

Did the behaviour of central banks make the credit crisis inevitable?

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Abstract

While a myriad of factors and subtleties contributed to the credit crisis and the ensuing economic recession, certain behaviours by policymakers made it more or less inevitable that there would be a problem of sorts at some stage.

On a more micro level a piecemeal system of skewed economic incentives and complacency fostered innovation at a pace and to a degree that even practitioners had little comprehension of the full implications of their actions.

I argue that three major policy errors or unintended consequences made an economic calamity pretty much inevitable.

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1. Central bank policy

Prior to the current economic downturn, a clear pattern had developed for successive recessions and economic reversals to become progressively shallower, culminating in the 2001 recession, which statistically was barely a recession at all. At the same time the policy response from central banks became more extreme with each successive downturn. This trend saw the Federal Reserve cutting the Funds rate to just 1% in the early 2000s and then keeping rates at that level until mid 2004, despite unemployment having peaked the previous July.

Even at the time this policy response appeared excessive: both in terms of its aggression and duration. The Fed Funds rate stayed below 2% for almost three years: long after it was unequivocally established that 2001 was more a bump in the road than a full blown recession. While inflation, as measured by standard consumer measures, and corrected for the excessive volatility of energy prices, remained stable, asset price growth accelerated. At the same time the current account deficit, which had briefly moderated in 2001, resumed its widening trend, providing a clear indication of the underlying imbalances in the US economy.

Contrast this behaviour with the more pre-emptive Reserve Bank of Australia, which started tightening monetary policy even as the Fed was still on its way down to 1%. The RBA then continued to raise interest rates into 2007 as the credit bubble entered its most excessive phase: long after the Fed had ended its own efforts to reverse its prior over-accommodation.

Arguably the RBA's more measured behaviour left the Australian economy less exposed to the perils of excessive imbalances despite it being unusually highly reliant on the volatile natural resources sector.

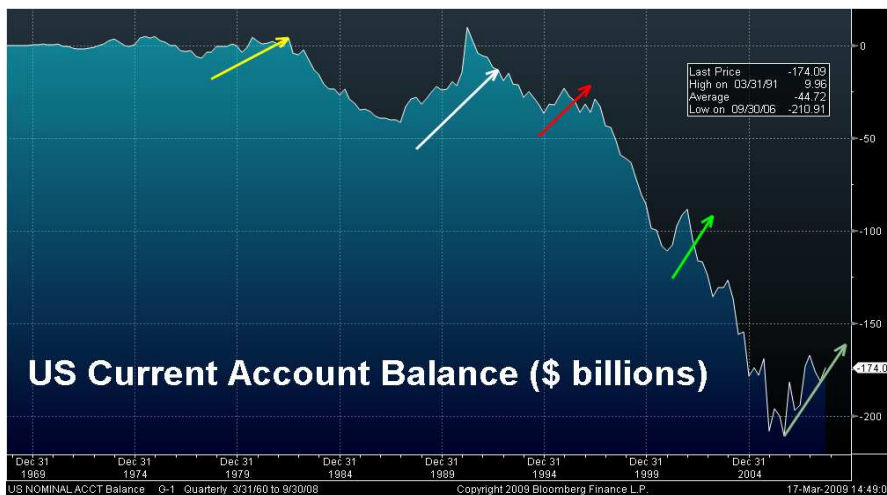
1.1 With such excessive imbalances a correction became inevitable, but it remained difficult to determine its nature and severity

Clearly it was impossible to envisage just how severe the fallout would be from the prior overstimulation, nor the impact that it would have on areas not directly exposed to US subprime mortgage lending and the credit bubble. What was possible to see, and what was observed at the time, were the teaser mortgage rates which proved to be the most potent symbol of the credit crisis. The cheapness of credit and its ready availability not only served to inflate asset prices, but also helped to sustain a rate of growth in consumption that domestic productivity alone did not come close to facilitating.

Figure 1 shows the evolution of the US current account deficit and underlines the increasing tolerance shown by policymakers over time towards major structural imbalances. Intentional or not, periods of economic contraction historically tended to correct imbalances in the current account. However, as inflation slowed during the 1990s, central bankers felt that they had more policy latitude to avoid recession by means of extremely accommodative monetary policy. Recessions were averted and the aftermath of successive speculative bubbles was soothed by ever more aggressive and prolonged periods of monetary accommodation.

