Introduction

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Post Keynesian literature has long been associated with the study of money, financial markets, and financial instability. Indeed, this is perhaps the area to which Post Keynesians have made the greatest contributions. Paul Davidson's *Money and the Real World* revived interest in Keynes's contributions to monetary theory, putting money back into 'Keynesian' economics. Indeed, it is ironic that most of the post-war research associated with Keynes's name (whether of the neoclassical synthesis orthodoxy or even of the Cambridge heterodoxy) relegated the role of money to the background. Davidson emphasized the 'Chapter 17' version of Keynes, in which money plays a crucial role in the economy owing to its peculiar characteristics and to the nature of decision making in conditions of uncertainty. This was, of course, the theme of contemporaneous work by Jan Kregel, who contrasted Keynes's methodology ('shifting equilibrium') to that of orthodoxy. Since the early 1980s, there have been major advances made to the Post Keynesian approach to money, in particular the development of Basil Moore's horizontalism, the refinement of the Italian–French circuit approach, and the revival of the Knapp–Keynes chartalist approach. Many of the papers collected here draw on these traditions in the Post Keynesian literature to inform their thinking on money and monetary policy. In particular, the paper by Thabet as well as the paper by Springler, concern recent Post Keynesian approaches to money.

The economist whose name is most intimately associated with the Post Keynesian focus on financial institutions and financial instability is Hyman Minsky. While his early work can probably be identified more closely with the institutionalists than with the Keynesians of the 1950s and 1960s, he gradually incorporated the economics of Keynes within his vision of an economy operating with complex financial relations. Long before financial instability (re)appeared in the developed capitalist economies, Minsky explained why such systems are inherently unstable using his 'financial theory of investment and investment theory of the cycle'. Although in his view it would be impossible to eliminate instability, he did lay out the conditions that would tend to enhance stability, or at least postpone the instability that would inevitably arise in economies that managed to prevent 'it' (another great depression) from happening

again. There is no question that Minsky's thoughts have had the greatest influence on Post Keynesian research into domestic financial instability in developed nations, and many researchers have carried Minsky's analysis to the field of international financial instability. Examples in this volume of research inspired by Minsky include most importantly the paper by Kregel, as well as the papers by Huerta, by Hudson and by Muñoz and Snowden.

It is of course well-known that Keynes participated in the discussions that would reform the international financial system in the post-war world. While his 'bancor' plan would not be adopted, the Bretton Woods system did help to bring a long period of relative international stability based on a dollar-gold standard. With the breakdown of that system in the early 1970s, the international monetary system has taken on something of a Tower of Babel form, with experiments in floating currencies, dirty float, fixed exchange rates, currency boards, monetary unions and dollarization. The result has been a series of international currency and financial crises – and a case could be made that these are becoming more frequent and increasingly severe. Davidson has revived and updated the Keynes plan for a post-Bretton Woods era. Many Post Keynesians have followed Davidson's lead in calling for a return to some sort of fixed exchange rate system. It is not always clear whether these Post Keynesians would endorse a 'go-it-alone' strategy that is not consistent with Keynes's own bancor plan, but at least some seem to support Europe's monetary union (while rejecting Maastricht criteria). Others have called for floating exchange rates, perhaps only as a 'second best' politically feasible alternative to Keynes's bancor plan, which is seen as highly improbable for political reasons. At least a few argue for floating rates as 'first best' because they preserve fiscal and monetary policy independence, with Goodhart's critique of European monetary union on the basis of chartalist theory serving as perhaps the best example. Authors in this volume that take up international stability while addressing problems with the international monetary arrangements include, in addition to Kregel and Goodhart, the papers by Herr and Priewe, by Huerta, and by Muñoz and Snowden.

In the remainder of this introduction, we will briefly summarize the most important contributions of the papers collected in this volume.

