

## **Labour's Fiscal Policy: Which Horse for Which Course?**

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### **Abstract**

*The publication of the Code for Fiscal Stability (CFS) sets out the principles on which the Labour Government intends to conduct fiscal policy. However, there are major weaknesses in the orthodox public finance theory on which much of the CFS is predicated. In particular, there is a lack of congruence between its micro- and macroeconomic elements which raise doubts about the ability of fiscal policy to achieve stated policy objectives. This paper sets out the framework of a dynamic Kaleckian macroeconomic approach to taxation in which the micro- and macroeconomic elements are fully integrated. Kalecki's theory of taxation is integrated with his theories of investment and business cycle. Recent changes in income distribution are seen to have been important in influencing the level of investment. Without a radical change in the thinking behind it, the authors are pessimistic about the scope for fiscal policy in the UK.*

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### **1. Introduction**

The publication of the Code for Fiscal Stability (CFS) heralds a new era for the conduct of fiscal policy in the United Kingdom. To accompany this new code of conduct, we argue that a new approach to the interpretation of fiscal policy is also required. In recent years, a number of distinguished scholars have identified a major weakness of

current public finance theory as the continuing lack of congruence in the interaction between its micro and macro aspects (Atkinson and Stiglitz (1984); Kotlikoff and Summers (1987); Stern (1992); Musgrave (1997)). The problem is summarized by Musgrave (1997, p.13):

More basically, is the distinction between micro and macro issues [of public finance] a valid one?...The role of fiscal policy and indeed the consequences of fiscal behaviour depend on the macro as well as the micro functioning of the economy. But where micro analysis has moved along a steady path, macro models have remained in a state of flux, as have perceptions of the macro role of fiscal policy and the interplay of micro and macro concerns.

In this paper we outline an approach to public finance theory in which the micro- and macro-elements are fully integrated and in which the macroeconomic dimension is a logical extension of the microeconomic. The paper is structured as follows. In section 2 we outline the conventional approach to fiscal policy; in section 3, we set out the framework of our alternative approach; in section 4, we present the new framework for the conduct of fiscal policy which the British government has recently published; and in section 5, we discuss some policy implications which follow

from our analysis.

## ***2. Micro and macro aspects of fiscal policy: the conventional approach***

In this section, we draw heavily on Musgrave (1997). We make no apology for so doing. Musgrave's credentials as a public finance economist are of the highest and the issues he raises are, in our view, central to the conduct of fiscal policy. Fiscal policy has both micro and macro objectives. But how these interact remains an issue of debate. To use Musgrave's own terminology, what are the interactions and conflicts between the allocation, distribution and stabilization branches of public finance? Even in the context of market clearing, is it proper to regard macro behaviour simply as the aggregation of micro behaviour? Musgrave thinks not. And when markets do not clear, macro outcomes are not the desired result of the behaviour of individual agents. As we quote above, while Musgrave appears satisfied with the development of the micro aspects of public finance theory, he recognises that macro models remain in a state of flux, as do perceptions of the macro role of fiscal policy and the interplay between micro and macro issues.

The pre-Keynesian classical view saw fiscal policy in the micro context of efficient resource use and distributional equity. There were micro concerns that taxation could have unwelcome effects on incentives and macro concerns for the effects of fiscal policy on savings and capital formation. However, macro concerns were subordinated to micro concerns and were not seen as a means of maintaining an efficient level of economic activity. The Keynesian model shifted the macro emphasis from one of market clearing to one of market jamming. Fiscal policy, whether by increases in government expenditure or by tax reduction, was seen as

the macro solution to the non-clearing of markets. However, concerns over the possibility of ever-increasing burdens of public debt and the emergence of stagflation toppled the Keynesian model from its position of supremacy. Under the 'neoclassical synthesis' of the 1960s, the neoclassical model reinstated monetary policy as an effective device to be used in combination with fiscal policy to achieve the correct policy balance. The return of growth theory to the classical vision of market clearing resulted in equilibrium growth models identifying the effect of the state of the government's budgetary balance to be on the overall rate of saving and thereby on capital formation. Musgrave (1997, p.16) poses a set of questions emanating from the equilibrium growth model approach, none of which he considers to have been answered satisfactorily:

- Are the short-run micro premises (based on market failure) consistent with the long-run macro premises (based on market clearing)?
- Can both versions offer policy guidance at the same time?
- Are the short- and long-run models alternatives, each analytically consistent, but based on incompatible assumptions?
- Can their incompatibility be resolved by replacing full employment as a policy target by the natural rate of unemployment?
- Will their incompatibility wash out in the long-run by a tendency of the economy to fluctuate around a full-employment level?
- Will monetary policy be sufficiently powerful to implement short-run stabilization and allow fiscal policy to operate as in the classical system?

- What should be the reliance on public investment as a means of securing growth if private sector investment is lagging?

The failure to answer these questions leaves macro policy, and within it the role of fiscal policy, in limbo caught between the Scylla of the short-run constraints of the neoclassical model and the Charybdis of the long-run logic of the classical model. Nor is the problem resolved by recourse to the new classical model which argues that rational expectations will render stabilization policy ineffective.

Musgrave (1997, pp.20 - 21) argues that at a normative level, the conflicts between the micro and macro dimensions of fiscal policy can be resolved. In practice, however, a number of problems arise. The current orthodoxy sets much store by the discipline of a balanced budget. As such, increases or reductions in expenditure have to be matched by simultaneous action to increase or reduce taxation. Consequently, the multiplier effects of fiscal action are largely lost (other than any balanced-budget multiplier effect) and the burden of stabilization has to lie primarily with monetary policy. Any advantages to be had from the combined use of fiscal and monetary instruments are largely lost.

