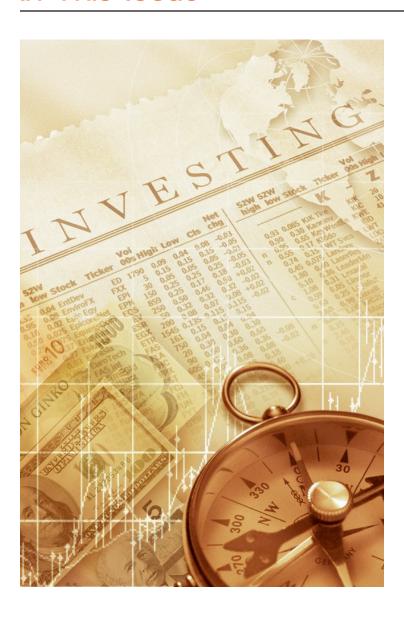
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 Three emerging hedge fund managers speak to Opalesque



Benedicte Gravrand

In this issue of New Managers, Opalesque's monthly monitor of emerging managers, we see how Opalesque's very own Emanagers Total Index gained 2.72% in January 2012.

Our in-house number cruncher Peter Urbani then explains how emerging managers have outperformed since 2007, have

kept pace with equities since 2008, and how their universe contains significant non-beta related sources of return.

In "Focus", we look at the state of the hedge fund industry in Asia with data from well-known providers, and the trends among emerging managers and among investors who invest in them. Asia is quite a challenging environment, just like everywhere else. Eliza Lau of Synergy Fund Management, Jeroen Tielman of IMQubator, and Richard Harris of Port Shelter give their perspectives.

This is followed by a "Q&A", in which Bryan K. Johnson, an experienced alternative investments marketer, exposes the (many) demands of marketing and asset raising.

"Launches" recapitulates the recent maiden launches from ex-hedge fund managers, from ex-bankers, as well as the launches of platforms and seeding ventures. We also list all new entrants in Opalesque's Emerging Managers database.

"Perspectives" recounts recent analysts' findings related to emerging managers; did you know that emerging funds have a good chance of raising assets from the \$1 Billion Club? And in "Profiles", three emerging hedge fund managers talk to Opalesque about their funds: Craig James talks about volatility in Asia and his forthcoming launch; Sarah Bernett about her '\$1,000 hedge fund' which started the year with a bang after a terrible 2011; and Gavin Vorwerg and Mark Preston explain their Sub-Saharan fund and the South African market.

I hope New Managers will be of benefit to you.

Do contact me if you have any related news.

Benedicte Gravrand

Editor

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Opalesque New Manager is edited by **Benedicte Gravrand.** Based in Geneva, Switzerland, Benedicte also writes exclusive stories, special reports, co-edits Opalesque's daily hedge fund publication Alternative Market Briefing (AMB) and occasionally moderates Opalesque Roundtables. Benedicte is perfectly bilingual (French/English) and has lived in Paris, Geneva and London. She obtained a BA (Honours) in Philosophy from the University of London, worked in the publishing sector, the hedge fund industry and then joined Opalesque in 2007.

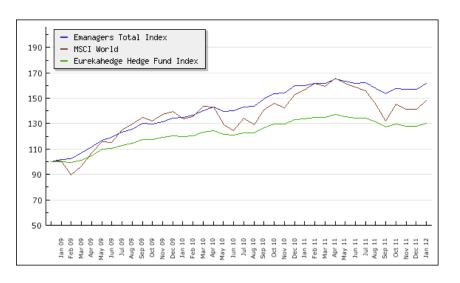
Peter Urbani is the former CIO of Infiniti Capital, a now defunct Hong Kongbased Fund of Funds group. Prior to that, he was Head of Quantitative Research for Infiniti, Head of Investment Strategy, Head of Portfolio Management, Head of Research and Senior Portfolio Manager for number of buy-side firms. He started out in stock-broking as an open outcry floor trader in the late 1980's. Some of his VBA code was included in Kevin Dowd's Measuring Market Risk and he specialises in Risk Management and Portfolio Construction.

Emanagers Indices

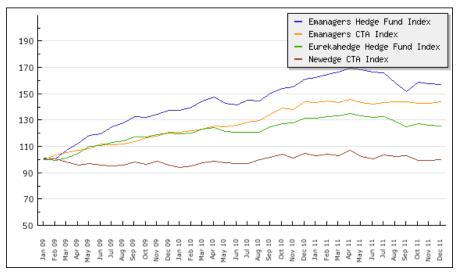
Emanagers Total Index gains 2.72% in January after losing 1.6% in 2011

Opalesque Ltd., a leading provider of online information services to the alternative investment industry, announced the estimated January and updated 2011 year-end results for its series of indices tracking emerging hedge fund and managed futures fund managers. Index calculations are based on currently 303 funds listed in Opalesque Solutions' Emanagers database, the industry's only database dedicated exclusively to fund management firms less than 48 months old and with assets under management of less than \$600 million at the time of the firm's inception.

The Emanagers Total Index, consisting of both hedge funds and managed futures funds, gained 2.72% in January after losing 1.6% in 2011. Since inception in January 2009, the index grew over 61%, outperforming both the global stock market and its hedge fund peers.



The positive January result was generated by the returns of hedge fund strategies, as the **Emanagers Hedge Fund Index** gained 3.97% (-2.45% in 2011). Managed futures funds tracked by the **Emanagers CTA Index** gained 0.56% (+0.39% in 2011).



12-month rolling volatility of Emanagers hedge funds slightly increased due to heavy performance swings in the second half of 2011 and January 2012. We calculated a stock market beta of approximately 50%, compared to 29% for the Eurekahedge Hedge Fund Index.

Emanagers managed futures strategies continued their trend of delivering truly uncorrelated returns, resulting in an equity market beta of less than 1%. As one of very few fund performance indices, the Emanagers CTA Index also finished the year 2011 in positive territory.

Emanagers Indices

Performance (in %), Volatility and Equity Market Beta (in %)

Index	Jan 2011	2011	2010	2009	Volatility	Equity market beta
Emanagers Total Index	2.72	-1.60	18.73	34.51	6.50	34
Emanagers Hedge Fund Index	3.97	-2.45	17.07	37.59	9.62	50
Emanagers CTA Index	0.56	0.39	19.15	20.52	3.72	0.8
Eurekahedge Hedge Fund Index	2.10	-4.10	10.71	20.37	5.72	29
Newedge CTA Index	0.46	-4.45	9.26	-4.31	8.37	1.7
MSCI World	0.75	-7.61	9.40	27.07	18.33	100

⁻ Florian Guldner, Opalesque Research

Emerging Managers outperform strongly since 2007 – keep pace with Equities post 2008



Peter Urbani

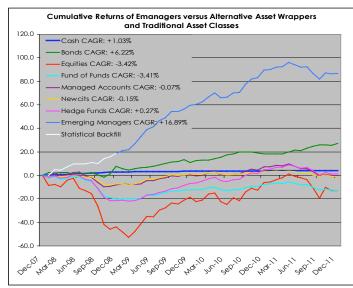
An analysis of the funds contained within the Opalesque Emerging Managers Index shows the following:

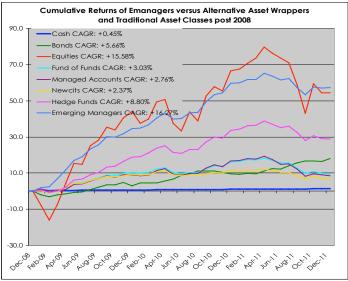
The Opalesque Emanagers Total Index has delivered compound average annual returns of just under 17% since Jan 2007* and just over 16% since Jan 2009 post the 2008 crisis period. This post-crisis period return is in line with the just under+16% from Equities and very substantially higher than that of all of the comparative Hedge Fund benchmarks.

In the wake of the 2008 crisis period we saw a plethora of new alternative investment structures launched to meet the increased demands for liquidity and transparency. These included the increasing popularity of various Managed Account platforms, Newcits (UCITS III compliant) funds and even a number of US Act40 Alternative ETF's.

Three years down the track we can say that at this stage the aggregate returns of these newer vehicles have been disappointing with Managed Accounts averaging +2.76%, Newcits +2.37% and Fund of Funds +3.03%. It is worth noting that Bonds returned +5.66% p.a. over this period. The broader stand alone Hedge Fund universe returned a respectable +8.8%.

If one looks at the longer 4 year history from 2007 then you can see why Funds of Funds in particular are continuing to struggle as fully 50% of them remain below their high water marks and are not able to earn performance fees. Equities have also yet to recoup all of their 2007 – 2008 losses.





*based on a statistical backfill for period prior to Jan 2009

Emerging Managers Universe contains significant non beta related sources of return

One of the main difficulties in analysing hedge funds is the paucity of information about what they actually own. This lack of transparency has spawned many innovations to the family of returns based style analysis models first proposed by William Sharpe (1992).

In addition to the widely used 3 Factor Model of Fama & French (1993) which takes the general form of:

$$r = R_f + \beta_3(K_m - R_f) + b_s \cdot SMB + b_v \cdot HML + \alpha$$

Additional factors such as Carhart's (1997), winners minus losers (WML) momentum factor have been added. William Fung & David A. Hsieh (2001, 2004) also proposed the addition of Primitive Trading Strategies to better replicate the non-linear attributes of Hedge Funds. Other contributions were made by Capocci (2005) and Hasanhodzic and Lo (2006).

All of these innovations are aimed at better explaining the sources of variance within a fund or hedge funds and in general in improving the 'goodness of fit' of the model as denoted by its R squared. Numerous issues surrounding the choice of factors, analysis period and multicollinearity exist. An important contribution in this regard was made by Angelo Lobosco and Dan DiBartolomeo (1997) with their paper on "Approximating the Confidence Intervals for Sharpe Style Weights".

In general the more parsimonious the model, the better, but additional factors may be warranted under some circumstances.

Key to Style Analysis Benchmarks and Factors

1 Market	Fama & French (Mkt-RF)
2 Size	Fama & French (SMB)
3 Style	Fama & French (HML)
4 Momentum	Fama & French (WML)
5 Cash	Fama & French (RF)

6 Gold Gold Price - USD End of Month

7 Commodities DJUBS 8 Oil WTI Crude

9 Intra Month Vol %Chng in Intra Month Vol

10 VIX %Chng in VIX 11 USD - TWX USD - TWX

12 1/(USD/EUR) Merrill Lynch (1 / USD-EUR)

13 Corporate Credit Spread %Chng in Credit Spread (BAA - US10Y)

14 Slope of Yield Curve Slope of YC (30YR - 3m Libor)

16 Term Spread Term Spread 5-7YR - 1-3YR 17 Emerging Mkt MSCI World - MSCI EM

18 Small Merrill Lynch (Russell 2000 - Libor)

19 Size - Large Foreign Surz Forn Large Style
20 Size - Mid Foreign Surz Forn Mid Style
21 Size - Small Foreign Surz Forn Small Style

22 Size Foreign Surz Forn Size

23 Style - Large US Surz US Large Style
24 Style - Mid US Surz US Mid Style
25 Size - Small US Surz US Small Style

26 Size US Surz US Size 27 Style US Surz US Style

28 Market + Short Call Fama & French 4 Factor Mkt-RF + Short Call
29 Market + Long Putl Fama & French 4 Factor Mkt-RF + Long Put

30 Market + Long Call Fama & French 4 Factor Mkt-RF + Long Call 31 Market + Short Put Fama & French 4 Factor Mkt-RF + Short Put

32 Liquidity (Pastor & Stambaugh)

Other more advanced methods such as Principal Component Analysis (PCA) and Independent Component Analysis (ICA) exist and can be used to infer more about the makeup of funds. Whilst these statistical models are more sophisticated they have the particular problem of generating factors that are not as easily open to interpretation as are the macro and fundamental factors typically used.

We conducted a basic Style Analysis on the <u>Emerging Managers</u>
<u>database</u>, using most of the factors referred to in the literature with the exception of Fung and Hsei's PTS factors which were not available.

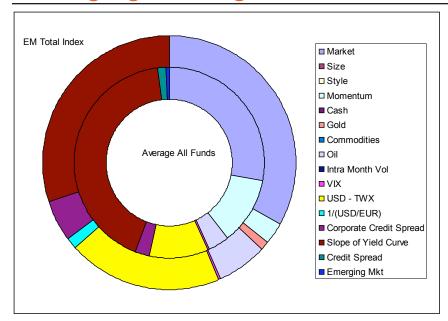
The Liquidity Factor of Pastor and Stambaugh (2003) was also not available for the full period.

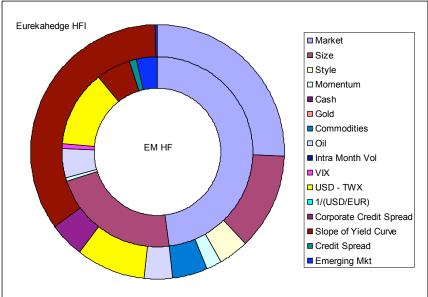
For the most recent 12 month period (Calendar 2011) the 16 Factor model we constructed which is similar to that of Capocci was able to (statistically) explain most of the variance attributable to the Emerging Manager funds universe. The 16 factor model achieved an R Squared of 68% versus 64% for the Capocci model and just 39% for the 4 factor Fama, French and Carhart model. The additional factors are thus (statistically) able to explain more of the variance of these funds.

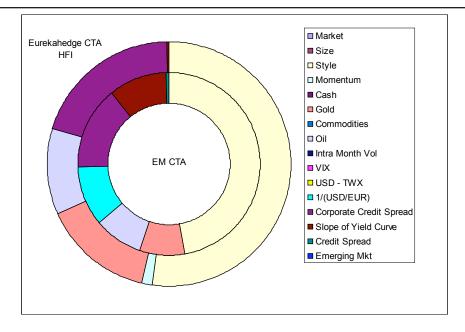
We then compared the average factor weights for the most recent 12 month period with those of some specific fund and benchmarks, in particular the Emerging manager Index, EM CTA, EM HF, Eurekahedge HFI and Eurekahedge CTA indices.

Style Analysis for 12m to 31 Dec 2011	Average All Funds	EM Total Index	EM HF	Eurekahedge HFI	EM CTA	Eurekahedge CTA HFI
R Squared	98.5	99.9	99.0	99.9	89.3	88.3
1 Market	28.1	33.0	48.1	25.5	0.0	0.0
2 Size	0.0	0.0	21.9	12.2	0.0	0.0
3 Style	0.0	0.0	0.0	3.9	47.2	52.3
4 Momentum	11.4	2.9	0.6	2.1	0.0	1.4
5 Cash	0.0	0.0	0.0	0.0	0.0	0.0
6 Gold	0.0	1.0	0.0	0.0	8.1	14.7
7 Commodities	0.0	0.0	0.0	4.4	0.0	0.0
8 Oil	3.4	6.5	5.0	3.5	8.4	11.3
9 Intra Month Vol	0.0	0.0	0.0	0.0	0.0	0.0
10 VIX	0.5	0.2	0.7	0.2	0.0	0.0
11 USD - TWX	9.9	19.6	13.1	8.9	0.0	0.0
12 1/(USD/EUR)	0.0	1.4	0.0	0.0	10.7	0.0
13 Corporate Credit Spread	2.6	5.3	0.0	4.2	14.7	19.9
14 Slope of Yield Curve	42.2	30.1	6.0	34.7	10.2	0.4
15 Credit Spread	1.3	0.0	0.9	0.0	0.6	0.0
16 Emerging Mkt	0.6	0.0	3.7	0.4	0.0	0.0
TOTALS	100	100	100	100	100	100

The table on the left shows the Emerging Managers Index to have less Equity Market exposure than the EM HF Index (which makes sense since it contains funds from both the HF and CTA indexes) but more Market exposure than the Eurekahedge HFI. The Emerging Managers appear to have more exposure to Currency (USD – TWX). The Emerging CTAs appear to have less exposure to Gold and Style than the Eurekahedge CTA Index, and more emphasis on FX and Govt Credits than the Eurekahedge CTA Index.



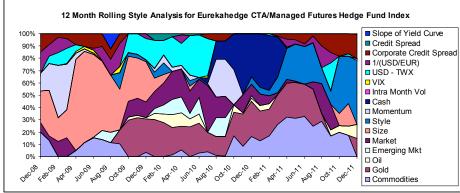


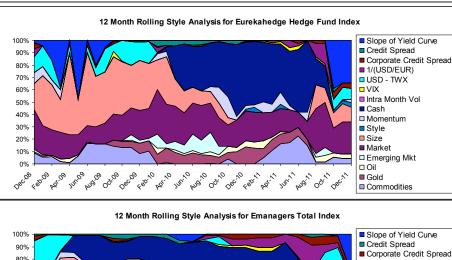


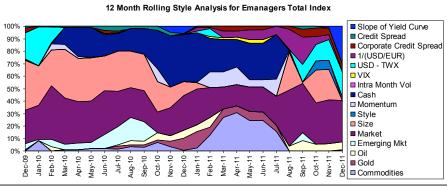
The surrounding doughnut charts show the most recent 12m factor weight relative to their respective benchmarks.

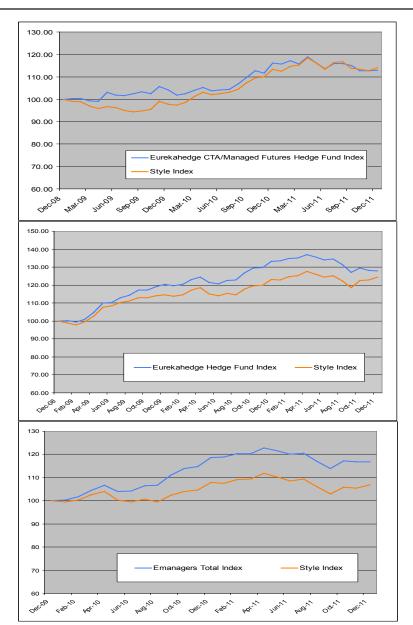
The charts on the following page show the 12m rolling style weights as well as the line chart of the style index for each fund/index. As you can see the 16 factor model used can 'better' explain the variance of the two Eurekahedge Indices than that of the Emerging Managers Index although the R squared is high in all cases. This suggests that the Emerging Managers have access to otherwise un-explained sources of potential alpha. Another possible interpretation is the potential use of leverage.

