Factors generating and transmitting the US financial crisis: Overview paper

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Abstract: This paper presents an overview of eight studies which examine the key factors which are said to have either generated or transmitted the financial crisis in the United States which began in August 2007 and deepened dramatically in September 2008.

Key words: US economy, finance and crisis, global imbalances, financial deregulation, income distribution

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Introduction

The financial crisis which broke in the United States in 2007 and deepened dramatically in 2008 has generated a huge literature. A wide variety of factors have been advanced to explain the origins and transmission of the crisis reflecting, explicitly or implicitly, different theoretical perspectives and different standpoints. There is widespread agreement that, from the early 1980s, the US economy entered a new phase characterised, among other features, by a major expansion of the financial sector.

In the 1980s, the US economy witnessed a takeover boom financed by issuing so-called junk bonds. Following several years of a major expansion of bank lending, credit was abruptly curtailed by an over-extended banking system in 1990 and the US entered a recession. The Federal Reserve responded by sharply lowering interest rates and, following several years of low ‘job-less’ growth, economic growth picked up strongly in the second half of the 1990s. This was associated with a boom in information technology stocks, and was accompanied by a surge in fixed investment and a further large expansion of bank lending. In the late 1990s, a significant bubble developed in US stock market prices and, after the bubble burst in late 2000, fixed investment collapsed and the economy entered a new recession in 2001. Once again, the Federal Reserve adopted a highly expansionary monetary policy, pushing its main interest rates down to a then unprecedented one per cent and thereby avoiding a major deflationary spiral. A third period of expansion followed between 2002 and 2007 in which, yet again bank lending increased very strongly. Fixed investment remained weak but there was a very strong increase in mortgage lending and a boom in house prices. There was also significant lending to finance a new wave of company takeovers. In August 2007, following the failure of complex securities based on ‘sub-prime’ mortgages, the Federal Reserve had to intervene to prevent a failure of the inter-bank money market. Over the next twelve months the crisis deepened, step by step, until in early October 2008 the US authorities were faced with the prospect of a collapse of the US financial system. A massive government rescue programme together with the effective nationalisation of several of the country’s leading banks prevented a collapse, but bank lending contracted abruptly and led to a dramatic fall in economic output, resulting in the most serious recession since the 1930s.
The aim of this paper is to review a series of studies prepared for the Fessud project which examined the following factors which are said to have either initiated or contributed to the transmission of the crisis:

- Subprime mortgages and mortgage backed securities
- The failure of risk management
- The role of incentives
- US monetary policy
- Global imbalances
- Financial deregulation
- The distribution of income
- Enhanced funds seeking higher returns

1. Subprime mortgages and mortgage backed securities

The crisis was detonated by the failure of complex securities based on subprime mortgages. Banks were eager to expand into more profitable areas and, with falling or stagnant wages, governments were keen to extend home ownership. As Michal Jurek and Pawel Marszalek (2014) state in their report, it is possible to identify three main steps involving subprime mortgages: the provision of the mortgages, the packaging of the mortgages in mortgage backed securities (MBSs), and the creation on the basis of MBSs of more complex securities known as collateralised debt obligations (CDOs).

The standard form of mortgage in the US was for many years the 30-year loan introduced by the Roosevelt government in the 1930s. The loans covered up to 80 per cent of the price of a home and the interest rate was fixed for the duration of the loan, generally around 1 percentage point above the rate on 10-year government bonds. From the 1990s, banks increasingly used a system of credit scores which were based on a range of factors including applicants’ previous credit repayment history and existing level of indebtedness, to determine whether to grant mortgages. The deregulation of the financial system, in particular the ending of legal limits on interest rates, opened the way for banks to advance so-called subprime mortgages to borrowers with weaker
credit histories who did not meet the conditions for a standard mortgage.\textsuperscript{1} The banks generally charged interest rates for subprime mortgages that were around two percentage points higher than the rate for standard mortgages, and the rates were generally adjustable, moving in line with changes in market rates. It was also possible – at a yet higher rate – to borrow up to 100 per cent of the price of a house. Banks aggressively marketed these loans, sending sales representatives to poorer neighbourhoods, offering very low ‘teaser’ rates for the repayments in the first one or two years, with the cost of the reduction being added to the loan.

The annual value of new subprime mortgages increased very strongly in the early 2000s, rising from around $100 billion a year at the start of the decade to $600 billion a year in the peak years between 2004 and 2006, when they accounted for over 20 per cent of new mortgages (Financial Crisis Enquiry Commission, 2011, p. 70). The recipients included a high proportion of Afro-American, Hispanic and female-headed households, and the proportion of households living in their own homes increased from 64 per cent in the mid-1990s to 69 per cent in 2006, largely due to the expansion of subprime mortgages. However, many of these households had low or precarious incomes. From 2004 interest rates on adjustable-rate mortgages began to rise as market rates began to rise in line with the Federal Reserve’s lending rate; furthermore, for many borrowers early ‘teaser’ rates began to expire. In the years up to 2005 the proportion of adjustable-rate subprime mortgagees in serious arrears or facing foreclosure stood at just over 5 per cent but from 2006 the figure began to rise very sharply. In the course of 2007 the figure rose to 20 per cent and by 2009 it had reached over 40 per cent (Financial Crisis Enquiry Commission, 2011, p. 216).

The second step in the process involved securitisation, whereby banks packaged hundreds of mortgages into securities which could be sold to investors on the capital market. This had begun in the 1970s, when the semi-official mortgage institutions, Fannie Mae and Freddie Mac, began to create securities based on prime mortgages, which they sold to investors with a guarantee that they would cover the risk of any defaults. In the 1990s, investment banks began to construct mortgage backed securities based on subprime mortgages, but without any guarantee that they would cover non payments. The rapid expansion of subprime mortgages in the early 2000s was

\textsuperscript{1} There is also an intermediate category between prime and subprime known as Alt A. The most widely used system of credit rating is the FICO score, first introduced in 1989.
conducted by banks with the expectation that the loans would be packaged and securitised and not held on their own books. Since banks made a profit from the fees associated with selling mortgages, they no longer had an incentive to check whether households would be able to service the mortgages in the future. The mortgage backed securities were sliced into tranches, with the most highly rated tranche having first call on the flow of mortgage repayments, and with successive, lower-rated tranches then receiving payments with a higher rate of return -- provided the stream of mortgage service payments was sufficient.

The third stage in the process involved the creation of collateralised debt obligations. Investment banks combined the lowest tranches of a number of mortgage backed securities to create new, highly complex securites, which were themselves subject to tranching. This was based on the notion that the lowest tranches of the mortgage backed securities would not all fail at the same time and, on this basis, the senior tranches of the CDOs were awarded the highest possible rating, AAA. They were therefore eligible to be purchased by investment funds and proved particularly attractive since they offered higher rates of return than other AAA rated securities. The lower rated ‘mezzanine’ CDO tranches, which carried a greater risk, offered higher rates of return, and the riskiest, unrated tranches carried the highest rate of return.

