Holistic Approach to Portfolio Construction

CPBI Professional Development Day

Dan Kim, Associate Partner, Hewitt EnnisKnupp

May 29, 2014

DB vs DC

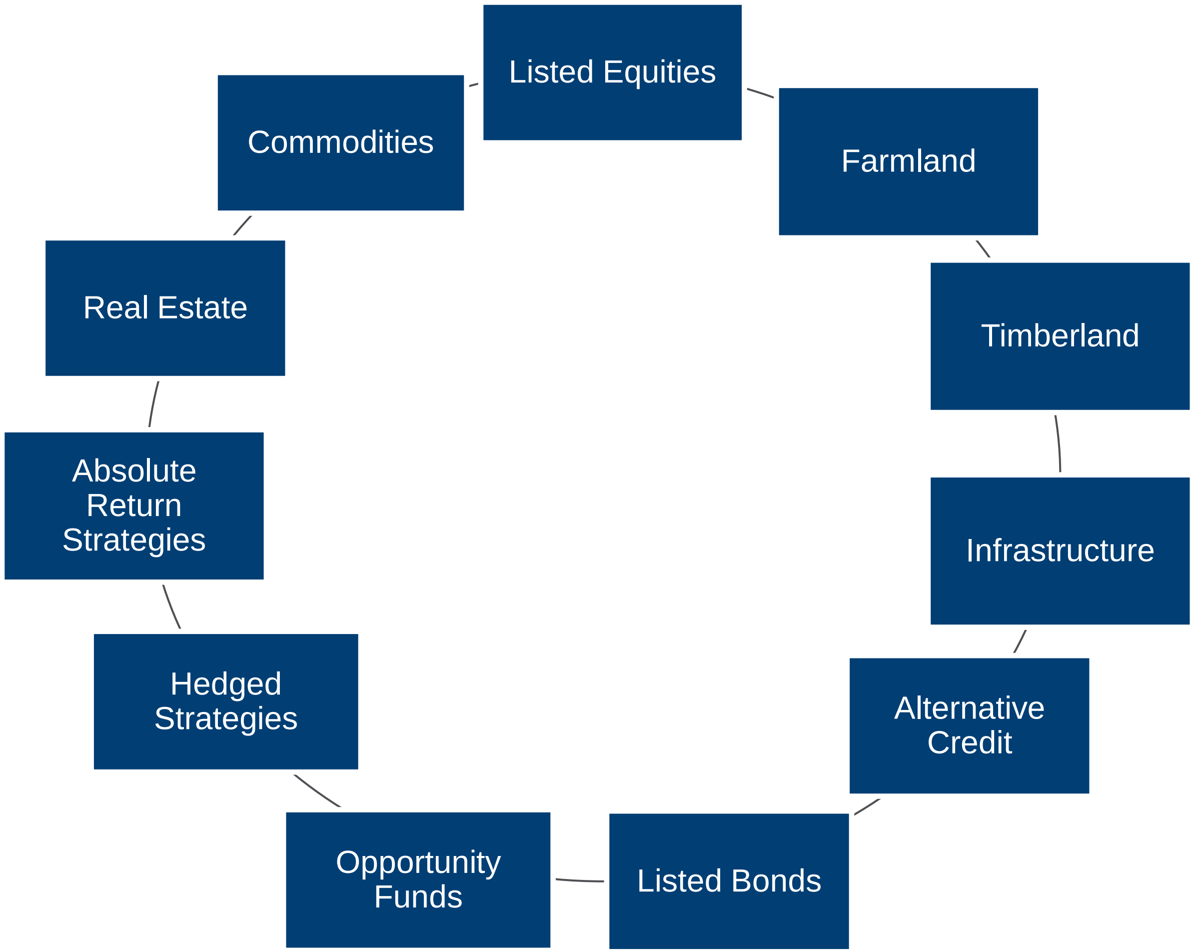
DB Plans have two core competitive advantages:

1. **Long term investment horizon**
2. **Excess liquidity**

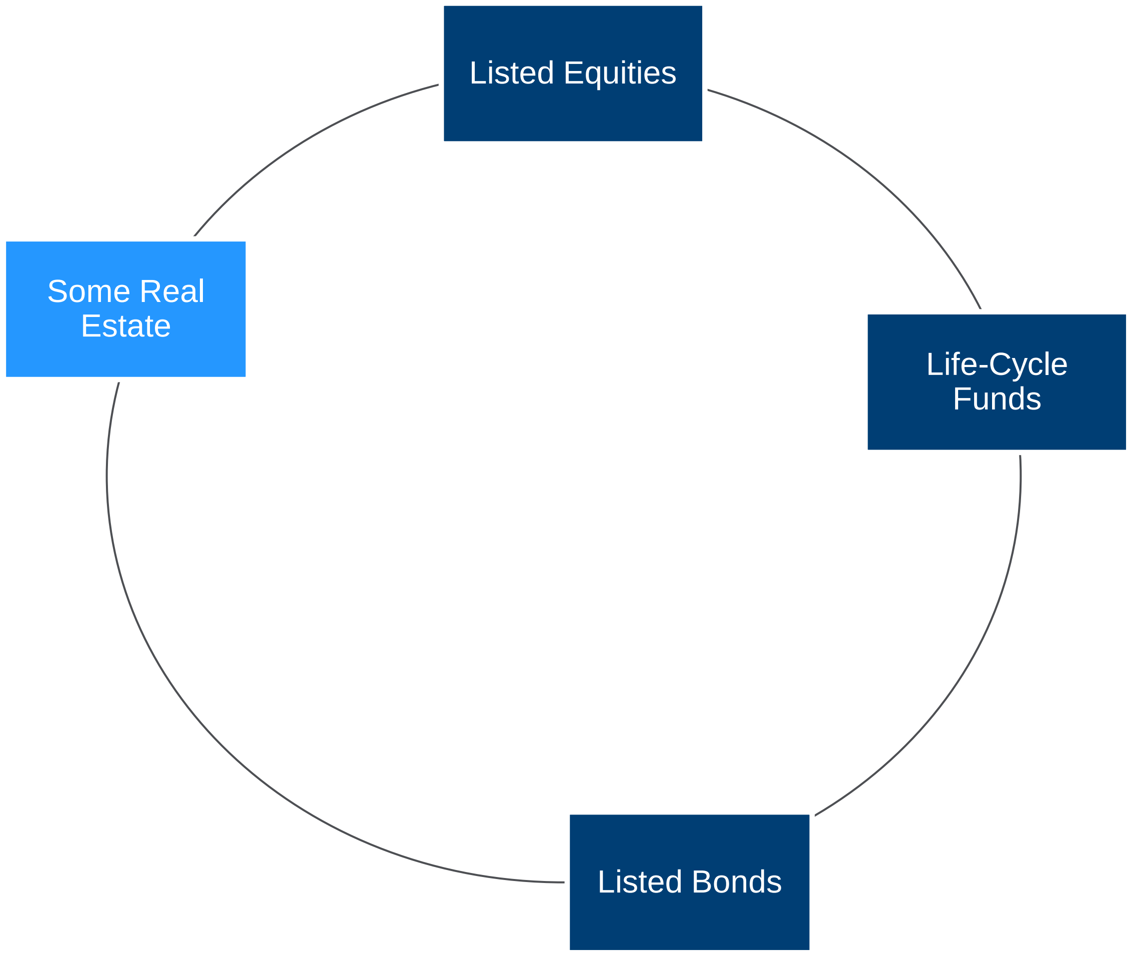
DB investors should use this competitive advantage to:

1. Develop a more efficient risk/return portfolio through broader **(β)** diversification. This is the lowest hanging fruit in portfolio management
2. Harvest additional outperformance **(α)**
3. Harvest illiquidity premium
4. Structure portfolios that can behave differently under different factor behaviour (lower risk portfolio, higher inflation portfolio…)

