



Board of Trustees

Quarterly Meeting

December 13-14, 2023

Table of Contents

- Agenda
- Approval of Minutes Memo
 - September 6-7, 2023 Special Meeting Minutes
- Chief Executive Officer Reports
 - Pending Board Matters
 - Trustee Education Report
 - Disclosure Report
 - Staff Summary Report
 - Staff Education & Training Report
 - HR Summary Report
 - Communication Report
 - Financial Update
 - Financial Report
 - APFC Transfers
 - APFC History & Projections
 - Investment Management Fee Report
 - FY24 Budget Update
- Chief Investment Officer Report
- Risk Overview
- APFC Technology & AI Roadmap & IAG Presentation
- Callan Fund Performance
- Governance Committee Recommendations
- APFC Org Charts & Alpha Targets
- Asset Class Overview: Absolute Return
- Crestline Summit Presentation
- Bridgewater Presentation
- Strategic Plan
- Legislative Initiatives
- Trustee Paper #10 **Further Materials may be added at a later date**
- May 2024 Meeting Memo



QUARTERLY MEETING OF THE BOARD OF TRUSTEES December 13-14, 2023

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

Wednesday, December 13, 2023

Time: 8:30 am – 4:45 pm

Day 1 Webinar Access:

<https://apfc.org/bot-meeting-day1>

Event Password: APFCDay1

Teleconference Option

Phone: 415-655-0003

Access Code: 2634 502 5300

Numeric Password: 27323291

Thursday, December 14, 2023

Time: 8:30 am – 4:45 pm

Day 2 Webinar Access:

<https://apfc.org/bot-meeting-day2>

Event Password: APFCDay2

Teleconference Option

Phone: 415-655-0003

Access Code: 2634 288 5012

Numeric Password: 27323292

**If giving public testimony by phone please sign-up by
emailing jloesch@apfc.org by 4 pm on Tuesday, December 12**

**Written comments can be sent to Trustees anytime at
boardpubliccomment@apfc.org**

AGENDA

WEDNESDAY, DECEMBER 13, 2023

- 8:30 a.m. CALL TO ORDER
- ROLL CALL (Action)
- APPROVAL OF AGENDA (Action)
- APPROVAL OF MINUTES (Action)
- Special Meeting – September 7, 2023
- OPPORTUNITY FOR PUBLIC PARTICIPATION
- COMMITTEE REPORTS (Information)
- Governance Committee will report later in the agenda*
- 8:45 a.m. CHIEF EXECUTIVE OFFICER'S REPORTS (Information/Standard Reports)
- Pending Board Matters, Trustee Education Report, Disclosure Report, Staff Summary Report, Staff Education & Training Report, Human Resources Summary, Communications Report, Financial Update, Financial Report, APFC Transfers, History & Projections, Investment Management Fee Report, FY24 Budget Update

Agenda Cont.

- 9:15 a.m. CHIEF INVESTMENT OFFICER'S REPORT (Information)
Marcus Frampton, Chief Investment Officer
- 10:30 a.m. INVESTMENT ADVISOR COMMENTS (Information)
John Skjervem
George Zinn
Britt Harris
- 11:00 a.m. *BREAK*
- 11:15 a.m. RISK OVERVIEW (Information)
Sebastian Vadakumcherry, Chief Risk Officer
- 12:00 p.m. *LUNCH*
- 12:30 p.m. APFC TECHNOLOGY AND AI ROADMAP & INVESTMENT ADVISOR PRESENTATION
(Board Education & Information)
Scott Balovich, IT Director
George Zinn, Investment Advisor
- 1:15 p.m. FUND PERFORMANCE (Information)
Greg Allen, CEO & Chief Research Officer
Steve Center, CFA, Senior Vice President
- 2:30 p.m. *BREAK*
- 2:45 p.m. GOVERNANCE COMMITTEE RECOMMENDATIONS (Action)
Committee Chair Rubenstein
Deven Mitchell, CEO
- 3:15 p.m. APFC ORG CHART & ALPHA TARGETS (Action)
Deven Mitchell, CEO
Marcus Frampton, CIO
- 4:45 p.m. *RECESS FOR THE DAY*

