

CLIFFWATER<sup>LLC</sup>

INVESTMENT ADVISORY SERVICES

Los Angeles • New York

**Hedge Fund Operations Due Diligence Report**  
**BlueTrend Fund Limited**  
**BlueTrend Fund LP**

**March 2011**

*Investment Due Diligence Report provided under separate cover.*

## Hedge Fund Operations Due Diligence Report

<b>Firm Name:</b>	BlueCrest Capital Management LLP		
<b>Fund Name:</b>	BlueTrend Fund Limited BlueTrend Fund LP		
<b>Style:</b>	Macro	<b>Location:</b>	London, UK
<b>Review Date:</b>	March 26, 2010	<b>Reviewer:</b>	██████████

Operations Score: █████			
1. Business Management	██████	4. Valuation	██████
2. Trading and Investment Operations	██████	5. Risk Management	██████
3. Financing and Counterparty Risk	██████	6. Investor Related Practices	██████

### Summary

Since Cliffwater's last operational in March 2010, BlueCrest has remained a very stable organization and has seen strong capital inflows from investors which has caused it to hard close many of its funds. The most material change from an organization prospective is that the manager has opened a Geneva office and relocated many of its key investment professionals to the new office. The firm's founder and Head Trader Mr. Michael Platt and the Head of Systematic Trading Ms. Lega Braga have relocated with their research and trading teams from London to Geneva. In total, the firm has [ ] employees of which [ ] are in London, [ ] are in Geneva and the balance are smaller offices in Guernsey, New York, Boston and Singapore. The vast majority of all back office professionals and all internal control functions are based in London. The manager has also made the following additional changes:

- Completing a level 2 SAS 70 for the ten month period ending of September 30, 2010. This effort was led by the internal control group which is headed by Mr. [ ]. The review was conducted by KPMG who found no exceptions in its testing.
- Adding two Guernsey based senior professionals to the Executive Committee. The Executive Committee felt this change was needed because prior to the change all five members of the Executive Committee were based in London. The manager feels these additions will help the manager gain a greater presence in Europe and help it keep abreast of the new European Union legislation. In addition, if the new legislation restricts marketing activities, having a presence in Guernsey may make it easier for them to "passport" into all European Union countries.
- Hiring additional traders and implementation programmers. Over the past two years the manager has roughly doubled the size of the systematic trading desk's implementation team to 38 professionals. This is because the capital dedicated to the strategy has substantially increased over the same timeframe and the manager wanted to ensure it was able to effectively deploy the capital. In addition, the manager has added thirteen traders to the discretionary side to handle the increased trade volume over the same timeframe.
- 
- Implementing a new reconciliation system called Intermatch which is use to reconcile all positions except for over the counter ones which continue to be reconciled using Markit.
- Modifying the personal trading policy so that now all pre approved trades must be executed within 24 hours of the compliance team's approval rather than 72 hours, which was the window per the old policy. In addition, all trades now have a required 30 holding period to discourage short term trading.

*This report reflects information only through the date hereof. Our reporting relies upon the accuracy and completeness of financial and other information publicly available or provided to us by the fund manager, its professional staff, and through other references we have contacted. We have not conducted an independent verification of the information provided other than as described in this report. Our conclusions do not reflect an audit of the investment nor should they be construed as providing legal advice. Past performance does not guarantee future performance. The information contained herein is confidential commercial or financial information, the disclosure of which would cause substantial competitive harm to you, Cliffwater LLC, or the person or entity from whom the information was obtained, and may be protected from disclosure by applicable law.*

- Registering their new Guernsey office with the Guernsey Financial Services Commission as required by Guernsey law. BlueCrest must also report some financial information to the Guernsey regulator on a quarterly basis and have quarterly meetings in Guernsey.

Over the next year the manager also plans to roll out a proprietary risk manager system called BlueScreen. This new system will monitor risk on a near real-time basis.

BlueCrest's team of \_\_\_ non-investment professionals effectively manages all trading and business operations and meets all industry operational best practices. BlueCrest has made a substantial investment in building out its middle and back office team and infrastructure. As mentioned above, BlueCrest distinguishes itself from other funds because they completed a Level 2 SAS 70. \_\_\_ identified 50 control objects and 150 controls. The control owners are required to sign off that all controls are functioning as intended on a quarterly basis. In addition, the controls are also tested on a risk basis by the internal risk control group.

