



# Measuring Operational Risk – Myth or Reality II?

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# Cost of the crisis - enormous

- IMF estimates the potential crisis cost to \$12 000 Billion, 20% of global GDP, including:
  - capital injections into banks
  - soaking up toxic assets
  - guarantees
  - liquidity support
- G20 countries face a combined budget deficit of 10% of GDP in 2009, worst since WW II

# Cost of crisis - how much was operational risk?

*"the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events"*

= A (large) component of all other risks!

- Credit risk (underwriting subprime loans)
- Market risk (originate-to-distribute, lack of due diligence)
- Reputational risk (saving connected SIVs)
- Strategic risk (bonus systems, risk culture)

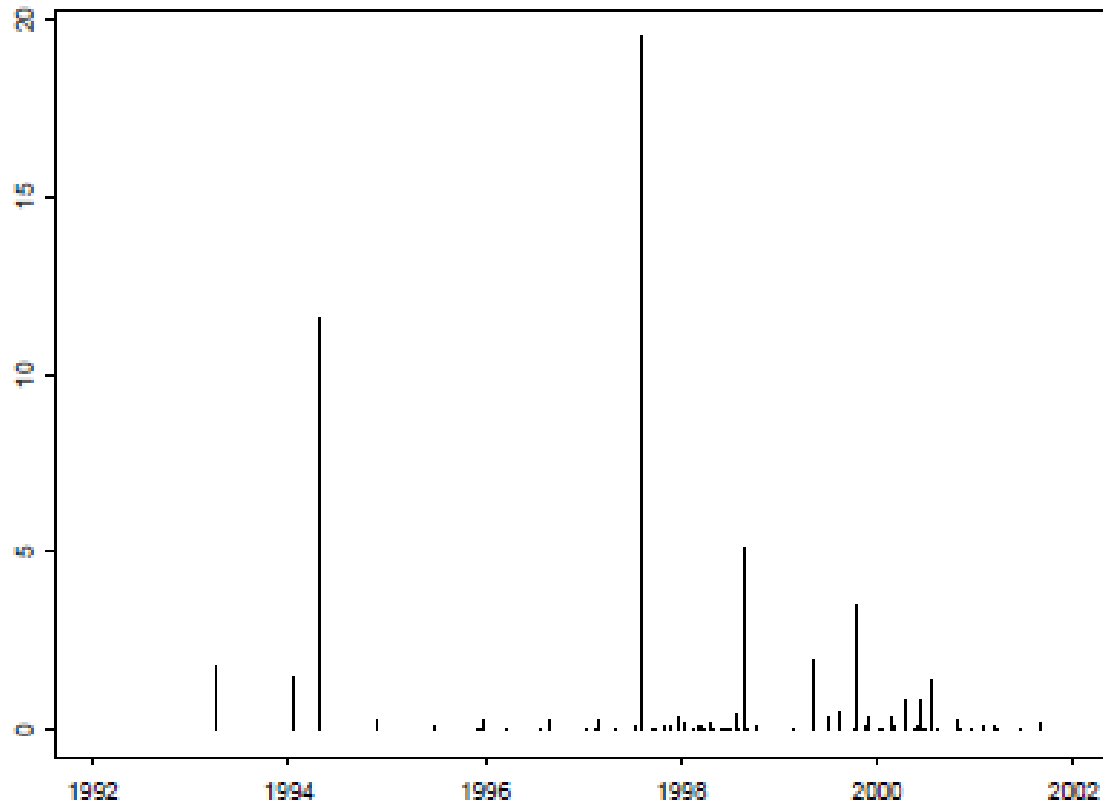


# Three questions:

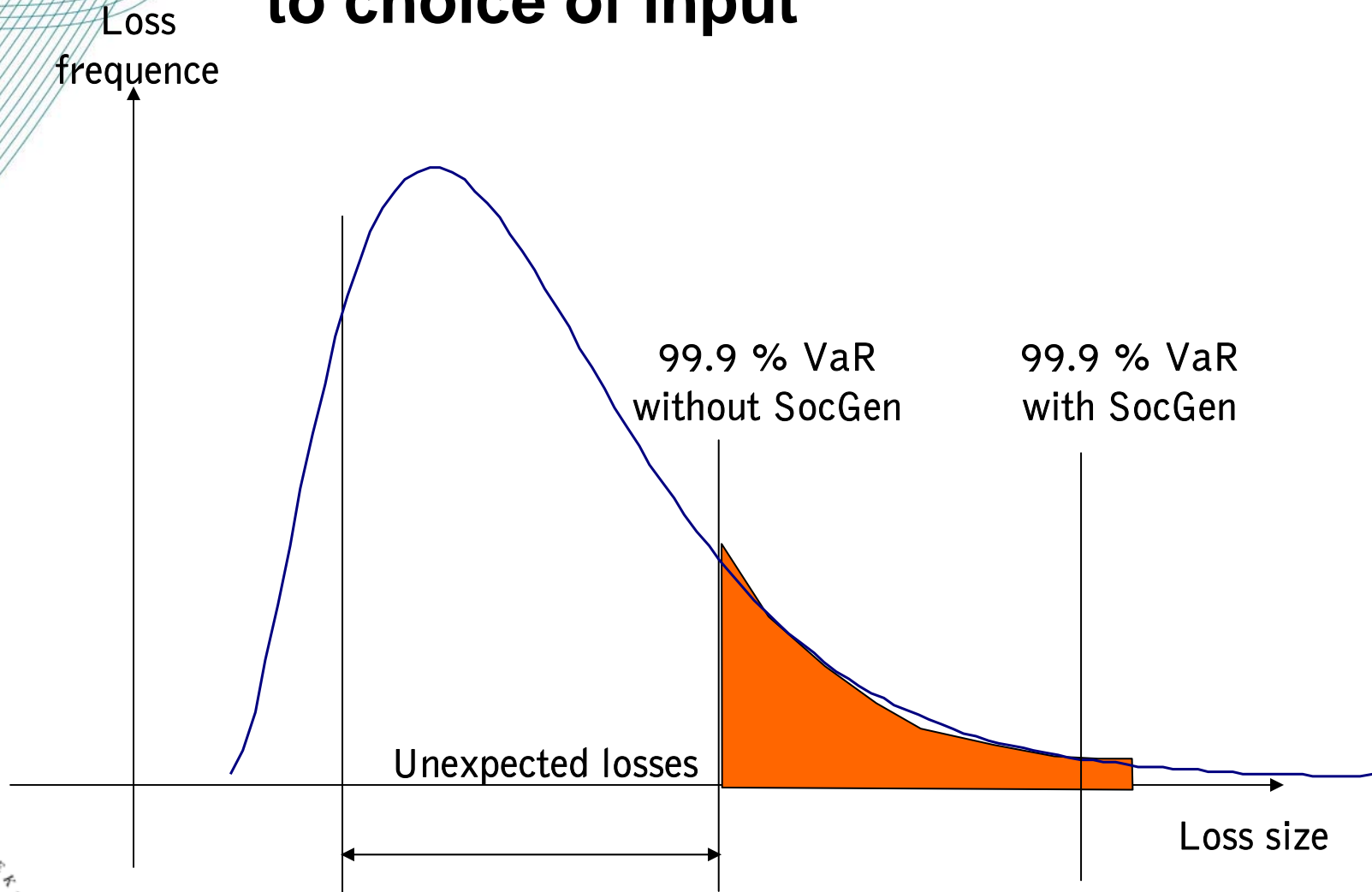
1. Can we measure it?
2. Do we want to measure it?
3. Is it worth measuring it?