Musgrave and the orthodoxy are sceptical of the use of tax structures as a means of achieving fiscal objectives. Musgrave's opinion (1997, pp.22-23) is that conflicts will still arise when trying to use a single tax structure. His view is that the use of a single tax system to alter the level of aggregate demand via changes in the overall level of taxation will have, possibly unwelcome, distributional effects. As he correctly recognizes, the problem is not simply one of adjusting the level of taxation, but also of choosing among taxes. Some taxes (e.g. on consumption) are deemed to be 'bad' because

they depress demand: other taxes (e.g. on capital income or undistributed profits) are deemed to be 'good' because they do not depress demand. Even in a context of market clearing, where the primary concern of macro policy is with growth, the choice of tax instrument, he argues, depends not just on the effects on aggregate demand but on how income is divided between consumption and saving. We seek to demonstrate in the following section how we think the circle of the incompatibility of the micro and macro aspects of fiscal policy can in fact be squared.

### ***3. An integrated micro and macro approach to fiscal policy***

The starting point for our analysis is the *General Theory* (Keynes, 1936), or, more correctly, a response by Kalecki to the *General Theory*. As is well known, Kalecki had published independently prior to 1936 all the essential features of what is now recognized as Keynesian macroeconomics, notwithstanding the arguments offered by Patinkin (1989). He was, therefore, well equipped to appreciate the wider significance of the *General Theory*. In particular, Kalecki (1937, p.444) immediately recognized the need to develop an entirely new approach to the macro analysis of taxation: 'Mr. Keynes theory gives us a new basis for the enquiry into the problems of taxation. The analysis of the influence of various types of taxes on effective demand leads, as we shall see, to quite unexpected results which may be of practical importance'.

He analyzed the effects of taxes on commodities, profit income and capital, on employment and the determination and distribution of national income, in an economy with capital equipment and money wages given. His simplifying assumptions were (i) a closed system with a surplus of all

types of labour and equipment; (ii) workers spend all they receive as wages (this assumption is relaxed below); and (iii) a balanced government budget with all government expenditure financed by taxation.

Kalecki starts by considering short-period equilibrium in an economy with no taxation and no government expenditure. He defines gross profits as the difference between the value of sales and prime costs (wages plus materials). National income is the sum of gross profits and the wage bill. It can also be defined as the sum of total consumption and investment. As, by assumption, workers consume all they earn, total gross profits must be equal to the sum of capitalists' consumption ( $C_c$ ) plus investment ( $I$ ). If  $C_c + I$  changes, employment will be 'pushed' to the point at which gross profits will be equal to the changed  $C_c + I$ . Gross profits ( $P$ ) are determined by the rate of investment ( $I$ ) - which is equal to capitalists' savings - and by capitalists' propensity to consume. Kalecki makes two assumptions about the determinants of gross profits: (a) the rate of investment ( $I$ ) does not change immediately in response to some exogenous change as it is the result of previous investment decisions which require a certain finite length of time for completion; and (b) capitalists' propensity to consume is insensitive to expectations of changes in income. From these assumptions, it follows that profits and, consequently, the level of national income, will only respond to exogenous changes with a certain, not very short, time lag. Kalecki then introduces taxation into the system, which pays for the salaries of officials or is disbursed as doles to the unemployed. He conducts the analysis in terms of the macro effects of three categories of taxes - on commodities, on capitalists' income (profits) and on capital.

*(i) Tax on commodities*

Kalecki first considers the funding of  $G$  from a constant-rate *ad valorem* tax,  $T_w$ , on all kinds of wage goods. This tax constitutes a new category of prime cost. National income now equals gross profits ( $P$ ) plus wages ( $W$ ) plus the tax on wage goods ( $T_w$ ). Workers' wages are spent entirely on wage goods. Total taxes ( $T_w$ ) equal government expenditure which is spent on the consumption of wage goods. Thus, gross profits are again equal to  $C_c + I$ . In an economy with commodity taxation only and a balanced budget, there is no change in the level of national income as there is no stimulus to capitalists' consumption or to investment. There has simply been a change in the distribution of income as a consequence of a shift in purchasing power from those in employment to the unemployed.

*(ii) Tax on capitalists' income*

Kalecki next introduces a tax on capitalists' income ( $T_i$ ) levied as a constant percentage. This is not a prime cost but a part of gross profits ( $P$ ) which are now equal to  $C_c + I + T_i$ , and the part of  $P$  received by capitalists is  $C_c + I$ . If  $T_i$  is increased from, say, 15 per cent to 25 per cent, nothing will happen to investment or capitalists' consumption in the period immediately following the increase in  $T_i$ . The immediate effect is a rise in  $P$  because of the rise in  $T_i$ . Employment will be 'pushed' to the point at which  $P$  increases by the amount of  $T_i$ , since again a balanced budget is assumed.

The increase in  $T_i$  must raise the rate of interest, otherwise the net reward to lending will fall since it is assumed that interest payments are taxed along with other capitalist income. The rise in the rate of interest will not diminish the willingness of lenders to lend but will exert downward pressure on the

willingness of capitalists to invest. However, this may not be the final result because, in the first period of the new tax regime, gross profits ( $P$ ) rise by just the amount of the increase in  $T_i$ . If capitalists expect future returns to increase by the same amount as present returns, this will be just enough to counter the depressive effects of the increase in  $T_i$  on the incentive to invest. If that is so, then  $C_c + I$  remains unchanged and, therefore, gross profits will rise (by the amount of the increase in  $T_i$ ) and so, too, will employment.

The principal result from the introduction of a tax on capitalists' income will be a rise in workers' consumption from the unemployed. This will raise both the output and the price of wage goods, reducing the real consumption of already employed workers but increasing the consumption of newly employed workers.

