

Hedge Fund Performance in 2006: A Vintage Year for Hedge Funds?

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Table of Contents

About the Author	4
1. Market Environment	5
2. Hedge Fund Return Analysis	5
3. Hedge Fund Strategy Performance.....	5
3.1. Convertible Arbitrage.....	5
3.2. CTA Global.....	5
3.3. Distressed Securities.....	5
3.4. Emerging Markets.....	6
3.5. Equity Market Neutral	6
3.6. Event Driven.....	6
3.7. Fixed Income Arbitrage	6
3.8. Global Macro	6
3.9. Long/Short Equity.....	6
3.10. Merger Arbitrage	7
3.11. Relative Value.....	7
3.12. Short Selling.....	7
3.13. Funds of Funds.....	7
4. Hedge Fund Risk Analysis	9
5. Methodology	10
About the EDHEC Risk and Asset Management Research Centre	11

About the Author



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Hedge Fund Performance in 2006: A Vintage Year for Hedge Funds?

1. Market Environment

The year 2006 was characterised by strong performance in global stock markets compared to the previous year. For example, the S&P 500 return was 13.62% in 2006 versus 3.00% in 2005, with lower volatility in 2006 than in 2005. Bond market performance remained about the same. It was still negative, but slightly less negative in 2006 than in 2005, with respective performances of -1.68% and -1.83% for the Lehman US Treasury bond index. Commodity price levels first rose and then fell during 2006, ending the year at about the same level as at the beginning of the year. This is to be contrasted with the year 2005, during which they rose considerably.

2. Hedge Fund Return Analysis

In this context, all hedge fund strategies, except Short Selling, posted positive returns and all positive returns were higher than in 2005, except for Global Macro. Funds of hedge funds, which are sometimes taken to give an aggregate view of the industry's performance, yielded a sound return of 11.25% in 2006. This performance is strong compared to the return of 6.8% in 2005, a mixed year for hedge funds, but it is also better than the long-term performance of the funds of hedge funds index. The best performing strategy was Emerging Markets, with a return of 18.85%, followed by Event Driven and Distressed Securities, with respective returns of 15.48% and 15.27%. The lowest return was obtained by Short Selling managers, with a strongly negative return of -8.29%.

The volatilities of the strategies turn out to be quite low for the last three years, ranging from 1.03% for Fixed Income Arbitrage to 9.36% for Short Selling. For the ten-year period, the range is larger, from 2.13% to 20.21%, with the minimum value observed for Equity Market Neutral and the maximum value again observed for Short Selling. In view of these results, the best Sharpe ratio value is exhibited by the Fixed Income strategy during the 2004 to 2006 period, while Distressed Securities exhibited the best Sortino ratio. The Sharpe ratio and Sortino ratio

were both negative for the Short Selling strategy. Over the whole period of 10 years, Equity Market Neutral exhibited both the highest Sharpe ratio and the highest Sortino ratio, while the lowest risk-adjusted performance ratios were obtained for Short Selling.

3. Hedge Fund Strategy Performance

3.1 Convertible Arbitrage

The Convertible Arbitrage strategy exhibited a strong positive performance in 2006, with a return of 12.32%, to be compared with a negative return of -1.93% in 2005, which was also the worst performance for this strategy over the ten-year period. The 2006 performance is better than its long-term average and rather high compared to its average performance for the last three years. At the same time, 12.32% is well below the maximum return of 17.77% obtained in 2000.

3.2 CTA Global

The CTA Global strategy exhibited positive performance in 2006, with a return of 5.86%, versus -0.35% in 2005, which was also the worst performance for this strategy for the ten-year period. The 2006 performance is slightly weaker than its long term average, but rather high compared to its average performance for the last three years. 5.86% is below the median value for the ten-year period for this strategy, and also very far from the maximum value of 14.58% obtained in 2002.

3.3 Distressed Securities

Distressed Securities managers posted a return of 15.27%. This translates into even better performance for these managers in 2006 than in 2005, when performance was already quite strong with a return of 9.22%. This year's performance is better than the long-term average for this strategy, but about the same as its average performance for the last three years. Though this performance was very good, it is considerably lower than the maximum value of 27.35% obtained in 2003.

Hedge Fund Performance in 2006: A Vintage Year for Hedge Funds?

