



INVESTMENT ADVISORY SERVICES

Los Angeles • New York

**Hedge Fund Investment Due Diligence Report  
Capula Global Relative Value Master Fund, Ltd.**

**March 2011**

*Operations Due Diligence Report provided under separate cover.*

### Hedge Fund Investment Due Diligence Report

<b>Firm Name:</b>	Capula Investment Management LLP		
<b>Fund Name:</b>	Capula Global Relative Value Master Fund Ltd.		
<b>Fund/Strategy Assets:</b>	\$6.2 billion		
<b>Style:</b>	Market Neutral	<b>Location:</b>	London, UK (headquarters)
<b>Review Date:</b>	March 2011	<b>Reviewer:</b>	[REDACTED]

#### Summary

*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.

#### Recommendation

Capula GRV Fund is recommended for investment in the Market Neutral category.

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.

**People and Organization**

Capula Investment Management LLP ("Capula"), founded in October 2005, manages \$8.6 billion, the majority of which is invested in the flagship Global Relative Value Master Fund ("GRV Fund" or "the Fund"). The GRV Fund pursues a fixed income arbitrage strategy ("the 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 strategy was initially managed by the founding partners, including CIO Yan Huo, when they were members of JP Morgan's Fixed Income Proprietary Trading group. All of the founding partners and principal traders worked together at JP Morgan and/or UFJ International, where Dr. Huo spent about a year as the Head of Fixed Income prior to founding Capula.

Capula has [REDACTED] strategic investors in the management company of the fund, [REDACTED] who hold [REDACTED] and [REDACTED] stakes, respectively. These investors hold [REDACTED] in the management company and are not involved in the investment strategy or the management of the business.<sup>1</sup> The partners of Capula own the remaining [REDACTED] share of the management company, with Dr. Huo holding a [REDACTED] stake. The firm is based in London, UK, with additional offices in Tokyo, Japan and Greenwich, CT. Most of the firm's trading, back-office and investor relations staff are located in London. The Tokyo office houses the team responsible for trading activities in Japanese markets and a small investor relations team that is primarily focused on Asian clients. The Greenwich office houses nine professionals, including a six person investment team focused on US rates trading and tail hedging.

Capula manages \$8.6 billion in assets, the majority of which is invested in the flagship GRV fund. In 2009, the firm also launched two additional products, a long-only fund focused on highly rated, short duration government instruments (the "GOLF Fund") and a portable alpha product. The GOLF Fund was closed in March 2010 due to investor withdrawals. The portable alpha product is currently offered as a customized mandate for individual clients but Capula may also launch a commingled enhanced fixed income fund in the future. In addition, the firm launched a fund focused on tail risk hedging in March 2010 and this fund has experienced significant asset growth since inception. Exhibit 1 below shows the assets managed by Capula since the inception of the firm.

Exhibit 1  
Capula Investment Management LLP  
Assets Under Management  
(\$ millions)

<u>Year End</u>	<u>Total Firm Assets</u>	<u>Global Relative Value Master Fund Assets</u>	<u>Tail Risk Master Fund Assets</u>	<u>Other Assets*</u>
2005	668	668	-	-
2006	1,611	1,611	-	-
2007	3,059	3,059	-	-
2008	4,534	4,331	-	203
2009	4,628	3,864	-	764
2010	8,162	5,975	1,356	831
2011	8,568	6,225	1,505	837

(February)

\* In 2010, other assets include the beta component of a portable alpha mandate managed by Capula. In 2009, other assets include both the beta component of a portable alpha mandate and assets from the GOLF Fund (closed in March 2010).

The Capula GRV fund has a diversified and stable investor base with over 100 investors, including institutional investors, sovereign wealth funds, financial intermediaries, high net worth individuals and funds of funds. Despite paying out over \$1 billion in cash redemptions during 2008, the fund raised over \$1.3 billion in new capital in 2009 and \$2.1 billion in 2010. In addition, the Fund has dramatically improved the quality of its investor base, which is now [REDACTED] institutional.

CIO Yan Huo and the other founding partners have worked together for over 10 years and the six senior trading partners collectively have over 70 years of experience. Dr. Huo established and developed JP Morgan's Fixed Income Proprietary Trading Team during a career there that lasted from 1996 through 2003. From July 2004 to September 2005, he served as the head of Fixed Income at UFJ International. Dr. Huo earned his MA and PhD from Princeton and his BS from Fudan University. Masao Asai serves as the head of Yen Macro trading. Mr. Asai previously served as the head of Yen Fixed Income at UFJ International and also worked at Tokai Bank. He earned his BA from Keio University.

Bing-Le Wu serves as the head of European Relative Value trading. He previously served as a Managing Director in JP Morgan's European Proprietary Trading business. Dr. Wu also previously served as an Assistant Professor of Mathematics at the University of Pennsylvania. He earned his PhD in Mathematics from Brandeis and his MA in Mathematics from USTC (Beijing). Jean-Marc Bottazzi serves as the head of Yen Relative Value trading. Dr. Bottazzi previously served as Managing Director and co-head of the proprietary trading business in Japan for JP Morgan. He previously also worked at Credit Suisse First Boston and was an Assistant Professor of Mathematics at the University Paris I Pantheon Sorbonne. Dr. Bottazzi earned his PhD in Mathematics at Sorbonne.

Exhibit 2 provides additional biographical information on the key investment and operations professionals at Capula. Exhibit 3 provides a breakdown of fund employees by functional area.

Exhibit 2  
Capula Investment Management LLP  
Key Investment and Operations Professionals

<u>Name</u>	<u>Title</u>	<u>Years At Firm</u>	<u>Years Exp.</u>	<u>Prior Experience/ Education</u>
Yan Huo	Managing Partner, Chief Investment Officer	Since inception	16	UFJ International, JP Morgan Princeton PhD & MA, Fudan University BS
Masao Asai	Partner, Head of Yen Macro	Since inception	21	UFJ International, Tokai Bank Keio University BA
Bing-Le Wu	Partner, Head of EUR RV	Since Apr 2008	16	JP Morgan, U. Penn Mathematics Professor Brandeis University PhD, USTC (Beijing) MA
Jean-Marc Bottazzi	Partner, Head of Yen RV	Since Sep 2008	16	JP Morgan, CSFB Sorbonne PhD, Harvard BS
Mark Barnett	Partner, Chief Risk Officer	Since inception	15	UFJ International, JP Morgan University of Delaware BS
Qiang "John" Dai	Partner, Head of Systematic Trading	Since inception	5 plus 14 years teaching	UNC Finance Professor, Stanford GSB Professor Stanford University PhD (Physics & Finance), Peking University BS
Neil McCallum	Partner, Chief Operating Officer	Since inception	27	UFJ International, Sanwa International, WestLB, Barclays, JP Morgan Durham University BA
Edward O'Reilly	MD and Head of	Since Oct	21	Peloton Partners, The

