Heterodox Macroeconomics
Keynes, Marx and globalization

Edited by Jonathan P. Goldstein and Michael G. Hillard
2 The central core of heterodox macroeconomics

Malcolm Sawyer

Introduction

This chapter is firmly based on the idea that there is a common core of heterodox macroeconomics. It seeks to sketch the contents of that core, and to briefly consider some of the implications of the heterodox analysis particularly in the policy direction. In this chapter I have avoided using the term post-Keynesian (rather than heterodox) as many of the propositions advanced below either do not make an appearance in Keynes' writings or run counter to his analysis (and it enables me to side-step the issue of what is post-Keynesian, though leaving the question of what are the boundaries of heterodox macroeconomics). Although we do not seek to ascribe the origins of the ideas sketched here, many of them come from the works of Kaldor, Kalecki and Robinson.

The chapter outlines what are considered to be the eight key features of a heterodox macroeconomic analysis. The following section draws out three sets of implications from those features. Whilst we would argue that the eight features listed are the central ones, the three sets of implications are intended to be illustrative rather than exhaustive.

The key features of heterodox macroeconomics

Heterodox macroeconomics is macroeconomics in the sense described by Pasinetti that it is not “macro-economic” in the sense of representing a first simplified rough step towards a more detailed and disaggregated analysis. It is macroeconomic because it could not be otherwise. Only problems have been discussed which are of a macro-economic nature; an accurate investigation of them has nothing to do with disaggregation. They would remain the same - i.e. they would still arise at a macro-economic level - even if we were to break down the model into a disaggregated analysis.

(Pasinetti, 1974)

But it is also the case that heterodox macroeconomic analysis has always involved microeconomics in the obvious sense that the behaviors of households, workers, social classes and firms are analyzed and modeled. The ways in which that microeconomic analysis is undertaken varies considerably between authors: this is particularly noticeable with respect to the behavior of firms and the nature of competition. Whereas there is a uniformity in the mainstream approach with utility and profit maximization widely applied, there is no attempt to apply the same mode of behavior to all, and any notion of methodological individualism is rejected. The institutional and social arrangements in an economy have to be reflected in the ways in which economic behavior is analyzed.

Heterodox macroeconomics analysis is clearly intended to be that of a monetary capitalist economy in which the monetary and financial sectors play a central role (in contrast to the passive monetary sector as envisaged in most mainstream macroeconomics). The decision-making of individuals and firms, the interactions of those decisions and the evolution of the economy have to be analyzed in the context of fundamental uncertainty (in the sense of Keynes) where the future is unknown and unknowable, and the evolution of the economy must depend on the collective decisions which are made.

There are, we suggest, eight key features in heterodox macroeconomic analysis, and it is to these we now turn.

Aggregate demand

A central element in heterodox macroeconomics is that the level of demand is always important for the level of economic activity, that is in the long run (however that is defined) as well as the short run. There is thereby a denial of the validity of approach of the neoclassical synthesis portraying the long run as characterized by supply-side equilibrium (at full employment). Whilst some other approaches to macroeconomics recognize the role of demand in the short run but not in the long run, the heterodox approach views the role of demand as pervasive. There are then no market forces which could be relied on to propel the level of aggregate demand towards any supply-side equilibrium (or towards any other desired level of economic activity). There is a denial of the operation of relative prices to clear markets or of the real balance effect (in an endogenous money world) as the instrument of adjustment. Indeed, as illustrated in the paper of Hein and Stockhammer (2007), how private aggregate demand changes in the face of unemployment depends on the reactions of wages and prices, the change in the distribution of income and the impact which that has on the level of demand, and those changes may lead aggregate demand towards a supply-side equilibrium, or may lead demand away. There are numerous ways in which the level of demand impacts on supply and the evolution of supply potential, and this is outlined below (pp. 27-8).

Role of investment

There has long been agreement in heterodox macroeconomic analysis on the key and dual roles played by investment as a relative volatile component of
aggregate demand and the driving force in the savings-investment relationship, and as involving the creation of productive potential. Investment by its nature is forward-looking and firms are looking for rewards from their investment over a long future time horizon. But the future is inherently uncertain and unknowable, and investment decisions cannot come from or be modeled by precise optimization.

