



Update on UC's Absolute Return Program

603

Committee on Investments / Investment Advisory Committee
February 14, 2006



AGENDA

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Absolute Return Strategies and Asset Allocation

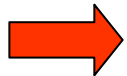
■ **The Absolute Return strategy is not a homogeneous asset class; it should be viewed as a collection of diverse investment strategies with:**

- Similar legal and fee structures
- Similar requirements for due diligence/oversight as other Alternative strategies
- Lack of position transparency (usually)
- Limited performance history



Qualities of an Absolute Return Program

- Increases portfolio diversification and lowers overall volatility
- Adds incremental returns to portfolio without adding more volatility
- Provides excess returns with low correlation to other asset classes
- Generates positive returns in up or down equity markets
- Allows access to advanced investment management techniques and top investment managers

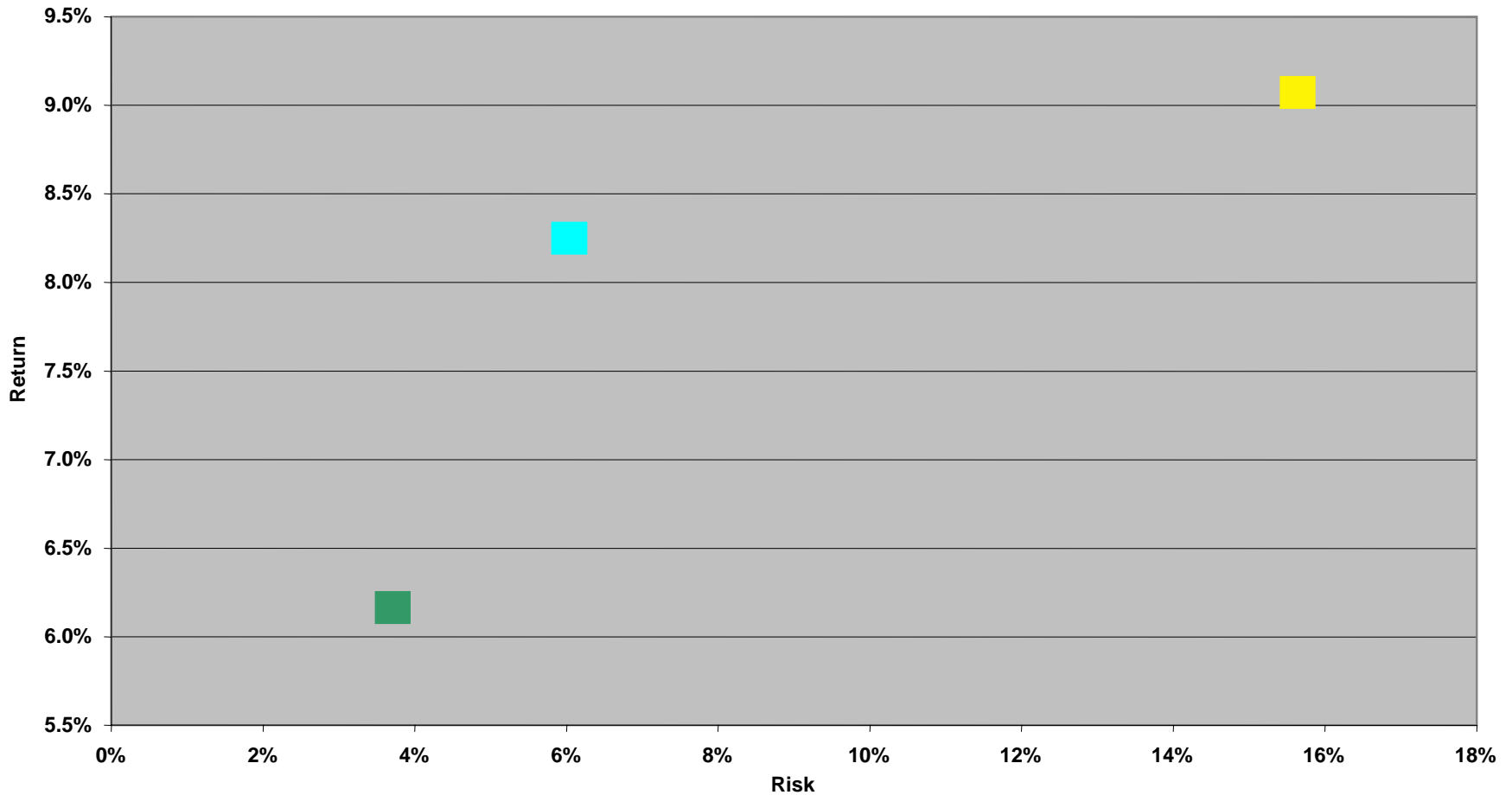


Increases overall risk adjusted performance



10 Year Risk/Return Profile: Stocks, Bonds & Hedge Funds

1996 – 2005



■ HFR Fund of Funds Composite

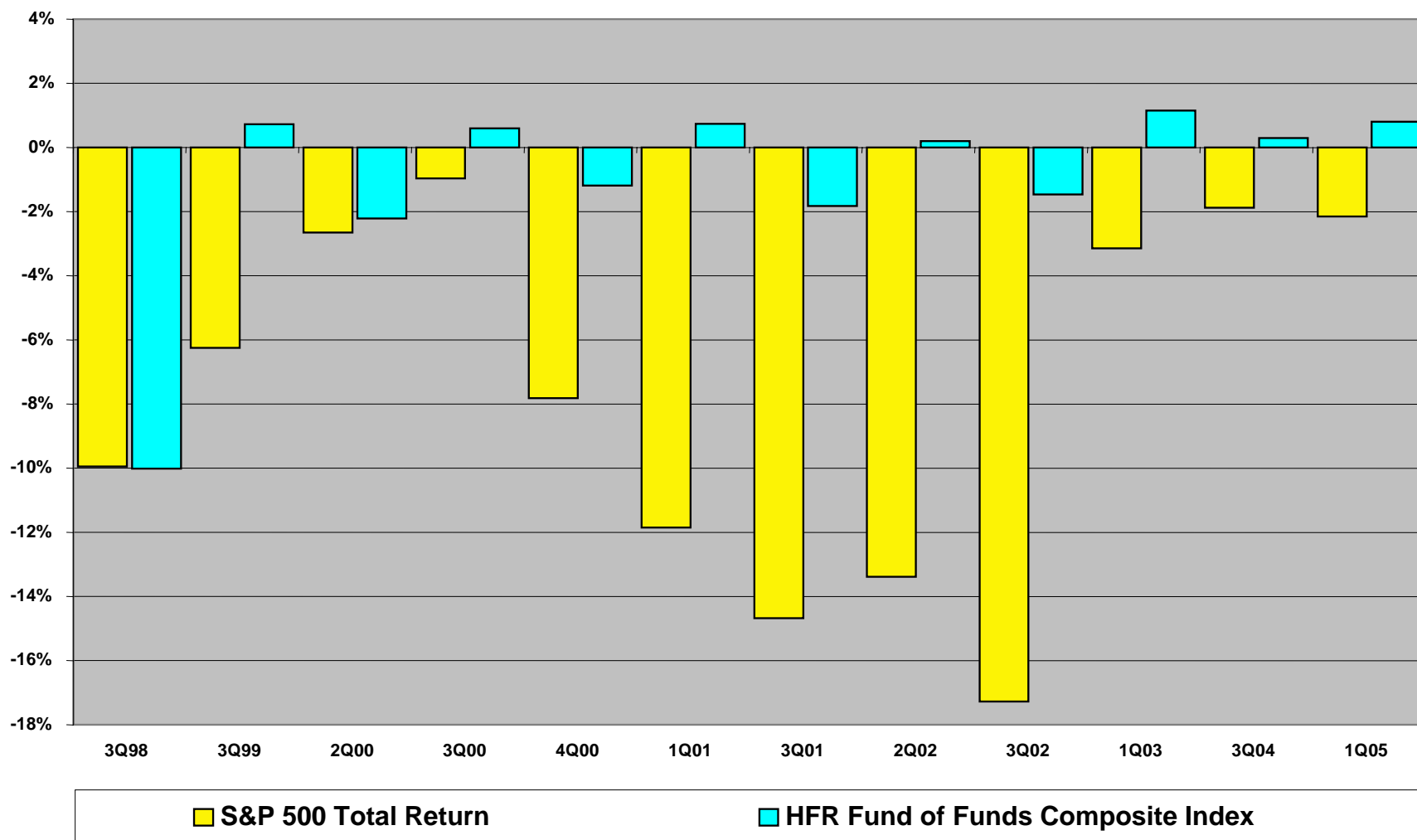
■ S&P500 Total Return

■ Lehman Aggregate Bond Index



Hedge Fund Returns During S&P Down Quarters over Last 10 Years

1996 – 2005





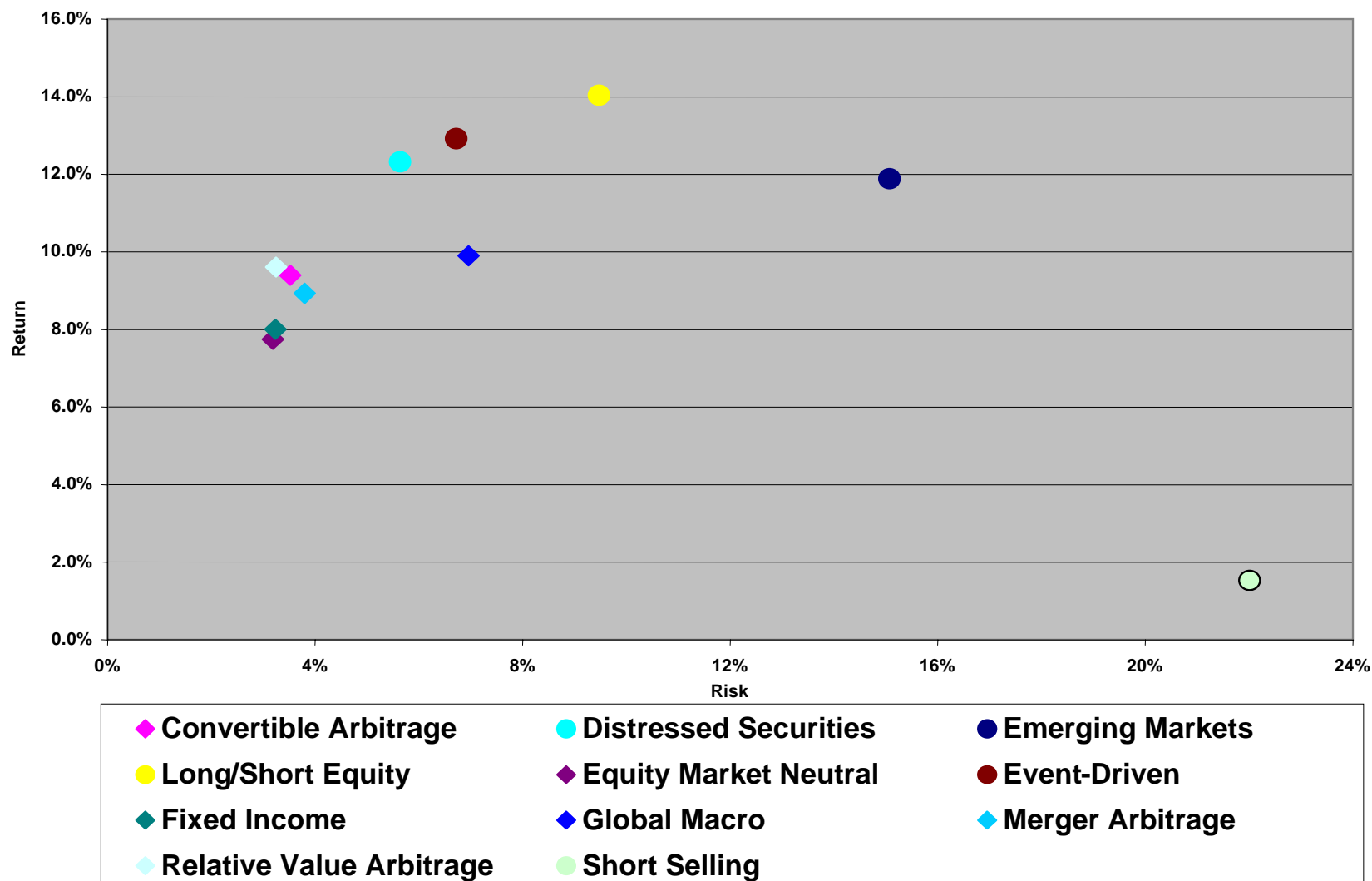
Absolute Return Strategies: Substitute for Bonds or Stocks

- A substitute for fixed income, especially credit
 - If low volatility / low leverage strategies are used
- A substitute for equity
 - If long-biased, equity-based strategies are emphasized
 - If significant leverage is applied
- An “alternative” investment (i.e. non-traditional)



Hedge Funds: 10 Year Risk/Return Profile by Style

1996 – 2005





Absolute Return Strategies: Asset Allocation

■ In GEP, Absolute Return strategies were initially used

- To increase expected return (above bonds)
