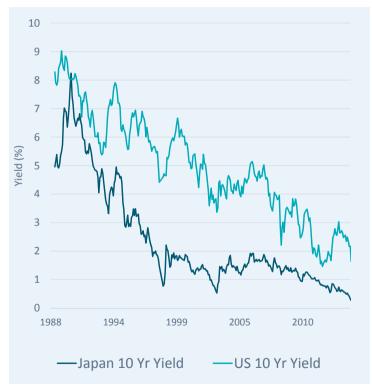


SEPTEMBER 1, 2015Shelly Heier & Jim Vos from Aksia, LLC

Using Hedge Fund Alpha Strategies to Improve Portfolio Construction

2015 Client Summit
True North

Why we favor hedge funds today





End of the 30-year bull market in bonds?

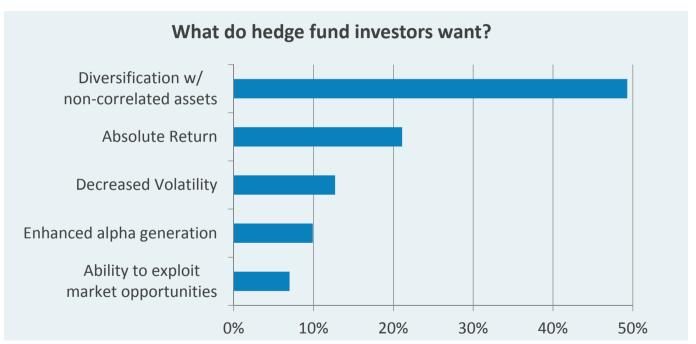
Cresting of six-year bull market in equities?

Sources: Bloomberg, MSCI, Standard & Poors



The role of hedge funds

The low correlation promise



Source: SEI Hedge Fund Investor Survey



MARKETS

Calpers to Exit Hedge Funds

Pension Plan to Shed \$4 Billion Investment to Simplify Its Assets, Reduce Costs

By DAN FITZPATRICK

Updated Sept. 15, 2014 7:59 p.m. ET

The largest U.S. public pension plan is getting out of hedge funds as part of an effort to simplify its assets and reduce costs, a retreat that could prompt other cities and states to consider similar moves.

The California Public Employees' Retirement System said Monday it would shed its entire \$4 billion investment in hedge funds over the next year.

The pension known by the abbreviation Calpers, which manages \$298 billion in investments and benefits for 1.6 million current and retired police officers, firefighters and other public employees, is a bellwether for investment trends at other public plans. Any shift it makes will likely influence others because of its size and history as an early adopter of alternatives to stocks and bonds.



Diminishing benefits?

Aggregate hedge fund correlation versus stocks and bonds





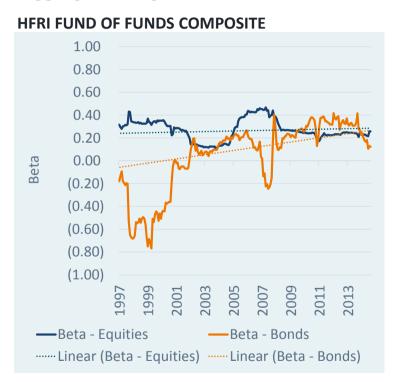
HFRI FUND WEIGHTED COMPOSITE

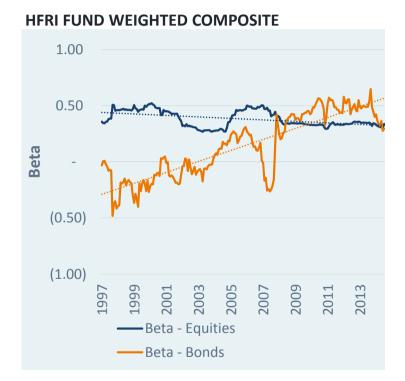


Source: Bloomberg, HFR, Barclays, MSCI, Verus. Equity returns represented by MSCI ACWI, while Bonds were represented by the Barclays Global Agg

Diminishing benefits?