Investment is undertaken by firms, and hence the amount of investment undertaken depends on the objectives of the firms, their organization structure and goals as well as the market structure and competitive framework within which they operate. Heterodox macroeconomists have provided many analyses of investment, based on different approaches to firms' organization and behavior (see, for example, Crotty, 1990). Limitations of space preclude any significant discussion of those analyses, except to say that the analysis of investment behavior has to be institutional specific. A significant development in the past two decades or so has been that of financialization (e.g. Epstein, 2005) and the changing relationship between industry and finance. In macroeconomic terms a key aspect of that has been the impact on rate of investment and capital accumulation (there are, of course, many other important aspects). The pace of investment at any time has also to be understood in the context of the prevailing technological paradigm.

In terms of the macroeconomic variables which influence investment, there is broad agreement, notably profitability as a source of finance and as a spur to capital accumulation, and the level and change in capacity utilization through some form of accelerator mechanism. Investment in effect fuses together the demand and supply side in that it is a component of demand but adds to productive potential. The particular significant aspect of the heterodox approach is that investment responds to ongoing events including those impacted by the level of demand (most obviously capacity utilization) rather than being the way in which the capital stock adjusts to the pre-determined growth path of the economy. "The long-run trend is but a slowly changing component of a chain of short-period situations; it has no independent entity” (Kalecki, 1943, p. 263). Further, “technical progress is infused into the economic system through the creation of new equipment, which depends on current (gross) investment expenditure” (Kaldor and Mirrlees, 1962, p. 174).

**Income distribution**

Distributions of income, personal and functional, are, of course, of considerable interest and concern in their own right. Heterodox macroeconomics has viewed the functional distribution of income as determined within the macroeconomic analysis, and that the distribution of income impacts on the level of demand. It is a basic proposition from Kaldor (1956) and Kalecki (1943) that the propensity to save out of wages is small (or zero) and out of profits substantial. Kaldor (1956) clearly indicates the relevance of that proposition for the distribution of income between wages and profits, though his analysis is based a full employment assumption. The Kaleckian approach views the distribution of income as set by the degree of monopoly, leading to the view that the volume of profits is determined by the spending decisions of capitalists; the well-known aphorism that “workers spend what they earn, capitalists earn what they spend” summarizes this view.

The view that the propensity to spend out of wages was much larger than that out of profits led to a stagnationist view, namely that low demand and hence stagnation could result from wage share being relatively low thereby depressing consumption demand. The incorporation of the idea that investment depends on profitability and capacity utilization by Bhaduri and Marglin (1990) along with the differential propensities led to the distinction which they drew between a stagnationist regime and an exhortationist regime, now more usually referred to as wage-led or profit-led regimes. The significance of this approach is that it brings income distribution into a central role in the determination of aggregate demand and the level of economic activity. It also serves as a reminder that shifts in behavior or in structure – in this case in the differential in propensity to consume and the influence of profitability on investment – can have marked effects on approach to policy. The particular important element of this approach is the view that in a wage-led regime application of the orthodox medicine for unemployment – that is restraint of real wages – becomes counterproductive. The establishment of whether an economy is in a wage-led or profit-led regime then becomes a matter of some importance.

**Interdependence of demand and supply and path dependency**

The independence of demand and supply has been a (perhaps the) central proposition in mainstream economics, whether at the microeconomic level where the demand and supply curves only interact through the price mechanism with a separation of the factors influencing demand and those influencing supply or at the macroeconomic level. The AD-AS analysis rather replicates the microeconomic demand and supply analysis. The separation of the real and monetary sides of the economy, reflected in the classical dichotomy and the use of the term “natural” to try to separate the real forces from monetary forces” (Friedman, 1968, following Wickhiss). The way in which the growth process has been modeled as converging on the “natural rate of growth” is a further illustration.

The interdependence of demand and supply is closely related with path dependency. The term path dependency is used to emphasize two features. First, the path of the economy is not pre-determined as in neoclassical growth theory (including endogenous growth theory) but rather the path emerges in an evolutionary manner. Second, it is used rather than the term hysteresis which tends to suggest a movement from one equilibrium to another, albeit that the equilibrium toward which there is movement is influenced by the path taken.

The mechanisms by which there is path dependency and by which the path of demand opens up future supply are various, but three are generally to the fore. The first one, already discussed in the context of investment, where it is clear
that current demand influences investment which thereby adds to the capital stock. This general idea can readily be extended to a range of investment including that in education and health provision. The second is the way in which people are drawn into or pushed out of the effective labor supply through demand. Participation rates vary, ages of entry into and exit from the labor force change and there is regional and international migration. Clearly not all of such changes can be ascribed to pressures of demand as demographics, changes in social attitudes etc. are involved. But the evolution of the labor force cannot be understood without reference to demand. The third comes from the operation of a Verdoorn law type effect and "learning by doing" (and a variety of other forms of learning, e.g. "learning by exporting"). The rate of productivity change is then linked with the level of activity in the economy, which itself is determined by the level of demand.