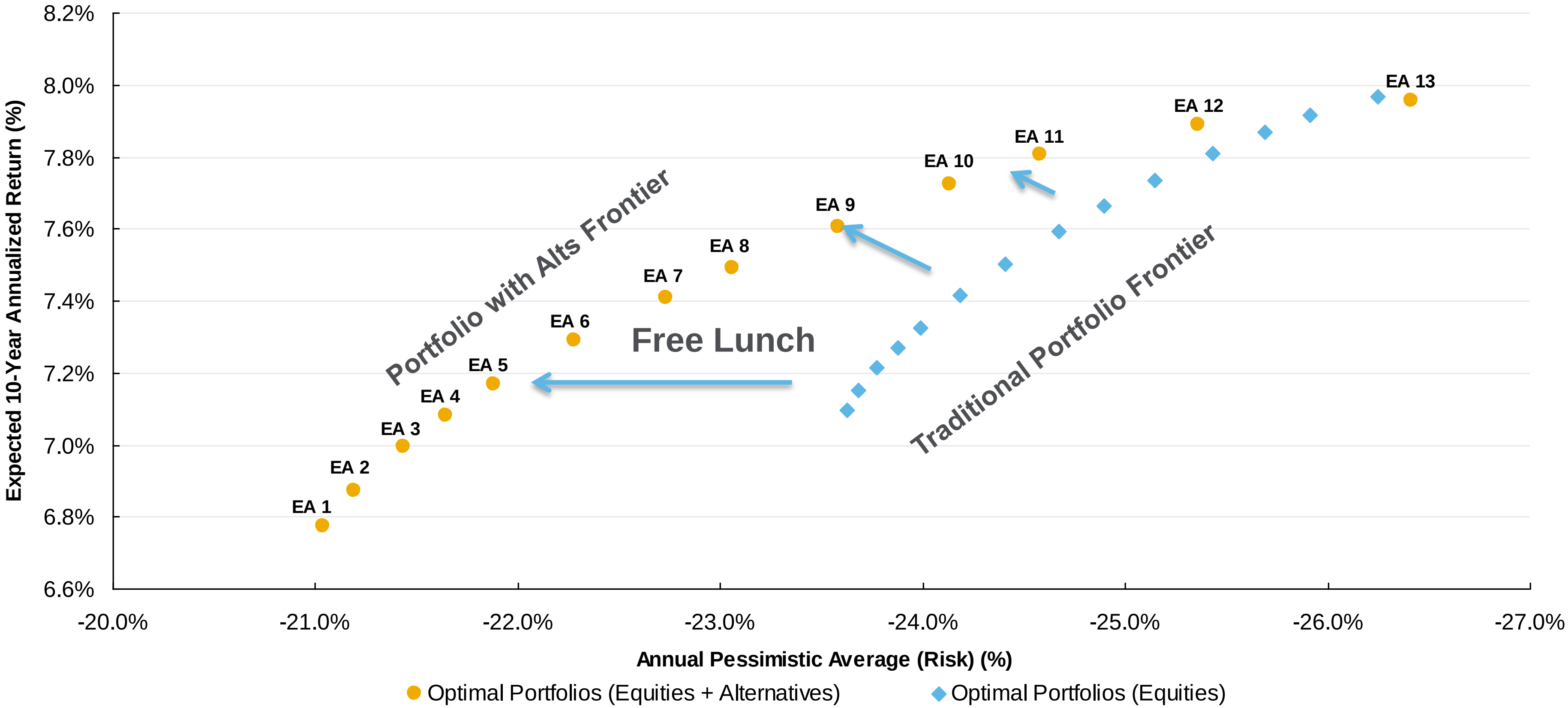
Define Benefit Options



Define Contribution Options

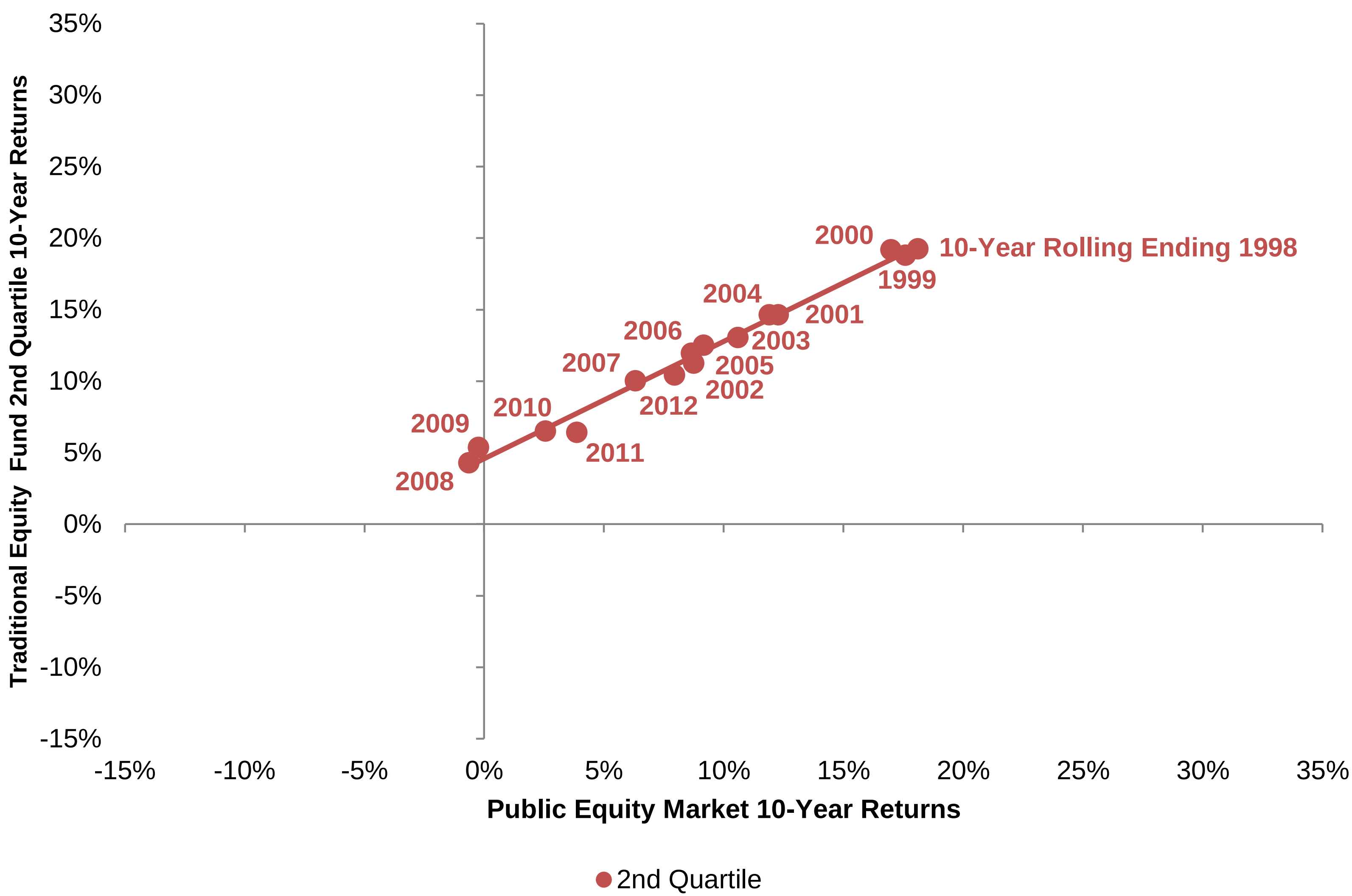


Efficient Frontier: Traditional-Only Vs Traditional + Alternatives



