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Post-Keynesian Economics – A User's Guide

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Abstract

This paper provides a brief introduction to post-Keynesian economics. Post-Keynesians are sceptical of the usefulness of the equilibrium method, and favour an approach based on path-determined models with, due to the influence of uncertainty on economic decisions, an important role assigned to money, institutions and rules of thumb. As there are no forces within capitalist economies which can guarantee full employment, government intervention is important. While monetary policy is seen as a rather blunt instrument, fiscal policy is perceived to be much more potent than it is in the mainstream. However, there are inherent limits to the achievement of sustained full employment in capitalist economies.

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Keywords: Keynes, post-Keynesians, methodology, path dependency, economic policy

Introduction

Post-Keynesian economics has, as its origins, a rejection of the core methodological foundations of mainstream economics, and the comparative static equilibrium method in particular. The critique extends to a dismissal of the behavioural assumptions that normally accompany the equilibrium based theories. Emerging from this critique has been the formation of alternative theoretical structures, based on methodological foundations considered to be more appropriate for economic analysis of the real world. As the post-Keynesian label suggests, the development of an alternative paradigm has been inspired, in part, by an attempt to

[1] We would like to thank Geoff Harcourt for his helpful comments.

resurrect what are judged to be the most important of John Maynard Keynes's contributions. However, the analysis extends well beyond this, incorporating elements of classical, Marxian and institutional schools of thought. These extensions have been influenced in particular by the work of Michal Kalecki (1899-1970), the Polish born economist who had developed a theory of effective demand reaching similar conclusion to those reached by Keynes, but which was embodied within a much broader framework of economic analysis, including consideration of Marx's schemas of reproduction, imperfectly competitive market structures, income distribution and the dynamics associated with cycles and growth[2]. The social and political realities observed to exist within modern capitalist societies were also emphasised. Beyond Keynes and Kalecki, and those who influenced their contributions, the early development of the post-Keynesian economics, both in terms of the critique and positive contributions, is most often associated with the work of Joan Robinson and Nicholas Kaldor. Within the Australian economics profession, the development and dissemination of post-Keynesian principles has been led by writers such as Geoff Harcourt and John King. The formulation of the post-Keynesian approach to economics has now progressed to the extent that an account of its historical development has been composed, and its distinctive analytical and methodological themes assembled to describe a school of thought, even if the latter

[2] For further discussion of the extent to which, from a post-Keynesian perspective, Kalecki's insights augments those found in Keynes' writings, see Kriesler (1997)

endeavour is subject to some debate[3.] This paper begins with a brief statement of the post-Keynesian critique of mainstream economics. This is followed by a description of some of the key elements that come together to form the central components of post-Keynesian approaches to theory and policy formulation.

[3] A comprehensive account of post-Keynesian economics can be found in the contributions to Harcourt and Kriesler (2013). See also, for example, Arestis (1992) Holt and Pressman (2001), King (2003), Harcourt (2006) and Lavoie (2009, 2015). The intellectual history is presented in King (2002).

The Methodological Critique

Central to the post-Keynesian critique of mainstream economics is the rejection of comparative static equilibrium analysis based on logical time. The thrust of the post-Keynesian objections are enunciated in the following way by Joan Robinson:

> A system of simultaneous equations need not specify any date and nor does its solution involve history. But if any proposition from it is applied to an economy inhabited by human beings, it immediately becomes self-contradictory. Human life does not exist outside of history and no one has correct foresight of his own future behaviour, let alone of the behaviour of all the individuals which will impinge upon his. I do not think that it is right to praise the logical elegance of a system which becomes self-contradictory when it is applied to the questions that it is designed to answer (Robinson 1974: 127).

