

## Recommendation on Phase II of Hedge Fund Implementation Plan

To: RISIC  
 Prepared: October 17, 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 II 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%	\$210				
Fixed Income	20%	\$1,400	2%	\$140	3	\$47
Real Estate	8%	\$560				
Real Return	11%	\$770	5%	\$350	7	\$50
Global Equity	51%	\$3,570	8%	\$560	10	\$56
Private Equity	7%	\$490				
	100%	\$7,000	15%	\$1,050	20	\$53

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 II 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.

<i>Asset Class</i>	<i>Strategy</i>	<i>Manager/Fund</i>	<i>Recommend Amount (Millions)</i>
Global Equities	Long Short Equities	Samlyn Capital	\$60
	Long Short Equities	Viking Global Equities	\$60
	Event Driven	Mason Capital	\$60
Absolute Return	Market Neutral	Capula Global	\$50
	Global Macro	Winton Futures	\$30
Fixed Income	Long Short Credit	Gracie Credit	\$40

Appendix – Manager Recommendation Summaries

## Samlyn Capital

*People and Organization:* Samlyn Capital (the “firm”), which was founded by Robert Pohly in 2007, is a lift-out from Sigma Capital, a wholly-owned subsidiary of S.A.C. Capital. The firm currently manages approximately \$3.5 billion in Samlyn Onshore Fund, L.P. / Samlyn Offshore, Ltd. (“Samlyn” or the “fund”), an equity long/short strategy mainly focused on financial, healthcare, and industrial companies. Prior to launching the firm, Mr. Pohly was a portfolio manager at Sigma from 2001 through 2006, where he managed the most assets and largest team of any portfolio manager other than Steven Cohen, S.A.C.’s founder. Prior to Sigma, Mr. Pohly held portfolio management and analyst positions at Credit Suisse, Tiger Management, and Goldman Sachs. Samlyn Capital is based in New York City, where all of its 34 employees are located. Mr. Pohly and the firm’s senior personnel have invested the vast majority of their liquid net worth in the fund, and as a group is among Samlyn’s top five investors.

*Investment Strategy and Process:* Samlyn is an equity long/short fund mainly focused on financial, healthcare, and industrial companies. The fund relies upon deep, bottom-up, fundamental analyses in order to identify long and short ideas. Samlyn runs with low net sector and market exposures. Net sector exposures can be expected to range from 0% to +15%, while overall net market exposures can be expected to range from +20% to +40%.

*Performance:* Samlyn has produced very strong absolute and risk-adjusted returns. From its inception through June 2011, the fund generated an annualized return of 13.40% with volatility of 8.71%, resulting in a Sharpe ratio of 1.27.

*Risk Management:* Mr. Pohly is responsible for portfolio risk management. He monitors long, short, gross, net, beta, sector, and sub-sector exposures on a real-time basis. Moreover, the liquidity and short interest of individual positions, as well as geographies and concentrations within sectors are closely monitored. The fund’s CFO utilizes prime broker reports as well as other custom reports to monitor VaR, portfolio volatility, and stress tests, and alerts Mr. Pohly to changing trends.

*Operations Analysis:* Samlyn’s team of thirteen non-investment professionals effectively manages all trading and business operations and meets most all industry operational best practices. The fund is highly transparent. On a monthly basis, investors receive a comprehensive statistics report, which includes exposures, attribution, and top positions.

*Investment Terms:* The fund offers two shares classes: i) 2% management fee and 20% incentive fee for a 1-year hard lock-up followed by a soft lock-up with a 7% redemption fee in year 2 and semi-annual liquidity thereafter or ii) 1.5% management fee and 17.5% incentive fee for a 3-year hard lock-up followed by a soft lock-up with a 7% redemption fee in year 4. The fund provides a key-man clause, enabling special withdrawal rights associated with Mr. Pohly’s involvement.

## Viking Global Equities

*People and Organization:* Viking Global Investors, L.P. (“VGI” or the “firm”) was founded in 1999 by O. Andreas Halvorsen, David Ott, and Brian Olson, all of whom had previously worked together at Tiger Management (“Tiger”). The firm currently manages \$11.6 billion in its flagship equity long/short fund Viking Global Equities, L.P. / Viking Global Equities III, Ltd. (“Viking” or the “fund”). VGI employs a total of 89 people, approximately half of whom are based at the firm’s Greenwich, CT headquarters and half at its New York City office. VGI also maintains small research offices in London, Tokyo, and Hong Kong. The firm is █████ owned by its senior employees, with Mr. Halvorsen holding a █████ stake. At █████ of NAV, VGI’s employees are, collectively, the largest investor in the fund.

