TABLE 4 **CORRELATION MATRIX**

	S&P 500	hedge fund index	FOHF composite
S&P 500	1.00	0.70	0.43
Hedge fund index		1.00	0.81
FOHF composite index			1.00

The correlation between the S&P 500 and the hedge fund index, at 0.70, is much higher than the correlation between the FOHF index and the S&P 500 of 0.43. FOHFs do appear to offer better diversification benefits than a diversified hedge fund portfolio as represented by the HFR hedge fund weighted index.

FOHFs AND ASYMMETRIC CORRELATION

It is also increasingly recognised that hedge funds exhibit asymmetric correlations with standard asset classes. In other words, correlations differ in up- versus down-markets. I follow Edwards and Caglayan (2001), who define a bull (bear) market as one in which the S&P 500 rises (falls) by 1 per cent or more in a month. Table 5 presents the bull and bear returns along with the correlations for the hedge fund and FOHF index.

TABLE 5 **RETURNS AND CORRELATIONS – BULL AND BEAR MARKETS**

	Bull markets		Bear markets	
	Average annual return (%)	Correlation with S&P 500	Average annual return (%)	Correlation with S&P 500
Hedge fund index	27.30	0.18	-7.80	0.67
FOHF composite index	16.47	0.01	-1.24	0.46

For the sample period there are 85 bull months and 50 bear months. In bull markets the hedge fund index (27.30 per cent return) considerably outperforms the FOHF index (16.47 per cent), but this is tempered by a lesser loss for FOHFs (-1.24 per cent) in bear markets relative to the loss in the hedge fund index (-7.80 per cent). FOHFs seem to be structured such that they are closer to market neutrality than the average hedge fund.

The correlation between the FOHF index and the S&P 500 is close to zero during bull markets, which is much lower than the correlation for the hedge fund index of 0.18. The correlations clearly increase during bear markets, but again the FOHF correlation at 0.46 is considerably lower than the correlation for the hedge fund index of 0.67. These findings offer support to the claims by the industry that FOHFs offer superior diversification benefits vis-à-vis a randomly selected portfolio of hedge funds or hedge fund indexing.