

An EDHEC Risk and Asset Management Research Centre Publication

Hedge Fund Performance in 2008

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About the Author



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Hedge Fund Performance in 2008

We analyse twelve years of data on EDHEC Alternative Indexes for different hedge fund strategies to provide some perspective on their performance. The extraordinary events of 2008 were not without an impact on hedge fund returns. Funds of hedge funds lost 17% in 2008, posting their worst annual returns since we began keeping records in 1997. Hedge fund investments lost value across the board. Except for CTAs and Short Sellers, all strategies posted their worst losses in 2008.

Even after the impact of a calamitous year, half the strategies still post cumulative returns above 100% for the past ten years, that is, a compound annual return above 7%. Interestingly, Distressed Securities funds and Emerging Markets funds are the strategies that have the highest return over the past ten years, even though they were among the biggest losers, with returns of -19% and -30%, in 2008. On the other hand, Short Sellers have the lowest ten-year returns of all the strategies, even after returning 25% in 2008.

In 2008 investors were given a painful reminder that hedge funds are exposed to a variety of risk factors, such as credit risk, liquidity risk and several equity risk factors. Historical estimates of volatility and Value-at-Risk now suggest greater risk for hedge funds as risk measures have increased across strategies when taking into account the data for 2008.

Market Environment

2008 was characterised by very negative performance in global stock markets. The S&P 500, for example, fell 37%, the greatest one-year fall for the period where data is available (starting in 1964). Most of this fall took place in the last months of the year, as news of the worsening financial

crisis spread. In October alone, the S&P 500 lost about 17%. Heavy losses (about 9% and 7% respectively) were also observed in September and November. Losses such as those of last October are extremely rare, and are greater than any that have been observed in the last decade. For example, during the Russian crisis of August 1998, the S&P 500 fell 14.5%. In September 2001, it fell about 8% and one year later, in September 2002, about 11%. The veritable plunge of stock markets in 2008 comes on the heels of fair performance—a total return of 5.49% for the S&P 500—in 2007. At the end of December 2008, the index was at its lowest since September 2003.

The volatility of returns was also considerably higher in 2008 than in 2007, with a standard deviation of 21.02% of the S&P 500 monthly returns, compared to 9.66% in 2007 and to 5.64% in 2006, a year in which we observed the lowest volatility of the decade for the S&P 500 index, together with very good performance of about 16%. The volatility observed in 2008 is nearly as high as any since 1997, and comparable to that of 1998, 2001 and 2002, years of turbulent stock markets.

Emerging markets were hit with even greater losses. For example, the S&P IFCI Index, which includes twenty-two emerging markets, fell by about 54% in 2008; this index had posted returns between 35% and 40% over the three previous years (2005-2007).

Government bonds are typically considered a safe haven in times of turbulent markets. In addition, central banks around the world cut interest rates in 2008. The government bond market thus performed well. The Lehman Global US Treasury Bond, for example, posted returns of 13.74%, higher than the 9.01%

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returns of 2007. After the substantial 40% progression of 2007, commodity prices fell considerably—by about 43%, to April 2005 levels, as measured by the S&P GSCI Commodity Spot Index.

Hedge Fund Return Analysis

All hedge fund strategies except for CTA Global and Short Selling posted negative returns, and all these negative returns were their worst returns since the 1997 creation of the indices. Not once since 1997 have so many strategies (eleven) posted such deeply negative returns at the same time; previously, no more than three strategies had been in the red in any one year. Funds of hedge funds, which are sometimes taken to give an aggregate view of the industry's performance, performed very badly in 2008, with a strong negative average return of -17.08%, the first time since 1997 that this index has posted negative returns. The months of September and October were the major contributors to the negative performance for all the strategies. But other months contributed as well, as most of the strategies racked up more negative than positive months; indeed, six strategies (Convertible Arbitrage, Distressed Securities, Emerging Markets, Event Driven, Fixed Income Arbitrage, and Funds of Funds) posted negative returns for as many nine months in 2008. December, on the contrary, provided an opportunity for a slight recovery for a majority of the strategies, as only five posted negative returns (Distressed Securities, Emerging Markets, Event Driven, Short Selling, and Funds of Funds). Unlike the other strategies, CTA Global and Short Selling posted not only positive, but strong returns, only slightly lower than their best annual returns since 1997. The best performing strategy was Short Selling,

with a return of 24.72%. The lowest return (-30.30%) was obtained by Emerging Markets, closely followed by Convertible Arbitrage (-26.48%).