*Investment Strategy and Process:* Viking is a global equity long/short fund employing a fundamental, research-intensive stock selection process. Viking is a true stock picking fund, maintaining a portfolio of individual long and short positions, with virtually no exposure to index futures and/or exchange-traded funds. The fund’s approach to investment selection is decentralized. It is divided into nine sub-portfolios, the largest of which are managed by Viking’s four senior-most investment professionals, who have an average tenure of eight years and collectively oversee the substantial majority of Viking’s capital.

*Performance:* The fund has produced very strong absolute and risk-adjusted returns for over a decade. From its inception in October 1999 through October 2010, the fund generated an annualized return of 18.44% with volatility of 10.08%, resulting in a Sharpe ratio of 1.44.

*Risk Management:* Viking is diversified across portfolio managers, positions, sectors, and geographies. At the overall portfolio level, longs are kept below 8% of NAV and shorts below 5%. Gross exposure is typically kept below 200% and net exposure below +50%. Although the sub-portfolio managers are given discretion within certain parameters, Mr. Halvorsen is ultimately responsible for risk management.

*Operational Analysis:* VGI has made a substantial investment in its middle and back office infrastructure. The back office team is experienced and has had minimal turnover. Ms. Rose Shabet is the firm’s Chief Operating Officer and oversees all middle and back office functions. The vast majority of positions in the portfolio are equities of companies with more than \$2 billion in market value, so overall valuation and liquidity risk is very low. No material issues were identified in the operational due diligence analysis.

*Investment Terms:* Viking offers two shares classes, both of which have better than average fees but worse than average liquidity. Class H has a 1.5% management fee and a 20% incentive fee for a rolling one-year soft lock up, while Class I has a 1.5% management fee and a 17.5% incentive fee for a rolling three-year soft lock up. The fund employs a 15% monthly gate for Classes H and I in the aggregate. There is no side pocket provision.

## Mason Capital

*People and Organization:* Mason Capital (“Mason” or the “firm”) was founded in July 2000 by Michael Martino and Kenneth Garschina to employ an event driven investment strategy. Prior to forming the firm, Mr. Martino was responsible for risk arbitrage research at Oppenheimer and Mr. Garschina was a Managing Director at KS Capital, an event driven hedge fund. Mason has offices in New York and London. Most of the firm's 28 employees are located in the New York office. The firm manages approximately \$6 billion in an event driven fund. The firm is owned [REDACTED] by Mr. Martino and Mr. Garschina and there are three additional partners who share directly in the profits of the firm. Insiders have a significant portion of their net worth invested in the fund and represent the largest investor group.

*Investment Strategy and Process:* Mason engages in event driven investing that combines deep fundamental analysis with a hard catalyst and a global perspective. The fund seeks to invest in opportunities where the impact of the event is not yet reflected in the price of the company's securities. Mason principally employs four event driven investment strategies: merger arbitrage, distressed securities, credit opportunities, and special situations. The fund is indifferent between being long or short within traditional event driven trades and both long and short positions are owned to generate alpha, not as hedges. Allocations to various strategies are a byproduct of the attractiveness of the opportunity set.

*Performance:* Mason has produced strong absolute and risk-adjusted returns. From its inception in July 2000 through November 2010, the fund generated an annualized return of 11.8% with volatility of 8.3%, resulting in a Sharpe ratio of 1.06.

*Risk Management:* Risk is managed by co-Portfolio Managers Mr. Martino and Mr. Garschina. They conduct a daily review of the portfolio as well as a continuous review of underlying company fundamentals. The fund rarely uses balance sheet leverage. Position sizes are typically limited to 5% and there is a 10% hard limit. Mason primarily invests in large capitalization securities that can be sold in one day, and the firm estimates the entire portfolio could be liquidated with no market impact in fewer than 10 days.

*Operational Analysis:* Mason has made a substantial investment in developing an institutional-quality infrastructure with a focus on creating a strong internal control environment and minimizing operational risk. The back office professionals have significant industry experience. The team is led by the CFO, Mr. John Grizzetti who has served as a CFO for alternative investment advisors for more than 15 years. No material departures from best practices were identified in the operational review.