Mainstream economists habitually thinks of a position of equilibrium as a position towards which an economy is tending to move as time goes by. However, as Joan Robinson (1953-4: 21) argued, it is impossible for a system to get into a position of equilibrium, for the very nature of equilibrium is that the system is already in it, and has been in it for a certain length of time (most likely forever). Unlike logical time, historical time is continuous and irreversible. The size and composition of the capital stock, together with the set of economic, social and political institutions, is a reflection of irreversible decisions made in the past. As time passes, individuals change not only with respect to the knowledge in their possession, but they also experience unforeseeable modifications in their economic endowments and in their perceptions of external institutional structures, environments and the possibilities of action taken by others[4].

In a world in which change is cumulative in nature, 'long-run' positions cannot be contemplated as existing independently from 'short-run' adjustments. Importantly, the past is irreversible and the future is unknowable. In this non-ergodic setting, as Keynes had emphasised[5], the fundamental consequences of uncertainty on economic decision making and activity take centre stage, together with the consequences arising from the subjective nature of expectations about the unknowable future. Axioms based on notions of rational optimising economic agents that characterise mainstream equilibrium modelling have no operational role to play in such a setting. Instead, historically and socially determined conventional behaviour becomes important, as does the evolution of institutions which often 'replace' markets. Therefore, from the post-Keynesian perspective, rather than using deductive reasoning based on behavioural assumptions that are consistent with the assumed equilibrating forces within an economy, it is the stylised facts of capitalism that have to be observed and accounted for in economic analysis, and which provide the starting point of the analysis.

Post-Keynesian economists see the development of the economy as being an historical process, with the unchangeable past influencing the present, with the future being inherently uncertain. This means that path determinacy involving historical

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[4] For further discussion on the significance of the logical versus historical time distinction see Setterfield (1995), and Dow (2013) for a more detailed account of methodology and post-Keynesian economics.

[5] Although Keynes himself did not know of the non-ergodic distinction, it was Paul Davidson who used it to interpret Keynes's work (see, for example, Davidson 2007).

time is central to their analysis, so that, to explain the current or future position of an economy, it is vital to know its history, how it came to be there. With historical time, time and events only move in one direction, so that what happens today is vitally dependant on what has happened previously.

Expectations have a significant and unavoidable impact on economic events. The world is messy and all important economic decisions are made within an environment of inescapable, fundamental uncertainty (in the sense posited by Frank Knight and Keynes), where we simply do not know:

> "By 'uncertain' knowledge let me explain, I do not mean merely to distinguish what is known for certain from what is only probable. The game of roulette is not subject, in this sense, to uncertainty..... Or, again, the expectation of life is only slightly uncertain. Even the weather is only moderately uncertain. The sense in which I am using the term is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest twenty years hence, the obsolescence of a new invention, or the position of private wealth holders in the social system in [2035]. About these matters there is no scientific basis on which to form any calculable probability whatsoever. We simply do not know." (Keynes 1937: 113-114)

In order to deal with such uncertainty, conventions, rules of thumb, 'satisficing' behaviour and institutions have developed – and these are all vital parts of economic behaviour. However, these rules and institutions will vary between economies, and over time. As a result of which, most post-Keynesian economists deny the usefulness of a general theory to explain all economic activity, but, rather believe that the theory needs to incorporate the institutional basis of the economy as its starting point.

Post-Keynesian economists stress the central role of money and finance, which affect the real economy in both the short and the long period – and at the micro and macro level. At the micro level, the importance of money is through its influence on the investment decision of firms, and through the ability of households to consume more than they earn. Importantly, money is never seen as being neutral, so that it always has an impact on the real economy.

The manner in which post-Keynesian economics has evolved in an endeavour to analyse these issues is now outlined[6].

