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# You can't manage what you can't see

**David Saunders**
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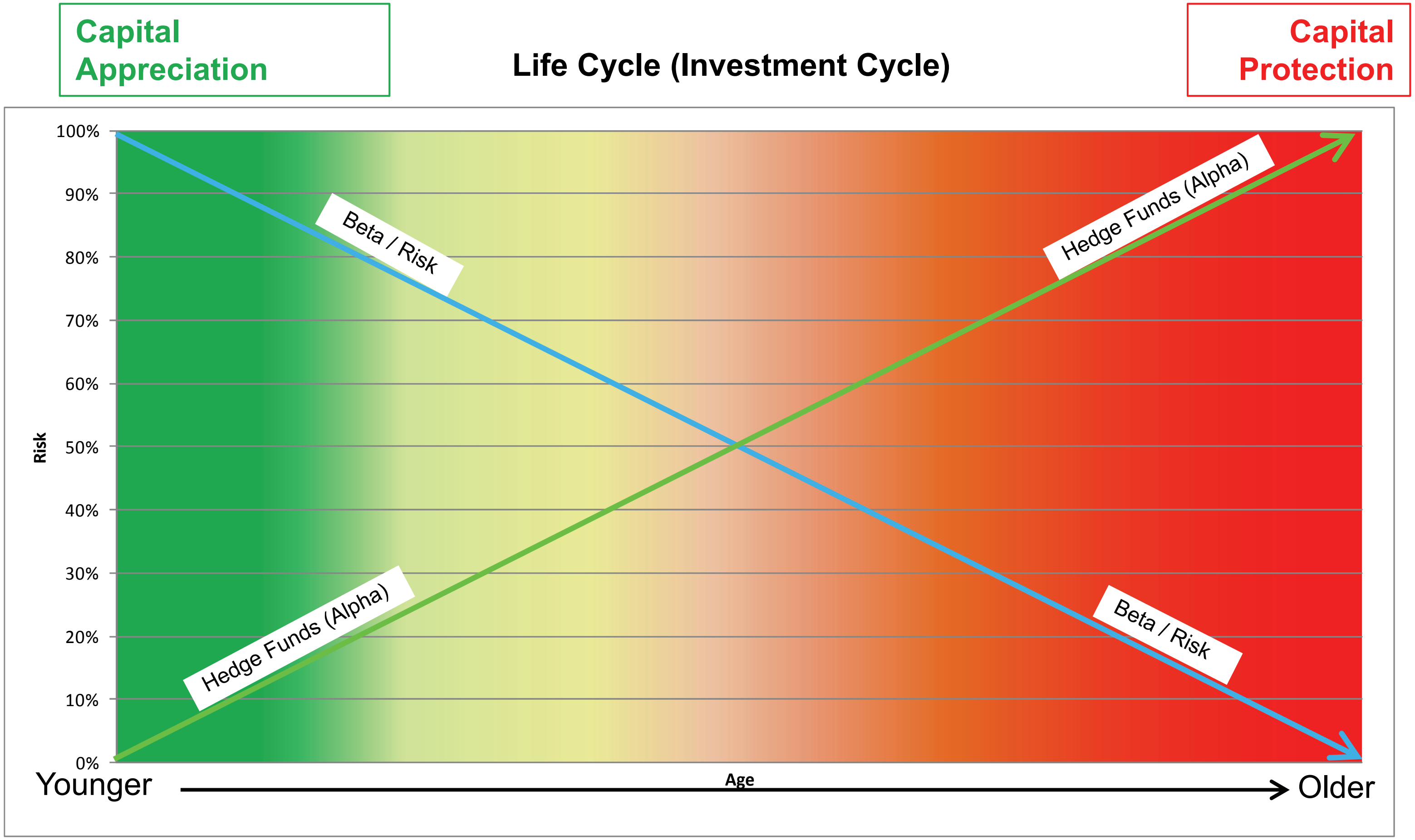
K2 Advisors in association with Ironbark Asset Management