- While reducing risk (similar volatility as bonds, lower correlations with equities)

■ Initial GEP investment of 5% to Absolute Return in April 2003

- Bond allocation reduced to fund Absolute Return
- Allowable strategies restricted to Long/Short Equity, Distressed, Market Neutral, Merger Arbitrage and Convertible Arbitrage
- Historical (1990- 2002) risk and return of policy mix was 4.8% and 14.0% respectively



Absolute Return Strategies: Asset Allocation

■ Absolute Return allocation increased to 10% in August 2005

- Bond allocation again reduced to fund Absolute Return
- Allowable strategies broadened to include Non US Long/Short, Event Driven, Relative Value, Fixed Income, Macro and Emerging Markets
- Historical (1990 – 2005) risk and return of new policy mix was 4.9% and 13.0% respectively*

■ Capital market exposures are limited in the combined Absolute Return portfolio

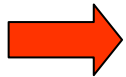
- US Equity (beta of 0.20)
- US High Yield Credit (beta of 0.38)



Risks Associated with Absolute Return Programs

Manager Risk

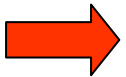
- Largest risk comes from individual manager risk
- Lack of transparency - could hide level of concentration or fraud
- Illiquidity due to longer lock-ups
- Excessive use of leverage could cause undesired level of volatility



Have a thorough due diligence process before investing with managers

Too Much Capital

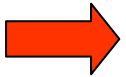
- Too much capital chasing same opportunities
- Many attractive managers may be closed to new investors
- Higher fees to new investors



Find newer strategies where inefficiencies still exist and access is not a constraint

Decreasing Returns

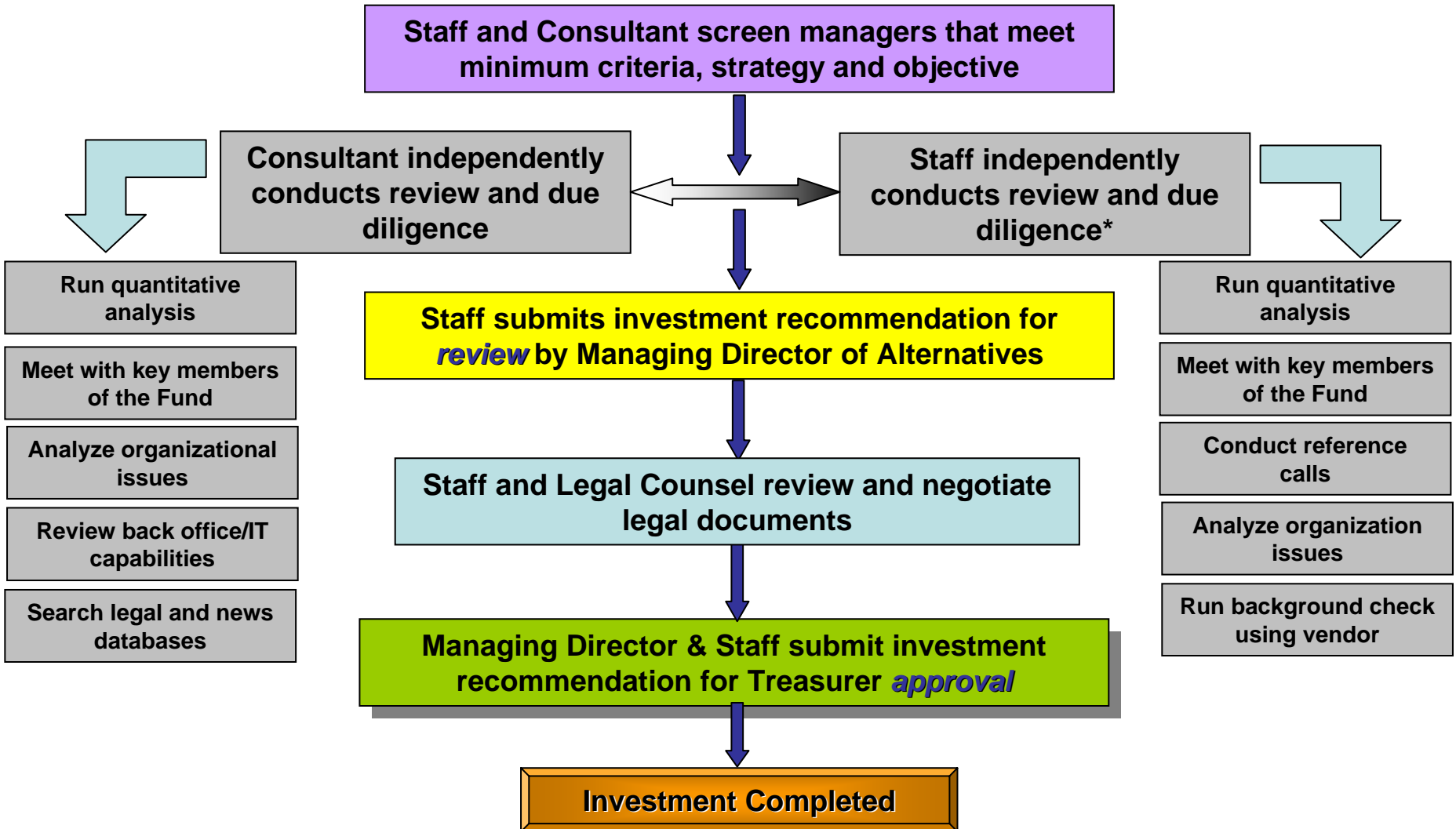
- Decreasing returns from underlying assets (equity, fixed income) means lower expected returns for industry
- Managers allowed incentive fees without performance hurdles (apart from high water marks)
- Investor's low tolerance for leverage means lower returns



