

Neither new nor Keynesian: A critique of the new Keynesian programme

Malcolm Sawyer

*University of Leeds, Leeds LS2 9JT, UK
e-mail: mcs@lubs.leeds.ac.uk*

Abstract

A 'new consensus in macroeconomics' has recently emerged which is closely linked with new Keynesian economics and which is highly influential in policy-making circles. This paper outlines the 'new consensus in macroeconomics', and argues that in virtually all respects it cannot be considered Keynesian, and in many respects it is not new either. Keynesian economics is viewed in terms of the role of the 'principle of effective demand' in both the short run and the long run with investment having a key role, the rejection of Say's Law and market adjustment processes to generate full employment, and the world characterised by pervasive uncertainty. The NCM is characterised by optimising behaviour under full information, the reinstatement of Say's Law, the denial of effects of demand on supply, and a focus on monetary policy and a denial of the role of fiscal policy. It can be readily seen not to be Keynesian. The crucial role given to the 'natural rate of interest' indicates its lack of novelty with a return to Wicksell.

Key words: New Keynesian, new consensus in macroeconomics, 'natural rate of interest', Keynes

JEL classification: E10, E12.

1. Introduction

The year 2006 saw the commemoration of the 70th anniversary of the publication of Keynes's *General Theory* and the 60th anniversary of his death. Whilst the diminishing band of Keynes's followers has 'banged the drum' for the *General Theory* in various

conferences, in the economic policy-making world the influence of Keynes and Keynesian ideas continues to decline. Illustrations of this would be the imposition of the anti-Keynesian Stability and Growth Pact in the Economic and Monetary Union, and the elevation of monetary policy over fiscal policy and the idea that unemployment and economic growth are supply-side determined. Yet, it could be pointed out that a ‘new consensus in macroeconomics’ is firmly established and this draws heavily on ‘new Keynesian’ economics (Meyer, 2001; Woodford, 2003; Bank of England, 2005). Since that ‘new consensus’ is highly influential in policy circles, doesn’t this show that Keynesian economics prevails? The answer from this paper is, as the title suggests, that the new Keynesian economics as exemplified in the ‘new consensus’ is neither new nor Keynesian. The paper proceeds by first briefly indicating what could be considered Keynesian (seeking to avoid theological debates on what Keynes really said, whether what is here described as Keynesian can be related to Keynes¹). It then outlines the ‘new consensus in macroeconomics’, and argues that in virtually all respects it cannot be considered Keynesian. It is also suggested that in many respects it is not new either. The ‘new consensus in macroeconomics’ represents a firm return to a pre-Keynesian perspective dressed up in some technical clothes.

2. The characterisation of Keynesian economics

The defining feature of Keynesian economics is the ‘principle of effective demand’, namely that in both the short run and the long run the level of economic activity is effectively determined by the level of effective demand. The emphasis is usually placed on the short run, but, if ‘the long-run trend is but a slowly changing component of a chain of short-period situations; it has no independent entity’ (Kalecki, 1971: 165), then demand rules in the long run as well. Alongside that is the view that, at best, the market forces moving the economy towards full employment are rather weak. The labour market (if such exists) does not operate such that real wages adjust downwards in the face of excess supply. Real wages are seen to be set by the actions of firms in the setting of prices. The real balance effect is weak (and in a world of endogenous money non-existent; Kalecki, 1944). The two mechanisms which have been traditionally relied upon do not work.

¹ Given my previous work, there is a strong Kaleckian tinge to what I describe as Keynesian.

These can be summed up as a rejection of Say's Law (interpreted as 'supply creates its own demand').

A particularly important ingredient in effective demand is investment, and there is what may be termed an independent investment function. Specifically, the forces determining the propensity to invest are quite different from those determining the propensity to save, and hence there is no good reason to think that desired savings will flow into desired investment.

The world is characterised by pervasive uncertainty, and views on the future are flimsily based and 'subject to sudden and violent changes' (Keynes, 1937: 213-4). Pervasive uncertainty, and the shifting 'waves of optimism and pessimism' may lie behind shifting propensity to invest (to which other factors such as technological opportunities could be readily added). 'It is only in a world where the future is uncertain that the importance of money, contractual arrangements, and financial market activity becomes predominant in determining future real world outcomes' (Davidson, 2002: 12), and uncertainty and money combine to produce unemployment. Davidson (2006) states that there are classical axioms '[1] *the axiom of neutral money* where money does not affect real outcomes and [2] *the axiom of an ergodic economic world* where the future can always be reliably predicted and [3] *the axiom of gross substitution* where everything is a substitute for everything else. Removal of these three axioms permits an analysis of an economic system where [1] money matters in the long and short run, i.e., money is never neutral; money affects real decision making². [2] The economic system is moving through calendar time from an irrevocable past to an uncertain, not reliably predictable (nonergodic) future. In uncertain, nonergodic circumstances, decision making agents 'know' that the future can not be reliably predicted in any probability sense. [3] Forward contracts in money terms are a human institution developed to efficiently organize time-consuming production and exchange processes. The money-wage contract is the most ubiquitous of these contracts.

