

# **Systemic Risk and Hedge Funds**

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**Discussion by:**

**Richard R. Lindsey**

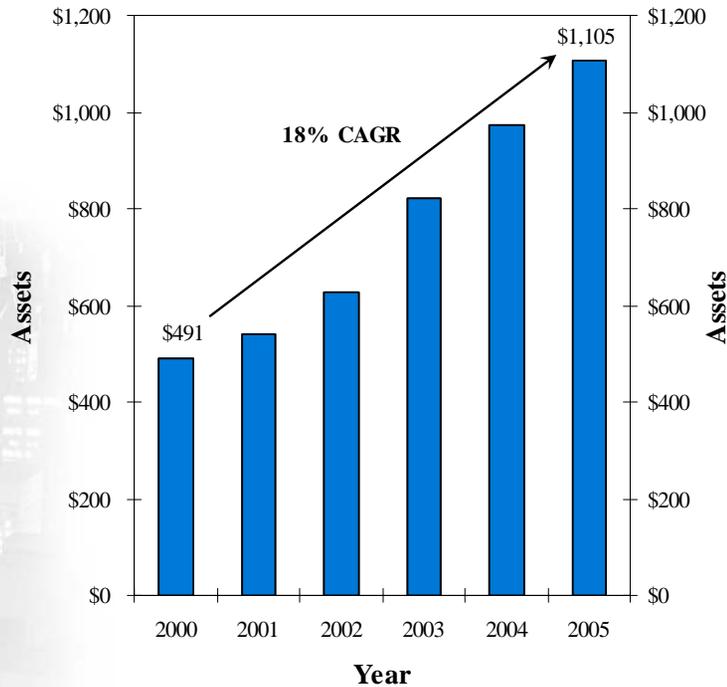
*Bear, Stearns Securities Corp.*

**11 May 2006**

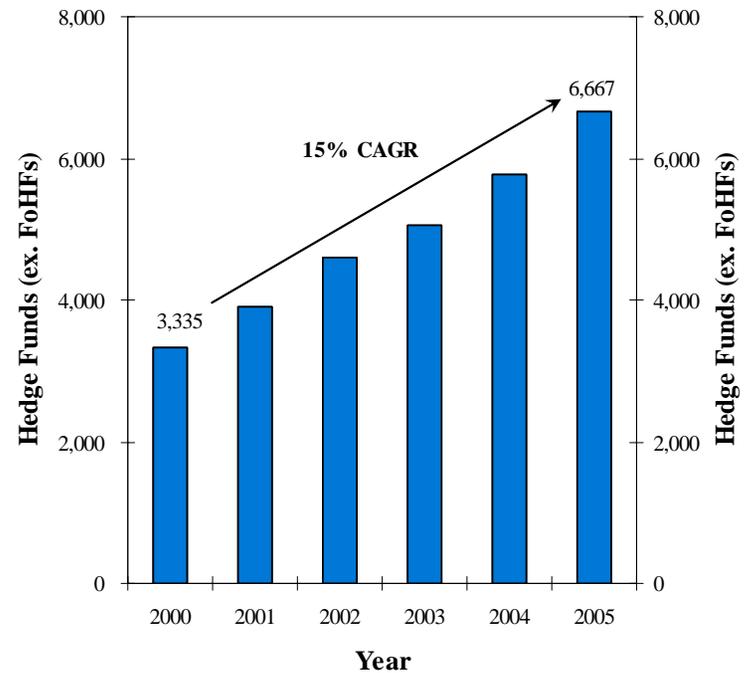
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# Hedge Funds Have Expanded Rapidly