Five of the strategies (Convertible Arbitrage, Distressed Securities, Emerging Markets, Fixed Income Arbitrage, and Funds of Funds) now present a negative average return for the period from 2006 to 2008, and only four (CTA Global, Global Macro, Merger Arbitrage, and Short Selling) have produced an average return above 5% for this same period. Only the two strategies that performed positively, CTA Global and Short Selling, present higher average performance for this recent three-year period than for the last ten years. All other strategies, except Merger Arbitrage, have done considerably worse over the short term (the past three years) than over the long term (the past ten years). The short-term performance of Merger Arbitrage is only slightly worse than its long-term performance.

The volatilities of the strategies, as shown by figures higher for the last three years than for the last ten years, have increased recently. Only for CTA Global and Short Selling is volatility higher over the long term than it is over the short term. For the period from 2006 to 2008, volatility figures range from 4.42% for Merger Arbitrage to 13.73% for Emerging Markets. For the ten-year period, the range is wider, from 3.17% to 17.74%, with the low observed for Equity Market Neutral and the high for Short Selling. In view of these results, the best Sharpe ratio for the period from 2006 to 2008 is that of CTA Global. This strategy also had the best Sortino ratio. Only four strategies had positive Sharpe and Sortino ratios (CTA Global, Global Macro, Merger Arbitrage and Short Selling). The lowest Sharpe ratio

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and the lowest Sortino ratio are exhibited by Convertible Arbitrage. Over the ten-year period, all Sharpe ratios are positive, except for that of Short Selling, which is only slightly negative, and all Sortino ratios are positive. Over this longer period, the highest Sharpe ratio value is posted by Merger Arbitrage; the highest Sortino ratio is posted by Global Macro.

Convertible Arbitrage

The Convertible Arbitrage strategy posted heavy losses in 2008, with a return of -26.48%, its worst performance since index inception in 1997. After Emerging Markets, it is the worst-performing strategy of 2008. For this strategy, and before this year, only one instance of negative annual performance (in 2005) had been observed but in 2005 it was not nearly as bad, as it was roughly -2%. 2008 performance is so poor that it brings performance for the last three years (about -5%) into negative territory. In addition to Convertible Arbitrage, four other strategies, Distressed Securities, Emerging Markets, Fixed Income Arbitrage and Funds of Funds, post negative cumulative returns for the period from 2005 to 2008 as a result of poor performance in 2008. These five strategies are also the worst performers of 2008. All the same, the long-term performance of Convertible Arbitrage (an average return of 4.75% for the last ten years) remains positive.

CTA Global

The CTA Global strategy is, with Short Selling, one of the two strategies that, with a return of 12.78%, yielded positive returns in 2008. This performance is one of the three best for the index since its 1997 inception. It returned more than its average over the last three years and much more than its long-term average.

This good recent performance makes its average short-term performance, measured by the three-year average return, better than its average long-term performance, measured by the ten-year average return. This characteristic is shared with Short Selling. CTA Global is the strategy with the narrowest spread between its minimum and maximum annual returns over the period 1997 from 2008, as it has never posted large negative returns. Until 2007, Equity Market Neutral could make this particular boast.

Distressed Securities

Distressed Securities managers posted strongly negative returns of -19.40% in 2008, their lowest returns since 1997. Before this year, only in 1998 (at -2%) had the strategy posted negative annual returns. These negative returns put a considerable dent in performance over the last three years (-0.93% for the period from 2006 to 2008). Distressed Securities is one of the five worst-performing strategies of 2008. The average return over ten years, at 9.28%, remains quite good. Over the long term, Distressed Securities is, just after Emerging Markets, the best-performing strategy.

Emerging Markets

Emerging Markets funds returned -30.30% in 2008. It is the worst-performing strategy of the year; in 2007, by contrast, its return of 20.79% was better than that of any other strategy. This extreme contrast between two successive annual returns is not unusual for this strategy, which has the widest range observed between its minimum and maximum annual returns. The -26.66% return of 1998 was, for example, followed in 1999 by a return of 44.59%, the highest observed for the twelve available years. The present performance is the second

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instance of negative annual performance for this strategy since index inception in 1997 (performance in 1998 was comparable to that of 2008). The current fall is largely the result of the considerable fall of emerging market asset prices, as described at the beginning of this document. The present poor performance of the Emerging Market strategy has greatly affected performance over the short term (2006-2008); average returns for the period are -1.7%. Over the longer term, however, this strategy is the best performer.