THURSDAY, DECEMBER 14, 2023

- 8:30 a.m. *MEETING RECONVENES*
- 8:35 a.m. ASSET CLASS OVERVIEW: ABSOLUTE RETURN (Board Education & Information)
Youlian Ninkov, Senior Portfolio Manager
- 9:30 a.m. CRESTLINE SUMMIT (Board Education & Information)
Caroline Cooley, CIO
Neilson Arbour, Deputy CIO
- 10:15 a.m. *BREAK*
- 10:30 a.m. BRIDGEWATER (Board Education & Information)
Andrew Mikolasy, Client Advisor, Head of Canada
Steve Secundo, Portfolio Strategist
- 11:15 a.m. STRATEGIC PLAN (Action)
(Possible Executive Session)
Deven Mitchell, CEO
Trustees & Staff
- 12:30 p.m. *LUNCH*

Agenda Cont.

- 1:00 p.m. LEGISLATIVE INITIATIVES (Information)
Paulyn Swanson, Communications Director
- 1:30 p.m. TRUSTEE PAPER #10 (Action)
Deven Mitchell, CEO
Trustee Craig Richards
- 2:30 p.m. BREAK
- 2:45 p.m. ADVISOR COMMENTS (Information)
George Zinn
Britt Harris
- 3:05 p.m. EXECUTIVE DIRECTOR REVIEW
(Possible Executive Session)
- 4:30 p.m. OTHER BUSINESS
May 2024 Meeting Memo
- TRUSTEE COMMENTS
- FUTURE AGENDA ITEMS
- 4:45 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.)*

SUBJECT: Approval of Minutes

ACTION: X

DATE: December 13, 2023

INFORMATION:

BACKGROUND:

Staff reviewed the following Board of Trustees meeting summary minutes, draft copies are attached for your approval.

- September 6-7, 2023 Special Meeting

RECOMMENDATION:

Approval of the summary minutes of the Board of Trustees meeting listed above.

**ALASKA PERMANENT FUND CORPORATION
SPECIAL MEETING OF THE BOARD OF TRUSTEES**

September 6 and 7, 2023
8:30 a.m.

Originating at:
Michael J. Burns Building
David Rose Board Room
801 West 10th Street, Third Floor
Juneau, Alaska 99801

Trustees Present:

Ethan Schutt, Chair
Gabrielle Rubenstein
Adam Crum

Craig Richards
Jason Brune
Ryan Anderson

APFC Staff Present:

Deven Mitchell, CEO
Marcus Frampton, CIO
Chad Brown
Jennifer Loesch
Rachel Price
Jacki Mallinger
Jessica Thornsbury
Elie Jordyn
Michael Prebeg
Norix Mangual
Lara Pollock
Chris LaVallee
Shawn Calhoon
Terek Rutherford
Valeria Martinez
Sebastian Vadakumcherry
Marisa McComas
Allen Waldrop

Val Mertz, CFO
Chris Poag, General Counsel
Alexander Smith
Paulyn Swanson
Fawad Razzaque
Jedediah Smith
Joe Shinn
Larissa Murray
Rachel Zepp
Rafael Ramirez
Sang Won Song
Scott Balovich
Stephen Adams
Youlian Ninkov
Brittney Ortega
Valeria Buschfort
Sarah Struble

Investment Advisors:

John Skjervem

Other Participants:

Amory Lelake
Erin Shine
Jack Peterson
Jon Haghayeghi
Noah Conlon
Steve Moseley
Steven Gagliardo

Anne Rittgers
Gina Romero
Jeff Stepp
Kevin Dee
Alexander Brown
Bruce Botelho
Tristan Walsh

Kayc Ullrich
Matthew Benson
Lorilyn Swanson
Forrest Badgley

PROCEEDINGS

CALL TO ORDER

CHAIR SCHUTT called the Special Meeting of the Board of Trustees to order and asked for the roll call.

MS. LOESCH called the roll and said there was a quorum. She added that Trustee Richards had not arrived.

CHAIR SCHUTT anticipated that Trustee Richards would be calling in shortly. He moved to approval of the agenda.

APPROVAL OF AGENDA

MOTION: A motion to approve the agenda was made by TRUSTEE CRUM.

There being no objection, the MOTION was APPROVED.

SCHEDULED APPEARANCES AND PUBLIC PARTICIPATION.

CHAIR SCHUTT moved to Scheduled Appearances and Public Participation and stated that he did not see anyone in the room. He asked if there was anyone online to provide comments and public participation.

MS. LOESCH stated that Casey Alrich indicated public testimony.