Aggregate hedge fund beta versus stocks and bonds



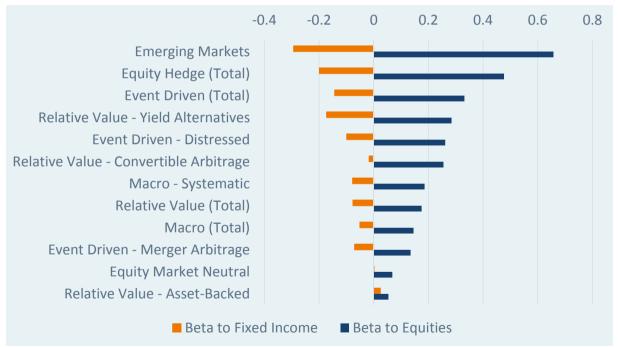


Source: Bloomberg, HFR, Barclays, MSCI, Verus. Equity returns represented by MSCI ACWI, while Bonds were represented by the Barclays Global Agg



Disintegrating the aggregate

Benefits and diversification capacity vary by strategy



Source: Analysis uses MSCI ACWI and BC Global Agg. MSCI, Barclays, Bloomberg, HFRI, Verus. Data from January 1995 to June 2015.



Disintegrating the aggregate

Benefits and diversification capacity vary by strategy

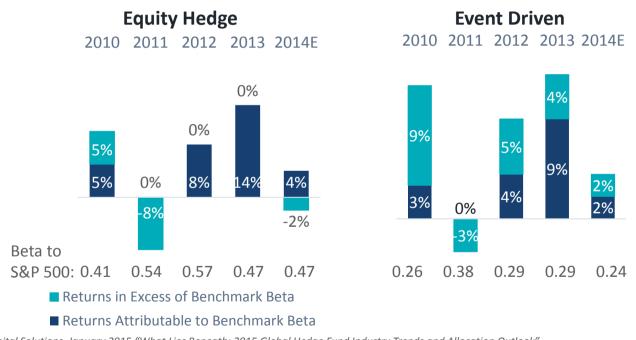


Source: Analysis uses MSCI ACWI and BC Global Agg. MSCI, Barclays, Bloomberg, HFRI, Verus. Data from January 1995 to June 2015.



Adding alpha

Barclays Capital Solutions study based on HFR returns







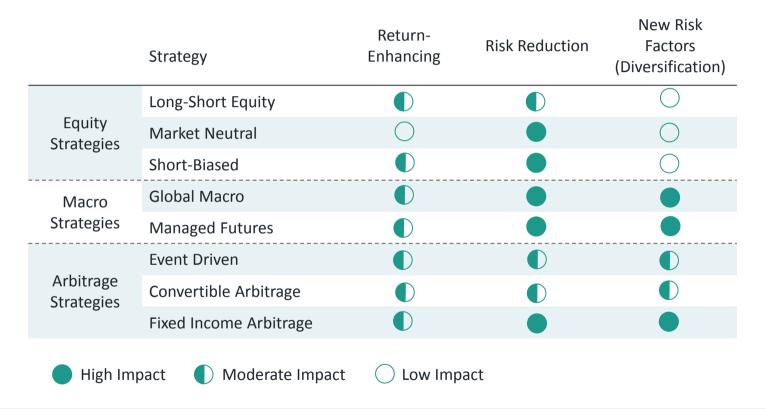
Hedge fund "beta"

Certain strategies rely on premia that are widely documented and understood...



Source: HFR, IndexIQ, Bloomberg, Verus

Finding alpha... and finding impact





The impact of hedge funds

Historical risk and return (1995-2015)



Source: Bloomberg, Barclays, MSCI, HFR, JP Morgan. Data from January 1995 to June 2015.



Seeking alpha: FOF or direct?

As much a governance decision as cost decision

Key considerations include:

- 1. Unbiased top-down expertise for designing portfolio strategy
- 2. Bottom-up expertise for evaluating and selecting managers
- 3. Independent expertise for evaluation of operational risks of managers
- 4. Administrative bandwidth for portfolio implementation and maintenance

Hedge funds are not without challenges



Verus hedge fund solution



Oversight, review, and monitoring

Verus Portfolio Managers, Consultants & Clients

Portfolio design & client communication

Verus hedge fund research staff

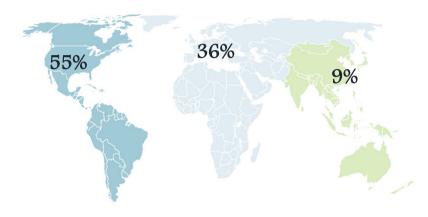
Risk-based evaluation & analysis Tailored portfolio design Formal focus list