Adjust expectations for future returns although the asset class remains attractive on a risk adjusted basis



Investment Process



* UC manager review and due diligence process is detailed in the Appendix on pages 33 - 35.

Albourne – Overview of Firm and Services

■ Albourne Overview

- Independent global advisory firm focused solely on hedge funds
- Founded in 1994 by two ex-hedge fund managers
- 78 employees with offices throughout US, Europe, and Asia
- 60 clients with over \$50bn invested directly in hedge funds
- Fixed dollar fee model, no fund of funds product and only paid by investors

■ Albourne Services

- Manager Selection
 - Evaluate underlying hedge funds based on their expected risk adjusted return
- Due Diligence
 - Review hedge fund's operations, financial statements, corporate governance and financial viability on an initial and on-going basis
- Strategy Timing
 - Evaluate expected and realized risk adjusted returns for hedge fund strategies
- Risk Management
 - Model and monitor fund and portfolio level risks present in a client portfolio
- Portfolio Construction
 - Determine optimal strategy and fund level allocations subject to client's objectives and policy guidelines

Albourne – Overview of Firm and Services

■ Key Statistics

- Established in March 1994
- Independent firm 100% owned by five full-time employees
- Offices in UK, US, Hong Kong and Cyprus
- 78 employees.
- Main US office in San Francisco has 13 employees
- Focused only on Hedge Funds
- 60 Clients, 43% North American, 35% Institutional
- Clients have over \$50bn invested in hedge fund

■ Structure

- Strategy Research (HFA) – 20 employees
 - Strategy specialization of senior analysts
 - Senior analysts average 7.8 years hedge fund experience*
 - No senior analyst has left firm
- Due Diligence (ODD) – 29 employees
 - Functional Specialization – Operations, IT, Accounts, legal documents and compliance
 - On-going multi-dimensional due diligence process.
- Client Service – 14 employees
- IT/Administration – 14 employees

* Time spent working in hedge fund due diligence and/or at hedge funds.

Albourne – Services in Relation to UC Regents

Manager Selection

- Albourne senior analysts independently analyze each UC hedge fund investment opportunity.
- Experienced strategy analysts regularly review the attractiveness of their sectors.
- Albourne highlights and discusses strengths and weaknesses in manager's Investment process, Portfolio Manager/Team and Risk Process.
- UC Staff has full access to Albourne universe of fund level research - Over 1000 reports.
- Albourne clients have assets with >700 hedge funds, which provides improved access to high quality funds.

Report Name	Report Description	Update Frequency
core. concept	Detailed strategy / front office review	Monthly
Top Picks	Summary of open hedge funds highly rated by Albourne.	Weekly
New Funds Report	Comprehensive list of newly launched hedge funds	Weekly
Regulatory News	Summary of all hedge fund related regulatory news	Weekly
13F Analysis	Analysis of quarterly SEC 13F filings	Quarterly

Due Diligence

Initial and On-Going Due Diligence:

- Prior to any investment by UC, Albourne conducts a comprehensive due diligence review of manager's infrastructure, personnel, financials statements and offering documents.
 - Due diligence reports updated regularly
 - All underlying research provided to UC staff
- Over 400 funds (including **all** UC investments) currently on Albourne's due diligence platform.
- UC is notified of any fund specific issues that arise.

Report Name	Report Description	Update Frequency
core. changes	Newsletter/Questionnaire review	Monthly
core. comparison	Quantitative check for style drift	Monthly
core. credit	Financial viability of the firm	Monthly
core. compliance	Regulatory and media search	Quarterly
core. counting	Review of fund accounts	Annually
core. competence	Onsite mid/back office review	Annually
core. computing	Technology review	Bi-annually
core. conditions	Commercial review of contract terms	Initially
core. checks	Reference checks	Initially

Albourne – Services in Relation to UC Regents

HF Strategy Analysis

- Albourne provides UC Staff with regular updates on the market environment for underlying hedge fund strategies.
- Albourne strategy analysts describe in detail the dynamics that are driving each strategy over a variety of time horizons and their expectations for future strategy performance.
- UC Staff have direct access to all Albourne strategy analysts to discuss their specific outlooks for their strategy and the risks associated with investment.

Report Name	Report Description	Update Frequency
Weather Forecast	Short term indicator of conduciveness of market environment for individual strategies.	Weekly
core. comments	Discussion of drivers of prior months strategy level performance (including manager performance, market performance, strategy news and senior analyst comments)	Monthly
Quarterly Strategy Review	Review of strategy performance	Quarterly
Quarterly Strategy Forecasts	Return forecasts for underlying hedge fund strategies.	Quarterly

Risk Management

- Albourne actively monitors the risk exposures of the UC hedge fund portfolio and each underlying UC investment.
- Albourne provides UC Staff and UC Managing Director of Risk with detailed fund and portfolio level risk analysis.
- Analysis includes:
 - Estimation of portfolio out-performance over style and strategic benchmark
 - Estimation of hedge fund portfolio VaR ("Value at Risk") in various market conditions (including current and Equity/Credit 'event' conditions)
 - Estimation of portfolio systematic exposure to underlying asset classes
 - Look through analysis to portfolio's regional and strategy exposures
 - Analysis of the effect of potential hedging strategies
 - Forecast portfolio risk and returns

Report Name	Report Description	Update Frequency
core. comparison	Quantitative analysis of fund returns	Monthly
core. composition	Analysis and summary of fund risk bucket exposures	Monthly
core. risk	Portfolio level risk report	Monthly

Albourne – Services in Relation to UC Regents

Portfolio Construction

- Albourne works with UC staff to determine an appropriate portfolio target asset allocation designed to achieve the UC investment objectives subject to investment constraints.
- Portfolio construction process draws on Albourne's strategy forecasts, due diligence and risk management tools.
- Albourne advises on how new capital should be invested due to current market conditions – this serves as a reference point for UC investment decisions.
- Albourne undertakes a quantitative asset allocation review on a quarterly basis used to monitor the current UC strategy allocation relative to an optimal portfolio subject to UC constraints.
- Albourne and UC staff meet regularly to review:
 - Manager performance (Absolute and Relative)
 - Portfolio performance (Absolute and Relative)
 - Manager due diligence issues as they arise
 - Status of due diligence on new/proposed managers
 - Current and proposed portfolio strategy allocation
 - Strategy / industry level issues that impact portfolio

Report Name	Report Description	Update Frequency
Model Portfolio - By Region / Mandate	Example portfolio of investible managers used to illustrate recommended strategy mix.	Monthly
Bespoke - Efficient Frontier Analysis	Efficient frontier analysis based on Albourne's strategy return, risk and correlation expectations, subject to UC constraints.	Quarterly
core. risk	Portfolio risk model used iteratively to evaluate portfolio impact of proposed investments and reallocations.	Monthly / Quarterly



Program Overview as of January 1, 2006

- **Program Inception Date** **March 31, 2003**
- **Total Number of Managers** **12**
- **Market Value** **\$453.4 million**
- **Annualized Return Since Inception** **8.1%**
- **Current Benchmark*** **1 Month T-Bill + 2%**
- **Annualized Benchmark Return** **6.2%**
- **Current Allocation of Total GEP** **8.2%**
- **Interim Target Allocation of Total GEP** **10%**

* Benchmark was temporarily changed from 1 Month T-Bill + 4.5% on October 1, 2005



Current Policy Guidelines

Performance Objective

- To earn an annualized return that exceeds One-month US Treasury bill by 2.0%.
- To provide diversification benefits with low correlation to the performance of other asset classes.