The Equity Portfolio: Traditional Active

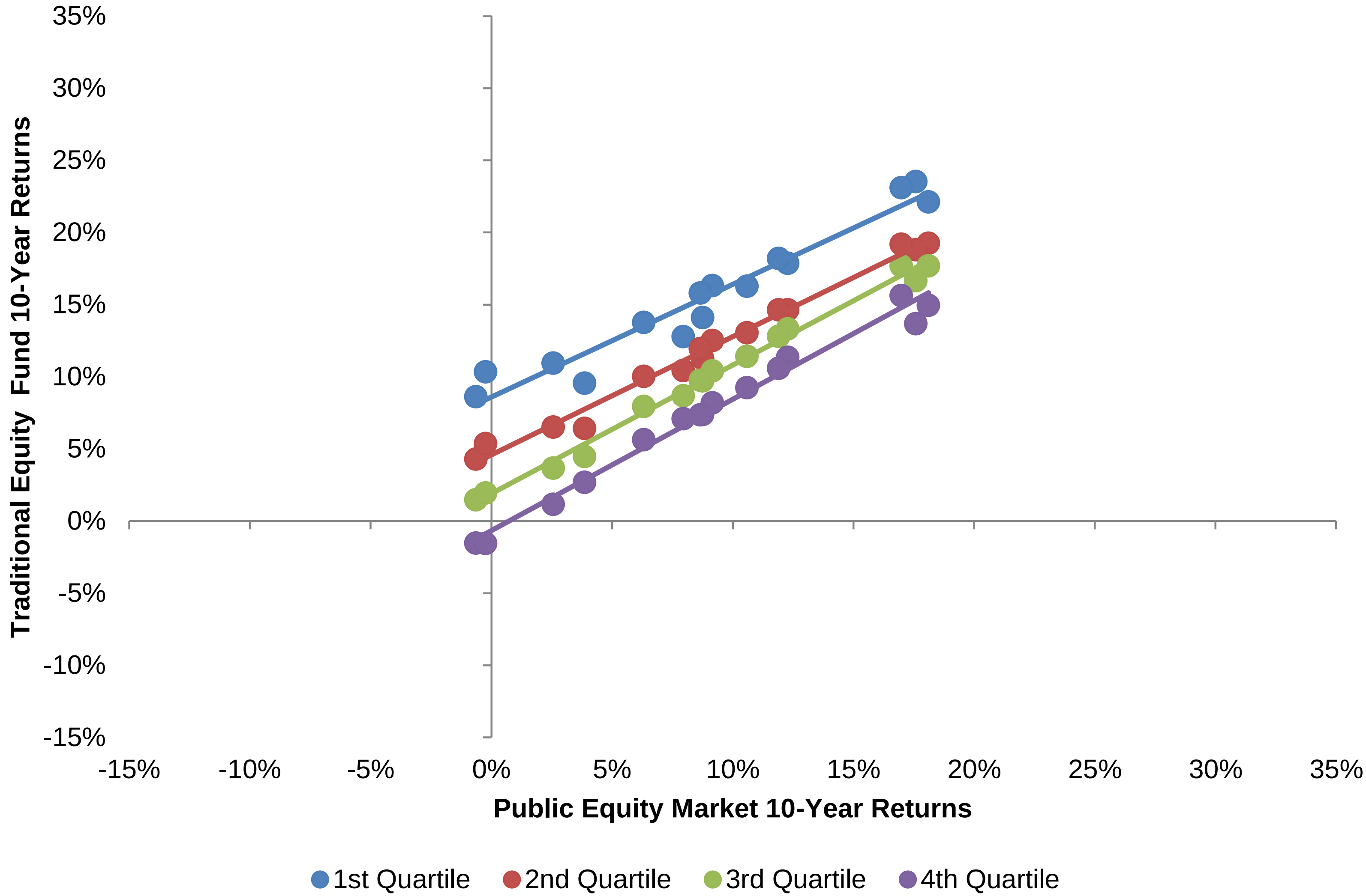
Rolling 10-Year Returns (2nd Quartile)



Aon Hewitt

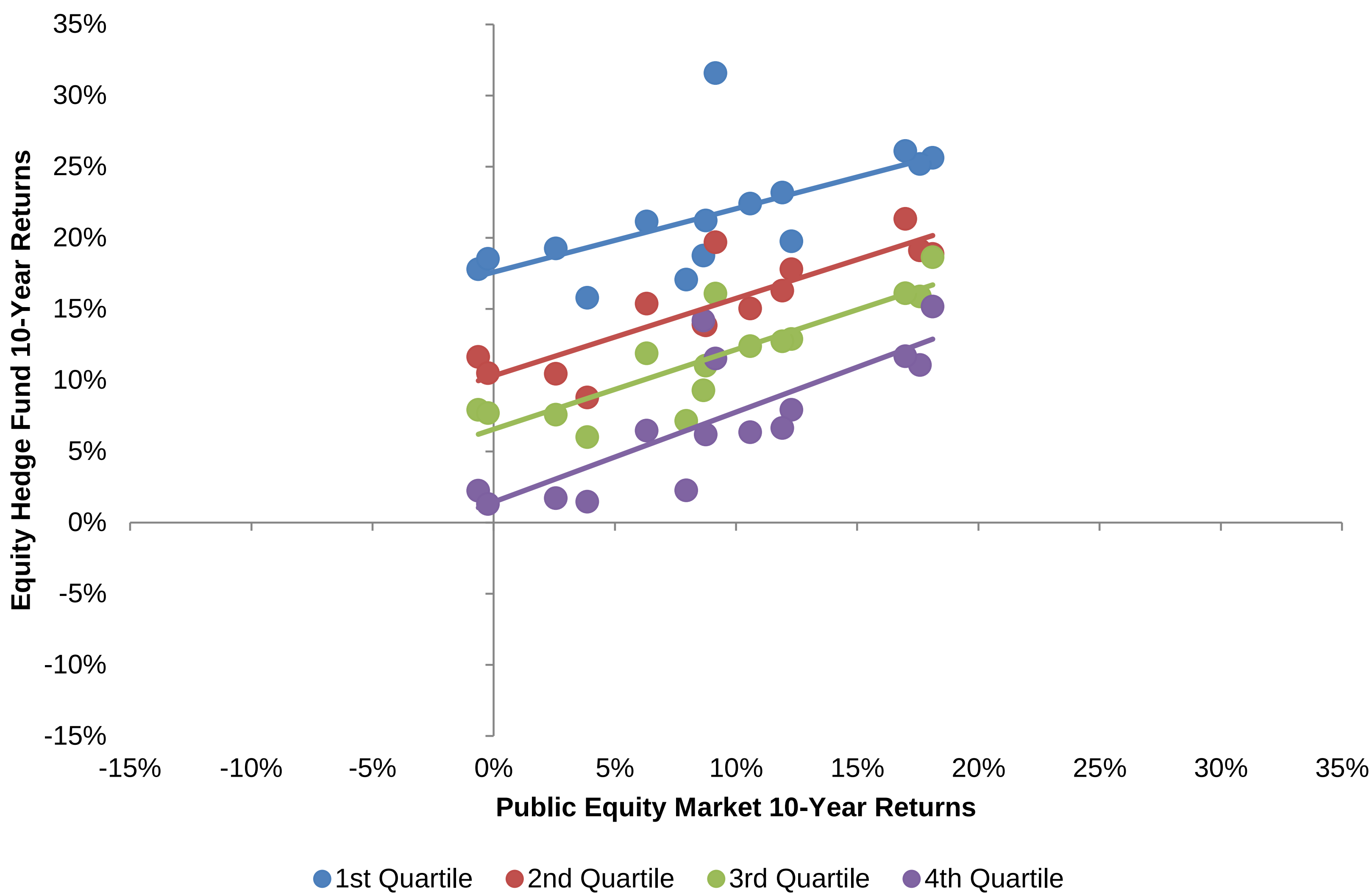
The Equity Portfolio: Traditional Active

