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New Perspectives on Alternative Investments

For the Institute and Faculty of Actuaries

Introduction

Today's speakers and topics are as follows:

- Ian Kitchenham, BlackRock Alternative Investors
 - Defining "alternative" investments
- Ted Logan, *Hedge Fund Solutions*
 - Measuring performance and the importance of selection
- Mark Long, Real Estate
 - Investment features across a broad asset class
- Sverker Akerblom, Renewable Power Group
 - Providing secure income from an alternative source

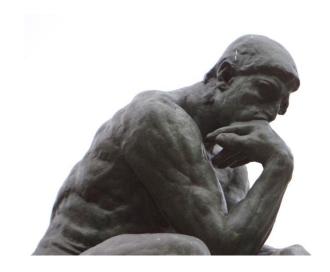
What are alternative investments?

1. Not "traditional", i.e. stocks, bonds or cash

 Returns not directly linked to returns available from a publicly traded asset

2. Asset(s) where the return is, at least partially, a function of factors that are not easily observable

Examples can include 'illiquidity premium' or 'alpha skill'



3. A different way of investing in "traditional" assets

For example, hedge funds and traditional long-only equity investors may both trade publicly available shares but hedge funds can look to make profits when share prices fall by short selling

Alternatives cover a broad range of investments



Commodities

Energy

Metals

Agriculture

Other Softs



Hedge Funds

Relative Value

Event Driven

Fundamental L/S

Direct Sourcing

Global Macro / Directional Trading



Real Estate

Core

Value-Add

Opportunistic

Mezzanine Debt



Private Equity

Buyout

Distressed

Venture Capital

Growth Capital

Mezzanine



Infrastructure

Core

Value Add

Debt

Renewables

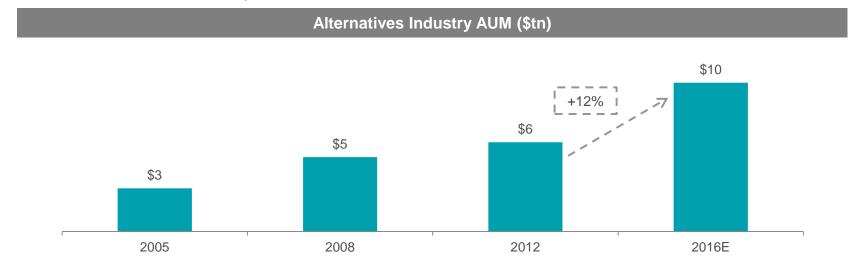
Short-Term Opportunities

Intermediate-Term Opportunities

Long-Term Opportunities

Allocation to alternatives is increasing

Institutional investors are expected to increase allocations across alternative asset classes



Alternatives industry is about \$6 trillion and expected to grow at 12% annually



Source: BCG Global Asset Management 2013 Capitalizing on The Recovery; McKinsey/Institutional Investor Global Survey on Institutional Investing, 2011

Why are investors allocating to alternatives?

We believe investors are finding new appeal in alternatives as a necessary source of investment returns in a low yield, low growth, high volatility environment...

- ▶ Low correlation with traditional asset classes to combat persistent volatility
- Diversified income to combat low yield as clients seek new opportunities outside traditional assets
- ▶ Illiquidity premium opportunities to capture

...and investors are overcoming the myths and concerns of alternative investing

- ▶ Risk factor portfolio analysis and allocation brings alternatives to the core of client investments
- ▶ Liability matching and long term income modeling is improving
- ▶ Transparency and infrastructure can be provided by partnering with institutional quality managers

Alternatives can address a range of investment needs

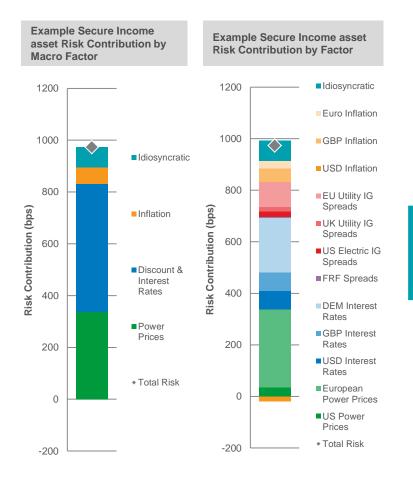
Client need	Asset characteristic	Hedge Funds	Illiquid Credit	Private Equity	Infrastructure	Real Estate
Income	Contracted Cash Flows		✓		✓	✓
Growth	High Target Returns	✓	✓	✓		✓
Inflation Protection	Inflation-linked Cash Flows			✓	✓	✓
Diversification	Low Correlation	✓	✓	✓	✓	✓
Reduce Volatility	Low Volatility	✓	✓		✓	✓