*(iii) Tax on capital*

Finally, Kalecki introduces capital taxation ( $T_c$ ) levied at a uniform rate on all forms of owned capital. Again,  $T_c$  does not constitute a prime cost and gross profits ( $P$ ) will be equal to  $C_c + I + T_i + T_c$ . The immediate effect of increasing  $T_c$  is to leave  $C_c$  and  $I$  unchanged, but employment rises as a response to the increase in  $P$  of the increase in  $T_c$ . Unlike  $T_i$ ,  $T_c$  is not a cost of production in the long-run and, therefore, does not affect the net profitability of investment. Whether or not a lender lends does not affect the amount of  $T_c$  he pays. Thus, the inducement to invest is not weakened by the rise in  $T_c$  if the expected returns were the same as before. Gross profits have risen by the increase in  $T_c$  which improves the expectation of future returns and strengthens the inducement to invest.  $T_c$  not only increases gross profits by the increase in  $T_c$  but capitalists' income ( $C_c + I$ ) also

increases significantly. The increase in capitalists' after-tax income via the real wage bill is higher than in the case of  $T_i$  because of the stronger rise in employment induced by  $T_c$ .

Kalecki never developed his analysis of taxation beyond the short-period model outlined above and it is only recently that a dynamic macroeconomic approach to taxation has been developed by Laramie (1991) and by Laramie and Mair (hereafter LM) (1996). They have integrated Kalecki's theories of taxation, income determination, income distribution, investment and business cycle to produce a dynamic macroeconomic theory of taxation. Throughout Kaleckian economics, the micro- and macroeconomic foundations stand side by side (Kriesler, 1989; Osiatynski, 1979) and are present in the analysis of taxation. At the macroeconomic level, aggregate spending flows determine the level of profits. At the microeconomic level, the degree of monopoly determines the distribution of income. Tax policy can affect the aggregate flow of spending and profits, but pricing decisions, as reflected in firms' price/cost mark ups, determine the distribution of income within and between industries and classes. Ultimately, the confluence of these factors determines the short-period incidence of taxes and this incidence, insofar as it has an impact on firms' investment, generates a long-period effect.

The changes in income distribution wrought by changes in taxation are extremely important in a Kaleckian framework. The distribution theory underpinning neoclassical and orthodox Keynesian theory is the marginal productivity theory. To the extent that it is a tenable theory, marginal productivity theory only holds under conditions of full employment which render it a rather fragile foundation on which to base a

dynamic theory of tax incidence.

The theory of income distribution underpinning Kalecki's theory of taxation is the degree of monopoly theory. This is an integrated treatment of the theories of income determination and income distribution in which both micro- and macroeconomic forces act together (Reynolds, 1996). Direct labour's share of national income is determined by the process of firms marking up prime costs to obtain prices. The level of profits is determined in part by investment decisions taken in the past and '...the national output will be pushed up to the point where the profits carved out of it are in accordance with the "distribution factors" [which include the price/cost mark up]' (Kalecki, 1954). This theory of income distribution is consistent with an approach to economics in which both income and employment are determined, at least in part, by effective demand and in which persistent unemployment is possible.

LM bring the various strands of Kaleckian analysis together in the following way.

*(iv) Short period effects of taxation*

If we assume that salaries are zero and define  $\alpha^*$  and  $P^*$  as the pre-tax wage share and the pre-tax level of profits respectively, then the pre-tax profit share of income can be written as:

$$P/Y = 1 - \alpha^* \quad (1)$$

which rearranges to:

$$Y = P^*/(1 - \alpha^*) \quad (2)$$

Thus,  $\alpha^*$  is the 'distribution' factor which 'pushes up' the level of national income so that profits out of it are realized.

Kalecki's theories of taxation and income distribution are then integrated by deriving the post-tax distribution of income and adjusting

the Kaleckian income multipliers.

National income is defined as:

$$Y = P + T + \alpha Y \quad (3)$$

$P$  is (after-tax) profits;  $T$  is total tax receipts; and  $\alpha$  is the after-tax wage share.

We rewrite national income as:

$$Y = \Pi/(1 - \alpha) \quad (3^*)$$

$\Pi = P + T$  (= aggregate surplus) which is written as  $(1 - t_w)/[(k - 1)(1 + j) + 1]$  (see Laramie, 1991).

The level of national income can be expressed as a function of expenditures by finding an expression for (after-tax) profits assuming all government transfer payments are consumed (Kalecki, 1954, p.49):

$$P = I + G - NR + X - M + C_c - W_s \quad (4)$$

( $I$  is gross investment;  $G$  is government purchases;  $NR$  is net tax receipts;  $X$  is exports;  $M$  is imports;  $C_c$  is capitalists' consumption; and  $W_s$  is workers' savings).

Equation (4) can be rewritten using a variant of Weintraub's (1979, 1981) consumption coefficient<sup>2</sup>, thus:

$$P = I + G - T + X - M + \alpha Y(a - 1) \quad (4^*)$$

( $a$  is the consumption coefficient, defined as the ratio of consumption to the after-tax wage bill).

By adding tax receipts,  $T$ , to both sides of equation (4<sup>\*</sup>) and by substituting (4<sup>\*</sup>) into (3<sup>\*</sup>), national income can be expressed as:

$$Y = (I + G + X - M)/(1 - \alpha a) \quad (5)$$

As can be seen from equation (5), the level of taxation has no explicit role in determining the level of national income. Assuming a balanced change in taxation and government spending, the change in  $(G - T)$  is zero and

taxes have no impact on profits. However, the surplus,  $\Pi (= P + T)$  expands by the amount of the change in government purchases and, therefore, national income expands by some multiple amount. Thus, an increase in taxation, insofar as it increases government purchases, causes the level of national income to expand, holding the distribution factor constant.

But the impact of taxation on the distribution factor,  $\alpha$ , has also to be taken into account. As tax revenues change, the distribution factors change, depending on the method of taxation and whether or not tax shifting takes place. Tax shifting occurs via changes to the markup, i.e. to changes in the degree of monopoly. Quite different macroeconomic effects of balanced budget changes in wage or profits taxation follow with and without tax shifting (see Laramie and Mair (1996)<sup>3</sup>).

*(v) Dynamic effects of taxation*

The above discussion relates to the effects of taxation in the short period. To understand the dynamic effects of taxation, it is necessary to integrate Kalecki's theory of taxation with his theories of investment and business cycle.

