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# The Credit Crisis: Causes, Public Responses and Beyond

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**Theme:** This paper comments on the causes, public response to and consequences of the credit crisis.

**Summary:** This ARI discusses the main causes of the credit crisis, the short-term responses from the authorities, and some of the regulatory issues arising from it. It argues that lessons from previous crises may have to be re-learned.

**Analysis:**

*Experience is a good school, but the fees are high*
Heinrich Heine

*US Monetary Policy 2000-06: From Crisis Management to Normalisation and Back Again*
Following the initial bursting of the tech bubble in 2000, the recognition by the Federal Reserve that the US economy might be heading for a recession going into 2001 came too late for some observers. Such perfect timing may be asking too much from central banks which are almost institutionally set up to be reactive rather than proactive. Yet when the monetary medicine was finally administered in 2001-04, the radical doses applied gave rise to a much better founded debate. Was it really necessary to leave real interest rates in generally negative territory for more than three years (2001-05) to make up for the weaker stock market and corporate de-leveraging in the period? Several private sector and academic economists raised concerns over the ensuing indebtedness of households.[1]

Happily into an economic recovery from 2004 onwards, monetary policy should now be normalised was the word, and the Fed instituted a series of rate hikes taking the Fed Funds Target rate from 1% in mid-2004 to 5.25% by mid-2006. But the economy was hardly 'normal' in all respects, with an unprecedented level of indebtedness among families and something resembling a housing bubble. Policy normalisation at first seemed to work smoothly. But going into 2006, as rates on Adjustable Rate Mortgages began to reset and delinquencies rose markedly, it became clear that some households were having serious difficulties carrying the higher debt-servicing burden, even if the higher

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[1] www.voxeu.org contains a long list of contributions to this debate. Taylor (2007) documents that a monetary policy in these years more strictly directed by a response function such as his own 'Taylor rule' would have rendered the housing bubble, and hence household indebtedness, much less significant. For a stinging criticism of Fed policy in a wider sense, see Buiter (2008).

policy rates seemed reasonable from a growth and inflation point of view.[2] The subprime mortgage market was most affected. At first, this was dismissed as an isolated phenomenon that would not spill over to other credit markets. But its extensive use as the underlying instrument in structured products became gradually clearer as hedge funds, insurance companies and banks progressively reported losses from this source. By mid-2007, as volume in the interbank market dropped to a minimum, central banks reacted with injections of vast amounts of liquidity into the banking system and, in the case of the Federal Reserve, with a reversal of its interest rate policy which took the Fed Funds Target Rate from 5.25% to 2% by April 2008.

Yet by now the monetary policy tool, which had so successfully countered the effects of the tech bubble implosion in earlier years, was suddenly much less powerful. To critics, previous overdoses had rendered the patient immune to the medicine. In economic terms, a credit crunch was at hand, as banks became reluctant to channel credit to the private sector, restricting its quantity and raising its price.

*Bank Practices and Structured Products*

Monetary policy was not alone in spurring the credit boom. As house prices generally increased, it became common practice among households to 'extract' parts or all of the capital gain via home equity loans, promoted by the financial sector. The newfound gains in the market prices of homes made some commentators question the information value of the saving rate. It was only rational, it was argued, that US households should feel less inclined to save out of current income, since their homes were essentially doing the job for them. Moreover, went the argument, debt levels were actually still low as measured against household equity.[3] Apart from making credit readily available, bank practices arguably added to demand for loans in very straightforward ways, by offering mortgages with extra long-duration, with no or little amortisation, or against only a superficial examination of the credit standing of borrowers. The growth in the subprime and Alt-A mortgage markets became the common denominator for excessively expansive credit policies on the part of financial institutions, further boosted by financial engineering.[4]

Beyond the technical intricacies, CDOs, SPVs and SIVs have at least three features that stand out.[5] First, they have permitted a higher than usual degree of leverage among investors of all kinds. Secondly, their complexity has made an assessment of risk, and especially aggregate systemic risk, an insurmountable task. And thirdly, the fact of the over-the-counter, bilateral nature of they way they had been sold meant that a high proportion had effectively never stood the test of being priced in an open market. The

[2] Some commentators de-emphasise the importance of lax monetary policy. Mizen (2008) argues that '... Short-term rates elsewhere, notably the euro area and the United Kingdom, were not as low as in the United States, but credit grew there too'. To be sure, factors beyond interest rates influence credit demand. But while negative real interest rates do not constitute a necessary condition for a credit boom, they are arguably often a sufficient one.

[3] Fed Chairman Greenspan himself seemed to back that argument, adding that housing markets are less prone to bubbles due to the illiquidity of real estate assets (cf. http://www.federalreserve.gov/newsevents/speech/2001speech.htm and subsequent years). A fallacy of composition seems to be at hand. In order to truly extract value from property one presumably has to sell the asset rather than simply leverage it further. But while this works on an individual level, the whole household sector could hardly get richer simultaneously from such a practice. Measuring leverage as debt-to-equity is thus at best questionable at the macroeconomic level.

[4] Laderman (2001) discusses the origins and the evolution of the subprime market and documents its rapid growth.

[5] Mizen (2008) provides a good, and up to date, discussion of these innovations and the evolution of bank practices in this field.

latter has added considerably to the difficulties of de-leveraging the balance sheets of banks facing problems of liquidity and solvency and made the task of central banks doubly hard. Some implications for future regulation are discussed below.