The corollary to this change in the behaviour of the Federal Reserve is that the United States' current account has not been in balance since the early 1990s. Indeed the corrections to the growing deficit have become ever more cursory with each speculative bubble.

Figure 1: US Current Account Balance (\$ billions).



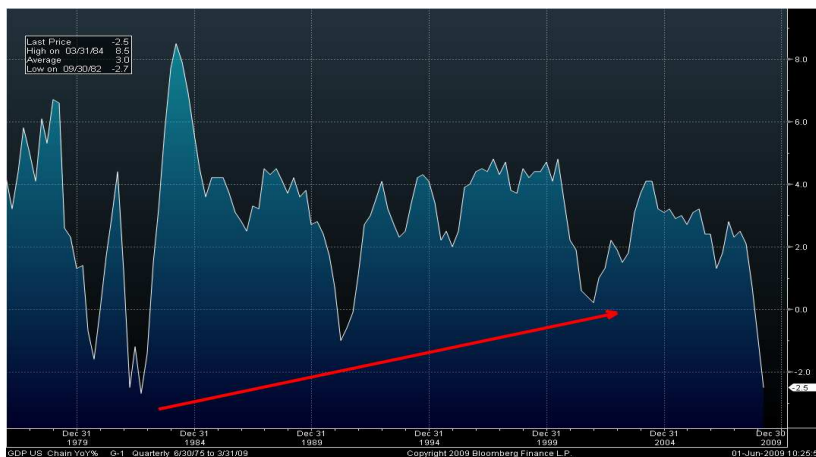
Source Bloomberg

While it may be an oversimplification to suggest that recession-induced corrections of the previous boom's current account deficit are a necessary, if not sufficient, condition for a sustainable recovery, the concept does appear to have some validity given the extremes to which the current account has been driven.

Indeed it was somewhat worse than that, inasmuch that policy was stimulative to a degree unmatched in recent history, even as the US deficit remained close to the widest levels ever recorded.

Figure 2 shows US GDP growth back to shortly before the Thatcher/Reagan era. Prior to the current downturn, there had been a marked tendency for economic slowdowns to become progressively less severe. Indeed, by this measure 2001 was barely a recession at all as the economy never actually contracted on a year-on-year basis.

Figure 2: US Chain weighted GDP (year-on-year %)



Source Bloomberg

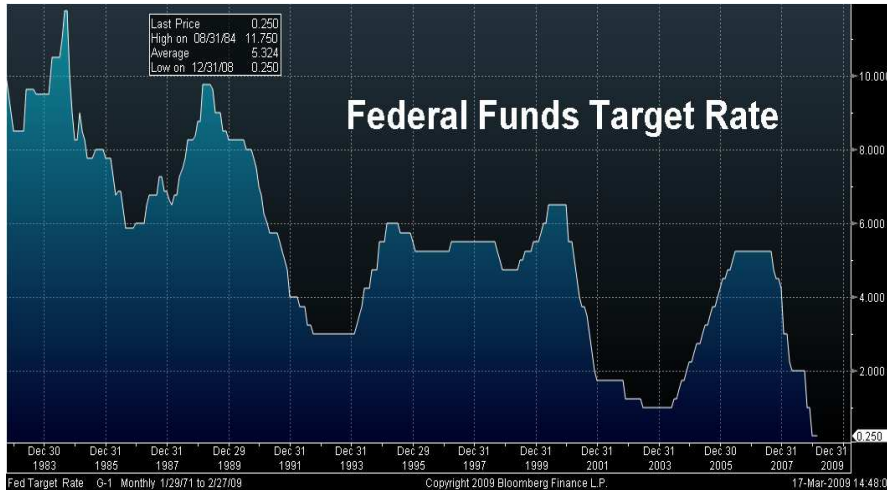
However, as Figure 3 shows, despite the trend towards ever milder recessions, the policy response became more and more extreme. With interest rates replacing supply side reforms as the dominant tool for tackling recessions, there was a sense in which the policy accommodation was “unearned”. Circumstantially at least, it appeared that the

interest rate cuts required to ease the aftermath of each successive bubble were the root cause of the next bubble: from the savings & loans crisis, to various emerging market events and LTCM, to the dotcom boom and finally the explosion in credit that was characterised by the rapid rise in subprime mortgage lending.

