

# Introduction: the global financial crisis

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If you have ten dollars, see me in the morning. If you've got six, can I lend you four? Groucho Marx in *The Cocoanuts* (1929)

... to exist you need an ideology. The question is whether it is accurate or not. And what I am saying is, yes, I found a flaw. I don't know how significant or permanent it is, but I've been very distressed by that fact. Alan Greenspan at a Congressional Hearing on the Financial Crisis in October 2008

There cannot now be a shadow of a doubt that 'the flaw' in his ideology—admitted by Alan Greenspan in response to a question by Henry A. Waxman, Chairman of the US House of Representatives Committee on Oversight and Government Reform, whether he felt 'that your ideology pushed you to make decisions that you wish you had not made?'—is both significant and permanent. The current financial and economic crisis that has forced the likes of Greenspan to question the coherence of dominant conceptual frameworks is unprecedented in global reach and systemic gravity. Some basic figures speak for themselves: According to McKinsey's *Mapping Global Financial Markets* (October 2008), global financial assets rose from US\$12 trillion in 1980 to US\$196 trillion in 2007. The International Monetary Fund's *Global Financial Stability Report* (IMF, 2009a) estimate for the latter figure is considerably higher, at US\$241 trillion.<sup>1</sup> Global cross-border capital flows more than doubled between 2002 and 2007, with foreign investors holding one in four debt securities and one in five equities. While in 2000 only 11 countries had financial assets of more than 350% of gross domestic product (GDP), 25 countries had deepened their financial markets to the same extent by 2007. As early as 1990, money managers had increased their control of US corporate equities from 8% in 1950 to 60% (Porter, 1992, p. 6; Whalen, 2002, p. 402). Similarly, pension funds had extended their share of total business equities from less than 1% to just short of 39%, and their fraction of corporate debt from 13% to 50% (Ghilarducci, 1992, p. 117; Whalen, 2002, p. 402). In the period from 1986 to 2006, the US financial sector as a whole increased its share of corporate profits from 10% to 30%, while its outstanding debts grew from 20% of GDP in 1980 to 116% in 2007 (FED, 2009). According to Gillian Tett from the *Financial Times*, outstanding credit default swaps (CDS) today amount to no less than US\$60 trillion, with the risk embodied after discounting mutually off-setting contracts still as high as US\$14 trillion (Tett, 2009, p. 264).

As we know, the curtains have now come down on this 'dance of the trillions' (Palma, 2009). The immediate 'hang-over' in the form of a pile of toxic debt is surreal not only in its

<sup>1</sup> These two sources differ only in their reporting of the bank component of financial stocks.

sheer quantitative dimensions, but also because it is riddled with uncertainty. As Tett remarks, in the end '[t]he chain that linked a synthetic CDO of ABS [a credit default obligation of asset-backed securities], say, with a "real" person was so convoluted it was almost impossible for anybody to fit that into a single cognitive map—be they anthropologist, economist or credit whizz' (Tett, 2009, p. 299). US financial institutions have already written off US\$1 trillion and, according to Wray (2009), are expected to write down at least another US\$3–5 trillion. The IMF (2009b, p. xv) expects write-downs on US-originated assets by all financial institutions to reach US\$2.7 trillion over the period 2007–10. Total commitments by the USA are now estimated at just short of US\$9 trillion. Nor is this wave of toxic destructiveness confined by way, say, of 'degrees of greediness' associated with institutional histories and particularities, to the Anglo-Saxon financial system and its various satellites. On 24 April 2009, a respected German broadsheet published an article, entitled 'Balance of Fear' in which it reported findings of the independent financial oversight group BaFin according to which the total toxic debt of the German financial system amounts to almost US\$1 trillion. The culprits include several German state banks, just the institutions that had previously been seen as representing Prussian-Germanic solidity and its ability to provide a viable alternative to Anglo-Saxon 'fickleness' and eccentric 'excesses'.