Market Structure and Pricing Behaviour

Consistent with the methodological principles outlined above, post-Keynesians question the usefulness of developing theories of market structure and pricing behaviour based on notions of perfectly competitive markets consisting of myopic profit-maximising firms. Therefore, explanations alternative to equilibrium-based theories of demand and supply reconciled relative prices are required. Following Kalecki, the industrial structure of an economy is divided into two sectors[7.] On the one hand, there is the 'flexible price' sector, consisting mainly of primary products and raw materials, where price determination does resemble the Marshallian short-period analysis, with prices to a significant extent 'demand determined' due to a

[6] Even if the methodological critique is brushed aside, post-Keynesians would point towards the serious logical inconsistencies found to exist within formal equilibrium analysis. Most particularly, these relate to capital theory controversies and related usage of aggregate production functions, controversies summarised in Harcourt (1972), and the Sonnenschein- Mantel- Debreu theorem that proved that well-behaved excess demand functions derived from Arrow-Debreu type general equilibrium frameworks failed to generate general results beyond existence of equilibrium (see discussion in Rizvi (2013), for example).

[7] Kalecki's approach to pricing theory is examined in Kriesler (1987). Other important influences include work in the tradition of Gardiner Means, Philip Andrews and Sylos-Labini, as is emphasised in the surveys of post-Keynesian pricing theory presented in Lee (1998) and Coutts and Norman (2013). Hicks (1965) makes much of this distinction.

variety of factors that limit the capacity of supply to react to demand variations. The majority of goods and services in developed capitalist economies are, however, produced and traded in the 'fixed-price' sector, characterised by imperfect competition and oligopolistic markets. The assumption of myopic profit-maximising behaviour is replaced with a notion of mark-up pricing where prices are determined as a 'mark-up' on expected average costs of production[8], a 'rule of thumb' pricing rule seen as being consistent with a long history of empirical observations first comprehensively assembled by Hall and Hitch (1939). Importantly, Kalecki's contributions in particular emphasised the existence of excess capacity, seen to be a characteristic of production within firms; which, rather than reflecting 'sub-optimal' decisions, instead illustrates the realities of decision-making under uncertainty. For given input prices, average (variable) costs of production are seen as being constant until full capacity is approached, and as a result demand pressures do not generally have a direct effect on prices, unless this situation is encountered. This represents a significant departure from the mainstream theories, characterised by the existence of the axiomatically derived 'U' shaped average cost curves attached to the equilibrium firm[9.]

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[8] The costs which are relevant for post-Keynesian economists are not marginal costs. Although firms calculate their costs on different basis, given the assumptions of constant costs until capacity is reached and of excess capacity being the general rule, variable costs are usually constant, and are the basis on which prices are determined. Some post-Keynesian economist add into the calculation of costs, average expected fixed costs.

[9] The significance of the departures from the standard textbook U-shaped (average) cost curves was emphasised, for example, in Sylos-Labini's (1962) influential analysis of the dynamics of oligopolistic markets. Note also that the law of diminishing marginal returns (which governs the shape of short-run cost curves in traditional mainstream expositions) is not directly applicable to situations where the degree of capacity utilisation is not fixed or pre-determined.

For mainstream theory, prices are determined by the interaction of supply and demand and are seen as scarcity indexes, and play a key role allocating scarce resources amongst unlimited wants. However, because post-Keynesian economists are concerned with dynamic analysis with an emphasis on production and accumulation, the concept of scarcity plays a limited role. Production and growth mean that more is being produced, and it is unclear what scarcity means in this context – except in the case of non-reproducible natural resources.

The mark-up pricing principle generates a wide variety of alternative theories, each with different specifications of 'prime costs' and emphasising various factors determining the mark-up applied to these costs. This is the result of the different circumstances and economic environments faced by firms – which results in different considerations dominating their price setting. Kalecki's (1937) consideration of a corporation's internal and external financing requirements, and the role of the mark-up in influencing cash flows for the firm, establishes important linkages between the financial sector, pricing behaviour and investment decisions, again reflecting the way in which money and finance can influence the real economy (Ball 1964, Eichner 1973, Wood 1975, Harcourt and Kenyon 1976). In addition, the mark-up can also be seen by corporations as a mechanism that assists in the pursuit of strategic objectives related to their survival and growth. In general, therefore, the mark-up pricing principle can be seen as a 'rule of thumb' pricing routine adaptable to the variable and uncertain environment in which corporations seek to survive and grow. Prices reflect the interests of firms rather than the conditions of their industries or markets.

