

The alpha and beta of Equity Hedge UCITS funds – Implications for momentum investing

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1. Embracing the alternatives

UCITS Directive

- Pan-European regulatory framework
 - ‘Undertakings for Collective Investment in Transferable Securities’
 - Product **regulation** (transparency, investment guidelines, and liquidity)
 - **Risk** management
 - Regulatory oversight

UCITS format



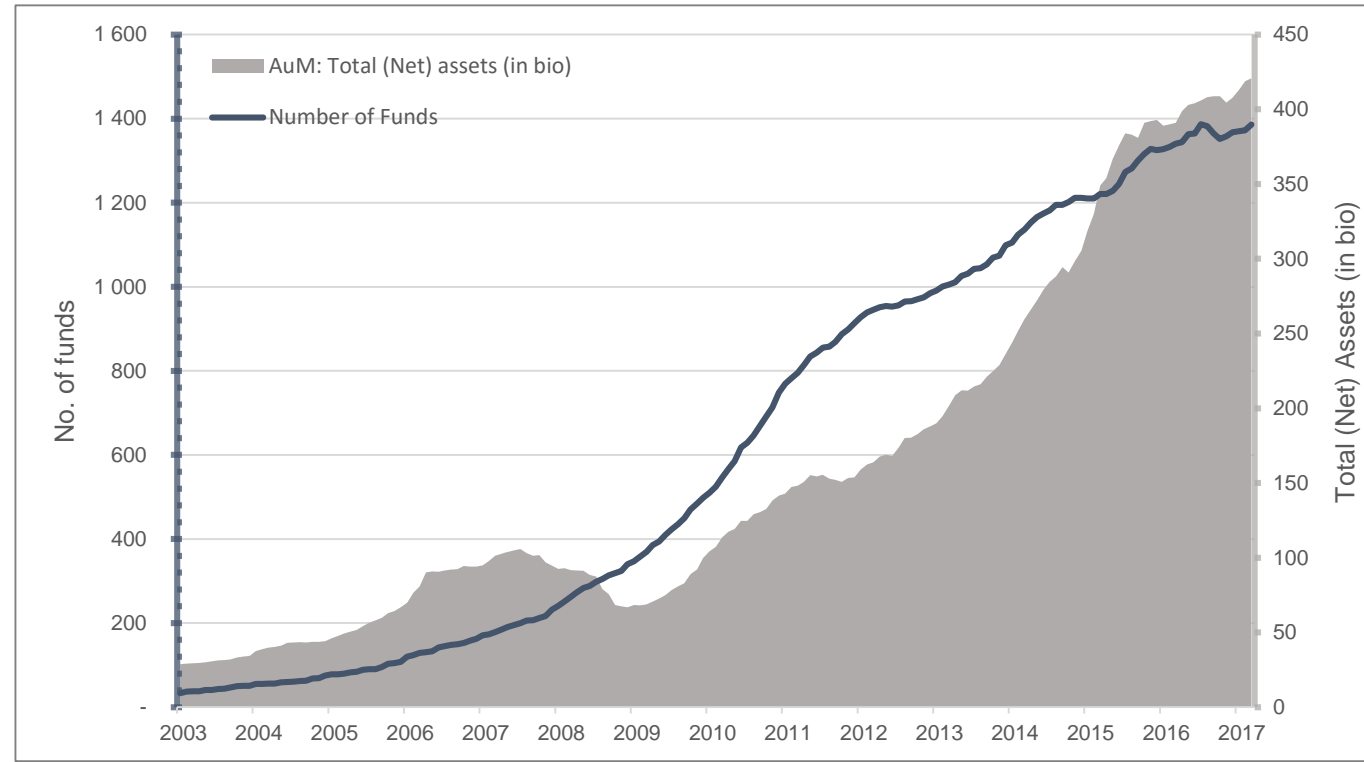
The Economist (March 2015), “How hedge funds work”

1. Embracing the alternatives

Growth of the market

- Pan-European regulatory framework
- Hedge fund return characteristics in an on-shore regulated vehicle

True absolute
return



Alternative UCITS Funds Evolution (2003-2017)

