

Investment Strategy for Pension Actuaries Seminar 11 April 2008, London

Hedge funds: industry update
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The other 'J Wilkinson'

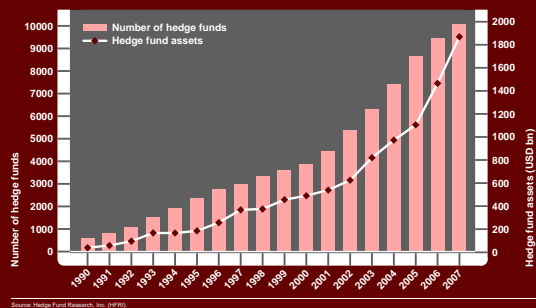


Agenda

- Scale of the industry
- Observed correlations with traditional markets
- Impact of the liquidity crisis
- Developments in self-regulation

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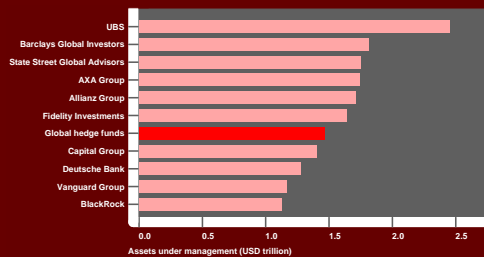
Hedge fund industry: 1990 to 2007 Estimated growth of assets



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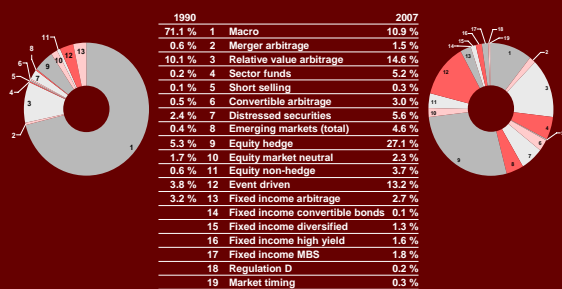
Still small in the scheme of things

- Global financial assets in 2006 totalled USD 167 trillion



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Estimated strategy composition by assets under management



Source: Hedge Fund Research, Inc. (HFR). Sector funds includes funds that concentrate their investments in the following sectors: energy, financial, healthcare/technology, real estate, technology and miscellaneous.

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Alpha

- Returns are a function of manager skill
- More anomalous trading environment
 - More opportunities
 - Greater return potential
- More capital enters market
 - Pricing becomes more efficient
 - Reduces size of anomalies

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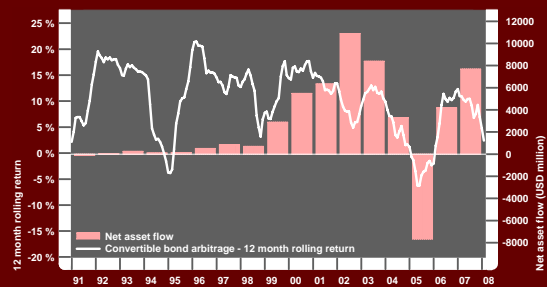
Can hedge funds still generate alpha?

- Convertible bond arbitrage
 - Delta/gamma trading
- Returns will suffer when
 - Limited issuance (limited universe of CBs)
 - Illiquid market
 - Low delta
 - Low volatility – implied and actual
 - **Too many hedge funds with too much money**

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Convertible bond arbitrage

1 January 1990 to 31 January 2008



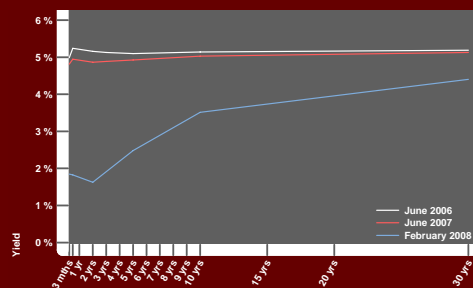
Source: Bloomberg and Hedge Fund Research, Inc. (HFR). There is no guarantee of trading performance and past performance is no indication of current or future performance results.

Convertible bond arbitrage - HFR Convertible Arbitrage Index.

