STRATEGIC VS TRADITIONAL ASSET CLASS DISCUSSION

EBMUD Employees' Retirement System

May 2017

PCA PENSION CONSULTING ALLIANCE

Strategic Class Framework

Global investment markets have become more volatile over the last 20 years, causing plan sponsors to focus on better understanding and managing risk.

Pre-2008

- Institutional investors had largely been ***Relative Return*** investors
- Managed portfolios to outperform a policy benchmark
- Individual asset classes and investment managers are evaluated on relative return criteria (return vs. market proxy benchmark)

Post-2008

- More complex, interrelated global markets, higher exposure to major market moves
- Understanding that ≈ 90% of portfolio's return is driven by the policy portfolio
- Recognize that macro risks drive a policy portfolio's returns – ***Absolute Return*** oriented
- Result: Seeking to diversify by sources of risk, rather than asset allocation

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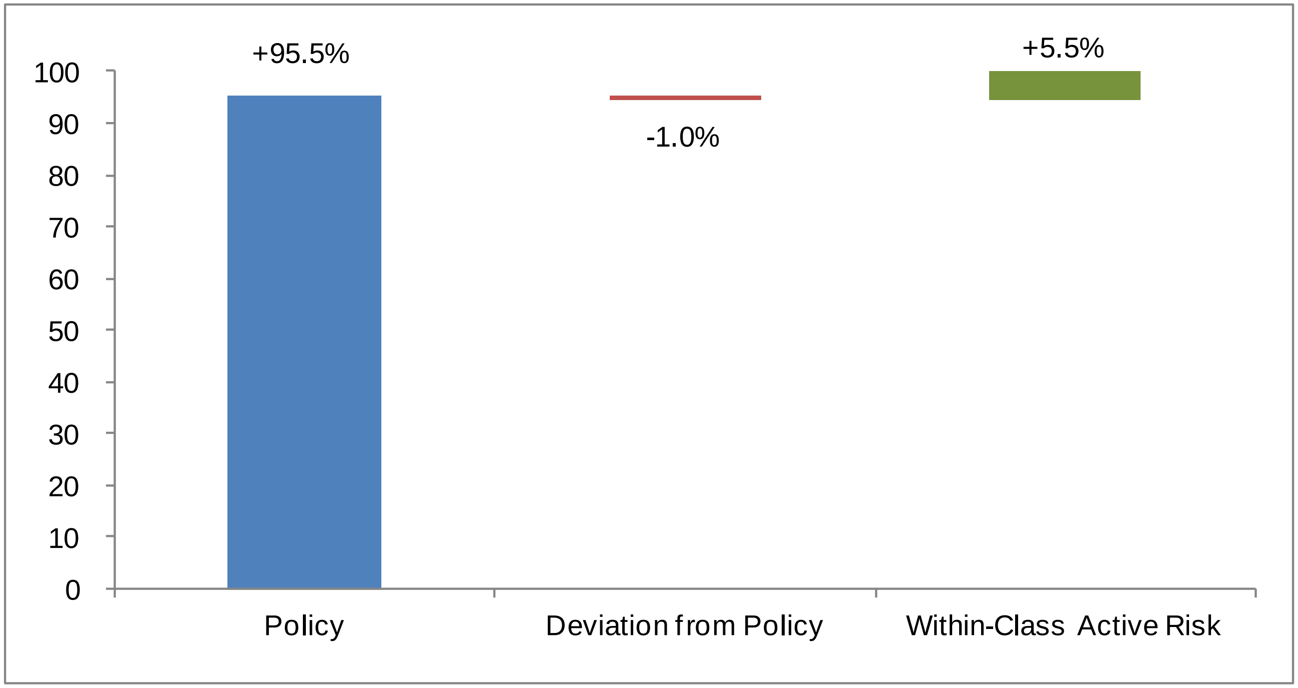
Strategic Class Framework

