A Response to Reflections on a Global Financial Crisis

by

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Purpose

This paper seeks to draw out the main themes of the debate on the current financial crisis as published in the special issue of CPOIB No. 1/2 (2009) and place them in the context of subsequent events. It also considers what conclusions can be drawn both for future policy and for the conduct of future academic research

Design/methodology/approach

The paper overviews existing literature and summarises the main findings, focusing particularly on some topics deemed important and interesting for directing future research.

Findings

The paper finds that while the neoclassical approach to finance has evidently failed there is currently little consensus on how to replace it. This opens up the possibility of debate, new avenues for research and ultimately radical change.

Practical implications

The paper argues that more interactions between academic and finance practitioners are needed. Research in finance should be interdisciplinary or embed the insights from other disciplines and it should put behavioural finance under mainstream attention. The teaching of management and finance should also be more informed by issues of ethics, politics, social corporate responsibility, distribution of wealth and power and it should stimulate more critical and creative thinking.

Social implications

The authors argue that capitalism works well only when it is adequately regulated and when there is a solid mechanism of balancing and counterbalancing of powers among the major players. The paper therefore calls for a "democratisation" of capitalism, to stop the trend of growing global inequality and reverse the existent plutocratic capitalism.

Originality/value

The paper outlines several viewpoints and interpretations of the financial crisis taken from the extant literature and hence offers a reflection on several dimensions that shaped the crisis.

Keywords

Financial crisis, neoclassical economics, behavioural finance, academic research, institutional theory, politics, monetary policy.

Paper Type

General Review

Both authors contributed equally to this paper.

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Introduction

The large and far reaching global financial crisis has naturally given rise to a wide variety of responses and reflections. The causes, consequences and implications have all been extensively debated and many authors have made recommendations as to future policy. The status quo in both the academic and practical approaches to economics and finance is rightly up for debate in a way that has not occurred for many decades. As one would expect, there is not complete consensus on either the diagnosis of the underlying problems or their solution. However, given the magnitude of the crisis a range of views can only be welcomed. Informed commentators have advocated actions ranging across a spectrum from making some modest reforms to the financial regulatory system to fundamentally reassessing our entire approach to politics, economics and ethics.

The recent special issue of this journal dealing with the crisis included articles containing a wide spectrum of opinions and this paper initially seeks to draw out the main themes of the debate and then place them in the context of subsequent events and consider what conclusions can be drawn both for future policy and for the conduct of future academic research related to these issues. In the next section of the article we give some background to the crisis and in the subsequent sections we review some of the different perspectives on the crisis, consider the implications for academic research and finally present conclusions.

Background

It is generally accepted that the present financial meltdown, originating in the USA, primarily stems from excessive risk-taking in the financial system. Homeowners took out risky loans that were pushed by greedy loan brokers and lenders who cared little about the riskiness of these loans as they would be packaged and sold off as residential mortgage-backed securities (RMBS)[1] not allowing their buyers to know exactly what default risk was attached to them. So those who issued the mortgages (and had done the risk assessment) passed on the risks to others – mostly sophisticated investors like financial institutions whose eventual losses due to mortgage defaults created systemic risks for other participants in the financial markets. Unlike the 1929's crisis, this is not a liquidity crisis, but a solvency crisis due to a lack of faith in the ability of borrowers to repay their debts, the inability of the market to value the toxic assets and hence the lack of credibility of balance sheets.

However a number of myths have grown up around the crisis. One myth that has to be demolished is that the state was a passive spectator to the events. As Aalbers (2008) argues, the state enabled both securitization and subprime lending. Gotham (2006) analyses the deregulation of the mortgage market and shows that the federal government, for example, through the *Financial Institutions Reform, Recovery and Enforcement Act* (1989), pushed portfolio lenders to securitize their loans and shift to off-balance lending (Aalbers, 2009, p. 94). That is, the US state was at the origins of

[1] Another common term used instead of RMBS is collateralized debt obligations (CDOs).

the current crisis.[2] Part of the guilt is to be shared with many regulators whose actions were absent or insufficient because they were either 'heavily understaffed or assumed financial markets could work most efficiently if they were to be self-regulated. More importantly, since the 1990s most mortgage lenders were non-banks that did not have to live up to banking regulations and could operate within an almost non-existent framework' (Aalbers, *ibidem*).

Additionally, there are two more interesting myths in the collective imagery of the credit crunch that need to be critically reassessed. The first is that subprime loans were taken out by highly indebted households with poor credit scores. The reality is that the majority of the subprime loans went to borrowers with prime credit (Brooks and Simon, 2007; Dymski, 2007).[3] The lending was at higher fees and interest rates, whether or not borrowers actually had bad credit, so selling these loans was good business for both mortgage lenders and brokers. Lenders could charge higher interest rates hence make more profits. Brokers also had incentives since they were not responsible for problems with defaulting borrowers but they were simply paid a fee for what they sold. Actually, if borrowers defaulted, brokers could make even more money by selling them another loan, increasing the market for refinancing (Aalbers, 2009, p. 96).

The second more disconcerting myth is that subprime lending allowed people who were formerly excluded from homeownership, like low-income and ethnic minority groups, to buy a house. There is nothing further from the truth. The reality is that more than half of the subprime loans were refinance loans and second mortgages, granted to people who already owned a mortgaged property. Most of these refinance loans were adjustable rate mortgages (ARMs), which start with a low interest rate to attract customers, but which become much more expensive after two or three years. The trick was that borrowers were often misled about the higher interest rate which was detailed in the small print of an incomprehensible mortgage contract (Aalbers, *ibidem*). Shockingly, these predatory loans were sold mostly in neighbourhoods with ethnic minority populations. Almost half of the loans in minority areas were predatory, compared to 22 per cent in white areas (Avery *et al.*, 2007). Schloemer *et al.* (2006) show how African-Americans received more than twice as many high-priced loans as Whites, even after controlling for the risk level of the borrower. Consequently, foreclosures were concentrated in certain parts of the cities.

One recurring theme when explaining the current financial turmoil is the increasing complexity of the financial system, both in terms of products and players. A large number of complex financial products, many of them derivatives, have been introduced in recent years, requiring a much larger proportion of financial industry employees to have advanced knowledge of financial engineering and risk management that was once confined to an élite of financial gurus. This complexity

[2] Aalbers (2009, p. 95) recalls how many US state initiatives to tighten financial regulation, like those from North Carolina, West Virginia or New Mexico, were halted by the federal government and that these states were forced to withdraw certain acts and regulations.