Jurek and Marszalek (2014) identify a range of factors which contributed to the emergence of problems at each stage in the process. First, laws from the 1970s together with other political pressure encouraged extending mortgage lending to lower-income and minority groups. Second, mortgage standards were not complied with as banks sought to expand their lending in the knowledge that loans would not be kept on their books. Third, stricter capital requirements for banks, introduced by the Basel Accords in 1988, encouraged banks to shift loans off their balance sheets through securitisation and the setting up of off-balance sheet entities. Fourth, collateralised debt obligations were so complex that financial investors relied largely on the assessment of ratings agencies which, because of the high fees which they could earn, had an incentive to approve the instruments. Fifth, banks did in fact continue to hold some of the riskier tranches of CDOs, most notably in structured investment vehicles (SIVs) which were financed by issuing short-term commercial paper. Sixth, investors obtained a form of insurance for their investments in MBSs and CDOs by purchasing credit default swaps (CDSs), but the firms which
issued these, in particular the American International Group (AIG), the largest insurance company in the US, did not have the resources to meet large-scale claims when they occurred.

The strong expansion of mortgage lending led to a major boom in house prices but in 2006 the bubble burst and prices began to fall. Households that had banked on being able to refinance their mortgages after house prices had risen were no longer able to do so. As defaults began to rise, mortgage backed securities began to lose value. In July 2007 the New York investment bank Bear Stearns closed two funds which had made large losses on such securities. SLVs found it increasingly difficult to raise funds on the commercial paper market to finance their holdings of CDOs and, as they sold CDOs, their prices plummeted. Many SLVs had arranged contingent credit lines with their parent banks in case financing from the commercial paper market should dry up and banks were now called on to honour these commitments. The crisis broke on 9 August 2007 when, as a result of widespread doubts about the credit worthiness of counterparties, lending in the interbank money market dried up and the Federal Reserve was obliged to pump reserves into the banking system to prevent a breakdown (the European Central Bank had to do the same as a result of the large losses incurred on investments in complex US securities by big European banks). In the next twelve months the crisis facing institutions involved in subprime based securities deepened step by step; at the same time the crisis spread to other sectors of the US financial system, eventually threatening several of the country’s major banks and other financial institutions with failure. In mid-September Bear Stearns, one of the leading New York investment banks, failed and in the following days the crisis spread to AIG and several major commercial banks were faced with closure. After the crisis spread to the stock market, which lost some 20 per cent of its value in the first week of October, the Federal government intervened on a massive scale to prevent a collapse of the US financial system.

There is widespread agreement that the crisis was detonated by the bursting of the US house-price bubble, and the failure of complex securities based on subprime mortgages. The policy proposals which follow directly from this involve a tightening of mortgage conditions, the more rigorous supervision of lending bodies, and a requirement for higher standards of financial disclosure. But, while subprime mortgages may have detonated the crisis, there had also been a major expansion of other forms of lending. This included a huge growth of lending for prime mortgages, which continued to account for the largest part of house lending, and which enabled
households to borrow against rising house prices to finance additional consumption spending. There was also a big expansion in lending to non-financial corporations which, although their retained earnings were more than sufficient to cover fixed investments, had borrowed extensively in order to fund an unprecedented accumulation of financial assets. While the crisis originated in the subprime sector, the devastating scale of its impact was due to a far more generalised expansion of credit right across the economy.

2. Risk management

Risk management is broadly defined as the identification and management of financial risk. Its importance has grown since the 1990s in response to financial innovations, the increased volatility of financial markets and some large well-known losses resulting from a failure to follow good risk management practices. The mainstream response to the crisis has focussed strongly on the lack of adequate risk management. The report by Sérgio Lagoa, Emanuel Leão and Ricardo Barradas (2014) reviews the extensive literature which has been produced on the failure of risk management. Their analysis of the extensive catalogue of failures that have been identified is based on distinguishing three areas or levels, which they term the methodological and technical level, the governance and strategic level, and the level concerned with regulation and external factors.

At the methodological and technical level the failures which are identified begin with inappropriate measures of risk. The most widely used measure is value at risk (VaR) but, they point out, this was never intended as a measure of the worst loss that could occur. While it might be adequate in normal times it underestimates low-probability events and performs badly in crisis situations. Based on short runs of data, it assumed house prices would continue to rise and failed to capture complex securities such as CDOs. The widespread adoption of VaR models induced similar behaviour by numerous players, thereby amplifying the crisis, while the narrow focus excluded off-balance sheet assets and failed to capture systemic risk. More generally, there was overconfidence in sophisticated but untried quantitative models, with insufficient attention to qualitative factors. Some risks were also overlooked. Liquidity risk, which due to its complexity is not included in models, was largely unanticipated in the crisis. Similarly, counterparty risk, which is difficult to account for since it is necessary to know counterparties’ counterparties – so-called
‘unknown unknowns’ – were not taken into account. At a deeper level, risk management also suffered from the unrealistic assumptions of modern portfolio theory, which relies on the efficient market hypothesis and assumptions about the rationality of investors. In sum, the evolution of financial securities outpaced the development of risk management and, in particular, the complexity of MBSs and CDOs contributed to a lack of transparency in financial markets.

At the governance and strategic level of risk management a key failure is identified in the scarce implementation of so-called Enterprise Risk Management: financial innovations were developed by separate departments and institutions did not have an idea of their aggregate risk; the Boards of banks did not have a defined capital allocation strategy which specified an acceptable level of risk; and Boards rarely included a Chief Risk Officer as risk management was seen as a support function. More specifically, there was a failure in communication between risk management staff and senior management and Board members not only did not know the global exposure of their companies to risk, they also did not understand the new products. The lack of supervision by regulators led to traders taking excess risks, and there was complicity between managers and traders to take risks in an exuberant market. This was encouraged by the compensation arrangements which focussed on maximising the results in the same year with little attention to risk and without taking into account the true economic profits. Managers strove to increase the profits in their business line without considering the institutions overall risk position. This was driven by a need to attract and retain talent and occurred in a context where raising doubts was not well received.

At the level concerning regulation and external factors it is argued that incorrect ratings led banks to take excessive risk while, more generally, the incentives of the different agents in the securitisation chain were misaligned. As a result of competitive pressure, financial institutions could not afford to miss out on the most profitable – and risky – activities. Meanwhile the regulatory framework was based on the belief that banks could regulate themselves. In particular, the Basel II banking regulations put great trust in banks’ own models to assess risks, emphasising quantitative measures. The focus on capital requirements led to pro-cyclicality and it encouraged the use of securitisation and shadow banking institutions to reduce the amount of regulatory capital banks that had to be held. Shadow banks, for their part, were subject to scarcely any regulation. A perverse result of this approach is that banks actually used risk management models
to economise on their regulatory capital, thereby contributing to the insufficiency of capital which amplified the impact of the crisis.

