

Abnormal Return Patterns and Hedge Fund Failures

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Abstract

Hedge fund performance and risk measurement continues to present intriguing challenges to both academics and practitioners. In recent months these challenges have become more visible in the light of losses at Amaranth Advisors. One of the main reasons why performance and risk measures fail to adequately expose certain risks in hedge funds is the uniqueness of hedge fund strategies and related operational issues in executing these strategies. In this article we will first examine the risk exposures and performance characteristics of a large sample of live and dead hedge funds, and then turn our attention to four recent hedge fund failures. All four of these funds were subject to enforcement proceedings by the SEC and/or CFTC and the major reason for failure was fraud. Using a variety of risk measures we will explore whether key risk exposures may be used to differentiate between active and dead funds. We show that a “monitoring test” could be used to determine if a hedge fund manager has changed his/her trading strategy significantly, which may be a signal that the manager is engaged in trading activities not covered by fund’s investment mandate. Our results indicate that careful qualitative and quantitative due diligence would have uncovered some abnormal return patterns in the four failed funds. In fact, in one case several investors decided not to invest after careful qualitative due diligence. We conclude that both qualitative and quantitative due diligence are equally important in successfully monitoring hedge funds risk exposures.

INTRODUCTION

Hedge fund performance and risk measurement continues to present intriguing challenges to both academics and practitioners (Kazemi and Schneeweis [2003]). Gupta [2005] examined the interdependence of several measures for various hedge fund strategies and concluded that in most cases these measures do not reveal any unique information and portfolio selection based on many of these measures result in highly correlated portfolios. This means that risk-return measures that are solely based on historical return series tend to provide limited information and the marginal new information revealed by another quantitative measure tends to be small, and approaches zero once three or more measures are considered.

Further, quantitative measures of risk-return that are solely based on historical returns very often fail to protect investors against losses. One of the main reasons for this failure is the uniqueness of hedge fund strategies and related operational issues in executing each strategy. Consider, for example, the recent problems at Amaranth Advisors, LLC. (e.g., see *Wall Street Journal* [2006]) Even though the firm emphasized that its fund was multi-strategy, most of the recent losses were driven by adverse natural gas trades. Prior to this debacle, most investors who viewed reports from this firm had no reason to worry about its performance although some privy to their portfolio positions expressed concern. The compound annual return for the period September 2000 – November 2005 according to media reports (Morgensen and Anderson [2006]) was 14.72% net of all costs. It is clear that knowledge of the fund's returns did not enable investors to correctly assess the fund's unique risks. It is important to point out, however, that Amaranth's misfortunes

were solely a result of poor risk management. It is also important to point out that even though the firm lost over \$6 billion in a matter of days, the losses had minimal impact in the industry as a whole.

Consider another example, the case of Bayou Funds, which is among the most highly publicized in recent years. Exhibit 1 lists the summary statistics of Bayou's reported returns as well as those of comparable CISDM, CSFB and HFR indices. While the indices reported annualized returns in the 4-7% range over the period Jan 2000 – Dec 2004, Bayou reported a return of 13.14% over that same period. Moreover the volatility of Bayou's returns was significantly lower than those of the three indices. The primary question that arises from this discussion is how relevant are the return figures? The return figures are extremely important as a first check in the quantitative due diligence process. However, the returns do not reveal the entire risk profile. A rigorous qualitative due diligence process is required to supplement the returns-based analysis. Interestingly, according to media reports, since diligence conducted by certain firms revealed problems at Bayou and some investors chose not to invest in the fund (e.g., see *Wall Street Journal* [2005]).

<< Exhibit 1 >>

In this article we will examine several risk measures using a large sample of active and dead hedge funds drawn from the CISDM Database. CISDM has been tracking managed

futures since 1979 and hedge funds since 1992 and has a collection of over 9000 funds in its active and dead databases.

We also examine the risk exposures and performance characteristics of selected recent hedge fund failures, and then apply a monitoring test to these funds to determine if performance figures can help in identifying failing funds. These failures include those of Bayou Fund which was managed by Bayou Management Group, Lancer Offshore Fund which was managed by Lancer Management Group, Marque Partners 1 which was managed by Marque Millennium Group and V-Tek Capital (BVI) which was managed by V-Tek Capital. We will describe the specific characteristics of each of these failures in the next section.

Below, we briefly review some of the previous work in the area of risk measurement and hedge fund defaults. In the next section we discuss our database and methodology followed by a section reporting our results. Finally, we will offer some concluding thoughts on the implications of our analyses and issues for future research.