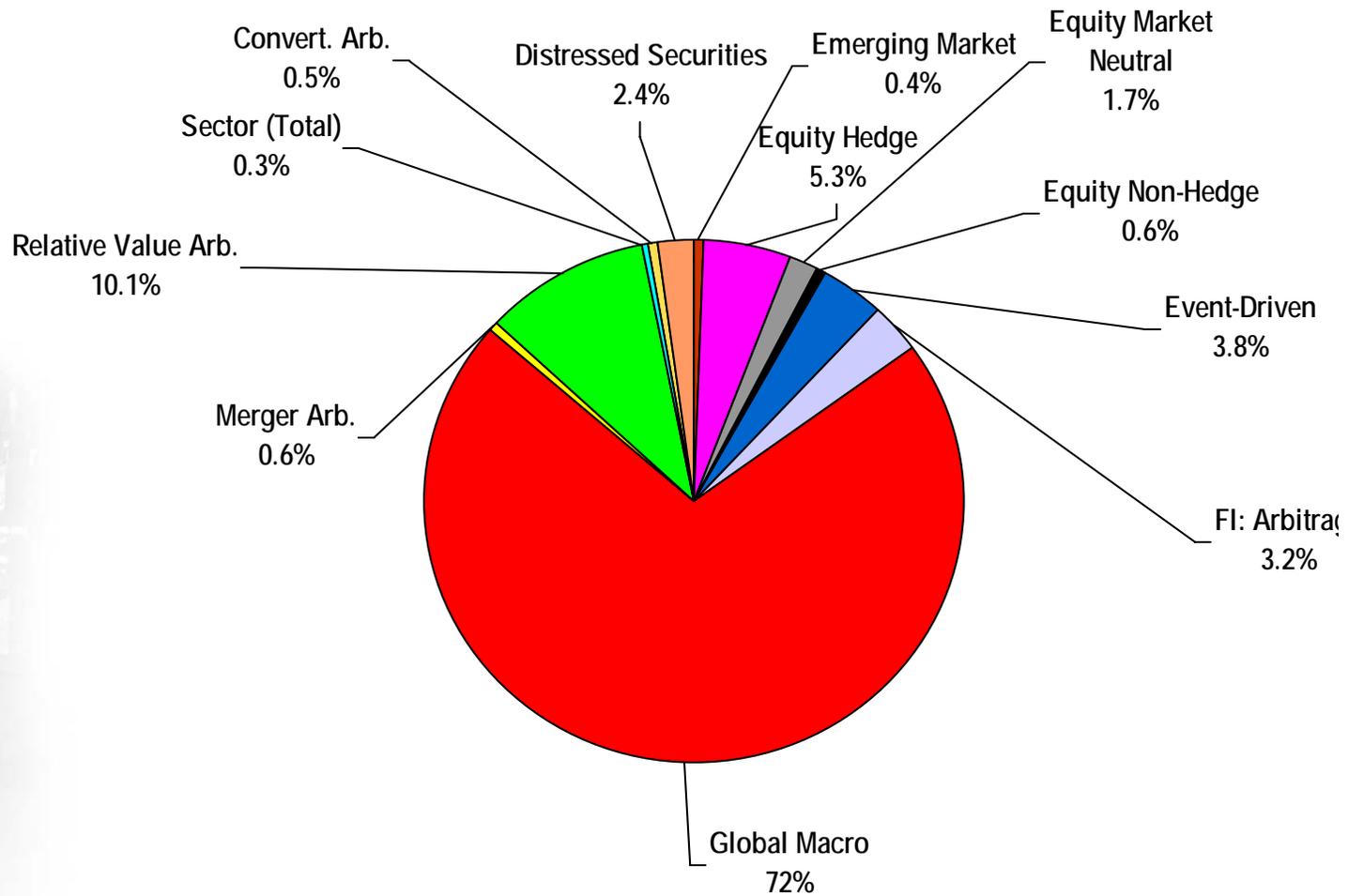
Worldwide Hedge Fund Assets (\$ in billions)