² Despite Friedman's use of the motto 'money matters', he remains faithful to the neutral money axiom and therefore assumes that the quantity of money can not affect the long run real outcome of his system. In his own description of his logical framework, Friedman (1974: 27) states: 'that changes in the quantity of money as such *in the long run* have a negligible effect on real income so that nonmonetary forces are 'all that matter' for changes in real income over decades and money 'does not matter'... I regard the description of our position as 'money is all that matters for changes in *nominal income* and for *short-run* changes in real income' as an exaggeration but one that gives the right flavor to our conclusions'.

Modern production economies are therefore organized on a money-wage contract based system. [4] Unemployment, rather than full employment, is a common *laissez-faire* situation in a market-oriented, monetary production economy.

The time path of effective demand and the level of economic activity influence the supply-side of the economy in a variety of ways. Investment sets the evolution of the capital stock, and demand pressures on the labour side lead to variations in the labour participation decision and to migration flows. The pace of technical change and productivity growth is also influenced by the path of demand and economic activity (as exemplified in the technical progress function advocated by Kaldor). With the supply of the factors of production and their productivity both dependent on the evolution of demand, it is clear that the supply side depends on demand, and that the evolution of supply cannot be separated from the evolution of demand.

3. The ‘new consensus’ formulation of new Keynesian approach

The ‘new consensus in macroeconomics’ (NCM) has often been described in terms of a few key equations. We present here a three equation version (following Meyer, 2001)³.

$$Y_t^g = a_0 + a_1 Y_{t-1}^g + a_2 E_t(Y_{t+1}^g) - a_3 [R_t - E_t(p_{t+1})] + s_1 \quad \dots(1)$$

$$p_t = b_1 Y_t^g + b_2 p_{t-1} + b_3 E_t(p_{t+1}) + s_2, \text{ (with } b_2 + b_3 = 1) \quad \dots(2)$$

$$R_t = RR^* + E_t(p_{t+1}) + c_1 Y_{t-1}^g + c_2 (p_{t-1} - p^T) + c_3 R_{t-1} \quad \dots(3)$$

where Y^g is the output gap, R is nominal rate of interest, p is rate of inflation, p^T is inflation rate target, RR^* is the ‘equilibrium’ real rate of interest, that is, the rate of interest consistent with zero output gap which implies from Equation (2), a constant rate of inflation, s_i (with $i = 1, 2$) represents stochastic shocks, and E_t refers to expectations held at time t . Equation (1) is the aggregate demand equation with the current output gap determined by past and expected future output gap and the real rate of interest.

Equation (2) is a Phillips curve with inflation based on current output gap and past and future inflation. As Gordon (1997:17) remarked (though not in the context of this ‘new consensus’), “in the long run inflation is always and everywhere an excess nominal GDP phenomenon. Supply shocks will come and go. What remains to

³ See Arestis (2007) for an extension to an open economy utilising six equations.

sustain long-run inflation is steady growth of nominal GDP in excess of the growth of natural or potential real output". We have elsewhere (Arestis and Sawyer, 2006a) outlined the derivation of the Phillips curve and presented a critique of its theoretical foundations.

The Phillips' curve underlies the orthodox approach to monetary policy in two senses. First, the use of interest rates to target inflation draws on the linkage: interest rate – aggregate demand – economic activity – inflation, and the Phillips' curve is the final link in that chain. The sole use of monetary policy in the form of interest rates to target the rate of inflation would be difficult to justify without that final link in the chain. Second, the notion of the trade-off between inflation and unemployment has been used to argue the case for independence of central banks on the grounds that politicians are tempted to stimulate the economy to reduce unemployment without regard for the longer-term inflationary consequences.

Equation (3) is a monetary policy operating rule (of the Taylor's rule form) with the nominal interest rate based on expected inflation, output gap, deviation of inflation from target and the 'equilibrium' real rate of interest. The lagged interest rate represents interest rate 'smoothing' undertaken by the monetary authorities (see, for example, McCallum, 2001).

A fourth equation can be added which relates the stock of money to 'demand for money variables' such as income, prices and the rate of interest, which would reinforce the endogenous money nature of this approach with the stock of money being demand determined. Clearly, though, such an equation would be superfluous in that the stock of money thereby determined is akin to a residual and does not feed back to affect other variables in the model.

Equation (3) clearly endogenises the setting of interest rate by the Central Bank and does so along the lines of 'Taylor's rule'. The significance of the use of 'Taylor's rule' is twofold. First, it treats the setting of interest rates as a domestic matter without direct reference to international considerations such as the exchange rate and interest rates elsewhere in the world, and those international considerations would only enter Taylor's rule through effects on the domestic variables of output gap and inflation rate. Second, the interest rate is adjusted in response to the output gap (and to the rate of inflation which in turn is modelled to depend on the output gap). A zero output gap is consistent with constant inflation, as can be seen from Equation (2). Equation (3) then implies a nominal rate of interest which translates into a real rate equal to the 'equilibrium' rate RR^* , which is

consistent with zero output gap and constant inflation. From Equation (1), the value of RR^* would need to be a_0/a_3 . Provided that the Central Bank has an accurate estimate of RR^* , then it appears that the economy can be guided to an equilibrium of the form of a zero output gap and constant inflation (at an interest rate equal to the pre set target). In this case, Equation (1) indicates that aggregate demand is at a level that is consistent with a zero output gap. In a private sector economy, this would imply that the real interest rate RR^* brings equality between (*ex ante*) savings and investment. The equilibrium rate of interest corresponds to the Wicksellian ‘natural rate’ of interest which equates savings and investment at a supply-side equilibrium level of income.

