

Return of the crisis part 1



Introduction

On September 12th 2008, before the assembled grand financiers of Wall Street, Hank Paulson, flanked by his team from the US Treasury, announced his determination that there would be no government money to bail out Lehman Brothers, the fourth biggest investment bank in the world, which was on the verge of going bust. After two days of frantic negotiation and brinkmanship the grand financiers called Paulson's bluff and Lehman Brothers was obliged to file for bankruptcy.

The financial crisis that had begun a year earlier with the credit crunch was now brought to a head as panic spread through the markets. For the next four weeks the global financial system teetered on the verge of meltdown as government and monetary authorities struggled to avert an economic catastrophe. The US Congress was brow-beaten into conceding a huge \$750 billion government bail out of the financial system. In Britain New Labour was obliged to surpass old Labour's 1983 manifesto pledge by nationalising two of Britain's largest banks.¹

The culmination of the financial crisis accelerated the slow-down in the real economy. Despite substantial attempts to reflate the economy by expansive monetary and fiscal policies across the world, there were very real fears over the following few months that there could be a global depression on a scale not seen since the 1930s.

So what is the nature and significance of the current financial and economic crisis? What implications does it have for the future of capitalism?

¹ New Labour was to a large extent defined against the shopping list of 'looney left' demands contained in 1983 Labour Party election manifesto. The election resulted in a humiliating defeat for the Labour Party. One of the central left-wing demands of the manifesto was to nationalise one of the leading British banks. The irony is, of course, that having embraced the city and much neo-liberal ideology New Labour has ended up going beyond this and nationalising two of Britain's leading banks!

Only a few months ago it was being widely proclaimed that the near meltdown of the global financial system had sounded the death knell for the era of neo-liberal capitalism. With the election of Barack Obama, the way was open for a new 'green Keynesianism' that would once again cage the monster of finance and establish a more progressive and egalitarian capitalism. Others saw the crisis as marking the beginning of the end of American hegemony. For them, the crisis could only accelerate the shift of economic power from the US to Asia. A few even suggested the possibility that the crisis could mark the end of capitalism itself.

A year on from the collapse of Lehman Brothers, with the return of the 'bonus culture' and business as usual in the main financial centres of the world, and the rest of the bourgeoisie increasingly confident that economic recovery is well on its way, all such excited claims that the crisis has marked a decisive historical turning point now seem a little too premature if not rather ridiculous.

To comprehend the significance of the current financial and economic crisis it is necessary to understand its nature and causes. We need a theory of the crisis. Where are we to find it? Should we not look to Marx?

Certainly the crisis itself has dealt a severe blow against market fundamentalism and in doing so has brought to the fore those critical of the prevailing economic orthodoxy. It, at least momentarily, appeared to vindicate the numerous Cassandras, whether from the political left or the right, who had repeatedly warned over the last three decades that the financial de-regulation and the debt fuelled economic boom would inevitably end in tears. But in doing so the crisis has also brought into focus the inadequacies of such critical theories, particularly those derived from Marx.

In perusing the various Marxist theories of crisis that have been trundled out to explain the current crisis, what is evident is how outdated most of them are. Despite a few minor adaptations to explain developments over the few decades, most are essentially little different from the crisis theories developed in the 1970s.

At that time the main enemy had been the then prevailing Keynesian orthodoxy that had claimed that

modern capitalism had overcome the evils of boom and bust through the tight regulation of finance capital. Against this it was argued that capitalism as a whole was an inherently crisis-ridden system. What is more, it was argued that capitalism was in decline and, as a result, it was becoming increasingly mired in stagnation. Attempts to use Keynesian style fiscal and monetary policy to stimulate the capitalist economy in order to overcome stagnation and postpone the inevitable crisis had only served to introduce ever greater amounts of inflation in the system.

The adoption of neo-liberal economic policies to restructure capitalism in the 1980s was widely recognised by Marxists as demonstrating the failure of the old Keynesian orthodoxy. However, it was usually insisted that neo-liberalism would prove no more effective in avoiding stagnation and crisis than the old Keynesian orthodoxy had been. Now, it was asserted, with the re-emergence of finance capital, capitalism could only be kept going, not so much by inflation but by ever-greater asset bubbles and ever growing amounts of debt. Sooner or later there would be a big economic crash.

The failure to accept the efficacy of neo-liberalism in reviving capitalism, and the crucial role resurgent finance capital has played in this, has meant that it has not been the capitalist economy that has stagnated but much of Marxist crisis theory. As the crisis, which it was insisted was always just around the corner, failed to arrive, Marxist theory has increasingly retreated into methodology.² Most of those who still claimed to be inspired by Marx turned away from the issues of crisis and the functioning of the capitalist economy.

The diminishing number that steadfastly predicted the big crash over the last twenty or thirty years can now feel at long last vindicated. They have been enthusiastically joined by many Marxist intellectuals, and would be intellectuals, who have now discovered that *Capital* was not merely a critique, but a critique of political economy; that Marx was not just a pupil of Hegel but was also a student of Ricardo. But the failure to adequately explain the long economic upturn of the last twenty years makes their theories of the crisis decidedly hollow.

There has arisen a gap between the abstract formulations derived from the study of the crises of the 1970s and the concrete specificities of the current crisis.³ At

² More than fifteen years ago, in surveying the development of Marxist theories of crisis, Simon Clarke had pointed that they had more or less come to a dead end after the 1970s. Although his own contribution contained in *Marx's Theory of Crisis* is certainly highly valuable, he himself admits that this work is more 'methodological than substantial'. *Marx's Theory of Crisis*, Simon Clarke, Macmillan, 1994. (p.279). Of course, methodology is necessary but not sufficient for the development of an adequate theory.

³ Following the Asian financial crisis in 1997 there was a brief revival in question of crisis. Robert Brenner's article 'The Economics of Global Turbulence', *New Left Review* 229, May 1998, produced a flurry of responses. But nearly all of these were methodological critiques focusing on his rejection of Marx's labour theory of value. See the symposium reprinted in *Historical*

best this has meant having to adopt quite uncritically concepts from bourgeois economic theory.⁴ But all too often this gap has been covered up by a descent into a crass empiricism where ever-greater numbers are quoted as supposedly statistical evidence to prove the severity of the situation without any regard for what these numbers actually mean.⁵ Instead of concrete analysis we have a profusion of buzzwords and clever Marxoid phrases such as 'fictitious capital' or 'financialisation', which obscure more than they explain.

In part II of this article, which we will publish in the next issue once the dust has settled a little more, we shall seek to understand the nature and historical significance of the current financial and economic crisis for global capitalism. To do this it will be necessary to critically consider in far more detail the various theories put forward to explain the underlying causes of the crisis. We shall look at the various theories put forward by Left Keynesians and see how they fail to explain the social and economic crisis that lead to the demise of the old Keynesian orthodoxy and the rise of neo-liberalism. We shall then look at stagnationist theories put forward by various strands of Marxists, and see how they are unable to explain the long economic upswing of the past two decades. And we shall consider the theories of a rising profit rate put forward by Permanent Revolution, and ourselves in previous issues,⁶ and see how it overlooked the importance of global finance in realising and distributing surplus value across the world.

As a prelude to this we shall here in Part I present a basic account of the crisis and its immediate causes. In doing so we shall be concerned with immediate appearances as they present themselves to the bourgeois mind in order to grasp the specificities of the current crisis. Of course, this does not mean studying the rarefied theories of bourgeois economics, but with relating and translating the perceptions of those who are practically concerned with the everyday functioning of the capitalist system. The perceptions of central bankers, financial commentators and pundits have been coloured by the ideology of market fundamentalism, and by the economic

Marxism 4, summer of 1998 *Historical Marxism*, 5, winter 1999.

⁴ For example, in his explanation of the impact of asset bubbles on the real economy Robert Brenner repeatedly deploys the concept of the 'wealth effect' drawn from orthodox neo-classical theory. This concept is something of a theoretical fiddle-factor that has been used by conservative economists since the 1950s to rule out the possible effectiveness of fiscal policy in regulating the economy. Brenner appears quite unaware of this and makes no effort to determine theoretically or empirically its validity.

⁵ This is usually done in regard to debt. We are told, for example, that the US economy has so many tens of billions, no hundreds of billions, no trillions of dollars debt! But of course while these figures are no doubt huge, having lots of noughts, but they tell us nothing. Debt is not a problem as such. What may be a problem is the ability to meet the repayments of the debt as and when they fall due. We need to know the income that can be used to meet the repayments, we need to know the interest rate on the debt and we need to know the maturity dates of the debt.

⁶ See for example, 'Explaining the Crisis' in *Permanent Revolution* 11. and 'China in World Capitalism', *Aufheben* 14, 2006..

models which purport to give it intellectual credence, but they are not simply deluded. As their willingness to countenance unorthodox emergency measures in the current crisis shows, they are ultimately quite pragmatic. After all immediate appearances are not illusions but real.

We shall begin by going back early 2007 and the eve of the current crisis.

An account of the crisis and its immediate causes

The calm before the storm

In early 2007 the masters of the universe, the plutocrats, their ministers and their minions could feel more or less content with the world. Whatever problems there may be with rogue and failed states and terrorism, the economic fundamentals of the global capitalist system seemed sound. The global capitalist economy seemed to be in fine fettle. Profits were high, as were bonuses and the rewards of office. The world economy was expanding at a brisk 6% per annum. In the advanced capitalist economies of North America and western Europe inflation, the great bane of previous decades, had now been long subdued; while, unemployment rates were stable if not falling.

What is more, class conflict, if not entirely eliminated, was no longer the threat it had once been. There was, it was true, growing working class militancy in China and other parts of Asia; and of course the working class in Western Europe remained entrenched and resistant to the march of neoliberalism. But such problems were challenges that the bourgeoisie could feel confident could be contained, if not eventually resolved.

Little less than seven years earlier the outlook had seemed decidedly different. The wild speculation in the shares of newly emerging information technology companies, which had seen firms often employing a few dozen people, and making little or no profits, being given stock market valuations greater than that of major transnational corporations, had come to an abrupt halt, resulting in what became known as the dot.com crash. At the beginning of March 2000 the Nasdaq composite price index of IT company shares had peaked at \$5048.62. It then suffered a series of sharp falls. The Nasdaq was to fall by more than 70%. More than \$5 trillion was wiped off the market value of dot.com shares.

At the time there had been serious concerns that the dot.com crash could trigger a collapse in other financial markets, leading to a financial crisis on a scale not seen since that of 1929 – and hence the possibility of a major economic recession. For the critics of the neoliberal bourgeois consensus, particularly those that gave voice to the anti-globalisation movement, it appeared, at least briefly, that the day of reckoning for neoliberalism and global capitalism may have arrived. By deregulating financial markets and tearing down the barriers to the free movement of capital neoliberal policies had created the monster of global finance capital. Only recently, it could be argued, the recklessness of this monster had wreaked havoc on the populations of Latin America, East Asia and Russia in a series of financial crises

at the end of the 1990s. Now it seemed it was coming home and about to turn on its creators.

However, such concerns soon abated as the financial system proved that it was sufficiently resilient to absorb the shock of the dot.com crash. Nevertheless this crash burst the bubble of hype that had surrounded the dot.com boom. All the exaggerated talk, about how the emergence of the ‘new weightless economy’ had so transformed capitalism and that the boom could go on more or less for ever, had evaporated. With the dot.com crash, the banks pulled the plug on the myriad of IT start up companies that had been generously bankrolled in the hope they might prove to be ‘the next Google or Microsoft’. Larger and more established companies in the ‘new economy’ now found it far harder to raise capital to finance expansion and had to cut back on planned investment. The consequent sharp contraction in the ‘new economy’ then had a knock on effect on the economy as a whole. Companies in the ‘old economy’ that had made good profits directly or indirectly supplying goods or services to either IT companies themselves, or else their often highly paid employees, now felt the pinch. As a result the dot.com crash brought about a sharp slowing of economic growth for the US economy as whole.

Those more sober policy makers and commentators who had long warned that the 1990s debt-fuelled boom could not last forever, and that it would inevitably be followed by a period of economic retrenchment, in which businesses and individuals alike would need to cut back on spending to reduce the high levels of debt they had accumulated during the ‘good-times’, now seemed to have been vindicated. The prospect of a severe and possibly prolonged recession had begun to loom.

As it turned out, the subsequent economic recession of 2001-2002, which affected not only the US but much of the world, proved to be mild and short lived, certainly when compared with the recessions of the early 1980s or the early 1990s.

Credit for averting such a severe and prolonged recession is usually given to Alan Greenspan, the then chairman of the US Federal Reserve Board, for taking prompt and decisive action to ‘ease monetary’ policy as soon as it became clear that the dot.com boom was resulting in a slowdown in the US economy. From the beginning of 2001 Greenspan began pushing through a series of half and quarter per cent cuts in the official interest rates. As a result, by June 2002 the official Federal Reserve Funds rate, which had been 6.5% in 2000, had been reduced to 1% - a rate that had not been seen for nearly fifty years. Other major central banks followed suit, bring down interest rates across the world.

Lower interest rates certainly came to the rescue of many firms who, having borrowed heavily on the expectation of continued economic growth, now found themselves struggling to meet their debt obligations in the face of falling demand and declining revenues. As such Greenspan’s bold and determined reduction in interest rates served to avert an avalanche of bankruptcies that could have only deepened and prolonged the recession.

Furthermore, by making it easier and cheaper to borrow money Greenspan’s cut in interest rates served to

give a timely boost to the debt-fuelled growth of consumer demand. Lower interest rates meant that individual households could afford to supplement their current incomes by extending their overdrafts or by taking out larger personal loans. Yet such means of borrowing was limited by the reluctance of banks and other financial institutions to lend to individual households without some form of security against possible default. For the vast majority the only substantial asset they could offer as security was their homes.

The easing of monetary policy also made it easier for homebuyers to take out larger mortgages. But, with the supply of housing limited, this extra money in the pockets of competing home buyers simply meant that house prices were bid ever upwards. However, rising house prices meant that it was easier for existing homeowners to borrow by taking out second mortgages, offering as security the increased value of their homes - or 'property' as homes increasingly came to be known.

This 'release of housing equity' was an essential part of the success of Greenspan's easing of monetary policy in sustaining the growth of consumer demand that helped ameliorate the depth and duration of the post-dot.com recession. Yet, as many of his critics have pointed out, much of the effectiveness of Greenspan's easy money policy in ameliorating the 2001 recession depended in a large part on ever-rising house prices. As we shall see, the resulting prolonged bubble in house prices was to have particular significance in the longer term.

Perhaps just as important as the easing of monetary policy in reducing the depth and duration of the 2001 recession, was the substantial fiscal stimulus provided by the Bush administration in his first term as president. Promises to make substantial tax cuts had been a central part of Bush junior's election campaign. On taking office at the beginning of 2001 Bush was able to use the looming fears of recession to overcome the opposition of fiscal conservatives in his own party in Congress to push through a series of substantial tax breaks targeted mainly at the rich.

