Total Portfolio Approach and Transition Considerations

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Today’s Discussion

I. Current State

II. Steps Toward a Total Portfolio Approach (TPA)

III. Managing the Change

Current State

Asset Liability Management (ALM) cycle

- 4-Year ALM cycle
- Adoption of actuarial assumptions
- Adoption of a candidate SAA with investment rate of return and discount rate
- Mid-cycle reviews to review and update assumptions

Status Quo Challenges

- Uncertainty and risk due to lack of Board-adopted risk appetite
- Accountability for complexity in policies and operations
- Investments driven by asset class benchmarks
- Assumptions underlying fixed SAA can quickly become out of date

What TPA Offers Compared to SAA

TPA represents an evolution in institutional investment management, enhancing the traditional SAA approach

- Generally improved performance, simplicity and transparency
- Fosters greater management accountability for decisions

Feature	Current SAA	TPA
Board Risk Appetite	Not explicitly defined	Central Role
Diversification by	Asset Classes	Investment Risk Factors
Performance	Asset Class Benchmarks	Total Fund Performance
Active Risk	Asset Class Managed	Total Fund Managed
Opportunity Set	Asset Classes	Contribution to Total Fund
Culture	Siloed, Fragmented	Common Purpose & Collaborative
Governance Mechanism	Target Allocations	Total Portfolio Risk

A Different Governance Model

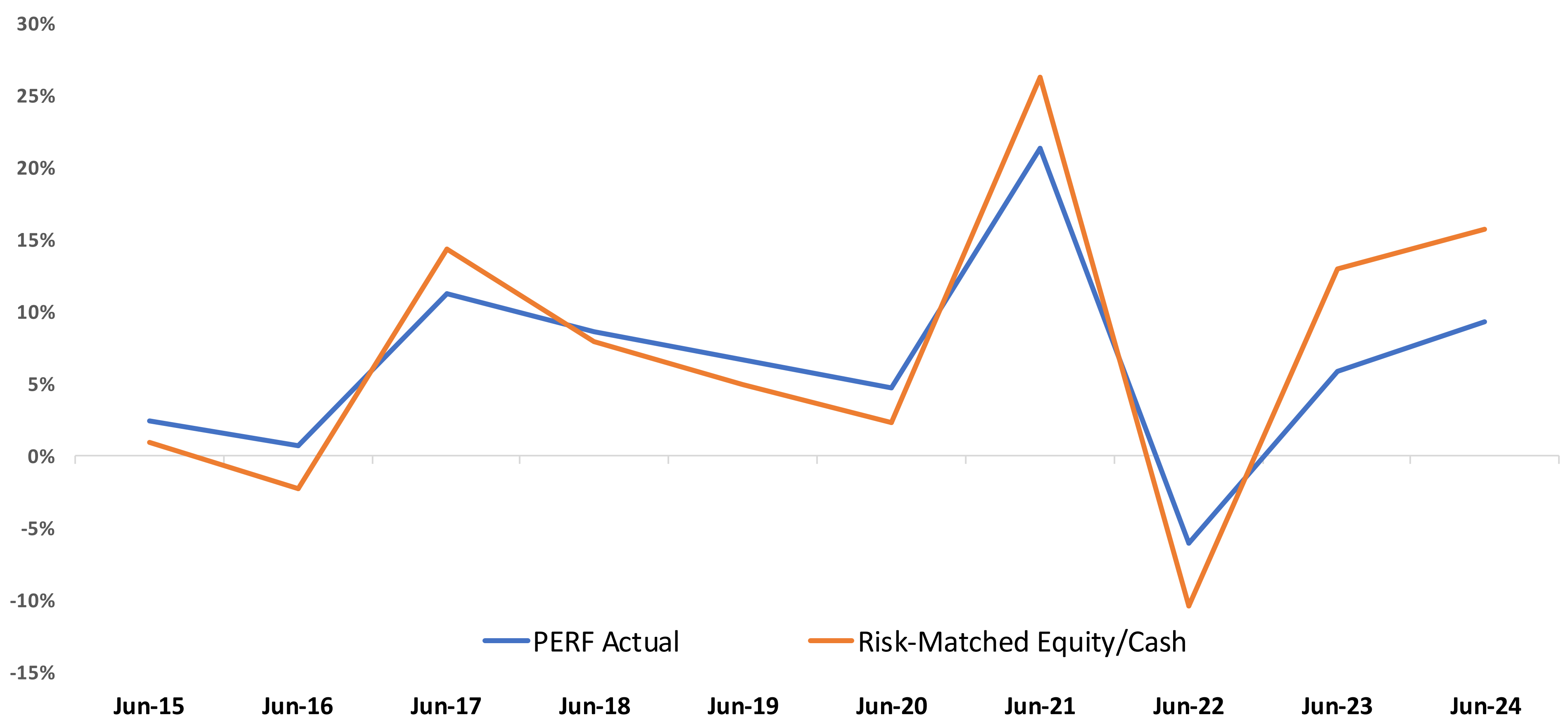
Board Adopted Risk Appetite that Guides the Investment Decisions

