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The political economy of the subprime crisis: Why subprime was so attractive to its creators

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ABSTRACT

Examination of the origins of the 2008 subprime crisis reveals that what occurred was no accident. All the major parties responsible for the crisis appear to have gained something from what transpired, at least in the short-run. Moreover, it seems to have been as much, if not more, a failure of government and its agencies inclusive of regulators as much as any failure of capitalism. Finally, the apparently arbitrary, if not self-interested, bank bailouts seem to indicate that governments are likely to directing bank policy for some time.

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1. Introduction

One of the defining features of the subprime crisis is to see it as a natural outgrowth of a policy of utilising both public funds and regulatory pressure to increase home ownership, especially by minorities such as African-Americans and Latinos. The origins of this public policy in favour of "affordable" housing lie in the Great Depression and the 1938 decision by President Roosevelt to found Fannie Mae (Federal National Mortgage Association) to add to housing liquidity by purchasing and insuring home mortgages. Home ownership rose from 43% during wartime to 62% in 1960. In 1968 Fannie Mae was privatised and any public guarantee for its debts was purely implicit. In 1970 Freddie Mac (Federal Home Mortgage Corporation) was set up to extend the work of Fannie Mae and to offer mortgage backed securities as a way of collateralising home mortgages and spreading the risks. From 1992 until almost the present day these organisations were encouraged to make "affordable" loans. Under the Clinton administration the growth in African-American home ownership was three times as fast as whites and for Latinos, five times as fast. Enforcement of the 1977 Community Reinvestment Act requiring banks to subsidise low-income communities and Fannie Mae and Freddie Mac were required to increase mortgages to low and median income borrowers and by 1997 loans to blacks grew by 72% (Brownstein, 1999).

In 1993 the National Homeownership Strategy was launched by Henry G. Cisneros, head of Department of Housing and Urban Development (HUD). Proof of stable income was reduced from five to three years and, more significantly, borrowers could use their

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own appraisers, giving rise to appraisal fraud. Lenders no longer had to interview government-insured borrowers or maintain physical branch offices. Lenders such as Countrywide were encouraged to service borrowers with a poor credit history with "subprime" loans. Home ownership rose to 67.4% by 2000 and to 69% by 2006. Mr Cisneros left HUD to set up a housing development company, which was subsequently fined for approving overstated or improperly documented loans (Streitfeld and Morgenson, 2008). Community action groups such as ACORN (Association of Community Groups for Reform Now) could protest to the Federal Reserve, Comptroller of the Currency, Office of Thrift Supervision and FDIC (Federal Deposit Insurance Corporation) if any bank refused to make subsidised loans (DiLorenzo, 2007).

Both Fannie Mae and Freddie Mac indulged in "crony capitalism" with Freddie Mac fined \$3.8 million in 2006 for illegal campaign contributions (Associated Press, April 18, 2006). Both U.S. President-elect Senator Barack Obama and John McCain were alleged to have received favourable treatment from Fannie and Freddie (Calmes, 2008). It can be seen from this involvement by the respective leaders of the Democrats and Republicans that the origins of the subprime crisis lay right at the heart of the American political system.

2. Excess liquidity

For the fundamentals underlying the global subprime crisis, we need look little further than the unprecedented actions of Alan Greenspan, Chair of the Federal Reserve, in lowering the Federal Funds Rate (FFR) from 6.54% in July 2000 to 1.1% by July 2003. This was one of the most dramatic policy interventions up until that time. Greenspan injected huge amounts of liquidity into the US economy and lowered interest rates due to fears of recession stemming from the hi-tech meltdown commencing in 2000 and the 9/11, 2001, assault on the United States. Three years later, in July 2006, the rate was back at 5.24%. According to press reports, Greenspan has personally done very well following his retirement as a speaker earning huge fees. The "irrational exuberance" he gave a name to, exemplified his period in office setting monetary policy. Moreover, much of this exuberance seems to have been inspired by the very extreme nature of the policy interventions that he initiated. He presided over one of the largest asset price inflations in recent history.