The common thread to all these crises was that policymakers repeatedly failed to appreciate the degree to which their monetary accommodation was being leveraged by financial innovation. Much has already been written about the role of the so-called shadow banking system in the current crisis and it is not my intention to revisit the lack of regulation and arbitrary capital treatment of such non bank subsidiaries in this section. Nevertheless, the failure to recognise the impact that this innovation might have on global credit, even as monetary aggregates and inflation accelerated, suggests some sort of behavioural bias among policymakers.

I will address this in more detail in the next section, but in general, given the series of asset bubbles, the policy response to each successive economic downturn became progressively more disproportionate to the downturn itself. At the same time there was an excessive reliance on manipulating short-term interest rates to the exclusion of virtually any other policy response.

Figure 3: Federal Funds Target Rate



Source Bloomberg

Even considered in isolation, it was apparent that this was an unwise strategy. However, the most recent crisis was/has been characterised by the unintended consequences of actions taken with the best of intentions in an attempt to mitigate the worst economic effects of the current downturn.

2. Three distinct behaviours by policy makers combined to create the credit crisis

Of course many factors contributed to the credit crunch to varying degrees and even now there is no universal agreement as to which were the most significant. However, I believe that there were three distinct behaviours by policy makers that combined to create the current crisis.

2.1. Policy mistake number one

I have already touched briefly on the first policy error: holding short term interest rates at unusually low levels for sustained periods of time. While the issue is more complex than merely failing to set interest rates at an appropriate level, there was nevertheless a very distinct change of policy from the early 1990s onwards that was not merely something that became apparent with the benefit of hindsight.

While there has been much discussion about the inefficacy of inflation-targeting, the reality was that many central bankers needed little encouragement to ignore broader trends in monetary growth and the price inflation of assets not included in the standardised consumer price indices.

Indeed a number, most notably the Bank of England, effectively refined their remit¹ to an even narrower measure of inflation, referencing core CPI, rather than the official Consumer Price Index, seeking to further exclude price pressures in the economy: in this case food and energy.

Monetary aggregates are quite rightly regarded with circumspection given their chequered history as absolute policy indicators. They lost much of their lustre during the Thatcher/Reagan era as slavish adherence to any given aggregate was discredited in relatively short order by, among other things, the pace of financial innovation.

One of the Bank of England's former policy advisors, Professor Goodhart, formalised the reason for the demise of monetary targeting in a law which bears his name. It states that any empirical relationship that is exploited for policy purposes will tend to break down². Nevertheless, the fact remains, that a surfeit of liquidity, however measured, is unlikely to result in a stable economy over time. Central bankers therefore still have a duty to satisfy themselves that an acceleration in the money supply is not a symptom, or indeed the cause, of unsustainable imbalances in the economy.

In testimony before the Parliamentary Treasury Select Committee on March 27th, 2007 serving Monetary Policy Committee members queued up to dismiss the significance of monetary aggregates. Deputy governor Rachel Lomax said that "I am not a believer in money supply data". Kate Barker didn't "give money supply data much weight". Sir John Gieve said that "there is no clear link between M4 and inflation". It was left to the Bank's governor, Mervyn King, to concede that he was "somewhat more concerned about M4" than many of his colleagues.

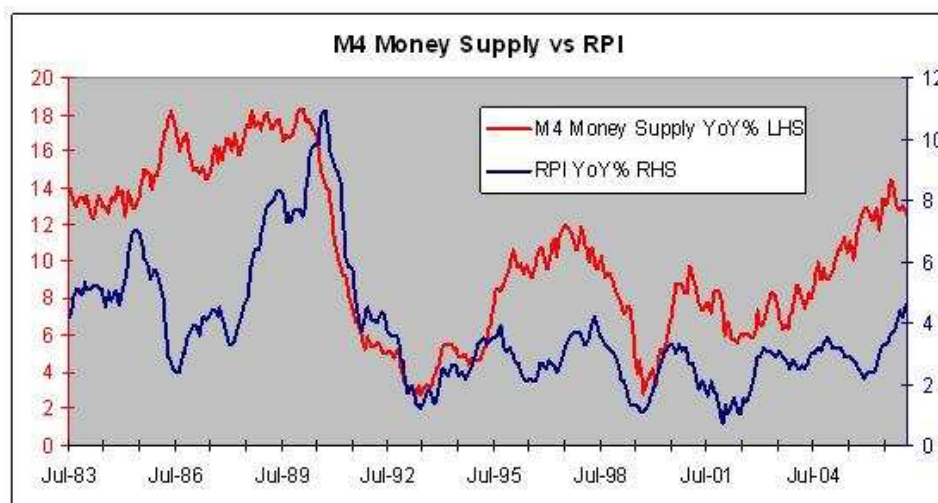
It was also left to a one of their former colleagues to define the malady which afflicted the policy committee at the time. Although hardly a monetarist, former MPC member David Blanchflower recently wrote in the *New Statesman*³ that the Monetary Policy Committee "was hobbled by "group think" – or the "tyranny of the consensus".