Investment due diligence Operational due diligence Comprehensive modeling & analytics



Aksia professionals



Total Staff	95
Research Staff	57
Average Assets Under Advisory Committed to Hedge Funds:	\$1,280* mm
Total Clients : Total Staff	.7:1
Monitored Funds : Operational Due Diligence Staff	12:1
Monitored Funds : Investment Due Diligence Staff	8:1

^{*} Data as of August 2015. This includes advisory clients only and represents a conservative estimate of the assets our clients have committed to allocating to hedge funds based on most recently available information. Number is not inclusive of clients who do not disclose hedge fund allocations to Aksia.





Research coverage

	Insight Reports ¹	ODD ²	IDD ³	Monitored ⁴
Long/Short Equity	188	393	206	82
Event Driven	169	165	121	65
Relative Value	137	173	104	54
Tactical Trading	76	180	123	50
Multi-Strategy	25	57	47	24
Hedge Funds	595	968	601	275



^{*}Data as of August 2015

^{1.} Figures represent investment programs on which an investment insight report has been completed.

^{2.} Figures represent investment programs on which operational due diligence has been performed. Both onshore and offshore funds of the same program count as one.

^{3.} Figures represent investment programs on which investment due diligence has been performed. Both onshore and offshore funds of the same program count as one.

^{4.} Figures shown represent total number of investment programs on which we perform ongoing monitoring. Both onshore and offshore funds of the same program count as one.

Investment due diligence

Strategy

Team & Structure

Risk

- History & background
- Investment strategy overview
- Investment risks
- Capital allocation
- Research / inv. process
- Firm and fund structure

- Key staff and dependencies
- Staff turnover
- Compensation structure
- Alignment of interests
- Firm ownership structure

- Risk management philosophy
- Risk management team
- Asset liability / mismatch
- Risk exposure, leverage and financing
- Quantitative risk analysis











Operational due diligence

Infrastructure & Operational Process

Regulatory, Compliance & Background

Document Review

- Competence of key staff
- Counterparty relationships
- Independence of NAV
- Review of trading systems
- Cash management process

- Regulatory registrations
- Compliance culture & approach
- History of examinations by regulator(s)
- Background checks on key employees
- Historical violations
- Conflicts of interest

Specialist review of:

- Financial statements
- Offering Memo
- Form ADV













Risk framework

Risk Exposures

Risk / Return Profile

Risk-Based Position Sizing

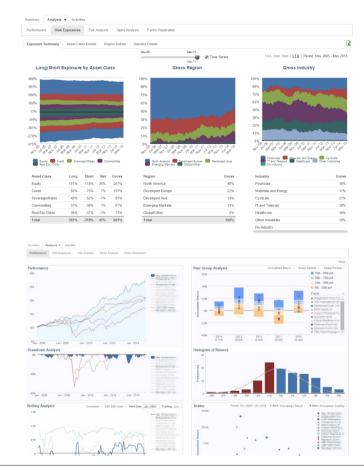
Public Holdings

Alpha Analysis

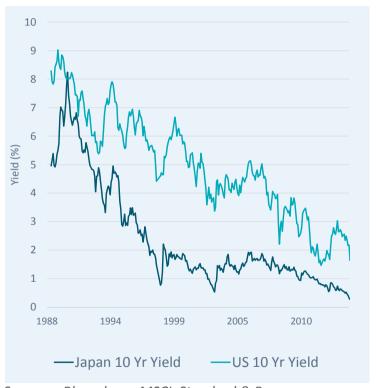
Factor Replication

Liquidity Mapping

Active Management Attribution



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Cresting of sixyear bull market in equities?

Sources: Bloomberg, MSCI, Standard & Poors





Thank you



Every asset class has a role

	RETURN ROLES			DIVERSIFICATION & VOLATILITY ROLES			
	Benefit from GDP Growth	Earn Risk Premium	Produce Stable Income	Hedge Against Inflation	Low Absolute Volatility	Low Corr. To Other Assets	Reduce Portfolio Volatility
Public Equities							
Fixed (Credit)					•		
Hedge Funds (Perceived role)			\bigcirc	\bigcirc		•	
MAGNITUDE	High	Med-High	Medium	Low	None		