Equity Market Neutral

Funds relying on the Equity Market Neutral strategy posted negative returns of -7.34% in 2008, on the heels of the solid 8.34% returned in 2007. Although 2008 performance is certainly nothing to write home about, the strategy seems to have withstood the stock market declines better than the other strategies. For example, its average three-year return for the period from 2006 to 2008 remains positive. Indeed, only four strategies did better than Equity Market Neutral in 2008. Though it is equity-oriented, this strategy tends to seek neutral exposure to stock markets and will thus suffer less from stock market declines than other equity-oriented strategies such as Long/Short Equity. It is also the first time that this strategy has posted a negative annual return. Before 2008, the worst performance was the 4.71% of 2004. The 2008 loss also considerably broadens the spread between minimum and maximum annual returns, which, once the narrowest of all the strategies, is now only the third narrowest, after that of CTA Global and Merger Arbitrage.

Event Driven

After positive performance of 9.65% in 2007, hedge fund managers in the Event Driven strategy returned -16.20% in 2008. Until 2008, only 2002 (at about -1%) had seen negative returns. This poor performance does not send the three-year average return into negative territory, but at only 1% it is far from the 8% average observed over a ten-year period. Over the long term, the performance of the Event Driven strategy puts the strategy in the top half of the class, as it were.

Fixed Income Arbitrage

Fixed Income Arbitrage hedge funds returned -16.80% in 2008, following the quite good performance of 6.01% in 2007. This result causes the three-year average performance for 2006-2008 to become negative (-1.82%). Until now, only one instance of negative annual returns had been observed, in 1998, (-8.04%), deep into negative territory, to be sure, but far from the result observed in 2008.

Global Macro

Global Macro is one of the few strategies that limited its losses in 2008; it returned -2.88%. Of the strategies that yielded losses in 2008, only Merger Arbitrage managed to limit losses more effectively. In 2007, Global Macro, with a return of 12.93%, outperformed every other strategy but Emerging Markets. 2008 is also its first year of negative annual returns. It had previously returned nothing less than 4.59%. Because of its limited loss, its three-year average performance (5.60% for 2006-2008) remains positive. Global Macro is one of the four strategies, together with CTA Global, Merger Arbitrage and Short Selling, whose three-year average returns are greater than 5%. These four strategies

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include the two strategies that perform positively and the two strategies that perform less negatively.

Long/Short Equity

For 2008, Long/Short Equity is the median performer: there are as many strategies that perform better as there are that perform worse. All the same, with a return of -15.57% for 2008, the result is clearly disappointing for investors. With an average return of 7%, this strategy is also the median performer over the long term.

The bad results of 2008 follow strong positive performance in 2007, with a return of 10.53%. This strategy is mostly affected by the fall in stock prices as Long/Short Equity strategies have a dominant long exposure. Before this year, instances of negative returns had been observed in two consecutive years, with a limited loss of -1.2% in 2001 and a more substantial loss of 6.38% in 2002; stock markets were falling at the time, but the strategy apparently withstood the falls better than in 2008. This strategy manages to post positive, barely positive, three-year performance (an average return of 0.05% for 2006-2008). For this strategy, the range of performance observed since inception is quite wide, with a maximum return of 31.40% in 1999. Long/Short Equity has one of the widest ranges of performance of all the strategies, just after Emerging Markets and Short Selling.

Merger Arbitrage

With a return of -1.03% in 2008, Merger Arbitrage managers posted limited losses, the least deeply negative of the eleven strategies that yielded negative returns. 2007 performance, at 9.11%, was good.

2008 was only the second year (after similar returns for 2002) in which the strategy posted negative returns. Short-term performance over the last three years (6.63%) remains good. This performance is now lower than the long-term average performance, but not greatly so. Of the eleven strategies with lower short-term than long-term returns, it is the one for which these returns have remained the closest.

Relative Value

Managers in the Relative Value strategy exhibited returns of -13.70% in 2008, the first year in which they failed to return anything less than 2.78%. The spread between the highest and lowest annual returns, hitherto one of the two narrowest, thus doubles. 2008 losses flatten performance over the last three years, to a still positive 1.44%.

