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Systemic Failure of Private Banking: A Case for Public Banks

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Abstract

The current crisis represents systemic failure of private banking. The private nature of banks has created opacity, and exacerbated problems of liquidity, bad assets and capital shortage. Furthermore, private banks have failed in information gathering and risk management, as well as in mediating the acquisition of vital goods by households. It is paradoxical that, confronted with such systemic failure, post-Keynesian and other heterodox economists have generally made non-systemic reform proposals. This paper draws on Marxist theory to argue that systemic change is necessary, including conversion of failed private into public banks run transparently and with democratic accountability. Public banks could more easily confront the problems of liquidity and solvency; they could also play a long-term role by providing stable flows of social credit to households as well as to small and medium enterprises. Finally, public banks could provide long-term credit redirecting mature economies toward new economic activities.

1. A systemic financial crisis requires a systemic response

At the core of the current crisis lies systemic failure of private banking - both commercial and investment. The failure is systemic because the crisis has been caused by the interaction of several components of the financial system, above all, banks. No single element of finance is uniquely at fault, and nor has the turbulence been caused by malpractice in a small number of institutions. The failure is also systemic because several large commercial banks in the USA, the UK and elsewhere have been effectively bankrupt during 2008-9. Had governments allowed these to fail, it is probable that there would have been general banking collapse. On the other hand, mere prevention of bankruptcy through extraordinary measures has not resolved the underlying systemic banking problems. As a result, there has been persistent disruption of the supply of credit, exacerbating the global recession. It is unlikely that sustained accumulation will be restored without confronting the failure of banking.

The systemic nature of the crisis has been highlighted by heterodox economists, particularly post-Keynesians. For a brief period in 2007-8, talk of a 'Minsky moment' even attained global prominence (Whalen 2007). The content of this 'Minsky moment' has never been entirely clear, but the term drew on Minsky's theory of endogenous financial instability (1986, 1992, 1996; and Minsky and Whalen 1996). Minsky claimed that 'money manager capitalism' had emerged in the USA after the Second World War, pivoting on pension and mutual funds, and favouring short-termism. Thus, 'money manager capitalism' encouraged the systematic migration of capitalist enterprises from 'hedge' to 'speculative' to 'Ponzi' finance. Consequently, financial fragility has increased steadily during the last several decades.

Minsky's theory certainly posits financial instability as a systemic aspect of contemporary capitalism. Yet, despite appearances, it does not immediately fit the current turmoil. This, after all, is a crisis induced by mortgage loans to poor households that were subsequently securitised, thus ruining banks and other financial institutions. It has little to do with industrial or commercial enterprises migrating toward Ponzi finance. Indeed, the productive sector has not suffered from excessive leverage throughout the period.

This difficulty has been clear to some post-Keynesians, including Kregel (2008), who has suggested a compromise. For Kregel, the crisis is Minskyan because adjustable rate subprime borrowers acted as Ponzi units that relied on remortgaging and house price increases to finance past loans. More significantly, the crisis is also Minskyan because, during the bubble, banks exhausted their liquidity cushions, rendering themselves

vulnerable to subprime default. Along similar lines, Nesvetailova (2008) claimed that the systemic disappearance of liquidity is a Minskyan process characteristic of the crisis.

Other heterodox economists have used Minsky in a more generic sense, but similarly to stress the systemic aspects of the crisis. Thus, Wray (2007, 2008) put forth detailed analytical descriptions of the US housing market as well as of the process of securitisation. The analytical link with Minsky appears to be the Ponzi nature of adjustable rate subprime borrowing as well as the spread of fragility as money-manager capitalism took hold in the USA. More complexly, and relying on a far broader range of analytical and institutional arguments, Crotty (2008, 2009) has claimed that the crisis is due to the New Financial Architecture that has emerged during the last three to four decades. A globally integrated system comprising giant banks and 'shadow banks' gradually took shape encouraging excessive risk taking. For Crotty, relevant insight into risk, and therefore into the inherent instability of this system, are offered by Minsky but also Keynes and Marx.

The emphasis laid by post-Keynesians on systemic aspects has been a major strength of their analysis of the crisis. This makes it all the more striking, therefore, that the proposed reforms and policy changes have been non-systemic. Thus, Kregel (2009a, 2009b), has suggested that shortages of liquidity should be dealt with by raising wages instead of lowering interest rates to zero. He has also advocated universal banking (combining commercial and investment banking activities) but with closer matching of maturities and tighter control over the size of loans, emulating German practices.

Similarly, Crotty and Epstein (2008, 2009) have offered a nine-point programme for financial regulation that ranges from reducing asymmetric incentives and moral hazard by regulating bonuses, to extending regulatory oversight over 'shadow banking', to prohibiting the sale of 'too complex' financial securities, to adopting countercyclical capital adequacy requirements. These several and partial reforms are in the same spirit as the measures suggested by D'Arista and Griffith-Jones (2008), the list of regulatory changes recommended by Pollin (2009), the brief suggestions by Wray (2009), and the finance section of the radical manifesto issued by Ash et.al. (2009).

It is instructive in this respect to note parallels and differences with mainstream analyses of the crisis. Mainstream economics is aware of the systemic nature of the crisis, but lacks systemic theories of financial instability. Nonetheless, it has already put forth concrete empirical accounts of institutional faults within the financial system that have mutually interacted and presumably led to disaster (Brunnermeier 2009). Not surprising, theoretical emphasis has been laid on the disappearance of liquidity. An influential model has shown that 'funding liquidity' (the ease of borrowing by the trader) and 'market liquidity' (the ease

of selling an asset) could be mutually destabilising, if margins rose due to imperfect information of financiers and rising fundamental volatility (Brunnermeir and Pedersen 2008). Earlier and related work had shown that vicious circles of market liquidity were possible, and if panic appeared, liquidity could disappear down a 'black hole' (Persaud 2002). Furthermore, mainstream theorists are aware of the systemic failure of risk management by banks, describing the underlying cause of the crisis as 'mispricing of risk' (Goodhart 2008).

Remarkably, mainstream economists have been more daring - and even more systemic - in recommending reform than post-Keynesians. Several partial reforms, including countercyclical regulation of capital adequacy, maturity matching of assets and liabilities, altering banker remuneration, changing the flawed practices of credit rating, and more, have been proposed (Brunnermeir, et. al. 2009; Dewatripont, et. al. 2009). However, other mainstream economists have also recommended outright nationalisation of banks (Stiglitz 2009, Posen 2009). To be sure, this was seen as a short-term step allowing for a more efficient handling of the crisis, and banks were eventually to be rendered back into private ownership. Yet, the radical aspect of the proposal, tackling ownership and control relations at the heart of the crisis, cannot be gainsaid.

In comparison post-Keynesian reform proposals appear hesitant, something that is probably related to Minsky's own reluctance to advocate public or communal finance. But such timidity is problematic in view of the depth of the current crisis. Private banking has failed in a systemic way, and responses to it should be equally systemic, with the aim of permanently changing the balance between private and public in finance. Public banks could be instrumental in effectively confronting the crisis as well as restructuring the financial system and the economy for the long term.