Number of Hedge Funds Worldwide

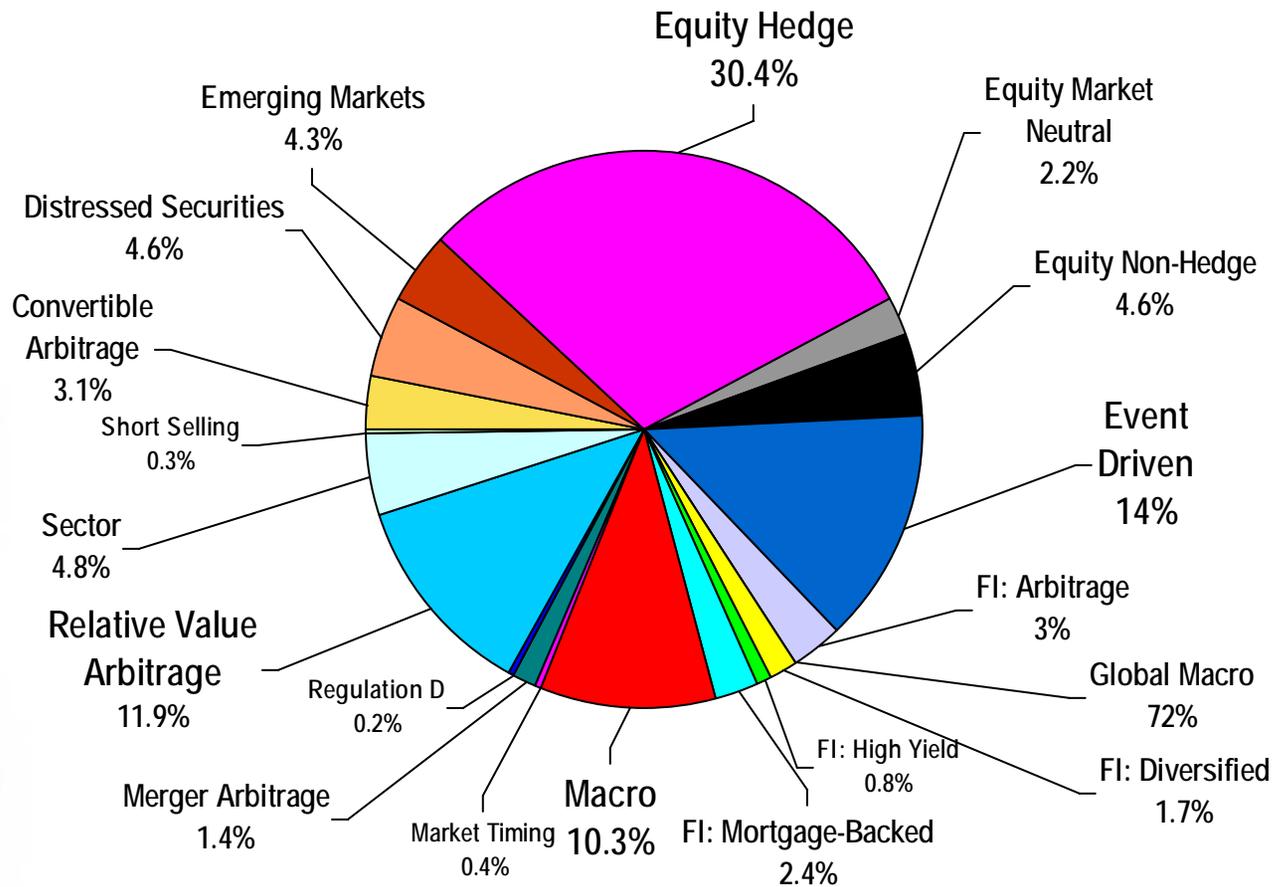


## Estimated Strategy Composition by AUM – 1990



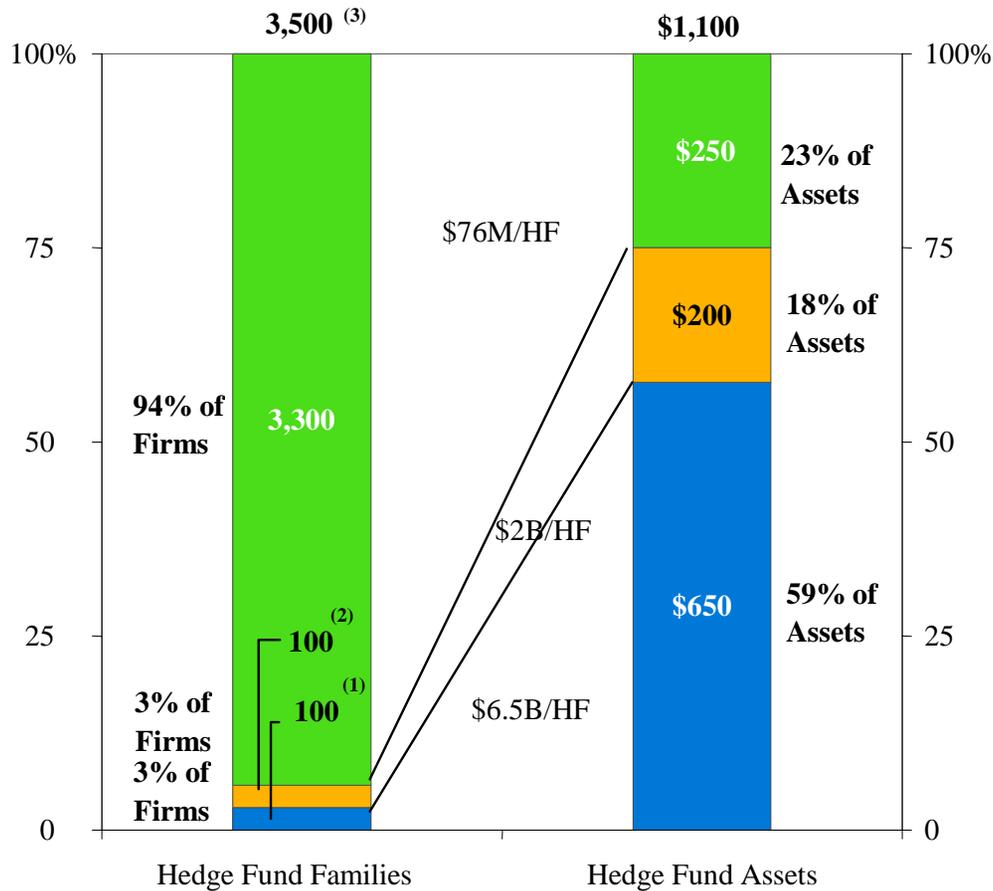
Note: From HFR

# Estimated Strategy Composition by AUM – 2006



Note: From HFR 2006-1Q Report

# Concentration of Hedge Fund Assets



Notes:

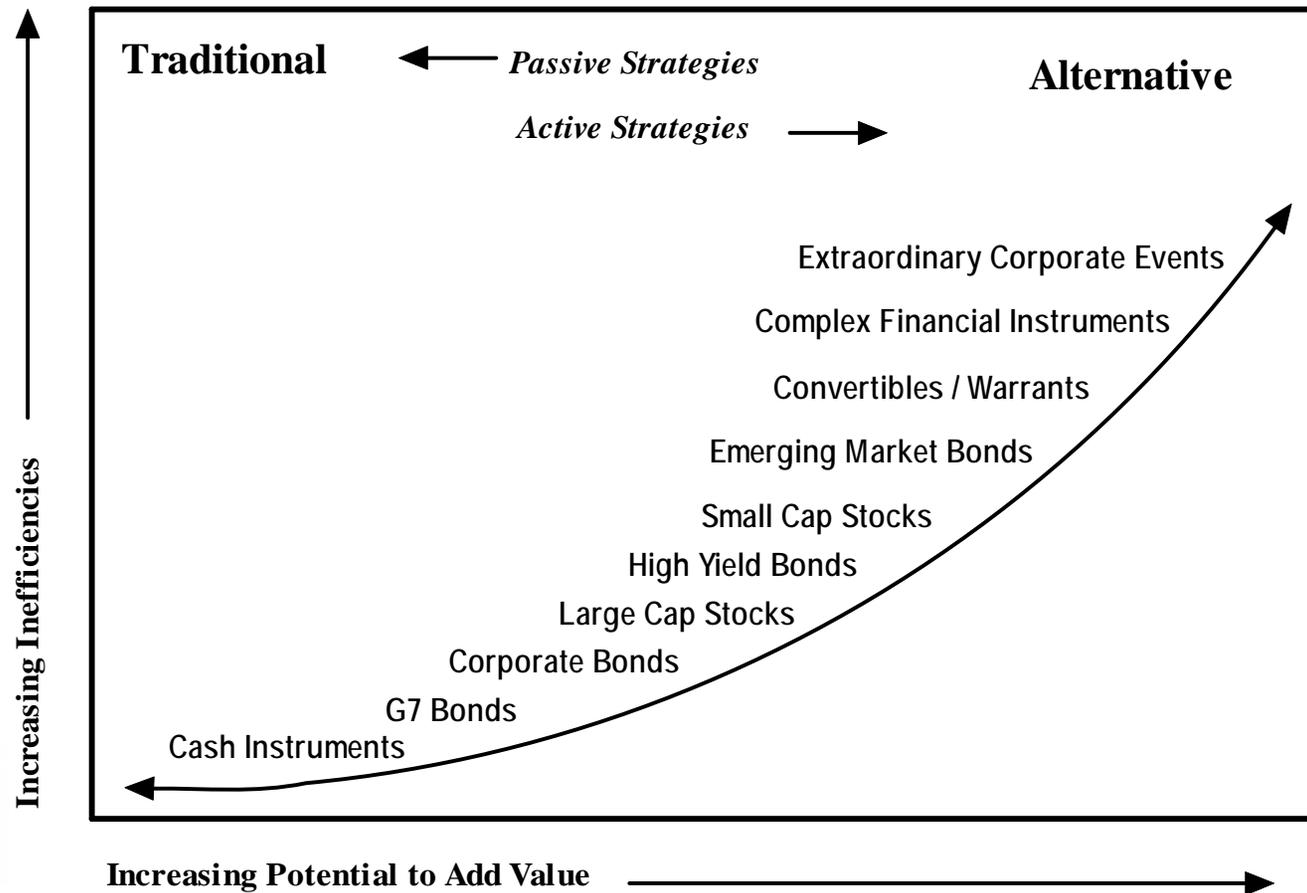
1. Source: *Absolute Return*, Feb-2006
2. Source: "The Hedge Fund 100", *Alpha Magazine*, May/June 2005
3. Source: Strategic Financial Solutions estimates 3,500 General Partners based on HF database study

## **Hedge Funds are Active Market Participants**

- **They Account for 35-40% of Overall Equity Commissions in US and Asia**
- **They Account for 40-50% of Daily Turnover on the New York and London Stock Exchanges**
- **They Dominate Convertible Bond Trading Flows, Accounting for over 70% of Total Volume**
- **They Account for 20-30% of the Credit Default Swap Volume**
- **They Represent 82% of the Trading Volume in US Distressed Debt**
- **They are Almost 33% of Trading in US Speculative-Grade Bonds**
- **They Dominate US Exchange Traded Funds, Controlling 70% of the Volume**
- **They are Heavily into Global Foreign Exchange, Representing 10-15% of Worldwide Volume**