Bhaduri (2006) provides an example of a growth model which fuses together the demand and supply sides. His model is one in which "both investment and savings decisions exert their influences on the long-run equilibrium growth of output." While this result is a natural outcome of introducing aggregate demand in the analysis by separating investment from savings decisions, it is the endogeneity of labor productivity growth with increasing returns that provides the main impetus to the growth process on the supply side. A novel aspect of this model is to view the growth in both the real wage rate and in labor productivity "as being driven simultaneously by the forces of intra-class competition among capitalist firms over market shares, as well as by inter-class conflict over income shares" (p. 80).

Dutt (2006) is a further example with "a simple model with endogenous technological change in which aggregate demand and aggregate supply both have a role to play and in which long-run growth can be affected by aggregate demand" (p. 331).

Money and credit

The role of money created through the credit system and now labeled endogenous money has been a central element in heterodox macroeconomics for the past quarter of a century, though ideas on endogenous money and the development of the circuitist approach go much further back. Moore (1988) was a major contribution which marked out the way for post-Keynesian analysis, and ensured an emphasis was given to the money creation processes. Kalecki (as argued in Sawyer, 2001), Kaldor (1970), Robinson (1956) and others had incorporated an essentially endogenous money approach. Keynesian analysis (in the form of IS-LM) had, of course, proceeded with exogenous money and all that entailed, and it was perhaps only the onslaught of monetarism which required more serious attention be given to the nature and role of money (Kaldor, 1970).

Endogenous money is important for macroeconomic analysis in a number of ways. First, an adjustment process which relies on some idea of real balance effect is no longer viable since endogenous money does not constitute net worth; the orthodoxy (in the form of the new consensus in macroeconomics, NCM: see Arestis and Sawyer, 2008) has now adopted some aspects of endogenous money but rely on the wisdom of the Central Bank in the setting of interest rates (at the "natural rate of interest"). The adjustment process becomes a matter of administrative decision rather than market mechanism. Second, the manner in which loans are provided by the bank system becomes a central question. It is not only that banks hold the key to expansion since any refusal on their part to provide loans would limit any expansion of expenditure. The way in which the inevitable credit rationing occurs in terms of who are "awarded" loans and who are not reflects a wide range of discrimination (gender, ethnicity etc.). The type of sectors (e.g. large vs. small business, high tech vs. low tech) favored which influence the evolution of the economy in a path dependent world. The terms and conditions on which loans are supplied can also interact with the analysis of financial liberalization. Instead of the "loanable funds" approach of McKinnon (1973) and Shaw (1973) in which banks act as intermediaries between savings and investment, the banks provide credit "off their own bat."

Third, monetary policy becomes more closely identified with interest rate policy, though interest rate policy has always been the key element in monetary policy even in the heyday of monetarism. But the heterodox analysis suggests that interest rate movements have relatively small effects and points to the need for a broader concept of monetary policy (see Arestis and Sawyer, 2006a).

Fourth, the behavior of banks and related credit institutions become important for the economy. Their willingness or otherwise to provide loans and the terms on which they are provided impact on the level and structure of demand. Further, the financial sector is prone to act in ways which generate bubbles and crises: "instability is determined by mechanisms within the system, not outside it; our economy is not unstable because it is shocked by oil, wars or monetary surprises, but because of its nature" (Minsky, 1986, p. 172).

Finally, any notion of the non-neutrality of money disappears. It is difficult to even envisage what a non-monetary economy would look like in order to judge the neutrality or otherwise of money. But since money comes into existence via the credit process, the ways in which credit is created impacts on investment, and thereby the productive potential of the economy.