Short Selling

With returns of 24.72% in 2008, managers in the Short Selling universe did considerably better than they did in 2007, which, at 7.38%, was already a year of ample returns. This strategy benefited greatly from falling stock prices, as it is characterised by a dominant short exposure to stock markets. It delivers its best performance during periods of stock market decline. It is the best-performing strategy of 2008. This year's performance is not far off the all-time high for the strategy, the 27.27% in 2002, another year of declining stock markets. Performance over the last three years, at 9.04%, is greater than for any strategy other than CTA Global. This short-term performance is considerably better than the long-term average performance obtained over a ten-year period (an average return of only 3.02%). The performance

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of this strategy can vary greatly from one year to the next. It can alternate strongly positive returns and strongly negative returns, though on average positive returns predominate. After Emerging Markets, Short Selling has the widest range of annual returns. It has also yielded the greatest number (four) of negative years.

Funds of Funds

After a return of 10.07% in 2007, the Funds of Funds strategy posted negative returns (-17.08%) in 2008, the first year that this strategy has posted a negative annual return. 2008 losses cause short-term performance (over the last three years) to fall into negative territory, at -0.41%. Over the long term, this strategy posts an average return slightly above 6%, less than one basis point below the average return of the median strategy.

Illustration 1: Comparison of 2008, short-term, and long-term hedge fund strategy performance

	Performance					
	2008 Annual Return*	2007 Annual Return*	3-Year Average Return* (2006-2008)	3-Year Cumulative Return (2006-2008)	10-Year Average Return* (1999-2008)	10-Year Cumulative Returns (1999-2008)
Convertible Arbitrage	-26.48%	3.87%	-5.02%	-14.31%	4.75%	59.00%
CTA Global	12.78%	9.89%	10.40%	34.55%	7.39%	104.02%
Distressed Securities	-19.40%	7.16%	-0.93%	-2.76%	9.28%	142.93%
Emerging Markets	-30.30%	20.79%	-1.69%	-4.97%	10.71%	176.56%
Equity Market Neutral	-7.34%	8.34%	2.18%	6.69%	6.46%	87.06%
Event Driven	-16.20%	9.65%	1.06%	3.23%	8.06%	117.12%
Fixed Income Arbitrage	-16.80%	6.01%	-1.82%	-5.35%	4.65%	57.48%
Global Macro	-2.88%	12.93%	5.60%	17.76%	8.17%	119.24%
Long/Short Equity	-15.57%	10.53%	0.05%	0.14%	7.00%	96.79%
Merger Arbitrage	-1.03%	9.11%	6.63%	21.23%	7.46%	105.33%
Relative Value	-13.70%	9.43%	1.44%	4.39%	6.80%	93.07%
Short Selling	24.72%	7.38%	9.04%	29.66%	3.02%	34.64%
Funds of Funds	-17.08%	10.07%	-0.41%	-1.23%	6.22%	82.83%

* annualised statistics are given

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Illustration 2: Comparison of 2008 and previous years' hedge fund strategy performance

	Performance					
	2008 Annual Return*	2007 Annual Return*	Maximum Annual Return* (1997-2008)	Minimum Annual Return* (1997-2008)	Year of Maximum Annual Return	Year of Minimum Annual Return
Convertible Arbitrage	-26.48%	3.87%	17.77%	-26.48%	2000	2008
CTA Global	12.78%	9.89%	14.58%	-0.35%	2002	2005
Distressed Securities	-19.40%	7.16%	27.35%	-19.40%	2003	2008
Emerging Markets	-30.30%	20.79%	44.59%	-30.30%	1999	2008
Equity Market Neutral	-7.34%	8.34%	15.44%	-7.34%	1997	2008
Event Driven	-16.20%	9.65%	22.74%	-16.20%	1999	2008
Fixed Income Arbitrage	-16.80%	6.01%	12.62%	-16.80%	1999	2008
Global Macro	-2.88%	12.93%	23.91%	-2.88%	1997	2008
Long/Short Equity	-15.57%	10.53%	31.40%	-15.57%	1999	2008
Merger Arbitrage	-1.03%	9.11%	18.11%	-1.03%	2000	2008
Relative Value	-13.70%	9.43%	17.17%	-13.70%	1999	2008
Short Selling	24.72%	7.38%	27.27%	-23.86%	2002	2003
Funds of Funds	-17.08%	10.07%	28.51%	-17.08%	1999	2008

