Introduction

The recent onset of the most severe, synchronized global economic slump since the 1930s depression has rekindled controversies over the contradictory 'laws of motion' of capitalism and the very nature of capitalist money in the wake of the global financial meltdown, which preceded the slump. The evidence suggests that these recurrent crises have become more frequent, severe and prolonged during the neoliberal era from the mid-1970s onward and appear to have coincided with the policies of financial deregulation enacted during this period. Many heterodox critics have argued that the phenomenon of 'financialization' lies at the very core of these recurrent financial crises. The aim of this study is to examine the dynamics of these debilitating phases of financial instability from a theoretical perspective. What are the implications of financialization? Does the present conjuncture signify the final historical vestiges of the neoliberal project? More importantly, what is the nature of specifically capitalist money? These are quite profound questions which attempt to reveal the pathologies of the present phase of capitalist evolution and the inherent instability of deregulated financial markets.

In a broader historical context, capitalist crises are functional and strategic. These crises signify the culmination of one process and the beginning of another. In a continuous, latent process of transformation, all of the subterranean, conflicting forces come to the surface and bring to light the very paradoxes of history itself. Through the dynamics of catharsis and reconstruction, capitalist crises provide the material basis by which profitability is restored once again. The 'slaughtering of capital values', to paraphrase Marx, is a necessary, though irrational means which allows the restructuring of production to establish the material and technological basis for yet another phase of accumulation. The recovery, however, is neither automatic nor entirely endogenous. The outcome will ultimately depend upon the complex relation of class forces. As Dobb quite perceptively contends: 'To study crises was *ipso* *facto* to study the dynamics of the system, and this study could only be undertaken as part of an examination of the forms of movement of class relations and of class revenues which were their market expression' (Dobb, 1937, p. 81).

The ascendancy of finance capital after the long period of 'financial repression' during the post-war Keynesian era was an integral element of a much broader strategy by the capitalist state to reassert the hegemony of capital through the policies of neoliberal restructuring. The persistence of severe productive excess capacity, however, was never fully resolved. To be sure, the forcible ejection of superfluous capacity is precisely the functional role performed by capitalist crises to counteract a falling rate of profit and establish the basis for a renewed phase of accumulation. Although the strategy of imposing the rationalizing logic of the market succeeded in winding back the previous gains of the working class, the restoration of profitability inevitably encountered the limits set by the chronic lack of effective demand. In most advanced capitalist countries, income inequalities only worsened over time as real wages stagnated. In order to maintain their real purchasing power in the face of stagnating real wages, workers were compelled to resort more than ever to the privations of debt servitude. Real purchasing power was increasingly augmented by burgeoning levels of household debt (Barba and Pivetti, 2009, p. 122). On the other hand, the wealth effect of rising asset prices transformed millions of ordinary workers into investors and acted as a powerful transmission mechanism in the maintenance of the purchasing power of consumers. In 1987, 25 per cent of US households had a stake in the stock market. By the late 1990s, over half of all US households owned shares, either directly or indirectly through mutual funds (Harmes, 2001). Indeed, the financial assets of mutual and pension funds had grown by almost ten-fold since 1980, estimated at about $US20 trillion in the late 1990s (Gilpin, 2000, p. 32). In the decade 1997–2007, real estate values had more than doubled – from about $US10 trillion to over $US20 trillion. Home mortgage liabilities rose even faster during this period – from $US2 trillion to over $US10 trillion (Wray, 2007, p. 27). This represented an additional $US8 trillion generated by the housing wealth effect (Baker, 2007, p. 2).