They are strategically determined rather than cost-determined and should be viewed conceptually as non-equilibrium prices, playing the more dynamic role of reflecting and promoting change in the economy.

Firms, in post-Keynesian economic analysis, are not seen as short-run profit maximisers. Rather, in an environment of fundamental uncertainty, they are seen as being concerned with longer-run considerations. Their pricing and capacity decisions reflect strategic behaviour in oligopolistic markets where the reactions of competitors and access to finance are both important concerns[10].

The Macro economy

The influence of Keynes (and Kalecki) on post-Keynesian economics is centred on the emphasis on the role of effective demand and the non-neutrality of money, decision-making under conditions of uncertainty, and the associated role of subjective and volatile expectations, all of which represented an attack on the validity of Say's law of markets. According to Say's Law, supply creates its own demand, so that neither employment nor output can ever by demand-constrained. Most importantly, this attack on Say's Law was not dependent on assumptions relating to the degree of competition or the extent of 'market rigidities', such as sticky money wages. Post-Keynesians are particularly opposed to the attempts that have been made to locate Keynes's economics within a general equilibrium framework, and reject the subsequent manifestations of 'Keynesian' thought that have become part of, or been

[10] A seminal and classic paper on this is Rothschild (1947)

derived from, the various renditions of the neoclassical synthesis. They also distance themselves from the ‘New Keynesian’ methodology that attempts to derive ‘Keynesian’ type conclusions by simply adding a variety of frictions to the New Classical apparatus (Akerlof 2007: 6). Post-Keynesians warn that the major shortcoming embodied in each of these rival theoretical perspectives is the failure to recognise and understand the inherent instability found within advanced capitalist economies when market forces are left to their own devices.

Following from the analysis of both Keynes and Kalecki, post-Keynesians emphasise that the fundamental determinant of real output and employment is the level of effective demand, with fluctuations in these variables being driven largely by investment expenditures governed by the prevailing state of expectations or ‘animal spirits’. The importance of effective demand is reinforced by the reversal, for post-Keynesian economists, of the conventional casualty running from increases in saving leading to increases in investment. Instead, as long as investment is able to obtain finance, it leads so that changes in investment, via the multiplier, generate changes in income which in turn change saving. In other words, total savings is determined by investment expenditure, and not *vice versa*.

Keynes’s theoretical structure has been refined and extended in a number of different directions by post-Keynesians, perhaps most importantly in relation to the representation of financial markets and institutions. In the tradition of Keynes, the existence of uncertainty is re-emphasised as the key rationale for holding money as a store of value, playing a key role in connecting the irreversible past and uncertain future. Following Kaldor's (1982) critique of the monetarist doctrines, the endogeneity of the money supply is stressed; with the money supply increasing as financial institutions make more loans available, leading to increased deposits in financial institutions and/or purchase of financial assets. These borrowing and lending decisions are based on expectations about the future and the cost of funds. Changes in the volume and composition of financial assets depend critically on the subjective perceptions on the part of lenders of the balance sheet positions of potential borrowers. The collective manner in which these perceptions are formed leads to alternating episodes of optimism and pessimism within financial markets, which may well amplify similar shifts in confidence within the real sectors of the economy. As was demonstrated emphatically in Hyman Minsky's (1982, 1985) financial instability hypothesis, real and financial sector instability are interconnected and inevitable characteristics of capitalist economies. Countervailing forces to endogenous instability are to be found in the operations of central banks and fiscal stabilisation policies (combined with the operation of automatic stabilisers). Notions of 'efficient markets' and the associated asset pricing models need to be abandoned if these interrelationships are to be understood.

