Topics in Corporate Finance

Securitisations

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Plan of the Lecture

- **Introduction and overview of securitisations**
- **Securitisation in Practice**

(Richard Golding, Anthem Corporate Finance)

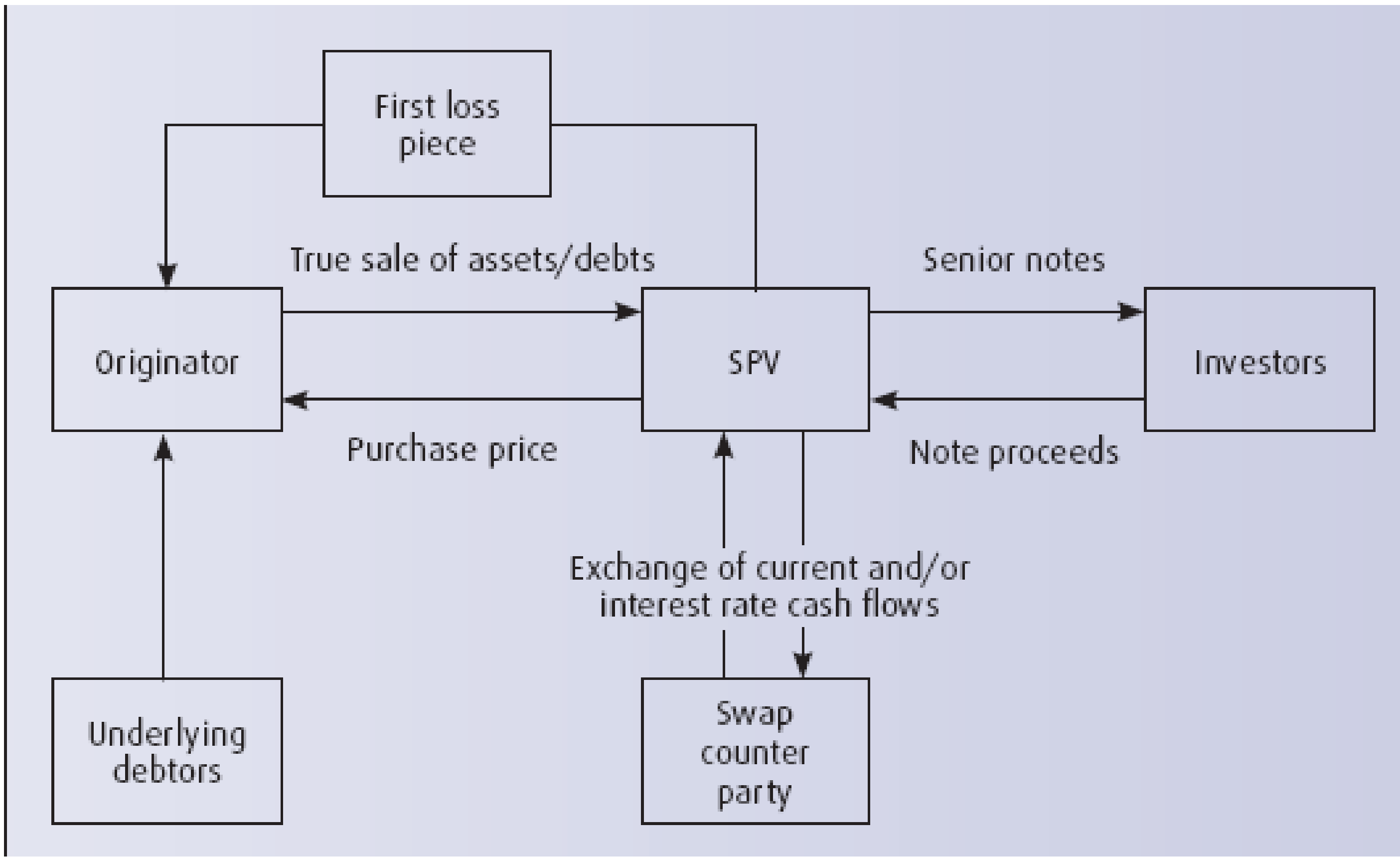
- **Regulation and securitisation**

(Enrique Benito, FSA)