Most importantly, perhaps, the misery is, of course, not confined to the financial sector. The IMF predicts a decline of world economic activity of 1.3% in 2009, 'a substantial downward revision from the January WEO *Update*. This would represent by far the deepest post-World War II recession' (IMF 2009b, p. xvi). On 14 May 2009, the European Central Bank announced that the recession in the European Union (EU) member states would be twice as bad as projected in February. The EU's output is now expected to contract by 3.4% in 2009, reflecting the worst output contractions in several leading EU economies, including Germany and France, since the beginning of quarterly records in 1970 and 1980, respectively. The International Labour Organisation estimates that world-wide unemployment could rise by at least 30 million people, and possibly as much as 50 million people, from 2007 to 2009, if conditions continue to deteriorate. It also expects that more than 200 million people, mostly in developing economies, will be pushed into poverty (Recommendations of the UN Commission of Experts on Reforms of the International Monetary and Financial System, 19 March 2009, p. 2). And according to Greenspan, if one adds to the losses of the financial and listed corporate sector 'the thousands of billions of dollars of losses of equity in homes and losses of non-listed corporate and unincorporated businesses that could easily bring the aggregate equity loss to well over US\$40 trillion, a staggering two-thirds of last year's global gross domestic product' (Greenspan, 2009).

An economic calamity of such proportions, with such potentially wide-ranging social and political repercussions, creates a sense of urgency. There is, of course, a pressing need not only to understand what has happened and why, but also to act so as to prevent the worst scenarios from coming about. Furthermore, for those who have for years advocated more far-reaching structural reform agendas there is a sense that current circumstances constitute a rare opportunity that should not be wasted. This Special Issue responds to this sense of urgency in a specific way. It brings together a wide range of contributions on as broad a spectrum of specific features of the current financial crisis as possible. Although the authors all share a heterodox background in economics, which informs their approaches, the point of this Special Issue is not, and at this stage of ongoing events could not be, to provide a once-and-for-all unified view of the financial crisis, let alone of its longer-term

social, economic and intellectual consequences. Rather, the main strength of this issue is that it combines in-depth analyses of particular facets and features of the financial crisis with a breadth of coverage that spans its antecedents, its immediate causes and its potential consequences in the longer-term.

Not surprisingly, a fairly large number of contributions are primarily concerned with the causes of the global financial crisis in terms both of immediate short-run determinants and of underlying structures and developments that adopt a more long-run political economy perspective. Crotty (2009) locates the deep cause, on the financial side, of the current crisis, in the New Financial Architecture (NFA) and the radical financial deregulation process associated with its institutions and practices. He argues that the current crisis is but the latest stage in a series of financial boom and bust cycles, stretching back to the late 1970s, in which financial deregulation and innovation alternated with government bailouts to allow renewed expansion after each crisis. Crotty provides an enlightening account of disaster gradually spreading and eventually hitting through a careful point-by-point refutation of the main hypothesis and claims of the proponents of the NFA. Morgan (2009) also focuses on the successive and cumulative failures of the pre-crisis financial architecture, but concentrates more specifically on the role of central banks, tracking down fundamental failures in central bank policy, both in theoretical design as well as practical implementation.

They are joined by Perez (2009) and Tregenna (2009), with two accounts of different pre-crisis developments. Perez analyses two boom and bust episodes preceding the current crisis, the 1990s 'dotcom' internet mania and the liquidity boom of the early 2000s, arguing that these constitute two components of a single structural phenomenon, also to be found prior and during the 1929 crash and depression. Like Crotty, she regards preceding boom and bust episodes as an endogenous trend, but focuses more on changing technoeconomic paradigms rather than institutional and ideological determinants.

Tregenna provides a detailed empirical analysis of the structure and profitability of the US banking sector pre-crisis that shows concentration (rather than efficiency) to have been an important determinant of this profitability. Concentration appears to raise the profits of the banking sector in a generalised way, not only for the largest banks. These findings lead her to question the legitimacy of expectations that pre-crisis profitability levels should eventually be restored, and to call attention to the need for future regulatory measures to address fundamental issues relating to the structure and use of banking profits as well as pricing behaviour in this sector.

Still also primarily focused on the causes and nature of the current financial crisis, Wray (2009) and Palma (2009) attempt a more wide-ranging historical analysis of what went wrong and why. Wray takes an unapologetically Minskyian stance from which he provides a wide-ranging, yet also detailed account of the gradual transformation of finance capitalism throughout the twentieth century. Intentionally taking a step back from the detailed analyses of unfolding events and the debate surrounding policy responses to these, Wray examines the historical antecedents of today's 'money manager capitalism' through the lens of the works of Veblen, Hilferding, Keynes, Schumpeter and, of course, Minsky. He proceeds to analyse the rise and fall of contemporary 'money manager capitalism' from the 1970s through to the current crisis. Successfully managing to bring together economic history, the history of economic thought and detailed technical knowledge of financial structures in one overarching account of why we are where we are now, Wray nevertheless fails to resist temptation and exits with a brief forthright intervention into current policy debates.