Post-Keynesian representations of industrial structure and mark-up pricing principles outlined above have implications that extend well beyond the analysis of relative price determination, as the shift away from an emphasis on demand and supply determined equilibrium prices and quantities means that the macroeconomic analysis of output, employment and general prices changes substantially. The existence of excess capacity means that increases in demand are met through output adjustments without directly generating inflationary pressures. In the absence of demand pressures associated with the proximity of full capacity utilisation, inflationary pressures emerge largely from 'cost factors' such as raw material costs and wages through the mark-up pricing mechanism. Importantly, it is the level of effective demand, rather than real wages, which determines the level of employment. Real wages themselves are not primarily determined by market forces, but instead by the pricing behaviour outlined above and the bargaining processes related to the struggle between wages and profits for a share in national income. The outcomes of these processes depend very much on the institutional setting that has evolved through time. As a result, inflation is seen as usually resulting from the incompatible claims on national income of labour and capital – with changes in the rate of change of the price level the only mechanism that resolve this. This implies that a necessary component of policies designed to achieve price stability is the establishment of a permanent incomes policy[11]. Importantly, the notion of a 'trade-off' between inflation and unemployment is highly questionable, except to the extent that the bargaining power of wage earners may strengthen substantially during periods of lower rates of unemployment likely to occur as the economy approaches full capacity utilisation. Similarly, lower rates of unemployment can coincide with increases in effective demand and output without fuelling inflationary pressures, provided that the economy is operating below capacity utilisation, which is generally seen as being the case. This

[11] As a starting point, nominal award wages would be adjusted periodically for movements in the general price level and the overall level of productivity. For further discussion on wages policy, see Harcourt (2006, chapter 6) and King (2013).

has significant implications for the formulation and implementation of macroeconomic stabilisation polices, as outlined in the following section.

Post-Keynesians are very concerned with the analysis of growth and development, as they believe that these are the key to capitalist dynamics. However, they do not see either process as being smooth and continuous. Rather, the growth process is subject to cumulative causation processes, which dominate the dynamics of the economy, as initially analysed by Adam Smith and developed by Veblen, Myrdal, Allyn Young and Kaldor. The analysis of growth is particularly influenced by Goodwin and Kalecki[12] who developed cyclical growth models where the trend and cycles were "indissolubly mixed". In other words, it is the short-run cycle from which the trend emerges.

Economic Policy

The broad policy recommendations that flow from post-Keynesian theory often appear counter-intuitive to those who would claim to derive policy guidelines from more orthodox approaches. Generally speaking, post-Keynesians support a more interventionist policy stance than do their more mainstream colleagues. This in turn reflects the post-Keynesian perspective on the limitations of markets in achieving efficient and equitable outcomes in both the short and long runs. Therefore, strategic trade and industry policies are more likely to be supported, together with regulations

[12] See Goodwin (1953) and Kalecki (1962, 1968)

and controls thought necessary to offset inherent market myopia and volatility. The necessarily brief discussion of economic policy that follows in this section will focus on the macroeconomic sphere, with reference also to the ongoing difficulties associated with the Global Financial Crisis [GFC].

Post-Keynesian economists are much more supportive of an active or discretionary outlook on macroeconomic stabilisation policy than is the current orthodoxy, which has increasingly embraced the notion of non-discretionary policy rules. To the extent that discretionary policy has been implemented, monetary policy instruments have been the preferred policy choices in most advanced capitalist economies over recent decades, initially in the form of money supply rules, and subsequently in the form of variations in official interest rates or less conventional measures such as quantitative easing. Post-Keynesian economists, in contrast, question the effectiveness of such polices, arguing that while these measures may reduce the cost of borrowing and increase the ability of financial institutions to lend, they do not act on the incentives to spend or lend which are largely driven by subjective expectations about future income flows. This makes monetary policy particularly ineffective when it is most needed; during the peaks and troughs of the economic cycle[13]. The most important role of central banks is to contribute to the achievement of greater financial stability through regulatory and other prudential controls placed on the banking sector in particular. Other more selective interventions

[13] For a detailed critique of orthodox approaches to the role and effectiveness of monetary policy see Kriesler and Lavoie (2007) and Rogers (2013), and commentary on the post-Keynesian views on money and finance in general see Chick and Dow (2013), Lavoie (2003, 2013) and Wray (2009, 2013).

may have a role in influencing the direction of asset prices and exchange rates. It is fiscal policy that post-Keynesians argue has to take centre stage in the formulation of counter-cyclical macroeconomic policy, a policy perspective that carries with it a critique of more mainstream views on the role and effectiveness of fiscal policy.