Public banks are a long-standing socialist demand, put forth by Marxist economists (for instance, Hilferding 1981). Examining their potential role in the current crisis, therefore, offers scope for fruitful interaction between post-Keynesian and Marxist approaches to finance. There is a long record of exchange of ideas between the two currents, the roots of which can be found in the nineteenth century monetary tradition of the Banking School. The present crisis allows - but also calls - for wider cross-fertilisation of heterodox approaches on finance. The severity of the crisis and the complex economic problems it has posed require selective drawing on the full armoury of alternative ideas on finance, theoretical differences notwithstanding.

In the rest of this essay a case is made in favour of long-term establishment of public banks. Attention focuses primarily on the USA and the UK but the case holds more generally. The

analytical framework is provided by Marxist theory of finance, particularly recent work on financialisation by Lapavitsas (2009, 2010) and Dos Santos (2009), while empirical insights are drawn from Dymski (2009). In sum – and discussed in more detail in section 3 below - financialisation represents a structural transformation of mature capitalist economies that has gathered pace since the 1970s and comprises the following three key domestic elements.

First, industrial and commercial enterprises have become adept at obtaining external finance in open markets, thus lessening their reliance on banks. Enterprises have become financialised in so far as they have acquired financial capabilities, learning to generate profits in open financial markets and through other financial transactions.

Second, and partly as a result of the first, banks have been transformed while developing new fields of profitability. On the one hand, banks have turned to open markets as source of trading profit as well as profit on own accounts, fees and commissions. Such profits typically result from investment banking activities, which banks have learnt to pursue in conjunction with commercial banking. The combination of the two has been highly unstable and a fundamental cause of the current crisis. On the other hand, banks have turned to individual income as a source of profit. This typically involves lending for mortgages, consumption and so on, but also charging fees to manage accounts and handle assets of individuals.

Third, the personal income of workers and others has become financialised in terms of both debts and assets. Real wages have been stagnant or growing at low rates during this period, while public provision in housing, health, education and pensions has retreated. Consequently, private finance has emerged as mediator of the acquisition of vital goods that enter the wage basket, such as housing. At the same time, private finance has come increasingly to handle savings and other provision of workers for old age. The emergence of private finance as mediator of workers' consumption and savings has allowed it systematically to extract profits directly out of wages and salaries. This process has elsewhere been characterised as financial expropriation (Lapavitsas 2009).

In this light, the turmoil that commenced in August 2007 represents a crisis of financialisation. In the 2000s private finance intensified its turn toward personal income, buttressed by investment banking activities, above all, securitisation. The extraction of profits out of wages and salaries was combined with profit-making through securities trading, leading to a huge financial bubble in the USA and the UK. The failure of private banking thus also stands for failure of financialisation. By the same token, establishment of public banks could help address some of the problematic implications of financialisation. Thus, the rest of the paper is structured as follows. Section 2 considers the current crisis as evidence of the failure of private banking; section 3 discusses the broad underlying trends of

financialisation of capitalist economies in recent decades that have led to this failure; section 4 concludes by considering more closely the likely operation of public banks.

2. The crisis of 2007-9 as systemic failure of private commercial banks

2.1. Disappearance of private liquidity and loss of trust

In systemic terms, the disappearance of private liquidity in the course of the crisis is due to commercial banks adopting investment banking functions while expanding loans to individual workers (Lapavitsas 2009). On the liability side, banks increasingly relied on wholesale liquidity to finance securitisations; on the asset side, they securitised loans to generate liquidity at the same time nearly eliminating traditional liquid reserves. When the housing market crashed, the creditworthiness of mortgage-backed securities collapsed, the solvency of banks was put in doubt, and hence liquidity mechanisms seized up generally. Banks hoarded liquidity instead of lending it to each other.

At bottom the disappearance of liquidity reflects loss of trust among banks - as well as of others in banks - primarily due to the poor quality of their assets. Among small savers this became apparent during the run on Northern Rock building society in the UK in late 2007. Among institutional holders of loanable capital, loss of trust was greatly exacerbated when US authorities allowed Lehman Brothers to collapse in September 2008, while fostering a takeover of Bear Sterns in March 2008. Differential treatment of bank creditors removed the unspoken basis of trust in money markets.

Private banks proved incapable of confronting the loss of trust through their own devices, and were obliged to seek recourse to state intervention. Deposit holders were reassured through strengthened government guarantees, reaching 100% in the UK. Things were more complicated in wholesale markets, but liquidity policy has basically taken two directions.

First, central banks in the USA, the UK, and even the EU, effectively adopted Zero Interest Rate Policy (ZIRP), originally deployed in Japan in the 1990s. ZIPR amounts to a public subsidy to banks because it drives down the cost of funds, thus widening spreads, including for acquisition of state paper. Not surprisingly, banks in the USA reported rising profits in early 2009.

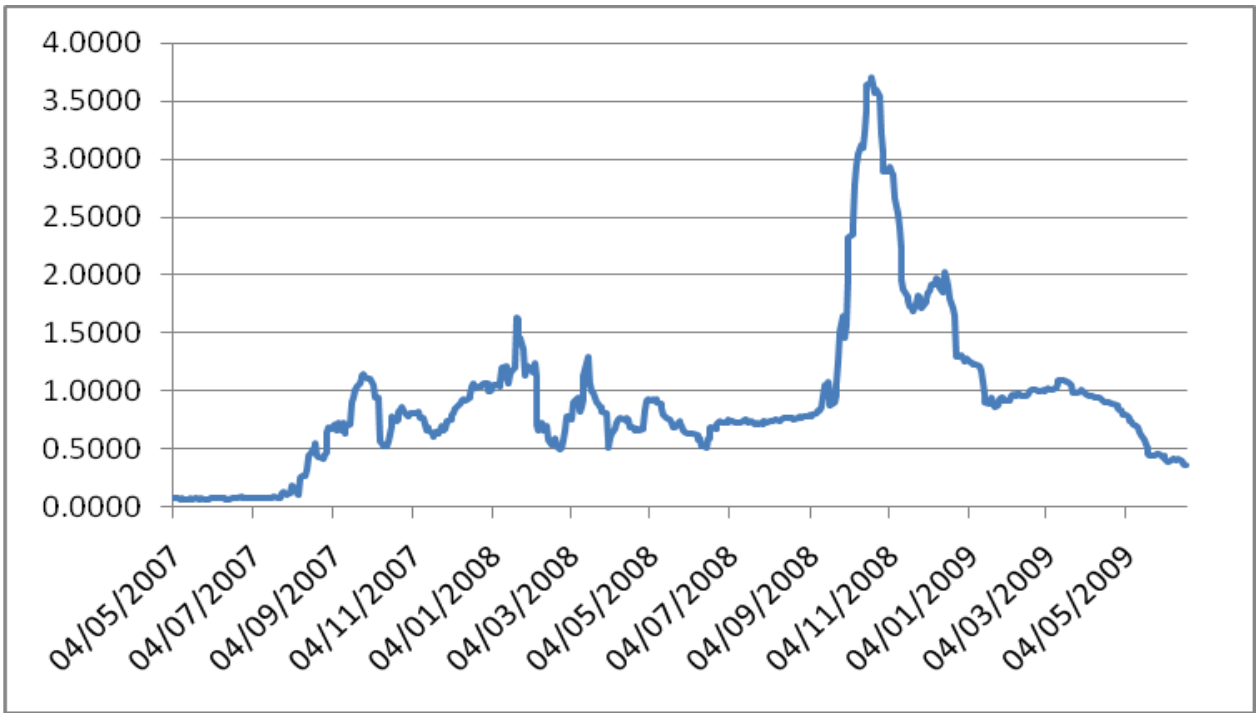
Second, central banks directly supplied public liquidity through lending; bank debt was guaranteed; and public securities were made available for banks to use as collateral. Following the Lehman shock, US and UK central banks adopted 'quantitative easing', another Japanese practice of the early part of this decade. This amounts to systematic over-expansion of bank reserves with the central bank, though, unlike Japan, US and UK authorities did not adopt quantitative targets for reserves. 'Quantitative easing' also includes

announcement of intent to drive down long-term interest rates. Clearly, these policies are also public subsidies to banks since they replace safe public for risky private credit.

