RISK MANAGEMENT AND REPORTING IN THE ALTERNATIVE UNIVERSE
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I would like to thank EDHEC for inviting me today to be on the Risk Management panel of this conference.

The research presented just now by Professor Martellini shows that we have come a long way since the naïve assertion that hedge funds can deliver investors equity-like returns with bond-like risk.

In my brief remarks, I will first discuss the 2002 EDHEC paper on "The Benefits and Risks of Alternative Investment Strategies," which focuses on the character of hedge fund *risks*.

Next I will briefly discuss the 2004 EDHEC paper on "The Alpha and Omega of Hedge Fund Performance Measurement," which focuses on the nature of hedge fund *returns*.

Risks

We now have a greater understanding of the nature of the *risks* of hedge fund investing. As noted in the 2002 EDHEC paper, just because a hedge fund is non-market-directional does not mean that there aren't other systematic risks being undertaken by a fund. For example, a hedge fund may be exposing its investors to liquidity or default risks for which an investor should be compensated.

The 2002 paper also advises investors to go beyond the Sharpe ratio in evaluating individual hedge fund investments. As the EDHEC researchers state, the "omnipresence of the Sharpe ratio poses a theoretical problem … [since] it assumes that investors are only interested in the … mean and variance" of an investment's distribution.

By using variance (or standard deviation) around the mean as one's risk measure, one is assuming that investors are indifferent between upside risk and downside risk. In this case, investors are said to not have "skewness" preference. I don't think it would be controversial to say that in fact, investors do have a preference for upside risk and an aversion to downside risk.

In order to properly take into consideration the potential of extreme risks, the 2002 EDHEC article presents "a pragmatic application of the Value-at-Risk calculation in a fat-tail environment along with its integration into an optimization process."

The researchers find that if investors only take into consideration the mean and variance of a portfolio of stocks, bonds, and hedge funds that they will underestimate by a factor of 2.5 the extreme risk to which they are exposed.

Returns

I will now briefly provide some comments on the 2004 EDHEC paper, which focuses on understanding the *returns* generated by hedge funds.

In order to estimate the skill-based portion of a hedge fund's performance, the 2004 EDHEC paper explicitly takes into consideration the systematic market exposures of a fund. We commonly refer to an investment's systematic risk factors as the investment's betas, and the skill-based aspect of a manager's investment process as the manager's alpha.

An investor should not pay large fees to a hedge fund manager who is essentially taking in risk premiums for them.[1] If investors want to take on various kinds of beta risk, they can do so in a cost-efficient way using index funds, exchange-traded funds, futures, and options instead of through hedge funds. In order to justify a hedge fund's large fees, we must be assured of its ability to produce alpha.

The 2004 EDHEC paper is very helpful to the practitioner in identifying a range of methods to evaluate the risk-adjusted returns of hedge fund managers and thereby isolate those managers who seem to be able to provide alpha. One significant result of this work is that in most of the models, the majority of hedge funds did not have alphas that were significantly greater than zero. (See exhibit below.)

These results provide empirical support for Warren Buffett's recent prediction:

"People that are now investing in hedge funds *in aggregate* are going to be disappointed." [Italics added.]

Questions

This leads to me my two questions for Professor Martellini.

My first question is, given that most of the models in your 2004 paper showed that a minority of hedge funds had alphas that were significantly greater than zero, how would you recommend a practitioner use this information? Does this elevate the importance of actively selecting hedge fund managers? Or does it point to an opposite conclusion: given that it may be the case that most hedge funds can't produce alpha, should one focus instead on how to cheaply replicate the beta-aspect of alternative investing?

[1] Jensen, Greg and Jason Rotenberg, "Hedge Funds Selling Beta as Alpha," *Bridgewater Daily Observations*, June 17, 2003.

My second question is, do you think it would be appropriate to further "haircut" your estimated alphas by subtracting out backfill bias? A 2003 article by two researchers from ABP Investments found that the magnitude of the overall backfill bias in the Tass database to about 4% per year.[2]

Exhibit

	% of Funds with Alpha Significantly > 0
Performance of Hedge Funds as Measured with CAPM:	31%
Performance of Hedge Funds with Conditional Model (Corrects for Time-Varying Risk Exposure):	27%
Performance of Hedge Funds under Lagged CAPM:	17%
Performance of Hedge Funds under Implicit Factor Model (Using Principal Component Analysis):	44%
Performance of Hedge Funds under Multi Index Model (Hedge Fund Indexes as Derived from a Cluster Analysis):	57%
Performance of Hedge Funds under a Cluster-Based Single Index Model:	60%

Excerpted from Amenc, Noel, Susan Curtis, and Lionel Martellini, "The Alpha and Omega of Hedge Fund Performance Measurement," EDHEC Risk and Asset Management Research Center, Working Paper, February 27, 2004.

[2] Posthuma, Nolke and Pieter Jelle van der Sluis, "A Reality Check on Hedge Fund Returns," ABP Investments and Free University (Amsterdam), Working Paper, July 3, 2003.

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