In effect, the model portrays an economy in which the interest rate can be adjusted to secure equilibrium in terms of a zero output gap and a balance between aggregate demand and aggregate supply (alternatively, between planned savings and planned investment).

Equation (1) relates the output gap from a demand perspective to expected future output gap, and the rate of interest. First, though, note that the emphasis is on the output gap, that is, the gap between actual level of output and the ‘normal’ or trend rate of output. It is assumed that the ‘normal’ or trend rate of output is set on the supply-side of the economy. In effect this trend rate of output is a function (*via* a production function) of the factor inputs of labour, capital etc.. Second, the real rate of interest is included, and this reflects the role of a comparison between present consumption and future consumption in terms of discounting the future.

Equation (1) is derived from optimisation of expected lifetime utility subject to a budget constraint (see, for example, Blanchard and Fischer, 1989:Chapter 2). Households and firms have perfect foresight, and know the current and future values of wages and rental rates. A condition, sometimes known as a non-Ponzi game condition is imposed which ‘prevents families from choosing such a path (with higher and higher levels of borrowing), with an exploding debt relative to the size of the family. At the same time, we do not want to impose a condition that rules out temporary indebtedness. A natural condition is to require that family debt not increase asymptotically faster than the interest rate’ (Blanchard and Fischer, 1989: 49).

Three features of this approach should be noted. First, the non-Ponzi game condition leads to the implication that lifetime consumption is equal to lifetime income (each suitably discounted). At the individual level, this comes from a combination of a non-satiation

assumption along with a no final debt condition. Second, the income of the individual depends on labour supply at the given wage and of capital, and the implicit assumption that the individual is able to supply their labour. There is a full employment assumption. The combination of these two features means that at the aggregate level there is the equivalent of Say's Law: potential supply (of labour) leads to actual supply of labour, and the resulting income is fully spent.

Third, the consumption decision is made at the level of the household or family under perfect foresight. We can then observe that objections made be raised to the notion of intertemporal optimisation along the lines of 'unrealism' in terms of the information on the future levels of income, interest rates etc. which are required, and the computational requirements to solve the optimisation problem. There is no consideration given to uncertainty about the future, to learning and the change in household membership. A certain (or certainty equivalent) future is postulated. Significantly there is little room for learning in this process. A further complication arises from whether the optimisation is carried out at the individual level or the household level. If the decision is at the individual level, then some consideration should be given to income sharing within a household. If the decision is presented as being made at the household level then there should be some recognition of changing household composition – children grow up, households split, etc..

Our focus here is on the features of this approach, which are particularly relevant for the analysis of monetary and fiscal policy. These are:

i) The perfect capital market assumption; specifically, the absence of credit rationing (which would mean that some individuals were credit-constrained) and the assumption of a single interest rate. This would mean that the only effect of monetary policy would be a 'price effect' as the rate of interest is changed. The parts of the transmission mechanism of monetary policy, which involve credit rationing and changes in the non-price terms on which credit is supplied would be excluded by assumption.

ii) There is no mention of banks in this analysis. It has been noted that in the major text of Woodford (2003), banks make no appearance in the index (Goodhart, 2004). Since banks and their decisions play a considerable role in the transmission mechanism of monetary policy, and further that decisions by banks as to whether or not to grant credit plays a major role in the expansion of the economy (in the sense that a failure of banks to supply credit would imply that

expansion of expenditure cannot occur), there is a disjuncture between this analysis and the role of monetary policy.

iii) The role for investment. The basic analysis (cf. Woodford, 2003: Chapter 4) is undertaken for households optimising their utility function in terms of the time path of consumption⁴. Investment can then be introduced in terms of the expansion of the capital stock, which is required to underpin the growth of income. In effect the future path of the economy is mapped out, and consequently the time path of the capital stock. Investment ensures the adjustment of the capital stock to that predetermined time path. There is then by assumption no impact of the path of the economy on the capital stock. There is not what we may term an independent investment function in the sense of arising from firms' decisions taken in the light of profit and growth opportunities, separated from savings decisions of households.