However, alternatives are not heterogeneous and one size does not fit all

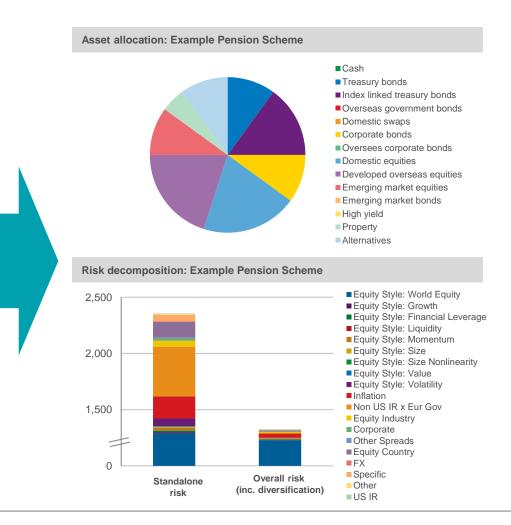
Source: BlackRock Strategic Product Management, from Towers Watson survey, client interviews, BLK team materials, Deutsche Bank survey, CitiBank, Pyramis Survey Investing in alternative assets may involve higher risks and fees than traditional investments and is not suitable for all investors. They may engage in leverage or speculative investment techniques that may magnify potential losses or gains.

Identifying a suitable allocation can be challenging

Risk factor modelling provides a common language...



...that allows efficient portfolio construction at a scheme-wide level



Hedge Funds

The challenges facing pension plans today

Problem

- ▶ Market and liability risk volatility
- ▶ Low return/ yield makes achieving objectives difficult
- ► Effective diversification is challenging due to high correlation in traditional asset classes
- ▶ Increased requirements for governance and transparency

Questions

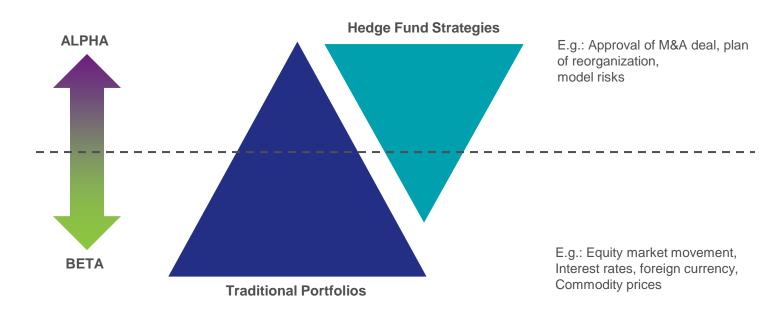
- ► Can I generate returns with a different profile than traditional equity and fixed income?
- ▶ What risks do I need/need to avoid?
- ▶ How can I do this in a cost-efficient way?

Solution

 Risk-based approach to replace 'performance chasing' as basis for asset allocation decisions