3.4 Emerging Markets

Emerging Markets funds exhibited strong positive performance for 2006 with 18.85%. This is slightly above 2005's return, which was already strongly positive. This recent performance is significantly better than its long-term average. While this strategy's performance appears to have been rather stable during the last three years, the range of annual performance can be very large over the long term, as can be seen with the maximum and minimum annual returns obtained for the ten-year period. The maximum value comes from 1999, with a return of 44.59%, and the minimum value was obtained in 1998, with a return of -26.66%. Among all the strategies, Emerging Markets exhibited the largest range of performance over the long term. This is to be contrasted with the relative stability of the performance observed for the last three years. For this recent period, this strategy can be taken as the one with the most stable performance.

3.5 Equity Market Neutral

Funds in the Equity Market Neutral strategy exhibited a positive return of 7.49%, which was slightly higher than the 6.52% of 2005. The performance appears to be rather stable over the last three years, but lower during this time period than its long-term performance. The 2006 return is above the minimum value observed in 2004, but far from the maximum value of 15.44% obtained in 1997. This is also the strategy with the narrowest range of annual returns, considering that the minimum return, obtained in 2004, is 4.71%. We can also observe that this strategy has never exhibited a negative return over the ten-year period. This characteristic is shared with the Global Macro, Relative Value and Funds of Funds strategies.

3.6 Event Driven

Hedge fund managers in the Event Driven strategy exhibited strong positive performance in 2006, with a return of 15.48%, which was much higher than the 7.30% observed in 2005. 15.48% is above both its average figures for the last three years and its long-term performance. The return for 2006 is above the median value

for the ten-year period. Moreover, this strategy has produced returns above 20% during this period, with a maximum of 22.74% observed in 1999.

3.7 Fixed Income Arbitrage

Fixed Income Arbitrage hedge funds exhibited better performance in 2006 than in 2005, with a return of 7.43%, which was higher than the 4.63% observed in 2005. This performance is slightly higher than its average performance for the last three years and also well above its long-term performance. We observed that the maximum return was obtained in 1999, with a value of 12.62%, while the minimum return was the -8.04% observed in 1998. With the exception of these two years, together with 1997, which exhibited about the same return as in 1999, the range of all other annual returns is relatively narrow, ranging from 4.63% to 8.37%. The return from 2006 is located in the higher part of this range.

3.8 Global Macro

Global Macro is one of only two strategies that exhibited worse performance in 2006 than in 2005, with a return of 7.48% compared to 9.50%. This performance is about the same as its average annual return through the last three years, but is lower than the long-term performance. This return is quite weak, compared with the maximum return of 23.91% observed in 1997. The 2006 return is located below the median value for the ten-year period.

3.9 Long/Short Equity

Managers in the Long Short Equity strategy performed approximately as well in 2006 as in 2005 with a return of 11.77% this year versus 11.35% last year. The yearly performance of this strategy appears to be rather stable on average, both during the last three years and in the long term. Meanwhile, the range of performance observed through the ten-year period is quite large, though not as large as for Emerging Markets, with a maximum return of 31.40% observed in 1999 and a minimum of -6.38% observed in 2002.

Hedge Fund Performance in 2006: A Vintage Year for Hedge Funds?

3.10 Merger Arbitrage

Merger Arbitrage managers exhibited considerably better performance on average in 2006 than in 2005, with a return of 13.70% versus 4.95% the previous year. This performance is also better than that observed on average during the last three years, and than the long-term performance. 13.70% is below the maximum value of 18.11% observed in 2000, but above the median value for the ten-year period.

3.11 Relative Value

Managers in the Relative Value strategy performed around twice as well in 2006 as in 2005, with a return of 11.84% this year versus 5.23% last year. This performance is also better than that observed on average over the last three years, and better than its long-term performance. 11.84% is considerably below the maximum value of 17.17% observed in 1999, but above the median value for the ten-year period.

3.12 Short Selling

Managers in the Short Selling universe are the only ones that exhibited negative performance on average in 2006, with a return of -8.29%, which can be compared with the positive return of 7.26% in 2005. Over the last three years,

the average performance of this strategy has been negative, but considerably better than the performance observed in 2006. Over the long term, the strategy exhibits positive performance, but it is relatively low compared to all the other strategies. Observing all the annual returns for the ten-year period reveals a wide range of performance returns, from a minimum of -23.86% in 2003 to a maximum of 27.27% in 2002. This is also the strategy which exhibited the largest number of negative returns, with four years showing negative returns, among which two were very strongly negative.

3.13 Fund of Funds

The Funds of Funds strategy exhibited better performance in 2006 than in 2005 with a return of 11.25% versus 6.80%. This performance is also better than that observed on average during the last three years, and also better than its long-term performance, albeit comparable to the latter. The return for 2006 may appear to be quite low compared to the maximum return of 28.51% obtained in 1999. However, the 2006 return is above the median value, as the maximum value observed in 1999 was quite exceptional compared to all the other annual returns.