Portfolio Guidelines

- Permissible investments include funds that invest primarily in Long/Short strategies, Relative Value strategies, Event Driven strategies, and Opportunistic strategies.
- Policy allocations and ranges for the strategies are:

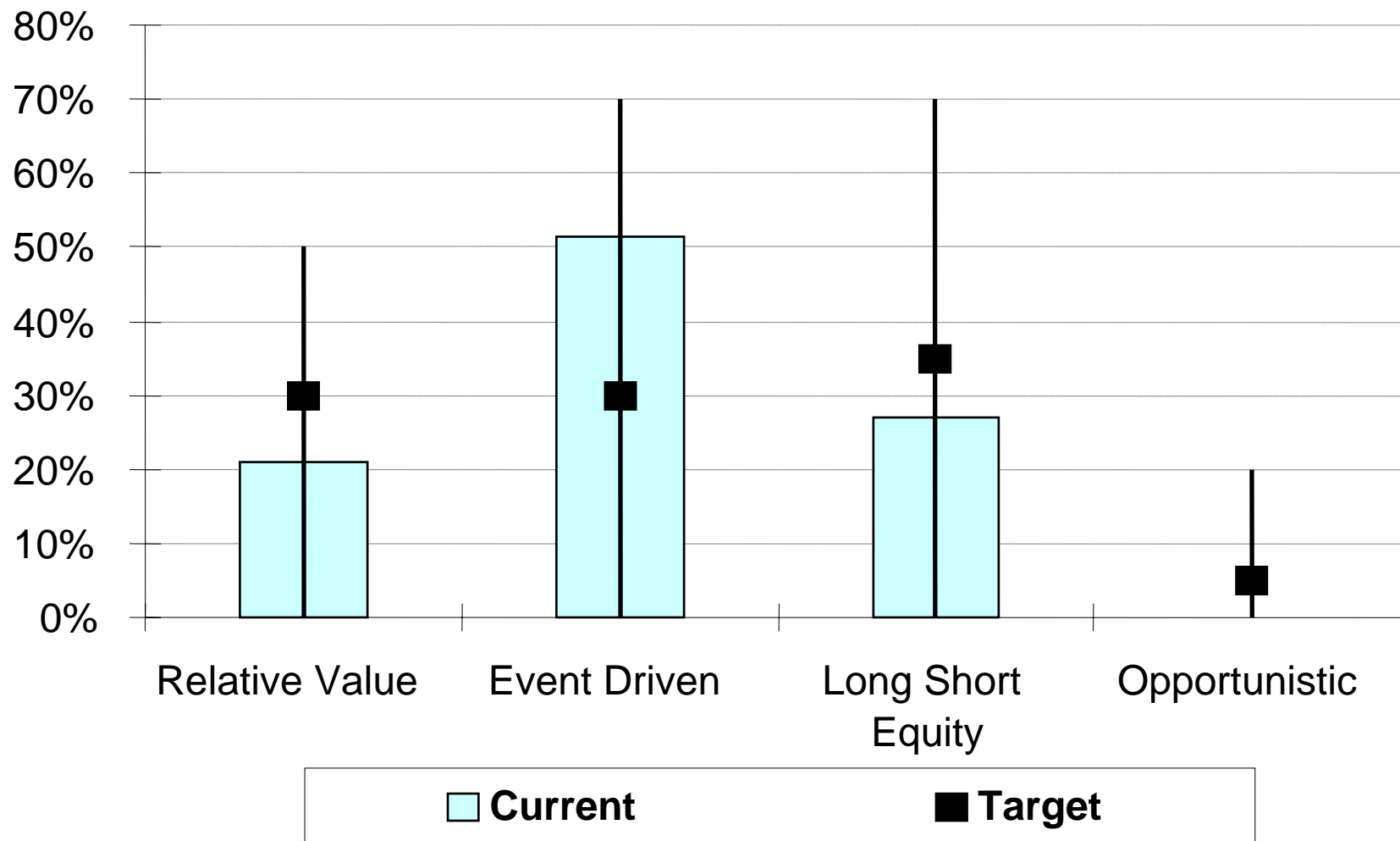
	<u>Target</u>		<u>Range</u>	
Long/Short Equity	35%	Target weights set to allow for maximum diversification	0-70%	Ranges are widely defined to allow for opportunistic allocations when necessary
Event Driven	30%		0-70%	
Relative Value	30%		0-50%	
Opportunistic	5%		0-20%	

5. No investment with any single manager can represent more than 15% of the AR portfolio.
6. No investment with any single manager may exceed 15% of that manager's total assets under management.
7. Leverage at the aggregate portfolio level shall not exceed 2.5 times the market value of the total AR assets.
8. No more than 10% of the total AR portfolio may be invested in dedicated Non-U.S. strategies.
9. No more than 15% of the total AR portfolio risk may be derived from any single manager.



Policy Guidelines and Current Weightings as of 12/31/05

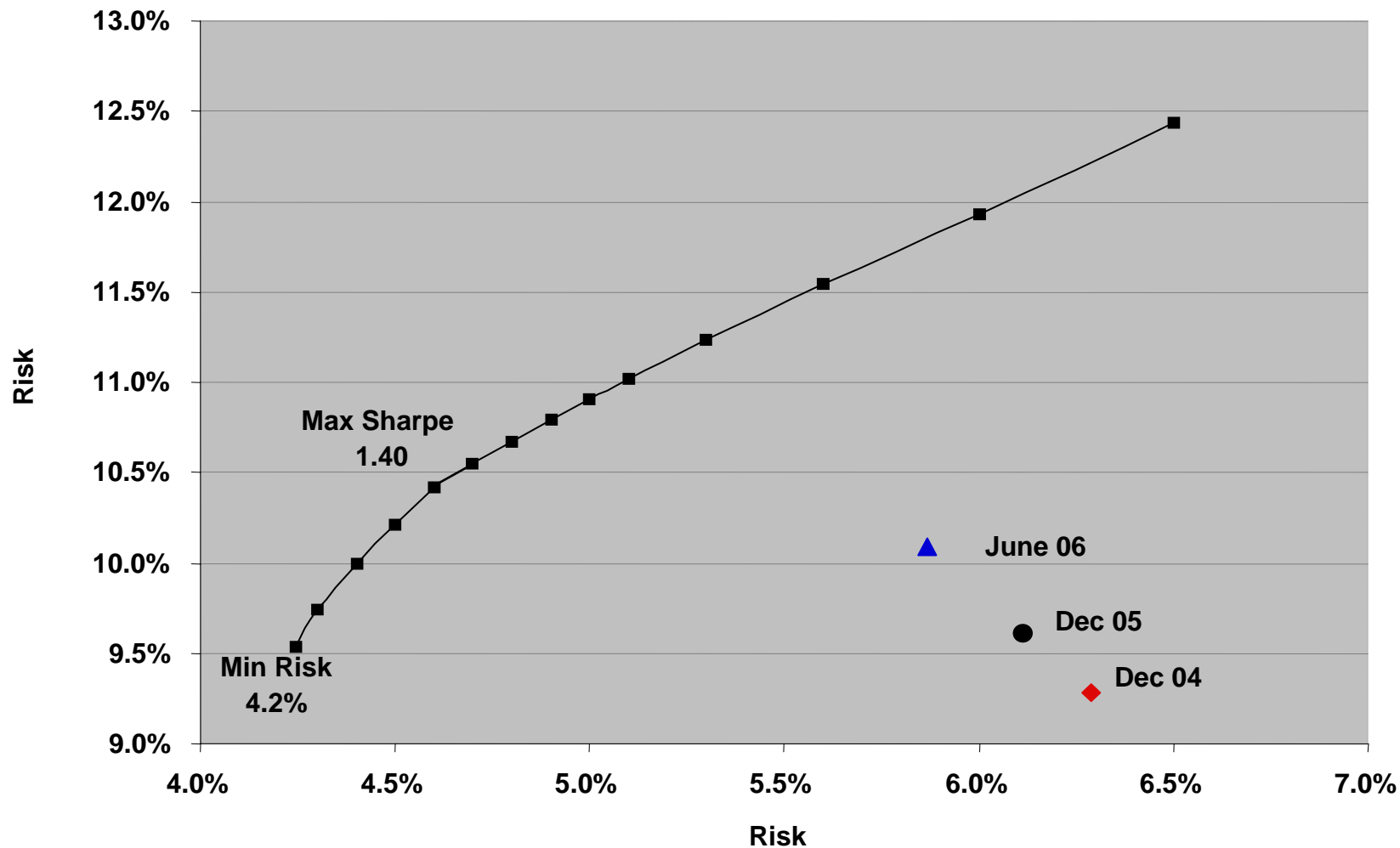
Permitted range for each strategy is indicated by the solid black lines