4. The 'natural rate' of interest and the return of Say's Law

It is instructive to consider the features of the equilibrium of the model outlined above. Equilibrium in this context refers to the fulfilment of expectations and the achievement of the inflationary target. Given the construction of the model, a constant inflation rate implies a zero output gap. The features of equilibrium are:

a) The output gap is zero. Hence the level of demand has adjusted to the level of supply as reflected in the trend level of output. This has elements of Say's Law in the sense that the level of output is supply-determined, and demand adjusts to supply, albeit here that the adjustment mechanism comes through the interest rate setting activities of the Central Bank.

b) The rate of inflation is on target. The target rate could be set anywhere as the level of inflation is presumed to have no effects, which raises the paradox of why there is concern over inflation if it is modelled as having no real side effects (e.g. on output or employment). A form of classical dichotomy is involved, that is, a separation of the real side of the economy from the monetary (price level) side. The level of output is set on the real supply-side of the

⁴ 'One of the more obvious omissions in the basic neo-Wicksellian model developed in Chapter 4 is the absence of any effect of variations in private spending upon the economy's productive capacity and hence upon supply costs in subsequent periods' (Woodford, 2003: 352).

economy, and the rate of inflation is set by the target adopted but achieved through effects on expectations and monetary policy.

c) The real interest rate is at an equilibrium level of RR^* which can be seen to be equal to a_0/a_3 . This equilibrium rate is often seen to correspond to what is called the Wicksellian 'natural rate' of interest. Wicksell distinguished between the money rate of interest (as observed) and the 'natural rate of interest' which was the interest rate that was neutral to prices in the real market, and the interest rate at which supply and demand in the real market was at equilibrium.

Although it is not self-evident from the model outlined above, this 'natural rate of interest' equates savings and investment and does so at a zero output gap (which is implicitly assumed to be consistent with the full employment of labour : flexible real wages would permit the labour market to clear with full employment compatible with the zero output gap). Although the rate of interest is set by the Central Bank, a loanable funds view of interest rate determination is reinstated.

This takes us back to a pre-Keynesian position (in the *General Theory* sense) as described by Keynes himself (in his *Treatise on Money*; Keynes, 1930). 'Following Wicksell, it will be convenient to call the rate of interest which would cause the second term of our fundamental equation to be zero the *natural rate* of interest, and the rate which actually prevails the *market rate* of interest. Thus the natural rate of interest is the rate at which saving and the value of investment are exactly balanced, so that the price level of output as a whole (II) exactly corresponds to the money rate of the efficiency earnings of the factors of production. Every departure of the market rate from the natural rate tends, on the other hand, to set up a disturbance of the price level by causing the second term of the second fundamental equation to depart from zero. We have, therefore, something with which the ordinary quantity equation does not furnish us, namely, a simple and direct explanation why a rise in the bank rate tends, in so far as it modifies the effective rates of interest, to depress price levels" (Keynes, 1930: 139).

But in the *General Theory* Keynes explicitly rejects the idea of a unique natural rate of interest, and in effect argues that there is a natural rate of interest corresponding to each level of effective demand, which would bring savings and investment into balance. "In my *Treatise on Money* I defined what purported to be a unique rate of interest, which I called the natural rate of interest - namely, the rate of interest which, in the terminology of my *Treatise*, preserved equality

between the rate of saving (as there defined) and the rate of investment I had, however, overlooked the fact that in any given society there is, on this definition, a *different* natural rate of interest for each hypothetical level of employment. And, similarly, for every rate of interest there is a level of employment for which the rate is the 'natural' rate, in the sense that the system will be in equilibrium with that rate of interest and that level of employment. Thus it was a mistake to speak of the natural rate of interest or to suggest that the above definition would yield a unique value for the rate of interest irrespective of the level of employment. I had not then understood that, in certain conditions, the system could be in equilibrium with less than full employment" (Keynes, 1936: 242-3). It is also the case that a shift in the state of confidence and expectations leading to a shift in the investment schedule would lead to a shift in the natural rate of interest. Keynes went on to argue that "If there is any such rate of interest, which is unique and significant, it must be the rate which we might term the *neutral* rate of interest, namely, the natural rate in the above sense which is consistent with full employment, given the other parameters of the system; though this rate might be better described, perhaps, as the *optimum* rate The above gives us, once again, the answer to the question as to what tacit assumption is required to make sense of the classical theory of the rate of interest. This theory assumes either that the actual rate of interest is always equal to the neutral rate of interest in the sense in which we have just defined the latter, or alternatively that the actual rate of interest is always equal to the rate of interest which will maintain employment at some specified constant level. If the traditional theory is thus interpreted, there is little or nothing in its practical conclusions to which we need take exception. The classical theory assumes that the banking authority or natural forces cause the market-rate of interest to satisfy one or other of the above conditions" (Keynes, 1936: 243-4).

An interesting feature of the NCM approach is that the operation of Say's Law does not come on through the operation of market forces : there is, for example, no real balance effect through which falling prices increase the real value of the stock of money, thereby stimulating demand to finally reach a level compatible with full employment. It is the wisdom of the Central Bank through the setting of the key rate of interest which ensures that there is a zero output gap. It is aided in this through the operation of Taylor's rule : in effect the 'natural rate' does not need to be known to the Central Bank and the

Central Bank will know when the ‘natural rate’ of interest is reached as then output gap is zero and inflation is constant.