Palma adopts a similarly challenging perspective from which he seeks to situate the global financial crisis within a broader political economy context. He starts by adopting the

perspective of heterodox Keynesian–Minskyian–Kindlebergian financial economics and considers a number of mechanisms that have led to the current financial crisis. However, he then proceeds to argue that the current financial crisis is the outcome of something much more systemic. Based on the in-depth analysis of core empirical evidence, Palma suggests that the root cause of the disaster, as it eventually and inevitably descended on us, is the neo-liberal (or, in US terms, neoconservative) folly of attempting to construct a capitalism ‘without compulsions’—i.e., one in which there are minimal pressures for big business to engage in competitive struggles in the real economy, and where the state turns itself into a facilitator of rent-seeking practices. Amongst the architects of this ‘capitalism without compulsions’ he finds capitalists (in particular rentiers from the financial sector as well as from the ‘mature’ and most polluting industries of the preceding techno-economic paradigm), members of the political classes, as well as intellectual networks with their allies (including many economists and the ‘new left’). Although rentiers did succeed in their attempt to get rid of practically all fetters on their greed, Palma concludes that the crisis materialised when the markets took their inevitable revenge on the rentiers by calling their bluff.

Wade’s contribution (2009) provides a stimulating and refreshingly ‘no-nonsense’ bridge between those focusing on the analysis of the causes and nature of the current crisis and those primarily concerned with policy responses and reform agendas. Similarly sweeping in scope and ambition as Wray and Palma, Wade places debates on both the causes of and the remedies for the current financial and economic crisis, in a broader context of historical developments and changing ideas since World War II. He scrutinises his wide-ranging knowledge of these histories for thoughts on solutions to the current crisis, with a view not simply to address immediate dilemmas but to reorganise capitalism for the long run. Wade emphasises the importance of structural macroeconomic imbalances in the world economy beyond the financial sector, including trade, exchange rate regimes and income distribution, and insists on the need for any viable, progressive and more egalitarian agenda to take proper account of these structural problems and imbalances. This means that, over and above immediate concerns about international financial regulation, a more profound reorganisation of the current international division of labour has to be high up on the post-crisis reform agenda.

While constructive reform proposals and discussion of adequate policy responses are present throughout this Special Issue, it is the contributions by D’Arista (2009) and Kregel (2009) that focus on these issues most explicitly. Following a succinct analysis of the evolution of the international monetary system, D’Arista provides a detailed list of reform proposals for a new and more viable monetary order. This includes a public international investment fund for emerging economies, reform proposals for the international payment system and a new structure for reviving Special Drawing Rights (SDR) Issuance. As she points out, core elements of her reform proposals—such as the need for an effective international clearing agency capable of coordinating each country’s need to control its currency with a smooth working of the international economy—go back to and revive concepts and ideas suggested at Bretton Woods. Many of these original proposals were never introduced despite repeated and urgent warnings from their proponents—not least by Kaldor in 1971—as to their significance and indispensability for world economic stability and political peace. D’Arista draws our attention to the disturbing possibility of a loss in the value of what she calls the ‘key currency’ precipitating a world-wide shrinkage in credit and thus a deepening of the current crisis, with all the social and political consequences that would entail.

Kregel focuses less on the international monetary system and more on US government policies. Following a scathing criticism of response measures to the current financial crisis introduced by US government authorities to date, he makes a convincing case for alternative policies that would have an impact on income (rather than prices). This includes a proposal for the US government to act as 'employer of last resort' (rather than propping up the economy more indirectly through government investment schemes, only eventually and indirectly translating into increased household incomes through manifold layers of difficult-to-monitor financial intermediation). Over and above this specific proposal, Kregel's contribution is a rallying call, based on detailed technical discussion, to reconsider Depression Era measures and for us and our policy-makers to live up to the courage and cunning that Roosevelt displayed at that time.