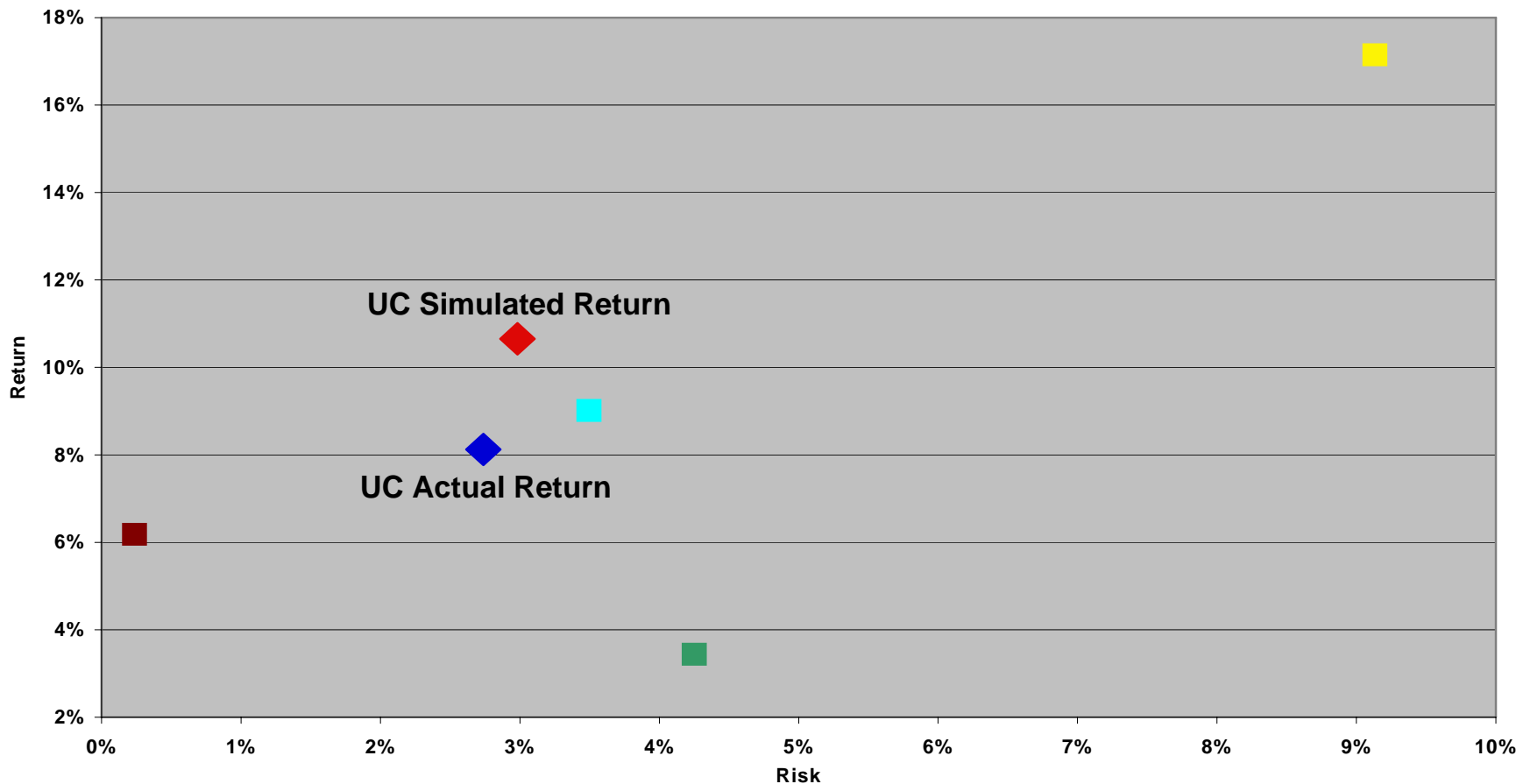
Optimization based on Albourne's Forecast of Returns

Traditional mean variance optimization - based on Albourne's Quarterly Strategy Forecasts for Return, Risk and Correlation*





Risk/Return Profile from April 2003 to December 2005



◆ UC Actual Returns

■ 1mth Tbill + Premium

■ Lehman Aggregate Bond Index

■ HFR Fund of Funds Composite

■ S&P500 Total Return

◆ UC Simulated Returns

Appendix



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Qualities of an Absolute Return Program

Data 1996 to 2005	Annualized Return	Annualized Standard Deviation	Sharpe Ratio
Portfolio 1 (60% S&P 500, 40% Lehman Aggregate Bond Index)	8.3%	9.4%	0.50
Portfolio 2 (55% S&P 500, 35% Lehman Aggregate Bond Index, 10% Hedge Funds)	8.3%	9.0%	0.53
Portfolio 3 (50% S&P 500, 30% Lehman Aggregate Bond Index, 20% Hedge Funds)	8.4%	8.5%	0.56



Enhances Returns and provides portfolio diversification



10 Year Correlation Matrix: Stocks, Bonds, Real Estate & Hedge Funds

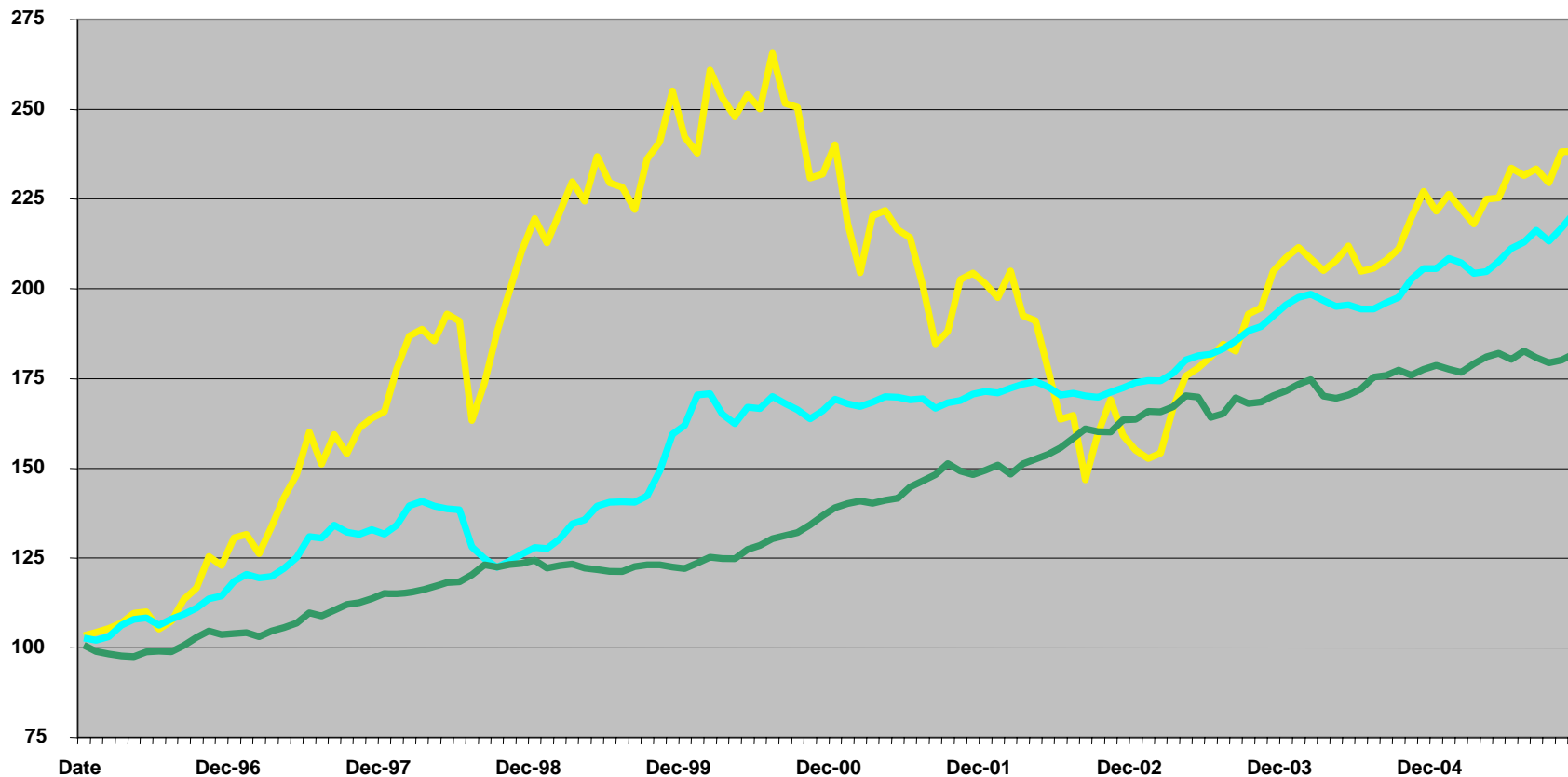
CORRELATION MATRIX: 1996 - 2005

	HFR FoF Composite	S&P 500 Total Return	Lehman Aggregate Bond Index	NAREIT Index	Sharpe Ratio
HFR FoF Composite	1.00				0.75
S&P 500 Total Return	0.54	1.00			0.34
Lehman Aggregate Bond Index	0.01	-0.07	1.00		0.66
NAREIT Index	0.27	0.30	0.07	1.00	0.74