Securitisation technology

- Originator:
  - Original holder of a portfolio of illiquid assets/debts (mortgages, credit card payments,…)
- Special purpose vehicle/entity (SPV or SPE):
  - Buys protfolio by issuing securities (asset-backed securities (ABS))
  - Financed with non-recourse debt to originator (bankruptcy remote)
  - ABS tranched into layers with different risk profiles & rating (e.g. “super-senior”, “senior”, “mezzanine”, “subordinated”, “equity”) attributed by rating agencies such as S&P, Moody’s
- Investors:
  - Buy securities according to their preferences

A simple securitisation transaction



Source: Echave (2008)

Objectives

- For originators…
  - Frees up capital and liquidity taking loans out of balance sheet
  - Allows for regulatory relief (for banks and insurance co.)
  - Reduce cost of capital for originators with low ratings
- For investors…
  - Allows them to invest in this type of assets
- For everyone…
  - Convert illiquid into liquid securities
  - Improve risk sharing

Moral hazard and adverse selection

- Banks might not…
  - impose same credit risk assessment
  - longer screen and monitor risks they originate
- View has gained prominence since the outburst of crisis

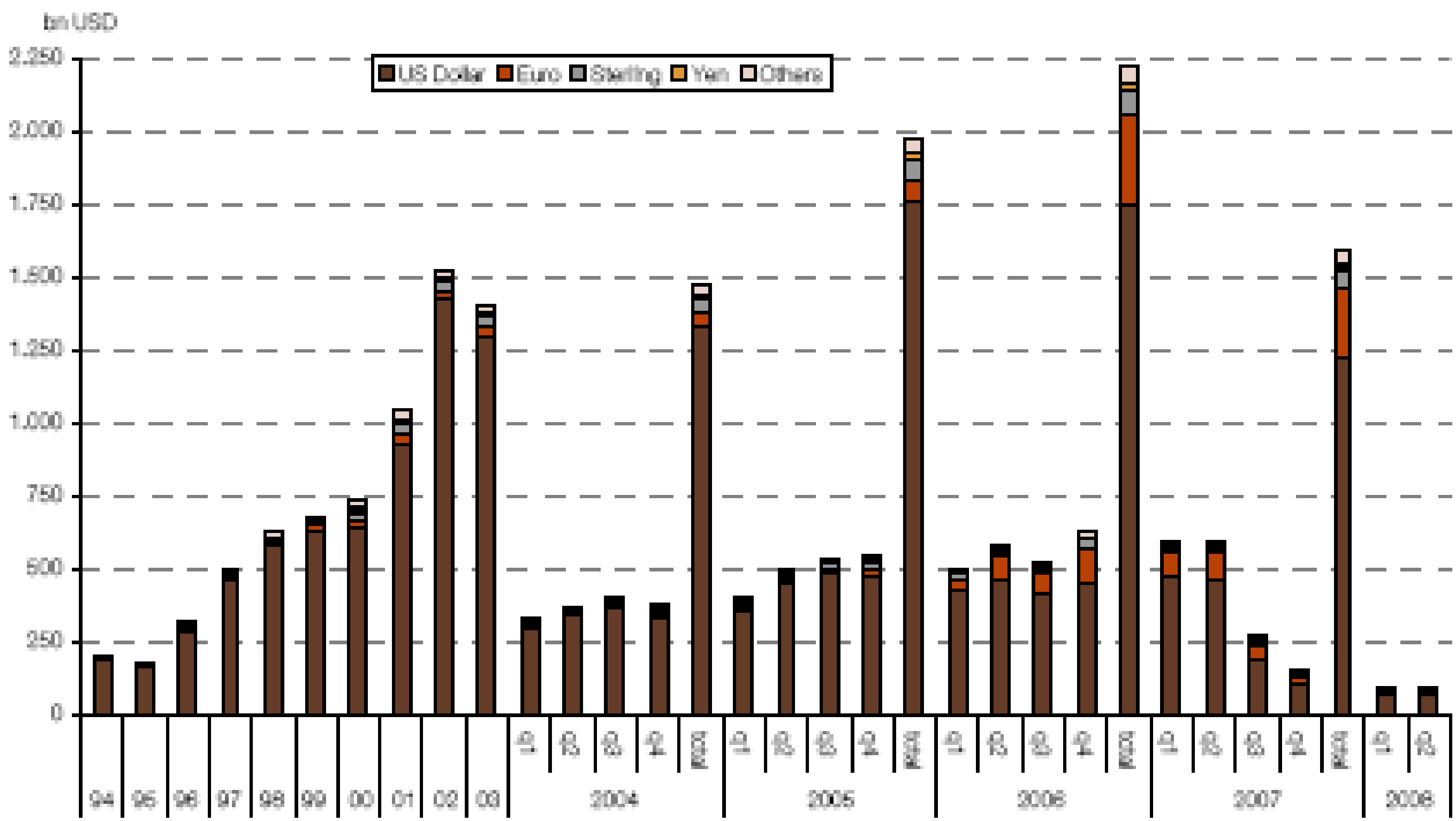
  "...securitization contributed to bad lending: in the old days, banks that originated bad loans bore the consequences; in the new world of securitization, the originators could pass the loans onto others": Stiglitz [2007]
- As a result, loans…
  - More likely to be securitized default 20% more than similar risk loans with lower likelihood of securitization (Keys et al. 2008)

