

# Operational Risk International Developments



**ISDA-PRMIA Risk  
Management Seminar**

**November 2006, Singapore**

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**ISDA**

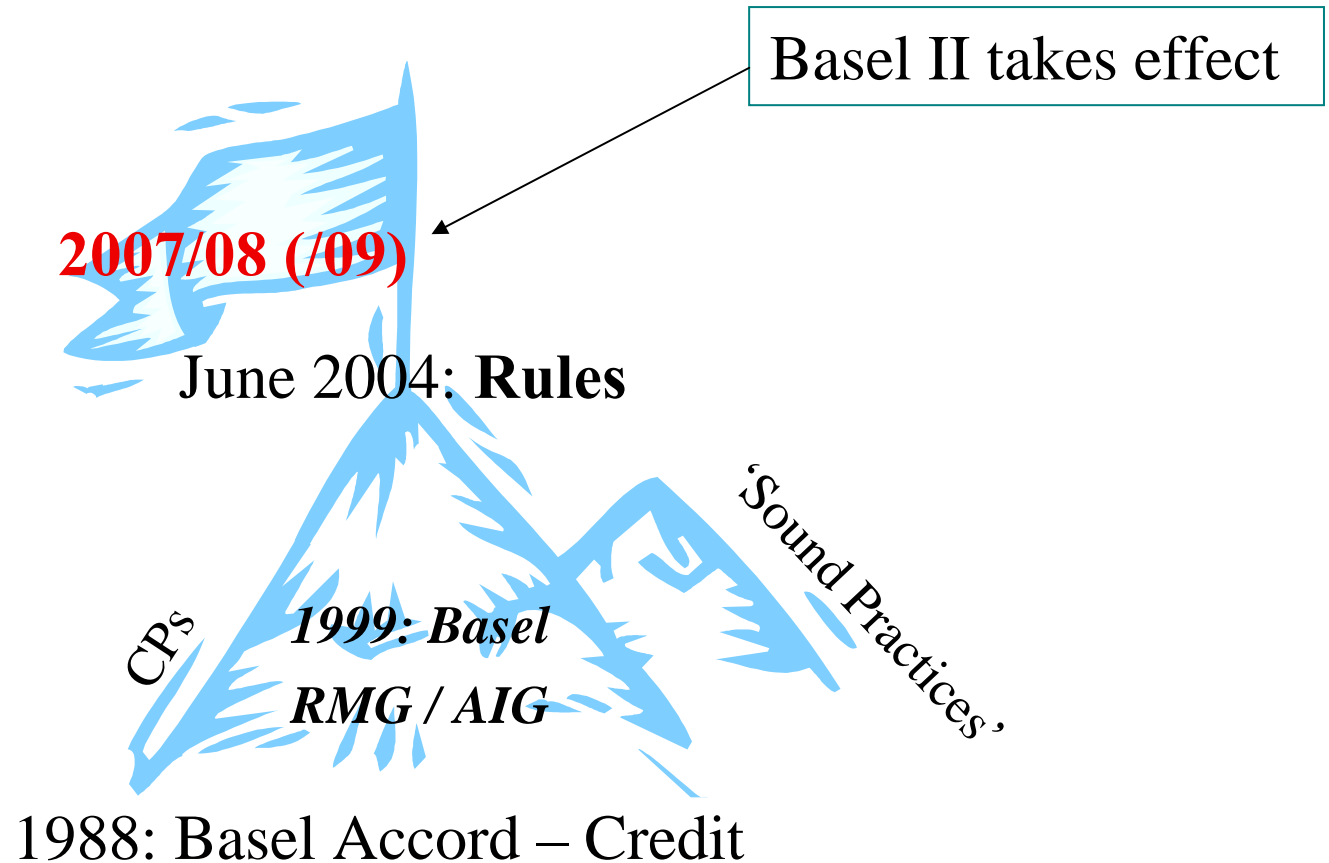
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# 1. Overview

