Board of Trustees

Special Meeting

October 30, 2023

Table of Contents

APFC ALASKA PERMANENT FUND CORPORATION
801 W 10TH SUITE 302 | JUNEAU, AK 99801
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SPECIAL MEETING OF THE BOARD OF TRUSTEES

Monday, October 30, 2023
10:30 a.m. – 4:30 p.m.

Michael J. Burns Building
David Rose Board Room
(3rd Floor)
801 W 10th Street, Juneau, AK 99801

Please sign-up for public testimony by emailing jloesch@apfc.org by noon October 27

Webinar Access:
https://apfc.org/bot-special-meeting

Event Password: APFCMtg

Teleconference Option

Phone: 415-655-0003
Access Code: 2630 570 5754
Numeric Password: 2732684

AGENDA

MONDAY, OCTOBER 30, 2023

10:30 a.m. CALL TO ORDER

ROLL CALL (Action)

APPROVAL OF AGENDA (Action)

SCHEDULED APPEARANCES AND PUBLIC PARTICIPATION

10:35 a.m. INTRODUCTION TO STRATEGIC PLAN (Information)
Kevin Dee, President, KMD SERVICES & CONSULTING llc
Deven Mitchell, Chief Executive Officer (CEO)

11:00 a.m. INCREASE AUM TO $100 BILLION (Action)

- Achieve Increased Return Above CPI+ 5%
- Consideration of Leverage
- Asset Allocation Adjustments
- Execution Within Private Markets

Marcus Frampton, Chief Investment Officer
Allen Waldrop, Director of Investments, Private Equity
Sebastian Vadakumcherry, Chief Risk and Compliance Officer

12:30 p.m. LUNCH

1:00 p.m. IMPROVE CORPORATE FUNCTIONALITY (Action)

- Open Meetings Act
- Procurement
- Fund Level Leverage
- Personnel Records
- Budget Flexibility

Deven Mitchell, CEO
Chris Poag, General Counsel
Paulyn Swanson, Director of Communications

2:00 p.m. ESTABLISH LONG TERM ORGANIZATIONAL STRUCTURE PLAN TO ACCOMMODATE GROWTH (Action)

- Key Person Risk/Additional Incentive Compensation Structures
- Outside Offices

Marcus Frampton, CIO
Deven Mitchell, CEO

2:30 p.m. BREAK

2:45 p.m. COMPREHENSIVE COMMUNICATIONS PLAN (Action)
Paulyn Swanson, Director of Communications

3:15 p.m. REVIEW AND ASSESS OPTIMAL STRUCTURE OF FUND (Information)

- Trustee Paper #10

Deven Mitchell, CEO
Trustee Craig Richards

3:45 p.m. ADOPT STRATEGIC PLAN (Action)
Trustees

4:00 p.m. OTHER MATTERS / FUTURE AGENDA ITEMS / TRUSTEE COMMENTS
2024 and 2025 Calendar – Select Meeting Locations
Trustee Committee Assignments

4:30 p.m. ADJOURNMENT

NOTE: TIMES MAY VARY AND THE CHAIR MAY REORDER AGENDA ITEMS
(Please telephone Jennifer Loesch at 907-796-1519 with agenda questions)

APFC ALASKA PERMANENT FUND CORPORATION
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SUBJECT: Introduction of the Strategic Plan

ACTION:

DATE: October 30, 2023

INFORMATION: X

BACKGROUND:

At the July 12, 2023 board meeting staff were directed to begin the process of drafting a revised strategic plan. In support of this effort Kevin Dee was selected as the strategic plan consultant in August. Staff, board volunteers, and Mr. Dee met regularly to identify, refine, and build out the following strategic goals presented to the entire board. A summary of that development of the Board Strategic Goals will be provided to the entire Board.

RECOMMENDATION:

Trustees will provide their feedback on the goals that have been identified and either adopt as written or request modifications for a final plan to be distributed at the December quarterly meeting.

SUBJECT: Total Fund Return Objective ACTION: X

DATE: October 25, 2023 INFORMATION:

Background

APFC's Investment Policy Statement currently mandates a CPI + 5% long-term return objective. This CPI + 5% mandate is a key input into the investment strategies implemented by Staff. The asset allocation of the Fund is the most notable feature of the portfolio impacted by return objective, but other considerations such as use of leverage may result from changes to return objective. Any institutional investor needs to consider the return objective of their fund and carefully trade off the risks and benefits of higher or lower return objectives. Generally, a higher return objective would result in adopting an asset allocation with more public and private equity, potential adoption of tools such as fund-level leverage, and higher tracking error tolerance in the pursuit of benchmark outperformance. Conversely, lower return objectives allow for more allocation to lower risk, more stable asset classes like fixed income, cash and absolute return; allow for more conservative use of leverage in the portfolio and/or at the fund level; and rely less on benchmark outperformance.

In a base case scenario, an increased return objective could be expected to result in changes to portfolio strategy that result in higher fund growth and earlier projected achievement of milestones such as achievement of a $100 billion fund value. In adverse scenarios, such as an equity bear market, a higher return objective would result in more pronounced drawdowns in fund value. A higher return objective would essentially increase the range of outcomes for fund values (and resultant POMV distributions to the Fund's stakeholders) while a lower return objective allows for more stability in POMV and fund value.

A significant portion of discussions in the strategic plan working group to-date have centered around the potential to achieve the milestone of $100 billion fund value in a shorter time frame than forecasted today. Callan Associates currently forecasts APFC's portfolio to achieve a 7.2% nominal rate of return. At this rate, we forecast that the Fund will achieve the $100 billion milestone in 2032 (~9 years). Should the Board of Trustees establish a higher return objective of 9.3% nominal (CPI + 6.8%) we forecast that $100 billion Fund value would be achieved by FYE 2028 (~5 years). ***It is important to note that these are base case forecasts based on Callan Associates capital market forecasts and actual results could differ substantially from these scenarios.***

The following table outlines the date at which a $100 billion fund value would be achieved at different rates-of-return. (Note: all analyses done herein are as of July 1, 2023)

Nominal Return	Fiscal year $100 b is reached	Value
7.50%	2031	$101,054
7.75%	2031	$103,145
8.00%	2030	$101,383
8.25%	2030	$103,198
8.50%	2029	$100,626
8.75%	2029	$102,151
9.00%	2029	$103,695
9.25%	2028	$100,028
9.50%	2028	$101,269

Levers to Achieve Higher Fund Expected Returns

Should the Trustees direct Staff to manage the portfolio to a higher return objective than CPI + 5%, the following three tools have been studied in the strategic plan working group to achieve these higher targets. Staff would use various mixes of these three levers in varying magnitudes based, to a large degree, on how large a change from CPI + 5% the new return objective is.

- **Asset Allocation:** Based on the latest Callan capital markets forecasts (January 2023) each 1% shift from Fixed Income to Private Equity is associated with a ~4 bps increase in total fund expected return (~40 bps increase for 10% asset allocation shift)
- **Fund Level Leverage:** Staff estimates that introducing ~25% fund level leverage at market interest rates prevailing today increases total fund expected return by ~75 bps
- **Alpha / Outperformance:** at fiscal year end June 30, 2023 APFC beat its performance benchmark by 44 bps over the trailing five years

It is important to note that increasing expected returns through both changes to Asset Allocation and introducing Fund Level Leverage magnify financial outcomes both positively (in strong market conditions) and negatively (in adverse market conditions). APFC's Chief Investment Officer will present on how the mixes of the levers above could be used to achieve higher expected returns in base case scenarios.

Private Equity Strategy Review

While APFC has been successful historically in the third lever (Alpha/Outperformance) much of the discussion in the strategic plan working group revolved around strategies to maximize return in the private equity asset class in furtherance of the aim of maximizing alpha. In particular, Staff believes that over time we can improve upon already strong private equity returns achieved by APFC by (i) increasing the percentage of capital deployed via co-investments and direct investments, (ii) over time executing more investments fully internally or through project-based consultants vs. asset-based fee consultants, and (iii) a variety of other complementary tactics. APFC's Director of Private Equity will present on the go-forward strategy for the private equity strategy. This strategy will be implemented regardless of changes to fund return objective, however, the scale at which we pursue initiatives such as increased co-investment and direct investment activity will vary based on return objective changes.

Risk Implications

It is important for APFC's stakeholders to understand the risk implications of any changes to return objective and asset allocation. APFC's Chief Risk Officer will present on this topic with a particular focus on analyzing fund-level leverage considerations.

Action

Should APFC's Board of Trustees amend the Fund's Investment Policy Statement to specify a different return objective than CPI + 5%? If so, what should the new return objective be.

ALASKA PERMANENT FUND CORPORATION

Strategic Plan – Increase Fund to $100 billion

October 30, 2023

Executive Summary

- A significant portion of discussions around Strategic Plan to-date have gravitated toward an imperative to achieve $100 billion total Fund value.

- The following slides include quantification of required rates-of-return to achieve this milestone over various time periods.

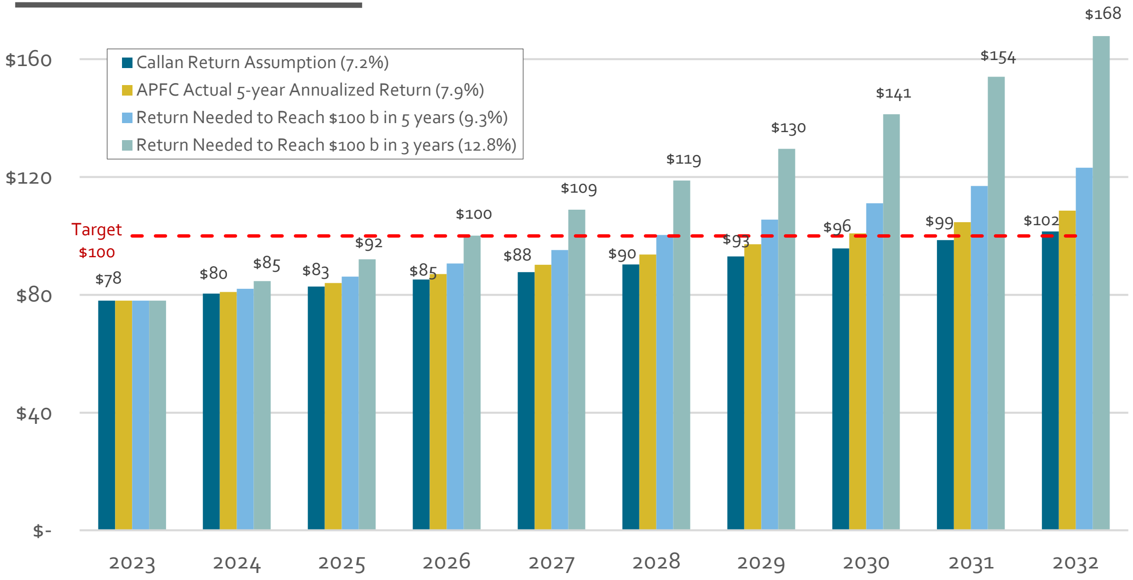
- If APFC's Board of Trustees elects to pursue a different return objective than the historical CPI + 5% return objective, then Staff would stand ready to construct as efficient a portfolio as possible geared towards the new return objective.

- Return objectives in excess off the historical CPI + 5% return objective would likely require some combination of the following three levers: (i) asset allocation shifts towards higher return / higher risk investment areas, (ii) fund-level leverage, and (iii) investment Staff outperformance of benchmarks (alpha).

- Each lever carries its own risk for APFC; these risks, taken together, result in a wider band of outcomes at higher return objectives than the band of possible outcomes at the current CPI + 5% target.

- Finally, we have included as an appendix the current strategy for APFC's Private equity asset class; Private Equity strategy was the subject of considerable discussion in the strategic plan working group and likely will be an important area for driving benchmark outperformance going forward.

Growing the Fund to $100 billion



- **9 years** (FYE 2032) needed to reach $100 billion at Callan's annual return assumption of **7.2%**.
- **7 years** (FYE 2030) needed to reach $100 billion at APFC's 5-year annual return of **7.9%**.
- To reach $100 billion NAV in **5 years** (FYE 2028), APFC would need an annual return of at least **9.3%**.
- To reach $100 billion NAV in **3 years** (FYE 2026), APFC would need an annual return of at least **12.8%**.

Key drivers and assumptions:

- Fiscal Year End 2023 Fund value is actual and used as a starting value in the model; 2024 and beyond are projections.
- POMV assumed to be drawn from the Fund using mid-year convention.
- Annual royalty deposits assumed to be added to the Fund at the end of each fiscal year.

Sources: APFC June 30 & August 31, 2023 History and Projections; APFC June 30, 2023 Monthly Performance Report

AUM Growth - Summary

- As demonstrated on the previous slide, achieving $100 billion of AUM by various dates can be linked to various fund rates-of-return
- Three drivers that Staff has identified to target higher rates-of-return and, therefore, early achievement of $100 billion include (i) asset allocation adjustments, (ii) fund-level leverage (beyond existing investment level leverage in the portfolio) and (iii) alpha or achievement of returns in excess of our benchmark
- **Asset Allocation** – based on the latest Callan capital market forecasts (January 2023) each 1% shift from Fixed Income to Private Equity is associated with a ~4 bps increase in the total Fund expected return (~40 bps increase for 10% asset allocation shift) (complete summary is shown on following page)
- **Fund Level Leverage** – Staff estimates that introducing ~25% fund level leverage at market interest rates prevailing today increases total Fund expected return by ~75 bps (complete summary is shown on following page)
- **Alpha / Outperformance** – at FYE June 30, 2023 APFC beat its performance benchmark by 44 bps over the trailing five years
- Fund in-flows and out-flows are clearly a driver of AUM growth as well; herein we have used the baseline POMV and royalty deposit data from History & Projections file; however, we recognize that policymakers could adjust both factors

Should APFC's Trustees elect to target a higher performance objective than the historical CPI + 5%, Staff would likely recommend using a mix of the three levers to achieve desired expected returns

AUM Growth – Asset Allocation

- The Fund's current asset allocation (FY '24) is based on a return target of CPI + 5%. The following table shows the marginal effect on total Fund expected return of shifting allocation from Fixed Income to Private Equity.

Asset Class	FY '24	CPI +5.1%	CPI +5.2%	CPI +5.3%	CPI +5.4%	CPI +5.5%	CPI +5.6%	CPI +5.7%	CPI +5.8%	CPI +5.9%	CPI +6.0%
Fixed Income	20%	15%	12%	11%	9%	7%	4%	2%	0%	0%	0%
Private Equity	16%	18%	21%	22%	24%	26%	29%	31%	34%	36%	39%
Real Estate	10%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%
Public Equities	34%	34%	34%	34%	34%	34%	34%	34%	34%	34%	34%
Private Income	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%
Absolute Return	7%	7%	7%	7%	7%	7%	7%	7%	6%	4%	1%
Tactical Opportunities	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Cash	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Total Fund Nominal	7.5%	7.6%	7.7%	7.8%	7.9%	8.0%	8.1%	8.2%	8.3%	8.4%	8.5%
Inflation (CPI-U)	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*
Total Fund Real	**5.0%**	**5.1%**	**5.2%**	**5.3%**	**5.4%**	**5.5%**	**5.6%**	**5.7%**	**5.8%**	**5.9%**	**6.0%**

- Based on the latest Callan capital market forecasts (January 2023), each 1% shift from Fixed Income to Private Equity is associated with a ~4 bps increase in the total fund expected return.

- In order to target a CPI + 6% return based on current capital market expectations, all of the Fixed Income allocation and the majority of the Absolute Return allocation would need to be shifted to Private Equity.
- It should be noted that 10-year yields are up 119 bps from January 1, 2023 (when Callan releases capital market expectations) to present (October 18, 2023). Therefor, one might conclude that expected returns might be marginally higher than shown here.

AUM Growth – Leverage

Total Fund Levered Return Sensitivity (1)

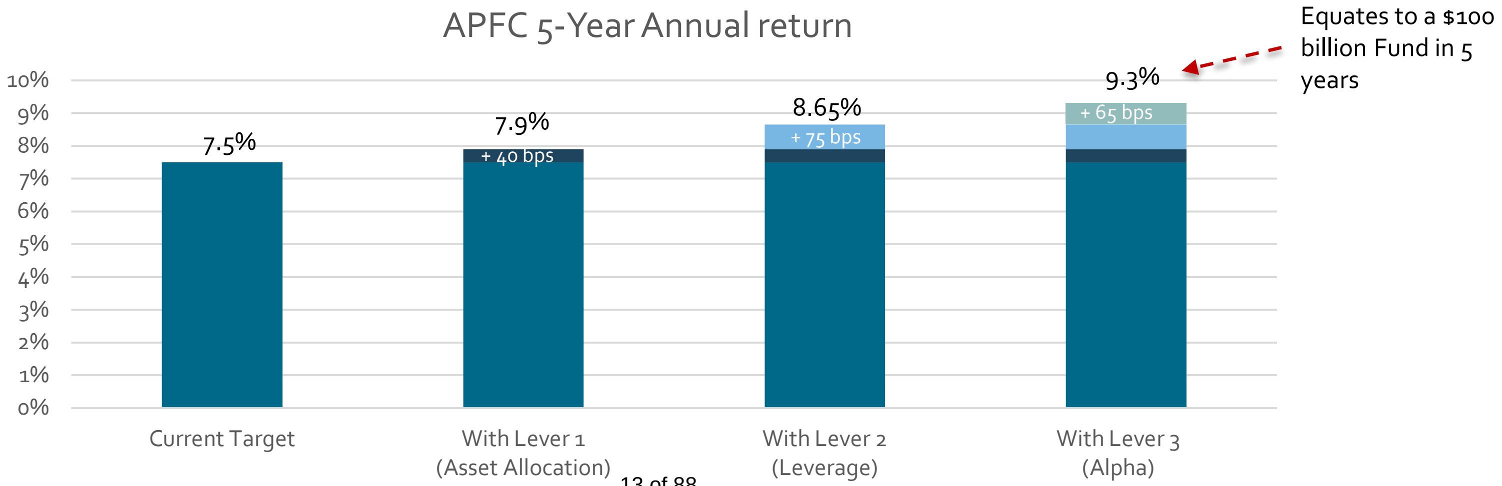
% Total Fund Leverage	Unlevered Return %										
	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
0%	0.00%	1.00%	2.00%	3.00%	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
10%	-0.63%	0.48%	1.59%	2.71%	3.82%	4.93%	6.04%	7.15%	8.26%	9.37%	10.48%
20%	-1.41%	-0.16%	1.09%	2.34%	3.59%	4.84%	6.09%	7.34%	8.59%	9.84%	11.09%
30%	-2.42%	-0.99%	0.44%	1.86%	3.29%	4.72%	6.15%	7.58%	9.01%	10.44%	11.86%
40%	-3.77%	-2.10%	-0.43%	1.23%	2.90%	4.57%	6.23%	7.90%	9.57%	11.23%	12.90%
50%	-5.65%	-3.65%	-1.65%	0.35%	2.35%	4.35%	6.35%	8.35%	10.35%	12.35%	14.35%
60%	-8.48%	-5.98%	-3.48%	-0.98%	1.53%	4.03%	6.53%	9.03%	11.53%	14.03%	16.53%
70%	-13.18%	-9.85%	-6.52%	-3.18%	0.15%	3.48%	6.82%	10.15%	13.48%	16.82%	20.15%
80%	-22.60%	-17.60%	-12.60%	-7.60%	-2.60%	2.40%	7.40%	12.40%	17.40%	22.40%	27.40%
90%	-50.85%	-40.85%	-30.85%	-20.85%	-10.85%	-0.85%	9.15%	19.15%	29.15%	39.15%	49.15%