*Investment Terms:* Mason offers annual liquidity which is less favorable than some other event driven managers. The onshore and offshore share classes differ slightly in their investment terms. The onshore fund charges a 1.5% management fee and a 20% performance fee and offers investors annual liquidity with 60 days notice. The offshore fund offers two share classes: i) 2% management fee and a 20% performance fee with annual liquidity upon 45 days notice, and ii) 1.5% management fee and a 20% performance fee with a two year initial lock-up and annual liquidity with 45 days notice thereafter.

## Capula Global Relative Value Fund

*People and Organization:* Capula Investment Management LLP (“Capula”), founded in October 2005, manages a fixed income arbitrage strategy focused on relative value opportunities primarily in the USD, EUR and JPY interest rates markets. The founding partners worked together at JP Morgan’s Proprietary Trading group prior to founding the firm. Yan Huo acts as CIO of the fund and is also the head trader responsible for USD relative value trading. The firm manages \$8.6 billion in assets, the majority of which is in the flagship Global Relative Value Master Fund (“GRV Fund” or “the Fund”). Insiders have invested a significant portion of their net worth in the fund.

*Investment Strategy and Process:* The Fund pursues a fixed income arbitrage strategy which is focused on relative value and convergence trades in government bonds, interest rate swaps and major exchange-traded derivatives within US, European and Japanese markets. The instruments traded are highly liquid and holding periods are generally short, ranging from a few days to a few months. The trading style is active and highly focused on liquidity, with continuous portfolio turnover. The investment research process is analytically intensive, with a consideration of macroeconomic trends and micro analysis with respect to fund flows and other technical factors.

*Performance:* The strategy has generated strong absolute and risk-adjusted returns, posting an annualized return of 13.21% and a standard deviation of 5.49%, for a Sharpe ratio of 1.78 over the period October 2005 through February 2011.

*Risk Management:* Capula has developed a sophisticated and comprehensive risk management system. This system encompasses prudent market and instrument selection, strict risk limits, extensive stress testing, analysis of exposures to yield curve shifts and spread changes, liquidity risk and counterparty risk. A dedicated risk management team of four professionals is responsible for monitoring all areas of risk in collaboration with the portfolio managers. Much of Capula’s risk management derives from the actions of the investment team, including trade construction, risk budgeting & position limits, risk limits, and macro/tail risk hedging.

*Operational Analysis:* Capula has made a substantial investment in its middle and back office functions. It has developed an institutional-quality platform and meets all industry operational best practices. The portfolio is highly liquid and the fund maintains a large amount of unencumbered cash. The middle and back office teams are highly experienced and enforce a clear segregation of duties between front and back office functions.

*Investment Terms:* Capula offers a number of options for investors. Share classes with an initial 2-year soft lock-up period and a 3% early withdrawal penalty are subject to a 2% management fee and 20% performance fee. Quarterly liquidity is available after the initial lock-up with a 45-day notice period. Investors may also opt for an initial 3-year lock-up period, 1.5% management fee and a 20% performance fee, paid at the end of the lock-up. Investors may also elect their base currency. Capula provides a key-man clause applying to Yan Huo and one other senior trader.

## Winton Futures

*People and Organization:* Winton Capital Management (“Winton” or “the firm”) was founded in 1997 and is run by David Harding, one of the pioneers in the CTA space. Winton currently manages \$22.7 billion in assets, including \$22.1 billion in total managed futures program assets. The firm is principally located in London, with additional offices in Oxford and Hong Kong. Winton is registered with the FSA in the UK and as a CTA and Commodity Pool Operator with the CFTC and is a member of the National Futures Association in the US.

*Investment Strategy and Process:* WFF is a systematic CTA trading over 120 liquid global futures markets across equities, fixed income, currencies, energies and commodities. The fund’s strategy is dictated by a highly sophisticated algorithm that is continuously executed throughout each trading day. The strategy is fully systematic and trades are executed with the sole purpose of tracking the model. Winton’s approach is primarily directional, with systems sampling thousands of prices daily to identify and profit from momentum opportunities across a broad range of sectors. Trend following is at the core of Winton programs, but the fund is continually focusing on research into non-price factors to diversify returns. The fund is currently allocated approximately 70% to trend following and 30% to non-price driven, fundamental factors.