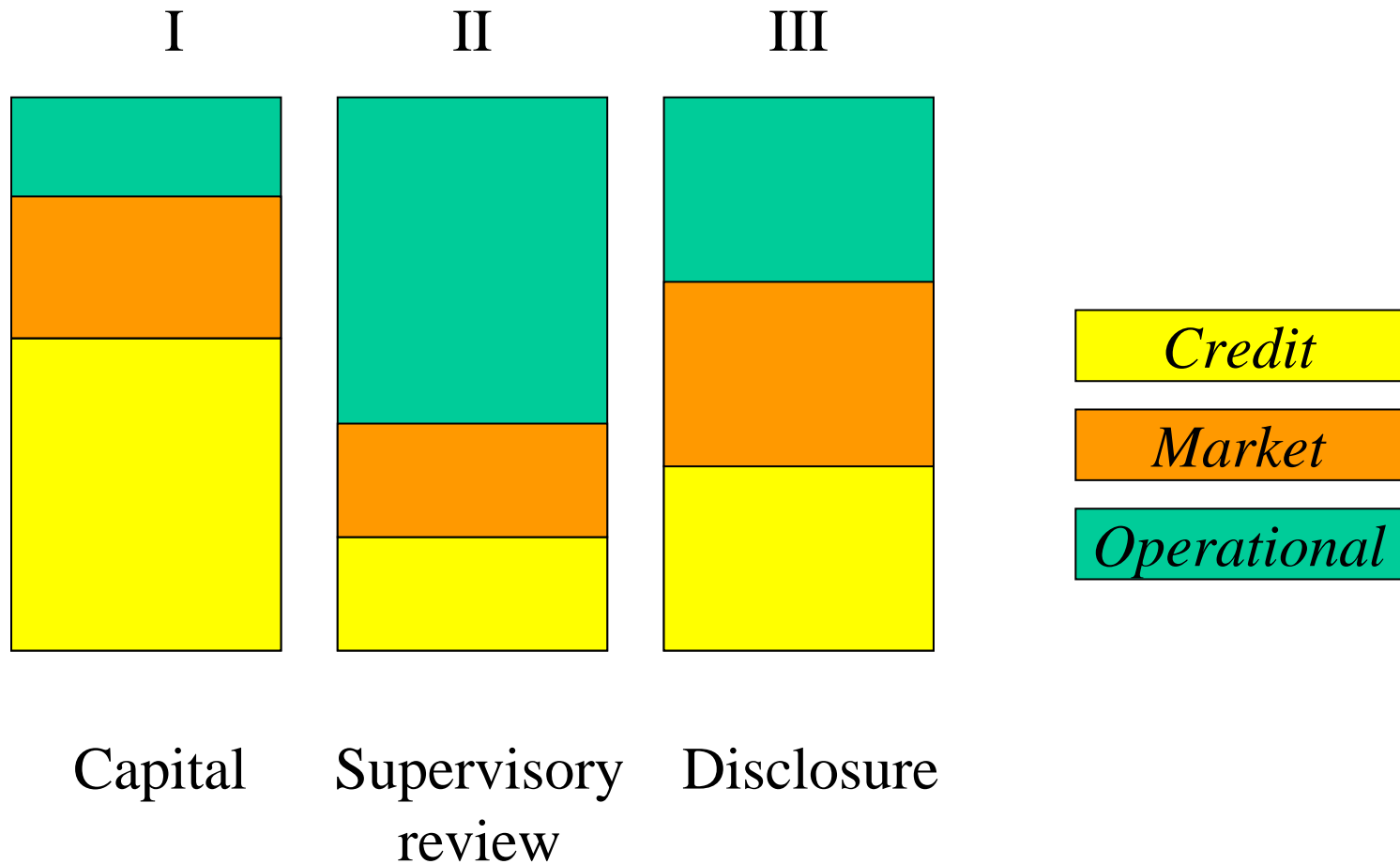


# The climb



# 3 Pillars...

# ...and risks





## ‘OR’ (=“Old Risk”?)

- Definition: “...**processes, people and systems** or **external events**... includes legal risk... excludes strategic and reputational risk.”
- Calibration:  $\approx$  12% of industry average regulatory capital (under 1988 rules)