Illustration 1: Hedge Fund Strategies' Performance for 2006 compared to Short-Term and Long-Term Performance

	Performance					
	2006 Annual Return*	2005 Annual Return*	3-year Average Return* (2004-2006)	3-year Cumulative Return (2004-2006)	10-year Average Return* (1997-2006)	10-year Cumulative Returns (1997-2006)
Convertible Arbitrage	12.32%	-1.93%	3.73%	10.14%	9.54%	146.74%
CTA Global	5.86%	-0.35%	3.92%	5.49%	7.93%	105.97%
Distressed Securities	15.27%	9.22%	14.13%	25.90%	12.78%	228.41%
Emerging Markets	18.85%	17.20%	17.04%	39.29%	12.93%	210.92%
Equity Market Neutral	7.49%	6.52%	6.25%	14.50%	9.19%	140.56%
Event Driven	15.48%	7.30%	11.77%	23.92%	11.66%	196.82%
Fixed Income Arbitrage	7.43%	4.63%	6.11%	12.41%	6.40%	84.82%
Global Macro	7.48%	9.50%	7.26%	17.69%	10.58%	168.83%
Long/Short Equity	11.77%	11.35%	10.71%	24.46%	12.08%	205.44%
Merger Arbitrage	13.70%	4.95%	7.79%	19.33%	9.39%	143.74%
Relative Value	11.84%	5.23%	7.59%	17.70%	9.82%	153.79%
Short Selling	-8.29%	7.26%	-1.69%	-1.63%	4.28%	24.73%
Funds of Funds	11.25%	6.80%	8.43%	18.81%	9.85%	151.87%

* Annualised statistics are given

Hedge Fund Performance in 2006: A Vintage Year for Hedge Funds?

Illustration 2: Hedge Fund Strategies' Performance for 2006 compared with Previous Years' Annual Performance

	Performance					
	2006 Annual Return*	2005 Annual Return*	Maximum Annual Return* (1997-2006)	Minimum Annual Return* (1997-2006)	Year of Maximum Annual Return	Year of Minimum Annual Return
Convertible Arbitrage	12.32%	-1.93%	17.77%	-1.93%	2000	2005
CTA Global	5.86%	-0.35%	14.58%	-0.35%	2002	2005
Distressed Securities	15.27%	9.22%	27.35%	-2.25%	2003	1998
Emerging Markets	18.85%	17.20%	44.59%	-26.66%	1999	1998
Equity Market Neutral	7.49%	6.52%	15.44%	4.71%	1997	2004
Event Driven	15.48%	7.30%	22.74%	-1.07%	1999	2002
Fixed Income Arbitrage	7.43%	4.63%	12.62%	-8.04%	1999	1998
Global Macro	7.48%	9.50%	23.91%	4.59%	1997	2004
Long/Short Equity	11.77%	11.35%	31.40%	-6.38%	1999	2002
Merger Arbitrage	13.70%	4.95%	18.11%	-0.88%	2000	2002
Relative Value	11.84%	5.23%	17.17%	2.78%	1999	2002
Short Selling	-8.29%	7.26%	27.27%	-23.86%	2002	2003
Funds of Funds	11.25%	6.80%	28.51%	1.25%	1999	2002