Cumulative Returns by Asset Class over Previous Ten Years

1996 – 2005



— S&P500 Total Return

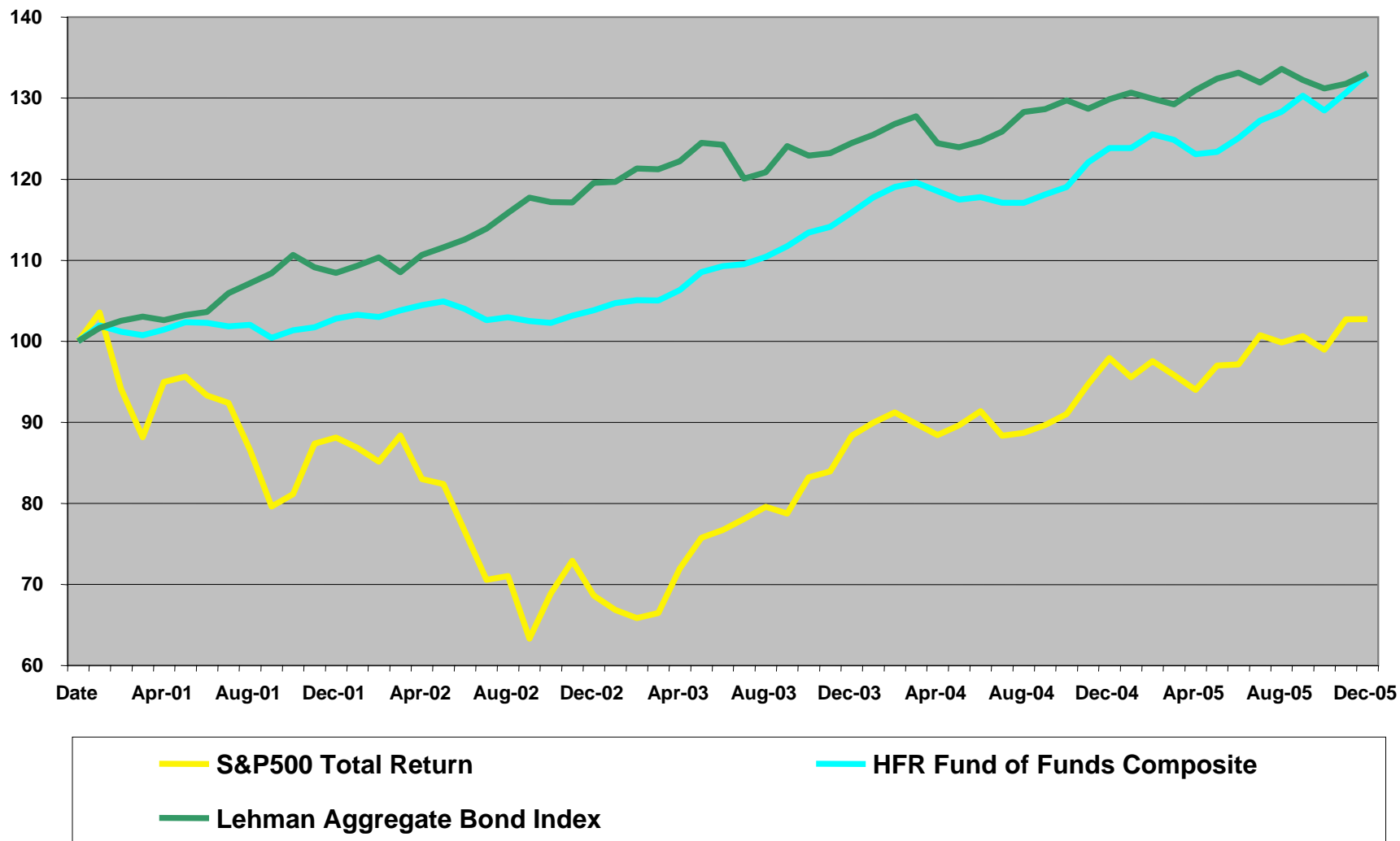
— HFR Fund of Funds Composite

— Lehman Aggregate Bond Index



Cumulative Returns by Asset Class over Previous Five Years

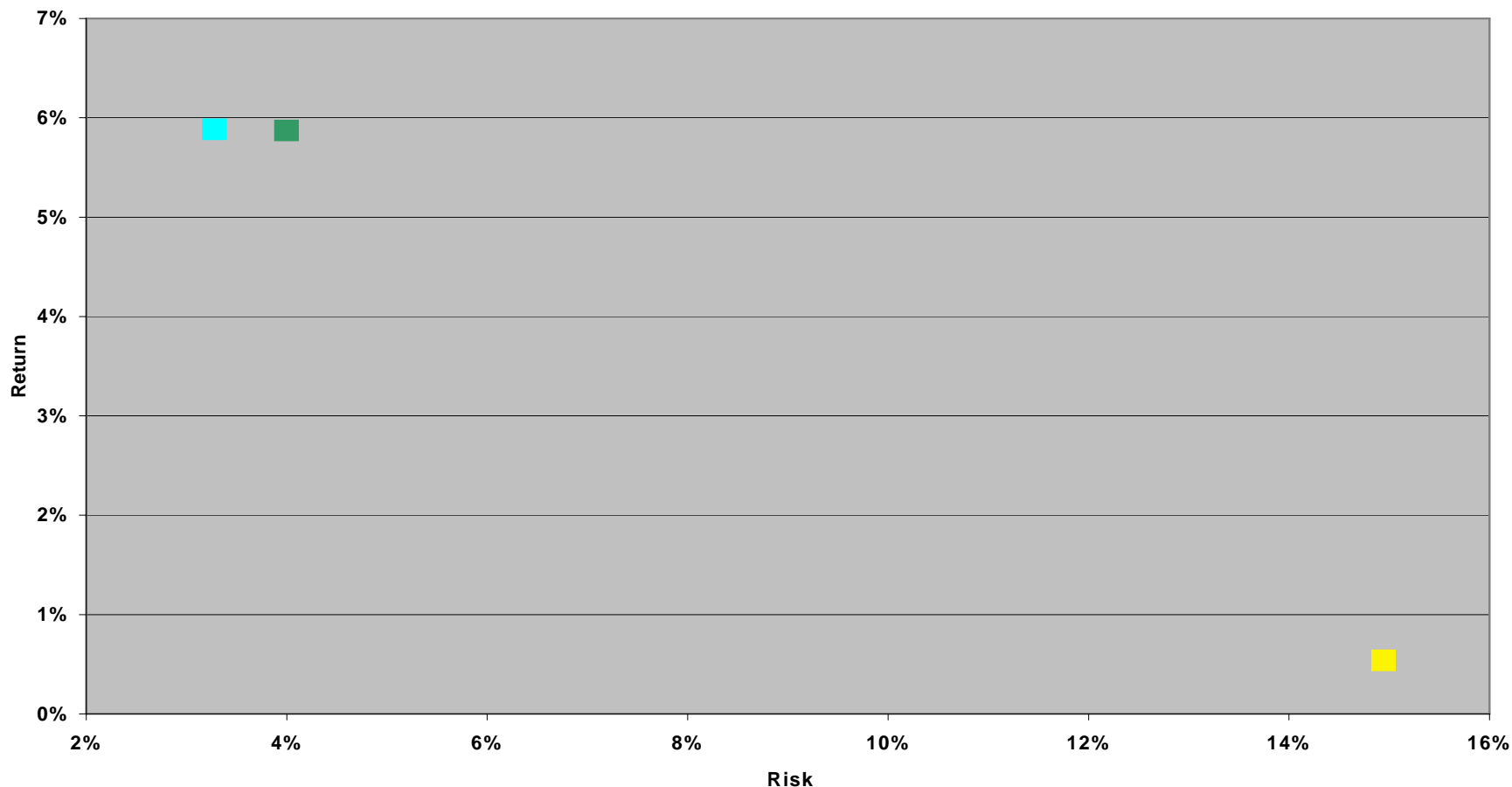
2001 – 2005





Risk/Return Profile by Asset Class over Previous Five Years

2001 – 2005



■ HFR Fund of Funds Composite ■ S&P500 Total Return ■ Lehman Aggregate Bond Index