Recent research has focused on quantifying various hedge fund default risks as well as the value of disclosure. These risks may be in various forms such as financial risks, operational risks and straight fraud. Corentin, Daul and Giraud [2006] examine the statistical properties of 109 defaults over the period 1994-2005. They find that a high percentage of defaults (over 50%) were due to fraud compared to defaults due to operational risk (13%) or defaults due to financial risk (33%). Another interesting finding

in the study is that a high percentage of funds (almost 50%) that defaulted had less than \$100 million under management. Further, 56% of defaults were in funds that traded simple instruments compared to 29% of defaults in funds that traded complicated or opaque instruments. Brown et.al. [2007] use the recent controversial and unsuccessful SEC attempt to increase hedge fund disclosure to examine the potential benefits of registration to investors. They note that any consideration of disclosure requirements should take into account the endogenous production of information within the industry and the marginal benefit of required disclosure on different clienteles. Other research in the area of performance and risk measurement have focused on specific failures such as Amaranth (Martin [2007], Chincarini [2006]) as well as liquidity issues, Derman [2006]). For overviews of this line research, the reader is directed to Till and Gunzberg [2005] or Gehin [2006].

DATA AND SUMMARY STATISTICS

The data for the present study has been taken from the CISDM Database. As noted before, this database, as of December 2006, had a collection of 9000 active and dead funds. CISDM provides both qualitative as well as quantitative information on these funds and their management companies. The so-called dead funds database consists of hedge funds that at some point have decided to stop reporting to the database. CISDM attempts to find out why a hedge fund has stopped reporting and in some cases these funds provide some information to the database. However, in a majority of cases it is not clear why a hedge fund stops reporting.

Performance statistics for both live and dead funds are presented in Exhibits 2A and 2B. For the entire sample of active and dead funds we calculated each of the risk-return measures and then reported their average values in Exhibits 2A and 2B. Several features of the estimates need to be pointed out. As expected, for each strategy the average volatility of dead funds is greater than the average volatility of active funds. Of course these managers are not homogeneous and there is considerable variation within each group.

<< Exhibits 2>>

Exhibits 2A and 2B also show that dead funds generally tend to have lower skewness than active funds. This result is particularly strong for event driven strategies, where the average active fund has positive skewness while the average dead fund has negative skewness. This indicates that everything else being the same, dead funds are more likely to experience large negative returns. These two exhibits also show that dead funds tend to have higher estimated kurtosis, indicating that return distributions of the dead funds tend to have fatter tails.

An interesting aspect of the analysis is the direction and magnitude of the estimates for alphas and betas obtained from a single-factor regression. Our single factor is defined as a weighted combination of the Russell 3000 Total Return Index, the Lehman U.S Aggregate Index and the Lehman High Yield Index. The estimates for alphas and betas as well as the R-squares of the linear regression for active and dead samples are very similar both in direction and magnitude. This indicates that quantitative measures based solely

on historical returns may not be useful in predicting which funds are likely to become defunct. Finally, we present estimates for the Sharpe-Omega measure (Kazemi et.al. [2004]). It can be seen from Exhibits 2A and 2B that, on average, dead funds have lower Sharpe-Omega ratios than active funds.

A number of authors have argued that the presence of auto-correlations in hedge fund returns is an indication of the illiquidity of the underlying assets held by hedge funds (Getmansky et.al. [2004]). Some authors have gone further and have claimed that the presence of positive autocorrelation could be used to detect fraudulent return smoothing in the hedge fund industry (Bollen and Krepely [2006]). Looking at Exhibits 2A and 2B, we can see that certain strategies display higher positive autocorrelation than others. As expected, autocorrelation estimates are higher for convertible arbitrage, distressed securities and fixed income arbitrage and very low for equity and global macro strategies. However, we do not see significant and uniform differences between active and dead funds when it comes to auto-correlation.

An interesting aspect of our sample of dead and active funds is that the means for dead funds are not uniformly smaller than those of active funds. In certain cases such as convertible arbitrage, event driven multi-strategy and merger arbitrage the mean for dead funds is actually higher. A careful examination of the list of dead hedge funds reveals the presence of funds run by firms such as Steel Partners, Third Point Partners and Perry Partners. These funds are still active with strong performance, but have voluntarily stopped reporting to the database.

To improve the information content of our results, we decided to examine the dead fund database further and eliminate those funds that are still active but decided not to report to the database, and those funds that had strong performance prior to their decision not to report to our database. To compare the performance of this selected group of dead funds with a similar group of active funds, we decided to concentrate on the same number of active funds that had the lowest ranking according to their Sharpe-Ratios. In a sense we are comparing the performance of the selected dead funds with the same number of poor performing active funds. The results are presented in Exhibit 3. Even for these selected groups of dead and active funds we do not see strikingly different measures for all types of risks. The two results that stand out are that dead funds tend to have higher kurtosis and lower skewness.