	North American Sales and Marketing	2008		O'Connor Partnership, SBC, UBS Duke University MBA, Miami University BA
Vijay Sharma	Partner, Head of Market Risk	Since March 2009	20	UBS, Protean, Northbay Investments, Clinton Group, Deutsche Bank Wharton MBA, University of Southern California MS, Indian Institute of Tech BS
Angel Serrat	Partner, Chief Strategist	Since June 2009	16	JP Morgan, Credit Suisse, Goldman Sachs, Uni of Chicago MT PhD, CEMFI (Bank of Spain) MSc, Universitat Barcelona BSc (Economics) and BSc (Mathematics)
Ayman Hindy	Partner, Senior Portfolio Manager	Since January 2010	17	Platinum Grove, Long Term Capital Management MIT PhD, MIT MS, Cairo University BS
Thorkild Juncker	Partner, Head of Business Development	Since May 2009	28	NewFinance, JP Morgan, World Bank Graduate Institute of International Studies (Geneva) Doctorate International Economics, Copenhagen Business School BSc

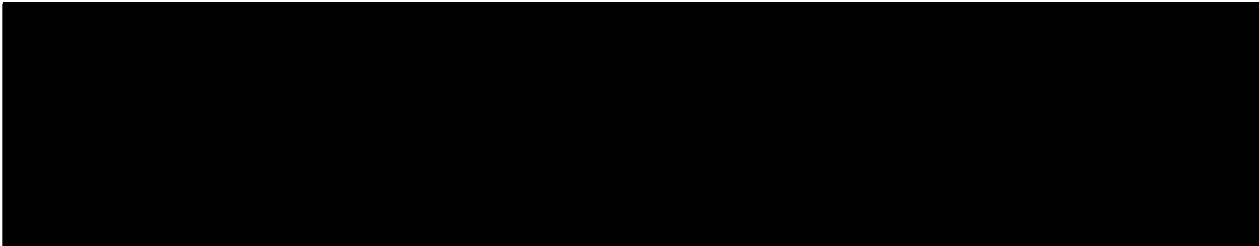
Exhibit 3  
Capula Investment Management LLP  
Personnel Count

	Involved With Fund Strategy	Firm-Wide	Departures Within Last Three Years
<b>Investment Professionals:</b>			
CIO/Portfolio Manager	1	1	0
Portfolio Managers	6	6	0
Research Analysts*	10	10	3
Traders/Trade Assistants	22	22	6
<b>Operations/Back Office:</b>			
Operations/Accounting	14	14	3
Legal/Compliance	1	1	0
Information Technology	9	9	1
Investor Relations	7	7	1
Admin & Other	9	9	4

\* Includes risk and market research team.

Capula directly employs 79 people, including 39 investment professionals, 14 operations personnel, 9 information technology specialists, and 17 other investor relations/legal/administrative professionals. The investment team includes CIO Yan Huo, 6 other portfolio managers, 22 traders and 10 analysts, including 4 risk management professionals and 6 market researchers. The operations group includes a COO and 13 other professionals. Collectively, the group has over 100 years of experience supporting fixed-income

trading. The information technology ("IT") group includes 9 full-time employees. Capula has invested substantial resources in its IT infrastructure since its inception to support the intensive data and analytical requirements of the strategy.



The fund is organized in a master-feeder structure. Capula Global Relative Value Fund Ltd., a Cayman Islands exempted company, is the offshore feeder. Capula Global Relative Value Fund L.P., a Cayman Islands exempted limited partnership, is the onshore feeder for US tax purposes. Both funds invest substantially all of their assets in the Capula Global Relative Value Master Fund, Ltd., a Cayman Islands exempted company.

### **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. Capula distinguishes itself from other fixed income arbitrage funds by developing investment ideas that are based on market flows and other technical factors, as opposed to theoretical models.

The Fund does not take long credit positions and strives to avoid any directional exposure in the portfolio. Capula utilizes a macro hedge overlay at the portfolio level in order to reduce tail risks and to eliminate any residual exposures to interest rate, credit or currency risks. The macro hedge book generally has a long protection exposure (through interest rate options and CDS) and is structured to be negative carry. Capula stresses the importance of the macro hedging of tail risks because investment opportunities in the interest rates markets often emanate from macro events, such as the quantitative easing in the UK and the historically high issuance of US government debt following the 2008 financial crisis.

Capula expects the GRV Fund to generate a 15% net annualized return with target annualized volatility of 6-7%. In addition, the Fund is expected to have near-zero correlation to fixed income, credit and equity markets. The Fund has achieved these goals since inception, with very low correlations of 0.08 and 0.03 to the JPM Global Government Bond Index and the MSCI World Index, respectively.

Capula's Investment Committee, which is chaired by CIO Yan Huo, is responsible for allocating capital across currencies and strategies in a dynamic, discretionary process. All of the senior traders and the two most senior risk professionals (CRO Mark Barnett and Head of Market Risk Vijay Sharma) sit on the Investment Committee, which meets at least once monthly. Capital is allocated first among currencies (USD, EUR and JPY) and then among sub-categories that correspond with trade types (bond trades, swap trades, volatility trades and macro trades). Capital allocation decisions are made based on the committee's expectation of the market opportunity, expected profitability, liquidity, realized and expected volatility, tail risk scenarios and fit within the overall portfolio.

After capital is allocated among the investment categories, potential trade opportunities are identified in formal weekly research meetings where both quantitative and qualitative information are presented and discussed. Capula has a highly experienced research team which was previously led by Dr. Suresh Sundaresan, an expert in fixed income markets and risk management for hedge funds. Dr. Sundaresan is also a full-time Professor of Finance at Columbia University and now serves as a consultant to the

fund. The trade selection process relies on both top-down macroeconomic analysis and bottom-up micro (technical) factors. Top-down macroeconomic considerations include monetary policy, fiscal policy, demographic changes and regulatory changes. Bottom-up technical factors include asset flows among various fixed income market participants, levels of leverage provided by prime brokers and certain idiosyncratic factors that may cause investors to favor or avoid certain issues for ephemeral reasons.<sup>2</sup> After potentially profitable themes are identified in research meetings, the portfolio managers and traders will then develop the most effective way to implement the trade given current market pricing, the availability of leverage and potential tail risk exposure. The GRV Fund generally pursues 15-25 themes at any one time, with multiple positions held for each theme.

The following table describes the allocations and themes that each of the currency books pursue:

Book	Typical Allocation	Current Allocation (as of February 2011)	Themes and Position Focus
USD	30-40%	40%	<ul style="list-style-type: none"> <li>- Bond Trading</li> <li>- Swaps Trading</li> <li>- Cross Currency Trading</li> </ul>
EUR	30-40%	26%	
JPY	10-20%	15%	
Macro Hedge	5-10%	19%	Macro overlay hedging of aggregate portfolio risks, counterparty risks, liquidity and systemic risks

Supporting the investment professionals in their work is a robust IT infrastructure which facilitates market data analysis and complex fixed income and derivative analytics. These technical capabilities were developed and are maintained by the nine person IT department in collaboration with the risk management and market research teams.