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Fixed income arbitrage

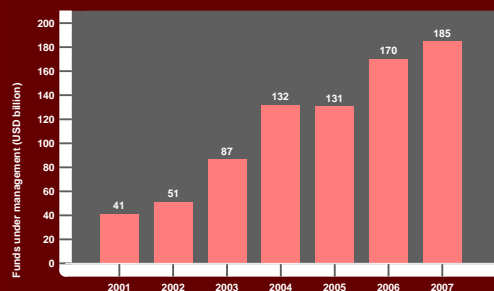
US Treasury yield curve



Source: Bloomberg. There is no guarantee of trading performance and past performance is no indication of current or future performance results.

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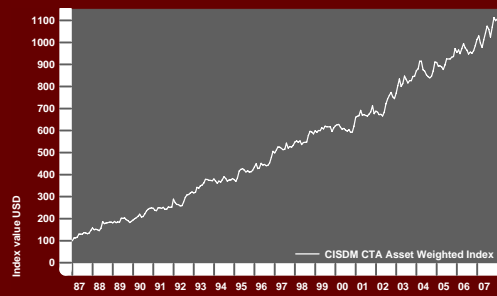
Growth of futures markets



Source: Barclay Group

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CTAs



Source: Bloomberg and more knowledgeable.com. There is no guarantee of trading performance and past performance is no indication of current or future performance results. Date range: 1 January 1987 to 31 December 2007.

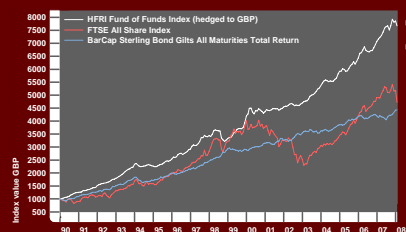
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Why invest?



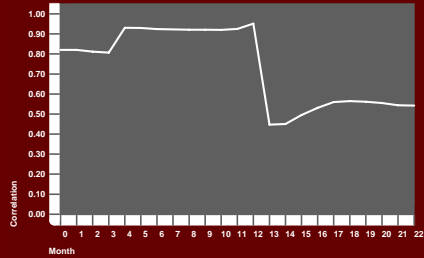
Source: Bloomberg. There is no guarantee of trading performance and past performance is no indication of current or future performance results. Date range: 1 January 1990 to 31 January 2008. Please note that the HFRI index data uses the past 6 months average to calculate the HFRI Fund of Funds Index has been hedged into GBP using the nearest 3 month LIBOR interest rate differentials.

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- Absolute return
- Diversification

Is the perfect long/short fund... ...the perfect diversifier?

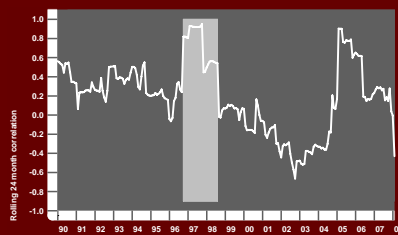
Rolling 24 month correlation vs. FTSE All Share Index



Source: Bloomberg. There is no guarantee of trading performance and past performance is no indication of current or future performance/results. Short-term track records are statistically not significant.

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The perfect hedge fund

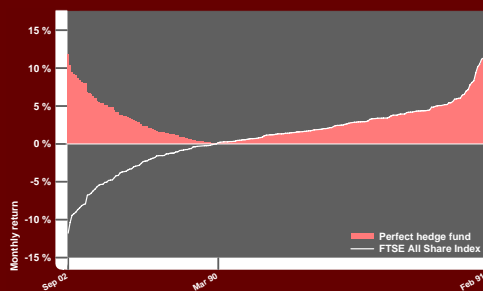


- With perfect foresight
 - If FTSE All Share rises, buy
 - If FTSE All Share falls, sell

Source: Bloomberg. There is no guarantee of trading performance and past performance is no indication of current or future performance/results. Date range: 1 January 1988 to 31 January 2008.

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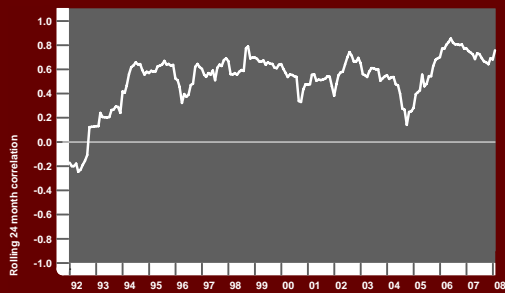
From a different perspective...