Chart 1 shows the Federal Funds Rate (Federal Reserve, 2008) on the LHS and the Case-Schiller House Price Index for Miami on the RHS for the period January 2000 to July 2008. While Miami in Florida and the two Californian cities, Los Angeles and San Francisco, are some of the most affected, the volatility of the overall 20-city index is not as extreme but very similar in terms of its pattern. When the FFR started to decline in January 2001, the Miami House Price Index was at 110.3 and it peaked in December 2006 at 280.9, a gain of 155%. The gain on the Composite Index was more modest at 81%. By the time the housing market peaked, the FFR had already competed its fall to one percent and climbed back to 5.24%. The subsequent fall in Miami prices to July 2008 was very considerable at 33.5%, and for the Composite, 18.25%. Perhaps US\$5 trillion has already been wiped off the value of the U.S. housing stock (Bardhan, 2008).

While the link to the FFR interest rate mechanism is by no means precise and involves considerable lags, the exceedingly high provision of liquidity by the Federal Reserve clearly played a role in the housing price bubble and subsequent collapse. For example, the much lower return on "safe" investments such as Treasury Bills may have encouraged lenders to seek higher and riskier returns

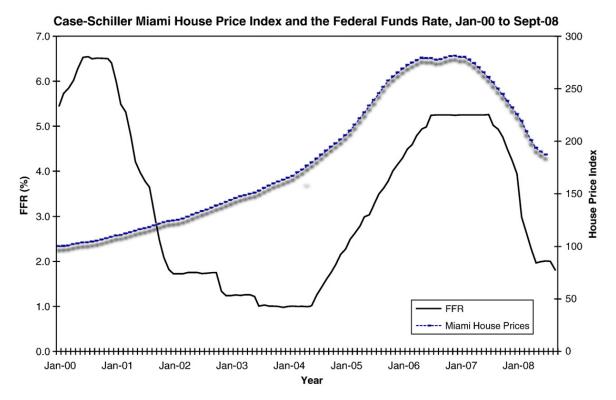


Chart 1. Case-Schiller Miami House Price Index and the Federal Funds Rate, January, 2000 to September 2008.

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following the massive decline in the FFR while the regulatory actions that promoted mortgage acquisition and insurance by Fannie Mae and Freddie Mac encouraged borrowers and appeared to lower risk via an implicit government guarantee that subsequently was made explicit. When house prices were escalating rapidly, the perceived risk seemed very low.

3. Nature of subprime loans

During the period, 2001 to 2005, the number of sub-prime loans issued increased by 451%, from 624,000 to 3,440,000, falling to 2,646,000 in 2006, while the average value increased by 72% from US\$151,000 in 2001 to \$259,000 in 2006. Subprime loans issued in 2001 totalled US\$94 billion but by 2006 this had risen by more than seven-fold to US\$685 billion (Demyanyk and Hermert, 2008). These loans are reported from a database that contains about 85% of all securitised subprime mortgages. Subprime loans all have a higher default risk than prime loans due typically to a combination of a low credit score for the borrower, a lender who specialises in high-risk loans, a high projected default rate and mortgage contract type (e.g., no money down and no documentation). In 50% of cases the loan was designed to extract cash from an existing property, fuelling higher consumption and imports. In only 30 to 45% of cases was the loan for the purchase of a new house.

Over the period 2001 to 2004, the spread between prime and subprime mortgages declined from around 2.8% to as little as about 0.6%, rising to just over one percent by 2007 (Demyanyk and Hermert, 2008). The substantially declining spread, commencing from an already low differential, suggests a very high demand for securitised mortgages, e.g., collateralised debt instruments, indicating an excess supply of risk capital over this period and doubtless also, ignorance as to the true nature of these assets. Subprime loans increased as a percentage of all mortgages from 1.4% in 1994 to 18.7% in 2002 with the proportion securitised rising from 31.6 in 1994 to 62.5% in 2002 (Danis and Pennington-Cross, 2008).