# Investment Opportunities



## Hedge Funds and Financial Institutions

HF 1

HF 2

HF 3

HF 4

HF 5

HF 6

HF 7

HF 8

HF 9

HF 10

HF 11

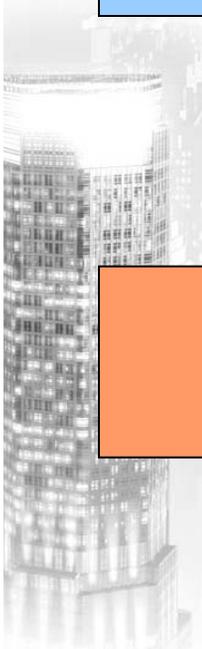
HF 12

FI 1

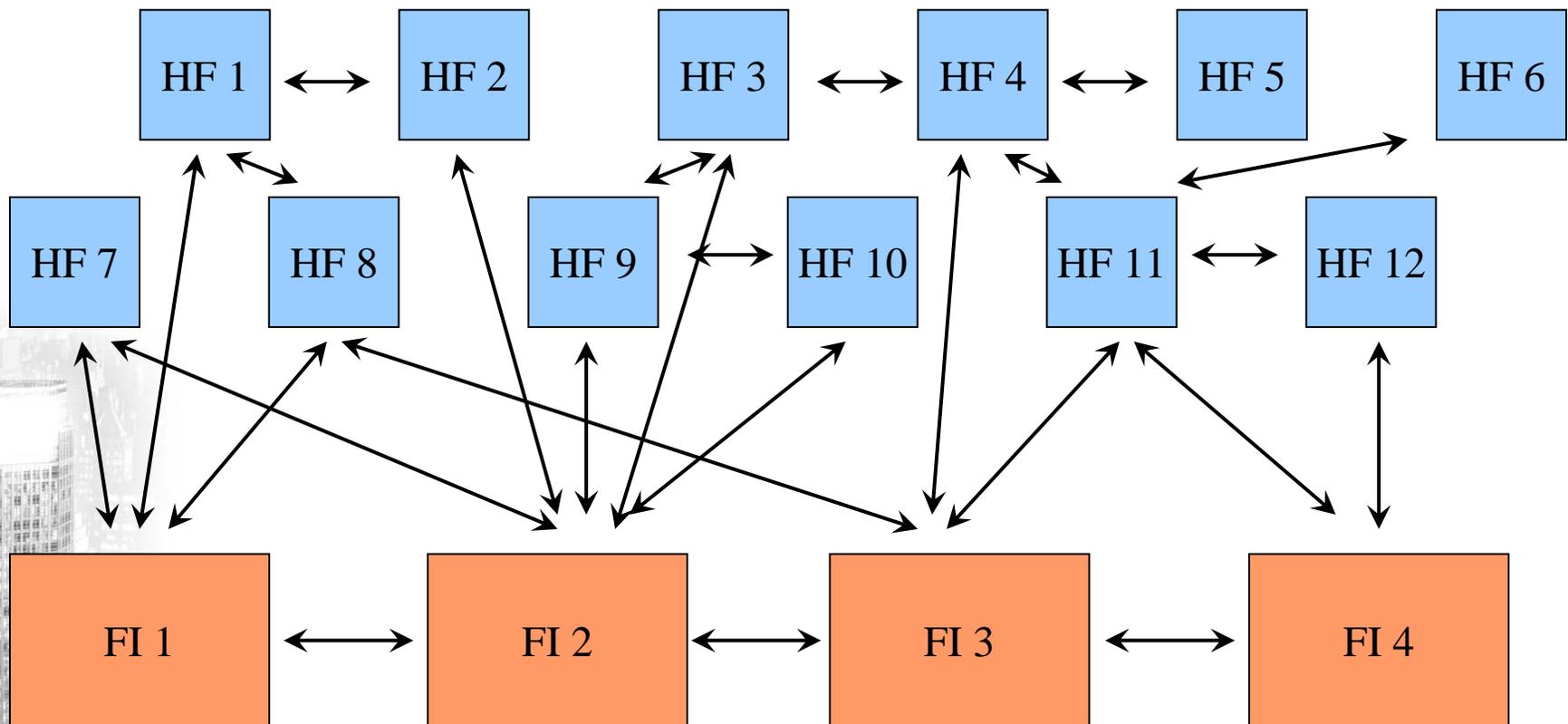