Worldwide securitisation levels

- Growth (1995-2007):
  - Spectacular growth and increased diversification in asset classes and jurisdictions
- Liquidity crisis (summer 2007):
  - Concerns over exposure of banks to riskiest segment of US mortgage markets (*subprime mortgage market*)
  - Turmoil spills over other types of securitised transactions
- From liquidity to solvency crisis (2008)

Global securitisation

Chart 1. Global securitization by currency

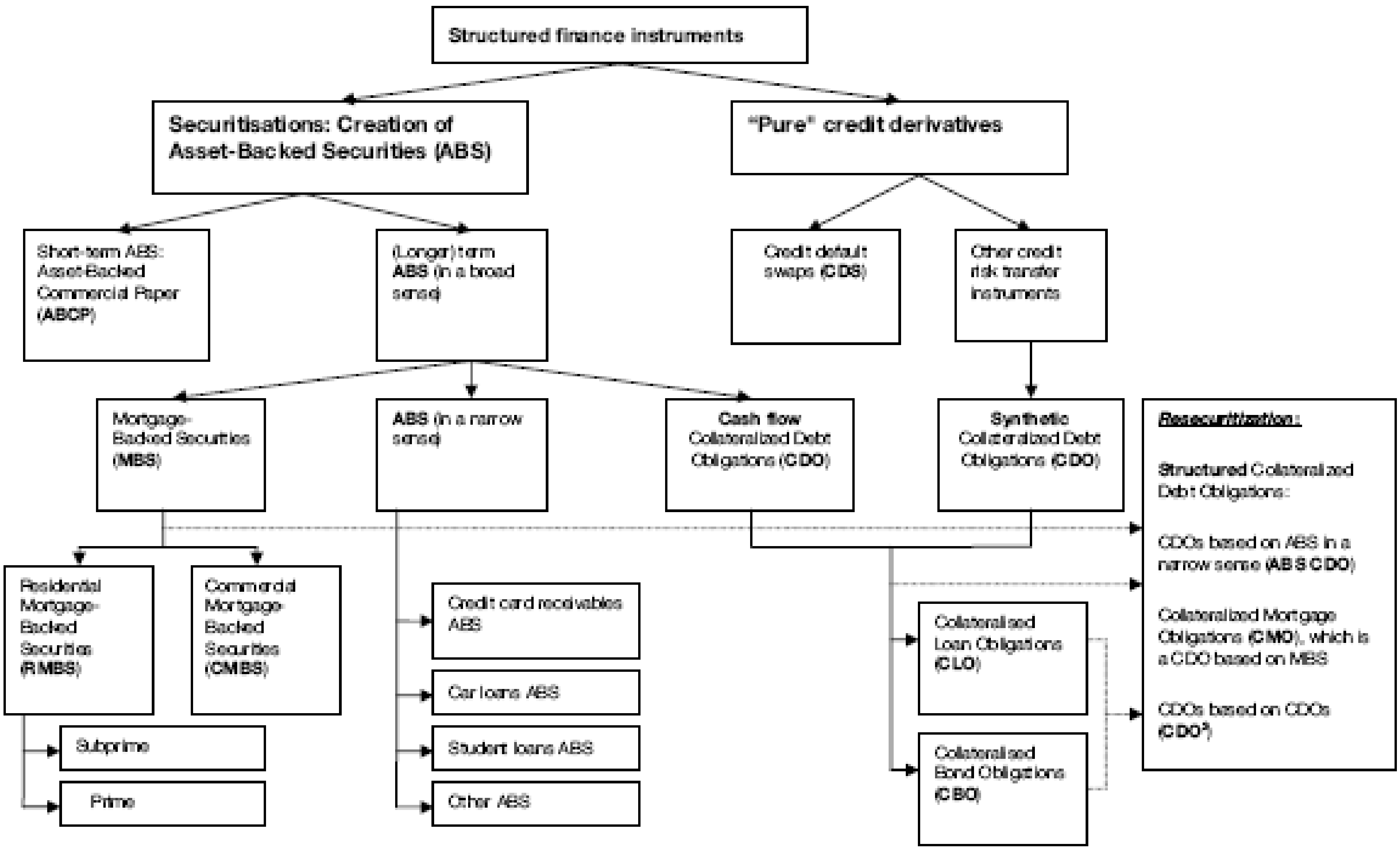


SOURCE: Dealogic.

Securitisations and credit derivatives

- In a true sale securitisation…
  - The underlying assets are actually sold to the SPV
  - They are removed from originators' balance sheet
  - Examples: residential mortgage based securities (RMBS), asset-backed commercial paper (ABS), and others (see references)
- In a credit derivative…
  - only the credit risk is transferred to the SPV
  - buys credit derivatives such as CDS over these assets
  - Examples: credit default swaps,… (see references)