Yet these neoliberal victories were always problematic and contingent. As the current crisis unfolds, it is becoming increasingly evident that the neoliberal transformation was to a large extent self-defeating. As the state regains a central role amidst the ruins of bankrupt financial institutions and the desperate attempts by the state to socialize losses and privatize profits, neoliberal ideology appears to have lost all credibility and legitimacy, not least from the standpoint of capital itself. The current crisis can be said to signify the final lingering remnants of a discredited neoliberal project. The realignment of class forces will doubtless determine how these complex ideological struggles will be consummated. The crisis will also sharpen these contradictory class conflicts and breed anti-systemic social forces. Despite the rather pyrrhic victories over the labour movement and the relative success in restoring the hegemony of capital, the neoliberal strategy could not resolve the fundamental problems of over-accumulation and economic stagnation. The successive speculative asset price and equity booms have to some extent temporarily counteracted these stagnationist tendencies but ultimately proved to be illusory for the mass of the population as the financial meltdown has testified. At the same time, the three decade-long Monetarist struggle against inflation has left in its wake stagnant economic growth; rising levels of structural unemployment; greater job insecurities and income inequities; and the re-emergence of deflationary forces inextricably associated with the chronic depression of effective demand. A brief history of neoliberalism reveals the limits of an ideology imbued with the nostalgic appeal of nineteenth-century laissez-faire, colliding with the realities of twenty-first-century monopoly capitalism.

The basic failure of the neoliberal strategy has been the unfounded faith that the market mechanism would automatically ensure that increased profits generated through the reduction of the wages share of national income were ultimately channelled into productive investment. In retrospect, however, the evidence suggests that the restoration of the rate of profit was achieved overwhelmingly through extensive rather than intensive forms of exploitation, which have had the overall effect of increasing the rate of productivity via the restructuring and rationalization of the labour market. Consequently, the purgative forces induced by an intensification of competition have failed to reignite productive and technological dynamism; or what Schumpeter had alluded to as the gales of 'creative destruction'. Instead of providing the foundations for technological reconversion and industrial upgrading, the sharp increases in aggregate profits were dissipated into corporate mergers and acquisitions, speculative financial engineering, and other forms of rent-seeking and entirely unproductive expenditures. In the aftermath of financial deregulation in the early 1980s, these speculative propensities reached truly astounding proportions and led to an unprecedented series of asset price booms. The business cycle has become almost entirely dependent upon asset price bubbles. The real vulnerability of this finance-led regime of accumulation is that it has been based upon the greatest equity boom in modern history. The 1990s speculative boom in the USA has already reached its zenith. The bursting of the financial bubble is now reverberating on a global scale.

The myth of the market – depicted by the high priests of neoclassical economics as the bearer of allocative efficiency and the source of competitive and innovative dynamism – was in reality an ideological device to conceal the real interests of powerful corporate oligopolies. The consolidation of class rule involved the gradual redistribution of wealth through tax cuts, privatization and deregulation, from ordinary wage earners to the upper echelons of wealthy shareholders and their subaltern corporate-class allies. Regardless of its party-political incumbents, the neoliberal state relentlessly pursued the dystopian vision of an informal empire of free enterprise (Arrighi, 1978a). The mantra of free trade and the drive to deregulate labour markets accompanied these neoliberal nostrums, while wholesale privatizations provided a fertile terrain in the expanded reproduction of capital into formerly state-owned and regulated sectors (that is, transportation, education, utilities, social infrastructure and services, natural resources and so on). These processes of 'accumulation through dispossession' have been starkly portrayed by Harvey: 'If the main achievements of neoliberalism have been redistributive rather than generative, then ways had to be found to transfer assets and redistribute wealth and income from the mass of the population towards the upper classes, or from the vulnerable to richer countries (i.e., accumulation by dispossession)' (Harvey, 2006, p. 43).