*Bailing Out the System*

Crises have a remarkable way of schooling the un-initiated in otherwise obscure technical questions and concepts. Financial crises are no exception. Positive as such awareness generally is *ex ante*, policy-makers *ex post* were at pains to avoid problems of moral hazard, excessive leverage in the banking system, misuse of securitisation and distorted incentives of bank executives, all while at the same time passing measures to back-stop a rampant credit crisis that threatened the economy in a very immediate way. The approval of Secretary of the Treasury Henry Paulson's Troubled Asset Relief Program (TARP) in the US Congress is a case in point, and was sadly delayed by bi-partisan politicking due to the proximity of the November election. As is well known, the TARP gives authority to the US Treasury to purchase up to US$700bn of 'toxic assets' from banks thereby assisting their de-leveraging process, improving the transparency of their balance sheet and strengthening their ability to attract new capital.

Concerns over the viability and fairness of the plan have been several-fold. First, the complexity and heterogeneity of the instruments to be sold gave rise to questions regarding the speed with which the plan could be implemented. Secondly, an essential concern is the price to be paid for the assets. On the one hand, a price for assets close to market value would provide no capitalisation and might therefore render the plan insufficient. On the other hand, any price in excess of this would amount to a subsidy to banks (and bankers), an apparent Catch-22 situation. The present Fed Chairman, Ben Bernanke, usefully suggested that some level between the 'fire sale' prices available to banks in the market and a hold-to-maturity price might effectively both assist banks and imply a limited cost to taxpayers.[6] Still, many commentators felt that a direct capitalisation of banks was called for or, put differently, a partial nationalisation, in order to ensure that society took part in the upside potential when the financial institutions had later resuscitated.

Further reflection on this issue would suggest that what really matters is that such plans be sufficiently powerful and 'final'. To be sure, the mere purchase of assets by the Treasury does not give the state access to the upside potential, but it also represents a more limited commitment of public money. For given the systemic nature of the problem, injecting capital into parts of the banking system might not suffice unless the liabilities of the banks are simultaneously guaranteed, making the public commitment more open-ended. In the end pragmatism has justifiably prevailed. Following the British example, most countries are now guaranteeing both bank deposits and bank re-financing across the board, as well as offering routes to inject capital directly into the banking system. Systemic crises arguably warrant systemic responses from the authorities. In spite of the large amounts of money involved, the fiscal cost of these more complete back-stop measures could well turn out to be much smaller than the cost of partial measures which might subsequently turn out to be insufficient. Initial evidence of the measures bearing fruit would be a return to normality of the interbank market followed, at some later stage, by a return to less restrictive lending practices of banks, once the process of de-

[6] See Bernanke (2008).

leveraging has been finalised. Meanwhile the macroeconomic effects of the crisis will inevitably pan out.[7]

*Regulatory Issues*

A previous study by the FDIC discusses the many interwoven and progressively relevant factors involved in the Savings and Loan crisis of the 1980s. Even if excessive lending on the part of financial institutions clearly preceded the crisis it is less clear whether prior regulation or subsequent deregulation was ultimately the cause (FDIC, 1997). Economists of a liberalist hue have argued that bank failures need be no more unmanageable than regular corporate failures, despite the feared systemic risk.[8] Whether or not such a view can prevail will ultimately depend on the quality of regulation and subsequent banking supervision. In this context it is worth reconsidering some of the concepts involved.

Does the fact that banks cannot find buyers for complex structured products represent market failure? Arguably it is not the existence of markets, or any excesses produced by markets, which have been the root cause of this crisis but rather the absence of markets where such might have played an essential role. Markets are 'social institutions' that do not always arise spontaneously. Efforts at product standardisation and transparency, formulation of rules of participation, enforcement of such rules and repetition of transactions constitute essential requirements for markets to exist and function well. The implication would seem to be that financial innovations are by no means detrimental *per se* but that they must pass the test of being marketable and tradable in primary and secondary markets to a greater extent, and left to OTC practices to a lesser extent.

Regulation should seek to promote the construction of such markets by providing an adequate institutional framework for them to exist, much in the way it has been seen in futures and options markets or in instruments like swaps. Such efforts would arguably also diminish the difficulty of designing appropriate accounting rules. Marking-to-market accounting is more likely to provide meaningful valuations if there is something to market to.

A separate issue is the incentive structure of financial companies themselves. Some institutions do effectively appear to be 'too big to fail', as the bail-outs of entities such as Fannie Mae, Freddie Mac and AIG would seem to suggest. But much as a more atomistic banking structure might be attractive from a competition point of view, it is to little avail if it fails to reduce systemic risks. The US experience from the 1980s, of four-digit bank failures, is a case in point. Ultimately, there is no substitute for correct incentive structures on the individual institutional level and supervision of systemic risks on the aggregate level. With respect to the former, careful thought should be given to whether Government Sponsored Enterprises (GSEs), such as the Agencies, and similar entities in the financial system enjoying an implicit state guarantee constitute viable constructs in a modern economy. Perhaps the most important lesson from the Savings and Loan crisis was that entities with a status in between complete public ownership, and the control this implies, and pure private ownership with the absence of public responsibility this (normally) implies, represent the worst of both worlds. If moral hazard is a weed found in most financial gardens, it would seem to grow more vigorously in some than others.

[7] Several public and private institutions now predict a recession both in the US and in Europe. But even if this is not avoided by the bail-out programs it is clear that something grimmer, and rather unquantifiable, might have resulted in the absence of any public response.

[8] See, eg, Kaufman (1996) and Kaufman & Seelig (2002).

**Conclusions:** The paper has pointed an accusing finger at US monetary policy, excessive lending practices, securitisation with no markets, and inadequate regulation. This list could surely be extended significantly and arguments modified or reinforced. While the current credit crisis invariably has some unique peculiarities, it still leaves a sense of *déjà vu*. Attempts at making a special case of the current crisis by pointing to its peculiarities should be resisted. Instead an appeal to general principles borne out of this and previous experiences should be made. Failing that, we may be forced to re-live history yet another time.

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