<< Exhibit 3>>

CASES STUDIES OF FAILED FUNDS

As noted earlier, we will examine the failure of four funds. These funds as well as their characteristics are presented in Exhibits 4A and 4B. Below we briefly describe the circumstances surrounding the failures of each of these funds¹.

<<< Exhibits 4 >>>

Bayou Fund

In a complaint dated September 2005, the Securities and Exchange Commission noted that Samuel Israel III of New York and Daniel E. Marino of Connecticut, the managers of a group of hedge funds known as the Bayou Funds (Funds), defrauded investors in the Funds and misappropriated millions of dollars in investor funds for their personal use. The Commission noted in its complaint that from 1996 through 2005, investors deposited over \$450 million into the Bayou Funds and a predecessor fund. During that period, Israel and Marino defrauded current investors, and attracted new investors, by grossly exaggerating the Funds' performance to make it appear that the Funds were profitable and attractive investments, when in fact, the Funds had never posted a year-end profit. On October 2005, charges were also filed against Israel and Marino by the Commodity Futures Trading Commission (CFTC).

Lancer Offshore Fund

In a complaint dated July 2003, the Securities and Exchange Commission noted that Michael Lauer, principal of Lancer Management Group, LLC, the firm that operated

¹ More information on these failures is available on the SEC (www.sec.gov) and CFTC (www.cftc.gov) websites.

Lancer Offshore fund violated the federal securities laws in connection with their deliberate manipulation of the closing prices of various Over-the-Counter Bulletin Board ("OTCBB") and pink sheet quoted stocks. The complaint also noted that from at least March 2000 to the July 2003, defendants have used their portfolio pumping techniques to overstate the value of certain of the fund's holdings in virtually worthless companies and over-inflate performances and net asset values ("NAVs"). Through defendants' fraudulent scheme the fund amassed hundreds of millions of dollars from investors and defendants earned at least tens of millions of dollars in fees. As of April 30, 2003, defendants Lauer and Lancer represented that that fund had \$657 million in assets.

Marque Partners I

In December 2003, the Securities and Exchange Commission instituted public administrative and cease-and-desist proceedings pursuant to Sections 203(f) and 203(k) of the Investment Advisers Act of 1940 against Wilfred Meckel and Robert T. Littell. Littell, from October 1997 through June 2000 was employed by Marque Millennium Group, Ltd. ("MMG") as Manager of Investments. Until March 2000, Littell was primarily responsible for operating Marque Partners I including making all investment decisions, entering trades, and communicating with investors. The order noted that from at least December 1998 through March 2000, MMG, through Littell, communicated materially inaccurate performance information to limited partners and potential investors in the Hedge Funds. In addition, from MPI's inception in October 1997 through March 2000, MMG, through Littell, made various misrepresentations to investors and potential

investors about the Hedge Funds' management structure, retention of an accountant and auditor, and risk management techniques.

V-Tek Capital (BVI)

The U.S. Commodity Futures Trading Commission (CFTC) announced that on September 10, 2004, Judge Blanche Manning of the United States District Court for the Northern District of Illinois issued an order freezing assets in an enforcement action filed on September 8, 2004, that charges Edward R. Velazquez of Chicago, Illinois, and his companies V-Tek Trading Group, Inc. (V-Tek Trading Group), and V-Tek Capital, Inc. (V-Tek Capital) with fraud. Specifically, the complaint alleges that defendants defrauded at least 43 customers of at least \$2.4 million by fraudulently misrepresenting the profit potential, and failing to adequately disclose the risks, of trading commodity futures. According to the complaint, until July 2004, Velazquez, V-Tek Capital, and V-Tek Trading Group touted their collective operations, which they referred to as "V-Tek," as a hedge fund, and promoted investments in managed commodity futures trading accounts on a website that displayed a V-Tek Capital banner proclaiming "rated in the top 1% of capital management firms worldwide." The complaint also alleges that defendants falsified Velazquez's trading performance track record and distributed it to customers, falsely stating on an Internet website and in printed promotional material that V-Tek Capital is registered with the CFTC.

We will first present summary statistics for each of these funds. Next, we will present single factor regression results for each of the four funds against the relevant indices.

Finally, we will perform a “monitoring test” as described below to detect any structural breaks in the data.