Red = Levered return is less than unlevered return
Green = Levered return is greater than or equal to unlevered return

(1) Assumes a 5.65% cost of debt based on borrowing at ~100 bps spread to US 10-Year Treasury yield

AUM Growth – Levers to Achieve 9.3% (CPI +6.8%)

- **Lever 1:** Asset Allocation
  - An incremental 40 basis points is achieved by shifting half of the Fixed Income allocation to Private Equity
- **Lever 2:** Leverage
  - An incremental 75 basis points is achieved by using 25% Fund leverage
- **Lever 3:** Alpha
  - An incremental 40 – 70 basis points (65 bps assumed below) outperformance may be achieved from creating a high-performance driven investment office



AUM Growth - Risks Associated with the Levers

	Lever 1 Alpha	Lever 2 Leverage	Lever 3 Asset Allocation Adj.
Risks	• Ability to attract and retain high performers • Lack of long-term commitment by stakeholders to strategy and budgets • Disparity within organization in terms of culture, compensation, legacy processes • Increased operational risk (potentially dispersed operations in multiple locations)	• Increased volatility (expected loss) of returns • Increased liquidity risk • Structuring, managing and administering debt program and related operational risks • Increased legal risks (More analysis of risks pertaining specifically to Leverage is summarized in Appendix A)	• Increased volatility (expected loss) of returns: redefining risk appetite • Increased liquidity risk • Potentially lower benefits of diversification across asset classes • Potential adverse impacts of increasing scale in certain scale sensitive assets
Pre-Requisite	• Approval of strategy, budgets and operating model by all stakeholders	• Approval from relevant stakeholders on the ability to have structural leverage with recourse to the Fund • Update Investment Policy	• Revise BOT approved risk appetite, asset allocation and Investment Policy

A more detailed risk analysis relating to asset allocation changes and potential modification to Investment Policy will be provided to the Board at the next meeting in December 2023

Appendix A

Leverage

Leverage: introduction

- *Leverage has the potential to amplify returns, enhance diversification and improve efficiency.*
- *Leverage magnifies risks: greater volatility of returns (higher expected loss), increased liquidity risk and significantly more operational risks.*

- Leverage at the Fund level and with recourse to Fund is prohibited per investment policy and State regulation. However, some types of leverage, with recourse limited to specific assets/portfolios, are permitted and currently exists within certain asset class portfolios.
- Structurally, leverage may be viewed as of two types:
  - Recourse Leverage (recourse to Fund/APFC): *fund-level leverage*
  - Limited Recourse Leverage (non-recourse to Total Fund/APFC): *asset-class-level leverage*

Leverage: important to choose the appropriate tool(s)

Some mechanisms that can be used to generate leverage:

- **Medium/long term borrowing (e.g., issuance of debt):** build a debt issuance program aimed at sourcing long term financing
- **Repurchase agreements (Repo):** collateralized borrowing, mostly utilizing good quality fixed income securities
- **Other Secured borrowing**: borrowing by pledging other types of assets, either at the asset level or at the portfolio level, like real estate
- **Securities lending**: lending securities against cash receipts which potentially can be re-invested
- **Synthetic:** using futures, swaps and other derivatives to obtain synthetic exposure
- **Fund structures**: investments in fund structures which have inherent leverage, e.g., private equity, hedge funds, other

Recourse to Fund

Non-Recourse to Fund

(recourse limited to specific assets within Fund)

Leverage tools: currently within the fund

Limited Recourse Mechanisms	Current Usage
Repurchase agreements (Repo): collateralized borrowing, mostly utilizing good quality fixed income securities	▪ MRA in place, not active currently
Other secured borrowing: borrowing by pledging other types of assets, either at the asset level or at the portfolio level	✓ Real Estate, property level and via special structures
Securities lending: lending securities against cash receipts which potentially can be re-invested	✓ Public securities, primarily re-invested in cash
Synthetic: using futures, swaps and other derivatives to obtain synthetic exposure	✓ Mostly within public securities portfolios
Fund structures: investments in fund structures which have inherent leverage, e.g., private equity, hedge funds, other	✓ Alternative and private asset portfolios

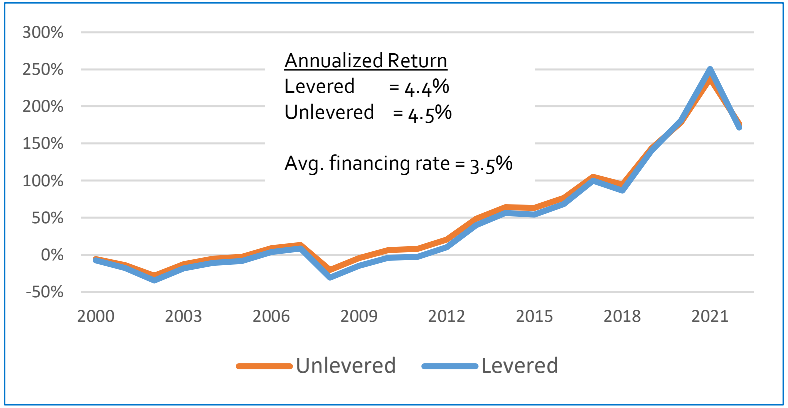
Leverage: magnifies existing risks and creates new risks

Higher Expected Loss	• Increase in financing costs • decline asset values • both
Liquidity Risk	• asset-liability mismatch • liability management experience /knowledge
Operational Risk	• managing and administering program • regulatory compliance • legal risks

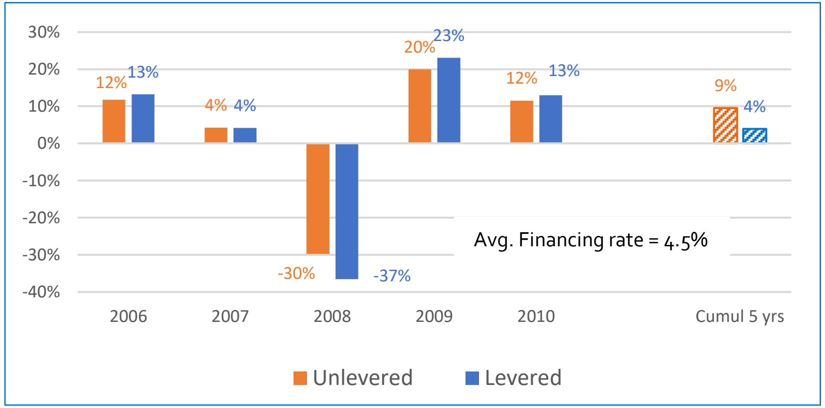
Leverage: increases return variability potentially undermining purpose

- A portfolio comprising 80% equities (S&P) and 20% bonds (US Agg) was back tested using actual S&P and US Agg returns
- The impact of leverage was analyzed by back testing the same portfolio with and without leverage
- The leverage level used was 20% (or 1.2X) – i.e., an additional 20% of initial NAV was borrowed and these additional funds were redeployed in the same 80%/20% proportion

Cumulative Returns of an 80/20 Equity/Bond Portfolio
23 years: 2000 to 2022



Annual and Cumulative Returns of an 80/20 Equity/Bond Portfolio
5 years: 2006 to 2010

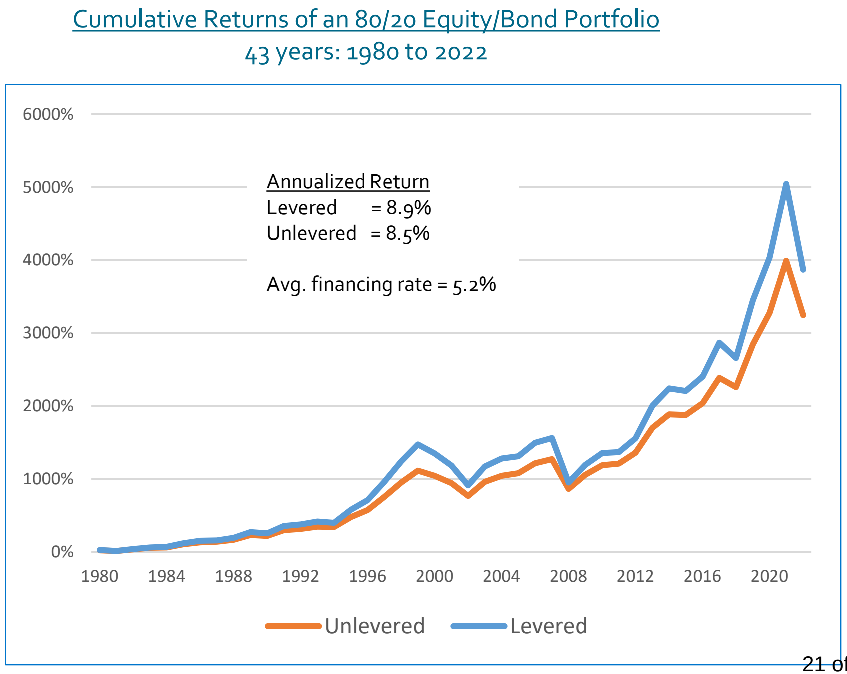


- The financing cost was assumed to be average 3M Libor during the said period plus 150bps
- Annual rebalancing was assumed

During both periods, 23 years (2000 – 2022) and 5 years (2006 – 2010), the unlevered portfolio had a higher return

Leverage: over the long-term seems to add value

- Over a 43-year period, the same 80/20 equity/bond portfolio performed better when levered (20%) than unlevered



Key takeaways

- ✓ **A long-term commitment to strategy seems crucial**
- ✓ **Market conditions - interest rates and asset value cycles- have material impact**
- ✓ **There could be several years (decades) when leverage detracts value**
- ✓ **Liquidity and operational risk aspects not considered in this analysis**
- ✓ **A deeper analysis would shed more light on optimum leverage level, impact of different asset allocations, leverage mechanisms, funding costs, etc.**

Peers using Leverage: few US pension plans use fund level leverage

- Within the US State pension plan space, less than 7% or about 16 plans have target leverage levels. Of these only the following 6 had AUMs of over $20 billion*
- Most institutions is the list below implemented leverage over the last decade, post the GFC

					Annualized Returns				Cumul	Asset Allocation (Current/Recent)				
	As of	Leverage		AUM/ NAV	1-Y	3-Y	5-Y	10-Y	2008-09	Public Equities	Fixed Income	Private Equity	Real Estate	Other
		Years**		$ Billion										
CALPERS	Jun-23	~2+	5%	462.8	5.8%	6.3%	6.1%	7.1%	(27.9%)	45.1%	26.4%	12.9%	15.2%	4.0%
TRS, Texas	Aug-22	~3+	6%	183.5	(6.7%)	7.7%	7.3%	8.1%	(23.5%)	36.1%	13.3%	17.2%	16.4%	23.3%
SWIB, Wisconsin	Dec-22	~10+	15%	128.6	(12.9%)	5.5%	6.2%	7.3%	(21.4%)	48.0%	25.0%	15.0%	8.0%	19.0%
PERS, Pennsylvania	Mar-23	n/a	10%	71.9	(4.0%)	11.2%	7.4%	7.2%	(28.6%)	24.4%	24.8%	17.2%	27.5%	16.0%
SFERS, San Francisco	Jun-23	n/a	3%	33.6	4.3%	10.6%	8.4%	9.0%	(24.4%)	31.9%	5.4%	29.8%	15.6%	17.3%
MSRPS, Maryland	Jun-23	n/a	10%	65.2	3.1%	8.2%	6.9%	7.0%	(24.3%)	29.7%	26.1%	21.5%	10.8%	11.9%
CPPIB, Canada	Mar-23	~10+	25%	570.0	1.3%	9.2%	7.9%	10.0%	(18.8%)	24.0%	12.0%	33.0%	9.0%	22.0%
APFC	Jun-23			78.0	5.2%	10.5%	7.9%	8.4%	(20.9%)	34.5%	18.3%	19.6%	10.5%	17.1%

*Source: Public Plans Data, annual reports

** approximate number of years since leverage was utilized

Key Takeaways: and next steps

- Employing certain types of leverage, with limited recourse, is within the scope of APFC's current Investment Policy.
- Over the long-term leverage has the potential to be accretive to fund returns
- However, in the interim leverage is likely to increase return variability and can be detrimental to fund returns over several years (decade+)
- The operating context, primarily asset value cycles, have material impact on returns.
- Leverage introduces other material risks including liquidity and operational risks

Suggested Next Steps

- As a first step, team to explore leverage mechanisms with limited recourse, working within the current Investment Policy. Have the tools ready to deploy at the opportune time.

Appendix B

Private Equity Discussion

Contents

Portfolio Overview

Strategy	Commitments	Contributions	Distributions	Market Value	%	Total Value	Gain	TVPI	DPI	IRR
Buyout	8,768.5	7,519.8	6,918.3	6,160.6	*40%*	13,078.9	5,559.1	1.74x	0.92x	15.1%
Venture Capital	4,269.9	3,776.2	4,980.1	4,369.4	*28%*	9,349.5	5,573.3	2.48x	1.32x	24.4%
Growth Equity	1,734.2	1,322.5	1,400.5	1,340.2	*9%*	2,740.7	1,418.3	2.07x	1.06x	23.8%
Specialifized Funds/Investments	6,314.6	5,367.4	4,226.2	3,567.7	*23%*	7,793.9	2,426.5	1.45x	0.79x	10.6%
Total	**$21,087.2**	**$17,985.9**	**$17,525.1**	**$15,438.0**	***100%***	**$32,963.1**	**$14,977.2**	**1.83x**	**0.97x**	**16.8%**

NOTES: As of March 31, 2023. Based on fund strategy. 11.5% of the portfolio's market value reflects roll-forward values and is subject to change. Amounts may not foot due to rounding.

- $21bn committed to 550 partnerships / investments across ~160 managers (455 active partnerships / ~120 active managers), approximately 7,500 underlying individual companies
- Contributions of $18bn have generated total value of $33bn resulting in $15bn of gains, $3bn remaining unfunded commitments
- Portfolio was cash flow positive in 2022 with $1.9bn of distributions compared to $1.5bn of contributions, first three quarters of 2023 generated $1.2bn of distributions compared to $900m of contributions

Year in Review – FY 2023

APFC–PCM FY 2023 COMMITMENTS

Investment	Close Date	Commitment
Sentinel VII	7/13/22	$15.0
Spectrum X	7/20/22	15.0
TCV XII	7/29/22	15.0
WestView Capital Partners V	12/15/22	15.0
Incline Equity Partners VI	12/16/22	15.0
GTCR XIV	12/16/22	15.0
HV IX Venture	12/21/22	7.9
HV IX Growth	12/21/22	7.9
Canaan XIII	1/6/23	15.0
Parthenon VII	3/14/23	15.0
Genstar XI	4/26/23	15.0
Mayfield XVII	5/1/23	8.4
Mayfield Select III	5/1/23	8.0
KPS VI	6/30/23	17.0
EnCap XII	6/30/23	15.0
FY 2023		**$199.3**

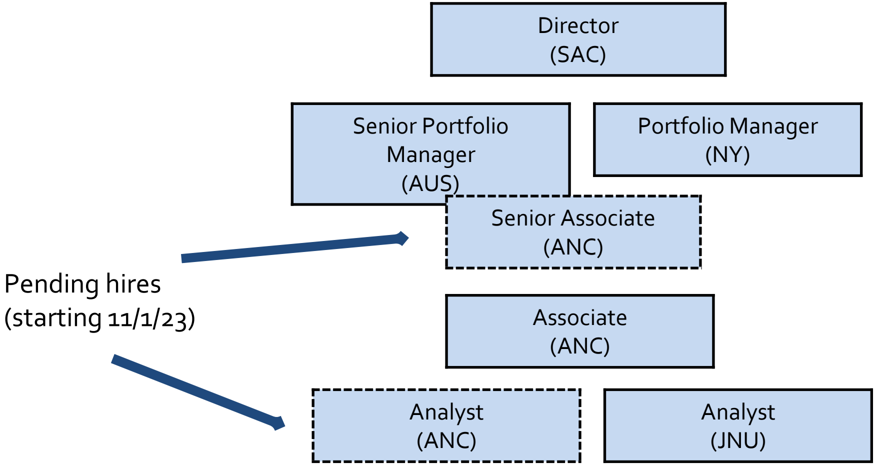
NOTE: Commitments to non-USD denominated partnerships are calculated using exchange rates at the time of commitment.
[1]Follow-on commitment.

APFC FY 2023 COMMITMENTS

Investment	Close Date	Commitment
Altitude Co-Inv[a]	7/18/22	$10.0
Lee Equity IV	8/4/22	25.0
H.I.G. MM LBO Fund IV	9/30/22	25.0
Goodwater Infinity III	10/13/22	10.0
Goodwater V	10/13/22	15.0
Crestline AK Advisory III	12/7/22	100.0
GTCR XIV	1/12/23	40.0
Bain Asia V	2/24/23	25.0
TA XV	3/30/23	50.0
Vista VII/VIII - Avalara (Co-Inv)	3/31/23	25.0
Genstar XI	4/26/23	40.0
H&F XI	5/9/23	25.0
Summit Partners Co-Invest (Ironman)[a]	5/12/23	1.4
EnCap GM III Co-Invest	6/9/23	45.0
KPS VI	6/30/23	50.0
KPS Mid-Cap II	6/30/23	25.0
EnCap XII	6/30/23	50.0
Platinum Equity VI	6/30/23	50.0
FY 2023		**$611.4**

- Approximately $920m committed in 2023 ($810m above plus $110m committed post 6/30/22 pushed into prior FY)
- Expected pace of $1bn in FY 2023 and annually over next several years across both funds and co-investments

Team Structure - Existing (7 inv, 0 admin)



- Current team includes 5 professionals, with 2 pending hires (starting 11/1/23)
- Focus primarily on funds investments, but also covers co-investments and other projects (no specialization)
- No dedicated co-investment / direct investment resources
- Leverage third-parties for due diligence, fund management and admin, reporting, legal and other services

Contents

Third-Party Resources

- PE team uses several third-parties for market research, deal sourcing, deal evaluation / due diligence, legal assistance, financial and tax accounting, distribution management and post investment monitoring and reporting
  - Investment Management Agreements – Fees classified as Investment Management Fees and are netted against returns
  - Consulting / Research (project-based or retainer) – Fees classified as Fiduciary Expenses
- Enables PE staff to focus on strategy, manager evaluation / diligence and portfolio management
- Given size / age of the portfolio and current PE team resources, more work can be performed with internal and project-based resources
  - Executing selective secondary sales of non-core / older funds drives additional savings
- Increase use of existing market research tools as well as third-party research
- Assess APFC's current fiduciary requirements to determine when third-party opinions are required

Funds and Co-Investments

- Funds
  - Target 50% - 75% of annual capital deployment into funds annually
    - Performance – Range of firms across size, stage and geography with proven ability to consistently generate high returns
    - Relationship – Strategic partners that generate significant co-investment / direct deal flow, generally small and mid-sized buyout / growth equity funds
  - Focus on our best existing relationships and select new relationships ("no free passes")
- Co-investments
  - Increase co-investment activity to get capital deployed in a more attractive investment environment and drive stronger returns / asset growth
    - Activity declined significantly in last several years – No investments executed from December 2021 to March 2023, 2 in 2021, 5 in 2020, 7 in 2019 and 8 in 2018 (includes biotech deals
    - Recent activity has increased with 4 deals completed from March 2023 – August 2023 totaling $155m (27% of the total commitments during that six-month period)
  - Recent co-investments on 1:1 ratio to fund commitment, lowering average fee load
  - Created deal log to track deal, type, industry, geography, sponsor and size (45 deals reviewed from 7/1/23 – 9/30/23, 2 closed + 1 in diligence)