FI 2

FI 3

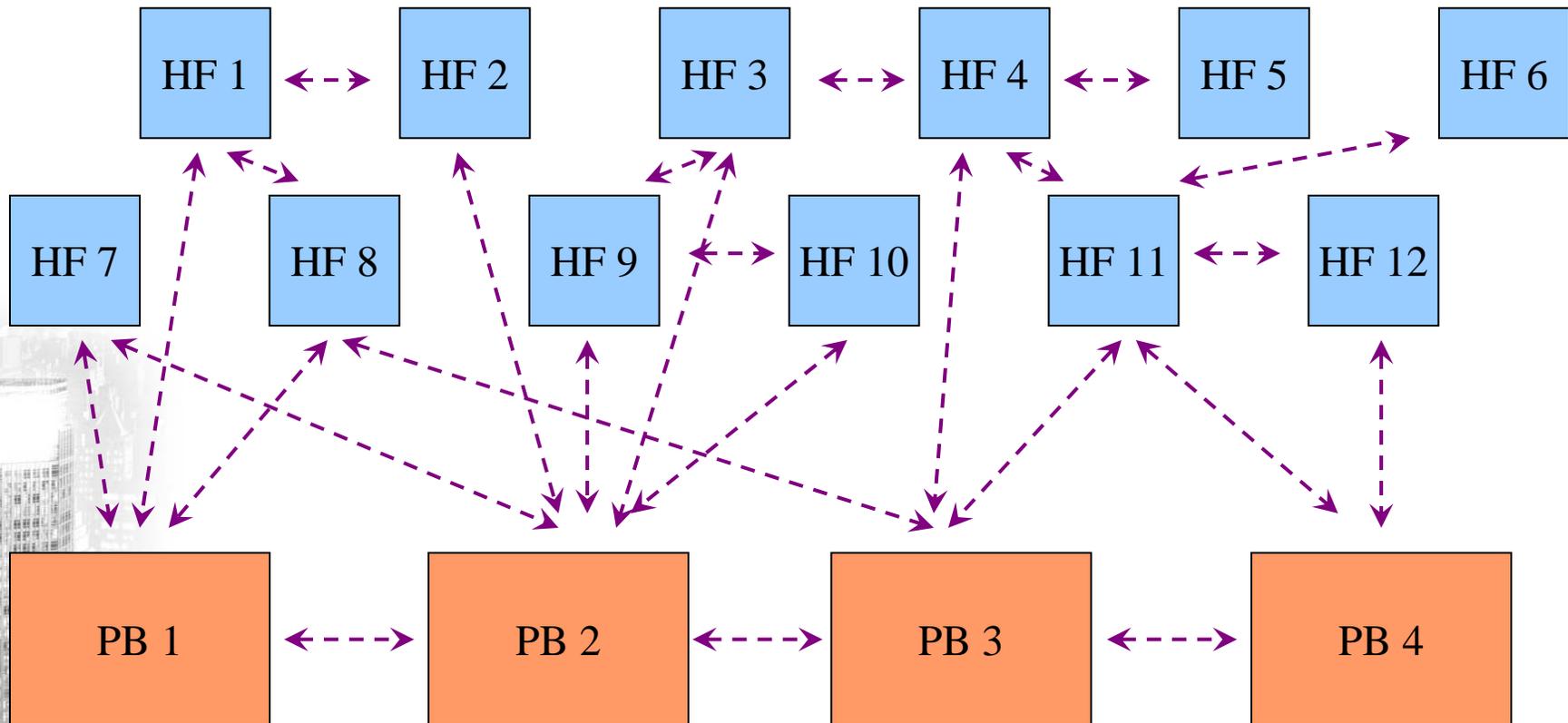
FI 4



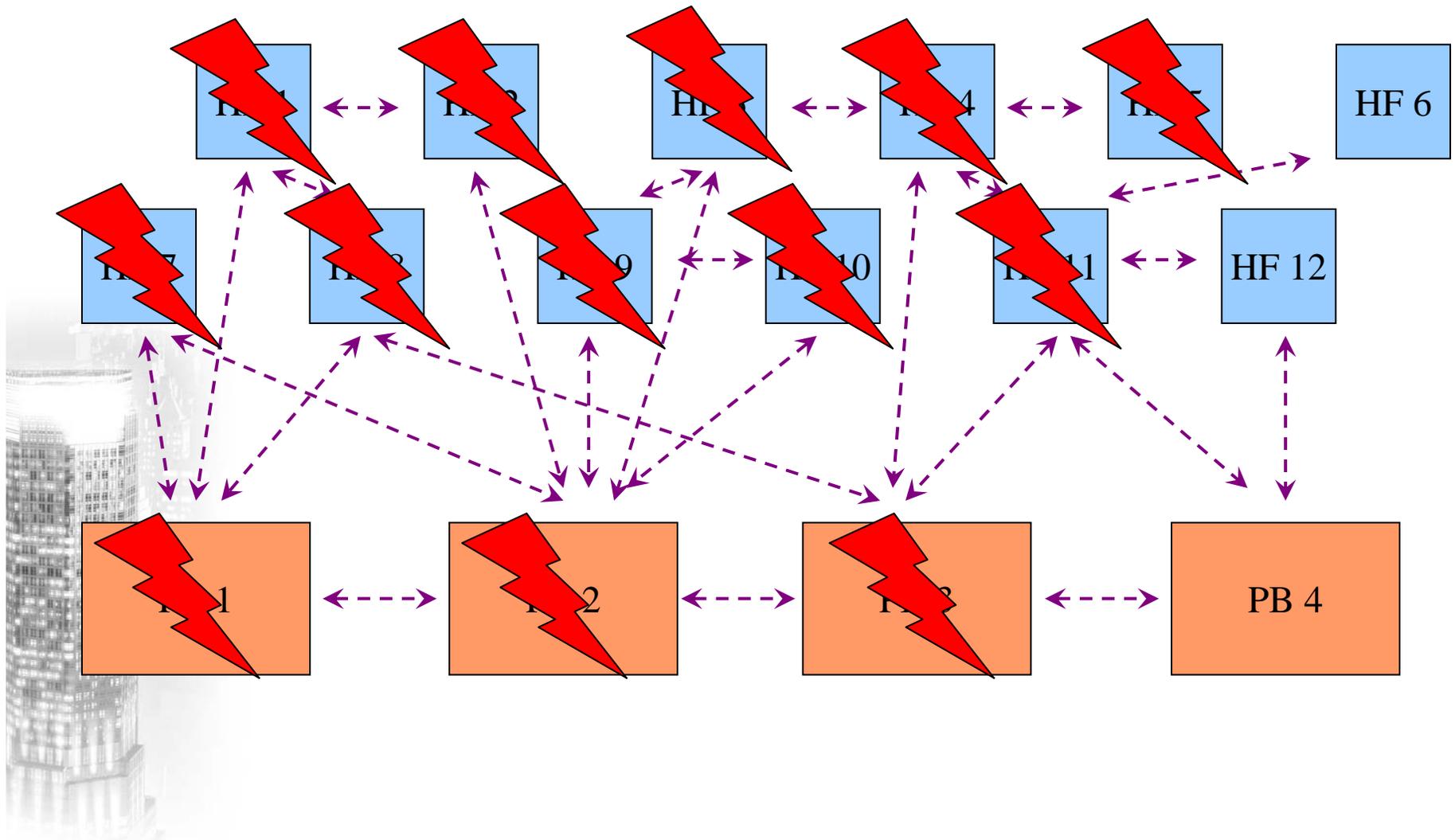
## Complex Interactions



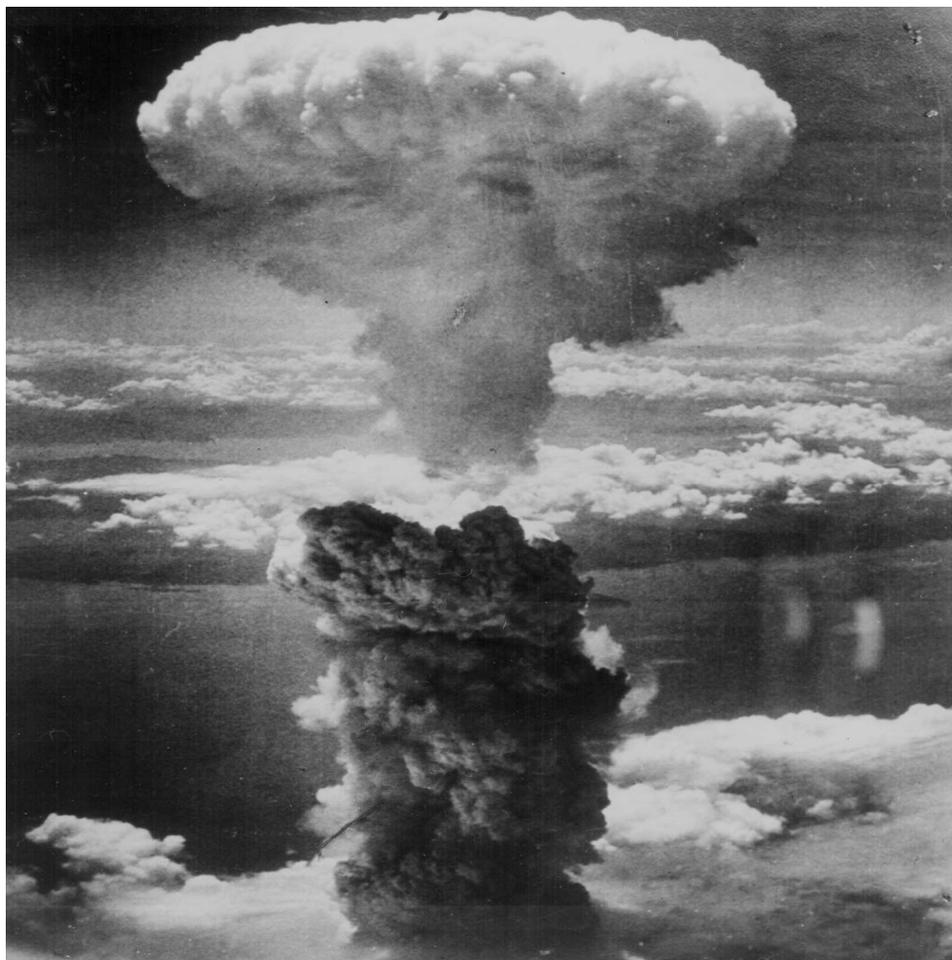
## Strategies and Trades are Often Correlated



## Economic Crises can lead to Contagion



## Systemic Risk?



## **Key Ideas**

- **Hedge Funds are Risky**
- **Dynamic Trading Strategies Produce Option-Like Payoffs**
- **Liquidity Matters**



