

The fall of major financial institutions last year struck onlookers with shock and fear, **says Michelle Darracott**, but where others failed, lessons can be learned

PASSING THE STRESS TEST



Few would argue that 2008 was not a trying year in the world of pensions. Unfortunately, it is likely that 2009 will test the resolve of trustees even further. To a growing number of schemes that have moved to a strategy incorporating derivatives such as swaps, the default of a global powerhouse such as Lehman Brothers was almost incomprehensible. While counterparty credit risk was certainly discussed in many trustee meetings, it was largely from a theoretical perspective.

However, despite the severe financial market implications that consequently played out, the default by Lehman Brothers was in fact a good stress test of the procedures investment managers had in place to manage counterparty credit risk. Here, the ramifications posed by the default of a major counterparty such as Lehman Brothers are explored, as well as the steps that investment managers can take to mitigate them.

Counterparty credit risk

One of the most extreme risks that could arise from trading in the swap market is that the party with which you are entering a trade does not hold up its side of the agreement. Known as counterparty credit risk, this situation could occur if a swap was in-the-money to a pension scheme and a bank counterparty defaulted. In this event, the scheme would lose some or all of the value of its asset. While counterparty credit risk cannot be completely removed, it can be largely mitigated. The key ways that investment managers can manage counterparty

KEY POINTS

■ Counterparty credit risk is where the party with which you are entering a swaps trade fails to hold up its side of the contract

■ Robust operational controls, diversification and collateralisation help to mitigate much of the risk

■ The collapse of Lehman Brothers has shifted the focus onto investment managers, who will now be expected to demonstrate the effectiveness of their risk management processes

credit risk are:

- having comprehensive derivative documentation;
- counterparty monitoring;
- diversification by counterparty;
- collateralisation;
- having a robust counterparty selection process;
- having strong operational controls and processes in place.

Default by a counterparty bank is a risk in itself, but associated with it is a series of additional risks. Each of these is addressed below, in conjunction with steps that can be taken to mitigate them. The most recent test of whether investment managers have the correct procedures in place was the default by Lehman Brothers in September 2008.

Weeks leading up to default

It is fair to say that nobody really expected Lehman Brothers to fail. However, with ever-decreasing confidence in Lehmans' creditworthiness, investment managers did investigate methods of mitigating the impact should such an event occur.

The impact of Lehmans' default carried different implications, depending on the procedures and processes an investment manager had in place. For managers who had diversified their use of counterparties across 10 or more different banks, the default of Lehmans, while not ideal, was nowhere near as severe as if Lehmans was behind all of their derivatives trades. Diversifying across counterparties also gave investment managers key relationships that they could leverage off during such an extreme event.



protect themselves.

The timeline shows the events leading up to Lehmans' default and subsequently the risks that a scheme could be exposed to if their investment manager did not have adequate protection mechanisms in place.

Friday, September 12

To help protect the exposure from a derivative position, the different parties involved may transfer assets or 'collateral' to cover any current shortfall between them that has resulted from market movements. This process is known as 'collateralisation' and it has now become a market standard for this to be performed on a daily basis.

Where daily collateralisation was in operation during the Lehmans event, collateral was collected on Friday September 12, based on the close-of-business price on the previous day. By exchanging collateral daily, intra-day risk still remains. However, when combined with high quality collateral assets using appropriate 'haircuts' (see glossary), this at least partially offset the daily exposure.

Investment managers can further reduce the risk of a shortfall by ensuring that the terms are bilateral (or in the scheme's favour), so that the collateral assets of which the scheme is in receipt are of an equivalent quality to those that the scheme can post under the terms of the credit support annex (CSA).

Sunday, September 14

It became apparent to the market that Lehmans was at risk of filing for bankruptcy.

Monday, September 15

Many investment managers will have scheduled emergency meetings of those responsible for making decisions on counterparties. The market news at the time was that Lehman Brothers Holdings would file for chapter 11 bankruptcy protection at 10:00 UK time. In preparation, investment managers no doubt were preparing default notices.

Later on that day, the market was informed that Lehmans had indeed defaulted. The next step was to deliver 'event of default' notices by as many means as possible.

Tuesday, September 16

On the assumption that there was enough collateral to cover the out-the-money positions to Lehmans, the biggest concern was being out of the market. Therefore, investment managers were very focused on replacing trades. If everything went according to plan, all trading activity in respect of the replacement trades would have been completed by close of play on Tuesday. It quickly became imperative that the investment managers had the depth of resources and the relationships with other counterparty banks to move quickly.