Other countries have seen similar circumstances. For example, Australia, in common with may other countries, is by not immune from this process described for the U.S. A recent Australian Parliamentary inquiry (House of Representatives Standing Committee on Economics, Finance and Public Administration, 2007) finds that real house prices have more than doubled over the past two decades in Australia, despite Australia having since 2003 the highest mortgage interest rates in the world. Nonetheless, Australian circumstances would appear to have been different with rising demand due to immigration, housing shortages and rising rents.¹

Michael Lewis (2008), the author of a very popular expose of the financial sector, Liar's Poker, describes the short selling activities of one of the earliest financial traders to identify problems with subprime loans, Steve Eisman, as early as 2005:

"And short Eisman did — then he tried to get his mind around what he'd just done so he could do it better. He'd call over to a big firm and ask for a list of mortgage bonds from all over the country. The juiciest shorts—the bonds ultimately backed by the mortgages most likely to default—had several characteristics. They'd be in what Wall Street people were now calling the sand states: Arizona, California, Florida, Nevada. The loans would have been made by one of the more dubious mortgage lenders; Long Beach Financial, wholly owned by Washington Mutual, was a great example. Long Beach Financial was moving money out the door as fast as it could, few questions asked, in loans built to self-destruct. It specialized in asking home-owners with bad credit and no proof of income to put no money down and defer interest payments for as long as possible. In Bakersfield, California, a Mexican strawberry picker with an income of \$14,000 and no English was lent every penny he needed to buy a house for \$720,000."

One way this desire to take risks was reflected in balance sheets can be seen from financial information released by the investment bank, Lehman Brothers, in 2008 prior to its declaration of bankruptcy on September 15, 2008. Its leverage ratio (total assets divided by total stockholders equity) was very high at 34.9 fold in the quarter ended 29 February 2008 when the assets were \$761 billion, 30.7 fold in 2007 and up from 23.7 fold in 2001 (Lehman Brothers, 10Q Filing, February Quarter, 2008 and 2007 Annual Report). Higher debt levels, to avoid what became known as "lazy balance sheets", was something highly prized by the major investment banks that all owned brokerage houses. On April 28th, 2004, the U.S. Securities and Exchange Commission (SEC) exempted these brokerages from credit limits, enabling even higher gearing into subprime mortgages (Labaton, 2008). Despite this apparent connivance by the regulator as investment banks took on more debt, Richard Fuld, the CEO of Lehman Brothers, was hauled before Congress as the scapegoat for the subprime crisis after the collapse of the bank. One Congressman told him publicly: "You're the villain today" (Fishman, 2008).

It seems inconceivable that Lehman Brothers, or any of the major investment banks for that matter, would have taken on such risks if they had remained partnerships with all partners individually and collectively liable for debts. In the first quarter of 2008 for which Lehman's provides complete accounts, income was \$663 million compared with \$1669 in the corresponding quarter the previous year. At 31st August, 2007, Lehman's balance sheet indicated only \$1.66 billion of unrealised losses on mortgage and asset-backed securities, which does not seem, in and of itself, sufficient to have precipitated the filing for bankruptcy. Opacity remains the watchword here with considerable losses hidden in either the accounts or off-balance sheet. On June 9, 2008, Lehman's posted its second quarter 2008 earnings, reporting a loss of US\$2.8 billion for the quarter and on September 10, US\$3.8 billion for the third quarter. This is a combined reported loss of US \$6.6 billion over the final six months. Yet for 14 years, the CEO, Richard Fuld, had achieved an average growth rate in the stock price of 25% (Fishman, 2008). By comparison, these reported losses were quite small.

¹ Rents for units in some areas of Sydney commenced to fall in the last month or so (as of December, 2008) due to layoffs of many professional in the financial sector and elsewhere (Sydney Morning Herald, December 5, 2008).

The U.S. Treasury Secretary, Henry Paulson, was about to bail Lehman's out for US\$70 billion, but the deal fell through at the last moment and Lehman's filed for bankruptcy a few days later (Fishman, 2008).

There are many myths about the subprime crisis. One in particular is that it was caused by low "teaser" rates and that defaults occurred when the teaser rates were reset at much higher (six percentage points) (floating) rates after two or three years. For a sample of subprime loans for the State of New England analysed by Foote, Gerardi, Goette, and Willen (2008), this is not the case. In fact, many borrowers defaulted well before the reset date and the "teaser" rates were already quite high. Thus the problems of subprime went far deeper than teaser rates. Given that defaults on subprime loans took place even when considerable equity should have been accumulated during the period of rising house prices, what could explain this? It would appear, as already indicated, that a sizeable proportion of subprime loans were used for consumption purposes, that is, to get cash out.