- Peter Urbani









Pearson and Best Fit (Bivariate Copula) Correlations

Best Fit Correlation		Avg	0.0455										0	orporate		Slope of										
									Int	tra Mnth			·	Credit	Credit	Yield	Avg All Er	nanager E	merging E	Eurekahe E	merging	Eurekahe	S&P500	MSCI E	merging	Global
	Commdty	Gold	Oil Em		Market	Size	Style	Mom	Cash	Vol			1/USDEUR	Spread	Spread	Curve	Funds	s		dge CTA	HF	dge HFI	TR		Markets	Bonds
Commodities	1	0.36	0.48	-0.18	0.63	0.22	0.00	-0.03	-0.07	-0.22	-0.44	-0.46	-0.44	-0.27	-0.27	0.25	0.56	0.67	-0.17	0.47	0.67	0.76	0.56	0.63	0.67	0.01
Gold Oil	0.36 0.48	-0.05	-0.05 1	-0.01 -0.54	0.02 0.42	0.16 0.19	-0.33 0.04	0.02 -0.14	-0.06 -0.10	0.17 -0.22	0.03 -0.23	-0.23 -0.49	-0.13 -0.20	0.15 -0.35	0.05 -0.05	0.06 0.25	0.10 0.21	0.03 0.46	-0.16 -0.23	0.38 0.04	0.06 0.37	0.17 0.45	-0.03 0.42	0.01 0.42	0.10 0.41	0.34 -0.22
Emerging Mkt	-0.18	-0.05	-0.54	-0.54 1	-0.22	-0.26	0.04	0.30	0.17	0.08	0.12	0.46	0.05	0.34	-0.05	-0.19	-0.08	-0.22	0.03	0.04	-0.09	-0.24	-0.19	-0.21	-0.20	-0.22
Market	0.63	0.02	0.42	-0.22	1	0.10	0.10	-0.45	-0.26	-0.49	-0.76	-0.59	-0.35	-0.49	0.06	0.38	0.56	0.84	-0.21	0.00	0.80	0.88	0.13	1.00	0.93	0.21
Size	0.22	0.16	0.19	-0.26	0.10	1	-0.20	0.01	-0.14	-0.05	0.01	-0.20	-0.13	-0.30	-0.10	0.24	0.19	0.20	-0.10	0.13	0.26	0.34	-0.01	0.06	0.21	0.04
Style	0.00	-0.33	0.04	0.10	0.37	-0.20	1	-0.38	0.18	-0.04	-0.16	-0.17	0.09	-0.16	-0.07	0.05	0.28	0.32	0.12	-0.07	0.16	0.14	0.43	0.38	0.17	0.08
Momentum	-0.03	0.02	-0.14	0.30	-0.45	0.01	-0.38	1	0.14	0.07	0.26	0.32	0.05	0.26	-0.12	-0.05	-0.12	-0.30	0.00	0.27	-0.15	-0.30	-0.46	-0.45	-0.42	-0.31
Cash	-0.07	-0.06	-0.10	0.17	-0.26	-0.14	0.18	0.14	1	0.13	0.12	0.08	0.12	0.21	-0.22	-0.73	0.10	0.28	0.36	0.17	-0.15	-0.27	-0.26	-0.26	-0.29	-0.04
Intra Month Vol	-0.22	0.17	-0.22	0.08	-0.49	-0.05	-0.04	0.07	0.13	1	0.63	0.22	0.38	0.33	-0.07	-0.07	-0.38	-0.45	-0.04	-0.29	-0.49	-0.54	-0.41	-0.49	-0.46	-0.13
VIX USD - TWX	-0.44 -0.46	0.03 -0.23	-0.23 -0.49	0.12 0.46	-0.76 -0.59	0.01 -0.20	-0.16 -0.17	0.26 0.32	0.12 0.08	0.63 0.22	1 0.39	0.39 1	0.26 0.32	0.40 0.38	-0.15 0.03	-0.11 -0.24	-0.49 -0.36	-0.61 -0.47	0.06 0.16	-0.08 -0.14	-0.63 -0.41	-0.65 -0.56	-0.74 -0.50	-0.76 -0.57	-0.70 -0.56	-0.23
1/(USD/EUR)	-0.46 -0.44	-0.23 -0.13	-0.49	0.46	-0.59 -0.35	-0.20 -0.13	0.09	0.32	0.08	0.22	0.39	0.32	0.32	0.02	0.03	-0.24 -0.11	-0.36	-0.47	0.16	-0.14	-0.41	-0.56	-0.50 -0.21	-0.57 -0.34	-0.56 -0.41	-0.29 -0.17
Corporate Credit Spread	-0.44	0.15	-0.20	0.05	-0.35	-0.13	-0.16	0.05	0.12	0.33	0.40	0.32	0.02	0.02	-0.20	-0.11	-0.33	-0.33	0.10	0.19	-0.44	-0.44	-0.21	-0.34	-0.41	0.29
Credit Spread	-0.27	0.05	-0.05	-0.11	0.06	-0.10	-0.07	-0.12	-0.22	-0.07	-0.15	0.03	0.05	-0.20	1	0.12	-0.18	0.48	-0.14	-0.27	-0.14	-0.05	0.10	0.06	-0.03	0.10
Slope of Yield Curve	0.25	0.06	0.25	-0.19	0.38	0.24	0.05	-0.05	-0.73	-0.07	-0.11	-0.24	-0.11	-0.31	0.12	1	0.00	-0.01	-0.38	-0.13	0.17	0.35	0.38	0.37	0.33	0.02
Avg All Funds	0.56	0.10	0.21	-0.08	0.56	0.19	0.28	-0.12	0.10	-0.38	-0.49	-0.36	-0.33	-0.22	-0.18	0.00	1	0.96	0.37	0.50	0.76	0.69	0.49	0.55	0.55	0.03
Emanagers	0.67	0.03	0.46	-0.22	0.84	0.20	0.32	-0.30	0.28	-0.45	-0.61	-0.47	-0.33	-0.41	0.48	-0.01	0.96	1	0.47	0.40	0.97	0.95	0.77	0.82	0.87	-0.15
Emerging CTA	-0.17	-0.16	-0.23	0.03	-0.21	-0.10	0.12	0.00	0.36	-0.04	0.06	0.16	0.18	0.22	-0.14	-0.38	0.37	0.47	1	0.35	-0.11	-0.14	-0.19	-0.21	-0.26	-0.14
Eurekahedge CTA	0.47	0.38	0.04	0.00	0.09	0.13	-0.07	0.27	0.17	-0.29	-0.08	-0.14	-0.30	0.19	-0.27	-0.13	0.50	0.40	0.35	1	0.32	0.36	-0.01	0.07	0.08	0.07
Emerging HF	0.67 0.76	0.06 0.17	0.37	-0.09 -0.24	0.80	0.26	0.16	-0.15 -0.30	-0.15 -0.27	-0.49 -0.54	-0.63 -0.65	-0.41 -0.56	-0.44 -0.44	-0.37 -0.50	-0.14 -0.05	0.17	0.76	0.97	-0.11	0.32 0.36	0.00	0.90 1	0.71 0.79	0.78 0.87	0.86	0.04
Eurekahedge HFI S&P500 TR	0.76	-0.03	0.45 0.42	-0.24 -0.19	0.88 0.97	0.34 -0.01	0.14 0.43	-0.30	-0.27	-0.54 -0.41	-0.65 -0.74	-0.50	-0.44	-0.50	0.10	0.35 0.38	0.69 0.49	0.95 0.77	-0.14 -0.19	-0.01	0.90 0.71	0.79	0.79	0.87	0.91 0.86	0.08
MSCI World	0.63	0.03	0.42	-0.13	1.00	0.06	0.43	-0.46	-0.26	-0.41	-0.74	-0.57	-0.21	-0.48	0.10	0.37	0.45	0.77	-0.13	0.07	0.71	0.73	0.98	1	0.92	0.10
Emerging Markets	0.67	0.10	0.41	-0.20	0.93	0.21	0.17	-0.42	-0.29	-0.46	-0.70	-0.56	-0.41	-0.47	-0.03	0.33	0.55	0.87	-0.26	0.08	0.86	0.91	0.86	0.92	1	0.20
Global Bonds	0.01	0.34	-0.22	-0.01	0.21	0.04	0.08	-0.31	-0.04	-0.13	-0.23	-0.29	-0.17	0.29	0.10	0.02	0.03	-0.15	-0.14	0.07	0.04	0.09	0.15	0.20	0.20	1
Pearson Correlation		Avg	0.0437																							
		3						Iomentu		Intra			C 1/(USD/EU	orporate		Slope of										
	Commodit														Credit		Ava All Fr	manager F	merging F			Furekshe	S&P500	MISCL Fr	merging	
Commodities	Commount	Gold	Oil Em	erging	Market	Size	Style	m	Cash Me		VIX US	SD - TWX	1/(USD/EU R)	Credit Spread	Credit Spread	Yield Curve	Avg All Er Funds	manager E s		Eurekahe E dge CTA	merging HF	Eurekahe dge HFI	S&P500 TR	MSCI Er World	merging Markets	Global Bonds
	1	Gold 0.45	0.51	-0.22	0.67	0.24	Style -0.01	-0.08	-0.09		-0.46	SD - TWX -0.54	R) -0.45	Spread -0.37	Spread -0.16	Curve 0.33	Funds 0.52	s 0.67	CTA -0.35	dge CTA 0.43		dge HFI 0.78		World 0.66	Markets 0.71	Bonds 0.06
Gold	1 0.45	0.45 1		-0.22 -0.05	0.67 0.09	0.24 0.26	Style -0.01 -0.33	-0.08 0.04	-0.09 -0.07	onth Vol -0.24 0.18	-0.46 0.02	-0.54 -0.34	R) -0.45 -0.15	-0.37 -0.02	-0.16 0.16	0.33 0.12	0.52 0.10	0.67 0.08	-0.35 -0.34	0.43 0.31	0.67 0.12	dge HFI 0.78 0.24	TR 0.60 0.03	0.66 0.08	0.71 0.18	0.06 0.32
Oil	0.45 0.51	0.45 1 0.03	0.51 0.03 1	-0.22 -0.05 -0.54	0.67 0.09 0.42	0.24 0.26 0.18	Style -0.01 -0.33 0.04	-0.08 0.04 -0.18	-0.09 -0.07 -0.08	-0.24 0.18 -0.22	-0.46 0.02 -0.26	-0.54 -0.34 -0.51	R) -0.45 -0.15 -0.20	-0.37 -0.02 -0.43	-0.16 0.16 -0.21	0.33 0.12 0.30	0.52 0.10 0.19	0.67 0.08 0.43	-0.35 -0.34 -0.34	0.43 0.31 0.01	0.67 0.12 0.36	0.78 0.24 0.46	TR 0.60 0.03 0.43	0.66 0.08 0.42	0.71 0.18 0.42	0.06 0.32 -0.25
Oil Emerging Mkt	0.45 0.51 -0.22	0.45 1 0.03 -0.05	0.51 0.03 1 -0.54	-0.22 -0.05 -0.54 1	0.67 0.09 0.42 -0.22	0.24 0.26 0.18 -0.26	Style -0.01 -0.33 0.04 0.09	-0.08 0.04 -0.18 0.33	-0.09 -0.07 -0.08 0.14	-0.24 0.18 -0.22 0.08	-0.46 0.02 -0.26 0.18	-0.54 -0.34 -0.51 0.45	R) -0.45 -0.15 -0.20 0.06	-0.37 -0.02 -0.43 0.36	-0.16 0.16 -0.21 0.11	0.33 0.12 0.30 -0.23	0.52 0.10 0.19 -0.08	0.67 0.08 0.43 -0.22	CTA -0.35 -0.34 -0.34 0.12	0.43 0.31 0.01 0.04	0.67 0.12 0.36 -0.09	0.78 0.24 0.46 -0.25	TR 0.60 0.03 0.43 -0.19	World 0.66 0.08 0.42 -0.21	0.71 0.18 0.42 -0.20	0.06 0.32 -0.25 -0.01
Oil Emerging Mkt Market	0.45 0.51 -0.22 0.67	0.45 1 0.03 -0.05 0.09	0.51 0.03 1 -0.54 0.42	-0.22 -0.05 -0.54 1 -0.22	0.67 0.09 0.42 -0.22 1	0.24 0.26 0.18	Style -0.01 -0.33 0.04 0.09 0.36	-0.08 0.04 -0.18 0.33 -0.43	-0.09 -0.07 -0.08 0.14 -0.26	0.18 -0.22 0.18 -0.22 0.08 -0.48	-0.46 0.02 -0.26 0.18 -0.75	-0.54 -0.34 -0.51 0.45 -0.62	R) -0.45 -0.15 -0.20 0.06 -0.36	-0.37 -0.02 -0.43 0.36 -0.54	-0.16 0.16 -0.21 0.11 -0.02	0.33 0.12 0.30 -0.23 0.41	0.52 0.10 0.19 -0.08 0.55	0.67 0.08 0.43 -0.22 0.84	-0.35 -0.34 -0.34 -0.12 -0.33	0.43 0.31 0.01 0.04 0.08	HF 0.67 0.12 0.36 -0.09 0.80	0.78 0.24 0.46 -0.25 0.89	TR 0.60 0.03 0.43 -0.19 0.97	0.66 0.08 0.42 -0.21 1.00	0.71 0.18 0.42 -0.20 0.93	0.06 0.32 -0.25 -0.01 0.21
Oil Emerging Mkt Market Size	0.45 0.51 -0.22 0.67 0.24	0.45 1 0.03 -0.05 0.09 0.26	0.51 0.03 1 -0.54 0.42 0.18	-0.22 -0.05 -0.54 1 -0.22 -0.26	0.67 0.09 0.42 -0.22 1 0.10	0.24 0.26 0.18 -0.26 0.10 1	Style -0.01 -0.33 0.04 0.09	-0.08 0.04 -0.18 0.33 -0.43 -0.03	-0.09 -0.07 -0.08 0.14 -0.26 -0.14	0.18 -0.22 0.18 -0.22 0.08 -0.48 -0.05	-0.46 0.02 -0.26 0.18 -0.75 -0.04	-0.54 -0.34 -0.51 -0.45 -0.62 -0.22	R) -0.45 -0.15 -0.20 0.06 -0.36 -0.11	-0.37 -0.02 -0.43 0.36 -0.54 -0.30	-0.16 0.16 -0.21 0.11 -0.02 -0.05	0.33 0.12 0.30 -0.23 0.41 0.24	0.52 0.10 0.19 -0.08 0.55 0.19	0.67 0.08 0.43 -0.22 0.84 0.21	-0.35 -0.34 -0.34 -0.12 -0.33 -0.17	0.43 0.31 0.01 0.04 0.08 0.16	0.67 0.12 0.36 -0.09 0.80 0.27	0.78 0.24 0.46 -0.25 0.89 0.35	TR 0.60 0.03 0.43 -0.19 0.97 -0.01	0.66 0.08 0.42 -0.21 1.00 0.06	0.71 0.18 0.42 -0.20 0.93 0.21	0.06 0.32 -0.25 -0.01 0.21 0.04
Oil Emerging Mkt Market	0.45 0.51 -0.22 0.67	0.45 1 0.03 -0.05 0.09	0.51 0.03 1 -0.54 0.42	-0.22 -0.05 -0.54 1 -0.22	0.67 0.09 0.42 -0.22 1 0.10 0.36	0.24 0.26 0.18 -0.26 0.10 1 -0.20	style -0.01 -0.33 0.04 0.09 0.36 -0.20	-0.08 0.04 -0.18 0.33 -0.43	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 0.17	-0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11	-0.54 -0.34 -0.51 0.45 -0.62	R) -0.45 -0.15 -0.20 0.06 -0.36	-0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19	-0.16 0.16 -0.21 0.11 -0.02	0.33 0.12 0.30 -0.23 0.41 0.24 0.00	Funds 0.52 0.10 0.19 -0.08 0.55 0.19 0.28	0.67 0.08 0.43 -0.22 0.84	-0.35 -0.34 -0.34 -0.12 -0.33	0.43 0.31 0.01 0.04 0.08 0.16 -0.08	0.67 0.12 0.36 -0.09 0.80 0.27 0.16	dge HFI 0.78 0.24 0.46 -0.25 0.89 0.35 0.12	TR 0.60 0.03 0.43 -0.19 0.97	0.66 0.08 0.42 -0.21 1.00	0.71 0.18 0.42 -0.20 0.93	0.06 0.32 -0.25 -0.01 0.21 0.04 0.08
Oil Emerging Mkt Market Size Style	1 0.45 0.51 -0.22 0.67 0.24 -0.01	0.45 1 0.03 -0.05 0.09 0.26 -0.33	0.51 0.03 1 -0.54 0.42 0.18 0.04	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09	0.67 0.09 0.42 -0.22 1 0.10	0.24 0.26 0.18 -0.26 0.10 1	Style -0.01 -0.33 0.04 0.09 0.36	-0.08 0.04 -0.18 0.33 -0.43 -0.03	-0.09 -0.07 -0.08 0.14 -0.26 -0.14	0.18 -0.22 0.18 -0.22 0.08 -0.48 -0.05	-0.46 0.02 -0.26 0.18 -0.75 -0.04	-0.54 -0.54 -0.34 -0.51 -0.45 -0.62 -0.22 -0.17	R) -0.45 -0.15 -0.20 0.06 -0.36 -0.11 0.08	-0.37 -0.02 -0.43 0.36 -0.54 -0.30	-0.16 0.16 -0.21 0.11 -0.02 -0.05 -0.16	0.33 0.12 0.30 -0.23 0.41 0.24	0.52 0.10 0.19 -0.08 0.55 0.19	0.67 0.08 0.43 -0.22 0.84 0.21 0.37	-0.35 -0.34 -0.34 -0.32 -0.33 -0.17 -0.10	0.43 0.31 0.01 0.04 0.08 0.16	0.67 0.12 0.36 -0.09 0.80 0.27	0.78 0.24 0.46 -0.25 0.89 0.35	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38	0.71 0.18 0.42 -0.20 0.93 0.21 0.17	0.06 0.32 -0.25 -0.01 0.21 0.04 0.08 -0.24
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol	0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07	0.51 0.03 1 -0.54 0.42 0.18 0.04 -0.18 -0.08	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05	Style -0.01 -0.33 0.04 0.09 0.36 -0.20 1 -0.41	m -0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 1 0.08 0.08	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 0.17 0.08 1 0.12	-0.24 -0.28 -0.22 -0.08 -0.48 -0.05 -0.03 -0.08	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22	SD - TWX -0.54 -0.34 -0.51 0.45 -0.62 -0.22 -0.17 0.29	R) -0.45 -0.15 -0.20 0.06 -0.36 -0.11 0.08 0.12 0.13 0.47	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.18 0.26	90.16 -0.16 -0.21 -0.21 -0.02 -0.05 -0.16 -0.03	0.33 0.12 0.30 -0.23 0.41 0.24 0.00 0.00 -0.76 -0.10	Funds 0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.18 0.10 -0.43	\$ 0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.41 0.28 -0.48	CTA -0.35 -0.34 -0.34 -0.12 -0.33 -0.17 -0.10 -0.05 -0.33 -0.05	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24	0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52	0,78 0,24 0,46 -0,25 0,89 0,35 0,12 -0,31 -0,28 -0,55	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.42 -0.25 -0.41	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45	0.06 0.32 -0.25 -0.01 0.21 0.04 -0.24 -0.05 -0.11
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX	0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09 -0.24 -0.46	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02	0.51 0.03 1 -0.54 0.42 0.18 0.04 -0.18 -0.08 -0.22	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04	Style -0.01 -0.33 0.04 0.09 0.36 -0.20 1 -0.41 0.17 -0.03 -0.11	-0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 1 0.08 0.08	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 0.17 0.08 1 0.12 0.15	00000000000000000000000000000000000000	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1	SD - TWX -0.54 -0.34 -0.51 0.45 -0.62 -0.22 -0.17 0.29 0.08	R) -0.45 -0.15 -0.20 0.06 -0.36 -0.11 0.08 0.12 0.13 0.47 0.35	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.18 0.26 0.42	\$pread -0.16 0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17	0.33 0.12 0.30 -0.23 0.41 0.24 0.00 0.00 -0.76 -0.10 -0.22	Funds 0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.18 0.10 -0.43 -0.47	\$ 0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.41 0.28 -0.48 -0.63	CTA -0.35 -0.34 -0.34 -0.12 -0.33 -0.17 -0.10 -0.05 -0.33 -0.05 -0.22	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06	0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52 -0.62	0,78 0,24 0,46 -0,25 0,89 0,35 0,12 -0,31 -0,28 -0,55 -0,68	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.42 -0.25 -0.41 -0.71	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48 -0.75	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.70	0.06 0.32 -0.25 -0.01 0.21 0.04 0.08 -0.24 -0.05 -0.11
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX USD - TWX	0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09 -0.24 -0.46 -0.54	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34	0.51 0.03 1 -0.54 0.42 0.18 0.04 -0.18 -0.08 -0.22 -0.26 -0.51	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18 0.45	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75 -0.62	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22	style -0.01 -0.33 0.04 0.09 0.36 -0.20 1 -0.41 0.17 -0.03 -0.11 -0.17	-0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 1 0.08 0.08 0.22 0.29	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 0.17 0.08 1 0.12 0.15 0.08	00000000000000000000000000000000000000	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1	SD - TWX -0.54 -0.34 -0.51 0.45 -0.62 -0.22 -0.17 0.29 0.08 0.22 0.41	R) -0.45 -0.15 -0.20 0.06 -0.36 -0.11 0.08 0.12 0.13 0.47	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.18 0.26 0.42 0.49	Spread -0.16 0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17 0.10	0.33 0.12 0.30 -0.23 0.41 0.24 0.00 0.00 -0.76 -0.10 -0.22 -0.30	Funds 0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.18 0.10 -0.43 -0.47 -0.34	\$ 0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.41 0.28 -0.48 -0.63 -0.47	CTA -0.35 -0.34 -0.34 -0.12 -0.33 -0.17 -0.10 -0.05 -0.33 -0.05 -0.33 -0.22 -0.39	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06 -0.10	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52 -0.62 -0.43	0,78 0,24 0,46 -0,25 0,89 0,35 0,12 -0,31 -0,28 -0,55 -0,68 -0,59	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.42 -0.25 -0.41 -0.71 -0.53	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48 -0.75 -0.61	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.70 -0.61	0.06 0.32 -0.25 -0.01 0.21 0.04 0.08 -0.24 -0.05 -0.11
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX USD - TWX 1/(USD/EUR)	0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09 -0.24 -0.46 -0.54 -0.54	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34 -0.15	0.51 0.03 1 -0.54 0.42 0.18 0.04 -0.18 -0.08 -0.22 -0.21 -0.51 -0.20	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18 0.45 0.06	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75 -0.62 -0.36	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22 -0.11	style -0.01 -0.33 0.04 0.09 0.36 -0.20 1 -0.41 0.17 -0.03 -0.11 -0.17 0.08	m -0.08	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 0.17 0.08 1 0.12 0.15 0.08 0.13	onth Vol -0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03 0.08 0.12 1 0.65 0.22 0.47	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1 0.41 0.35	- TWX -0.54 -0.34 -0.51 -0.45 -0.62 -0.22 -0.17 -0.29 -0.08 -0.22 -0.41 -1 -0.34	R) -0.45 -0.15 -0.20 0.06 -0.36 -0.11 0.08 0.12 0.13 0.47 0.35 0.34 1	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.18 0.26 0.42	-0.16 -0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17 0.10	0.33 0.12 0.30 -0.23 0.41 0.24 0.00 0.00 -0.76 -0.10 -0.22 -0.30 -0.17	Funds 0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.18 0.10 -0.43 -0.47 -0.34 -0.34	0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.41 0.28 -0.48 -0.63 -0.47 -0.33	- CTA -0.35 -0.34 -0.34 -0.12 -0.33 -0.17 -0.10 -0.05 -0.33 -0.05 -0.22 -0.39 -0.24	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06 -0.10 -0.30	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52 -0.62 -0.43 -0.45	0.78 0.78 0.24 0.46 -0.25 0.89 0.35 0.12 -0.31 -0.28 -0.55 -0.68 -0.59 -0.45	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.42 -0.25 -0.41 -0.71 -0.53 -0.23	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48 -0.75 -0.61 -0.35	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.70 -0.61 -0.42	Bonds 0.06 0.32 -0.25 -0.01 0.21 0.04 -0.08 -0.24 -0.05 -0.11 -0.23 -0.29