[3] Only a portion of funds were being lent to subprime borrowers. These loans were called, in a derogatory way, "ninja loans" – "no income, job or assets". Their existence was justified by the simple expectation that house prices would continue to appreciate and the lenders would recover their loans from the appreciation of the prices when borrowers default. The quality of these borrowers clearly did not matter because of such expectations (Jain, 2009, p. 104).

was such that many observers considered these products difficult to understand and not easily controllable. New players, such as hedge funds, private equity funds, conduits, Structured Investment Vehicles (SIVs), etc. became prominent on the financial scene, but their actions were not transparent and subject to little or no regulation (Viñals, 2008, pp. 4-5). A particularly deleterious element that amplified the meltdown is leveraging. Many investors, such as investment banks, bought RMBS with borrowed money, with leverage factors averaging around 14, but not uncommonly reaching 20 or 30 (see Aalbers, 2009, p. 95). Under these conditions both profits and losses become disproportionately large.

The events that occurred at the most acute stage of the crisis, after the decline in the US housing market, have been very well documented, not least in the special issue of this journal[4], and so need only be briefly summarised here. The facts are that in the autumn of 2008, after the collapse of several of America's largest financial institutions, the world's financial system was on the verge of total systemic collapse with incalculable consequences for the real economy. The possibility of another Great Depression was certainly not hyperbole.

The only possible quick way out of such an impasse was the enormous deployment of public funds that took place, mainly in the USA and a number of European countries through government loans, nationalizations and monetary policies based on quantitative easing.[5] One of the novelties of the current crisis compared to previous crises is the policy coordination efforts made by such countries, as witnessed by the setting of the agenda for the G8 2009 in L'Aquila (Italy), the G20 London summit (April 2009) and the extraordinary G20 Pittsburgh summit (September 2009), the latter called for the purpose of tackling the global credit crisis. Such massive government liquidity interventions and bail-outs were determined rather quickly, as noticed by Caprotti (2009) and directed at stabilizing and providing legitimacy to the financial industry organizations before gigantic domino effects contaminated the real economy. In a sense such interventions could be characterised as an emergency and unplanned U-turn from free market to Keynesian-type policies at least partially inspired by memories of the policy mistakes of the 1930s (see Pressman, 2009, for an analysis of the crisis from a Keynesian perspective). Unfortunately at the time of writing some reflections on the effectiveness of such governmental interventions to

[4] Critical Perspectives on International Business, Volume 5, Issue 1/2.

[5] For example, as ONS (2009) figures show, at the end of August 2009 the UK's net debt was £804.8 billion, equivalent to 57.5% of gross domestic product, compared to 44% and 35.9% in August 2008 and August 2007 respectively (Northern Rock's tumble started in September 2007). Regarding the quantitative easing practised by the Bank of England since March 2009 the quantity of assets (like government and corporate bonds) purchased by the creation of central bank reserves on a settled basis reached £162.175 bn on 8th October 2009. At end-June 2009, the contribution to the UK's public sector net debt (PSND) from financial sector interventions amounted to £141.2bn. Northern Rock and Bradford & Bingley together accounted for £118bn of this difference. Compensation payments to depositors by the Financial Services Compensation Scheme and HM Treasury accounted for a further £9bn. The remainder represents the contribution to net debt from purchases by the Bank of England's Asset Purchase Facility Fund. Cfr. ONS (2009, p. 5).
The American Recovery and Reinvestment Act of 2009, signed into law by President Obama on February 17th 2009, is an unprecedented effort to jumpstart the US economy and distribute $787 billion across several measures from saving jobs and providing tax relief to improve infrastructure, education, healthcare and energy independence. US public sector gross debt is projected to rise by at least 40% in the next five years (to over 100% of GDP from the 70% level at the time of writing in October 2009). Source: http://www.usgovernmentspending.com/federal_debt_chart.html

restore liquidity and market confidence lead us to observe that although the major financial players have been saved from failure and continued their operations (even under a changed organizational form) and bank runs or similar panics were largely avoided, the negative effects on the real economy are still far reaching. The wave of company closures on the global scene, the shrinking international trade and foreign direct investment and the unemployment hike hit more or less all industrialised countries and several emerging economies. As Wong (2009, p.58) correctly points out, ‘the difference with 1929 is that the world is far more interdependent and the scale of the crisis is potentially far bigger.’ Although official discount rates/federal funds rates reached their lowest historical levels, the credit spreads ─ the difference between what it costs the government to borrow and what private-sector borrowers must pay ─ are at historic highs. Banks have failed to pass on much of the cut in base rates, with margins between the base rate and lenders' Standard Variable Rates more than doubling over the last year, hence they have kept relatively high bank rates and restricted loans and mortgages to recover their exposures. In other words the transmission of monetary policy has been altered.[6] Until all the bad assets are removed, many institutions will still lack sufficient capital to extend fresh credit to the economy (Wong, 2009, p. 62). This bleak scenario is accompanied by increased public debts and deficits, lower tax revenues, expected rises in inflation and interest rates and the announced austerity that will characterise most countries in the future. It is clear that the public spending priorities will have to change to repay these huge debts during the time the financial industry organizations clean up all the toxic assets and non-performing loans that still appear on their balance sheets. The shares acquired by activist States turned into shareholders will in the future be sold on the market and banks now nationalized will return to private hands. But in the meanwhile what demands are being placed on taxpayers’ pockets? What social-economic policies will have a budget cut to see through these difficult times? Education and research funding seems one.[7] Caprotti (2009) discusses the missed opportunities represented

[6] Ibañez (2009) argues that since the introduction of the euro, innovations in credit markets in the euro area have had a significant impact on banks’ ability and incentives to grant credit and, more specifically, on the effectiveness of the bank lending channel. Two major innovations in this respect have been the greater reliance of banks on market sources of funding (i.e. expansion of the covered bond market) and a dramatic increase in securitisation activity. The recent crisis suggests that due to the increase in funding via financial markets, banks’ incentives and ability to lend are likely to be more sensitive to financial market conditions than was the case in the past when banks were overwhelmingly funded via bank deposits. There is significant US evidence that securitisation has led to laxer screening of borrowers (see Dell’Ariccia, Igan and Laeven, 2008, and Keys, Mukherjee, Seru and Vig, 2008). These papers assume that when securities are passed from banks’ balance sheets to the markets there could be fewer incentives for financial intermediaries to screen borrowers. In the short term, this change in incentives would contribute to looser credit standards, in the long term, this would lead to higher default rates on bank loans. Also, the laxer screening of borrowers seems to be linked to an expansion in the granting of credit (see Mian and Sufi, 2008). Moreover, there is tentative evidence that securitisation has detached credit supply from monetary policy changes (see Altunbas, Gambacorta and Marqués Ibañez, 2008) and this suggests that securitisation could make the bank lending channel less effective. Last, but not least, some recent research has also raised the issue of how the stance of monetary policy could affect the “risk tolerance” of banks which could possibly trigger a credit supply shock if risk taking became excessive (see Rajan, 2006). This is the “risk taking” channel of monetary policy transmission, which suggests that financial innovation is likely to have enhanced the importance of the perceptions and pricing of risk as factors influencing the behaviour of banks. This could have strengthened the link between the stance of monetary policy and banks’ incentives for risk taking.