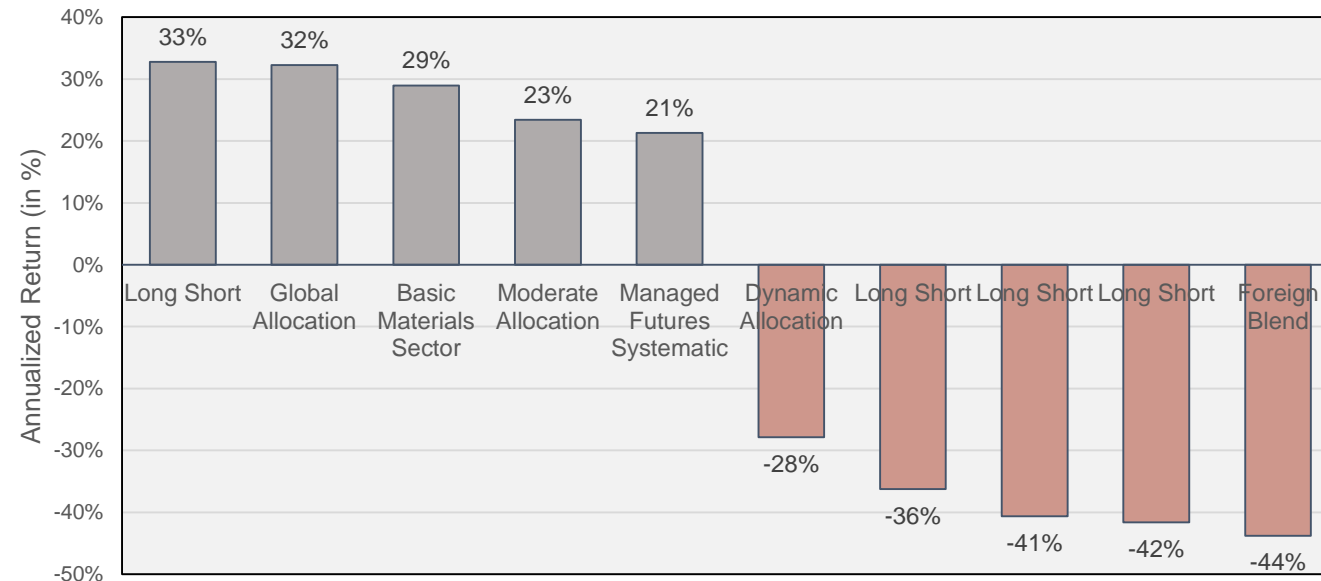
Source: LuxHedge, September 2016

1. Embracing the alternatives

Manager selection

- Pan-European regulatory framework
- Hedge fund return characteristics in an on-shore regulated vehicle
- Realistic portfolios
 - Adaptive Market Hypothesis (Lo, 2004)
 - Equity hedge UCITS funds
 - Role of **talent**

Managerial
selection



Top-5 versus Worst- Performers in 2016: Annualized Return

Source: LuxHedge (2016)

2. Fund selection

Unbundling of returns

- Alpha vs. **Beta**
 - Determinants: asset category, direction, and leverage (Fung & Hsieh, 1997).
 - Exposure to **style**-factor (Brown & Goetzmann, 2003; Jagannathan et al., 2010; Hunter et al., 2014)
 - Exposure to **asset**-based factors
 - Equity risk factors (Carhart, 1997)
 - Primitive Trend Following Strategy (Fung & Hsieh, 2004)
- From rolling averages to **residual returns** (Blitz et al., 2011)
 - **Hot hands** in fund performance (Hendricks et al., 1993; Ardia & Boudt, 2013; Jagannathan et al.; 2010)
 - Time-variation in alpha (Avramov et al., 2011; Patton & Ramadorai, 2013; Criton & Scaillet, 2014)