# Operational loss simulation

## US data



# Extremely "heavy" tails – sensitive to choice of input

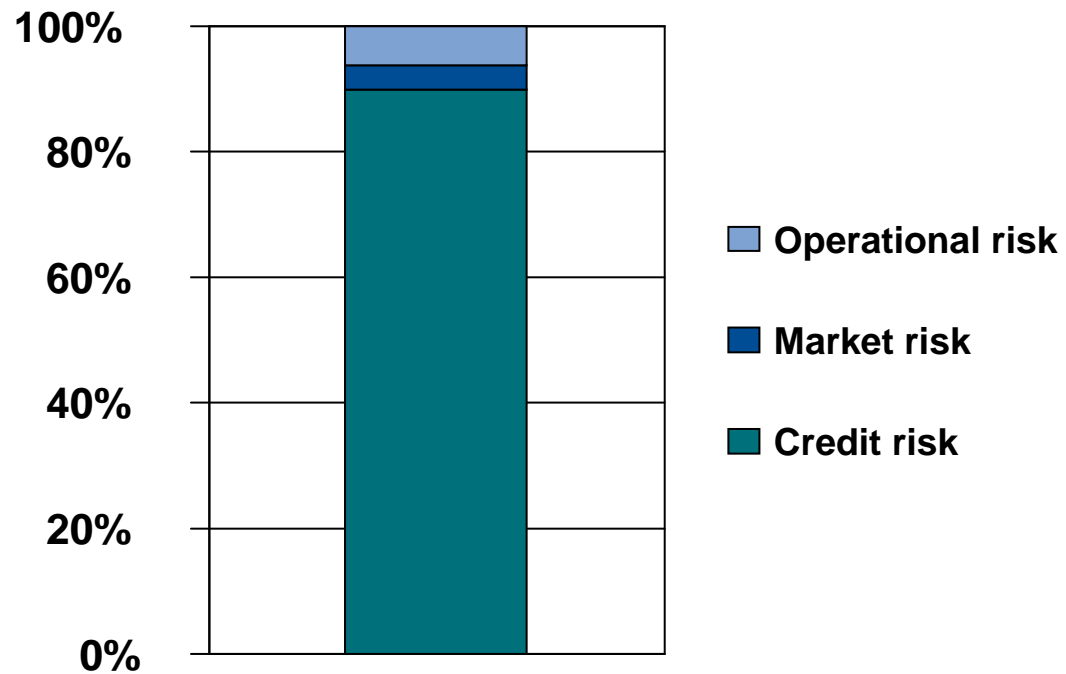




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# Capital requirements – before the crisis...