**Section 1: Business Management**

**Score:**

BlueCrest meets all best practices which assess firm organization, compliance, investor protections and disaster recovery.

\_\_\_\_\_ serves as the Chief Compliance Officer and oversees a team of six compliance professionals. Her team continuously updates the written compliance manual, ensures the fund's policies are adhered to, monitors personal trading and files regulatory reports as necessary for all the BlueTrend funds. The fund is registered with the SEC and, thus, has document retention policies and soft dollar procedures as required. Its anti-money laundering procedures confirm to the standards set out in Title III of the US PATRIOT Act of 2001. The manager is also registered with the Financial Services Authority in the United Kingdom.

The manager has a very comprehensive insurance program which includes an errors and omissions policy. The combined aggregate insured sum is | \_\_\_\_\_ million but the manager does not disclose the maximums on specific policies. The manager has several disaster recovery plans depending on the specific disaster and has an off-site facility in \_\_\_\_\_. The data is replicated to the off-site facility and all information is also backed up by tape on a daily basis.

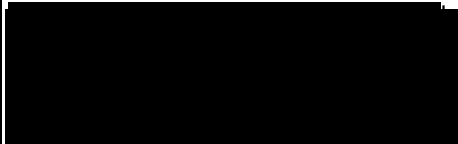
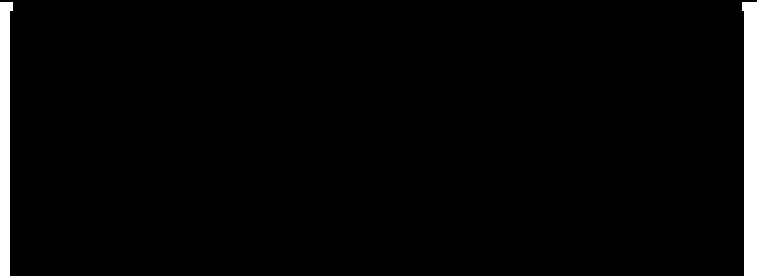
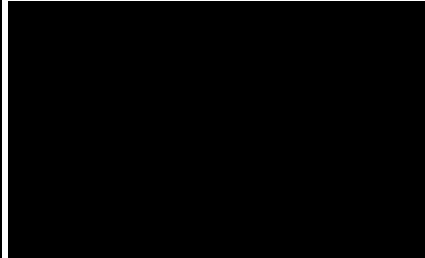
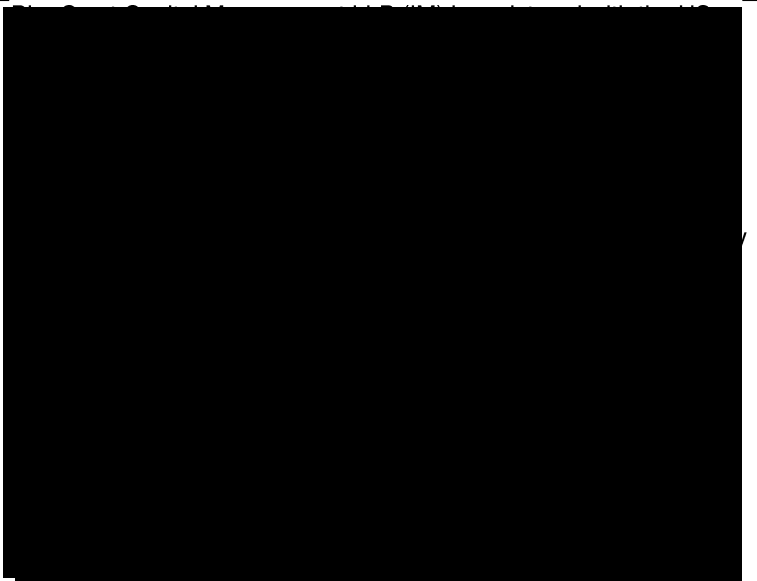
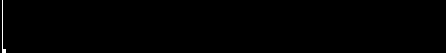