*(It's a 'plug'...)*



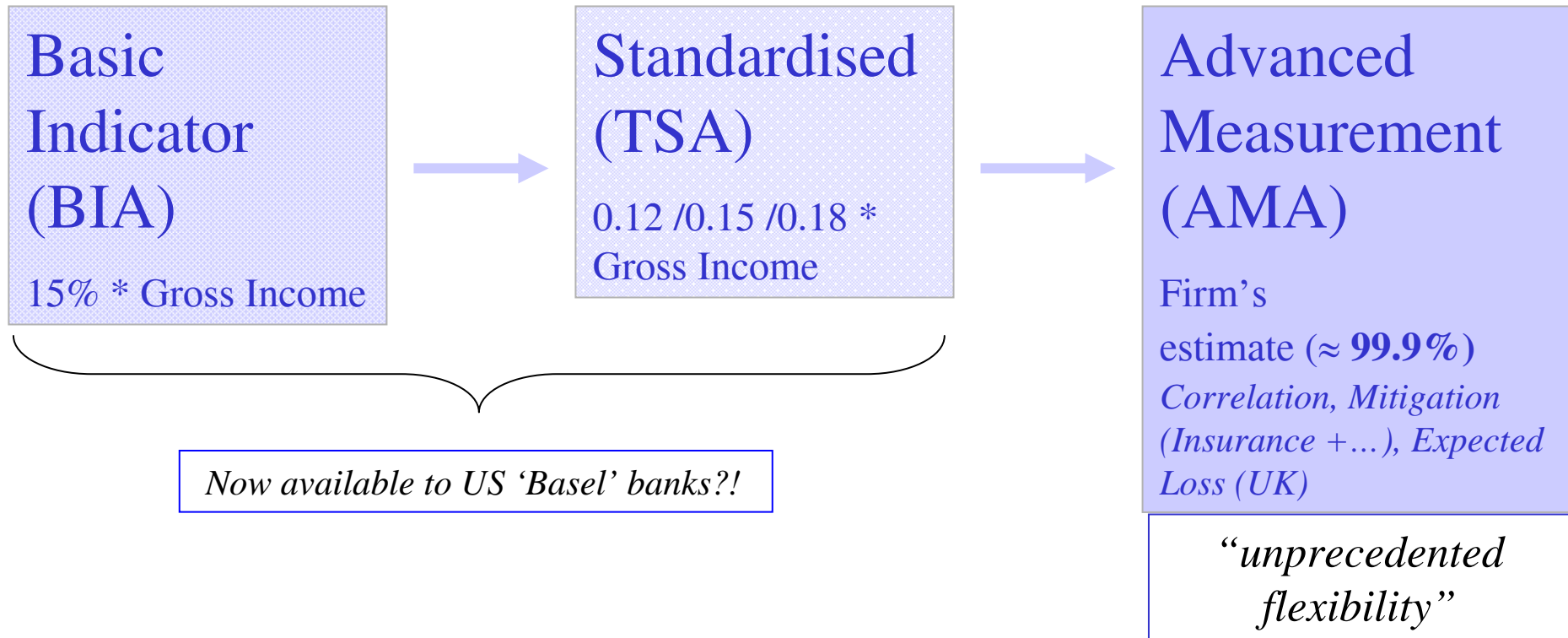
# Quote, unquote

“It’s the firms that have poor risk management *procedures* that give us most concern – not the *risks* themselves.”

