

# Recommendation on Phase One of Hedge Fund Implementation Plan

To: RISIC

Prepared: September 19, 2011

From: Thomas Lynch, CFA, Managing Director

The purpose of this memo is to provide RISIC with a summary of Cliffwater's recommendation for Phase One of the Hedge Fund Implementation Plan.

Cliffwater has presented to the RISIC an investment plan for hedge funds. The goal of the plan is to reduce volatility in the ERSRI portfolio (or the "Fund") as well as individual long-only asset classes and to improve the Sharpe Ratio of the Fund.

The overall investment plan calls for an allocation of 15% of the Fund to hedge funds. The hedge fund allocation will consist of three components, grouping hedge funds strategies by associated market beta. As shown in Table 1 below, 8% of the 15% hedge fund allocation will be made to equity related strategies (i.e. equity long/short and event driven strategies) and they will be allocated to the Fund's global equity allocation. Similarly, 5% of the 15% hedge fund allocation will be made to absolute return strategies (i.e. global macro and multi-strategy) and they will be allocated to the Fund's real return allocation; 2% of the 15% hedge fund allocation will be made to fixed income strategies (i.e. credit and relative value strategies) and they will be allocated to the Fund's fixed income allocation.

Table 1.

	RISIC Policy		Recommended Hedge Fund Allocations		Recommended Structure	
	% Target	\$ Target	% Target	\$ Target	# Funds	\$/Fund
Cash	3%	\$225				
Fixed Income	20%	\$1,500	2%	\$150	3	\$50
Real Estate	8%	\$600				
Real Return	11%	\$825	5%	\$375	7	\$54
Global Equity	51%	\$3,825	8%	\$600	10	\$60
Private Equity	<u>7</u> %	\$525				
	100%	\$7,500	15%	\$1,125	20	\$56

Recommendations on individual hedge funds will be subject to the following:

- 1. Completion of investment due diligence by Cliffwater
- 2. Completion of operations due diligence by Cliffwater
- 3. A recommendation to invest by Cliffwater
- 4. A review of the hedge fund's fit within the Hedge Fund Implementation Plan

Cliffwater recommends that the Hedge Fund Implementation Plan be executed in three phases over the next six months with a recommendation on six to eight managers per phase. Cliffwater is currently recommending Phase One which consists of six managers. Table 2 lists the six

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managers that are recommended. The appendix to this memo includes a summary of our recommendation report for each manager.

Table 2.

Asset Class	Strategy	Manager/Fund	Recommend Amount (Millions)
Global Equities	Long Short Equities	Ascend Partners	\$60
	Event Driven	Davidson Kempner	\$60
	Event Driven	Elliott Management	\$60
Absolute Return	Multi-Strategy	Och-Ziff Master Fund	\$75
	Multi-Strategy	D.E. Shaw Composite	\$50
	Global Macro	Brevan Howard	\$75



# **Ascend Capital LLC**

People and Organization: Ascend Capital is an SEC registered investment advisor that manages \$3.3 billion in equity long/short hedge funds. The firm was founded in 1999 by Malcolm Fairbairn, who previously worked at Citadel Investment Group and Strome Susskind. Ascend has 32 employees, including 21 investment professionals, and is located in San Francisco. Mr. Fairbairn owns of the firm. Mr. Fairbairn and Ascend employees have a significant investment in Ascend's funds.

Investment Strategy and Process: The Ascend Partners funds are managed to generate superior risk-adjusted returns over a broad range of market environments. Ascend utilizes an extensive bottom-up, fundamental research process to develop a long/short portfolio of publicly traded, mostly US equities. This strategy represents Ascend's flagship hedge fund strategy and is available as an unlevered (Partners I) or 1.5 times levered (Partners II) strategy. Ascend's fundamental research analysts are organized by industry and provide the majority of new investment ideas. Mr. Fairbairn is the CIO and is ultimately responsible for security selection and portfolio construction.

*Performance:* Ascend has generated strong absolute performance with less volatility than its peers. Ascend Partners Fund II L.P. has an annualized net return, from inception in February 2004 through June 2011, of 8.12% and an annualized standard deviation of 4.49%, resulting in a Sharpe Ratio of 1.19. The fund has had only four months with a drawdown of more than -2%, and has never experienced three or more consecutive months of negative performance. The longer-running unlevered fund (Partners I) has produced similarly strong risk adjusted returns since its inception in January 2000, with somewhat lower absolute returns.

Risk Management: All investment professionals and two operations professionals take an active role in Ascend's portfolio risk management process, although Mr. Fairbairn is ultimately responsible for risk management. The Partners funds are well diversified with respect to number and size of positions, and sector and industry exposure. Although the Partners II funds represent Ascend's 1.5 times levered strategy, the funds' exposures are in-line with or lower than most equity long/short funds.