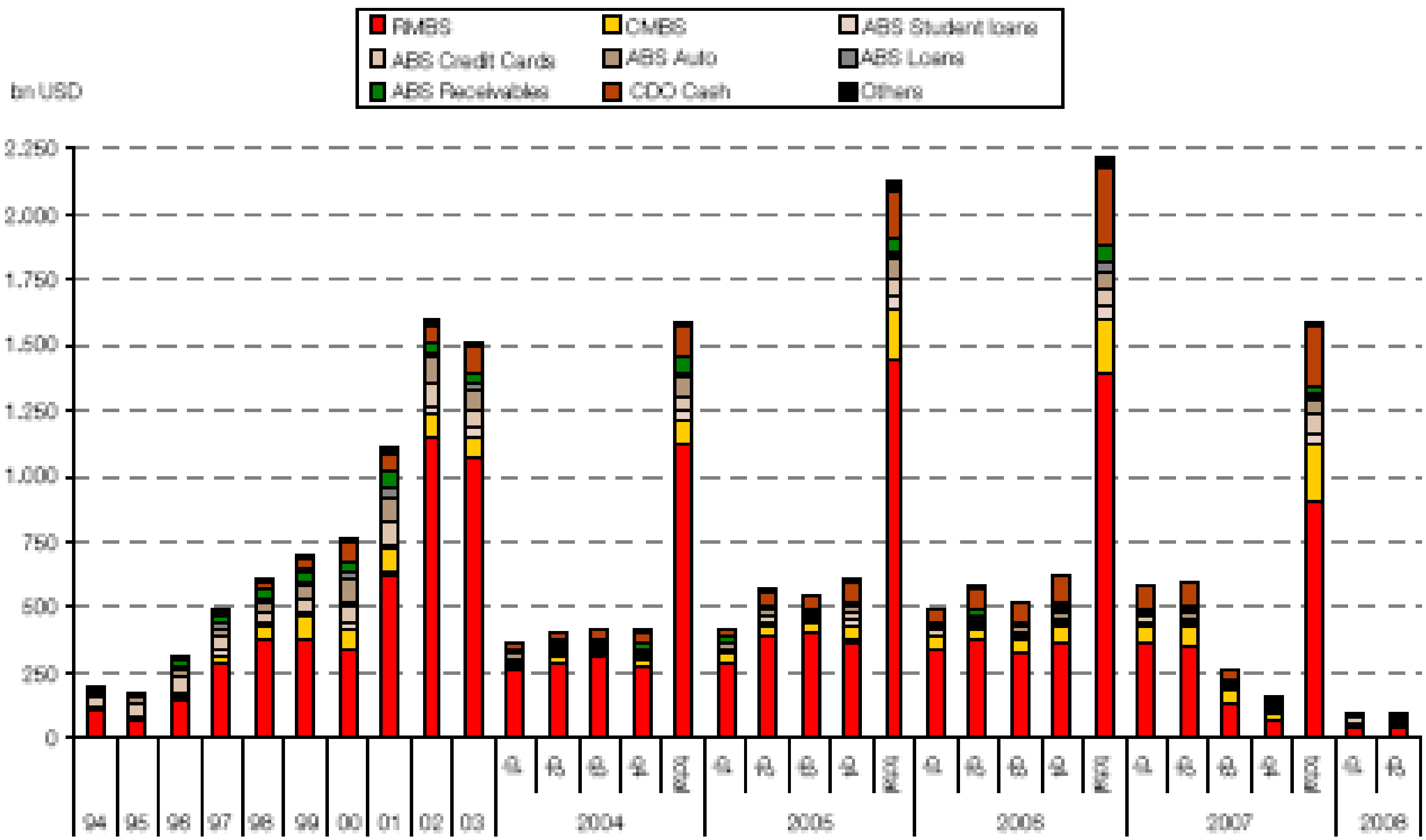
Figure 1: Structured finance instruments and securitization



SOURCE: Own interpretation based on Jobst (2003) and (2006) and BIS (2005a).