In his article Mr Blanchflower was criticising his colleagues for their hawkishness as the credit bubble started to deflate. The equally puzzling "group think" was the failure to tighten policy sufficiently at a time when all the traditional alarm bells were ringing and

high leverage was readily available: not just to hedge fund managers and credit structurers, but also on the high street.

The confidence of the majority of the MPC in the irrelevance of the monetary data was extraordinary given the state of the economy in early 2007 (see Figure 4). An interesting anecdote at the time was that the Office for National Statistics introduced a calculator on its website⁴, which allowed the general public to estimate their personal consumer price indices. Many who tried the calculator were unsurprised to learn that the effective inflation rate for employed families tended to range between 7% and 10%: far in excess of the headline CPI at the time and irreconcilable with reported levels of core inflation.

Figure 4: How the UK economy looked in the Spring of 2007



Source Bloomberg

In his New Statesman article David Blanchflower also wrote that “it was in late 2007 that I became convinced there was much more slack in the economy than others on the MPC believed”. By this point, however, Professor Blanchflower had already voted against three rate increases and had actually voted for a cut in rates in March 2007.

So why did policymakers systematically misread the developing bubble? The argument that they were constrained by their inflation targeting mandate is erroneous as we can see that the Bank of England voluntarily refined its brief to an even narrower definition of inflation precisely to avoid what it viewed as unnecessary rate hikes. The committee’s view on inflation effectively became qualitative rather than quantitative.

A more likely, although entirely subjective, explanation for their behaviour might be that many of the policy committee’s members cut their professional teeth at a time when monetarism and all its political connotations were extracting a pretty dreadful toll on employment. The committee’s majority view appeared to be that, in the absence of an acceleration in wage growth, inflation pressures could not be sustained over the medium term. Essentially wage growth was the only relevant transmission mechanism to translate higher input costs into accelerating inflation.

Thus members tended to view the economy in terms of labour and wages rather than from a monetary perspective. This is despite repeated references in Bank of England material to inflation being a monetary phenomenon⁵.

At the March 2007 Parliamentary testimony there was a palpable sense of irritation, verging on indignation from various members of the MPC when they were questioned about why they were ignoring data on monetary aggregates and asset prices.

From the perspective of accelerating asset prices and steady growth in all measures of the money supply, this was highly irrational behaviour. However, Professor Blanchflower is a labour economist and Figure 5 shows the world as he saw it. Wage growth had essentially been stable since the early 1990s and, with globalisation helping to keep a lid on even service sector incomes, it was felt that there was simply no transmission mechanism for faster monetary growth to feed into inflation as measured by the CPI. Even at the time the frustration of economists with a broader perspective was considerable and Mr King's more hawkish remarks to the Treasury Select Committee are telling.

Figure 5: UK wage growth (year-on-year %)



Source Bloomberg

Bear in mind too that the Bank of England had controversially cut interest rates in August 2005 with Governor King famously being in the minority in a 5 to 4 split vote. Although not an MPC member at that point, Professor Blanchflower wrote (again in the *New Statesman*) that “with hindsight” the cut “surely fuelled the surge in house prices”. This sent entirely the wrong signal to the housing market and by the time the Bank did eventually start to increase interest rates a year later it was considerably too late. In reality this cut probably caused more damage than the failure to increase rates more sharply in 2006 and 2007, at which point, with the benefit of hindsight, the die was pretty much cast.

The US Federal Reserve made a very similar error in ignoring monetary data in favour of tracking the labour market, but did so to a far greater degree.

Figure 6 shows real interest rates from various parts of the world and illustrates that in the United States real rates were negative from late 2001 until early 2005. That level of monetary stimulus was inevitably going to do something to asset prices and so it proved. The fundamental problem was that the Fed appears to have been philosophically unable to normalise monetary policy before there had been a fall in the unemployment rate. Given that unemployment is generally regarded as being a lagging indicator, the Fed was inevitably going to be “behind the curve” when it came to unwinding monetary accommodation.