As noted above, Capula does not make directional bets on the movement of interest rates or currencies but instead pursues trade ideas that exploit pricing discrepancies caused by relatively predictable market events that will likely converge within a short period of time. Given the short holding period, Capula has an average portfolio turnover of only 15 business days. The following exhibits describe trade examples that fall within the three sub-categories of trades:

Sub-Category	Trade Examples
<u>Bond Trading</u> <ul style="list-style-type: none"> <li>- Bond Basis</li> <li>- Auction Related</li> <li>- Bond Butterflies</li> <li>- Bond vs. Swap</li> </ul>	Long futures vs. short bond, duration/curve hedged Short current 5-year bond vs. surrounding benchmarks, duration/direction hedged Short 5-year bond vs. long 2-year and 10-year bonds Short 5-year bond vs. receiving fixed in 5-year swaps
<u>Swap Trading</u> <ul style="list-style-type: none"> <li>- Basis Swaps</li> <li>- Swap Butterflies</li> </ul>	Long 3m6m USD basis vs. 1y1y forward Pay 2-year and 10-year swaps vs. receive 5-year swaps
<u>Cross Currency Trading</u> <ul style="list-style-type: none"> <li>- Relative Value</li> <li>- Macro</li> </ul>	Spread trade in one currency vs. spread trade in another Long duration in one currency vs. short duration in another

<sup>2</sup> An example of this might be the consistent cheapening in certain off-the-run Treasury bonds prior to an auction and the subsequent richening in the days after the auction as passive investors such as insurance companies roll over their holdings. See Trade Example 2 on page 8.

[REDACTED]

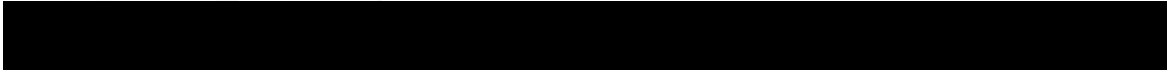
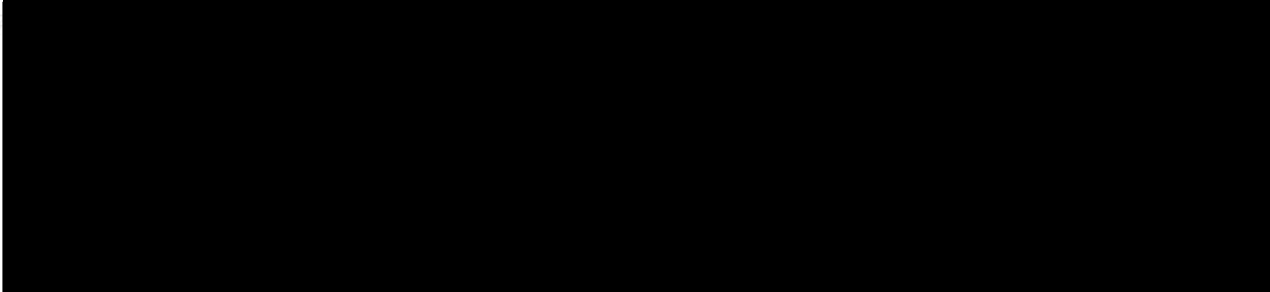
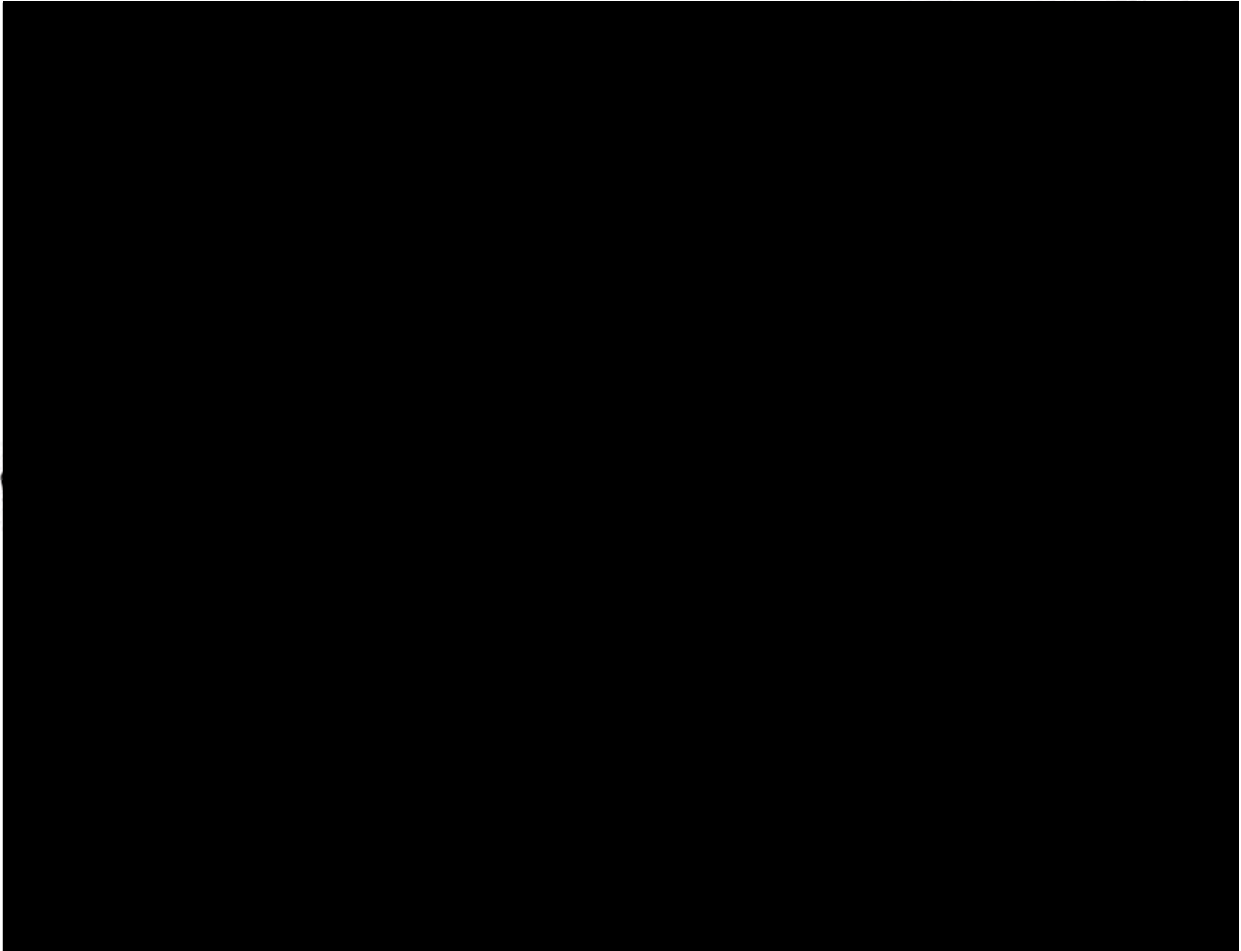
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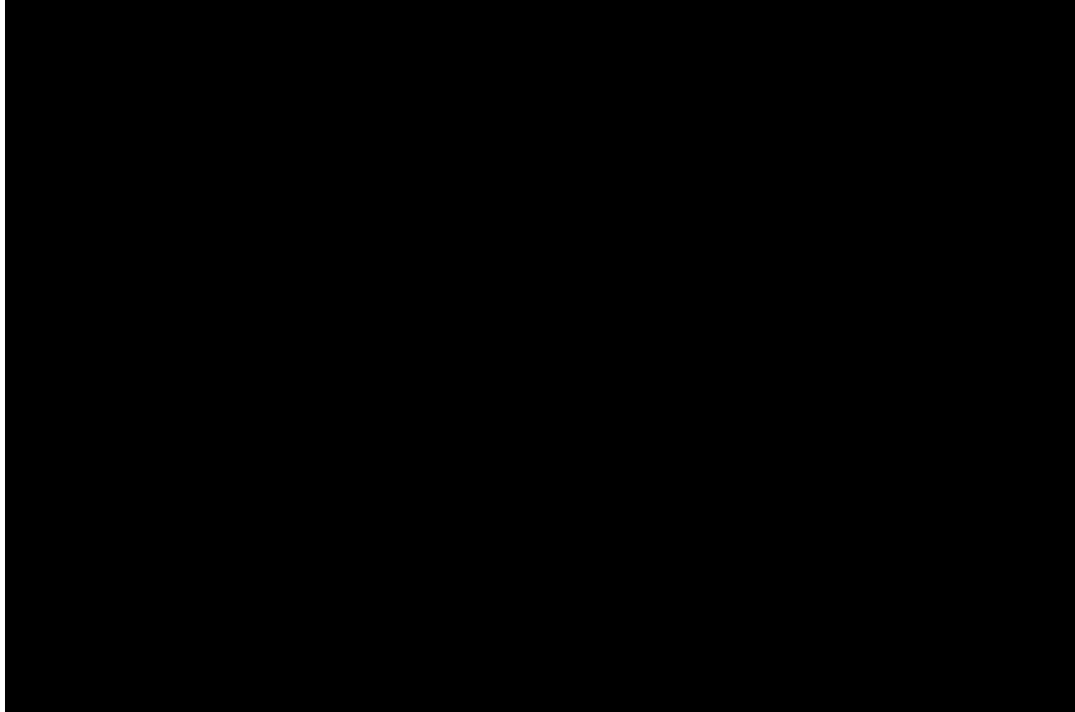
[REDACTED]