The response to collapse of trust in wholesale markets, in other words, was for central banks (and the state) to substitute themselves for the commercial operation of money markets. The result has inevitably been tremendous expansion of the balance sheet of the US central bank. Thus, provision of central bank funds rose from about $0.91tr in September 2008 to roughly $2.1 in May 2009. The bulk of the increase was absorbed by enormous growth of bank reserves (which started to receive interest), rising from about $10bn in September 2008 to about $900bn in May 2009. 'Quantitative easing' is thus another term for banks hoarding liquidity with the central bank. Both the provision of central bank credit and the accumulation of reserves appeared to have declined slightly in June 2009, for the first time since the Lehman shock.

Broadly speaking, liquidity policy has followed Bagehot's traditional advice, namely to lend first and ask questions later. If there is novelty, it lies in the extent to which public mechanisms of liquidity provision have substituted themselves for the market. Nonetheless, mere provision of liquidity through state mechanisms has not been enough to restore trust among banks. Figure 1 shows the three month LIBOR-OIS spread, which reflects risk in the interbank market, and stood below 0.1% prior to the crisis. In August 2007 the spread rose substantially, but remained below 1%; the paroxysm of crisis in September-October 2008 pushed it toward 4%, making all business among banks impossible. During the first half of 2009 the spread has declined steadily, though in June 2009 it still stood significantly higher than before August 2007.

Figure 1 - Three-Month LIBOR-OIS Spread, percentage points



Source: Bloomberg

The steady shrinking of the spread in the first half of 2009 was partly due to the enormous volume of liquidity supplied by the monetary authorities. It also had to do with the adoption of measures dealing with capital shortages and bad assets, discussed below. Nonetheless, the unprecedented extent of state intervention also lessened the importance of LIBOR-OIS as indicator of trust among banks. The distinct possibility arose in 2009 that banks continued to mistrust each other in the money market but abundant public liquidity disguised reality and rendered LIBOR-OIS less meaningful than before.

In sum, the liquidity policy adopted by central banks primarily in the USA and the UK has ameliorated the worst of the shortages, but this has also been an essentially short-term response. Private banks have been crippled by lending and borrowing decisions, thus destroying trust among them and freezing the money market. The central bank - and the state more generally - has stepped in and engulfed the money market. This situation cannot persist indefinitely, and certainly not in 'free-market' economies. Therefore, there are two broad options for the longer term. One is to remove the underlying causes of collapse of trust among private banks, eventually resuming normal supply of liquidity. The other is to restructure the banking system, including a stronger presence for public banks. Both have major consequences, and raise deeper issues regarding the future of banking.

2.2. Bad assets

The failure of banks is due, in the first instance, to devalued mortgage- and other asset-backed securities, which put bank solvency in doubt and thus destroyed liquidity. But weakened solvency has also prevented banks from engaging in normal lending. Solvency problems have made banks overcautious, often encouraging them to call back or refuse to roll over loans, while raising the threshold of creditworthiness for new loans.

Tighter bank credit combined with the collapse of securitised loan pools in the USA. Federal Reserve Flow of Funds shows that commercial bank lending declined from $758bn in 2007 to $655bn in 2008, while asset-backed security issues literally vanished, falling from $314bn in 2007 to $-421bn in 2008. Household borrowing took the brunt, collapsing from $849bn in 2007 to $51bn in 2008, with a corresponding impact on aggregate demand and output.

Thus, for regular credit provision to be re-established it is necessary, first, to remove bad assets from bank balance sheets but also, second, to ensure either recovery of securitisation, or the emergence of alternatives to it. The former is considered immediately below, the latter in section 3.

Removing bad assets is a standard requirement of banking crises. However, the private nature of banks complicates the problem. Banks have been at pains to conceal the extent of bad assets in order to prevent complete collapse of trust. In a competitive environment, the first to reveal the full extent of the problem suffers disproportionately in terms of access to liquidity, share price, inflow of deposits, and so on. Consequently, state policy toward bad assets has had to be designed amidst relative opacity.

Revelation aside, the deeper problem is assigning prices to bad assets: if set high, buyers face losses, or are driven away; if set low, the banks would be intractably insolvent. The problem is particularly complex in the current crisis because of the nature of the assets involved, particularly in the USA. Collateralised debt obligations typically rest on subprime, Alt-A and prime mortgages, all of which have been continually deteriorating since 2006. Unprecedented rates of non-repayment and general falls in house prices have invalidated historic assumptions built into formal models of asset valuation. Moreover, as was mentioned above, markets in asset-backed securities have collapsed, removing the grounds for establishing prices through repeated and extensive trading. Finally, it is often hard to establish who has ultimate responsibility for payment, who is entitled to returns, and who has legal claim over underlying assets. In market terms, the current value of bad assets on bank balance sheets is probably very low, entailing losses of hundreds of billions of dollars.

Therefore, private banks have found themselves in a quandary. If bad assets were removed rapidly and in market terms, several would become irrevocably bankrupt; but if banks continued to carry bad assets in the hope of obtaining better final prices, their balance sheets would remain illiquid, preventing normal banking functions. The longer that normal banking was interrupted, the more bad assets would probably accumulate in the course of the recession, including commercial property, automobile-related asset-backed securities, and so on.

The political economy of dealing with bad assets, therefore, is transparent, at least in the USA. Private banks have revealed as little as possible of the extent of their bad assets, while trying to shift them off the balance sheet for the highest price. Thus, they have been at pains to create the impression that bad assets have been caused essentially by the drying up of liquidity, rather than by bad credit decisions. As a result they have rendered even more difficult the formation of public policy and the restoration of normal credit supply.

Things became even more complicated when it came to apportioning likely losses from disposing of bad assets. Small depositors are typically protected by law as well as by the need to maintain monetary stability. But in competitive capitalist markets equity holders are supposed to carry all residual risk, which makes them liable to the full extent of their

holdings. In the absence of state support, the value of bank shares would have collapsed completely. Even on capitalist efficiency grounds (moral hazard), therefore, shareholders could have no claim to retrieving value invested. Bondholders and other creditors, on the other hand, have made funds available on the basis of repayment plus interest, while also benefiting from capital gains. But since they have lent to essentially failed enterprises, they should also be in line to take some of the consequences.

The problem is, however, that equity and bondholders are often pension funds and other institutional investors, who have bought bank securities as portfolio diversification. They are also foreign buyers, frequently from large public and semi-public institutions of developing countries. Thus, the social criteria against which bank stakeholders ought to be ranked are not immediately apparent. On what grounds should the burden of bank failure be shifted onto social layers that have, at most, placed their pension savings in particular funds? And why should bank failure in developed countries impinge upon the savings of people in developing countries? What will be the economic and political implications?