Policy risk drives overall portfolio risk

Typical Plan Risk Contribution



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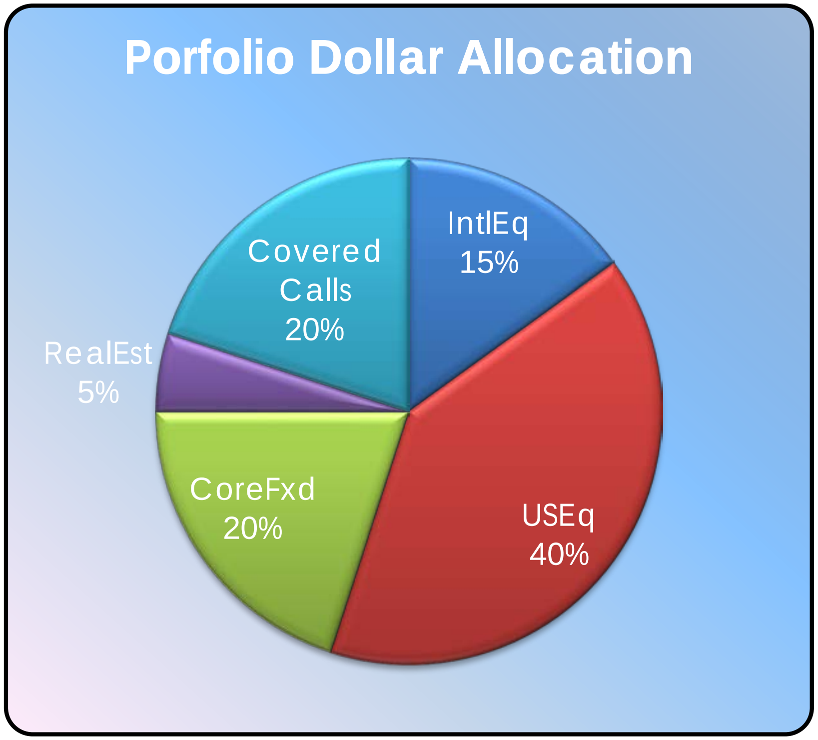
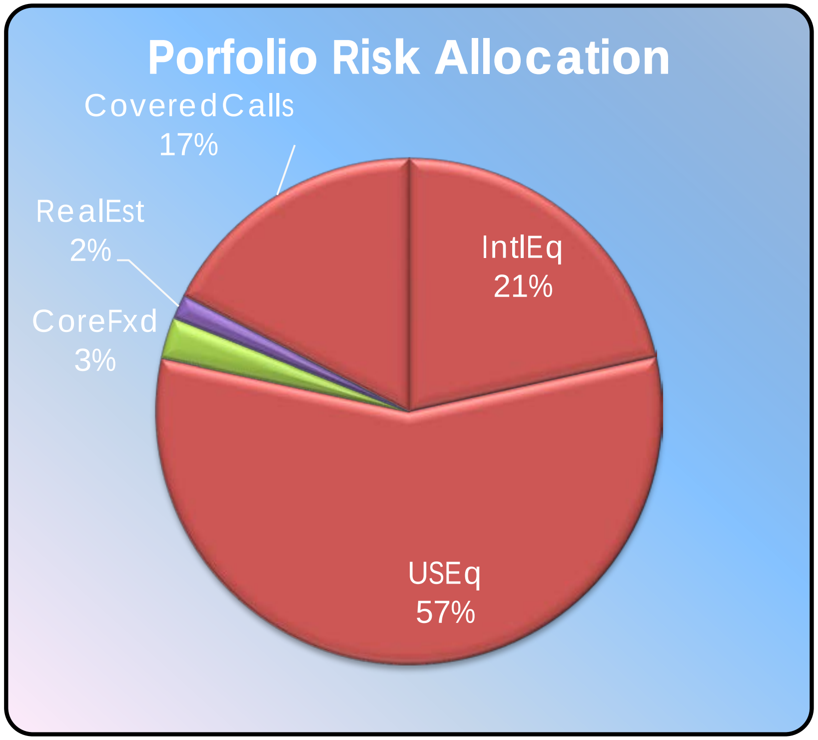
Strategic Class Framework

Despite a balanced Asset Allocation EBMUDERS' risk allocation is overwhelmingly (~95%) allocated towards Growth





- Similar to most plan sponsors, despite having numerous asset classes and thousands of securities, EBMUDERS' portfolio lacks diversification as roughly 95% of the portfolio is geared towards one risk factor: growth risk

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Strategic Class Framework

Absolute return orientation leads to a Strategic class (risk/objective) orientation versus Traditional asset orientation

- Portfolios are organized around certain risk/objectives
- Recognizing the need for an *absolute return* orientation lends itself to a more risk-centric management process
  - Focus on total risk rather than relative risk
  - Seek to diversify by risk rather than necessarily by asset
  - Regardless of varying asset allocations, most plan sponsors' portfolios are currently dominated by one risk; Economic Growth Risk
- **Primary Goal:** Improved transparency into the broad risk exposures
  - Better insight into the portfolio's likely response(s) to major macro events
  - Incorporate increased complexity into the portfolio