[REDACTED]

[REDACTED]







Geographically, the fund is typically diversified across the three primary currencies, with 30-40% allocated to USD interest rate markets, 30-40% allocated to EUR markets and 10-20% allocated to JPY markets. Currently, the portfolio is overweight to USD interest rate instruments given the significant market dislocations caused by the massive supply of newly issued government debt and interventionist policies such as quantitative easing. The fund is currently cautiously positioned in Europe due to significant concerns about the fiscal situation in that region.

Multiple trades can make up the execution of any given sub-strategy, and each trade is executed using a number of positions in order to isolate the pricing discrepancy that Capula is attempting to exploit while limiting exposure to other market risks, especially tail risks. Residual tail risks and exposures to broad market factors are also hedged at the portfolio level using long positions in interest rate options, FX forwards and options, commodity options and CDS.

In 2007, Capula started to expand its scope into investments in hybrid option ARMs and other mortgage-backed securities. The portfolio managers believed that the firm's analytical and risk management tools could be effectively utilized for investments in these instruments but liquidity dried up quickly as the market turmoil began in early 2008. Capula exited all of its positions in this area in March 2008, which caused much of the -7.4% loss for the month.

In January 2011, Capula began allocating approximately 3% of GRV Fund capital to a quantitative managed futures strategy that was developed by Head of Systematic Trading (and former Chief Risk Officer) John Dai. This strategy utilizes a combination of directional and relative value trend-following and momentum strategies to systematically trade bond and foreign exchange futures contracts. Capula believes that model-based trading strategies act as a strong diversifier to the fund's core discretionary investment activities and that the systematic strategy should outperform in a risk reduction environment. However, CIO Yan Huo is cautious about the sizing of the strategy within the overall GRV portfolio and does not intend to increase the risk capital allocation materially in the near future. If the strategy generates strong risk-adjusted returns and favorable diversification characteristics over time, Capula may launch a standalone fund at some point in the future.



### **Performance**

The strategy managed by Capula has generated strong absolute and risk-adjusted returns since inception in October 2005. An audited 7-year track record from the CIO's tenure at JP Morgan also suggests similarly strong risk-adjusted returns. The strategy has generated an annualized return of 13.21% and standard deviation of 5.49%, for a Sharpe ratio of 1.78. As shown in Exhibit 5, this ranks very favorably relative to other hedge funds (as represented by the HFRI Fund Weighted Composite Index) and other fixed income arbitrage funds (as represented by the HFRI Relative Value Index).

As shown in Exhibit 6, Capula has historically shown statistically significant sensitivity to high yield bonds and non-US sovereigns. This is consistent with the fund's focus on G3 interest rate markets. The fund has also shown a statistically significant negative sensitivity to European equities. Finally, since inception, the fund has shown very low correlations to other hedge funds.

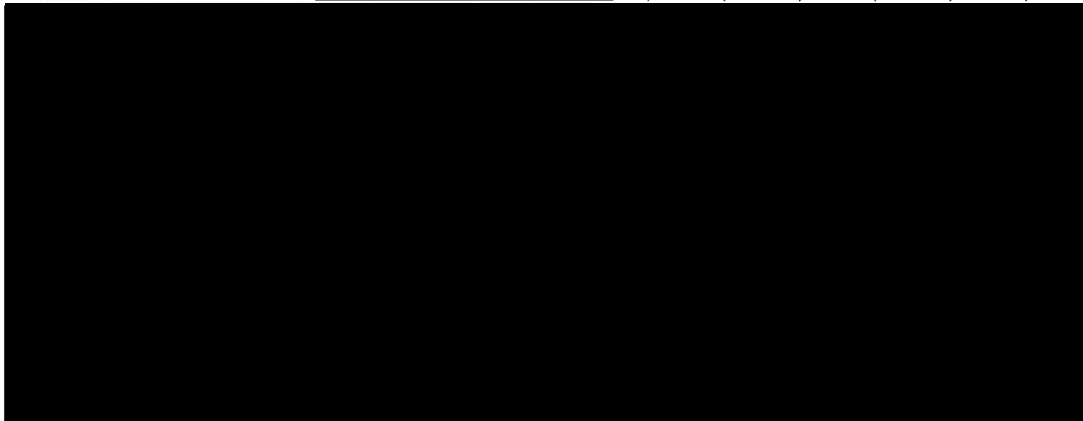
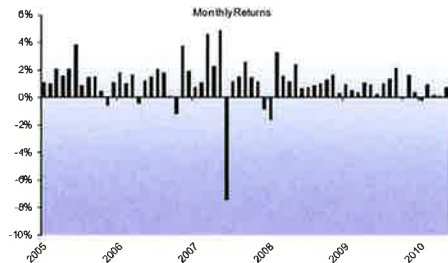
Exhibit 5  
 Capula Global Relative Value Fund  
 Performance as of February 2011



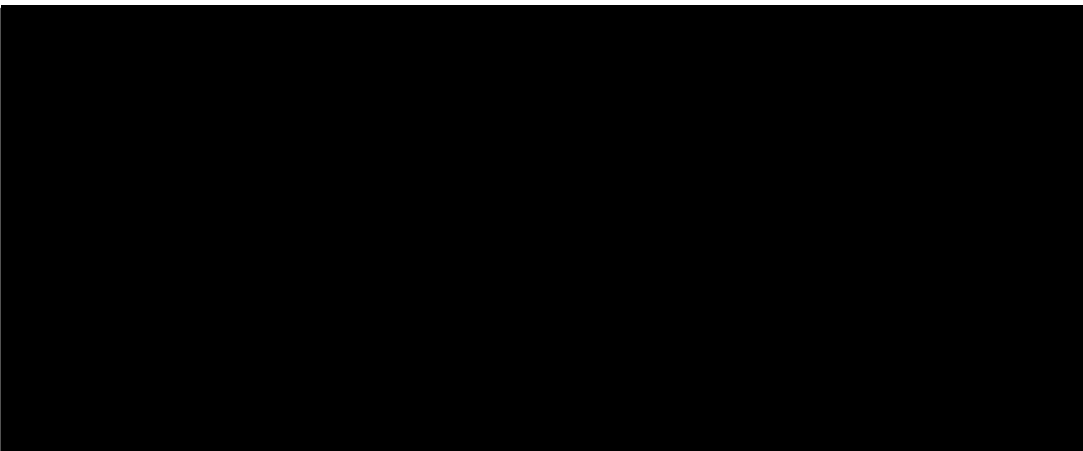
Fund Return	1-Year	3-Years	5-Years	Inception
Capula Global Relative Value Fund Limited				