Direct Investments

Adding Direct Investment capabilities can drive significant value for APFC

	Direct	Fund
Deal Structure	$100m investment alongside a sponsor who also invests $100m (50% / 50% ownership)	$100m investment through a fund
Investment Returns	2x return in 4 years	2x return in 4 years
External Costs (Fees)	None	20% carry ($20m); 2% annual management fee ($2m annually x 4 years)
Internal Costs	$1.5m annually for increased staffing assuming 3 FTEs added to do one $100m co-investment annually ($6m total over investment life)	None
Net Return (Investment return – External costs – Internal costs)	**$94m** ($100m gain - $6m internal costs)	**$72m** ($100m gain - $20m carry - $8m mgmt. fees)

- Net savings of $22m over 4 years ($5.5m annually)
- Benefit increases with:
  - Higher returns due to incentive fee structure of funds
  - Increased capital invested (i.e. $200m of investments at a 2x return equates to $44m higher return over 4 years)
- Staffing increase is not linear as deal size can be increased without adding resources

Direct Investments (2)

- Approach
  - Set size, return and risk parameters - return targets, deal type, industry, size, stage, geography
    - Initial focus on buyouts of cash flow positive businesses in the US
    - Avoid venture, complex turnarounds / restructurings, foreign countries
    - Target $50m - $100m per deal initially with 25% - 50% ownership (joint control with sponsor)
  - Identify 10-20 existing and select new sponsor relationships to increase deal flow
    - Deals co-underwritten, evaluated and diligenced by staff / advisors
    - Leverage sponsors sourcing networks and industry expertise
- Resources – Initial program can be launched quickly
  - Existing APFC staff has capacity to source and execute on 1-2 opportunities annually
  - External resources may be leveraged for legal and financial diligence (transaction support)

Fee Impacts

Category	Description	Operating Budget	Investments
Fund Investments	$200m commitments using internal team Wind-down of non-core funds ($100m)	$300k $150k	- -
Co-investments	$200m annually at no fee / carry, $100m of which using existing internal resources and project-based consultants	$300k	$14m
Direct Investments	$100m annually using internal resources	-	$7m
Annual Savings		$750k	$21m

- Differential increases / decrease with increased / decreased commitments (i.e. higher % of annual commitment done in project-based)
- Co-investments / Directs savings assumes 2x return in 4 years, avoiding 2% / 20% structure
- Above can be achieved without adding additional resources, however, increased internal resources drive potential for higher levels of activity generating more savings
- Proposed increases in staff are more than offset by total annual fee savings

Complementary Tactics

- Outsourced / Third-Party Support
  - Utilize a third-party manager to manage co-investments and direct investments, typically through an SMA or commingled fund commitment
    - Pros – Enhanced capacity, speed of execution, simple / existing model
    - Cons – Additional fees to third-party, loss of discretion / control over timing and placement of capital deployed (lose tactical advantage), APFC already has these relationships and capabilities (no apparent incremental benefit)
- Joint Venture / SPV
  - Create a JV (potentially through an SPV) with another SWF / Pension / Asset Manager to execute on direct investments
    - Pros – Potential increased capacity and resources, ability to add resources and expand knowledge base, enhanced market coverage
    - Cons – Structural complexities around governance / ownership and investment decision making, no clear model exists in the market, loss of control over timing and placement of capital deployed, determination of objectives / risk tolerance / deal types / geographies / etc.

Complementary Tactics (2)

- Investment / Acquisition
  - Acquire a minority / majority stake in an existing asset manager to leverage their professional expertise and deal flow in a particular market segment (Note: Different than GP stakes investing which generally is a passive exercise designed to generate a return from the growth of the underlying platform)
    - Pros – Enhanced capacity and speed of execution, access to professional investors with differentiated deal flow and capabilities, potential to earn return on the investment itself through AUM growth
    - Cons – Tends to address a specific area (industry, deal type / stage, geography) and does not replace the need for a broader program that has capabilities across a range of strategies and investment ypes, need to understand potential issues over control / decision-making, ability to raise third-party capital to fund growth, implications of a control stake under APFC ownership

As the Private Equity team size, capabilities and resources evolve, Staff will evaluate various structures and approaches that can enhance our capabilities and skill sets across various investment strategies and industries.

Contents

Execution Plan / Next Steps

- Shift an increasing proportion of annual commitments to project-based consultants to drive operating budget fee savings goals, without sacrificing returns or investment quality
- Utilize existing Private Equity team to execute on more-focused fund investment approach, along with targeted co-investment / direct investment pace to drive market leading returns and investment fee savings
- Enhance our direct investment capabilities through the buildout of a direct investment team (funded through fee savings) utilizing a combination of transfers and new hires
- Evaluate potential investments / acquisitions and other structures (JV / SPV) that could increase APFC's capabilities and scale, while addressing certain strategic goals and operating challenges
- Utilize key learnings from the above, assess the applicability of these approaches to other asset classes within APFC, particularly those with similar investment and fee structures

While we have generated strong returns across funds, co-investments and direct investments since the inception of our program, we will seek to continuously improve our capabilities across our targeted strategies to maintain our position as a leading private markets investor

Direct Team Buildout

Expand Direct Investment Capabilities (3 new inv FTEs, 1 new admin FTE)

- Structure would shift to create a "Fund Investment" team to cover funds and secondaries and a "Direct Investment" team to cover co-investments and direct investments
- Direct investment team requires additional resources with different skill sets
- Recommend adding 3 investment FTEs (SPM / PM, Sr. Associate and Associate / Analyst)
- Recommend adding 1 dedicated administrative support to assist with travel, meetings, information tracking, board reporting and other items given the larger team
- Depending on desired transaction volume and approach, team may need to grow over time

Estimated Cost

- Expected incremental run rate cost of $1.5m annually (compensation costs of $1.3m plus incremental travel / subscriptions / other costs of $200k)
- Additions spread over two years (2 new hires in Year 1, 2 in Year 2), actual costs will lag budget
- Lower costs may be achievable with workload efficiencies, synergies across relationships and more effective use of systems / processes

Team Structure – Proposed (10 inv, 1 admin)

Director
(SAC)

Funds / Secondaries Team (6)

Senior PM
(AUS)

PM
(NY)

Sr. Associate
(ANC)

Associate
(ANC)

Analyst
(ANC)

Analyst
(JNU)

Directs / Co-investments Team (3)

SPM / PM
(TBD)

Sr. Associate
(TBD)

Associate
(TBD)

Direct Team can be created through a combination of new positions as well as transfers / promotions from the funds team.

Any shifts from the funds team should be backfilled.

Administrative Support (1) - TBD

Legal / Transaction Support – Pathway, Sheppard Mullin, Cox Castle

Fund Administration / Financial / Accounting Support - Pathway

Due Diligence Support – Pathway, Crestline, Mercer


ALASKA PERMANENT FUND
Established 1976
APFC
ALASKA PERMANENT
FUND CORPORATION
Integrity • Stewardship • Passion

SUBJECT: Open Meetings Act ACTION: X

DATE: October 30, 2023 INFORMATION:

<u>Open Meetings Act</u>

The Open Meetings Act requires the Board of Trustees to deliberate and make decisions in an open meeting with the affected parties and members of the public participating.

Issue

Deliberating in public can harm the best interest of the fund because it impairs the ability of the staff or the Board to have an open and candid discussion about the pros and cons of the matter before the Board for consideration. Further, any informal volunteer board working groups are limited to three members of the Board which denies some members of the Board from the option of participating.

This leaves the Board to make decisions without all of the relevant information that is too sensitive for a public discussion.

Proposed Solution

Add the APFC Board of Trustees to the list of public entities that are not subject to the Open Meetings Act and modify the Board's Bylaws to require all meetings and Board action to take place in a meeting that is open to the public. The Bylaws, however, would allow for the Board to convene in executive session to deliberate on board matters when the best interest of the Fund would be harmed by a public discussion. The purpose of this change is to create an APFC specific Open Meetings Act requirement that is tailored to the function and purpose of the Fund that protects the ability of the Board to receive and consider all relevant information when making decisions that impact the Fund.

a. **Proposed sample language-**

"AS 44.62.310(h)(3) is proposed to be amended to read:

"public entity" means an entity of the state or of a political subdivision of the state including an agency, a board or commission, the University of Alaska, a public corporation, a municipality, a school district, and other governmental units of the state or a political subdivision of the state; it does not include the court system **[or]** the legislative branch of state government **<u>or the Alaska Permanent Fund Corporation.</u>**"

Action:

Should APFC staff advocate for the proposed amendment to State Statute 44.62.310? If so in the short, intermediate or long term?

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SUBJECT: Procurement Flexibility ACTION: X

DATE: October 30, 2023 INFORMATION:

Existing State of Alaska procurement:

The dollar amount associated with procurements will always include the total duration of the resulting agreement; for example, a 3-year service agreement for $10,000 per year would be identified as a $30,000 procurement. If the procurement is to obtain a product, then the dollar amount would include shipping cost and maintenance fees, if applicable. For all levels of Procurement, the solicitation of exclusively Alaskan vendors is highly encouraged, and for higher levels a waiver must be obtained if soliciting out-of-state vendors.

Procurement Tiers

Level I: any solicitation that totals from $1 up to $10,000. This tier requires the least amount of formal documentation or procedures and can even be performed by simply reaching out to 3 different entities by phone or email to acquire a quote for the products or services required. Level I procurements are typically short-term, bare-bones agreements for non-professional services or everyday goods.

Level II: any solicitations that total $10,000.01 up to $100,000.

1. $10k - $50k: allows for the acquisition of verbal quotes, but the use of written "Request for Quotations" or "Informal Request for Proposals" is encouraged.

2. $50k - $100k amount requires the use of written quotes or informal proposals. At that amount, additional procedures must also be followed, such as requesting waivers to reduce the scoring weight for cost proposals and providing written notice of award, including a protest period.

Level III: any solicitations that total more than $100k. This level requires detailed documentation of all components and events, and strict adherence to the guidelines. Use of the approved Request for Proposals (RFP) and Intent To Buy (ITB) shells are mandatory.

Issue with Existing Structure

APFC staff have a fiduciary duty to make investment and management decisions that promote the best interest of the permanent fund. This includes using a prudent level of competition that promotes the best interest of the fund (i.e. controls costs) when procuring services to invest and manage permanent fund assets. The state procurement code, however, with built-in timelines and the public process/transparency requirements often hinders APFC's ability to quickly and efficiently contract with best-in-class vendors needed to assist APFC staff when investing and monitoring Fund assets.

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Proposed Solution-request an exemption from the state procurement code because APFC's fiduciary duties already obligate it to use competitive bidding practices when procuring services needed by the corporation and the state procurement code is currently hindering APFC's ability to timely procure the services needed to prudently manage the permanent fund.

a. **Proposed sample language expanding the current exemption-**

"AS 36.30.850(b) is proposed to be amended by adding a new subsection to read:

(51) contracts of the Alaska Permanent Fund Corporation under AS 37.13."

Action:

Should APFC staff advocate for the proposed amendment to State Statute 36.30.850. If so in the short, intermediate, or long term.

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SUBJECT: Fund Level Leverage ACTION: X

DATE: October 30, 2023 INFORMATION:

Fund Level Leverage:

Existing state law currently authorizes the use of leverage by the Alaska Permanent Fund Corporation (corporation) as a part of a specific investment strategy and allows for the pledging of specific permanent fund assets or a pool of permanent fund assets to backstop these borrowings. However, existing state law does not allow the corporation to borrow funds generally and pledge the assets of the total fund or provide a creditor with recourse against the corporation (i.e., the state) to backstop these borrowings. So, a change in state law would be required to authorize the corporation to issue revenue bonds, use the bond proceeds to grow the size/AUM of the permanent fund, and then repay the principal and interest on these bonds from the annual earnings of the permanent fund. Additionally, the Attorney General's Office would also have to issue a legal opinion that supports the dedication of permanent fund earnings to repay this debt in light of the dedicated funds prohibition in the Alaska Constitution (Art. IX Sec. 7 of the Alaska Constitution) and the case law interpreting it.

Regarding the needed changes in state law, the Legislature would have to enact new statutes that would:

(1) Provide the corporation with authority to issue revenue backed bonds and set a total amount that could be borrowed by the corporation;
(2) Outline the permissible use of the borrowed funds (i.e., deposit proceeds into the principal to be invested with the existing assets allocation);
(3) Pledge the annual realized earnings of the fund to repay the bondholders the required principal and interest payments; and
(4) Create a revenue fund to hold and reserve annual realized earnings for the payment of the required debts service on the bonds.

Should the Board decide to pursue this as a part of the strategic plan, there are numerous existing state law revenue bond authority provisions that we can draw from to model this legislation on.

To pursue fund level leverage, in addition to state law changes highlight above, the corporation would also need a legal opinion from the Attorney General's Office that reaches the conclusion that the Alaska Constitutional provision creating the permanent fund authorized the dedication of permanent fund earnings to repay these revenue bonds without violating the constitutional prohibition on dedicated funds. Without the support of this legal opinion, the use of revenue backed bonds would fail because the bondholders would not have a legal mechanism to ensure the payment of the principal and interest payments owed to them. So, should the Board decide to pursue this as a part of the strategic plan, in addition to working on the legislative proposal discussed above, we will begin the process of requesting a formal legal opinion from the Attorney General's Office.

Action:

Should APFC staff advocate for the proposed amendment to AS 37.13 to authorize the use of fund level leverage through the issuance of revenue backed bonds to be repaid from the investment earnings of the permanent and seek an AG Opinion that would support the dedication of fund earnings to repay these bonds?

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SUBJECT: Personnel Records ACTION: X

DATE: October 30, 2023 INFORMATION:

Employment records of APFC Staff

Issue- The Personnel records of the Executive Director have been determined to be public rather than confidential as is more typical. Further, existing law creates an ambiguity regarding whether the personnel records of all APFC employees are confidential and exempt from a public records request. Without an ability to protect the confidentiality of performance evaluations of APFC employees, it becomes difficult to provide candid and valuable feedback to APFC employees, including the Executive Director.

Proposed Solution-amend existing law to expressly provide for the confidentiality of personnel records of all APFC staff.

a. **Proposed sample language-**

"**Sec. 37.13.100 Corporation Staff**. The board may employ and determine the salary of the executive director. The executive director may, with the approval of the board, select and employ additional staff, as necessary. An employee of the corporation, including the executive director, may not be a member of the board. The executive director and the other employees of the board are in the exempt service under AS 39.25. **Except for the information described in AS 39.25.080(b)(1) – (7), the personnel records of the executive director and other employees of the corporation, including employment applications and examinations and other assessment materials, are confidential and are not open for public inspection.**

Action:

Should APFC staff advocate for the proposed amendment to State Statute 37.13.100. If so in the short, intermediate, or long term?

SUBJECT: Improving Budget Flexibility ACTION: X

DATE: October 30, 2023 INFORMATION:

Improving Budget Flexibility

Issue- The Board is in the best position to determine which investment activities should take place through APFC staff and which activities should be outsourced to an external manager or advisor. Yet, because APFC's current budget is placed in the numbers section of the state's annual operating budget and split between two allocations (one for internal management and one for external management), even if the Board approves the transition of investment activities from an external manager to APFC staff, having two separate budget allocations requires the approval of OMB and runs the risk of frustrating the Legislature if they do not support the allocation transfers approved by OMB.

Proposed Solution-advocate for placement of APFC's budget in the language section of the state's annual operating budget as a single allocation. This change will allow the Board the authority to move appropriated funds between the external manager and internal management objects of expenditure without the need for OMB and Legislative approval.

Proposed sample budget language-

"An amount not to exceed $? is appropriated from the Alaska Permanent Fund Corporate Receipts for the investment and operating costs of the Alaska Permanent Fund Corporation."

Action:

Should APFC staff advocate for its annual budget to be placed in the language section of the annual operating budget as a single allocation? If so in the short, intermediate, or long term?

APFC ALASKA PERMANENT FUND CORPORATION

APFC Key Person Risk & Additional Incentive Compensation

October 30, 2023

Executive Summary

- Strategic Plan working group discussions featured considerable conversation around key person risk mitigation at APFC going forward.

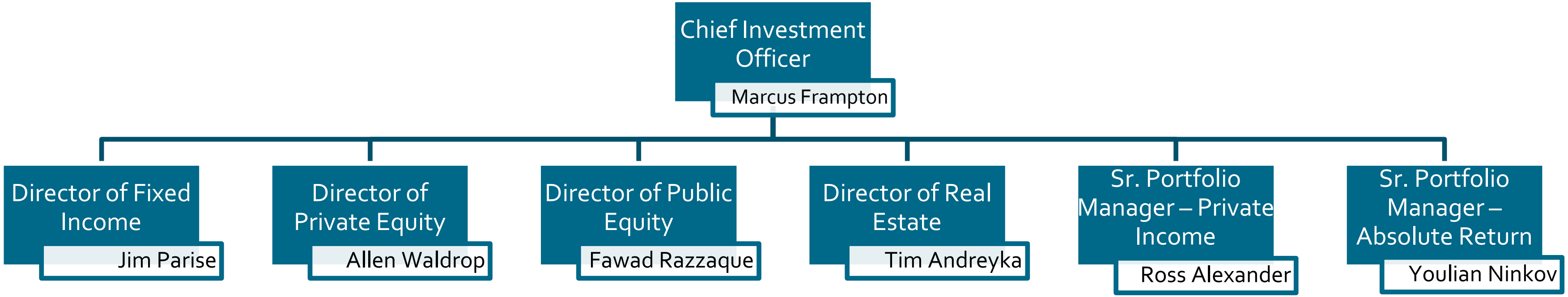
- The following slides outline the current / status quo key person risk mitigation procedures at APFC.

- At the direction of Trustees involved in the strategic planning work group, Staff is researching the following areas to enhance our key person risk mitigation strategy:
  - What long-term incentive compensation programs could be considered in addition to the current year-to-year incentive compensation plan; what do peer plans do in this regard?
  - Staff will engage in dialogue with other peer plans on how they approach key person risk mitigation and will report back with findings and insights gathered.

Key Person Risk

Position	Short-term plan	Long-term plan
Chief Investment Officer	• The Deputy Chief Investment Officer (pre-designated by CIO) will assume the position of Chief Investment Officer on an interim basis.	• The Executive Director will commence a recruitment process that seeks the best qualified candidate and may consider both internal and external consultants.
Asset Class Director(s)	• If a previously identified candidate is in place, promote internally.	• If no previously identified candidate is in place, the CIO will assume the role of acting head of the asset class while a recruiting process is conducted, considering both internal and external candidates. In the event that the CIO needs to assume the role of acting asset class director, actions taken by CIO will be asset class specific and are detailed on the following slide.

Organizational Chart



- Deputy Chief Investment Officer
- Voting member of Investment Committee

- Voting member of Investment Committee
- Assumes role of Deputy Chief Investment Officer if current Deputy CIO departs

Key Person Risk – Asset Class Specifics

- Upon departure of an asset class director when no previously identified candidate is in place to immediately assume the role, the following steps will be taken by the Chief Investment Officer depending on the type of asset class:

  - **Liquid Asset Classes** (Public Equity & Fixed Income)
    - The CIO will weigh reducing tracking-error and closing out trades that are done at the direction of departing asset class head (for example, the Tactical Tilts portfolio in Public Equities).
    - If closing out a departing asset class head's trades results in increases to portfolio-wide tracking error, the CIO will consider using index exposure to balance out unintentional over/underweights.
    - The CIO may designate a team member of the asset class to assume interim responsibility for the asset class, and the CIO will take an increased role in oversight of the asset class on an interim basis.