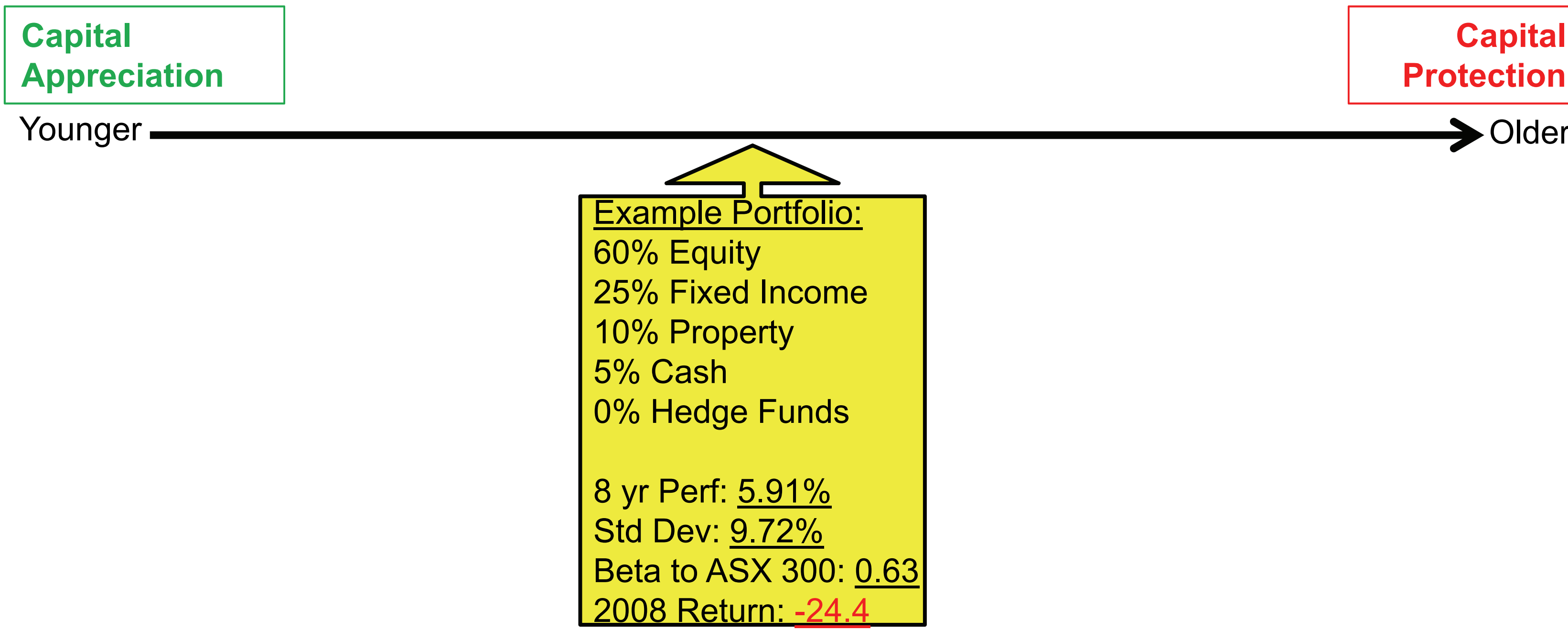
Lifecycle Investments

## Evolution of Risk Profile Over Time




For illustrative purposes only. Source: K2. Please see Important Disclosures and Disclaimers and Definitions of Comparative Indices and Statistics at the end of the presentation, which provide detailed information regarding information presented herein and form an integral part hereof.