Anonymous official, July 2003

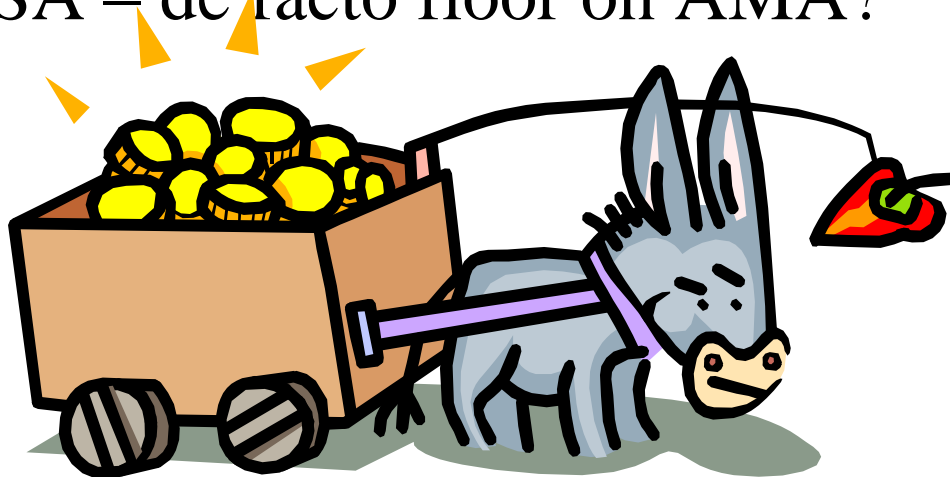


# Approaches 3...



# Carrots and sticks

- Incentives (?) to move to AMA (recalibration?)
- BIA/TSA – de facto floor on AMA?



- Review of AMA (*pgph 668*)
- Peer comparison (*footnote 91*)

## 2. BIA, TSA, AMA



# ... 3 sets of hurdles

**BIA**

15% \* Gross Income



**TSA**

0.12/0.15/0.18 \* Income



**AMA**

Firm's **99.9%**

‘Sound Practices’  
(Basel, Feb 03)



- Organise
  - Function + system
- Track data
  - Create incentives
- Report + escalate
- Document
- Validate
  - Internal/External



- Data (Internal, 3-5 years)
- + Data (External)
- + Scenario Analysis
- + Control factors (KRIs)

**NB:**

- 1-2 years' parallel running
- (Not before 2008!)
- Limits on insurance (20%)
- Floors (90/80%...)

# Issues to dig into



- BIA/TSA vs ‘scale / nature / complexity’
- AMA
  - Modelling (data scarcity, stability, tail events, correlation....)
  - Rapidly recovered losses

# Modelling (science or art?)



- Poisson (*frequency*) + [lognormal] (*severity*)
- Above 95% confidence level, outcome may vary vs forecast by >100%
- Accuracy of data increases only as  $\sqrt{\text{amount of data}}$ 
  - 5 yrs' more data  $\Rightarrow$  2.2 x more accuracy
- Correlation (0.15 or 0.9)?

# AMA – work in progress

- UK: [6] applications (in 1<sup>st</sup> wave – more to follow)?
- Australia: APRA Response paper/APS 115
  - “All data factors... with appropriate granularity”
- AIG-OR: AMA ‘Range of Practices’ paper (Oct 06)
  - validation practice embryonic
  - near misses generally collected
  - double-counting across ‘elements’

<http://www.bis.org/publ/bcbs131.htm>

# Supervisory ‘blessing’ (*à la* FSA)



- Self-certification (TSA)
- Waiver/approval (AMA)
  - Standards *vs* Principles
  - “Minded-to-give” notices

# Validation – A study concludes:

- Wide range of techniques
- Not an exact science
- Expert judgment of critical importance
- Data issues: quantity not quality
- Regional differences
- Additional work: standards for stress testing