*Operations Analysis:* Ascend outsources the majority of non-investment duties to quality service providers and has adequate staff to handle the remaining operational demands. Ascend provides good reporting and is willing to provide position level transparency if required.

Investment Terms: Ascend's 1.5% management fee and 20% incentive fee are in line with market standards. Liquidity is good with monthly liquidity after a one year lock-up (hard lock for onshore, soft lock with a 3% fee for offshore funds) and special withdrawal rights per key man provisions.

#### **Brevan Howard Capital Management**

People and Organization. Brevan Howard Capital Management LP ("BHCM", "Brevan Howard", or the "firm") was founded in 2002 by former members of the Credit Suisse First Boston ("CSFB") Developed Markets Rates trading team. The firm's flagship fund, the Brevan Howard Master Fund Limited ("BHMF" or the "fund"), is a global macro strategy with exposure predominantly to global fixed income and foreign exchange markets. The firm manages \$32.6 billion in assets, including \$24.7 billion in BHMF.

Investment Strategy and Process: BHMF primarily employs global macro and relative value trading strategies, but also includes equities, commodities, and credit strategies. The global macro strategy seeks to identify changes in economies around the world and to monetize the traders' views on monetary policy, macroeconomic changes, policy changes, and capital flows. The relative value strategy aims to identify and capitalize on situations in which expectations for macroeconomic outcomes have been discounted inconsistently across related sets of securities and derivatives. The investment team comprises approximately 45 traders, all of whom have indepth experience trading within a defined universe.

*Performance:* BHMF has produced excellent risk-adjusted returns. The strategy has generated an annualized return of 13.05% with volatility of 7.32%, resulting in a Sharpe ratio of 1.33.

Risk Management: Brevan Howard's risk management philosophy is to reduce overall portfolio exposure in times of increased market uncertainty and to impose strict stop-loss guidelines on each trader. Risk management is an independent oversight function. The Chief Risk Officer ("CRO") and his team report to the co-CEO rather than the CIO. Portfolio risk is also closely monitored by the risk and liquidity committee, which is comprised of six of the most senior members of the firm. Each trader agrees to formal, written mandates that define their capital allocation and risk parameter limits, in addition to the specific markets and instruments in which they can trade.

Operational Analysis: Brevan Howard has developed institutional-quality processes and controls to manage its high daily trade volume of approximately 800 to 900 trades across a wide range of product types. Brevan Howard has retained a reputable, independent administrator to outsource many back office functions and to value the portfolio at each month end. No material weaknesses or departures from best practices were identified in this review.

Investment Terms: Brevan Howard charges either a 2% management fee and 25% performance fee (Class B) or a 1.5% management fee and 20% performance fee (Class E) depending on the share class. All investors pay an additional operational service charge of 0.50% per annum. The fees, while high in comparison to the general hedge fund universe, are in-line with most other global macro funds. The top funds in the space charge a 2% to 4% management fee and a 20% to 30% performance fee. Liquidity varies depending on the class of investment: Class B provides for a one year "soft" lock up and monthly liquidity thereafter, whereas Class E has an initial three year "soft" lock up. Redemptions are subject to investor level and fund level gating mechanisms.

#### **Davidson Kempner Capital Management**

People and Organization: Davidson Kempner Capital Management ("the firm" or "DKCM") is an established hedge fund management firm founded in 1983 by Marvin Davidson who previously managed the risk arbitrage and convertible securities departments at Bear Stearns. Thomas Kempner joined the firm in 1984 after having traded high yield and distressed securities at First City Capital Corporation. Ten principals are shareholders of DKCM. The firm employs 186 individuals, most of whom work at its New York headquarters. The firm also has offices in London and Hong Kong. As of April 2011, the firm managed approximately \$17 billion.

Investment Strategy and Process: Davidson Kempner's multi-strategy event fund, Davidson Kempner Institutional Partners, Davidson Kempner Partners, and Davidson Kempner International, Ltd. ("DKIL", "DKIP" or "the fund") applies a fundamental approach to investing in various event driven situations. Davidson Kempner primarily invests in merger arbitrage, and bankruptcy and restructuring situations. They also have smaller allocations to other event driven strategies including convertible arbitrage, event driven equities and distressed opportunities. The allocation to each strategy is a function of bottom-up opportunities and varies over time. The manager invests across the capital structure with a focus on the securities that are more secure. DKCM uses only a minimal amount of leverage to finance the convertible arbitrage portfolio.