Hedge Funds diversify by risks, not returns

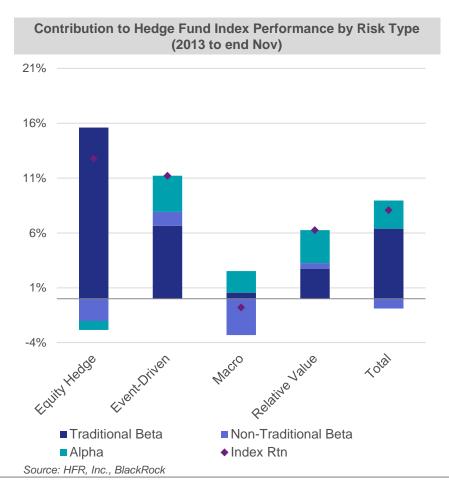
Sources of Risk and Return

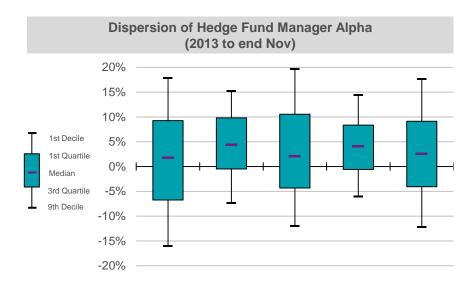


- ▶ Risks are the input, returns are the output
- ▶ Hedge funds seek to generate different returns via a different set of risks than traditional, long-only investments
- ▶ Idiosyncratic risks (alpha) are difficult to replicate

Selection can enhance portfolio alpha

- ▶ Hedge funds do offer alpha
- ► Highest return ≠ highest alpha
- Selecting the right managers can enhance the alpha



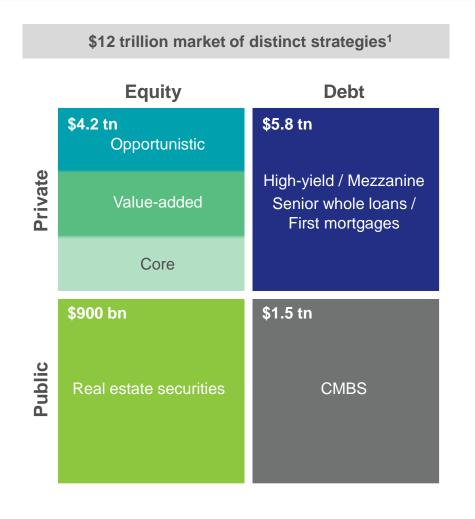


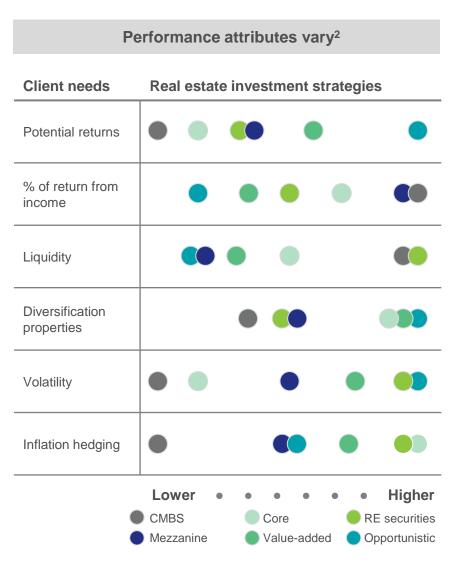
		Equity Hedge	Event Driven	Macro	Relative Value	Total
Percentiles	90%	17.8%	15.2%	19.6%	14.4%	17.6%
	75%	9.2%	9.8%	10.5%	8.3%	9.1%
	50%	1.7%	4.3%	2.0%	4.0%	2.5%
	25%	-6.7%	-0.5%	-4.3%	-0.6%	-4.1%
	10%	-16.1%	-7.4%	-12.0%	-6.0%	-12.2%
Interdecile range		33.9%	22.6%	31.6%	20.4%	29.8%
Interquartile range		16.0%	10.3%	14.9%	8.9%	13.2%
Fund Count		744	167	350	287	1548