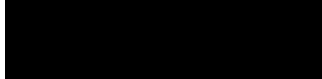

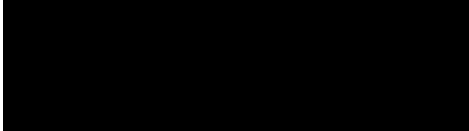
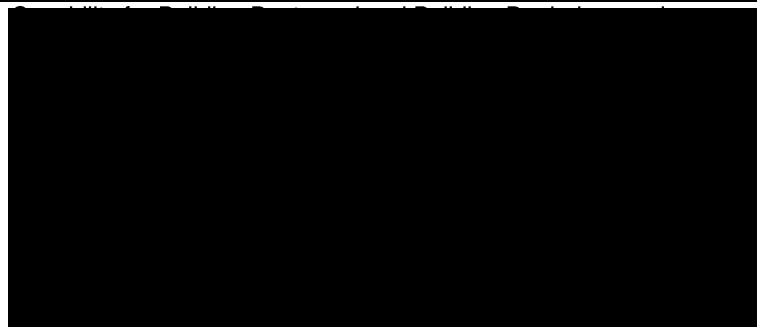

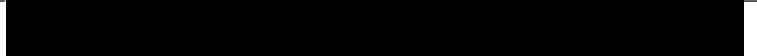
*Best Practices Comparison*

Organization and Governance		Yes	No
1			
2			
3			
4			
Compliance			
5			
6			
7			
8			
9			
10			
11			
12			

13	[REDACTED]
14	[REDACTED]
Investor Protections	
15	[REDACTED]
16	[REDACTED]
17	[REDACTED]
18	[REDACTED]
19	[REDACTED]
20	[REDACTED]
21	[REDACTED]
22	[REDACTED]
23	[REDACTED]
24	[REDACTED]
Disaster Recovery	
25	[REDACTED]
26	[REDACTED]
27	[REDACTED]

*Background*

Criteria	Cliffwater Comments
Firm structure: [REDACTED]	[REDACTED]
Fund structure and domicile [REDACTED]	[REDACTED]
Compliance policies: [REDACTED]s	[REDACTED]
Specific policies: [REDACTED]	[REDACTED]

<p>Legal proceedings</p> 	
<p>Regulatory authorities:</p> 	
<p>Systems and platforms:</p> 	
<p>IT staff size and turnover:</p>	
<p>Backup procedures:</p> 	
<p>Business continuity and disaster recovery plan:</p> 	
<p>Insurance coverage:</p> 	



**Section 2: Trading and Investment Operations**

**Score:**

BlueCrest meets all trading and investment operations best practices which assess outside service providers, infrastructure, trading and accounting processes, counterparty monitoring, and cash management.

\_\_\_\_\_ serves as the funds' administrator and \_\_\_\_\_ and \_\_\_\_\_ are the funds' prime brokers. \_\_\_\_\_ and \_\_\_\_\_ are also used to clear trades and the law firms of \_\_\_\_\_ and \_\_\_\_\_ are retained to advise the funds as needed.

The manager runs a systematic macro strategy so it executes thousands of trades \_\_\_\_\_ hours a day from execution desks in Geneva, London, Singapore, Boston, and New York. All trades are confirmed by the execution desk on the day they are executed. The back office team does a full reconciliation of all trades, positions, and cash the following day. All trading information is also sent to \_\_\_\_\_ who also receives the information from the prime brokers and custodians. \_\_\_\_\_ does an independent reconciliation and sends an open trade reconciliation to the BlueCrest back office team. The back office professionals and \_\_\_\_\_ will work together to resolve these breaks.




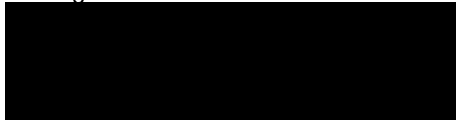

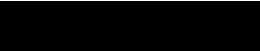



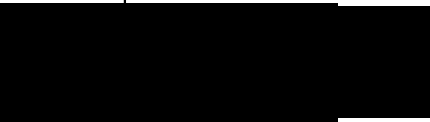
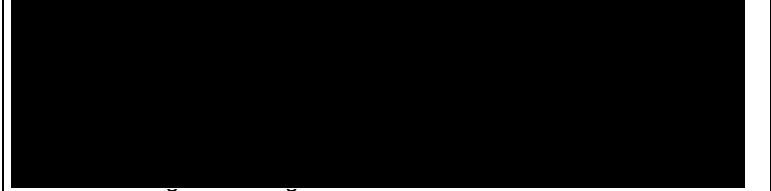
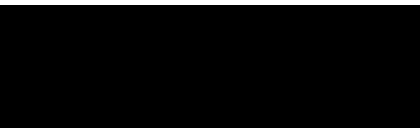