[7] For example, in the UK Universities students’ enrolment has increased across all disciplines due to the prospect of high youth unemployment but the increase in students numbers has not been matched

by ‘the ready availability of capital and resources to rescue the financial system, while much smaller capital and resource allocations required to help resolve or ameliorate lasting socioeconomic problems, especially at the domestic scale, have regularly not been made available, or have been voted down by political representatives concerned with constituency reactions (Weir *et al.* 1988).’

Nouriel Roubini in an article entitled “The risk of a double-dip recession is rising” published in the *Financial Times* on 23 August 2009 affirms:

> […] true deleveraging has not begun yet because the losses of financial institutions have been socialised and put on government balance sheets. This limits the ability of banks to lend, households to spend and companies to invest. […] The releveraging of the public sector through its build-up of large fiscal deficits risks crowding out a recovery in private sector spending.

In other words, some painful deleveraging through bank failures should have probably been allowed.

Different Perspectives on the Crisis

A number of different perspectives can be taken on the crisis. Some commentators take a broad overview of the process. Kallis *et al.* (2008, p. 20) point out that ‘the problem was that all the actors in the process had been looking at what they thought was reality through trends in market signals rather than looking at the underlying reality.’ The bad habit that became spread among both home buyers and lenders was to be over-confident that housing prices would continue to go up because they had gone up for a long time. Was this motivated by greed as Weitzer and Darroch (2009) argue? Was it due to lack of common sense? Was it the lax regulation that blinded the eyes of controllers? Be that as it may we certainly need to recover that common sense and morality we pushed aside. It is perhaps not by chance that books such as *A Colossal Failure of Common Sense: The Incredible Inside Story of the Collapse of Lehman Brothers* by Larry MacDonald and Patrick Robinson have just seen the light.

Jain (2009, p. 101) states that the subprime crisis of 2007-2008 is not a crisis of greed or excessive financial innovations, it is a crisis of hubris. Why? Because mortgage lenders where passing on risks so that they did not suffer in the case of borrowers’ default; buyers were taking on risks that they did not understand without assessing them; ‘rating agencies were classifying the RMBS as high quality paper even when they contained large shares of sub-prime mortgages’; buyers trusted completely these ratings; ‘regulators deluded themselves that markets were efficient in pricing risk even when given a free lunch’; more generally ‘regulators suffered from the investors’ curse of “overconfidence in their abilities” and ignored everything that the past crises have taught us about how individuals and markets behave’ (Jain, 2009, pp. 100-101, 104).

Other authors have tended to stress particular causal effects. For convenience we have adopted a number of broad themes to summarise the discussion and these are outlined below. One approach is to emphasise the role of regulation, the failure of which can

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by increased government funding due to the restriction on funding student places. Several colleges and universities face financial distress and have decided to make staff redundant. See www.ucu.org.uk be viewed as allowing the crisis and the reform of which is necessary for a satisfactory financial system in the future. Some authors emphasise the disjoint between the financial and the real economy which is bound to lead to drastic periods of readjustment as we have so recently witnessed. Another approach is to consider the nature of the interactions between institutions involved in the financial system. Finally the relationship between politics, economics and the financial system over the last few decades, and in particular the dominance of the neoclassical economics paradigm, is seen by a number of authorities to be at the root of the crisis.

Regulation

Given that one of the fundamental aims of financial regulation is to prevent the danger of a systemic collapse it is almost a truism to argue the prevailing regulatory system has failed. An obvious and necessary response to the crisis is to make appropriate reforms to the regulatory system and huge efforts are going into this area (see, for example, Turner, 2009, for a wide ranging overview from the Financial Services Authority, the main UK regulatory body or a recent special issue of the Journal of Financial Regulation and Compliance[8] for a range of academic viewpoints).

Interestingly, although the precondition to avoid the recurrence of another crisis would be to introduce more stringent regulation, not everybody agrees with its long-term effectiveness. Wong (2009, p. 67) argues that 'the (re)regulation of the finance sector and governmental interventions in the sector do not constitute a radical change'. He quotes Moran (1991, p. 13) who notices that there is long history of popular protest and discontent triggered by financial scandals and crises in the USA and that far from undermining the institutional and regulatory basis of financial expansion, have repeatedly been "pacified" through the process of further "codification, institutionalisation and juridification". The underlying idea is that capitalism has an anarchic nature, and as such it cannot be controlled by governments and central bankers (Wong, *ibidem*). This anarchism is compounded by the unprecedented concentration of capital, mostly fictitious, and the possibility of moving it around the world – still quoting Wong – 'at the caprice of a small number of people', making the capitalism 'more convulsive and unpredictable'. Our capitalism is thus more prone to recurrent crises because 'a particular dynamic of growth, marked by intensified financialization, is generating new contradictions and new barriers to sustained accumulation (Wong, 2009, p. 68).

Disjoint between the financial and the real economy

A major point of departure from conventional economic thinking is lucidly explained in the article "Paper Assets, Real Debts: An Ecological-Economic Exploration of the Global Economic Crisis" by Kallis *et al.* (2009) These ecological economists take the view that the crisis is only a manifestation of a 'growing disjuncture between the real economy of production and the paper economy of finance'. They challenge the notion of growth-as-progress given that ecological and resource factors are constrained. The very nature of the financial system is to allow inter-temporal transfer of funds, or to

[8] Journal of Financial Regulation and Compliance, vol. 17, no. 4, 2009.

borrow against the future, on the expectation that future economic growth will provide the means to repay the interest and principal. But what if this economic growth cannot be sustained indefinitely? The real economy of production that lies beneath the financial sphere is the one that matters to create wealth and avoid debt default. But, in turn, this real economy relies on the availability of resources and energy whose growth depends only partially on economic factors like prices and markets, having physical and biological limits too. Depletion of stock resources like fossil fuels, the degradation of the global atmosphere and the shrinking space on Earth available to receive our waste may seriously condition future human activity and its economic returns. Also, such bio-physical constraints can become binding in a fast and irreversible manner, not allowing an effective correction once the thresholds have been surpassed.