## **Implications**

- **Traditional Risk Measures Are Inappropriate**
  
- **Traditional Performance Measures Do Not Work**
  
- **Need For New Measures**
  
- **Is there alpha?**
  - Tail Risk
  - Liquidity Risk



## **Hedge Fund Leverage**

- **Balance Sheet Leverage**
- **Instrument Leverage**
- **Dry-Powder Agreements**
- **Leverage on Leverage**



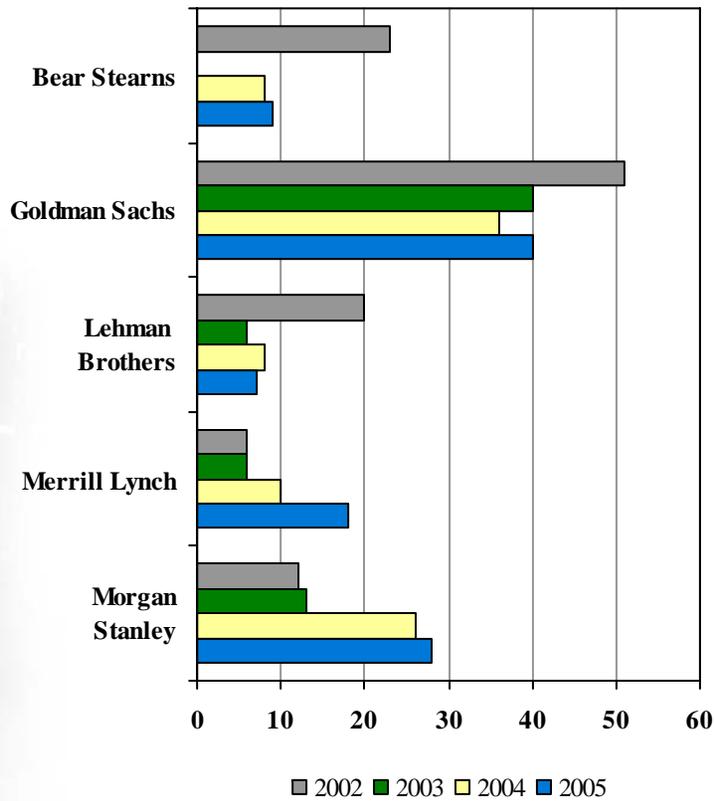
## **Institutional Exposure to Hedge Funds**

- **Prime Brokerage**
  - Cash
  - Synthetic
- **Financing**
- **Counterparty Trading**
- **Correlated Trading**
- **Secondary Market Effects**

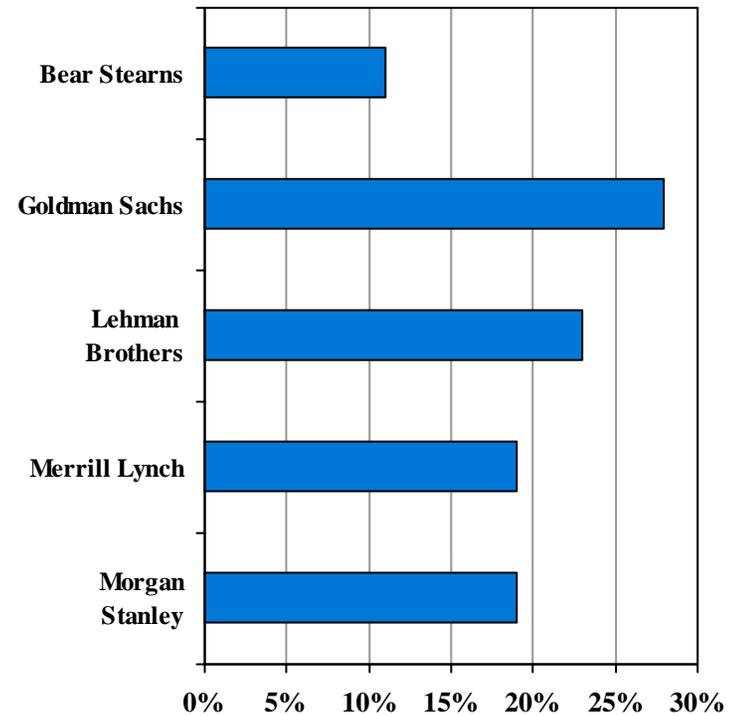


## Trading Volatility

### Negative Trading Days



### Trading Revenue Volatility



**Notes:**

- 1) Trading Revenue Volatility measured by standard deviation of trading revenue as % of its mean, over three years to Q4 2005
- 2) Source: Moody's, as reporting in *The Economist* 29-Apr-06

## **Institutional Exposure to Hedge Funds**

- **Legal Certainty**
  - Netting
  - Bankruptcy
- **Documentation**
- **Clearance and Settlement**
  
- **Internal Systems**
- **Risk Management**
- **Liquidity Management**