A number of the contributions to this Special Issue extend the current discussions of the causes and nature of the financial crisis by analysing specific aspects of its scope and impact. Thus, Pagano and Rossi (2009) provide an imaginative and thought-provoking exploration of the role of the new knowledge economy and intellectual property rights in bringing about the crisis. Three other papers focus on the significance and impact of the crisis on developing economies, either generally (Frenkel and Rapetti, 2009) or specifically in India (Ghosh and Chandrasekhar, 2009) and in Latin America (Ocampo, 2009). While, given limitations of space, we cannot here explore these contributions in detail, they do provide a clear indication of the scale of the intellectual challenge that lies ahead. They set the pace for future debates in a different sense. Their clear-sighted and in-depth analysis of specific aspects of the current crisis, whether sectoral or regional, highlight the fact that the major task of systematically sorting through the debris left behind by the current financial and economic crisis, and of developing an overall assessment of the damage done has only just begun.

Lawson (2009) expands the coverage to include not just the economy but also the way in which it is studied. Lawson takes the economics profession to task for prioritising technical acumen over concern for relevance. He urges those who, in the context of the current financial crisis, criticise dominant mainstream economics to shed not only dominant policies and substantive theories but also the dominant methodology. Lawson points out that the usefulness of any research method depends on the nature of the object of analysis. He argues that when addressing an open social system it is futile to cling on to mathematical-deductive methods and advances an alternative constructive approach concerned more with understanding underlying structures and mechanisms and real world possibilities. Lawson illustrates the positive aspects of his framework by focussing on certain fundamental aspects of the financial crisis.

Lawson's concern for a necessary paradigm shift in economic theorising, albeit along different lines of argument, is explicitly shared by Leijonhufvud, Wade and Crotty. The main difference between Lawson, on the one hand, and Wade, Crotty and Leijonhufvud, on the other, is that the latter advocate a paradigm shift in specific directions. Broadly speaking the proposed direction is Keynesian in the case of Wade and Leijonhufvud and Marxian in the case of Crotty. Lawson, meanwhile, is arguing for a methodological shift informed by ontological considerations. Lawson is hopeful that the crisis may provide the opportunity required for such a significant change in the academy. At the very least he is concerned that heterodox economists make the most of this opportunity.

Based on his profound knowledge of J. M. Keynes's work and a succinct discussion of the main characteristics of the financial crisis, Leijonhufvud (2009), argues that what we should take from Keynes are not specific policy proposals and analyses of the financial

crises of the time. According to Leijonhufvud these, while more helpful than New Keynesianism and the Dynamic Stochastic General Equilibrium framework of mainstream analysis, are nevertheless of less immediate relevance for today than is often claimed. Instead, what we should take on board from Keynes is his insistence on taking our own social responsibilities seriously, on focusing on what can and has to be done, and on whether or not contemporary economic theory is of any use in this enterprise.

Perhaps rather encouragingly, whether by conscious intent or simply as the unintended result of the requirements of real-world pressures, the contributions in this Special Issue, individually and taken together, actually rise to both Lawson's and Leijonhufvud's challenge, or so it seems to us.

Over and above the wide range of issues raised by the global financial crisis and covered in detail in this Special Issue, three fundamental themes run through most of the contributions gathered here.

First, there seems to be agreement that the severity, in both scope and structural depth, of the current financial crisis is such that, short of a radical system change, only a fundamental reorganisation of capitalism can restore medium- to long-term stability and sustainability of the economic world order. Minsky certainly hit at least one nail on the head, when he wrote in 1993, looking back over the preceding two decades:

A peculiar regime emerged in which the main business in the financial markets became far removed from the financing of the capital development of the country. Furthermore, the main purpose of those who controlled corporations was no longer making profits from production and trade but rather to assure that the liabilities of the corporations were fully priced in the financial market. [...] The question of whether a financial structure that commits a large part of cash flows to debt validation leads to a debacle such as took place between 1929 and 1933 is now an open question. [...] In the present stage of development the financiers are not acting as the *ephors* of the economy, editing the financing that takes place so that the capital development of the economy is promoted. Today's managers of money are but little concerned with the development of the capital asset of an economy. [...] Today's financial structure is more akin to Keynes' characterization of the financial arrangements of advanced capitalism as a casino. The Schumpeter–Keynes vision of the economy as evolving under the stimulus of perceived profit possibilities remains valid. However, we must recognize that evolution is not necessarily a progressive process: the financing evolution of the past decade may well have been retrograde. (Minsky, 1993, pp. 112–13, italics in original)

Notwithstanding the differing emphases on a range of immediate as well as deeper causes of the current crisis, discussed in the pages of this Special Issue, it seems clear that one central objective of this reorganisation of capitalism must be to restore and restrict finance, once again, to its original function, namely to serve, rather than dominate, productive capital accumulation and economic development. This is *the* necessary, if not therefore sufficient, condition to achieve wider goals, such as a stable and efficient international monetary system and a productive, progressive and more egalitarian international division of labour.