So the argument put forward by these authors is simple: the finance sphere grew far too fast and too large to be supported by the real economy beneath. This is not a new argument. As cited by Kallis *et al.* (2009), Soddy (1926) noticed that the financial system can be prone to increase debts (both private and public) and then mistake the expansion of credit for the creation of real wealth. Brenner (2006) showed how asset bubbles – first technology shares and then houses – contributed to maintaining the perception of a buoyant economy and consumption growth, but only at the cost of building up personal and corporate indebtedness.[9] The amount of speculation which has been growing exponentially in recent years helps to drive a wedge between finance and the underlying real economy. As Wong (2009, p. 64) reports, for every dollar that crosses the exchanges for trade, sixty go for pure speculation. According to Augar (2006) speculative capital movements, swaps, forwards and options now overwhelm trade in their importance for the balance of payments. Financial sector profits as a percentage of total US corporate profits rose at a staggering rate from 14 percent in 1981 to 40 percent in 2003; and at the end of 2008 they were still at 27.6 per cent notwithstanding the financial turmoil.[10]

This problem is made worse by the incorrect calculation of economic growth by standard accounting measures like GDP, where negative externalities like pollution are not accounted for. Then we can form the false impression that we can fulfil the obligation to repay the accumulated financial debts at compound interest because we use an inflated measure of economic growth since pollution is not valued and exhaustible resources are undervalued. In other words, if we would have been able to correctly measure our real growth we could have avoided such excessive growth of financial assets relative to the growth of real wealth. Banks suddenly had to close the credit taps and rightly so; we had too much liquidity, not too little, and the bubble burst. Also Wong (2009, p. 61) agrees that ‘the present crisis is not one arising from a lack of money; on the contrary, it is the crisis that causes a lack of money. When the economy enters into crisis, credit dries up and people demand hard cash instead.’ The problem is that the effect of the crisis becomes its cause as well, creating a downward

[9] See Wong (2009, p. 73). The expanded number of mortgagees despite increasing house prices occurred with loan-to-house-values up to 100 percent and this could only be sustainable as long as house prices continued to rise and interest rates remained low. Heavy borrowings were used to buy up financial assets, not based on the income streams they would generate, but merely on the assumption of increasing prices for these assets (Wong, *ibidem*).

[10] Authors’ own calculations based on BEA data for domestic corporate profits with inventory valuation and capital consumption adjustments.

spiral. That is why State intervention has been judged crucial by policymakers in trying to break this spiral, and market discipline, i.e. leaving corporations to go bankrupt, in nearly all instances was not an option because of the very nature of the financial industry. Whether public instead of private deleveraging will be conducive to more sustained growth remains however a debatable issue.

Another aspect not highlighted enough in our view is that high oil prices are among the culprits of the current economic crisis.[11] These were not caused by the OPEC oligopoly, since the cartel members were producing close to full capacity from 2002 and particularly in 2007-08 even as prices shot up.[12] Such an oil price hike then must be attributed more to oil market speculation. And here two explanations are given. First, as Kallis *et al.* (2009) point out, we are approaching peak-oil and market expectations incorporated this. Second, as Khan (2009) explains, the phenomenal increase in financialisation of commodity markets during 2006–08, including in particular the oil market, led to speculation and momentum trading,[13] which pushed oil prices way beyond their long-term equilibrium level as determined by fundamentals. Speculation on the future price of oil led to both overshooting of spot prices in the first half of 2008 and undershooting in the second half of the year. Speculation can be gauged by the data on the volume of oil futures, which shows a spectacular growth over the last few years. In 2002 the average daily trading volume of oil futures (also known as paper barrels) was four times the daily world demand for oil (physical barrels). By 2008, daily trading in paper barrels had reached 15 times the daily world production of oil (of around 85 million barrels per day) and remained at about that level through the first half of 2009.[14] The importance of speculation in oil price futures is recognised by the fact that the Commodity Futures Trading Commission (CFTC) is considering whether to impose speculative limits on futures contracts for energy products as it already does for agricultural products like wheat and corn. In an article in the *Wall Street Journal* on July 8, 2009, UK Prime Minister Gordon Brown and the French President Nicolas Sarkozy also expressed concern about “damaging speculation” and called for the International Organization of Securities Regulators to oversee the oil futures market and investigate the role that futures trading plays in oil price fluctuations. If, as claimed by Khan (2009), speculation played a significant role in the 2008 bubble, then it is correct to invoke more controls to prevent the emergence of another bubble in the future. The policies being considered by the CFTC (2009) to put aggregate position limits on futures contracts and to increase the transparency of futures markets are moves in the right direction. Apart from the speculation argument, oil capacity expansion has slowed in 2009 (see OPEC, 2009), at the same time the International Energy Agency (IEA) forecasts world demand for oil to rise by about 0.6 percent a year from 2010 on,

[11] Hamilton (2009) offers an economic explanation of why oil prices are important in understanding the crisis. Basically higher oil and gasoline prices damaged the U.S. auto industry, the effects of which cascaded through large swathes of the rest of the economy and helped curtail spending. Energy prices also cut consumers’ disposable income and confidence. Cheap abodes in distant US suburbs lost value following oil price hikes, so much that the housing meltdown too can be partially attributed to higher oil prices.

[12] See Khan (2009).

[13] Momentum trading is essentially buying commodities that have experienced high returns during some recent period and selling (or shorting) those that have had low returns.

[14] As Khan (2009) argues, the futures data are probably an underestimate since they do not include options or over-the-counter trades. Furthermore, major oil producers, like Saudi Arabia and the other OPEC countries, transact only in the spot market and not in the futures market.

reaching 89 million barrels per day by 2014 (see IEA, 2009). Given the still limited development of alternative sources of energy, demand for oil will remain strong in the next few years. If oil supply does not keep up and provide the additional 3 million barrels per day needed by 2014, a serious imbalance between future demand and supply in the world oil market will emerge. Hence the plan by Prime Minister Brown and President Sarkozy, involving both capacity expansion and conservation or fuel economy, represents the only way to correct this potential imbalance. Failing these, and if there is no brake to speculation, a repetition of 2008 bubble could easily occur with spot oil prices soaring above their long-term equilibrium level and other bubbles could become highly likely.

Institutional Theory

Another important contribution to interpret the current financial crisis and why it developed is offered by Riaz (2009) using the concepts developed by the new institutional theory as put forward by DiMaggio and Powell (1983) and Meyer and Rowan (1977). According to this author the fundamentals of such a crisis stem from 'an institutional crisis, resulting from the interplay of the financial industry organizations and broader formal and informal institutions' (Riaz, 2009, p. 27). The main idea is that there exists a reciprocal influence between investment banks and financial services organizations on one side, and, on the other side, the formal and informal institutions shaping the regulative, normative and cultural context in which financial industry organizations operate. So, the traditional idea that institutions influence organizations, but not the other way round, has to be abandoned in favour of a more realistic picture: financial industry organizations represent powerful interests that have a bearing on the survival of the institutional framework itself through active support and sanctions. In part due to the wave of mergers and acquisitions that the banking sector underwent in recent years and the globalisation which saw these M&As becoming cross-borders, multinational organizations now have 'budgets far exceeding those of several countries put together', as Riaz (2009, p. 28) remarks, and exercise their influence, lobbying, persuasion and manipulation ability to their advantage with regards to the institutions. The legitimacy that institutions bestow upon organizations in reality is mirrored by a "reverse legitimacy" created by the success of organizations, which then benefits the institutions, allowing their continuation and survival, because they are deemed to have a role in the success of such organizations. In other words the success of certain big organizations in the financial industry can cause the institutions responsible for sanctioning them to also become recognized as successful for having created the right regulative, normative and cultural environment for that success to thrive, even when the success is driven by other factors beyond the reach of institutional control. Such was the case for the mortgage-backed securities that proliferated thanks to the success of the organizations which managed their creation, securitization, insurance and rating. This success reverse legitimated the formal regulatory institutions (the Securities and Exchange Commission, and the Federal Reserve with its credit expansion and inflationary policies) and sanctioned the informal cultural-cognitive and normative institutions like the cultural acceptance of high debt and excessive home mortgage.