The ascendancy of finance capital was the driving force behind neoliberalism. The powerful rentier interests, who had been in long hibernation during the post-war 'golden era' of Keynesianism, now assumed centre stage, propagating the doctrines of 'shareholder value' and 'sound finance'. The onset of stagflation in the 1970s and 1980s as a result of successive oil price shocks witnessed the rise of Monetarism as rentiers clamoured to restore the value of their financial assets from the depredations of inflation and the threat posed by the labour movement as it sought to increase the relative share of wages. Indeed, Kalecki had already foreseen the political aspects of full employment in his seminal article in 1943. Kalecki argued that full employment would not be tolerated by the 'captains of industry' because of the threat this would pose for the maintenance of worker discipline in the factories and would ultimately weaken the role performed by the reserve army of labour in depressing wages (Kalecki, 1943). The rise of Monetarism was precisely the panacea that Kalecki had uncannily foreseen, which would ostensibly restore profitability and shareholder value. The revival of pre-Keynesian economic doctrines witnessed the revival of Say's law of the market in its modern guise as the 'efficient markets hypothesis'. The ideology of these laissez-faire doctrines was embellished with the dogma of budget surpluses, the abandonment of full employment policies and the winding back of the state. In the absence of countervailing modes of state regulation and governance, market fundamentalism inevitably destroyed the post-war Keynesian institutions and modes of regulation (Boyer, 1996, 108). The persistence of high levels of unemployment, more volatile financial panics and the emergence of semi-permanent overcapacity have characterized the neoliberal era since the mid-1970s.

> In modern complex economies, a large and growing part of money capital (i.e., money invested with a view to earning more money) is not directly transformed into productive capital serving as a means by which surplus value is extracted from the productive utilization of labour power. Instead it is used to buy interest-bearing or dividend-yielding financial instruments ... . Many capitalists are being offered an enormous variety of financial instruments to choose from – stocks and bonds, certificates of deposit, money-market funds, titles to all sorts of assets, options to buy and sell, futures contracts, and so on. There is no presumption, let alone assurance that money invested in any of these instruments will find its way, directly or indirectly, into real capital formation. It may just as well remain in the form of money capital circulating around in the financial sector, fuelling the growth of financial markets which increasingly take on a life of their own. (Magdoff and Sweezy, 1987, pp. 96–7)

The crisis of over-accumulation means that markets have become saturated and in order to reinvest profitably, financial markets become the channels through which a growing proportion of capital is held and reinvested in its liquid form, while an ever-growing volume is devoted almost entirely to short-term speculation. To be sure, the successive waves of financialization since the mid-1970s have been marked by speculative and predatory asset price booms and busts. Financial deregulation unleashed these powerful redistributive forces of accumulation by dispossession. The quite extraordinary rise in private indebtedness reduced whole populations into debt peonage and attracted millions into the vortex of speculative manias emanating from the stock market casinos. Ordinary workers were now drawn into the maelstrom of the financial markets as their wealth, in the form of real estate and mutual/pension funds, was increasingly subjected to the vicissitudes of these volatile markets. In short, the logic of financialization has penetrated the ordinary lives of wage earners and inserted the ideology of the market in the reproduction of capitalist social relations. This process was reinforced by the dominant ideology of neoliberalism, which was pursued remorselessly by the neoliberal state as it proceeded to open up the public sphere to private investment and ownership. With the curtailment of state intervention and public investment, privatization and the policies of deregulation gradually destroyed the institutions and regimes of regulation established during the post-war Keynesian era.

Financialization propagated the doctrine of shareholder value, which soon began to govern the imperatives of corporate governance. Short-term financial gains based upon the maximization of share market returns soon eclipsed and eventually undermined long-term investment strategies. A self-serving managerial class, motivated by short-term, speculative gains in the form of stock options and bonuses, emerged as the new corporate predators. The pursuit of short-term shareholder value was frequently invoked to promote the downsizing of the workforce and the distribution of retained earnings to shareholders (Lapavitsas, 2008, pp. 25–6). This strategy also led to the recurrent waves of hostile mergers and acquisitions during the equity booms of the 1980s and 1990s and ultimately to the massive over-valuation of market capitalization spurred by booming equity prices and sustained by unprecedented leveraging operations. This whole process supported and accentuated the stock market boom of the 1990s and generated the illusory enrichment created by temporary asset price bubbles and the equally hallucinatory wealth effects induced by the financial euphoria. Initially led by the pension and mutual funds and later emulated by the more risk-seeking hedge funds, the theology of shareholder value mobilized and converted millions of ordinary workers into shareholders. Neoliberal ideology alone could not have mobilized this vast popular movement. As Minsky notes: 'The pension and mutual funds have made business management especially sensitive to the current stock market valuation of the firm. They are an essential ingredient in the accentuation of the predatory nature of current American capitalism' (Minsky, 1996, p. 363).