At the same time, the time limited legislative restrictions designed to limit 'pork barrel' government spending, which had been introduced ten years before in order to reduce the huge government budget deficits built up under Ronald Reagan's presidency, were allowed to lapse. Bush junior was thereby able to give generous hand outs to

his many business friends. Then, in addition to this surge in 'pork barrel' spending, came the unexpected escalation in military spending caused by the wars in the Middle East and the occupations of Iraq and Afghanistan.

With tax revenues falling and government spending rising the US government's financial position moved sharply in to the red. In Clinton's last year of office there had been a budget *surplus* that amounted to more than 2% of annual GDP of the US economy. By the end of Bush junior's first term in office this had become a budget deficit amounting to 4% of annual GDP. This growing deficit meant that the government was pumping more money and demand into the economy than was being clawed back through taxes. The growing government deficit, along with the growth in consumer demand caused by the easing of monetary policy, served to offset the fall in demand generated by investment spending. Towards the end of Bush junior's first term the economy had not only come out of recession but was beginning to pick up speed.

Even so there were still some concerns amongst both economic policy makers and their critics that the recovery might not be sustainable. Much of the US economy was still in a phase of retrenchment. Many firms were still concentrating on cutting costs to restore profits. Rather than using these restored profits to invest in expansion, many firms were still paying off their debts or even accumulating substantial 'cash' surpluses. For much of the American economy capital accumulation remained stalled and, as such, the economic recovery was still dependent on ever increasing consumer and government borrowing. Clearly in the long term economic growth could not be sustained on the basis of ever increasing government and consumer debt.

However, such concerns had also soon dissipated. By the time of Bush junior's re-election as US president it was beginning to become clear that the engine of capital accumulation had at long last begun to kick in as the rate of investment began to increase. Capital accumulation could now begin to take over from government and consumer spending in propelling economic growth. As tax revenues consequently increased and economic growth picked up, the budget deficit stabilised and began to fall as a proportion of annual GDP. In the summer of 2004 Greenspan had felt able to begin to steadily tighten monetary policy in order to rein



in the debt-fuelled growth in consumer demand and gradually deflate the housing bubble. By early 2007 the budget deficit had fallen to 2.2% of annual GDP while official interest rates had been restored to 5.25%.

Viewed seven years later, the dot.com crash, far from demonstrating its fragility, could be seen as providing a further example of the global financial system's resilience and robustness. The dot.com boom had once again shown how financial markets were prone to wild irrational exuberance leading to booms and sudden crashes. But it had also demonstrated how, so long as monetary authorities were vigilant and acted promptly and decisively, it was possible to limit the impact on the real economy. Indeed, as Alan Greenspan argued, even if it was possible for the monetary authorities to prevent asset price bubbles in the financial markets, it would not be desirable since such irrational exuberance played an essential part in the dynamism of capitalism.

Hence, with hindsight, the dot.com crash and the subsequent recession of 2001-2002, could be seen as little more than a minor correction in what had now become a fifteen year-long economic upswing that had followed the tumultuous years of crisis, class conflict and economic restructuring of the 1970s and 1980s. What was more, with the US-led recovery this upswing had seemed to be taking on a broader and more stable character than it had in the 1990s. Indeed, by early 2007, the long economic upswing was becoming known as 'The Great Moderation': a period of steady economic growth, low inflation and ever greater financial stability. It was argued by many bourgeois commentators that we had entered a new age of economic prosperity that was well on the way to surpassing that of the long post-war boom of the 1950s and 1960s.

As such neoliberal ideologues could claim to have been vindicated. The hard and often unpopular neoliberal policies that had seen the defeat of organised labour, the privatisation and commercialisation of state provision of public services, the tearing down of impediments to the free movement of capital and the embracing of a globalised capitalism, could now be seen to have well and truly borne fruit. They were now able to concede to their critics in the anti-globalisation movement that neoliberal policies might have at times made the rich richer at the expense of the poor, particularly in the third world. They could admit that the free movement of capital may have burdened third world countries with unacceptable debt that had been borne disproportionately by the poorest sections of their populations. They could readily admit that global finance had brought about boom and bust with devastating consequences to the working populations of Asia and Latin America. However, for them all this had for the most part been the necessary birth-pangs for a new, dynamic, born again free-market capitalism.

Freed from the 'artificial' impediments, which had been imposed by organised labour and nationalistic states during much of the twentieth century, this new globalised capitalism was now not only making the rich richer but, by converting peasants into wage labourers, was lifting hundreds of millions of people out of abject poverty. In

addition increased economic prosperity was creating a substantial 'middle class' in many 'third world' countries - but particularly in China and India - that could enjoy a standard of living and consumer lifestyle that had previously been largely confined to North America, Japan and Europe.

As a consequence, the more adept neo-liberal ideologues could now turn the tables on their critics in and around the anti-globalisation movement by trumping their moralistic concerns for the poor of the 'third world'. Many in the anti-globalisation movement held a certain nostalgia for the golden age of Keynesianism of the 1950s and 1960s when finance, free markets and the free movement of capital had been highly circumscribed by nation states. It could be readily admitted that such arrangements had promoted economic growth and prosperity. But it could be pointed out that such growth and prosperity had been largely confined to the long established capitalist countries of North America and Europe. Absolute poverty may have been more or less eradicated in the west, but improvements in the living standards of the vast majority of the world's population had been limited. Furthermore, the only country of any size to have joined the club of rich nations during this period had been Japan. 'Globalisation' was now serving to spread the benefits of capitalism across the globe. Now there were a host of nations knocking on the door of the rich nations' club and, according to the IMF's calculations, 60% of world economic growth was accounted for by 'newly emerging market economies'.

So, in early 2007 the view from the citadels of capitalist power looked bright. Of course there were some ominous dark clouds on the horizon. There were the growing concerns over the depletion of the world's oil reserves and the need to reduce oil dependency. There was the issue of climate change and the problems of moving to low carbon economy. There was also the problem of the continuing international trade imbalances and problems of financing the US growing foreign debts.

However, all these problems still lay in the future. In the short term worries on the part of economic policy advisors that rising prices of oil and raw materials might lead to inflation had by early 2007 given way to worries that such price rises combined with the tightening of monetary policy was leading to a mild economic slow down. But such worries were minor, and certainly paled into insignificance compared with the problems economic policy makers had faced a generation before. Indeed many argued that a mild slowdown in the US economy would not be such a bad thing since it would provide the economic slack for the American economy to move towards a more balanced investment and export-led growth that would allow it to begin unwinding its debts.

Although many economists expected a mild slowdown in the US economy, few if any predicted that the financial system would come close to a meltdown and as a result the US and indeed the world would only narrowly avoid a full scale economic depression. Yet already early in 2007 events were rapidly unfolding that were to lead to the credit crunch that summer.

Bubble, bubble, toil and trouble

From resilience to fragility

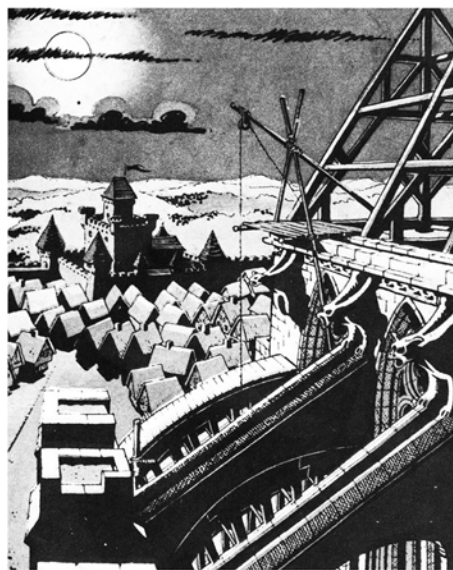
It is now well known that the difficulties in the US sub-prime mortgage market that had begun to become apparent in early 2007 were to turn out to be the trigger that detonated the current financial crisis, which subsequently broke out with the credit crunch in the summer of 2007 and then culminated little more than a year later with the collapse of Lehman Brothers and the near meltdown of the entire global financial system. How was it possible that such difficulties, in what after all had up until then been a rather small and obscure sector of the US mortgage market, were capable of having such a devastating effect both on the global financial system and the world economy?

The now widely accepted explanation of how this came about can be set out as follows. After more than three decades of deregulation the financial markets across the world had by the beginning of this decade become more or less self-regulating. This process of deregulation had of course been based on the neoliberal nostrum that, so long as they were open and transparent in their operations, financial institutions were best left to pursue their own self-interests. After all, it was argued, each financial institution was best placed to make a rational assessment of the balance between the prospects of making a profit and the risks of making a loss from any deal it might make with any other player in the financial system. Any financial institution that was behaving recklessly and taking too many risks would soon lose its reputation and hence lose business once its financial position became widely known. As such well-informed rational calculations regarding both the promise of profit and threat of bankruptcy were seen as being normally sufficient to ensure that this pursuit of self-interest by each financial institution promoted both the efficiency and the stability of the financial system as a whole.

Mainstream economists had done their bit in giving a scientific gloss to such neoliberal nostrums by publishing volumes of treatises giving 'rigorous mathematical proofs' of this supposed 'market efficiency hypothesis'. Of course, however much they may have been committed to 'free market fundamentalism', those who had practical responsibilities in supervising the financial markets knew that in fact reality did not always correspond to the abstract formulations of conventional economic theory. As we have already mentioned, Alan Greenspan had readily admitted that financial markets were prone to bouts of 'irrational exuberance', which became evident in the speculative asset price bubbles. If these bubbles were allowed to go too far then when they burst they could trigger an avalanche of bankruptcies that could seriously destabilise the financial system as a whole.

In the more regulated past central bankers had seen it as part of their responsibilities to nip these bubbles in the bud - or, as William McChesney Martin (Chairman of the Federal Reserve Board between 1951 and 1970) put it, central bankers had to 'take away the punch bowl before the party got going'. However, many of the policy instruments that allowed central bankers to intervene to prevent asset bubbles going too far had been dismantled as part of the

process of deregulation. The principal means with which central bankers now had to curb speculative asset bubbles were either to resort to exhortation or to increase official interest rates. In Greenspan's opinion neither means had much efficacy. Carefully worded statements from respected central bankers could have a significant effect on market sentiments but were unlikely to be sufficient to reverse a speculative stampede once it had got going. If exhortation was too weak, then raising interest rates was perhaps both far too strong and too weak a weapon to curb speculative bubbles. Raising interest rates sufficiently high to break the momentum of speculation in the financial markets risked having a serious impact on the real economy. Indeed, for Greenspan the prime purpose of interest rate policy was to control price and wage inflation, not to regulate the financial system.



As a consequence, Greenspan had concluded that there was little option but to let speculative bubbles to run their course. When they eventually came to an end then the financial authorities would then have to be prepared to intervene promptly and decisively to contain the impact of the bursting of the bubble. Some financial institutions may have to be allowed to go bust, and if nothing else this would provide a salutary lesson to others of the consequences of wild speculation for the future. However, the authorities would have to be prepared to act to prevent any avalanche of bankruptcies that could threaten the financial system as a whole. The central banks might have to act as the lender of last resort in order to supply much needed liquidity to the financial system as a whole; they might also have to cut interest rates, while those financial institutions, particularly the major banks, deemed too big or important to fail might have to be bailed out. If central bankers could no longer take away the punch bowl before the party got going then it would have to act as the emergency services that could bury the dead and take care of sick when the party was over.

Alan Greenspan could be quite sanguine about this doctrine of benign neglect regarding financial bubbles and

speculation. As the dot.com crash seemed to confirm, the growing size and sophistication of the global financial system meant that it was resilient enough to absorb the impact of the bursting of even major asset bubbles with minimum help from the financial authorities. The financial authorities were rarely likely to be called to bail out the financial system in a big way. As such Greenspan could claim that the costs of the financial authorities in providing this guarantee to the stability of the financial system was likely to be far less than the benefits gained from free self-regulating financial markets. If he had been more conversant with Hegel he may have said that the 'irrational exuberance' was merely a necessary moment of the rationality and efficiency of the financial system.

Thus when Greenspan began cutting interest rates in 2002 he acted strictly in accordance with his doctrine. For Greenspan, interest rates had to be cut to exceptionally low levels in order to ward off the threat that the slowdown in the real economy would lead to a downward spiral of prices and wages. He was not particularly worried by its impact on the financial markets. Yet, as his critics from both the left and right have argued, in cutting official interest rates to exceptionally low levels, and then holding them there for an extended period of time, Greenspan can be seen to have created the conditions of cheap money and easy credit that triggered an increasingly reckless over-expansion of the financial system.

On past experience, by making it easy and cheap for speculators to borrow money, low interest rates could have been expected to have fuelled speculative bubbles in financial exchanges; such as the stock exchanges, the foreign currency exchanges or the various 'commodity' markets. It is true that share prices had tended to rise; as did the prices in most of the major 'commodity' markets.⁷ But these price rises were relatively steady and could be seen to be broadly in step with the global economic recovery. Rising share prices more or less reflected the rise in corporate profits; while rising 'commodity' prices could be seen to reflect the fact that growth in world demand for raw materials and agricultural products was outstripping their supply. There was little sign that such price rises were due to any excessive 'irrational exuberance'.

Nevertheless, low interest rates can be seen to have contributed to the acceleration of the trend towards the rapid expansion, greater complexity and integration of the global financial system. Exceptionally low interest rates squeezed the profit margins that could be made from simply lending money. To compensate for this squeeze on profit margins financial firms were driven to respond in three ways. Firstly they could find new ways of expanding the volume of loans (a financial version of pile them high, sell them cheap). Secondly they could make loans that were considered to be more risky on which they could charge a higher interest rate – known as the 'search for yield'. Thirdly, and perhaps most

importantly, they could shift away from making their money from interest payments and instead concentrate on the revenues that could be derived from various fees and commissions they could charge for carrying out large money transactions.

By far the most important drivers of this tendency towards the rapid expansion, greater complexity and integration of the global financial system were the commercial banks. The principal function of commercial banking is to collect deposits from those businesses and individuals that have, at any moment, idle money and then to lend this money to those businesses and individuals that have need of money. As such commercial – or high street – banks play an essential role for any modern capitalist economy. Also, by collecting together a large proportion of the real economy's savings through their extensive network of high street branches, commercial banks have control over vast sums of money that make them major players in the financial system. Because of the importance of commercial banking both to the real economy and the financial system, at least the major commercial banks are considered as being too big to fail. In the past, as a *quid pro quo* for providing the tacit guarantee that they would bail them out if they got into trouble, the financial authorities had insisted on tightly regulating and supervising the activities of commercial banks. Now, however, unhindered by such regulation and supervision, but still confident that they would be bailed out if the worse came to the worse, commercial banks were able to respond to the pressure placed on their profit margins by low interest rates by embarking on an aggressive, and what was to prove an increasingly reckless, expansion.