The report by Lagoa, Leão and Barradas (2014) then turns to examine the policy recommendations that have been proposed to deal with this extensive list of failures. Their analysis of the proposals is organised in the same three groups as the failures. At the methodological and technical level, it has been proposed that, although some forms of risk are difficult to measure, banks should be aware of them, keep them to a size which does not threaten bankruptcy, and hold sufficient capital to act as an effective buffer. In particular, liquidity risk should be monitored on all securities, and attention should be paid to the concentration risk in the case of new products. More generally, a comprehensive view of risk should be adopted which captures the interaction between different types of risk, and a less quantitative approach is needed in which professionals, rather than machines, play a central role. The use of forward looking scenarios could help to identify where extreme events might occur, and there is a need to be alert to new risks. Another point that has been made is that while quantitative models could be improved, it is important to understand the limits of such models since economics, unlike the natural sciences, involve human interactions.

Turning to the governance and strategic level, one proposal is that a risk culture should be promoted through the widespread adoption of Enterprise Risk Management (ERM). More generally, managers should become more risk aware, and build contingency hedging plans that can be implemented at short notice. It is proposed that a Board of Risk should be established beyond the Board of Directors; another proposal is that a Chief Risk Officer (CRO) should report directly to the Board, and be at the same level as the CEO. However, criticisms have also been raised of the ERM approach: the concept of a single organisational risk appetite is said to be problematic; ERM is criticised for attempting create routine compliance rules, rather than thinking through risk scenarios; it is also said to be unable to understand the risk of interconnectedness between the institution and the economic system. An alternative approach, known as Business Continuity Management, is a hybrid approach combining IT professionals and emergency management, among others, which includes non-accounting knowledge in order to respond to the interconnectedness of economic life with a more collective response. More specific proposals include the need for greater accuracy and timeliness in risk reports, greater independence between traders and risk controllers and a need for stronger long-term investment in high-quality
professionals and technology. It is also argued that there should be a change in the system in the system of remuneration: the managers of bailed-out enterprises should be penalised while incentives should be based on long-term shareholders' interests.

The policy recommendations concerning regulation and external factors include the need to rethink the Basel rules and introduce more robust, standardised stress testing, and contingency funding plans so as to minimise losses when strains occur. Maximum leverage ratios should be reduced and counter-cyclical capital requirements introduced. There are also proposals to impose limits on the size of banks, or to introduce special supervision for large banks, and to ensure that in the future the cost of bailouts should be borne by financial institutions. Other proposals include the creation of a Financial Markets Stability Authority, with responsibility for overseeing the stability of the whole financial system, with adequate regulation of the shadow banking system. Various writers point out that, as capital requirements lead to regulatory arbitrage, they cannot be a substitute for close supervision of banks. Further proposals call for the reform of ratings agencies, and the creation of a public ratings agency; for financial products that are too complex to be sold on an exchange to be prohibited; for banks to be required to conduct due diligence to evaluate each underlying mortgage in the case of structured products; and for banks originating mortgages to retain an equity share of at least 20 per cent. More generally, it has been argued that predatory credit and usurious practices should be banned, while variable rate mortgages, where interest rates can increase substantially after an initial period, should be prohibited.

Lagoa, Leão and Barradas (2014) conclude that financial corporations were too optimistic and that they took excessive risk, most notably in relation to the appraisal of subprime mortgages and the complex securities which were created on their basis. They also note – perhaps slightly optimistically – that many of the proposals which they discuss have, at least partly, been implemented, in particular through the adoption of regulations developed in the Basel III agreement. However, they are cautious about the explanatory power of analyses of the crisis which have a relatively narrow focus on failures of risk management. Instead, they argue for a broader approach which they call the financialisation perspective. This draws attention to the major shifts that have occurred in the structure of the financial system that, in the context of deregulation, has led to a major expansion of financial capital into a whole range of new activities characterised by an increasingly short-term approach to generating profits.
3. The role of incentives

The role of perverse incentives has been identified at various stages in the process of selling subprime mortgages and generating the complex securities mortgages that played a key role in detonating the crisis in the US. Mortgage sales personnel were paid by the number of mortgage contracts they sold and had little incentive to check people’s declared incomes or point out that repayments would rise significantly when very low ‘teaser’ rates ended after one or two years. Banks wished to generate as many mortgages as possible and had little incentive to check whether mortgage holders would be able to meet repayments since the banks did not plan to keep the mortgage on their own books but rather to bundle large numbers of mortgages and, through securitisation, sell them to financial investors. Investment bankers packaged the mortgage backed securities in highly complex collateralised debt obligations which generated huge fees for investment banks and lavish bonuses were paid when the securities were created irrespective of how they performed in the future. Ratings agencies faced a serious conflict of interest as they generated a substantial part of their profit from rating complex mortgage-backed securities and did not wish to lose the business to another agency [Evans, 2010].

The paper by Giampaolo Gabbi, Alesia Kalbska and Alessandro Vercelli [2014] examines several of these factors. The first part, by Giampaolo Gabbi, reviews the extensive literature on how the crisis, having originated in the bursting of the sub-prime mortgage bubble, was transmitted through a process of contagion. The second part, by Alesia Kalbska examines the process of securitisation and the role of ratings agencies. The third part, by Alessandro Vercelli, which will be reviewed here in more detail, is concerned with the nexus between securitisation and contagion and how this led to the onset of the major recession in 2008-09.

Vercelli focuses on the mainstream approach to finance and financial stress which, he notes, has since the 1970s been based on the notion of asymmetric information. According to this approach, borrowers are assumed to have better information than lenders about the true nature of their financial position and about the investment projects which they propose to finance. Lenders therefore are unable to distinguish between bad and good borrowers and charge an average rate of interest that is too high for good borrowers and too low for bad borrowers. This leads to reduced investment, greater instability and lower growth to which lenders react with higher interest rates
and results in yet greater adverse selection and credit rationing. The result of this cumulative process is a recurrence of financial fluctuations and, in the extreme, a severe financial crisis. The key position of banks in the financial system is, according to the proponents of asymmetric information, their ability to collect information about the reliability of borrowers, in particular when they have long-term relations with customers. The main market-based remedy for lenders risk is to require collateral but the value of the collateral must be, in the mainstream jargon, ‘information insensitive’, so that its value is not affected by adverse economic developments.

Vercelli explains that when it comes to the subprime financial crisis, the asymmetric information approach yields two very different analyses based on divergent evaluations of the development of banking and securitisation since the 1980s. The first view, which has been widely accepted by official institutions, is that the process of banks packaging loans to form securities which they could sell on the market led to reduced incentives for banks to assess the reliability of borrowers and the soundness of their investment projects. The problem was compounded by the fact that securitisation was largely conducted by means of ‘off balance sheet’ transactions through special purpose vehicles (SPVs) and other especially established conduits.