MS. ALRICH stated that she was just monitoring.

MS. LOESCH stated that there was no one else online.

FY24 BUDGET ADJUSTMENT

CHAIR SCHUTT stated that the first item on the agenda was the budget adjustment for the year '24. He recognized CEO Mitchell.

CEO MITCHELL stated that there was a supplement in the packet that included a memo affiliated to this request for budget authority to add \$222,000 to the current fiscal year budget from consulting to office rent lease that related to the office located at 555 Cordova Street in Anchorage, which will be discussed as part of the budget development process. This is the first step in that based on the directive of the board from prior meetings. A memorandum of agreement was developed with DEC and the Department of Transportation Public Facilities that allowed entrance into a use agreement for the Department of Environmental Conservation space available at the building they occupy in Anchorage. This is a use agreement, with an extended timeframe for the space for up through May 31, 2029, with the ability to end this agreement with 90 days' notice. We can also exit it if they are successful in finding a more desirable Anchorage office for the corporation. He added that staff is prepared to sign this agreement with the board providing budget support for the item.

TRUSTEE RUBENSTEIN asked if \$500,000 was put in the budget for an out-of-state office.

CEO MITCHELL replied that, at this point, nothing has been modified in the budget for

anything beyond an Anchorage office. We will be looking for guidance from the board on any additional offices.

A discussion ensued on the office plans that were put in motion.

CEO MITCHELL stated that the board has the support of staff to insure that the office is a success to the extent that is possible.

TRUSTEE RUBENSTEIN asked if any of the new hires had committed to moving to Anchorage since the last board meeting.

CIO FRAMPTON replied that two offers were accepted in private equity, and at least one of the two was very interested in Anchorage. In both cases, the plan was to have them come up, do some training, and see where that went.

TRUSTEE RUBENSTEIN asked about the temporary housing allocation.

CEO MITCHELL replied that it is mandated for training for three months if an employee will be working out of the Anchorage office.

CHAIR SCHUTT continued that they will be provided with housing while they are living outside of the office that they intend to work out of.

TRUSTEE RICHARDS let everyone know that he was on and had been for a bit, but did not want to interrupt.

CHAIR SCHUTT welcomed Trustee Richards, and recognized Trustee Brune.

TRUSTEE BRUNE asked if they were ready for a motion.

MOTION: A motion to execute this agreement between the Department of Transportation and the APFC for a \$22,000 budget amendment for establishing an office at 555 Cordova in Anchorage. The motion was made by TRUSTEE BRUNE; seconded by TRUSTEE CRUM.

TRUSTEE RICHARDS stated that he understood the motion to be an approval of an agreement. He noted that he did not read an agreement, and asked where it was.

CEO MITCHELL replied that he did not distribute the agreement to the trustees. It did not seem that it rose to the level of requiring the trustees review it. He continued that they had rates for rents that were established in the agreement that were pretty austere in the scope of the budget for office rents: In general, there was a slight escalator of 1 percent a year, and we have the ability to terminate the lease with 90 days' notice. There is a lot of flexibility.

TRUSTEE RICHARDS thanked him and suggested rewording the motion so that it says that the trustees authorize him to enter into an agreement as opposed to approving a specific agreement.

TRUSTEE BRUNE accepted the friendly amendment.

CHAIR SCHUTT the motion is to consider, with the friendly amendment, an authorization for staff to execute the agreement, instead of authorizing the agreement directly. He asked for any further questions or comments from the trustees.

TRUSTEE BRUNE noted that he wanted to make sure that it was on the record that this is an agreement between the Department of Transportation and the APFC, and that DEC was not involved. This is a leased space. The Compass piece that ran said it was a state-owned building, and it is actually a state-leased building that the DOT oversees.

TRUSTEE RUBENSTEIN wanted to clarify that the headquarters is not moving. There had been some commentary that we are moving the headquarters.

CEO MITCHELL clarified that it is nine offices with a small conference room that will be available to staff, as well. He added that it is not a space that is conducive to being the headquarters of the Permanent Fund Corporation.

TRUSTEE CRUM thanked CEO Mitchell for the clarification. He added that that had never been discussed here in any capacity, and he wanted to make sure that the public is aware of that.

TRUSTEE RUBENSTEIN added great job to the staff.

CHAIR SCHUTT asked for any other comments or questions before the vote. Hearing none, he stated that they were ready for the question, and asked for a roll-call vote.

