



New debt product matches risk and return The National Business Review - 01 Aug 2003 : 40-01

Investment
Kurt Hess

Declining interest rates are fuelling demand for higher-yielding investments, among them novel collateralised debt obligations (CDOs).

Two such products are the A minus-rated Generator bond, ABN Amro's Hy-Fi and ING's Diversified Yield Fund, which all promise yields around 1.5-2% higher than corporate bonds with comparable credit ratings.

Too good to be true? This article reviews the risk characteristics of the Generator bond, which are well disclosed in the offering circular but one has to read it in detail to understand them.

Synthetic loan portfolio

Performance of the Generator bond is determined by the default experience of a reference portfolio of 100 mostly international companies, all rated at least BBB- by Standard & Poor's. This means should one or more of these companies default, interest and principal payable to Generator bondholders may be affected.

The purchase of Generator bonds is thus not a direct investment and there exists no physical loan portfolio held on behalf of CDO investors, for example by a trustee, that could be liquidated under a worst-case scenario. Rather bondholders actually help insure this loan portfolio held by some third party that would typically be an international bank. How does this work?

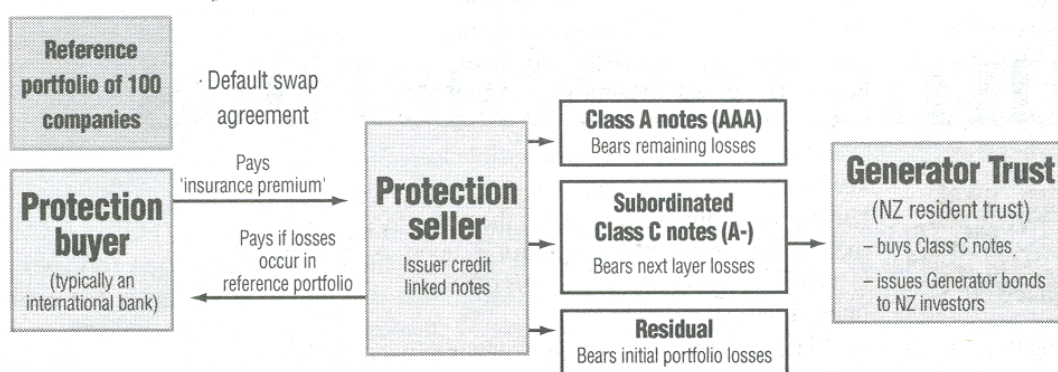
Internationally there is great demand from financial institutions to hedge their credit exposure. They might seek such protection to reduce risk concentrations on their balance sheet or to decrease the regulatory capital required, which in turn can improve their own profitability.

One method often applied is to set up a so-called CDO structure under which a special corporate vehicle such as a trust provides credit insurance to banks. To back the potential claims, it will in turn issue credit-linked securities, often in a number of tranches.

The most junior or residual tranche suffers first if losses occur in the portfolio and are often retained by the banks themselves. More senior tranches enjoy protection until the junior note's principal is used up.

The Generator bonds offered in the New Zealand market actually represent a mezzanine tranche; they enjoy some protection but bear the credit losses before a more senior AAA-rated class A tranche would be affected.

Figure 1



PROTECTION SELLERS: Generator bondholders are indirectly invested in a subordinated credit-linked note issued by a special corporate vehicle that provides credit insurance to a third party, typically an international bank, by means of a default swap. In the jargon of the industry they are in fact protection sellers that have insured the loan portfolio of a protection buyer

Assessing the credit rating

A key feature of the Generator bond will be an A-minus credit rating issued by Standard & Poor's. Would the risk to Generator bondholders thus be lower than say for a BBB rated Mighty River or BBB+ rated Powerco corporate bond?

The rating agency will argue this is the case as a particular rating supposedly expresses the same likelihood that the bond will not be serviced in accordance with its terms. Unfortunately, the markets will not buy this story and structured transactions like this will virtually always be traded at a higher yield than equivalent corporate bonds.

This has to do with the method by which these ratings are actually derived. The rating of a corporate bond is for the most part determined by a qualitative assessment by the rating analyst as to how the company is positioned in its markets. Accordingly, given the operational risks in a particular industry, companies will have a typical range of ratings unless their financial situation is very poor.