Real Estate

Broad range of Real Estate strategies and vehicles



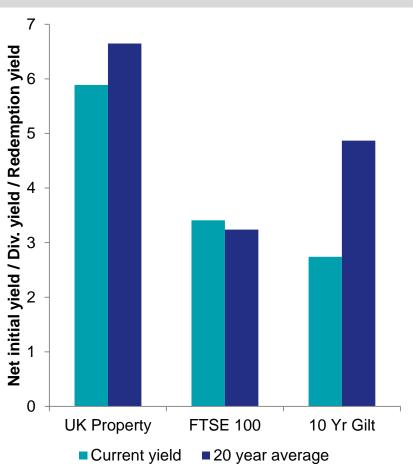


^{1.}DTZ Research, BlackRock; as of December 2013

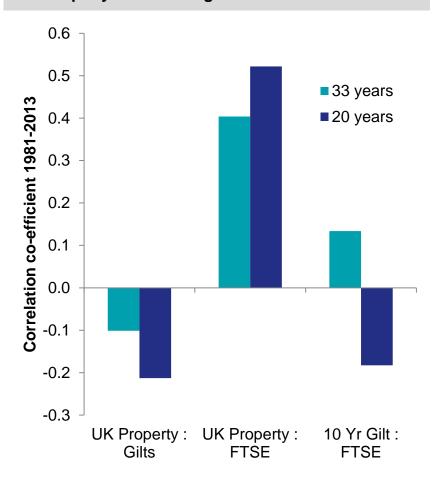
^{2.}BlackRock

Income and diversification

Property delivers a higher level of income¹



Property offers strong diversification benefits²



¹ IPD UK Monthly Index March 2013

¹ IPD UK Annual Index Dec 2013

Characteristics of underlying real estate equity investments



- Diversification benefits
- Real asset inflation hedging
- High level of income
- Asset-Liability matching



- Heterogeneity
- Illiquidity
- Lack of divisibility
- Management intensive



Types of Real Estate investments: Equity

Value Added Core **Opportunistic** Traditional property types Asset Repositioning and ▶ Full scale development refurbishment and redevelopment Fully leased / minimal projects leasing risk Leasing risk Often low income ▶ Prime & secondary markets Minimal development risk distribution Well diversified ▶ Listed securities (REITs) Back-end loaded return Balanced alternative ▶ No specific diversification Typically High Leverage strategies requirement Total return 6-8% Total return 8-10% Total return 10%+ 80%+ rental income 50-80% income >50% capital Multi-asset diversifier Diversification plus alpha Alpha generation Stable Income **Income and Growth** Income & capital growth Open-end funds Open-end, Closed-end funds Closed-end funds & Separate Accounts & Separate Accounts Increased risk/return



What are Infrastructure investments?

Investor Needs

Investor Benefits

Infrastructure Assets

Characteristics

Capital Preservation

Stable Cash Flows

Inflation Linkage

Diversification Effects

A **defensive** asset class that can preserve capital

A key return attribute of infrastructure assets is **high** and stable income

Infrastructure assets often have implicit or explicit inflation protection

Low correlation of infrastructure investments with traditional assets

Essential Services

Capital Intensive



Sectors

Energy



Transport



Water/Waste

Long Life Span



Communication

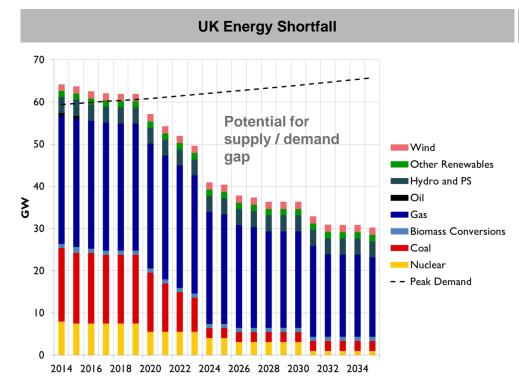
Local Monopoly



Social

Source: BlackRock (April 2014)

Renewable Power – UK Market Opportunity



Material conventional plant closures:

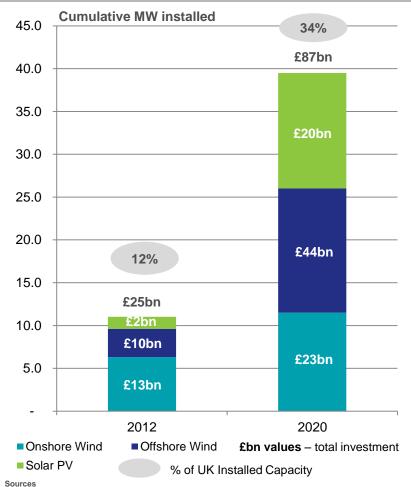
 c.9GW of fossil plants recently closed (2012-2013), with material additional closures expected

Rising electricity prices:

Shortfall in supply will likely lead to significant increases in UK power prices

Source: UK Power Consultant (Q4 2013)