Taking advantage of their access to the vast pools of savings, commercial banks now became increasingly embroiled in the complex web of international finance, becoming involved in activities that had previously been the preserve of the investment banks. The investment arms of the commercial banks now began competing with the investment banks in producing and marketing various increasingly 'sophisticated and innovative' financial instruments. We can distinguish two broad types of such financial instruments that were to play an important part in undermining the stability of the financial system; firstly there were those instruments that were designed to manage risk, and secondly there were those involved in the 'securitisation of debt'.

The basic purpose of those instruments designed to manage risk was to provide companies, both in the real economy and in the financial sector with a means to insure themselves against unexpected adverse financial or economic events or a combination of events. Amongst other benefits by buying these instruments companies could reduce the amount of idle money-capital they needed to hold in reserve to cushion themselves against any losses resulting from such unexpected events.

These instruments are essentially analogous to bets on certain economic or financial outcomes. By betting on an outcome that might have a substantial adverse effect on their business a company could limit its potential losses if it actually occurred. The role of the investment bank is like that of the bookmaker, taking bets on various outcomes by selling

⁷ In Marxist terms commodity is anything that is produced for sale. However, in the financial press 'commodities' are basic raw materials, such as oil, tin, copper etc or basic food stuffs such as coffee, wheat, rice etc.

various financial instruments and paying out if such events occurred. Like a bookmaker, an investment banker will seek to cover what has to be paid out if a particular event actually occurs with the money received on the bets that this event will not occur – taking a small cut of course for running the book.⁸

As a consequence, to the extent that companies are risk-averse and in effect seek to make bets with long odds (i.e. they pay a small amount to insure themselves against unlikely but high costly events), then the investment bankers have to find those prepared to in effect make the corresponding opposite short odd bets. This opened up a lucrative opportunity for financial firms, such as the notorious hedge funds, in betting against unlikely economic and financial events. With the growing competition in investment banking caused by the encroachment of the investment arms of the commercial banks, and in the prevailing climate of declining economic and financial volatility, it was tempting for investment bankers themselves to follow the hedge funds into this area of business. This could be done either directly, by not fully covering the instruments with 'long odds', or by lending money to hedge funds so they could 'leverage up' their investments. As a result, investment banks and the investment banking arms of the commercial banks became heavily exposed to the possibility of large losses if the financial and economic situation became more volatile and uncertain.

The second broad type of financial instrument that we need to highlight are those involved in the various forms 'securitisation of debt'. Traditionally banks made loans to businesses and individuals and then held them until they were fully repaid. With the 'securitisation of debt' banks make loans and then bundle similar types of loans together and sell the rights to the interest and repayments of the loans in the form of tradable securities. As such, banks do not make their money on the interest on the loans but on the fees and commissions that are earned for originating and managing the loans.

The advantage for banks is that by selling off their loans they can then use the proceeds of such sales to make further loans and thereby make more money in the form of fees and commissions. Furthermore, because the risk that there might be exceptionally high defaults on these loans is transferred to the buyers of the debt, banks do not need to hold money reserves in order to cover the losses that may arise. Yet at the same time, in taking the form of tradable securities, these loans can be sold on to third parties by their buyers. Because they can be easily converted into money these assets appear as liquid assets that can be used instead of money as part of their owners' reserves against losses on other business dealings.

Indeed, as was to become exposed in the current financial crisis, the securitisation of debt performs a great

conjuring trick in which illiquid loans are magically transformed into highly liquid assets that persuade everyone involved that they need fewer reserves to cover unexpected losses.

We shall return to this in more detail later when we consider the crucial role of the securitisation of mortgage debt in bringing about the 2007 credit crunch. However, we must now draw together the implications of the trend towards the rapid expansion, greater complexity and integration of the global financial system that can be seen to have been accelerated by Greenspan's interest rate cuts.

Firstly, the increased integration of the global financial system meant not only a growing interconnectivity across national boundaries but also a blurring of the old divisions between different financial functions. The old firewalls, such as those which had separated commercial banking from investment banking, and investment banking for hedge fund activities, or which had separated the financial system from one country from that of another, were eroded. As a result, the global financial system had become far more susceptible to the rapid spread of crisis from one part to another.

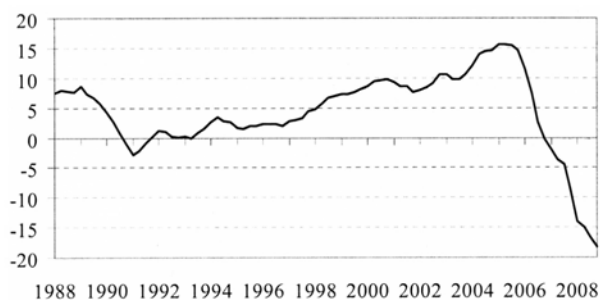
Secondly, the growth in the sheer complexity of financial deals made the global financial system increasingly opaque, not only to those entrusted with supervising the system but also to those directly involved. With many financial instruments often based on dense and intricate specifications and sophisticated mathematical models, few if anyone were able to fully understand. Deals had to be made largely on trust and the reputation of those involved, rather than on 'due diligence' before entering such deals. Thirdly, as we have seen in the case of the 'securitisation of debt', many of the financial innovations and developments had served to reduce the amount of cash reserves necessary to cushion the system from unexpected shocks. As a result, rapid expansion prompted by exceptionally low interest rates could be seen with hindsight to have left the global financial system dangerously over-extended.

As a result of all this it can be argued that the global financial system had by 2007 become increasingly fragile. As such it would need only a relatively small unexpected shock to bring down the house of cards. The shock proved to be the crisis in the US sub-prime mortgage market.

The housing boom...

The boom in US house prices had begun as early as 2000 – well before Alan Greenspan had begun cutting interest rates. Of course, house price booms are far from being anything new, and, at least at first, this boom seemed to exhibit all the familiar dynamics as previous ones had done. Periods in which house prices rise faster than the general levels of wages and prices, and in which market transactions become increasingly frantic as people seek to 'get on the housing ladder' before it becomes unaffordable, have always tended to alternate with periods in which house prices and the housing market are stagnant. Indeed, it can be said that the capitalist production of housing as a commodity necessarily gives rise to housing booms and busts. Why is this?

⁸ Bookmakers do not set the odds they offer by calculating the probability of each horse winning a race. In fact such a calculation would be impossible because there are simply too many factors involved. They determine the odds they offer by what they expect their punters think the probabilities will be.



Annual growth rate of US home price index

Normally capitalistically produced commodities will tend to sell at their prices of production, that is the cost of production plus the general rate of profit ruling in the economy as a whole. If excess demand arises the market price will rise. This will lead to higher than average profits in the industry producing the commodity. These higher profits will then in turn attract an inflow of capital into the industry concerned providing the means to expand the production and hence the supply of the commodity. Supply will then rise to meet the increased demand and the market price will fall back to price of production. Thus constantly rising prices can only be the result of systematically increasing costs of production or of demand continuing to increase faster than supply.

However, there are certain peculiarities of the production and sale of houses that alter the operation of this normal process of regulating both prices and the relation of supply and demand. First of all, on the side of supply, there is the fact that houses take a considerable time to build. The time taken from the decision to build, through the various planning procedures, the securing and preparing of the building site, to the actual completion of the construction of new housing is measured in months if not in years. Thus compared for example to most manufactured commodities, even small incremental increases in the supply of housing can take considerable amounts of time to come through. As a result the market prices can for considerable periods rise above the price of production as supply takes time to catch up; and equally, if supply overshoots demand, market prices may well fall for a considerable time below the price of production.

The second, and perhaps more important, peculiarity of the construction of housing is that land is an essential and substantial factor of production. For capital to be invested in the construction of new housing land had to be bought. By using the scarcity of land, landowners can use the increase in demand for land to raise land prices. The increase in market price for housing thereby leads in time to an increase in the price of land and hence the costs of production facing the house builder. This means that the supply of new housing for sale will depend as much on the rate of increase in house prices as their actual level, since house prices have to out run the consequent rise in land prices.

On the demand side there is a third peculiarity that arises from the substantial cost of housing. The price of a house is usually several times the annual income of any likely buyer. Few homebuyers are in a position to simply buy a house outright. Instead they have to take out a loan using the house itself as security in case they are at some point unable to meet the repayments, that is they have to take out a mortgage. This means the price a homebuyer can pay for a house is not determined by the amount of money they have in their pocket, but how much they can borrow. However, the amount they can borrow depends on what is deemed by the mortgage lender to be the market price of the house that is the security for the mortgage loan. As a consequence, in a situation where there is even a small shortage of housing at the current market price, there can arise a prolonged upward spiral in house prices. As the market price of houses is bid up, mortgage lenders are prepared to lend more money, which then allows homebuyers to bid up prices further, and so on.⁹

Yet there is a further twist in this upward dynamic of house prices that drives a housing boom. This upward spiral of house prices depends on both the willingness and ability of mortgage lenders to provide mortgage loans. Of course, mortgage lenders are willing to make loans because they are able to make money in doing so. Yet this prospect of making a profit has to be weighed against the possibility that those they lend to may default on the loan, and the subsequent losses this may incur for the mortgage lender. Mortgage lenders will therefore seek to ration the mortgage funds they lend to those least likely to default.

The obvious means of rationing mortgages is to set restrictive criteria of creditworthiness for potential borrowers. Those who have shown themselves to have bad credit records in the past, it can be reasoned, are likely to have a higher risk of defaulting in the future. Another important method of rationing loans is to lend only a certain proportion of the full market price of the house that is to be mortgaged. The difference between the amount loaned on the mortgage and the purchase price of the house is then expected to made-up out of the pocket of the homebuyer. In this case it may be reasoned that if the home buyer is able to manage his finances sufficiently to save up the amount needed to make this 'down payment' or 'deposit' on the house, then they are likely to be sufficiently financially competent to be able to keep up with the subsequent mortgage repayments.

The willingness of the mortgage lenders to lend only a certain proportion of the market price of a house not only serves to restrict mortgage lending to those least likely to default, it also serves to minimise the losses that might be

⁹ Indeed, it may be asked what prevents a situation in which there is a shortage of housing leading to an unsustainable explosion in house prices? Of course, if house prices rise fast enough then this will cause an increase in the supply of new housing before this is choked off by the subsequent rise in land prices. If this increase in supply is sufficient to overcome the shortage of housing then the upward spiral in house prices could be brought to a halt. If not then it may simply lead to a temporary slow down in the rate of increase in house prices.

incurred if a default does occur. After all, if the mortgage lender only lends say 70% or 80% of the full market price, in the unlikely eventuality that the homebuyer does default on the mortgage, and the house has to be repossessed and sold off, then, even with the considerable legal costs of repossession proceedings and the substantial discount on the market price that may have to be accepted for a quick sale, the mortgage lender can be confident of recovering the money still owed on the mortgage.

However, far more importantly, the amount mortgage lenders can lend also depends on the funds they have at their disposal. They may impose highly restrictive criteria for assessing creditworthiness and insist on large 'deposits', not merely to minimize the costs of defaults, but to limit the demand for mortgages to the available supply of mortgage finance available. This is important if we are to understand the cycle of boom and bust in the housing market.

In the wake of a recession, when money is still tight, and when rising unemployment has led to increasing mortgage defaults, mortgage lenders will be reluctant, if not unable, to expand the supply of mortgages. As a consequence, mortgage lending will be restrictive and both the number of mortgages and amount loaned on each one will be strictly rationed. Even when economic recovery leads to falling unemployment, rising wages and to more stable economic conditions, and consequently to an increase in the numbers of potential home buyers, mortgage restrictions, particularly the need to find a substantial deposit, will serve as a break on any incipient house price spiral.

However, to the extent that economic recovery brings about an expansion in the funds available to finance mortgage lending, competition will drive mortgage lenders to become less restrictive. In order to find outlets for the funds at their disposal they will have to compete to attract potential homebuyers. They may relax the criteria they use in assessing their creditworthiness. Alternatively, in what often amounts to the same thing, they may produce 'innovative' mortgage repayment schemes 'tailored' to the financial circumstances of the homebuyer. But most importantly they can increase the proportion of market price they will loan. Whereas mortgage lenders may have insisted on offering only 70% or 80% mortgages; 90%, 95% and even 100% mortgages start to become common. Once this competitive process takes hold the breaks come off the house price spiral and the housing boom takes off.

Of course, with rising house prices and with people stretching their finances in desperation to buy a home of their own, there is the danger that mortgage lenders, in their drive to expand their mortgage book, will at some rather indeterminate point begin to lend 'too much' and as a result face sharply rising default rates. However, because defaults usually occur long after a mortgage is granted no one can be certain when this point has been reached.

Nevertheless, mortgage lenders can still see themselves as acting prudently because even if there is a sharp rise in defaults, due to the aggressive expansion of mortgage lending, rising house prices will limit any losses incurred. After all, even if a mortgage lender offers a 100% mortgage, by the time the homeowner defaults and the house

is repossessed, house prices will have risen far enough that sale of the house, even if it has to be auctioned at discount, will be sufficient to pay any legal costs and allow most if not all of the money lent to be recovered.

Indeed, if house prices are rising, and are expected to continue to rise, then mortgage lenders will feel less restrained by the fear that expanding lending might lead to a significant rise in future defaults on their loans. With rising house prices minimizing the costs of any particular default, the increased profits that can be made by lending more is likely to far outweigh any increase in losses caused by the rise of the number of defaults.

However, the emergence of a mortgage industry dominated by long established and relatively large mortgage lenders has long served as a check to competitive pressures towards predatory lending. Of course, as is often observed, few mortgage lenders, particular well-known high street banks and building societies that are dependent on doing business with the general public, will want to risk being seen as loan sharks; ensnaring people in loans they can't repay and then ruthlessly evicting them from their homes. They will therefore be careful that their rate of repossessions does not rise too high, particularly in comparison with their main competitors.

Although reputation for responsible lending has played its part, perhaps a far more important restraint on the competitive pressure to relax lending restrictions has been the need to find the vast sums of loanable capital required to fund large scale mortgage lending. Mortgage lenders have been able to attract cheap loanable capital on a large scale because mortgage lending is seen as a very safe investment that produces predictable and reliable returns. Even if a mortgage lender can expect to recover most of its losses due to mortgage defaults, the process of foreclosing the loan, repossessing the house and then selling it takes time. During this time the repayments on the defaulted mortgage have stopped. It is only when the house is sold and the money raised is lent out again, so that the defaulted mortgage is replaced by a new performing one, that repayments recommence. High or volatile default rates can therefore lead to large variations in returns on the money invested on mortgage lending, as defaults disrupt repayment flows. They may also introduce a degree of uncertainty that may undermine the perception of the mortgage lender as being involved in an almost risk free form of investment.

Certainly, in previous housing booms competitive pressure have produced a progressive relaxation of lending restrictions and a reduction in deposits. They may have also seen at times the emergence of cowboy operators engaged in predatory lending for short-term profit. However, by and large, most mortgage lenders have long enough time horizons and resources to have been able to resist the competitive pressures, and indeed temptations, to go very far beyond the limits of responsible lending. Certainly since the second world war mortgage default rates have remained very low, and have been usually the result of unforeseen changes in circumstances of the borrower; such as illness, unemployment or divorce, rather than due to any predatory lending. This is true even after the housing booms have

burst, and the full extent of excess lending is likely to have been revealed.