Rolling 10-Year Returns By Quartile



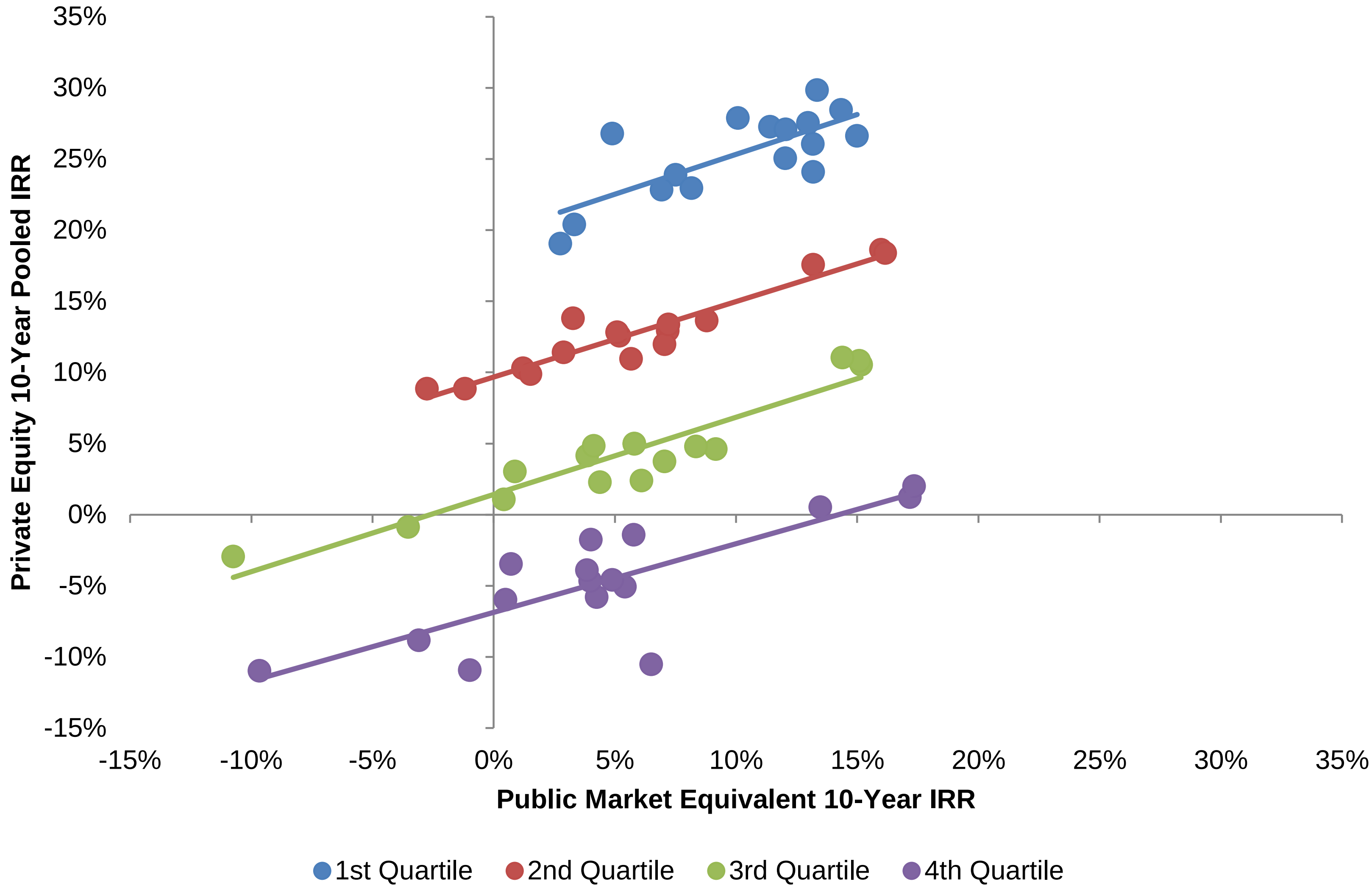
AON Hewitt

The Equity Portfolio: Equity Hedge Funds
Rolling 10-Year Returns By Quartile



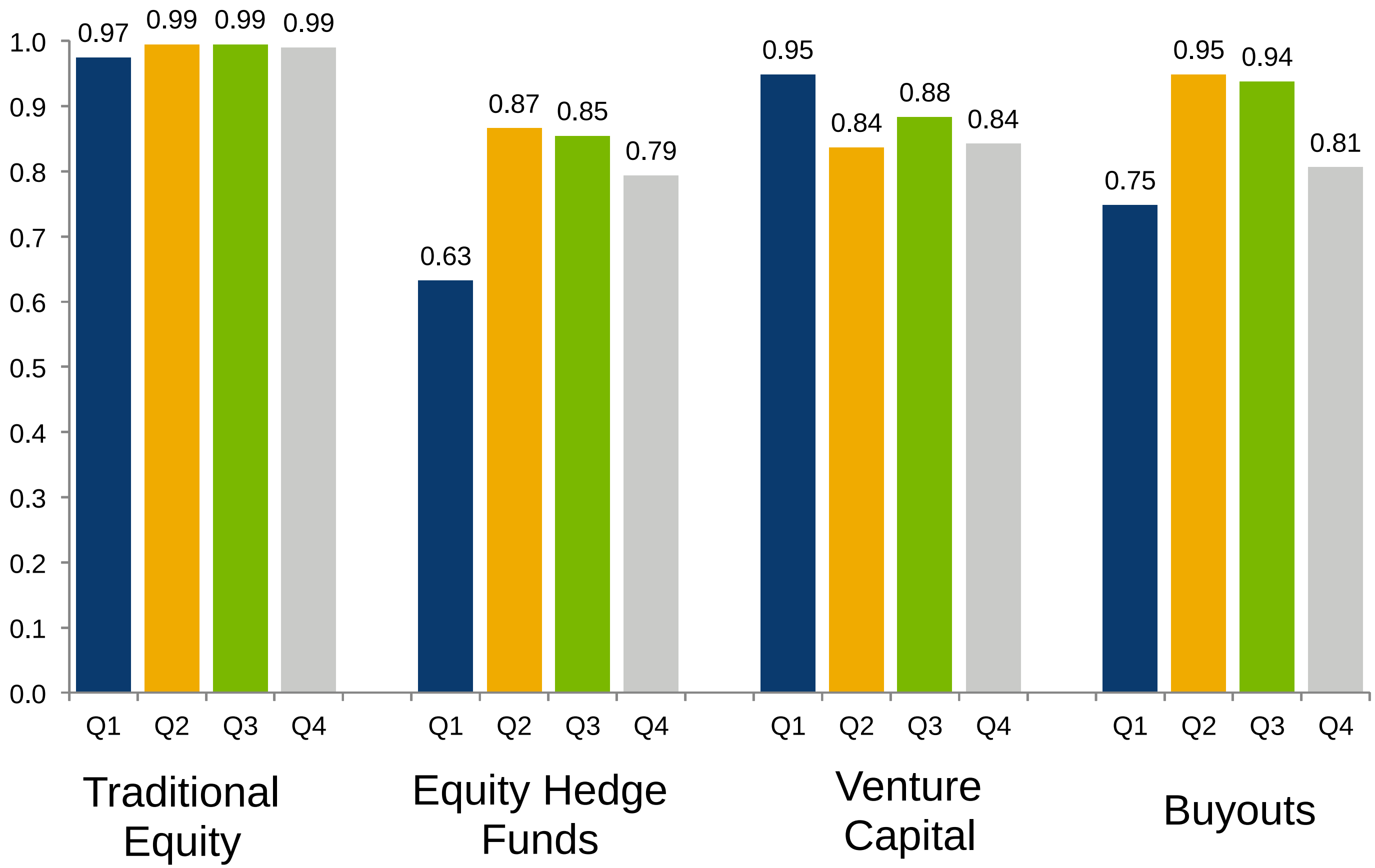
The Equity Portfolio: Buyouts

Rolling 10-Year Pooled IRRs By Quartile

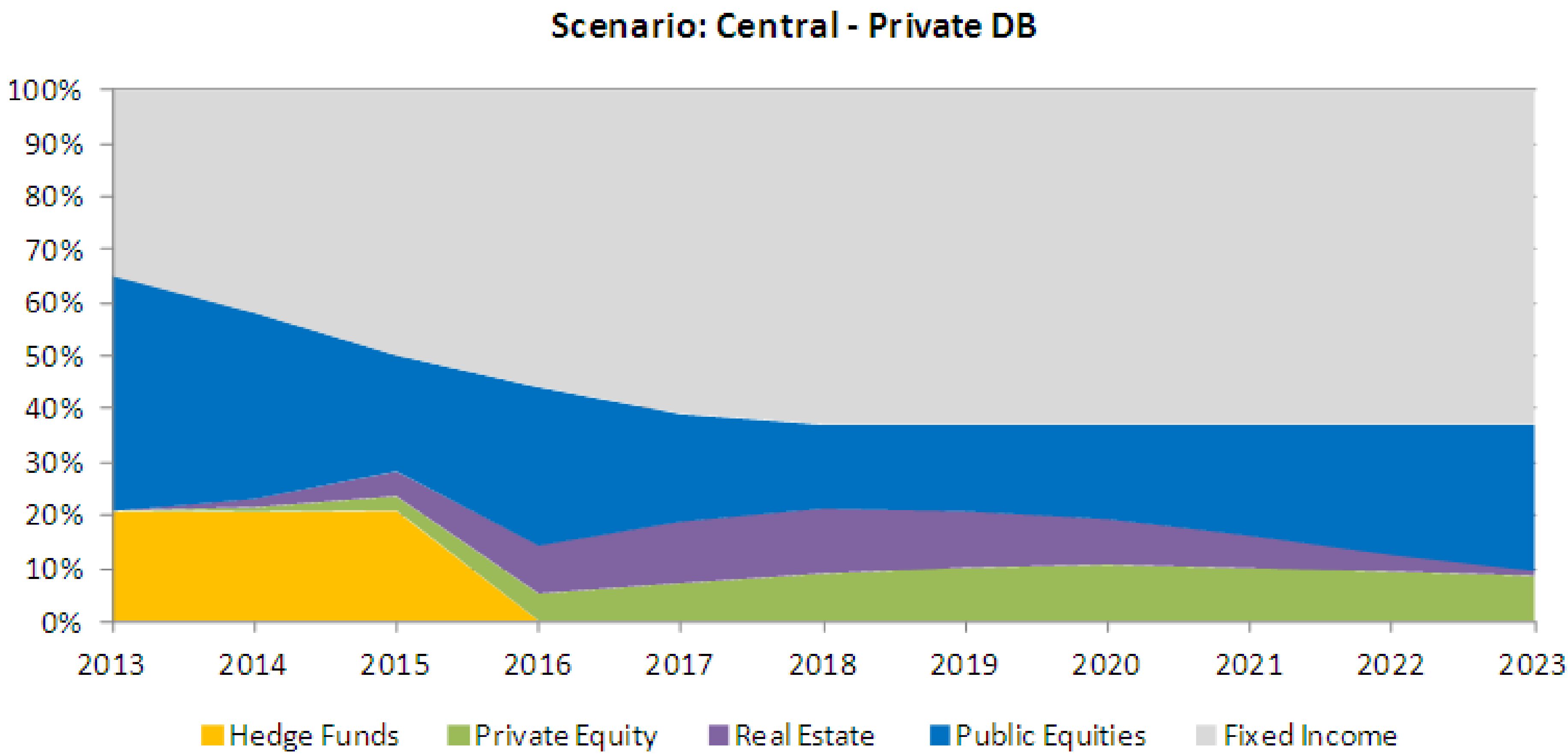


AON Hewitt

What's an Asset Class?
Correlation of Rolling 10-Year Returns With Public Equity

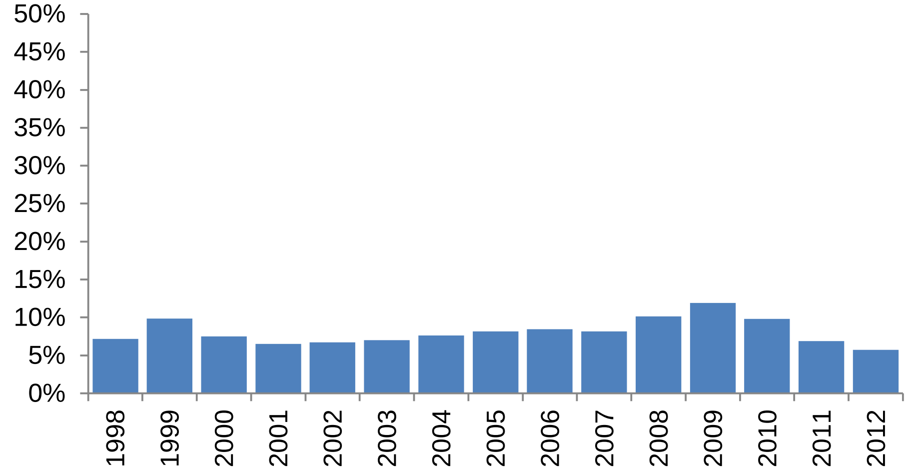


How Much Tolerance Does Your Plan have for Illiquidity?