* annualised statistics are given

Illustration 3: Hedge fund strategies' annual performance from 1997 to 2008

	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*	2007 Annual Return*	2008 Annual Return*
Convertible Arbitrage	14.80%	3.13%	16.08%	17.77%	13.78%	8.60%	10.79%	1.10%	-1.93%	12.32%	3.87%	-26.48%
CTA Global	12.27%	14.29%	1.80%	7.31%	3.52%	14.58%	11.64%	5.18%	-0.35%	5.86%	9.89%	12.78%
Distressed Securities	16.67%	-2.25%	19.74%	4.82%	14.66%	5.86%	27.35%	17.90%	9.22%	15.27%	7.16%	-19.40%
Emerging Markets	22.56%	-26.66%	44.59%	-3.81%	12.52%	5.76%	31.27%	14.31%	17.20%	18.85%	20.79%	-30.30%
Equity Market Neutral	15.44%	10.58%	13.17%	15.36%	8.19%	4.72%	6.28%	4.71%	6.52%	7.49%	8.34%	-7.34%
Event Driven	21.01%	0.99%	22.74%	9.02%	9.31%	-1.07%	20.47%	12.44%	7.30%	15.48%	9.65%	-16.20%
Fixed Income Arbitrage	12.43%	-8.04%	12.62%	5.72%	7.81%	7.58%	8.37%	6.27%	4.63%	7.43%	6.01%	-16.80%
Global Macro	23.91%	8.42%	15.72%	8.17%	5.50%	4.98%	17.26%	4.59%	9.50%	7.48%	12.93%	-2.88%
Long/Short Equity	21.36%	14.58%	31.40%	12.03%	-1.20%	-6.38%	19.32%	8.62%	11.35%	11.77%	10.53%	-15.57%
Merger Arbitrage	17.44%	7.77%	17.98%	18.11%	2.87%	-0.88%	8.34%	4.83%	4.95%	13.70%	9.11%	-1.03%
Relative Value	16.53%	5.28%	17.17%	13.36%	8.61%	2.78%	12.13%	5.72%	5.23%	11.84%	9.43%	-13.70%
Short Selling	3.07%	27.07%	-22.55%	22.79%	10.19%	27.27%	-23.86%	-4.66%	7.26%	-8.29%	7.38%	24.72%
Funds of Funds	17.40%	4.18%	28.51%	7.83%	3.52%	1.25%	11.46%	7.07%	6.80%	11.25%	10.07%	-17.08%

* annualised statistics are given

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Hedge Fund Risk Analysis

Illustration 4: Hedge fund strategies' risks for the period from 2006 to 2008

Reference period: January 2006– December 2008	Risk Dimension				Risk-Adjusted Performance	
	Maximum Drawdown (in %)	Volatility (in %)*	Downside Risk (in %)*	Modified Value-at-Risk (in %)**	Sharp Ratio*/**	Sortino Ratio*/**
Convertible Arbitrage	29.27%	10.32%	12.98%	6.76%	-0.82	-0.58
CTA Global	5.29%	7.71%	3.39%	2.73%	0.90	2.33
Distressed Securities	22.60%	7.60%	7.63%	4.47%	-0.57	-0.45
Emerging Markets	34.54%	13.73%	12.46%	7.85%	-0.37	-0.34
Equity Market Neutral	11.08%	4.85%	5.71%	2.74%	-0.26	-0.06
Event Driven	20.07%	7.60%	6.95%	4.18%	-0.31	-0.21
Fixed Income Arbitrage	17.60%	6.87%	9.12%	4.35%	-0.77	-0.47
Global Macro	7.92%	5.30%	3.30%	2.13%	0.41	0.94
Long/Short Equity	21.04%	8.50%	7.16%	4.65%	-0.40	-0.34
Merger Arbitrage	5.65%	4.42%	3.31%	1.80%	0.72	1.25
Relative Value	15.94%	6.56%	7.35%	3.77%	-0.30	-0.14
Short Selling	14.93%	12.11%	4.13%	3.73%	0.46	1.59
Funds of Funds	20.22%	7.53%	6.54%	4.21%	-0.51	-0.45

* annualised statistics are given

** the risk-free rate is the average three-month US Treasury bill during the period from 2006 to 2008 (3.44%); MAR is fixed at 2.5%