However, previous house price booms had usually been cut short by economic crises or recessions. What came to distinguish the 2000-2007 housing boom from previous housing booms was its duration. Although the cut in interest rates to exceptionally low levels in 2002 may not have been the original cause of the housing boom, it certainly can be argued that it helped to prolong it. Firstly interest rate cuts can be seen to have mitigated the post dot-com recession that may have otherwise brought the housing boom to an abrupt halt. Secondly, to the extent that they obliged banks to compensate low profit margins by expanding their lending, including mortgages, exceptionally low interest rates gave a timely boost to the availability of mortgage finance necessary to sustain the housing boom.

As it continued, there were growing concerns on how much longer the housing boom could go on, and what might happen when it ended. Had boom and bust in the housing market been replaced by a semi-permanent boom? Would it soon end in a big bang? Or could it be gently deflated?

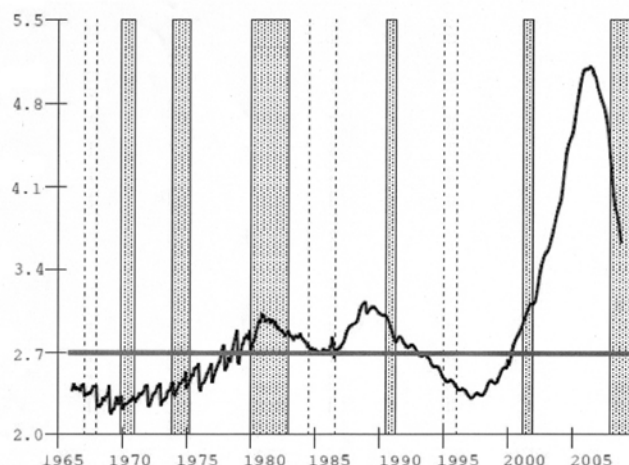
Of course, even the most enthusiastic estate agent could not claim that the house price boom could continue forever – even if there was a limitless supply of mortgage funding. It had to be admitted that, although the amount that can be paid for a house is immediately limited by the amount that can be borrowed, ultimately what can be borrowed depends how much loan repayments a homebuyer can afford to pay. As house prices rose, and mortgage debts became ever larger, it could be argued that eventually some ill-defined point would be reached where homebuyers would not be able to afford to meet the required loan repayments. At that point the house price boom would necessarily have to come to an end.

The question then was whether the American housing boom had reached, or even overshot, this point. Certainly, with house prices outpacing wages for the best part of a decade, by 2007 the ratio of the average house price to the average annual wage had reached unprecedented heights. But this did not mean that the housing boom had reached the limits of affordability. If nothing else, to the extent that they had been cut short by recession and rising unemployment, then previous housing booms were not necessarily a good guide to the limits of how much mortgage debt was ultimately affordable.

But even if it was the case that previous booms had come close to reaching the limits of affordability, and that would have soon run out of steam anyway, then this would not mean that the current limits of mortgage debt were the same as what they had been then. Firstly, it could be argued, that with the steady growth in the numbers of women working and having their own careers in recent decades then, in the case of working couples, affordability had now to be judged on joint incomes rather than that of the average male wage. Secondly, most of the recent and comparable housing booms had taken place during periods of high inflation when, consequently, interest rates had been very much higher than

they were even before the interest rate cuts that began in 2002. With less interest to pay, homebuyers could afford to take out larger mortgages and pay a higher price for their home. Indeed, the average ratio of mortgage repayments of homeowners to their total household income in the US, even as late as 2006, did not seem exceptionally high by either historical or international standards.¹⁰

From its early stages there had been repeated predictions that the housing boom was about to come to a sticky end. The failure of these repeated predictions had only served to convince many, particularly those in the mortgage industry, that, although the boom might not be able to go on forever, it still had a long way to go before house prices became unaffordable. However, during 2006 it became increasingly clear that the boom was slowing down. The rate of increase in house price slowed sharply. By the end of the year the average price of a house had already peaked and there were signs that US house prices in general were beginning to fall.



US house prices divided by the median family

This slow down was largely attributed to the impact of Greenspan's decision to raise interest rates a year or so before. Certainly, the substantial increase in interest rates had meant a considerable increase in mortgage repayments that prospective homebuyers faced on any particular size of mortgage. With house prices less affordable many prospective homebuyers might put off buying a house, thereby reducing demand. Nevertheless, many commentators had still thought that this impact of higher interest rates might prove to be temporary. Once prospective homebuyers adjusted their expectations as to what mortgage repayments were needed to buy a house then the chronic shortage of housing would force them to start bidding up the price of housing again. The upward spiral of house prices would then be restored. Others suggested that once expectation of ever-rising house prices was shattered the dynamics of the house

¹⁰ According to the Federal Reserve Board statistics the average home owner had spent almost 9% of their disposable income on mortgage repayments in 2000. In 2006 this had risen to little more than 11%.

price boom would be thrown into reverse. Banks would restrict lending and house prices would tumble, perhaps by 20%, 30% or even more. The third position, which was based on the experience of previous housing booms, was that house prices might fall back to what they were a year or so before and then stagnate. With sellers reluctant to sell their houses for less than they had paid for them they would withdraw from the market. The housing market would then largely seize up until wage inflation allowed wages to catch up with house prices.

Yet even if house prices tumbled, or the housing market stagnated for an extended period, this would not in itself produce dire consequences. So long as house owners had the means to repay their mortgages it did not matter how far actual house prices fell. The fall in the demand for housing would certainly have an impact on the housing industry and other industries dependent on the housing market. There may be problems with labour mobility as workers found the sale of their home was no longer sufficient to pay off the mortgage and they had become trapped by 'negative equity' and could not move house. Furthermore, many mortgage lenders would be given a hard economic lesson in the need to maintain lending standards as the costs of defaults rose sharply. But none of this meant the end of the world or some serious economic or financial crisis. After all, as past experience had repeatedly shown, the cycle of boom and bust in the housing market was an effect of economic and financial crises and the business cycle rather than a cause of them.

Critics of the prevalent sanguine view of the US economy had long pointed out the growth of consumer debt, particularly mortgage debt, as the ticking time bomb that would sooner or later blow apart American-led economic prosperity. It could be suggested that the substantial rise in interest rates could have tipped millions of American homebuyers down the slippery slope of mortgage arrears, eventually leading to debt default. It could be argued that even though there was ample evidence to show that the average mortgage borrower was not in fact that heavily indebted, this was in fact a little misleading. After all this was an average that obscured the fact that there could be a large proportion of homebuyers whose financial position was very far from being the average.

Even the individual homebuyer could expect to have a distinct cycle of mortgage indebtedness. As a first time buyer, most homebuyers are obliged to stretch their finances to get on the property ladder. At that point in their life mortgage payments are likely to be a large proportion of their income. However, even if their wages only rise in line with everyone else's, the burden of mortgage repayments, which at any given rate of interest normally remain fixed in money terms, will tend to fall. Wage inflation will continue to erode the homebuyers' mortgage debt until they decide to move to a larger house and therefore take out a larger mortgage, or take out a second mortgage on the existing house to finance increased expenditure. Mortgage repayments will then rise again as a proportion of income before once again being eroded by inflation. Eventually, when the family leaves home, the house buyer may trade

down to a smaller house. Then whatever mortgage repayments remain will be small, if not negligible.

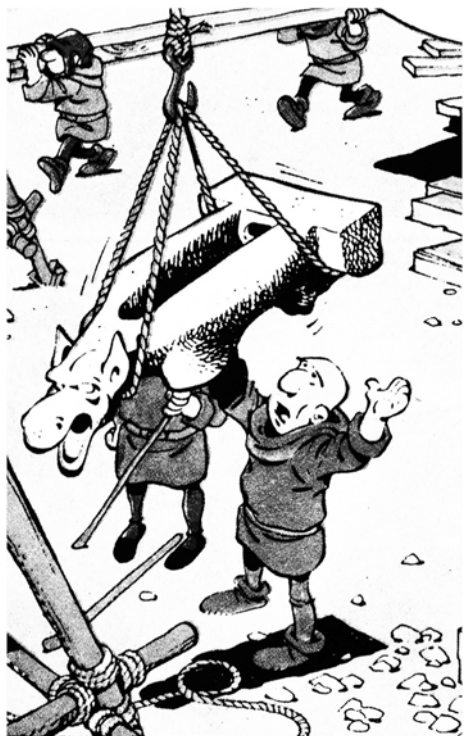
As a consequence, at any time there may be a considerable proportion of homebuyers, particularly those who have just bought their first home, that are close to the limits of their ability to keep up their mortgage repayments. An unexpected rise in interest rates could therefore place a substantial number of homeowners in serious difficulties. Furthermore, the housing boom had occurred during a period of low inflation. Therefore mortgage debt erosion would have been slower which, together with the large increase in people taking out second mortgages, would seem to suggest that there could be far more homeowners at risk from the jacking up of interest rates than would have been the case in previous housing booms that had occurred during periods of high inflation.

Against this view it could be argued that interest rates had not been suddenly raised from 1% to over 5% all at once. Alan Greenspan had made evidently clear that his intention was to raise interest rates and had done so in gradual steps giving lenders and borrowers considerable notice of which way things were going. What is more, because most American mortgages are based on 'fixed rates' in which interest rates are only adjusted every two or three years, most people would have had plenty of time to adjust to the rise in rates. Undoubtedly there would be considerable numbers of home buyers who had taken out mortgages expecting low interest rates to continue and these could face serious financial difficulties. But most households would go to considerable lengths to prevent the roof over their heads being taken away. By working extra overtime, taking up an extra job, or else cutting back on other expenditures, most of the households in financial difficulties due to the unexpected rise in interest rates could be counted on to keep up their mortgage payments.

Certainly it was true that by the beginning of 2007, even though levels of employment in the American economy still remained largely stable, the number of mortgage defaults had already risen to levels that were high by historical standards. Nevertheless, those who took the sanguine view could take comfort from looking across the Atlantic. The UK, Ireland and Spain had all experienced very similar booms to that which had occurred in the USA. Indeed, in some cases, the housing boom in the UK had started much earlier and had seen house prices rise much further than in the US. Yet, although variable interest rate mortgages were much more common in the UK, which meant that the impact of the rise in interest rates on homebuyers had been far more sudden than it had in the US, there had been no tsunami of mortgage defaults. What is more, as Alan Greenspan pointed out at the time, in the UK the rate of house price increases had slowed down for a while but there were already strong indications that the housing market was beginning to take off once more.

Alan Greenspan was perhaps correct in counting on the rationality and responsibility of mortgage lenders and homebuyers in the traditional mortgage market to limit the excess lending and borrowing of the long housing boom to manageable levels. But, with hindsight, we now know that

the likes of Greenspan had seriously underestimated the significance of once small corner of the US housing market that had come to circumvent many of the traditional checks and balances on excess lending and borrowing. This was the sub-prime market.



... and the sub-prime bust

In their efforts to shift the blame from the greed of bankers and the failure of free market capitalism, some right-wing Republicans in the US have argued that the ultimate cause of the current financial crisis was the well-meaning, but ill-judged attempts on the part of liberal Democrats to distort market mechanisms in order to expand home ownership to the feckless poor.

It is true, as they point out, that the origins of what was to become known as the sub-prime mortgage market can be traced back to the Community Reinvestment Act (1979) and Depository Institutions Deregulation Act (1980) passed under the Carter administration in the late 1970s. In order to correct what was seen as the implicitly racist lending practices of mortgage lenders, to renovate poor and depressed neighbourhoods and to facilitate the emergence of a black middle class, the Carter administration had sought to extend homeownership to poor and disadvantaged minorities. Under these acts mortgage lenders were to be permitted, and indeed encouraged, to offer a new type of mortgage that would be exempt from the usual regulations governing standard mortgages. This distinct new type of mortgage would allow those who would have been rejected from taking out a standard mortgage loan due to a poor credit or employment history to borrow in order to buy a house. In return for accepting the higher risk of such sub-prime

mortgages, mortgage lenders, together with certain government guarantees and inducements, were to be allowed to charge a higher rate of interest on these sub-prime loans.¹¹

The Reagan administration, with its ideology of market deregulation and a property-owning popular capitalism, was far from being adverse to efforts to expand homeownership. As right-wing Republicans usually gloss over, far from reversing Carter's 'affirmative action' with regard to mortgage lending, Reagan's administration sought to consolidate and extend it with measures included in the Alternative Mortgage Transaction Act (1982) and the Tax Reform Act of (1986). With these acts the parameters of what was to become the sub-prime mortgage market were firmly established. However, the expansion of the sub-prime mortgage market remained limited. It was not until the Clinton administration that a further concerted attempt was made to expand homeownership to the poor and disadvantaged minorities.

In 1989 hundreds of savings and loans institutions, the American equivalent to the old British building societies, went bust. These usually mutually owned institutions had provided a proportion of mortgage lending to working class homebuyers. This savings and loans crisis, combined with the perennial problem of what to do about the decay of America's inner cities, had pushed the issue of housing up the political agenda in the 1990s. In coming into office Clinton had sought to find a 'third way' solution to the problem that would allow him to outflank the Republicans, and, at a time when the government deficit was dangerously high, would not cost the public purse too much money. As such public provision of social housing or direct housing subsidies were out of the question. Instead, the market was to be harnessed to achieve social ends. To do this Clinton sought to use the profit-making mortgage lenders to provide the finance to sustain and expand homeownership.

Firstly, the Clinton administration used its regulatory powers to cajole mortgage lenders into providing mortgages to disadvantaged minorities and deprived neighbourhoods. Under the Community Reinvestment Act (CRA), mortgage lenders had been given a rating by the regulatory authorities that indicated how well they were doing in diversifying homeownership across different groups in society. This CRA rating was now to be taken into account when regulators decided whether to grant permission for mortgage lenders to expand their financial activities, set up new branches and merge with other institutions. This meant that it was in the interests of profit-making mortgage lenders to pursue the social objective of expanding homeownership to disadvantaged groups.

Secondly, the Clinton administration permitted the two 'government sponsored' corporations, Freddie Mac and Fanny Mae, to buy up sub-prime mortgages from mortgage

¹¹The encouragement of home ownership can be seen as an important part of the state's reaction to the struggles arising out of the civil rights movements of the 1960s. It provided a material interest for an incipient black middle class in American capitalism and provided a basis to maintain bourgeois individualist ideology.

lenders. As we shall see in more detail later, Freddie Mac and Fanny Mae had long played a major role in reducing the risks faced by mortgage lenders by buying up their mortgages and then selling them on to financial markets. However, in providing what amounted to an insurance against default losses, Freddie Mac and Fanny Mae had been restricted to buying up mortgages that had been granted following strict procedures to ensure the homebuyer could be expected to be willing and able to keep up the necessary repayments. By allowing Freddie Mac and Fanny Mae to buy up more risky mortgages, the Clinton administration could hope to entice mainstream mortgage lenders to become more involved in sub-prime lending.