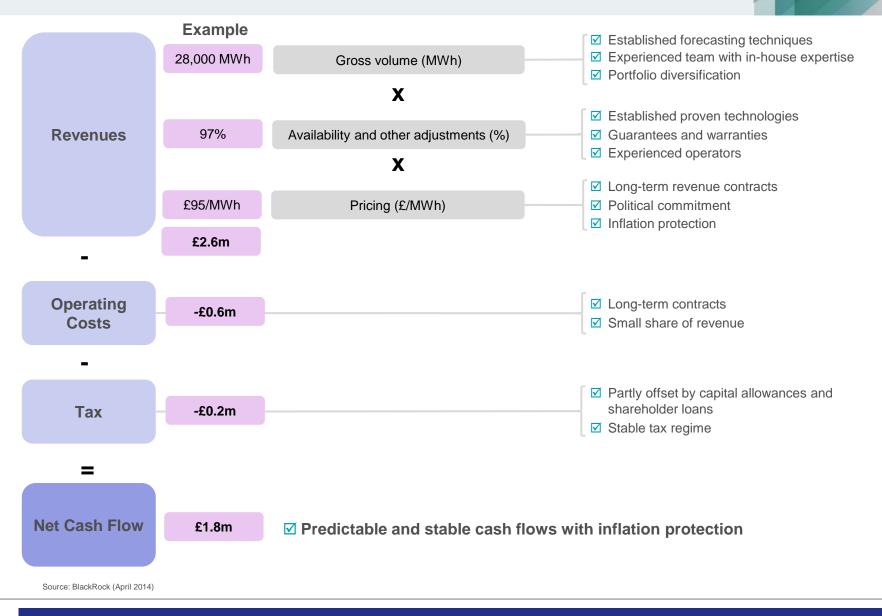




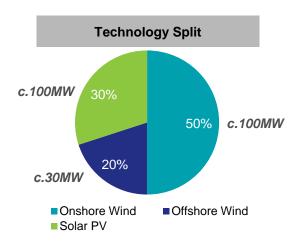
2012 Capacity: Wind Statistics - RenewableUK (4 Jul 2013), PV Statistics - DECC (Nov 2012), Capacity Forecast - National Grid (Sep 2012)

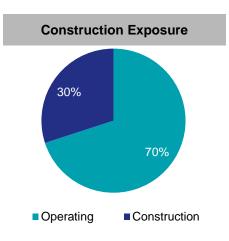
2020 Capacity: DECC UK Renewable Energy Roadmap 2011 (and 2012 update), average of central scenario range Note: Enterprise value assumes £2m/MW for Onshore Wind, £3m/MW for Offshore Wind and £1.4m/MW for Solar PV

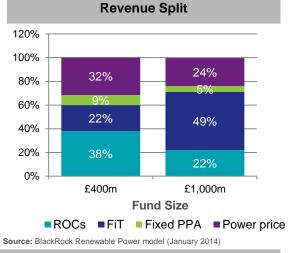
Renewable Power Projects – Key Economic Drivers



Portfolio Analysis – Illustrative £400m UK Portfolio



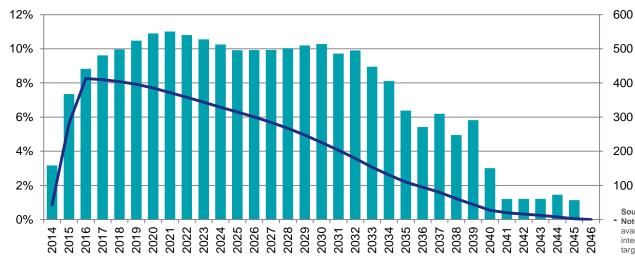




Source: BlackRock Renewable Power model (October 2013)

Note: % of committed capital based on £400m fund size Source: BlackRock Renewable Power model (January 2014)

Estimated Gross Cash Yield and Net Asset Value 600 500



Source: BlackRock Renewable Power model (January 2014)

Note: Based on £400m investment size. Additional assumptions available upon request. The manager cannot guarantee that the intended target rate will be achieved. In addition, over time the target rate is subject to change

Cash Yield NAV

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