Simple Accountability of Complexity and Cost

- Board adopted Reference Portfolio as the benchmark is low cost and low complexity
- Complexity and associated costs shift to active portfolio

Reference portfolio (beta) and active risk limit are an implementation of the Board's risk appetite

Equity Beta Explains Much of PERF’s Past Performance



Historic data from January 1, 2000, to November 29, 2024
MSCI ACWI Gross Return and cash (BBG ticker = LD12TRUU)

Active Decisions

Management's active decisions create the difference between the benchmark portfolio and actual portfolio

Active Risk is the risk associated with management's active decisions

An active decision to invest in a new asset requires selling a (beta) risk-equivalent amount of current assets to remain within the Board's adopted risk level

Demonstrating Active Decisions

$500 billion Portfolio → Reference Portfolio 70/30 Equity-Cash → $350 billion in Equity
$150 billion in Cash

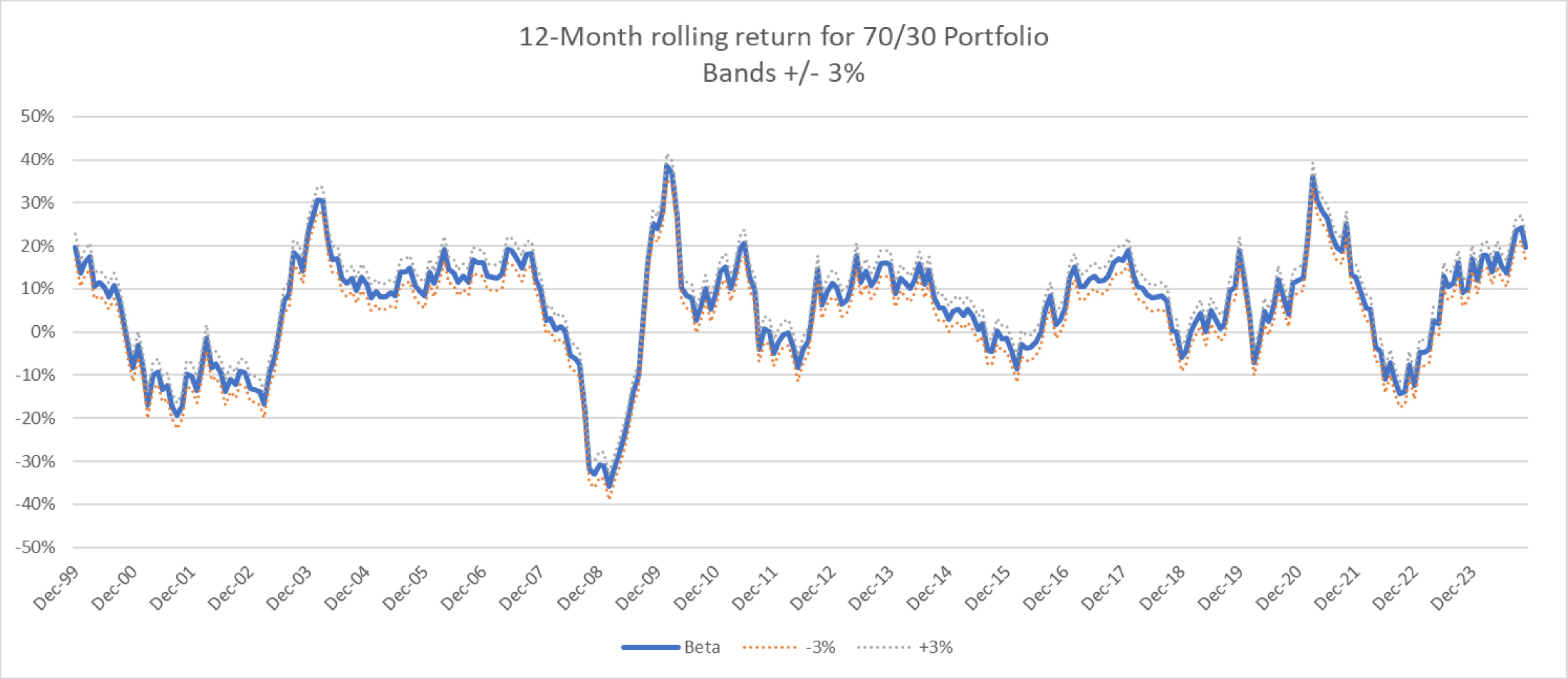
To Buy $5 billion in Infrastructure → If Infrastructure had Equity Beta of 0.6 → Funding the Purchase Requires Selling:
$3 billion in Equity
$2 billion Cash