## The Typical Investor's Current Portfolio and Product Choices May All Look Very Similar




For illustrative purposes only. Source: K2, Bloomberg. Data from January 2008 through June 2013.
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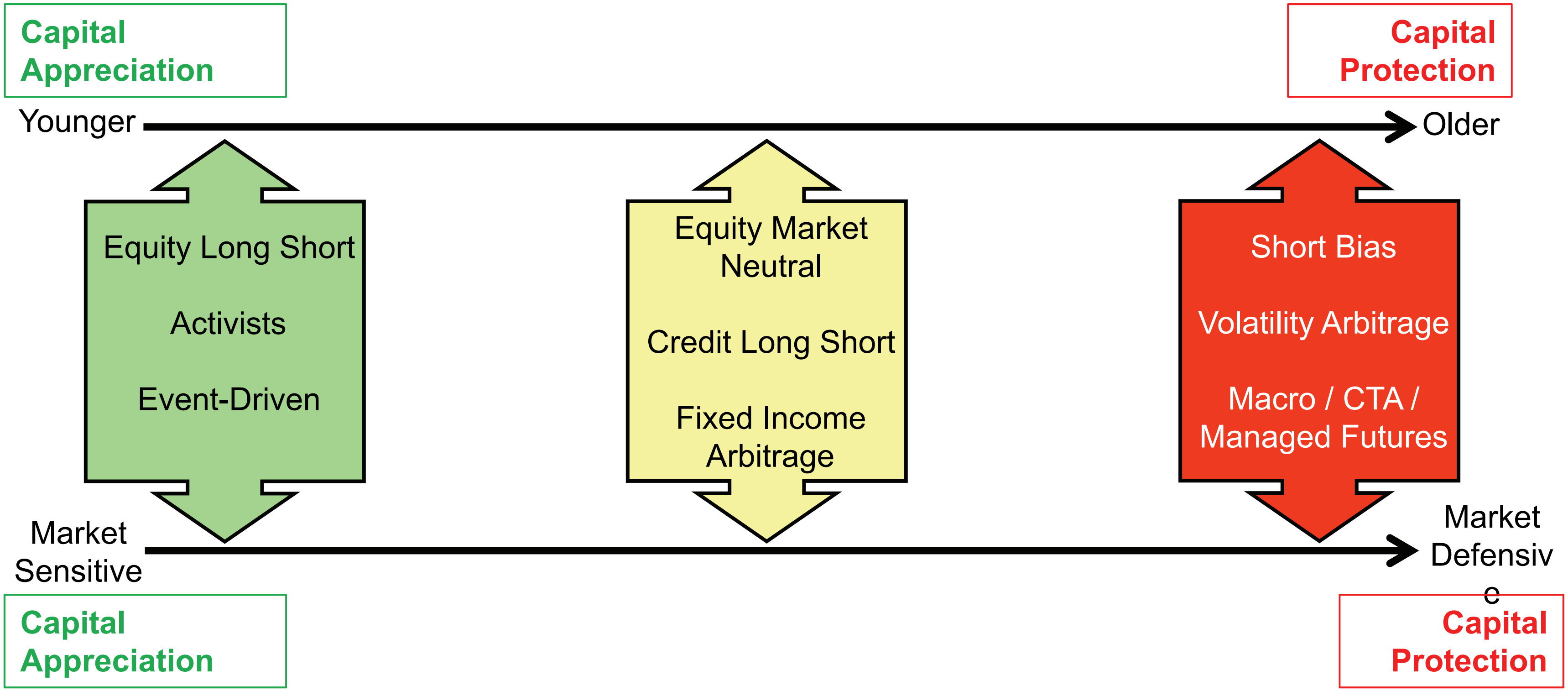
## Various Hedge Fund Strategies:

**a) Offer diversification benefits versus traditional long only investments**

**b) Fit well with the evolutionary risk profile shifts during a life cycle**

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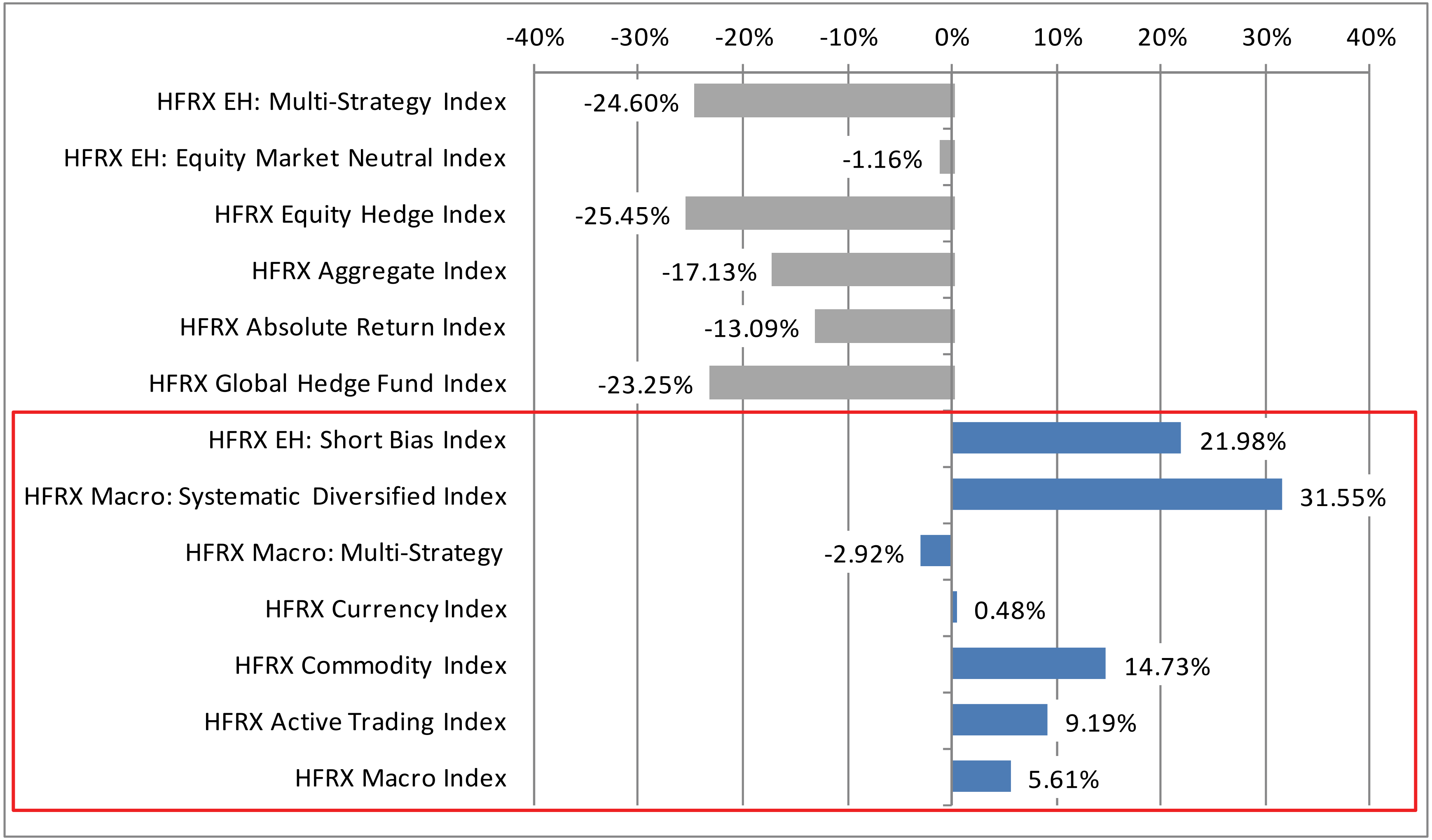
Hedge Fund Strategy Benefits

## Divergent Hedge Fund Strategies Outperformed in 2008




Source: K2, Bloomberg. Data from January 2008 through December 2008.

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## Fund of Hedge Funds

- Leverage resources and competence across all functions of fund of funds provider
- Ability to invest across a spectrum of alternative assets
- Ability to allocate to newer, smaller and up-and-coming hedge funds
- Vehicle of choice for many new investors in hedge funds
- Potential diversification
- Holistic risk management across the entire fund of hedge funds portfolio
- Provide an extra layer of “insulation” from headline and reputational risk

## Fund of Hedge Funds

- Various cost and implementation efficiencies resulting from economies of scale:
  - Leverage internal capabilities with specialized expertise
  - Ability to negotiate better terms and conditions with underlying hedge fund managers
- Investment solutions may address portfolio issues such as:
  - High correlation; volatility; limited liquidity
  - Liability matching
- Strategic partnerships
  - Trusted advisor
  - Unbundling of services
  - Ability to be nimble and responsive to market conditions without having to seek Investment Committee and/or Board approval
  - Enable the CIO and Investment Board to focus on financial policy rather than implementation
  - Knowledge transfer / education of staff

## Lifecycle Investing

### Hypothetical Portfolio Manager Selection Criteria

- **Portfolio A:**
  - Manager criteria included high volatility of returns, both on the upside and the downside, and above average equity market beta. The portfolio includes 7 Long Short Equity managers, 3 Event Driven managers, 2 Global Macro managers, and 2 Commodities managers.
- **Portfolio B:**
  - Manager criteria included high volatility of returns, but with controlled volatility on the downside, and above average equity market beta. The portfolio includes 6 Long Short Equity managers, 2 Event Driven managers, 2 Global Macro managers, 2 Commodities managers, 1 Specialist Credit manager, and 1 Structured Credit manager. The 2 credit-focused managers were added to diversify away some equity market beta and to reduce volatility and historical drawdowns.

