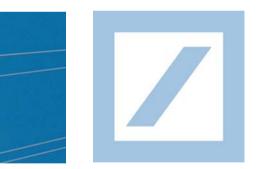
Credit Derivatives and their Impact on the Incentive Structure for Corporate Lending

Workshop on "The future of corporate financing in an integrating EU financial market"

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Agenda

- 1 Credit derivatives: the issues
- 2 Some facts on the CDx market
- 3 Credit derivatives: supporting a wider trend
- 4 Credit derivatives: impact on corporate lending markets
 - Monitoring of debtors
 - Incentives in cases of (imminent) default
 - Relative impact on small vs. large banks
- 5 Conclusions



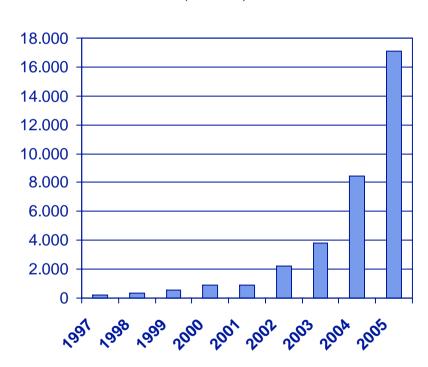
1. Credit derivatives: the issues

- Financial stability issues
 - Documentation and settlement
 - Pricing
 - Market concentration
 - Transparency about distribution of risk
- Consequences for incentive structures
 - Monitoring of debtors' behaviour
 - Incentives and processes in situations of (imminent) default
- Consequences for banking structures
 - Favouring small or large banks?

2.1 Credit derivatives – some facts about the market Volumes and net positions

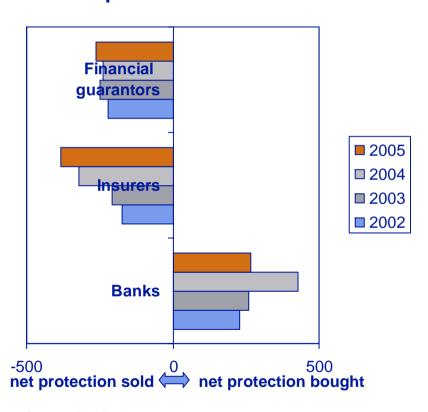
Volume of CDx markets

(USD bn)



Source: ISDA

net positions in CDx market



Source: FitchRatings



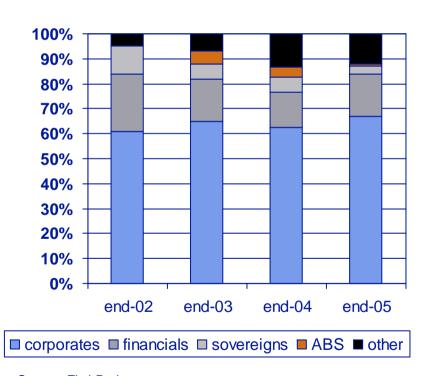
2.2 Credit derivatives: market facts characteristics of reference entities

CDx reference entities: down the credit curve!

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% end-02 end-03 end-04 end-05 ■ AAA ■ AA ■ A ■ BBB ■ below IG

Source: FitchRatings

CDx reference entities: share of corporates edging up!



Source: FitchRatings

2.3 Drivers for market growth

Credit derivatives as new asset class

- Search for yield
- Isolated trading of credit risk

Desire to transfer risk

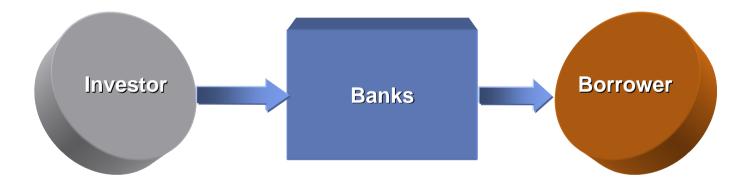
- Reduction of RWA
- Elimination of risk concentrations

Active management of risk and capital

- Regulatory developments (Basel II)
- Optimisation of earnings profile

3.1 Supporting a wider trend

The changing role of banks: From asset intermediation...



3.2 ... to risk intermediation



3.3 Convergence of capital markets and lending

- Capital markets and bank lending become complementary
- Credit risk being passed on to capital markets in the form of
 - securitisations
 - credit derivatives
- Regulatory change (Basel II) and shareholder pressure will support active risk / return management
- Risk-adequate pricing
- From "buy and hold" to "originate and distribute"
- This explains resilience of banking sector despite several shocks

4.1 Incentives for monitoring credit risk

In "buy and hold"-model, monitoring is rationale for the existence of banks

- Savers delegate task of monitoring debtors' behaviour to specialists, i.e. banks
- Banks monitor and, more importantly, control debtors' behaviour
- In doing so, banks reduce transaction costs in the economy

In a world of credit derivatives, incentives for monitoring migrate to the market

 Creditors' incentive to monitor debtor behaviour is reduced



Alternatives to monitoring by banks are needed



4.2 Monitoring in a world of credit risk transfers

- Use market signals provided by CDS markets
 - Reliability of pricing signal?
 - Market signal alone insufficient! Enforcement by market discipline is needed
- Incentive-compatible contract design
 - Original debtor to retain share in loss
 - Digital CDS (settlement payment fix, not based on market value)
 - Retention of loss piece by protection buyer
 - Guarantee fund funded by protection buyer
- Repeated contracting / reputation

4.3 Behaviour in times of (imminent) debtor default

Traditional model

- Creditor banks with incentive to limit losses
 - Full exposure to potential loss
 - Interest in continuation of relationship
- Homogeneous group of creditors
 - Similar incentives structures
 - Repeated games between creditors
- Negotiated restructuring more likely than outright default

Credit derivatives world

- Creditors' incentive structure changes
 - Default might be attractive if pay-off from CDS is larger than expected recovery rate in restructuring
- In case of physical settlement, new creditor, but:
 - Physical settlement becoming rare
 - New creditor may not be able to participate in restructuring
- More heterogeneous creditor group
 - Diverse incentive structures
 - Less experience with default situations
 - But: general phenomenon!



4.4 Impact on banking structures

Prima facie, small banks to benefit most

- Tend to have concentrated lending portfolios
- Hence, opportunity to diversify by means of CDx would be useful

But realising this potential is difficult

- CDx market concentrated in the hands of large banks
 - better expertise and systems (pricing models)
- Small banks' debtors without public debt history and public disclosure
 - Potential acquirers cannot assess credit risk and hence will offer too a low a price
 - Problem may diminish in future thanks to greater information on small firms, too
- Portfolio structures alleviate lack of information on small banks' debtors
 - But: Small banks portfolios often too small to be packaged as synthetic CLOs
- → Reverse characteristics for large banks more likely beneficiaries!



5. Conclusions

- Industry logic supports further growth of CDx markets
- Monitoring of debtors' behaviour more difficult
- No evidence (yet) for more aggressive creditor behaviour in times of corporate difficulties
- Wide-spread use of credit derivatives enhance problem of heterogeneous creditor groups
- Large banks with advantages in exploiting the potential of credit derivatives

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