When an investor decides to allocate capital to one or more hedge fund strategies, the first step is to perform due diligence. During this process, the investor can learn a great deal about the fund, the portfolio manager, his/her trading strategy, the fund’s back office support and its risk management techniques. Once the due the diligence is over and the commitment is made, the investor will typically visit the manager every few months to ensure that the provisions of the investment agreement are still followed. Between regular visits to the office, the investor has to rely on reported fund’s returns to determine if the fund is following the agreed guidelines. In the last section of this paper we apply the “monitoring test” of Zeileis et.al. [2005] to show how between due diligence visits a fund’s return could be used to determine if the manager has deviated from his/her investment mandate.

The mathematical details of the monitoring test can be found in the original paper of Zeileis et.al. [2005]. Briefly, suppose the rate of return on a fund’s strategy can be expressed by a linear factor model of the following form

$$r_t = \beta_0 + \sum_{j=1}^F \beta_j f_{jt} + \varepsilon_t \quad (1)$$

In this expression r_t is the return on the fund at time t , β_i for $i = 1, \dots, F$ are factor exposures of the fund, f_{it} is the return to factor i and ε_t is the error term.

Suppose we have confidence that the manager's return up to the last due diligence visit, $t = n$, was generated by the above model. Therefore, our objective is to use returns observed at time t , where $t = n + 1, \dots, T$, with T being the time for next visit, to determine if there have been material changes in factor exposures. The monitoring test proposed by Zeileis et.al. [2005] uses the following test statistic

$$Y(t) = \Lambda(t) \times (\hat{\beta}^{(t)} - \hat{\beta}^{(n)}),$$

where $\hat{\beta}^{(n)}$ is the estimated value of the vector of the coefficients of the linear factor model using data up to period n and $\Lambda(t)$ is an scaling factor related to the volatility of the data and the standard errors of the estimates (see equation (3) of Zeileis et.al. [2005]). It can be shown that the statistic $Y(t)$ follows a Brownian bridge process. To decide if there has been a structural change in the linear factor model, the value of $Y(t)$ is compared to $\pm b(t)$, where

$$b(\tau) = \sqrt{\tau(\tau-1) \left[\lambda^2 + \log\left(\frac{\tau}{\tau-1}\right) \right]},$$

$$\tau = \frac{t}{n}$$

If $Y(t)$, for $t = n + 1, \dots, T$, crosses the two boundaries, then the null hypothesis of no change is rejected. The value of λ^2 is selected to reflect the level of confidence (e.g., at 95% confidence level $\lambda^2 = 7.78$). We apply the above monitoring case to the selected group of failed funds listed in Exhibit 4.

EMPIRICAL RESULTS AND DISCUSSION

Our results regarding the failed funds are segmented into three parts. First, we will present summary statistics for the four funds that were described in the previous section. Next, we will present single factor regression results against the relevant indices for each of the four funds. Finally, we will present the results of the “monitoring test” of Zeileis et.al. [2005], which illustrates how a fund’s return could be used to determine if the manager has deviated from his/her investment mandate.

Summary Statistics

The summary statistics for the four funds are presented in Exhibit 4B. The numbers reveal two interesting points. First, the annualized return of all four funds over their respective reporting periods is in excess of 15%. The top funds in the industry (e.g. Caxton, SAC, Renaissance) have performance characteristics that are similar to those of these funds. At a first glance, these funds look as promising as the top funds mentioned above. Second, with the exception of V-Tek, the other three funds are classified as long/short equity in the database. These statistics would imply that these funds are among the best performers of all funds executing equity long/short strategies.

Exhibit 5 displays 12-month rolling return volatilities for the four failed funds. Also included are rolling volatilities on CISDM Equally Weighted Hedge Fund index and CISDM Asset Weighted CTA index. With the exception of Marque Partners I Fund, the remaining funds show dramatic changes in their return volatility. For example, note the significant reduction in Bayou’s return volatility. While this reduction in and of itself

may not always be a cause for concern, it is certainly an indication that a fund's trading strategy needs to be looked at closely to understand the nature of its returns. It so happens according to media reports that trouble began brewing at the fund around the time there was the drastic reduction in its volatility in 1999.

Single Factor Regressions

Single factor regression results of the Bayou return series against three major hedge fund indexes, the CSFB/Tremont, HFR and CISDM are presented in Exhibit 6. The R-squares are extremely low and the slope coefficients are insignificant in all three cases. One would expect the strategy indices to have a little more explanatory power than those obtained from the regressions.