4. Role of securitization in opacity

A major element, if not the major element, in the subprime crisis is securitisation. Apart from the undoubted gains that may accrue from "slicing and dicing" the risk inherent in mortgages in such a way as to potentially benefit different kinds of risk bearers according to their capacity to bear risk, the major benefit it to the issuer that wishes to take liabilities off the balance sheet. Table 1 shows the benefits of securitisation to an issuing entity such as a bank. A debt/equity ratio of 100% can be reduced to (say) 10% by selling bundled securities to a special purpose vehicle (SPV) that is notionally distinct from the issuer's balance sheet. Due to the presence of cross-guarantees and the like, the reality is usually quite different from the notional separation.

Thus the first casualty of securitisation is transparency of the accounts. The balance sheet is now far more opaque. This ability to hide or disguise debt from investors and regulators is perhaps even more valuable in the public sector than in the private sector. Thus it is not surprising that one of the first proponents of mortgage securitisation in Australia were the State Governments (NSW, Victoria and Western Australia). For, example, the NSW Government set up FANMAC (First Australian National Mortgage Acceptance Corporation) that it partially owned to serve a similar role to Fannie Mae and Freddie Mac in the U.S. by issuing securitised mortgages for the provision of low-cost housing that would be State guaranteed (Butera, 1998). The aim was to disguise the debt by removing it from the State balance sheet given that the Loans Council set up by the Commonwealth Government and the States limited State indebtedness. By 1992, the cumulative losses made by FANMAC had cost NSW taxpayers in excess of \$475 million in the dollars of the day (Ferris, 2008). Thus Australia managed to anticipate many of the features of the current subprime crisis, inclusive of both opacity and substantial government bailouts.

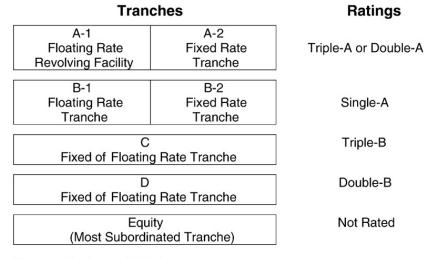
Not only does securitisation result in opacity via (appearing to) remove debt from balance sheets, something that Enron indulged in on a massive scale prior to its filing for bankruptcy on December 2, 2001, (e.g., see Timeline of Enron, 2008 and Feldstein, 2002) but the securities created through this process are themselves exceedingly complex and opaque. Mortgage Backed Securities (MBS) typically contain many tranches of securities with different seniority classes and these are often split into interest only and principal only strips and many other flavours (Mason and Rosner, 2007). A typical Collateralised Debt Obligation (CDO) might have the following structure (Chart 2):

The rates for the different tranches might range from LIBOR + 26 basis points for AAA to LIBOR + 475 basis points for Class D (BB rating) with 77.5% rated as AAA. So opaque are these over-the-counter CDO and MBS securities that none of the regulatory agencies such as OCC, Federal Reserve, or FDIC are deemed "qualified investors" and thus the regulators are not permitted access to the relevant documents on these securities (Mason and Rosner, 2007). According to Michael Lewis (2008), the subprime shorting specialist, Steve Eisman, knew that loans that "might be rated BBB, threw them into a trust, carved the trust into tranches, and wound up with 60% of the new total being rated AAA." Thus it would appear that the rating agencies fell into the same trap as many of the borrowers in assuming that real estate prices would either keep on rising or at least never fall. Even with the protection

Table 1Balance sheet impact of securitising assets of ABC bank

Assume, for expository purposes Assets liabilities equity ratio: Receivables \$100, debt \$100, equity \$100 debt/equity=1/1 Equipment \$100 1. If ABC Bank borrows \$100, secured by its receivables, its ratio of debt to equity deteriorates Assets liabilities equity ratio worse Cash \$100, debt \$200, equity \$100, debt/equity = 2/1 2. But if ABC Bank sells \$100 of its receivables (for example to an SPV) Assets liabilities equity ratio unchanged Cash \$100 debt \$100 Equity equity \$100 debt/equity=1/1 Equipment \$100 3. And if ABC Bank then uses (for example) \$90 of its cash to pay off some of its debt, its ratio of debt to equity dramatically improves Assets liabilities equity ratio improved Cash \$10 debt \$10 Equity equity \$100 debt/equity = 1/10 Equipment \$100 (The table assumes that the receivables are sold at face value) Source: Schwarcz (1993)