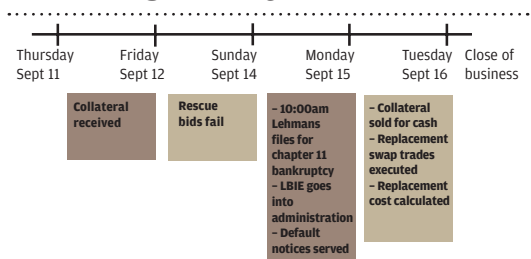
Investment managers who had the right processes and procedures in place were then able to sell their collateral for cash and execute their replacement swap trades with their new counterparties (reducing or eliminating their exposure to Lehmans). As markets are not static, there is a cost to re-establishing market exposure (replacement cost). This reflects the extent to which markets have moved since the

For example, one of the options that many investment managers looked at was intermediation, both on behalf of segregated and pooled fund clients. This situation involved another counterparty (typically another bank) stepping in between the scheme and Lehmans. This bank would then become the principal counterparty to both the scheme and Lehmans and would have credit exposure to both. The scheme's exposure would then be to this other bank, and Lehmans would be exposed to that bank as well. There would be a cost payable to this new counterparty for their intermediation. The costs of intermediation would automatically be borne by the scheme, and therefore requires an assessment of the costs of intermediation versus the potential benefits.

While default by a counterparty is not a particularly favourable event, at least Lehmans' default provided a good stress test for any processes and procedures schemes may have in place to

Lehmans' default provided a good stress test for any processes and procedures schemes may have in place to protect themselves

LEHMANS' DEFAULT



Source: LGIM

GLOSSARY

■ Counterparty

A participant in a swap contract or another derivative contract. Typically, there will be two counterparties to a swap contract.

■ Collateral and collateral management

To ensure the exposures are covered on derivatives contracts, there may be a legal transfer of assets between one party and another. Collateral is transferred to the 'in-the-money' party (ie the party would lose out in the event of default of the other party). The assets transferred (typically bonds) are referred to as collateral. The process of transferring collateral from one counterparty to another is known as collateral management.

■ Collateral haircuts/valuation percentages

The idea of collateral is that it can be sold by the counterparty that has not defaulted to compensate them for the non-performance of the swap contract, and/or to finance the contract with a new counterparty. Since there will be a period between when collateral was last received and when the swaps are closed out, non-cash collateral may fall in value.

To mitigate the risk of collateral falling in value over the close-out period, more collateral is required to be posted than the value of the credit exposure. For example, £105 of bonds may be posted to cover £100 of credit exposure. The difference between the £105 and £100 is called the 'haircut' (an amount sliced off the top). The size of haircut applied to each bond posted as collateral will depend on the maturity and credit rating of the bonds.

■ Credit support annex (CSA)

A CSA documents the collateral arrangements between two parties in privately negotiated over-the-counter (OTC) derivative securities, such as swaps. The CSA is an appendix to an industry standard derivative agreement called an ISDA master agreement.

■ International Swaps & Derivatives Association (ISDA) master agreement

An ISDA master agreement is used to document the legal relationship between counterparties to an OTC derivative contract.

■ Minimum transfer amount (MTA)

The aim of the MTA is to prevent the frequent exchange of small amounts of money between two counterparties. Typical levels might be from zero to £2m. The MTA would be documented in the CSA.

■ Thresholds

The threshold is the amount of unsecured credit exposure one counterparty is willing to accept from the other. For swaps between UK pension schemes and banks, a typical threshold level might be zero or £1m. Details of the threshold amount would be contained in the CSA.

default by the counterparty. Assuming the documentation allowed this, any replacement costs could then be claimed by schemes from administrators to the defaulting counterparty.

No doubt there will now be increased focus on this by schemes in the selection of their investment manager for a derivatives mandate. These clients will now be able to ask prospective fund managers to demonstrate the effectiveness of their risk management processes using an actual example, rather than from a theoretical perspective.

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A word from the sponsor...

Background

Legal & General Investment Management (LGIM) is one of the leading fund management groups in the UK, managing over £194bn* on behalf of over 2,900 corporate pension fund clients. LGIM's client relationship teams are dedicated to meeting the needs of different institutional clients, ranging from multibillion-pound pension schemes to small charities.

Its success has been driven by a clear focus on delivering investment solutions to meet the needs of clients and their advisers.

Range

LGIM aims to meet specific client needs and objectives by providing a full range of funds and services, from index and active equities, bonds, property and cash, to liability-driven investment solutions, transition management and cash-flow matching. LGIM is well known for its competitive index offerings and is one of the largest fixed income managers in the UK.

Consistency

LGIM's approach to investing your money means you know what you're getting, and it

intends to deliver on its promises year after year.

Service

LGIM believes in providing the service you want and deserve. Its culture means that it strives to go out of its way to provide what you need when you ask for it. Its client service team recently won the *Financial News* team of the year award. In addition, through initiatives such as trustee training, it aims to help you make the best investment decisions.

Value

LGIM believes in a fair deal. It aims to deliver the most appropriate products and best client service at a total cost that provides good value for money. This extends beyond value-for-money fees into simple, low governance product offerings that help make the investment process easier and cheaper.

*Source: LGIM as at September 30, 2008

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