Strategic Class Framework

- Instead of “asset classes” consider “risk classes” or “risk bundles” or “strategic classes”
- Under such a framework shift, the investor considers organizing a portfolio to meet certain risk management criteria or portfolio objectives
- Many plan sponsors are adapting the new framework incrementally; carving out portions of the portfolio not tied to a specific asset class
- Policies and guidelines become less holdings-based or benchmark-centric and more absolute return/total risk-oriented
- A Strategic allocation framework implicitly recognizes the fact that all sub-asset classes within a larger asset class do not all respond to the same economic forces
    - This became abundantly clear during the 2008 financial crisis

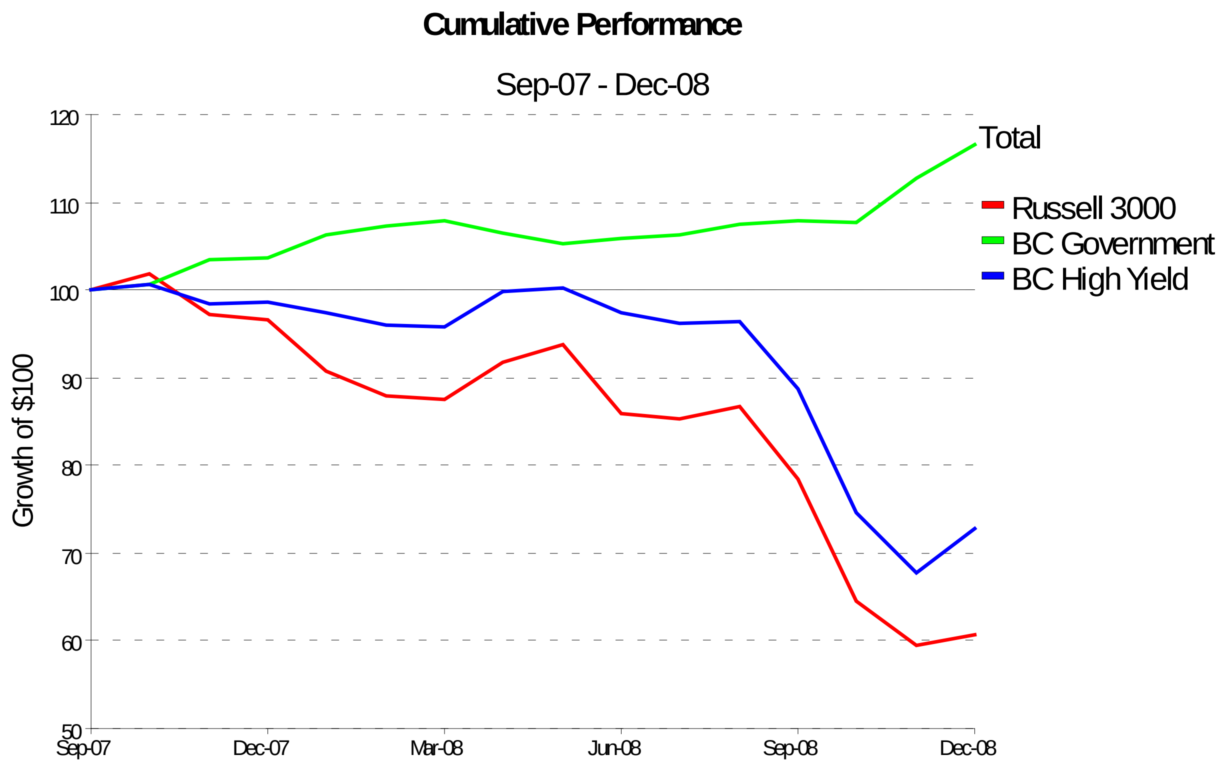
Strategic Class Framework

- The fixed income asset class is a hallmark example of the shortcomings of traditional asset allocation and the relative strength of a Strategic class methodology
- Fixed income as an asset class encompasses a wide range of security types and borrower characteristics (any security that represents a loan to another entity)
- Because of this, different fixed income segments of the market performed strikingly differently during the financial crisis
- Securities backed by the full faith and credit of the government benefit from their prices being bid up in a flight to safety while at the same time securities backed by questionable assets/companies fell dramatically
- This led to a striking dichotomy in investor's returns dependant on what they actually owned within their fixed income portfolios
- For many plan sponsors their fixed income allocation did not "act" the way the expected/ modeled when determining their policy portfolios

Strategic Class Framework

- Which segment of the fixed income universe an investor was allocated to had an enormous impact on their performance during the financial crisis