Source: Bloomberg. There is no guarantee of trading performance and past performance is no indication of current or future performance/results. Date range: 1 January 1990 to 31 January 2008.

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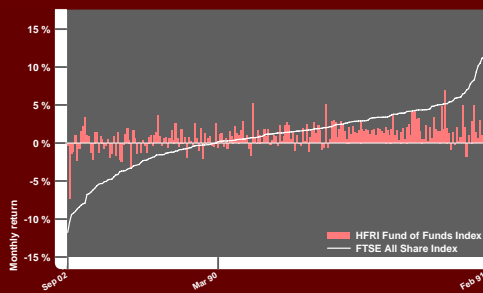
HFRI Fund of Funds Index versus FTSE All Share Index



Source: Bloomberg. There is no guarantee of trading performance and past performance is no indication of current or future performance results. Data range: 1 January 1992 to 31 January 2008. Please note that the HFRI index data over the past 4 months may be subject to change. The HFRI Fund of Funds Index has been hedged into GBP using the relevant 3 month LIBOR interest rate differential.

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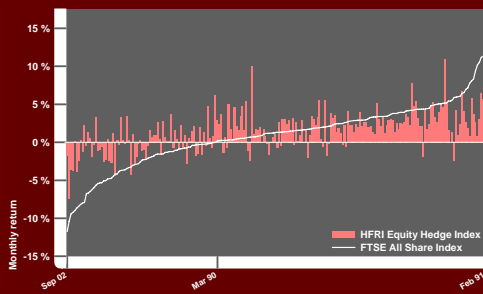
HFRI Fund of Funds Index versus FTSE All Share Index



Source: Bloomberg. There is no guarantee of trading performance and past performance is no indication of current or future performance results. Data range: 1 January 1992 to 31 January 2008. Please note that the HFRI index data over the past 4 months may be subject to change. The HFRI Fund of Funds Index has been hedged into GBP using the relevant 3 month LIBOR interest rate differential.

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Equity long/short versus FTSE All Share Index

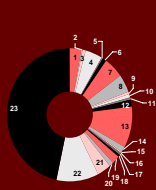


Source: Bloomberg. There is no guarantee of trading performance and past performance is no indication of current or future performance results. Data range: 1 January 1992 to 31 January 2008. Please note that the HFRI index data over the past 4 months may be subject to change. The HFRI Equity Hedge Index has been hedged into GBP using the relevant 3 month LIBOR interest rate differential.

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Benchmarks

Global equities



1	Australia	3.2 %
2	Austria	0.3 %
3	Belgium	0.5 %
4	Canada	4.5 %
5	Denmark	0.5 %
6	Finland	0.3 %
7	France	5.2 %
8	Germany	4.4 %
9	Greece	0.3 %
10	Hong Kong	1.1 %
11	Ireland	0.3 %
12	Italy	1.9 %
13	Japan	10.0 %
14	Netherlands	1.4 %
15	New Zealand	0.1 %
16	Norway	0.5 %
17	Portugal	0.2 %
18	Singapore	0.5 %
19	Spain	2.0 %
20	Sweden	1.2 %
21	Switzerland	3.5 %
22	United Kingdom	10.9 %
23	United States	48.7 %

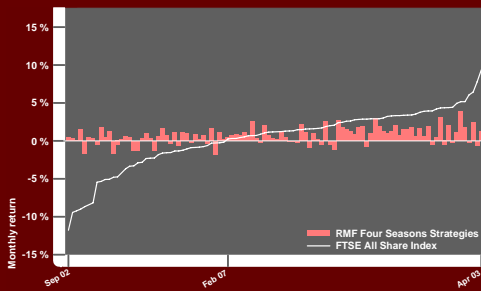
Hedge funds



Source: MSCI Inc. As at 7 March 2008.