The promotion of sub-prime mortgages contributed to a rapid expansion and diversification of homeownership in the 1990s.¹² As a result, from being a rather specialist financial activity, sub-prime mortgages now became a significant segment of the mainstream mortgage market. By the year 2000 sub-prime mortgages accounted for 5% of all outstanding mortgages in the USA. Yet the reckless boom in sub-prime lending that was to lead to the sub-prime crisis began not under Clinton but towards the end of Bush junior's first term of office.

As we have seen, exceptionally low interest rates had put considerable pressure on banks and other financial firms to compensate for low profit margins on each of their loans by expanding the amount lent, by making money from money dealing in the form of brokerage fees and commissions involved in various financial transactions, and by searching for investments that gave a higher return. The vast American mortgage market offered substantial potential business opportunities to make money in these ways.

No longer content to simply buy up the mortgage debt offered by Freddie Mac or Fanny Mae, the big investment banks now began to 'cut out the middleman' and buy up mortgages directly from mortgage lenders. Their lobbyists launched a campaign against the two government-sponsored mortgage institutions. It was claimed that because they were implicitly backed by the government they could borrow money cheaper and had an unfair advantage. Although their attempts to gain congressional support for imposing stricter limits on the activities of Freddie Mac and Fanny Mae failed, they succeeded in forestalling any political and regulatory scrutiny on their own activities by presenting the investment banks as the injured party. Together Freddie Mac and Fanny Mae had purchased 90% of all mortgages sold on the 'secondary mortgage market'; by 2007 it had fallen to less than 50%.

The sub-prime segment of the American mortgage market was particularly attractive to the investment banks because it offered significantly higher returns for what seemed very little extra risk. As a consequence, there was a

high demand on the part of investment banks and other financial firms for sub-prime mortgages. With sub-prime mortgages easy and profitable to sell on to other investment banks, mortgage lenders responded by increasing the supply by issuing more. The growth of sub-prime mortgage lending rose far faster than standard mortgages. By 2007 14% of all outstanding mortgages were sub-prime.

As could be expected, competitive pressures to expand mortgage loans led to a relaxation of lending restrictions. This was all the more so for sub-prime mortgages, which were expected to be a bit more risky anyway. With house prices rising, and expected to continue to rise, and with it easy and quick to sell on mortgages, mortgage lenders had little incentive to maintain rigorous lending practices. As competition increased to find ever more borrowers to satisfy the voracious demands of the investment banks for sub-prime mortgages, the more unscrupulous mortgage lenders became ever more reckless. To entice people to take out a sub-prime mortgage they offered especially low interest or repayment terms for the first two or three years. These low payments being rolled-up to be paid in later years when it was hoped the borrower's financial position might have improved. At the extreme, some mortgage lenders even made what were later to become known as NINJA loans; that is they granted mortgage loans to people who had no income, no job or no assets.

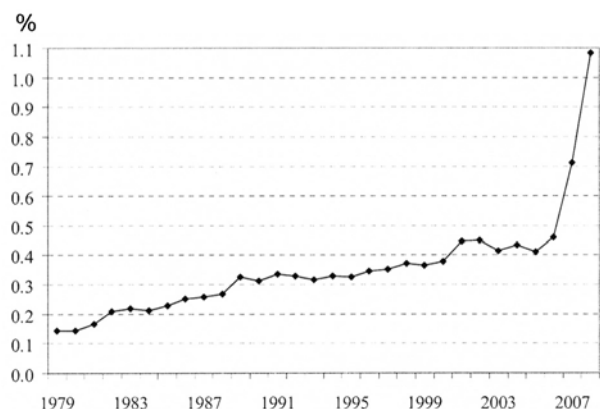
With house prices rising, mortgage lenders were confident that after two or three years the price of the house that was mortgaged on these terms would have risen sufficiently to allow the borrower to take out a bigger loan to pay off any arrears. Failing that the house could always be repossessed and the loan recovered.

But all this depended on ever rising house prices. As we have seen, by 2006 the rise in the average price of houses in the USA had slowed down and had begun to slowly fall. This was, however, an average price. Sub-prime mortgages were highly concentrated in deprived and rundown neighbourhoods. As the low repayment periods began to run out on loans made in 2004, sub-prime mortgage defaults had begun to rise sharply. As a consequence, mortgage lenders began to repossess increasing numbers of houses and auction them off. But this flood of housing coming on to the market drove down the price of housing in these neighbourhoods. Indeed, house prices in many of these neighbourhoods began to collapse. As a result, sub-prime mortgage lenders now began to find that they were unable to sell the houses they were repossessing and were left holding increasingly derelict buildings. In the coming months neighbourhoods across the USA were turned into little more than ghost towns as homelessness soared.

Increasingly unable to recover their loans, and with the number of defaults rising rapidly, mortgage default losses soared. By early 2007 3% of the \$2.3 trillion sub-prime and other non-conventional mortgages had defaulted. But to the extent that these mortgages had been sold on, these soaring default losses did not simply hit the mortgage lenders; they struck the investment banks and the various financial firms that had ended up owning these mortgages.

¹² According to Harvard University's Joint Center for Housing Studies the number of mortgages granted to African Americans grew by 71% between 1993 and 1998. For Hispanics the increase in this period was more than 87%. While for non-Hispanic whites the increase was 31%. See report in The New York Times on 30/9/1999.

As we have seen, the financial system had become increasingly fragile. It was these default losses that proved sufficient to bring the entire house down.



Rate of foreclosure started for all mortgages

Who saw it coming?

Of course, with hindsight we now know that these sub-prime default losses were leading to the credit crunch of the summer of 2007 and the subsequent unfolding of the financial crisis a year later. But it was certainly not evident that this was going to happen at the time.

Alan Greenspan was certainly aware of the developing sub-prime mortgage crisis in early 2007. However, he could rightly point out that mortgage default losses, which were then running in tens of billions of dollars, was still relatively small beer. After all, the annual GDP of the US was \$15 trillion.

Of course, it was possible that the crisis in the sub-prime market might become worse. It might also drive down house prices more generally and increase the costs of defaults on standard mortgages. Greenspan was well aware that, although on average house prices were only falling slowly, in some areas house prices were collapsing. But he could see the glass half-full: if in some areas prices were collapsing this meant that in others houses prices must be still rising. This divergence in the direction of house prices in different areas confirmed for him the fact that the US housing market was compartmentalised. Hence rather than there being a single big housing bubble, there was a housing froth made up of small bubbles. As a consequence, the rapid fall in prices in those areas where subprime lending had been prevalent was unlikely to cause similar falls in the majority of areas where standard mortgage lending was the norm.

Greenspan was confident that the impact of the losses on sub-prime mortgages could be easily absorbed by the financial system. After all, the whole point of the securitisation of debt was to spread the risk of loss across the entire global financial system. So far only, in early 2007, 3% of \$2.3 trillion worth of outstanding subprime and other non conventional mortgages had defaulted. Even if none of these losses were recovered through the sale of repossessed homes, losses would still be less than \$50 billion. An amount small

compared with the trillions of dollars profit made by the global financial system each year.¹³

Yet it was not only those blinkered by market fundamentalism, like Greenspan, that failed see the credit crunch coming.¹⁴ It was also true of most if not all of those critical of the prevailing economic orthodoxy.

There had been many on both the right and left that had long warned that housing bubble would end in tears.¹⁵ However, few saw it ending in a banking crisis. The usual prediction had been that falling house prices would mean that it would be difficult for home owners to take out second mortgages to finance consumption levels higher than their income. This would result in a slow down in the growth of debt fuelled consumption that was seen as essential to America's continued economic growth. The slow-down in the economy would result in rising unemployment which would result in further falls in house prices leading to a down spiral in the real economy.

It is true that the well-known and perceptive left-Keynesian critic of the economic orthodoxy, Paul Krugman, had expressed concerns that the growing mortgage defaults would result in a financial crisis. But he predicted that this financial crisis would break out in the form of a stock market crash. Instead it broke out in the form of a banking crisis. Indeed, as we shall see, the stock market continued to rise for several months after the credit crunch of August 2007.¹⁶

We must therefore consider in a little more detail how it was that the sub-prime crisis triggered the credit crunch and the subsequent financial and economic crisis.

The integration of mortgage finance into the global financial system

As we have seen, housing booms depend on the continued availability of mortgage finance. The prolonged housing boom over the last decade had been made possible by the ability of mortgage lenders to tap the vast oceans of loanable capital in the global financial markets. Yet, at same time, it was this integration of mortgage finance in to the global financial system that meant that the crisis in the US sub-prime mortgage market was able to have such devastating effects on the financial system as a whole. If we are to understand how the crisis in the sub-prime mortgage market

¹³ A year and half later the OECD estimated losses on subprime mortgages to have risen to \$300-\$400 billion.

¹⁴ Of course, Alan Greenspan is imbued with the ideology of market fundamentalism from an early age. Nevertheless for two decades he had the important and practical job of running American monetary policy as the Chairman of the Federal Reserve Board. This required him to temper his neo-liberal ideology with dose of pragmatism.

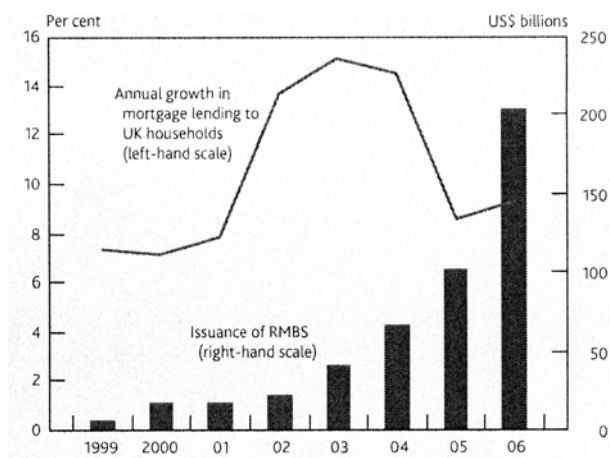
¹⁵ For example the Marxist historian Robert Brenner had argued that the housing bubble had only temporarily postponed the big economic crash in 2002. See *The boom and the bubble: the US in the world economy*, Robert Brenner, Verso, 2002.

¹⁶ Prof. Nouriel Roubini is often credited with predicting that the credit crunch would result in a potentially devastating financial crash. However, although from 2006 he had repeatedly warned that there was going to be a financial crisis he was unable to decide how it would happen.

was able to trigger the credit crunch and subsequently the near melt down of the global financial system we must therefore first of all consider in more detail how mortgage finance has become increasingly incorporated into the global financial system.

Under the stringent regulatory regime that had been put in place as a result of the Wall Street crash in 1929 and the second world war, finance across the advanced capitalist world had been strictly compartmentalised. In the UK, for example, residential mortgage lending had been mainly the preserve of non-profit making building societies. Building societies collected together the numerous small savings of their members, who were largely drawn from the lower middle class and the better off sections of the working class, and then lent this money to those of its members who needed mortgages to buy a home.

By the 1950s and 1960s most building societies had outgrown their local origins and established a nation wide network of branches. Nevertheless, although their extensive branch network allowed them to obtain a large number of deposits, the amount of building societies had to lend was always limited relative to the demand for mortgages. Building societies were therefore obliged to ration mortgages, by insisting on high deposits and by imposing strict criteria in assessing potential borrowers' credit worthiness. Furthermore, since building societies were owned by their borrowers and depositors, rather than by shareholders, they were under no pressure to maximise profits. Without the pressure to make profits their mortgage lending practices tended to err on the side of caution and prudence.



Major UK banks' issuance of RMBS and growth in mortgage lending

As a consequence, housing booms and busts had not only been rather muted, but also subordinated to the general economic cycle. During upturns in the economy, when wages were rising and unemployment falling, savings would rise and the pool of available mortgage finance would expand. This would then facilitate a limited housing boom. Contrawise, when the economy slowed down then savings would fall, and the housing boom would be brought to a halt.

But there was never sufficient mortgage finance to fuel a prolonged and rampant housing price bubble.

Legislation was passed in 1970 which opened the mortgage market to commercial banks. Commercial banks not only took deposits from individuals on modest incomes but also from wealthy individuals and businesses. They therefore had a much larger deposit base and hence a much more substantial pool of money-capital to finance mortgages. This, combined with the de-mutualisation of nearly all building societies in the 1980s, resulted in increasingly pronounced housing booms and busts in the final quarter of the twentieth century. Nevertheless the mortgage market still remained within national boundaries, and these booms and busts were still largely determined by the general cycle of the British economy.

The new century saw the beginning of a further development in the financing of mortgages. British banks began to rapidly move away from the traditional practice of granting mortgages and then holding them until they reached maturity. Instead they began bundling mortgages together and then selling them on as tradable securities – what became known as residential mortgage backed securities (RMBS) – to other financial institutions across the globe.¹⁷ In 1999 the amount of new mortgages financed by the issue of RMBS, rather than out of bank deposits, had been negligible; by 2007 more than half of all new mortgages were being financed in this way. As a result, British mortgage finance was no longer limited by the sum of deposits commercial banks could attract through their network of local branches. Commercial banks could now tap the vast loanable funds available in the global financial system.¹⁸

Due to the peculiarities of the American financial system the practise of 'selling on' mortgages has been long established. Because of historical and geographical factors commercial banking in general, and mortgage lending in particular, is relatively decentralised when compared with the UK and Europe. Commercial banks, and other mortgage lenders such as Savings and Loans institutions, are only able to operate and collect deposits within the boundaries of the individual state in which they are registered and regulated.

As a result, commercial banking and mortgage lending in the USA is composed of a large number of small institutions. Because of their small size these banks and other financial institutions are limited in their ability to spread the risks involved in their operations. This has meant that they have been liable to err on the side of caution, particularly when making such long term loans as mortgages. After all,

¹⁷ From a bank's point of view, a mortgage represents an asset; a stream of monthly income for X number of years. Like any asset, it can be sold. The buyer takes on the risk the borrower might default, but also collects the repayments.

¹⁸ Through most of the twentieth century the British commercial banking system had been very stable. The only change at the top had been the merger the National Provincial with the Westminster Bank to form NatWest in the 1960s which reduced the 'big five' high street banks to a 'big four'. The decade or so has seen a large scale restructuring of British commercial banking following the transformation of building societies into banks and a series of mergers and takeovers.

with large parts of America prone to natural disasters, such as hurricanes, earthquakes or forest fires, there is often a significant risk that homes on which a mortgage is secured might be destroyed, along with the mortgage holder being rendered destitute, before the mortgage is paid back. Besides such risks of natural disasters there is also the risk of localised economic downturns that may increase unemployment and thereby mortgage defaults. Unable to spread risk beyond the confines of the individual state, any such natural disaster or localised economic downturns can easily lead to mortgage lenders going bankrupt.