In Chapter 1, Jan Kregel argues that the international financial system has evolved since the breakdown of the Bretton Woods system in a manner that increases instability and the risk of financial crises. Further, the primary international institution created in the post-war period to contain international instability, the IMF, has changed its operating procedure so that it contributes to instability. Under the fixed exchange rate system of the Bretton Woods era, IMF lending was largely undertaken on a short-term basis to support exchange rate stability. As a condition of such 'bridging loans', countries had to deflate to generate surpluses on external accounts to earn foreign exchange to service the debt to the IMF. In this period, private international lending was relatively

unimportant. However, after the 1970s, private bank loans and portfolio flows came to dominate international finance, permitting sustained imbalances in external accounts. After the US and UK experiments in monetarism, interest rates rose sharply on large outstanding foreign currency-denominated external debt (especially dollar debt). Private international institutions reduced lending to developing country borrowers with external earnings insufficient to service debt. Thus the IMF found a new role as it provided short-term adjustment lending to prevent international default. Effectively, the IMF became a guarantor of creditworthiness and enforcer of adjustment policies that came to be known as the 'Washington Consensus'. In the context of large and growing international financial flows, IMF lending was far too small to maintain international stability, so it had to recruit private lenders by providing a 'seal of approval' that the country's policies were on the right track. The problem is that external debt would continue to grow, putting developing nations into a 'Ponzi' finance situation in which external earnings are not sufficient to cover net capital factor services. At the same time, the adjustment policies almost guarantee slow domestic growth and, given nearly global adoption of demand constraints, a deflationary bias is built into the international system. The US has become the market of 'last resort', but has perhaps also succumbed to Ponzi finance. Kregel suggests that analysts should return to Domar's stability conditions and to Keynes's Clearing Union to find a path out of this dilemma.

Charles Goodhart's chapter examines the deficiencies of many of the contemporary macroeconomic models, especially their treatment of money and their neglect of the role of government. He does note, however, that the old 'exogenous' money approach of the ISLM models – in which the central bank controls the money supply – has been replaced in many models with the recognition that central banks actually set interest rates endogenously in response to perceived economic developments. Still, he finds much of the literature on central bank attempts to fool the public to be silly and welcomes recent models that include more realistic behaviour of central banks that use interest rates to target inflation. He would like to see more serious work on wage and price stickiness and on policy lags to obtain a better match with what he takes to be actual real-world experience. He is also sceptical of representative agent models that presume complete financial markets for it is not clear why such economies would use money. Further, he suggests that, rather than blind adoption of rational expectations, the expectations-generating process should be time-variant and endogenous, subject to inertia, hysteresis and initial conditions. Goodhart is particularly impressed with the work of Shubik, which embraces incomplete financial markets, default, heterogeneous agents and regulatory policy. This is a precondition to studying systemic financial stability issues such as contagion and the role that government can play. Finally, Goodhart devotes the second half of his chapter to macro policy stabilization issues, addressing in particular

the euro and the Growth and Stability Pact. As he has argued elsewhere, the attempt to divorce fiscal and monetary policy is the main flaw of the euro system. Because most economic theory still locates the origins of money in barter and attributes its evolution to the search for transactions costs reducing media of exchange, it is not able to model the role of government in the monetary system. Relatedly, Goodhart believes that economists have paid far too little attention to legal and governance systems and hence to the important role played by government in economic growth.

The chapter by Tauheed and Wray explores the conventional wisdom that monetary policy should raise interest rates to dampen demand, slow the economy and thus restrain inflation. It demonstrates that, on plausible assumptions, raising interest rates could actually stimulate aggregate demand through debt service payments made by government on its outstanding debt. This is more likely if private sector indebtedness is small, if private spending is not very interest-rate elastic, if interest rates are high and if government debt is large (above 50 per cent) relative to GDP. Thus it is shown that, if monetary policy tries to fight inflationary pressures that could be fuelled by large government deficits, this could generate destabilizing feedback effects: the high interest rates would increase budget deficits (as interest payments on government debt would rise) and thereby increase private sector income and wealth, leading to ever-rising private demand. Similarly, in recession, lowering interest rates could actually depress demand by reducing government interest payments. Such a scenario could be relevant to the case of Japan by the end of the 1990s, when the overnight interest rate was kept at zero in the face of depressed private sector spending. Given the very large government budget deficits and government debt-to-GDP ratios above 100 per cent, it is possible that raising rates would actually be stimulative.

In a very interesting analysis (Chapter 4), Edwin Le Heron and Emmanuel Carre argue that the evolution of monetary policy in the post-war period can best be understood by distinguishing between a *confidence* strategy and a *credibility* strategy. While debate over monetary policy formation has traditionally taken the form of rules versus discretion, the authors argue that such an approach sheds little light on central bank behaviour, especially over the past 25 years. Rather, policy has evolved from behaviour designed to increase credibility to one that is focused on building confidence. The old monetarist strategy based on a constant growth rate of money rule really was designed to build credibility: the central bank says what it does and does what it says. Further, this strategy was based on 'common knowledge' of the 'natural laws' of the economy. By respecting the universal truth that inflation is always and everywhere the result of too much money, the central bank could control inflation by controlling money growth. Even as the old-style monetarism morphed into new classical economics, the commitment to rules built credibility by avoiding surprises.