- Many higher risk segments of the fixed income universe behaved much more like equities than government backed securities



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Strategic Class Framework

- Using a Strategic allocation framework improves the transparency of the overall allocation process allowing for better insight into the portfolio's likely response(s) to major macro events

- Instead of grouping assets purely on what type of security they are (traditional asset classes) a Strategic allocation framework groups assets based on the underlying economic drivers of the securities

- For example, many segments of the fixed income universe respond much more to factors that influence the performance of equites (GDP growth, business cycle) than they do to factors that influence the performance of government-backed fixed income securities (interest rate level and movement, changes in yield curve)

- As such, a Strategic framework groups assets by the economic factors that drive their risk/return profiles
  - For example, high yield debt, bank loans, opportunistic real estate would fall under the same umbrella as global equities because their returns and risk are driven by similar factors: Growth

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Strategic Class Framework

- Conceptually, a portfolio can be organized by investment objective and risk tolerance with asset classes and segments becoming “feeders”

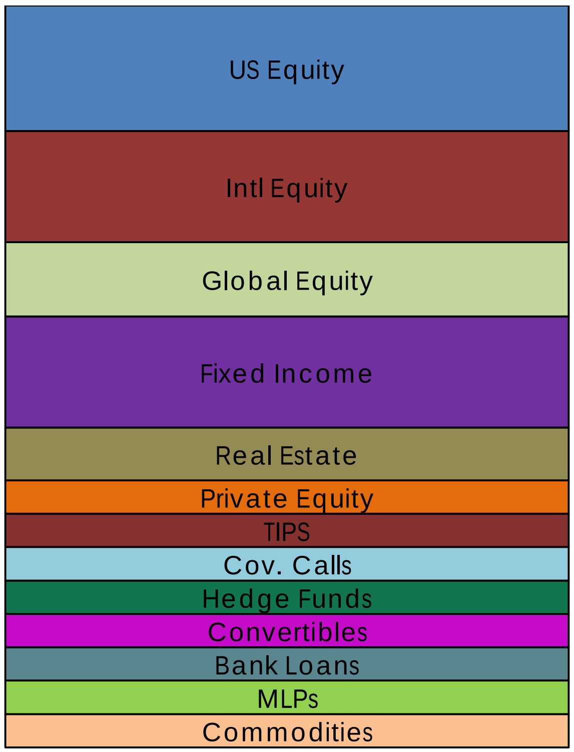
Growth Oriented	• Focused on equity oriented strategies. • Strategies’ returns driven by global economic growth. • For example, high yield debt and opportunistic real estate.
Inflation Oriented	• Broad collection of asset classes: TIPS, infrastructure, commodity-oriented, timber, core real estate, and absolute return. • Strategies designed to return positively under inflation pressures.
Protection Oriented	• Fixed income and fixed income substitutes, but also protection against market event risk. • Low volatility and stable total return strategies. • Long duration Treasuries may stabilize the asset class and protect against event risk.

- Such a structure is expected to be more complex, but also more flexible
- Many plan sponsors are beginning to move in this direction structuring functional classes and reorganizing assets under these functional definitions

Strategic Class Framework

FRAMEWORK COMPARISON

Traditional Asset Class Framework



or

Strategic Framework

- A Strategic framework allows for a more streamlined portfolio structure at the risk level

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Strategic Class Framework

A number of large Plan Sponsors have transitioned to a Strategic class structure

CALPERS STRATEGIC FRAMEWORK

Strategic Risk Classes	Supporting Asset Classes	Policy Target
Growth	Public Equities Private Equity	61%
Income	US Fixed Income International Fixed Income	20%
Real Assets	Real Estate Infrastructure Forestland	12%
Inflation Assets	Inflation-Linked Bonds Commodities	6%
Liquidity	Short-term high-quality fixed income securities	1%

Source: CalPERS Interim Strategic Targets. CalPERS.ca.gov

Strategic Class Framework

Conclusions

- Like most institutional portfolios, the EBMUDERS' portfolio is heavily allocated to growth risk
- Growth risk may show up where you don't expect it (think: fixed income)
- A strategic framework may clarify exposures and expectations, but... achieving a more risk-balanced portfolio may require portfolio restructuring, not tinkering
- Diversification only works well if the offsetting risks are IDENTIFIED & MEANINGFUL
- The benefit of a more risk-balanced investment approach is potentially a more risk-efficient portfolio (higher return per unit of risk borne)
- Strategic allocation framework is a paradigm, not a product. It is a trustee level decision, requiring some heavy lifting to get up the curve

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