S&P 500 TR				
Barclays Aggregate Bond Index				
3 Month Libor Rate				

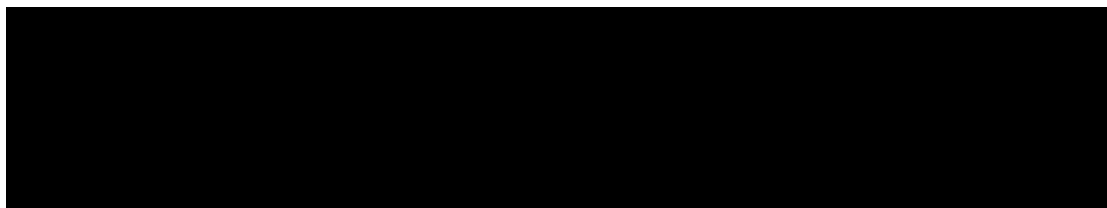
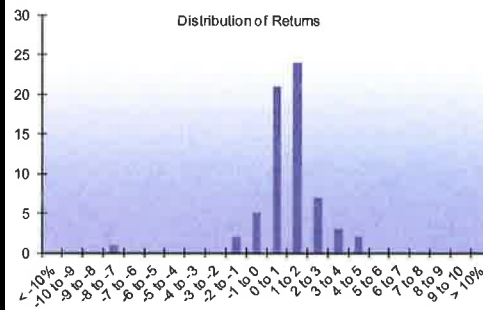
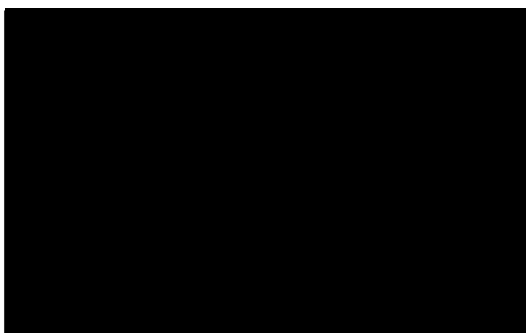
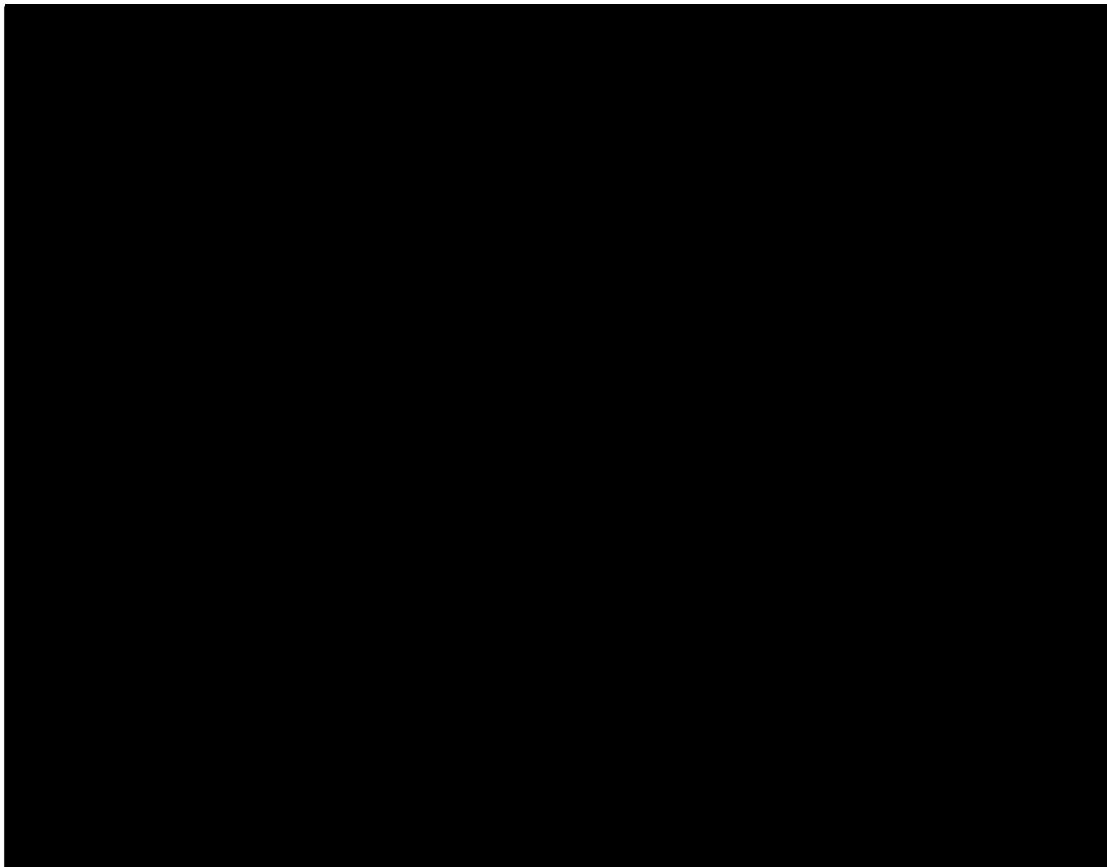


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	HFR1 FW
2011	0.04%	0.69%											0.73%	1.78%
2010	1.03%	0.69%	0.22%	0.96%	1.36%	2.11%	-0.09%	1.58%	0.33%	-0.20%	0.91%	0.11%	-9.58%	10.28%
2009	1.14%	2.40%	0.64%	0.72%	0.87%	0.96%	1.25%	1.61%	0.29%	0.88%	0.50%	0.36%	12.24%	19.96%
2008	2.25%	4.84%	-7.41%	1.16%	1.48%	2.52%	1.40%	1.10%	-0.87%	-1.58%	3.21%	1.51%	-9.48%	-19.03%
2007	-0.42%	1.16%	1.47%	2.05%	1.76%	0.03%	-1.16%	3.72%	1.88%	0.67%	1.07%	4.56%	18.00%	9.96%
2006	1.55%	2.03%	3.77%	0.84%	1.40%	1.49%	0.44%	-0.59%	1.04%	1.72%	0.95%	1.63%	17.47%	12.80%



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Exhibit 6  
Capula Global Relative Value Fund  
Risk Characteristics as of February 2011



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## Risk Management

Capula employs a sophisticated, comprehensive approach to risk management in all areas of the business. The firm employs a dedicated risk management team of four people, including CRO Mark Barnett, Head of Market Risk Vijay Sharma and three other professionals. The team is responsible for monitoring all areas of risk, including market, credit, liquidity, counterparty and operational risk. Capula's former Director of Research Dr. Suresh Sundaresan (and current consultant to the fund) is a recognized expert in the analysis and mitigation of risk for hedge funds and his collaboration with the risk management team has helped the Fund to develop world-class risk management systems that are impressive among fixed income arbitrage hedge funds.