For illustrative purposes only. The above hypothetical portfolios are composed of hedge funds selected by K2.
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## Lifecycle Investing

### Hypothetical Portfolio Manager Selection Criteria

- **Portfolio C:**
  - Manager criteria included below average volatility of returns and limited equity market beta. The portfolio includes 4 Specialist Credit managers, 4 Insurance managers, 2 Structured Credit managers, 2 Commodities managers, 2 Event Driven managers, and 1 Global Macro manager. Long Short Equity managers have been removed from the portfolio with the intention of severely reducing the equity market beta. An allocation to Insurance-Linked managers was added to provide a return source that is low volatility and has historically shown very low correlations to traditional investments.
- **Portfolio D:**
  - Manager criteria included low volatility of returns, both on the upside and the downside, and very low equity market beta. The portfolio includes 5 Specialist Credit managers, 5 Insurance managers, 3 Commodities managers, and 3 Structured Credit managers. Allocations to strategies with higher equity beta (i.e. Long Short Equity and Event Driven) have been completely removed in favor of a diversified source of low volatility returns with very little equity market exposure.

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# Fund of Hedge Fund Portfolios Can be Nimble to Fit Life Cycle Funds

## Example Hedge Fund Portfolios By Age Group

| | Age 18-30 | Age 30-45 | Age 45-55 | Age 55-65 |
|---|---|---|---|---|
| Portfolio | A | B | C | D |
| Annualized Return | 18.20% | 17.50% | 16.68% | 15.40% |
| K2 Estimated VaR | -3.09% | -2.90% | -1.54% | -0.99% |
| Standard Deviation | 7.92% | 6.53% | 3.50% | 2.57% |
| Annualized Alpha vs. S&P/ASX 200 | 18.08% | 17.33% | 16.57% | 15.36% |
| Beta vs. S&P/ASX 200 | 0.33 | 0.30 | 0.13 | 0.06 |
| Maximum Drawdown | -13.05% | -9.41% | -2.20% | -0.49% |
| Strategy Allocation | L/S Equity: 54%<br>Event Driven: 20%<br>Global Macro: 14%<br>Commodities: 12% | L/S Equity: 44%<br>Global Macro: 14%<br>Event Driven: 12%<br>Commodities: 13%<br>Specialist Credit: 9%<br>Structured Credit: 8% | Specialist Credit: 31%<br>Insurance: 26%<br>Structured Credit: 14%<br>Commodities: 13%<br>Event Driven: 11%<br>Global Macro: 5% | Specialist Credit: 34%<br>Insurance: 33%<br>Commodities: 15%<br>Structured Credit: 18% |

For illustrative purposes only. Source: K2, Data shown from January 2006 to June 2013. The above hypothetical portfolios are composed of hedge funds selected by K2.
Portfolio returns are hypothetical and assume annual rebalancing and that individual manager performance is filled as the average of other manager performance if not available. All non-AUD currency exposure is hedged back to AUD, assuming the perspective of an AUD investor. Please see previous slide for descriptions of portfolios shown above. Please see important Disclosures and Disclaimers and Definitions of Comparative Indices and Statistics at the end of the presentation, which provide detailed information regarding information presented herein and form an integral part hereof.
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## Incorporating Hedge Funds Help Fine Tune Investor's Return-To-Risk Profile at Various Ages

**Capital Appreciation**

**Capital Protection**

Younger → Older

Early Life Portfolio:
65% Equity
10% Fixed Income
10% Property
5% Cash
**10% Return Seeking Hedge Funds**

8 yr Perf: 6.28%
Std Dev: 11.63%
Beta to ASX 300: 0.75
2008 Return: -29.6

Example Portfolio:
60% Equity
25% Fixed Income
10% Property
5% Cash
**0% Hedge Funds**