A second and very different view has been propounded in a series of papers by Gary Gorton with various co-authors. For Gorton, the essential role of banks is not that of intermediating between savers and investors, but rather in creating a special kind of debt, namely ‘informationally-insensitive’ debt. This tends to keep its value and, because it is not affected by adverse ‘information’, it is very liquid. This information-insensitive debt was originally limited to demand deposits, but bank deposits may be unsuitable for corporate treasuries, banks and hedge funds which need to deposit large amounts of money for a short period of time, and which would not be insured. According to Gorton, such large sums are therefore deposited in the repurchase market, where the deposits are insured by posting bonds as collateral. The collateral is not only a protection against default risk, it may also be rehypothecated, or reused. Repo transactions are therefore a form of banking as it creates something akin to deposits which are available on call. Since securitized assets are accepted as collateral, the growth of the repo market stimulated the growth of securitisation so as to provide for the growing need for collateral. For Gorton, securitisation is a form of banking since SPVs hold loans financed with high-grade debt which is largely information-insensitive.
For Gorton, securitisation and the repo market became part of an alternative, shadow banking system in the ten years prior to the crisis. However, when the crisis broke in 2007, the supposedly ‘information-insensitive’ nature of the peculiar form of deposits proved to be illusory. This became evident through the ‘haircut’ or margin between the face value of the collateral that is posted and the amount lent. The average margin on structured debt had been zero until July 2007, but then started to rise, reaching 10% in January 2008 and 46% after the bankruptcy of Lehman Brothers in September. The increasing margin is interpreted by Gorton as being similar to a withdrawal of deposits from banks, and the subsequent very sharp rise to the equivalent of a bank run.

Vercelli argues that the two approaches can usefully be combined to understand the development of the crisis, giving rise to a process of contagion with four main features. First, the bursting of the house-price bubble led to a decline in the value of mortgage-backed securities (MBS), initially focused on those based on sub-prime mortgages. Second, as MBS had been increasingly used as collateral for the type of shadow-banking activity identified by Gorton, their loss of value led to increasing ‘haircuts’ and a drying up of liquidity in the repo market. Third, distress in the shadow banking system was rapidly transmitted to the formal banking sector as highly leveraged banks, pressed for liquidity, engaged in a ‘fire sale’ of assets, triggering a vicious circle of falling asset prices, as identified by the widely held official analysis of the perils of securitisation. Finally, an abrupt contraction of credit by the financial system led to a deep recession in the real economy, not only in the US but also in Europe, where many banks held portfolios which included many securities directly or indirectly linked to US mortgages.

The policy conclusions which follow from the two approaches are however very different. For those who focus on the weakening incentives associated with the process of securitisation, the key policy response should involve a strict limit on securitisation and a requirement that assets should be held on banks’ own balance sheets. Vercelli notes, however, that while the authorities concur broadly with this approach, as a result of strong opposition from the financial sector itself, in practice central banks have responded by providing banks with extensive liquidity at very low interest rates and so-called ‘quantitative easing’.

According to the view propounded by Gorton and his colleagues, the focus on limiting securitisation is mistaken. They argue that the transfer of risk from the banks which originated
loans to investors was not complete since, in various ways, banks continued to hold an interest in the loans, including warehousing them while they were in the process of securitisation and even keeping some items, such as senior CDO tranches, on their own balance sheets. The shadow banking system should, it is argued, not be repressed; rather, because it serves as the banking system of large institutions, it should be strictly controlled and regulated by law. To this end Gorton proposes measures to create ‘information insensitive’ debt, such as senior tranches of securitized products being insured by the state, and securitisation being supervised by the government instead of relying on ratings agencies. He also argues that, in order to reduce moral hazard, any firm involved in securitisation would be deemed a bank.

Whatever the difference between the two approaches, Vercelli concludes his analysis by pointing to the limitations which both share as a result of their common roots in general equilibrium theory, and its broad assumption that market-based economies are, for the most part, self-regulating. Whatever the importance of information asymmetries and the uncertainty which this gives rise to, for Vercelli this does not exhaust the causes of financial crises and their propagation. He argues that a key weakness of both approaches is that, as is typical of mainstream business cycle theory, the cause of the crisis is identified in an exogenous factor, and the theories considered here aim to explain the propagation of financial crises and not their ultimate causes. Vercelli is very critical of policy proposals which seek to overcome the problems of incentives through greater self-regulation, since this has so evidently failed. He is also highly critical of Gorton’s proposals for confronting the problem of information sensitive debt. How, he asks, is it possible to regulate the shadow banking sector if the ultimate problem is asymmetric information and the relevant date is missing?

4. Monetary policy in the United States

An explanation for the crisis that has been received with some acclaim in more conservative circles is that, following the bursting of the stock market bubble in 2001, US monetary policy was too expansive and for too long, and that this facilitated the financial over-expansion which culminated in the crisis of 2007-08. One of the best know proponents of this view is John Taylor (2009), author of the well-known Taylor Rule, which prescribes a simple procedure for setting
nominal interest rates, and who served as an under-secretary at the US Treasury during the first presidential term of George W. Bush.

Yanis Varoufakis (2014) identifies three hypotheses advanced by Taylor: that after 2001 the Federal Reserve engaged in a discretionary monetary policy which violated the Taylor Rule; that this discretionary monetary policy led to an unsustainable boom in house prices and financial assets; and that the Fed’s adoption of so-called ‘quantitative easing’ after the crisis constituted yet another violation of the Taylor Rule, and is a harbinger of future inflation. Varoufakis argues that all three are wrong.

The Taylor Rule is based on a relatively simple formulae whereby nominal interest rates should be set according to the difference between actual inflation and target inflation (a positive value indicates that interest rates should be raised) and the difference between actual output and full employment output (a negative value indicates that interest rates should be lowered).² According to Varoufakis, Taylor’s claim that monetary policy violated the Taylor Rule after 2001 is based on inappropriate measures of inflation and of the output gap. Taylor measured inflation using a moving average for the GDP deflator; the Fed, however, prefers an index of consumer prices that excludes highly volatile food and energy prices, and which was substantially lower than the GDP deflator for much of the period between 2002 and 2004. Varoufakis demonstrates that, using the Fed’s preferred index, the claim that interest rates were too low is substantially weakened. Taylor measured the output gap using figures for unemployment but, as Varoufakis shows, figures for unemployment did not begin to decline until the end of 2003, while figures for capacity utilization indicate that between 2002 and 2004 output was well below its value prior to the 2001 recession.