The great depression of the 1930s had made the problem of risk adverse mortgage lenders particularly acute. With mortgage lenders reluctant to lend, potential home buyers could not buy houses. The consequent lack of demand for houses meant that the house building industry remained depressed and construction workers could not find work. In order to break out of this problem an important plank of the New Deal had been to provide Federal government funds to insure mortgage lenders against default losses. These funds were administered by Fannie Mae.

In the 1969 the Fannie Mae was privatised; being transformed from a federal agency to a 'government sponsored company' to be run on commercial lines. In the following year Freddie Mac was set up on similar lines in order to provide a degree of competition. As commercial companies Freddie Mac and Fannie Mae were able to fulfil their task of guaranteeing mortgages by buying up mortgage debt from the numerous mortgage lenders across the USA and then selling this debt on to banks and other financial institutions. In doing so they created a 'secondary mortgage' market that provided the basic preconditions for the rapid expansion of RMBS that has occurred over the last decade.

As we have seen, because Freddie Mac and Fannie Mae were implicitly backed by the Federal government they had a distinct advantage in both borrowing money and in selling on mortgages. Being highly unlikely to default or go bankrupt they could borrow at cheaper rates and sell mortgages on for a higher price than any other private competitor. This advantage had allowed them to maintain their duopoly of the American secondary mortgage market up until the beginning of this decade. However, once the investment banks decided to move in a big way they were soon able to overturn these advantages by utilising their superior connections in the global financial system, their expertise in producing 'sophisticated products' and their greater freedom from regulatory control.

In order to avoid the prying eyes of the regulators the investment banks set up what are known as Structured Investment Vehicles (SIVs). These SIVs were ostensibly independent companies but because it was well known that they had the implicit backing of the parent investment bank they could borrow money cheaply. These SIVs then set up what was in effect a kind of production line for producing RMBS. The starting capital provided by the parent investment bank was 'leveraged up' by borrowing on a short term basis from other banks and financial institutions and then used to buy mortgages from mortgage lenders across the

USA.¹⁹ Instead of bundling together similar types of mortgages as had been the standard practice of Freddie Mac and Fannie Mae, they mixed different types of mortgages together. This allowed them to tailor the RMBS and the cash flows that they were expected to produce to demands of their customers. For those customers who might want a higher return on their investment at the cost of a slightly higher risk, which increasingly became the case, then the SIVs would add a slice of sub-prime mortgages to the mix.

These bundles of mortgages were then priced using highly complex statistical models that calculated the probabilities of the expected returns on they would produce over time taking in to account the possibility of defaults. This pricing was then verified by hiring 'independent' credit agencies. The resulting RMBS were then sold 'over the counter' to banks and other financial institutions across the world. The money obtained could then be used to pay back the loans and buy up more mortgages.

This business model, however, was only viable because there was a growing demand for RMBS. One of the main sources of this demand was the commercial banks, particularly those in Europe. We shall now turn to consider why commercial banks wanted to buy up securitised mortgage debt in such large amounts.

Mortgage backed securities and the banking system

As we have previously mentioned, the basic operation of commercial banking is to take deposits from businesses and individuals and then lend this money out at interest to other businesses and individuals. But of course, people will only deposit money if they are confident that the bank will be able to fulfil its pledge to pay out the money as and when it is needed. Banks are therefore obliged to keep a proportion of this money in the form of cash to meet the day to day demands for cash withdrawals.

Now for most of the time banks can count on fact that not all of their depositors will demand their money back at one and the same time. They can therefore use most of the money deposited with them to grant loans and overdrafts. Nevertheless, there is always the danger that a substantial number of their depositors might lose confidence in the banks ability to continue to meet demands to withdraw money. If sufficient numbers rush to withdraw their money the bank will not have the money to pay out. Indeed, any rumour, however irrational it might be, that the bank might

¹⁹ 'Leveraging up capital' is a common way for multiplying profits on financial deals. But how does it work? Say for example an SIV has a starting capital of \$10m. It might borrow \$90m and buy up \$100m worth of mortgages. Now say it agrees to pay 1% on its loan. On repaying its loan it will pay \$90m plus \$0.9m in interest, that is \$90.9m. Now if it sells the resulting RMBS on for \$101m, after paying off its loan it will be left with \$11.1m. It will have made \$1.1m profit on \$10m capital, giving a rate of return of 11%. If, however, the RMBS is sold for say \$102m then profit will be \$2.1m giving a rate of return of 21%. So less than a 1% increase the price of the RMBS nearly doubles the rate of return. Leverage multiplies profits, but it also multiplies losses. If the RMBS can only be sold for \$99 then the losses will \$1m that is 10% of the capital originally advanced.

not be able to honour its commitments to depositors can soon become a self-fulfilling prophecy once it becomes widely believed. We then have a 'run on the bank' – as we saw with Northern Rock in September 2007.

In order to ward off any hint that they might not be able to meet their commitments to depositors, banks will therefore not only be obliged to keep enough money to fill the tills and holes in the wall to meet the ordinary day to day demands for cash, but also as a reserve to cushion against any unexpectedly high demand from depositors to withdraw their money.

In modern capitalist economies most economic transactions are not carried out using cash. Most involve money transfers between bank accounts, either directly or through cheques. If the transaction requires a payment between businesses or individuals that are account holders of one bank the money transfer will involve a simple accounting exercise by that bank. One account will be credited by the specified amount of money and the other debited by the same amount. If the transaction requires a payment between businesses or individuals that are account holders of different banks then the money transfer will involve the process of inter-bank clearing.

At the end of each working day, the major banks will add up the amount of money their account holders wanted transferred to account holders with each of the other banks and the amount that account holders of the other banks want to transfer to them. The balance is then settled between them. However, the settlement is not usually made in cash. All the main banks will have an account with the central bank, which acts the bankers' bank. Those banks that have money due will have their accounts credited, while those that owe money after the clearing process will have their accounts debited.

Thus in addition to keeping ready money reserves in form of cash (i.e. notes and coins), banks also need to keep money reserves in the form of money on account with the central bank. The money on account held at the central bank must be sufficient to cover any fluctuation in the net transfers of money that may arise with other banks.

When banks grant loans or overdrafts they do not do this by debiting the money in accounts of depositors. They in effect create their own 'bank' or 'credit' money by crediting the account of the borrower. This bank money is then in effect destroyed when the loan or overdraft is repaid. Banks can do this so long as they can convert this bank money into cash or central bank money on demand. Indeed, banks can create more money than they have received in deposits and from loan repayments because increased loans will lead to increased deposits elsewhere in the banking system.

To the extent that the loans or overdrafts are spent and paid to other account holders of the same bank, the banks money simply returns to itself as an increase in deposits, and it does not need to convert it into cash or central bank money. Of course, the bank can not insist that the borrower exclusively deals with the bank's own account holders. When the loan or overdraft is spent money may have to be transferred to other banks. The bank concerned will therefore face an increased demand for payment at the end of

the clearing process. Hence the extent to which it can increase loans beyond its current deposits will be strictly limited by the amount of money it holds at the central bank over and above what it needs as a reserve to cover day to day fluctuations in money transfers.

However, if other banks are also creating their own bank money by expanding loans and overdrafts then some of their loans will end up as money transfers to the bank in question. This may offset all or part of the transfers of money caused by the banks extra loans or overdrafts. There will little or no balance to settle after clearing and no need draw down the amount held on account at the central bank.

Indeed, each bank can in effect create money through granting loans and overdrafts so long as it more or less keeps step with all the other banks in the system. If it expands too fast then it will face a drain on the money it holds at the central bank and *vice versa*. However, we shall see when we examine the unfolding of the credit crunch the reverse is also true. If other banks are destroying money by reducing the amount it lends then any individual bank is obliged to follow suit or face a drain on the money it hold at the central bank.

This process of the expansion of bank money plays a vital role in course of capital accumulation since it creates the money necessary for the expansion of the real economy. It provides the extra money required to realise the increase in commodities and hence value that must be produced if capital is to accumulate.²⁰

Yet this dynamic process of bank money expansion also requires more money in the form of money on account at the central bank to be held by each bank since it increases the fluctuations in the flows of money between banks. At any particular time some banks may be expanding their lending faster than other banks and will be experiencing a drain on the money they hold on account at the central bank. Later this will be corrected when these loans are repaid and the money held on account will increase.

Banks will also need to hold a money reserve to cover losses on loans. In lending out money there is always a risk that money will not be paid back. The bank may therefore find itself short of money to meet its obligations.

For these reasons banks need to hold money reserves, either as cash or as money on account with the central bank. However, the problem of holding such money reserves is they it earns no interest. It is for the bank 'idle money'. One way of overcoming this is for banks to lend money to each other. Thus, for example, if at the end of the clearing process a bank is short of money it may borrow money from other banks 'overnight' rather than draw down the money it holds at the central bank. Through such inter-

²⁰ Contrary to the 'currency cranks' of the Social Credit movement, from CH Douglas to his modern-day acolytes (George Monbiot amongst them, via Michael Rowbotham), this process of money creation in the banking system is not the *source* of the excess of total prices over total wages. Seeking to explain surplus value in this way, via a truncated critique of capitalism focussing solely on the financial system is mired in anti-semitic overtones. CH Douglas himself referenced the infamous 'Protocols of the Elders of Zion.'

bank lending banks can reduce the amount of central bank money they need to cover the day to day fluctuations that arise out of the clearing process. Likewise, longer term fluctuations can be covered by longer term loans between banks.

However, the main way of overcoming the problem of holding zero interest money reserves is to hold reserve assets. Instead of holding the entire reserves in the form of money, banks will hold a part of their reserves in the form of interest bearing assets that can be easily sold and converted into money. As such, the essential qualities of reserve assets are that they are safe and 'liquid' (i.e. easily converted into cash). The most suitable and traditional form of reserve asset is short term government securities such as treasury bills. These securities are safe in that the government is highly unlikely to default on them. They are also highly liquid since they are well established exchanges on which they can be sold more or less at a moments notice.²¹

The return on short term government securities is usually low precisely because they are so safe and liquid. However, under the Basel agreement of 1988, which established international guide lines for of banking regulation, banks were allowed to hold a proportion of their reserves in other forms of reserve assets that were perhaps not quite as safe or liquid as government securities but which earned a higher rate of return. Mortgage backed securities seemed to provide a perfect form for such reserves. They earned a higher rate of return than short term government securities but were after all as 'safe as houses'. Because they were not homogenous there was no open exchange where they were traded. Instead they had to be sold 'over the counter' in bilateral deals that could take time. They were therefore not as liquid as treasury bills. But with the high demand for them as a reserve asset they could be sold without too much difficulty.

As a consequence, RMBS, issued by other banks, became highly popular as a reserve asset for commercial banks both in the USA and in Europe. This, as we shall see, was to have devastating implications for the banking system in the course of the credit crunch.

From Credit Crunch to the verge of Meltdown

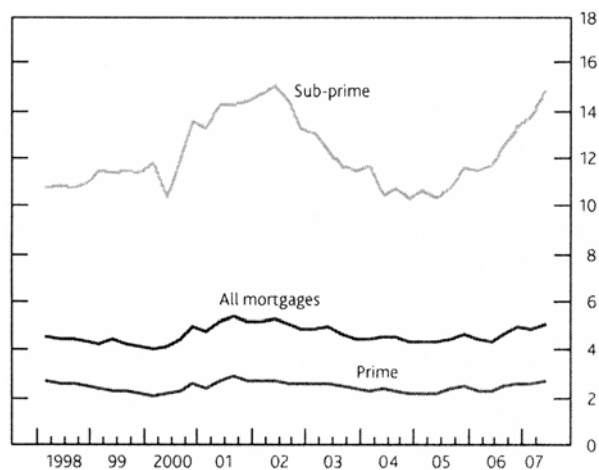
The Credit Crunch

By the spring of 2007 concerns about the continued rise in sub-prime defaults had begun to surface in the inside pages of the financial press. Sub-prime default rates – the proportion of foreclosures out of the total number of sub-prime mortgages - were now beginning to reach unprecedented levels. Not only this, with rising numbers of sub-prime mortgages in arrears there was growing uncertainty on how many more defaults there might be in the

²¹ The amount a bank holds in reserve in the form of cash, money on account with the central bank and in the various forms of reserve assets is rather misleading known as the bank's 'capital'. The 'capitalisation' of bank is the ratio of the amount it holds as 'capital' to the amount it has lent out. It is an expression of how adequate its reserves are given the size of its operations. 'Recapitalisation' means increasing a banks reserves.

pipeline. Yet what was more worrying for those reading these reports was that the losses resulting from these defaults were rising even faster. This was further highlighted by the fact that mortgage lenders that had been heavily involved in sup-prime lending were now going bust.

Nevertheless, from a general financial perspective, these troubles could still seem minor. The vast majority of home buyers, even those with sub-prime mortgages, were still keeping up their repayments. Default losses might be rising but they were still relatively small in the larger scheme of things and should be easily absorbed by the financial system as a whole. If a few reckless mortgage lenders were going bust, then this was could be viewed as simply the working out of the discipline of the market.



US residential mortgages more than 1 month in arrears
(As can be seen, subprime arrears in early 2007 had just passed the previous peak)

But, for those in the banks and other financial institutions responsible for investing in securitised mortgage debt the situation was more worrying. The problem was that most American-originated RMBS had been spiced up with a slice of sub-prime mortgages. It was true that most of these RMBS would continue pay out the expected returns on the traditional mortgages and the sub-prime mortgages that remained good. However, because RMBS were so complex and drew on mortgages originated across the US, no one could be really sure if the RMBS they bought might contain sub-prime mortgages sold on from neighbourhoods where there were high defaults and collapsing house prices. Hence there was growing uncertainty whether any RMBS purchased would be able to continue to pay out the expected returns in the future. As a result, investors were becoming increasingly wary about buying RMBS.

By early summer the troubles of sub-prime defaults were beginning to show up further downstream. The SIV's of the major investment banks, who as we have seen had borrowed heavily to leverage up their profits from producing RMBS, were facing serious problems. They were finding it increasingly difficult to sell on the RMBS they had produced. They either had to hold on to them, in the hope the worries of investors in RMBS would pass, or else sell them

at a discount. Either way they were finding it increasingly difficult to repay the loans they had taken out to buy up the mortgages to produce the RMBS. Indeed, their 'leverage' was now multiplying their losses rather than their profits.

On June 22nd, Bear Stearns, the smallest of the big five investment banks, was obliged to come to the rescue of two of its SIV's – the Bear Stearns High-Grade Credit Fund and the Bear Stearns High Grade Enhanced Leveraged Fund – that had been heavily involved in producing and selling RMBS. Having put up \$35 million as starting capital for the Bear Stearns High-Grade Credit Fund they now were having to pay \$3.2 billion to bail it out; while they were having to take on expensive loans to save the Bear Stearns High Grade Enhanced Leveraged Fund.