8 yr Perf: 5.91%
Std Dev: 9.72%
Beta to ASX 300: 0.63
2008 Return: -24.4%

Middle Life Portfolio:
45% Equity
20% Fixed Income
5% Property
5% Cash
**25% Hedge Funds (FoF)**

8 yr Perf: 6.48%
Std Dev: 8.56%
Beta to ASX 300: 0.55
2008 Return: -21.2%

Later Life Portfolio:
35% Equity
35% Fixed Income
0% Property
5% Cash
**25% Defensive Hedge Funds**

8 yr Perf: 6.20%
Std Dev: 5.34%
Beta to ASX 300: 0.34
2008 Return: -9.6%

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This presentation contains hypothetical performance information and analysis for the period specified therein of a model portfolio constructed by K2 Advisors ("K2") comprised either of hedge funds managed by unaffiliated investment managers, indices constructed by third parties and/or funds or accounts managed by K2 ("K2 Funds"). This presentation constitutes proprietary and confidential trade secrets and/or commercial or financial information of K2, and disclosure of such information would cause substantial competitive and financial harm to K2. The information contained in this presentation may not be distributed, copied, loaned or distributed to any other person, in whole or in part, without the express permission of K2.

The model portfolio is not an actual portfolio managed by K2, Any indices contained in the model portfolio have been either (i) selected based on research conducted by K2 or (ii) designed by K2 to represent an example of an institutional portfolio or a subset thereof. There can be no assurance that the model portfolio accurately represents the recipient's portfolio or an actual institutional portfolio. Any indices contained in the model portfolio are unmanaged, may not be investable and have no expenses.

The information presented herein is hypothetical in nature, and is for informational purposes only, and must not be relied upon as the basis for an investment decision.

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The model portfolio was constructed on a look-back basis based on certain stated assumptions such as frequency of rebalancing, rate of return used for an underlying fund when no return is available and use of leverage. Hypothetical performance results shown herein are based on a static model portfolio without active management by K2, and generally reflect the reinvestment of dividends and distributions. The hypothetical performance information may not reflect the impact of material economic and market factors that would have influenced K2's decision making if the model portfolio was actually managed during this time period. Actual results would have been different had the model portfolio been actively managed as are most of the K2 Funds.

The performance information presented herein does not reflect the deduction of investment advisory fees and expenses that an investor would pay to K2. An investor's return would be reduced by the annual management fees and incentive fees, if any, payable to K2 and the actual expenses of the structure chosen. For example, if an investor invested $1 million from January 1, 2006 through August 31, 2012 in a portfolio earning 8% annually, the investment, gross of fees, would be worth approximately $1,670,418 on August 31, 2012. On the other hand, had that investment been subject to a management fee of 1.25% and estimated expenses of 0.50%, that investment, net of these fees, would be worth approximately $1,498,050 on August 31, 2012. Please note that investors may pay different management and incentive fees.

This presentation compares hypothetical performance information of the model portfolio to the performance of various securities indices. The model portfolio, however, consists of securities that vary significantly from each of those in the indices. Nevertheless, K2 believes that a comparison to these indices is relevant because each of these indices may be considered to be representative of various securities markets or investment strategies. However, comparing hypothetical performance results of the model portfolio to these indices may be of limited use. Any composite returns included in the model portfolio reflect estimated returns achieved by the specified investment team. Such returns may include returns achieved at one or more prior firms. Such returns may have been adjusted pro forma to reflect the payment of management fees and performance fees that an investor may pay to invest directly with the investment team, but do not reflect any fees or expenses payable to K2. Such returns have been provided to K2 by the investment team or another third party and have not been audited or independently verified by K2.

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**HFRX Equity Hedge Index** - Equity Hedge strategies maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios.

**HFRX Absolute Return Index** - The HFRX Absolute Return Index is designed to be representative of the overall composition of the hedge fund universe. It is comprised of all eligible hedge fund strategies; including but not limited to convertible arbitrage, distressed securities, equity hedge, equity market neutral, event driven, macro, merger arbitrage, and relative value arbitrage. As a component of the optimization process, the index selects constituents which characteristically exhibit lower volatilities and lower correlations to standard directional benchmarks of equity market and hedge fund industry performance.