However, the consensus about the link between money growth and inflation broke down over the 1980s, leading to uncertainty about the natural laws (if they exist at all) guiding the economy. Hence monetary policy became to some extent rudderless. While many analysts and some central banks have adopted inflation targets, Chairman Greenspan of the Fed has rejected these as inflexible. Rather, the Fed has adopted a strategy of building confidence by communicating its understanding and policy intentions while taking into account expectations of markets so as to avoid surprises. Thus the Fed announces its likely policy changes far in advance and only moves once markets appear to expect action. By creating a common understanding of economic performance, even while admitting that the economy is complex and the future unknowable, Greenspan is still able to garner the confidence of markets. Hence Le Heron and Carre see in Greenspan's Fed a return to Keynes's philosophy, no doubt a position that many American Post Keynesians will view as provocative.

In the next chapter, Slim Thabet draws out the links between Post Keynesian research and one version of Institutionalism: the original Institutional economics (OIE) associated with Veblen, as opposed to the new Institutional economics (NIE) associated with North and Williamson that he believes is more consistent with orthodoxy. Of course, Post Keynesians are well known for their preoccupation with the importance of time, irreversibility and decision making under conditions of uncertainty, but what is less recognized is the study of institutions created to deal with uncertainty. After first summarizing the implications of accepting fundamental uncertainty into models of the economy, Thabet moves on to an analysis of the institutions that have been created to constrain instability in a non-ergodic world. Of course, money is the major institution of capitalist economies and has been extensively studied by Post Keynesians as well as by economists working in the OIE tradition. Thabet also examines the links among legal contracts, especially forward contracts, banking institutions and money, noting the natural affinity between the ideas of Keynes and those of Commons. The chapter also discusses the reaction of OIE 'New Dealers' to Keynes's *General Theory*, which provided a theoretical basis for the new institutions that were developed to usher in 'the age of Keynes'. Many post-war economists explicitly linked OIE and Keynes's theory in their own work: they included Eichner, Dillard, Galbraith, Cornwall and most importantly, Minsky. However, Thabet argues that OIE could benefit by paying greater attention to Post Keynesian work on uncertainty even as Post Keynesians could benefit through analysis of real-world institutions.

Michael Hudson's contribution (Chapter 6) examines the rapid growth of debt and financial savings that is a characteristic of post-war capitalist economies. This chapter recalls Minsky's description of the current stage of capitalism as the 'money manager' epoch, with huge flows of 'managed' or 'institutionalized' money chasing returns. Hudson argues that much of the savings and debt is

created to finance purchase of real estate, stocks and bonds, rather than to finance tangible investment that would increase employment. Indeed, it is the potential for making high returns through speculative purchases of financial assets that turns attention away from the potential profitability of investing in means of production. This argument, of course, also recalls Keynes's Chapter 12 from the *General Theory*, that speculation could come to dominate 'enterprise'. Higher saving propensities can bid up financial asset prices, but do not increase *net savings*, defined as savings above debt. Rather, most growth of savings is equal to growth of debt. According to Hudson, a modern economy is composed of two quite distinct systems. The first, and largest, is that of land, monopoly rights and financial claims that yield *rentier* income in the form of interest, financial fees, rents and monopoly gains. The other, much smaller, system produces goods and services using labour and capital goods; profits here are very much smaller than the *rentier* proceeds. Indeed, purely financial transactions each day are greater than the annual national income. Hudson notes that the US savings rate has steadily fallen over the post-war period, and has actually been negative since the late 1990s; however, the economy has never been more 'flush' with savings and credit. That is, while net savings are below zero, gross savings are soaring as debt-financed purchases of financial assets and real estate fuel *rentier* income. Hence today's economy should be seen as a financial bubble, with asset-price inflation running apace even as commodity prices stagnate and labour's spending power falls. Hudson closely examines the growth of the 'FIRE' (financial, insurance and real estate) sector and links this to stagnation of the 'real' economy due to depressed effective demand. Earnings in the FIRE sector should be seen as transfers rather than as factor payments, effectively a diversion of revenues to a separate circular flow from the system that yields *rentier* income, little of which will be spent on output from the productive sphere. The productive sphere, in turn is hobbled by an increasing debt burden and rising transfer payments to *rentiers*. Hudson argues that something similar brought down the Roman Empire and wonders how much longer today's financial bubbles can keep expanding. Because economies cannot grow as fast as debt – which grows at least as fast as the compound interest rate – a financial crisis is likely. While government can be expected to intervene to guarantee debt, Hudson doubts that such a policy can be successful in the long run.