In terms of stock market capitalization, the value of financial assets and finance-based income has risen dramatically since the neoliberal era. In the USA, for instance, stock market capitalization as a percentage of GDP increased from its long-term average of about 50 per cent during the post-war era to more than 128 per cent in 2002 after peaking at 185 per cent at the zenith of the dot.com bubble in 1999. The ratio of profits of financial institutions to the profits of non-financial corporations rose from about 15 per cent on average in the 1950s and 1960s to almost 50 per cent in 2001 (Crotty, 2005, p. 85). Another indicator of the degree of financialization is the level of private debt or the relative size of the US credit market. In 1981, for instance, the value of the US credit market was estimated at 168 per cent of GDP. By 2007, this figure was over 350 per cent. At the same time, the share of total corporate profits accrued in the financial sector expanded from only 10 per cent in the early 1980s to 40 per cent in 2006 (Crotty, 2008, p. 10). The increasing reliance of large corporations on the issuing of debt via the open financial markets rather than borrowing from the commercial banks reinforced this whole process of financialization. The commercial banks were therefore deprived of their traditional sources of lending to corporations and began to engage in direct speculative operations in the real estate and equity markets. The other major new outlet for the commercial banks was the saturation of the household credit markets in mortgages and consumer credit. After financial deregulation, commercial banks also expanded their presence in financial market mediation through transactions in securities, derivatives, insurance and so on. Doubtless the most astounding evidence of financialization was the astronomical rise of derivative contracts. The volume of the derivatives market in the USA alone rose from about three times global GDP in 1999 to an estimated eleven times of global GDP in 2007. Credit default swap derivatives were estimated at $US62 trillion in 2007 (Crotty, 2008, p. 10). As Bryan and Rafferty elaborate:

> In global currency markets daily turnover has grown 50-fold since the early 1980s, and is now about $US1.9 trillion a day. Two thirds of this is transacted in derivatives markets, with three quarters of this derivatives trade (half the overall market) made up of foreign exchange swaps. To put this daily $US1.9 trillion turnover in some perspective, the annual value of international trade is less than $US6 trillion; equal to roughly 3 days trade in foreign exchange markets. (Bryan and Rafferty, 2006, p. 55)

The overall effect of the decoupling of financial intermediation by the commercial banks has been to render the entire banking system more fragile (Toporowsky, 2008b, pp. 9–10). As Minsky warned quite presciently, financial innovation through the process of 'securitization' has shifted the whole structure of the financial system towards a state of perilous and chronic instability: 'In securitization, the underlying financial instruments (such as home mortgage loans) and the cash flows they are expected to generate, are the proximate basis for issuing marketable paper. Income from paper (cash flows) is substituted for the profits earned by real assets, household incomes, or tax receipts as the source of the cash flow to support paper pledges' (Minsky, 2008, p. 4). Financial deregulation accelerated this Minskyian process of pushing the financial system into a zone of extreme instability. The repeal of the Glass-Steagall Act in the USA in 1999, which had prevented commercial banks from engaging in investment banking activity, represents a historical landmark in the annals of recent financial history. To be sure, the elimination of this legislation, which was enacted amidst the collapse of the US banking system in the 1930s, was the culmination of over three decades of radical financial deregulation. In retrospect, there is a very sound argument to suggest that the financial turmoil of 2008–09 signifies the final destructive cataclysm of more than three decades of disastrous neoliberal economic policies.