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX USD - TWX 1/(USD/EUR) Corporate Credit Spread	1 0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09 -0.24 -0.46 -0.54 -0.45 -0.37	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34 -0.15 -0.02	0.51 0.03 1 -0.54 0.42 0.18 0.04 -0.18 -0.22 -0.26 -0.51 -0.20 -0.43	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18 0.45 0.06 0.36	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75 -0.62 -0.36 -0.54	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22 -0.11 -0.30	style -0.01 -0.33 -0.04 -0.20 -1 -0.41 -0.17 -0.03 -0.11 -0.17 -0.08 -0.19	m -0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 1 0.08 0.08 0.22 0.29 0.12 0.26	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 0.17 0.08 1 0.12 0.15 0.08 0.13	onth Vol -0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03 0.08 0.12 1 0.65 0.22 0.47 0.26	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1 0.41 0.35 0.42	-0.54 -0.54 -0.51 -0.55 -0.62 -0.22 -0.17 -0.29 -0.08 -0.22 -0.14 -0.34 -0.49	R) -0.45 -0.15 -0.20 0.06 -0.36 -0.11 0.08 0.12 0.13 0.47 0.35 0.34 1 0.02	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.18 0.26 0.42 0.49 0.02	Spread -0.16 0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17 0.10	0.33 0.12 0.30 -0.23 0.41 0.24 0.00 -0.76 -0.10 -0.22 -0.30 -0.17 -0.35	Funds 0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.18 0.10 -0.43 -0.47 -0.34 -0.34 -0.15	0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.41 0.28 -0.48 -0.63 -0.47 -0.33 -0.41	- CTA - 0.35 - 0.34 - 0.34 - 0.12 - 0.33 - 0.17 - 0.10 - 0.05 - 0.33 - 0.05 - 0.33 - 0.22 - 0.39 - 0.24 - 0.41	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06 -0.10 -0.30 0.26	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52 -0.62 -0.43 -0.45 -0.34	0ge HFI 0.78 0.24 0.46 -0.25 0.89 0.35 0.12 -0.31 -0.28 -0.55 -0.68 -0.59 -0.45 -0.52	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.42 -0.25 -0.41 -0.71 -0.53 -0.23 -0.52	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48 -0.75 -0.61 0.35 -0.53	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.76 -0.61 -0.42 -0.52	Bonds 0.06 0.32 -0.25 -0.01 0.24 0.08 -0.24 -0.05 -0.11 -0.23 -0.29 -0.17
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX USD - TWX 1/(USD/EUR) Corporate Credit Spread Credit Spread	1 0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09 -0.24 -0.46 -0.54 -0.37 -0.16	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34 -0.15 -0.02 0.16	0.51 0.03 1 -0.54 0.42 0.18 0.04 -0.18 -0.22 -0.26 -0.51 -0.20 -0.43 -0.21	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18 0.45 0.06 0.36 0.11	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75 -0.62 -0.54 -0.54	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22 -0.11 -0.30 -0.05	style -0.01 -0.33 0.04 0.09 0.36 -0.20 1 -0.41 -0.17 -0.03 -0.11 -0.17 -0.08 -0.19 -0.16	-0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 1 0.08 0.08 0.22 0.29 0.12 0.26 0.03	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 0.17 0.08 1 0.12 0.15 0.08 0.13 0.18 -0.11	onth Vol -0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03 0.012 1 0.65 0.22 0.47 0.26 -0.13	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1 0.41 0.35 0.42 -0.17	- TWX -0.54 -0.34 -0.51 -0.65 -0.62 -0.22 -0.17 -0.29 -0.08 -0.22 -0.14 -1 -0.34 -0.49 -0.10	R) -0.45 -0.15 -0.20 0.06 -0.36 -0.11 0.08 0.12 0.13 0.47 0.35 0.34 1 0.02 -0.18	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.18 0.26 0.42 0.49 0.002	-0.16 -0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17 0.10 -0.10 -0.10	0.33 0.12 0.30 0.23 0.41 0.24 0.00 0.00 -0.76 -0.10 -0.22 -0.30 -0.17 -0.35 -0.04	0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.18 -0.10 -0.43 -0.47 -0.34 -0.34 -0.15 -0.07	0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.41 0.28 -0.48 -0.63 -0.47 -0.33	- CTA -0.35 -0.34 -0.34 -0.12 -0.33 -0.17 -0.10 -0.05 -0.33 -0.05 -0.22 -0.39 -0.24 -0.41 -0.16	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06 -0.10 0.30 0.26 -0.17	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52 -0.43 -0.44 -0.34	0.78 0.24 0.46 -0.25 0.89 0.35 0.12 -0.31 -0.28 -0.55 -0.68 -0.59 -0.45 -0.52 -0.03	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.25 -0.41 -0.71 -0.53 -0.52 -0.03	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48 -0.75 -0.61 -0.35 -0.53 -0.01	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.70 -0.61 -0.42 -0.52 -0.04	Bonds 0.06 0.32 -0.25 -0.01 0.21 0.04 0.08 -0.24 -0.05 -0.17 0.20 0.16
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX USD - TWX 1/(USD/EUR) Corporate Credit Spread Credit Spread Slope of Yield Curve	1 0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09 -0.24 -0.46 -0.54 -0.45 -0.37 -0.16	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34 -0.15 -0.02 -0.34 -0.15	0.51 0.03 1 -0.54 0.42 0.18 0.04 -0.18 -0.08 -0.22 -0.26 -0.51 -0.20 -0.43 -0.21 0.30	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18 0.45 0.06 0.36 0.11 -0.23	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75 -0.62 -0.36 -0.36 -0.36	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22 -0.11 -0.30 -0.05 0.24	style -0.01 -0.33 0.04 0.09 0.36 -0.20 1 -0.41 -0.03 -0.17 -0.03 -0.11 -0.17 0.08 -0.19 -0.16 0.00	-0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 1 0.08 0.02 0.22 0.29 0.12 0.03 0.03	-0.09 -0.07 -0.08 -0.14 -0.26 -0.14 0.17 0.08 0.12 0.15 0.08 0.13 0.11 -0.76	onth Vol -0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03 0.08 0.12 1 0.65 0.22 0.47 0.26 -0.13 -0.10	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1 0.41 0.35 0.42 -0.17 -0.22	-0.54 -0.34 -0.54 -0.62 -0.22 -0.17 -0.29 -0.08 -0.22 -0.41 -1 -0.34 -0.34 -0.30	R) -0.45 -0.15 -0.20 -0.36 -0.11 0.08 0.12 0.13 0.47 0.35 0.34 1 0.02 -0.18 -0.17	\$pread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.18 0.26 0.42 0.49 0.02 1 0.06 -0.35	-0.16 -0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17 0.10 -0.16 -0.06	Curve 0.33 0.12 0.30 -0.23 0.41 0.20 0.00 -0.76 -0.10 -0.22 -0.30 -0.17 -0.35 -0.04	Funds 0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.18 0.10 -0.43 -0.47 -0.34 -0.34 -0.15	0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.41 -0.63 -0.48 -0.63 -0.47 -0.33 -0.47	- CTA -0.35 -0.34 -0.34 -0.12 -0.33 -0.17 -0.10 -0.05 -0.22 -0.39 -0.24 -0.16 -0.43	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06 -0.10 -0.30 0.26 -0.17 -0.15	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52 -0.62 -0.43 -0.45 -0.34 -0.01	dge HFI 0.78 0.24 0.46 -0.25 0.89 0.31 -0.28 -0.59 -0.68 -0.59 -0.45 -0.03 0.41	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.42 -0.25 -0.41 -0.71 -0.53 -0.23 -0.52 -0.03 0.41	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.61 -0.35 -0.51 0.40	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.45 -0.70 -0.61 -0.42 -0.52 -0.04 0.37	Bonds 0.06 0.32 -0.25 -0.01 0.21 0.04 0.08 -0.24 -0.05 -0.11 -0.23 -0.29 -0.17 0.20 0.16
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX USD - TWX 1/(USD/EUR) Corporate Credit Spread Credit Spread	1 0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09 -0.24 -0.46 -0.54 -0.37 -0.16	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34 -0.15 -0.02 0.16	0.51 0.03 1 -0.54 0.42 0.18 0.04 -0.18 -0.22 -0.26 -0.51 -0.20 -0.43 -0.21	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18 0.45 0.06 0.36 0.11	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75 -0.62 -0.54 -0.54	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22 -0.11 -0.30 -0.05	style -0.01 -0.33 0.04 0.09 0.36 -0.20 1 -0.41 -0.17 -0.03 -0.11 -0.17 -0.08 -0.19 -0.16	-0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 1 0.08 0.08 0.22 0.29 0.12 0.26 0.03	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 0.17 0.08 1 0.12 0.15 0.08 0.13 0.18 -0.11	onth Vol -0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03 0.012 1 0.65 0.22 0.47 0.26 -0.13	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1 0.41 0.35 0.42 -0.17	- TWX -0.54 -0.34 -0.51 -0.62 -0.22 -0.17 -0.29 -0.08 -0.22 -0.14 -1 -0.34 -0.49 -0.10	R) -0.45 -0.15 -0.20 0.06 -0.36 -0.11 0.08 0.12 0.13 0.47 0.35 0.34 1 0.02 -0.18	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.18 0.26 0.42 0.49 0.002	-0.16 -0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17 0.10 -0.10 -0.10	0.33 0.12 0.30 0.23 0.41 0.24 0.00 0.00 -0.76 -0.10 -0.22 -0.30 -0.17 -0.35 -0.04	0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.18 -0.10 -0.43 -0.47 -0.34 -0.34 -0.15 -0.07	0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.41 0.28 -0.48 -0.63 -0.47 -0.33	- CTA -0.35 -0.34 -0.34 -0.12 -0.33 -0.17 -0.10 -0.05 -0.33 -0.05 -0.22 -0.39 -0.24 -0.41 -0.16	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06 -0.10 0.30 0.26 -0.17	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52 -0.43 -0.44 -0.34	0.78 0.24 0.46 -0.25 0.89 0.35 0.12 -0.31 -0.28 -0.55 -0.68 -0.59 -0.45 -0.52 -0.03	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.25 -0.41 -0.71 -0.53 -0.52 -0.03	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48 -0.75 -0.61 -0.35 -0.53 -0.01	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.70 -0.61 -0.42 -0.52 -0.04	Bonds 0.06 0.32 -0.25 -0.01 0.21 0.04 0.08 -0.24 -0.05 -0.11 -0.23 -0.29 -0.17 0.20 0.16 0.04
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX USD - TWX I/USD/EUR) Corporate Credit Spread Credit Spread Slope of Yield Curve Avg All Funds	1 0.45 0.51 -0.22 0.67 -0.24 -0.01 -0.08 -0.09 -0.24 -0.46 -0.54 -0.37 -0.16	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34 -0.15 -0.02 0.16 0.12 0.10	0.51 0.03 1 0.54 0.42 0.18 -0.08 -0.22 -0.26 -0.51 -0.20 -0.43 -0.21 0.30 0.19	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18 0.45 0.06 0.36 0.11 -0.23 -0.08	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75 -0.62 -0.36 -0.54 -0.05 -0.41	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.04 -0.02 -0.11 -0.30 -0.04 -0.22 -0.11 -0.30 -0.04 -0.22 -0.11	style -0.01 -0.33 -0.04 -0.20 -0.41 -0.17 -0.03 -0.19 -0.19 -0.16 -0.20 -0.20 -0.20 -0.20 -0.20 -0.28	-0.08 0.04 -0.18 0.33 -0.43 -0.04 1 0.08 0.02 0.29 0.12 0.26 0.03 0.00 -0.18	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 0.17 0.08 1 0.12 0.15 0.08 0.13 0.13 -0.11 -0.76 0.10	onth Vol -0.24 0.18 -0.22 0.08 -0.48 -0.03 0.08 0.12 1 0.65 0.22 0.47 0.26 -0.10 -0.10 -0.43	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1 0.41 0.35 0.42 -0.17 -0.22	- TWX -0.54 -0.34 -0.51 -0.62 -0.22 -0.17 -0.29 -0.29 -0.41 -1 0.34 -0.34 -0.30 -0.30	R) -0.45 -0.15 -0.20 0.06 -0.36 -0.11 0.08 0.12 0.13 0.47 0.35 0.34 1 0.02 -0.18 -0.17 -0.34	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.18 0.26 0.42 0.49 0.02 1 0.06 -0.35 -0.15	Spread -0.16 0.16 0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17 0.10 -0.18 0.06 1 -0.04 -0.07	Curve 0.33 0.12 0.30 -0.23 0.41 0.24 0.00 -0.76 -0.10 -0.25 -0.30 -0.17 -0.35 -0.04	Funds 0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.18 0.10 -0.43 -0.47 -0.34 -0.15 -0.07 -0.07	0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.41 -0.63 -0.48 -0.63 -0.47 -0.33 -0.47	0.35 -0.34 -0.34 -0.12 -0.33 -0.17 -0.10 -0.05 -0.33 -0.25 -0.39 -0.24 -0.41 -0.43 -0.43 -0.32	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06 -0.10 -0.30 0.26 -0.17 -0.15 0.52	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52 -0.43 -0.45 -0.34 -0.01 0.19	dge HFI 0.78 0.24 0.46 -0.25 0.89 0.35 0.12 -0.31 -0.28 -0.55 -0.68 -0.59 -0.45 -0.52 -0.31	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.42 -0.25 -0.41 -0.71 -0.53 -0.23 -0.52 -0.04 1 0.48	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48 -0.75 -0.53 -0.53 -0.05 0.54	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.75 -0.61 -0.42 -0.52 -0.04 0.37 0.53	Bonds 0.06 0.32 -0.25 -0.01 0.21 0.04 0.08 -0.24 -0.05 -0.11 -0.23 -0.29 -0.17 0.20 0.16 0.04 0.02 -0.13
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX USD - TWX I/USD/EUR) Corporate Credit Spread Credit Spread Slope of Yield Curve Avg All Funds Emanagers Emerging CTA Eurekahedge CTA	1 0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09 -0.24 -0.46 -0.54 -0.45 -0.37 -0.16 0.33 0.52 0.67 -0.35	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34 -0.15 -0.02 0.16 0.12 0.10 0.08 -0.34 -0.34 -0.34 -0.34 -0.34 -0.34 -0.34 -0.34 -0.34 -0.34 -0.34 -0.35 -0.35 -0.34 -0.35 -0.34 -0.35 -0.34 -0.35 -0.34 -0.35 -0.34 -0.35 -0.35 -0.34 -0.35 -0.	0.51 0.03 1 -0.54 0.42 0.18 -0.04 -0.18 -0.22 -0.26 -0.51 -0.20 -0.43 -0.21 0.30 0.19 0.43 -0.34	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18 0.45 0.06 0.36 0.11 -0.23 -0.08 -0.22 -0.08	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75 -0.62 -0.54 -0.02 0.41 0.55 0.84 -0.83	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22 -0.11 -0.30 -0.05 0.24 0.19 0.21 0.17 0.16	style -0.01 -0.33 -0.04 0.09 0.36 -0.20 1 -0.41 -0.17 -0.03 -0.11 -0.17 -0.08 -0.19 -0.16 0.00 0.28 0.37 -0.01 -0.08	0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 1 0.08 0.22 0.29 0.12 0.26 0.03 -0.12 0.26 0.03	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 0.17 0.08 1 0.12 0.15 0.08 0.13 0.18 -0.11 -0.76 0.10 0.28 0.33 0.19	onth Vol -0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03 0.08 0.12 1 0.65 0.22 0.47 0.26 -0.13 -0.14 -0.43 -0.43 -0.43 -0.43	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.41 0.35 0.42 -0.17 -0.22 -0.47 -0.62 -0.47 -0.62 -0.47 -0.62 -0.47 -0.62 -0.47 -0.62 -0.47 -0.62 -0.47 -0.62 -0.47 -0.62 -0.47 -0.62 -0.47 -0.62 -0.47 -0.62 -0.47 -0.62 -0.65	SD - TWX -0.54 -0.34 -0.51 -0.62 -0.22 -0.17 -0.29 -0.08 -0.22 -0.41 -1 -0.34 -0.49 -0.30 -0.30 -0.30 -0.30 -0.39 -0.39 -0.39	R) -0.45 -0.15 -0.20 -0.06 -0.36 -0.11 -0.08 -0.13 -0.47 -0.35 -0.34 -0.17 -0.34 -0.33 -0.24 -0.33 -0.24 -0.30 -0.	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.42 0.49 0.02 1 0.06 -0.35 -0.15 -0.41 0.41	Spread -0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17 0.10 -0.18 0.06 1 -0.04 -0.07 0.35 -0.16	Curve 0.33 0.12 0.30 -0.23 0.41 0.24 0.00 0.00 -0.76 -0.10 -0.22 -0.30 -0.17 -0.35 -0.04 1 -0.02 -0.02	Funds 0.52 0.10 0.19 -0.08 0.55 0.19 0.28 0.10 0.10 -0.47 -0.34 -0.34 -0.15 -0.07 -0.07 -0.02 1 0.96 0.32 0.52	0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.48 -0.63 -0.47 -0.33 -0.41 0.35 -0.02 0.96 1 0.47	0.35 -0.34 -0.34 -0.34 -0.17 -0.10 -0.05 -0.22 -0.33 -0.05 -0.22 -0.39 -0.24 -0.41 -0.43 -0.43 -0.43 -0.43 -0.43 -0.32	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06 -0.10 -0.30 0.26 -0.17 -0.15 0.52 0.43 0.31	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52 -0.43 -0.43 -0.01 0.76 0.97	dge HFI 0.78 0.24 0.46 -0.25 0.89 0.35 0.12 -0.35 -0.68 -0.55 -0.68 -0.52 -0.41 0.67 0.95 -0.25	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.42 -0.25 -0.41 -0.71 -0.53 -0.52 -0.03 0.48 0.77 -0.30 -0.00	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48 -0.75 -0.53 -0.53 -0.05 0.40 0.54 0.82 -0.33 0.07	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.70 -0.61 -0.42 -0.52 -0.04 0.37 0.53 0.87 -0.39 0.09	Bonds 0.06 0.32 -0.25 -0.01 0.04 0.08 -0.24 -0.05 -0.11 -0.23 -0.29 -0.17 0.20 0.16 0.04 0.02 -0.13