After the roll-call vote, the MOTION was APPROVED. (Trustee Crum, yes; Trustee Brune, yes; Trustee Richards, yes; Trustee Anderson, yes; Trustee Rubenstein, yes; Chair Schutt, yes.)

CHAIR SCHUTT stated that there was a lot of work and some controversy around this office and appreciated everyone's thick skin and hard work to accomplish the strategic objective of the board that has been on the books here for a few years. Hopefully it will be an exciting new tool to recruit and retain quality employees within the State of Alaska. He thanked CEO Mitchell, and continued to the rest of the budget overview.

FY25 BUDGET OVERVIEW

CEO MITCHELL stated that he had not been through this budget planning process before and asked the board for guidance going through the budget. He continued that he was aware of the funding for the Anchorage office, but he generally did not try to anticipate the goals of the board in the construction of this budget. He began with the presentation and then added that the memo had more detail. He stated that he had jotted down potential strategic funding needs that would be the potential of staffing increases for particular asset classes, and the consideration of bringing management in-house rather than relying on external consultants. He continued that the Board could consider additional funding for public relations and outreach in markets that have not been as active recently. He added that, as discussed earlier, in addition to the Anchorage office proposal, the consideration of offices in other locations around the United States, or potentially internationally, and whether those were items to include in the 2025 budget. He then talked about the general discussion around staff compensation and having an effort placed on strategic

increases in salaries to be more in line with what their staffs could be compensated. He continued that, in moving through this, none of that had been included in the budget, but board members should be thinking about it. He then began going through the proposed operating budget, which was adhering to the standards of the Corporation and the mission and vision to insure that they would provide for the needs of the organization, and he believed that the budget requests did. He moved to the summary of the two appropriations: the operations allocation, and the investment management fee allocation operations, and he explained them both. He continued through, explaining and answering questions as he went along. A question was raised on the travel line item which was answered and discussed in more detail. He stated that having a budget that can respond to needs when the need arises is a preference of staff. He continued that they could put together additional detail on the projection of spending for travel in FY2025, and provide that to the board at the annual meeting. He added that if the work was viewed as unsupportive of the increment that was requested, the board could modify the budget at that point. He moved to the Anchorage office summary and stated that Phase 1 is an FY25 appropriation to secure the space and build out. He went through the estimates that may need to be revised as interest in shifting between offices continues to materialize. He continued through the breakdown of contractual services that showed the components of the \$596,000 increment. He noted, that estimate was based on some of the vacancy rate diminishment, and that some positions would be filled. He stated that they had a solicitation out now with 26 applicants for the director of HR. There is a solid group that is very qualified based on their experiences; a mix of out of state and in state.

TRUSTEE RICHARDS talked about the big increment from last year on training and education. He would not like to see another large increment after this one without some proof that some real efforts and goals and clearer actions were taken to use the prior big increment before adding on another one.

CEO MITCHELL thanked him for the challenge, and he would see what could be provided in advance of the annual meeting to support the request.

TRUSTEE BRUNE stated appreciation for the conversation. He noted that he believed that every one of the employees is an investment. This is an investment organization, and we need to invest in the employees. There is a need to put development plans in place and to figure out their long-term and short-term goals, and to make a commitment to the employees that they are going to be invested in. Those types of messages to employees are incredibly important in working on improving retention.

CEO MITCHELL moved to commodities and equipment. This was where the workstation equipment was budgeted in the decrement because of the three-year replacement schedule that will take place in the current fiscal year. He explained why the Fairbanks data center was determined to be less reliable than required, which resulted in it being relocated to Anchorage. The new facility has more capability and is perceived as being a much better solution to providing backup to the servers in Juneau.

MR. BALOVICH stated that the disaster recovery center was built to carry the Juneau office in a limited fashion, and when it moved to South Anchorage, it was anticipated that it would be the data center for the Anchorage office and the Juneau office. Some of the equipment would be upgraded to be performant for both of those offices. If the Juneau data center goes down, then

they would run off the Anchorage office data center, and vice versa. He added that they were both upgraded simultaneously.

TRUSTEE RICHARDS stated that he thought that the Anchorage office would be the location for the backup.

MR. BALOVICH replied the South Anchorage data center will be the primary data center for Anchorage. That saves from having a big, cooled room and paying a lot more to have a data center in the office. He added, that may change if there is space to have a data center in the space chosen down the road. It would be performant and have a network capability to perform very well. He clarified that the data center for the Anchorage office will be in South Anchorage, and would be the backup data center for Juneau.

