latter can only be revealed if one goes beyond the indirect type of evidence analyzed above, i.e. if one undertakes direct econometric testing of the hypotheses involved.

Such direct evidence involves the estimation of consumption or savings (personal or private) functions of the general form:[11/]

$$S_t^{prv} = S(Y_t^{prs}, S_t^c, Z_t) \quad (1)$$

where S_t^{prv} = private savings, S_t^c = corporate retentions,

Y_t^{prs} = personal disposable income,

Z_t = a vector of relevant explanatory variables, and

t = a time subscript.

A coefficient of the S_t^c variable equal to zero, would support the perfect substitutability hypothesis; a coefficient equal to one, the add-on hypothesis, and a coefficient between zero and one, the imperfect substitutability hypothesis. Provided our theoretical considerations are correct, and given the indirect evidence available, we would expect such tests to reveal a very small degree of substitutability.

To our knowledge there are eleven studies in this category. Pitelis (1983) surveys eight of the previous studies and provides some new results which support the add-on hypothesis. From the two remaining studies Bhatia (1979) and Feldstein (1978) find support for the add-on and the imperfect substitutability hypothesis respectively. From the eight studies surveyed in Pitelis three support the add-on, three the imperfect substitutability, and two are inconclusive. From the total of four studies supporting the imperfect substitutability hypothesis only one finds a coefficient of retention variable

It would appear that, contrary to neoclassical wisdom, the location of control of firms is in particular exemplified in their retention policies, does act as a constraint on the possibilities of choice of certain (groups of) individuals, and induce a flexibility on the aggregate propensity to save – that is, money capital accumulation.

4. The 'Urge' and the Role of the Joint Stock Company in Capital Accumulation

Our suggestion that a controlling subset of the owners, rather than managers, control the firms and performs the functioning of capital accumulation, results in reposing two questions. Firstly, what motivates capitalist behaviour, and secondly why in particular should they exhibit a preference for a retention ratio higher than the one preferred by the other (groups of) shareholders? Note that the function of accumulation does not necessarily imply such a difference in preferences. What is required is that in its absence the capitalists' desired level of accumulation could not be realized, either by a lower retention ratio alone (i.e. the one reflecting all groups' preferences), or by a lower retention ratio plus external borrowing; or that external borrowing is not considered as preferable.

Regarding the first question, we saw in our quotation of Baran and Sweezy (1966) that the authors effectively assumed an 'urge' to accumulate on the part of capitalists. A comprehensive analysis of the various explanations given for this 'urge' under conditions of competitive capitalism is given in Lambrinides (1972). Whether the Marxian in particular imperative to accumulate, that is competition, should be abandoned, modified and/or substituted by another, as a result of the transition to the monopolistic stage of capitalism, is a question that gave rise to interesting discussions (see e.g. Cowling, 1982, and Mandel, 1967).

Here it is sufficient to note that independently of the outcomes of such discussions all empirical evidence reported earlier suggests that a capitalist class still exists and saves - in one form or another - a very high proportion of its income; (see also Pitelis, 1982): that is accumulates.

Thus, we come to the second question; the preference - if any - on the part of capitalists, for a high retention ratio. This question we will analyze by noting two contradictory outcomes of the emergence of the joint-stock company: the ability to expand - produce more and the need to sell the new products, on the other hand; and the need - if any - for financing further expansion, on the other.

For Hilferding (1981), there were two crucial changes that the joint stock company introduced to the system. a) The ability on the part of the controlling group of the firms to administrate other people's income, i.e. the shareholders' income; which they do by giving away part of their ownership - i.e. sell shares - while retaining control. b) The access this control gives to external borrowing, from banks. We see immediately from the last mentioned reason, a rationale for the preference of a high retention ratio. Indeed, as already noticed, this was the explanation that Kalecki (1971) advanced along, with the added element of a posited risk avoidance on the part of the 'controlling group' as regards external borrowing. That the preference for internal finance entails a preference for a high retention ratio seems undisputable. That this preference should be higher than the one of other societal groups is however less clear. Indeed, in the early twentieth century when both Hilferding and Kalecki were writing, such an argument could hardly be advanced. The advancement of capitalism in the meantime introduced another dimension to the problem.

The problem that the joint stock company solved in its early phase was the need for more finance on the part of capitalists, either without turning to banks for this finance or by doing so but from a better position, therefore with better terms. Expansion, however, requires the need to sell the previously produced goods. With growing incomes of the wage earners and middle classes, the further the gap between the physical level of subsistence and actual income opens, the more it is possible for people to save in shareholding and/or in banks, that is the more aggregate finance becomes available. Further expansion, however, requires again the sale of the new goods. The need to bolster effective demand gives rise to advertising and other selling-promotion activities of the firms; new needs are created and consumption tends to catch up with disposable income. This, however, undermines the sources of more finance for expansion.

We, therefore, observe that in the closed economy, and provided there is a need for further finance on the part of the controlling group; i.e. above the one which would leave both controlling and non-controlling groups in the economy with just sufficient effective income to buy the new products, there arises an inconsistency between producing and selling new products on the one hand, and obtaining more finance, on the other. That is, further finance contradicts the possibility of realising profits in the home economy. The problem will be solved against realisation, if the need for more finance is very strong; that is if, say, such finance is required for there exists, say, more profitable outlets, abroad than the ones available in the home economy. In such a case, more finance may be obtained by setting a high retention ratio which, as argued previously, will result in increasing the private saving ratio in the economy.