This raised two fears in the financial markets. Firstly, Bear Stearns' bailout of two of its SIVs, and the possibility that other investment banks might be obliged to follow suit, could lead to a fire-sale of RMBS forcing down their price. This could only add to the reluctance of investors to buy up American-originated RMBS. Secondly, \$3.2 billion was a considerable sum for a company that had a stock market valuation of little more than \$13 billion. Although it could be hoped to recoup much of losses eventually through the sale of the assets of its SIVs, there was a very real danger that Bear Stearns could go bankrupt. As an investment bank at the very centre of the global financial system, if Bears Stearns did go bankrupt then banks across the world could face heavy losses.

These fears were to be brought to ahead a few weeks later. BNP Paribas, one of Frances largest Banks, had been investing heavily involved in buying up American originated RMBS and selling them on to other banks in Europe. On August 9th BNP Paribas announced that it could no longer value its holdings of such RMBS because it could no longer sell them. This sent shock waves through the financial world. If the market for American-originated mortgage debt had seized up, then a large proportion of the reserve assets of both American and European banks had become in effect frozen. There was now a real possibility that any bank, however large, might find itself seriously short of money and, unable to sell or borrow against its American originated RMBS, would not be able to meet its debt obligations when they fell due. With all banks enmeshed in an opaque and ever shifting web of dealings with other banks and financial institutions, it was almost impossible to know which banks might be at most risk of failure.

Panic ensued. There was a flight to hard money. Banks hoarded what money they had in cash or at the central bank and refused to lend to other banks, even over night, for fear they would not get it back. As a result the short term money markets, through which banks lend to each other, ceased to function. Within hours of BNP Paribas' announcement, the world's banking system had frozen up and global financial system seemed on the verge of imploding.

However, the monetary authorities acted promptly and decisively to contain the situation. Seeing the problem as primarily one of liquidity and confidence in the banking

system, rather than as one of profitability, their response took three distinct forms.

First of all, the central banks extended their role as lender of last resort. In normal times only the most important banks at the top of the banking pyramid are permitted to borrow in emergencies from the central banks and the collateral that such banks can offer to secure such loans is usually restricted. However, the central banks were quick to extend the range of banks and other financial institutions they would be prepared to make emergency short term loans too and the collateral they were prepared to accept in making such loans. Indeed, they made it clear they were prepared to accept certain classes of RMBS. As a result, the Federal Reserve, the Bank of England and the European Central Bank began pumping tens of billions of dollars, pounds and euros into their banking systems, thereby making up the much of the short fall in credit caused by the ceasing up of the short term money markets.

Secondly, the monetary authorities made it clear that, despite all the previous talk of the dangers of 'moral hazard', they would be prepared to bail out any bank or financial institution, not just commercial banks, if it was deemed they were too important to the financial system as whole to fail.

Thirdly, they began the process of lowering interest rates. This had the effect of making it easier to for financial institutions to service their debt. It also helped to put a floor under the price of reserve assets, and thus value of reserves held by the banks other than RMBS.

These measures on the part of the monetary authorities, combined with subsequent announcements by governments that they would guarantee small and medium depositors against the failure of commercial banks, certainly served to contain the credit crunch to the banking system and the short term money markets, at least for the time being. The long term capital markets continued to function and, after a sharp fall following the panic of early August, stock market across the world resumed their upwards path, only peaking at the end of the year. At the same time the danger that lending to businesses and individuals in the real economy would be drastically curtailed as banks sought to hoard money or went bankrupt was for the most part averted.

Holding the line

Perhaps rather ironically, the very complexity of RMBS that had contributed to bringing about the credit crunch also helped to buy the time necessary for the authorities to contain it. As we have pointed out previously, because of their very complexity and heterogeneity RMBS were 'over the counter' in bilateral trades between financial institutions rather than being brought and sold on open exchanges like bonds or shares. If they had been traded on open exchanges then they would have been valued day to day at the prices quoted on the exchange. Thus when the banks published their accounts the RMBS would have been 'marked to market'; that is they would have been valued at the price ruling on the exchanges the day the accounts were drawn up. The collapse in demand for RMBS would have resulted in a collapse in their market price. As a result, in publishing their

quarterly accounts in September, many banks would have been obliged to declare that the value of their reserves assets was below that required by financial regulations. Either the monetary authorities would have had to suspend the regulations or the banks affected would have to take drastic action to replenish their reserves. Either way the uncertainty created by such an unprecedented situation would have likely been a serious financial panic that could not so easily be contained.

However, in drawing up their accounts RMBS were not 'marked to market'. For the banks that owned them they were still performing assets. Most American mortgage holders were still keeping up their repayments and this money was still flowing into the accounts of those who held RMBS. Assets are worth what they earn. Of course, some of the RMBS that banks held were not earning as much as had been expected when they had been bought because of the sub-prime default losses. The banks had to therefore to write down their value accordingly when drawing up their accounts. But this reduction in the value of the RMBS they held as reserve assets was far less than what they would be if they had to sell them in the current circumstances. The banks, in all honesty, could therefore declare that they had sufficient reserves or 'capital' to meet their regulatory requirements.

Of course, banks were still highly vulnerable to unexpected losses or a speculative attack since RMBS could not be sold at their declared 'book value'. Being illiquid they were not really reserve assets any more. Yet, so long as the monetary authorities continued to pour short term money into the system to maintain liquidity, and stood prepared to come to rescue of important banks that might find themselves in trouble, the crisis could be contained sufficiently long for it to be diffused.

The banks could hope that in time the sub-prime crisis would pass and the American housing market would stabilise. Confidence in RMBS securities would then eventually be restored and the banks might then be able to sell them at prices not much different from their current book values.

However, the monetary authorities were anxious that they might not be able to hold the line for that long. There was still no end in sight for falling house prices in the USA, and indeed falling house prices had now spread across the Atlantic to the UK and Europe. If one bank fell then this could easily have a knock on effect on other banks. The authorities might end up having to bail out the entire banking system at a huge cost. They put pressure on the banks to 're-capitalise' - after all banks were still profitable. Instead of distributing a large part of their profits in form of bonuses to their wiz kid traders and executives and dividends to their shareholders, banks could, over time, buy up other forms of reserve assets to replace those that had become 'toxic'. Alternatively, when conditions in the stock market were propitious, they could issue more shares and 're-capitalise' in that way.

Yet although it was certainly in the interest of the banking system as a whole for banks to recapitalise and repair their balance sheets, each individual bank had an

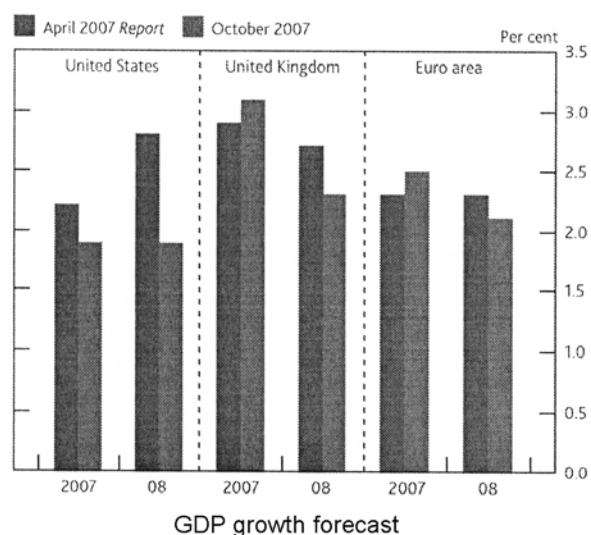
interest in dragging its feet. If dividends were reduced in order to 're-capitalise' a bank, then the return on the banks shares would fall. Likewise, if recapitalisation was achieved by issuing more shares then the amount of profit paid out in dividends would then have to be spread over a greater number of shares and the return on each share would fall. Either way the price of the banks shares would most likely fall.

Of course, for the executives and star traders, whose bonuses are often paid at least in part in the form of shares or share options, a fall in the bank's share price was not very welcome. For the bank as an institution a fall in its share price was not welcome either. First of all, in the immediate term when markets were nervous, a falling share prices might trigger a panic and a speculative attack on the bank. Secondly, in the longer term, a low share price would make the bank vulnerable to any hostile take over bid launched by rival banks, which was highly likely to occur in the inevitable restructuring of the banking sector following the crisis.

As we shall see, this conflict between the interests of the banking system as a whole, as represented by the monetary and government authorities, and the immediate interests of individual banks was to culminate in the brinkmanship over the bailing out of Lehman brothers a year later.

The credit crunch and the real economy

As we have already seen, in early 2007 the rate of growth of the US economy was already beginning to slow down. However, few economic forecasters had at the time expected that the US economy would contract. The main issue between economists had been whether the economy could still grow fast enough to maintain existing levels of employment.



The credit crunch raised the danger that stricken banks, desperate to conserve money, might be forced to cut back drastically on their lending to businesses and individuals in the real economy. Companies would then be forced to cut back on investment and individuals would

reduce their consumption. This could lead to a sharp reduction in demand. Unable to sell what they had produced companies would go bankrupt and unemployment would rise. Defaults on loans would rise sharply forcing the banks to cut back further on their lending. The credit crunch could thereby trigger a vicious downward spiral causing a serious depression in the real economy.

Yet, as we have pointed out, the prompt action by the monetary authorities had largely succeeded in containing the immediate impact of the credit crunch to banking sector. By providing ample short term credit, central banks had ensured that commercial banks could maintain the supply of longer term loans to real economy. But although the monetary authorities were able to avert the danger of the implosion of the short term money markets triggering a potentially catastrophic collapse in the real economy, they could not eliminate impact of the credit crunch altogether.

As the secondary mortgage market ceased up so did the supply of mortgage finance. Freddie Mac and Fannie Mae, under government pressure, were able to take up much of the slack in the supply in mortgage finance. This certainly averted a full scale collapse of the housing market, but it could not prevent a steady decline in the level of house prices across the USA. Falling house prices led to a sharp decline in house building, throwing thousands of building workers out of work. As house sales stagnated, the demand for furniture, household appliances and other commodities closely dependent on a buoyant housing market were also hit. More generally, falling house prices, and tighter mortgage lending, limited the ability of home owners to take out second mortgages to finance consumption. As a result, the credit crunch could not but intensify the economic slow down that was already underway.

Nevertheless, on the whole US capitalism still seemed strong. Most of the large corporations had seen rising profits over the past decade and had built up large financial reserves. They were in a strong position to ride out the impact of the credit crunch. Of course, many small to medium sized businesses were far more dependent on bank overdrafts and loans. Many had become heavily indebted on the expectation of continued economic expansion and easy credit. A substantial number of such companies could be expected to go bust, particularly those dependent on a buoyant housing market. However, towards the end of 2008, with the stock market still booming, it seemed that at worst, like the dot.com bust before it, the credit crunch would result in merely a short and mild recession in the real economy. Indeed, it still seemed possible that a recession might be avoided altogether.

This rather sanguine view overlooked important secondary effects of both the credit crunch and the policies that had been taken to contain it. Following the credit crunch, loanable funds that perhaps would have previously been invested in the short term money markets or used to buy up the multitudinous forms of financial 'products' produced by the banks now looked for more straight forward forms of speculation. The first port of call had been the stock market. The sharp cut in interest rates following the credit crunch and made the return on shares attractive, even though profits, and

hence dividends paid out on shares, could be expected to fall with the slow down in the economy. Indeed, much of the surge in the price in shares in the months following the credit crunch can be explained as a speculative bubble triggered by the expectation of continued interest rate cuts, rather than from investors expectations of a longer term continuation of rising company profits.

By the end of 2007 this speculative bubble had run its course. Taking their profits, speculators sold their shares and began to turn to the 'commodity' markets. After years of strong economic growth, in most 'commodity' markets supply was having difficulties in keeping up with the growth in demand. At the same time a conjunction of bad harvests across the world had reduced the supply of staple foods such as wheat and rice. As speculators piled in even a relative small increase in demand caused by speculation was sufficient to see prices soar. As a result over the first six months of 2008 the prices of fuel, raw materials and basic foodstuffs rocketed. Most significantly the price of oil nearly doubled in price between January and July.

Soaring prices in the commodity markets had a serious impact not only on the US economy but on economies across the world. As consumers had to spend more of their incomes on basic necessities, such as food and fuel, they had significantly less to spend on everything else. Thus demand for services and manufactures fell. At the same time as many companies faced falling demand for what they produced or sold, they also faced higher costs as the price of fuel and raw materials rose sharply. Profits and cash flows were squeezed accentuating the economic downturn as companies retrenched on investment and laid off workers to save money.

By the summer of 2008 it was clear that the US economy was already in recession and Europe was rapidly following it. Earlier in the year there had been much talk of China and rest of south and east Asia 'decoupling' from the American centred global economy. It had been argued that China, and with it much of Asia, had reached a point where they were no longer dependent on the US for economic growth. As a result they would be able to ride out any recession caused by a contraction in the American economy.²² With 30% of the Chinese economy dependent on exports, much of which was destined for the US, such talk had always seemed dubious. Now it was becoming clear that with the rate of growth in exports rapidly falling not only to the US but also to Europe, China's economic growth rate would be substantially less in 2008 than the 13% recorded in 2007. With China slowing down so would most of the economies of south and east Asia that supplied it with raw materials and component parts. The recession in the US was leading to a world wide economic slowdown.

Nevertheless, most economists expected that this global economic slowdown would be short lived - after all, this surge in commodity prices was largely driven by speculation. As the global economy slowed down, demand

²² Such talk seems largely to have been the result of hype put out by investment banks in order to promote sales of investments in 'newly emerging markets'.

for fuel and raw materials would also slow down, allowing supply to catch up. The speculative bubble would then be punctured. In fact, this prognosis was soon proved correct as commodity prices peaked and then began to fall sharply as the summer wore on.

Indeed, for central bankers in the US, and perhaps in even more so in Europe, who had been schooled in the 'lessons' of the 1970s, the main concern at this time was not of continued economic recession but of stagflation. The sharp rise in food and fuel prices in the first half of the year had pushed up the rate of inflation. The rather misplaced fear was that workers would be able to demand higher wages to meet their higher fuel and food bills and this would spark a wage-price spiral. Economic recovery might be inhibited and a situation could arise of accelerating price inflation and sluggish economic growth. Fearing such a prospect of stagflation, central bankers were reluctant to continue to cut interest rates.

So, a year on, it seemed that the calamitous predictions made by some when the credit crunch had broke had been proved wrong. Although it had intensified the economic downturn, the worst impact of credit crunch had too a large extent been contained to the banking sector. As the IMF put it, as a result of the credit crunch the 'global economy had bent but not buckled'.²³ But there were still serious unresolved problems in the financial sector that the slow down in the real economy could only exacerbate.