It bears stressing that these issues cannot be tackled through ingenious accounting tricks, but ought to be confronted democratically and in full view of the consequences. But this is hardly possible while private banks are concealing the extent of bad assets, manoeuvring to secure as high a price as possible, and attempting to protect both equity and bondholders. The need for transparency and democratic procedure is particularly acute, if losses are to be borne directly by society in the form of subventions of public funds to banks. Substantial public funds have already been made available to banks, as is discussed below, without direct implications for either shareholders or bondholders. The exclusionary nature of financial policy making (and the privileged access of banks to it) have made democratic decision making more difficult, while protecting bank stakeholders.

Some of these complexities are apparent in the debate that has emerged on aggregating bad assets in a 'bad bank', or equivalently, creating 'good banks'. Thus, Buiter (2009) - who favoured temporary nationalisation despite also thinking that it might be politically difficult - proposed the establishment of new public banks that would aggregate the good assets of stricken banks. They would thus be able to resume lending, while leaving failed banks to cope with the rest over time. Bulow and Klemperer (2009), on the other hand, proposed creating 'good' private banks by taking over the whole of the assets, but only the most senior liabilities of stricken banks (including deposits). The remaining liabilities would continue to be held by the failed old banks, which would also hold the equity of the new banks. Ingenious as these proposals are, their cleverness is largely due to attempting to circumvent the political and ideological obstacles posed by the private nature of banks, which created the problem in the first place.

The policy actually adopted by US administrations in late 2008 and early 2009 should be seen in light of the above. Removing bad assets was proclaimed a priority by the Bush administration's Troubled Asset Relief Plan (TARP) in September 2008, and $700bn was committed to it. However, the difficulty of pricing bad assets and the severity of solvency problems in late 2008 and early 2009 forced a change of emphasis toward capital injections, discussed in the next section. Eventually, the Obama administration put forth the Geithner plan in March 2009, in similar spirit to TARP.

Geithner's plan shared the assumption that bad debts reflect the drying up of liquidity, rather than bad credit decisions (Bebchuk 2009). Its objective, therefore, was to remove these assets by restarting the market for securitised securities, while securing for the banks the highest possible price. Driving the plan was the determination to avoid nationalisation (or to appear to do so), while solving the problem by relying on private capital. Thus a mechanism was proposed to auction bad debts to coalitions of private and public funds. Private capital would be allowed to participate by contributing only 1/14 of the funds necessary; the balance would be provided by the public (1/14 equity, 6/7 public debt). The bidding process would therefore favour those who believed that the true value of bad debts was high. Assuming that there would be enough optimists, and as long as banks were prepared to countenance reasonable losses, the auctioning process should result in high prices.

For the plan to succeed, therefore, it would be necessary to have enough buyers sharing its underlying assumption that the problem was one of liquidity. But the underlying assumption could well be incorrect and the real problem of banks might be irrecoverable loans, which have led to liquidity shortage. If that turned out to be the case, there would be substantial losses for those who bought the bad assets. This risk would be mostly carried by the public, which would have provided the bulk of the funds, either as capital or debt guarantees.

Despite its stated intentions, the Geithner plan had little in common with a genuine market process. Rather, care was taken to attract private buyers, who were given incentives to drive prices high. Most of the risk, meanwhile, was shifted onto the public. In short, the Geithner plan aimed at assuaging private bank failure by relying on public funds, while allowing private capital to make still more profits despite bearing only a fraction of the risk.

Even worse, however, the Geithner plan would succeed only if banks were prepared to take some losses in to remove bad assets from their balance sheets. But the policy of liquidity provision already succeeded in shoring up bank profits in 2009. Moreover, capital injections were managed fully in the interests of banks, as is shown below. Consequently,

banks had little incentive to auction their bad assets even at a small loss. From their perspective it would make more sense to wait to maturity, rather than taking part in the faux-market processes of the Geithner plan. Meanwhile, bank lending continue to stagnate, negatively affecting demand and output.

2.3.Capital injections

Effective bankruptcy implied that banks required additional capital, if they were to continue in operation. By early 2009 US commercial banks and other financial institutions had already received more than $300bn of capital injections from TARP, typically as preferred stock with guaranteed interest payments. There had also been two bouts of capital injections by the UK government, while several continental European banks also received government funds. Nonetheless, the eventual capital shortfall was likely to be larger, depending on the extent of further losses on bad assets.

Further capital injections, therefore, raised several questions going to the heart of the banking problem. What would be their likely size? Where would additional capital come from? What would be the implications for managing banks? Dealing with these issues was made considerably more complex because of the private nature of failed banks.

Ascertaining the extent of future capital injections requires assessing the performance of bank assets under different economic circumstances. Naturally, the outcome would vary among banks, depending on past decisions and management practices. It seems obvious that independent auditors – preferably public employees - should have taken charge of bank books. But to avoid even the appearance of nationalisation, the US and UK governments were chary of such action.

Consequently, in March 2009 the Obama administration introduced the Supervisory Capital Assessment Program - 'stress tests' of nineteen banks - to be conducted by US regulatory authorities on the basis of information requested from the banks. Instead of taking charge of the stricken banks, US authorities relied on the banks' own assessment of bad debts under a 'baseline' and a 'more adverse' scenario of the behaviour of the economy as a whole (Federal Reserve 2009a). The authorities subsequently tweaked these assessments, always in close contact with the banks. The quality of the final results, announced in May 2009, was thus in doubt from the beginning. Still, it was estimated that ten out of the nineteen banks would need an additional $185bn to the end of 2010, under the 'more adverse' scenario. The expected losses were due mostly to mortgages and consumer loans. But given that banks had been building up their capital since the end of 2008,

particularly as their profitability rose, the actual shortfall was estimated at only $75bn (Federal Reserve 2009b).

It should be noted that the 'stress tests' conducted by US authorities merely assessed the likely losses on loans maturing to 2010. This is a very different exercise from attempting to ascertain the value of the bad assets carried by the banks, and thus the likely magnitude of their losses is they were forced to clean up their balance sheets, as was discussed in the previous section. On this basis, it would be perfectly plausible for banks to have enough (or nearly enough) capital to cover their losses up to 2010, while carrying substantial bad assets that prevented them from engaging in normal lending as well as endangering their solvency after 2010. In short, the 'stress tests' were not only conducted in opaque ways that favoured the banks, but were also of limited value in revealing the underlying state of private banking.

Still, the 'stress tests' helped bolster stock market confidence in banks, allowing them to raise capital through fresh issues of equity. The recovery of market confidence was purely due to the policies adopted by the US state after the Lehman shock. On the one hand, the state effectively insured private banks against bankruptcy through provision of capital, backing for assets, and guarantees on deposits. On the other, the state boosted bank profitability through the disguised subsidies discussed in section 2.1. Thus, around the middle of 2009, the largest US banks were permitted to repay some of the money they had received through TARP earlier in 2008-9.