<< Exhibit 6>>

Single factor regression results for Marque, Lancer and V-Tek are presented in Exhibits 7, 8, and 9 respectively. The R-squares are extremely low in all three cases. The slope coefficients are negative and insignificant in the case of Marque, while they are positive and significant in the case of Lancer. Equity based strategies generally performed well in the period 1995-2000 and the results indicate that Lancer is a top performer. Of course, it was later revealed that the reported performance numbers were materially false.

<<< Exhibits 7, 8 & 9 >>>

Monitoring Test

In this section we apply the monitoring test discussed in the previous part to the four failed funds. As discussed previously, these funds failed because of fraud and other illegal activities. Our goal is to determine if the monitoring test can be used to detect significant changes in these funds strategies after the first 12 months of operations. Typically, an investor will perform this test after the due diligence process is completed. In our case we assume that any significant changes in these funds strategies have taken place after the first 12 months of operations.

Using CISDM hedge fund and CTA indices, we estimated factor exposures that appear in equation (1). For the hedge funds, we used convertible arbitrage, event driven, global macro, merger arbitrage, fixed income arbitrage, equity long-short and emerging market indices as factors, while for the V-Tek we used CTA financial and CTA commodity indices to measure factor exposures.

<< Exhibits 10 >>

Exhibits 10 display the results of our tests. We can see that in cases of Bayou Fund, Marque Partners I, and V-Tek Capital there were significant changes in the strategy after the first 12 months. News reports have indicated that Bayou Fund was involved in illegal activities almost from the outset, and as it can be seen, the test indicates that the fund's factor exposures almost immediately violated the 95% boundaries. A more interesting case is V-Tek Capital. As can be seen, the fund's exposures remained basically unchanged for the first 26 months (i.e., 14 months after the initial 12 months). However

in month-27 there was a significant shift the in fund's trading strategy and less than 2 years later the fund was closed for fraudulent activities.

CONCLUSIONS

One of the continuing challenges to hedge fund performance measurement is the efficacy of available measures. We applied several measures of risk and return to a large sample of active and dead funds. The results generally indicate traditional measures of risk and return may not provide enough early warning about failing funds.

In this article we examined the return patterns of four significant failures in recent years. These include Bayou Fund, Lancer Offshore Fund, Marque Partners I and V-Tek Capital. We found that in all cases when fund returns are regressed against relevant strategy indices the resulting R-squares were very low irrespective of the index provider used. One would expect stronger exposures to the strategy index. We also applied a monitoring test to these funds to detect changes in style. Results from the monitoring tests show that in most cases there were significant changes in strategy after the first twelve months. The methodologies used in the article would be very effective for investors seeking to test stability of fund strategies from reported returns.

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Exhibit 1: Summary Statistics of Bayou Funds

	Annualized Return	Standard Deviation	Skew	Kurtosis
BAYOU FUNDS	13.14%	4.58%	-1.01	2.67
CSFB-Tremont HFI Long-Short Equity	4.83%	9.01%	0.79	5.11
HFRI Equity Hedge Index	6.26%	8.75%	0.67	2.21
CISDM Equity Long/Short Index	5.73%	6.64%	0.42	0.80

Exhibit 2A: Summary Statistics of Active Funds over the period 1990-2006

	Annualized Mean	Annualized Standard Deviation	Skew	Kurtosis	Sharpe	Beta	Alpha	R-Square	Sharpe Omega	Auto Correlation
Relative Value Strategies										
Convertible Arbitrage	10.44%	6.81%	-0.06	2.61	1.99	0.43	0.04	0.13	1.40	0.39
Fixed Income Arbitrage	8.36%	4.52%	-0.37	5.38	1.40	0.13	0.04	0.06	1.09	0.22
Equity Market Neutral	8.66%	8.94%	0.23	6.03	0.47	0.09	0.04	0.02	1.36	0.07
Event Driven Strategies										
Distressed Securities	16.52%	9.00%	0.45	3.23	1.53	0.49	0.10	0.14	1.65	0.25
Merger Arbitrage	8.31%	4.64%	0.55	8.34	0.86	0.21	0.03	0.10	1.45	0.17
Event Driven Multi-Strategy	12.97%	10.47%	0.06	3.54	1.08	0.85	0.05	0.27	1.62	0.22
Opportunistic Strategies										
Equity Long/Short	14.89%	14.27%	0.36	2.75	0.82	0.82	0.07	0.18	1.76	0.13
Global Macro	15.01%	16.57%	0.33	3.26	0.56	0.58	0.08	0.10	1.48	0.06
Emerging Markets	21.46%	20.35%	-0.07	4.41	1.03	1.35	0.10	0.21	2.19	0.17

All estimates are averages within each group.

