Accounting Valuation and the Credit Crisis
November 21, 2008

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Alistair Milne and Perry Mehrling, together with Laurence Kotlikoff of Boston University, propose using government credit insurance guarantees to combat the credit crisis. Their idea is to use these guarantees to put a floor under the prices of the better quality tranches of structured credit securities, hence restoring liquidity to credit markets and arresting the global credit contraction. This article was written as part of a recent visit by Professor Mehrling to Cass Business School, promoting these ideas in London. It examines the origins of the crisis and the consequent concern over valuation of illiquid securities. One of the main arguments in favour of the Kotlikoff-Mehrling-Milne insurance guarantees is that they are a cost effective way of using tax-payers money to bring mark to market accounting valuations back in line with prospective credit losses.

The origins of the crisis

The deluge of media commentary on the credit crisis has missed an important fact. Seemingly all-pervasive withdrawal of credit availability can be traced back to a single cause, the collapse of liquidity and the consequent dislocation of prices in the secondary market for the most senior structured credit securities.

The seeds of the current crisis were planted in the years 2002 to 2007 when commercial and investment banks worldwide built up large portfolios of what they thought were safe senior tranches of structured credit securities. Importantly, their holdings of these securities were largely financed with short term borrowing, using asset-backed commercial paper or 'sale and repurchase' repo agreements. This short term funding was the principal means of intermediation of the worldwide global savings surplus and thus the main source of finance for the long credit boom that has now come to an end.

The trick that released this vast new supply of credit was the repackaging of loans – mainly household mortgage loans but also other loans – as asset backed and structured securities. In this way heterogeneous and illiquid loans were transformed into homogeneous and liquid bonds that could always be sold, if need be, or so the banks believed. Banks thus persuaded themselves (and their regulators) that they had avoided the usual liquidity risk from borrowing short and lending long.

Given the assumed liquidity of the new structured credits, the decision to finance their holdings using short term money was driven simply by cost considerations. Short term funding was much cheaper than long term money. So banks aggressively pursued this new business opportunity, piling up more of these exposures year after year until the total amount of good quality senior long term structured loans financed by banks in the short term markets rose to around $3.5 trillion dollars worldwide.

Banks and regulators alike failed to recognise the fallacy of composition on which this business strategy rested. Securitisation blinded them to the massive systemic liquidity risk to which they were exposed. What was safe for an individual bank – borrowing short to hold long term safe senior marketable structured credit securities – was far from safe for the banking sector as a whole. The ability of one bank to sell always depended on the presence of other banks willing to buy, and would disappear when all banks wanted to sell at the same time. Just so, since August of 2007, we have seen a collapse in both trading volumes and prices in the secondary market, and the effective closure of the market for the new structured credit securities.

Exploding some myths

Commentators have propagated several myths about the credit boom and subsequent crisis, myths that have little factual foundation but nevertheless sound plausible, and so have unfortunately been driving the responses of policy makers.

The first myth is that banks and other investors were misled by biased credit ratings, because of a fundamental conflict of interest at the ratings agencies. The issuers of the new structured credit securities paid for ratings and as a result, so it is argued, the rating agencies were under pressure to give favourable ratings or risk losing market share.

This does not square with the facts. Rating agencies have been paid by corporate issuers for ratings for many years and there is little evidence that this has resulted in bias. Also the ratings of the more vanilla structured products have not worked out that badly – to date there has not yet been a single default of a AAA tranche on a sub-prime mortgage backed security.

That said, it is true that the rating agencies made some mistakes when offering their opinions on the new asset class at the centre of the crisis, namely the assets created by the two-layer (or more) securitizations involved in CDOs of ABS. Agencies provided ratings on some overly complex structures when, frankly, they did not understand the underlying risks. As a consequence, the ratings of these complex products have proven to be unsound.

But even in these cases an argument could be made that the more important source of trouble was not failure to understand and convey the credit risk. Rather it was failure to make sufficiently clear that the ratings concerned credit risk only, not liquidity risk. There were no warnings from credit rating agencies about the possibility that secondary markets might become illiquid, so that market prices might become disassociated from underlying value.

A second myth is that structured credit products lack transparency. This myth reflects a basic confusion between transparency and liquidity. Structured credit is now very hard to either buy or sell (liquidity). But most structures are in fact rather simple (transparency).

In almost all cases, structures involved a small number of securities tranched according to their seniority and secured on a pool of fairly homogenous assets. Moreover there is considerable information available on the performance of the underlying assets.