Figure 6: Global real interest rates

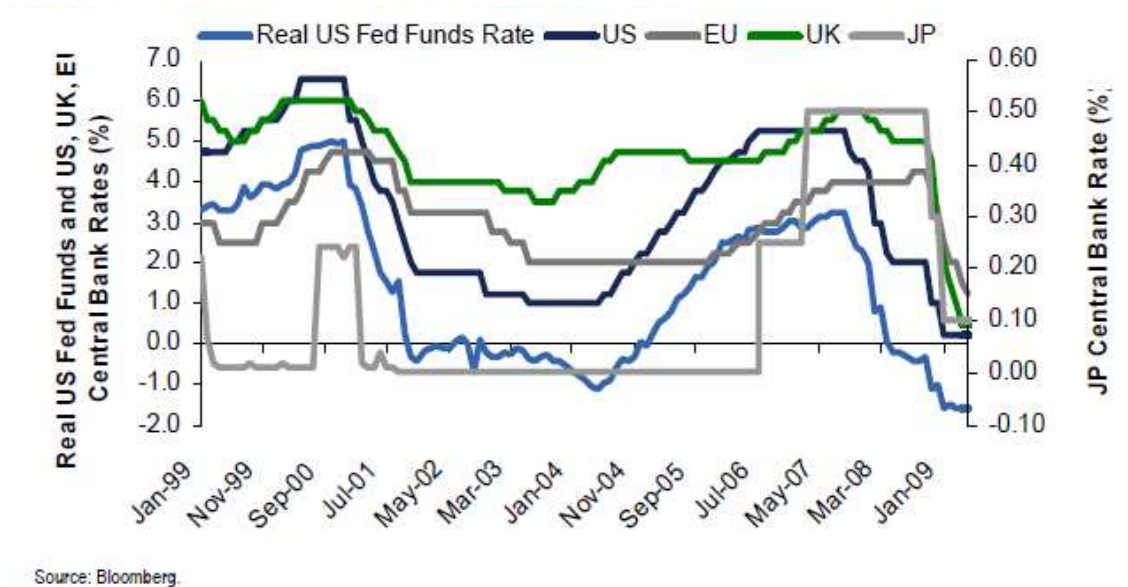
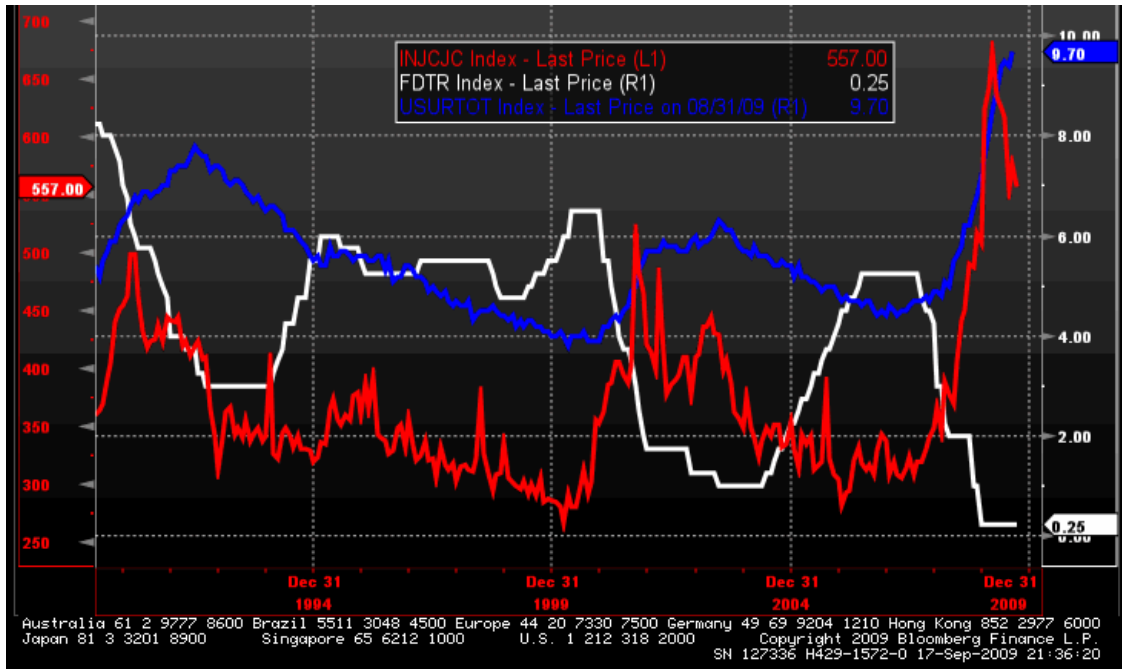