New $500 billion Portfolio
$347 billion Equity, $148 billion Cash, $5 billion infrastructure

Added active risk, added some illiquidity, the equity risk remains unchanged, and performance is measured against the reference portfolio

Total Portfolio Risk

Total portfolio risk is active risk plus beta risk - but dominated by beta risk



ACWI Net Total Return and cash (LD12).

Accountability of Managing Risk

Fiduciary Accountability

Board's role is to set the system's risk and management's active risk limit

Management Accountability

INVO's role is to manage the system within the Board's risk limit while maximizing returns

- Management decisions must be transparent
- For a given portfolio, excess returns and active risk depend on the benchmark
- Current Board adopted policy portfolio embeds complexity and risk and further limits management use of discretion
- With a simple portfolio as the benchmark, all the private assets and segment decisions are in the active portfolio with management accountability

Two Paths of Active Benchmarking

Total Portfolio

Asset Class	%
Public Equities	43%
Private Equities	16%
Fixed Income Credit	25%
Treasuries	5%
Private Debt	3%
Real Assets	13%
Cash	-5%

SAA
(Current)

SAA Policy Portfolio

Asset Class	%
Public Equities	36%
Private Equities	17%
Fixed Income Credit	24%
Treasuries	5%
Private Debt	8%
Real Assets	15%
Cash	-5%

Active Relative to Policy Portfolio

Asset Class	%
Public Equities	7%
Private Equities	-1%
Fixed Income Credit	1%
Treasuries	0
Private Debt	-5%
Real Assets	-2%
Cash	0