Banks were keen to do so despite having received these funds without significant direct implications for ownership and control. Only relatively minor, and highly contested, conditions were applied, requiring banks to maintain the level of their lending, while limiting the exceptional remuneration of management. But private banks resented even these mild conditions, particularly as there would be competitive advantages for those among them that managed to shake off the restrictions first. Consequently, around the middle of 2009 and barely nine months after the Lehman shock, the largest banks started to repay some of the TARP funds, while taking steps to restore management remuneration to pre-crisis levels. Meanwhile, fresh credit provision by banks remained mediocre, barely maintaining existing levels.

State policies toward private banks, therefore, created deeply problematic outcomes in both the USA and the UK. Large public funds were made available to managers of failed banks in 2008-9, subsequently to be used to protect shareholders and bondholders from losses arising out of bad lending. Meanwhile, liquidity was supplied in enormous volumes, driving interest rates down and improving bank profitability. Finally, schemes were devised

to remove problematic assets in the most painless way for banks. In receipt of this largesse, banks improved their profitability, hoarded liquidity, and avoided the removal of bad assets to escape even modest losses. Not surprisingly, they also avoided expanding loans and providing fresh credit.

In short, public funds and credit were mobilised to create room for banks to wait in the hope that the underlying problems would sort themselves out slowly. Credit creation inevitably suffered, potentially prolonging the recession. In other words, to rescue failed banks the authorities imposed substantial costs on society as a whole, while protecting bank shareholders, bondholders and managers. Society was forced to bear the brunt of the costs because policy makers aimed at protecting the private nature of banks while avoiding assumption of public control.

3. Financialisation and the underlying causes of systemic banking failure

The failure of private banking, however, is more deeply systemic than is indicated by the complexities of resolving the crisis alone. For one thing, this is a crisis of the major global banks, not of relatively minor banking systems, particularly those of developing countries, as has often happened during the last three decades. Even the largest of recent banking crises never became truly global, including the US Savings and Loans crisis of the 1980s, the Swedish banking crisis of the 1990s, and the Japanese disaster of the 1990s and 2000s. In this respect, the current crisis is even worse than that of the 1930s since it has hit some of the largest international banks. The core of the global banking system as that has developed in the last three decades has effectively failed. This is unprecedented in the history of industrial capitalism.

Equally unprecedented is that the crisis has originated in mortgage lending in the USA, including to the poorest layers of workers and others. Historically, major banking crises have been typically due to lending to enterprises or states, but not to workers. This extraordinary situation has arisen partly due to financial engineering by banks, above all, securitisation of mortgages. The major banks have failed both in terms of offering financial services to workers as well as undertaking financial engineering in open markets.

This failure is related to the transformation of banking in recent years, which has elsewhere been associated with the financialisation of contemporary capitalism (Lapavitsas 2009, 2010). In a nutshell, during the last three decades, large corporations (industrial and commercial) have become better able to obtain external finance in open markets. Enhanced ability to issue bonds and commercial paper has lessened corporate reliance on banks,

forcing the latter to seek alternative fields of profitability, which have varied from country to country. Two of these have been vital to leading commercial banks: first, mediating transactions in open financial markets (and earning profits through trading) and, second, providing financial services to individuals. Both are instrumental to the current crisis and merit closer consideration in the following sections.

3.1 Banks turn to markets and lose track of risk

Mediating transactions in open financial markets is, in essence, investment banking, profits deriving from fees and commissions from handling securities but, above all, from trading generally as well as on own account. These profits differ in kind from commercial banking profits, which derive primarily from the spread between borrowing and lending rates, as well as from fees and commissions to handle money (foreign exchange, transmission, managing accounts, and so on). Investment banking has some of the character of broking, while also dealing on own account; commercial banking is financial intermediation that also provides money-dealing services. Systematically mixing the two can be profoundly destabilising.

Above all, solvency and liquidity requirements of investment and commercial banking differ substantially. Investment banks obtain wholesale funds in open markets to operate in liquid securities. Commercial banks collect money-like deposits, often protected by law, to invest in both loans and securities. Given the money-like character of deposits, commercial banks must hold substantial liquid assets; they also need significant own capital to support idiosyncratic loans. Investment banks, on the other hand, do not have money-like liabilities to protect, and nor do they make longer-term customer specific loans. But they need capital to support their borrowing in open markets.

Generalised adoption of off-balance-sheet securitisation in the 1990s turned long-term, idiosyncratic debts (mortgages) into securities, thus removing them from the balance sheets of commercial banks. In effect, commercial banks handled these assets in the manner of investment banks (including on own account). The implications for balance sheets were immediate and direct: reliance on wholesale funds was increased, asset liquidity was reduced, and solvency was weakened. Investment banks in the USA engaged in similar practices, only more extreme as they faced less regulation on capital and liquidity.

Note that the failure of mortgage-backed securitisation is not inherent in the technique itself, but rather due to the private and competitive nature of the commercial and investment banks involved. The large state-sponsored organisations of the US housing

market (Federal National Mortgage Association and Federal Home Loan Mortgage Corporation) used securitisation for decades without comparable problems. Disaster was induced by large-scale entry of commercial and investment banks into mortgage securitisation in the early 2000s. This also encouraged the state-sponsored organisations to emulate private bank behaviour, eventually causing their downfall in 2008.

At a deeper level, however, the failure of combining commercial with investment banking is due to banks forfeiting the most elementary functions of banking, namely collecting and assessing information on borrowers, and thus managing risk. Banks delegated the assessment of the creditworthiness of mortgage-backed (and other) securities to credit rating organisations that were typically in the pay of the originator. Risk management of the balance sheet, on the other hand, was entrusted to Value at Risk methods, which rely on arms-length, computationally-intensive mathematical techniques that draw on historical data (Lapavitsas and Dos Santos 2008).

By adopting investment banking functions, commercial banks weakened some of their most fundamental banking skills, including collecting information about borrowers and assessing risk by using banking experience. Thus banks could imagine that they were acting within safe parameters while erecting an enormous superstructure of derivatives on top of US housing loans. The bulk of housing loans, furthermore, were extended to workers whose real wages had been stagnant for years, while subprime loans were often advanced to workers who had no chance at all of repaying. It is a measure of the failure of private banking during 2001-7 that it contrived to ignore these blindingly obvious sources of risk.

It is hard to exaggerate the long-term importance of these phenomena. In the 1990s and 2000s private commercial banks reacted to reduced lending opportunities to large corporations by acquiring investment banking functions. But they were unable to deliver these successfully, and in the process forfeited some of their elemental capacity to collect information and assess risk. But then, what is the economic role that private commercial banks deliver in contemporary capitalist economies, which also justifies their enormous profits? This is far from an academic question, as is shown by the collapse of securitised lending since the crisis commenced. If securitisation does not recover promptly, and given the limited lending opportunities to large corporations, the long-term lending role of private commercial banks is far from clear.

Note also that the failure of banks is not due to lax regulation. To be sure there has been progressive deregulation of finance during the last three decades, including Big Bang in the UK in 1986 and abolition of the Glass-Steagall Act in the USA in 1999, which formally allowed commercial and investment banking to overlap. But the presumed specialisation of

banks in collecting information and assessing risk is not conditional on regulation. Rather, it is supposed to be what private banks do inherently. To advocate creation of supervisory bodies in order to induce appropriate behaviour in private banks is to admit that their own inclinations are naturally different.