Price and wage determination and the supply-side of the economy in the short run

There have been many contributions by heterodox economists to the analysis of price determination and of wage determination. Here we can only sketch some aspects. Firms make interrelated decisions on price, output supply and employment offers in light of the demand conditions which they face and their own productive capacity. In doing so, firms set the relationship between price and wage, and their pricing decisions bear on profit determination. The determination of wages is represented by a wage curve as a positive relationship between real wages and employment and based on efficiency wage considerations and/or on collective bargaining. From the interaction of these price and wage determinations a form of
supply-side equilibrium can be derived, which can be seen as forming an inflation barrier. This could be seen as akin to a non-accelerating inflation rate of unemployment (NAIRU). But this inflation barrier differs from the NAIRU in (at least) two major respects. First, it is presented in a manner which seeks to emphasize that the interaction of prices and wages do not take place in what may be described as "the labor market," and hence the supply-side equilibrium is not set by the features of the labor market. Instead the emphasis is placed on the role of productive capacity. Second, there is no presumption that the inflation barrier acts as a strong (or even weak) attractor for the actual level of economic activity. There are no market forces which lead the level of aggregate demand to adjust to the inflation barrier.

Inflation

Inflation is a non-monetary phenomenon in the sense that changes in the stock of money do not determine the rate of inflation in any causal sense, but rather the rate of change of the stock of money (endogenously) adjusts to the pace of inflation. There are a range of factors which impact on the rate of inflation including a struggle over income shares, the level of and rate of changes of the level of aggregate demand and cost-push factors coming notably from the foreign sector (change in import prices and the exchange rate).

A heterodox approach (which we labeled a structuralist approach, Arestis and Sawyer, 2005) concentrates on three key elements in the inflationary process. One set of inflationary pressures comes from the level of demand relative to the size of productive capacity. There is no presumption that there is adequate capacity in an economy to support the full employment of labor, and hence enterprises may be operating at or even above normal capacity with substantial levels of unemployment.

A second and related set of inflationary pressures comes from the inherent conflict over the distribution of income. The ability of the economy to reconcile the conflict depends, inter alia, on the productive capacity of the economy. The determination of an inflation barrier (as indeed in the literature on the NAIRU and on the "natural rate of unemployment") involves the notion that wages and prices rise together with the difference in the rate of increase of wages and that of prices being equal to the rate of labor productivity growth. In other words, the distribution of income between wages and profits would remain constant. This serves as a reminder that there are basic conflicts over the distribution of income. If all groups and classes in society were in effect content with the existing distribution of income, then it could be expected that there would not be a problem of inflation: at a minimum it would mean that the rate of inflation was constant. An increase in the rate of inflation can be viewed as arising from some combination of intention of some groups to increase their share of income and enhanced opportunity to do so. A higher level of demand for labor may, for example, be seen as enhanced opportunity for workers to increase their share. But a related higher level of demand for output would allow firms to increase their profits. The "conflict theory" of inflation can be seen as based on this insight.

This, the level of economic activity depends on the level of aggregate demand, and there is no presumption that the level of demand will generate full employment of labor and/or full capacity utilization. Investment has a crucial dual role to play through its impact on aggregate demand and through its enhancing impact on capital stock. Further, there is no automatic mechanism, which takes the level of aggregate demand to any supply-side equilibrium. Mechanisms such as adjustment of real wages to clear the labor market, or the operation of the real balance effect, are explicitly rejected.

Open economy considerations

The openness of an economy means that the domestic economy is buffeted by events in the rest of the world. There is no reason to think that the domestic economy can be insulated from the rest of the world through smooth adjustments in the exchange rate: hence inflation in the rest of the world impacts on domestic inflation in that it cannot be assumed that some form of purchasing power parity holds under which the nominal exchange rate would move to offset any inflation differential.

It would be generally agreed that there has been considerable volatility of exchange rates (both nominal and real) under the floating exchange rate regime, and that capital related flows, rather than trade related flows, across the exchanges are the dominant factor influencing movements in the exchange rate. It has not been possible to understand the movements in the exchange rate, perhaps other than to say that uncovered interest rate parity does not apply. Whilst the real exchange rate has some mean reverting properties, these do not prevent movements of the order of +/-25 to 30 percent in the real exchange rate (and also in the nominal exchange rate given the similarities of inflationary experience across industrialized countries).

Orthodox economics makes much of "inter temporal budget constraints" and the limitations which they place on the behavior of individuals and of government. Yet the most significant of those type of constraints, namely that on the country as a whole, has played little role. In heterodox economics by contrast a variant of such constraints has played a considerable role, notably in the form of balance of payments constrained growth as developed by Thirlwall (e.g. Thirlwall, 1979). The argument is straightforward: as a country cannot borrow more and more on its capital account, this places a constraint on its current account and trade position. Imports and exports of goods and services have to grow at much the same rate, and putting continuous real devaluation to one side, this leads to growth of domestic income equal to the income elasticity of demand for exports multiplied by growth of world income divided by income elasticity of demand for imports.