Figure 7 shows that the Fed systematically ignored much earlier evidence of an improvement in the labour market as each successive upturn took root. The weekly initial jobless claims report shows that the number of people claiming unemployment benefit from their insurance (the red line on the chart) peaked between 15 and 22 months before the unemployment rate (the blue line) reached its cyclical high. It was then another 10 to 19 months before the Fed started to tighten policy. The result was that the Fed invariably cut rates immediately a potential threat emerged (in the vernacular it took out insurance), but developed a pattern of behaviour by which it was very slow indeed to reverse its monetary accommodation.

Figure 7: US Initial Jobless Claims (red), US Unemployment Rate (blue) & Fed Funds Target Rate (white).



Source Bloomberg

The irony is that dovish central bankers were eventually proved correct in being sanguine about the risks posed by inflation, but only because the credit boom turned to bust in the second half of 2007. The fact that policymakers were so slow to appreciate the severity of the credit crunch when it first emerged underlines that their reluctance to raise rates as the bubble inflated hadn't been prescient.

2.2. Policy mistake number two

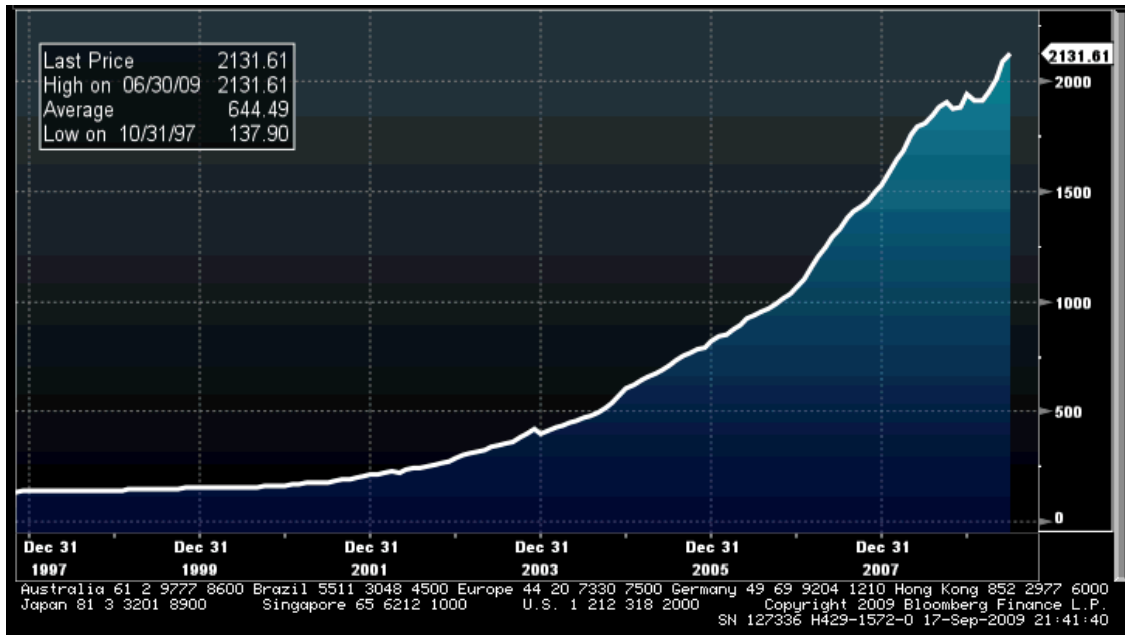
The second policy error was that while short-term interest rates were being maintained at low levels not seen in a generation or more, long-term rates were also artificially low.

