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"Credit derivatives"

Angela Maria Carozzi

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What are Credit Derivatives?

Credit derivatives are: bilateral financial contracts that isolate specific aspects of credit risk from an underlying instrument and transfer that risk between two parties.

In outline, a credit derivatives is:

an individually negotiated over the counter (OTC) transaction or a note structure

between two parties (Protection buyer and Protection seller)

the value of which is based on the credit of a third party

which obligations are triggered by the occurrence of a specific credit event.

Ex. 1 Credit default swap



CREDIT DERIVATIVES ARE DERIVATIVES PRODUCTS

Derivatives produtes are

securities whose value depends on other securities

and, often, also depends on future event not yet konwn with certainty.

Peculiar features of Credit derivatives place theme firmly among the derivative category

- **1.** Credit derivatives are instruments whose value is based on the credit of a third party.
- **2.** Credit derivatives are "notional" contracts.
- **3.** Credit derivatives are treated commercially, in terms of pricing and liquidity, as derivatives.

How is credit risk managed? A. Traditional methods

1. Loan underwriting standards.

2. Diversification of the credit risk across different borrowers.

 Limit: their ability to reduce credit risk is limited by a lack of diversification's opportunities.
 3. Securitization (technique that transforms or repackages a pool of assets on the balance sheet of a bank into securities that can be re-sold to investors in the capital market).

 Limit: this approach in only well suited for loans that have standardized payment schemes and similar credit risk characteristics.

How is credit risk managed? B. Credit derivatives

Credit derivatives are financial contracts that provide insurance against credit-related losses.

These contracts separate ownership and management risk of credit risk from other qualitative and quantitative aspects of ownership of financial assets.

Why use credit derivatives? (Advantages)

- **1.** The Reference entity is not a party of credit derivatives transaction.
- **2.** Credit derivatives are off balance sheet instruments.
- **3.** Credit derivatives offer flexibility in terms of tailoring a structure to meet end users' individual specification.

BASIC CREDIT DERIVATIVES STRUCTURES

A credit derivative may be structured as a swap, an option or an collateral security. If the credit obligations are triggered by the occurrence of a Credit event, it is called a default product.

Credit default swap

Credit Default Swap is a bilateral financial contract in which one counterparty (the Protection buyer) pays a period fee, typically expressed in basis point on the notional amount, in return for a contingent payment by the Protection seller following a Credit event of a Reference entity.

Ex. 2 Credit default swap



Payout occurs only after a credit event. Payout can be:

- → physical delivery: the Protection buyer delivers an asset against a predefined payment by the buyer;
- → or a cash settlement: the Protection seller pays initial market value (or 100%) minus post credit event market value;
- \rightarrow or pre-agreed amount ("**digital**").

Total return swap

A Total Return Swap is a bilateral financial contract in which one party (TR Payer) pays the total positive return of a bond, loan, or other financial obligation (Reference asset), while the other party (TR Receiver) pays a fixed or floating rate payment plus any negative total returns on the Reference asset.

Ex. 3 Total rate of return swap



Where:

- **Total Return**: interest flows + (final value original value)
- **Reference Asset**: Bond, loan, index, equity, comodity
- **Total Return Receiver** is long both price and default risk of the Reference Asset.
- **Total Return Payer** is the legal owner of the Reference Asset.