**HFRX EH: Equity Market Neutral Index** - Equity Market Neutral strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. These can include both Factor-based and Statistical Arbitrage/Trading strategies. Factor-based investment strategies include strategies in which the investment thesis is predicated on the systematic analysis of common relationships between securities. In many but not all cases, portfolios are constructed to be neutral to one or multiple variables, such as broader equity markets in dollar or beta terms, and leverage is frequently employed to enhance the return profile of the positions identified. Statistical Arbitrage/Trading strategies consist of strategies in which the investment thesis is predicated on exploiting pricing anomalies which may occur as a function of expected mean reversion inherent in security prices; high frequency techniques may be employed and trading strategies may also be employed on the basis on technical analysis or opportunistically to exploit new information the investment manager believes has not been fully, completely or accurately discounted into current security prices.

**HFRX Global Hedge Fund Index** - The HFRX Global Hedge Fund Index is designed to be representative of the overall composition of the hedge fund universe. It is comprised of all eligible hedge fund strategies; including but not limited to convertible arbitrage, distressed securities, equity hedge, equity market neutral, event driven, macro, merger arbitrage, and relative value arbitrage. The strategies are asset weighted based on the distribution of assets in the hedge fund industry.

**HFRX Macro Index** - Macro strategy managers which trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top down and bottom up theses, quantitative and fundamental approaches and long and short term holding periods. Although some strategies employ RV techniques, Macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on predicted or future movements in the underlying instruments, rather than realization of a valuation discrepancy between securities. In a similar way, while both Macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposes to EH, in which the fundamental characteristics on the company are the most significant and integral to investment thesis.

**HFRX Currency Index** - Curency Index include both discretionary and systematic currency strategies. Systematic Currency strategies have investment processes typically as function of mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. Strategies often employ an investment process designed to identify opportunities in markets exhibiting trending or momentum characteristics across currency assets classes, frequently with related ancillary exposure in sovereign fixed income.

**HFRX Aggregate Index** - HFRX Aggregate Index is the equally weighted index across all substrategy and regional indices.

**HFRX Commodity Index** - Commodity strategies include both discretionary and systematic commodity strategies. Systematic commodity have investment processes typically as function of mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. Strategies employ an investment process designed to identify opportunities in markets exhibiting trending or momentum characteristics across commodity assets classes, frequently with related ancillary exposure in commodity sensitive equities or other derivative instruments. Strategies typically employ quantitative process which focus on statistically robust or technical patterns in the return series of the asset, and typically focus on highly liquid instruments and maintain shorter holding periods than either discretionary or mean reverting strategies.

**HFRX EH: Multi-Strategy Index** - Equity Hedge: Multi-Strategy Investment Managers maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios.

**HFRX Macro: Multi-Strategy** - Macro: Multi-Strategy Strategies which employ components of both Discretionary and Systematic Macro strategies, but neither exclusively both. Strategies frequently contain proprietary trading influences, and in some cases contain distinct, identifiable sub-strategies, such as equity hedge or equity market neutral, or in some cases a number of sub-strategies are blended together without the capacity for portfolio level disaggregation. Strategies employ an investment process is predicated on a systematic, quantitative evaluation of macroeconomic variables in which the portfolio positioning is predicated on convergence of differentials between markets, not necessarily highly correlated with each other, but currently diverging from their historical levels of correlation. Strategies focus on fundamental relationships across geographic areas of focus both inter and intra-asset classes, and typical holding periods are longer than trend following or discretionary strategies.

**HFRX EH: Short Bias Index** - Short-Biased strategies employ analytical techniques in which the investment thesis is predicated on assessment of the valuation characteristics on the underlying companies with the goal of identifying over-valued companies. Short Biased strategies may vary the investment level or the level of short exposure over market cycles, but the primary distinguishing characteristic is that the manager maintains consistent short exposure and expects to outperform traditional equity managers in declining equity markets. Investment theses may be fundamental or technical and nature and manager has a particular focus, above that of a market generalist, on identification of over-valued companies and would expect to maintain a net short equity position over various market cycles.