A third myth is that the current credit losses are a consequence of perverse incentives for bank employees created by bank bonus arrangements. Yes, there are incentive problems with some bank compensation packages, both for traders and for executives, but again this is nothing new. Shareholders and regulators have been aware of these incentive problems for years and they are not limited to the trading of credit. They arise in equities, corporate finance, retail savings products, and all other areas of bank activities. Thus there were already moves being taken, even before the crisis, to ensure that bonuses were deferred or paid in the form of stock with restrictions on sale. If there is an underlying incentive problem that has not yet been adequately addressed, it is with the asset management industry, where compensation depends entirely on short term quarterly performance. The consequence is excessive focus on quarterly earnings, which are most easily increased in an up market simply by adding leverage.

A fourth myth is to ascribe the current crisis to a widespread lowering of standards of risk-assessment across the banking industry. There can be no question that there were problems of risk assessment in particular areas, notably in sub-prime mortgages and other retail credit; the banks confused high levels of repayment during the boom with low levels of underlying credit risk. But losses on these risky borrowers are not unusually high compared with previous episodes, for example in the early 1990s, and most recent bank lending was to relatively safe borrowers – mid tier corporates, prime mortgages, emerging market sovereigns – that could be expected to repay as long as there is was no economic cataclysm. Today these safe exposures seem risky, but blaming these loans for the credit crisis is putting the cart before the horse. It is the bank liquidity crisis, and the resulting shortage of credit worldwide, that has caused these loans to begin to go bad, not the other way around.

These mistaken beliefs are dangerous because they persuade politicians and regulators – who must be seen to be 'doing something' – to throw money around unnecessarily and make damaging and unnecessary interventions that further inhibit the supply of credit, thus worsening rather than alleviating the global shortage of credit.

The consequences of the crisis: illiquidity and deleveraging

Emerging losses on US sub-prime lending, although not so large in themselves, sparked the subsequent crisis by revealing to everyone the liquidity risk inherent to the new parallel banking system more generally. As some banks and funds moved to sell their sub-prime exposures they found that, absent willing buyers for these securities, they became engulfed in a vicious circle of falling and more variable prices, and collapsing volumes of trade. Banks faced an unenviable choice: sell out of these securities at a substantial loss, or hold on to them but experience large swings in portfolio values because trading was so infrequent and at such unrepresentative prices.

Most tried to hold on, but uncertain values made it increasingly difficult to raise short term finance using the securities as collateral, and some thus chose (or were forced) to liquidate at fire-sale prices. This dynamic is the source of all the subsequent problems in short term money markets. Most important, it is the source of the widely-remarked wedge between secured and unsecured money market interest rates. It is instructive to explore in more detail exactly how this dynamic played out.

During the boom the job of bank liquidity management was rather easy. Banks would never agree to pay much more for unsecured lending than for secured repo loans because they had plenty of good collateral with which to access the latter. Unsecured LIBOR interest rates were typically only a few basis points over repo rates. This close correspondence depended on the eligibility of mortgage backed and structured credit securities as collateral, and that eligibility of course depended on the continued existence of a liquid market for these securities, but that was no problem at all during the boom.

After the summer of 2007, however, there was no longer any liquid secondary market for senior structured credit securities, either for repo or for outright sale; the most straightforward low cost alternative to unsecured borrowing was no longer available. Banks were forced instead to borrow on an unsecured basis, and this necessitous demand for funds led to a sharp increase in the price of unsecured money market borrowing. The overhang of structured securities financed short term explains the marked and persistent divergence between unsecured LIBOR interest rates and monetary policy rates.

The same overhang also explains the sharp contraction in credit availability and the speed and depth of the current economic downturn. Desperate measures were required simply to avoid liquidating existing portfolios, so new lending was out of the question. Thus the problems in the banks spread to the economy as a whole. Everyone, not just the banks, sought to reduce their dependence on external debt finance.

The distributional consequences of deleveraging

"Deleveraging" has become the watchword of the day, not just for financial firms but also for non-financial firms and households. What that means is that everyone – banks and non-banks alike – has been trying to liquidate assets and use the proceeds to pay down their debts.

In principle this should be possible, because financial assets are almost all "inside" assets, which means that they are someone else's liability so that, at the level of the economy as a whole, they net out. If we were all one big happy family, we could do that netting and have done with it.

But we are not one big happy family, and what that means concretely is that each of us worries about our own individual balance sheet. As we individually try to sell assets, asset prices fall relative to cash. The consequence is that any sales at those depressed

values amount to a redistribution of wealth from those selling the assets to those providing the cash.

Since each of us individually is concerned to hold on to as much net wealth as possible, sales happen only when there is no alternative. This explains why the deleveraging process has been so slow and painful, and also why it has been punctuated by moments of rapid and frightening collapse in the aftermath of the failure of some particularly important entity.

The role of government

The proper role of government policy is to facilitate the deleveraging process, which means on the one hand trying to keep the pressure on so that the process does not take forever or even reverse, but also taking the pressure off whenever the process threatens to get completely out of control. This explains why government policy has seemed to switch direction so often, and so rapidly.