This wasn't so much a policy error per se, as an unintended consequence of poor

decisions made by those officials charged with investing the reserves of countries that routinely ran significant current account surpluses. Basically, while western central banks were busy keeping their short-term interest rates low and fuelling domestic consumption, Asian central banks were building up huge currency surpluses from meeting the credit-driven demand in the United States and Europe. Figure 8 shows how the build-up in Chinese foreign exchange reserves accelerated as the credit bubble reached its height and indeed has continued to well beyond \$2 trillion this year. This reserve accumulation has been mirrored in other emerging nations, which had been primed to meet the ever growing demand from the major western economies. These vast sums needed to be invested, but invariably the investment process was restricted to buying either US Treasury bonds or agency mortgage bonds. This artificially reduced the cost of the US government funding its deficit, while at the same time also driving mortgage rates lower, even as the credit bubble was reaching its peak.

Former Fed Chairman Alan Greenspan said as much when he told the Financial Times in September 2007 that the housing bubble was “fundamentally engendered by the decline in real long-term interest rates” caused by a cascade of surplus savings from fast-growing emerging market economies such as China. The fall in long-term rates provided the initial gain in house prices that unleashed later speculative activity. He blames human nature – though he talks about “euphoria” rather than “greed”⁶.

Figure 8: China reserves (billion dollars)



Source Bloomberg

The combination of artificially low short-term interest rates and the distorted recycling of Asian current account surpluses effectively served to keep long-term interest rates in the US far below where they might otherwise have been.

2.3. Policy error number three

Error number three relates to a combination of skewed regulatory incentives. The most basic of these were the tax breaks that elevated debt above equity as the preferred means of funding a business activity. The adjunct to this is that leverage is effectively subsidised and became integral to business plans ranging from buy-to-let investors with a

single property to global investment banks at the cutting edge of securitisation technology.

The current crisis has also highlighted a further problem with debt capital inasmuch as it is nowhere near as good at helping a company absorb losses as equity. Indeed it tends to only be in liquidation that debt displays any loss absorption properties at all.

The skewed incentives on debt are clearly an important element of securitisation, but what really distorted the market was the ability to arbitrage capital regulation. This incentivised banks not only to hold a large proportion of their assets “off balance sheet”, but increasingly to originate, or otherwise acquire, fresh assets for the specific purpose of benefitting from the lower capital charges attached to these off balance sheet vehicles. Ostensibly these highly leveraged vehicles had no recourse to the sponsoring bank’s balance sheet. However, the current crisis has exposed flaws here as well. The most dramatic of these was the large number of major banks that were forced to take back onto their balance sheets impaired assets from structured investment vehicles, commonly known as SIVs. The credit crunch meant that the SIVs were suddenly incapable of funding themselves in the capital markets, despite originally carrying triple-A credit ratings and were obliged to either fail altogether, or to be rescued by their parents, who were often poorly placed to offer any assistance. It was the forced selling of SIV assets that did so much to damage the broader market. Many types of bonds and structured

notes were sold almost exclusively to these vehicles, so when the SIVs turned sellers there was often, quite literally, nobody left to buy.

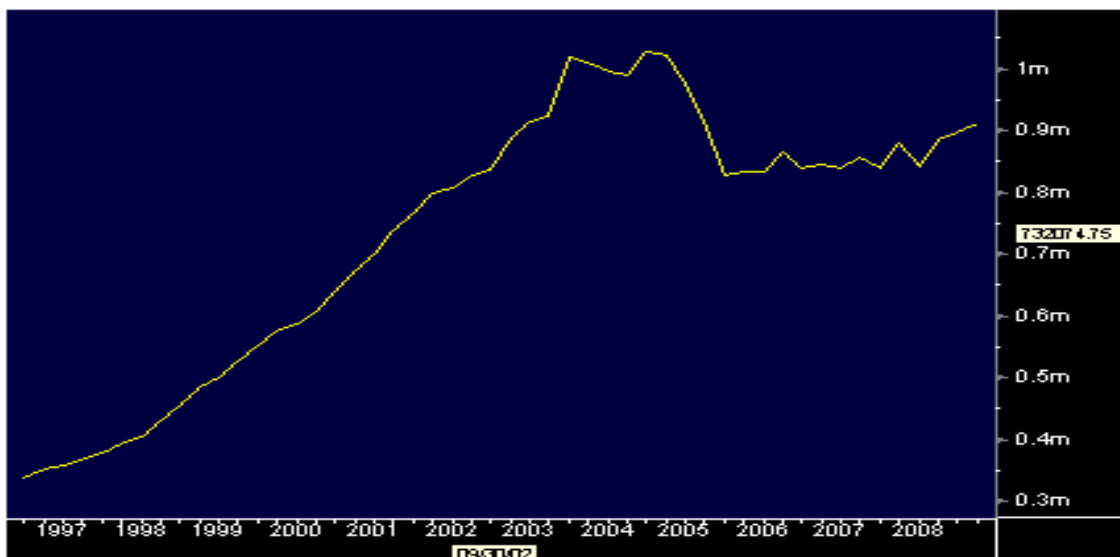
While of course much blame attaches to the banks in all this, in practice it would be difficult, if not impossible, for individual banks to stand against the tide. If, as a bank chief executive, you didn't maximise your return on equity (another reason to prefer debt finance over equity), somebody else would do it for you. As far as the banks were concerned they were merely operating at the efficient frontier of regulation.

