What's the damage? Why banks are only starting to uncover their subprime losses

By Gillian Tett and Paul J Davies

Published: November 4 2007 18:08 | Last updated: November 4 2007 18:08

When **Merrill Lynch**, the US bank, announced 10 days ago that it was taking $8bn-worth of losses on mortgage-related securities, bankers and regulators around the world reeled in shock. For the writedown was twice the size of the losses that Merrill had forecast just a two and a half weeks earlier – a "staggering" multi-billion dollar gap, as Standard and Poor's, the US credit rating agency, observed.

But last week, investors received an even more staggering set of numbers. As financial analysts perused Merrill's results, some came to the conclusion that the US bank could be forced to make $4bn more write-offs in the coming months.

These calculations were not limited to Merrill: after **UBS** unveiled $3.4bn (€2.3bn, £1.6bn) of third-quarter mortgage-related losses last week, Merrill Lynch analysts warned that the Swiss bank would need to take up to $8bn more losses in the fourth quarter of this year. Meanwhile, **Citigroup**'s share price slumped on rumours that it may need to acknowledge another $10bn of losses.

Such a tsunami of red ink would undoubtedly be shocking at any time. But right now, this news is proving particularly unsettling for investors for two particular reasons. First, the numbers offer an unpleasant reminder that the pain from this summer's credit turmoil is still far from over – contrary to what some bullish American bankers and policymakers were trying to claim a few weeks ago. "To judge from secondary market prices, losses on mortgage inventory are likely to be larger in the fourth quarter than the third quarter," warns Tim Bond, analyst at Barclays Capital, the UK bank.

Second, the write-downs have reminded investors just how little is known about where the bodies from this summer's credit turmoil might lie. Perhaps the most shocking thing about recent announcements is that while big banks might have now written down their mortgage holdings by more than $20bn, this does not appear to capture all the potential losses.

Last week, for example, a US congressional committee warned that over the next year mortgage lenders could foreclose on 2m American homes, destroying $100bn of housing value. And some private sector economists think the total loss from mortgage problems could reach $200bn or more. "What everyone keeps asking is where are those losses sitting – where is the rest of that $100bn?" admitted one senior international policymaker late last month. "The worrying thing is that there still is just so much uncertainty around."

To an extent, this uncertainty reflects the fact that the tangible scale of defaults in the US mortgage arena is still unclear, particularly in that sector of the mortgage market known as "subprime" – loans extended to borrowers with poor credit histories. In the past year, the pace of defaults on subprime loans has risen sharply in America, particularly on mortgages made in 2006 and 2007. However, it is unclear what scale of losses this will eventually produce for banks, since it typically takes several months for lenders to foreclose on loans and then sell a property.

Moreover, it is also very unclear how the pattern of mortgage defaults will develop. While some economists fear that the default ratios could rise sharply in the coming year, others suspect that the US government will force lenders to be lenient towards borrowers. Thus estimates of potential mortgage losses in the subprime sector range from $100bn (according to government figures) to several times that.

However, when it comes to working out the impact on banks, the task becomes even harder. For in recent years, banks have not simply been acquiring subprime loans, they have been repackaging them into complex "asset-backed securities" (ABS) that can be difficult to value. The Bank of England, for example, suggests that on the basis of industry data some $700bn-worth of bonds backed by subprime loans are now in circulation in the world's financial system, with another $600bn of bonds backed by so-called "Alt A" loans, or those with slightly better credit quality.

Moreover, these bonds have then been used to create even more complex securities backed by diversified pools of debt, known as collateralised debt obligations (CDOs). According to the Bank's calculations, for example, some $390bn of CDOs containing a proportion of mortgage debt were issued last year – though the precise level of the subprime component varies.

The multi-layered nature of these complex financial flows means it is hard to assess how defaults by homeowners will affect the value of related securities.

In recent weeks, some credit rating agencies have indeed started to downgrade their ratings of debt: Moody's and S&P, for example, downgraded about $100bn of mortgage-related securities last month. But most analysts think that this "downgrade" process is still at a very early stage – and in tangible terms, that means that subprime defaults have not yet delivered tangible losses for many security investors. "Most CDOs have yet to see many downgrades and there have been almost no actual defaults of the ABS bonds within the CDO portfolios," points out Matt King, analyst at Citigroup. "[But] all that is about to change."

The other big problem that makes it hard to calculate the "real" scale of mortgage-linked losses at banks is that it is often fiendishly hard to get an accurate value for mortgage-linked assets – and thus determine how much prices have fallen so far. In other arenas of finance, such as equities, banks typically value their assets by looking at external markets: the share price of a British company, say, can be calculated within seconds, by glancing at the stock exchange. Mortgage-related securities have not been widely traded in recent years, and in the past couple of months activity has dried up almost completely – meaning there is no market, and thus no market value.

Some banks have tried to get around this problem in the past by developing computer models to work out what the securities "should" be worth. However, these can be very unreliable and vary wildly between different banks. Recent calculations by the Bank of England, for example, show that if tiny changes are made to the type of model typically used by banks to value mortgage-linked debt, the implied price of supposedly "safe" assets can suddenly change by as much as 35 per cent.