Absolute Return Strategies: Substitute for Bonds or Stocks

■ Volatility is generally bond-like for individual strategies (based on manager averages*)

- Only Equity Sector Funds, Equity Non-Hedge and Emerging Markets Equity have consistently equity-like volatility
- Except for the strategies noted above, returns are generally between equity and bonds

■ Volatility of Funds-of-Funds (FoF) is strongly bond-like (< 10% in all four sub-periods examined**)

- Returns are generally between equity and bonds
- Since 2000, FoF were much more bond-like (small but positive returns)

* Based on analysis of HFRI monthly performance data from 1990 – 2005.

** The four sub-periods examined are 1990-1994, 1995-1999, 2000-2002, and 2003-2005.



Absolute Return Strategies: Substitute for Bonds or Stocks

■ Perspective on risk: similar to bonds

- Albourne's strategy forecast model (4Q 2005)
 - Current portfolio: 5.7% standard deviation
 - Policy mix: 5.0% risk
 - Strategies range from 3.5% to 10.8% risk
- Returns-based forecast risk for current portfolio
 - Treasurer model: 3.7% risk
 - Managers range from 2.6% to 12.9% risk
 - Albourne model: 5.1% risk
 - Managers range from 3.3% to 10.4% risk
- Realized risk over past 12 months: 3.2%
 - Managers range from 1.9% to 9.3% risk



UC Absolute Return Initial Program

- In May 2002, a 5% allocation to Absolute Return (AR) in the General Endowment Pool was approved in agreement with the Treasurer and Wilshire's recommendation. The initial investment was made on March 31, 2003.
 - ✓ The allocation was increased to 10% on August 2005. Currently, the program constitutes 8.2% of the GEP.
- The emphasis will be on capital preservation and limited volatility in strategies that reduce the risk of the overall portfolio while enhancing returns. The initial program allowed for mainly five strategies: Long/Short Equity, Distressed, Market Neutral, Merger Arbitrage and Convertible Arbitrage.
 - ✓ The current portfolio has a historical annualized volatility of 2.7% since inception of the program. The volatility should increase moderately as newer strategies are incorporated into the program.
- Further emphasis will be placed on managers using little or no leverage. The current guidelines limits the maximum portfolio leverage use to 2.5X.
 - ✓ This constraint will limit volatility in the portfolio but will also limit return potential and exposure to certain strategies (fixed income, statistical arbitrage, global macro).
- Historically, AR returns and volatilities have been correlated with the amount of systematic or directional market risk.
 - ✓ The current portfolio has a Beta of 0.2 to US equity since inception of the program.
- Managers hired will principally be firms with demonstrated investment and business expertise that have produced consistent above-average performance with low volatility through a market cycle.
 - ✓ Of the current manager lineup, the average annualized return per manager over the past 3 years is 12.9%. The average annualized standard deviation is 4.6% over the same period.



Manager Selection Process

■ Source Potential Names from a Variety of Sources

- Existing relationships
- Active efforts by Staff to access premier funds
- Consultant's top recommendations
- Industry contacts
- Direct marketing efforts by Funds/Marketers

■ Initiate Due Diligence on Managers Meeting UC Criteria

- Fund strategy fills a currently underweighted strategy within UC portfolio
- Fund positively impacts the UC portfolio with respect to correlation, volatility and return expectations
- Manager possesses a good reputation
- Fund is currently open to new investors



Portfolio Monitoring Process

- Requires regular communication with managers
 - Information needed to monitor performance
 - Monthly returns
 - Monthly exposure reports
 - Quarterly manager newsletters
 - Albourne reports on competitive analysis within peer groups
 - On-going due diligence
 - Quarterly conference calls
 - Annual onsite meetings
 - Albourne on-going due diligence services, independent of Staff



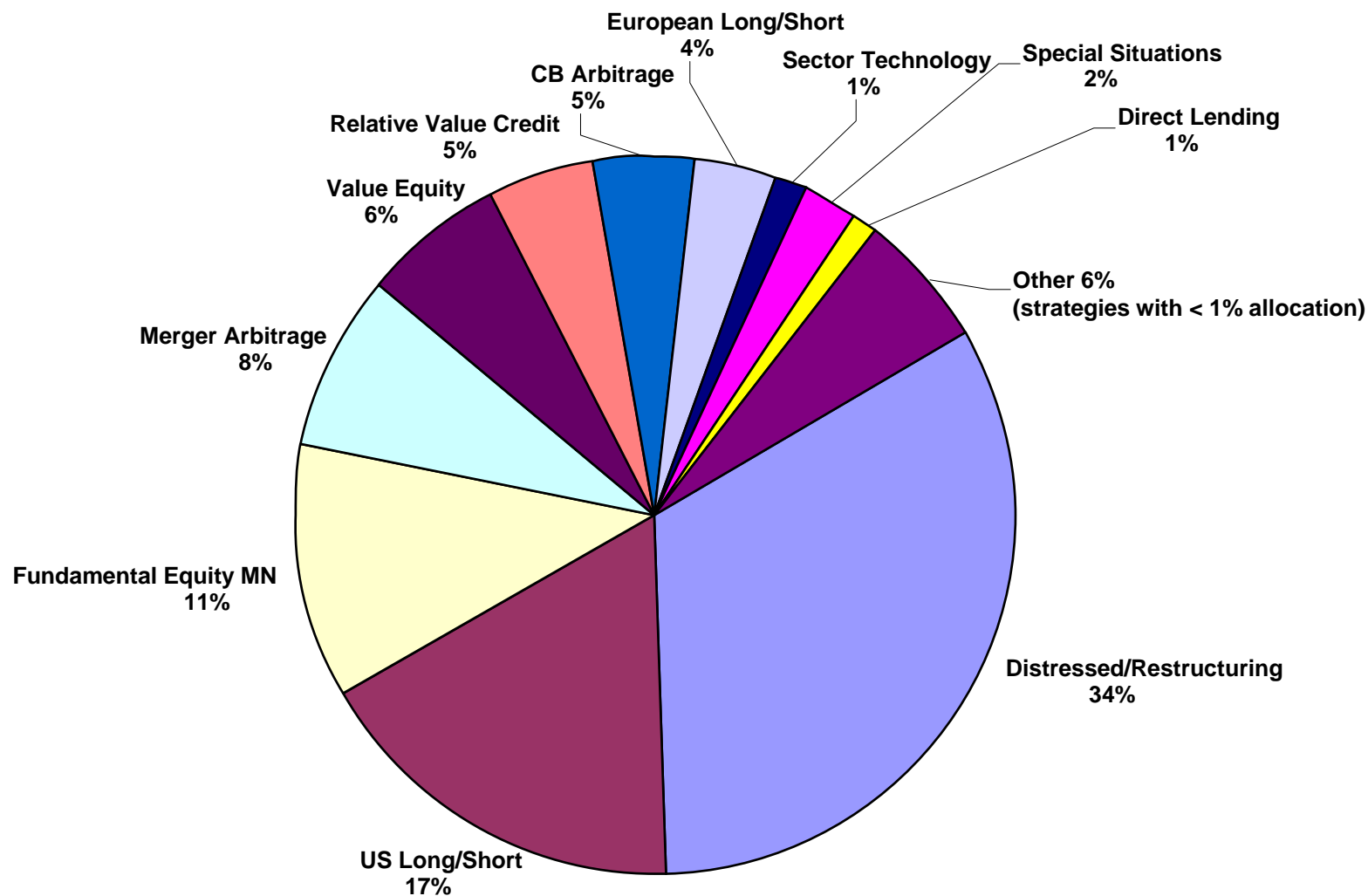
Portfolio Monitoring Process

■ Monitoring at the portfolio level is a team effort

- Monitor opportunities and risks across strategies
 - Market conditions and events
 - Manager and investor feedback
 - Correlation analysis within portfolio
- Albourne Reports
 - Risk Report - A monthly fund and portfolio level risk analysis that includes estimates of portfolio systemic exposure to underlying asset classes, relative risk contribution of each fund and monitors the portfolio's performance relative to a style benchmark
 - Strategy Reports: Weekly and monthly written updates on strategy forecasts and commentaries
- UC Internal Risk Models
 - An alternative monthly fund and portfolio level risk analysis of systematic and residual risk, used to assess individual fund's contribution to portfolio risk
- Quarterly quantitative review by Alternatives Staff, internal Managing Director of Risk Management and Albourne of strategy allocations relative to UC Policy Targets and Albourne's expectations