Capula's approach to risk management begins with the markets and instruments that the traders choose to employ in executing their strategy. The Fund is solely focused on trading highly liquid G3 fixed income and foreign exchange instruments. Furthermore, the Fund's investment strategy relies on short-term trading time horizons, which allows the portfolio managers to constantly reassess the liquidity profile in order to ensure that it is appropriate for the current market risk environment.

The next level of risk management occurs at the trader level, where much of Capula's risk management derives from the actions of the investment team, including trade construction, risk budgeting & position limits, risk limits, and diversification. Each trader is responsible for hedging unwanted risks, such as interest rate, spread, volatility, foreign exchange and inflation risk factors. The liquidity profile of each instrument and strategy is also assessed by the risk management team prior to trade execution.

Capula also performs extensive stress testing on all positions and potential trade ideas, in which it models the exposure of the portfolio to events such as the collapse of LTCM, the September 11<sup>th</sup> terrorist attacks, the March 2008 Bear Stearns failure and the September 2008 Lehman Brothers bankruptcy and subsequent market deleveraging. In all cases, the worst 10-day loss can not exceed 7% of Fund NAV under the stress test scenarios.

Capula strives to maintain an uncorrelated, market neutral portfolio with limited exposure to factors such as interest rates, credit spreads, currencies and volatility. Therefore, in addition to the trader level risk controls, CIO Yan Huo and the Investment Committee also apply a macro overlay at the portfolio level in order to provide protection for the book in stress and tail-risk scenarios. These macro hedges generally consist of long option positions and long CDS protection and their size will generally increase with market volatility or an increased expectation of tail risk.

Capula believes that the liquidity of its trading strategies is consistent with that of its investors, even under stressed market conditions. The Fund always maintains a sufficient level of unencumbered cash, which is equal to assets under management less initial margin posted less any necessary variation margin. Capula's margin requirements are relatively low compared to other hedge funds given the high level of liquidity and credit quality of the underlying collateral. Furthermore, the portfolio managers, risk management and back-office professionals continuously monitor the risk exposure across bonds, futures and OTC products in order to optimize the initial margin by netting certain related products against one another.

In addition to managing the investment and liquidity risks of the portfolio, Capula also closely tracks the Fund's exposure to counterparty risk. Capula has agreements in place with over 25 repo and OTC counterparties and 6 prime brokers. The Fund strives to maintain as little margin exposure as possible at any given time with its counterparties and sweeps any excess margins beyond the minimum prime

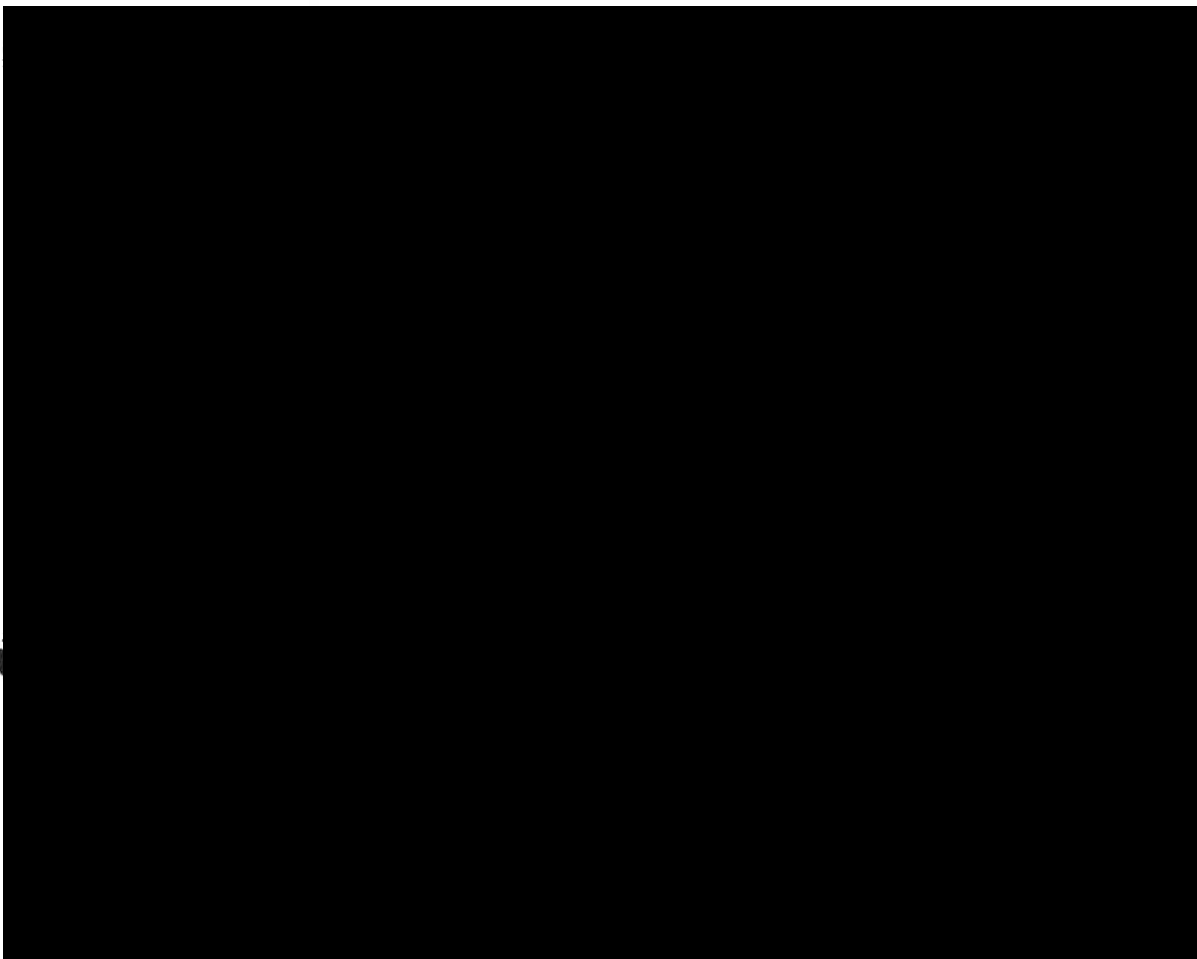
brokerage requirements into its custodian accounts on a daily basis in order to ensure that its cash remains unencumbered.

