

# Essay on cdos risk management

[Education](#)



**ASSIGN  
BUSTER**

Case Study- CDO CREATIVE BALANCE SHEET RISK MANAGEMENT: VALUE CREATION? 1) What is a CDO? Who buys CDOs? CDOs are a type of asset backed security composed of bonds issued by special purpose vehicles (a corporate entity that holds the assets as collateral, packages them and sells the resulting notes to investors). Normally, the bonds issued are divided into tranches with different risk characteristics and debt rating. Each tranche carries a different rating which determines the interest and cash flow for each layer. There are several types of underlying assets that the special vehicle can buy.

The most typical are corporate bonds, corporate loans, trust preferred stocks, mortgage-backed securities and commercial real estate bonds. Those described above are conventional CDOs. Banks also created synthetic CDOs. The main characteristic is that the credit risk is transferred by a derivative (credit default swap, normally) but the originating bank retains the underlying pool of assets in the balance sheet. Nevertheless, with synthetic CDOs credit risk is transferred and the originating bank obtains an important relief in capital requirements.

There are several investors interested in buying CDOs. The motivations for those investors are different depending on the tranches they buy. In general, investors buy CDO assets with certain rating that offer a higher return than more traditional securities and benefit from the theoretical diversification buying a CDO portfolio. Risk adverse investors such as mutual funds and pension funds will buy the senior tranches in order to obtain a higher return than buying treasury bonds.

Senior tranches pay a spread above LIBOR even if they are rate AAA. Other investors, such as hedge funds, banks or private banking organizations can sometimes prefer junior tranches such as mezzanine notes and equity notes, tranches offering yields normally not available in other fixed income products. 2) Who sell CDO and why? CDO is a form of securitization. When securitizing, banks manage to transfer their loans out of their balance sheets, transferring also the credit risk of these loans. The main CDOs issuers are investment banks.

Transferring credit risk, banks require less capital to accomplish Basel II capital requirements. Moreover, banks will use capital 'excess' and the cash they receive from the loan transfer to lend again money to more attractive lenders, generating additional fees, returning higher incomes and improving RoAA and RoAE. This constituted the principal objective for Richard Mason for issuing CDOs in RBS. The second important reason for banks to issue CDOs are the commissions and the fees they earn during the CDO life.

Thus, CDOs are in theory a very attractive product for originating banks which explain their development in the last decade reaching a volume of \$520 billion in 2006. In practice, issuer banks transfer their loans to special purpose vehicle (SPV) that will package these loans and sell notes with interest and principal payments to the interested investors. 3) What are the main characteristics of the SEQUIL/MINCS deal described in the case? SEQUILS/MINCS is a specific structure that combines both plain vanilla and synthetic CDO structures and uses two separated SPVs.

In the case, RBS sells a portfolio of loans to the SPV SEQUILS. SEQUILS will issue notes from this portfolio and sell them to investors. SEQUILS will also

buy a credit default swap from Morgan Guarantee, paying a regular fee and transferring in theory the credit risk to JP Morgan. As JP Morgan will hold the risk, SEQUILS will be able to issue some notes with AAA rates even if the underlying loans were rated BB- to B+. Then, JP Morgan will back the loans with its own credit default swap while at the same time transferring the CDS to investors through a separate SPV (MINCS).

By doing this it separates the funding and the credit risk on the loan portfolio into two separate pools of investors. 4) From a pool of loans « below investment grade (BBB) », the deal promise the creation of investment grade securities (some AAA and the worst is a BBB). Fantastic! How is this possible? The main objective of this structure is to transform low rating loans into higher rating notes in order to attract more investors. It also eliminates or minimizes the equity tranche, therefore, transferring the risk from the bank to a third party.

The structure starts with the originating bank (RBS) owning a portfolio of loans worth \$852. 5 million of low-rated loans from BB- to B+. Because RBS wants to improve its capital requirement ratios it will remove them from its balance sheet. The bank creates the first SPV, SEQUILS that is consisted of a traditional CDO structure. SEQUILS would issue low rated BB- to B+ notes to sell to investors. To achieve an investment-grade rating, SEQUILS insures its notes by a credit default swap provided by Morgan Guarantee Trust.

SEQUILS would pay Morgan Guarantee a percentage of the \$852. 5 million as a periodic fee using the spread. Being backed up by a highly rated entity boosts the ratings of the tranches issued by SEQUILS to AAA, AA and BBB loans. This repackaging of loans attracts more investors and minimizes the

risk on RBS. The second step is to create a separate SPV, MINCS that uses a synthetic CDO structure. Morgan Guarantee Trust buys credit swaps from MINCS –the second SPV. MINCS would issue notes worth \$144 million based on the original 852.5 million-loan amounts.

MINCS would provide Morgan Guarantee Trust insurance through a credit default swap 6 times its capital of \$144 million ( $6 \times 144\text{m} = 864$ ). Therefore, investors in MINCS would be receiving higher yields, 6 times the credit swap, on the \$144 million, yet they are exposed to the full risk. To boost the ratings MINCS would invest the proceeds of the \$144 million into a AAA security. 5) Imagine to be a portfolio manager of a large pension fund, would you buy Mincs securities (the BBB ones)? What are the risks from the perspective of the investor?

What are the risks from the perspective of RBS? A portfolio manager of a pension fund should invest in financial instruments with low risk since a pension fund is a scheme which provides retirement income. Buying MINCS notes means receiving higher yield but also being exposed to the full risk. In reality Morgan Guarantee Trust did not fully insure SEQUILS in case of the default of investors. It only insured 16% to 17% of this SPV ( $144/852.5$ ). If it has fully insured SEQUILS, then all the tranches created by SEQUILS could have a triple-A rating.

MINCS only issued notes that are worth \$144 million, which is almost 16% on the original loan portfolio. However, regardless of whether SEQUILS was partly or fully insured by Morgan Guarantee Trust, this structure keeps transferring the risk from one party to another. From RBS's perspective, it is a good deal because the bank is not exposed to the risk anymore, the equity

tranche was minimized or even eliminated and the bank obtained a better rating for its portfolio of loans.

In practice, pension fund managers trusted the ratings that MINCS notes received by the rating agencies and were not fully aware the risk they were holding by buying those notes. This kind of complex structure helped to transfer the credit risk from company to another. Additionally, it was another important risk factor that was not almost taken into consideration by investors. Loans had a high default correlation with themselves. When one mortgage defaulted, many would, which would trigger many credit defaults at the same time.