*Performance:* DKCM has generated solid returns over a long period and various market conditions. From inception in November 1995 to April 2011, Davidson Kempner International, Ltd has an annualized net return of 9.32% with a very low 3.80% standard deviation of return, resulting in a 1.43 Sharpe Ratio.

*Risk Management:* DKCM manages a highly diversified portfolio of over 400 positions. They typically invest in the top half of the capital structure in secured bonds, trade claims and bank loans, and in announced merger deals only. The key risk factor is issue specific, while exposure to macro risks is mitigated via interest rate and currency hedging.

Operational Analysis: Davidson Kempner has institutional quality middle and back office team processes. Davidson Kempner's team of 100 non-investment professionals led by COO Mr. Tim Levart, who has over 20 years of industry experience, effectively manages all trading and business operations. No material weaknesses were identified by Cliffwater's operational due diligence process

*Investment Terms:* DKCM has investor friendly terms which include a 1.5% management fee, 20% performance fee, a high water mark, quarterly liquidity and no lock-up. Fund terms limit side pocket investments to 5% of fund assets. The funds also have a 10% gate on redemptions.

## D.E. Shaw Group

People and Organization: D.E. Shaw is a quantitatively based hedge fund management firm founded in 1988 by David E. Shaw. Dr. Shaw previously managed the automated analytical trading technology unit at Morgan Stanley and served on the faculty of the Department of Computer Science at Columbia University. The firm has 1,260 employees globally and is managed by a six person Executive Committee. Dr. Shaw is no longer involved in the investment aspect of the business. D.E. Shaw manages \$20.7 billion in hedge funds and long-only products. Its flagship fund, the Composite Fund, launched in 2001, is one of the largest multi-strategy hedge funds with approximately \$7.3 billion in assets. The management company is registered with the SEC. Insiders are the largest single investor group in the Composite Fund.

Investment Strategy and Process: The D.E. Shaw Composite Fund is a global, multi-strategy fund invested across nine quantitative and qualitative strategies on a largely market neutral basis. Equity and credit-related strategies comprise approximately 41% of the Fund. Capital is allocated by the Risk Committee according to a proprietary optimizer to maximize risk-adjusted returns and minimize long-term correlation to major asset classes. Though D.E. Shaw promotes collaboration among managers, each strategy is run separately according to relevant parameters. Certain strategies use some leverage while others use none. The aggregate leverage has recently been around 4.5 times, on a gross market value over capital basis.

*Performance:* The Composite Fund has generated strong risk adjusted returns since its 2001 inception. From March 2001 to May 2011, the Composite International Fund has produced an annualized net return of 11.88% with a 6.78% standard deviation, generating a 1.33 Sharpe ratio. The fund mitigated losses during the financial crisis, with a modest loss of -9.81% in 2008 followed by a gain of 21.31% in 2009.

Risk Management: The portfolio is highly diversified across tens of thousands of positions. A Risk Committee, which includes the Chief Risk Officer, is responsible for capital allocation and ongoing analysis of the various strategies. The Chief Risk Officer and his staff support this process and monitor strategy risk budgets intra-month. Risk management is conducted both through automated quantitative hedging as well as fundamental oversight.

Operations and Reporting: D.E. Shaw has significant resources allocated to operations and back-office infrastructure. The firm has extensive policies and controls in place to address the operations, trading, reconciliation, valuation and shareholder accounting procedures. The firm provides extensive monthly exposure and quarterly investor reports.

Investment Terms: The Composite Fund has above average fees with a 2.5% management fee and 25% incentive fee. There is no initial lock-up. Redemptions are permitted each calendar quarter subject to an 8.33% fund-level gate or a 12.5% investor-level gate. The Fund may invest up to 15% of capital in side-pocketed private equity or other illiquid investments but investors may opt out of these side pockets. D.E. Shaw recently improved its liquidity terms and lowered its fees in an effort to be more investor-friendly and to align the withdrawal terms with the improved liquidity of the underlying portfolio.

# **Elliott Management Corporation**

People and Organization: Elliott Management Corporation ("Elliott" or the "firm") was founded in 1977 by Paul Singer who practiced corporate and securities law prior to founding the firm. Elliott is one of the oldest hedge funds in existence. The firm manages more than \$16 billion in its hedge fund strategy. Elliott is headquartered in New York City and maintains offices in London, Hong Kong, and Tokyo. The firm has 247 employees, of which 113 are investment professionals. The firm is \_\_\_\_\_\_ owned by Mr. Singer and three additional principals will become equity partners in 2011. Firm principals and other insiders have a substantial portion of their net worth invested in the funds and comprise the largest investor group.