* Annualised statistics are given

Illustration 3: Hedge Fund Strategies' Annual Performance from 1997 to 2006

	1997 Annual Return*	1998 Annual Return*	1999 Annual Return*	2000 Annual Return*	2001 Annual Return*	2002 Annual Return*	2003 Annual Return*	2004 Annual Return*	2005 Annual Return*	2006 Annual Return*
Convertible Arbitrage	14.80%	3.13%	16.08%	17.77%	13.78%	8.60%	10.79%	1.10%	-1.93%	12.32%
CTA Global	12.27%	14.29%	1.80%	7.31%	3.52%	14.58%	11.64%	5.18%	-0.35%	5.86%
Distressed Securities	16.67%	-2.25%	19.74%	4.82%	14.66%	5.86%	27.35%	17.90%	9.22%	15.27%
Emerging Markets	22.56%	-26.66%	44.59%	-3.81%	12.52%	5.76%	31.27%	14.31%	17.20%	18.85%
Equity Market Neutral	15.44%	10.58%	13.17%	15.36%	8.19%	4.72%	6.28%	4.71%	6.52%	7.49%
Event Driven	21.01%	0.99%	22.74%	9.02%	9.31%	-1.07%	20.47%	12.44%	7.30%	15.48%
Fixed Income Arbitrage	12.43%	-8.04%	12.62%	5.72%	7.81%	7.58%	8.37%	6.27%	4.63%	7.43%
Global Macro	23.91%	8.42%	15.72%	8.17%	5.50%	4.98%	17.26%	4.59%	9.50%	7.48%
Long/Short Equity	21.36%	14.58%	31.40%	12.03%	-1.20%	-6.38%	19.32%	8.62%	11.35%	11.77%
Merger Arbitrage	17.44%	7.77%	17.98%	18.11%	2.87%	-0.88%	8.34%	4.83%	4.95%	13.70%
Relative Value	16.53%	5.28%	17.17%	13.36%	8.61%	2.78%	12.13%	5.72%	5.23%	11.84%
Short Selling	3.07%	27.07%	-22.55%	22.79%	10.19%	27.27%	-23.86%	-4.66%	7.26%	-8.29%
Funds of Funds	17.40%	4.18%	28.51%	7.83%	3.52%	1.25%	11.46%	7.07%	6.80%	11.25%

* Annualised statistics are given

Hedge Fund Performance in 2006: A Vintage Year for Hedge Funds?

4. Hedge Fund Risk Analysis

Illustration 4: Hedge Fund Strategies' Risks for 2004-2006 Period

Reference period: January 2004– December 2006	Risk Dimension				Risk-Adjusted Performance	
	Maximum Drawdown (in %)	Volatility (in %)*	Downside Risk (in %)*	Modified Value-at-Risk (in %)**	Sharpe-Ratio*/**	Sortino Ratio*/**
Convertible Arbitrage	8.22%	3.69%	3.15%	1.70%	0.47	0.55
CTA Global	11.68%	8.70%	5.27%	3.89%	0.22	0.36
Distressed Securities	0.52%	3.24%	0.80%	0.31%	3.75	15.07
Emerging Markets	4.82%	7.09%	4.43%	2.42%	2.12	3.40
Equity Market Neutral	0.82%	1.62%	0.98%	0.33%	2.63	4.33
Event Driven	1.73%	3.90%	2.22%	0.95%	2.51	4.40
Fixed Income Arbitrage	0.13%	1.03%	0.33%	-0.01%	4.00	12.47
Global Macro	3.28%	4.07%	1.87%	1.34%	1.29	2.82
Long/Short Equity	3.39%	5.39%	2.97%	1.90%	1.62	2.94
Merger Arbitrage	1.45%	2.79%	2.11%	0.76%	2.08	2.74
Relative Value	1.52%	2.54%	1.26%	0.60%	2.20	4.46
Short Selling	13.95%	9.36%	5.53%	4.50%	-0.39	-0.67
Funds of Funds	1.84%	3.82%	1.95%	1.23%	1.69	3.30

* Annualised statistics are given

** Risk-free rate and MAR (minimum acceptable return) are fixed at 2%

*** Non-annualised 5%-quantiles are estimated

Illustration 5: Hedge Fund Strategies' Risks for 1997-2006 Period

Reference period: January 1997–December 2006	Risk Dimension				Risk-Adjusted Performance	
	Maximum Drawdown (in %)	Volatility (in %)*	Downside Risk (in %)*	Modified Value-at-Risk (in %)**	Sharpe-Ratio*/**	Sortino Ratio*/**
Convertible Arbitrage	8.22%	3.95%	3.19%	1.35%	1.91	2.36
CTA Global	11.68%	9.00%	5.04%	3.57%	0.66	1.17
Distressed Securities	11.62%	5.29%	5.30%	1.88%	2.04	2.04
Emerging Markets	35.45%	12.72%	11.51%	5.80%	0.86	0.95
Equity Market Neutral	1.07%	2.13%	1.16%	0.18%	3.38	6.21
Event Driven	10.92%	5.56%	5.88%	2.17%	1.74	1.64
Fixed Income Arbitrage	12.61%	3.61%	6.26%	1.41%	1.22	0.70
Global Macro	5.36%	6.00%	2.48%	1.43%	1.43	3.45
Long/Short Equity	10.75%	7.08%	4.17%	2.36%	1.42	2.42
Merger Arbitrage	5.44%	3.71%	4.37%	1.34%	1.99	1.69
Relative Value	4.71%	3.31%	3.04%	1.00%	2.36	2.57
Short Selling	49.56%	20.21%	11.80%	7.96%	0.11	0.19
Funds of Funds	7.07%	5.72%	3.69%	1.71%	1.37	2.13

* Annualised statistics are given

** Risk-free rate and MAR (minimum acceptable return) are fixed at 2%

*** Non-annualised 5%-quantiles are estimated

Hedge Fund Performance in 2006: A Vintage Year for Hedge Funds?