By the same token, the failure of banks can hardly be dealt with by tougher capital adequacy requirements. There has been much regulation of capital adequacy during the last two decades, and it is fatuous to imagine that the current crisis hinged on whether commercial banks kept 6%, or 8%, or 10% of regulatory capital. Indeed, Basle II regulations arguably exacerbated the crisis in two ways. First, they determined the capital adequacy of large banks by encouraging deployment of in-house computationally-intensive techniques of risk measurement. Second, they gave an incentive to banks to securitise in order to shift assets off-balance-sheet and thus 'churn' regulatory capital. Such phenomena are associated with 'regulatory arbitrage' and tend to appear under any system of bank regulation. The systemic failure to collect information and assess risk is a far deeper problem, going to the core of what private banks are supposed to do in a capitalist economy.

3.2 Banks turn to individuals

The turn of banks (and the rest of the financial system) toward individual workers is associated with the financialisation of personal income. It appears as rising proportions of mortgages and unsecured lending on bank balance sheets, as well as increasing individual indebtedness relative to GDP and to disposable income (Lapavitsas 2009). Furthermore, individual financial assets have also grown relative to GDP, particularly as government policy in the USA, the UK and elsewhere systematically directed savings to capital markets.

For banks, these trends represent expansion of the field of profitability through lending, but also through mediation of the flow of savings to capital markets as well as of the flow of expenditure via bank accounts. These sources of financial profit are closely related to the retreat of public provision across a range of fields, including housing, health, education, transport, pensions, and so on, during the last three decades. Private capital has been encouraged to meet these social needs, and banks have inserted themselves in these processes, facilitating the accumulation of assets and liabilities by individuals. To a certain extent banks have become social mediators of the acquisition of a range of vital goods by workers.

Financial profit systematically generated by banks that orient themselves toward personal income raises complex theoretical issues. It has no analogue with providing

financial services and loans to functioning capitalists, which are remunerated out of future profits. Rather, lending to individuals has an aspect of the old practice of 'trucking' - i.e. the employer providing wage goods at exorbitant prices in tied shops - except that 'trucking' now takes place on a social scale and indirectly. As public provision has retreated in housing, pensions, and so on, workers have had to rely on private finance, on terms favourable to banks and financial institutions.

More specifically, there are systematic disparities in information and social power between banks and individual workers. There are also systematic differences in motivation and purpose, since banks aim for monetary profit, while workers aim for acquisition of goods. In this context, it is possible for effectively usurious relations to emerge between banks and individuals, with exploitative aspects. Predatory lending is a part of the mediating role of banks relative to workers, particularly of the weakest layers of workers that were previously subjected to 'redlining' (Dymski 2009). These complex mechanisms that resemble 'trucking' and usury have elsewhere been called financial expropriation (Lapavitsas 2009).

The bubble of 2001-7 in the USA and the subsequent crisis resulted from an escalation of financial expropriation. Financial institutions reached the poorest and most oppressed layers of workers, often black and Latino women. As their traditional skills declined, banks engaged in perfunctory information collection and risk assessment of borrowers. They relied on computationally-intensive and arms-length methods of individual credit scoring, failing to capture the underlying risks. Easy credit unleashed waves of greed among households aiming for capital gains through housing. Throughout this period real wages - the ultimate source of repayment - remained stagnant. Meanwhile, securitisation multiplied the claims on the stagnant source of repayment, eventually ruining the banks.

Thus, the true extent of the systemic failure of private banking is not conveyed merely by the effective bankruptcy of large banks due to inadequate information gathering and risk management. Banks have also failed as mediators of the acquisition of vital goods by workers. The housing crisis has left millions homeless in the USA alone, while extreme personal indebtedness in the USA, the UK and elsewhere has forced a retrenchment of consumption. Rising unemployment is likely to exacerbate these phenomena through second order effects. The crisis has shown that private banking is ill-suited to mediating demand for housing, pensions and several other goods that enter the wage basket. Alternative mechanisms are necessary, with a clear public character.

4. Establishing public banks – a rational and desirable step

A systemic response to these failures of banking ought to include the conversion of private commercial into public banks. Such action would make it easier to confront the immediate pressures of the banking crisis as well as influencing the long-term role of banks.

4.1 Public banks to deal with the crisis

Establishing public banks would make it easier to deal with the crisis because it would lift the obstacles placed by private banks. This is apparent for liquidity, which has dried up because of the collapse of trust in banks. Public banks would immediately command trust since they would be backed by society's guarantees, resources, and money-creating powers. With trust restored, liquidity would become more easily available, including re-strengthened flows of deposits. This would lessen bank reliance on central banks, possibly lifting the need for quantitative easing, and thus limiting the extraordinary expansion of central bank balance sheets. Monetary policy would be immediately placed on a sounder footing.

Public banks would also have social authority to deal with the problem of solvency transparently and democratically. For one thing, public banks would have no reason to conceal bad debts incurred by private banks, and nor would they need to maintain the fiction that problematic assets are due to liquidity shortages. Even more strongly, there would be no need to engage in the complex interactions and evasions of 'stress tests'. Public supervisors would take charge of bank books throwing light on bad credit decisions, including irrecoverable housing loans to workers on low and stagnant incomes, speculative loans to commercial real estate, purchases of mortgage-backed securities without assessment of risk, and so on.

With full revelation, it would become possible to apportion resultant losses using social and democratic criteria. Public banks would be instrumental to society deciding which social classes would carry the burden domestically, and what would be done with foreign bondholders. Equity owners have in practice already been expropriated by the failed actions of private banks. Bondholders and other lenders could be ranked on social criteria to determine the incidence of loss. The full cost of not honouring debts incurred by private banks to foreign lenders would also become clear to society as a whole, providing the basis for collective decision making.

It is apparent, however, that these are not technical matters to be decided by experts behind closed doors. They ought to be tackled in ways that favour the many rather than the

few, which makes it necessary to rely on free and organised expression of popular will. In this light, establishing public banks ought to be more than mere nationalisation, and certainly not the simple replacement of failed private managers by state bureaucrats. Rather, public banks ought to be democratically run and fully accountable to society as a whole. The boards of public banks ought to have full representation of popular interests, including trades unions and civil society organisations. Their remit ought to be set socially and collectively, their decision making ought to be transparent, and their activities ought to be accountable to elected bodies.

This is not to imply that public ownership and control over banks is a simple matter that does not run risks of corruption and inefficiency. But note that the systemic failure of private banking has cast fresh light on these issues too. As for other listed corporations in recent years, bank 'governance' has been based on 'shareholder value' (Lazonick and O'Sullivan 2000). This has ultimately drawn on the efficient market hypothesis, which asserts the merits of stock markets in assessing information about corporations and the economy. Corporations have engaged in a search for short term returns with no clear effects on efficiency (Erturk et.al. 2004). For banks, meanwhile, the search for short-term returns has encouraged financial engineering in open markets that has ruined solvency and liquidity.

'Shareholder value' has also encouraged remuneration schemes for traders and managers that have fostered recklessness. Enormous bonuses have been systematically paid on the basis of short-term performance, with little concern for long-term implications. Losses have been borne primarily by equity holders, while managers have not suffered commensurately. The institutional mechanisms of ownership and control of the last three decades seem to have allowed managers (and simple functionaries) of finance to earn huge incomes, while jeopardising the existence of banks. Private owners made significantly profits while the bubble lasted, only to be wiped put as the crisis struck.