On the other hand, ratings for structured bonds are in essence derived from probabilistic credit risk models. These are calibrated with historical loss experience and then produce a rating that corresponds to the likelihood of a default scenario occurring.

While it is always said past performance is no indicator for the future, this is exactly what is done here. The question arises as to whether we should believe that 25-odd years' experience of observing defaults of rated firms is a reliable predictor for the coming five years. It is this uncertainty the market is concerned about when it requires a risk premium for such synthetic instruments.

Probability versus severity of loss

Default rates on A and even BBB-rated bonds have indeed historically been low but it is also the loss magnitude that must be considered since a rating per se does not express an opinion on the prospective severity of the loss.

Should, for instance, a utility company with substantial tangible assets such as Powerco run into financial trouble and cease interest payments, there would be good chances the bondholders would still recover a substantial portion of their investment.

However, in the case of a CDO bond, consequences would be much more grave.

Take the Generator bond as an example. Once losses in the portfolio exceed a threshold of roughly 4.4%, each subsequent company defaulting in the portfolio would substantially reduce the principal of the Generator bonds.

If total losses reach 6.4%, the bond will have lost all its value.

This is almost like a binary payout: either the bond is serviced as promised or, obviously with a very small probability, bondholders lose their whole investment. In theory, the probability of 4.4%, respectively 6.4% or greater loss could be estimated and this would be an important input into the decision to invest.

Risk and return

The final terms for some of the CDO products, in particular the interest coupon for the Generator bond, have yet to be finalised. The yield premium compensates the investor for a potentially more severe loss. The risk profile of CDOs certainly compares favourably to the term deposits with some New Zealand finance companies engaged in property lending.

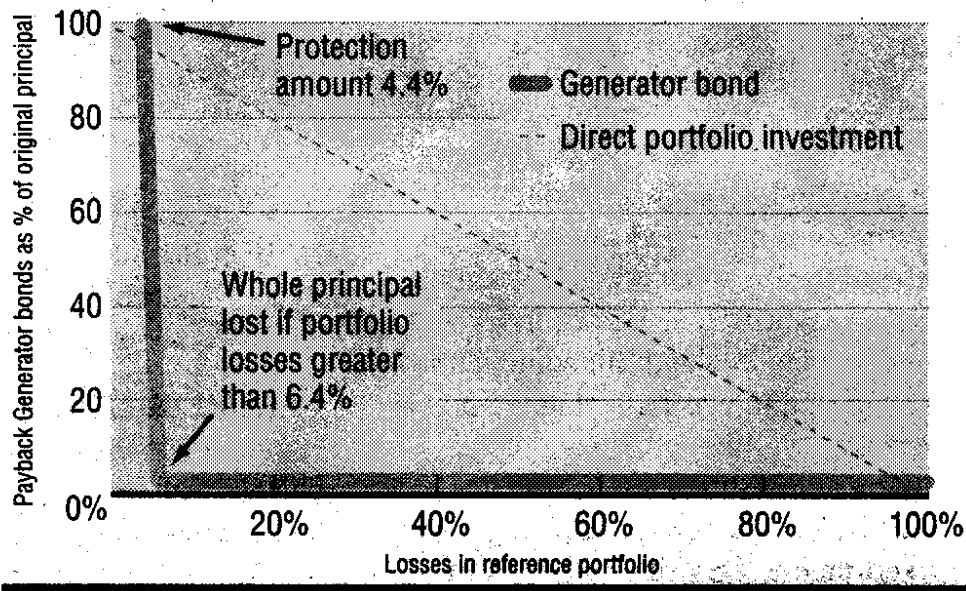
Unlike CDO products their disclosure of risks is often minimal and, while they offer similar yields, they are not rated, which indicates they should be considered speculative investments.

Still investors must realise what they are buying with CDOs and not complain if the unexpected occurs.

Kurt Hess, is senior fellow, University of Waikato Management School. Department of Finance. Email: kurthess@waikato.ac.nz

Figure 2

CDO payback depends on losses in reference portfolio



SERIOUS LOSSES: Once losses in the reference portfolio exceed a set protection amount, CDO investors will suffer serious losses. Admittedly there is a very small likelihood of this happening but this is quite a contrast to the payout of a hypothetical direct investment in such a portfolio.

Note: The chart is based on preliminary terms for Generator bonds