Exhibit 2B Summary Statistics of Dead Funds over the period 1990-2006

	Annualized	Annualized							Sharpe	Auto
Relative Value Strategies	Mean	Standard	Skew	Kurtosis	Sharpe	Beta	Alpha	R-Square	Omega	Correlation
		Deviation								
Convertible Arbitrage	11.70%	7.91%	-0.16	4.13	1.22	0.32	0.06	0.09	1.13	0.29
Fixed Income Arbitrage	7.18%	8.40%	-1.25	11.41	0.78	0.17	0.02	0.07	1.00	0.21
Equity Market Neutral	8.12%	9.27%	0.16	2.29	0.39	0.03	0.04	0.03	1.05	0.09
Event Driven Strategies										
Distressed Securities	12.35%	14.13%	-0.01	4.77	0.88	0.88	0.04	0.22	1.17	0.22
Merger Arbitrage	9.80%	8.21%	-0.41	4.04	0.76	0.38	0.04	0.12	1.01	0.16
Event Driven Multi-Strategy	14.29%	11.40%	-0.24	4.04	1.04	0.75	0.06	0.24	1.18	0.21
Opportunistic Strategies										
Equity Long/Short	14.26%	20.83%	0.19	3.50	0.60	1.12	0.04	0.20	1.31	0.10
Global Macro	9.11%	17.53%	0.11	2.99	0.37	0.75	0.01	0.10	1.02	0.07
Emerging Markets	10.35%	27.45%	-0.28	6.86	0.26	1.45	-0.01	0.15	0.56	0.16

All estimates are averages within each group.

Exhibit 3: Summary Statistics of Selected Dead and Active Funds over the period 1990-2006

	St Dev	Mean	Skew	Kurtosis	Sharpe Ratio	Beta	Alpha	R Sqr	Sharpe Omega	Auto Correl
Dead Emerging Markets Funds	26.76%	0.76%	-0.475	5.635	-0.150	1.437	-10.7%	15.4%	-0.12	14.7%
Active Emerging Markets Funds	25.87%	18.41%	-0.203	5.385	0.533	1.639	5.9%	21.9%	2.76	16.4%
Dead Convertible Arbitrage Funds	8.60%	3.30%	-1.352	6.287	-0.305	0.199	-1.8%	5.8%	-0.22	16.3%
Active Convertible Arbitrage Funds	8.23%	6.02%	-0.359	2.239	0.138	0.559	-0.9%	18.3%	0.60	25.8%
Dead Equity Long-Short Funds	22.16%	-1.65%	-0.457	4.628	-0.288	1.184	-11.8%	20.9%	-0.36	4.7%
Active Equity Long-Short Funds	15.49%	7.65%	0.019	2.440	0.197	0.905	-1.1%	19.2%	0.70	8.2%
Dead Equity Mkt Neutral Funds	8.87%	2.66%	-0.021	1.710	-0.283	-0.034	-1.3%	3.0%	-0.24	6.0%
Active Equity Mkt Neutral Funds	8.35%	4.17%	-0.298	6.876	-0.023	0.232	-0.6%	2.4%	0.28	6.7%
Dead Distressed Securities Funds	23.23%	2.17%	-0.767	6.116	-0.041	1.188	-8.0%	20.4%	0.03	25.7%
Active Distressed Securities Funds	12.55%	12.98%	0.239	6.344	0.732	0.521	6.2%	9.7%	2.54	15.4%
Dead Global Macro Funds	19.51%	0.15%	0.099	2.876	-0.225	0.856	-8.3%	11.3%	-0.19	3.7%
Active Global Macro Funds	13.86%	9.15%	0.049	3.470	0.310	0.317	3.5%	8.8%	0.90	7.5%
Dead Merger Arbitrage Funds	7.18%	2.53%	-0.552	3.490	-0.504	0.280	-3.0%	7.8%	-0.20	5.1%
Active Merger Arbitrage Funds	4.30%	6.98%	0.732	7.724	0.575	0.164	2.1%	7.3%	1.34	16.6%
Dead Fixed Inc Arb Funds	12.55%	2.86%	-1.569	11.799	-0.181	0.194	-2.2%	10.2%	-0.29	17.2%
Active Fixed Inc Arb Funds	6.05%	7.02%	-1.080	7.499	0.473	0.173	2.1%	7.4%	1.21	16.6%
Dead Event Driven Funds	12.61%	4.73%	-0.611	3.013	0.051	0.480	-1.8%	24.8%	0.21	20.5%
Active Event Driven Funds	19.77%	8.38%	-0.017	5.180	0.246	1.481	-3.3%	22.1%	0.96	9.9%