Global securitisation by collateral

Chart 2. Global securitization by collateral



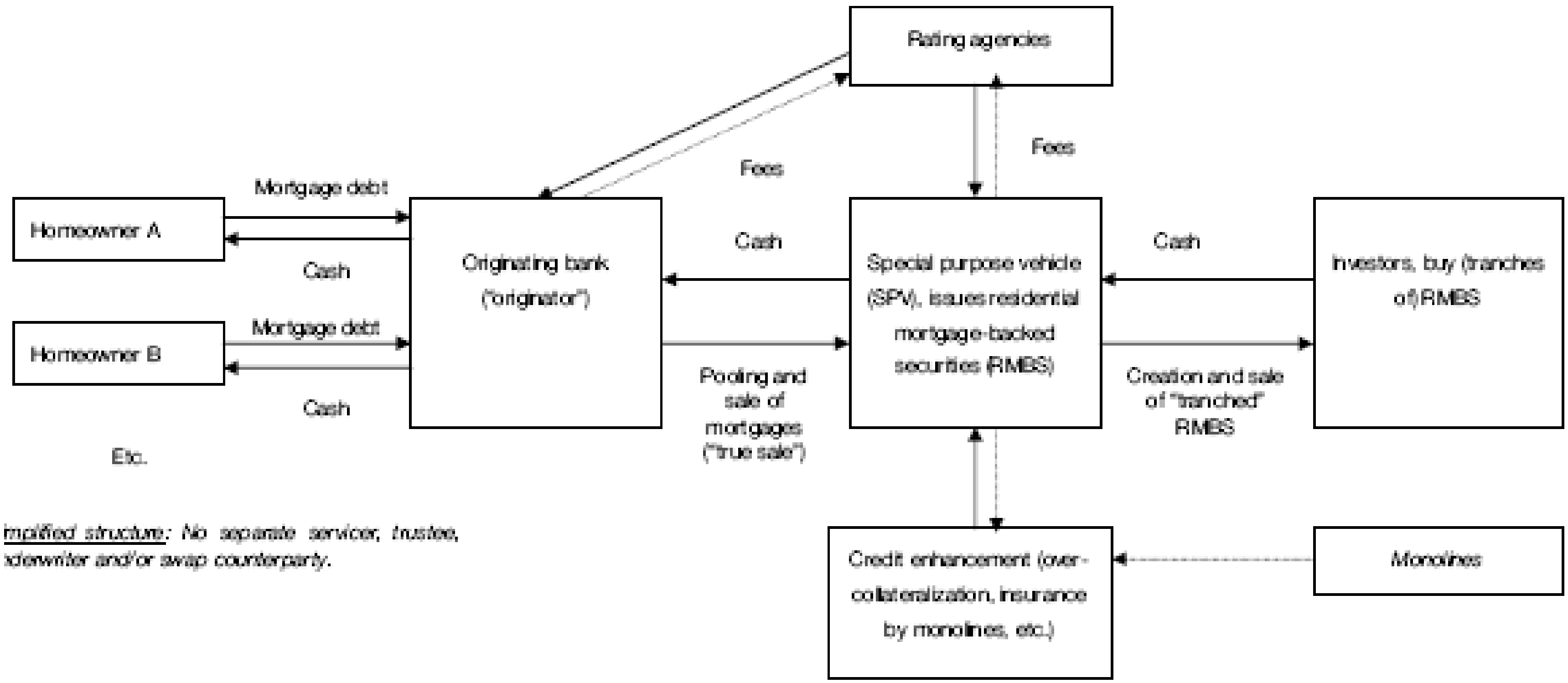
SOURCE: Dealogic.

Example: a RMBS

- Bank (originator)…
  - gives loans to homeowners and puts them together in a pool
  - Sells the pool to a SPV in return for cash
  - No longer has these mortgages in balance sheet
- SPV…
  - Finances the purchase by issuing RMBS
  - RMBS are tranched and rated
  - Can use credit enhancement techniques such as *monolines* (which guarantee that interest and payments will be paid)
- Investors…
  - Buy securities according to their preferences (e.g. pension funds might prefer supper senior tranche)

Figure 2:

Example RMBS securitization: Creation of residential mortgage-backed securities (RMBS) ("Cash flow", "true" sale securitization)