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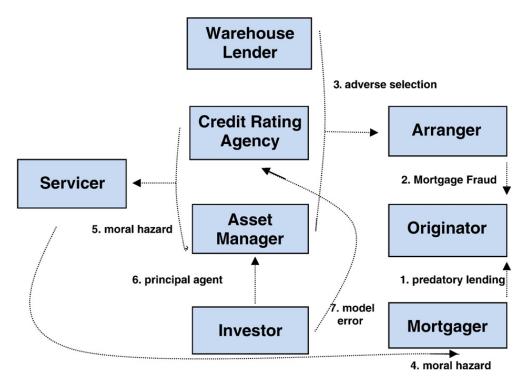
Source: JP Morgan (2001).

Chart 2. Example of a typical collateralized debt obligation.

afforded by giving priority over the entire CDO to the highest-rated AAA tranche (i.e., the bottom 40%), it is very hard to see how so much of the CDO could otherwise be rated AAA.

5. Agency issues

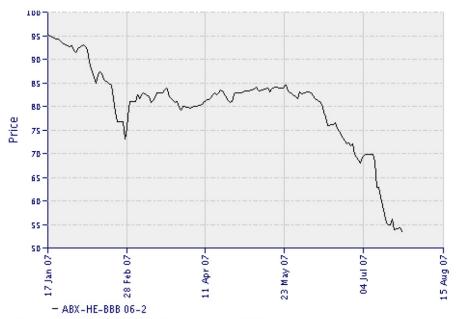
Fig. 1 illustrates the complex process involved in securitization of mortgages and the nature of the possible issues and failures at each stage. The borrower (mortgagor) may be subject to predatory lending by the originator, of which \$600 million issued in 2006. The arranger (issuer) organises every aspect of the process. The originator could understate the nature of the risks involved and it has been documented that arrangers often forego the necessary due diligence on the loans (Rucker, 2007). The arranger underwrites the loans but knows more that the asset manager or credit rating agency giving rise to an adverse selection problem. There is a moral hazard problem leading to altered behaviour according to how the risks are shifted. There can be severe moral



Source: Ashcraft and Schuermann (2008)

Fig. 1. Key players and frictions in subprime mortgage credit securitisation.

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Source: Ashcraft and Schuermann (2008).

Chart 3. Decline in the Price of the ABX-HE-BBB CDO from January 17, 2007 until 15th August, 2007 as Shown by the Markit Index.

hazard issues between the investor (e.g., various NSW councils that have invested heavily in subprime) and the asset manager (e.g., Lehman Brothers).

6. Decline in value of mortgage backed securities

The graph depicted in Chart 3 shows the decline in the price of BBB rated securities based on the Markit ABX index (Ashcraft and Schuermann, 2008). Over the period the implied spread increased from 300 to about 900 basis points in February and, finally,

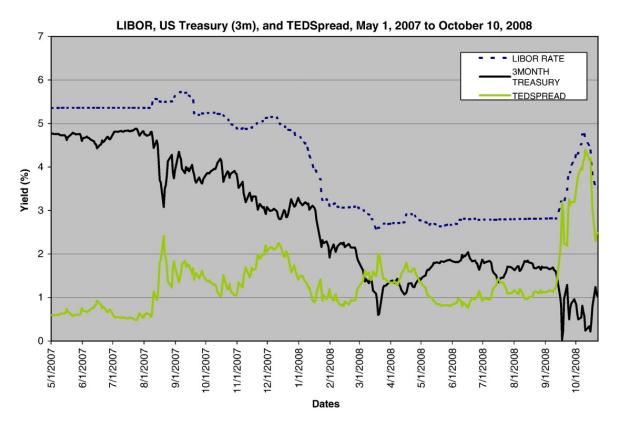


Chart 4. LIBOR, U.S. Treasury (3 month) and TEDSpread, May 1, 2007 to October 10, 2008.

by about 1800 basis points in August. Investors were becoming increasingly wary about taking on risks of MBS. In part at least, it was the visibility (transparency) of the Markit indexes that first alerted investors to the risks associated with subprime.