In the spirit of our analysis, therefore, the preference for a high retention ratio, on the part of the controlling group, can be attributed to their attempt to solve the contradiction between the need for higher finance, and the fact that their own and/or their rivals' policies undermine this need by raising the non-controlling households' propensities to consume. The argument presupposes a relative independence from the home market, that is the possibility of accumulating at home but investing abroad. The induced preference for high consumption on the part of the non-controlling groups, moreover, explains why a difference arises between the latter and the controlling group as regards the retention ratio.

One can trace similarities in the above analysis to the ones of managerialists and Marglin. Suffice it to note the differences. For one our analysis is in line with the empirical evidence which suggests that capitalists rather than managers control the firms. Secondly, it is via this knowledge that one can realize that the add-on hypothesis, when it comes to the substitutability issue, will be correct for the controlling group, by definition. Last, but not least, we can trace the preference for a high retention ratio in capitalists behaviour and understand the dual way by which joint-stock companies have managed to boost private savings - i.e. money capital accumulation.

A preference for high consumption will also be expected to have a depressing effect on shareholding. This adds a further implication for the analysis. That is, in their attempt to attract other people's income - i.e. sell shares, capitalists will attempt to provide some incentives. One may be the paying of a dividend just higher than the prevailing rate of interest. (See Hilferding, 1981, Ch.7)). Another may be by trying to obtain a preferential tax treatment of retained earning on the part of the State.[12/] Provided the appropriate links exist between corporate leaders and State officials this can always be a possibility. As we have seen a preferential treatment for retained earnings today exists in most advanced capitalist countries. In our analysis the new element is that causality now runs from capitalists' preference for a high retention ratio to a preferential tax treatment of retentions, than the other way around.

We observe, therefore, that a preference for a higher retention ratio on the part of the controlling group may be justified in terms of a resolution of the conflict between finance for expansion and realization at home, against the latter; which is by producing abroad.

As a general conclusion we may state that it was not managers who saved capitalism, but rather capitalists, who by means of the joint stock company managed not only to retain a 'reasonably high' level of accumulation but also to become able to increase it almost at will.

Summary

We analyzed the link between corporate control, social choice and capital accumulation. We advanced the simple idea that corporate decisions do not constrain the possibilities of choice of those who take the decisions - the corporations' controlling group. However, they do constrain non-controlling groups' choices. Thus the level of capital accumulation depends on the decisions of the controlling group on retentions, subject to the lack of perfect substitutability between corporate retentions and personal savings on the part of the non-controlling groups. For the controlling group substitutability does not exist by definition. For the non-controlling groups of shareholders it will depend on the level of their personal savings and the extent to which they exhaust their possibilities to borrow - if any. Under the existing conditions of today the idea that substitutability - if any - will be much less than perfect, is more than probable: this is supported by all existing evidence. The controlling group's preference for high retention ratios may be explained in terms of risks associated with, and more access to, external borrowing and also, in terms of their attempts to solve the emerging contradiction between their increasing needs for finance and the all-income-consuming households. It would appear that the joint stock company furthered the possibilities of achieving high levels of capital accumulation, not only by passing to the controlling group other people's savings, but also by allowing it to increase the level of savings others would otherwise have chosen to do.

1. These should be viewed flexibly though, since the boundaries are often vague, as the analysis to follow will reveal.

2. Incidentally, this 'rather simple model' introduced for the first time in the consumption function what came later to be termed the 'error correction mechanism'; used in the well known DHSY model, and many subsequent studies of the consumption function.

3. We use this term to indicate the substantial and widespread acceptance that the managerialist idea on the issue have gained: in particular Kaldor's (1966) submission to the idea that the high propensity to save out of profits is "something which attaches to the nature of business income, and not to the wealth (or other peculiarities) of the individuals who own property" (1966, pp. 297-8). Also some "Neo-Marxist" ideas such as Baran and Sweezy's (1966); see also note 4.

4. That is the idea that managers do control firms: for Baran and Sweezy (1966) in particular, managers are the "leading echelon" of the capitalist class; an idea which has (wrongly to us) resulted in the term "Marxist-managerialists" as descriptive of the ideas advanced in particular by Sweezy and O'Connor (see e.g. Fitch, 1972).

5. Obviously asymmetry in choice is to be found in the managerialist and the Marginian views too. The particular feature of our approach is the asymmetry in (groups of) individuals'choices and not corporations (or their managers) on the one hand, and all other (groups of) individuals on the other.

6. E.G. when constraints imposed on the 'controlling group' from the market valuation of shares and the associated risk of takeover raids, do become binding.

7. It is obvious that not every single capitalist will exhibit the same degree of preference for the level of retention ratio, to other capitalists. The following behaviour should be expected in such a case. Those who find the retention ratio 'excessive' will try to compensate for it by reducing their personal savings - if any - and/or by borrowing. Those who find it smaller than desired will attempt to buy either other firms' shares and/or they will put their, thus resulting, 'excessive income' in the form of personal savings.

8. But not the implication too, with regard to the substitutability issue.

9. The idea is consistent with the Marxist political analysis of capitalist democracies, that is the idea that such democracies are indeed democratic to capitalists but essentially dictatorial to other societal classes - wage earners in particular.

10. Obviously in the long run increased retentions invested in new capital outlets will increase their income (assuming constant distribution of income). This, however, does not affect directly our analysis.

11. We use a private (corporate plus personal) savings function; for exposition. Obtained results, however, are directly translatable to the ones obtained by personal savings and/or consumption functions. (see e.g. Pitelis, 1983, for details).

12. This obviously increases their own potential for savings too: by increasing their total disposable income.

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