The aim of this study is to critically examine alternative, heterodox theories of money and finance. For the prevailing neoclassical and Monetarist theories, money is essentially a 'veil' over barter to reflect differing exchange ratios between commodities. From this perspective, money is assumed to be neutral in the long run. The supply of money is treated as an exogenous variable, which is created by the central bank. The prevailing wisdom asserts that financial crises are random, exogenous events, which arise out of central bank policy errors or emanate from extraneous shocks to an otherwise self-correcting market economy to incorporate a whole spectrum of historical contingencies including wars, natural disasters, oil price shocks and so on. Indeed, the very assumptions of neoclassical theory, informed by the efficient markets hypothesis, tend to rule out the very possibility of endogenous financial crises. Consequently, the endogenous causes of these crises are either ignored or simply treated as random historical events. In stark contrast to the neoclassical/Monetarist view, there are numerous heterodox theories which seek to explain the occurrence of these financial crises as a result of the inner workings of the capitalist system. Endogenous money can be construed as specifically capitalist money and increasingly takes the form of pure credit. Since the banking system is capable of issuing credit money *ex nihilo,* a complex network of credit/debt relations emerge and elevate the role of money as an abstract, dematerialized unit of account. Credit money is therefore an increasing function of private financial institutions, while the expansion of credit supersedes the limits imposed by the monetary unit (either as commodity money or as state money issued by the central bank). The breakdown of this chain of payments, however, causes a financial crisis. Money now reverts to its role as a means of payments and as a store of wealth.

The neoclassical reinstatement of Say's law implies the general impossibility of crises. The conditions necessary for the neutrality of money assume a pure commodity economy in which money is conceived merely as a medium of exchange. In a monetary economy, however, money also performs the role of store of value and means of payment. Under these conditions, Say's law ceases to apply. Indeed, the sole object of a capitalist economy is to realize exchange-values in the form of money. In Marx's circuit, M-C-M´, the ultimate aim of the individual capitalist is to increase his or her monetary wealth. A pure barter economy is the very antithesis of a sophisticated monetary economy. Crises are therefore inherent features of a monetary economy governed by investment cycles. Under a finance-led regime of accumulation, these realization crises become quite endemic. In other words, the greater the mediation of financial circuits, the sharper is the separation of the production of surplus value from its realization.

Since the very possibility of endogenous financial crises is ruled out by the assumptions of neoclassical and quantity theories of money, it is necessary – if not essential – to examine the various alternative heterodox theories of endogenous money. Although there is considerable divergence within the heterodox tradition, these theories share the critical and central contention that money is neither neutral, nor is the monetary sphere necessarily separate from the so-called 'real' economy. Quite the contrary: money is the most active element of an advanced capitalist economy. Money does indeed matter. Modern money is endogenous – it is created and destroyed purely on the basis of its demand. A monetary circuit initiates the process of production from the very moment that a bank creates a loan to a private enterprise and sets in train the streams of income in the form of profits, wages and rent. The circuit is closed when the firm pays back the initial debt to the bank and credit money is destroyed.

The structure of this volume is organized around the various heterodox strands of endogenous money. Most of these theories originate in the seminal writings of Karl Marx and J.M. Keynes. The first two chapters are devoted to Marxian perspectives on money, credit and crisis.

Chapter 1 examines Marx's original theory of value from the standpoint of a monetary economy. This chapter provides a coherent foundation for the analysis of a monetary circuit, which incorporates the theory of value. Since money validates social abstract labour, value cannot be measured solely in terms of socially necessary labour-time but as its monetary expression measured in terms of the monetary unit. The introduction of a monetary circuit restores the centrality of money in Marx's analysis of the accumulation of capital. This view is quite consistent with Marx's original theory of value and supersedes the commodity theories of money, which informed classical political economy during Marx's own era. Indeed, it can be surmised that Marx was one of the original theorists of endogenous money. Chapter 2 extends the analysis of a monetary economy to examine Marx's theories of money, credit and crises. This chapter reveals that Marx's original theory of endogenous money represents a radical departure from the prevailing doctrine of Say's law and the reigning orthodoxy of the quantity theory of money. In Volume 3 of *Capital,* Marx develops a theory of the trade cycle, which incorporates the credit cycle and provides some of the most insightful analyses of these inherently destabilizing tendencies produced by recurrent financial manias. It would be reasonable to contend that Marx's analysis of capitalist crises prefigures the modern Keynesian and post-Keynesian tradition.