In the tradition of Keynes and Kalecki, post-Keynesians place emphasis on the direct impact of fiscal policy on the level of output and effective demand through the well-known income-expenditure multipliers. Post-Keynesians reject arguments based on the proposition that the impact of fiscal policy will be offset by negative feedback effects on private sector spending flowing from either interest rates or the fixity of loanable funds. These, and related arguments, rest on the assumption of an exogenously determined money supply controlled by the central banks. Instead, as the monetary authorities have long been aware, in modern capitalist economies, the supply and composition of money and finance is endogenously determined by the spending and portfolio decisions of economic agents. Likewise, the theoretical and empirical legitimacy of the Ricardo-Barro equivalence theorem is rejected, a theorem which, if accepted, would imply that budget deficits (for example) would have no effect on aggregate demand, national saving, real interest rates, exchange rates or current and future output levels. The notion that budget deficits are fully offset by increases in private saving because rational forward thinking economic agents, being ‘aware’ of inter-temporal fiscal budget constraints, realise that government borrowing today has to be financed later through higher taxes, is seen to be based on a long list of behavioural assumptions that cannot be realistically associated with the stylised facts of the economic systems being analysed[14].

In the setting of macroeconomic policy formulation during the GFC and its aftermath, an even more significant point of departure between post-Keynesian and mainstream economists on the nature and role of fiscal policy becomes apparent in terms of the 'fiscal sustainability debate'. The mainstream position has been succinctly summarised by the IMF in terms of a 'daunting fiscal challenge', especially for advanced economies, whereby the GFC and associated increases in fiscal deficits and government debt have meant that while 'fiscal activism has cushioned the adverse effects of the crisis,' it is now necessary to 'articulate a strategy to ensure the sustainability of the public finances'. Despite the fact that it conceded that the 'recovery' from the GFC was 'uneven and fragile, and that unemployment in many countries remains at unacceptable levels', a retreat from expansionary fiscal policy and adoption of austerity packages was deemed necessary to meet the objective of reducing public debt to GDP ratios to 'sustainable' levels (IMF 2010: 3-4). Implicit in this argument is the notion that governments, like households and corporations, must 'finance' any revenue-expenditure shortfalls through borrowing. This is despite the fact that, unlike households and corporations, governments are able to issue currency.

By contrast, the post-Keynesian perspective embraces principles of functional finance, originally proposed by Abba Lerner back in the 1940s, where it is

[14] See also Tobin (1980)

demonstrated that the capacity of governments to spend is not constrained by their ability to collect tax revenue or by the willingness of the private sector to hold government securities[15]. Instead governments spend by crediting the private sector banks' settlement accounts (reserves) held at the central bank, and for nations that issue their own sovereign currency, these transactions do not require the issuance of debt to the non-bank public to proceed, unless it is a requirement imposed voluntarily by governments. Therefore, the fiscal sustainability agenda and the 'daunting fiscal challenge' perceived by the IMF, simply reflect restraints that have been imposed on, and by, governments on the operation of fiscal policy actions. Ultimately, the capacity of governments to spend is constrained only by the willingness of the private sector to exchange fiat money issued by the government in return for goods and services, and by the productive capacity of the economy to absorb the increased effective demand flowing from the fiscal policy actions.