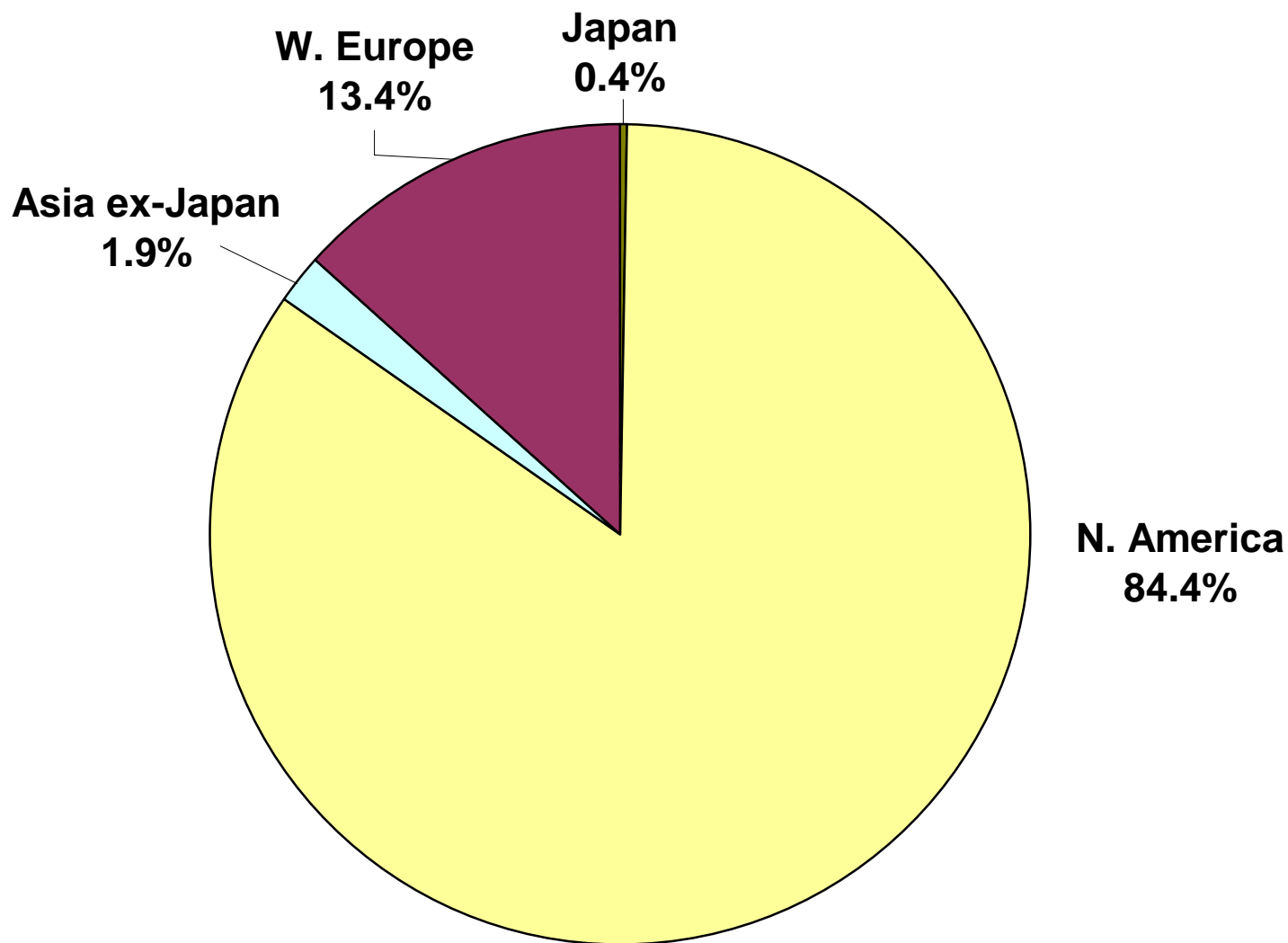
Strategy Exposure in UC Portfolio as of 12/31/05



Based on look through analysis of underlying Manager's strategy allocations.



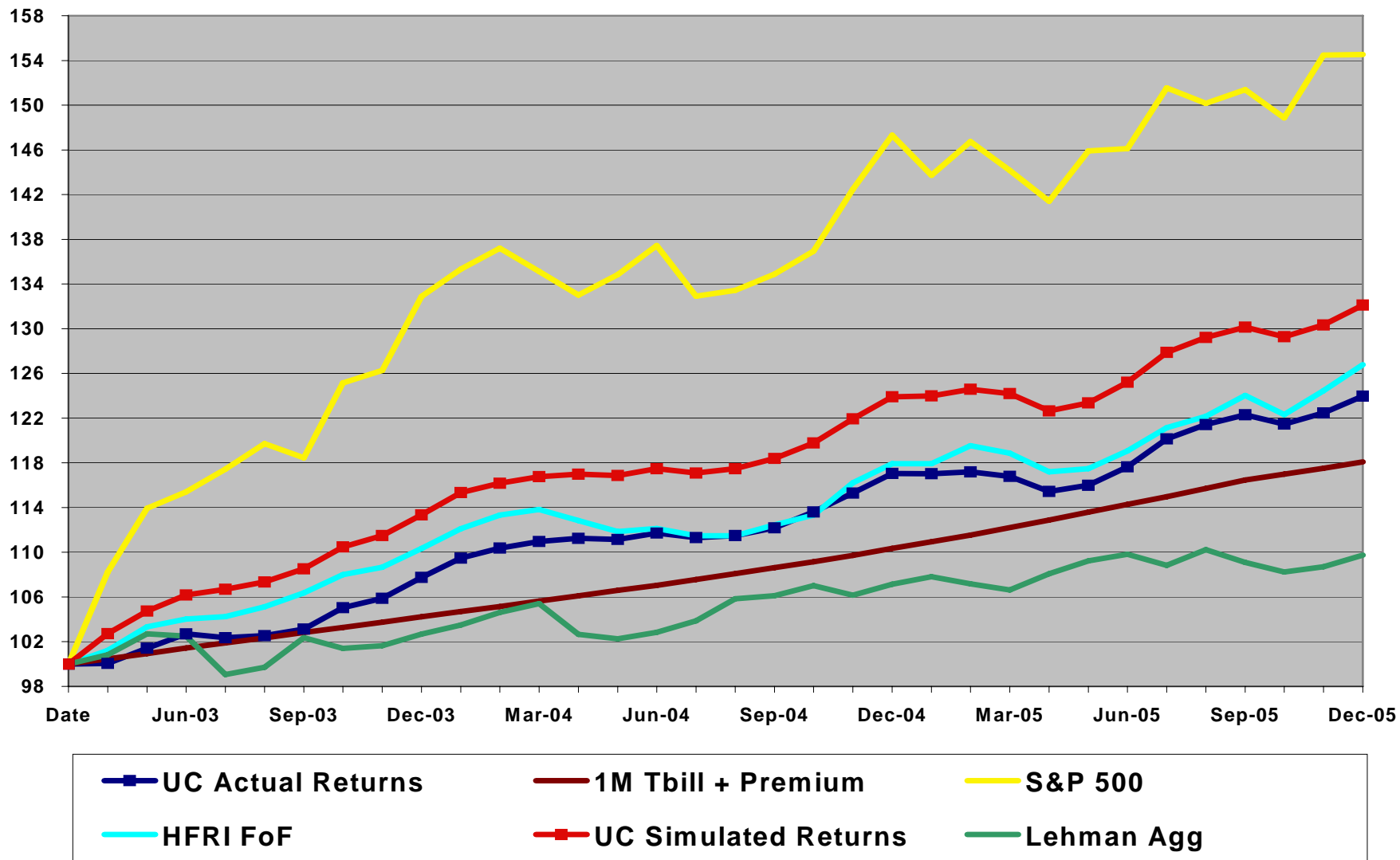
Regional Allocation in UC Portfolio as of 12/31/05



Based on look through analysis of underlying Manager's regional allocations.



Cumulative Returns from April 2003 to December 2005





UC Actual Performance During S&P Down Months from April 2003