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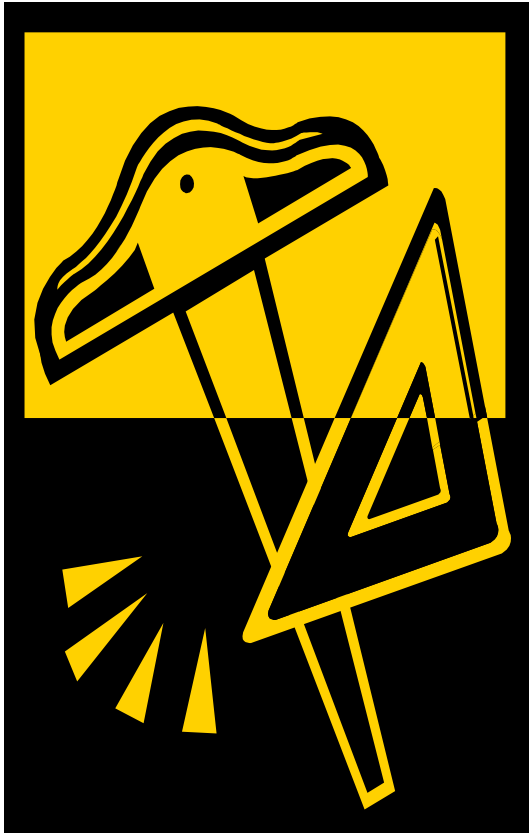
Which study...?

# IRB (Credit) Validation...

- Wide range of techniques
- Not an exact science
- Expert judgment of critical importance
- Data issues: quantity not quality
- Regional differences
- Additional work: standards for stress testing