Public ownership and control would ameliorate and – with full transparency and accountability to elected bodies – even eliminate the principal-agent problem that bedevils private banks. This is something that mere public regulation of private banks could not achieve. But further analysis of this issue requires going beyond the problem of dealing with the banking crisis to consider broader aspects of systemic bank failure.

4.2 Long-term functioning of public banks

It is clear from the above that establishing public banks ought to be more than a short-term measure, aiming to restore failed banks to health before rendering them back to private ownership. It has already been suggested that long-term public banks be established to provide credit as public utility (Erturk et.al. 2009), while in the UK there is trade union support for a Post Bank. Several long-term aims of public banks ought to be considered in the light of the above.

For large enterprises in developed capitalist economies public banks are unlikely to be a decisive source of credit, given that the former have easy access to open financial markets. But for small and medium enterprises, as well as for individuals, public banks would be indispensable providers of finance. Bank borrowing by small and medium enterprises (including bank mediated trade credit) is typically necessary for fixed and circulating capital. Borrowing by individuals, on the other hand, allows for smoothing of consumption profiles, even if it has expropriating aspects under present conditions. Mature capitalist economies rely on such credit for the completion of countless small capital circuits, which sustain aggregate demand. In effect, future output and personal income are anticipated by large numbers of small decision-making units, which obtain funds in advance, and proceed to organise current investment and consumption accordingly.

Since these economic units correspond to a significant part of social reproduction, it is possible that aggregate returns for banks would be stable, provided that the flow of credit remained steady and avoided speculative excesses. If, on the other hand, the flow of credit was disrupted, capital circuits and individual consumption would be disturbed, possibly leading to rising unemployment. There reason to think of provision of such credit as a public utility, akin to transport, electricity, water, and so on.

Naturally, the analogy should not be stretched too far as credit is not a normal commodity, but rather a set of economic relations based on trust and anticipation of future returns. The point is, however, that in contemporary capitalist societies broad layers of small enterprises but also workers have come to depend on the steady reproduction of such relations. Credit to individuals and to small enterprises already has a social aspect, as is manifested by its constant manipulation through regulations and central bank policy. Public banks could strengthen it social character by providing institutional and organisational mechanisms to regulate its flow as well as deploying elements of aggregate forecasting and planning.

The social nature of such credit is perhaps clearer in relation to worker and other households. Public banks would find a ready field of activity in advancing credit for housing,

education, health, and consumption in general. Supplying such credit could be undertaken with reasonable stability, if based on reliable information about income, employment, and personal conditions. The credit scoring techniques that private banks have used so badly in recent years would find a natural home in public banks. The predatory and exploitative practices of financial expropriation would also come to an end.

Needless to say, such social credit would be an adjunct to restoring public provision across a range of wage goods, which ought to be a mainstay of public policy. In this respect, establishing public banks would be part of a general reversal of the financialisation of personal income during the last three decades. Public banks would offer greater flexibility in public provision, including more choice for households in housing, education and elsewhere. Naturally, public provision of wage goods and availability of social credit would themselves be adjuncts to a policy of raising real wages.

More than that, however, public banks could also take upon themselves aspects of development banking since they would have both social authority and requisite information about borrowers and the economy. Public banks could thus be part of a general policy to deal with financialisation by supporting a revival of production and moving economies away from finance. They would be natural institutions to guide aggregate investment and promote new fields of activity, including 'green' industries in which mature capitalist economies appear to have a comparative advantage.

Provision of development credit by public banks would necessarily take place within a broad institutional framework that would direct aggregate investment toward socially selected fields. As part of this framework, public banks would be shorn of investment banking functions, thus enhancing the stability of finance. Moreover, provision of finance for development by public banks could also include large enterprises that would seek to develop productive capacity. Such a step would naturally pose the problem of coordinating the activities of public banks with those of open markets in finance. Public banks could then act as levers for the broader restructuring of finance, imposing social regulation on financial markets, including prices and trading volumes. A permanent shift in favour of social and collective as opposed to private and individual interests could be brought about in capitalist economies. This would strengthen the forces favouring a more radical transformation of capitalist society and, dare one say it, socialism.

Public banks would not, of course, be free of problems. Corruption linked to political manipulation of lending would be a danger. But it is plain ideology to assume that private automatically perform better than public banks with regard to corruption. Public interests, when fully articulated, represented, and organised can prevent corruption more successfully

than the various ineffectual mechanisms of regulation that have proliferated in financialised capitalism.

Finally, there is the issue of the technical capacity of state and society to run banks. On this it is enough to observe that the growth of finance in recent years has produced hundreds of thousands of finance specialists many of whom are currently unemployed or live in extreme uncertainty. There is no shortage of technical expertise that could be hired by public banks. What is lacking is political will but also pressure from below demanding radical transformation. As the systemic failure of private banking becomes clearer in the years to come, that could well change.

REFERENCES

Ash, M., Balakrishnan R., Campbell A., Crotty J., Dickens E., Epstein G., Ferguson T., Ghilarducci T., Greisgraber J.M., Griffith-Jones S., Guttman R., Jayadev A., Kapadia A., Kotz D., Meerepol M., Milberg W., Moseley F., Ocampo J.A., Pollin R., Sawyer M., and M. Wolfson. 2009. 'A Progressive Program for Economic Recovery and Financial Reconstruction', www.peri.umass.edu/fileadmin/pdf/other_publication_types/PERI_SCEPA_statementJan27.pdf.

Bebchuk, L. 2009. 'How to Make TARP II Work', Discussion Paper No 626, Cambridge, MA: Harvard Law School.

Brunnermeier M. 2009. 'Deciphering the Liquidity and Credit Crunch 2007-2008', Journal of Economic Perspectives, 23 (1), 77-100.

Brunnermeier M. and L.H. Pedersen. 2008. 'Market Liquidity and Funding Liquidity', Review of Financial Studies, advance publication, doi:10.1093/rfs/hhn098

Brunnermeier M., Crockett A., Goodhart C., Persaud A., and H. Shin. 2009. The Fundamental Principles of Financial Regulation, Geneva Reports on the World Economy 11, Preliminary Conference Draft, International Center for Monetary and Banking Studies.

Buiter W. 2009. 'The "Good Bank" Solution', Maverecon, http://blogs.ft.com/maverecon/2009/01/the-good-bank-solution/.

Bulow J. and P. Klemperer. 2009. 'Reorganising the banks: Focus on the liabilities, not the assets', VOX, http://www.voxeu.org/index.php?q=node/3320.

Caprio G. and D. Klingebiel. 1996. 'Bank Insolvencies: Cross-country Experience', Policy Research Working Paper 1620, Washington, DC: World Bank.

Crotty J. 2008. 'Structural Causes of the Global Financial Crisis: A Critical Assessment of the 'New Financial Architecture'', Political Economy Research Institute, Working Paper 180.

Crotty J. 2009. 'Profound Structural Flaws in the US Financial System That Helped Cause the Financial Crisis', Economic and Political Weekly, vol. XLIV, no. 13, pp. 127-135.

Crotty J. and G. Epstein. 2008. 'Proposals for Effectively Regulating the US Financial System to Avoid yet Another Meltdown', Political Economy Research Institute, Working Paper 181.