Exhibit 4A: Failed Funds' Characteristics

Fund_Name	Fund_Type	Inception_Date	Strategy	Strategy_Description	Min_Investment
BAYOU FUNDS	Hedge Fund	31-Jan-97	Equity Long/Short	Long/short	500000.00
LANCER OFFSHORE FUND	Hedge Fund	31-Oct-95	Equity Long/Short	US opportunity. Value.	500000.00
MARQUE PARTNERS I	Hedge Fund	31-Oct-97	Equity Long/Short		100000.00
V-TEK CAPITAL (BVI)	CTA	31-Jan-00	CTA-Systematic/Trend-Following	169 systems covering stock indices, currencies, interest rates.	500000.00

Exhibit 4B: Summary Statistics for Failed Funds

Fund_Name	Reporting Period	Annualized Return	Standard Deviation	Skew	Kurtosis	Minimum	Maximum
BAYOU FUNDS	January 97 - February 05	16.69%	10.95%	2.08	15.91	-10.55%	20.35%
LANCER OFFSHORE FUND	October 95 - December 02	34.53%	24.25%	2.34	8.09	-8.96%	35.75%
MARQUE PARTNERS I	October 97 - November 99	37.72%	15.72%	1.02	2.14	-4.93%	16.61%
V-TEK CAPITAL (BVI)	January 00 - September 03	56.28%	83.73%	6.29	41.01	-8.80%	159.83%

