The financial crisis in an OpRisk context - a review of causes and influencing factors

Dr. Lasse B. Andersen, David Häger, Svein Maberg
The OpRisk Project

Societal Safety & Risk Mng. Research group:
- 18 professors, 15 assoc. professors, 25 Ph.D students, 50-60 MSc stud.
- Acknowledged as one of the world wide leading research groups on operational risk management

Create a forum for innovation, experience transfer and learning regarding management of operational risk
The financial crisis in an OpRisk context - a review of causes and influencing factors

Objective:
Survey how and to what extent OpRisk exposure contributed to the financial crisis

Scope of work:
Identify and analyse OpRisk causes and influencing factors to the financial crisis
Financial crisis – prelude

- Global macroeconomic imbalance, i.e. countries in Asia and oil producing countries had large profits on their trade balance while USA and some EU countries had huge deficits’

- Increasing real estate prices driven by:
  - National Home Ownership Strategy
  - low interest rate
  - the availability of investment capital

- Deregulation of US banks, e.g. Investment banks allowed to increase debt from 12 to 40 times Equity Capital (04)
Collateralized Debt Obligations (CDO) – played a prominent role

- A CDO is created by bundling a pool of similar loans into a single investment that can be bought or sold (entitled to a part of the pool's interest income and principal)
- Subprime share in CDOs’ increased from 43% in 2003 to 71% in 2007
- CDOs’ hid the underlying risk in mortgage investments
- The ratings on CDO debt were based on incorrect information about the creditworthiness of the borrowers
BN: OpRisk influences to the financial crisis

- Investment banks
  - Risk Management Department Severely Understaffed
  - Explosive Growth in CDO Market
  - Ambitions Greed
  - Desire to Realize Market Potential

- Insurance comp.
  - Aggressive CDS Sales
  - CDO Insurance
  - Insufficient Risk Capital Insurance
  - Poor or Failed Risk Management in Insurance

- Mortgage brokers
  - Lehman Bankrupt
  - CDO Market Collapse
  - Increased Subprime share in CDOs

- Credit rating firms
  - Credit Rating Firms
  - Incentives and Bonuses Heavily Influence Decision making
  - Lack of Risk Management Competency
  - Poor or Failed Risk Management in Investment Banks
  - New Complex Derivatives

- Investment banks
  - AIG in Trouble
  - No Regulation

- Insurance comp.
  - Overoptimistic Credit Rating of CDOs

- Mortgage brokers
  - Banks Take over Houses
  - Walkout Right Exercised

- Credit rating firms
  - Breach in Procedures
  - Lack of Training
  - New Complex Derivatives to Rate
Mortgage brokers

- Ownership: independent, investment banks
- Aggressive sales equipped with: Adjustable-rate mortgages (ARM), interest-only mortgages, the Option ARM ...and no credit evaluation
- Focus on short term profit
- Mortgages were instantly resold, i.e. close to zero business risk

“No income verification. Instant qualification”
*Quick Loan Funding Inc.*

- Bakersfield, California – a Mexican strawberry picker with $14 000 annual income borrowed 100% of the purchase price of $720 000 on a new house
- Queens, NY - two sisters from Jamaica, working as babysitters borrowed 100% of the purchase price of a new house. When house prices increased the mortgage broker recommended them to borrow more money and purchase a second house. The experiment was repeated until the girls owned five houses
BN: OpRisk influences to the financial crisis

OpRisk influences:
- Aggressive sales
- Credit evaluation failure

Credit risk for CDO owners

Credit rating firms

Mortgage brokers
The Credit rating business

CDO Credit Rating

Growth in Revenue

Percentage Change Comparison from 2002 versus 2003 - 2007 in CDO Revenue, Rated Deals, and Ratings Staff
BN: OpRisk influences to the financial crisis

"we are short on resources and the analysts are working far more than 60 hours a week. We are burning them out" (SEC report)

"The rating agencies continue to create an "even bigger monster – the CDO market". Let’s hope we are all wealthy and retired by the time this house of cards falters ;o)" (internal e-mail credit rating firm)

#1 "By the way this deal is ridiculous"
#2 "I know, the, model doesn’t even count half the risk"
#1 "We shouldn’t rate it"
#2 "We rate every deal. Even if it was made and structured by a cow, we would go ahead and rate it" (internal e-mail credit rating firm)

Credit rating firms

Credit risk - CDO owner
Risk - Insurance comp.

OpRisk influences

Loss of reputation
BN: OpRisk influences to the financial crisis

AIGFP CDS business:
- CDS sales: 100£
- Sales cost: 17£
- Profit: 83 £

Employee bonuses: 46£
Transfer to AIG: 37£

“We find it difficult to envision any reasonable scenario in which these transactions would incur a single dollar in losses” (Cassano, CEO AIGFP)

Outstanding CDS (1000 Billion USD)
BN: OpRisk influences to the financial crisis

Sept. 2007 Citigroup owned $43 billion in mortgage related assets. Mortgage default probability considered too small to be included in risk analysis.

“Sr. managers got addicted to revenues and arrogant about risk. As long as you could grow revenues, you keep your bonus growing”
CDO staff, Citigroup

“Theres blood in the water: Lets go kill!”
Goldman Sachs CEO, John J Mack
Risk reducing measures - OpRisk

Risk Management Principle:

Give priority to mitigating measures affecting probability rather than consequence reducing measures

- OpRisk should never be treated as a residual risk
- Increase authority, independence and status of the OpRisk function:
  - Reporting lines
  - Salary & bonuses
  - Competence and skills
- Organisational culture should be on the OpRisk function agenda
- Require OpRisk focus and control from all business partners
Thank you for your attention