It is essential to note that the fiscal policy financing issue is distinct from debate over the appropriate stance of fiscal policy. The absence of financial constraints in the form envisaged and advocated by mainstream economists does not imply that fiscal budget deficits will necessarily correspond to 'responsible' macroeconomic policy. From the functional finance perspective, the goals of fiscal policy are full employment and price stability, rather than any particular relation

[15] Discussion here draws on a more detailed coverage in Hart (2011). For Lerner's original contributions see Lerner (1943, 1948) and commentary in Collander (1984). Further discussion of the principles of functional finance can be found in Bell and Wray (2003) and contributors to Nell and Forstater (2003). It should be remembered that that by definition, the budget deficit must be equal to the changes in private sector holding of government securities *plus* changes in the money base (which includes private sector bank reserves held at the central bank)

between either government expenditures or revenues or the sales and purchases of government securities. From the functional finance perspective, monetary policy plays very much the role of servant in the overall scheme of macroeconomic policy formulation, with fiscal policy being the master once freed from the self-imposed ‘‘financing rules.’’ Interest rate targeting monetary policy is not the central anti-inflationary policy tool in this setting; rather (often politically unpalatable) increases in taxation are prescribed for governments in situations where inflationary pressures persist. In this setting central banks operate in concert with democratically elected governments and their Treasuries[16].

While post-Keynesians argue that Governments have the ability to manipulate aggregate demand, they caution that macroeconomic policy in itself is not sufficient to achieve objectives such as prolonged full employment and price stability. As noted earlier, some degree of centralization and of coordination of wages setting is necessary if the inflationary consequences of the maintenance of full employment are to be addressed. At the same time, recent experience has illustrated that it is essential that real wages match productivity growth in the economy. During the period leading up to the GFC, there were significant declines in the real wages/labour productivity ratios in most of the advanced economies. Normally this would have led to a reduction in consumption and aggregate demand. However, this spending gap was accommodated by ‘investment income’ and unrealised capital gains, fuelled by asset market booms and financed through increased lending by financial institutions

[16] For a post-Keynesian criticism of the arguments for central bank independence see Forder (2000, 2004) and Bibow 2013.

leading to increasingly high debt ratios. This serves to emphasise the importance of prudential supervision of lending behaviour by central banks and the importance of the distribution of income and wealth in determining private sector spending patterns through time.[17]

More generally, there are socio-political forces that mitigate against the use of macroeconomic policies to sustain full employment while preserving price stability. As Kalecki (1943) warned in his study of the political aspects of full employment, the assumption that Governments will be motivated to maintain full employment in a capitalist economy if it knows how to do so may well be fallacious, as social and political changes resulting from the maintenance of full employment may conflict with the interests of what Kalecki termed the 'captains of industry'. Ultimately, the success or otherwise of economic policy depends on the qualities of the socio-economic institutions that have evolved through time and the political forces that drive public opinion[18].

Some Conclusions

This brief survey has attempted to explain the main areas in which post-Keynesian theory and policy differs from that of the mainstream. Limitations of space have prevented us from doing justice to the full post-Keynesian program, and

[17] For a more detailed discussion of the post-Keynesian analysis of the GFC see Dymski (2013), Palley (2013) and Taylor (2010, 2013). For a critique of mainstream theory of the role of the state and the post-Keynesian alternative see Harcourt (2010), Holt (2013) and Arestis and Sawyer (2013)

[18] The nature of these socio-economic forces are discussed further by Sawyer (1995).

interested readers are encouraged to pursue further reading from the bibliography below.

In terms of the theoretical approach, post-Keynesians are sceptical of the usefulness of the equilibrium method, and favour an approach based on path-determined models with, due to the influence of uncertainty on economic decisions, an important role assigned to money, institutions and rules of thumb. Money and finance are seen as influencing real activity in both the short and the long run. It is not the wage rate which determines the level of employment, but, rather, the level of aggregate demand. This means that there are no forces within capitalist economies which can guarantee full employment, so that some government intervention is important. While monetary policy is seen as a rather blunt instrument, fiscal policy is perceived to be much more potent than it is in the mainstream. However, there are inherent limits to the achievement of sustained full employment in capitalist economies.

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