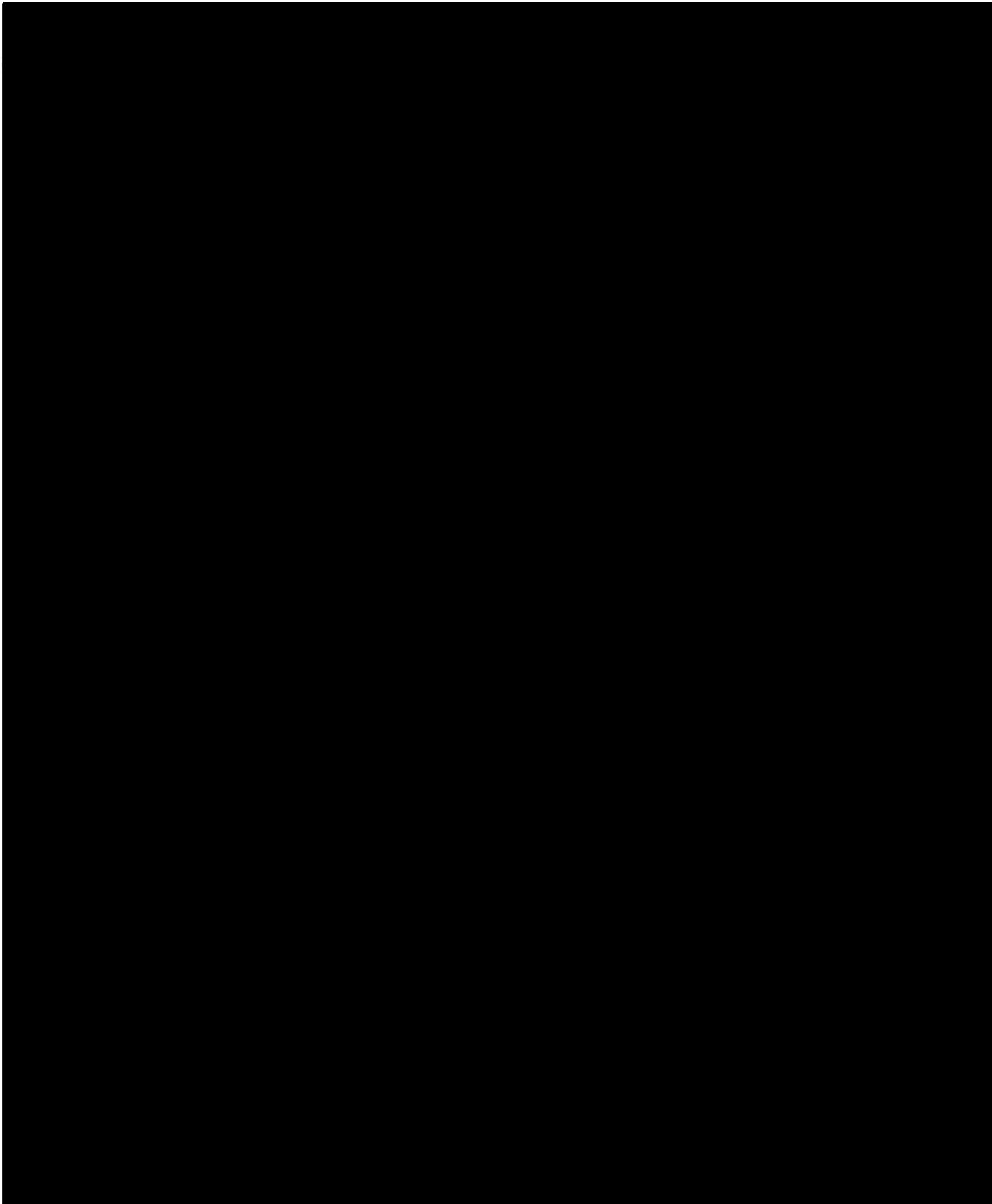
Capula's strict and comprehensive risk management principles allowed it to deftly navigate the financial crisis during the second half of 2008. As market conditions deteriorated in the fall of 2008, the GRV Fund proactively reduced its VaR exposure and leverage and increased its holdings in unencumbered cash. In addition, it greatly reduced its counterparty exposure to Lehman Brothers beginning in the spring of 2008 and hedged any residual exposure with CDS so that its net exposure to Lehman was negative at the time of the bankruptcy.

## **Investment Terms**

### Summary Comments

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 in the offshore fund may also opt for the same liquidity as above but with a 1.5% management fee and 25% performance fee. Alternatively, offshore investors who are making allocations of at least \$50 million may opt for a 3-year lock-up period, which includes a 1.5% management fee and 20% performance fee, which is paid at the end of the 3-year lock-up period. Investors may also elect their base currency. Capula provides a key-man clause applying to CIO Yan 'Huo and Partner Masao Asai, enabling special withdrawal rights associated with their involvement in the Fund.







**Appendix: Glossary**

Alpha	Measure of a fund's excess returns over market indices. Alpha represents the portion of a portfolio's returns attributable to manager skill.
Arbitrage Strategy	A hedge fund style that aims to profit from the discrepancy in valuation between related securities, which may include equities, fixed income, derivatives, etc. An example is convertible arbitrage, which attempts to exploit the mispricing between embedded options in convertible bonds and the underlying security.
Beta	Measure of a portfolio's return sensitivity to a market index. The higher the beta, the greater the sensitivity to the market. A portfolio with a beta of 1.0 should move directly in line with the market index.
Convexity	A measure of the sensitivity of a bond's duration to changes in interest rates. Bond portfolios with positive convexity are structured to have greater upside, when interest rates decline, than downside when interest rates increase.
Credit Strategy	A hedge fund style that typically invests in high yield and high grade bonds, bank loans, credit default swaps and structured products. Managers use fundamental credit analysis to identify mispriced debt instruments and express their views through long and short positions.
Derivative	A security whose price is derived from the value of one or more of the underlying variables, commonly the price of another security. An example is a call option which gives the holder the right, but not the obligation, to buy an asset at a specified price for a limited period of time. Derivatives can be used to hedge risk, speculate, or establish arbitrage positions.
Distressed Strategy	A hedge fund style that seeks to take advantage of corporate securities in default, under bankruptcy protection, in distress or heading toward such a condition, or in liquidation. Some distressed managers attempt to add value by becoming actively involved in the restructuring process.
DV01	The hypothetical mark-to-market impact on a fixed income portfolio of a 1 basis point increase in the credit spread of each asset.
DV1%	The hypothetical mark-to-market impact on a fixed income portfolio of a 1% increase in the credit spread of each asset.
Early Withdrawal Penalty	A fee assessed to investors that redeem assets prior to the expiration of a "soft" lock-up. The penalty is a percentage of assets, typically 2% to 5%, and these fees generally accrue to the fund.
Equity Long/Short Strategy	A hedge fund style that primarily allocates capital to long and short positions in equities and equity derivatives. Exposures range from net long to market neutral to dedicated short. Some equity long/short funds focus on specific sectors (e.g., technology and healthcare) or regions (e.g., Asia and Europe).
Event Driven Strategy	A hedge fund style that aims to profit from the mispricing of securities related to hard and/or soft catalysts. Examples include mergers (merger arbitrage), restructurings, bankruptcies, litigation, regulatory and legislative changes.
F-Stat (p-value)	Measure of the statistical significance of a regression. A smaller p-value associated with the F-stat indicates a higher level of statistical significance. For example, a p-value of .01 or less indicates significance at the 99% level.
Expense Ratio	All expenses charged to the fund other than those related to trading and financing. These expenses typically include organizational expenses; fund legal, compliance, audit and administrative fees (including middle/back office services); directors' fees and expenses; fund-related insurance costs and research and data fees. Charges related to entering into, maintaining, and financing a position are not included in the ratio. These charges would typically include commissions, margin and other finance charges ("carry"), stock loan costs net of short rebate, brokerage charges, intermediation fees, and any other execution or finance related charges.
Fund of Funds	An investment vehicle that invests in a portfolio of hedge funds.
Gate	A restriction on the amount that investors can redeem from a hedge fund in a given period. Gates are designed to help prevent problems associated with large redemption requests during a specific period. Fund level gates establish this limit as a percentage of all holdings in the fund, potentially allowing redeeming investors to receive a percentage greater than the gate amount. Investor level gates limit each investor's withdrawal to a specific percentage of their account.
General Partner	The partner responsible for the management and investment decisions of the fund.
Global Macro Strategy	A hedge fund style focused on taking advantage of structural macroeconomic imbalances and trends. Global macro managers generally have broad mandates to invest globally