*Taxation and investment:* Kalecki (1971/1968) recognized that he was engaged on '...continuous search for new solutions in the theory of investment decisions..'. In his last approach (which he described as being 'for better or for worse'), he considered three determinants of new investment decisions; (i) entrepreneurial savings  $E$ ; (ii) the prerequisites for the re-investment of these savings; and (iii) an innovation factor.  $E$  influences investment decisions because of the limitations of capital markets and increasing risk. Whether  $E$  is re-invested depends on the relationship between the actual rate of

investment,  $I$ , and the investment that generates the standard (or 'normal') rate of profit,  $I(\pi)$ . Kalecki thought of  $I(\pi)$  as the reciprocal of the payback period of investment. Entrepreneurs undertake investment in the expectation that it will pay itself back in some standard or 'normal' period. If, in fact, it pays itself back in less than the 'normal' period, this will act as an inducement to entrepreneurs to contemplate increasing investment and vice-versa.

The extent to which the difference between  $I$  and  $I(\pi)$  has an impact on investment decisions depends on  $r$ , 'the intensity of reaction of entrepreneurs' (Kalecki, 1971/1968, p.172). Kalecki adds innovations-induced investment decisions,  $B(t)$ , which he argues can be represented as a semi-autonomous function which depends on 'past economic, social and technological developments' (Kalecki, 1971/1968, p.173) and are assumed to change slowly over time. Fixed investment decisions,  $D$ , can be written as:

$$D = E + r[I(\pi) - I] + B(t) \quad (6)$$

Equation (6) can be rewritten by finding expressions for  $E$  and  $I(\pi)$ .  $E$  is written as a fraction of total (after-tax) profits:

$$E = \lambda P \quad (7)$$

In order to find an expression for  $I(\pi)$ , Kalecki assumes ample unused productive capacity and that new investment will only capture a small proportion,  $n$ , of the new 'real' profits generated by  $I$ .<sup>5</sup> This proportion is referred to as  $n\Delta P$ . This amount is augmented by the extent to which new investment results in increases in productivity. The productivity increases associated with new investment increase the real costs of

producing from existing equipment and result in a transfer of production from existing to new equipment. This reduces the real profits from existing equipment and increases the profits of new equipment.

The loss in profits to existing equipment (or, the same thing, the gain in profits to new equipment) is assumed to be proportional to the difference between  $Y$  and  $P$  i.e.  $\omega(Y - P)$ . Thus, the profits generated by new equipment are  $[n\Delta P + \omega(Y - P)]$ . The rate of profit on new investment ( $\rho$ ) is  $[n\Delta P + \omega(Y - P)]/I$ . However, if the new investment is to just generate the standard rate of profit (i.e. if  $I$  is to equal  $I(\pi)$ ), then, by definition,  $\rho = \pi$ . Thus,  $\pi = [n\Delta P + \omega(Y - P)]/I(\pi)$  which, by rearrangement, yields:

$$I(\pi) = [n\Delta P + \omega(Y - P)]/I(\pi) \quad (8)$$

In turn, equation (8) can be rewritten by finding an expression for national income as a function of profits<sup>5</sup>. As a consequence, equation (3\*) can be rewritten as:

$$Y = P(1 - t_w)/(1 - t_\pi)(1 - t_w - \alpha) \quad (9)$$

( $t_w$  is the tax rate on wages;  $t_\pi$  is the tax rate on profits).

Equation (9) is important because it shows that the tax system influences the relationship between aggregate profits,  $P$ , and national income,  $Y$ , directly through the impact of the taxation of profits,  $t_\pi$ , and of wages,  $t_w$ , and indirectly through the wage share,  $\alpha$ . A tax on wages reduces the income share of (after-tax) wages by a factor equal to  $t_w$ . Thus, the (after-tax) wage share can be written as:

$$\alpha = (1 - t_w)/[(k - 1)(1 + j) + 1] \quad (10)$$

( $k$  is the price/cost mark up (reflecting the

degree of monopoly) and  $j$  is the ratio of the materials bill to the wage bill).

By substituting equation (9) into equation (8),  $I(\pi)$  can be rewritten as:

$$I(\pi) = [n\Delta P + \delta P]/\pi \quad (8^*)$$

where

$$\delta = \omega[\alpha + t_\pi(1 - t_w - \alpha)]/(1 - t_\pi)(1 - t_w - \alpha) \quad (11)$$

$\delta$  is the rate of depreciation in the sense that it represents the rate at which profits are lost to existing capital as the result of technical progress. As reflected in equation (11), we adjust Kalecki's expression for depreciation to take account of the role of the tax system. We discuss this below.

Investment decisions,  $D$ , taken in any time period,  $t$ , can be translated into investment expenditures in time period,  $t+\tau$ , so that  $D_t = I_{t+\tau}$ . By substituting equations (8\*) and (9) into equation (6), equation (6) can be rewritten as:

$$I_{t+\tau} = \lambda P_t + r\{[n\Delta P_t + \delta P_t]/\pi\} - I_t + B(t) \quad (6^*)$$

From equation (6\*), the determinants of investment expenditure can be summarized as:

- the level and the change in the level of profits;
- the past level of investment;
- the rate of innovations,

given the parameters  $\lambda$ ,  $r$ ,  $n$ ,  $\delta$  and  $\pi$ .

The investment function specified in equation (6\*) can be used to assess the impact of the tax system on investment. This impact

will operate through two channels: the rate of depreciation and the level of profits.

*Taxation and the rate of depreciation:* The impact of depreciation on investment operates by affecting the real tax bill associated with old equipment. By means of new investment, technical progress brings about increases in productivity which result in lower costs. This increases the real costs and lowers the real profits of existing equipment. The decline in real profits to existing equipment accelerates its obsolescence. Therefore, an increase in  $t_\pi$  will increase  $\delta$ , given  $B(t)$ . To consider how a change in  $t_v$  or  $t_\pi$  affects  $\delta$ , we recognize that a change in any of the parameters that increase  $Y$ , given  $B(t)$ , will increase  $\delta$ .