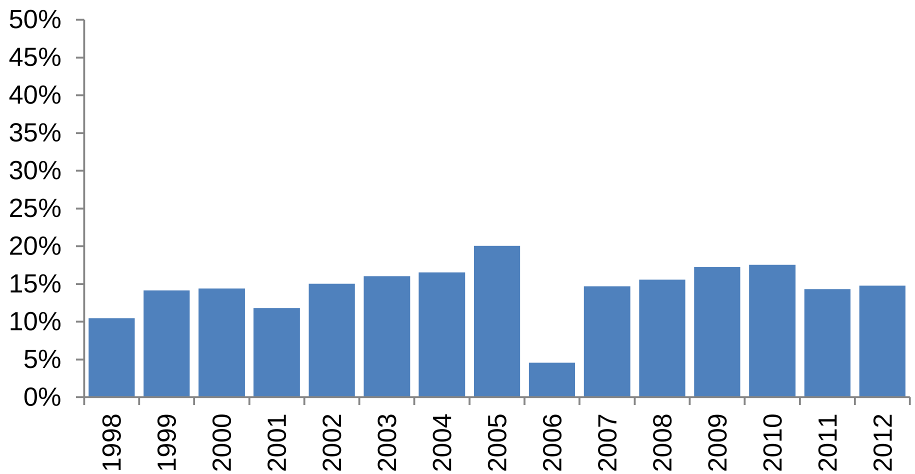


Dispersion:
Top Minus Bottom Quartile Rolling 10-Year Returns

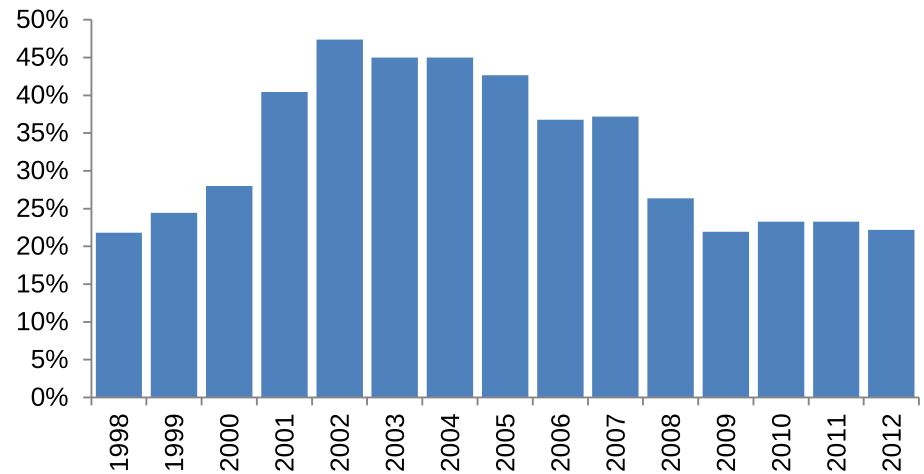
Traditional Active Equity



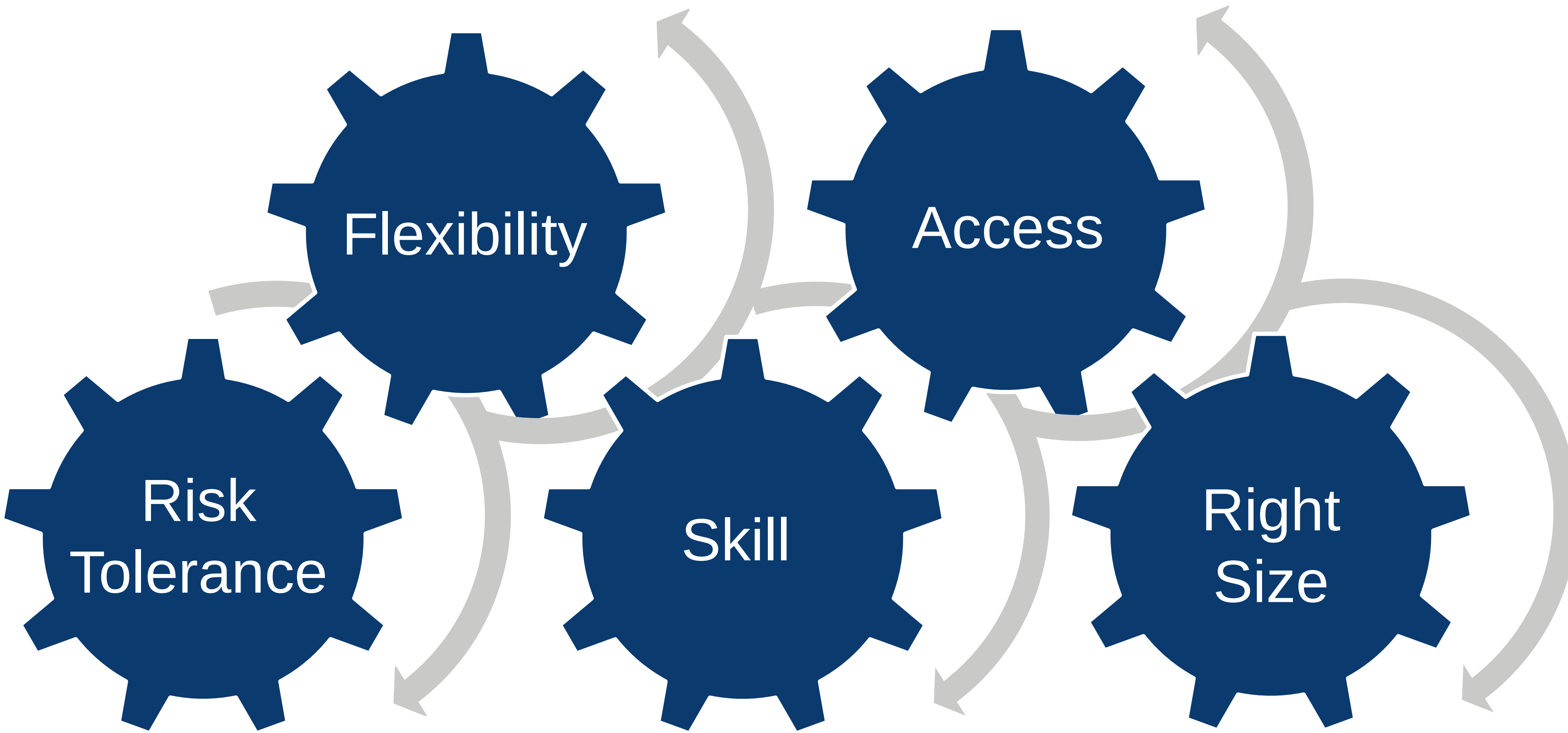
Equity Hedge Funds



Private Equity



Suitability for alternative Investments: Five Key Areas

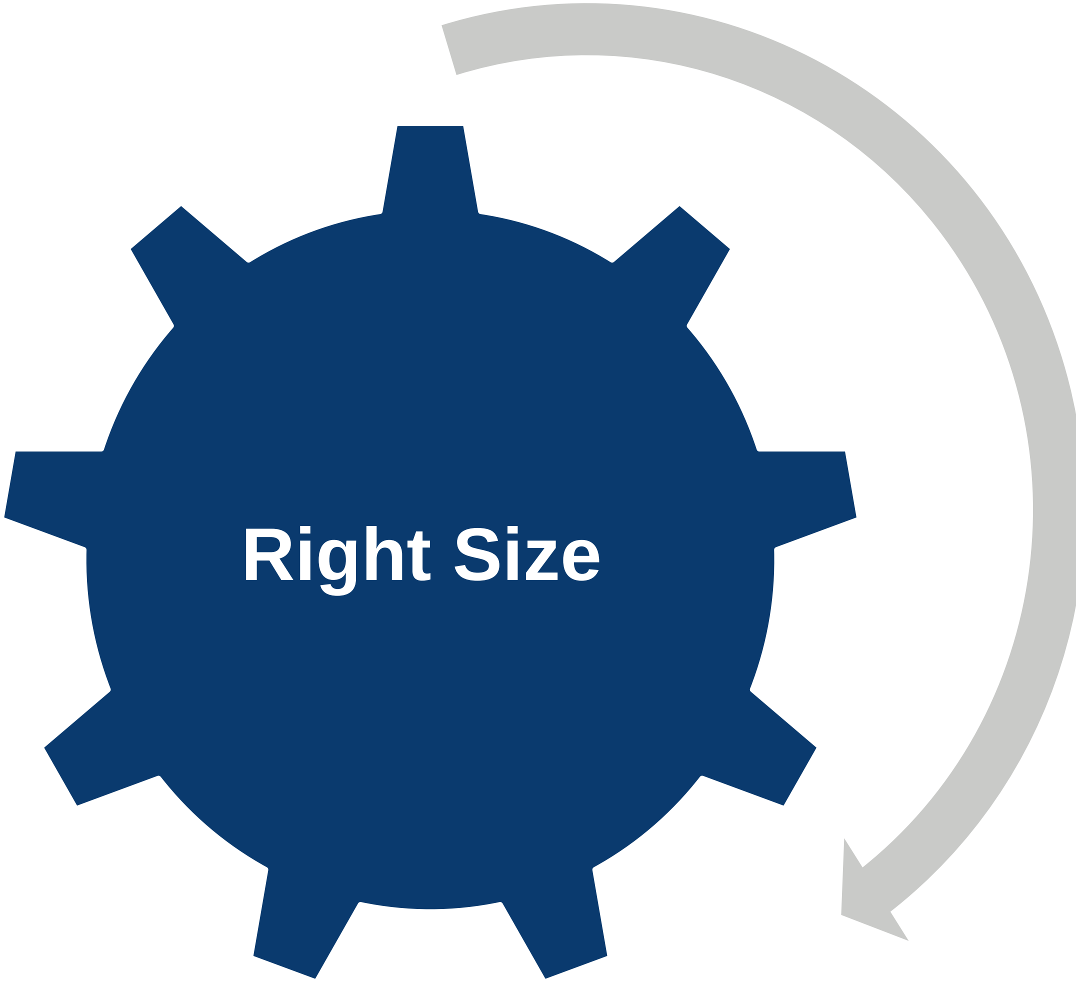


Suitability: Risk Tolerance

- Active risk is "uncompensated"
- Shift from market to active risk
- Ambiguity about returns and good benchmarks

Aon Hewitt

Suitability: Right Size



- Ability to adequately diversify without buying the market