Investment Strategy and Process: The fund pursues an event driven approach and implements a variety of strategies, including: credit, equity, arbitrage, and portfolio volatility/short stocks. Elliott seeks to direct capital opportunistically to the most attractive investments at each point in time. With the exception of commodities and structured products, the investment analysts are generalists and are able to invest across the capital structure and types of industries. A significant portion of the firm's positions include activist or control activities.

*Performance:* Elliott has produced very strong returns on a risk adjusted basis. Since inception in February 1977 through November 2010, Elliott Associates, L.P. has generated an annualized net return of 14.40% and a standard deviation of 4.13%, resulting in a Sharpe ratio of 1.78.

Risk Management: Elliott's primary emphasis is on risk control. The firm implements a layered approach to hedging, seeking to protect downside risk at the individual position, strategy, and overall portfolio level resulting in a portfolio with relatively low net exposure. The firm employs a substantial degree of diversification among strategies and positions and the portfolio consists largely of uncorrelated and event driven investments. Elliott will often reduce investment risk through an activist approach and is willing to take on complex investment opportunities.

Operational Analysis: Elliott has made a substantial investment in its middle and back office functions. It has developed an institutional-quality platform and no material departures from best practices were identified. In addition, the firm has greatly increased its transparency by implementing several new procedures to give investors increased confidence in the valuation and existence of assets. Specifically, it has retained the Bank of New York to independently verify the existence of assets on a quarterly basis. Further, beginning at the end of the first quarter of 2010, its independent auditor Grant Thornton LLP will conduct a full audit on a quarterly basis.

Investment Terms: Elliott most recently capital through a two-year commitment format subsequent to which an investor will hold Class B common shares. Elliott can call capital during the two-year commitment period, after which investors will be released from making further capital contributions. Elliott's 1.5% management fee and 20% performance fee are standard. However, the fund has a modified high water mark and a capital surcharge of 1.75% on contributions and withdrawals that is payable to the fund. Elliott's liquidity is limited as the Class B Shares have a two-year lock-up after which an investor can redeem up to 25% on a semi-annual basis. In addition, the terms of the commitment prohibit an investor from redeeming any capital prior to January 1, 2013, but investors will be released from this additional lock-up in the event a key-man provision on Paul Singer is triggered.

### **Och-Ziff Capital Management Group**

People and Organization: Och-Ziff Capital Management Group ("OZ" or the "Firm") is a top tier hedge fund management firm founded in 1994 by Daniel Och and the Ziff family. Daniel Och was previously co-head of equity trading at Goldman Sachs. The firm has 421 employees globally, of which 134 are investment professionals. OZ manages \$29.3 billion in multi-strategy, structured credit, and special situations funds. Its flagship fund, the OZ Master Fund ("OZ Master" or the "Fund") is one of the largest multi-strategy funds with about \$20.4 billion in assets. Senior members of the team, particularly Daniel Och, have a substantial portion of their net worth invested in the funds. The management company is publicly listed. OZ is registered with the U.S. Securities and Exchange Commission.

Investment Strategy and Process: OZ applies an event oriented approach to multi-strategy investing by opportunistically allocating capital across multiple strategies including: merger arbitrage, long/short equity special situations, convertible and derivative arbitrage, corporate credit, structured credit and private investments. Portfolios are constructed bottom-up and OZ actively trades around long-term positions to add value. The firm takes advantage of its global reach to manage a portfolio diversified across the US (50%), Europe (35%) and Asia (15%). OZ utilizes limited leverage and total gross exposure averages around 200% with a low (30% average) net exposure.

*Performance:* OZ Master has generated very strong risk adjusted returns over various market conditions. The fund has produced an annualized net return of 13.93%, with a 5.52% standard deviation from inception in April 1994 through June 2011, generating a 1.73 Sharpe ratio.

Risk Management: OZ manages the portfolio to be beta neutral and seeks to hedge market, credit and currency exposure. The portfolio is highly diversified across 1,000+ positions, with each position sized to limit loss

The head of risk analytics independently analyzes the portfolio and provides risk exposure to the portfolio managers.

Operations Analysis: OZ has dedicated significant resources to develop a sophisticated operations and back office infrastructure. They have a team of over 280 individuals in accounting, operations, investor relations and legal, and have adopted numerous industry best practices. As a registered investment advisor, OZ has a strong control and compliance foundation.

Investment Terms: The terms for the OZ Master Fund are in-line with industry standards and vary depending on the share class. The Fund offers a two year lock-up share class at a 2% management fee, a one year lock-up at a 2.5% management fee and a three year lock-up at a 1.5% management fee. The incentive fee for all three share classes is standard at 20%. The share class with a three year lock-up period also has a 3-month T-bill hurdle rate. Annual withdrawals are permitted in the two year and three year classes, while the one year class offers quarterly withdrawals. All share classes have a perpetual high water mark.