Exhibit 5: 12-Month Rolling Volatilities of Failed Funds and Related Benchmarks

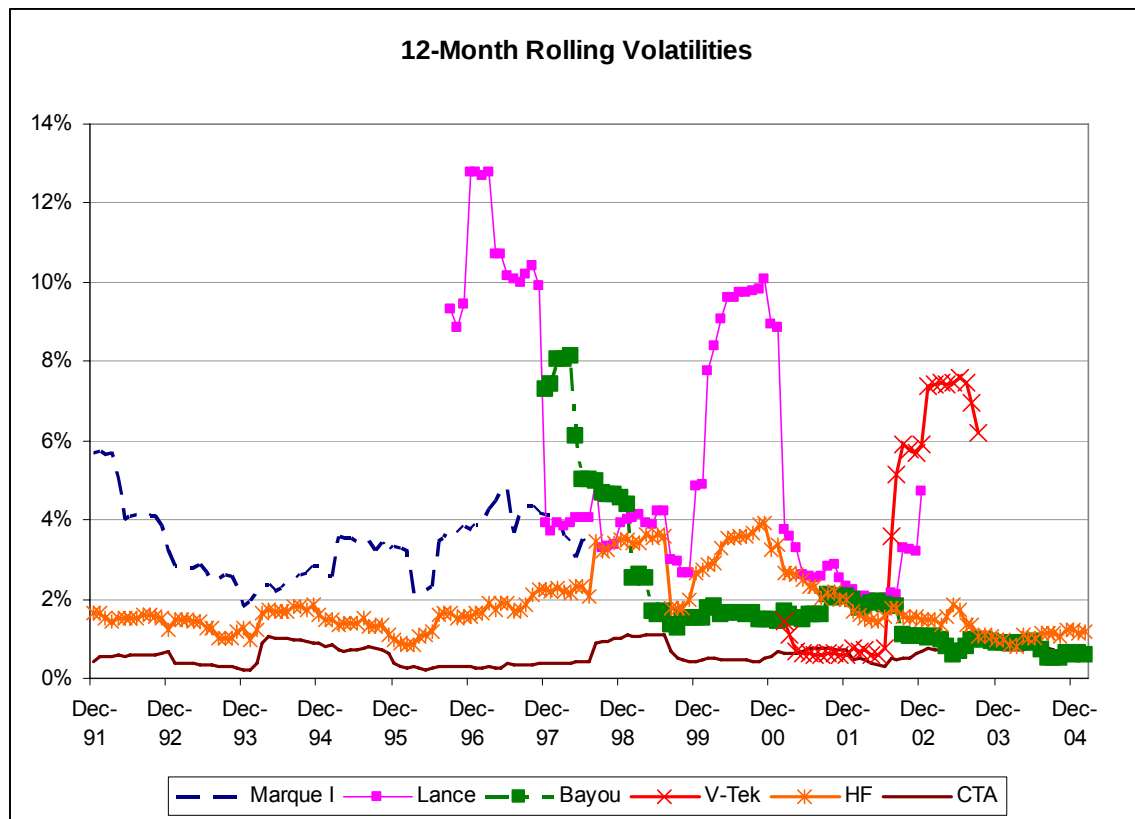


Exhibit 6: Single Factor Regression Results for Bayou

Regression: Bayou Return = α + β *Index Return + ϵ				
Index = CSFB-Tremont HFI Long/Short Equity				
Regression Statistics				
R Square	0.01			
Adjusted R Square	-0.01			
	Coefficients	Standard Error	t Stat	P-value
Intercept	1.06%	0.17%	6.14	0.0000
CSFB-Tremont HFI Long-Short Equity	-5.13%	6.64%	-0.77	0.4424
Index = HFR Equity Hedge Index				
Regression Statistics				
R Square	0.02			
Adjusted R Square	0.00			
	Coefficients	Standard Error	t Stat	P-value
Intercept	1.01%	0.17%	5.76	0.0000
HFR Equity Hedge Index	6.95%	6.81%	1.02	0.3112
Index = CISDM Equity Long/Short Index				
Regression Statistics				
R Square	0.02			
Adjusted R Square	0.01			
	Coefficients	Standard Error	t Stat	P-value
Intercept	0.99%	0.18%	5.65	0.0000
CISDM Equity Long/Short Index	10.81%	8.94%	1.21	0.2318

Exhibit 7: Single Factor Regression Results for Marque Partners 1

MARQUE PARTNERS I				
Regression: Marque Partners 1 Return = α + β *Index Return + ε				
Index=CSFB Long/Short Equity				
Regression Statistics				
R Square	0.09			
Adjusted R Square	0.05			
	Coefficients	Standard Error	t Stat	P-value
Intercept	3.74%	0.95%	3.95	0.0006
X Variable 1	-35.19%	22.65%	-1.55	0.1334
Index=CISDM Long/Short Equity				
Regression Statistics				
R Square	0.12			
Adjusted R Square	0.08			
	Coefficients	Standard Error	t Stat	P-value
Intercept	3.71%	0.91%	4.08	0.0004
X Variable 1	-48.68%	27.08%	-1.80	0.0848
Index=HFR Equity Hedge				
Regression Statistics				
R Square	0.10			
Adjusted R Square	0.06			
	Coefficients	Standard Error	t Stat	P-value
Intercept	3.93%	0.99%	3.98	0.0006
X Variable 1	-47.15%	28.82%	-1.64	0.1149

Exhibit 8: Single Factor Regression Results for Lancer Offshore Fund

LANCER OFFSHORE FUND				
Regression: Lancer Offshore Fund Return = α + β *Index Return + ϵ				
Index=CSFB Long/Short Equity				
Regression Statistics				
R Square	0.29			
Adjusted R Square	0.29			
	Coefficients	Standard Error	t Stat	P-value
Intercept	1.71%	0.66%	2.57	0.0118
X Variable 1	107.17%	18.04%	5.94	0.0000
Index=CISDM Long/Short Equity				
Regression Statistics				
R Square	0.26			
Adjusted R Square	0.25			
	Coefficients	Standard Error	t Stat	P-value
Intercept	1.51%	0.70%	2.17	0.0325
X Variable 1	128.85%	23.61%	5.46	0.0000
Index=HFR Equity Hedge				
Regression Statistics				
R Square	0.32			
Adjusted R Square	0.31			
	Coefficients	Standard Error	t Stat	P-value
Intercept	1.31%	0.67%	1.96	0.0537
X Variable 1	128.99%	20.53%	6.28	0.0000

Exhibit 9: Single Factor Regression Results for V-Tek Capital

V-TEK CAPITAL (BVI)				
Regression: V-Tek Return = α + β *Index Return + ϵ				
Index=CSFB Managed Futures Index				
Regression Statistics				
R Square	0.00			
Adjusted R Square	-0.02			
	Coefficients	Standard Error	t Stat	P-value
Intercept	4.93%	3.71%	1.33	0.1903
X Variable 1	-32.97%	95.07%	-0.35	0.7305
Index=CISDM CTA Asset Weighted Index				
Regression Statistics				
R Square	0.00			
Adjusted R Square	-0.02			
	Coefficients	Standard Error	t Stat	P-value
Intercept	4.57%	3.77%	1.21	0.2314
X Variable 1	17.69%	143.58%	0.12	0.9025
Index=Barclay CTA Traders Index				
Regression Statistics				
R Square	0.00			
Adjusted R Square	-0.02			
	Coefficients	Standard Error	t Stat	P-value
Intercept	4.84%	3.73%	1.30	0.2016
X Variable 1	-26.72%	143.05%	-0.19	0.8527

Exhibits 10