5. Disputing the role of fiscal policy

The three equation model outlined above appears to offer little opportunity for fiscal policy. It would be possible to interpret the coefficient a_0 in Equation (1) as a shift variable reflecting the fiscal stance. It would, of course, be the case that the equilibrium level of output is unaffected by fiscal policy. If the fiscal stance were changed reflected in a change in a_0 , the implication from this model is that the ‘natural rate’ of interest (which can be solved out as a_0/a_3) would also change so as to leave the equilibrium level of aggregate demand unchanged and compatible with the equilibrium level of output. Fiscal policy could be compared in terms of its stabilising properties with monetary policy by the use of a ‘fiscal policy Taylor’s rule’ whereby the fiscal stance changes in response to deviations of inflation from its target and output from its equilibrium level. Equation (3) is asserted to reflect actual practice, even though fiscal policy may be adjudged more powerful.

However, there is a strong sense in which fiscal policy is deemed impotent in this approach by construction. As indicated above, there is the idea of an intertemporal budget constraint at the level of the individual, and then by construction at the level of the private sector. Under this budget constraint, there is an essential equality between income and expenditure and savings and investment. There is then a corresponding government budget constraint. This takes the form of ‘the government’s *intertemporal budget constraint*. “... It states that *the current level of debt must be equal to the present discounted value of primary surpluses*. If the government is currently a net debtor, it must intend to run primary surpluses at some time in the future” (emphasis in original, Blanchard and Fischer, 1989: 127).

This approach nullifies any requirement (or effect) of fiscal policy for two interrelated reasons. First, it is an accounting requirement that the private sector surplus plus the public sector surplus sum to zero (in the context of a closed economy). Hence, if the private sector is, over time, constrained to have a balanced budget along the full employment path, then so must the public sector. But since the private sector is spending all its income, full employment is assured and there is no space for a public sector budget deficit. Second, there is Ricardian equivalence so far as the households are

concerned. Hence any fiscal stimulus by government would be completely offset by the response of the private sector.

6. Role of monetary policy

The NCM model portrays an economy in which the interest rate can be adjusted to secure equilibrium in terms of a zero output gap and a balance between aggregate demand and aggregate supply (alternatively between planned savings and planned investment). There are (at least) six factors that may prevent this from coming about, and which would upset the conclusion that interest rate policy can guide the economy to equilibrium with demand and supply in balance and inflation on target.

The first is that the 'equilibrium' rate of interest is either negative or positive but so low as to be unattainable.⁵ In terms of the equations given above this would correspond to the real rate of interest given by a_0/a_3 being low or negative. This would be equivalent to saying that the savings and investment schedules do not intersect in the positive range of interest rates. The aggregate demand equation (Equation (1)) above clearly assumes that aggregate demand, and presumably investment, is interest rate sensitive (such that a_3 is greater than zero) and that there is a substantial autonomous component of demand (otherwise a_0 would be non-positive).

Second, and not unrelated to the previous point, interest rates may have very little effect on the levels of investment and savings and hence variations in the rate of interest would be ineffectual in reconciling intended savings and investment.⁶ The theoretical and empirical arguments on the ambiguity of the sign of the relationship between savings and the rate of interest are well known. The empirical literature on investment has often cast doubt on the impact of interest rates on investment and stressed the roles of profitability and capacity utilisation.

⁵ This discussion is in terms of the Central Bank rate. It is assumed that the rate of interest on loans is above that Central Bank rate, and that it is the rate of interest on loans, which is relevant for investment decisions. Given the risks for banks involved in extending loans, it can be assumed that there is a minimum level below which banks would not go in terms of the loan rate.

⁶ It is notable in this respect that Kalecki's approach made just this assumption – interest rates are not mentioned in respect of savings, and investment did not depend on the rate of interest as the long-term rate of interest (deemed relevant for the level of investment) varied little and the differential between the rate of profit and the rate of interest (also seen as relevant) also varied little. See Sawyer (1985).

Third, the linkage from the key discount rate set by the Central Bank and the interest rates, which influence economic decisions, may be rather loose and uncertain. For example, the long-term rate of interest may be viewed as relevant for long-term investment decisions, and the response of the long-term rate of interest to changes in the key discount rate may be relatively slight and may vary over time. The banks could respond to a change in the discount rate by a combination of changes in the interest rate on loans and changes in the credit standards, which they set. Hence, the impact of a change in the discount rate on interest-sensitive spending decisions depends on the decisions of banks and other financial institutions.

Fourth, the 'equilibrium' rate of interest has been determined in light of domestic considerations only, and may not be compatible with interest rates in the rest of the world or have severe implications for the capital account balance.⁷

Fifth, the Central Bank cannot calculate and attain the 'equilibrium rate' of interest through reasons of lack of information, it being a moving target. It can be seen in the equations given above that the 'equilibrium rate' depends on a_0/a_3 and these are parameters, which can and do vary over time. Mistakes may occur in the setting of interest rates as the Central Bank has imperfect information on the equilibrium real rate of interest RR^* (assuming that such a rate does actually exist), and may aim for a real rate of interest which is not equal to a_0/a_3 . Any shift in fiscal policy, in investors' confidence or in world trade conditions would be reflected in a change in a_0 , leading thereby to a change in the equilibrium real rate of interest. This would, of course, exacerbate the problems of securing information on the equilibrium rate and exacerbate the chances of policy mistakes. Information on the 'equilibrium rate' is not exactly readily available, and indeed at best can only be estimated with some lag and over a period when it can be reasonably assumed the underlying parameters are stable. A significant issue arises here, namely whether the Central Bank can make systematic mistakes on its estimates of the 'natural rate', and in particular does the Central Bank tend to overestimate the 'natural rate'. The interest rate set by the Central Bank will have an