TPA

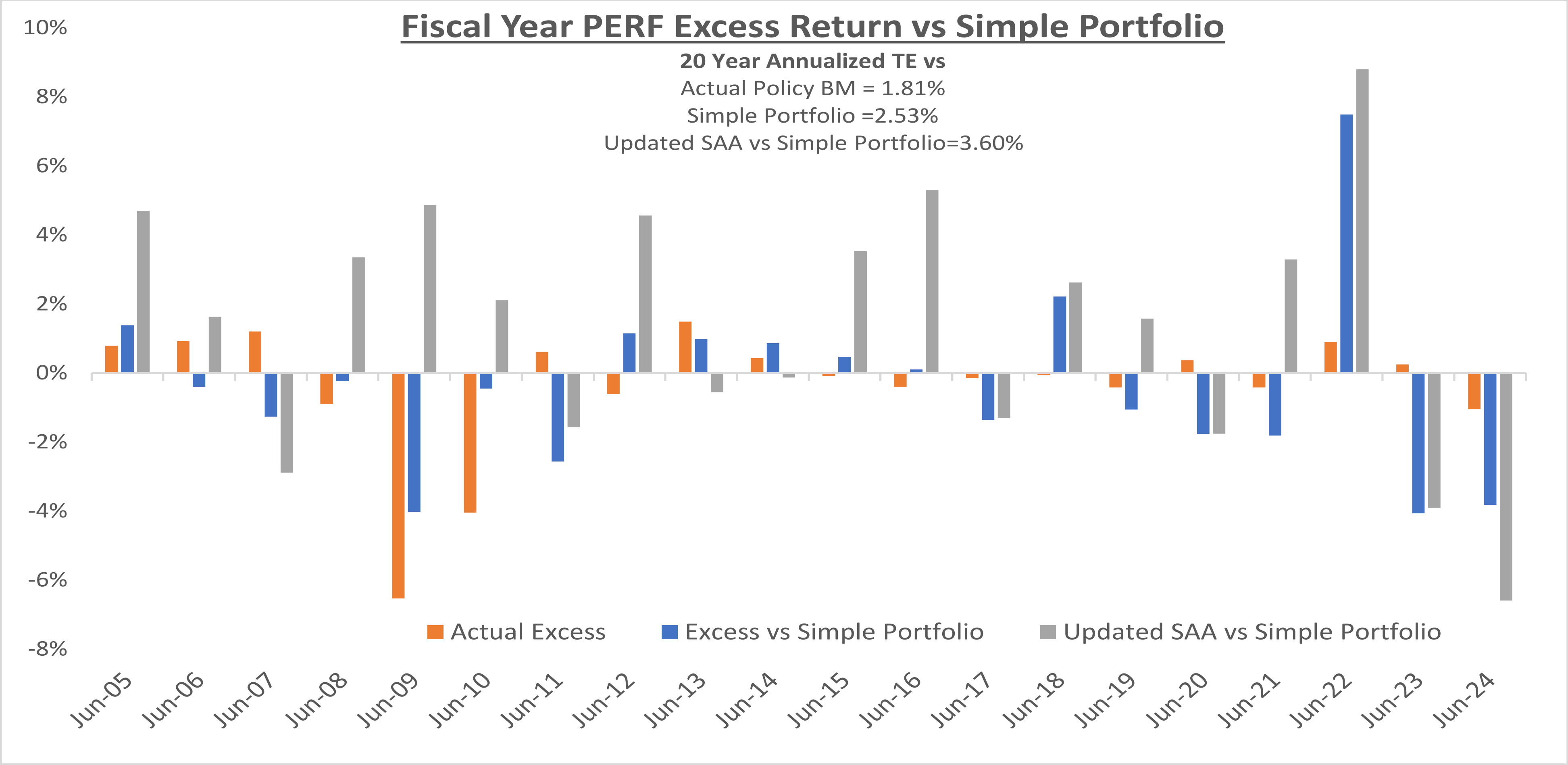
TPA 70/30 Reference

Asset Class	%
Public Equities	70%
Private Equities	0
Fixed Income Credit	0
Treasuries	0
Private Debt	0
Real Assets	0
Cash	30%

Active Relative to Reference Portfolio

Asset Class	%
Public Equities	-27%
Private Equities	16%
Fixed Income Credit	25%
Treasuries	5%
Private Debt	3%
Real Assets	13%
Cash	-35%

Performance Transparency



Calculation Details

1 – Annual PERF Return minus Official PERF Policy Benchmark
2 – Annual PERF Return minus Simple Portfolio (ACWI and Treasury BMs)
3 – Updated PERF Return based on the new SAA weights minus Simple Portfolio (ACWI and Treasury BMs)
TE = based on the annualized standard deviation of the fiscal year excess returns (as described above)

Managing the Change

With planning, communication, and engagement, we will:

- Reinforce our common purpose – Fiduciary duty and maximizing returns consistent with our risk appetite
- Ingrain a common language to our work
- Elevate transparency into the portfolio
- Enhance management accountability

A coordinated effort utilizing a change management framework, supported by dedicated leadership and team resources, to implement and sustain the change.

Path Forward

Framework Considerations	Focus Areas	Implementation Mechanisms
• Increase sense of urgency • Develop a vision/strategy • Communicate the vision	**Common Purpose**: Reinforce our shared commitment to fiduciary duty and maximizing returns consistent with our risk appetite	• Board meetings • Executive Leadership meetings • CIO Town Halls • Stakeholder engagement • Strategic initiatives and annual business planning
• Remove obstacles • Generate short-term wins	**Unified Language**: Consistent framework for discussing risk and returns **Standard methodology:** Hurdle rates; investment screen/underwriting	• CIO Committees • Standardized investment processes and frameworks • Total Fund Investment Policy
• Sustain acceleration	**Operational Model:** Review resources, technology & data, and incentive alignment necessary to drive long-term change	• Enterprise partnership with HRSD, ITSB • CIO Committees
• Anchor change in culture	**Risk focus**: Thinking more in terms of risk deployed vs. capital deployed **Accountability:** Regularly assess whether we've done a good job of choosing areas to invest in and the investments within	• Annual planning and quarterly reviews to evaluate risk deployment • Competition for capital across the portfolio • Enhanced Board reporting