*Best Practices Comparison*

Outside Service Providers		Yes	No
28	[Redacted]		
29			
30			
Infrastructure			
31	[Redacted]		
32			
33			
34			
35			
36			
Trading Practices			
37	[Redacted]		
38			
39			

40	
41	
42	
43	
44	
45	
Core Accounting Processes	
46	
47	
48	
49	
50	
51	
Cash, Margin, and Collateral Management	
52	
53	
54	
55	
56	

Entity and Contact	Onshore	Offshore
Prime Broker		
Administrator		
Audit		
Legal		
Tax		
Other (including custodian if not PB)		
Changes in providers (3 yrs)		
Any issues encountered in audit of firm or its products?		

Criteria	Cliffwater Comments
Organizational Structure: [Redacted]	[Redacted]

	
<p>Control structure and oversight</p> 	
<p>Trading team:</p> 	
<p>Types of securities traded</p> 	
<p>Trading practices:</p> 	
<p>Trade flow process:</p> 	
<p>Trade confirmation and reconciliation:</p> 	
<p>Specialized groups</p> 	



Reconciliation process with administrator: [REDACTED]	[REDACTED]
Cash movements: [REDACTED]	[REDACTED]

**Section 3: Financing and Counterparty Risk**

**Score:** [REDACTED]

BlueCrest meets all financing and counterparty monitoring best practices which assess how the manager finances its portfolio and manages its cash.

BlueTrend's financing agreements include margin financing from prime brokers and use of over-the-counter products governed by ISDA agreements. All excess cash is kept in segregated AAA money market funds and short-dated G7 debt. All excess cash is swept from prime brokers accounts on a daily basis. Counterparty risk is managed by the Market, Counterparty and Liquidity Risk Committee which includes the Chief Risk Officer, President, Chief Financial Officer, Chief Operating Officer, Head of Product Control, Rates Portfolio Manager, Relative Value Portfolio Manager, and Credit Portfolio Manager. The firm trades only with counterparties who have a high credit rating and will shift assets away from any firm whose financial condition deteriorates.

All cash movements are done by the external administrator, [REDACTED]. There are four levels of approval at the manager level, depending on the amount of cash that is being moved and whether it is being moved between funds or to a third party. The administrator and prime brokers have separate additional controls.

*Best Practices Comparison*

Financing and Counterparty Risk		Yes	No
57	[REDACTED]		
58			
59			
60			
61			
62			
63			
64			
65			

*Background*

Criteria	Cliffwater Comments
Sources of financing: [REDACTED]	[REDACTED]

[REDACTED]	[REDACTED]
Counterparties and terms of arrangements: [REDACTED]	[REDACTED]
Prime broker financing: [REDACTED]	[REDACTED]
Repo agreements [REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
Other (i.e. CDOs, debt offerings, etc.)	[REDACTED]

**Section 4: Valuation**

**Score:** [REDACTED]

BlueCrest meets all valuation best practices. There is a product control team of approximately [REDACTED] individuals who work independently of the front office and are responsible for all pricing. As of January 1, 2011, BlueTrend was approximately [REDACTED] of the instruments in [REDACTED], which are typically level [REDACTED] assets and approximately [REDACTED], which are typically level [REDACTED] assets. For BCI, over [REDACTED] of the assets are level [REDACTED] under FAS 157 and the balance are level [REDACTED]. No positions are level [REDACTED] and no internal models are used in pricing. The product control team obtains all exchange prices from [REDACTED]

On a daily basis and at every month end, the administrator independently prices the portfolio using a price feed from [REDACTED]. The administrator reconciles its NAV calculation to the fund's and investigates any differences but in practice there are rarely any differences.