It is important to appreciate that the only reason the government is able to play such a role comes from the fact that, as mentioned above, financial assets are almost all "inside" assets. If one private entity holds the liability of another private entity, it is always possible for the government to step in between, swapping its own liability for the private liability. Since the government's liability is cash, or near-cash Treasury bills, this process facilitates private deleveraging, albeit at the cost of public leveraging. This kind of substitution of the government's balance sheet for open market credit is the main cause of the widely-noted expansion of central bank balance sheets in the US and worldwide.

The price at which the government does this swap is clearly of the essence, not least because of its implications for the distribution of wealth. A high price helps the asset holder at the expense of the government's creditors (which means everyone else) and a low price does the reverse. This explains why the policy response has been so slow, and also why it has been so politically charged and non-transparent when finally it has come.

The biggest advantage of our insurance approach to the crisis is that it offers a way simultaneously to keep the pressure on while preventing collapse, and does so in a way that is transparent and politically neutral. The idea is to sell insurance against a key class of the distressed assets, at a price that is sufficiently high that it keeps the pressure on, but with a supply sufficiently elastic that it puts a floor under prices and so prevents collapse. By charging the same price to everyone, the government can avoid the time-wasting and energy-sapping political process of managing the redistribution of wealth, relying instead on existing mechanisms for handling failures, both financial and non-financial, both business and household.

The advantages of an insurance approach

Government backed insurance of assets will enable banks and investors to hold rather than sell, because it will immediately restore the eligibility of the assets as collateral for secured financing. The pressure on unsecured markets, pressure that is now being met by an expansion of central bank balance sheets that is unprecedented in peace time, will thereby abate.

Government backed insurance of assets will also enable banks and investors more accurately to evaluate their capital positions. The pressure to raise capital, either from private sources or increasingly from government sources, will therefore also abate.

On both accounts, asset insurance is much the most efficient way of using taxpayer's money to combat the credit crisis.

The alternative – the policy that governments world wide are now pursuing – is to work on the liability side of bank balance sheets, using government funds to provide banks with equity capital or debt or (which comes to the same thing) guaranteeing private sector purchases of bank wholesale borrowing. These liability focused solutions will be effective at slowing down the process of deleveraging but they have two major drawbacks:

- They expose taxpayers to quite unnecessary risk, risk which the private sector would carry if the government placed a floor under asset values
- They result in the public sector becoming the dominant holder of bank equity and debt, thus making bank decisions and strategy political rather than business decisions.

Governments claim that risk and political interference will be limited and that these exposures will be sold to the private sector, but it is difficult to see how this will happen anytime soon without some form of government backed asset insurance, so that investors need not worry about a systemic collapse of asset prices..

Implications for accounting valuations

This way of understanding what has been happening, and the path forward, sheds light on recent debates concerning accounting practice.

FAS 157 on "Fair Value Measurements" has come under attack for exacerbating the crisis by requiring financial firms to write down the value of their asset holdings to current fire sale prices, so possibly exaggerating their losses and undermining their ability to finance their activities on an ongoing basis, either in the debt markets or in the equity markets. Against this criticism weighs the argument that exchange price (specifically the exit price) provides both a more objective and a more consistent basis for valuation than other possible choices.

Both points of view seem to have definite merit, and it seems a shame that we have to choose. But must we choose?

The analysis presented above makes clear that one reason firms refuse to liquidate at current prices is that they are trying to resist the consequent redistribution of wealth toward the buyers. Clearly, the very same reason will make them refuse to sell to the government at those prices. It follows that the original Paulson Plan could only transfer assets to the government if the government paid higher than the private sector, and it therefore comes as no surprise that that plan has proved unworkable.

The very same reason lies behind resistance to marking down the value at which assets are carried on the balance sheet, since doing so involves recognizing a net wealth transfer even if it does not involve realizing it by actual sale. (The transfer is recognized when markdowns force dilutive recapitalizations.) The point is that the market price may be objective and consistent, but there is no reason to think that it is correct, and until we get prices correct there will be no recovery of trade.

One way to resist marking to market is to go back to cash flow accruals based valuation, but the analysis presented above makes clear that such a move does precisely nothing to address the underlying problem. Investors are well aware of the illiquidity problems with these securities and want to know the impact these problems are having on individual banks. Whether they are revealed in the balance sheet and P&L or relegated to accounting footnotes will make little difference. The most that can be expected from abandoning fair value for these illiquid securities would be to save some embarrassments for chief executives and thus reduce incentives to undertake the necessary and unavoidable deleveraging.

Our proposal for government backed insurance of good quality illiquid assets is a much better response. The point of the insurance approach is to make market prices correct, so that fair value measurement will be correct as well as objective and consistent, and banks and others can then make sensible and informed decisions about the leverage they desire.