² Mathematically: \( i_t = \frac{p_t}{p^*_t} + \gamma_t + \alpha \left( \frac{\pi_t}{\pi^*_t} - \frac{\pi^*_t}{\pi^*_T} \right) + \beta (y_t - \bar{y}) \) where \( i \) is the nominal interest rate, \( r \) the real interest rate, \( \alpha \) \& \( \beta \) are constants between 0 and 1 (usually close to \( \frac{1}{2} \)), \( \frac{\pi_t}{\pi_t} \) is the rate of price inflation, \( \frac{\pi^*_t}{\pi_t} \) is the Central Bank’s inflation rate target, \( y_t \) is GDP and \( \bar{y} \) is an estimate of potential [full employment] GDP [Varoufakis, 2014].
Varoufakis then turns his attention to what he considers the true origin of the boom in asset prices prior to the onset of the crisis. He argues that the key to this was the global recycling mechanism established from the 1970s by which the US absorbed a large part of the rest of the world’s net exports and its surplus capital. According to Varoufakis, the ‘steady torrent of capital inflows’ was the basis for the ‘miracle’ of financialisation. Wall Street banks created new financial instruments which combined greater opacity, greater exchange value and, through securitisation, the illusion of being riskless. In this way the big Wall Street banks had access to the equivalent of a minting press, minting private money ‘almost at will’. For Varoufakis, it was this process, over which the Fed and other central banks had very little control, which was the key to the period prior to the crisis. If the Fed tightened monetary policy, it would have attracted more capital to the US and further fuelled the private creation of money; if it lowered interest rates, any loss of capital inflows was compensated by a rise in asset prices. Varoufakis concludes that the so-called ‘Great Moderation’ when consumer price inflation remained very subdued prior to the crisis was in fact founded on what he describes as ‘a highly immoderate, grossly unstable global surplus recycling system over which the Fed had next to no power’.

The third argument which Varoufakis addresses concerns developments since the crisis, in particular why despite a nominal central bank interest rate of zero and the extensive programme of ‘quantitative easing’, the recovery of growth and employment in the US remained very weak. Varoufakis’ answer is that, despite highly expansive monetary and fiscal policies, Wall Street institutions had lost the ability to recycle global surpluses. To this end, he compares the development of key financial variables since the crisis with what would have happened had pre-crisis trends continued (something which, he might have emphasized, was shown by the crisis to be unsustainable). He demonstrates that, whereas the rest of the world has continued to buy US treasury securities, there has been a fall in the US demand for imports and an especially marked decline in the flows of capital from the rest of the world into financing US corporate investment. Varoufakis concludes that, while ‘quantitative easing’ is not guilty of provoking the danger of inflation, as Taylor and other conservatives claim, it is also quite incapable of substituting for the large inflows of capital which were so central to driving the US economy prior to the crisis.
5. Global imbalances

An alternative explanation for the crisis focuses on the current account surpluses generated by so-called ‘emerging’ economies which were invested in US financial assets. Due to the strength of demand for US assets, it is argued, this depressed long-term interest rates and promoted a credit boom that led to the bubble in house prices. The report by Carlos Carrasco and Felipe Serrano (2014) observes that it is possible to identify two very different approaches to analyzing the development of global imbalances before the onset of the crisis.

One approach, advanced amongst others by the International Monetary Fund, argued that overly lax fiscal and monetary policies in the US had led to a marked decline in the country’s savings rate and to a dangerously large current account deficit which was being financed by capital inflows from emerging markets. Various authors, including Olivier Blanchard, the chief economist of the IMF, warned that this situation could prove highly vulnerable, both for the US and the global economy more generally, if there should be a sudden stop to the capital inflows to the US.

The other main approach, by contrast, argued that global imbalances reflected a new type of global equilibrium. This position was put forward by Ben Bernanke (2005), who argued several years before the crisis that there was a ‘savings glut’ in emerging markets, and that this glut was being invested in US financial assets. A more general argument along the same lines was proposed by Michael Dooley, Peter Garber, and David Folkerts-Landau (2004), who claimed that something which might be termed a Bretton Woods II system had emerged in which the surpluses of emerging countries were being successfully recycled into US financial assets.

Various reasons have been advanced to explain the growth of the savings rate in emerging economies. These include the nature of the export-led growth model, which requires depressed consumption to maintain a devalued exchange rate, and the desire to accumulate precautionary savings in order protect against a repeat of the capital outflows which had such a devastating impact at the time of the 1997-98 Asian crisis. Other arguments are that the problem was not one of excess savings, but rather of an ‘investment draught’ and that it was the underdeveloped state of local financial systems which led to the capital outflows to the US. At all events, the imbalances were not seen as necessarily problematic.
As Carrasco and Serrano point out, both positions proved erroneous. There was no sudden stop to the capital flows into the US; nevertheless imbalances did play an important part in disrupting the supposedly stable new international order. Carrasco and Serrano point out that the evidence for a link between net capital flows into the US and the onset of the crisis is rather weak. They argue, however, that in a world economy characterized by large capital flows it is not net flows but gross capital flows that are the key to understanding developments. Drawing on a paper by Bernanke and others (2011), they emphasise that the capital inflows to the US from Asia were accumulated largely in safe, liquid assets – even as the return from such assets was declining. By contrast, while European countries had a roughly balanced current account with the US, banks from the European Union were deeply involved in acquiring financial assets in the US that were very risky, and were financing this by borrowing in the US. This was a key factor in transmitting the crisis in the US so rapidly to Europe – a process which Carrasco and Serrano also analyse in their paper.

For Carrasco and Serrano, the important role of European banks in the US prior to the onset of the crisis undermines the argument that global imbalances were a key cause of the crisis. The weak link between current account imbalances and the crisis, they argue, should turn attention to what they consider the true cause of the crisis: the fragility of the US monetary and financial system. They concede that while the large inflow of capital to the US financial system was a source of stress, this could have been managed if strict controls on credit had been implemented. ‘The dominant predictors of financial crises are not current account imbalances’, they argue, ‘but credit growth’.

For the critics of the savings glut hypothesis the policy response should focus on the reform of the financial system. This is not, however, the predominant view according to Carrasco and Serrano. For mainstream economists, including the IMF, the policy focus should be on correcting current account imbalances, at least in the medium term. Such imbalances, it is said, lead to sectoral shifts, notably the growth of the non-traded sector, which depresses productivity growth. There is also the danger of a ‘sudden stop’ in external financing, in the event of losing credibility in financial markets.

The mainstream view argues that the necessary adjustment should not only take place in the US; in emerging markets there should also be a shift away from the dependence on exports towards
more domestic-driven growth (Olivier and Milesi-Ferretti, 2009). In order to counter the high rate of savings, governments in emerging countries – notably China – should reduce the need for precautionary savings by promoting social protection schemes. It is also argued that governments in emerging markets should improve the institutional framework of their financial systems so as to improve access to credit for consumption and investment. This, it is said, would reduce the need for savings and improve the domestic supply of attractive assets so that capital does not have to be exported on such a large scale.

6. Deregulation

In the 1980s, the stringent regulatory restrictions on the activities of financial institutions which had been introduced in the US in the aftermath of the 1929 crisis began to be liberalized. A number of writers, many of whom are associated with progressive research institutions, have argued that it was this process of deregulation which permitted a major expansion of speculative and increasingly risky financial activities and that led to the onset of the financial crisis in 2007-2008. The report by Özgür Orhangazi (2014) first sets out the key regulations that were introduced in the 1930s, and then examines the process by which they were undermined by developments in the post-war era.