  - **Illiquid Asset Classes** (Private Equity, Private Income, & Real Estate)
    - The CIO may seek to use the departing employee as a helper and for transition knowledge to extent possible.
    - The CIO will take over responsibility until a replacement arrives.
    - In-process investment decisions will be re-considered and re-underwritten without the vote of the departing employee.

  - **Absolute Return & Tactical Opportunities**
    - The CIO will take over responsibility until a replacement arrives.
    - Gold trading executions and ad hoc public market trades will be temporarily delegated to staff in Fixed Income.

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SUBJECT: Potential Offices Outside of Alaska ACTION: X

DATE: October 30, 2023 INFORMATION:

Existing Offices:

The Alaska Permanent Fund Corporation (APFC) currently has two offices both located in Alaska. An approximately 17,000 square foot headquarters in Juneau and a recently established approximately 2,500 square foot office in Anchorage.

The Potential for Offices Outside Alaska

The APFC has considered establishing offices outside Alaska at various times in the past. Currently there are six employees that are working outside of Alaska in a full remote mode, one each in Texas, New York, Alabama, and Utah, and two in California. None of these locations include an APFC office. An office outside of Alaska could provide better recruitment and retention potential as well as being in time zones or in geographic areas that the investment firms APFC works with are more likely to be located. Upon request, Callan LLC was able to determine that two of the US based pension funds or endowments that they work with have offices outside of their home states. Texas Teachers has an office in London and Ohio STRS has offices in San Francisco, Chicago, and New York City.

Consideration

Trustees have requested that the potential of establishing a bricks and mortar office in both the continental US as well as internationally be explored. Staff have researched the cost of establishing a 7,000 square foot office in four locations around the US and two locations outside of the US. The proposed office size and the locations identified have not been determined to be appropriate for a potential APFC office outside of Alaska, but rather are intended to provide a range of costs in the real estate markets around the US and internationally.

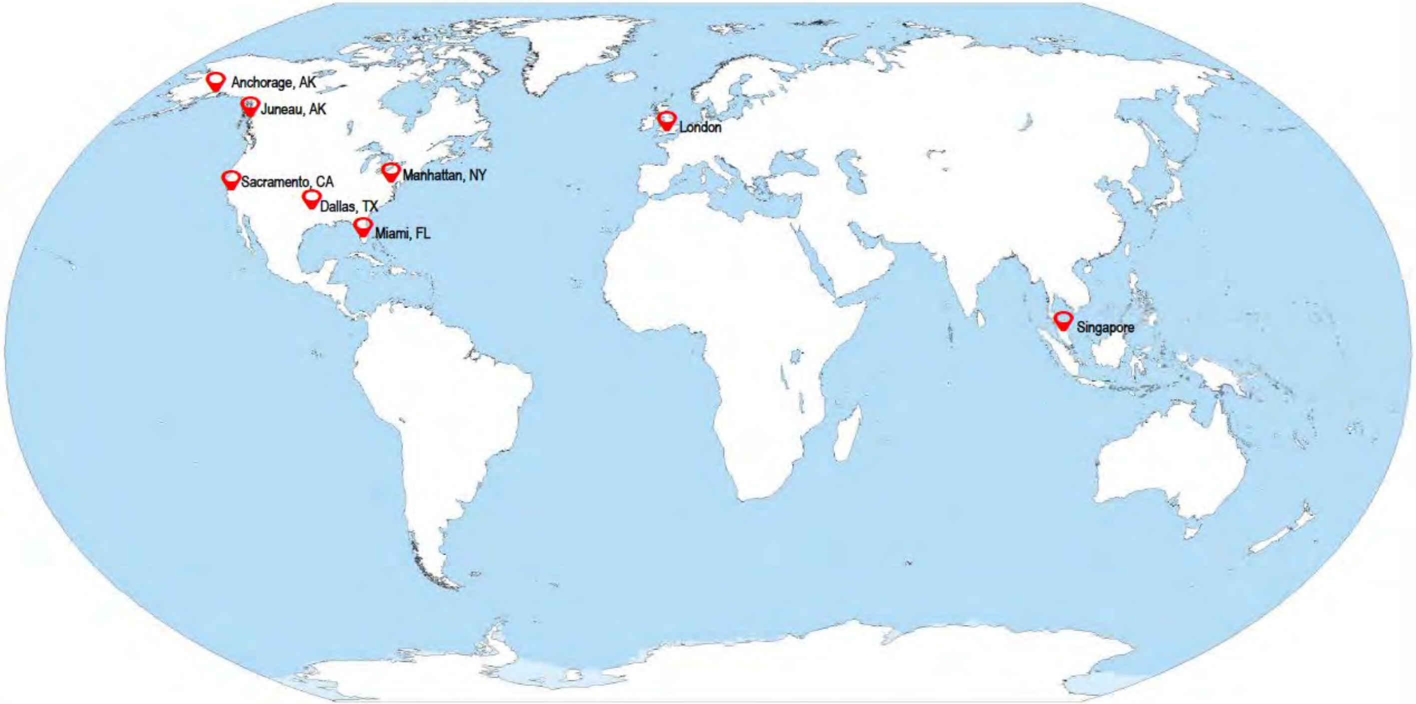
Action:

Should APFC staff pursue obtaining funding for an office outside of Alaska. If so, at what square footage and which market should that funding target.

APFC ALASKA PERMANENT FUND CORPORATION

Additional Office Potential

Existing and Potential Offices



Potential Office Locations 1-3

7,000 Square Feet

	Sacramento, CA	Miami, FL	New York, NY
Estimated Cost	• Annual Rent $20-40 per square foot • Monthly Utilities and maintenance $3-5,000 • Tenant Improvements $20-100 per square foot • Furniture $150-200 thousand • **Year One $466,000-1,240,000** • **Annual $176,000-340,000**	• Annual Rent $30-60 per square foot • Monthly Utilities and maintenance $3-5,000 • Tenant Improvements $30-100 per square foot • Furniture $150-200 thousand • **Year One $606,000-1,380,000** • **Annual $246,000-480,000**	• Annual Rent $80-100 per square foot • Monthly Utilities and maintenance $3-5,000 • Tenant Improvements $80-150 per square foot • Furniture $150-200 thousand • **Year One $1,306,000-2,010,000** • **Annual $596,000-760,000**
Potential Additional Costs	• Operating Expenses • Parking Expenses • Legal/Administrative Costs • Security Deposits • Insurance Expense		

Potential Office Locations 4-6

7,000 Square Feet

	Dallas, TX	Singapore	London
Estimated Cost	• Annual Rent $25-40 per square foot • Monthly Utilities and maintenance $3-5,000 • Tenant Improvements $20-100 per square foot • Furniture $150-200 thousand • **Year One $501,000-1,240,000** • **Annual $211,000-340,000**	• Annual Rent $70-130 per square foot • Monthly Utilities and maintenance $3-5,000 • Tenant Improvements $73-182 per square foot • Furniture $150-200 thousand • **Year One $1,187,000-2,440,000** • **Annual $526,000-970,000**	• Annual Rent $82-204 per square foot • Monthly Utilities and maintenance $3-5,000 • Tenant Improvements $54-163 per square foot • Furniture $150-200 thousand • **Year One $1,138,000-2,829,000** • **Annual $610,000-1,448,000**
Potential Additional Costs	• Operating Expenses • Parking Expenses • Legal/Administrative Costs • Security Deposits • Insurance Expense		

APFC ALASKA PERMANENT FUND CORPORATION
801 W 10TH SUITE 302 | JUNEAU, AK 99801
907.796.1500 | apfc.org

SUBJECT: Communications Plan ACTION: X

DATE: October 30, 2023 INFORMATION:

In support of the Board of Trustees' Strategic Initiatives for the Fund and the Corporation, the Communications team will ensure the vision is conveyed through consistent, aligned messaging and targeted outreach.

Nationwide and Global Focus on Investment Performance and Strategy

- **Growing the Fund to $100 billion –** to provide an enduring source of renewable financial revenue to support the state and benefit Alaskans.
- **Best Sovereign Wealth Fund –** to maintain and build upon Alaskan, domestic, and international brand recognition, ensuring high regard among global peers, potential partners, and Alaskans.

In-State Mission of Education & Awareness

- **Stakeholder Education –** to enhance awareness and confidence in investment performance, expertise, and strategy for the investment management of the Alaska Permanent Fund while fostering transparency and accountability.
- **Legislative Initiatives** - to support, modernize, and grow the Fund and APFC's effectiveness.

Audiences

- Alaskans
- Legislative and Executive Branches of Government
- Financial Industry Stakeholders
- Peer SWFs and Endowments
- Media Outlets – Local & Global

Resource Request

APFC is looking to improve its global financial coverage of performance, expertise, and strategy. Our aim is to bring together the interests of APFC's diverse stakeholder groups through a team-based approach that offers statewide, national, and global support. Procuring a global financial media consultant to provide targeted and collaborative services will support this effort.

- Potential Action

Additional budget resources are needed to ensure a successful procurement of an annual contract estimated to be in the range of $200,000 - $250,000.

- Motion for Board Consideration
  - To Amend the FY25 Proposed Operating Budget Request
  - Increment of $150,000 for the Communications Contractual Services
  - Pursue adding a third person to APFC's internal communications team

APFC ALASKA PERMANENT FUND CORPORATION

Communications - Framework
Board of Trustees- Strategic Initiatives

October 2023

Communications’ Overarching Goal

Maintain and further APFC’s brand — *a world-class sovereign wealth fund that prides itself on integrity and innovation.*

Uplift and expand upon positive public regard through intentional and consistent messaging via internal and external communications, public relations, content creation, research, analysis, crisis communications, and reputation management.

Communicating Strategic Initiatives

Forward the Strategic Vision and Initiatives of the Board to position the Corporation and the Fund for long-term sustainability and growth.

- **Growing the Fund to $100 billion –** to provide an enduring source of renewable financial revenue to support the state and benefit Alaskans.
- **Best Sovereign Wealth Fund** – to maintain and build upon Alaskan, domestic, and international brand recognition, ensuring high regard among global peers, potential partners, and Alaskans.
- **Stakeholder Education** – to enhance awareness and confidence in investment performance, competence, and strategy for the investment management of the Alaska Permanent Fund while fostering transparency and accountability.
- **Legislative Initiatives** - to support, modernize, and grow the Fund and APFC's effectiveness.

Integrating Initiatives

In-State Mission of Education & Awareness

- Stakeholder Education
- Legislative Initiatives

Nationwide and Global Focus on Investment Performance and Strategy

- Best SWF / Endowment
- Growing the Fund to $100B

Targeted Messaging

Growing the Fund to $100B	Best Sovereign Wealth Fund	Stakeholder Education	Legislative Initiatives
Audiences	**Audiences**	**Audiences**	**Audiences**
Alaskans	Alaskans	Alaskans	Alaskans
Financial Industry	Peer SWFs & Endowments	Legislative & Executive	Legislative & Executive
Local & Global Media	Financial Industry	Local Media	Local Media
	Local & Global Media		

Growing the Fund to $100 Billion

Mission-driven message to align with the targeted goals of the Board and established investment objectives.

Sets the local and global stage for expanded content generation on investment performance and strategy.

Investment Strategy
Performance Highlights
Milestones and Achievements

Brand Recognition

Build upon the Alaska Permanent Fund’s positive reputation as **the best sovereign wealth fund** among local and global audiences to be held in high regard.

Continue to be a model and source of information for sovereign wealth funds around the world.

Enhance public relations by utilizing consistent messaging while sharing educational and informative content on APFC’s investment management of the Fund.

- Governance, Accountability, and Transparency
- Performance and Industry Recognition
- APFC Values: Integrity, Stewardship, Passion

Education and Awareness

Expanded strategy to bring awareness and confidence to the investment management of the Alaska Permanent Fund.

Strengthen understanding of the Fund, the investment management work of APFC, and the staff who do it.

Develop and deliver messages reinforcing APFC's investment performance, accountability, and global reputation.

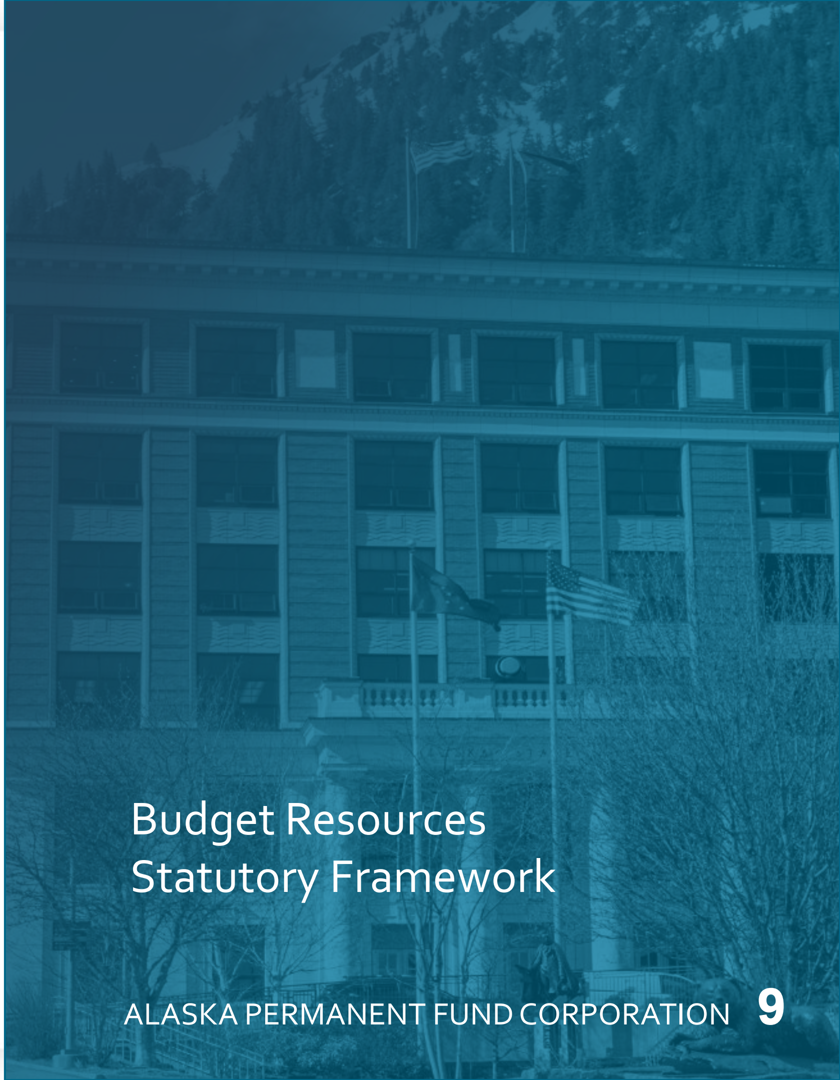
Work with partners and media to promote understanding of

- APFC’s contributions as a profit center for Alaska
- The Permanent Fund as a renewable financial resource for the State.

Legislative

Work with Trustees, the Governor's Legislative Office and the Legislature to **bring forth the Board's legislative initiatives for introduction during the second session of the 33rd Legislature.**

Foster legislative support to modernize the functionality of APFC based on the Board's approved initiatives.



APFC Ambassador Roles

Integrity | Stewardship | Passion

Enhance visibility into the daily corporate-wide workings of APFC.

Establish a Flow of Information – Investment Highlights, Milestones, Achievements, and Contributions to enhance and support messaging and online presence about the amazing work being done by our team.

Alignment

Consistent messaging representative of the whole Corporation

Engagement

Ambassador engagement and interaction fostering positive rapport and respect

Communications: Resources

Media Relations

Enhance global financial and Alaska coverage of APFC's performance, expertise, and strategy for the Fund's management and investment.

Global Financial Media Communications Services

- ➢ Board Approval for the FY25 Budget Request
- ➢ Increment of $150,000 for the Communications Program

Communications Position

- ➢ Allocate a position to support enhanced program objectives.

Tactics and Strategies

Key Message Development
➢ **Media Relations**
Website & Online Presence Enhancement
Public Awareness Campaign
Stakeholder Engagement & Collaboration
Employee Advocacy
Transparency Initiatives
Crisis Communication Plan
Reputation Management
Media Relations
➢ **Resources**
Timeline
Evaluation


APFC
ALASKA PERMANENT
FUND CORPORATION
World-Class: Integrity and Innovation

SUBJECT: Trustee Paper #10 ACTION: ___________

DATE: October 30, 2023 INFORMATION: ____X____

BACKGROUND:

In July staff issued a solicitation for proposals to function as author of the proposed Trustee Paper. Dr. Malan Rietveld was the successful candidate of this procurement. Dr. Rietveld wrote the last Trustee Paper and is exceptionally qualified for the task.

STATUS:

A working group of the Board has been meeting with staff and Dr. Rietveld to generate the Trustee Paper. Dr. Rietveld distributed the initial draft of the paper to project participants on October 23 in which he included three major sections comprised of history, models/showing the problem, and solutions. The project team then met with Dr. Rietveld to discuss the draft on October 25. Trustee Richards will provide a brief overview of the process to date as well as re-highlight the goals of drafting the Trustee Paper.

APFC ALASKA PERMANENT FUND CORPORATION

APFC Strategic Plan

October 30, 2023

Objective: Establish a strategic plan endorsed by the Board of Trustees in support of APFC's mission, vision, and values

APFC Mission

To manage and invest the assets of the Permanent Fund and other funds designated by law

APFC Vision

Our Vision is to deliver outstanding returns for the benefit of all current and future generations of Alaskans

APFC Values

Integrity

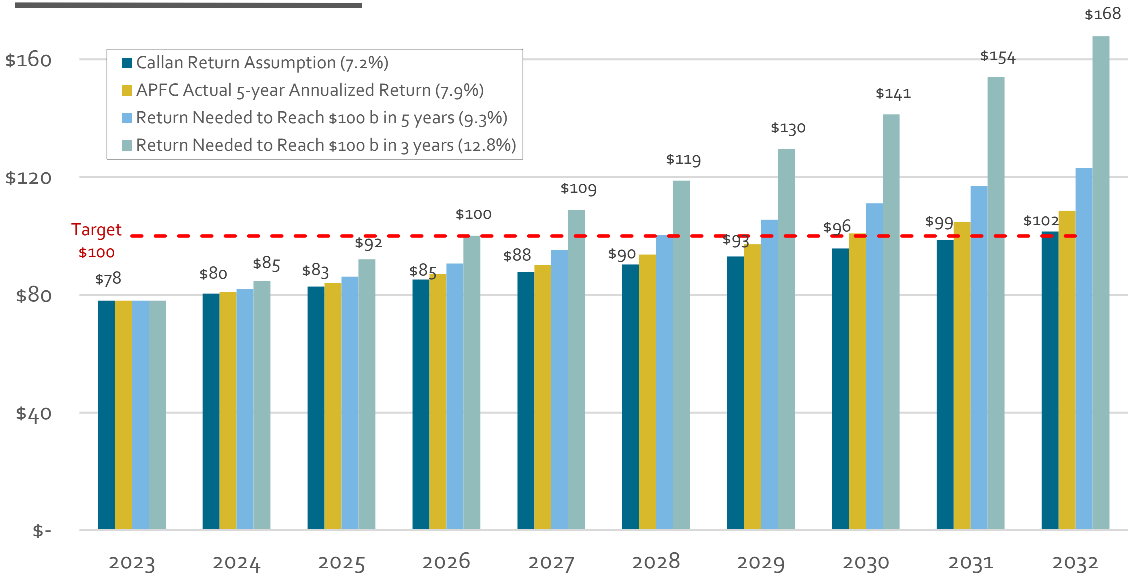
Stewardship

Passion

Board of Trustees Strategic Goals

- Increase AUM to $100 Billion
  - Achieve Increased Return Above CPI+5%
  - Consideration of Leverage
  - Asset Allocation Adjustments
  - Execution with Private Markets
- Improve Corporate Functionality
  - Open Meetings Act
  - Procurement
  - Fund Level Leverage
  - Personnel Records
  - Budget Flexibility
- Establish Long Term Organizational Structure Plan to Accommodate Growth
  - Key Person Risk/Additional Incentive Compensation Structure
  - Open continental US or international offices
- Comprehensive Communications Plan
  - In-State mission of education and awareness
  - Nationwide focus on investment performance and strategy
- Review and Assess Optimal Structure of Fund
  - Trustee Paper #10

Growing the Fund to $100 billion



- **9 years** (FYE 2032) needed to reach $100 billion at Callan's annual return assumption of **7.2%**.
- **7 years** (FYE 2030) needed to reach $100 billion at APFC's 5-year annual return of **7.9%**.
- To reach $100 billion NAV in **5 years** (FYE 2028), APFC would need an annual return of at least **9.3%**.
- To reach $100 billion NAV in **3 years** (FYE 2026), APFC would need an annual return of at least **12.8%**.