Crotty J. and G. Epstein. 2009. 'Regulating the US Financial System to Avoid Another Meltdown', Economic and Political Weekly, vol. XLIV, no. 13, pp. 87-93.

D'Arista J. and S. Griffith-Jones, 2008. 'Agenda and Criteria for Financial Regulatory Reform', FONDAD, http://www.fondad.org/uploaded/Arista-Griffith-JonesonFinancialRegulatoryReform.pdf.

Dewatripont M., Freixas X. and R. Portes. 2009. Macroeconomic Stability: Key Issues for the G20, London: CEPR

Dos Santos P. 2009. 'On the Content of Banking in Contemporary Capitalism', Historical Materialism, 17.2, forthcoming.

Dymski G. 2009. 'Racial Exclusion and the Political Economy of the Sub-Prime Crisis', Historical Materialism, 17.2, forthcoming.

Erturk I., Froud J., Johal S. and K. Williams. (2004). 'Corporate Governance and Disappointment', Review of International Political Economy, vol. 11, no. 4, pp. 677-713.

Erturk I., Froud J., Johal S., A. Leaver and K. Williams. (2009). Memorandum to the House of Commons – Treasury,

http://209.85.229.132/search?q=cache:eN9HSiTRwusJ:www.publications.parliament.uk/...

Federal Reserve Bank. 2009a. 'The Supervisory Capital Assessment Program: Design and Implementation', April 24,

http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20090424a1.pdf

Federal Reserve Bank. 2009b. 'The Supervisory Capital Assessment Program: Overview of Results', May 7,

http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20090507a1.pdf

Freixas J. and J.C Rochet. 1997. Microeconomics of Banking, Cambridge, MA: MIT Press.

Goodhart, CAE 2008. 'The background to the 2007 financial crisis', International Economics and Economic Policy, 4: 331-346.

Hilferding, Rudolf 1981 [1910], Finance Capital, London: Routledge & Kegan Paul.

Kregel J. 2008. 'Using Minsky's Cushion of Safety to Analyze the Crisis in the US Subprime Mortgage Market', International Journal of Political Economy, vol. 37, no. 1 (Spring): 3-23.

Kregel J. 2009a. 'It's That "Vision" Thing', Public Policy Brief 100, Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.

Kregel J. 2009b. 'Background Considerations to a Regulation of the US Financial System: Third Time a Charm? Or Strike Three?', Working Paper 557, Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.

Lapavitsas C. 2009. 'Financialised Capitalism: Crisis and Financial Expropriation', Historical Materialism, 17.2, forthcoming.

Lapavitsas C. 2010. 'Financialisation, Or the Search for Profits in the Sphere of Circulation', Economiaz, forthcoming.

Lapavitsas C and P.L. Dos Santos. 2008, 'Globalization and Contemporary Banking: On the Impact of New Technology', Contributions to Political Economy, 27, pp. 31-56.

Lazonick W.and M. O'Sullivan 2000, 'Maximizing shareholder value: a new ideology for corporate governance', Economy and Society, 29, 1: 13-35.

Minsky H. 1986. Stabilizing an Unstable Economy, New Haven: Yale University Press.

Minsky H. 1992. 'The Financial Instability Hypothesis', Working Paper 74, Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.

Minsky H. 1996. 'Uncertainty and the Institutional Structure of Capitalist Economies'. Working Paper 155, The Levy Economics Institute of Bard College.

Minsky H. and C. Whalen. 1996. 'Economic Insecurity and the Institutional Prerequisites for Successful Capitalism', Working Paper 165, The Levy Economics Institute of Bard College.

Nesvetailova A. 2008. 'The End of a Great Illusion: Credit Crunch and Liquidity Meltdown', Danish Institute for International Studies Working Paper 2008/23.

Persaud A. 2002. 'Liquidity Black Holes', WIDER Discussion Paper No 2002/31, http://62.237.131.23/publications/dps/dps2002/dps2002-31.pdf.

Pollin R. 2009. 'Tools for a New Economy', Boston Review, January/February, http://bostonreview.net/BR34.1/pollinphp.

Posen A. 2009. 'A Proven Framework to End the US Banking Crisis Including Some Temporary Nationalizations', Testimony Before the Joint Committee of the US Congress Hearing on "Restoring the Economy: Strategies for Short-term and Long-term Change"', February 26,

http://www.iie.com/publications/papers/posen0209.pdf

Stiglitz J. 2009. 'A Bank Bailout That Works', The Nation, March 4, http://www.thenation.com/doc/20090323/stiglitz/print?rel=nofollow.

Whalen C. 2007. 'The US Credit Crunch of 2007: A Minsky Moment', Public Policy Brief 92, The Levy Economics Institute of Bard College.

Wray L.R. 2007. 'Lessons from the Subprime Meltdown', Working Paper 522, Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.

Wray L.R. 2008. 'Financial Markets Meltdown: What Can We Learn from Minsky?', Public Policy Brief 94, Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.

Wray L.R. 2009. 'The Return of Big Government', Public Policy Brief 99, Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.

APPENDIX

Aspects of the Geithner plan

The plan invites public-private coalitions to bid at auction for the bad assets of banks. Bids are to be funded at 1/7 equity (half by private capital, half by the state) and 6/7 debt guaranteed by FDIC, i.e. effectively public debt. The coalitions will have responsibility for managing and collecting on the assets.

Assume that the nominal value of the assets is Z, the price paid at auction is X and the value eventually collected is Y. The profit function for private capital (ignoring interest paid on borrowings) is:

$$\Pi = 1/2(Y-X) - 1/14X \qquad (1)$$

Hence,

$$E(\Pi) = 1/2E(Y) - 8/14X \qquad (2)$$

Thus,

$$\max E(\Pi) = 1/2E(Y) \qquad (3)$$

Breakeven is at:

$$E(\Pi) = 0, \text{ hence } Xbr = 7/8E(Y) \qquad (4)$$

Finally, maximum price is at:

$$Xmax = 7/8Z \qquad (5)$$

The price paid will depend on E(Y). Since prices are determined at auction, it is likely that there will be several views on E(Y). Take bidders who believe that Y is distributed normally over 0 and Z, with mean $E(Y)_1$. In (E(Π), X) space the expected profit function will be a straight line running from maximum profit, $1/2E(Y)_1$, on the E(Π) axis, to breakeven, $7/8E(Y)_1$, on the X axis, and stopping at the vertical on Xmax. Bidders are in-the-money to the left of $7/8E(Y)_1$, while out-of-the-money to the right and until Xmax. The ratio of the former to the latter area is a measure of the potential profitability of the scheme.

Now take bidders who believe that the distribution of Y is skewed to the right, hence $E(Y)_2 > E(Y)_1$ and thus $Xbr_2 > Xbr_1$. It follows trivially that the expected profit function is shifted in parallel and to the right. Hence the ratio of the in-the-money to the out-of the-money areas rises.

Thus the scheme favours bidders who believe that problematic assets have a high expected value, i.e. they are not truly bad. This is consistent with the underlying assumption

that the problem is really one of liquidity, not of bad credit decisions by banks. Optimistic bidders are likely to drive prices up at auction, ultimately pushing X toward Xmax. Consequently, the scheme benefits the banks, while shifting most of the risk onto the public which has provided the bulk of the funding.