	across all asset classes. These managers tend to employ leverage and have exposure to global interest rates, currencies, commodities and equities.
High Water Mark ("HWM") (also Modified HWM)	The value that a portfolio must exceed before incentive fees can be assessed. The HWM is the highest net asset value previously achieved, and ensures that the manager does not earn performance fees on gains until previous losses are recaptured. A modified HWM allows the manager to earn a reduced (one-half) incentive fee during recovery, with the full incentive fee resuming after recovering 200% of earlier losses. A modified HWM helps a manager retain talented employees during weak performance periods.
Information Ratio ("IR")	Commonly used measure of a manager's risk-adjusted alpha versus a benchmark or set of market indices. The IR is the ratio of excess fund returns to tracking error. LIBOR is an appropriate benchmark for evaluating absolute return strategies, with a high IR indicating consistent outperformance.
Kurtosis	Positive kurtosis measures the tendency of returns to deviate from a "normal" distribution and exhibit "fat tails" where there is a greater frequency of large losses and large gains versus what would be normally predicted. Investors should be cautious of hedge funds whose returns exhibit high positive kurtosis, also known as tail risk.
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> <ul style="list-style-type: none"> <li><i>Equities</i> – the market value of long and short positions</li> <li><i>Corporate Debt and Municipal Bonds</i> – the market value of long and short positions</li> <li><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)</li> <li><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</li> <li><i>Credit Default Swaps</i> – total notional exposure of the underlying reference credit</li> <li><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</li> <li><i>Futures/Forwards</i> – total notional exposure to reference security or index</li> </ul>
Limited Partner	Investors are limited partners in the hedge fund and are "limited" in that they have no voice in hedge fund investment or operational matters, and their losses are limited to amounts invested.
Liquidity	The ease with which a hedge fund can convert its holdings to cash. Funds with higher liquidity can close out of positions more easily and with fewer costs.
Lock-up	The period of time before an investor is eligible to redeem from a hedge fund. Lock-ups of one or two years are typical, and may apply to each subsequent investment. The liquidity of the strategy typically influences the length of the lock-up. For example, distressed funds typically have longer lock-up periods than macro and equity long/short funds.
Hard	Assets can not be redeemed during the lock-up period.
Soft	Assets may be redeemed prior to expiration of the lock-up period, but an early redemption penalty must be paid.
Management Fee	Compensation for management of the hedge fund. Management fees typically range from 1% to 2% of assets.
Macro Overlay	A supplemental component of a portfolio designed to change the exposure of the underlying portfolio to various macroeconomic factors.

Margin (Encumbered Cash)	Cash posted as collateral with a broker or exchange to satisfy the trading requirements of derivative contracts.
Margin-to-equity ratio	The percentage of portfolio capital posted as margin with a broker or exchange (i.e., margin capital divided by total capital). In a portfolio composed entirely of derivative contracts, this number represents the percentage of encumbered cash in the portfolio. This is a common measure of leverage used by CTA managers, since it is proportional to the amount of notional exposure per dollar of capital. For example, if one CTA portfolio has a higher margin-to-equity ratio than another, all else being equal, the former portfolio has higher leverage.
Master-Feeder Fund Structure	A fund structure which allows for onshore and offshore fund vehicles to be managed as a single portfolio.
Master Fund	The master fund is that part of a master-feeder structure into which the feeder funds invest and which manages the single combined investment portfolio. The master fund is generally a non-US corporate entity.
Feeder Funds	Two separate legal entities, one a U.S. onshore partnership (LP) and the other a non-U.S. offshore corporation (LTD) which accommodates investor groups with different tax and regulatory needs.
Max Drawdown	The greatest investment loss experienced by a hedge fund, measured from peak (prior highest cumulative return) to valley (subsequent lowest cumulative return).
Multi-Strategy	A hedge fund style that opportunistically allocates capital to various hedge fund strategies and uses diversification to reduce asset-class and single-strategy risks. Ideally, multi-strategy portfolio managers tactically shift capital among strategies in order to capitalize on current market opportunities. Some multi-strategy funds act as a collection of traders, while others have a more formal organizational structure.
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.
Offshore Fund	Hedge funds which are registered/domiciled in offshore jurisdictions such as the Cayman Islands, British Virgin Islands, and Luxembourg. Offshore funds provide eligible investors with tax benefits and regulatory relief. Because offshore funds are administered outside of the U.S., non-U.S. investors and tax exempt U.S. investors such as ERISA pension funds can take advantage of tax benefits.
Onshore Fund	A fund with a U.S. legal domicile under the tax and regulatory locale of the fund manager. Most onshore funds are limited partnerships registered under Delaware law.
Performance (Incentive) Fee	The manager's share of the profits above the high water mark and net of management fees and expenses. The fee is typically 20%.
Serial Correlation	The correlation between current and past returns. In an efficient market, there should be no correlation between returns from one period to the next. Some hedge funds, particularly credit oriented funds, exhibit positive serial correlation which indicates that security pricing may be "sticky" and not change from period to period.
Sharpe ratio	Commonly used measure of a manager's risk-adjusted alpha in relation to a risk-free asset. The Sharpe ratio is equal to excess returns divided by excess risk. A high Sharpe ratio indicates that a manager has generated high risk-adjusted returns.
Side Letter	An addendum to the partnership and subscription agreement which stipulates key terms for a particular investor, such as negotiated fee levels, MFN (Most Favored Nation) clauses, transparency requirements, or special liquidity terms.
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.
Skew	Skew measures the tendency of returns to deviate from a symmetrical distribution. Given two return distributions with the same mean and standard deviation, the distribution with the higher positive skew would be more desirable. Several hedge fund styles, particularly arbitrage strategies, exhibit return patterns that are negatively skewed, an undesirable trait but one that can be managed through style diversification at the portfolio level.
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.
Suspension Provisions	A hedge fund provision that allows the manager to suspend all redemptions, generally to deal with extraordinary market circumstances.
T-Stat (p-value)	Measure of the statistical significance of an individual independent variable in a regression. A smaller p-value associated with the T-stat indicates a higher level of statistical significance. For example, a p-value of .01 indicates significance at the 99% level.
Tail Risk	A form of risk that arises when portfolio returns deviate from a "normal" distribution and exhibit "fat tails" where there is a greater frequency of large losses and large gains versus what would be predicted. Although technically positive kurtosis, tail risk is usually associated with downside risk in an extreme scenario.
Tracking Error	Measure of the volatility of an investment's performance relative to a benchmark.
Transferability	The terms under which an investor may transfer ownership rights to another investor. Typically requires the approval of the manager or administrator.
Unencumbered Cash	Unencumbered cash is equal to cash holdings less margin requirements.
VAMI	The Value Added Monthly Index (VAMI) reflects the growth of a hypothetical \$1,000 in a given investment over time.
Value at Risk (VaR)	The potential loss in value of a portfolio given a specific time horizon and probability. For example, if a portfolio has a one day 5% VaR of \$1 million, there is a 5% chance the portfolio will lose more than \$1 million on any given day.