Chapter 3 introduces the original Keynesian theory of money and uncertainty. Keynes's formative liquidity preference theory is examined and the problem of uncertainty, as opposed to probabilistic risk, is restored to its pre-eminent role in Keynes's unique non-ergodic vision of a monetary economy. There are also some parallels between Marx and Keynes in relation to Keynes's earlier 1933 monetary theory of production and in their respective treatments of money as a store of wealth. The evolution of chartalist forms of state money in Keynes's earlier analysis in the *Treatise* also provides a starting point for subsequent post-Keynesian theoretical renovations. Chapter 4 extends and elaborates on Keynes's original contributions within the post-Keynesian and Circuitist literature. The ongoing debates and controversies over the issues of uncertainty, liquidity preferences and Keynes's finance motive inform many of these theoretical contributions in the heterodox literature. Chapter 5 represents the penultimate development of these controversies and deals directly with the central thesis of this study. The aim is to construct a theoretical synthesis which incorporates Kalecki's principle of increasing risk and Minsky's financial instability hypothesis. The debt-deflation theory of depressions – first formulated by Veblen and later refined by Fisher – augments Minsky's financial instability hypothesis and provides a valuable analytical framework by which to interpret the cumulative causation of economic depressions.

The final two chapters are devoted to a more concrete, historical narrative of the current financial crisis. These chapters analyse the historical origins of the global slump through the lens of the heterodox tradition of endogenous money and the theoretical currents, which inform the dynamics of financialization. Indeed, the current crisis reveals quite starkly the limitations of existing neoclassical theories of general equilibrium and debunks the Monetarist myth of monetary neutrality. Quite ironically, policy makers throughout the world have sought some guidance in the revival of neo-Keynesian theories and have attempted to relearn some of the lessons of the 1930s depression. Whether these short-term expansionary fiscal and monetary policies will be sufficient to stabilize the slump and reactivate a synchronized recovery still remains to be seen. For the first time in over six decades, the world economy is now at the threshold of a severe synchronized downturn, which has engulfed the three major poles of accumulation in East Asia, the European Union and the USA. The only question that remains is over the severity of the emerging slump. In other words, will the onset of debt-deflation characterize the advanced capitalist countries? Furthermore, is there a real likelihood that the world economy could relapse into another phase of depression?

The ultimate object of this study is to provide a critical alternative view of the real causes of these destructive crises and by doing so, to expose the false apologetics of prevailing orthodoxies. A return to pure theory cannot be avoided. Ideas, as Keynes once remarked, are more powerful than is often presumed by the conventional wisdom. The 'struggle to escape from habitual modes of thought and expression' to paraphrase Keynes (1936, p. viii), doubtless informs the critique developed in this volume. Unlike the natural sciences, however, a paradigm shift in economic theory normally occurs in the event of a major historical catastrophe. The uncomfortable reality is that economic theory continues to be captive to ideology and the existing structure of political power. On a more optimistic note, however, the end of the neoliberal era could create the conditions for a radical rethinking of prevailing orthodoxies. Indeed, the Keynesian revolution was only made possible because of the depredations of the 1930s depression and the bitter political lessons that had indelibly imbued the consciousness of the new post-war political order. The cornerstone to this post-war Keynesian consensus was the doctrine of full employment. To reclaim full employment as the prime macroeconomic objective would be tantamount to declaring the final obituary for the failed neoliberal project.