7. Counterparty risk and the flight to quality

In Chart 4 I have plotted the 3 month LIBOR rate for U.S. securities, the corresponding three month U.S. Treasury rate and the difference which is known as the TEDSpread. There was a sizeable jump in the spread during August, 2007. At this stage the Markit indices for subprime were already showing substantial declines. The flight to quality and the actions of the U.S. Federal Reserve can be seen in the decline in the yield on Treasuries to under one percent in March 2008. The large jump in the spread occurs in September and October 2008 when the yield on Treasuries fell to almost zero and the spread jumped to an unprecedented level of over 450 basis points (4.5%).

8. Bank failure and bailout

One of the first dominos to fall was not in the U.S. where it could have been expected but in the U.K. where the fifth largest mortgage lender, Northern Rock, suffered a bank run in September 2007. This was the first bank run since 1866 for a British bank. Ironically, it immediately followed a substantially higher dividend payout due to relaxed capital adequacy requirements (Blundell-Wignall and Atkinson, 2008). Like non-traditional banks and mortgage providers in Australia, Northern Rock relied on wholesale funds rather than depositor funds. It also relied heavily on securitisation. The Bank of England announced on September 14 that it would act as a lender of last resort and on the 17th that it would guarantee all of the bank's existing deposits. Various other extensions of the commitment were announced on September 20. The movement in the prices of other U.K. banks on these dates can largely be explained by their exposure to the wholesale market (Yorulmazer, 2008). These findings suggest that equity markets do not simply reflect "blind panic" during the crisis but do reflect real differences in risk exposure.

In the U.S. the failure of Lehman's on September 15, 2008, with approximately \$639 billion in assets, is the biggest bank failure in U.S. history. Mortgage banks Washington Mutual (\$307 billion) and IndyMac (\$32 billion) also failed. Wachovia (\$812 billion on 30 June, 2008) was acquired by Wells Fargo. Wachovia made an \$8 million bailout loan to the National Republican Congressional Committee while it was in negotiations over its own bailout (Kromm, 2008). On the same date the Irish Government provided loan guarantees to its banks. A similar guarantee in the U.S. would amount to \$30 trillion (Harvey, 2008).

While the complete guarantee that Prime Minister Rudd has made to all Australian bank depositors has not been costed, it is also likely to be of a sizeable order of magnitude. The Federal Reserve moved to guarantee the debts of Bear Stearns when absorbed by JP Morgan Chase, the debts of Fannie Mae and Freddie Mac² and a US\$85 billion loan commitment to the insurer, AIG (American International Group) that has credit default swaps with a notional value of \$441 billion.

On October 3, 2008 the U.S. Treasury Secretary, Henry Paulson, obtained Senate approval to spend up to US\$700 billion buying subprime related mortgage assets. This sum is nonetheless small compared to possibly \$7 trillion in subprime related mortgages and over \$40 trillion in CDOs and related derivative instruments written on home mortgages. However, a little over a week later when the U.K decided to purchase equity in potentially failing banks and guarantee new debts, Paulson decided to follow suit by reversing his previous stand. He outlaid \$125 billion on ten banks including \$10 billion for Goldman Sacks (he was the former CEO of Goldman's prior to taking up his Treasury post) with one of the most generous bailouts again being provided to AIG. The Government also guaranteed all new issues of bank debt for a period of three years. The Government also bailed out Citigroup with a guarantee of US\$306 billion for its most toxic assets and \$20 billion in cash in return for \$27 billion in preference shares (Economist, 24th November, 2008). A study by Mian, Sufi and Trebbi (2008) of Congressional voting patterns finds that politicians tend to transfer taxpayer income to defaulting borrowers in their own electorates.

Veronesi and Zingales (2008) use an event study methodology to examine the impact of the revised Paulson plan. They find that the market response to the announcement reflects little more than pure transfers from the taxpayer, largely to debt holders in the banks. There is no evidence of gains accruing from a reduction in systemic risks such as bank runs and they argue that the same benefit to the banks could have been achieved at a far lower cost to taxpayers. There is no evidence of gains to the public or other social benefits that might offset the cost to the taxpayer.

In effect, the U.S. government has now been captured by the recipients of hundreds of billions in taxpayer largess and must keep on upping the ante now that it has declared that all the banks with the one exception of Lehman's are "too big to fail".