*Performance:* WFF has a long performance history extending almost 14 years. The fund’s annualized return of 11.43% over the last 5 years exceeds the HFRI Fund Weighted Composite Index and the HFRI Macro (Total) Index, ranking in the top 22<sup>nd</sup> percentile of all hedge funds. The fund’s Sharpe ratio of 0.85 over the last five years places it in the top 19<sup>th</sup> percentile of all hedge funds. Usually I mention the annualized return, risk and Sharpe since inception and leave out the rankings.

*Risk Management:* The risk management process is systematized within the fund’s model. In contrast to many trend-following CTAs, WFF does not use stop losses to manage risk. The fund aims to mitigate risk by dynamically sizing positions based on signal strength, volatility, and liquidity and by diversifying risk across a large number of market and models. The firm has a dedicated risk management team that measures and monitors portfolio risk.

*Operational Analysis:* Winton’s team of operations professionals has built institutional quality processes and controls. Given the firm’s high trade volume and algorithmic trading strategy, the firm has made a substantial investment in building out highly automated trading systems. Approximately 88% of all trades are executed without any manual intervention. No material departures from best practices were identified in the operations due diligence.

*Investment Terms:* Winton’s fees are lower than other CTAs and the liquidity terms are investor friendly. Winton charges a 1% management fee and 20% performance fee, which is lower than the typical 2% and 20%. The liquidity terms permit monthly liquidity with no lock up and no gate. Winton has agreed to waive all subscription and early redemption fees for Cliffwater clients, which brings the liquidity terms in-line with peers.



## Gracie Credit Opportunities Fund

*People and Organization:* P&S Credit Management (“Gracie” or the “manager”) was founded in 2004 by Daniel Nir. The credit strategy launched in July 2004, and with the addition of a credit team from Calyon headed by James Palmisciano in April 2005, Gracie shifted the focus of its credit strategy from distressed to global long/short with a macro overlay. Gracie currently has 30 employees including 18 investment professionals and is headquartered in New York. The firm manages \$2.3 billion in one credit strategy. Senior members of the firm have a substantial portion of their net worth invested in the funds. Gracie expects to be registered with the SEC by early 2012.

*Investment Strategy and Process:* The Gracie Credit Opportunities Fund (“GCOF” or the “fund”) is a global long/short credit strategy focused on liquid credit instruments. Gracie combines a fundamental core credit portfolio with a macro overlay to dampen volatility and focus on risk adjusted returns. The fund typically has 100 to 200 trades in the portfolio expressed through cash or derivative instruments from investment grade to distressed companies. The portfolio is actively traded with typical holding periods of four months. Gracie invests globally and expects that a significant portion of fund investments will be outside the U.S.

*Performance:* GCOF has generated strong risk adjusted performance. From July 2004 to July 2011, the fund has produced an annualized net return of 11.79% with a 5.20% standard deviation, resulting in a 1.67 Sharpe ratio.

*Risk Management:* Gracie Credit uses a multi-portfolio manager approach to managing risk and making investment decisions. The three portfolio managers collaborate among themselves and with the investment team on a regular basis. Gracie utilizes proprietary models to assess and manage portfolio risk, including stress testing and risk analysis scenarios. In addition, Gracie is focused on maintaining a liquid portfolio, and this is one of the main factors monitored through the firm’s risk management process.

*Operational Analysis:* Gracie’s team of 12 non-investment professionals effectively manages all trading and business operations. The manager has institutional-quality processes and controls which includes detailed trade confirmation and reconciliation procedures and a strong internal compliance program. In addition, [REDACTED], the administrator, performs an independent review of the valuations determined by the manager on a monthly basis. No material departures from best practices were identified during Cliffwater’s operational due diligence.

*Investment Terms:* The fund’s investment terms are in-line with other top-tier credit managers. Gracie charges a 2% management fee and a 20% performance fee with a modified high water mark. The fund imposes a 12 month soft lock on each contribution, with an early withdrawal penalty of 3%. The fund offers quarterly liquidity with a 90 day notice. In addition, the fund offers monthly liquidity with a 90 day notice, subject to a 6% redemption penalty (9% during the soft lock). Gracie also offers an institutional share class (Class D) with a 1.5% management fee and a 20% performance fee with a two year soft lock. The institutional share class has a \$125 million minimum. There is a 25% fund level gate.