We consider how changes in  $t_v$  and  $t_\pi$  affect  $\delta$  for two cases: (a) no tax shifting and (b) tax shifting.

In the no tax shifting case,  $k$  is constant (i.e. there is no change in the degree of monopoly) with respect to changes in  $t_v$  and  $t_\pi$ . An increase in  $t_v$  simultaneously increases  $\Pi$  and reduces the basic multiplier,  $(1/(1 - \alpha))$ , causing  $Y$  and  $\delta$  to remain constant. An increase in  $t_\pi$  causes  $\Pi$  to expand but leaves  $1/(1 - \alpha)$  constant, thereby increasing  $Y$  relative to  $P$  and increasing  $\delta$ .

With shifting of  $t_v$ , a change in  $k$  (i.e. a change in the degree of monopoly) with respect to a change in  $t_v$  is assumed to be negative. Therefore, shifting of  $t_v$  dampens the change in  $1/(1 - \alpha)$ . Thus, the impact on  $Y$  of the increase in  $\Pi$  is less than fully offset by the reduction in  $1/(1 - \alpha)$  and, consequently, an increase in  $t_v$  increases  $\delta$ .

With shifting of  $t_\pi$ , a change in  $k$  with respect to a change in  $t_\pi$  is assumed to be positive. Therefore, shifting of  $t_\pi$  reduces the value of  $1/(1 - \alpha)$  and dampens the increases in  $Y$  and  $\delta$ . Given that a change in  $\delta$  affects  $I(\pi)$ , taxation will have an impact on the level

of investment and the structure of the business cycle.

*Taxation and the level of profits:* Assuming that the government budget is in balance, that the trade surplus,  $X - M$ , is zero, the impact of taxation on the level of profits is through: (a) government purchases,  $G$ , and (b) the wage share,  $\alpha$ .

A change in  $G$ , when accompanied by an identical change in  $T$  increases  $Y$  through a balanced budget multiplier effect. The impact on  $P$  is positive if  $a$  is stable and greater than 1.

In the *no tax shifting* case, an increase in  $t_v$  reduces  $\alpha$ ,  $1/(1 - \alpha)$  and  $Y$ . The impact on  $P$  is negative and more than offsets the positive balanced budget multiplier effect. A change in  $t_\pi$  has no impact on  $1/(1 - \alpha)$  and simply increases  $P$  through a balanced budget multiplier effect.

With *shifting* of  $t_v$ , the negative impact of  $1/(1 - \alpha)$  is reduced by the extent to which shifting changes  $\alpha$  and  $1/1 - \alpha$ . With *shifting* of  $t_\pi$ , the effect of  $1/(1 - \alpha)$  on  $P$  is reduced, assuming  $a$  is stable and greater than 1.

#### (vi) Taxation and the business cycle

Having identified the channels through which changes in the structure of taxation have a static impact on investment, LM (Laramie and Mair, 1996) develop the dynamic effects of balanced changes in  $G$  and  $T$  on the business cycle. The impact of taxation on future investment depends on four factors:

- the cyclical variation in investment;
- the change in the cyclical variation in investment;
- a trend component in circumstances when a non-zero trend is assumed;

- three parameter shift effects:
  - a depreciation effect operating through  $\delta$ ,
  - a distribution effect operating through changes in  $\alpha$ ,
  - a tax shifting effect operating through changes in  $k$ .

Assuming throughout that  $a$  is stable and greater than 1, (as it has been in the UK over the period 1972 - 1995 (see Laramie, Mair and Toporowski (1998)) we examine the effects on the business cycle of changes in the structure of taxation when taxes are not shifted and when they are shifted.

In the *no tax shifting* case, (i.e. no change in the markup,  $k$ , via changes in the degree of monopoly) a change in  $t_v$  has no effect on  $\delta$ . Consequently,  $t_v$  alters  $I$  and the structure of the business cycle through changes in  $\alpha$ . A change in  $t_v$  is inversely related to  $\alpha$  and, therefore, to  $P$  and  $I$ . If  $I$  is in an upswing or at its peak, when current  $I$  determines  $P$  and  $P$  determines future  $I$ , then an increase (decrease) in  $t_v$  reduces (increases) the impact of current  $I$  on  $P$  and future  $I$ . Thus, an increase (decrease) in  $t_v$  dampens the upswing and reduces the peak of the business cycle. The opposite happens during the downswing and at the trough so that an increase (decrease) in  $t_v$  dampens (heightens) the amplitude of the cycle.

In the *no tax shifting* case, (i.e. no change in the markup,  $k$ , via changes in the degree of monopoly) the impact of a change in  $t_\pi$  is through  $\delta$ . A change in  $t_\pi$  has no effect on  $\alpha$ . If  $I$  is in an upswing or at its peak, when current  $I$  determines  $P$  and  $P$  determines future  $I$ , an increase (decrease) in  $t_\pi$  increases (decreases) the impacts of current  $I$  and  $P$  on future  $I$  via an increase (decrease) in  $\delta$ . Thus, the increase (decrease) in  $t_\pi$  increases (reduces)  $I$  during the upswing and at the peak of the business cycle. The opposite

occurs during the downswing and at the trough, an increase (decrease) in  $t_\pi$  heightens (dampens) the amplitude of the cycle.

With *shifting* of  $t_v$  (i.e. there has been a change in the degree of monopoly) when  $k$  is inversely related to  $t_v$ , then  $\delta$  and  $P$  both rise. Shifting of  $t_v$  reduces the dampening effect of an increase in  $t_v$  on  $I$ . With *shifting* of  $t_\pi$ ,  $P$  and  $\delta$  both fall. Thus, an increase in  $t_\pi$  attenuates the rising amplitude of the business cycle.