As a result, some analysts are now using another technique to work out their mortgage-linked losses, namely, extrapolating from prices based on derivatives indices such as the so-called ABX. For although mortgage bonds have not traded much in recent weeks, derivatives *have* been bought and sold – meaning that the ABX can offer a trading price.

In recent weeks, this trading price has fallen sharply (see chart), which has increased the pressure on banks to mark their books down. However, the banks have not yet made write-offs as large as the ABX might imply. Merrill Lynch analysts, for example, calculate that mid-quality ABX debt is on average now trading at 40 cents in the dollar. But these analysts say that Merrill Lynch itself has only written this type of debt down to 63 cents in the dollar – and UBS is still assuming this debt is worth 90 cents. "Simple math would imply that UBS needs an additional $8bn write-down [on its $15.4bn holdings] if the ABX pricing is correct," Merrill says.

But the problem is that no one really knows whether these numbers represent the "true" guide to tangible mortgage losses either; some analysts claim, for example, that the ABX is an unreliable guide to price. Moreover, most banks have not actually sold their troubled securities yet in an open market. And while there are reports that some banks have tried to arrange quasi-sales between institutions, on "sweetheart" terms in recent months, the US regulators now appear to be scrutinising these practices too – not least because this could potentially manipulate prices as well.

But if these problems make it hard to calculate the scale of banks' subprime losses, the guesswork becomes even wilder when it comes to other financial groups. As the subprime credit chain has grown in recent years, it has left banks exposed not simply to these assets but to a host of other investment institutions as well, including insurance companies, pension funds and hedge funds. These institutions sometimes use different approaches to reporting their subprime exposures from those adopted by bulge-bracket banks – and these differences are further magnified by the fact that they are operating under different national accounting regimes.

In some corners of the global financial system, institutions are already trying to come clean about the pain. It is relatively easy, for example, to calculate the losses at so-called structured investment vehicles (SIVs) – a breed of specialist fund – because they are required to publish regular "net asset value" numbers. According to the rating agencies, for example, the average value of assets in SIV vehicles has fallen by a third since the start of the summer.

Some investors with holdings of SIVs have recently come clean about their losses. TPG-Axon, the US hedge fund, is understood to have written off the value of all the junior notes issued by its SIV.

A number of Taiwanese banks – which have been among the biggest buyers of such paper – have also been surprisingly frank. For example, **Bank SinoPac** said it would take a third-quarter hit of $43m on its $350m of SIV holdings.

However, for every example of transparency there is a case – or several – of an institution reluctant to reveal losses. In jurisdictions such as Japan, for example, it is widely accepted that institutions need not mark all their assets to market, since they often hold these to maturity.

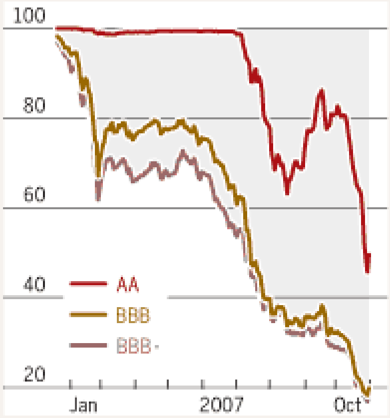
Similarly, uncertainty dogs large parts of the asset management world in continental Europe. Meanwhile, the insurance industry is generating particular anxiety among some investors. In recent days, for example, the share price of the largest US monoline insurance groups, such as **MBIA** and **Ambac**, have collapsed in spectacular fashion due to concerns about potential exposure to mortgage-linked CDOs. The two companies say that they do not have any serious problems – and point out that the proportion of mortgage-related assets in their business is tiny. But the challenge that dogs these "monoline" groups is that their balance sheet accounting is poorly understood by most investors.

Optimists within the financial world point out that such uncertainty is not unique to the 2007 credit squeeze: 15 years ago, for example, the financial world was presented with a similar fog, when it tried to untangle the losses that hit the Lloyd's insurance syndicate. "There are a lot of parallels today," says Adam Ridley, a senior London financier who was heavily involved in the Lloyd's affair.

However, the challenge for policymakers today is that the 2007 credit storm – unlike the Lloyd's debacle – is not a contained affair: on the contrary, the opaque subprime chain has created unexpected linkages between an extraordinarily wide range of investors and institutions around the world. The longer investors continue to fear that this chain could produce unexpectedly large future losses, the greater the danger of a downward spiral in investor confidence – and thus the higher the risk of a knock-on impact on the "real" economy.

US mortgage-backed securities

ABX index (2007-01 tranche)

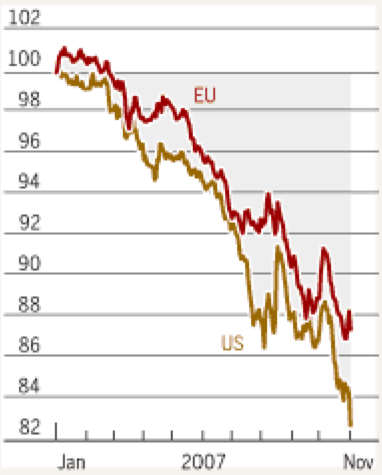


Ambac Financial and MBIA

Cost of insuring against debt default (basis points)

Financial sector performance

Relative to the market (FTSE indices)



Sources: Markit; CDS IndexCo; Thomson Datastream