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

Illustration 5: Hedge fund strategies' risks for the period from 1999 to 2008

Reference period: January 1999–December 2008	Risk Dimension				Risk-Adjusted Performance	
	Maximum Drawdown (in %)	Volatility (in %)*	Downside Risk (in %)*	Modified Value-at-Risk (in %)**	Sharp Ratio*/**	Sortino Ratio*/**
Convertible Arbitrage	29.27%	6.74%	8.69%	3.55%	0.24	0.26
CTA Global	11.68%	8.80%	4.85%	3.52%	0.48	1.01
Distressed Securities	22.60%	5.88%	5.56%	2.50%	1.04	1.22
Emerging Markets	34.54%	11.60%	9.04%	5.05%	0.65	0.91
Equity Market Neutral	11.08%	3.17%	4.34%	1.28%	1.05	0.91
Event Driven	20.07%	5.83%	5.34%	2.56%	0.84	1.04
Fixed Income Arbitrage	17.60%	4.21%	6.44%	2.03%	0.36	0.33
Global Macro	7.92%	5.27%	2.62%	1.56%	0.95	2.16
Long/Short Equity	21.04%	7.60%	5.21%	3.14%	0.51	0.86
Merger Arbitrage	5.65%	3.58%	2.95%	1.31%	1.21	1.68
Relative Value	15.94%	4.52%	5.27%	2.08%	0.81	0.82
Short Selling	36.30%	17.74%	11.31%	7.91%	-0.01	0.05
Funds of Funds	20.22%	6.18%	4.78%	2.43%	0.50	0.78

* annualised statistics are given

** the risk-free rate is the average three-month US Treasury bill during the period from 1999 to 2008 (3.14%); MAR is fixed at 2.5%

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

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Methodology

We use 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 have decided to present three risk-adjusted performance indicators that take these risks into account. 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 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. Its reputation is built on the high quality of its faculty (110 professors and researchers from France and abroad) and the privileged relationship with professionals that the school has been developing since its establishment in 1906. EDHEC Business School has decided to draw on its extensive knowledge of the professional environment and has therefore focused its research on themes that satisfy the needs of professionals.

EDHEC is also one of the few business schools in Europe to have received the triple international accreditation: AACSB (US-Global), EQUIS (Europe-Global) and Association of MBAs (UK-Global).

EDHEC pursues an active research policy in the field of finance. The EDHEC 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.

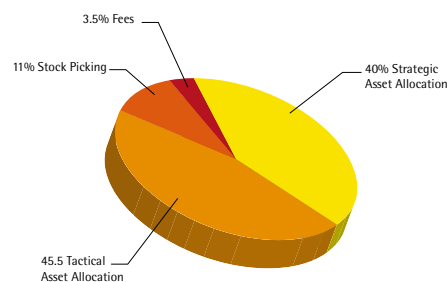
The choice of asset allocation

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 alpha into account; taking extreme risks into account in the allocation; or studying the usefulness of derivatives in constructing the portfolio.

Percentage of variation between funds



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

An applied research approach

In an attempt to ensure that the research it carries out is truly applicable, 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. This board is made up of both internationally recognised researchers and the Centre's business partners. The management of the research programmes respects a rigorous validation process, which guarantees the scientific quality and the operational usefulness of the programmes.

About the EDHEC Risk and Asset Management Research Centre

Research for Business

To optimise exchanges between the academic and business worlds, the EDHEC Risk and Asset Management Research Centre maintains a website devoted to asset management research for the industry: www.edhec-risk.com, circulates a monthly newsletter to over 235,000 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 offshoot EDHEC Asset Management Education.

EDHEC Asset Management Education helps investment professionals to upgrade their skills with advanced risk and asset management training across traditional and alternative classes.

EDHEC Position Papers and Publications from the last 3 years

EDHEC Risk and Asset Management Research Centre

2009 Position Papers

- Gregoriou, G., and F.-S. Lhabitant. Madoff: A riot of red flags (January).

2008 Position Papers

- Amenc, N., and S. Sender. Assessing the European banking sector bailout plans (December).
- Amenc, N., and S. Sender. Les mesures de recapitalisation et de soutien à la liquidité du secteur bancaire européen (December).
- Amenc, N., F. Ducoulombier, and P. Foulquier. Reactions to an EDHEC Study on the fair value controversy (December). With the EDHEC Financial Analysis and Accounting Research Centre.
- Amenc, N., F. Ducoulombier, and P. Foulquier. Réactions après l'étude. Juste valeur ou non : un débat mal posé (December). With the EDHEC Financial Analysis and Accounting Research Centre.
- Amenc, N., and V. Le Sourd. Les performances de l'investissement socialement responsable en France (December).
- Amenc, N., and V. Le Sourd. Socially responsible investment performance in France (December).
- Amenc, N., B. Maffei, and H. Till. Les causes structurelle du troisième choc pétrolier (November).
- Amenc, N., B. Maffei, and H. Till. Oil prices: The true role of speculation (November).
- Sender, S. Banking: Why does regulation alone not suffice? Why must governments intervene? (November).
- Till, H. The oil markets: let the data speak for itself (October).
- Amenc, N., F. Goltz, and V. Le Sourd. A comparison of fundamentally weighted indices: Overview and performance analysis (March).
- Sender, S. QIS4: Significant improvements, but the main risk for life insurance is not taken into account in the standard formula (February). With the Financial Analysis and Accounting Research Centre.