One unintended consequence that arises, though, is that developing countries often imitate institutions from more developed countries where powerful business and financial organizations have succeeded, and try and attract these organizations to their country hoping that they will replicate the same success in their host institutional environment. This gives rise to what Riaz (2009) calls 'contagion of legitimacy'. For example, countries whose institutional environment historically encouraged savings saw a cultural shift and a move towards acceptance of debt and a softening of regulation to allow financial organizations to replicate businesses similar to those successful in the U.S. and Western Europe. There has been therefore an institutional formation in emerging economies through attempts at replication of the "successful" institutions where such institutions were non existent. This obviously poses on developed countries the big responsibility of setting the right example for developing countries.

But the new institutional theory – as outlined by Riaz (2009) – offers probably even more insight into the unfolding crisis when it explains the tactics used by organizations to manipulate the legitimacy-granting process through strategies of decoupling to avoid institutional pressures not in line with parts of their structure (Meyer and Rowan, 1977). Organizations may pay lip service to the institutional pressures and requests of conformity through the organization's institutional layer, offering symbolic conformance, while implementing a substantive non-conformance in technical aspects using strategies of concealment or buffering (Olivier, 1991; Olivier, 1996).[15] Such strategies of decoupling or concealment by powerful and successful organizations, when prolonged over a period of time, eventually have a negative impact on the survival of the institutions involved. The ability to comply only symbolically and non substantially gives a competitive advantage to the first few organizations which implement such strategies, since they can still derive legitimacy from the institutions but keep the flexibility in technical or substantive aspects to better their performance. If such strategies are understood or discovered by other organizations, then the industry becomes populated by more and more organizations which mimic such strategies, especially if they were first implemented by the more powerful and successful organizations, which consolidated their positions thanks also to such behaviour. But this situation can get even worse when powerful organizations succeed in manipulating the concerned institutions in order to make it easier to implement such concealment and decoupling strategies. This is achieved when institutions are weakened in their ability to detect the substantive non-conformity of organizations and their "illegitimate" substantive structures, nonetheless projecting a heightened perception of legitimacy to the outside world. And this clears the way for a legitimacy crisis once the illegitimate structures become prevalent in the organizational field. Like a bubble ready to burst, when the illegitimacy of a few organizations, particularly the more successful ones, becomes well-known outside the field, a domino effect occurs whereby the legitimacy of all organizations (even those

[15] For example Wong (2009, p. 64) recalls how since the 1990s banks have been creating "structured investment vehicles" (SIV) and other derivative assets to bypass the reserve requirement of the Basel Bank regulations. SIV were institutions used by banks to transfer their RMBS off balance sheets. To this we can add the blurring of the lines between commercial and investment banking, insurance and real estate which led to financial innovative packages enabling high leveraging of funds accessible through low interest loans. Tett and Davies (2007) called this "shadow" banking system 'the plethora of opaque institutions and vehicles [that] have sprung up in American and European markets this decade, and […] have come to play an important role in providing credit across the system.' This "hidden" system expanded rapidly in the 1990s and 2000s as a consequence of deregulation, which allowed many financial institutions to take on banking functions and loosened the rules that govern borrowing and lending (Wong, *ibidem*).

who fully complied in all aspects) goes under scrutiny. At this point the institutions which bestowed legitimacy to organizations with illegitimate structures suffer from a dramatic attack to their legitimacy-granting powers. Riaz (2009) gives the example of the investment banks in the USA, which needed to avoid institutional pressures that were in conflict with substantive aspects of the banks' operations related to subprime mortgage risks, yet also needed to be considered legitimate for the nature of their business. Hence 'they remained exposed to the high risk of subprime mortgages in substantive terms, while maintaining legitimacy in symbolic aspects.' But 'once the discovery of illegitimate structures within powerful and successful investment banks became public knowledge outside their field, the legitimacy of all investment banks along the relevant dimensions became suspect.' (Riaz, 2009, p. 32). The reaction of the most prominent investment banks was to change organizational form to escape the legitimacy crisis.[16] Other financial organizations had to be saved through nationalization or government loans.

The collateral effect however was that the collapse of the "contagion of legitimacy" invested both the formal institutions (like the Federal Reserve and its credit expansion and inflationary policies, the U.S. Treasury, the SEC) and the informal institutions, with scepticism rising regarding their legitimacy granting powers and the lack of an early warning system. High criticism and popular indignation spread and many debates ensued regarding the responsibility of aggressive high-risk investment strategies, over-leveraged banks, inefficient risk management regimes, and the practice of paying huge bonus rewards to executives and traders who lent themselves to such greedy policies in search of ever more profits for their companies.

Financial services and politics

Since the early 1980s, there has been a decoupling between the financial services industry and politics. Deregulation and privatisation, in the neoliberal spirit, became dominant economic paradigms (Caprotti, 2009) with, in some cases, ultimately catastrophic results as in the disastrous demutualisations of the UK building societies (see Klimecki and Willmott, 2009). But this crisis has restored the links between political power and finance, now extended at supranational level (evident, for example, in the banking industry disputes between Iceland and the UK) which underlines how globalisation of financial markets pushes the boundaries of the organizational-institutional interplay described by Riaz (2009) to a cross-border dimension where domestic and international politics have a say in the financial world. Also, Caprotti (2009, p. 82) notes 'the calls for the use of public funds were both naturalised *and* prescriptive.' The communication between industry and government led to the assumption that public bail-outs were the only rational solution possible and consequently it was natural that governments would provide public funds, legitimising the financial industry's claims to citizens' fiscal contributions. Such rapid response of governments and deployment of public funds is unprecedented. More long-standing domestic and international social, political and medical issues (like public health funding in the USA, a more serious commitment to fight global

[16] For example, Goldman Sachs and Morgan Stanley changed organizational form to cease being specialized investment banks and became deposit holding banks. Bear Sterns and Merrill Lynch, which used to be highly specialized investment banks, in effect changed organizational form when acquired by universal banks JPMorgan and Bank of America respectively (Riaz, 2009, p. 32).

warming or to sustain public education, malaria research, or return-oriented funding of micro-enterprises in developing countries) have never received a parallel political attention, let alone cash injections of comparable scale. As Caprotti (2009) argues, this should show the way forward in terms of communication and political engagement to socio-economic advocates, business leaders, non-state actors with social objectives and NGOs looking for funds which politicians often refuse or limit on the grounds that such funds are unavailable, while this is clearly not the case.