In order to identify the impact of taxation on the business cycle, it is necessary to know four things:

- the stage of the cycle at which the economy happens to be;
- the long-run trend of investment, whether rising, falling or zero;
- the direction of tax policy;
- the process and degree of tax shifting.

The effects of changes in the structure of taxation on the business cycle change dramatically depending on the tax change under consideration and whether or not the tax is shifted.

#### (vii) *Comparison of orthodox and Kaleckian micro and macro aspects*

As our discussion has demonstrated, Kaleckian fiscal analysis is essentially concerned with the distribution and stabilization branches of fiscal policy and has nothing to say anent the allocation branch. As a result, the short-run vs long-run, market failure vs market clearing, micro vs macro difficulties discussed in section 2 simply do not arise in a Kaleckian context. This is precisely because the Kaleckian strand of post

Keynesian economics has its origins in Marx's reproduction schemes (Harcourt and Hamouda, 1992). Kalecki's concern was with formulating a theory of effective demand in a context in which the dynamic of the capitalist economy was the class struggle. He explicitly developed his analysis within an economic system characterised by unused resources of capital and labour and by monopolistic industrial structures. Issues of optimal resource allocation and the attendant fiscal implications are not on the agenda.

This leaves us in a stand-off. It is all very well for post Keynesians to indulge in *schadenfreude* at the problems of their orthodox brothers and sisters as they endeavour to reconcile the irreconcilable. But then post Keynesians are left looking rather embarrassed when confronted with issues of allocation. Post Keynesians may choose to occupy the moral high ground and argue as Harcourt and Hamouda (1992, p.232, n.17):

'Thus post Keynesian theory is holistic in terms of world view, not in terms of technique. It is the policy problem which determines the choice of method and technique - the neo-Ricardians may be an exception. In mainstream theory the technique tends to determine what problems may be addressed'.

Thus, a 'horses for courses' approach may be the most appropriate solution. Post Keynesians have tended to use this argument as a defense against criticisms of the internal lack of coherence between the various strands of post Keynesian economics. But there is no reason in principle why 'horses for courses' should not be used to arrive at an accommodation between orthodox and post Keynesian approaches to fiscal policy. On issues of allocation, the orthodoxy is the horse

for the course and if this requires post Keynesians to go along with a Paretian welfare economics approach, then so be it. But on issues of distribution and stabilization, there may be a case for considering a post Keynesian approach of the kind outlined in this paper to be a more suitable runner. If this line of argument is to be accepted, then we should proceed to examine the nature of the course before the runners come under the starter's orders.

#### **4. Fiscal stability under New Labour**

The *Pre-Budget Report* of November 1997 (HM Treasury, 1997a; hereafter *PBR*) sets out the conditions under which the government will seek to achieve its central economic objectives of high and stable levels of growth and employment (*PBR* 1.01). Low inflation and low government borrowing are seen to be essential building blocks for long-term growth (*PBR* 1.07). Responsibility for the operation of monetary policy has been transferred to the Bank of England, with the apparent approval of the City (*PBR* 1.08). The challenge now seen by the *PBR* is to apply a similar approach to fiscal policy in order to ensure that future governments will always set fiscal policy in ways which promote economic stability. To this end, the government has published a Code for Fiscal Stability (HM Treasury, 1998a; hereafter *CFS*). The *CFS* enshrines the two cardinal rules which will henceforth determine fiscal policy (*PBR* 1.12):

- the golden rule: over the economic cycle the government will borrow only to invest and not to fund current expenditure; and
- public debt as a proportion of national income will be held over the cycle at a stable and prudent level

These rules, linked to the government's plans for deficit reduction, are intended to establish a sound long-term basis for fiscal policy. The application of these fiscal rules over the cycle will enable the automatic stabilizers to operate and contribute to economic stability (*PBR* 2.14). On occasion, discretionary changes in fiscal policy may provide a useful support to monetary policy, but always subject to the conditions of the *CFS* (*PBR* 2.15). The fiscal rules are set out as an average over the cycle to recognize the significant effect of cyclical fluctuations on the public finances. The intention is to enhance stability by allowing borrowing to fluctuate due to cyclical changes in output, that is, by allowing the automatic stabilizers to operate. (*PBR* 2.25). Fiscal policy will also be guided by cyclically-adjusted estimates of the fiscal indicators, allowing for uncertainty (*PBR* 2.26).

In setting out these rules, the government has been considerably influenced by the failure of past fiscal policy, *Fiscal Policy: Lessons from the Last Economic Cycle* (HM Treasury, 1997b). From this the government has learned two lessons (*Fiscal Policy*, page 2):

- Lesson 1: Take a prudent approach: adjust for the economic cycle and build in a margin for uncertainty;
- Lesson 2: Be open and transparent: set stable fiscal rules and explain clearly fiscal policy decisions.

In order to ensure that the lessons are implemented, they have been incorporated into the *CFS*. The *CFS* is based on three considerations (*CFS*, page 5):

- a stable economic environment is vital if growth and employment are to prosper;

- the conduct of fiscal policy has a critical influence on economic stability;
- fiscal policy under the previous government had been an important source of instability;

Among the principles of fiscal management set out in the *CFS* (*CFS*, p. 7) are the following:

- stability in the fiscal policy-making process and the way in which fiscal policy impacts on the economy;
- efficiency in the design and implementation of fiscal policy;

By 'stability', the government means the operation of fiscal policy in a way that is predictable and consistent with the central economic objective of high and stable levels of growth and employment. By efficiency, the government means that it will seek to ensure that it uses resources in ways that give value for money (whatever that means!).