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX USD - TWX 1/(USD/EUR) Corporate Credit Spread Credit Spread Slope of Yield Cuve Avg All Funds Emerging CTA Eurekahedge CTA Emerging HF	1 0.45 -0.51 -0.22 -0.67 -0.24 -0.01 -0.09 -0.24 -0.45 -0.54 -0.45 -0.33 -0.56 -0.33 -0.67 -0.35	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.02 -0.34 -0.15 -0.02 0.16 0.12 0.10 0.08 -0.34 0.34 0.34 0.11 0.03	0.51 0.03 1 -0.54 0.42 0.18 0.04 -0.18 -0.08 -0.22 -0.26 -0.51 -0.20 -0.30 0.19 0.33 -0.21 0.30 0.34 0.34	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.45 0.06 0.36 0.11 -0.23 -0.08 -0.22 0.04 -0.09	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.76 -0.62 -0.36 -0.54 -0.04 -0.04 -0.03 0.84 -0.33 0.88	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22 -0.11 -0.30 -0.25 0.24 0.19 0.21 -0.16 0.27	Style -0.01 -0.33 -0.04 -0.09 -0.36 -0.20 -1 -0.41 -0.17 -0.03 -0.11 -0.17 -0.08 -0.19 -0.16 -0.00 -0.28 -0.37 -0.10 -0.08 -0.10 -0.08 -0.10 -0.10 -0.10 -0.10 -0.10 -0.10	0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 0.08 0.08 0.22 0.29 0.12 0.29 0.12 0.03 0.00 -0.14 0.05 0.05	-0.09 -0.07 -0.08 -0.14 -0.26 -0.14 -0.17 -0.08 1 -0.15 -0.15 -0.18 -0.11 -0.76 -0.10 -0.28 -0.33 -0.16	onth Vol -0.24 -0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03 0.12 1 0.65 0.22 0.47 -0.13 -0.10 -0.43 -0.48 0.05 -0.24	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 1 0.41 0.42 -0.17 -0.22 -0.47 -0.63 0.22 -0.06 -0.62	SD - TWX -0.54 -0.34 -0.51 0.45 -0.62 -0.22 -0.17 0.29 0.82 0.41 1 0.34 -0.49 0.10 -0.30 -0.34 -0.47 0.39 -0.34	R) -0.45 -0.20 0.06 -0.36 -0.11 0.08 0.13 0.47 0.35 0.34 1 0.02 -0.18 -0.17 -0.33 0.24 -0.30 0.24 -0.30 -0.45	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.18 0.42 0.49 0.05 1 0.06 -0.35 -0.15 -0.41 0.41 0.42	Spread -0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17 0.10 -0.18 0.06 1 -0.04 -0.07 0.35 -0.16 -0.17 -0.01	Curve 0.33 0.12 0.30 -0.23 0.41 0.24 0.00 0.00 -0.76 -0.10 -0.22 -0.30 -0.17 -0.35 -0.04 1 -0.02 -0.02 -0.43 -0.15	Funds 0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.18 0.10 -0.43 -0.34 -0.34 -0.34 -0.34 -0.07 -0.02 1 0.96 0.32 0.52 0.76	8 0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.41 0.28 -0.63 -0.48 -0.63 -0.41 0.35 -0.92 0.92 0.92 0.94 0.93 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94	CTĀ -0.35 -0.34 -0.34 -0.12 -0.33 -0.17 -0.10 -0.05 -0.32 -0.39 -0.41 -0.16 -0.43 -0.32 -0.47 -1 -0.31 -0.18	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06 -0.10 -0.30 0.26 -0.17 -0.15 0.52 0.43 0.31 1 1 0.36	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.62 -0.62 -0.43 -0.45 -0.34 -0.01 0.76 0.97 -0.18	dge HFI 0.78 0.24 0.46 -0.25 0.89 0.35 0.12 -0.31 -0.28 -0.55 -0.68 -0.59 -0.45 -0.52 -0.03 0.41 0.67 0.95 -0.29 0.35	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.25 -0.41 -0.53 -0.53 -0.53 -0.53 0.41 0.41 0.41 0.41 0.41 0.41 0.41 0.41	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48 -0.35 -0.61 -0.35 -0.01 0.40 0.54 0.82 -0.33 0.07 0.78	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.70 -0.61 -0.42 -0.61 -0.42 -0.53 0.87 -0.39 0.09 0.85	Bonds 0.00 0.32 -0.25 -0.07 0.22 0.04 0.08 -0.24 -0.05 -0.11 -0.25 -0.16 0.04 0.02 -0.11 -0.25 -0.10 0.04
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX USD - TWX 1/(USD/EUR) Corporate Credit Spread Slope of Yield Curve Avg All Funds Emanagers Emerging CTA Eurekahedge CTA Emerging HF Eurekahedge HFI	1 0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09 -0.24 -0.45 -0.45 -0.37 -0.16 0.33 0.52 0.67 -0.35 0.43	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34 -0.15 -0.02 0.16 0.12 0.10 0.08 0.09 0.12 0.10 0.08 0.09 0.12 0.10 0.09 0.12 0.10 0.09 0.12 0.10 0.09 0.0	0.51 0.03 1 -0.54 0.42 0.18 -0.08 -0.22 -0.26 -0.51 -0.20 -0.43 -0.21 0.30 0.19 0.43 -0.34 0.01	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18 0.45 0.06 0.36 0.11 -0.23 -0.08 -0.22 0.12 0.04 -0.09	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75 -0.36 -0.54 -0.05 -0.54 -0.05 0.41 0.05 0.80 0.80 0.80	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22 -0.11 -0.30 -0.05 0.24 0.19 0.21 -0.17 0.16 0.27 -0.17	style -0.01 -0.33 0.04 0.09 0.36 -0.20 1 -0.41 0.17 -0.03 -0.11 -0.17 0.08 -0.19 -0.16 0.00 0.28 0.37 0.10 -0.08 0.10 -0.08 0.10	0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 1 0.08 0.29 0.12 0.29 0.12 0.29 0.14 0.03 0.00 -0.14 0.05 0.05	-0.09 -0.07 -0.08 -0.14 -0.26 -0.14 -0.17 -0.08 1 -0.15 -0.08 -0.11 -0.76 -0.11 -0.76 -0.28 -0.33 -0.16 -0.28	onth Vol -0.24 -0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03 0.08 0.12 1 0.65 -0.13 -0.10 -0.43 -0.48 -0.05 -0.24 -0.55 -0.55	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1 0.41 0.35 0.42 -0.17 -0.22 -0.63 0.22 -0.66 -0.63	SD - TWX -0.54 -0.34 -0.51 0.45 -0.62 -0.22 -0.17 0.29 0.08 0.22 0.41 1 0.34 0.49 0.10 -0.30 -0.34 -0.47 0.39 -0.14 -0.43	R) -0.45 -0.20 0.06 -0.36 -0.11 0.08 0.12 0.13 0.47 0.35 0.34 1 0.02 -0.18 -0.17 -0.34 -0.30 0.24 -0.30 -0.45 -0.45 -0.45	Spread -0.37 -0.02 -0.43 0.36 -0.50 -0.19 0.26 0.18 0.26 0.49 0.02 1 0.06 -0.35 -0.15 -0.41 0.26 -0.34 -0.52	Spread -0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17 -0.04 -0.07 -0.16 -0.18 -0.04 -0.07 -0.05 -0.16 -0.17 -0.01	Curve 0.33 0.12 0.30 -0.23 0.41 0.24 0.00 0.00 -0.76 -0.10 -0.20 -0.30 -0.17 -0.35 -0.04 1 -0.02 -0.43 -0.15 0.19 0.41	0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.10 -0.43 -0.47 -0.34 -0.34 -0.17 -0.07 -0.02 1 0.96 0.32 0.52 0.52	0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.41 0.28 -0.48 -0.63 -0.47 -0.33 -0.47 -0.35 -0.02 0.96 1 0.47 0.43 0.95	0.35 -0.34 -0.34 -0.34 -0.17 -0.10 -0.05 -0.33 -0.05 -0.24 -0.43 -0.43 -0.32 -0.47 -0.31 -0.31 -0.31 -0.29	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06 -0.10 -0.30 0.26 -0.17 -0.15 0.52 0.43 0.31 1 0.36 0.35	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52 -0.63 -0.45 -0.34 -0.19 0.76 0.97 -0.18 0.36 1 0.90	dge HFI 0.78 0.24 0.46 -0.25 0.89 0.35 0.12 -0.31 -0.28 -0.55 -0.69 -0.45 -0.59 -0.45 -0.59 -0.33 0.41 0.67 0.95 -0.29 0.35 0.90	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.42 -0.25 -0.41 -0.71 -0.53 -0.52 -0.03 0.48 0.77 -0.30 -0.00	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.61 -0.35 -0.51 0.40 0.54 0.82 -0.33 0.07 0.78 0.87	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.70 -0.61 -0.42 -0.52 -0.037 0.53 0.87 -0.39 0.09 0.85 0.92	Bonds 0.00 0.32 -0.25 -0.01 0.04 0.08 -0.22 -0.11 -0.23 -0.29 -0.17 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.0
Oil Emerging Mkt Market Size Style Style Momentum Cash Intra Month Vol VIX USD - TWX 1/(USD/EUR) Corporate Credit Spread Credit Spread Slope of Yield Curve Avg All Funds Emanagers Emerging CTA Eurekahedge CTA Emerging HF Eurekahedge HFI S&P500 TR	1 0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09 -0.24 -0.46 -0.45 -0.45 -0.67 0.67 -0.37 -0.66 0.37 -0.66 0.37 -0.66 0.37	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34 -0.15 -0.02 0.16 0.12 0.10 0.08 -0.33 0.04 -0.35 -0.05 -0.33 0.04 -0.15 -0.02 -0.15 -0.02 0.16 -0.12 0.10 0.08 -0.33 -0.02 -0.34 -0.05 -0.02 -0.15 -0.02 -0.16 -0.17 -0.02 -0.16 -0.10 -0.02 -0.10 -0.02 -0.10 -0.02 -0.10 -0.03 -0.02 -0.10 -0.02 -0.10 -0.02 -0.10 -0.03 -0.02 -0.03 -0.02 -0.03 -0.03 -0.03 -0.03 -0.04 -0.05 -0.02 -0.03 -	0.51 0.03 1 -0.54 0.42 0.18 -0.04 -0.18 -0.02 -0.20 -0.51 -0.20 -0.43 -0.21 0.30 0.19 0.43 -0.34 0.01 0.36 0.43	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18 0.45 0.06 0.31 -0.23 -0.08 -0.22 0.12 0.04 -0.09	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75 -0.62 -0.36 -0.54 -0.04 0.55 0.81 0.83 0.80 0.80	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22 -0.11 -0.30 -0.024 0.19 0.21 -0.17 0.16 0.27 0.35	style -0.01 -0.33 -0.04 -0.09 -0.36 -0.20 -1 -0.41 -0.17 -0.03 -0.11 -0.17 -0.08 -0.37 -0.10 -0.08 -0.16 -0.08 -0.	0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 0.08 0.08 0.02 0.22 0.29 0.12 0.26 0.03 0.00 -0.18 -0.41 0.05 -0.22 -0.21 -0.42	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 -0.17 0.08 1 0.12 0.15 0.08 0.13 0.18 -0.11 -0.76 0.10 0.28 -0.33 0.19 -0.16 -0.28	onth Vol -0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03 0.08 0.12 1 0.65 0.22 0.47 0.26 -0.13 -0.10 -0.43 -0.48 0.05 -0.24 -0.52 -0.52 -0.41	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1 0.41 0.42 -0.17 -0.22 -0.47 -0.63 0.22 -0.63 0.22 -0.63 -0.22 -0.66 -0.63 -0.65 -	SD - TWX -0.54 -0.34 -0.51 0.45 -0.62 -0.22 -0.17 0.29 0.22 0.41 0.34 0.49 0.10 -0.30 -0.30 -0.34 -0.47 -0.43 -0.43 -0.53	R) -0.45 -0.20 0.06 -0.36 -0.11 0.08 0.12 0.13 0.47 0.35 0.34 1 0.02 -0.18 -0.17 -0.34 -0.33 0.24 -0.34 -0.34 -0.35 0.24 -0.30 -0.45 -0.45 -0.23	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.42 0.49 0.02 1 0.06 -0.35 -0.15 -0.41 0.26 -0.34 -0.52 -0.52	Spread -0.16 -0.21 0.11 -0.02 -0.05 -0.16 -0.21 0.11 -0.03 -0.17 0.10 -0.18 -0.06 1 -0.04 -0.07 0.35 -0.17 -0.01 -0.03	Curve 0.33 0.12 0.30 0.24 0.00 0.00 0.76 0.10 0.02 0.30 0.17 0.35 0.04 1 0.02 0.02 0.15 0.19 0.41	0.52 0.10 0.19 0.28 0.55 0.19 0.28 0.10 0.10 0.10 0.18 0.10 0.47 0.34 0.15 0.07 0.07 0.05 0.05 0.05 0.05 0.05 0.0	0.67 0.08 0.43 -0.21 0.37 -0.41 0.28 -0.63 -0.47 -0.35 -0.04 0.35 -0.09 0.96 1 0.47 0.43 0.97 0.97	CTĀ -0.35 -0.34 -0.34 -0.33 -0.17 -0.10 -0.05 -0.33 -0.17 -0.10 -0.5 -0.33 -0.17 -0.16 -0.43 -0.16 -0.41 -0.16 -0.43 -0.18 -0.29 -0.30	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.26 -0.10 -0.36 -0.17 -0.15 0.52 0.43 0.31 1 0.36 0.35 -0.03	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.52 -0.16 -0.52 -0.43 -0.45 -0.34 -0.01 0.19 0.76 0.97 -0.18 0.36 1 0.90 0.71	dge HFI 0.78 0.24 0.46 0.25 0.89 0.35 0.12 -0.31 -0.28 -0.59 -0.68 -0.59 -0.45 -0.52 -0.03 0.41 0.67 0.95 -0.29 0.35 0.90 1 0.80	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.25 -0.41 -0.71 -0.53 -0.52 -0.03 0.48 0.77 -0.30 0.71 0.48 0.77 -0.30 0.71 0.48 0.77 -0.30 0.71 0.48 0.77 -0.30 0.71 0.48 0.77 -0.30 0.77 -0.30 -0.30 -0.	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48 -0.35 -0.61 -0.35 -0.01 0.40 0.54 0.82 -0.33 0.07 0.78	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.45 -0.52 -0.04 0.37 0.87 -0.39 0.85 0.92	Bonds 0.06 0.32 -0.25 -0.01 0.04 -0.05 -0.11 -0.23 -0.29 -0.17 0.20 0.16 0.04 0.02 -0.13 -0.22 0.03 -0.21 -0.05
Oil Emerging Mkt Market Size Style Momentum Cash Intra Month Vol VIX USD - TWX 1/(USD/EUR) Corporate Credit Spread Credit Spread Slope of Yield Cuve Avg All Funds Emanagers Emerging CTA Eurekahedge CTA Emerging HF Eurekahedge HFI S&P50 TR MSCI World	1 0.45 -0.51 -0.22 -0.67 -0.24 -0.01 -0.09 -0.24 -0.45 -0.54 -0.45 -0.33 -0.57 -0.16 -0.35 -0.67 -0.35 -0.67 -0.35	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34 -0.15 -0.02 0.16 0.12 0.10 0.08 -0.34 0.01 0.08 -0.34 0.01 0.08 -0.08 -0.08 -0.09 0.08 -0.09 0.0	0.51 0.03 1 -0.54 0.42 0.48 0.04 -0.08 -0.22 -0.26 -0.51 -0.20 -0.43 -0.30 0.19 0.43 -0.34 0.04 0.46 0.46	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.45 0.06 0.36 0.11 -0.23 -0.08 -0.22 0.12 0.04 -0.09 -0.25	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.48 -0.76 -0.62 -0.36 -0.54 -0.04 -0.02 0.41 0.55 0.84 -0.33 0.89 0.89 0.89 0.89	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22 -0.11 -0.30 -0.05 0.24 0.19 0.21 -0.16 0.27 0.35 -0.01 0.06	style -0.01 -0.33 -0.04 -0.09 -0.36 -0.20 -1 -0.41 -0.17 -0.03 -0.11 -0.17 -0.08 -0.16 -0.09 -0.16 -0.00 -0.28 -0.37 -0.10 -0.08 -0.16 -0.12 -0.38	0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 0.08 0.02 0.29 0.12 0.03 0.00 -0.18 -0.41 0.05 0.22 -0.31	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 0.17 0.12 0.15 0.08 0.13 0.18 -0.11 -0.76 0.10 0.28 0.33 0.19 -0.16 -0.28 -0.28 -0.28	onth Vol -0.24 -0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03 0.12 1 0.65 0.22 0.47 0.26 -0.13 -0.10 -0.43 -0.48 0.05 -0.25 -0.55 -0.48	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1 0.41 0.35 0.42 -0.17 -0.22 -0.47 -0.63 0.22 -0.63 0.22 -0.66 -0.62 -0.62 -0.68 -0.75	SD - TWX -0.54 -0.54 -0.51 0.45 -0.62 -0.22 -0.17 0.29 0.08 0.22 0.41 1 0.34 0.10 -0.34 -0.47 0.39 -0.47 0.39 -0.47	R) -0.45 -0.20 0.06 -0.36 -0.31 0.47 0.35 0.34 1 0.02 -0.18 -0.17 -0.33 0.24 -0.30 -0.45 -0.45 -0.45 -0.45 -0.45 -0.35	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.18 0.26 0.49 0.02 1 0.06 -0.35 -0.41 0.41 0.41 0.52 -0.53	Spread -0.16 -0.21 0.11 -0.02 -0.05 -0.16 0.03 -0.11 -0.13 -0.17 -0.10 -0.18 0.06 1 -0.04 -0.07 -0.35 -0.16 -0.17 -0.01 -0.03 -0.01	Curve 0.33 0.12 0.30 -0.23 0.41 0.24 0.00 0.00 -0.76 -0.10 -0.22 -0.30 -0.17 -0.35 -0.04 1 -0.02 -0.43 -0.19 0.41 0.41 0.40	0.52 0.10 0.19 -0.08 0.55 0.19 0.28 -0.18 0.10 -0.43 -0.34 -0.34 -0.34 -0.34 -0.07 -0.08 -	0.67 0.08 0.43 -0.22 0.84 0.21 0.37 -0.47 -0.43 -0.47 -0.33 -0.47 -0.35 -0.02 0.96 1 0.47 0.47 0.49 0.97 0.95	CTĀ -0.35 -0.34 -0.34 -0.34 -0.17 -0.17 -0.10 -0.05 -0.33 -0.17 -0.10 -0.43 -0.24 -0.43 -0.30 -0.31 -0.18 -0.29 -0.30 -0.33	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.24 -0.06 -0.10 -0.30 -0.30 -0.17 -0.15 0.52 0.43 0.31 1 0.36 0.35 -0.03	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.22 -0.16 -0.52 -0.43 -0.43 -0.44 -0.01 0.19 0.76 0.97 -0.18 0.36 1 0.90 0.77	dge HFI 0.78 0.24 0.46 -0.25 0.89 0.35 0.12 -0.31 -0.28 -0.55 -0.68 -0.59 -0.45 -0.52 -0.03 0.41 0.67 0.95 -0.29 0.35 0.90 1 0.80 0.87	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.25 -0.41 -0.53 -0.25 -0.30 -0.	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.48 -0.45 -0.53 -0.01 0.40 0.54 0.82 -0.33 0.07 0.78 0.87 0.98 1	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.70 -0.61 -0.42 -0.52 -0.037 0.53 0.87 -0.39 0.09 0.85 0.92	Bonds 0.06 0.32 -0.25 -0.01 0.04 0.08 -0.24 -0.05 -0.11 -0.23 -0.29 -0.17 0.20 0.16 0.04 0.02 -0.13 -0.22 0.03 0.04 0.02
Oil Emerging Mkt Market Size Style Style Momentum Cash Intra Month Vol VIX USD - TWX 1/(USD/EUR) Corporate Credit Spread Credit Spread Slope of Yield Curve Avg All Funds Emanagers Emerging CTA Eurekahedge CTA Eurekahedge HFI S&P500 TR	1 0.45 0.51 -0.22 0.67 0.24 -0.01 -0.08 -0.09 -0.24 -0.46 -0.45 -0.45 -0.67 0.67 -0.37 -0.66 0.37 -0.66 0.37 -0.67	0.45 1 0.03 -0.05 0.09 0.26 -0.33 0.04 -0.07 0.18 0.02 -0.34 -0.15 -0.02 0.16 0.12 0.10 0.08 -0.33 0.04 -0.35 -0.05 -0.33 0.04 -0.15 -0.02 -0.15 -0.02 0.16 -0.12 0.10 0.08 -0.33 -0.02 -0.34 -0.05 -0.02 -0.15 -0.02 -0.16 -0.17 -0.02 -0.16 -0.10 -0.02 -0.10 -0.02 -0.10 -0.02 -0.10 -0.03 -0.02 -0.10 -0.02 -0.10 -0.02 -0.10 -0.03 -0.02 -0.03 -0.02 -0.03 -0.03 -0.03 -0.03 -0.04 -0.05 -0.02 -0.03 -	0.51 0.03 1 -0.54 0.42 0.18 -0.04 -0.18 -0.02 -0.20 -0.51 -0.20 -0.43 -0.21 0.30 0.19 0.43 -0.34 0.01 0.36 0.43	-0.22 -0.05 -0.54 1 -0.22 -0.26 0.09 0.33 0.14 0.08 0.18 0.45 0.06 0.31 -0.23 -0.08 -0.22 0.12 0.04 -0.09	0.67 0.09 0.42 -0.22 1 0.10 0.36 -0.43 -0.26 -0.48 -0.75 -0.62 -0.36 -0.54 -0.04 0.55 0.81 0.83 0.80 0.80	0.24 0.26 0.18 -0.26 0.10 1 -0.20 -0.03 -0.14 -0.05 -0.04 -0.22 -0.11 -0.30 -0.024 0.19 0.21 -0.17 0.16 0.27 0.35	style -0.01 -0.33 -0.04 -0.09 -0.36 -0.20 -1 -0.41 -0.17 -0.03 -0.11 -0.17 -0.08 -0.37 -0.10 -0.08 -0.16 -0.08 -0.	0.08 0.04 -0.18 0.33 -0.43 -0.03 -0.41 0.08 0.08 0.02 0.22 0.29 0.12 0.26 0.03 0.00 -0.18 -0.41 0.05 -0.22 -0.21 -0.42	-0.09 -0.07 -0.08 0.14 -0.26 -0.14 -0.17 0.08 1 0.12 0.15 0.08 0.13 0.18 -0.11 -0.76 0.10 0.28 -0.33 0.19 -0.16 -0.28	onth Vol -0.24 0.18 -0.22 0.08 -0.48 -0.05 -0.03 0.08 0.12 1 0.65 0.22 0.47 0.26 -0.13 -0.10 -0.43 -0.48 0.05 -0.24 -0.52 -0.52 -0.41	-0.46 0.02 -0.26 0.18 -0.75 -0.04 -0.11 0.22 0.15 0.65 1 0.41 0.42 -0.17 -0.22 -0.47 -0.63 0.22 -0.63 0.22 -0.63 -0.22 -0.66 -0.63 -0.65 -	SD - TWX -0.54 -0.34 -0.51 0.45 -0.62 -0.22 -0.17 0.29 0.22 0.41 0.34 0.49 0.10 -0.30 -0.30 -0.34 -0.47 -0.43 -0.43 -0.53	R) -0.45 -0.20 0.06 -0.36 -0.11 0.08 0.12 0.13 0.47 0.35 0.34 1 0.02 -0.18 -0.17 -0.34 -0.33 0.24 -0.34 -0.34 -0.35 0.24 -0.30 -0.45 -0.45 -0.23	Spread -0.37 -0.02 -0.43 0.36 -0.54 -0.30 -0.19 0.26 0.42 0.49 0.02 1 0.06 -0.35 -0.15 -0.41 0.26 -0.34 -0.52 -0.52	Spread -0.16 -0.21 0.11 -0.02 -0.05 -0.16 -0.21 0.11 -0.03 -0.17 0.10 -0.18 -0.06 1 -0.04 -0.07 0.35 -0.17 -0.01 -0.03	Curve 0.33 0.12 0.30 0.24 0.00 0.00 0.76 0.10 0.02 0.30 0.17 0.35 0.04 1 0.02 0.02 0.15 0.19 0.41	0.52 0.10 0.19 0.28 0.55 0.19 0.28 0.10 0.10 0.10 0.18 0.10 0.47 0.34 0.15 0.07 0.07 0.05 0.05 0.05 0.05 0.05 0.0	0.67 0.08 0.43 -0.21 0.37 -0.41 0.28 -0.63 -0.47 -0.35 -0.03 -0.41 0.35 -0.09 0.96 1 0.47 0.43 0.97 0.97	CTĀ -0.35 -0.34 -0.34 -0.33 -0.17 -0.10 -0.05 -0.33 -0.17 -0.10 -0.5 -0.33 -0.17 -0.16 -0.43 -0.16 -0.41 -0.16 -0.43 -0.18 -0.29 -0.30	dge CTA 0.43 0.31 0.01 0.04 0.08 0.16 -0.08 0.20 0.19 -0.26 -0.10 -0.36 -0.17 -0.15 0.52 0.43 0.31 1 0.36 0.35 -0.03	HF 0.67 0.12 0.36 -0.09 0.80 0.27 0.16 -0.52 -0.16 -0.52 -0.43 -0.45 -0.34 -0.01 0.19 0.76 0.97 -0.18 0.36 1 0.90 0.71	dge HFI 0.78 0.24 0.46 0.25 0.89 0.35 0.12 -0.31 -0.28 -0.59 -0.68 -0.59 -0.45 -0.52 -0.03 0.41 0.67 0.95 -0.29 0.35 0.90 1 0.80	TR 0.60 0.03 0.43 -0.19 0.97 -0.01 0.42 -0.25 -0.41 -0.71 -0.53 -0.52 -0.03 0.48 0.77 -0.30 0.71 0.48 0.77 -0.30 0.71 0.48 0.77 -0.30 0.71 0.48 0.77 -0.30 0.71 0.48 0.77 -0.30 0.77 -0.30 -0.30 -0.	World 0.66 0.08 0.42 -0.21 1.00 0.06 0.38 -0.43 -0.25 -0.61 -0.35 -0.51 0.40 0.54 0.82 -0.33 0.07 0.78 0.87	Markets 0.71 0.18 0.42 -0.20 0.93 0.21 0.17 -0.42 -0.28 -0.45 -0.45 -0.52 -0.04 0.37 0.87 -0.39 0.85 0.92	Bonds 0.06 0.32 -0.25 -0.01 0.04 -0.05 -0.11 -0.23 -0.29 -0.17 0.20 0.16 0.04 0.02 -0.13 -0.22 0.03 -0.22 0.03