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**HFRX Macro: Systematic Diversified Index** - Systematic Diversified strategies have investment processes typically as function of mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. Strategies which employ an investment process designed to identify opportunities in markets exhibiting trending or momentum characteristics across individual instruments or asset classes. Strategies typically employ quantitative process which focus on statistically robust or technical patterns in the return series of the asset, and typically focus on highly liquid instruments and maintain shorter holding periods than either discretionary or mean reverting strategies. Although some strategies seek to employ counter trend models, strategies benefit most from an environment characterized by persistent, discernible trending behavior. Systematic Diversified strategies typically would expect to have no greater than 35% of portfolio in either dedicated currency or commodity exposures over a given market cycle.

**HFRX Active Trading Index** - Active Trading strategies utilize active trading methods, typically with high frequency position turnover or leverage; these may employ components of both Discretionary and Systematic Macro strategies. Strategies may contain distinct, identifiable sub-strategies, such as equity hedge or equity market neutral, or in some cases a number of sub-strategies are blended together without the capacity for portfolio level disaggregation. Strategies employ an investment process based on systematic, quantitative evaluation of macroeconomic variables in which the portfolio positioning is predicated on convergence of differentials between markets, not necessarily highly correlated with each other, but currently diverging from their historical levels of correlation.

**GLOSSARY**

**Alpha** – Returns which are not attributable to systematic exposures. This is the return remaining after accounting for the effects of Beta.

**Average Correlation (Avg Corr)** – The average of the pair wise correlations of a component to the other components in the portfolio.

**Beta** – the single factor relationship of a portfolio's or component's expected returns as compared to a benchmark. It is based on a single factor regression between a month-end holdings snapshot of the portfolio or component and the benchmark. Betas presented herein were calculated by a third party risk aggregation provider using a Monte Carlo approach based on two years of historical daily return data, weighing more recent returns more heavily than older return data (exponential weighting factor of 0.97) in a manner consistent with the VaR calculations used herein. In some cases K2 adjusts the beta data from the risk system to exclude the effects of illiquid and uncorrelated credit instruments. In the event that data is not available from a third party risk aggregation provider, betas are estimated using up to 2 years of monthly returns of the portfolio and the benchmark. Contribution to

**Risk** – The portion of a portfolio risk attributable to the given component. If all contributions to risk are summed, the result is the portfolio risk.
Estimated Performance-to-VaR – The ratio of actual return to current VaR over the same period.

**LIBOR** – An interest rate at which banks can borrow funds in marketable size, from other banks in the London interbank market. The LIBOR is fixed on a daily basis by the British Bankers' Association. The LIBOR is derived from a filtered average of the world's most creditworthy banks' interbank deposit rates for larger loans with maturities between overnight and one full year.

**Marginal VaR Contribution –** The additional VaR which results from adding a component to the portfolio.

**Max Drawdown** – Monthly compounded return representing the largest "peak to trough" loss sustained within a specified date range, including any temporary gains.

**Sharpe Ratio** - A reward/risk ratio. The numerator, annualized geometric return less the risk-free interest rate (defined as annualized geometric return on 3-month U.S. Treasury Bills), indicates the excess reward earned above the risk-free rate. The denominator, annualized standard deviation, measures the volatility of monthly performance. The higher the Sharpe Ratio, the more return (reward) per unit of volatility (risk) has been achieved.

**Standard Deviation** - arithmetic standard deviation is a measure of dispersion indicating the degree to which each monthly return clusters about the mean return. Standard deviation is calculated based upon monthly returns through the same Monte Carlo approach described above in the definition of Beta, and, in the case of the figures shown on the Hypothetical Statistics page, annualized by multiplying by the square root of 12 (approximately 3.46).

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Investment in a fund of funds is a speculative investment, entails significant risk and should not be considered a complete investment program. An investment in a fund of funds provides for only limited liquidity and is suitable only for persons who can afford to lose the entire amount of their investment. There can be no assurance that the investment strategies employed by K2 or the managers of the investment entities in which K2 Funds invest will be successful.

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Hedge funds are not required to provide investors with periodic pricing or valuation and there is generally a lack of transparency as to the underlying assets. Investing in hedge funds may also involve tax consequences and a prospective investor should consult with a tax advisor before investing. Investors in funds of hedge funds will incur asset-based fees and expenses at the fund level and indirect fees, expenses and asset-based compensation of investment funds in which these funds invest.

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