⁷ As Keynes argued, "the dilemma of modern banking is satisfactorily to combine the two functions. As a purveyor of representative money, it is the duty of the banking system to preserve the prescribed objective standard of money. As a purveyor of loans on terms and conditions of a particular type, it is the duty of the system to adjust, to the best of instability, its supply of this type of lending to the demand for it at the equilibrium rate of interest, i.e. at the natural rate" (Keynes, 1930: 192).

effect on investment decisions, and a generally too high interest rate will lead to lower investment and capital stock. In turn, the capital stock will help determine the 'trend' level of output, and a lower capital stock could lead to a lower 'trend' level of output.

Sixth, the Central Bank (or the government) may not wish to attain the 'equilibrium rate' of interest as defined above. In other words, the Central Bank does not pursue a policy rule akin to Taylor's rule.

7. Does the classical dichotomy hold?

The approach to monetary policy outlined above rests on a form of the classical dichotomy whereby there is a separation between the real side of the economy (here in effect described by the supply-side equilibrium) and the monetary side of the economy (specifically here the demand side in the form of interest rates). This separation permits the assignment of monetary policy to the nominal side of the economy, and specifically to inflation, and supply-side policies to address the real side of the economy. The classical dichotomy was developed in the context of exogenous money and the application of the quantity theory of money. Relative prices and resource allocation were determined by the interaction of demand and supply for each good, leaving the price level to be set from the stock of money. Money acted as 'a veil'. In the NCM, the stock of money does not play any causal role, as can be seen from Equations (1) to (3) above. Monetary policy has become aligned with interest rates. The question arises as to whether monetary policy in the form of interest rate setting has any lasting effects on the supply side of the economy. There is a more general question, namely, whether the level of demand makes a lasting impression on supply potential, and hence whether the time path of economic activity influenced by fiscal and monetary policy impacts on supply potential: the issues of path dependency and hysteresis effects (see Palacio-Vera 2005 for elaboration on this).

The component of aggregate demand likely to be the most interest sensitive is investment expenditure. This is supported by the results of the simulations of the effects of interest rate policy to which reference is made below in which the effect of interest rate change on investment is larger than the effects on other components of demand. The NCM framework is concerned with the effects of interest rate on aggregate demand, and thereby on the rate of inflation. But investment impacts on the time path of the capital stock, and hence on the future supply-side position. For monetary policy to have no lasting supply

side effects, it would have to be assumed that the real rate of interest averaged out at the equilibrium rate, and that the effects of interest rates (relative to the equilibrium rate) were symmetrical. Even then there would be effects on investment, which would last for some time (e.g. perhaps 20 years, depending on the life of the capital stock).

However, we need to consider the logic of the NCM approach, namely that households set the optimum time path for the economy in terms of consumption from which the time path of savings can be inferred. Savings flows into investment, and hence the time path of investment is derived from these decisions of households. Investment itself, as was evident in the neo-classical model of growth, does not have an independent existence from the savings function. When the investment function has an independent existence it can be seen as driven, for example, by firms' decisions based on profitability, capacity utilisation and growth expectations. The evolution of the capital stock then depends on those key variables, and investment and the time path of the capital stock becomes path dependent.

The use of deflationary measures (e.g. raising interest rates) to address inflation may have longer-term adverse consequences. In so far as the deflationary measures impact on investment, then future productive capacity will be that much reduced (Arestis and Sawyer, 2005; Sawyer, 2002). Specifically in the context of monetary policy, interest rate changes have an effect through those components of demand, which are sensitive to monetary conditions whether in the form of price effects (interest rate) or quantity effects (credit rationing). Investment is, of course, a major form of demand, which falls into that category.

The complex relationship between the level of economic activity and inflation undermines simple notions such as a higher current level of economic activity leads to future inflation. It may be that lower level of economic activity now leads to lower future economic activity and worsening inflation position. It was though the former notion (as reflected in the Phillips curve), which lies behind much of the argument with regard to problems of time inconsistency. It also lies behind much of the argument for independence of Central Banks, which are presumed to be less likely than politicians to engage in short-run stimulation of the economy, which is perceived to have longer-term inflationary consequences.

8. Discussion

In the NCM the supply-side equilibrium is represented by the zero output gap. The model is constructed to ensure that the economy tends to that zero output gap albeit that it is the guiding hand of the Central Bank through monetary policy that is in operation. This conclusion seems to reject all of the lessons of the Keynesian revolution on the role of effective demand.