The regulatory structure introduced in the US in the 1930s imposed a clear separation between commercial banks, which accept deposits and advance loans, and investment banks, which are involved in much riskier activities in capital markets. The Federal Deposit Insurance Fund (FDIC) was established in order to reduce the possibility of bank runs, and a legal limit (‘Regulation Q’) was imposed on deposit interest rates in order to avoid excessive competition between banks, and to ensure the provision of credit at low rates. These measures, together with new institutions to regulate securities markets and the exchanges for commodities and derivatives, established a very stable financial framework during the so-called ‘Golden Age’ of prolonged economic growth and rising living standards after the Second World War.

This framework began to be undermined in the 1970s as a result of a number of significant developments. Banks had financed long-term loans with short-term deposits but, as a result of higher inflation, were faced with lower real interest rates and declining profitability. In response,
they began to look for ways of circumventing regulations through financial innovations. This process had begun in the late 1960s with the creation of negotiable certificates of deposit, which enabled banks to offer interest rates above the legal limit on large deposits. In the 1970s, as large US industrial corporations became increasingly international, US banks began to open foreign branches so as to provide financial services to such companies and to circumvent the provisions of the Interest Equalisation Tax, which had been introduced in 1963 to restrict lending US dollars overseas. Following the marked rise in oil prices in the 1970s, oil producing countries deposited large sums with big US banks and, as the banks sought to increase their international lending, this added to pressure to end restrictions on banks conducting international business from inside the US. From the 1980s, there was also a strong growth of so-called institutional investors, including investment or mutual funds which began to attract deposits previously held in banks.

The deregulation of the US financial system began in 1980 when the legal limit on interest rates was abolished, thereby enabling banks to raise rates in response to rising inflation. The process continued in 1982 with the elimination of many of the legal restrictions on the activities of Savings and Loan Associations (S&Ls), institutions which had originally been set up to enable households to save and finance the purchase of a home. The lifting of restrictions was followed by a major growth of speculative lending and, after extensive losses, eventually cost the government some 150 billion dollars rescuing failed S&Ls – the largest ever such expenditure at the time. Then following the appointment of Alan Greenspan as Governor in 1987, the Federal Reserve began to interpret the legal restrictions on commercial banks in an increasingly flexible way and this culminated in 1999 with a new law which completely abolished the legal separation between commercial and investment banks, thereby allowing the emergence of giant universal banks.

Orhangazi identifies five channels by which the process of deregulation led to the financial crisis. First, rapid financial innovation led to the growth of riskier forms of lending and financial investments. This included loans to households for up to 100 per cent of the cost of a home, with the possibility of borrowing even more as the value of the home increased. Second, loans were bundled to create securities which could then be sold on the capital market. Since banks did not intend to hold the loans themselves, this led to less rigorous lending standards, most notoriously in the case of sub-prime mortgage lending, while complex techniques for pooling loans and tranching securities served to obscure the risks involved. Third, a major expansion of so-called
shadow banking institutions enabled banks to shift assets off their books to various entities, such as Special Purpose Vehicles, that were subject to little regulation. In this way, they avoided legal requirements to maintain a certain proportion of capital and reserves against their assets and were able to raise their rate of return. Fourth, the system of incentives at banks and other financial institutions encouraged excessive risk taking. Employees were rewarded on the basis of their short-term success in expanding business, with little attention to the long-term risks that were involved. Finally, the strong reliance on self-regulation and banks’ own assessment of risk using highly sophisticated quantitative models led to a serious underestimation of the real risks involved.

Orhangazi’s analysis brings out the fact that the framework of financial regulations introduced in the US in the 1930s was undermined by broader economic developments which came to a head in the 1970s, including rising inflation and the increasing internationalisation of big firms – developments which also contributed to the demise of the post-War international monetary system based on managed exchange rates. The deregulation of the financial system, therefore, was not simply a result of the shift to more neo-liberal policies in the US, as appears to be the case in some analyses by progressive writers. Rather the old regulatory system had ceased to be effective. The banks were increasingly circumventing the old order and, as they mobilized support for a new, more accommodating regime, they were able to draw support from the arguments advanced by a resurgent school of neoliberal economists. In the face of these developments governments of both Democratic and Republican hue were, for their part, only too willing to oblige.

7. The distribution of income

During the period from the 1950s to the 1970s, real incomes in the US rose roughly in line with labour productivity – as they did in most advanced capitalist countries. From the 1970s, however, real wages rose significantly more slowly than productivity in the US and many households became increasingly indebted in order to sustain their pattern of consumption. The shift in the distribution of income in favour of higher income groups, and the rising indebtedness of many middle and working-class households, has been identified as a principle underlying cause of the financial crisis which broke out in 2008-09. This position is particularly held by writers with a Keynesian or Kaleckian background, although it has also been advanced by Raguram Rajan (2010), a former chief economist at the International Monetary Fund.
The report by Jo Michell (2014) begins by reviewing various measures showing the development of the distribution of income in the US and other countries since the 1960s. These show a clear decline in the share of wages in the US between the 1970s and 2010, both in terms of national income and in terms of the value added in the corporate sector. There has also been a dramatic widening in wage differentials since the 1970s. Real wages for less skilled workers actually declined, while those for more educated workers increased. Most famously, the share of income accruing to the top 1 per cent increased from 8 per cent in the 1970s to almost 20 per cent by 2012 (Alvardo et al, 2013).

Michell outlines three of the main approaches which have been advanced to explain these developments in income distribution. What he terms the mainstream approach has principally focussed on the impact of technical change, which has led to an increased demand for skilled relative to unskilled labour. According to Michell, however, many of the statistical studies which have attempted to demonstrate this have suffered from significant methodological problems. An alternative approach, adopted by a second group of writers, has focussed on the impact of major institutional changes, in particular the deregulation of labour markets and the decline in trade-union influence; the globalisation of economic relations; and the increasing dominance of the financial sector. Michell argues that various empirical studies have found evidence which demonstrates the impact of declining union membership and of increasing globalisation on rising inequality. A third approach to explaining rising inequality has pointed to the importance of more general political shifts, most notably the shift towards greater regulation under the Roosevelt government in the 1930s and, particularly since the 1980s, the shift back towards a more conservative policy agenda which favoured the better off.

Michel then identifies three broad approaches that have been employed to link growing inequality with the onset of the financial crisis. The first of these argues that falling or stagnating incomes led to a major increase in the build-up of private sector debt, in particular debt by households. In fact, he points out, many economists had not seen this as a problem prior to the onset of the crisis. Alan Greenspan, for one, argued that debt to income ratios had been rising for half a century and

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3 Michell does also note, however, that according to Thomas Piketty and Emmanuel Saez (2003), this is only a reversal of a rising wage share in the years after the Second World War.
saw no cause for concern (Greenspan, 2004). Others claimed that efficient financial markets had made it possible for households to mitigate the impact of volatile incomes on consumption, and that increased income inequality had, consequently, not been accompanied by increased consumption inequality (Krueger & Perrri, 2006). By contrast, there were writers who warned that the build-up in household debt was unsustainable. Perhaps most presciently, Wynne Godley warned from a very early stage that if the build up of private sector debt continued, ‘a sensational day of reckoning could then be at hand’ (Godley, 1999). As Michell emphasises, prior to the crisis households with average and below average incomes accumulated debt as wages either failed to rise in line with productivity or even fell in real terms. At the same time, incomes became more insecure with the shift to more precarious employment. At an aggregate level, this was reflected in a decline in the savings rate, which eventually became negative. Rajan (2010) argues explicitly that easy access to credit was consciously deployed as the politically easiest option to compensate for stagnant incomes. At all events, in the view of such critics, rising inequality led to greater indebtedness, and it was rising indebtedness which led to the crisis.