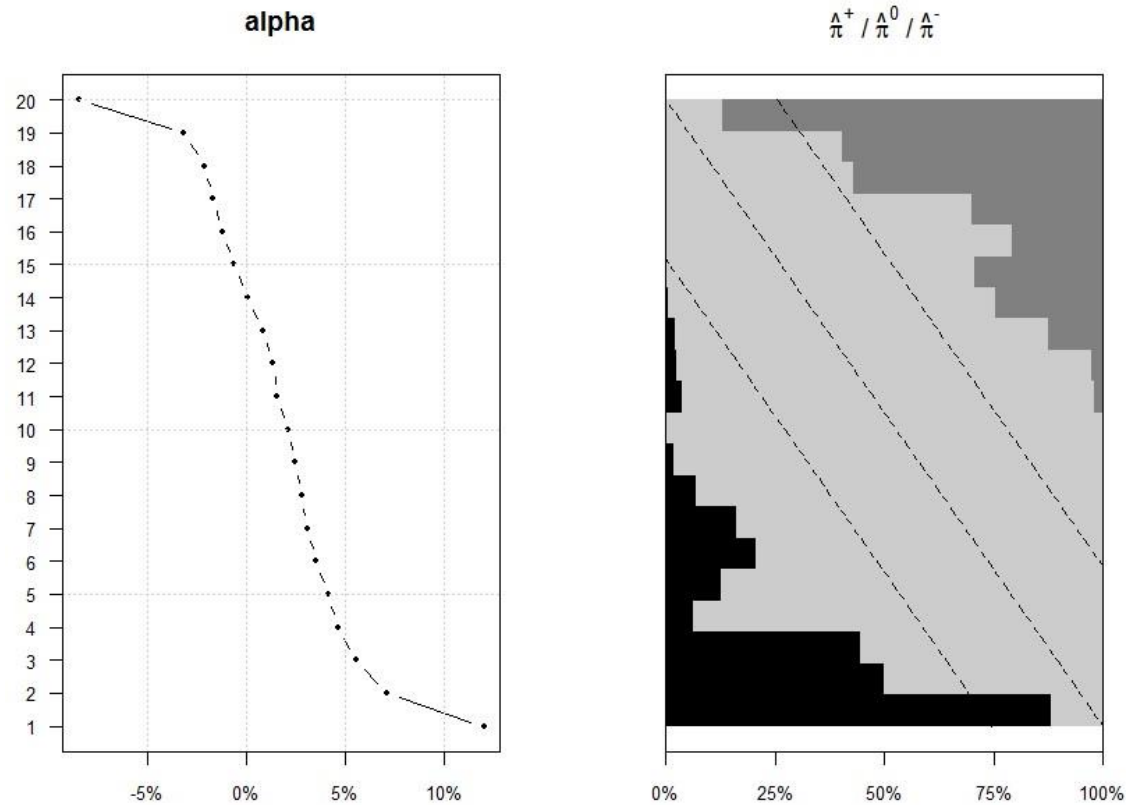


Unbundling of returns (S&P 2016, "The rise of indices if changing the face of investing")

2. Fund selection

False discoveries

- Decomposition: majority are zero-alpha funds (Barras et al.; 2010)
- **Peer performance** evaluation framework in Ardia and Boudt (2017) & False Discovery methodology by Storey (2002)
- Downward correction 37 percent.



Screening plot: out- (black), equal- (lightgrey) and underperformance (darkgrey) of style alpha of Equity Hedge UCITS funds (2010-2016)

3. Short-run persistence

Portfolio sorts using reliable signals

- Positive **autocorrelation** in monthly and quarterly hedge fund returns;
- Shift portfolio allocation to outperforming funds (Fung et al., 2008)
- Adopt a reliable **ranking criterion** that integrates risk premia (Carhart, 2004; Capocci and Hübner, 2004; Blitz et al., 2011)