The crisis will undoubtedly have major geopolitical consequences. A key question is the extent to which it will bring US hegemony under challenge. The origins of the credit crunch in the USA has left the superpower economically weakened and accelerated some already powerful adverse trends. The huge current account deficits that it has built up in recent years (debt mostly with Japan and China) has weakened the dollar, so much that the euro could replace it as the international reserve and transaction currency (and to some extent it already has).[17] After all the USA is a victim of that high-debt culture and disregard for savings that led to the crisis. A current account deficit that is not periodically reversed means that the country is living beyond its means. This has been possible so far to the extent to which the dollar was accepted for transactions on the global markets and held in the vaults of central banks. However no clear alternative to the US hegemony is immediately in sight. China is growing fast but yet not ready. The EU has always been an economic giant but a political dwarf. Only time will tell whether the Treaty of Lisbon, after the Irish referendum cleared the way to its EU-wide adoption, makes a difference in this sense. Another open question is the ultimate effect of the crisis on the UK. One of the key reasons for preserving monetary independence has been to protect the competitive advantage of the City. Now that the UK financial services industry has been so severely hit it may be that eventually public and political attitudes towards the Euro will alter.

In broad terms, the large emerging markets (like the BRICS countries) appear to have escaped the worst effects of the financial crisis (see Azevedo and Terra, 2009, for a discussion of the Brazilian experience). In the current context of globalisation and the increasing level of interdependencies present in production and consumption the relative resilience of these economies has been very positive for global growth and Western countries. However, one of the main predicaments of development economics is that growth has to occur with redistribution. If such developing countries experience increasing income inequality then growth cannot be sustainable because, as Daly (2008) observes, this will ‘prevent most people from buying much of the new stuff – except on credit’.

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[17] At the time of writing dollars accounted for about 62 percent of the currency reserve at central banks around the world, the lowest on record according to the International Monetary Fund. According to Barclays Capital over the period July-September 2009 central banks put 63 percent of their new cash into euro and yen, a nearly complete reversal of the dollar's onetime dominance for reserves. The dollar's share of new cash in the central banks was down to 37 percent compared with two-thirds a decade ago (see Paul Tharp “Dollar loses reserve status to yen & euro”, New York Post, 13 October 2009 accessible at http://www.nypost.com/p/news/business/dollar_loses_reserve_status_to_yen_hFyfwvpBW1YYLykSJwTTEL).

Implications for Academic Research

The crisis has enormous implications for academic research in business related disciplines. Wong (2009) invokes greater regulation of market behaviour, business practices and boardroom pay, and at the same time calls for a reform of the business educational agenda. Harney (2008) points the finger at the inadequacy of management and business education, particularly its neglect of social and political questions. The teaching of business ethics and corporate social responsibility are still marginal or non existent in the curricula of undergraduate and postgraduate students. Research published in the leading journals of business, management, accounting and finance rarely analyses the relationship between business practices and the distribution of wealth in society (Harney *et al.*, 2008). Ferguson (2008) recalls the Marxist interpretation of capitalism as a 'history of expropriation and concentration of wealth ─ the means of production ─ in the hands of an ever-decreasing minority […], making capitalism crisis-prone'. Wong (2009, p.58) reaches the strong conclusion that 'unless fundamental reforms are introduced, including an injection of politics within business education and our practices, the crisis will recur again in the future.' Echoing Doria *et al.* (2003) we invoke a teaching that stimulates more critical and creative thinking on a regular basis.

In the field of academic finance the dominant paradigm has been drawn from neoclassical economics and so mainstream research has been very congruent with and indeed provided intellectual justification for the general move towards free-markets and deregulation in the finance area over the last three decades. The general presumption has been that atomistic, informed individuals operating in their own self interest in a free market will lead to prices being formed in a rational and efficient manner. In this view of the world free markets, almost by definition, should be self regulating. As stated by Keasey and Hudson (2007, p. 947) 'Within this domain the activities/interactions of individual investors, institutional investors, financial intermediaries, companies and the market itself are rarely explored in any detail'. This list of under-researched topics actually forms a very good starting point for investigating the roots of the current crisis. As discussed above, the motivations, knowledge and rationality of individual borrowers, financial intermediaries, banks, regulators and stockholders and how these shaped their interactions were instrumental in creating the crisis.

Basically academic finance has to become much more open to different research agendas and to move its focus away from the study of interactions between rational individuals in idealised free markets. In this respect areas that show particular promise include the insights available from behavioural finance and the active incorporation of wider approaches from economics and from other academic disciplines.

Since the early 1980s there has been a steady growth of interest in behavioural finance, which focuses on departures from rationality and aims to bridge the gap between finance and psychology (see De Bondt et al, 2008 for a recent review of the field). However, acceptance of the area has been slow with many in the academic finance establishment being very unsympathetic to the approach (see, for example, Fama, 1998 for an influential critique). Consequently behavioural finance remains a somewhat marginal topic receiving, for example, little coverage in standard finance textbooks. The area does, however, hold a great deal of future promise and certainly offers much needed alternative research approaches. Its emphasis on the role of biases, mental frames and judgemental heuristics in the financial decision making of individuals necessitates a positive methodology which looks at how decisions *are* actually made. This stands in stark contrast to the normative approach associated with the neoclassical paradigm which deduces which decisions logically *should* be made given an appropriate set of starting axioms. These differences in philosophy and methodology produce hugely different outlooks on the financial system. One particularly pertinent example would be in regard to the possible existence of irrational bubbles in asset prices such as are often claimed to have occurred in the housing markets on both sides of the Atlantic in recent years. The possibility of such bubbles sits perfectly easily within the behavioural finance paradigm and, of course, is in accord with the conclusions of most non-academic observers. In stark contrast, many adherents of neoclassical finance struggle with the concept that asset prices could ever be set in a largely irrational way. Overall, given the huge stakes involved and the uncertainty governing the underlying processes, basic prudence would indicate that policymakers should consider the implications of a variety of possible paradigms regarding market behaviour.

Academic finance can also benefit from many other important and relevant research insights from the areas of economics that are less wedded to the neoclassical paradigm, good examples of these are provided in the discussion of the benefits of evolutionary and complex systems approaches compared to neoclassical modelling by Allen and Snyder (2009) and the Kindleberger-Aliber-Minsky paradigm by Rapp (2009). In addition, the seminal work on asymmetric information by Akerlof, Spence and Stiglitz[18] and the more recent work on information suppression in competitive markets by Gaibaux and Laibson (2006) could have produced invaluable insights into the roots of the current crisis in the ultimately dysfunctional interactions between the various parties in the mortgage supply chain. The interactions between mortgage borrowers, financial intermediaries, banks and credit agencies seem to have been characterised by perverse incentives, suppression of information and exploitation of the less informed at numerous levels. Much of this problematic behaviour could have been anticipated by detailed investigations of the interactions at a micro level. In this area the assumption that free markets will be self-regulating appears to have been not only misplaced but flying in the face of a large body of extremely rigorous and grounded economic theory.