2009 Publications

- Goltz, F. A long road ahead for portfolio construction: Practitioners' views of an EDHEC survey. (January 2009).

2008 Publications

- Amenc, N., L. Martellini, and V. Ziemann. Alternative investments for institutional investors: Risk budgeting techniques in asset management and asset-liability management (December).

EDHEC Position Papers and Publications from the last 3 years

- Goltz, F., and D. Schröder. Hedge fund reporting survey (November).
- D'Hondt, C., and J.-R. Giraud. Transaction cost analysis A-Z: A step towards best execution in the post-MiFID Landscape (November).
- Schröder, D., The pros and cons of passive hedge fund replication (October).
- Amenc, N., F. Goltz, and D. Schröder. Reactions to an EDHEC study on asset-liability management decisions in wealth management (September).
- Amenc, N., F. Goltz, A. Grigoriu, V. Le Sourd, and L. Martellini. The EDHEC European ETF survey 2008 (June).
- Amenc, N., F. Goltz, and V. Le Sourd. Fundamental differences? Comparing alternative index weighting mechanisms (April).
- Le Sourd, V. Hedge fund performance in 2007 (February).
- Amenc, N., F. Goltz, V. Le Sourd, and L. Martellini. The EDHEC European investment practices survey 2008 (January).

2007 Position Papers

- Amenc, N. Trois premières leçons de la crise des crédits « subprime » (August).
- Amenc, N. Three Early Lessons from the subprime lending crisis (August).
- Amenc, N., W. Géhin, L. Martellini, and J.-C. Meyfredi. The myths and limits of passive hedge fund replication (June).
- Sender, S., and P. Foulquier. QIS3: Meaningful progress towards the implementation of Solvency II, but ground remains to be covered (June). With the EDHEC Financial Analysis and Accounting Research Centre.
- D'Hondt, C., and J.-R. Giraud. MiFID: The (in)famous European directive (February).
- Hedge Fund Indices for the Purpose of UCITS: Answers to the CESR Issues Paper (January).
- Foulquier, P., and S. Sender. CP 20: Significant improvements in the Solvency II framework but grave incoherencies remain. EDHEC response to consultation paper n° 20 (January).
- Géhin, W. The Challenge of hedge fund measurement: A toolbox rather than a Pandora's box (January).
- Christory, C., S. Daul, and J.-R. Giraud. Quantification of hedge fund default risk (January).

2007 Publications

- Ducoulombier, F. Etude EDHEC sur l'investissement et la gestion du risque immobiliers en Europe (November/December).
- Ducoulombier, F. EDHEC European real estate investment and risk management survey (November).

EDHEC Position Papers and Publications from the last 3 years

- Goltz, F., and G. Feng. Reactions to the EDHEC study "Assessing the quality of stock market indices" (September).
- Le Sourd, V. Hedge fund performance in 2006: A vintage year for hedge funds? (March).
- Amenc, N., L. Martellini, and V. Ziemann. Asset-liability management decisions in private banking (February).
- Le Sourd, V. Performance measurement for traditional investment (literature survey) (January).

2006 Position Papers

- Till, H. EDHEC Comments on the Amaranth case: Early lesson from the debacle (September).
- Amenc, N., and F. Goltz. Disorderly exits from crowded trades? On the systemic risks of hedge funds (June).
- Foulquier, P., and S. Sender. QIS 2: Modelling that is at odds with the prudential objectives of Solvency II (November). With the EDHEC Financial Analysis and Accounting Research Centre.
- Amenc, N., and F. Goltz. A reply to the CESR recommendations on the eligibility of hedge fund indices for investment of UCITS (December).

2006 Publications

- Amenc, N., F. Goltz, and V. Le Sourd. Assessing the quality of stock market indices: Requirements for asset allocation and performance measurement (September).
- Amenc, N., J.-R. Giraud, F. Goltz, V. Le Sourd, L. Martellini, and X. Ma. The EDHEC European ETF survey 2006 (October).
- Amenc, N., P. Foulquier, L. Martellini, and S. Sender. The impact of IFRS and Solvency II on asset-liability management and asset management in insurance companies (November). With the EDHEC Financial Analysis and Accounting Research Centre.