Average Style Weights by Factor Model for 12 months to 31 Dec 2011	Fama & French	Capocci	Merrill Lynch	Surz	Author	Jones F	rench +	Capocci + Options	French +	Avg
R Squared	39.1	64.4	31.2	15.9	68.0	40.3	39.6	62.5	37.4	44.3
1 Market 2 Size 3 Style 4 Momentum 5 Cash 6 Gold 7 Commodities 8 Oil 9 Intra Month Vol 10 VIX 11 USD - TWX 12 1/(USD/EUR) 13 Corporate Credit Spread 14 Slope of Yield Curve	27.9 18.1 17.5 12.8 23.7	10.3 2.3 14.3 11.0 1.1 4.3 5.2 5.0 0.7 2.0 12.3	58.5 13.4		11.8 0.7 13.2 6.2 0.6 3.8 7.3 8.1 0.8 2.2 9.5 3.8 7.7	30.5 8.1	0.5 18.8 17.7 13.3 23.7	0.1 3.6 7.5 9.0 0.7 2.1 12.4 5.7 9.0 11.3	22.1 15.3 8.3 12.5 35.8	12.3 5.6 8.8 6.6 14.3 1.3 3.3 3.6 0.4 1.0 5.5 2.6 4.0 5.0
15 Credit Spread 16 Term Spread 17 Emerging Mkt 18 Small 19 Size - Large Foreign 20 Size - Mid Foreign 21 Size - Small Foreign 22 Size Foreign 23 Style - Large US 24 Style - Mid US 25 Size - Small US 26 Size US 27 Style US 28 Market + Short Call 29 Market + Long Putl 30 Market + Long Call 31 Market + Short Put 32 Liquidity	100	9.9 0.8 3.6	11.1 8.1	6.0 4.6 7.1 54.0 3.5 0.8 3.7 20.1 0.3	9.7	21.5 11.9 9.0 5.5 1.7 11.7 0.1	1.2 0.0 2.5 22.2	22.3 4.4 1.4 0.1 1.6 8.7	6.0	6.8 0.1 5.1 0.6 0.2 0.2 0.3 3.4 1.0 0.6 0.3 2.0 0.0 0.3 0.0 0.5 3.6 0.6
TOTALS	100	100	100	100	100	100	100	100	100	100