The impact of greater inequality has also been analysed using macroeconomic models. These have been used to study how a shift in the distribution of income can result in a decline in aggregate demand and lead to stagnationary tendencies. The original basis for this analysis stems from the work of Michal Kalecki and Josef Steindl. They argued that, due to a higher propensity to save out of profits than out of wages, an increase in the share of profits in national income will lead to a fall in aggregate demand. More recently, Amit Bhaduri and Stephen Marglin developed a similar model, but they argue that the overall effect of a wage increase on aggregate demand may be positive (if consumption responds strongly) or negative (if the associated decrease in profits has a stronger impact on depressing investment). Attempts to estimate this type of model using empirical data have concluded that most developed countries conform to the first of these, the ‘wage-led’ model. Given that the share of wages in national income has declined since the 1980s, it is argued that economic growth has only been sustained either by encouraging greater domestic consumption through an extension of debt to households or by generating an export surplus, both of which lead to an accumulation of financial imbalances. The US is the archetypical example of a country that has attempted to compensate weak domestic demand through the growth of lending
to households, and growth was therefore accompanied by a rising – and ultimately unsustainable –
level of household debt.

A third approach to the relation between inequality and the crisis has focussed on wealth
inequality, which is considerably greater than income inequality in the US. The appropriation of a
rising share of national income by top earners, who save a high proportion of their income, has led
to a significant concentration of wealth and this has contributed to a rising demand for financial
securities (Lysandrou, 2011). The increased demand from so-called ‘high net worth individuals’,
together with that of institutional investors and sovereign wealth funds, was reflected in falling
yields and led banks to engage in financial engineering and the creation of ever more complex
instruments in an attempt to raise yields. It was this ‘search for yield’, it is argued, which
encouraged the banks to undertake yet further innovations and to promote the extension of credit
to poorer, high risk borrowers which ultimately proved so damaging.

Michell concludes that greater inequality has been driven by globalisation, deregulation and
financialisation and a policy agenda that has sought to weaken the bargaining power of workers.
As the share of wages in national has fallen, declining aggregate demand was compensated in the
US by an expansion of credit to households, resulting in rising household indebtedness and a
growing current account deficit. For Mitchell rising inequality was, therefore, an important
underlying cause of the crisis, but he is more cautious about identifying the extent to which each of
the different factors contributed to greater inequality.

8. Enhanced funds seeking higher returns

In the US the stock of financial assets grew roughly in line with the size of the economy between
the 1950s and the 1970s, remaining at around 200 per cent of GDP. From around 1980, however,
financial assets began to expand much more strongly than output, and by 2007 had risen to some
440 per cent of GDP (McKinsey Global Institute, 2009). This process has been associated with a
marked expansion of institutional investors; the rise of smaller, but more aggressive hedge funds
and private equity funds; and the emergence of non-financial corporations as major financial
players.
The paper by Szabolcs Szikszai and Tamás Badics (2014) refers, very briefly, to analyses by Jan Toporowski (1999) and Özgür Orhanganzi (2008) as examples of authors who have identified the growth of the financial sector as the cause of the crisis. More specifically, as the title of his work indicated, Toporowski argued that the inflow of capital into the markets for financial assets had led to the phenomenon of what he called ‘asset price inflation’. Orhanganzi, for his part, argued that the increasing importance of financial markets and financial institutions (‘financialisation’) had been associated with a more significant role for financial investments by non-financial corporations and, at the same time, greater pressure from financial markets on non-financial corporations to generate higher returns. For Orhanganzi these developments had led to a decline in productive investments by non-financial corporations.

Szikszai and Badics first provide figures on the growth of investments by conventional financial institutions (pension funds, insurance funds and mutual funds) and by so-called ‘alternative’ financial institutions (hedge funds and private equity funds). They note that hedge funds and private equity funds, although remaining much smaller than conventional funds, grew especially rapidly in the period before the crisis, and that there has been an increasing interconnectedness between conventional institutional investors and hedge funds, with the proportion of hedge fund assets held by institutional investors rising from 19% in 1992 to 57% in 2007. They also note that the activities of hedge funds have generated perhaps the greatest controversy among economists. Nevertheless, after reviewing the work of various mainstream economists, they conclude that, despite hedge funds increased activity, they are not widely seen as a major factor in contributing to the outbreak of the crisis.

Szikszai and Badics then consider the financial activities of non-financial corporations. They note the growth of prominence of the so-called ‘share-holder value’ norm in corporate governance since the 1980s and the fact that non-financial corporations have increasingly engaged in financial operations in order to raise their rate of return. The result, they observe, has been a shift from productive investment to financial investment. Drawing on Orhanganzi (2008), they identify two

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4 Most of Szikszai and Badics figures are for global markets, but they indicate that the growth of these financial institutions was very significant in the US, and note that 70 per cent of hedge funds assets were managed by funds based in the US.
channels by which financialisation has had an impact on productive investment: firstly, the higher returns on financial investments make them more attractive than productive investments; while, secondly, increased payments for interest, dividends and share-buybacks has led to a decline in the amount of internal funds available for productive investments. They also provide figures to show that the scale of share buy-backs increased especially strongly in the period from 2002 to 2007.

Finally, Szikszai and Badics review the proprietary trading of banks. They draw on a GAO study of the six largest US bank holding companies which accounted for 88 per cent of the trading revenues of all bank holding companies in 2010. Figures for the period from 2006 to 2010, which obviously includes the crisis, show that while four banks did make significant profits, two banks made losses. In particular, they note that stand-alone proprietary trading units of the big banks made losses for much of the period between the fourth quarter of 2007 and the fourth quarter of 2008.

When it comes to reform proposals, Szikszai and Badics focus almost exclusively on the proposals that have emanated from official sources and, notably, to the Dodd-Frank Wall Street and Consumer Protection Act of 2010. They first refer to the regulatory framework for hedge funds and private equity funds, where the Act is designed to increase transparency and liquidity, in particular through disclosure requirements and the regulation of over-the-counter derivatives. The second area of the Dodd-Frank Act they mention is the introduction of what has come to be known as a Volcker Rule, requiring the banks to establish a separation between their commercial banking activities and their own proprietary trading, but they note the difficulty of establishing a clear division between covering the risks incurred on behalf of commercial banks’ legitimate customers, and taking positions that are motivated merely by the banks’ own desire to obtain a return.

