2005 Sound Practices for Hedge Fund Managers
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Panel 5 - Risk Monitoring

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Sound Practices

• Management and Internal Trading Controls
• Responsibilities to Investors
• Valuation Policies and Procedures
• Risk Monitoring
• Regulatory Controls
• Transactional Practices
• Business Continuity and Disaster Recovery
What Is Risk?

• How likely is a given outcome to occur?

• How much does that outcome scare you?
The Risk Equation

Risk = Uncertainty + Consequences
Sources of Uncertainty

(guaranteed incomplete)

- Market
  - Economic Growth
  - Interest and Inflation Rates
  - Foreign Exchange
  - Credit and Counter-party
- Operational
  - Lack of Discipline
  - Lack of Flexibility
  - Operational Errors and Deficiencies
- Strategy
  - Non-Stationarity
  - Overfitting
  - Lack of Realism
- Event Risk
  - Regulatory Changes
  - Political Upheavals
A 5% position loss...

• ...at 1:1 leverage is an inconvenience.
• ...at 5:1 leverage is a disaster.
• ...at 10:1 leverage puts you out of business.
• ...at 20:1 leverage bankrupts you.
Risk Monitoring


- Reports to Senior Management
- Develop and Implement a System of Checks and Balances
- Conduct Back Tests and Stress Tests
- Quantify and Monitor Current Exposures
Risk Classification

Source: MFA’s 2005 Sound Practices for Hedge Fund Managers, pp. IV-3 to IV-9

- Market Risk
- Liquidity Risk
- Credit Risk
- Leverage Risk
- Operational Risk
- Valuation Risk
Risk Overlap

Source: MFA’s 2005 Sound Practices for Hedge Fund Managers, p. IV-1
Monitoring Risk

Source: MFA’s 2005 Sound Practices for Hedge Fund Managers, pp. AI-1 to AI-22

- General Techniques
  - No one numerical or statistical measure is complete
  - Employ multiple measures
    - VaR
    - Stress Testing
    - Scenario Analysis
- Funding Liquidity Risk
  - The fund’s ability to absorb losses
  - Volatility a key element
- Leverage (in context)
  - Multiple Definitions
  - Not an Independently Useful Measure
Today’s scientists have substituted mathematics for experiments, and they wander off through equation after equation, and eventually build a structure which has no relation to reality.

Nikola Tesla, *Modern Mechanics and Invention* (1934)
Thank You!