The Table on the Left shows the average style weights by factor for all funds in the Emerging Manager Database for the past 12 months.

It also shows the R Squared for each model.

Bear in mind that these sort of models are an indication only and highly susceptible to GIGO.

There is no substitute for real intelligence about the underlying holdings of a fund and these sorts of Statistical measures should at best be used as a point of departure for further discussion with the manager.

FIND FUNDS WITH	Must have input on both sides		F	RIMARY S					SORT AS	SCENDING /	DESCENDIN	G		% o	f Total AUM	22.44	
4 UDD	> Than	< Than			С	AGR						D				22.00	
HPR CAGR	-100.00 10.00	1000.00 1000.00		IO OF MAT	CHEC		53							Theo	oretical Perf	22.08	
Mean Ann. Peter: < These fields	10.00	1000.00		IO OF WAT	CHES		33										
Std Dev Ann. are any of the																	
Skew statistics in the DBS			9	AVED SEA	RCHES										Weights	% Ret	Theoretical
6 Kurt			F	ull excl Br	nks									CTA	6.62	1.52	22.95
7 Drawdown														HF	93.38	20.56	22.02
8 Stutzer (2000)				ъ о			0 0							Bmk	0.00	0.00	0.00
9 AUM \$m 0 Months				Run S	elected Se	earch	Save C	urrent Sea	ch						100.00	22.08	
v Months 1 Fund Name	,		-														
2 Firm name																	
3 Bmk Peter: < Note these	CTA	HE											Fama & French	h (Mkt-RF)	6.45	1.42	
4 Category fields are all of the			9	AVED DISI	PLAY HEA	ADERS							Fama & Frei		19.76	4.36	
5 AUM \$m Categorical fields			F	ama & Fre	nch 4 Fa	ctor Model							Fama & Fre	nch (HML)	32.44	7.16	
available for the													Fama & Fren		24.23	5.35	
7 ETFdb													Fama & Fr	ench (RF)	17.12	3.78	
<u></u> 9				Run Se	lected Hea	adings	Save Cu	ırrent Head	ers						100.00	22.08	
0			-														
<u>0</u> 1																+	
2			Analysis of	Opalesqu	e Emerai	ng Managers	HF Databas	se for 12 N	lonths fro	om 31 Jan 2	011 to 31 De	c 2011 - Use at	t own risk				
3			,	Zqu	9	5											
		otal Index Bmk	100.0	-1.58	-1.58	-1.43	5.84	-0.06	-0.10		-3.60	-3.60	31.33	14.12	0.00	9.06	45.50
	-	AVERAGES	0.4	29.23	33.07	30.53	20.56	0.42	0.98	-8.02	-9.70	-8.16	15.73	16.52	22.71	9.93	35.11
													Fama 9	Fama 9	Fama 9	Fama 9	Fama &
Fund Name	Category	AUM \$m Bmk	% ТоТ	HPR	CAGD	Mean Ann.	Std Dev	Skew	Kurt	Drawdow	CVaR (CVaR (Best	Fama & French (Mkt-	Fama & French (Fama & French (Fama &	French (RF
ruiid Naille	Category	AOW JIII DIIIK	76 101	HEK	CAGR	wean Ann.	Ann.	Skew	Kuit	n	Normal)	Fit)	RF)	SMB)	HML)	WML)	rielicii (Kr
1 Kerrisdale Capital Partners LP	Equity Long/Short	19.0 HF	0.28	198.17	198.17	120.79	40.36	1.08	-0.09	-3.41	-13.96	-7.52	86.56	13.44	0.00	0.00	0.00
2 T2 Associates Contrary #1 Pool	Multi-Asset, Equity Derivatives	1.7 CTA	0.03	112.57	112.57	91.00	57.76	1.23	2.53		-26.81	-14.96	0.00	0.00	100.00	0.00	0.00
3 Infinium Global Fund	Multi Strategy	1.0 HF	0.01	105.10	105.10		3.47	-0.25			4.11	4.10	0.00	0.00	6.80	21.02	72.18
Trade Leader Investment Program	Funds of Funds	20.0 HF	0.30	78.27	78.27	60.00	13.38	0.56	0.12		-2.96	-0.83	2.86	0.00	97.14	0.00	0.00
5 SilverBack Managed Futures	Multi-Asset	0.2 CTA	0.00	51.29	73.67	74.19	67.38	0.97	-0.04		-33.94	-23.18		0.00	100.00	0.00	0.00
6 Inventum Algorithmic Fund Limited	Multi Strategy Hard Commodity, Base & Precio	4.7 HF 2.3 CTA	0.07 0.03	16.59 55.21	58.49 55.21	48.42 74.11	20.42 84.95	1.20 0.78	2.05 0.16		-8.13 -44 41	-4.87 -30.85	62.97 0.00	0.00 75.82	24.85 0.00	0.00 24 18	12.18 0.00
7 AFB FortyEighters Gold II Program 8 Essentia fund spc Managed Futures	Multi-Asset, Multi strategy	4.8 CTA	0.03	49.47	55.21	86.96	98.45	0.78	0.16		-44.41	-30.85 -47.59	0.00	0.00	0.00	0.00	100.00
9 Transworld Forex Fund	Currency, Forex	0.1 CTA	0.07	52.40	52.40		67.07	-0.74			-34.54	-47.55 -45.97	11.38	0.00	88.62	0.00	0.00
O Stanphyl Capital Partners LP	Equity Long/Short	3.1 HF	0.05	24.74	46.07	39.94	19.14	2.02	4.13		-8.07	-5.02	8.70	0.00	0.00	91.30	0.00
Adantia Foreign Exchange Volatility Strategy Very Aggre		1.1 CTA	0.02	43.93	43.93	39.99	25.07	-1.78			-11.59	-15.86	49.29	0.00	0.00	50.71	0.00
2 Matador Holdings LLC (Diversified Commodity Program)	Multi-Asset	0.6 CTA	0.01	41.71	41.71	40.29	34.70	1.70	2.36	-8.03	-17.30	-11.77	0.00	67.49	0.00	0.00	32.51
3 Adantia Foreign Exchange Volatility Strategy Aggressive	Pr Currency, Forex	1.8 CTA	0.03	41.56	41.56	36.18	14.32	-0.10	0.40		-5.51	-5.75		0.00	0.00	0.00	100.00
4 Stanchion Fund, L.P.	Equity Long Bias	0.4 HF	0.01	36.68	40.62	35.41	13.89	1.10	0.01	-1.36	-5.32	-3.10	42.45	0.00	0.00	14.84	42.71
5 Fx SelectiveQ (FXSQ) Program	Currency	1.0 CTA	0.01	32.23	39.83	34.39	9.50	0.20	0.68		-2.79	-1.27	0.00	0.00	0.00	0.00	100.00
6 Tauri Ursa Fund	Volatility	1.0 HF 80.0 HF	0.01 1.19	26.15 33.38	36.31 33.38	33.11 29.99	19.92 13.79	-0.19 0.47	-1.45 -0.90		-9.10 -5.71	-5.27 -3.51	17.56 0.00	0.00 59.39	0.00 40.61	0.00	82.44 0.00
7 Vanguard Axis Managed Currency Series 8 Directors' Dealings Fund	Currency Equity Long/Short	0.1 HF	0.00	9.62	31.72	27.90	2.95	0.47	0.74		0.57	1.04	0.00	0.00	0.00	43.86	56.14
9 Sapphire Global Macro Fund, LP	Multi Strategy	0.1 HF	0.00	7.10	31.57	28.40	14.20	1.73	0.14	0.00	-6.09	-3.82	0.00	0.00	0.00	0.00	100.00
Adantia Foreign Exchange Volatility Strategy Moderate I		0.1 CTA	0.00	29.11	29.11	26.26	9.90	0.44	-0.48		-3.71	-2.13	24.43	0.00	0.00	0.00	75.57
1 ArbitrOption Capital Management	Multi Strategy	0.5 HF	0.01	26.94	26.94	30.81	37.02	-1.30			-19.48	-25.78	41.48	4.25	0.00	54.27	0.00
2 HCAP Global Diversified Fund	Multi Strategy	0.7 HF	0.01	26.65	26.65	24.66	13.44	1.04	-0.44	-2.50	-5.95	-3.80	0.00	0.00	0.00	0.00	100.00
Sasco Energy Fund, LP	Commodity	1.0 HF	0.01	25.57	25.57	23.66	12.19	-0.26			-5.29	-3.99	0.00	0.00	0.00	76.86	23.14
AlphaOne Essentials Global Fund	Equity Market Neutral	12.0 HF	0.18	24.48	24.48	22.53	9.76	0.10	-1.18	-2.45	-3.93	-3.78	25.45	22.07	0.00	0.00	52.48
Angle Investment Partners LLC Fund	Multi-Asset	19.8 CTA	0.30	23.39	23.39		34.78	-0.43			-18.47	-18.47	0.00	100.00	0.00	0.00	0.00
C&O Fund	Multi-Asset	0.1 CTA	0.00 6.71	10.98 23.02	23.16 23.02	21.28 21.50	8.00 11.55	-1.33 -0.39	1.52 -0.64	-2.34 -5.12	-2.99 -5.09	-3.53 -5.09	0.00 0.00	0.00	100.00 1.32	0.00 74.69	0.00 23.99
Sasco Energy Overseas Fund, LTD Oracle Structured Credit Segregated Portfolio 2	Commodity Fixed Income	450.0 HF 17.1 HF	0.25	21.18	21.18	19.90	10.97	0.52	-1.16	-5.12 -5.05	-5.09 -4.88	-5.09	43.35	56.65	0.00	0.00	0.00
Varus Fund	Equity Long/Short	100.0 HF	1.49	20.66	20.66	19.90	8.08	1.89	3.05		-3.21	-1.92	8.11	0.00	91.89	0.00	0.00
Global Sigma Plus Program	Equity Index, Equity Derivatives	12.0 CTA	0.18	20.19	20.19	18.61	4.24	-0.97	4.61	-1.55	-0.97	-2.17	0.00	6.63	12.39	0.00	80.98
Opes Capital Trading Program	Equity Index	4.9 CTA	0.07	19.21	19.21	17.89	6.50	0.01	0.43		-2.38	-2.50	0.00	20.54	29.40	0.00	50.06
Arcanum REIT Investment Fund, Ltd - Class K (Gold)	Equity Market Neutral, Real Esta		0.01	17.69	17.69	20.19	28.23	-1.07	0.25		-15.13	-19.93	61.67	38.33	0.00	0.00	0.00
Brandywine's Symphony Program	Multi-Asset	10.8 CTA	0.16	7.90	16.43	15.38	4.20	-0.02	-0.75	-0.45	-1.22	-0.37	0.00	25.77	19.81	0.00	54.42
1 KeyPoint Real Estate Opportunity Hedge Fund, LP	Equity Long/Short	20.0 HF	0.30	15.75	15.75	14.90	6.29	-1.89	5.09		-2.50	-3.58	10.53	0.00	15.75	33.87	39.85
Golden Archer LBF	Equity Long Bias	1.0 HF	0.01	12.84	15.60	14.74	5.87	1.92			-2.27	-1.33	0.00	0.00	34.99	0.00	65.01
6 Gator Financial Partners, LLC	Equity Long/Short	3.8 HF	0.06	15.33	15.33	16.27	20.92	0.87	0.22	-11.96	-11.10	-7.76	51.88	0.00	48.12	0.00	0.00

When launching an Asia hedge fund, expect a budding but crowed space

In <u>last month's issue</u> of NewManagers (p.26), we mentioned a Preqin survey that claimed that Asian investors are not as shy as their Western counterparts when it comes to investing in new hedge fund managers. Indeed, <u>58% of investors</u> in the region are apparently prepared to invest in new funds, compared to 39% of European investors and 48% in North America. Asian investors were generally less affected by the downturn than those based elsewhere, which could explain their continued, and indeed increased confidence in such funds, said Preqin, a provider of intelligence on the alternative assets industry.

Opalesque did some further investigation into the matter of Asian investors, new managers of Asia funds (international and Asia-based), and international investors in Asia funds.

The first impression was that, Asia-focused hedge funds did just as well – if not better at times – as their other geographical counterparts, and a lot of international players are either setting up Asia funds or are investing in Asia funds to take advantage of the regional opportunities.

Asian investors themselves, however, do not invest so much in Asia hedge funds as they have more of a trader-like approach and prefer investing short term either directly or through domestic funds – usually long-only funds, to ride on the bull market. The environment is good enough for that despite the high volatility. Although wealthy Chinese investors are now turning to "sunshine" private trusts (Chinese version of hedge funds) as the property market cools, stocks slump and bank-deposit rates fail to match inflation, according to Bloomberg.

If they invest in international hedge funds, it is for diversification purpose. So the main bulk of capital coming to Asia-based and Asia-focused hedge funds usually comes from the international community, especially from Europe and North America.

Asian hedge fund industry: current status quo

Apparently, Asian hedge funds outperformed regional volatile markets in 2011 – for the second year in a row. According to HFR (Hedge Fund Research, Inc.), a Chicago-based hedge fund data provider, "in a year marked by a difficult cycle of navigating steep equity market declines in Japan and Emerging Asia," the HFRX Asia with Japan Index ended 2011 with a decline of -5.2%, mirroring the performance of the broad-based HFRI Fund Weighted Composite Index (-4.8%) and topping the Nikkei 225 and the Shanghai Composite Index by 1,200 and nearly 1,700 basis points (bps), respectively.

The worst record was for China long/short funds which dropped around 17%, while the MSCI China index was down around 20%, said <u>The Financial Times</u>. That disappointing performance partly reflects the difficulty to short individual shares in China itself, while shorting the indices can be risky.

As for the more general HFRX Asia Composite Hedge Fund Index, it lost 9.22% in 2011, after gaining 10.50% in 2010 and +16.80% in 2009. The all-encompassing HFRX Global Hedge Fund Index did slightly better last year when it lost 8.8%, but not as well the previous years as it was up

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5.19% in 2010 and 13.40% in 2009.

In 2011, <u>says HFR</u>, Asian hedge funds received inflows of \$6.6bn, a 7.5% increase in total assets under management (AuM), bringing total estimated capital in Asian hedge funds to **\$82.1bn**. Contrary to trends across the global hedge fund industry, two-thirds of the new capital invested in Asian hedge funds in 2011 went to equity hedge strategies, followed by event driven and relative value arbitrage.

HFR estimates the number of Asian hedge funds to be at 1,100 at the end of 2011 (up 4% for the year). The number of funds choosing to locate in Asia also went up for the year, with China, Singapore and Australia all showing increases, while the number located in the US declined. Asian-focused hedge funds located in China increased in number by 28% in H2-2011 for example.

When bearing in mind the survivorship bias that is inherent in numbers given by data providers, these numbers still don't look too bad.

According to <u>Eurekahedge</u>, a Singapore-based hedge fund data provider, there are 680 Asia-based hedge funds in existence.

There might have been a launch fatigue in 2011, which saw less of them than in 2008. Eurekahedge told Opalesque that 124 Asia-based hedge funds were launched in 2007; 96 in 2008; 121 in 2009; 114 in 2010; and 83 in 2011. And 130 of the Asia-based hedge funds that launched between 2008 and 2011 have closed down – almost a quarter of them.

Otherwise, 123 Asian hedge funds closed in the first 10 months of 2011, compared with 125 in 2010, and 184 in 2008. Hedge funds in the region

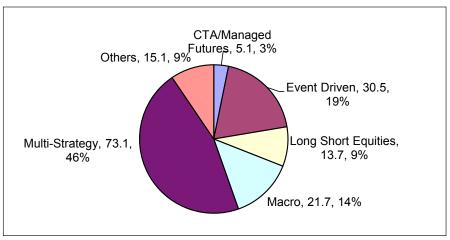
manage \$125bn, compared to \$176bn in 2007, according to Eurekahedge.

As can be seen from the charts below, the favorite strategies back in 2007 were multi-strategy and event driven. In 2011, it was long/short equity. Emerging hedge funds started with AuM of \$26.5m on average in 2007, and \$13m on average in 2011.

Although according to BNY Mellon's alternative investment services in Asia, Asia-based hedge funds are increasing in size due to better governance, and the average size of a fund launch in 2011 was the same as Europe, at around \$40m.

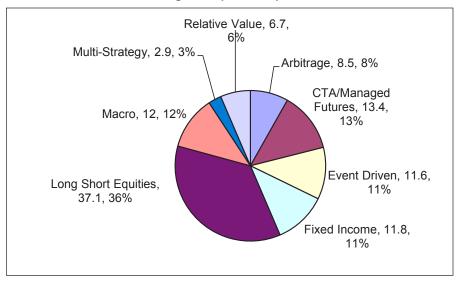
And unsurprisingly, most start-ups since 2007 have been setting up their head office either in Hong Kong or in Singapore.

Asia-based hedge fund launches by strategy and starting AuM(\$ million) - 2007



Data Source: Eurekahedge

Asia-based hedge fund launches by strategy and starting AuM (\$ million) - 2011

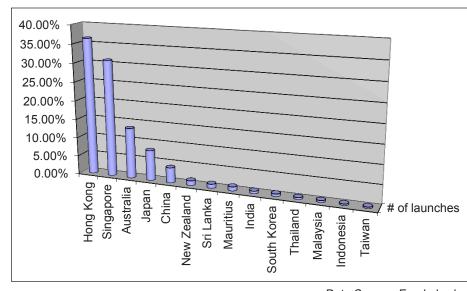


Data Source: Eurekahedge

Hedge fund seeders expect more talent coming out of Asia

Eliza Lau, founder and CIO of newly formed Hong Kong-based multi-manager firm Synergy Fund Management (SFM), and former CEO and CIO of fund of hedge funds house SAIL Advisors, and Jeroen Tielman, CEO and founder of Dutch-based seeding platform IMQubator recently formed a partnership, which entails sourcing and seeding Asia-Pacific hedge fund managers. They talked to Opalesque about what they have observed among investors and fund managers in the region.

Breakdown by head-office location of Asia-based hedge fund launches since 2007



Data Source: Eurekahedge

Eliza Lau is seeing quite a bit of interest in old and new Asian hedge funds coming from the major asset allocators. These asset allocators, she says, have not been investing in Asia much since the 2008 credit crisis. Some did not even allocate a penny in the region. But they are starting to invest in Asia again now, especially pension funds from Europe, from Japan and elsewhere. They are seeing that Asia is "clearly a growth engine."

As for Chinese investors, most invest domestically, she says. "But due to the wealth accumulating effect, they are looking to expand their products range out of China-focused funds. Now, domestic investors, institutions, and asset management firms are coming out of China to look for products."



Eliza Lau

Asian institutions are more conservative and will tend to stick to established funds. But family offices and asset management firms "definitely have more appetite for start-ups." But it is not a big problem for the latter. If they are seeded at an early stage (by the likes of Synergy and IMQubator for example), and their performance is satisfactory after 6 to 9 months, large Chinese and Japanese investors will be more open to them, she explains. "The good names have been able

to attract anything from \$20m to \$500m in 18 months – from pensions, institutions and family offices."

The problem that emerging managers have to deal with whether in Asia or elsewhere, Tielman notes, is the herd behaviour among investors.



Jeroen Tielman

"Remember also that fund managers based in Asia do not all necessarily focus their investments on Asia only, and not all are of Asian nationality," he points out. "Top talent is not geography-bound. We, as incubators, have seen a lot of applications from Europe, but also an increasing amount from Asia. And if we want to expose ourselves to emerging managers, it is necessary to include Asia."

According to data compiled by Synergy, the total number of funds in Asia is 1,315, with total AuM of \$131bn.

Lau is confident there will be more start-ups in Asia, with more talented managers.

"In the past, many of the local Chinese fund managers focused on domestic markets; they were not trading with foreigners," she explains. "The China market has been opening up. For example, the shortable list grew from less than 50 names two years ago to now about 281 names. This is the long/short side.

"The other side of it is in commodities. There is a very active commodity futures exchange, which domestic managers have been trading in.

Outside foreigners may not necessarily be able to hedge there.

"We have been helping some talented Chinese fund managers set up offshore funds in Hong Kong or in Singapore, or a Cayman fund structure. Jeroen's expertise is very helpful there as well."

Fund managers in the region have been able to do some shorting for some time now. China is even planning to introduce a Centralised Securities Lending Exchange to facilitate short-selling, the Financial Times reported in January, a move that will push forward its nascent hedge fund industry.

Commodity trading is currently one of the favourite activities among managers, as the market is demanding agriculture and energy. Lau expects the equity market will be also interesting. "Given the market volatility, China's market has corrected hugely in the last two years," she explained. "So I am expecting to see is lower valuation and the inflation to be under control, as well as liquidity easing coming slowly from the Chinese government." With the ongoing volatility, equity long/short, high frequency trading, and market neutral strategies may perform better than their long-biased peers, for the China and the Japan markets.

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(See our latest 3-part series on <u>China hedge funds here</u>, and a recent interview of Jeroen Tielman on <u>Opalesque TV here</u>).

Better to launch in two years' time

Richard Harris, a finance veteran who has lived 43 years in Asia, is the founder of Port Shelter, a newly formed consultancy and investment management shop based in Hong Kong. Most previously, Harris was CEO of Quam Asset Management, a financial services group in Hong Kong; Managing Partner at Grace Financial, an independent multi-asset fund manager; and Director/Head of Asset Allocation and Manager Selection at Citigroup Private Bank. In an article which appeared in Opalesque in January, he recalls his 26-years experience in the investment management industry and compares it to today's. Opalesque caught up with him to ask him what he had been observing among start-ups in Asia.