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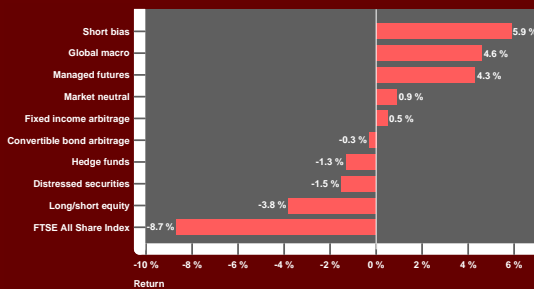
RMF Four Seasons Strategies versus FTSE All Share Index



Source: MSCI database and Bloomberg. There is no guarantee of trading performance and past performance is no indication of current or future performance. Data range: 1 August 1999 to 31 January 2008. RMF Four Seasons Strategies has been hedged into GBP using the relevant 3 month LIBOR interest rate differentials.

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January 2008



Source: Bloomberg. There is no guarantee of trading performance and past performance is no indication of current or future performance. Short-term bond returns are statistically not significant. The CDS indices have been hedged into GBP using the relevant 3 month LIBOR interest rate differentials. CDS indices have been used for the style returns.

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Factor approach to hedge fund correlations

- 'What correlation does not tell you about hedge funds: A factor approach to hedge fund correlations'
 - Jean-Francois Bacmann, Pierre Jeanneret, Stefan Scholz
- Hedge funds have dynamic strategies and risk allocations
- Relationship to traditional investments also dynamic
- Measured correlations provide limited insight into diversification potential over short time period

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Illiquid environment

- Difficult markets
 - Corporate bond and CDS rates continue to climb
 - Leverage loan prices dropping
 - Equity prices of banks continue to deteriorate
- Why?
 - Future losses based on uncertain economic outlook, especially in US
 - Size of losses already incurred
 - Realised losses on sub-prime only USD 30 billion so far
 - International banks written-off USD 100-150 billion
 - Using sub-prime ABX index to value securities, losses could be USD 300-400 billion
 - Many buyers of ABS have withdrawn from market
- Banks hoarding liquidity

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How do hedge funds lose money?

- Lose a limited amount
 - Wrong position
 - Stop-loss triggered
- 'Blows up'
 - Hold illiquid security
 - Prices gap down
 - No buyers
 - Can no longer meet margins

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The death spiral



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How was it for you?



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Winners and losers in illiquid environment

- Contrary to popular belief, most hedge funds are users of liquidity, not providers
- Style specific
 - Equity hedged
 - Global macro
 - Managed futures

} least affected

 - Relative value
 - Event driven

} big source of return is liquidity premium of some sort will suffer most, unless have ample liquidity

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Peloton ABS Fund



Source: www.roadcentral.com

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Regulations - do they help?



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Hedge funds?

- 'What do they do?'
- 'Isn't there a lack of transparency and data?'
- 'Are they regulated enough?'
- 'Don't they take too much risk?'
- 'Don't they have too much power and too little accountability?'
- 'Aren't hedge funds responsible for too much corporate activism?'

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Self-regulation or...



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Hedge Fund Working Group



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"Concerns"

Consultation Paper (October 2007)

- Disclosure
 - Investment policy, commercial policy, performance measurement, disclosure to lenders
- Valuation
 - Separation of duties, illiquid assets
- Risk management
 - Risk framework, portfolio risk, operational risk, third party services
- Fund governance
- Shareholder conduct
 - Market abuse, shareholder conduct – proxy voting, disclosure of derivative positions, borrowed stock

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The HFSB Standards

January 2008

- 1 Investment policy and risk disclosure
- 2 Commercial term disclosure
- 3 Performance measurement
- 4 Disclosure to lenders/prime brokers/dealers
- 5 - 6 Segregation of functions in valuation
- 7 - 8 Hard-to-value assets
- 9 - 10 Risk framework
- 11 - 16 Portfolio risk
 - Liquidity risk, market risk, counterparty credit risk, and control processes
- 17 - 18 Operational risk
- 19 - 20 Outsourcing risk
- 21 - 22 Fund governance
- 23 - 28 Shareholder conduct, including activism

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What does it mean for the hedge fund manager?

- A manager can become a 'signatory' and 'conform' to the Standards
- 'Comply or explain' approach
 - Flexibility needed as industry very diverse by size, strategy and nature
 - 'Comply only' would be far more detailed and prescriptive
 - Accommodates dynamism of firms without constantly changing Standards
- Provides investors with important instrument of due diligence
- Register of signatory firms available for public inspection

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