As the transmission mechanism of monetary policy has been altered, more research is needed in banking and monetary economics to understand whether and to what extent securitisation has made credit supply insensitive to monetary policy changes. In this light, an interesting topic of research suggested by Ibañez (2009, p. 4) would be to analyse what impact a crisis of confidence in securitisation markets has on the bank lending channel effectiveness. The link between the stance of monetary policy and banks' incentives for risk taking should also be investigated more extensively in the aftermath of the credit crisis. In this light more evidence has to be gathered as to whether an expansive monetary policy stance may lead to additional (and probably

[18] A good introduction to this area and a large number of key references is given in the Nobel Prize acceptance speech of Stiglitz http://nobelprize.org/nobel_prizes/economics/laureates/2001/stiglitz-lecture.pdf

excessive) risk taking by banks, supporting the idea of the existence of an additional "behavioural" channel for the transmission of monetary policy.

Moving beyond economics there are numerous opportunities for finance to draw on work from other disciplines, for example, the institutional theory approach discussed above, politics, sociology, business and management. The acceptance of research drawn from the management tradition has particular promise as one of the characteristics of academic research in finance to date has been a steadfast reluctance to interact with practitioners (see Keasey and Hudson, 2007). Given the almost total failure to anticipate the crisis within the academic community insights gained from such interactions can surely only be valuable.

An important strand of research that will have to be developed is assessing the impact that this crisis has had on the strategy, financing and investment decisions of international businesses. In the last couple of decades we have witnessed an unprecedented upsurge of cross-borders mergers and acquisition driven by capital market inflation "which made buying companies for resale at a higher price in an inflating market a profitable business proposition (see Toporowski, 2009, p. 164). The large fall in stock markets across the world has made it more difficult to make money from restructuring international business' balance sheets. It remains to be seen whether "the resulting inability to raise finance simultaneously in a number of countries will act as an informal capital control" as Toporowski (2009, p. 164) argues. We should certainly observe more mergers and acquisition driven by the prospect of improving the financial results of the resulting combined companies, rather than that of reaping benefits from financial asset inflation despite no substantial improvement in real results. Hence "the crisis provides an unrivalled opportunity to uncover the true constraints that determine the character and dynamics of cross-border capitalism" (see Toporowski, *ibidem*).

Conclusions

At the time of writing it appears that the world financial system has been pulled back from total collapse by government intervention on a huge scale. In the third quarter of 2009 US economic growth resumed after the longest period of contraction since the Second World War. In the teeth of the crisis urgent ad-hoc measures of a broadly Keynesian nature have been rapidly implemented. Seemingly some lessons have been learnt from the 1930s and a prospective depression seems to have been averted although very severe economic problems have proved unavoidable.

The neoclassical paradigm, as actually implemented, has been seen to have failed in practice but there currently seems little consensus on how to replace it, which opens up the possibility of debate and ultimately radical change. According to Kallis *et al.* (2009) the current crisis provides an opportunity that we should not miss: it is time to promote alternative socio-economic paradigms such as de-growth and environmental justice since the current rate of fossil fuel-driven growth may be unsustainable. This crisis should prompt us to reappraise our relationship with money and debt, and to rethink about what type of capitalism we want: hopefully a fairer and more inclusive version of capitalism, one that does not rely on self regulation and where pure *laissez* *faire* is forgotten.[19] Capitalism works well only when it is adequately regulated and, personally we believe, when there is a solid mechanism of balancing and counterbalancing of powers among the major players. We dare to call it a "democratic capitalism", not a plutocratic one.

Counterbalancing such idealistic sentiments many powerful groups will hope for a swift return to the pre-crisis orthodoxy. A system which allows favoured individuals to become very wealthy without taking any commensurate risks and which allows profits to be private whereas losses are nationalised is bound to have its supporters. Nonetheless the idea that an unregulated, global, financial market is the ideal to which policymakers should aspire has been given a huge, perhaps terminal, setback as indeed has the idea that financial innovation and growth in the financial services industry is necessarily a good thing. A sign of the new mood is the possibility of limits on speculation in the oil markets which would be anathema to advocates of totally free markets.

Finally we can see that the crisis demands a major reappraisal of academic research programmes in finance to incorporate much more seriously a wider range of ideas from other perspectives and disciplines and to also give priority to serious interaction with practitioners.

[19] As Jain (2009, p. 100) clearly explains 'self regulation […] does not work when risks and rewards associated with one's behaviour are distributed asymmetrically. Regulation becomes necessary when those who benefit from risky behaviour either do not bear the full costs of that risky behaviour or have a subjective discount rate for the distant costs that is higher than that of the society which may have to bear those costs. […] Regulation becomes necessary only if some of the consequences of bad decisions are externalized to third parties and lead to the creation of systemic risks for the financial markets and other participants.'

References

- Aalbers, M.B. (2008), "The financialization of home and the mortgage market crisis", *Competition & Change*, Vol. 12, No. 2, pp. 148-66.

- Aalbers, M.B. (2009), "Wrong assumption in the financial crisis", Critical Perspectives on International Business, Vol. 5, No. 1/2, pp. 94-95.

- Allen, R. E. and D. Snyder (2009), "New thinking on the financial crisis", *Critical Perspectives on International Business*, Vol. 5, No. 1/2, pp. 36-51.

- Altunbas, Y., L. Gambacorta and D. Marqués Ibañez (2008), "Securitisation and the bank lending channel", ECB Working Paper no 838 and Banca d'Italia Working Paper no 653, and *European Economic Review*, forthcoming.

- Augar, P. (2006), *The Greed Merchants: How the Investment Banks Played the Free Market Game*, Penguin, London.

- Avery, R.B., Brevoort, K.P. and Canner, G.B. (2007), "The 2006 HMDA data", Federal Reserve Bulletin, Vol. 93, pp. 73-109.

- Azevedo, A. F. Z. and P. R. S. Terra (2009), "Building resilience to international financial crises: lessons from Brazil", *Critical Perspectives on International Business*, Vol. 5, No. 1/2, pp. 141-155.

- Brenner, R. (2006), *The Economics of Global Turbulence: The Advanced Capitalist Economies from Long Boom to Long Downturn, 1945-2005*, Verso, London.

- Brooks, R. and Simon, R. (2007), "Subprime débâcle traps even very credit-worthy", *Wall Street Journal*, December 3, p. A1.

- Caprotti, F. (2009), "Financial crisis, activist states and (missed) opportunities", *Critical Perspectives on International Business*, Vol. 5, No. 1/2, pp. 78-84.

- CFTC (Commodity Futures Trading Commission). 2009. Statement by Chairman Gensler on Speculative Position Limits and Enhanced Transparency Initiatives, July 7. Available at www.cftc.gov.

- Daly, H. (2008), "Credit crisis, financial assets and real wealth", *The Oil Drum*, October 13, available at www.theoildrum.com/node/4617

- De Bondt, W., G. Muradoglu, H. Shefrin and S. K. Staikouras (2008), "Behavioral Finance: Quo Vadis?", *Journal of Applied Finance*, Vol. 18, No. 2, pp.7-21.