Two reports will be published to indicate progress towards attainment of fiscal objectives. At the time of each Budget, the Treasury will publish a *Financial Strategy and Budget Report* (hereafter *FSBR*) which will explain the fiscal policy measures introduced in the Budget and how these restore the public finances to a position consistent with fiscal policy objectives (*CFS*, p.10). Annually, the Treasury will also publish an *Economic and Fiscal Strategy Report* (HM Treasury, 1998b) (hereafter *EFSR*) which, among other things, will set out the government's long-term economic and fiscal strategy and present an analysis of the impact of the economic cycle on the key fiscal aggregates, including the cyclically-adjusted position (*CFS*, p.10). The *FSBR* will be the main vehicle for

reporting the government's short-term economic and fiscal projections. The *EFSR* marks an innovation in thinking. The *CFS* (*CFS*, p.18) expresses the view that for too long British governments have been overly pre-occupied with short-term issues. In the *EFSR*, the government is now required to set out its long-term economic and fiscal strategy and explain how the strategy and objectives relate to the principles of fiscal management. By requiring the *EFSR* to present an analysis of the impact of the economic cycle on the key fiscal aggregates, this will ensure that the effects of the cycle are not ignored when policy decisions are made. Illustrative long-term projections will also be published to shed light on the sustainability of fiscal policy and encourage debate on the longer-term issues facing the British economy.

#### **5. Fiscal policy and Kaleckian policy implications**

Elsewhere in this issue, Arestis and Sawyer (hereafter AS) use the term 'New Monetarism' to describe the economic philosophy of New Labour. Under this new monetarism, fiscal policy is downgraded and plays second fiddle to monetary policy. The principal features distinguishing Labour's new monetarism of the late 1990s from the 'Mark 1 Monetarism' of the 1980s are the independence of the Bank of England and a belief in rational expectations. The classical dichotomy still rules, under which monetary factors are presumed to influence the level of prices and real factors determine the level and composition of output and employment and relative prices. A central tenet of this new monetarism is the non-accelerating-inflation rate of unemployment or NAIRU. As AS point out, NAIRU should be more properly defined as the non-rising, rather than non-accelerating, rate of inflation. Despite a

number of attempts (Sawyer 1997a, 1997b) to challenge its theoretical and empirical credentials, belief in NAIRU at the Treasury and the Bank of England remains unshaken. The government is backing two runners in the macroeconomic policy stakes. The odds-on favourite is New Monetarism by Robert Lucas out of Milton Friedman. It is owned by a syndicate (the Monetary Policy Committee) and is ridden by Eddie George. The 100-1 outsider is Fiscal Stability by Richard Musgrave out of John Maynard Keynes. It is owned by the Treasury and ridden by Gordon Brown. Yet to come under starter's orders is Fiscal Restructuring by Michal Kalecki out of Karl Marx. It has yet to find a rider although Tony Laramie and Douglas Mair have been training it. Were Fiscal Restructuring to be entered, we suspect that the bookmakers in the City would be unlikely to quote initial odds of less than 1000-1.

However, in light of the problems discussed in section 2 and the nature of the course discussed in section 4, we argue that the Kaleckian theory we develop in section 3 may be a more suitable 'fiscal horse' than the 'spavined nag' the Treasury is currently backing. The macroeconomic dynamic effects of taxation we derive in this paper are all predicated on changes in the *structure* of taxation, within a framework of balanced changes in government tax revenues and expenditures. We abstract from any effects over the cycle brought about by the operation of automatic stabilizers. Thus, our analysis may be seen to be wholly consistent with the principles of the *CFS* discussed in section 4. It follows that fiscal policy can play a more positive role in the attainment of government economic objectives than is currently acknowledged in the *PBR*. However, this fiscal policy is from a completely different stable from the policy the Treasury is

advocating.

In a Kaleckian model discussed above, the stabilizing effects of balanced changes in taxation and government spending depend on the impact of taxation on investment and on tax-induced changes in the distribution of income. This, in turn, depends, as we note above, on the following factors - the cyclical variation in investment and its change, the trend level of investment and three parameter shift effects, (i) a depreciation effect, (ii) an income distribution effect operating through changes in the wage share and (iii) a tax shifting effect, operating through changes in the mark up.

The orthodox literature on the impact of taxation on investment is in some disarray and suffers from essentially the same micro-macro incompatibility as discussed in section 1 (Chirinko, 1993). A recent Kaleckian study of the macro effects of taxation on gross non-residential fixed investment in the US (Laramie, Mair, Miller and Statopoulos, 1997) suggests that changes in taxation on *personal* income have a more powerful effect on investment than changes in taxation on corporate income. A programme of research of the macro effects of taxation on investment is required. The *EFSR* emphasis reported in section 4 (p.12) on the closer monitoring of the cyclical location of the UK economy is an important development and particular attention should be paid to the behaviour of investment.

So far as the three parameter shift effects are concerned, we demonstrate in section 3(v) that an increase in the rate of depreciation (Kaleckian definition) would accelerate the replacement of older by newer equipment and stimulate investment. An increase in the taxation of profits would, *ceteris paribus*, increase the rate of depreciation and stimulate investment. The announcement in the 1997 Budget of a reduction in the rate of corporation tax from 32 per cent to 30 per

cent is unlikely, in our opinion, to achieve the desired increase in investment.

Our Kaleckian model also shows that changes in income distribution will affect investment and, hence, stability. There is now considerable evidence of a substantial shift in income distribution in the UK in the 1980s and 1990s towards the upper income groups (Goodman and Webb, 1994; Jenkins, 1995; Jenkins and Cowell, 1994). These studies have not, however, examined changes in the functional distribution of income, nor its macroeconomic consequences.

Laramie, Mair and Toporowski (1998) find in their analysis of the consumption coefficient that there has been a major shift in income distribution in the UK away from income from employment ('worker income' in Kaleckian terminology) in favour of non-employment income ('capitalist income' in Kaleckian terminology). For example, the ratio of non-employment/employment income in the UK has risen from around 0.38 in the early 1970s to around 0.5 by the mid 1990s. Thus, 'capitalist income' has been increasing relative to 'worker income'. Now, this may be considered to be 'A Good Thing' from a macroeconomic standpoint because of the importance Kalecki attached to 'capitalist income' as a source of funding for investment. A higher income share for 'capitalist income' is in Kaleckian theory a necessary condition for higher profits and higher future levels of investment with consequent benefits for long-term growth.