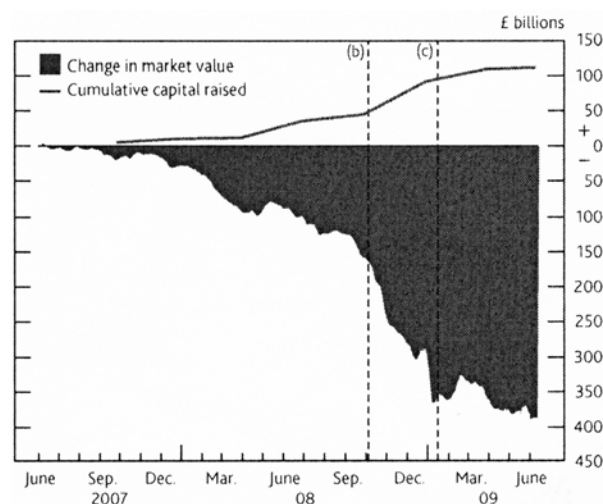
Approaching meltdown

By the summer of 2008 there was growing impatience on the part of both the monetary authorities and governments with the banks reluctance to mend their ways and 'recapitalise'. As the American and European economies entered recession there was an increasing urgency for the banks to pull their weight in resolving their problems. The problem of bad mortgage debt facing the banking system was now being compounded by growing defaults on personal and business loans. Although many banks had made efforts to replenish their reserves through share issues it was feared that this would not be enough to ensure that the banking system could withstand the recession. What is more, many banks - particularly investment banks - were still involved in high-risk ventures that could easily come a cropper in the current economic conditions.

The issue of the 'moral hazard' in offering government guarantees for shareholders, creditors and depositors of banks deemed too large to fail now came to fore. In promptly making it clear that the government would stand behind the big banks and financial institutions had been vital in dissipating much of the panic surrounding the credit crunch. Indeed, by the mere act of decisively making their commitment to such guarantees clear at an early stage, the authorities had been able to reassure the markets and saved many banks and institutions that might otherwise have failed.

The problem of course was that if banks could count on the government coming to the rescue and limit their losses there was less reason for them to act responsibly. The

temptation to take risks in order to make profits would not be counterbalanced by the fear of making losses. Reducing the fear of bankruptcy undermined the effectiveness of the discipline of the market. Furthermore, by only applying such guarantee to big banks, the authorities could be seen as distorting the banking sector. First of all it placed smaller banks at a decided disadvantage. Secondly, in doing so, government guarantees tended to create a banking sector dominated by banks that were too big to fail, creating, or at least exacerbating, the very problem they were designed to cure.



Loss of market value of UK banks' assets

On the basis of such arguments, market fundamentalists and populist right wing republicans argued that it had been wrong for the government to provide guarantees against bank failure. The market should be allowed to take its course regardless of the consequences. Why after all should the banks profits remain private while their losses were socialised. Wasn't this socialism for the rich?

The pragmatists at Federal Reserve and the US Treasury sought to resolve the dilemma in two ways. Firstly, they sought to act promptly so that they would not have to actually use public money to bail out banks very often. Secondly, they sought to maintain a degree of uncertainty as to which banks or financial institutions might be deemed to big or important to fail.

In the months following the credit crunch the authorities allowed numerous small banks, mortgage lenders and other financial institutions to fail around the country. However, in March 2008 Bear Stearns came under a sustained speculative attack as rumours emerged that it was having severe cash flow problems. The Federal Reserve came to the rescue by providing \$30 billion in cheap loans to facilitate the take over of Bear Stearns by Morgan Stanley.

For market fundamentalists and populist right wing republicans this had set a dangerous precedent. Up until then the authorities had been uncertain if the government guarantees extended beyond large commercial banks, or other financial institutions, that were directly involved in lending and taking deposits from the real economy. Now it was clear that the guarantees extended to investment banks.

²³ IMF Report 2009, p.2.

Six months later, as the world's fourth and third largest investment banks found themselves in serious trouble as a result of the growing defaults due to the economic recession, the market fundamentalists and populist right wing republicans could now claim that the consequences of rescuing Bear Stearns were now being reaped. With Presidential and Congressional elections in full swing, the argument for taking a hard line with banks, and particularly with the investment banks, was becoming increasingly influential within the Bush administration.

As we have mentioned, Freddie Mac and Fannie Mae had been obliged to take up the burden of maintaining the supply of mortgage finance following the ceasing up of the secondary mortgage market. However, unable to sell on their mortgage debt they had to take out loans at higher interest rates. Higher interest costs combined with rising losses due to mortgage defaults meant that by July 2008 they were in serious financial difficulties. The US government was obliged reassure potential creditors and shareholders by reaffirming that it would not allow either Freddie Mac or Fannie Mae to go bust. Such reassurances proved insufficient and in early September they were in effect nationalised.

As we have seen, Freddie Mac and Fannie Mae had long been criticised by both market fundamentalists and right wing republicans for distorting the mortgage market. But no sensible politician was going to risk putting in jeopardy millions of potential American homebuyers. Thus the nationalisation or conservatorship as it was to be euphemistically known, did not meet too much political opposition. However, with the costs potentially running into tens billions of dollars, the nationalisation of Freddie Mac and Fannie Mae certainly strengthened the argument of taking a harder line when the issue of bailing out Lehman Brothers and Meryl Lynch came to the fore a week or so later.

Under political pressure to take this hard line with the banks, Hank Paulson, the US Treasury Secretary, took the fateful decision to refuse to provide public funds to bail out Lehman Brothers.²⁴ The failure of the world's fourth largest investment bank, by far the biggest bankruptcy in history, sent shock waves across the global financial system. As stock markets crashed, within days more than a \$1trillion had been wiped off the value of shares across the world.

But more importantly most of the world's banks and financial institutions had dealings with Lehman Brothers and were exposed to the possibility suffering heavy losses due to the investment bank's bankruptcy. With reserves already low there was little to prevent an avalanche of banks across the

world going bankrupt. With no one knowing for certain which banks or financial institutions might be at risk, fear spread like wildfire. The entire global financial system was now teetering on the verge of meltdown.

The day after the failure of Lehman Brothers, the Federal Reserve was obliged to undertake an \$85 billion bail out of the AIG – the largest US insurance company. Although this showed the authorities were now prepared to act to shore up the financial system, it did little to reduce the alarm in the financial markets. It was now fast becoming clear that the policy of ad hoc bail outs of individual institutions was no longer sufficient. There had to be a systematic bail out.

After a nail-biting second attempt Hank Paulson managed push through a sceptical Congress legislation setting up his Troubled Asset Relief Programme (TARP). Under this scheme the authorities were to hold what was in effect a Dutch auction for specified trouble assets – mainly RMBS – from the banks. The banks could then use the money from the sale of these assets to recapitalise. The problem was that no one could be sure what the true value of these assets would be once the secondary mortgage eventually stabilised. Either the government would end up paying too much for them, in which case the banks would receive a huge handout from the government, or else the government would pay too little to provide the banks with enough money resolve their problem of deficient reserves. Yet the fact the fact that the government was prepared to put up an unprecedented \$750 billion certainly showed it meant business, and in doing so brought precious time for resolving the crisis.

It was clear that financial crisis could only be resolved if the banks were recapitalised. Simply ploughing back bank profits was no longer an option because it would take far too long. The stock markets were now certainly not propitious for making a share issue to raise bank 'capital'. With the problems involved in recapitalising the banks indirectly by buying up their toxic assets, the only solution was for governments and central bankers to swallow their neo-liberal ideology and buy up bank shares themselves – even if this might mean some banks might be effectively nationalised. In Britain the government set up scheme where it offered to buy bank shares, thereby recapitalising the banks. This was to lead to the nationalisation of Royal Bank of Scotland and Lloyds-TSB. In addition, the Bank of England offered to guarantee £200 billion worth of the loans made to British banks against default. Similar schemes were soon adopted in the US and elsewhere in the world. By late October it was becoming clear that the financial system, although still fragile, was stabilising. Attention now began to turn to the impact of the financial crisis on the real economy.

Despite pumping large amounts of short term money into the banking system and slashing official interest rates to near zero the monetary authorities could no longer contain the financial crisis. Unable to extend overdrafts or take out bank loans swathes of otherwise profitable small or medium sized businesses went bust. Although, as we have pointed out, the corporate sector as a whole was still highly profitable and in a sound financial position, there was (as the

²⁴ If Paulson had decided to bail out Lehman Brothers would this have averted the the near meltdown of system or merely postponed it. Certainly, as we have seen, the economic recession had resulted in increasing debt defaults and hence losses for the banks and the banking system was as a result highly fragile. It was likely that having bailed out Lehman Brothers, it would have been long before Paulson would have had to come to the rescue of another bank. Certainly this was what Paulson feared. On the other hand if he could have held the line for a few months longer then the recovery in the real economy may have been sufficient to have eased the situation of the banks.

Jeremiah of bourgeois economists Nouriel Roubini had pointed out months earlier when warning of the danger that the financial crisis might trigger an economic meltdown) a ‘fat tail’ of large corporations whose financial position was weak.²⁵ For this significant minority of large corporations, particularly those whose sales depended on easy consumer credit, the developing financial crisis had a serious impact. With the banks reluctant to roll over loans, and unable to raise capital in the financial markets because they were in free fall, many found themselves in serious trouble. In Britain we saw long established high street names go under such as Woolworths, MFI and Zavvi (formerly Virgin Megastores). In the US the three car giants, General Motors, Ford and Chrysler had to seek emergency government aid as they teetered on the verge of bankruptcy as car sales plummeted.

The economic impact of the financial crisis spread quickly across the globe. Just-in-time methods of stock control meant that declining consumer demand in the USA and Europe was quickly transmitted to reduced orders for imports. Furthermore, with the US and European governments pressing the banks to shore up loans to their domestic economies money-capital was diverted from financing international trade and investment. As a result the volume of international trade fell back sharply, leaving the docks full of empty cargo ships.

As 2008 drew to a close there were very real fears that the greatest financial crisis since the 1929 Wall Street crash would lead to another great depression on the scale of the 1930s. With Keynes now rehabilitated, governments across the world accepted that the only way to avert a great depression was to adopt Keynesian style fiscal policies and spend their way out of the crisis. Government budgets would have to take to strain in order to break the downward spiral of collapsing demand and collapsing production.

In addition to borrowing to cover the gap between falling tax revenues and rising government spending on welfare, through the G8 and G20 there was a loosely co-ordinated boost in discretionary fiscal stimuli. The newly elected President Obama announced a package of tax cuts and spending increases amounting to \$787 billion spread over three years (equivalent to more than 5% of the annual GDP of the US economy). Other governments of other major economies, including China and India, followed suit, although with relatively small packages.

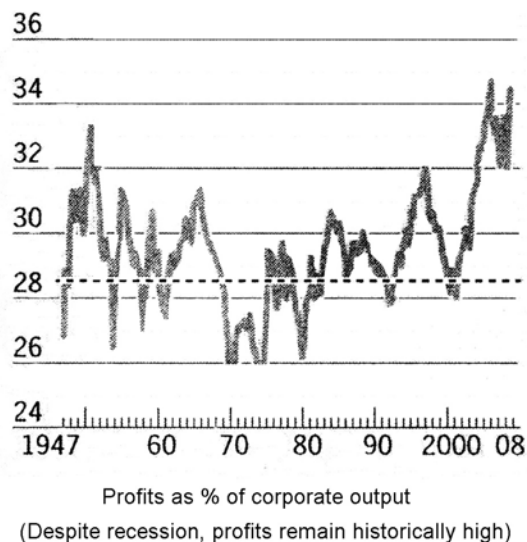
Although there were concerns expressed in the early months of 2009, even by the IMF, that they might not be enough, it is now clear that these fiscal stimuli were sufficient to avert a great depression. Yet with output falling by more than 5% and unemployment more than doubling over the last year in the UK it is clear we are experiencing an economic recession on a comparable scale with those of the 1970s and 1980s.

The aftermath

In the autumn of 2009, the masters of the universe, the plutocrats, their ministers and their minions can now feel cautiously optimistic. Not only have they avoided a deep economic depression, but already the signs are gathering that the global economy is on the mend. Of course, capital accumulation has stalled, and the incipient economic recovery is mainly dependent on fiscal and monetary stimulus. There is still a danger that, in the face of ballooning deficits and mounting debt, governments may lose their nerve and start cutting public spending too soon. Also the banking system is still very fragile, with the IMF warning that the banks have still along way to go before they are able to pay write down their toxic debts and replenish their reserves.²⁶ Certainly the global economy is not out of the woods yet, and dangers lurk of a ‘double dipped recession’.

Nevertheless they can congratulate themselves for having navigated what has been described as one of the most serious financial crises in history. The governance of global financial system proved just about adequate in averting a catastrophic financial and economic meltdown. Although the recession certainly dented profits, the position of non-financial corporate sector still remains generally sound. Indeed, the ‘fat tail’ of financially weak corporations failed to drag everyone else down with them when they went bust.

Furthermore, to the extent that the working class has so far been unable identify itself as a class for itself; in so far as it has been unable to affirm its own interests in and against capital, they can be confident that can they resolve the crisis in their favour. Indeed, already the crisis is being used as an opportunity to press head with privatisation, drastic reductions in public spending, cuts in wages and the further imposition of wage labour. The recovery may be coming to end from their point of view, but we will be expected to bear the costs of bailing out capitalism for years to come.



²⁵ ‘The Rising Risk of a Systemic Financial Meltdown’ by Nouriel Roubini, available at media.rgemonitor.com/papers/0/12_steps_NR.

²⁶ See IMF Global Financial Stability Report September 2009.

Conclusion

What then were the immediate causes of the credit crunch and the subsequent economic crisis? In short it can be said that deregulation of the financial system, coupled with Greenspan's policy of exceptionally low interest rates, caused a reckless over-expansion of the financial sector. This made the financial system increasingly fragile and complex. As a result, even the relatively small shock of the losses caused by the sub-prime mortgage crash was sufficient to cause a serious crisis that struck at the heart of the global financial system. Prompt action by the monetary authorities had at first succeeded in containing the credit crunch to the banking sector and the short term money markets and thereby limited its full impact on both wider the financial system and the real economy. However, it did not resolve the crisis. With Hank Paulson's refusal to bail out Lehman Brothers the dam burst causing a serious economic crisis.

This account is perhaps true in so far as it goes. Of course there can be different emphasis on the various causes that gave rise to the crisis that allows a different attribution of blame and different proposals to be made to make sure it does not happen again. Was Greenspan to blame for keeping interest rates too low in the first place? Was Paulson to blame to caving into the market fundamentalists and allowing Lehman Brothers to go bust? Are the bankers to blame for being too greedy or was it the fault of feckless poor for buying houses they could not afford? Or was it the excessive deregulation of the financial system? Should there be less discretionary interest policy? Should the financial system be regulated and so forth? But for these questions, this standard account provides the basis for most bourgeois understandings of the crisis.

But for us such questions are secondary. What is important is to understand the historical significance and nature of the crisis. As such we need to go beyond immediate causes. Indeed these causes will be uncovered as themselves effects of longer term developments in economic and social relations of capitalism. It will be these issues that we shall take up in Part II.