EDHEC Financial Analysis and Accounting Research Centre

2008 Position Papers

- Amenc, N., F. Ducoulombier, and P. Foulquier. Call for reaction. The fair value controversy: Ignoring the real issue (December). With the EDHEC Risk and Asset Management Research Centre.
- Amenc, N., F. Ducoulombier, and P. Foulquier. Réactions après l'étude. Juste valeur ou non : un débat mal posé (December). With the EDHEC Risk and Asset Management Research Centre.
- Escaffre, L., P. Foulquier, and P. Touron. The fair value controversy: Ignoring the real issue (November).

EDHEC Position Papers and Publications from the last 3 years

- Escaffre, L., P. Foulquier, and P. Touron. Juste valeur ou non : un débat mal posé (November).
- Sender, S. QIS4: Significant improvements, but the main risk for life insurance is not taken into account in the standard formula (February). With the EDHEC Risk and Asset Management Research Centre.

2007 Position Papers

- Sender, S., and P. Foulquier. QIS3: Meaningful progress towards the implementation of Solvency II, but ground remains to be covered (June). With the EDHEC Risk and Asset Management Research Centre.

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- Foulquier, P., and S. Sender. QIS 2: Modelling that is at odds with the prudential objectives of Solvency II (November). With the EDHEC Risk and Asset Management Research Centre.

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- Amenc, N., P. Foulquier, L. Martellini, and S. Sender. The impact of IFRS and Solvency II on asset-liability management and asset management in insurance companies (November). With the EDHEC Risk and Asset Management Research Centre.

EDHEC Economics Research Centre

2009 Position Papers

- Chéron, A. Quelle protection de l'emploi pour les seniors ? (January).
- Courtioux, P. Peut-on financer l'éducation du supérieur de manière plus équitable ? (January).
- Gregoir, S. L'incertitude liée à la contraction du marché immobilier pèse sur l'évolution des prix (January).

2008 Position Papers

- Gregoir, S. Les prêts étudiants peuvent-ils être un outil de progrès social ? (October).
- Chéron, A. Que peut-on attendre d'une augmentation de l'âge de départ en retraite ? (June).
- Chéron, A. De l'optimalité des allègements de charges sur les bas salaires (February).
- Chéron, A., and S. Gregoir. Mais où est passé le contrat unique à droits progressifs ? (February).

2007 Position Papers

- Chéron, A. Faut-il subventionner la formation professionnelle des seniors ? (October).

EDHEC Position Papers and Publications from the last 3 years

- Courtioux, P. La TVA acquittée par les ménages : une évaluation de sa charge tout au long de la vie (October).
- Courtioux, P. Les effets redistributifs de la « TVA sociale » : un exercice de microsimulation (July).
- Maarek, G. La réforme du financement de la protection sociale. Essais comparatifs entre la « TVA sociale » et la « TVA emploi » (July).
- Chéron, A. Analyse économique des grandes propositions en matière d'emploi des candidats à l'élection présidentielle (March).
- Chéron, A. Would a new form of employment contract provide greater security for French workers? (March).

2007 Publications

- Amenc, N., P. Courtioux, A.-F. Malvache, and G. Maarek. La « TVA emploi » (April).
- Amenc, N., P. Courtioux, A.-F. Malvache, and G. Maarek. Pro-employment VAT (April).
- Chéron, A. Reconsidérer les effets de la protection de l'emploi en France. L'apport d'une approche en termes de cycle de vie (January).

2006 Position Papers

- Chéron, A. Le plan national d'action pour l'emploi des seniors : bien, mais peut mieux faire (October).
- Bacache-Beauvallet, M. Les limites de l'usage des primes à la performance dans la fonction publique (October).
- Courtioux, P., and O. Thévenon. Politiques familiales et objectifs européens : il faut améliorer le benchmarking (November).

EDHEC Leadership and Corporate Governance Research Centre

2009 Position Papers

- Petit, V., and I. Mari. La légitimité des équipes dirigeantes : une dimension négligée de la gouvernance d'entreprise (January).

EDHEC Marketing and Consumption Research Centre – InteraCT

2007 Position Papers

- Bonnin, Gaël. Piloter l'interaction avec le consommateur : Un impératif pour le marketing. (January).