- In this framework, allocations depend on total equity and fixed income targets

Suitability: Flexibility

- Ability to act quickly
- Ability to invest in headline risk-prone assets
- Tolerance for high cost and bad performance

Suitability: Access

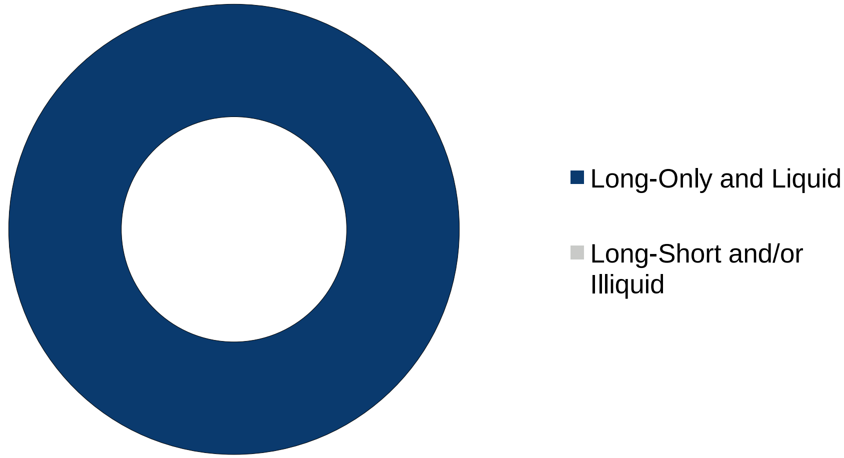
- Willingness to significantly commit to these assets and build larger positions over multiple years
- Special considerations for public funds
- Supply of best opportunities changes over time

Suitability: Skill

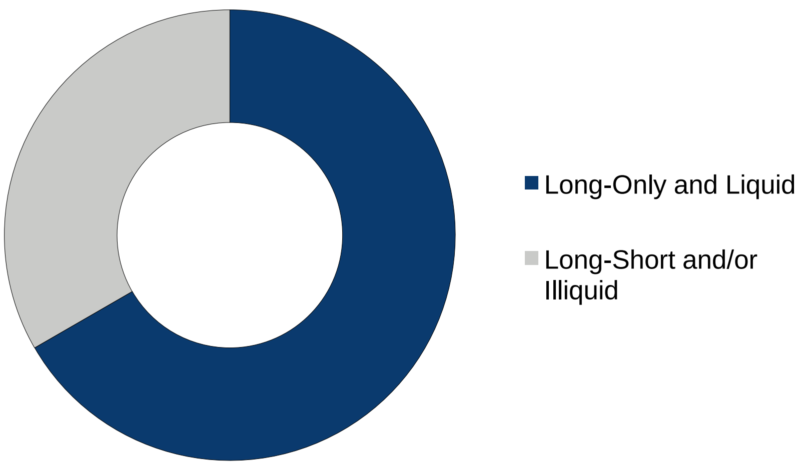
- Beliefs
- Resources
- Experience
- Process
- Objectivity and Un-emotion
- Risk acceptance
- Commitment