He sees the whole industry going through a big change at the moment. "It's like Economics 101," he explains. "If you have a few people in the industry that make a huge amount of money – and some of the richest people on the planet are currently hedge fund managers – then of course, every one is going to pile into the industry to follow them. Then margins collapse."

Fund management companies are falling like flies at the moment especially in Asia, and have to leave the industry before margins can recover again, he notes. As for investors, they have either deleveraged or have gone into cash, so there is a lot less available for investment.

He thinks there are too few (good) funds in the industry and too many fund managers. Even more so within the Asian hedge fund industry. One of the reasons for that is that China has been underperforming the World index for the last two and a half years. "When markets underperform, then assets leave."

The MSCI World Index posted a 2011 return of -8%, and +9.5% in 2010. Emerging Markets countries were also substantially impacted by the 2011 slowdown: the MSCI Emerging Markets Index showed a 2011 performance of -20.6% versus a return of +16.4% in 2010. And the All China+Hong Kong+Taiwan MSCI index went down almost 19% in 2010-2011.

"A second reason," Richard Harris continues, "in Asia, there has been a rise of fund managers, a lot of whom have not been able raise critical amounts. There are relatively few managing between \$300m and \$500m.

"There are a lot fewer [financial] products than in London and New York. As a result, fund managers have a very limited means of going short, can go short in fewer markets, and have fewer products to choose from. The industry has a lot of very young fund managers (with often just five-year track record), combined with this shrinkage of assets.

"That's also combined with the fact that a lot of fund managers in Asia have not been trained very well; a lot of them have been home-grown. I am from the old school and got formal training. Now a lot of people just come up and start to run money with very little asset management training. That combination means that a lot of houses out there don't have the experience to deal with difficult situations."

In other words, the hedge fund industry in Asia is still in its "youth" stage. Harris believes the chances out there for new hedge fund managers are in the negative at the moment. "The best thing to do would be to go on holiday for two years," he stated.

But to those companies looking to set up now, he would recommend gathering at least \$100m before marketing, as investors are not interested in small funds, and because one needs that kind of sum to run a regulator-compliant and international-investor-compliant fund management company.

Harris is not seeing many new start-ups in Asia right now and thinks that those who are starting at this moment are "just following all the lemmings of the cliff." It is simply not the right time because assets are difficult to come by; the domestic Chinese asset management industry is overcrowded; to set up in Hong Kong, you need to have at least \$100m in AuM; investors are short-term and have no loyalty to the funds; many fund managers are not very experienced; and institutional pools of capital are much smaller (there is not really a pension fund industry yet for example).

Paul Smith, CEO of Hong Kong-based asset manager Triple A Partners Ltd is equally pessimistic. "For smaller managers, it's simply a question that they cannot afford the opportunity cost of continuing," he recently told Bloomberg. "I am pessimistic on asset raising. I can't see that things will improve. There is too much global uncertainty which keeps investors on the sidelines."

Harris also recommends emerging fund managers to stick to a particular theme or a particular focus. Investors like that.

When he was at Quam, he set up the world's only liquid Mongolia fund – which is still going. He is convinced that he managed to launch it because of the one-month liquidity term. Other funds that offered longer liquidity terms did not launch. "Nobody is willing to do more than one month and that's the message I am getting out of Europe, and it's the same in Asia too."

He thinks it will take about two years before this overcrowding actually starts to go down.

"Pools of capital are very private and very [fickle]," he sums up." There aren't a lot of investors and there are a lot of funds. And there aren't many veterans or established fund managers around."

- Benedicte Gravrand

ABD

If you want to do well, develop your marketing strategy 4 to 6 months before starting active fundraising

According to a recent white paper titled "Marketing and Fundraising For Small Hedge Funds", it is getting harder, more expensive and more complex for small and new hedge funds to grow assets under management (AUM). No surprise there.

"Without intelligent, comprehensive planning and preparation, a fund's attempt to grow AUM can be over before it begins," the paper says. "Successful marketing and fundraising requires numerous discussions and planning sessions well in advance (optimally 4-6 months) of formally engaging investors, intermediaries and market participants." The paper then explains the steps to take.



Bryan Johnson

The white paper was authored by Bryan K. Johnson, managing partner of a marketing consultancy shop based in Austin, Texas, called Johnson & Company. The firm specialises in start-up and smaller hedge funds. Johnson has more than 20 years of experience in sales and marketing within alternative investments and was lastly Global Head of Business Development, Alternative Investments at Moody's Investors Service (NYC).

Opalesque put him to the test in a Q&A.

Question: Why and how should fund managers make the distinction between marketing and asset raising?

Answer: Marketing and fundraising are distinct but complementary activities.

Marketing is communication and should be a consistent and continual activity, while fundraising is active solicitation of investors, which should be a coordinated periodic and opportunistic activity.

A fund should always be in regulatory compliant qualitative and quantitative communication with the various constituents in its ecosystem (investors, intermediaries, service providers, etc.) to build the necessary relationships it may need through its maturation process in order to expediently and efficiently acquire AUM, resources, information and intelligence. Many small funds make the mistake of fundraising without sufficient relationships and before they have appropriate information as to the suitability of an investor as well as understanding of an investor's allocation process along with the degree of intermediation involved. Trying to circumvent that process is an unwise decision particularly in instances of intermediation. In addition, a fund needs to gain a level of "process confidence" with the investor.

Q. If smaller and emerging fund managers divert investing time to conduct marketing, performance suffers, and marketing becomes less

A&D

efficient... it's a vicious circle. Have you seen that happen a lot?

A. Yes. Usually this happens when a small fund does not have a written marketing plan. A sound marketing plan includes appropriate allocation of resources in the way of time and money to structured and disciplined investor outreach. Unfortunately, most small funds believe marketing is solely posting performance on databases and the allocation decision is a one metric criteria: performance.

Q. Could you give me examples of when geopolitical and volatility affect the asset raising environment?

A. Any issues that influence uncertainty and investor confidence affect marketing and fundraising. Among examples would be Madoff, the credit crisis, global economic uncertainty, unprecedented volatility and greater regulatory intervention. Such issues are increasing and changing exponentially. However, as always there is opportunity in crisis. In fact, when written in Chinese, the word "crisis" is composed of two characters. One represents danger and the other opportunity.

For hedge funds, effectively understanding geopolitical risk, changes in regimes, regulatory environment and attitudes, fiscal policy and corporate governance, etc., is a strategic and tactical imperative. Also such issues can have positive and negative influence on fundraising as a whole as well as by individual strategy. For example, global macro is much more sensitive to geopolitical risk than perhaps a healthcare long/short fund. Moreover, a fund that can demonstrate through its investment and enterprise processes the ability to consistently manage and opportunistically capitalize in such a climate is better positioned to raise as well as retain AUM through heightened or sustained periods of such risk.

Volatility has substantially increased in the last year or so largely as a result of geopolitical issues. Exacerbated volatility increases tail risk, events that are both unforeseeable and catastrophic, which is undesirable to say the least and drives investors (liquidity) out of the market. However, investors are now seeking out funds and strategies that have as an investment process the ability to hedge as well as profit from tail risk events. Again opportunity with crisis.

Q. You say "investors want to invest in managers they feel confident in." To what extent is it a game of confidence?

A. It's always been a "game of confidence", however confidence is now heavily derived from a fund's processes not pedigree as it once was. After the credit crisis, which some could call "the failure of pedigree", investors have come to realize that alpha is the result of process and gaining confidence in a fund's enterprise-wide processes is critical to the investment decision, which explains the increase in time and resources directed to process assessment i.e. operational due diligence.

Q. Do investors bear in mind that solid infrastructure is costly and makes it difficult for small or emerging fund managers to survive? Or are they uncompromising in general?

A. I don't see investors as uncompromising. However, what I do see is more invasive and protracted due diligence assessments as result of fear, inexperience and proprietary procedures on the part of investors and some consultants. This expands the allocation cycle and increases the cost of marketing.

In all, investors are attempting to prudently meet their investment

A&D

objectives and fiduciary responsibilities. In that regard, investors actively seek investment risk but aggressively avoid operational risk.

Moreover, business risk is for the entrepreneur not the investing client. Operating a hedge fund as a business is a risk. If a trader wants to trade for his or her own account and not accept outside money then minimal infrastructure is required as the only capital at risk is personal. If a fund is in business to manage individual wealth or fiduciary assets then it must meet the hurdles to do so. A financial institution, regardless of size, must operate with appropriate documented controls, procedures and infrastructure if it desires to accept and receive external sources of capital. Any compromise in that regard tends to conclude with dire consequences as we have seen.

Q. Strong tactics are needed to market a fund. However most fund managers do not know enough about that side of the business to even start writing a plan. What is the best thing for them to do: partner with a co-founder whose specialty is marketing and fund raising? Call on a third party marketing firm (can they afford it)? Seek refuge in a seeder's platform?

A. As to what's best depends on the fund, its position in the maturation process and resources. One of the areas that we counsel firms on is the appropriate understanding of internal and external professional marketing resources and their use. We construct a detailed map of the marketing options and requirements for a fund in order to provide a realistic understanding of what they "qualify" for and what they can expect in order to make informed decisions about marketing. For example, many funds waste a great deal of time attempting to engage third party marketing for which they may not yet be suitable. Much in the same way many smaller funds are frustrated by cap intro from prime brokers.

Q. One must identify the right investor segment. Can you give examples?

A. Most small funds do a poor job in tactical marketing: sourcing and profiling suitable, qualified and appropriate investors given their fund profile. As such, their efforts to grow AUM are highly inefficient and unsuccessful. The historical, critically important and most appropriate investor segment for small hedge funds (sub \$250 million in AUM) is private wealth: ultra high-net worth individuals, families and single/multi-family offices.

However, many small funds attempt to engage, inappropriately so, small and large institutional investors. Small institutional investors (endowments, foundations, etc.) generally allocate \$5-\$15 million to the asset class and usually focus on fund-of-funds (FoFs) to achieve diversification, while larger institutions typically seek to place allocations of \$25-\$50 million on average in a direct investment. Such larger direct allocations can only be accommodated by large funds, usually \$250 million AUM minimally, that have an "institutional-quality" operational infrastructure as well as enables large investors to remain within their concentration limits by not exceeding a certain percentage of a fund's AUM (usually 5%-10%). These requirements exclude small funds from institutional marketing and fundraising.

As an aside, FoFs, which use to be a significant source of capital for smaller funds, are under tremendous structural pressures and AUM is down considerably. As such, asset flow to small funds from FoFs has declined. A fund must be constantly in search of new sources of AUM as well as retention of existing AUM. Investor base management is one area where most small funds underperform.

A&D

Q. What do you recommend to managers whose hedge fund is less than a year old?

A. Build a track record, Build relationships and Build a business.

Then it's a matter of saying to the right investors. "I'd like you to keep an eye on me and I'm going to see that you do by proactively and consistently engaging with you quantitatively and qualitatively over the next year regardless of good and bad performance and volatile markets." What does that look like? Aside from posting and providing performance numbers, it means meeting with investors to talk with them about the markets, their issues, concerns and performance, your funds process and most critically, how your process deals with the primary goal of an investor: consistent absolute performance and the primary concern of an investor: risk.

Q. What do you recommend to those who have not started yet but are thinking of setting up a fund? Should they plan their marketing now?

A. All funds are aware of the legal, accounting, administration and technology service investments they must make to operate a fund but few completely understand the investment in marketing required. Successful marketing requires investments beyond passively listing on popular databases.

Candidly, regardless of size, investing in marketing is mission critical for a hedge fund. When asked to describe alpha generation all funds talk about process, which requires investment in skilled human resources, systems and documented procedures. However, the vast majority of funds approach marketing as an event and fail to make the necessary

investments to achieve success. Marketing is a process, which requires the same degree of thought, structure, planning, discipline and consistency as investing or trading.

We generally advise that for optimum success a marketing strategy be developed 4-6 months before launching a formal investor outreach campaign and active fundraising.

- Benedicte Gravrand

'Lots of launches from people coming out of hedge funds'

"Now we see a lot of launches from people coming out of hedge funds where they have run established funds or part of the portfolio in a hedge fund format," Lisa Fridman, head of European Research at Pacific Alternative Asset Management Company (PAAMCo), which invests in start-up funds, told City A.M.

We recently heard of the following ex-hedge funders striking out on their own:

- Ex-Gartmore manager Guillaume Rambourg started <u>Verrazzano Capital</u> in Paris in January with \$500m; he is to launch <u>two European long/short funds</u> with backing from former co-manager Roger Guy;
- 2. Thierry Lucas, formerly at Eton Park Capital Management, is to launch Portland Hill Capital in London with \$500m for an event-driven and equity long-short fund;
- 3. Emerging markets-focused <u>Falcon Edge Capital</u>, set up in New York and London by ex-Blue Ridge Capital and ex-Eton Park Capital traders, is apparently about to start trading;
- Former FrontPoint portfolio manager John Foo and three former colleagues are reviving <u>Kingsmead</u> which he set up in 2008 and will launch an Asia-focused hedge fund with about \$50m in March in Singapore;
- 5. Former Sparx Asia Investment Advisors manager Daryl Flint

- established <u>Double Haven Capital</u> in October 2011 and launched in January 2012 a long/short hedge fund with \$20m of principal capital;
- Jeff Lignelli, previously at Appaloosa Management, started hedge fund firm <u>Incline Global Management</u> with seeding from Appaloosa's founder David Tepper;
- 7. Steve Alperin and Sara Fleiss, previously of Harvard Management Company, set up a hedge fund firm in Boston, <u>Emeth Partners</u>, and will launch an event-driven volatility arbitrage fund in Q3;
- 8. Ex-Soros Fund Management's Betsy Battle, now CIO of Lone Peak Partners, a funds of hedge funds house, launched a new hedge fund firm, LPP Linden, L.P. with \$100m.
- 9. Philippe <u>Gougenheim</u>, former Managing Director and Head of Hedge Funds at Unigestion, will launch a liquid global macro hedge fund called the <u>Glasnost fund</u> in June;
- William Bollinger, former head of Egerton Capital, came out of retirement to launch a new hedge fund venture, <u>Judico Capital</u>, in Singapore;
- Ex-Martin Currie Investment Management executives Chris Ruffle and Ke Shifeng founded <u>Open Door Capital Group</u>, a \$400m Shanghai and San Francisco-based asset manager, and will launch a China hedge fund in March.

Among former bankers:

- 12. Todd Edgar, former global head of macro trading at Barclays Plc in London, is starting hedge fund <u>Atreaus Capital LLC</u> in May with a few former colleagues;
- 13. Sutesh Sharma, one of Citigroup's senior proprietary traders, registered a new firm, Portman Square Capital, in the UK last year and is expected to launch a fund soon (Citigroup shut down its proprietary-trading desk and most of the desk staff were supposed to leave the bank this month);
- 14. Morgan Stanley's former head of fixed income for Asia-Pacific, Ranodeb Roy, and Vickram Mangalgiri, a former adviser at Pacific Investment Management Co started <u>RV Capital Management Pvt</u> and will launch a hedge fund in April/May that will focus on interest rates, credit and foreign exchange.

Seeding ventures and platforms

There is a seeding frenzy in the hedge fund industry, declared the <u>New York Times</u> in January: "As the industry's returns have been disappointing, big investors need somewhere to park their money — and handing development capital to emerging hedge funds has become a strategy of choice."

The latest seeding ventures and platforms being launched were:

15. <u>Deutsche Bank and Financial Risk Management</u> (FRM) partnered to launch the industry's first hedge fund seeding managed account platform.

- 16. <u>Cantor Fitzgerald</u>, a global investment bank, is venturing into hedge fund seeding, joining an array of asset managers that seek to take advantage of start-up firms' difficulty in raising capital, reported The WSJ. The new seeding fund will provide between \$25m and \$50m start-up capital to 20 to 25 emerging fund managers.
- 17. Ader Investment Management (AIM) launched Accelerator Fund Partners LP, a funding platform for hedge funds looking to boost AuM and enhance their distribution into family offices and fund of funds.
- 18. The <u>HSBC Next Generation Fund</u>, which invests in new and upcoming hedge fund managers globally and was started in September 2011, launched High Net Worth and Institutional share classes.
- Benedicte Gravrand

New Funds in EManagers database

New Funds in Opalesque's **Emerging Managers Database** (January and first half of February 2012)

Fund name	Strategy	Location	Current AuM	Launch date
Bernett Diversified Global Fund, L.P.	Global macro	New York, NY	\$784.54	Jan-10
Grant LiquidMacro Fund	Global macro (North America)	Santa Barbara, CA	\$1M	Sep-08
Inventum Algorithmic Fund Limited	Global macro (East Europe)	Russia	\$4.7m	Jun-11
Cross Ledge Long/Short Fund	Equity long/short (North America)	Philadelphia, PA	\$5.7m	Sep-10
Acacia Master Fund, Ltd.	Equity long/short (tech/resources)	Beijing, China	\$15m	Nov-09
Stanphyl Capital Partners LP	Equity long/short (North America)	New York, NY	\$3.1m	Jun-11
Angle Investment Partners LLC Fund	СТА	Danbury, CT	\$19.8m	Jan-10
400 Capital Credit Opportunities Fund LP	Relative Value / Credit long/short	New York, NY		Feb-09
400 Capital Credit Opportunities Fund LTD	Relative Value / Credit long/short	New York, NY		Feb-11
Blue Marlin FIC FIA	Directional / Equity long bias	Rio de Janeiro. Brazil	BRL 54m	Dec-10
Beaconcrest Partners Fund	Directional / Equity long/short	Boston, MA	\$1.6m	Oct-09
PULL: Princeton Undervalued Liquid Large-cap Fund	Directional / Equity long-bias	New York, NY	\$0.250m	Jan-11
Vasken Macro Multi-Strategy Fund Ltd (\$ and € classes)	Global macro	Lausanne, Switzerland	\$784.54	Mar-11

Perspectives

Study: Smaller funds and younger funds outperform their peers

According to a recent study, hedge funds with greater managerial incentives, smaller funds and younger funds outperform their peers, while hedge funds with strict share restrictions are not associated with higher risk-adjusted returns. It also showed that using a consolidated database will help researchers avoid biases.

The study, "Revisiting 'Stylized Facts' About Hedge Funds - Insights from a Novel Aggregation of the Main Hedge Fund Databases," by Juha Joenvaara and Pekka Tolonen of the University of Oulu (Finland) and Robert Kosowski of Imperial College Business School (London), aims to present stylised facts about hedge fund performance and data biases based on a new database aggregation – stylized facts being simplified presentations of empirical findings.