5. Methodology

We used the EDHEC Alternative Indexes to measure the performance of hedge fund strategies and their exposure to major risk factors. These indices of indices have the merit of being by construction more representative and more stable than the hedge fund indices available on the market (see www.edhec-risk.com for more details). On the other hand, with hedge fund strategies showing significant extreme risks, we decided to present three risk-adjusted performance indicators taking account of this specific feature. The adjusted Sharpe ratio, for example, involves replacing the volatility in the denominator of the traditional Sharpe ratio with the Modified Value-at-Risk. The Sortino ratio divides the excess return of an asset over a pre-specified threshold (the minimum acceptable return is equal to 2.5 in our case), by the downside risk of this asset.

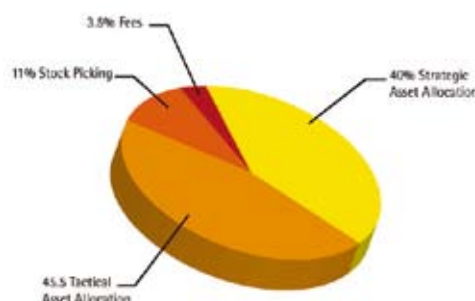
About the EDHEC Risk and Asset Management Research Centre

EDHEC is one of the top five business schools in France and was ranked 7th in the Financial Times Masters in Management Rankings 2006 owing to the high quality of its academic staff (over 100 permanent lecturers from France and abroad) and its privileged relationship with professionals that the school has been developing since it was established in 1906. EDHEC Business School has decided to draw on its extensive knowledge of the professional environment and has therefore concentrated its research on themes that satisfy the needs of professionals. EDHEC is one of the few business schools in Europe to have received the triple international accreditation: AACSB (USGlobal), Equis (Europe-Global) and AMBA (UK-Global). EDHEC pursues an active research policy in the field of finance. Its "Risk and Asset Management Research Centre" carries out numerous research programmes in the areas of asset allocation and risk management in both the traditional and alternative investment universes.

The choice of asset allocation

The EDHEC Risk and Asset Management Research Centre structures all of its research work around asset allocation. This issue corresponds to a genuine expectation from the market. On the one hand, the prevailing stock market situation in recent years has shown the limitations of active management based solely on stock picking as a source of performance. On the other, the appearance of new asset classes (hedge funds, private equity), with risk profiles that are very different from those of the traditional investment universe, constitutes a new opportunity in both conceptual and operational terms. This strategic choice is applied to all of the centre's research programmes, whether they involve proposing new methods of strategic allocation, which integrate the alternative class; measuring the performance of funds while taking the tactical allocation dimension of the alphas into account; taking extreme risks into account in the allocation; or studying the usefulness of derivatives in constructing the portfolio.

Percentage of variations between funds



Source: EDHEC (2002) and Ibbotson, Kaplan (2000)

An applied research approach

In a desire to ensure that the research it carries out is truly applicable in practice, EDHEC has implemented a dual validation system for the work of the EDHEC Risk and Asset Management Research Centre. All research work must be part of a research programme, the relevance and goals of which have been validated from both an academic and a business viewpoint by the centre's advisory board, which is made up of both internationally recognised researchers and the centre's business partners.

To date, the centre has implemented six research programmes:

- Multi-style/multi-class allocation
- Performance and style analysis
- Indices and benchmarking
- Asset allocation and extreme risks
- Asset allocation and derivative instruments
- ALM and asset management

Research for business

To optimise exchanges between the academic and business worlds, the research centre maintains a website devoted to asset management research for the industry: www.edhec-risk.com, circulates a monthly newsletter to over 75,000 practitioners, conducts regular industry surveys and consultations, and organises annual conferences for the benefit of institutional investors and asset managers. The centre's activities have also given rise to the business offshoots EDHEC Investment

About the EDHEC Risk and Asset Management Research Centre

Research, which supports institutional investors and asset managers in the implementation of the centre's research results and proposes asset allocation services in the context of a 'core-satellite' approach encompassing alternative investments and EDHEC Asset Management Education, which helps investment professionals to upgrade their skills with advanced risk and asset management training across traditional and alternative classes.