Asset Class Allocation Guidelines for Different Suitability Levels

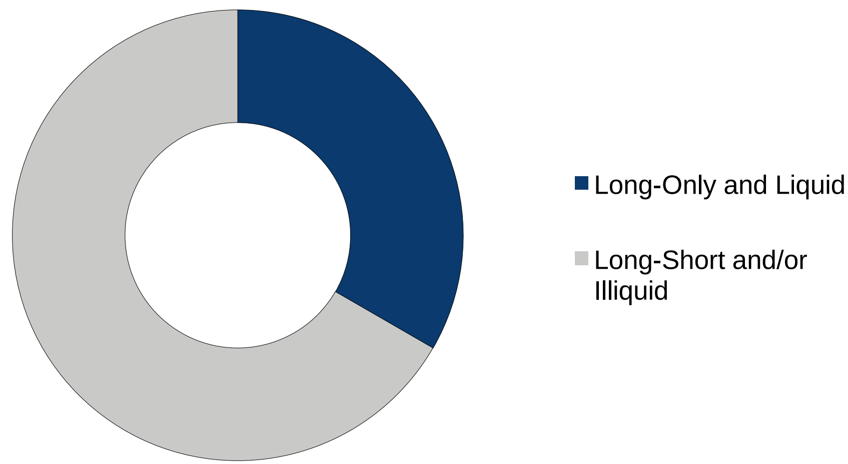
Not Suitable in One or More Areas



Suitable in All Areas

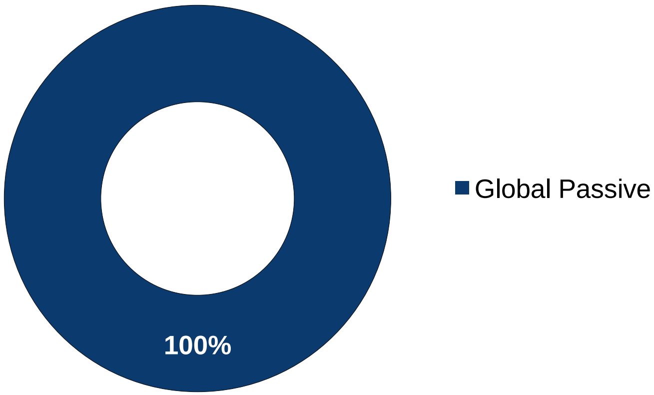


Strong Suitability in All Areas

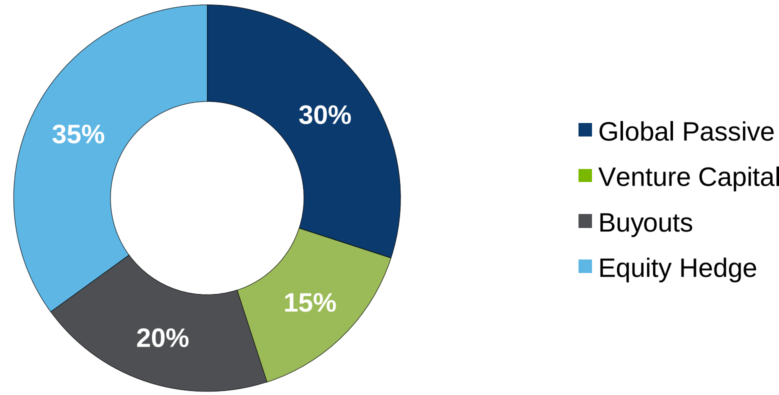


The New Equity Portfolio in Four Flavours

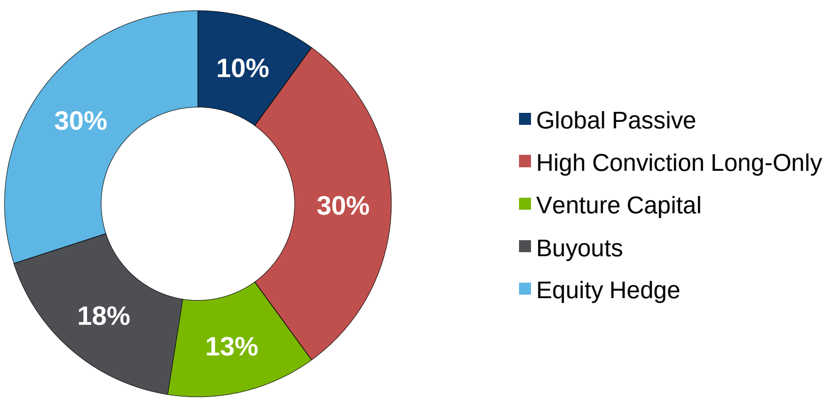
Not Suitable (Efficiency)



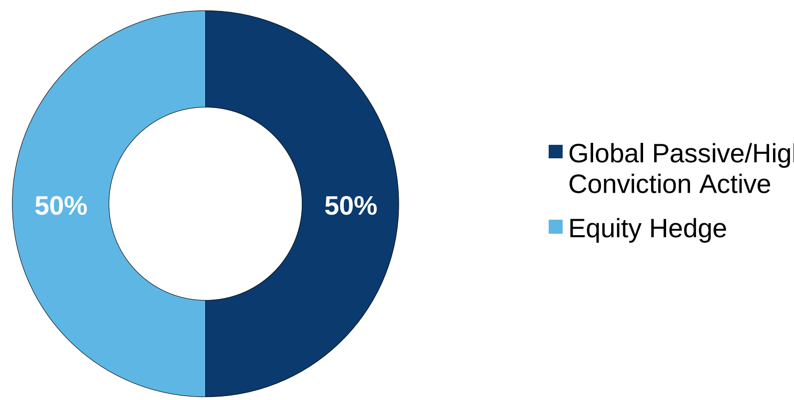
Strong Suitability: Go Big or Go Home



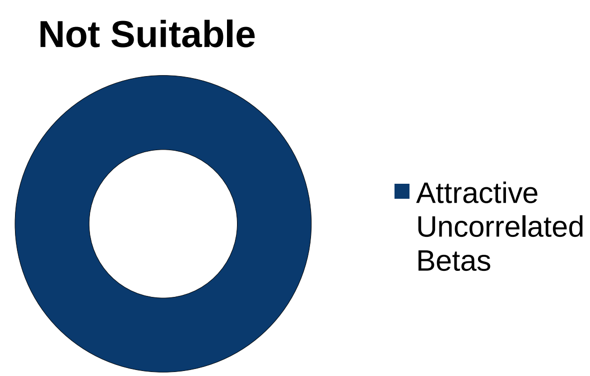
Strong Suitability: High Conviction Active

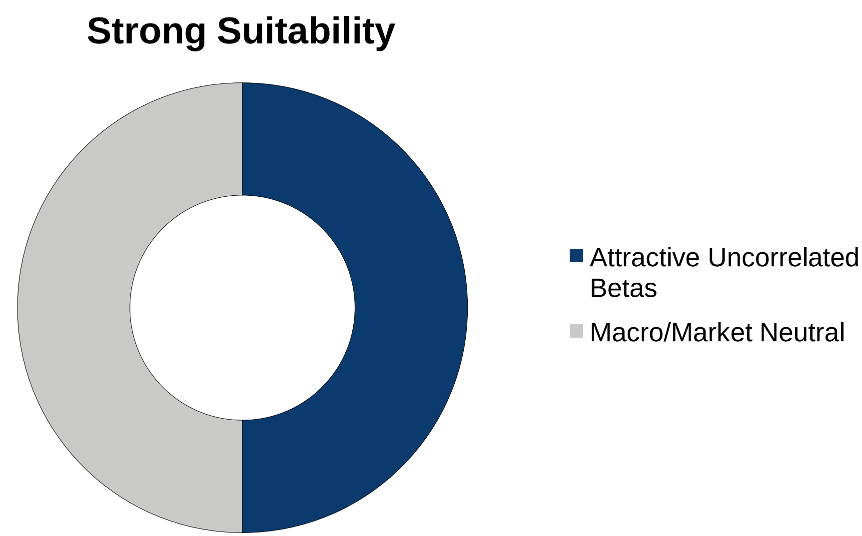


Strong Suitability: Short Time Horizon



The New Opportunity Allocation





Key Takeaways

- Consider whether you are positioned to taka advantage of alts?
- Consider incorporating alts into broader asset class mandates
- Evaluate your liquidity “bookends” to determine where your tolerances fall. How does your existing/prospective illiquid component fit?
- Consider broadening your Real Asset allocation – particularly in the areas of currently attractive opportunities