Conclusion

The eight reports focus on the different factors which have been identified as responsible for the crisis, although it is not always entirely clear which factors might be considered to have generated the crisis and which were responsible for transmitting the crisis more widely. The main points that emerge from the reports are as follows.
The crisis was detonated by the failure of complex securities based on subprime mortgages. Providing mortgages to households without a sufficient or secure enough income to meet the service payments was unsustainable. But banks were eager to expand into more profitable areas and, with falling or stagnant wages, conservative governments were keen to see an extension of home ownership. Packaging these mortgages in complex securities displaced the impact of a declining capacity to service the loans but resulted in even greater losses when the crisis finally erupted. Nevertheless, while subprime mortgages involved a notoriously fragile financial structure, they represented only one – minority – dimension of the huge expansion of credit on which economic growth in the US had become increasingly dependent since the 1980s.

Mainstream explanations of the crisis have given considerable weight to the failure of risk management and this was indeed extraordinarily pervasive. Inadequate measures, widely overlooked factors, an overconfidence in numerical models: all served to ensure that the evolution of complex securities completely outstripped the development of risk management techniques. But, however extensive such failures, a narrow focus on risk management can obscure the fact that such failures only acquired their full significance as a result of the massive growth of financial capital, its expansion into ever more areas of economic activity, and its increasingly short-term focus on generating returns.

A related argument, which has had considerable influence on shaping official policy responses, concerns the role of perverse incentives. At every stage, from the selling of subprime mortgages, to their packaging in securities, the construction of complex CDOs and finally their rating by profit-driven agencies, the payment of rewards on the basis of short-term results encouraged a willful disregard for any consideration of longer-term financial sustainability. In this sense, perverse incentives played an important role in promoting the unchecked accumulation of unsustainable credit structures. However, as with the failure of risk management, the impact of perverse incentives gained such significance in a context where legal restrictions were being relaxed and financial capital was straining to expand.

The claim that the crisis was provoked by the over-expansive character of monetary policy in the US in the years prior to 2007 has won support amongst more conservative circles in the US. Whether monetary policy was quite as expansive as is sometimes claimed has been challenged.
More significantly, since the 1980s economic growth in the US had been dependent on an ever expanding supply of credit. When this credit-driven expansion stalled in 1990, the Federal Reserve prevented a more serious recession by cutting interest rates and holding them down for several years. Then in 2001 following the collapse of the so-called internet bubble the economy again entered a recession and the Federal Reserve once more responded with a highly expansionary policy. Had it not done so, the US would almost certainly have experienced a far more serious crisis at that earlier time. In this way, the Federal Reserve’s accommodating monetary stance actually prevented more serious crises from occurring earlier – albeit at the cost of accumulating the tensions which finally burst out in 2007 and 2008.

The widening global imbalances which emerged in the years leading up to the crisis have been identified by several authorities as a source of the tensions which led to the crisis. The IMF emphasised how lax policies and a low savings rate led to a current account deficit in the US; the Federal Reserve drew attention to a so-called savings glut in developing countries which led to large net inflows of capital into US financial assets. But, contrary to some predictions, the crisis in the US was not the result of a sudden stop in capital inflows. The problem was not net inflows of capital, since investment from Asia was directed primarily at safe, low yield government assets; the problem was, rather, gross flows. Big European banks, in particular, borrowed large amounts in the US and invested the proceeds in risky, high-yield financial instruments. The inflows associated with international imbalances could have been managed if there had been stricter controls on the expansion of credit. The origins of the crisis did not lie in current account imbalances but in the fragility of the US monetary and financial system and the massive, unchecked expansion of lending.

The deregulation of the US financial system from the 1980s has been identified, especially by more progressive writers, as a major cause of the crisis. The steady elimination of the tight restrictions that had been introduced on banks in the 1930 resulted in a major growth of riskier forms of lending, the bundling or such loans into dubious securities, and the expansion of shadow banks to which assets could be shifted, accompanied by an increasing reliance on banks’ self-regulation. But the deregulation of the financial system was not simply a result of a shift by governments to more neoliberal policies. The existing system of regulation had ceased to be fully effective as banks had increasingly circumvented the old order through innovation and internationalisation.
Banks played a very active role, promoting the process of deregulation through extensive lobbying and, aided by the widespread influence of neoliberal ideas, US governments responded by accommodating their demands.

For many Keynesian and Kaleckian writers, major shifts in the distribution of income since the 1970s were a key underlying factor in generating the crisis. These shifts include the rising share of profits in national income, and the rising share of top earners in the distribution of waged or salaried incomes. As the incomes of many working- and middle-class households stagnated or even fell, they attempted to compensate by borrowing in order to finance a growth of consumption. One important way in which households raised funds was to borrow against the rising value of their homes, something which could only function so long as house prices were rising. Economic growth in the US became highly dependent on rising levels of household indebtedness – a pattern of development which clearly was not sustainable.

Perhaps the most fundamental of the factors which has been identified as generating the crisis involves the rapidly growing sums of capital which were striving to obtain ever higher returns. Linked to the shifts in the distribution of income, there was a major accumulation of financial assets by the better-off sectors of society. This was reflected in a strong growth of institutional investors, notably investment funds, and the rapid expansion of more speculative units, in particular hedge funds and private equity funds, all striving to raise their rate of return. There was also a major growth of large universal banks following the abolition of the legal distinction between investment and commercial and for some years these succeeded in extracting exceptionally high profits from what is politely termed 'proprietary trading'. At the same time, nonfinancial companies cut back on their fixed investment and turned increasingly to investments in financial assets to generate a higher rate of return. Ultimately, this search for higher returns all rested on the economy’s ability to generate an economic surplus. The creation of complex instruments could stretch and obscure this connection through seemingly impenetrable layers of financial transactions. But only for a time.
References


Ben Bernanke (2005), 'The global savings glut and the US current account deficit', Sandridge Lecture, Richmond, 10 March


Blanchard, Olivier and Gian Maria Milesi-Ferretti (2009), 'Global Imbalances: In Midstream?', *IMF Staff Position Note*, November


Evans, Trevor (2010), 'Five explanations for the international financial crisis', IPE Working Paper No 8, Berlin School of Economics and Law, June


Gabbi, Giampaolo, Alesia Kalbska and Alessandro Vercelli (2013), 'The role of incentives: securitisation and contagion', University of Sienna, October

Godley, Wynne (1999), 'Seven unsustainable processes: Medium-term prospects and policies for the United States and the world', The Jerome Levy Economics Institute at Bard College Special Report

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Jurek, Michal and Pawel Marszalek (2014), 'Subprime mortgages and mortgage backed securities role in generating and transmitting the global financial crisis', Fessud Working Paper Series No. 40


Lagoa, Sérgio, Emanuel Leão and Ricardo Barradas (2014), 'Risk management, the subprime crisis and financialisation: the role of risk management in the generation and transmission of the subprime crisis, Working Paper Series No. 37, May


Sziksazai, Szabolcs and Tamás Badics (2014), 'Enhanced Funds Seeking Higher Returns', Fessud Working Paper Series No. 43, June