Best Practices Comparison

Valuation Personnel		Yes	No
66			
67			
Valuation Policy			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
Pricing Sources and FAS 157 Companies			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
Positions with No Readily Ascertainable Market Value			
89			
90			
91			
92			
93			
94			
Valuation Committee			
95			
96			
97			
98			
99			
100			
101			
102			
103			

104	
105	
106	
107	
108	
109	

*Background*

Criteria	Cliffwater Comments
Month end closing process [Redacted]	[Redacted]
Valuation of exchange traded (level 1) assets: [Redacted]	[Redacted]
Valuation of OTC / illiquid instruments / private placement (level 2 and 3) assets [Redacted]	[Redacted]

**Section 5: Risk Management**

**Score:** [Redacted]

BlueCrest meets all risk management best practices. Mr. \_\_\_\_\_ is the Chief Risk Officer. He leads a team of \_\_\_\_\_ and reports to the Chief Financial Officer. The firm uses a risk management system called \_\_\_\_\_. The BlueTrend risk system is calibrated on historical data to provide a specified level of volatility is \_\_\_\_\_. The risk team also runs over \_\_\_\_\_ scenario stress tests to understand how the portfolio reacts to specific extreme events.

*Best Practices Comparison*

Structure	Yes	No
110		
111		
112		
113		
114		
115		
116		
117		
118		
119		

Risk Manager	
120	[Redacted]
121	
122	
123	
124	
125	
125	
Risk Limits and Testing	
126	[Redacted]
127	
128	
129	
130	
131	
131	
Leverage and Liquidity Risk	
132	[Redacted]
133	
134	
135	
136	

*Background*

Criteria	Cliffwater Comments
Structure of risk management group: [Redacted]	[Redacted]

Liquidity risk and funding:	
-----------------------------	--

**Section 6: Investor Related Practices**

**Score:** ██████

BlueCrest meets all disclosure and investor terms best practices. The PPM details the investment terms, fees, and conditions. The fees are calculated based on the audited financial statements and based on the dollar of value added. The lock up and gate provisions protect the fund from having to liquidate the portfolio at a discount to meet investors redemptions.

Investors receive weekly estimates every Wednesday for the performance of the past week. Investors receive monthly NAV statements by the fifth business day after every month end. The manager also sends monthly investor reports providing numerous risk and exposure metrics. In addition, the firm is willing to discuss the portfolio and senior team members are available for meetings and conference calls upon request.

BlueTrend's financial statements are audited by ██████████ and audited financial statements are sent to investors within 120 calendar days of year end, which is in line with the industry standard.

*Best Practices Comparison*

Initial Disclosures		Yes	No
137			
138			
139			
140			
141			
142			
143			
144			
145			
Fees and Expenses			
146			
147			
148			
149			
150			
151			
Ongoing Information Provided to Investors			
152			
153			
154			
155			

156	[REDACTED]	[REDACTED]
157	[REDACTED]	[REDACTED]
158	[REDACTED]	[REDACTED]
159	[REDACTED]	[REDACTED]
160	[REDACTED]	[REDACTED]
Financial Statement and Tax		
161	[REDACTED]	[REDACTED]
162	[REDACTED]	[REDACTED]
163	[REDACTED]	[REDACTED]
164	[REDACTED]	[REDACTED]
165	[REDACTED]	[REDACTED]
166	[REDACTED]	[REDACTED]
Investor Terms		
167	[REDACTED]	[REDACTED]
168	[REDACTED]	[REDACTED]
169	[REDACTED]	[REDACTED]
170	[REDACTED]	[REDACTED]

*Background*

Criteria	Cliffwater Comments
[REDACTED]	[REDACTED]
Fund financial and tax statements: [REDACTED]	[REDACTED]

**Meeting History**

Date	Location	Cliffwater Attendees	Manager Attendees
March 26, 2010	London, UK	[REDACTED]	
March 9, 2011	London, UK	[REDACTED]	