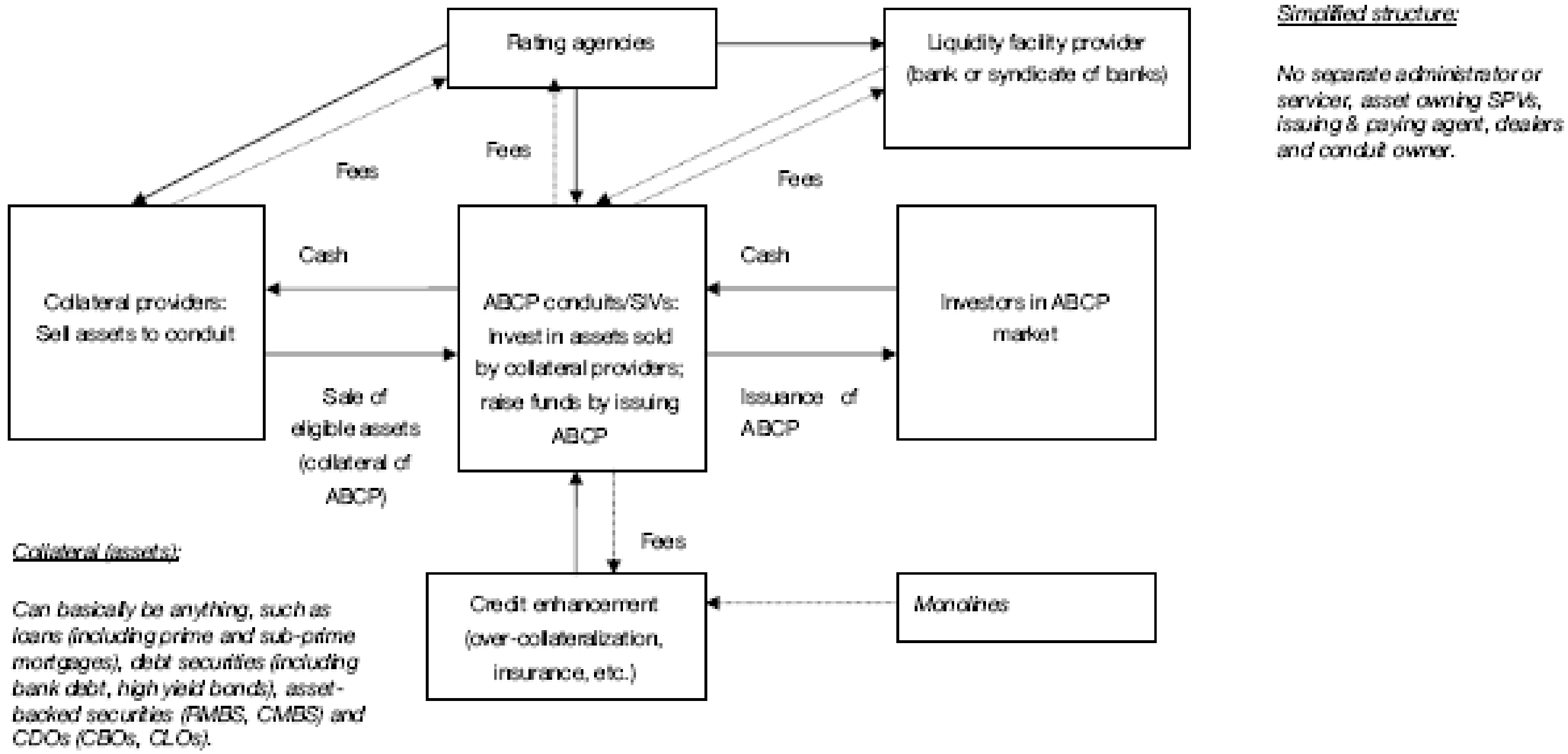
SOURCE: Adapted from: ECB (2008a), Mengle (2007), Fabozzi et al. (2006), Elul (2005), Gorton and Souleles (2005), The Bond Market Association (2004) and Jobst (2003).

Example: Asset-backed commercial paper

- Originators (banks or others)…
  - Obtain financing by selling assets (with a certain rating) to a "conduit" (a type of SPVs)
- Conduit…
  - Finances purchase by issuing asset-based commercial paper (ABCP), with short maturity, which is rolled over constantly
  - Invests in long-term highly rated receivables/loans and securities
  - Not tranched but credit enhancement also often used
- Investors buy…
  - Securities issued by ABCP conduit
- Liquidity provider (bank or bank syndicate)…
  - Provide liquidity in case of financing shortages
  - Important because ABCP has short maturities

Figure 4:

Example ABCP: Creation of Asset-Backed Commercial Paper (ABCP) by ABCP "conduits / structured investment vehicles (SIVs) ("true sale")



SOURCE: Adapted from: Fitch Ratings (2007), Moody's (2003) and Fitch Ratings (2001).

References

- Criado and van Rixtel: “Structured finance and the financial turmoil of 2007-2008: an introductory overview”, Bank of Spain working paper.
- Echave: “Securitisation: the end of the beginning”, journal of International Banking and Financial Law
- Kavanagh, “Securitization and Structured Finance: Legitimate Business Management Tools”
- Keys, Mukherjee, Seru, and Vig 2008, “Did Securitization Lead to Lax Screening? Evidence From Subprime Loans”, working paper LBS.