- Dell'Ariccia, G., D. Igan and L. Laeven (2008), "Credit booms and lending standards: evidence from the subprime mortgage market", *IMF Working Paper* No 08/106.

- DiMaggio, P. and Powell, W. (1983), “The iron cage revisited: institutional isomorphism and collective rationality in organizational fields”, *American Sociological Review*, Vol. 48, pp. 147-60.

- Doria, J., Rozanski, H. and Cohen, E. (2003), “What business needs from business schools”, *Strategy and Business*, Vol. 32, pp. 39-45.

- Dymski, G.A. (2007), “From financial exploitation to global banking instability: two overlooked roots of the subprime crisis”, working paper, University of California Center Sacramento, Sacramento, CA.

- Fama, E. F. (1998), “Market efficiency, long term returns and behavioral finance”, *The Journal of Financial Economics*, Vol. 49, pp. 283-306.

- Ferguson, N. (2008). “Full Marx”, *Financial Times*, 17-18 August.

- Gabaix, X. and D. Laibson (2006), “Shrouded attributes, consumer myopia, and information suppression in competitive markets”, *The Quarterly Journal of Economics*, Vol. 121, no. 2, pp. 505-540.

- Gotham, K. F. (2006), “The secondary circuit of capital reconsidered: globalization and the US real estate sector”, *American Journal of Sociology*, Vol. 11, pp. 231-75.

- Hamilton, J. (2009), “Causes and Consequences of the Oil Shock of 2007-08”, paper presented at the Brookings Papers on Economic Activity Conference, April, available at http://www.brookings.edu/economics/bpea/bpea_conferencepapers_spring2009.aspx

- Harney, S. (2008), “Business schools must spurn rewards culture that shamed City”, *Times Higher Education*, 20 November.

- Harney, S., M. Parker and S. Dunne (2008), “The Responsibilities of Management Intellectuals: A Survey”, *Organisation*, Vol. 15, No. 2, pp. 271-282.

- Ibañez, D. M. (2009), “Banks, credit and the transmission mechanism of monetary policy”, *ECB Research Bulletin*, No. 8, March.

- International Energy Agency (2009), *Medium-Term Oil Market Report 2009*, June, Paris.

- Jain, A.K. (2009), “Regulation and subprime turmoil”, *Critical Perspectives on International Business*, Vol. 5, No. 1/2., pp. 98-106.

- Kallis, G., Martinez-Alier, J. and R.B. Norgaard (2009), “Paper assets, real debts: An ecological-economic exploration of the global economic crisis”, *Critical Perspectives on International Business*, Vol. 5, No. 1/2, pp. 14-25.

- Keasey, K. and R. Hudson (2007), “Finance theory: A house without windows”, *Critical Perspectives on Accounting*, Vol. 18, pp. 932-951.

- Keys, B., T. Mukherjee, A. Seru and V. Vig (2008), “Did securitization lead to lax screening? Evidence from subprime loans 2001-2006”, paper presented at the EFA Annual Meeting, Athens, 27-30 November 2008.

- Khan M.S. (2009), “The 2008 Oil Price ‘Bubble’”, *Policy Brief No. PB 09-19*, Peterson Institute for International Economics.

- Klimecki, R. and H. Willmott (2009), “From demutualisation to meltdown: a tale of two wannabe banks”, *Critical Perspectives on International Business*, Vol. 5, No. 1/2, pp. 120-140.

- MacDonald, L. and Robinson, P. (2009), *A Colossal Failure of Common Sense: The Incredible Inside Story of the Collapse of Lehman Brothers*, Ebury Press.

- Meyer, J. W. and Rowan, B. (1977), “Institutionalized organizations: formal structure as myth and ceremony”, *American Journal of Sociology*, Vol. 83, pp. 340-63.

- Mian, A. and A. Sufi (2008), “The consequences of mortgage credit expansion: evidence from the 2007 mortgage default crisis”, *NBER Working Paper* No 13936.

- Moran, M. (1991), *The Politics of the Financial Services Revolution*, Macmillan, New York, NY.

- Olivier, C. (1991), “Strategic responses to institutional processes”, *Academy of Management Review*, Vol. 16, No. 1, pp. 145-7.

- Olivier, C. (1996), “The institutional embeddedness of economic activity”, *Advances in Strategic Management*, Vol. 13, pp. 163-86.

- Office for National Statistics (2009), “Public Sector Finances August 2009”, *ONS Statistical Bulletin*, 18 September, London.

- OPEC (Organization of Petroleum Exporting Countries) (2009), *World Oil Outlook 2009 (July).* Vienna.

- Pressman, S. (2009), “A Time to Return to Keynes”, *Critical Perspectives on International Business*, Vol. 5, No. 1/2, pp. 157-161.

- Rajan, R. (2006), “Has financial development made the world riskier?”, *NBER Working Paper* No 11728.

- Rapp, W. V. (2009, “The Kindleberger-Aliber-Minsky paradigm and the global subprime mortgage meltdown”, *Critical Perspectives on International Business*, Vol. 5, No. 1/2, pp. 85-93.

- Riaz, S. (2009, "The global financial crisis: an institutional theory analysis", *Critical Perspectives on International Business*, Vol. 5, No. 1/2, pp. 26-35.

- Schloemer, E., Li, W., Ernst, K. And Keest, K. (2006), *Losing Ground: Foreclosures in the Subprime Market and Their Cost to Homeowners*, Center for Responsible Lending, Washington, D.C.

- Soddy, F. (1926), *Wealth, Virtual Wealth and Debt*, E.P. Dutton, New York, NY.

- Tett, G. and Davies, P. (2007), "Out of the shadows, how banking's secret system broke down", *Financial Times*, 17 December.

- Toporowski, J. (2009), "International business and the crisis", *Critical Perspectives on International Business*, Vol. 5, No. 1/2, pp. 162-164.

- Turner, A. (2009), *The Turner Review A regulatory response to the global banking crisis*, Financial Services Authority, London.

- Viñals, J. (2008), "The role of the Banco de España in Spanish banking", panel presentation at IESE and Harvard Business Schools, 11 January, available at: http://www.bde.es/webbde/es/secciones/prensa/intervenpub/subgoberna/Sub110108e.pdf

- Weir, M., Orloff, A.S. and Skocpol, T. (1988), "Understanding American social politics", in Weir, M., Orloff, A.S. and Skocpol, T. (Eds.), *The Politics of Social Policy in the United States*, Princeton University Press, Princeton, NJ, pp. 3-27.

- Weitzer, D. and J. Darroch (2009), "Why moral failures precede financial crises", *Critical Perspectives on International Business*, Vol. 5, No. 1/2, pp. 6-13.

- Wong, L. (2009), "The crisis: a return to political economy?", *Critical Perspectives on International Business*, Vol. 5, No. 1/2, pp. 56-77.

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