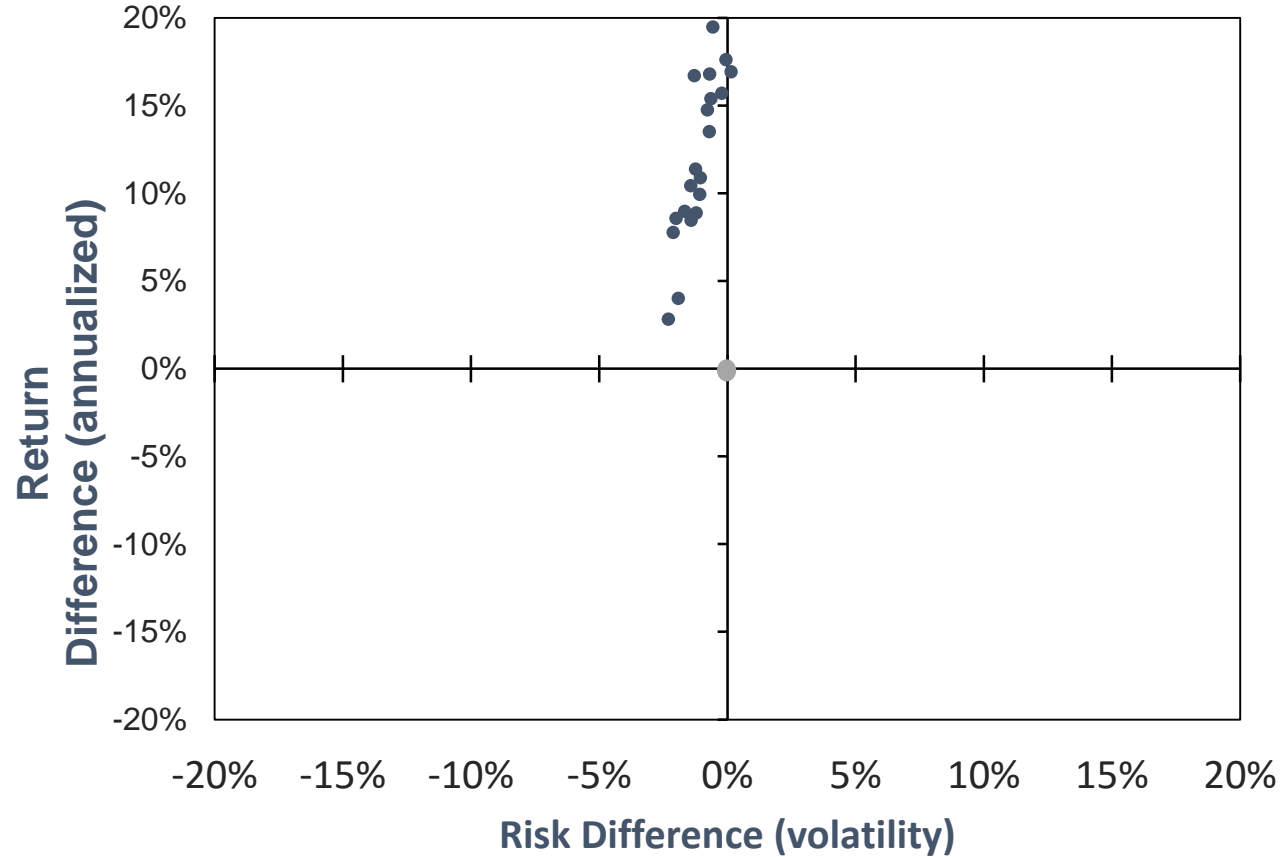
		Measurement error correction		
		Alpha	<i>t</i> -statistic	Peer Performance
Factor space	Peer	0.298	0.308*	0.301
	Carhart	0.258*	0.334***	0.374***
	Fung-Hsieh	0.216	0.268***	0.264***

Monthly alphas (%) across ranking criteria and factor models using portfolio sorts (2013-2016)

Significant risk-adjusted performance when correcting for measurement error.

3. Short-run persistence

Portfolio sorts using reliable signals



1Y-Rolling risk-return difference vs. HFRU Equity Hedge Index (2013-2016) for Carhart outperformance-sorted portfolio

Monthly Returns Analysis	Model pfolio	HFRU Equity Hedge
Annualized Return	9.37%	5.71%
Annualized Volatility (d)	3.95%	5.20%
Return/Risk	2.37	1.10
Winning Percent	74.19%	64.52%
Losing Percent	25.81%	35.48%
Largest Drawdown	-4.27%	-10.32%