Innovation in integrating cash and synthetic markets: the multi-SPV credit-hybrid structure

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Agenda

- Credit Derivatives
- Synthetic CDOs
- Managed synthetic CDO
- The multi-SPV credit hybrid structure

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Credit Derivatives

- **Credit derivatives** are bilateral OTC contracts designed to reduce or eliminate credit risk exposure and enable credit risk to be taken on or reduced synthetically. Include credit default swaps, total-return swaps and CLNs.
- With a credit derivative one is transferring credit risk of specified asset to a 3rd party while keeping the asset on the balance sheet – so not a "true sale" but use of loss definitions to hedge risk exposure
- A **single-name** credit derivative names one reference entity. **Basket** or portfolio credit derivatives are referenced to more than one obligor.
- They are derivative contracts. Covering an asset with one reduces Basel I risk-weighting from 100% to 20% (OECD bank counterparty).
- **Types of credit derivative:**
  - **Credit default swap – unfunded credit derivative**
  - **Total return swap**
  - **Credit-linked notes – funded credit derivative**
  - **Credit spread options**

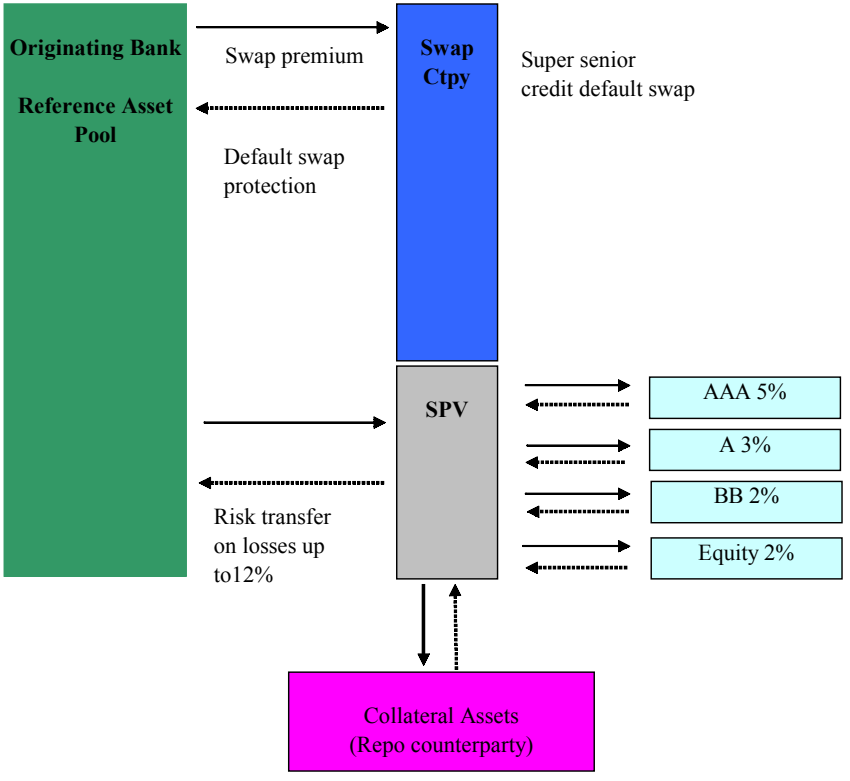
Using credit derivatives in securitisation

- **True sale versus synthetics: a true sale via SPV**
  - has higher costs
  - less flexibility
  - takes longer to bring to market
  - is more difficult across multiple legal and regulatory regimes
- **Unified documentation (ISDA)**
- **Flexibility to create customised exposure**
- **Enables separation of funding and credit risk management**
- **Synthetic CDOs**
  - “Second generation” CDO use CDS and/or CLN or SPV; unfunded, partially funded / fully funded
  - Third and fourth generation CDOs: Hybrid CDO mixing elements of synthetic CDO with cash assets (eg., AXA IM “Jazz”)
  - Managed synthetic or “CSO” (eg., Robeco III and IV)

Synthetic CDOs…

- Synthetic CDOs combine securitisation techniques with credit derivatives and were introduced in Europe in 1998.
- A vehicle used to transfer credit risk via credit derivatives, rather than via a “true sale” of receivables to an SPV. The variations include:
  - Funded synthetic, where liabilities are solely credit-linked notes
  - Unfunded, where liabilities are solely credit default swaps
  - Partially funded: both credit-linked notes and credit default swaps
- The originator transfers the credit risk of a pool of reference assets via **credit default swaps**, or transfers the total return profile of the assets via a **total return swap**.
- Typically an SPV issues one or more tranches of securities which are the **credit-linked notes**, whose return is linked to the performance of the reference assets.
- Proceeds of note issuance form the first-loss protection reserve and are usually invested in liquid AAA-rated collateral.
- Synthetic CDOs have evolved into a number of forms (**static, dynamic, managed**)