Second, from the contributions gathered here (as well as many other publications since the onset of the financial crisis), it is clear that there is no shortage of effective policy solutions, both for the recession as well as for necessary structural reforms in the longer run. At the 2009 Davos meeting, the UK Prime Minister, Gordon Brown, after belatedly admitting that his and other decision-makers' fervent belief in the efficient market hypothesis had been mistaken, nevertheless pleaded sympathy on the grounds that there was no clear map to follow from past experience in how to deal with the global crisis: 'I'm reminded of the story of Titian, who's the great painter, who reached the age of 90, finished

the last of his nearly 100 brilliant paintings, and he said at the end of it, “I’m finally beginning to learn how to paint”, and that is where we are’ (BBC News Online, 2009). Notwithstanding a penchant for quaint comparisons, Brown is certainly not alone amongst leading policy-makers in offering this excuse for inaction or, at the very best, timid action. Not only does this Special Issue alone contain sufficient proposals to put together an immediate reform agenda, but many of these proposals draw directly on historical precedence and experience. As Perez argues, and D’Arista and Kregel demonstrate in detail, the frequent references to the 1929 crash and depression, and to the Bretton Woods blueprint, are not simply lazy metaphors. While Leijonhufvud certainly has a point when he cautions against too easy and superficial reference to Keynes’s theoretical and applied work, what he has in mind, at least partly, are standard Keynesian policies, or what Joan Robinson would have called ‘Bastard Keynesianism’. And while history never repeats itself in any straightforward fashion, it does not follow that policies developed (though not always fully implemented) long ago to face another grave crisis of capitalism are not a useful starting point for discussion. What is more, at the very least their obvious relevance to the reform proposals put forward in this Special Issue (as well as elsewhere in recent months) indicate that the policy-maker’s excuse for inaction is unconvincing as well as potentially misleading.

Finally, a third theme runs through the contributions in this Special Issue, albeit in much more implicit fashion: If there is no dearth of economic policy solutions and reform proposals, why then *does* effective reform seem such a daunting task? The answer, in one sense, is obvious: the central obstacle is not the alleged ‘newness’ of the phenomenon, but powerful political resistance to change. Palma raises the question and Crotty hints at a tentative answer. The policy advisors (and some of the policy-makers) in charge of reform are themselves deeply weeded to the ‘old’ ways of ‘money manager capitalism’ and neo-liberalism. Crotty cites the examples of Larry Summers, Timothy Geithner and Robert Rubin for the USA. An article entitled ‘Mr Brown’s bankers’, published in the *New Statesman* (Brummer, 2009), makes much the same point for the UK: banks are inside the government, not by way of some outlandish conspiracy, but simply through increasingly close, often personal relationships between high level government officials, eventually moving into the financial sector, and business and banking executives occasionally joining government. More often than not, these relationships may be testy, especially in times of crisis, but they form an elitist inner circle of high-level decision-making that is largely shielded from public scrutiny. That these ‘money manager elites’ can wield such direct influence is itself a perhaps largely unintended outcome of what Palma would call ‘capitalism without compulsions’. It reflects the absence of organised and systematic opposition to neo-liberalism (following the collapse of socialism and the end of the Cold War) as much as, or perhaps more so, than the innate strengths and power of the makers and shakers of neoliberal capitalism. In short, perhaps the most urgent of all issues arising from the global financial crisis is this: who will be the historical subject of the changes and reforms suggested in this Special Issue and elsewhere, and of the more wide-ranging reorganisation of capitalism required to make these work in the longer term in the interest of a more productive and more egalitarian world economic order?

Clearly, this is not a question to which there are easy or obvious answers. Yet, if the fruitful, productive and insightful analyses presented here are to have some impact on the lives of ordinary people, it will, eventually have to be answered somewhere.

In the meantime, perhaps someone should introduce Alan Greenspan to the Marx Brothers. Better late than never.