Individual regulators would have been subjected to very similar pressures. How often did we hear during the boom that banks and investors in a particular country would cede a crucial advantage to their foreign competitors if their domestic regulator were to be too restrictive in determining what lines of business might be pursued. That threat was real enough as the US found to its cost when restrictive regulatory changes drove what was to become the Eurobond market away to London.

Of course the most significant skewers of market incentives are national governments. The US government, for example, was among the first to appreciate how the capacity to generate limitless cheap finance might be employed to achieve social objectives. In September 1999 The New York Times ran a headline, "Fannie Mae Eases Credit to Aid Mortgage Lending"⁷. The move was specifically aimed at increasing home ownership by helping minorities and low-income consumers. The article went on to highlight the dual pressures on Fannie Mae, the largest underwriter of US home mortgages. On the one hand the Clinton administration exerted considerable pressure on the agency to

extend home ownership to non-traditional mortgage borrowers. At the same time, Fannie Mae was also under pressure from shareholders to execute higher margined business and increase returns on equity. Leverage was the perfect solution to both problems (see Figure 9). While the agency was almost certainly more than happy to comply, there is no doubt that the industry and government were moving in the same direction in terms of the generation of credit.

Figure 9: Fannie Mae's assets peaked at over one trillion dollars



Source Bloomberg

Conclusion

It would, of course, be possible to also include comments about the ratings agencies and the problems inherent with the maturity transformations that sit at the heart of any

banking activity. However, I believe these to be secondary issues to the three broad behaviours that contributed most directly to the current crisis. For sure those banks or vehicles that were excessively reliant on being able to tap the capital markets at will suffered badly (Northern Rock for one), but invariably deeper problems emerged at these institutions as the crisis progressed. Not only that, but without transforming short term call deposits into long term loans, there wouldn't be a banking system at all.

What has been different since the early 1990s though is the behaviour of routine reliance on extremely accommodative monetary policy for extended periods of time in response to perceived threats to economic growth. This period coincided with the tacit acceptance of accelerating global imbalances, which in turn distorted capital flows to such an extent that long term interest rates were driven down to levels almost as extreme as those at the short end.

Finally, there was a complex web of skewed economic and regulatory incentives which essentially created a bias towards debt finance and leverage and against loss-absorbing equity capital. Financial institutions were then further incentivised to employ this leverage “off balance” sheet to enjoy the very best economic returns.

References

1) The Bank of England's remit is to achieve “price stability”, which in practical terms is defined as targeting 2% annual growth in the Consumer Price Index, give or take a percentage point. <http://www.bankofengland.co.uk/monetarypolicy/framework.htm>

2) “any observed statistical regularity will tend to collapse once pressure is placed upon it for control purposes” Goodhart, C.A.E. (1975). "Monetary Relationships: A View from Threadneedle Street". *Papers in Monetary Economics* (Reserve Bank of Australia)

3) The story from the inside, David Blanchflower, The New Statesman, 10th September 2009.

4) Office for National Statistics, Personal Inflation Calculator.

<http://www.statistics.gov.uk/PIC/index.html>

5) The transmission mechanism of monetary policy.

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6) The Financial Times, 16th September, 2007 <http://www.ft.com/cms/s/0/976b7442-6486-11dc-90ea-0000779fd2ac.html>

7) The New York Times, 30th September, 1999. Fannie Mae eases credit to aid mortgage lending <http://www.nytimes.com/1999/09/30/business/fannie-mae-eases-credit-to-aid-mortgage-lending.html>