Generalised partially funded synthetic CDO



- The majority of the credit risk is transferred by the "super senior" credit default swap, usually sold on to a monoline insurer
- The riskier element is transferred via the SPV which issues default swaps (unfunded) or credit-linked notes (funded)
- The first-loss piece is the unrated equity note.
- Each note has a different risk/return profile

Motivation behind synthetic CDOs

- The primary motivation for entering into an arbitrage CDO is to exploit the yield mismatch between a pool of assets and the CDO liabilities.
- Motivation behind a balance sheet CDO is to manage regulatory risk capital and engineer more efficient capital usage
- **Advantages of a synthetic structure**

  Typically the reference assets are not actually removed from the sponsoring firm's balance sheet. For this reason:

  - **synthetic CDOs are easier to execute than cash structures:** the legal documentation and other administrative requirements are less burdensome
  - **there is better ability to transfer credit risk:** especially partial claims on a specific credit reference asset
  - **risk transfer achieved at lower cost:** the amount of issuance is small relative to the reference portfolio. In a "partially funded" structure, funding is mainly provided by the sponsoring financial institution at lower cost than fully funded structures.
  - **Lower risk weightings:** eg., 100% corporate loan vs. 0% on funded portion

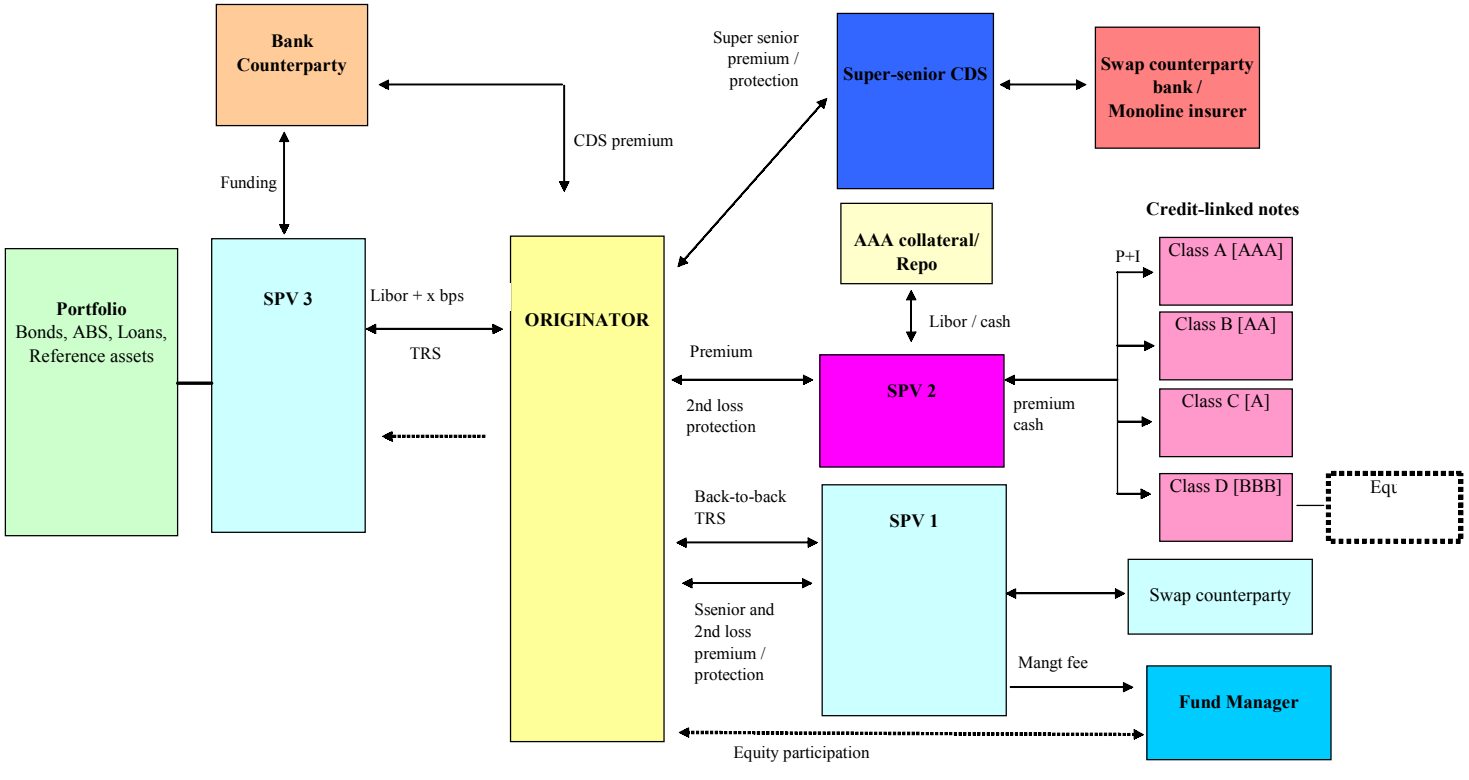
Managed synthetic CDOs

- Essentially a managed synthetic CDO or CSO is an arrangement designed to provide investors with high return on a portfolio of investment grade credits
- Structured to have a higher average rating quality and shorter maturity than traditional high yield cashflow CDOs
- The portfolio manager actively trades in and out of credits according to its view,
  - Buying protection with swap counterparties, entering into offsetting swap
  - Selling protection
  - Each new default swap traded must meet portfolio tests (“covenants”) established by rating agency and confirmed by Trustee
- The structure is designed to generate higher zero-default expected return than cashflow CDO, typically 7-9% higher, with risk-adjusted return (historical default statistics) around 5-6% higher