9. Australian reaction

Following in the footsteps of the FDIC³ and the U.K. Government but on a grander scale, Prime Minister Kevin Rudd announced, on October 11, 2008, a guarantee on the entire deposits of about \$700 billion in Australian banks without limit for a period of three years. Bank borrowings made overseas would also be guaranteed. Following a flight of capital out of non-deposit taking institutions and restrictions on withdrawals from a variety of financial institutions, Rudd announced October 23, 2008, that there would be an

² In July 2008, the U.S. Congress passed the American Housing Rescue and Foreclosure Prevention Act (AHRFPA.), a bill that provides up to \$300 billion in Federal Housing Administration insurance for renegotiated mortgages and unlimited support for Freddie Mac and Fannie Mae.

³ See FDIC (2008). Posner and Vermeule (2008) estimate a potential liability to the U.S. Government alone of over US\$1 trillion on debt guarantees.

insurance charge for deposits of over \$1 million. There appears to be no evaluation of costs of this guarantee, but in the event of significant losses the costs to the taxpayer could be high. One might argue that bank deposits were already implicitly guaranteed by the Reserve Bank of Australia, which could use its powers as "lender of last resort". In the past it has used its powers to have failing banks acquired by more profitable banks so that depositors in regular banks have not so far suffered loss, although the same is not true for some building societies and other kinds of institutional investor.

10. What needs to be done?

Certainly, we do not need "kneejerk" bans on the messenger, the short-seller. Rather, regulatory regimes, particularly in the U.S., need to be overhauled to provide transparency. Artificial devices to remove debts from the purview of investors and regulators, such as special purpose vehicles and opacity-creating CDOs, need to be subject to severe regulation. One possible solution is to require trading on transparent exchanges that mandate margin calls in the event of asset price declines and for the CDOs themselves to be transparent (e.g., a simple pass-through). The roots of the crisis lie in the abolition of the partnership governance arrangement for investment banks, and its replacement by private shareholders who have largely been kept uniformed, as very complex instruments have been adopted by banks, largely to avoid scrutiny.

Moreover, the nature of CDOs and MBSs has meant the introduction of an almost entirely trading-based security system in which originators of subprime loans play "pass the parcel" in an effort to earn high fees before the high toxicity of the product becomes widely known. As a result, the participants have "no skin the game", i.e., no residual ownership of the riskiest asset classes, or at least act as if they had none. As it turns out, they have massive "skin in the game", whether they knew it or not, with corresponding overwhelming losses. For example, Richard Fund, who had headed Lehman's since it was relinquished by American Express in 1994, lost personal wealth of over US\$1 billion as he held on to his ten million shares until the end (Fishman, 2008).

With a traditional mortgage that remains with the bank, the system is "incentive compatible" as bad loans will drive down the value of claims held by the bank, so that there will be greater reluctance to make such loans in the first place. The other major driving force has been the political aim of governments of all persuasions to encourage loans to the poor and under-privileged. Good intentions make bad policy. Regulatory policy in the U.S. especially has encouraged bank insolvency rather than the opposite. In fact, the regulators were complacent in such a way as to exacerbate the crisis. For example, in 2007 the IMF announced that even with substantial house price falls there would be negligible subprime losses, and the redesign of the world's banking system under Basel II meant that \$220 billion in equity capital was no longer required to support mortgage credit (Blundell-Wignall and Atkinson, 2008).

A popular scapegoat for the subprime crisis has been executive pay policies, particularly CEO remuneration, which has supposedly encouraged excessive risk taking and, although often tied to the stock price, the claim is often made that incentives have been effectively short-term in nature. Richard Fuld, the CEO of the failed investment bank, Lehman Brothers, would normally pay bonuses to staff substantially in the form of stock in the company. Moreover, these stock grants would not fully vest for a period of five years (Fishman, 2008). Clearly, the use of these market-based incentives, combined with quite conservative vesting arrangements to encourage employee retention and a longer-term perspective, were not enough to save Lehman Brothers.

Are governments in future going to set both the dividend and pay policies of most banks now that the banks have been effectively nationalized by bailouts, combined with depositor and borrower guarantees? We are left with the question: are politicians in what has become, effectively, a socialised banking system, the best people to be setting bank lending policies and making investment decisions on citizens' behalf?

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