STANDARD & POOR'S

Setting the Standard

Equity Long/Short Hedge Funds:

Properties and Behavior

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EL/S Category Both Broad and Varied

- Can hold both long and short positions in equities to benefit from market movements in both directions (“double alpha”).
- The short position serves the following purposes:
  - Alpha generation
  - Hedging of market risk
  - Earning interest on the short position while collecting the short rebate.
- Managers may use futures and options to hedge their positions.

EL/S Category Both Broad and Varied

- Managers’ processes may be either top-down or bottom-up and may shift from value to growth, from small to medium to large capitalization stocks.
- May include relative value trades that attempt to profit from the price movement of an equity, relative to the price movement of another equity.
- Generally, net exposures of EL/S managers to long positions minus short positions tend to have a positive bias. However there is great variation in net exposures among managers.

Beta Exposures

- High beta funds generally have high net market exposure and are often concentrated, while moderate beta funds are likely to hold proportionally more short positions that would lower net market exposure.
- Low beta funds have insignificant net market exposure or high beta variability and deserve more analysis to ensure that they are not better classified as Equity Market Neutral funds.
- Negative beta funds have investment methodologies and strategies that can result in a return stream that runs counter to traditional equity market indices.

Beta Variability

- Another critical element to understanding EL/S funds is the degree to which betas vary over time and over different market conditions. High beta variability may indicate several things:
  - The manager consistently includes securities different from those in the benchmark index
  - A market-timing fund manager is deliberately controlling beta, based on a market view.
  - A stock-picking fund manager does not manage beta because he or she is concerned primarily with the fundamental characteristics of the stocks in the portfolio.

Regression Results

	SPELSI	SPELSI US	SPELSI Global Ex-US	CSFB	FTSE	Edhec
Intercept	-0.15	-0.28	-0.13	-0.49	**0.47**	-0.11
	(0.56)	(0.31)	(0.71)	(0.13)	(0.002)**	(0.59)
Global Equity	**0.24**	**0.33**	**0.15**	**0.19**	**0.15**	**0.3**
	(0.0000)**	(0.0000)**	(0.0008)**	(0.05)*	(0.0000)**	(0.0000)**
Size Premium	**0.18**	**0.19**	**0.19**	**0.41**	**0.24**	**0.21**
	(0.0000)**	(0.0000)**	(0.0001)**	(0.0000)**	(0.0000)**	(0.0000)**
Value Premium	**-0.1**	-0.08	**-0.12**	**-0.22**		**-0.09**
	(0.02)*	(0.06)	(0.02)*	(0.005)**		(0.006)**
Volatility				-0.04		
				0.13		
Lagged Volatility						
Commodity				0.08		
				(0.07)		
Currency						
Cash	**2.48**	**3.46**	1.76			**1.44**
	(0.006)**	(0.0004)**	(0.12)			(0.04)*
Bond						
Mortgage Backed						
High Yield						**0.11**
						(0.04)*
Yield curve				**1.79**		
				(0.02)*		
Lagged Yield Curve						
Credit Spread	-0.34	**-0.56**		-0.7		
	(0.1)	(0.009)**		0.08		
R-Square	0.69	0.8	0.42	0.69	0.59	0.84

We applied stepwise factor regressions to decompose the returns of investable EL/S indices. For each index, we regress monthly indices' returns against a set of risk factors.

Data: January 2000 to May 2004

The values in parenthesis are the p-values

* denote statistical significance at 5% level
** denote statistical significance at 1% level
Regression coefficients that are statistically significant are in **bold**.

Note that independent variables that do not have values are excluded by the process of stepwise regression.

Regression Results

- Returns of the major investable EL/S indices have a statistical significance positive relationship with Global Equity Market return and Size Premium.
- Finding supports the conventional wisdom that EL/S funds have a net long bias and they usually go long small capitalization stocks and go short large capitalization stocks.
  - Managers want more liquidity on the short side.
- Statistically significant positive relationship with Cash, possibly due to interest earned from short positions.
- Statistically significant negative relationship with the Value Premium. This suggests that these managers were taking long position with Growth stocks and short position with Value stocks.

Rolling Regressions: Variable Beta

- Alpha and beta depend on time. A common approach to model variable alpha and betas are Rolling Regressions. The advantage of rolling regression is its simplicity but its limitation is the dependence on the size of the rolling window.
- Rolling regression analysis uses 24 observations compared to 54 observations in regression with constant betas.
- Analyzed the three independent variables characterizing EL/S returns:
  - Rolling Alphas
  - Rolling Betas of Global Equity, Size Premium, and Value Premium.

Rolling Regressions: Variable Beta

- In general, the overall results of the rolling regressions indicate that the betas of Equity and Size Premium are robust and their statistical significance is insensitive to the number of observation or time period being chosen where as the statistical significance of the beta associate with the Value Premium is less reliable.
- The results of both the constant and variable betas imply that the robustness of the beta associates with Value Premium is sensitive to the period being chosen or number of observation being used.

Conclusions

- We find that on average, Equity Long/Short hedge fund returns are driven by returns of the global equity market, size premium, and the value premium.
- But when we look at different sub periods over time, the impact of Value Premium become less robust. The variability of these betas over time is modest and the variability of these betas over time for some investable EL/S indices is different from each other.

Where Credit Is Due…

- A special thanks to Edward Leung, PhD, my former colleague who was the primary author for the chapter.

Thank You

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