Key drivers and assumptions:

- Fiscal Year End 2023 Fund value is actual and used as a starting value in the model; 2024 and beyond are projections.
- POMV assumed to be drawn from the Fund using mid-year convention.
- Annual royalty deposits assumed to be added to the Fund at the end of each fiscal year.

Sources: APFC June 30 & August 31, 2023 History and Projections; APFC June 30, 2023 Monthly Performance Report

AUM Growth – Asset Allocation

- The Fund's current asset allocation (FY '24) is based on a return target of CPI + 5%. The following table shows the marginal effect on total Fund expected return of shifting allocation from Fixed Income to Private Equity.

Asset Class	FY '24	CPI +5.1%	CPI +5.2%	CPI +5.3%	CPI +5.4%	CPI +5.5%	CPI +5.6%	CPI +5.7%	CPI +5.8%	CPI +5.9%	CPI +6.0%
Fixed Income	20%	15%	12%	11%	9%	7%	4%	2%	0%	0%	0%
Private Equity	16%	18%	21%	22%	24%	26%	29%	31%	34%	36%	39%
Real Estate	10%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%
Public Equities	34%	34%	34%	34%	34%	34%	34%	34%	34%	34%	34%
Private Income	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%
Absolute Return	7%	7%	7%	7%	7%	7%	7%	7%	6%	4%	1%
Tactical Opportunities	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Cash	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Total Fund Nominal	7.5%	7.6%	7.7%	7.8%	7.9%	8.0%	8.1%	8.2%	8.3%	8.4%	8.5%
Inflation (CPI-U)	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*
Total Fund Real	**5.0%**	**5.1%**	**5.2%**	**5.3%**	**5.4%**	**5.5%**	**5.6%**	**5.7%**	**5.8%**	**5.9%**	**6.0%**

- Based on the latest Callan capital market forecasts (January 2023), each 1% shift from Fixed Income to Private Equity is associated with a ~4 bps increase in the total fund expected return.

- In order to target a CPI + 6% return based on current capital market expectations, all of the Fixed Income allocation and the majority of the Absolute Return allocation would need to be shifted to Private Equity.

- It should be noted that 10-year yields are up 119 bps from January 1, 2023 (when Callan releases capital market expectations) to present (October 18, 2023). Therefor, one might conclude that expected returns might be marginally higher than shown here.

AUM Growth – Leverage

Total Fund Levered Return Sensitivity (1)

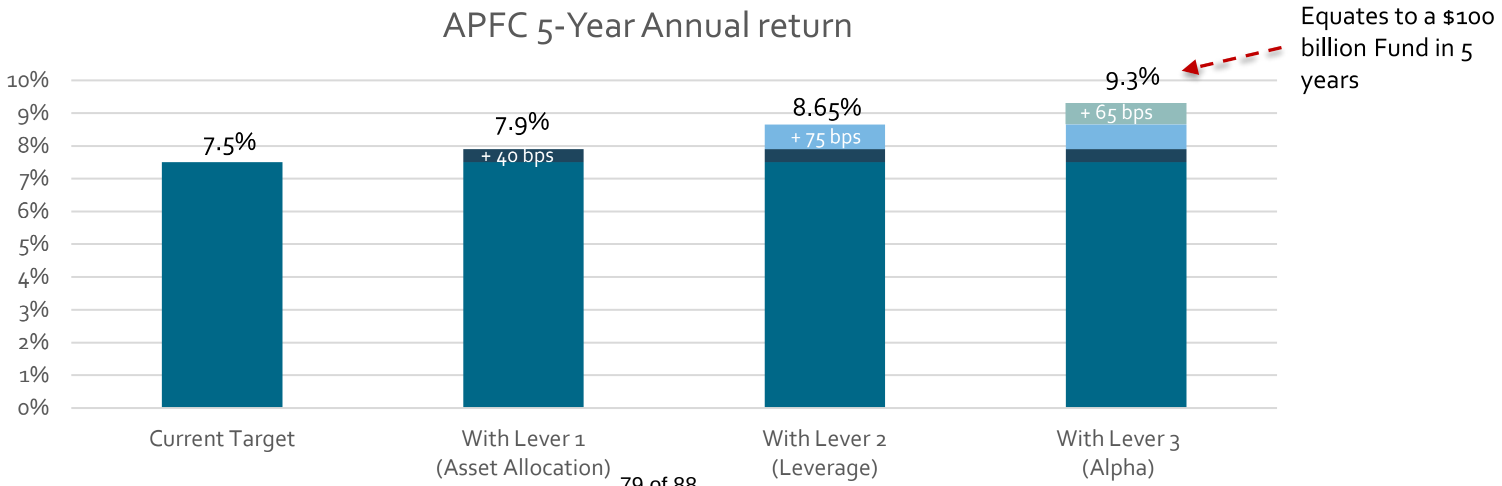
% Total Fund Leverage	Unlevered Return % 0%	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
0%	0.00%	1.00%	2.00%	3.00%	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
10%	-0.63%	0.48%	1.59%	2.71%	3.82%	4.93%	6.04%	7.15%	8.26%	9.37%	10.48%
20%	-1.41%	-0.16%	1.09%	2.34%	3.59%	4.84%	6.09%	7.34%	8.59%	9.84%	11.09%
30%	-2.42%	-0.99%	0.44%	1.86%	3.29%	4.72%	6.15%	7.58%	9.01%	10.44%	11.86%
40%	-3.77%	-2.10%	-0.43%	1.23%	2.90%	4.57%	6.23%	7.90%	9.57%	11.23%	12.90%
50%	-5.65%	-3.65%	-1.65%	0.35%	2.35%	4.35%	6.35%	8.35%	10.35%	12.35%	14.35%
60%	-8.48%	-5.98%	-3.48%	-0.98%	1.53%	4.03%	6.53%	9.03%	11.53%	14.03%	16.53%
70%	-13.18%	-9.85%	-6.52%	-3.18%	0.15%	3.48%	6.82%	10.15%	13.48%	16.82%	20.15%
80%	-22.60%	-17.60%	-12.60%	-7.60%	-2.60%	2.40%	7.40%	12.40%	17.40%	22.40%	27.40%
90%	-50.85%	-40.85%	-30.85%	-20.85%	-10.85%	-0.85%	9.15%	19.15%	29.15%	39.15%	49.15%

Red = Levered return is less than unlevered return
Green = Levered return is greater than or equal to unlevered return

(1) Assumes a 5.65% cost of debt based on borrowing at ~100 bps spread to US 10-Year Treasury yield

AUM Growth – Levers to Achieve 9.3% (CPI +6.8%)

- **Lever 1:** Asset Allocation
  - An incremental 40 basis points is achieved by shifting half of the Fixed Income allocation to Private Equity
- **Lever 2:** Leverage
  - An incremental 75 basis points is achieved by using 25% Fund leverage
- **Lever 3:** Alpha
  - An incremental 40 – 70 basis points (65 bps assumed below) outperformance may be achieved from creating a high-performance driven investment office



Improve Corporate Functionality

Work with Trustees, the Governor's Legislative Office, and the Legislature to bring forth the Board's legislative initiatives for introduction.

Build a comprehensive plan for legislative support to modernize the functionality of APFC.

- Open Meetings Act
- State Procurement Code
- Fund Level Leverage
- Personnel Issues – Privacy
- Budget Flexibility

Modernization of Permanent Fund Structure

Trustee Paper #10

- Drafting in Progress

Building on past work

Communicating Strategic Initiatives

Forward the Strategic Vision and Initiatives of the Board to position the Corporation and the Fund for long-term sustainability and growth.

- **Growing the Fund to $100 billion –** to provide an enduring source of renewable financial revenue to support the state and benefit Alaskans.
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Integrating Initiatives

- In-State Mission of Education and Awareness
- Nationwide Focus on Investment Performance and Strategy

Audience

- Alaskans
- Legislative and Executive Branches of Government
- Financial Industry Stakeholders
- Peer SWFs and Endowments
- Media Outlets – Local & Global
- APFC Brand Ambassadors


APFC
ALASKA PERMANENT
FUND CORPORATION

SUBJECT: Board of Trustees Meeting Locations ACTION: X

DATE: October 30, 2023 INFORMATION:

BACKGROUND:

APFC's Board of Trustees holds quarterly and regular meetings to review and evaluate the investment performance of the portfolio, the asset allocation and investment risk of the Fund, and the compliance program in relation to applicable laws, regulations, and governance policies. Special meetings of the Board of Trustees are scheduled as required.

The 2024 and 2025 Board of Trustees Meeting dates were previously approved, however, there are suggested locations to review. Please note that the December 2023 Quarterly Board Meeting will be held December 13-14 in Juneau. Attached are the calendars for your information, please mark your schedules.

RECOMMENDATION:

- Review and approve suggested locations for the 2024 and 2025 Board of Trustees Meeting Schedule

APFC ALASKA PERMANENT FUND CORPORATION

801 W 10TH SUITE 302 | JUNEAU, AK 99801
907.796.1500 | apfc.org

2024 ADOPTED BOARD OF TRUSTEES MEETING CALENDAR

With suggested locations in red

Date	Location	Type of Meeting	Recurring Topics
February 15, 2024 Thursday	Juneau	Quarterly	• CEO/CIO/CRO/COO reports • Performance for quarter ending 12/31 update • Asset Class Update/Review TBD • opportunity to discuss CIO recommendations and provide input/concerns. • Legislative Update – Opportunity for Board to weigh in on Legislative Strategy, pending legislation affecting APFC, or process.
April 10, 2024 Wednesday	Juneau	Regular	• CEO/CIO/CRO/COO reports • Legislative Update – update and feedback • Discuss Investment Policy ahead of May meeting, final discussion before the revised policy is provided in May.
May 29-30, 2024 Wed/Thurs	Homer**	Regular Audit Committee	• CEO/CIO/CRO/COO reports • Investment Policy review and adoption – policy is functionally finalized • Legislative Update/end of session review • Asset Class Update/Review TBD • Performance for quarter ending 3/31 – Callan • Budget Review • Private Markets Pacing approval • Review YTD financials and coming year audit plan
July 17, 2024 Wednesday	Fairbanks**	Regular	• CEO/CIO/CRO/COO reports • No regular topics

Date	Location	Type of Meeting	Recurring Topics
September 5, 2024* Thursday	Juneau	Audit Committee Budget Planning Session	• CEO/CIO/CRO/COO reports • Review Audit process • Budget Discussion ahead of annual meeting ask for adjustment to budget to meet goals.
September 25-26, 2024 Wed/Thurs	Anchorage	Annual Meeting	• CEO/CIO/CRO/COO reports • Budget Approval – This is the budget that will be submitted to the Governor's Office for consideration. • Performance for FY end 6/30 - Callan • Asset Class Update/Review TBD • Report of Annual Audit • Election of Corporate Officers – Chair and Vice-Chair • Calendar of meetings for next two years
December 11-12, 2024 Wed/Thurs	Juneau	Regular	• CEO/CIO/CRO/COO reports • Performance for quarter end 9/30 - Callan • CEO Evaluation – Chair coordinates – executive session • Asset Class Update/Review TBD

Committee Meetings and Special or additional APFC board meetings will be scheduled as needed.

*The Audit Committee Meeting in September must be scheduled in advance to coordinate with the release date for the Audited Statements and the Annual Report as required in statute.

** We invite the Trustees to suggest locations for a non-Juneau/Anchorage meeting once a year – logistics such as time of year, costs, venue & hotel room availability will be taken into account

Standard Topics for Quarterly Meetings include Callan Updates and Asset Class Updates. Asset Class Updates are scheduled throughout the year and will rotate through the Asset Classes

2025 BOARD OF TRUSTEES PROPOSED MEETING CALENDAR

With suggested locations in red

Date	Location	Type of Meeting	Recurring Topics
February 12, 2025 Wednesday	Juneau	Quarterly	• CEO/CIO/CRO/COO reports • Performance for quarter ending 12/31 update • Asset Class Update/Review TBD • opportunity to discuss CIO recommendations and provide input/concerns. • Legislative Update – Opportunity for Board to weigh in on Legislative Strategy, pending legislation affecting APFC, or process.
April 9, 2025 Wednesday	Juneau	Regular	• CEO/CIO/CRO/COO reports • Legislative Update – update and feedback • Discuss Investment Policy ahead of May meeting, final discussion before the revised policy is provided in May.
May 28-29, 2025 Wed/Thurs	Sitka**	Regular Audit Committee	• CEO/CIO/CRO/COO reports • Investment Policy review and adoption – policy is functionally finalized • Legislative Update/end of session review • Asset Class Update/Review TBD • Performance for quarter ending 3/31 – Callan • Budget Review • Private Markets Pacing approval • Review YTD financials and coming year audit plan
July 16, 2025 Wednesday	Utqiagvik**	Regular	• CEO/CIO/CRO/COO reports • No regular topics

Date	Location	Type of Meeting	Recurring Topics
September 24-25, 2025 Wed/Thurs	Anchorage	Annual Meeting	• CEO/CIO/CRO/COO reports • Budget Approval – This is the budget that will be submitted to the Governor's Office for consideration. • Performance for FY end 6/30 - Callan • Asset Class Update/Review TBD • Report of Annual Audit • Election of Corporate Officers – Chair and Vice-Chair • Calendar of meetings for next two years
December 10-11, 2025 Wed/Thurs	Juneau	Regular	• CEO/CIO/CRO/COO reports • Performance for quarter end 9/30 - Callan • CEO Evaluation – Chair coordinates – executive session • Asset Class Update/Review TBD

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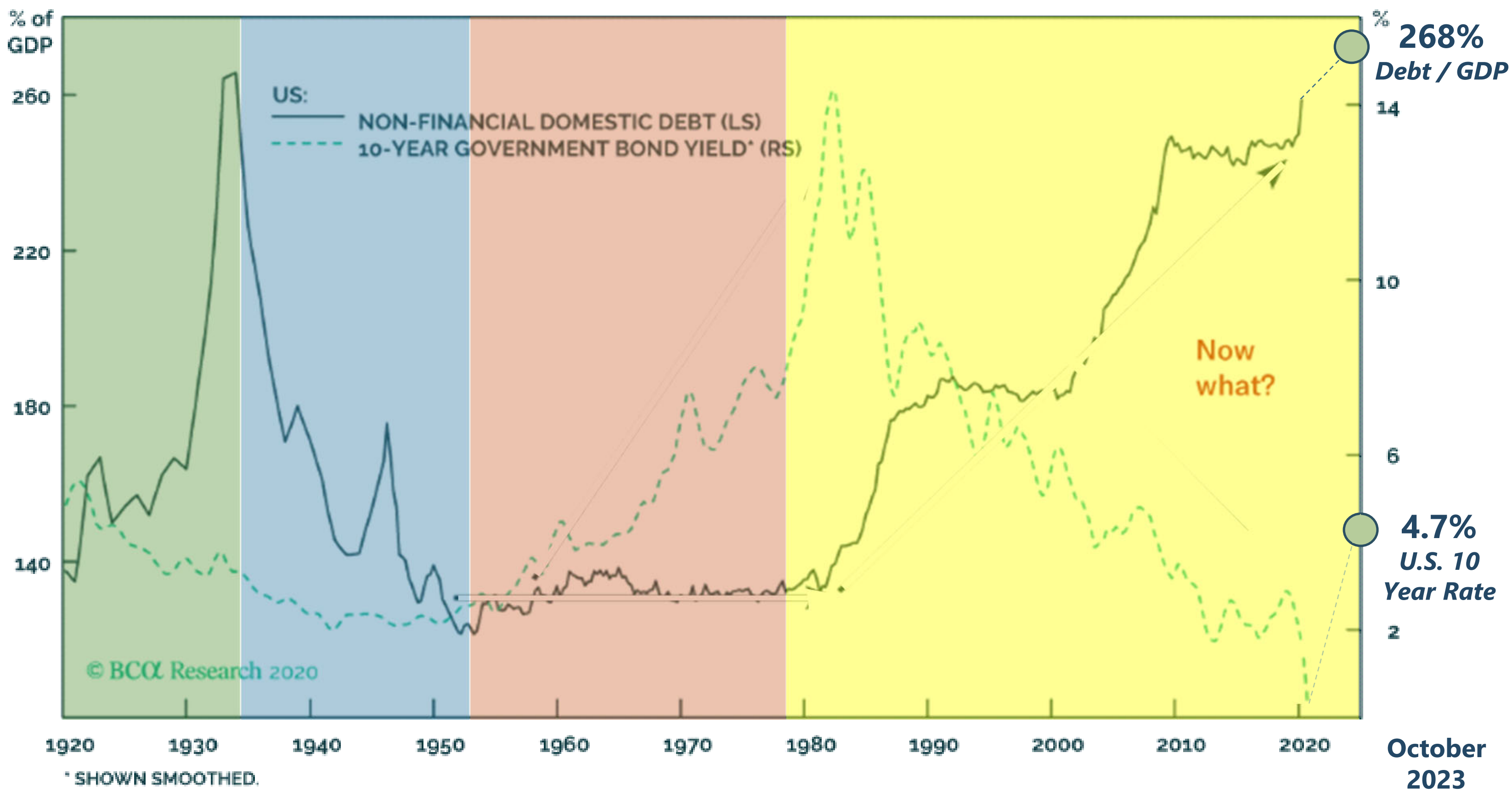
Alaska Permanent Fund Corporation

Britt Harris

October 2023

US Long-Term Debt Super Cycle



Source: BCA Research, Federal Reserve Board Financial Accounts of the United States