## Bibliography

- BBC News Online. 2009. PM says 'no clear map' for crisis, 1 February, available at <http://news.bbc.co.uk/1/hi/business/davos/7862203.stm> [date last accessed 1 June 2009]
- Brummer, A. 2009. Mr Brown's Bankers, *The New Statesman*, 22 January, available at <http://www.newstatesman.com/economy/2009/01/government-banks-bankers> [date last accessed 8 June 2009]
- Crotty, J. 2009. Structural causes of the global financial crisis: a critical assessment of the 'new financial architecture', *Cambridge Journal of Economics*, vol. 33, no. 4, 563–80
- D'Arista, J. 2009. The evolving international monetary system, *Cambridge Journal of Economics*, vol. 33, no. 4, 633–52
- FED (Federal Reserve Board). 2009. Flow of Funds Accounts of the United States, <http://www.federalreservebank.gov/datadownload>
- Frenkel, R. and Rapetti, M. 2009. A developing country view of the current global crisis: what should not be forgotten and what should be done, *Cambridge Journal of Economics*, vol. 33, no. 4, 685–702
- Ghilarducci, T. 1992. *Labor's Capital: The Economics and Politics of Private Pensions*, Cambridge, MA, MIT Press
- Ghosh, J. and Chandrasekhar, C. P. 2009. The cost of 'coupling': the global crisis and the Indian economy, *Cambridge Journal of Economics*, vol. 33, no. 4, 725–39
- Greenspan, A. 2009. We need a better cushion against risk, *Financial Times*, 26 March
- IMF. 2009a. Global Financial Stability Report. Responding to the Financial Crisis and Measuring Systemic Risk, April, Washington, DC, IMF
- IMF. 2009b. World Economic Outlook. Crisis and Recovery, *World Economic and Financial Surveys*, Washington DC, April
- Kregel, J. 2009. Why don't bailouts work? Design of a new Financial System versus a Return to Normalcy', *Cambridge Journal of Economics*, vol. 33, no. 4, 653–63
- Lawson, T. 2009. The current economic crisis: its nature and the course of academic economics, *Cambridge Journal of Economics*, vol. 33, no. 4, 759–77
- Leijonhufvud, A. 2009. Out of the corridor: Keynes and the crisis, *Cambridge Journal of Economics*, vol. 33, no. 4, 741–57
- McKinsey & Co. 2008. Mapping Global Financial Markets, Fifth Annual Report, October
- Minsky, H. 1993. Schumpeter and finance, pp. 103–115 in Biasco, S., Roncaglia, A. and Salvati, M. (eds), *Market and Institutions in Economic Development*, Basingstoke, St Martin's Press
- Morgan, J. 2009. The limits of central bank policy: economic crisis and the challenge of effective solutions, *Cambridge Journal of Economics*, vol. 33, no. 4, 581–608
- Ocampo, J. 2009. Latin America and the global financial crisis, *Cambridge Journal of Economics*, vol. 33, no. 4, 703–24
- Pagano, U. and Rossi, M. 2009. The crash of the knowledge economy, *Cambridge Journal of Economics*, vol. 33, no. 4, 665–83
- Palma, G. 2009. The revenge of the market on the rentiers: why neo-liberal reports of the end of history turned out to be premature, *Cambridge Journal of Economics*, vol. 33, no. 4, 829–66
- Perez, C. 2009. The double bubble at the turn of the century: technological roots and structural implications, *Cambridge Journal of Economics*, vol. 33, no. 4, 779–805
- Porter, M. E. 1992. Capital disadvantage: America's failing capital investment system, *Harvard Business Review*, September–October, 65–82
- Tett, G. 2009. Fool's Gold, How Unrestrained Greed Corrupted a Dream, Shattered Global Markets and Unleashed a Catastrophe, London, Little, Brown
- Tregenna, F. 2009. The fat years: the structure and profitability of the US banking sector in the pre-crisis period, *Cambridge Journal of Economics*, vol. 33, no. 4, 609–32
- Wade, R. 2009. From global imbalances to global reorganisations of capitalism, *Cambridge Journal of Economics*, vol. 33, no. 4, 539–62
- Whalen, C. 2002. Money manager capitalism: still here, but not quite as expected, *Journal of Economic Issues*, vol. XXXVI, no. 2, 401–6
- Wray, R. 2009. The rise and fall of money manager capitalism: a Minskian approach, *Cambridge Journal of Economics*, vol. 33, no. 4, 807–28