Unfortunately, life being what it is, things do not appear to be working out in the UK quite as Kaleckian theory requires. Laramie, Mair and Toporowski also show that the rising income share of 'capitalist income' has been accompanied by a rising average propensity to consume (APC) out of that income. The (after-tax) APC out of 'worker income' has remained fairly constant since the

early 1970s at around 0.67 and has shown no secular tendency to rise or fall. By comparison, the (after-tax) APC out of 'capitalist income' has risen by around a quarter from less than 0.4 in the mid-1970s to around 0.5 by the mid-1990s. Whereas Kaleckian theory predicts that investment will rise in response to increase in profits, in fact the rising 'capitalist income' has increasingly gone to finance 'capitalist' consumption. Examination of the trends in 'capitalist income' and investment in the UK shows that while the former has risen steadily in real terms through the 1980s and 1990s, the latter has flattened out since (Laramie, Mair and Toporowski, 1998).

There are two possible explanations. The first follows from the national income definition of non-employment (or 'capitalist') income as 'income from self-employment, rent, dividends and net interest'. Two events have occurred in recent years in the UK to swell the ranks of the 'capitalists'. First, as a consequence of the major structural changes in UK industry in the 1970s and 1980s, the number of self-employed has risen substantially (Jenkins, 1995, p.35). Also, the massive increase in share ownership as a result of the privatisations on favourable terms has resulted in a substantial growth in income received in the form of dividends (Jenkins, 1995, p.35). As a result, there has emerged in the UK over the last 20 years a new breed of 'capitalist' whose consumption is not the semi-autonomous slowly changing function of time that Kalecki (1971/1968) thought it was.

The second event leads us to the third of our shift parameters, namely, changes in firms' mark ups of price over prime costs. The inverse of the mark up,  $k$ , measures the income share of wages. In Kaleckian theory,  $k$  reflects the 'degree of monopoly', the set of institutional and environmental factors which

determines firms' mark ups of price over prime cost (Reynolds, 1996). Laramie, Mair, Miller and Reynolds (1998) demonstrate that at the industry level, the cyclical behaviour of the mark up can be expressed as a function of (i) a set of factors which constitute size barriers to entry; (ii) the extent of product specialization; and (iii) the degree of openness of an industry to foreign competition. At the macro level, since the mid-1970s, the aggregate mark up in the UK (GDP at factor cost/(pre-tax) wages, salaries and forces' pay) has risen by over 16 per cent from rather less than 1.5 to around 1.6 (*Economic Trends*, 1997). This indicates that there has been an equivalent fall in labour's income share and accords with the rising share of 'capitalist income' noted above by Laramie, Mair and Toporowski (1998).

The significance for fiscal stability of this change in income distribution lies in the sensitivity of the macro effects of balanced changes in tax structure we derived in section 3 to *tax shifting*. Examination of the results obtained above shows that fundamentally different macro effects occur with and without tax shifting, i.e. whether or not firms adjust their mark ups to the change in the structure of taxation. The extent to which firms will be able to shift changes in taxation will depend on the 'degree of monopoly' which, at the macro level has been rising steadily in the UK over the past 25 years or so. Thus, the ability of 'capitalists' to shift taxes has been increasing while the ability of 'workers' has been diminishing. Any attempt at macro stabilization based on the fiscal restructuring argument of this paper has to recognize the real possibility that the objectives may be thwarted by the ability of 'capitalists' to use their market power to shift taxes.

With the publication of the *PBR*, the *CFS* and the *EFSR*, the government has indicated

an apparent willingness to embark on a new era of greater transparency in the conduct of fiscal policy. On the basis of its current philosophy, fiscal policy seems doomed to operate in a secondary role to monetary policy. As AS argue elsewhere in this issue there must be serious question marks as to the ability of monetary policy as it is currently being interpreted to achieve full employment. Regrettably, we have to say that we are equally doubtful of the Treasury's Keynesian fiscal nostrum. The course of fiscal stability requires, we think, a horse of finer mettle than the one currently under starter's orders.

#### Endnotes

1. Heriot-Watt University, Edinburgh and Merrimack College, Ma., USA, respectively. The authors wish to thank Dr P J Reynolds and an anonymous referee for most helpful comments on earlier drafts of this paper. All remaining errors are the responsibility of the authors.
2. See Laramie, Mair and Toporowski (1998) 'Weintraub's consumption coefficient: some economic implications and evidence for the UK' *Cambridge Journal of Economics* (forthcoming) for a discussion of the role of the consumption coefficient. If we assume that all transfer payments are consumed, then equation (4) can be written as:  $P = I + G - T + X - M + C_c + \Omega - W_s$ , where  $\Omega$  = government transfer payments. By defining total consumption as:  $C = C_c + \Omega + C_v$  (where  $C_v$  is worker consumption) =  $\alpha Y - W_s$ , then  $C_c + \Omega - W_s = \alpha Y(a - 1)$ . See Laramie (1991, p.586, fn.5) for the conditions sufficient for  $a$  to be stable.
3. See Laramie (1991) for further elaboration, where the analysis is also modified to include salaries. If the level of salaries is treated as a second 'distribution' factor in the same way as  $\alpha$ , and held constant, then the conclusions of this section remain unchanged.
4. Kalecki assumes that since investment causes profits, that entrepreneurs will only capture a small portion of the profits generated by their own investment decisions, the larger part of profits will go to existing capital.
5. Equation (9) is derived by defining  $T = T_v + T_\pi$ , where  $T_v$  = wage taxes and  $T_\pi$  = profit taxes, assuming  $T_v = t_v(V + T_v)$  and  $T_\pi = t_\pi(P + T_\pi)$  and by noting that  $V = \alpha(Y)$ .

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