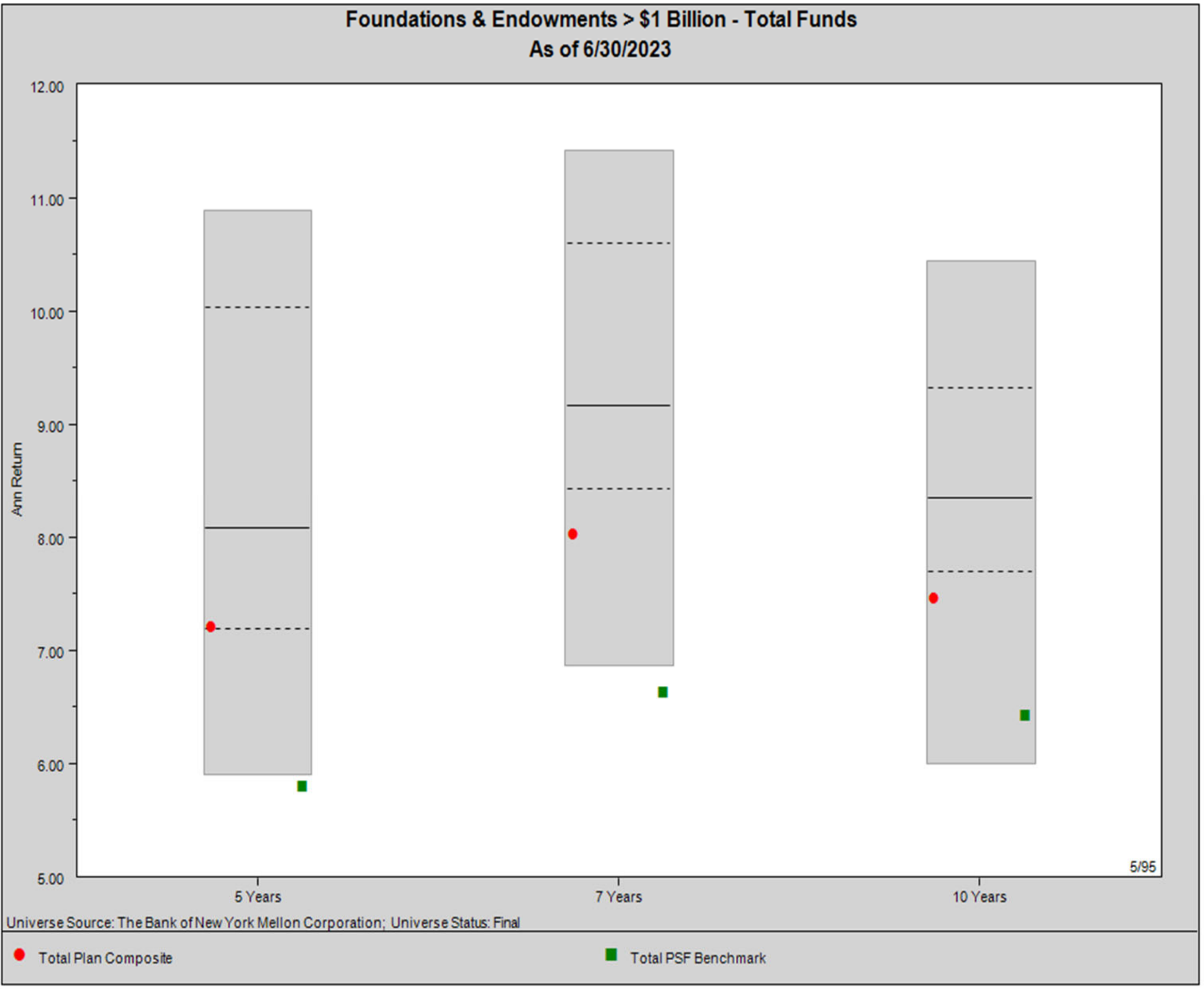
Expected returns and correlations by asset class

	Asset class	Compound Return 2024 (%)	Arithmetic Return 2024 (%)	Annualized Volatility (%)	Compound Return 2023 (%)	U.S. Inflation	U.S. Cash	U.S. Intermediate Treasuries	U.S. Long Treasuries	TIPS	U.S. Aggregate Bonds	U.S. Securitized	U.S. Short Duration Government/Credit	U.S. Long Duration Government/Credit	U.S. Inv Grade Corporate Bonds	U.S. Long Corporate Bonds	U.S. High Yield Bonds	U.S. Leveraged Loans	World Government Bonds hedged	World Government Bonds	World ex-U.S. Government Bonds hedged	World ex-U.S. Government Bonds	Emerging Markets Sovereign Debt	Emerging Markets Local Currency Debt	Emerging Markets Corporate Bonds	U.S. Muni 1-15 Yr Blend	U.S. Muni High Yield
Fixed Income	U.S. Inflation	2.50	2.51	1.52	2.60	1.00																					
	U.S. Cash	2.90	2.90	0.59	2.40	-0.02	1.00																				
	U.S. Intermediate Treasuries	3.90	3.95	3.27	3.60	-0.26	0.17	1.00																			
	U.S. Long Treasuries	5.20	5.92	12.39	4.20	-0.21	0.06	0.83	1.00																		
	TIPS	4.60	4.76	5.75	4.30	0.00	0.04	0.61	0.58	1.00																	
	U.S. Aggregate Bonds	5.10	5.19	4.28	4.60	-0.24	0.10	0.83	0.83	0.75	1.00																
	U.S. Securitized	5.30	5.35	3.34	4.80	-0.22	0.12	0.79	0.73	0.69	0.93	1.00															
	U.S. Short Duration Government/Credit	3.90	3.91	1.58	3.60	-0.29	0.26	0.83	0.58	0.61	0.82	0.79	1.00														
	U.S. Long Duration Government/Credit	5.70	6.24	10.76	5.20	-0.20	0.04	0.72	0.89	0.68	0.93	0.79	0.65	1.00													
	U.S. Inv Grade Corporate Bonds	5.80	6.04	7.14	5.50	-0.17	0.02	0.49	0.56	0.70	0.85	0.73	0.64	0.84	1.00												
	U.S. Long Corporate Bonds	6.00	6.64	11.70	5.80	-0.17	0.01	0.48	0.64	0.65	0.85	0.71	0.58	0.90	0.97	1.00											
	U.S. High Yield Bonds	6.50	6.83	8.36	6.80	0.01	-0.07	-0.06	-0.06	0.46	0.35	0.35	0.26	0.30	0.64	0.58	1.00										
	U.S. Leveraged Loans	6.50	6.79	7.89	6.20	0.18	-0.09	-0.39	-0.31	0.18	0.03	0.03	-0.07	0.02	0.37	0.32	0.78	1.00									
	World Government Bonds hedged	4.20	4.27	3.74	3.70	-0.28	0.10	0.85	0.86	0.60	0.86	0.77	0.71	0.83	0.63	0.66	0.07	-0.22	1.00								
	World Government Bonds	4.80	5.03	6.91	4.40	-0.15	0.10	0.74	0.63	0.67	0.79	0.71	0.73	0.72	0.67	0.66	0.30	-0.06	0.70	1.00							
	World ex-U.S. Government Bonds hedged	4.00	4.07	3.71	3.60	-0.27	0.09	0.71	0.73	0.55	0.77	0.68	0.61	0.76	0.61	0.64	0.15	-0.12	0.96	0.63	1.00						
	World ex-U.S. Government Bonds	4.90	5.25	8.61	4.60	-0.13	0.09	0.63	0.52	0.64	0.72	0.66	0.68	0.65	0.66	0.64	0.38	0.03	0.62	0.98	0.58	1.00					
	Emerging Markets Sovereign Debt	6.80	7.23	9.64	7.10	-0.12	0.03	0.27	0.30	0.61	0.63	0.58	0.47	0.59	0.81	0.76	0.74	0.47	0.40	0.57	0.42	0.62	1.00				
	Emerging Markets Local Currency Debt	6.00	6.69	12.23	7.10	-0.03	0.12	0.19	0.14	0.44	0.45	0.41	0.39	0.41	0.60	0.57	0.62	0.36	0.23	0.60	0.25	0.66	0.80	1.00			
	Emerging Markets Corporate Bonds	6.70	7.08	9.01	7.00	-0.05	-0.03	0.16	0.19	0.53	0.54	0.48	0.42	0.50	0.79	0.72	0.72	0.57	0.27	0.45	0.29	0.49	0.89	0.72	1.00		
	U.S. Muni 1-15 Yr Blend	4.00	4.07	3.89	3.70	-0.16	0.09	0.52	0.49	0.57	0.71	0.68	0.55	0.62	0.68	0.64	0.40	0.18	0.58	0.53	0.57	0.52	0.61	0.37	0.48	1.00	
	U.S. Muni High Yield	5.80	6.14	8.49	5.20	0.20	-0.04	0.11	0.20	0.46	0.39	0.39	0.17	0.35	0.53	0.47	0.48	0.50	0.24	0.22	0.26	0.24	0.55	0.29	0.55	0.62	1.00
Equities	U.S. Large Cap	7.00	8.19	16.19	7.90	0.01	-0.04	-0.11	-0.10	0.29	0.21	0.20	0.09	0.21	0.46	0.44	0.74	0.58	0.03	0.26	0.12	0.34	0.60	0.59	0.56	0.20	0.30
	U.S. Mid Cap	7.60	9.08	18.13	8.00	0.01	-0.05	-0.16	-0.12	0.28	0.19	0.19	0.07	0.19	0.47	0.44	0.78	0.63	-0.01	0.22	0.08	0.31	0.60	0.59	0.57	0.21	0.30
	U.S. Small Cap	7.20	9.07	20.44	8.10	-0.02	-0.07	-0.19	-0.19	0.18	0.11	0.12	0.01	0.10	0.36	0.34	0.71	0.56	-0.07	0.15	0.02	0.23	0.50	0.52	0.47	0.14	0.21
	Euro Area Large Cap	9.70	11.83	22.15	10.50	-0.02	0.05	-0.06	-0.10	0.27	0.25	0.24	0.19	0.22	0.48	0.45	0.72	0.53	0.02	0.39	0.08	0.47	0.67	0.72	0.62	0.24	0.28
	Japanese Equity	9.30	10.39	15.62	10.40	-0.07	-0.03	-0.05	-0.03	0.25	0.26	0.26	0.18	0.25	0.50	0.47	0.66	0.49	0.04	0.30	0.09	0.37	0.58	0.62	0.56	0.21	0.26
	Hong Kong Equity	9.90	11.80	20.89	7.50	-0.03	-0.01	-0.06	-0.06	0.23	0.26	0.25	0.20	0.23	0.49	0.45	0.60	0.50	-0.03	0.29	-0.02	0.35	0.60	0.67	0.65	0.24	0.33
	UK Large Cap	8.60	10.01	17.76	9.10	0.05	-0.02	-0.17	-0.18	0.23	0.17	0.17	0.09	0.15	0.44	0.41	0.72	0.61	-0.09	0.29	-0.02	0.39	0.61	0.66	0.60	0.18	0.33
	EAFE Equity	9.20	10.58	17.64	9.80	-0.01	0.01	-0.08	-0.09	0.30	0.26	0.25	0.19	0.24	0.52	0.49	0.77	0.59	0.01	0.39	0.07	0.47	0.68	0.74	0.65	0.24	0.31
	Chinese Domestic Equity	10.80	14.38	29.33	11.80	-0.05	0.10	-0.05	-0.03	0.11	0.16	0.16	0.11	0.14	0.29	0.26	0.35	0.29	0.01	0.15	0.02	0.18	0.34	0.35	0.40	0.10	0.18
	Emerging Markets Equity	8.80	10.77	21.20	10.10	0.00	0.02	-0.07	-0.06	0.32	0.27	0.25	0.21	0.25	0.52	0.48	0.72	0.57	0.01	0.38	0.05	0.46	0.69	0.80	0.70	0.22	0.35
	AC Asia ex-Japan Equity	8.90	10.83	20.98	10.00	-0.05	0.01	-0.04	-0.02	0.31	0.30	0.28	0.23	0.28	0.54	0.50	0.70	0.54	0.04	0.37	0.06	0.44	0.67	0.75	0.69	0.23	0.35
	AC World Equity	7.80	9.05	16.68	8.50	0.00	-0.01	-0.10	-0.10	0.31	0.25	0.23	0.15	0.23	0.52	0.49	0.79	0.62	0.02	0.34	0.09	0.43	0.67	0.71	0.64	0.22	0.32
	U.S. Equity Value Factor	8.40	9.76	17.42	10.10	-0.02	-0.07	-0.16	-0.16	0.22	0.16	0.17	0.07	0.14	0.41	0.38	0.74	0.58	-0.03	0.21	0.07	0.30	0.56	0.59	0.53	0.16	0.24
	U.S. Equity Momentum Factor	7.90	9.14	16.62	8.90	0.02	-0.03	-0.12	-0.07	0.33	0.23	0.21	0.08	0.23	0.49	0.46	0.76	0.62	0.03	0.24	0.12	0.32	0.61	0.56	0.56	0.24	0.34
	U.S. Equity Quality Factor	7.00	8.00	14.81	7.80	0.00	-0.02	-0.09	-0.08	0.30	0.23	0.21	0.10	0.22	0.47	0.45	0.73	0.56	0.05	0.27	0.13	0.35	0.61	0.60	0.55	0.22	0.29
	U.S. Equity Minimum Volatility Factor	7.40	8.17	12.98	8.20	-0.01	-0.08	-0.07	-0.04	0.29	0.24	0.22	0.10	0.25	0.47	0.45	0.71	0.54	0.08	0.28	0.16	0.35	0.61	0.61	0.53	0.24	0.30
	U.S. Equity Dividend Yield Factor	8.00	9.17	16.15	8.90	0.00	-0.08	-0.12	-0.11	0.27	0.19	0.19	0.08	0.19	0.45	0.43	0.73	0.58	0.00	0.25	0.09	0.33	0.59	0.61	0.54	0.22	0.27
	Global Convertible Bonds hedged	7.90	8.53	11.78	9.10	-0.08	-0.04	-0.12	-0.07	0.32	0.28	0.25	0.17	0.27	0.58	0.53	0.82	0.69	0.04	0.26	0.12	0.33	0.69	0.61	0.69	0.28	0.36
Alternatives	U.S. Core Real Estate	7.50	8.02	10.60	5.70	0.31	-0.17	-0.25	-0.16	0.11	-0.08	-0.02	-0.20	-0.09	0.05	0.02	0.38	0.45	-0.16	-0.13	-0.12	-0.10	0.15	0.15	0.24	-0.16	0.39
	U.S. Value-Added Real Estate	9.70	11.08	17.66	7.70	0.31	-0.17	-0.25	-0.16	0.11	-0.08	-0.02	-0.20	-0.09	0.05	0.02	0.38	0.45	-0.16	-0.13	-0.12	-0.10	0.15	0.15	0.24	-0.16	0.39
	European Core Real Estate	7.30	8.06	12.84	6.80	0.31	-0.16	-0.35	-0.31	0.17	-0.10	-0.04	-0.15	-0.14	0.14	0.07	0.53	0.56	-0.24	-0.03	-0.17	0.04	0.29	0.31	0.39	-0.06	0.36
	Asia Pacific Core Real Estate	8.70	9.75	15.32	8.10	0.22	-0.05	-0.27	-0.26	0.24	0.04	0.07	-0.04	0.01	0.33	0.27	0.67	0.65	-0.20	0.16	-0.14	0.25	0.49	0.53	0.55	0.14	0.48
	U.S. REITs	8.20	9.36	16.05	6.80	0.00	-0.06	0.05	0.13	0.36	0.35	0.34	0.15	0.36	0.51	0.51	0.67	0.43	0.21	0.34	0.26	0.38	0.58	0.57	0.50	0.29	0.33
	Commercial Mortgage Loans	6.30	6.58	7.78	-	0.11	0.00	0.18	0.17	0.53	0.43	0.47	0.27	0.32	0.47	0.40	0.49	0.46	0.28	0.24	0.31	0.26	0.56	0.40	0.52	0.48	0.57
	Global Core Infrastructure	6.80	7.38	11.24	6.30	0.20	0.01	-0.25	-0.28	0.23	0.00	0.03	-0.01	-0.05	0.25	0.18	0.57	0.60	-0.21	0.16	-0.16	0.26	0.47	0.51	0.48	0.11	0.33
	Global Core Transport	7.70	8.60	14.06	7.50	0.16	0.13	0.01	0.03	-0.03	-0.09	-0.04	-0.11	-0.08	-0.25	-0.21	-0.12	-0.05	-0.01	-0.05	-0.04	-0.07	-0.16	-0.04	-0.18	-0.18	0.00
	Global Timberland	6.20	6.74	10.81	6.70	-0.02	0.18	-0.12	-0.21	0.15	0.03	0.04	0.09	0.00	0.23	0.19	0.37	0.30	-0.12	0.22	-0.07	0.29	0.38	0.51	0.34	0.07	0.11
	Commodities	3.80	5.31	18.00	3.10	0.27	-0.04	-0.17	-0.23	0.27	0.00	-0.01	0.03	-0.01	0.21	0.17	0.46	0.42	-0.22	0.23	-0.18	0.31	0.35	0.46	0.36	-0.04	0.20
	Gold	4.10	5.43	16.93	3.50	-0.01	0.09	0.37	0.31	0.48	0.41	0.36	0.38	0.35	0.38	0.33	0.14	-0.04	0.29	0.52	0.22	0.52	0.34	0.40	0.32	0.25	0.15
	Private Equity	9.70	11.46	20.06	9.90	0.09	0.00	-0.36	-0.42	0.17	-0.03	-0.02	-0.04	-0.09	0.36	0.26	0.73	0.69	-0.28	0.07	-0.18	0.19	0.59	0.60	0.63	0.12	0.39
	Venture Capital	9.20	11.34	22.17	8.50	-0.07	-0.05	-0.27	-0.28	0.14	0.00	0.02	-0.05	-0.05	0.27	0.19	0.54	0.51	-0.15	0.01	-0.07	0.09	0.46	0.41	0.48	0.11	0.33
	Diversified Hedge Funds	5.00	5.16	5.80	5.00	0.09	0.01	-0.33	-0.25	0.19	0.01	-0.03	-0.07	0.04	0.34	0.29	0.61	0.68	-0.21	0.02	-0.13	0.10	0.46	0.41	0.50	0.08	0.39
	Event Driven Hedge Funds	5.00	5.32	8.22	5.40	0.09	-0.05	-0.29	-0.29	0.21	0.06	0.05	0.02	0.05	0.38	0.34	0.77	0.77	-0.19	0.11	-0.09	0.21	0.54	0.53	0.57	0.12	0.37
	Long Bias Hedge Funds	4.70	5.27	11.04	5.00	0.02	-0.04	-0.21	-0.21	0.25	0.15	0.13	0.10	0.13	0.45	0.41	0.77	0.68	-0.11	0.22	-0.03	0.32	0.59	0.62	0.60	0.15	0.31
	Relative Value Hedge Funds	4.90	5.06	5.73	4.90	0.14	-0.06	-0.29	-0.25	0.25	0.11	0.10	0.05	0.10	0.44	0.38	0.82	0.86	-0.17	0.08	-0.08	0.17	0.59	0.55	0.64	0.17	0.47
	Macro Hedge Funds	3.60	3.84	7.08	4.10	-0.03	0.04	-0.09	-0.08	0.09	-0.05	-0.14	0.01	0.00	0.07	0.07	0.11	0.07	-0.09	0.11	-0.07	0.14	0.10	0.18	0.07	-0.08	-0.04
	Direct Lending	8.50	9.29	13.21	7.80	0.24	-0.11	-0.43	-0.43	0.15	-0.12	-0.07	-0.18	-0.15	0.21	0.13	0.71	0.76	-0.32	-0.16	-0.20	-0.05	0.47	0.40	0.51	0.06	0.39