## Appendix: Glossary

Administrator	A service provider such as _____ or _____ that handles administrative responsibilities such as calculating the fund's NAV on a monthly basis, sending the investors performance reports, and maintaining the official books and records of the fund.
Fair Value (FAS 157)	FASB Statement No. 157, Fair Value Measurements ("FAS 157"), defines fair value as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date." Cliffwater reviews valuations according to the Fair Value hierarchy established by FAS 157, the three levels of which are described below.
Level 1 assets	Liquid assets with readily observable prices, and therefore a reliable market value. Level 1 assets typically include stocks, bonds, mutual funds, and any other assets that have a regular "mark to market" pricing mechanism.
Level 2 assets	Assets with a value based on market inputs that are not directly observable on a central exchange. These assets are often priced via quotations from dealers. An example of a level 2 asset is a credit default swap which is typically priced via indicative quotations from broker dealers.
Level 3 assets	Illiquid assets with a value that cannot be determined by observable measures. The fair value of a level 3 asset can only be estimated by using significant assumptions as inputs to the valuation model. Mortgage backed securities are an example of this type of asset.
Leverage	<p>The use of explicit debt (i.e. borrowing) or implicit debt (i.e. derivatives) to achieve investment positions that exceed invested capital (NAV), thereby amplifying return but also increasing risk. A common leverage calculation is the ratio of gross notional exposure to invested capital. For example, a \$100 investment in BP stock coupled with a \$100 short sale of Exxon stock yields gross notional exposure of \$200. Leverage in this example can be described in at least two ways:</p> <ol style="list-style-type: none"> <li>The portfolio has 200% gross exposure (equal to \$200 gross notional exposure divided by \$100 NAV)</li> <li>The portfolio is one time (1x) levered (equal to \$100 in debt divided by \$100 NAV)</li> </ol> <p>As illustrated in the example, the \$200 gross notional exposure equals the absolute value total of both \$100 long ("gross long") and \$100 short ("gross short") asset exposures. The measurement of gross notional exposure varies by asset class:</p> <p><i>Equities</i> the market value of long and short positions  <i>Corporate Debt and Municipal Bonds</i> – the market value of long and short positions  <i>US Treasuries (and other highly rated government debt)</i> the market value of long and short positions, adjusted to a 10 year bond equivalent maturity (approximate 9 year duration), so that a \$100 exposure to a 2 year duration bond is recognized as a lower risk compared to a \$100 20 year duration bond. The \$100 3 year duration bond is said to have a \$33 10 year bond equivalent exposure (\$100 times 3, divided by 9) while the \$100 20 year duration bond is said to have a \$222 10 year bond equivalent exposure (\$100 times 20, divided by 9)  <i>Options</i> the delta adjusted exposure rather than the total notional value of the underlying reference asset. Delta adjusted exposure represents the implied shares/holdings necessary to hedge the options position  <i>Credit Default Swaps</i> total notional exposure of the underlying reference credit  <i>Interest Rate Swaps</i> total notional exposure (expressed as 10 year bond equivalent, per the duration adjustment process described above) to reference security or index  <i>Futures/Forwards</i> total notional exposure to reference security or index</p>
Net Asset Value (NAV)	A fund's total assets less total liabilities.
Notional Exposure	The total dollar exposure represented by a position. Due to leverage, this amount may be greater than the equity in the position. For example, a CDS contract offering \$1 million of protection has a notional value of \$1 million even though the cost of the contract itself is likely to be a small fraction of that amount.
Gross Long	The total notional exposure of all long positions in a portfolio. Long positions benefit from increases in securities prices
Gross Short	The total notional exposure of all short positions in a portfolio. Short positions benefit from decreases in securities prices
Net	The difference between a portfolio's gross long and gross short exposures. A net long position indicates a higher portion of long positions in the portfolio, and that the portfolio



	should generally benefit from an increase in asset prices. A net short position indicates the opposite
Total Gross	The sum of a portfolio's gross long and gross short exposures.
Operations Score	A measure of how well the firm meets best practice standards on a scale of A (meets all best practice standards) to F (does not meet several best practice standards). A rating of "C" or lower indicates Cliffwater believes the firm's departure from best practices could hurt returns or lead to the misappropriation of firm assets.
Prime Broker	A prime broker custodies assets, provides settlement services, facilitates the borrowing of securities for short positions, and may provide performance reporting for hedge funds.
Side Pocket	A segregated portion of a portfolio that may be used to hold illiquid, less frequently priced securities. Once a holding is placed in a side pocket, only current investors participate in its performance. Subsequent investors do not share in the gains/losses associated with assets previously placed in side pockets. Performance fees are paid when side pocket investments are realized. Assets placed into side pockets are not available for withdrawal until the investments are realized.
Soft Dollars	Commission credits from trading securities that can be used to pay for research or other services that brokers provide to hedge funds and that are intended for the benefit of investors. Most funds operate under the SEC 28e safe harbor rules that restrict soft dollar use to research only.
Unencumbered Cash	Unencumbered cash is equal to cash holdings less margin requirements.