Real Estate

Benefits

– The benefits of adding Real Estate to a mixed asset portfolio include:

Diversification	High income yield	Potential for inflation protection	Attractive risk-adjusted return
Due to low correlation with other asset classes	Due to strong, predictable cash flow from core operating assets	From both expected and unexpected inflation	Potential for portfolio alpha when used opportunistically

– Compared to other asset classes, real estate has provided some of the highest returns, with a much lower level of risk (see table below)

(March 31, 2014)	1-Year	3-Year	5-Year	10-Year
Canadian Private Real Estate	**8.2%**	**12.8%**	**9.6%**	**11.6%**
US Private Real Estate (hedged)	11.4%	12.1%	5.4%	8.6%
Public Real Estate (hedged)	11.4%	12.1%	5.4%	8.6%
Global Equities (hedged)	35.6%	14.6%	12.2%	5.5%
Global Bonds (hedged)	3.9%	4.7%	0.8%	2.4%

Source: Private Real Estate – IPD, NCREIF   Public Real Estate – NAREIT

Bonds – Barclays Agg Bond index   Equities – S & P 500

AON Hewitt

Real Estate – Property Types

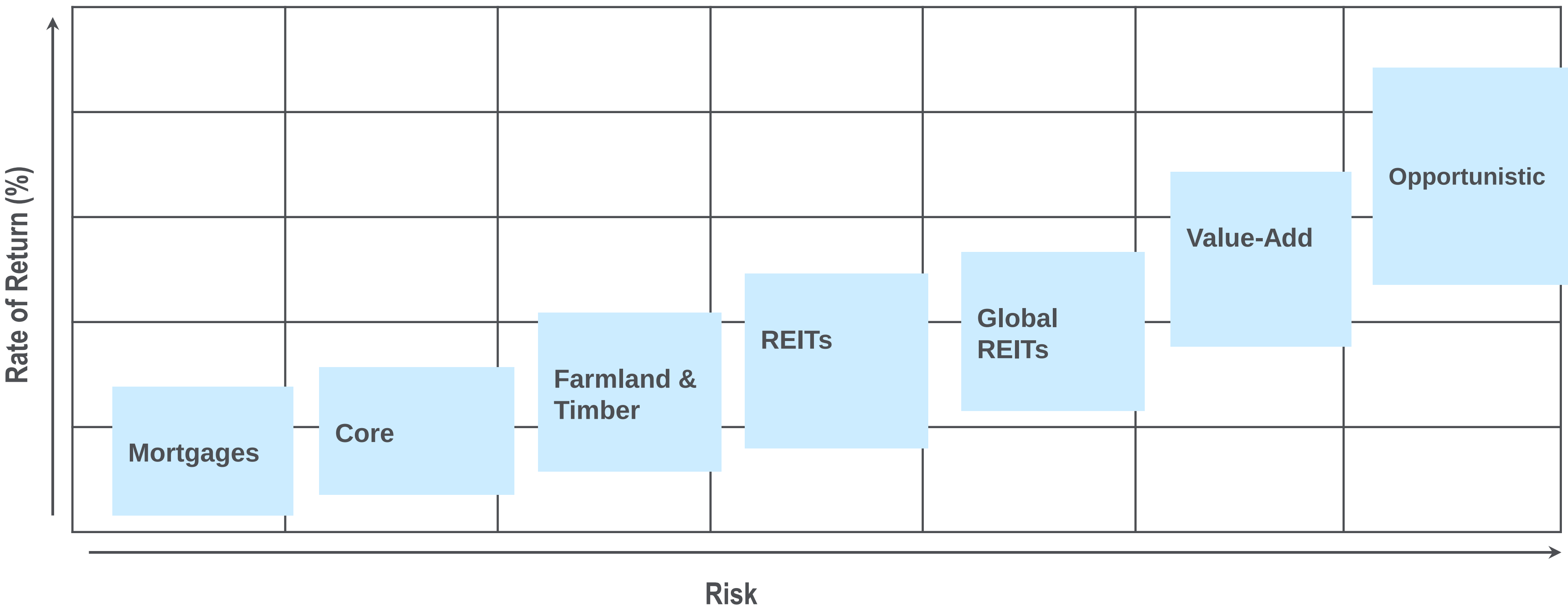
- The term Real Estate commonly refers to various investments in **income producing commercial properties**
- Institutional quality real estate refers to the subset of higher quality properties in medium to large markets, and largely focuses on the following property types:

Office	**Retail**	**Apartment** (Rental multi-family)	**Industrial**
Follows economic cycle and is correlated with job growth	Tied to consumer spending and sentiment	Moves in line with economic growth and household expansion	Follows health of local and global trade patterns
Low-rise, mid-rise, or high-rise, "trophy" assets, suburban vs CBD (Central Business District), infill, Green, etc.	Grocery-anchored shopping centers, "big box" retail centers, and regional malls	Categorized by style: garden, mid-rise, and high-rise	Comprised of sub-types such as Flex (blend of office and work space), R&D (Research and Development), manufacturing, and bulk distribution centers or warehouses

- *Niche* properties can also be found in institutional portfolios
  - Hotels, senior housing, student housing, self storage, medical office, land
  - Timber, Farmland

Real Estate Risk/Return Spectrum

- The full risk/return spectrum for real estate and tangential real estate sub-asset classes is meant as a reference guide in helping to optimize portfolio allocations



Infrastructure

What is Infrastructure?

- **Long-life, hard assets serving the backbone of the provision of services in the global ecosystem**
- **Examples are electricity networks, airports, seaports, roads and rail**
- **Why is infrastructure attractive:**
  1. Lower risk Assets
     - Essential services;
     - Strong market position with high barriers to entry;
     - Sustainable, long term cash flows, underpinned by regulation or long-term contracts;
  2. Potential for inflation-linked revenues;
  3. Low correlation to other asset classes;
  4. Long duration

AON Hewitt

Infrastructure – Definition and Types

- The term Infrastructure commonly refers to various investments in **income producing assets** that have the following characteristics:
  - Hard Assets
  - Long-Lived
  - serving the backbone of the provision of services
  - Secured by long-term contracts or with significant barriers to entry
  - Offering some correlation to inflation

Essential services

- Daily usage, high volume
- Large customer base – households, businesses, passengers, drivers
- Low risk of technological obsolescence
- Community focus

High barriers to entry

- Long life, high value physical assets
- Significant capital requirements for competitor development
- Long term contracts/ concessions
- Often a natural monopoly
- Planning and approval requirements

Predictable cashflows

- Concession arrangements
- Long term contracts
- Captive market
- Pricing power, inelastic demand
- Generally low on-going capex
- Low operating costs
- Prices and revenues often set by regulation

Inflation linkage / Correlation

- Cash flows typically exhibit strong inflation linked due to regulation or contracts
- Low correlation to other asset classes

Sector of Infrastructure


Transportation

- Toll roads
- Bridges
- Tunnels
- Airports
- Ports
- Rail and mass transit networks


Energy and Utilities

- Oil and gas pipelines
- Regulated electricity assets
- Transmission and distribution assets
- Water distribution and treatment
- Renewables

Social infrastructure

- Education facilities
- Healthcare facilities
- Courts, police stations and prisons

Communications

- Cable networks
- Communication towers
- Select satellite systems

Benefits

- In portfolio management, there is *one free lunch*, DIVERSIFICATION. It allows a plan to lower the its risk and move towards the efficient frontier
- Infrastructure behaves differently than stock, bond or real estate
  - Infrastructure returns are driven by factors different from those that drive stocks and bonds, such as demographic trends, government payments or regulated returns
  - Private equity Infrastructure returns tend to move in different directions at different times as compared to stock or bond returns

– The benefits of adding Infrastructure to a mixed asset portfolio include:

Diversification	**High income yield**	**Potential for inflation protection**	**Attractive risk-adjusted return**
Due to low correlation with other asset classes	Due to strong, predictable cash flow from core operating assets	From both expected and unexpected inflation	Potential for portfolio alpha when used opportunistically

Investment Strategies

Broad array of infrastructure investment strategies