Some implications

In this section we briefly draw out three sets of implications from the heterodox analysis to indicate the importance and relevance of that analysis for our understanding of the world.
Demand management policies

In the heterodox approach, securing a high level of aggregate demand and of economic activity retains a high priority for the usual reasons (including the lowering of unemployment) but also for the longer term effects. There is clearly no presumption that the level of demand will be consistent with a high level of economic activity (nor that there is sufficient productive capacity to employ the available labor). Nor is there any clear market mechanism which would secure the required level of demand. The heterodox approach would tend to view fiscal policy as a much more potent means of securing the high level of demand than monetary policy (Arestis and Sawyer, 2003). The arguments which have been advanced against the use of fiscal policy are based on the assumption that there is no issue over the lack of aggregate demand (Arestis and Sawyer, 2006b): for example crowding out arguments assume there is something to be crowded out.

The nature of inflation barriers and policy implications

A key aspect of the prevailing orthodoxy can be summarized in the terms “natural rate of unemployment” (NRU) and “non-accelerating inflation rate of unemployment” (NAIRU). The significance of those terms is that the emphasis is placed on the labor market (if such exists) as the arena in which the level of unemployment is effectively determined. It is a supply-side concept with the (often implicit) assumption that the level of economic activity will gravitate to that level of unemployment. Further, there is the suggestion that a relatively high level of unemployment is a consequence of poorly functioning, over-regulated, inflexible labor markets.

The heterodox approach has often been viewed in terms that money wages may be settled in the labor market (whether through collective bargaining or not) but real wages are effectively set in the product market through the pricing decisions of firms. This type of view is evident in Keynes (1936) and Kalecki’s analysis of the degree of monopoly which not only is seen to set the distribution of income but also the level of real wages. Whilst accepting that the setting of wages must necessarily be in money terms, and that pricing decisions of firms are significant for real wages, we bring in the effects of workers’ aspirations and bargaining power into the determination of any inflation barrier. There is a conflict over the distribution of income, and the inflation barrier represents the position where there is some “reconciliation” of that conflict.

In market economies, there is often a mismatch between available productive capacity and the labor force and its geographical distribution. Specifically, the zero output gap (where output equals trend output) and the full employment of labor cannot be used interchangeably. Higher levels of employment require more productive capacity. The aligning of productive capacity with the size and distribution of the labor force is a major task, which is rarely accomplished. There are generally supply-side (as well as demand-side) constraints on the achievement of full employment of labor. But the nature of those constraints comes from the lack of productive capacity rather than any notion of them arising from inflexible or rigid labor markets. Industrial and regional policies are required to ensure that any inflation barrier is compatible with the full employment of labor. Public expenditure, particularly investment, can also be structured to ease supply constraints. It then follows that policies which may be described as industrial and regional policies are required to address these issues of lack of productive capacity.

The non-neutrality of money and finance

“Money matters” is a rather bizarre way of summarizing monetarism in the sense that while money supply was viewed as a causal factor in inflation, it had no effect on the level of or composition of output and employment. The neutrality of money and the classical dichotomy were central to monetarism and related approaches. In a similar vein the Wicksellian based new consensus in macroeconomics retains a sense of neutrality in that it is based around a “natural rate of interest” which is neutral in respect to commodity prices, and tend neither to raise nor to lower them. This is necessary the same as the rate of interest which would be determined by supply and demand if no use were made of money and all lending were effected in the form of real capital goods. It comes to much the same thing to describe it as the current value of the natural rate of interest on capital.

(Wicksell, 1965, p. 102)

It is difficult (impossible) to envisage how a sophisticated market economy would operate without money or finance, and hence the “benchmark” of a real economy against which the neutrality of money and finance would be assessed is not available. It is clearly possible to write down macroeconomic models without explicit mention of money or finance, as is done in many Kaleckian models. But there is an implicit (and sometimes explicit) view of the banking system to the effect that loans will be forthcoming to enable investment to be financed and that if loans were not provided then the investment could not occur.

Conclusions

The belief which lies behind this chapter is that there is a set of propositions which are broadly shared by heterodox macroeconomists. We have sought to sketch out those propositions and to illustrate their significance, and to look at some of the implications of this heterodox approach.

Notes

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