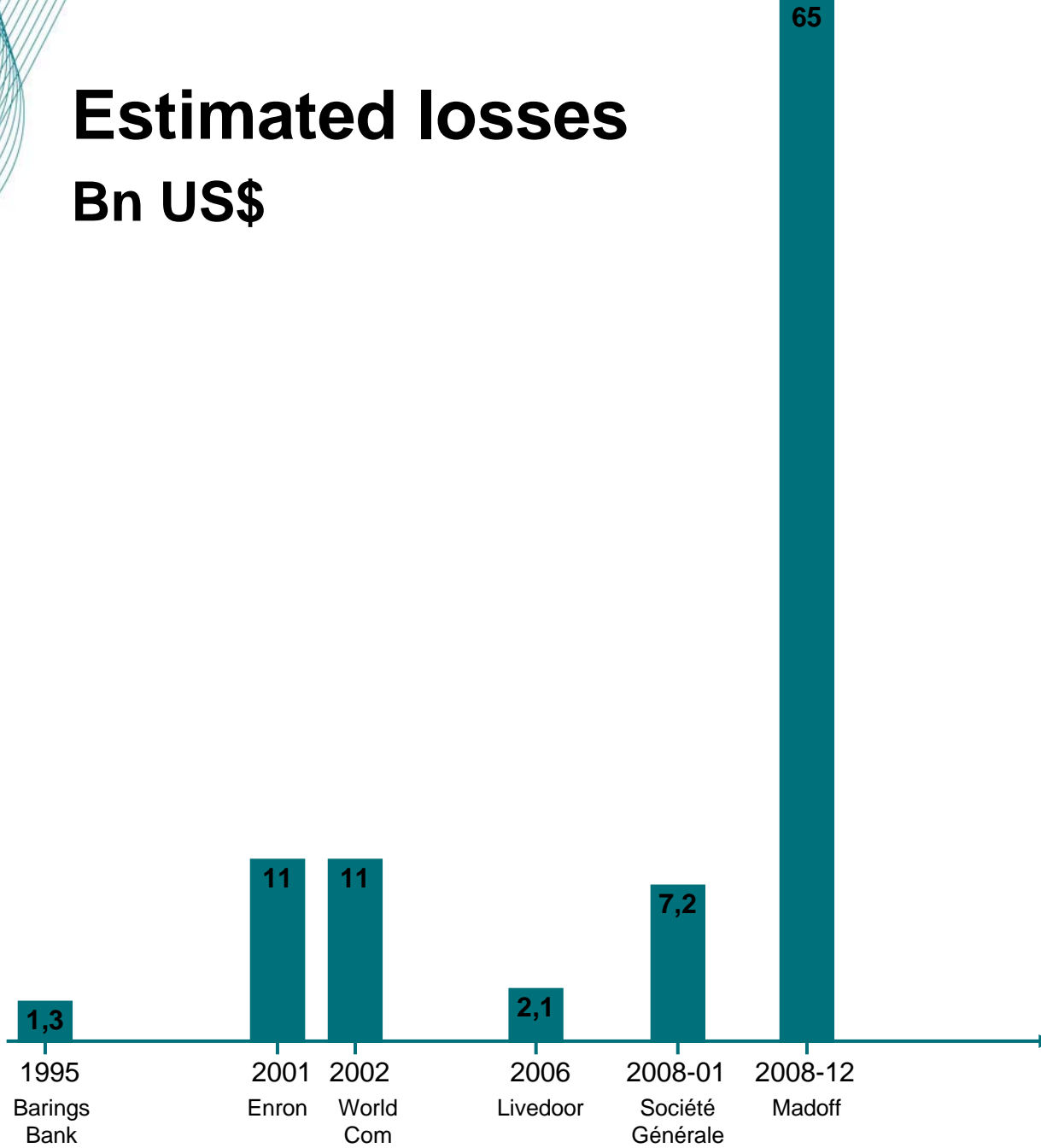
Average of the four largest Swedish Bank Groups

# Capital charges will already increase – a lot

- Capital requirements will increase for market risks (securitizations, structured products, etc.)
- Capital requirements will increase for credit risk (Basel II floors to be kept for 2 years)
- Tougher requirements on quality of capital
- Are banks – or supervisors – interested in adopting methods that increase OP-capital requirements?

# Estimated losses

## Bn US\$





# Three questions:

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# Capital requirement for operational risk

## ■ Pillar 1: Three fixed methods

- Basic indicator approach (BIA); based on gross income
- Standardized approach (SA); Activities divided into 8 business lines, based on gross income
- Advanced measurement approach (AMA)

## ■ Pillar 2 : ICAAP



# Advanced Measurement Approaches (AMA)

- Banks meeting rigorous supervisory standards can use their internal capital assessment techniques to calculate capital charges
- A range of internal approaches are emerging:
  1. Loss Distribution Approaches (but which distribution?)
  2. Scenario Based Approaches (but which scenarios?)

# Current situation in Sweden

- 1 Advanced Measurement Approaches
- 19 Standardised Approach
- 265 Basic Indicator Approach
  
- OP-risk still a small part of capital charges. Were there enough incentives to move to AMA even before crisis?
- Reduction of capital charges by insurance – at a reasonable cost?