Asset class	U.S. Large Cap	U.S. Mid Cap	U.S. Small Cap	Euro Area Large Cap	Japanese Equity	Hong Kong Equity	UK Large Cap	EAFE Equity	Chinese Domestic Equity	Emerging Markets Equity	AC Asia ex-Japan Equity	AC World Equity	U.S. Equity Value Factor	U.S. Equity Momentum Factor	U.S. Equity Quality Factor	U.S. Equity Minimum Volatility Factor	U.S. Equity Dividend Yield Factor	Global Convertible Bonds hedged	U.S. Core Real Estate	U.S. Value-Added Real Estate	European Core Real Estate	Asia Pacific Core Real Estate	U.S. REITs	Commercial Mortgage Loans	Global Core Infrastructure	Global Core Transport	Global Timberland	Commodities	Gold	Private Equity	Venture Capital	Diversified Hedge Funds	Event Driven Hedge Funds	Long Bias Hedge Funds	Relative Value Hedge Funds	Macro Hedge Funds	Direct Lending
U.S. Large Cap	1.00																																				
U.S. Mid Cap	0.96	1.00																																			
U.S. Small Cap	0.90	0.95	1.00																																		
Euro Area Large Cap	0.85	0.84	0.76	1.00																																	
Japanese Equity	0.73	0.72	0.67	0.76	1.00																																
Hong Kong Equity	0.60	0.61	0.53	0.69	0.62	1.00																															
UK Large Cap	0.83	0.81	0.73	0.91	0.75	0.74	1.00																														
EAFE Equity	0.88	0.87	0.79	0.97	0.85	0.75	0.95	1.00																													
Chinese Domestic Equity	0.36	0.35	0.32	0.38	0.35	0.59	0.40	0.41	1.00																												
Emerging Markets Equity	0.74	0.76	0.68	0.82	0.70	0.85	0.81	0.86	0.56	1.00																											
AC Asia ex-Japan Equity	0.71	0.72	0.65	0.79	0.69	0.89	0.77	0.83	0.61	0.98	1.00																										
AC World Equity	0.96	0.95	0.87	0.93	0.81	0.72	0.91	0.97	0.42	0.87	0.83	1.00																									
U.S. Equity Value Factor	0.96	0.96	0.93	0.84	0.73	0.59	0.83	0.87	0.34	0.73	0.69	0.94	1.00																								
U.S. Equity Momentum Factor	0.97	0.96	0.90	0.81	0.71	0.59	0.79	0.85	0.37	0.74	0.71	0.94	0.91	1.00																							
U.S. Equity Quality Factor	0.99	0.96	0.90	0.84	0.72	0.59	0.82	0.87	0.35	0.73	0.69	0.95	0.96	0.96	1.00																						
U.S. Equity Minimum Volatility Factor	0.93	0.92	0.85	0.79	0.67	0.56	0.78	0.83	0.30	0.69	0.65	0.90	0.93	0.90	0.95	1.00																					
U.S. Equity Dividend Yield Factor	0.93	0.94	0.89	0.81	0.70	0.61	0.83	0.85	0.31	0.73	0.69	0.91	0.97	0.88	0.94	0.96	1.00																				
Global Convertible Bonds hedged	0.86	0.89	0.83	0.82	0.74	0.69	0.78	0.86	0.48	0.81	0.79	0.90	0.82	0.89	0.84	0.76	0.79	1.00																			
U.S. Core Real Estate	0.38	0.37	0.33	0.23	0.27	0.23	0.35	0.29	0.13	0.31	0.29	0.36	0.37	0.36	0.35	0.39	0.36	0.26	1.00																		
U.S. Value-Added Real Estate	0.38	0.37	0.33	0.23	0.27	0.23	0.35	0.29	0.13	0.31	0.29	0.36	0.37	0.36	0.35	0.39	0.36	0.26	1.00	1.00																	
European Core Real Estate	0.51	0.51	0.44	0.42	0.37	0.46	0.53	0.48	0.40	0.58	0.54	0.54	0.48	0.50	0.46	0.43	0.45	0.53	0.70	0.70	1.00																
Asia Pacific Core Real Estate	0.62	0.65	0.56	0.65	0.56	0.65	0.72	0.70	0.36	0.71	0.69	0.70	0.62	0.62	0.60	0.62	0.65	0.63	0.59	0.59	0.63	1.00															
U.S. REITs	0.77	0.78	0.74	0.68	0.56	0.47	0.63	0.70	0.17	0.58	0.57	0.75	0.78	0.74	0.77	0.82	0.81	0.65	0.52	0.52	0.37	0.61	1.00														
Commercial Mortgage Loans	0.28	0.31	0.22	0.26	0.12	0.30	0.26	0.27	0.24	0.36	0.34	0.30	0.26	0.34	0.31	0.36	0.31	0.34	0.36	0.36	0.33	0.43	0.38	1.00													
Global Core Infrastructure	0.46	0.46	0.40	0.54	0.42	0.54	0.58	0.55	0.18	0.58	0.53	0.53	0.46	0.46	0.45	0.44	0.46	0.45	0.35	0.35	0.46	0.56	0.35	0.42	1.00												
Global Core Transport	0.03	-0.02	-0.01	0.00	-0.15	-0.03	-0.04	-0.04	-0.11	-0.07	-0.06	-0.02	0.01	0.01	0.05	0.07	0.01	-0.19	0.28	0.28	-0.06	0.08	0.18	0.15	0.13	1.00											
Global Timberland	0.45	0.47	0.44	0.57	0.38	0.53	0.54	0.56	0.36	0.54	0.51	0.52	0.46	0.45	0.45	0.46	0.46	0.41	0.04	0.04	0.23	0.43	0.32	0.06	0.44	0.05	1.00										
Commodities	0.45	0.48	0.40	0.48	0.39	0.44	0.60	0.54	0.19	0.57	0.49	0.54	0.44	0.46	0.43	0.42	0.47	0.45	0.35	0.35	0.53	0.57	0.32	0.14	0.46	-0.07	0.42	1.00									
Gold	0.03	0.03	-0.03	0.10	0.04	0.22	0.12	0.13	0.20	0.25	0.22	0.11	-0.01	0.06	0.06	0.08	0.05	0.12	-0.05	-0.05	0.05	0.24	0.09	0.36	0.16	0.05	0.22	0.36	1.00								
Private Equity	0.79	0.81	0.76	0.78	0.62	0.69	0.80	0.81	0.50	0.81	0.77	0.84	0.77	0.80	0.78	0.72	0.75	0.82	0.36	0.36	0.63	0.70	0.54	0.35	0.62	-0.11	0.59	0.57	0.10	1.00							
Venture Capital	0.65	0.67	0.71	0.56	0.52	0.51	0.56	0.59	0.47	0.61	0.61	0.65	0.61	0.68	0.63	0.54	0.55	0.73	0.26	0.26	0.52	0.44	0.36	0.29	0.43	-0.09	0.44	0.31	-0.01	0.78	1.00						
Diversified Hedge Funds	0.68	0.72	0.64	0.65	0.59	0.57	0.69	0.70	0.44	0.68	0.64	0.73	0.63	0.74	0.66	0.60	0.61	0.80	0.35	0.35	0.56	0.61	0.42	0.28	0.43	-0.13	0.46	0.53	0.12	0.80	0.72	1.00					
Event Driven Hedge Funds	0.80	0.85	0.81	0.77	0.68	0.63	0.81	0.82	0.42	0.76	0.72	0.85	0.81	0.82	0.78	0.72	0.79	0.87	0.38	0.38	0.56	0.68	0.57	0.30	0.49	-0.08	0.47	0.57	0.06	0.84	0.68	0.86	1.00				
Long Bias Hedge Funds	0.87	0.90	0.85	0.83	0.75	0.73	0.84	0.89	0.49	0.86	0.82	0.92	0.85	0.88	0.85	0.77	0.82	0.93	0.31	0.31	0.56	0.67	0.60	0.29	0.51	-0.10	0.49	0.58	0.14	0.86	0.74	0.86	0.94	1.00			
Relative Value Hedge Funds	0.69	0.74	0.67	0.69	0.64	0.67	0.76	0.75	0.44	0.76	0.72	0.77	0.70	0.72	0.66	0.64	0.69	0.83	0.42	0.42	0.62	0.71	0.51	0.40	0.54	-0.11	0.44	0.57	0.09	0.80	0.60	0.83	0.92	0.86	1.00		
Macro Hedge Funds	0.18	0.20	0.14	0.22	0.14	0.19	0.27	0.25	0.11	0.27	0.24	0.24	0.16	0.21	0.18	0.19	0.20	0.26	0.00	0.00	0.17	0.13	0.12	-0.14	0.00	-0.16	0.35	0.42	0.32	0.27	0.16	0.50	0.30	0.34	0.29	1.00	
Direct Lending	0.61	0.68	0.62	0.53	0.43	0.47	0.61	0.58	0.28	0.59	0.53	0.63	0.64	0.65	0.61	0.60	0.65	0.66	0.41	0.41	0.58	0.65	0.44	0.48	0.49	-0.02	0.29	0.54	0.03	0.74	0.54	0.66	0.76	0.70	0.80	0.12	1.00

Source: J.P. Morgan 2023 Long-Term Capital Market Assumptions (LTCMAs)

The Children's Fund Universe Percentile

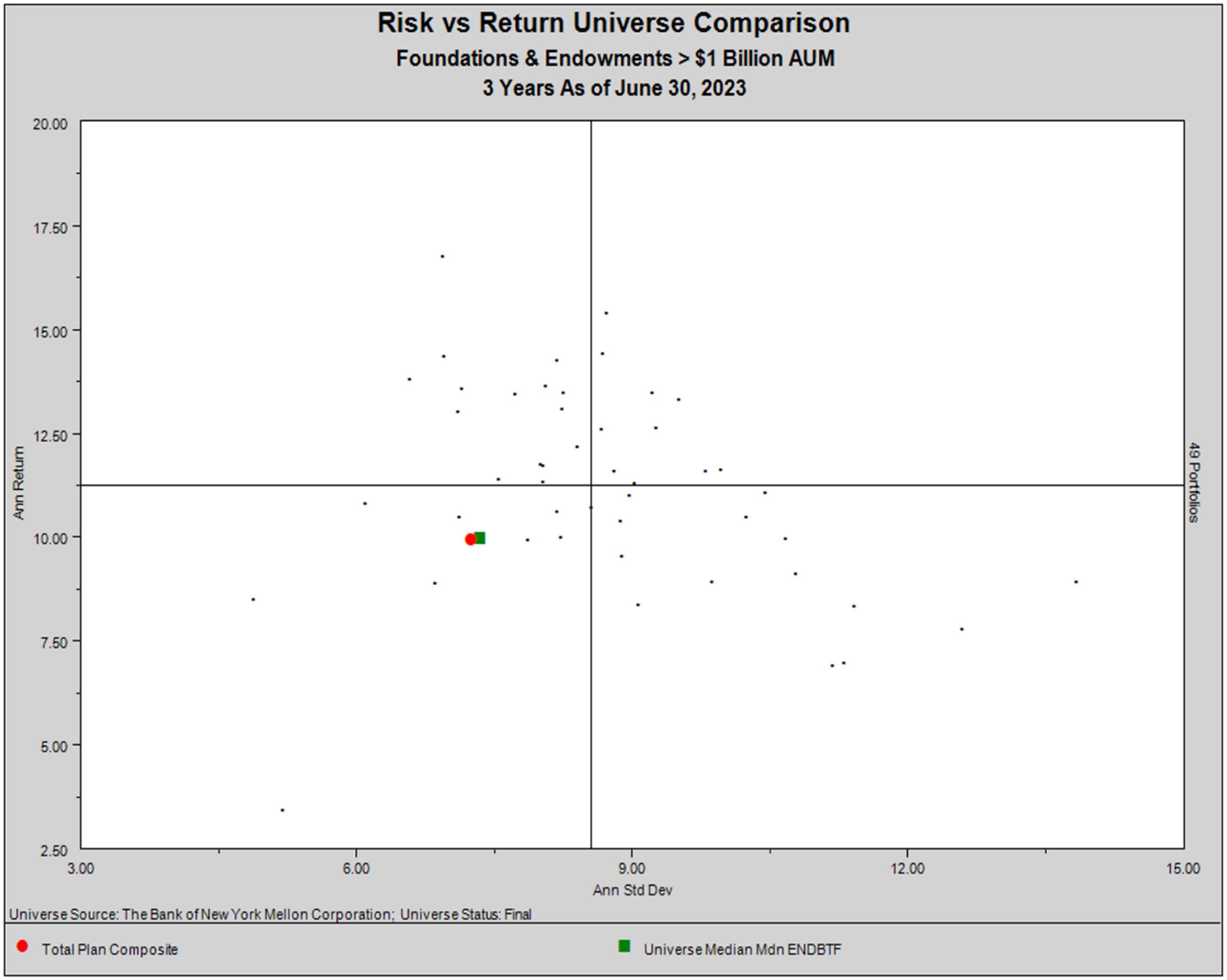


	5 Years	7 Years	10 Years
	Value	Value	Value
5th Percentile	10.90	11.42	10.44
25th Percentile	10.04	10.60	9.33
Median Percentile	8.09	9.16	8.35
75th Percentile	7.20	8.43	7.70
95th Percentile	5.90	6.87	6.00
# of Portfolios	49	46	44

	Value	%Tile	Value	%Tile	Value	%Tile
Total Plan Composite	7.21	74	8.03	86	7.45	80
Total PSF Benchmark	5.80	96	6.62	96	6.43	94

Source: BNY Mellon

The Children's Fund Universe Risk and Return



Three Years

	Annualized Standard Deviation	Risk Percentile	Annualized Return	Return Percentile
Total Plan Composite	7.26	22%	9.89	72%
Universe Median	7.36	22%	9.90	71%

*Total Universe consists of 49 Portfolios

Source: BNY Mellon

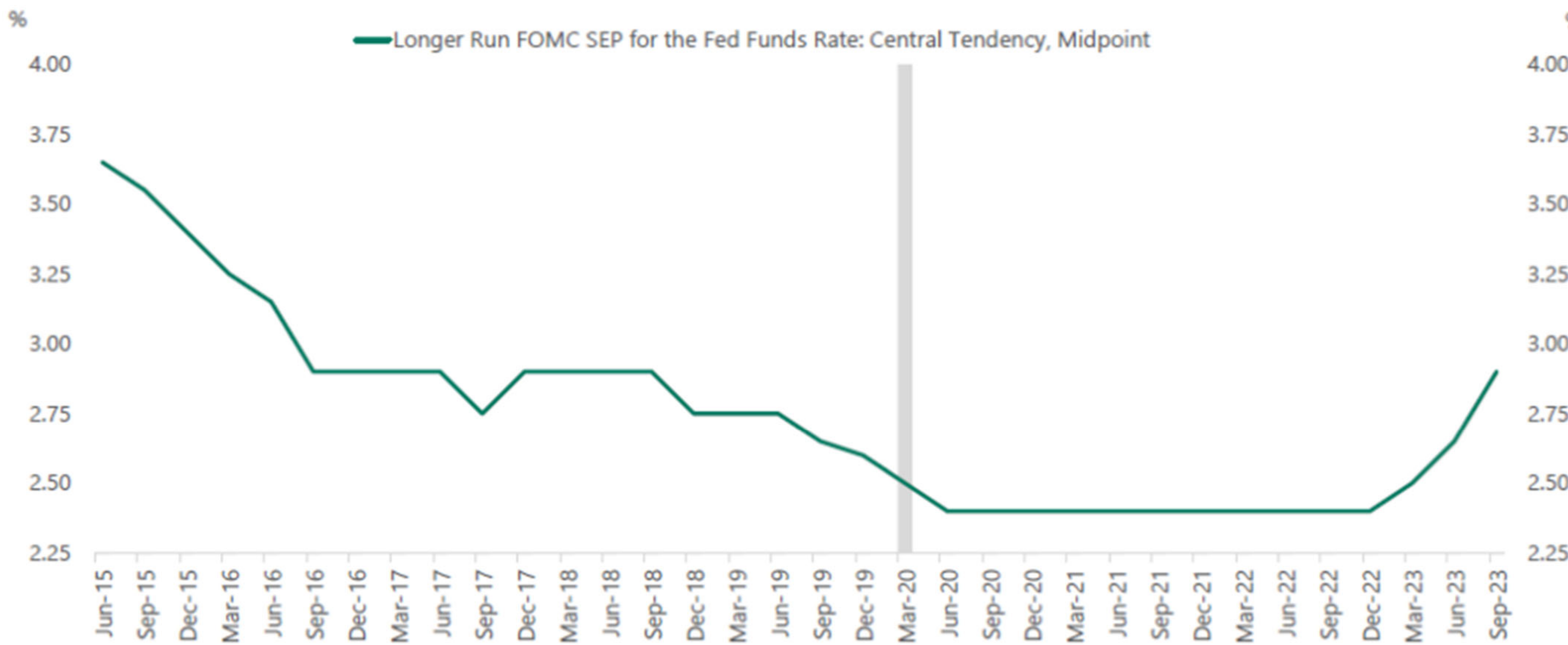
The stock market is more overvalued than it has been in past twenty years

Source: Apollo Chief Economist

Cost of Capital

APOLLO

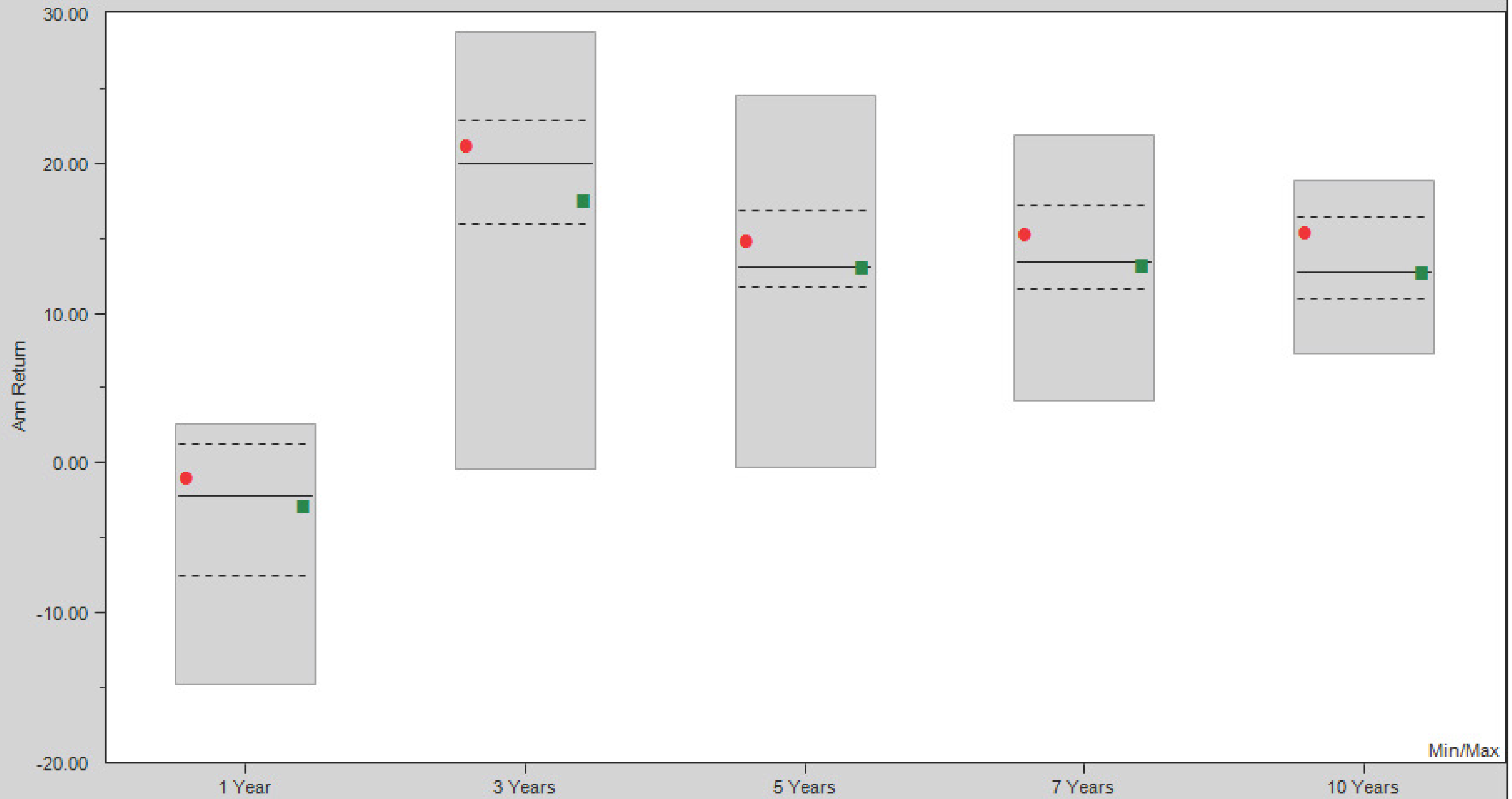
FOMC members continue to increase their estimate of the long-run Fed funds rate