Gilberto Libanio notes that Post Keynesians accept long-run non-neutrality of money, cumulative causation, non-stationarity and time-dependency, and persistent effects of policy changes. At the same time, mainstream economists such as those who embrace the real business cycle approach have been searching time series data for existence of unit roots, which are taken to indicate non-stationary processes that follow a random walk. Libanio argues that evidence that many time series do exhibit unit roots could be taken to support the Post Keynesian position: that is, that such data confirm Keynesian theory rather

than real business cycle theory. After first describing tests for unit roots, the chapter lays out how these have been used to confirm real business cycle theory. It is important to recognize the role that underlying assumptions play in these interpretations, such as the usual orthodox presumption that money is neutral. Libanio moves on to a useful summary of mainstream critiques of real business cycle models, particularly by New Keynesians, some of whom deny that the evidence actually can confirm the existence of unit roots. In the second half of the chapter, Libanio examines the implications of unit roots for Post Keynesian economics. He argues that unit roots can support the possibility of persistent involuntary unemployment owing to path dependence, hysteresis in labour markets and long-run non-neutrality of money. Indeed, theories in which demand constraints operate to constrain growth, or in which there are multiple equilibria (as in Keynes's 'general' model in which full employment is only one of many possible points of equilibrium) are consistent with existence of unit roots. Hence Chapter 7 reinterprets the empirical findings of real business cycle theorists using a different set of assumptions more in line with Keynes's theory. The primary real business cycle findings were non-stationarity, persistence of 'shocks' and time-dependent variance that approaches infinity as the forecast horizon increases, but all of these are consistent with the Post Keynesian paradigm. Capitalist economies operate in historical time: economic events are time-dependent and have persistent effects on the trajectory of the economy. Further, non-stationarity is a sufficient (although not necessary) condition for non-ergodicity, while non-ergodic systems need not have a long-run statistical average about which the system will fluctuate. Keynes's model of 'shifting equilibrium' is an alternative to the real business cycle 'random walk with drift' interpretation of time series data that do not exhibit mean reversion. Finally, while money endogeneity is used in the real business cycle model to ensure super-neutrality of money (only real variables matter), Post Keynesians reject such a dichotomy and emphasize that money always matters.

Noemí Levy and Guadalupe Mántey argue that commercial banks have oligopsonistic power in their domestic deposit market, and that in this market structure the loan rate is not systematically affected by central bank rates. Instead, they argue, the spread is determined by the interest elasticity of deposit demand, liability management and the banking sector balance sheet structure. After a review of the horizontalist, structuralist and asymmetric expectations approaches to short-term interest rate linkages found among endogenous money theorists, the authors turn to their alternative explanation. They then investigate the causal linkages between short-term interest rates in Mexico, where there is considerable banking oligopsony due to barriers to competition between public and private short-term financial assets. The chapter introduces a VAR (vector autoregression) model to attempt to disentangle the causal linkages between short-term interest rates in Mexico. The results of three cointegration and error-

correction models obtained for the loan rate, the Treasury bill rate, and the interbank rate support their hypothesis of the existence of oligopsony in the Mexican bank deposit market and the compensatory role of deposit interest rates in determining loan rates. Levy and Mántey conclude that in nations where the institutional framework enhances deposit market oligopsony, the spread between loan and deposit rates may be so large that central banks are unable to influence credit market conditions by means of open market operations. They recommend that, under such circumstances, monetary authorities return to direct controls on credit expansion as a means of influencing aggregate demand.

In Chapter 9, Hansjörg Herr and Jan Prieue critique the Washington Consensus framework for macroeconomic policy and development and offer a sketch of an alternative approach to macroeconomic policy for developing countries. After laying out the main features of the Washington Consensus, the authors offer their critical appraisal. As is well known, this approach, typified by the policies promoted by the IMF and World Bank, focuses on 'sound money' policies and improvements in resource allocation that are believed to be linked to productivity growth. Recommendations thus include privatization and improvement of property rights, 'getting the prices right', increased competition, deregulation, 'free trade', tax cuts and cuts in government spending, government budget balancing and avoidance of large current account deficits. The authors focus on six macroeconomic themes in their critique of the Washington Consensus: inflation analysis and stabilization policy, exchange rate regimes, capital account liberalization v. controls, current account deficits and external debt, dollarization, and the domestic financial system. They then contrast a typical regime of underdevelopment and repressed growth with an alternative growth scenario. Regarding the former, they emphasize the problems of increasing external debt (denominated in foreign currency). The key to the alternative positive growth scenario, they argue, is the creation of an accepted high-quality national currency. Finally, Herr and Prieue consider three different approaches to addressing the problems created when all nations strive for a current account surplus: global competition, international clearing union, and current account deficits for the most developed countries.