... BBA, ISDA, RMA – 2003

etc

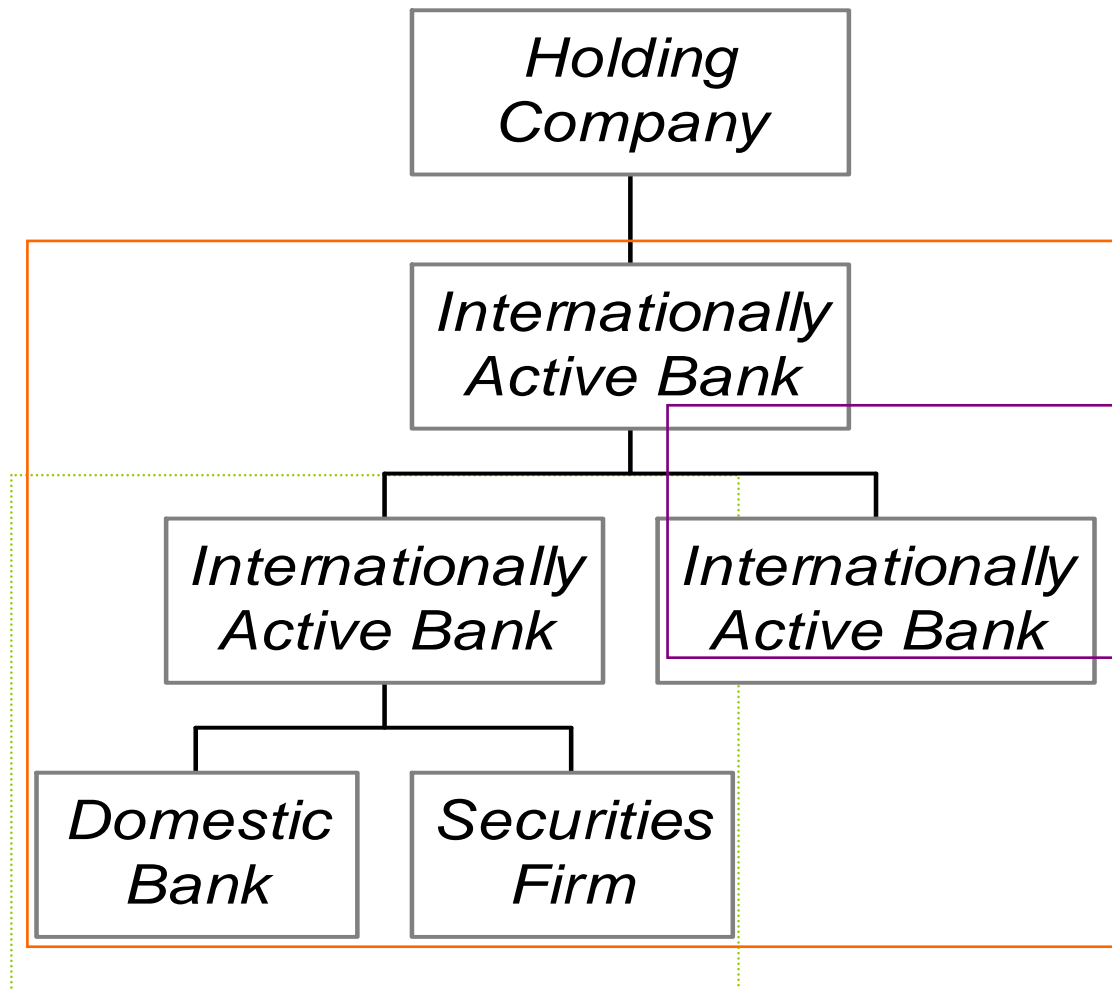


- Human resources
  - Firm
  - Supervisor
  - Third-party (eg, ratings)
- Implementation (AIG)
  - Co-ordination (formalised?)
  - Transparency
  - Regime impact review?

# 3. AMA Home-Host issues



# Scope of application



# Basel's proposals (2004-07)

- Home-supervisor lead
- Not too many “significant” subs...
- AMAs to include allocation approach
- AIG-OR consultation (Jan '07):
  - Risk sensitivity
  - Stability

<u><i>EU Partial Use Rules</i></u>	Group-level approach		
	BIA	TSA	AMA
Subsidiary / Business line			
BIA	-	acceptable*	acceptable
TSA	<u><i>not acceptable*</i></u>	-	acceptable
AMA	acceptable*	acceptable*	-

\* Partial use not acceptable *within* legal entity

# Capital allocation



- Basel paper, Jan 04
  - Significant subsidiaries
  - Capital transferability
- Industry concerns
  - Vague, unpredictable
  - Burden (business lines vs regulatory entities)
  - Diversification not recognised (99.9%)
  - ...Promotes TSA

# 4. The Bigger Picture



# The broader environment

- EU
  - Market in Financial Instruments Directive (MiFID)
  - Market Abuse Directive
  - Prospectus Directive (Risk disclosure)
  - Corporate Governance debate
- US + UK
  - ‘[Complex Structured] Financing transactions’
  - Retail structured products

# MiFID – some aspects

## II Authorisation & Operating Conditions:

Outsourcing/OpRisk (Article 13);

Conflicts of interest (Art. 18)

Suitability and Appropriateness (Art. 19)

Best execution (Art. 21); Order handling (Art. 22)

## IV Competent Authorities

Whistle-blowing obligation on auditors (Art 55)

Annex II: Client classification

**REGULATORY FINES?  
CUSTOMER ACTION?  
(REPUTATIONAL DAMAGE?)**

# Operations issues....

Average number of confirmations sent but not finalised  
(*Business-days' worth of average confirmation volumes*)

	2003	2004	2005	2006
FRAs	7.1	6.0	4.6	6.1
Vanilla swaps	8.9	8.9	10.1	9.0
Non-vanilla swaps	12.1	11.3	11.6	11.3
Interest rate options	10.7	9.3	8.1	10.3
Currency options	8.2	7.6	6.2	5.1
<b><u>Credit derivatives</u></b>	<b><u>21.1</u></b>	<b><u>17.8</u></b>	<b><u>13.3</u></b>	<b><u>12.9</u></b>
Equity derivatives	12.6	12.5	9.3	12.3
Commodity derivatives	9.5	12.1	10.0	12.5

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- FSA 'Stylised [AMA] Approaches' paper ([www.fsa.gov.uk](http://www.fsa.gov.uk))
- Risk Management Group, May '03 ([www.newyorkfed.org/newsevents](http://www.newyorkfed.org/newsevents))

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