The study's objective is to help hedge fund researchers when they compare results across different studies by highlighting differences between databases and "their effect on previously documented results."

The study used a comprehensive hedge fund database and documented "economically important positive" risk-adjusted performance of the average fund "while differences in magnitude are due to differences in fund size and data biases, but not differences in fund risk exposures."

As this performance does not stick with any of the databases when using value-weighted returns, the analysts show this is tied to fund size and bigger biases in certain databases. (A <u>value-weighted market return</u> is a weighted average of all stock returns, with the weights given by the market

value of the stock issue at the end of the previous trading period – such as the S&P 500.)

The study concludes that "hedge funds with greater managerial incentives, smaller funds and younger funds outperform while hedge funds with strict share restrictions are not associated with higher risk-adjusted returns." Furthermore, several stylised facts are coloured by the choice of each database. So to avoid biases, one should use a high quality consolidated database – such as the one used in the study of course.

Comparatively, a study by <u>Peter Urbani</u> in last month's issue of New Managers found that hedge funds' return distributions are not normal twice as often as those of long-only funds. On the whole, returns are higher and drawdowns are lower across indices.

Investors more open, fewer start-ups

A recent quarterly report on hedge funds from French bank <u>BNP Paribas</u> said that more institutions are now ready to look at smaller and emerging managers, as well as those with a narrower focus – geographical or sectorwise.

"The barriers to entry for starting a new hedge fund remain very high, after having risen significantly since 2008. Yet, the pipeline of new launches we see remains very strong," said another hedge fund report, this time from Deutsche Bank, which went on to say that there were fewer start-ups, but with higher starting AuM than in previous years, and with managers who have a better pedigree.

Perspectives

Apparently, the bigger investors are, the more open they are too to emerging fund managers. Furthermore, investors in general are more interested in looking at hedge funds which have less than \$100m in AuM. And the high-profile launches are expected to be among those hedge funds that attract the most assets this year.

\$1 Billion Club very open to emerging managers: Pregin

The UK's Universities Superannuation Scheme (USS) wants to make a maiden seed investment in a hedge fund, which, according to research house Preqin, demonstrates that it is not just the established hedge funds which will gain assets from the \$1 Billion Club (which comprises investors who allocate more than \$1 billion to hedge funds). Preqin goes on to say that the \$1 Billion Club are much more open to investment in emerging manager vehicles. 70% "will consider investment in emerging manager hedge funds. When looking at all other investors, this figure falls to 50%. The effect is more marked when looking at investors which would consider seeding arrangements - 19% of all other investors would consider a seed investment whereas 49% of the \$1 Billion Club."

Those Club investors require an average of 2.7 years as a minimum track record, and their investment is usually larger than average, at around \$100m, versus \$5-10m. Emerging managers should not dismiss the \$1 Billion club as inaccessible then.

High profile launches among those which will attract most assets: Agecroft

Looking forward to 2012, American consultancy <u>Agecroft Partners</u> believes that those hedge funds with the strongest brands will gain most of the flows. They can be divided into three main categories,

namely:

- 1. Hedge funds with over \$5bn in assets and a good performance track-record;
- 2. "A few high profile start-ups that have spun out of prop trading desks from investment banking firms or well known hedge funds;"
- 3. Those small and mid-sized hedge funds that provide a high quality offering and which have a best-in-breed marketing strategy.

Interest in managers with less than \$100m is increasing: Hedgeharbor

Hedgeharbor, an investment placement specialist, published its annual global investor survey in January 2012, which spoke of a trend not otherwise widely observed. "As several large blue-chip managers faltered this year, we saw interest in managers overseeing less than \$100m under management increase significantly," the survey said. "The percentage of survey respondents who would be willing to look at managers with less than \$25m of assets doubled from last year's responses." Respondents included global institutional, private investors. FoFs.

New start-up guide from Citi

<u>Citi</u> released a new start-up guide for US hedge funds, which explains specific Start-Up Services in the US market and how Citi can work with new launches to establish an institutional quality business infrastructure. Just so you know.

- Benedicte Gravrand

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Fund that will play with increased volatility in Asia to be launched Q2



Craig James

Craig James knows about volatility - especially Asian volatility. As Hong Kong-based Portfolio Manager for New York-headquartered AM Investment Partners, he used to run the Asia Volatility Fund, which took a long-volatility (long-vol) posture. (James participated at the 2009 Opalesque Hong Kong Roundtable.)

When he left AM in April 2010, he wanted to create a new fund with a different model - a model that would make better use of the volatility swings.

The Nikkei Stock Average Volatility Index, currently at around 22 (17 a year ago), saw some wild swings in the last year, especially in March 2011 and in the summer. And the HSI Volatility Index, currently at around 23 (around 18 a year ago), also saw spikes in March and in the second half of 2001. The index reached a high of 58 in January 2008, went up to 104 in October 2008, but cooled afterwards, staying in the 20-30 range. High volatility started again in September 2011 when the index reached almost 52.

James is now the founder and CIO of Expedition Advisors Ltd., a new Caymansdomiciled equity volatility fund. Currently in New York, he is moving to Hong Kong in March.

He has recently secured a significant seed capital investment from Protégé Partners, a New York-based fund of funds that focuses on investing in smaller hedge funds. James anticipates launching during the second guarter of 2012. After launch, he will try raising assets from Asia-based and European-based investors.

The fund is specifically designed to take advantage of an increase in asset price volatility in Asia – especially the Asia Pacific Region – over the coming decade. Expedition will provide investors with a diversified set of volatility exposures. The core strategy will be predisposed to long volatility profiles but will be constructed to respond to extreme pricing dislocations in either direction.

Given the mean-reverting and cyclical nature of equity volatility distributions, Expedition will employ an adaptive trading model and a process trading model. A key differentiating factor to Expedition's investment approach is the application of derivative trading to catalyst opportunities.

"We invest in structures that gave investors a diversified set of equity volatility exposures across the Asia Pacific region," James explained. "The actual structures themselves consist primarily of over-the-counter index and single stock options, as well as some exchange-traded products. We obviously look to deliver attractive volatility entry points for investors and monetize these positions over the life of the portfolio."

Sporadic volatility spikes ahead

He and his team believe that volatility, structurally, is on the rise - in Asia as well as globally. According to them, a key reason for this trend is that effective monetary policy, designed to mitigate asset price volatility, is no longer that effective. At the Fed, Ben Bernanke and predecessor Alan Greenspan had the ability to affect the risk climate through price stabilisation vis-à-vis monetary policy action. No longer.

"Simply put, we think the efficacy levels of these policy enactments are on the

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decline," James told Opalesque. "Central banks threw a lot of money at the credit crisis globally, on a warpath to create liquidity and stabilize markets, but it's not clear that we actually fixed anything. The unintended consequence however, is the fact that further quantitative easing measures to head off future stress scenarios may simply not work, or at least not work well. Which leaves us with a potentially much more volatile backdrop on risk assets going forward. We believe there will be sporadic volatility spikes like we those we saw in the summer of last year, and we expect these vol shocks to continue."

The level of effectiveness of monetary policy is rapidly declining and there is not much left in the tool kit now from a policy perspective, he added. Future stress scenarios – whether it be geopolitical (Middle-East) or liquidity driven, will show that the problem has not been fixed structurally. "We believe the 'kick the can' experiment only creates a higher cliff to fall off from."

Volatility as an asset class is something the long-only community will have to embrace.

"The reason we believe investors will have to embrace volatility products is that large, leveraged risk asset portfolios that everybody is holding will be a lot trickier to manage," he noted. "Peak to trough drawdown risk for traditional long-strategies will become more unpalatable and that will eat away at Sharpe ratios and other risk measures."

Expedition has tailored a long-tail, adaptive approach that recognizes the upward trending nature of volatility, but utilizes volatility of volatility to create favourable entry and exit points along the way.

So the fund should do just fine in that wild rodeo ride.

- Benedicte Gravrand

'\$1,000 hedge fund' starts 2012 up 24% after dire 2011



Sarah Bernett

Bernett Diversified Global Fund, L.P. is one of the 34 global macro funds featured in Opalesque Solutions' Emerging Managers database. It is managed by Sarah Bernett, CEO of Bernett Capital Management, LLC, a fund boutique based in New York.

Also a hedge fund and securities attorney, she launched the Fund in January 2010 with the aim to cater to "low-and-middle income individuals", thus requiring a minimum investment of \$1,000. Apparently, the fund ended up being dubbed 'the

\$1,000 hedge fund' - often with a sceptic connotation - by the media.

It is widely believed that only accredited investors can invest in hedge funds. It is a term used by the U.S. Securities and Exchange Commission (SEC) under Regulation D to refer to investors who are financially sophisticated and have a reduced need for the protection provided by certain government filings.

However, "there is no requirement under U.S. securities laws that hedge fund investors be accredited," she told Opalesque in an email exchange. "Rather, it is a myth propagated by the media and certain financial entities that hedge funds cannot be offered to non-accredited investors. Hedge funds are permitted under federal securities laws to offer their securities to non-accredited investors under Regulation D, Sections 504, 505, and 506... Furthermore, the Securities Act of 1933 requires a hedge fund to furnish certain information "to any purchaser that is not an accredited investor" at a reasonable time prior to sale (see Securities Act of 1933, Regulation D, Section 502(b)(1))." So there.

Bernett's U.S.-domiciled, SEC-registered Fund invests in securities by way of registered investment companies (mutual funds), ETFs and direct investments. A substantial portion of the Fund's assets is in securities issued by companies domiciled in or with operations outside of the U.S. The investment style is global macro and aggressive, incorporating a long-term trading strategy and a short-term directional trading strategy. Mrs. Bernett pointed out that in 2010 the Fund appeared 7 times in Hedgeco.net's top 10 global macro best-performance rankings, and in 6 times in 2011.

Bad weather in summer of 2011

At the time of the launch of the Fund (January-10), equity markets were making a slow recovery from their late-08/early-09 dip. The Fund returned +7% in its first year, -41% in 2011 (from a disastrous summer), and +24% in January 2012. It still has to make a bit more than 20% to recover, and Mrs. Bernett is confident that it will.

So what happened in 2011, when the Fund lost 43% in August and 40% in September? Here is a short reminder. The <u>S&P500</u> dipped from a high of \$1,343 at the end of July, to a low of 1,119 in early August, and stayed below 1,212 till it recovered in October (to 1,285). It is currently at around 1,361. Meanwhile, the <u>MSCI World Index</u> dived from \$1,348 at the end of July to 1,074 in early October before making a rebound. It is currently at around 1,288. And the <u>VIX</u> (Chicago Board Options Exchange SPX Volatility) Index rose from 16 in early July to a high of 48 in early August and stayed in high levels till the end of the year. It is currently at around 18, a much healthier place to be in for volatility.

According to Mrs. Bernett, as the fund entered 2011 with a long bias and a long-

term outlook, it was challenged with the most volatile market environment it had ever experienced.

"We believed that raising the U.S. debt ceiling prior to the deadline would have a calming effect upon the market, and that Standard & Poor's downgrade of the U.S.'s credit rating would not affect yields and would be discounted by the market as a questionable downgrade based on a math error," she explained. "Instead, the market's drawn-out focus on the European sovereign debt crisis compounded and lengthened the sell-off into September, delaying the recovery for the market and the fund until October."

Macro strategies posted negatively correlated gains in August 2011, with the HFRI Macro (Total) Index posting a narrow gain of 0.12% (-3.91% in 2011), while the HFRI Macro: Systematic Diversified Index gained 0.94% (-3.63% in 2011). According to Hedge Fund Research, a Chicago-based data provider, macro funds were impacted by a wide range of volatile influences. Systematic macro funds generally posted gains in gold and U.S. fixed income, with mixed macro performance across other commodities, currencies (notably Swiss Franc and Japanese Yen) and equities. (See Opalesque Exclusive here). The Dow Jones Credit Suisse Global Macro index fared better in August (almost 2%) and was up 6.44% in 2011.

Less aggressive bets in 2012

Some investors say that, due to prevailing general uncertainty in the markets, one should avoid aggressive bets in 2012. Mrs. Bernett agrees with that.

"Given that global markets are facing much uncertainty in 2012, it would be prudent to avoid aggressive bets in certain regions such as Europe until greater clarity is achieved and stability maintained vis-à-vis the sovereign debts of Greece, Portugal, Italy, and Spain," she told Opalesque. "It would also be prudent to avoid

aggressive bets in China due to its economic contraction. The continued global economic uncertainty coupled with a U.S. presidential election year warrants avoiding aggressive bets in certain economic sectors in the U.S. such as defence, finance, and healthcare."

Although, she adds, not all aggressive bets should be avoided in 2012, as certain companies, economic sectors, and geographic regions (such as emerging markets and the U.S.) are poised for greater upside potential in 2012 than they were in 2011.

Furthermore, for 2012, assuming no European nation defaults, she expects the equity market to sustain an upward trend and end the year in positive territory while experiencing corrections during the year. She also expects volatility to lessen.

"Given the budget austerity cuts and current investor and business confidence levels, the Euro area may experience a very mild recession," she noted. "I do not expect the U.S. will experience a double-dip recession in 2012."

Currently Bernett's Fund's favourite equities are BHP Billiton (BHP); Maersk (MAERSK-B.CO); Randgold Resources (GOLD); Reliance Industries Ltd ADR (RLI); Simon Property Group (SPG).

Going forward, the Fund will increase its exposure to frontier markets, central Europe, and Scandinavia while decreasing its exposure to western and southern Europe. The percentage of assets held in short positions will be reduced, and some assets will be shifted from short-term trading strategies to long-term buyand-hold strategies.

As things are uncertain, a wait-and-see stance might be the right one indeed.

- Benedicte Gravrand

Laurium Capital: stock picking in South Africa can produce attractive returns



Gavin Vorweg



Mark Preston

Johannesburg, South Africa-based Laurium Capital

Pty is an investment manager running various funds investing in Sub-Saharan Africa. The company was founded in 2008 and has over 85 years aggregate investment experience between eight professionals.

The firm currently manages or advises four funds, namely, the Laurium Capital Sub-Saharan USD Fund, the Zambezi USD Fund, the Laurium Capital Alternative Investments Fund, and the Bell Rock Fund, with a total AuM of approximately US\$160m. The first three funds are currently featured in Opalesque Solutions' Emerging Managers Database.

Laurium's co founder and portfolio manager Gavin Vorwerg and Chief Operating Officer Mark Preston spoke with Opalesque in an exclusive interview to discuss the firm's strategies, performance and outlook for this year.

Laurium's funds use fundamental bottom-up research, with a value bias, to generate a concentrated but conservative portfolios and utilizing derivatives where

appropriate to enhance yield, protect asset values, and minimize volatility.

Preston commented, "We believe that the South African (SA) and Sub-Saharan Africa's securities markets are less efficient than those of developed economies and that stock picking and appropriate fund management can produce attractive investment returns... The portfolio is constructed using a combination of a macro

overview, stock screening, fundamental and relative value analysis and in depth company analysis.

"The Laurium Capital Sub-Saharan Fund's strategy is to also capitalize on unique situations including corporate action, distressed situations, valuation anomalies and technical factors."

Sub-Saharan fund returned +48.8% since inception in Dec-08

Since its inception in December 2008, Laurium Capital's Sub Saharan fund has returned +48.8% as at end December 2011, compared to the JSE All Share Index which returned 31.4% over the same period. The fund was up 0.6% in December and up 4.92% in 2011. The MSCI world index was marginally down in December and ended 2011 down 7.6%. The MSCI Emerging Markets Index was down 1.3% for the month, taking its 2011 performance to a disappointing -20.4%. Given this backdrop the fund performed relatively well posting gains of 60bps for the month and 1.8% for the year.

Preston believes that the South African equity market (and the JSE in particular) is a reasonably liquid and efficient market by emerging market standards. However, the bulk of the investment is from large long-only fund managers which are regulated by either the Collective Investment Schemes Act or the Pension Funds Act, which impose mandate restrictions, such as no shorting.

"For these reasons, we believe that inefficiencies exist within the SA market, particularly on the short side or in 'pairs' trades. A fairly nimble hedge fund with an appropriate mandate is well-positioned to exploit these pricing inefficiencies,

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and we believe that our fund falls into this category. The Fund will have maximum flexibility to invest in a wide range of instruments including listed and unlisted equities, scrip loans, options, warrants, convertible debt securities, preferred equities, futures, ETFs and equity derivatives," he added.

Laurium's strategy performs best in times following abnormal market volatility, because during the volatile periods, prices tend to overshoot fundamental valuations, which provides opportunities to take positions in those stocks. "During strong bull markets, our performance is likely to lag slightly on a relative basis, but we anticipate earning alpha in such markets via successful pair trading," he said.

Preston furthered, "The evolution of the European debt crisis will dictate the direction of equity markets in the coming months. We remain convinced the US will avoid slipping into a recession due to accommodative monetary policy. On balance attractive equity valuations and negative real rates should underpin equity markets and help them deliver superior returns relative to both cash and bonds over the next 6-12 months."

The Laurium Capital Alternative Investments LLP and the Zambezi fund returned +7.6% and +0.5% respectively in 2011. While the numbers were disappointing in absolute terms, they can be considered good in light of the volatile markets, the managers said.

African equity markets ranged from broadly flat (Zimbabwe and Mauritius) to down 30% in Kenya and Nigerian and down around 50% in Egypt.

Vorwerg recalled that the management made two key decisions that helped its relative performance - firstly to keep its exposure to Sub Sahara outside of South Africa relatively low, and to avoid Kenya altogether. Laurium had direct exposures in Nigeria, Congo, Rwanda and Zimbabwe, and these exposures held up relatively

well.

He explained, "Besides trading and fundamental stock-picking, we also focus on event-driven trades and special situations. A handful of these presented themselves during the year, including index re-weights, block trades, IPOs and cross-exchange arbitrage. We find that very few African funds approach the markets with this mindset and so these trades, when they occur, can be profitable."

Bullish in 2012

Asked about their 2012 outlook, Vorwerg said that the firm is bullish for 2012 for Sub-Saharan equity markets outside of South Africa. Prices declined sharply in 2011, yet the economies and corporate earnings were generally healthy so valuations have become compressed. "We also expect meaningful fund flows into African bourses, not least from the large South African pension fund industry, following favourable regulatory changes, so we expect an underpin to equity prices during the second half of the year.

"In South Africa, we believe that the hunting grounds remain fertile for locally based hedge funds with niche strategies. The investment banks have generally trimmed their proprietary trading activities and the larger international hedge funds generally target a limited number of the most liquid stocks, thus leaving gaps for smaller funds," Vorwerg concluded.

- Komfie Manalo, Opalesque Asia

Document Disclosure

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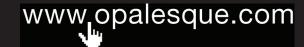
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