Arturo Huerta examines the impact of financial liberalization on developing countries and especially those in Latin America. Given the poor productive, financial and macroeconomic conditions in these countries, free movement of capital intended to attract foreign funds has increasingly relied on the implementation of restrictive monetary and fiscal policies in order to maintain stable exchange rates and low inflation. Huerta contends that the primacy of these two policy objectives (price and exchange rate stability) has brought counterproductive results. He first looks at the effect of inflation-reducing policies on firms' profit margins, investment activities and internal financing and argues that the loss of competitiveness of domestic producers vis-à-vis imports has further

eroded their financial positions and ability to raise capital for investment. Furthermore, low domestic demand, appreciated exchange rates and the increasing presence of imports in the domestic market propagate increased foreign indebtedness and decreased ability to fulfil cash commitments. The cumulative effect of these problems generates economic stagnation, which deepens the process of deindustrialization and reduced global competitiveness. Huerta points out that public policy is deficient in tackling these conditions. Governments are willing neither to devalue exchange rates to improve the competitiveness of domestic production nor to boost countercyclical spending to put a floor on falling demand. Huerta's chapter provides an inquiry into the unsustainable processes generated by the manner in which financial liberalization has occurred in Latin America.

In Chapter 11, on exchange rates and the Mexican stock market, Jesús Muñoz and P. Nicholas Snowden examine the disappointing contribution of equity finance in the recovery from the first of the sequence of emerging market financial crises experienced in the 1990s: the 'Tequila' crisis beginning in December 1994. The authors begin by demonstrating the marginal contribution of Bolsa Mexicana de Valores (the Mexican stock market, or BMV) to the financial needs of a growing economy. They argue that, in addition to institutional deficiencies, other systematic influences were acting on the demand for equities. In particular, they examine the relationship between equity returns and fluctuations in the value of the peso, especially in the period following 1997. Muñoz and Snowden conclude that equity stakes in indebted firms are likely to be of limited appeal to domestic investors under a regime of managed floating rates. The quandary they identify is that, while firms may wish to retire debt through the proceeds of new issues, domestic investors may only emerge after the debt exposure has been substantially reduced. The monetary policies Mexico used to attempt to stabilize the movements of the floating exchange rate amplified the impact on share prices, and thus the high interest rates thought to be necessary to 'defend' the peso also damaged the prospects for heavily indebted firms. The authors conclude that market reforms geared toward foreign investment may help support share prices and improve the prospects for a shift from debt towards equity.

In the final chapter, Elisabeth Springler examines the evolution of the financial system in eight of the ten new member states of the European Union. The countries under investigation are Estonia, the Czech Republic, Hungary, Latvia, Lithuania, Slovenia and Slovakia, nations with virtually non-existent financial systems prior to the late 1980s and their transition to a market economy. The purpose of the chapter is to delineate the mode of development of the financial sector observed in these countries, and thereby evaluate the prospects for future growth and continued economic convergence to the EU15 block. Springler utilizes the 'five-stage setting of banking evolution' advanced by Chick (1992) and

Chick and Dow (1988), to argue that most of the new member states have completed all but the last phase of banking development. In addition, she classifies the mode of development into 'bank-based' or 'market-based' financial systems, arguing that the latter, rooted in substantial market liberalization, lead to relative instability, while the former provide the right foundation for future economic development. Springler concludes that Hungary, Lithuania and Poland have developed a very strong bank-based financial system, while in the Czech Republic and Latvia this model is somewhat weaker but still quite advanced. In Slovakia and Slovenia, however, market-based financial systems seem to be the predominant mode of financial evolution while the bank-based systems are considerably weaker. After studying the remarkable transformation in the financial system after the banking crises that plagued all of these countries in the mid-1990s, Springler concludes, via a quantitative and qualitative analysis, that all new members states (Slovenia to a lesser extent) have the condition to promote further economic development and integration into the European Union.