Source: FRB, Apollo Chief Economist

Private Equity Comparison

US Asset Strategy View - Corporate - Private Investments >$5 B (USD) - Monthly
As of June 30, 2023
Quartile

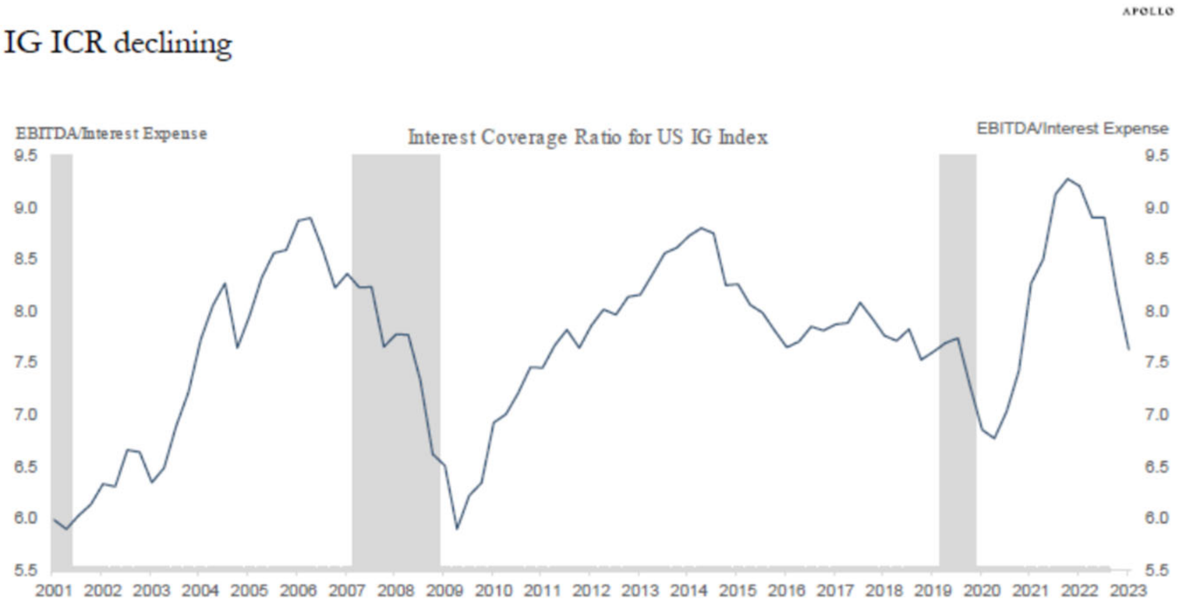


	1 Year Value	%Tile	Rank	3 Years Value	%Tile	Rank	5 Years Value	%Tile	Rank	7 Years Value	%Tile	Rank	10 Years Value	%Tile	Rank
Maximum	2.60			28.77			24.52			21.83			18.84		
25th Percentile	1.28			22.90			16.86			17.17			16.38		
Median Percentile	-2.20			20.03			13.06			13.39			12.76		
75th Percentile	-7.57			15.92			11.77			11.60			10.99		
Minimum	-14.79			-0.39			-0.32			4.21			7.26		
# of Portfolios	14			14			11			9			9		
● Total Private Equity	-1.04	42	7	21.12	45	7	14.71	46	6	15.21	35	4	15.31	30	3
■ Total Private Equity	-3.00	64	10	17.46	70	11	12.96	53	7	13.10	57	6	12.60	61	7

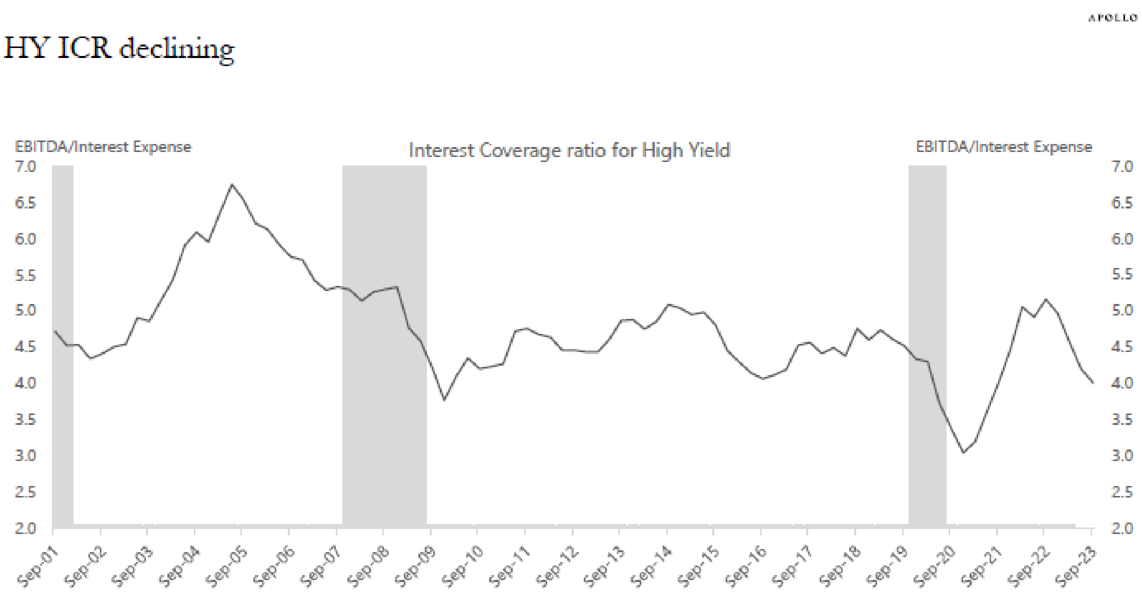
Universe Source: The Bank of New York Mellon Corporation; Universe Status: Final

Coverage ratios continue to decline for IG and HY

IG ICR declining



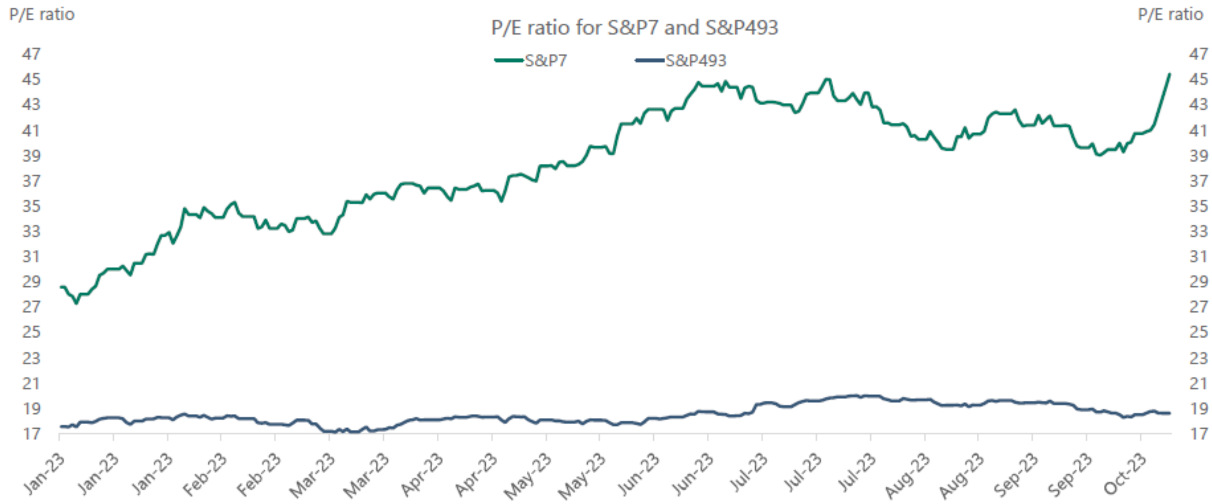
HY ICR declining



Source: Bloomberg, Apollo Chief Economist

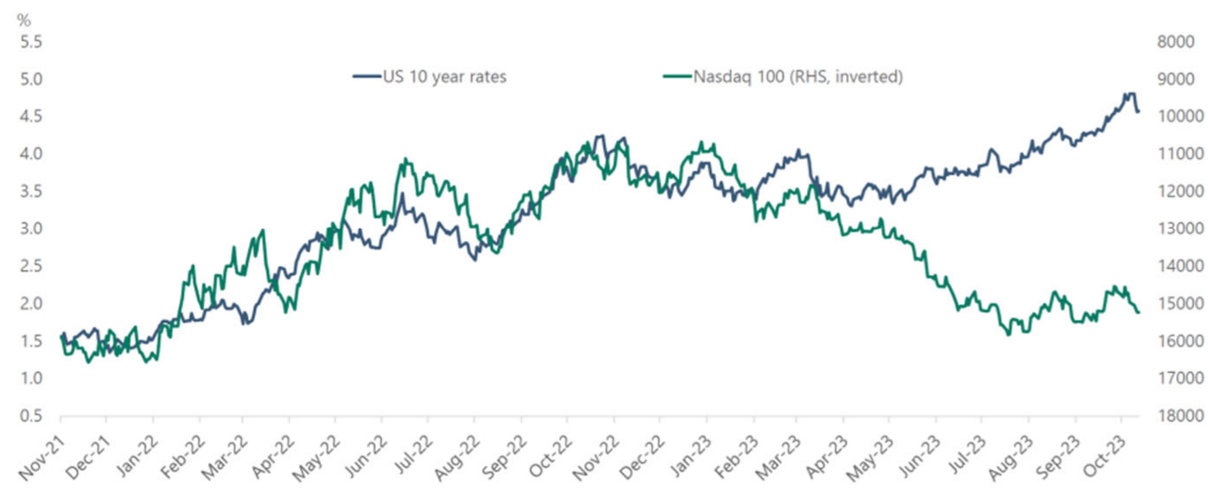
P/E Ratio for S&P7 vs S&P493

The P/E ratio for S&P7 has in 2023 gone from 29 to close to 45



Source: Bloomberg, Apollo Chief Economist. 12M trailing P/E ratio used.

The stock market is disconnected from 10-year rates

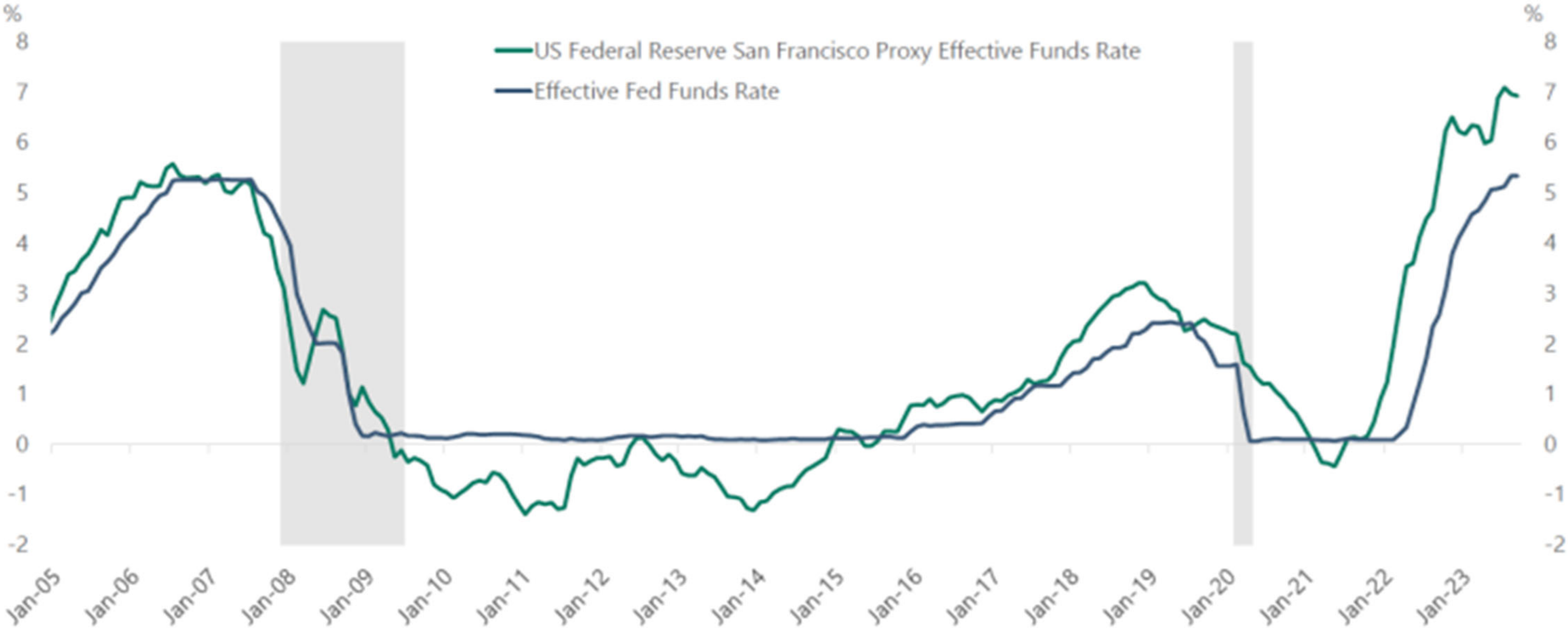


Source: Bloomberg, Apollo Chief Economist

Proxy Fed Funds Rate is 7%

APOLLO

The Fed's own proxy Fed funds rate is around 7%



Source: Bloomberg, Apollo Chief Economist. Note: Source: Monthly series of the proxy funds rate, from Doh and Choi (2016) and Choi, Doh, Foerster, and Martinez (2022). This measure uses public and private borrowing rates and spreads to infer the broader stance of monetary policy. When the Federal Open Market Committee uses additional tools, such as forward guidance or changes in the balance sheet, these policy actions affect financial conditions, which the proxy rate translates into an analogous level of the federal funds rate. The proxy rate can be interpreted as indicating what the federal funds rate would typically be associated with prevailing financial market conditions if these conditions were driven solely by the funds rate.

Environmental Signals

September 2023

US Signal: The annualized quarterly change in Real GDP for Q3 was 4.9%, which is the highest since Q4 2021 and exceeded consensus expectations of 4.7%. Nominal GDP rose to 8.5% at an annual rate, also the highest since Q4 2021. This rise in GDP moves the US into box 6, signaling a transition to a high growth to medium high inflationary environment.

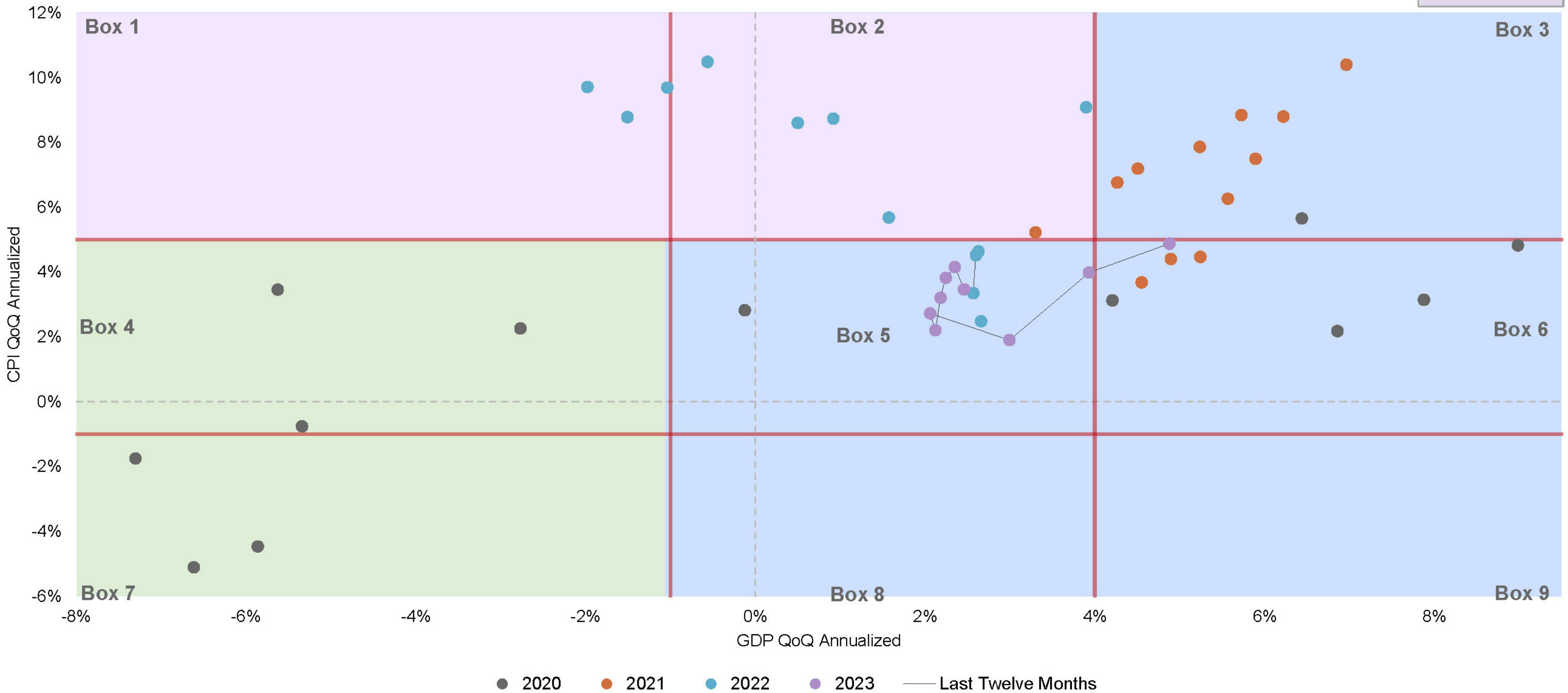
Box Movement: Since 1947, there is a 78% chance of the indicator staying in Box 6 over the next month and a 33% chance of staying in Box 6 over the next year.

Outliers: When in Box 6, there is a 5% chance of a movement to the Stable Value (green) environment, an 8% chance of a movement to the Real Return (purple) environment, and an 87% chance of the US staying within the Global Equity environment (blue).

- Since 1947, a movement from Box 6 to Box 4 or 7 a year later has only occurred 12 times (5%).

PSF: Since 1989, the PSF has averaged a 12% annualized return for the Total Fund when the markets have been in Box 6

US POLICY SIGNAL CHART



Historical Market Annualized Returns

Box #	S&P 500 Nominal	S&P 500 Real
1	17.7%	8.2%
2	-5.3%	-12.5%
3	11.5%	2.7%
4	7.4%	5.4%
5	12.1%	9.5%
6	12.0%	9.4%
7	-7.1%	-2.6%
8	20.1%	23.1%
9	44.8%	45.0%

PSF Box Alignment (Beginning Dec 1989)

Box #	Return	Occurance (%)
1	12.9%	1%
2	-5.8%	7%
3	21.2%	2%
4	-6.0%	4%
5	9.1%	60%
6	12.0%	21%
7	-23.2%	2%
8	16.3%	3%
9	0.0%	0%

**Total Observations 406*

Global Policy Signals Summary

Quarterly Signals	June 2023	March 2023	December 2022
US	5	5	5
Europe	5	2	5
Japan	6	5	5
China	9	6	6