Keynes and others have not denied that a supply-side equilibrium can be constructed in theoretical terms. As de Vroey (1997) argues, Keynes could have readily agreed with Friedman on the definition of the 'natural rate of unemployment' as corresponding to full employment (taking into account frictional and search unemployment), but differed in the major respect as to whether there was a strong feedback mechanism leading actual unemployment to the natural rate. Keynes would view the forces leading the actual rate of unemployment towards the 'natural rate' as weak, and the achievement of the 'natural rate' would require a high level of aggregate demand. In contrast, Friedman would view the adjustment of real wages in the face of the excess supply of labour as the mechanism by which the unemployment moved rapidly to the 'natural rate'.

But Keynes and others have stressed the role of effective demand which determines the level of economic activity, and that effective demand does not readily adjust to the supply-side equilibrium. Non-Keynesians have argued for a variety of ways by which the economy would move to full employment. From a focus on the labour market, adjustments of real wage in the face of excess supply was perceived to do the job (and though not often recognised in this way the Phillips curve as envisaged by, e.g., Friedman, 1968). But that adjustment process does not itself ensure that there is sufficient demand to underpin full employment, unless appeal is made to Say's Law. However, the mechanism which appears in many models (e.g. Layard and Nickell, 1986; Ball *et al.*, 1988) has been some form of the real balance effect. The real balance relies on money constituting net worth (i.e. that money is exogenous) and the effects of the real balance were accepted as being rather weak (but nevertheless played a key role in many new Keynesian models). These two mechanisms could be viewed as market adjustment processes.

The NCM appears to recognise that money is endogenous and does not constitute net worth. But endogenous money (and the

associated creation of money through the loan process) plays at most a minor role. Specifically the loan granting process by banks in enabling investment and the expansion of expenditure to take place does not feature at all. '(T)he possibility of stimulating the business upswing is based on the assumption that the banking system, especially the central bank, will be able to expand credits without such a considerable increase in the rate of interest. If the banking system reacted so inflexibly to every increase in the demand for credit, then no boom would be possible on account of a new invention, nor any automatic upswing in the business cycle' (Kalecki, 1990: 489). The credit rationing of banks (and other financial institutions) is also absent despite the arguments of authors such as Stiglitz on the ubiquity of credit rationing. The presence of credit rationing would mean, for example, that not all households can readily borrow against future income, and hence the life-cycle model as portrayed above would not apply to them.

The adjustment process is now the interest rate, though this is undertaken by the Central Bank, and the adjustment depends on the wisdom of the Central Bank rather than the operation of any invisible hand. In the model described above there is though an automatic feature in the form of Taylor's rule: demand above equilibrium, output gap positive, interest rate raised, demand falls. With interest rate treated as the relevant price, this has analogies with a Walrasian adjustment process whereby price changes in the face of excess demand. The responsiveness of demand to a change in interest rate (and even more the responsiveness of inflation to interest rate changes) can be questioned (Arestis and Sawyer, 2004).

The NCM has sought to re-establish the notion of a single 'natural rate of interest' which is invariant to movements in aggregate demand. The quote from Keynes given above indicates his dismissal of that notion. The 'natural rate of interest' can only be constant provided that the propensities to invest and to consume and the fiscal stance (not to mention in the open economy context the net foreign demand) remain unchanged. Although Keynesians have tended to suggest that the propensity to consume is rather stable (though there have been observed shifts in that propensity), in contrast investment is subject to shifts. Keynes would point to the effects of 'waves of optimism and pessimism' in an uncertain world with an unknowable future on investment. Kalecki would point to the effects in the short term of capacity utilisation and profitability and in the longer term the changing effects of technological opportunities.

The Keynesian consumption function relates consumer expenditure to current income. The NCM approach draws on the life-cycle approach to consumer expenditure, and as such makes two important assumptions. First, that individuals are not constrained in their lending and borrowing (subject to the overall life time budget constraint): there is no credit rationing, and all have access to credit. Second, individuals spend all their income over their life time. It is this assumption which is perhaps key, alongside the view that investment operates absorb savings. The fundamental feature in the work of Kalecki and of Keynes is that investment and savings are separate decisions and that (in effect) the overall propensity to spend cannot be taken as unity (and if it is, then Say's Law is in operation). The dependence of the NCM analysis on a life-time budget constraint (with the non-satiation assumption) and the (often implicit) view that savings automatically flows into investment runs directly counter to the insights of Kalecki and Keynes, and merely reinstates (in mathematical form) an 'all income is spent' view. An important side effect (argued in more detail in Arestis and Sawyer, 2006b) of this is to deny any role for fiscal policy. It is on this basis that we claim that the NCM is neither new nor Keynesian.

References

- ARESTIS, P. (2007), "What is the New Consensus in Macroeconomics?" in P. Arestis (ed.), *Is There a New Consensus in Macroeconomics ?* Basingstoke: Palgrave-Macmillan, forthcoming.
- ARESTIS, P. and SAWYER, M. (2004), "Can Monetary Policy Affect the Real Economy?", *European Review of Economics and Finance*, 3(3), 9-32.
- (2005), "Aggregate Demand, Conflict and Capacity in the Inflationary Process", *Cambridge Journal of Economics*, 29(6), 959-74.
- (2006a), "Another Look into the Phillips' Curve", *mimeo.*, University of Leeds.
- (2006b), "Fiscal Policy Matters", *Public Finance*, 54 (3), 1-15.
- BALL, L., MANKIW, N.G. and ROMER, D. (1988), "The New Keynesian Economics and the Output-Inflation Tradeoff", *Brookings Papers on Economic Activity*.
- BANK OF ENGLAND (2005), *The Bank of England Quarterly Model*, London: Bank of England.
- BLANCHARD, O. J. and FISCHER, S. (1989), *Lectures on Macroeconomics*, Cambridge, Mass., USA and London: The MIT Press.
- DAVIDSON, P. (2002), *Financial Markets, Money and the Real World*, Cheltenham: Edward Elgar.