The Multi-SPV credit hybrid structure

- This makes use of existing synthetic CDO technology (including partially-funded static deals and the managed arbitrage deal), and credit derivatives, and also accesses cash assets.
- The objectives of the structure are the same as before:
  - **Credit risk transfer**
  - **Balance sheet / regulatory capital management**
  - **Credit arbitrage**
- However this arrangement maximises flexibility and….
- A multi-SPV structure enables the originator to tailor each part of the deal to specific investors and also target a wider range of investors.

Structure diagram



Deal objectives

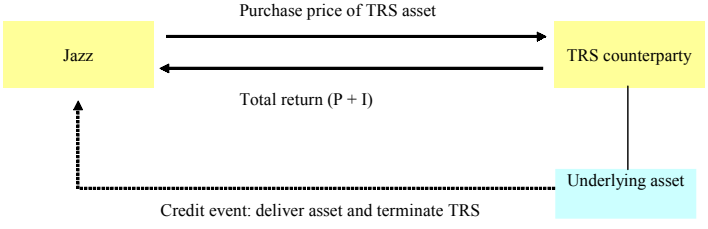
The new structure may be used to achieve one or a combination of the following:

- credit risk transfer and/or regulatory capital management of assets already on the balance sheet;
- exploiting arbitrage opportunities between cash and synthetic credits;
- obtaining funding for acquiring assets subsequently used in an arbitrage synthetic transaction;
- a significant increase in potential deal size, due to the benefits arising from the multi-SPV structure;
- any combination of conventional bonds, structured financial products (ABS, MBS and CDO), loans and synthetic assets such as credit default swaps in the reference portfolio;
- leveraging the credit expertise of a fund manager to deliver gains for the equity participants in the vehicle;
- meeting the requirements of a varied class of investors by means of the multi-SPV structure, including multi-currency requirements and specific fund management styles.

Innovative structure

The structure is comprised of the following:

- a reference portfolio sourced in the market or on originator's balance sheet;
- a total return swap (TRS) set up for funding purposes;
- a back-to-back TRS;
- a second-loss credit protection credit default swap;
- a funded element of credit-linked notes issued by SPV 2;
- if required, a managed arbitrage-element of credit default swap trading undertaken out of SPV 1.
- The TRS is a funded total rate-of-return swap. Can be funded by liquidity facility; eg., the type used in the Jazz CDO



Integrating cash and synthetic markets

- The Issuer can takes a view on particular reference assets and sells or buy protection via credit default swaps (this is SPV 1).
- The terms of the CDS are:
  - On occurrence of pre-defined credit event on any of the reference assets in the reference pool, the calculation agent will determine the difference between the nominal value of the reference asset and its market value. This amount paid by the vehicle to the counterparty (cash-settled CDS)
  - During life of transaction the Issuer may buy protection on any asset to close out an existing (sold protection) CDS
- The SPV 2 vehicle issues credit-linked notes and targets cash market investors
- The deal Manager can access cash or synthetic assets using SPV 1.

Trading guidelines

- Manager has discretion to trade up to 20% of portfolio provided that eligibility requirements are met.
- The instruments can be cash bonds, CDS, TRS, offsetting CDS and “credit short obligations” which are bought-protection CDS. This must meet *credit short minimum weighted average spread test*, the net receipt of premium specified for the vehicle.
- TRS are funded by liquidity facility. They are different to usual text book “TRS”.
- CDS can be either cash or physically settled.
- Issuer can enter into Equity Asset Swaps, a cash obligation or TRS, with TRS asset being a convertible bond.

Benefits of the structure

- Structure and close large volume deals ($7-10 bln) by placing risk across a wide range of investors, both cash bond investors and credit derivative counterparties;
- Provide a vehicle that enables each investor an opportunity to tailor the SPV to meet their specific investment requirements and criteria; for instance, specific requirements in terms of currency requirements, market sector and particular fund management style;
- Allows the Portfolio Manager to leverage experience from different areas of their firm to blend skills into the management of the overall deal;
- Retain flexibility in the deal structure so that risk exposure of any asset class can be transferred, and any asset class targeted in the market for credit trading;
- Securitise both cash and synthetic assets as required.
- **Summary:** a flexible, fund management vehicle in its own right that combines securitisation, trading expertise and cash and synthetic credits into one vehicle, almost a “SIV” type structure

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