- (2006), “Keynes and Money” in P. Arestis and M. Sawyer (eds.), *A Handbook Of Alternative Monetary Economics*, Cheltenham: Edward Elgar.
- DE VROEY, M. (1997), “Accounting for Involuntary Unemployment in Neoclassical Theory: Some Lessons from Sixty Years of Uphill Struggle” in R. Backhouse, D. Hausman, U.Mäki and A. Salanti (eds.), *Economics and Methodology: Crossing Boundaries*, Basingstoke: Mecomillan.
- FRIEDMAN, M. (1968), “The Role of Monetary Policy”, *American Economic Review*, 58 (1), 1-17.
- FRIEDMAN, M. (1974), “A Theoretical Framework for Monetary Analysis”, in R. Gordon (ed.), *Milton Friedman’s Monetary Framework: A Debate with His Critics*, Chicago: Chicago University Press.
- GOODHART, C.A.E. (2004), Review of *Interest and Prices* by M. Woodford, *Journal of Economics*, 82, 195-200.
- GORDON, R.J. (1997), “The Time-varying NAIRU and Its Implications for Economic Policy”, *Journal of Economic Perspectives*, 11(1), 11-32.
- KALECKI, M. (1944), “Professor Pigou on “The Classical Stationary State”: A Comment”, *Economic Journal*, 54 (1), 131-2.
- (1990), *Collected Works of Michal Kalecki, Vol. 1: Capitalism, Business Cycles and Full Employment* (ed. J. Osiantynski), Oxford: Clarendon Press.
- KEYNES, J.M. (1930), *A Treatise on Money, Vol.1: The Pure Theory of Money*. London: Macmillan.
- (1936), *The General Theory of Employment, Interest and Money*, London: Macmillan.
- (1937), “The General Theory of Employment”, *Quarterly Journal of Economics*, 51(2), 209-33.
- LAYARD, R. and NICKELL, S. (1986), “Unemployment in Britain”, *Economica*, 53 (Supplement), S121-69.
- MCCALLUM, B.T. (2001), “Monetary Policy Analysis in Models without Money”, *Federal Reserve Bank of St. Louis Review*, 83(4), 145-60.
- MEYER, L.H. (2001), “Does Money Matter?”, *Federal Reserve Bank of St. Louis Review*, 83(5), 1-15.
- PALACIO-VERA, A. (2005), “The ‘Modern’ View of Macroeconomics: Some Critical Reflections”, *Cambridge Journal of Economics*, 29(4), 747-67.
- SAWYER, M. (2002), “The NAIRU, Aggregate Demand and Investment”, *Metroeconomica*, 53(1), 66-94.
- WOODFORD, M. (2003), *Interest and Prices: Foundations of a Theory of Monetary Policy*, Princeton: Princeton University Press.

Özet

Ne “yeni” ne de “Keynesgil: Yeni Keynesgil Programın bir eleştirisi

Günümüzde yeni Keynesgil iktisatla yakından ilgili ve iktisat politikası oluşturan çevrelerde çok etkili bir uzlaşma oluşmaktadır: Makroiktisatta Yeni Uzlaşma (MYU). Bu yazıda MYU'nun betimlenmesine çalışılmakta ve söz konusu uzlaşmanın hemen hemen hiçbir özelliği ile Keynesgil sayılmayacağı, üstelik bir çok özelliği itibarıyla yeni de olmadığı ileri sürülmektedir. Keynesgil iktisat hem kısa, hem uzun dönemde yatırımların anahtar rolü oynadığı “efektif talep ilkesi”nin önemi, Say Yasası'nın ve piyasa uyum süreçlerinin tam istihdam yaratacağı görüşünün reddi ve yaygın belirsizliklerle karakterize edilen bir dünya üzerine kuruludur. Oysa MYU tam bilgilendirme altında optimizasyon davranışlarıyla, Say Yasası'na geçerlilik kazandırılmasıyla, talebin arz üzerindeki etkisinin reddi ile, para politikası üzerine odaklanılarak, maliye politikasının rolünün yadsınması ile karakterize edilmekte ve bu bağlamda Keynesgil olmadığı kolayca görülmektedir. MYU'da ‘doğal faiz haddi’ kavramına verilen kilit rol ise, bir yenilik değil, Wicksell'e dönüşür.

Anahtar kelimeler: Yeni Keynesçi, makroiktisatta yeni uzlaşma, “doğal faiz haddi”, Keynes.

JEL sınıflandırması: E10, E12.