CEO MITCHELL moved to the personal services line and talked about the variance increase.

TRUSTEE RICHARDS stated that he had a couple of comments on personal services and shared them before he left the call. He talked about the different discussions on compensation and how it would work. His view, which he had stated many times in the last few board meetings, is that peer groups are not the right solution. He continued that the right solution is to have the budget needed to hire and retain the people that need to be hired. He added that he did approve of the way they were going about getting incremental raises, which is to ask for a percentage or fixed dollar amount, and to let Marcus and his team and operations and their team allocate their individual buckets. That is what had worked best in the past, and would continue to work best. On incentive comp, he has always been a supporter of the staff under the one team concept having incentive comp. That ran into some problems getting that through the OMB and the Governor's Office last year. He would like to see CEO Mitchell have those conversations with OMB and the Governor's Office, and see if there has been a change in position there. Those were his thoughts, and he thanked all.

CEO MITCHELL responded that Trustee Richards was entirely right on the operations staff incentive comp and that OMB Director Steinger did not believe that was a path he was interested in going down. He added that he did not know how Director Sanders will feel about it. He continued that he got from the board to advocate for it at this point, and if the board wants to change directions that will be respected.

TRUSTEE BRUNE agreed with Trustee Richards and added that there was a disconnect with the former OMB director. He hoped that the commissioners could have prior conversations before putting in a final budget.

TRUSTEE CRUM noted that there were two P/E staff that recently accepted offers and asked if the increase in the merit and the incentive comp was a factor.

CIO FRAMPTON replied that, as of the last 12 months, this was the first time the incentive comp was a reliable, fully funded, ongoing thing. Those were important factors in those people's decisions, and we were able to be competitive for those positions. He asked for some data based on peer groups recently discussed. It would help to have a three- or four-year annual growth of like positions, on average. He continued that it took five years from when the policy was made to when it was consistently getting funded and paid out. He stated that in the last 12 months it

became very real and tangible and is helping with recruitment, and retention and motivating behavior around the office. This is a good place to be.

TRUSTEE RUBENSTEIN brought up other forms of investment for recruiting and asked why the investment staff could not invest their own personal money alongside some of the deals. She continued that it would be a great recruiting tool if allowed.

MR. POAG replied that he would be happy to reach out to outside counsel and ask if individuals that work for our place become accredited investors because they were investing alongside of us. He did not think that the answer would be that they become accredited investors. He explained that to get into a private market, the need is to be a qualified purchaser and a credit investor, and those representations need to be made. He did not know that whether individual staff could participate. He stated that the reason is that an unregistered security is complex and sophisticated, and the SEC wants only certain accredited investors to be making those investments.

TRUSTEE RUBENSTEIN stated that she was trying to understand if there were enough operations staff and whether they were being well paid enough to actually reduce the consultants. She continued that if consultants were being reduced, that the rest of the staff could take on the workload, which probably means adding more investment ops staff. She would like to see personnel services split out, and if that is called back office, middle office and investor staff, the need would be to do those three categories.

CEO MITCHELL stated that if there was going to be a strategic initiative in this budget, there is the need to plan for them and define that need with a plan of implementation that is workable from a staff and market perspective, with a funding scenario to support that. He added that clear direction is needed if that is where they should be heading. He talked about the board honorarium, which matches the authorization for '24. He then talked about the investment management fees. He stated that the final slide is intended to show the efficient nature of the operation. We have 3 basis points of the assets under management that were relied upon for the '25 proposed budget and matched the '24 proposed budget. He talked about the direction of staff, which is to try to move forward on developing a plan for the potential modification of how to do business. He asked the board to help facilitate pursuing an office outside the state of Alaska, if they are interested in that.

CIO FRAMPTON corrected that performance fees are not paid to any consultants.

MR. POAG interrupted and stated that if the board wanted to discuss more of the details about consultants and the fees, that is proprietary information, and could be done in Executive Session.

TRUSTEE RUBENSTEIN stated that that should be done at the annual meeting.

CEO MITCHELL stated that a staff recommendation on a Phase 1 approach, with the additional phases that would be additive to that, to reach through the entire gamut of potentials for the board could be done.

CHAIR SCHUTT called a short break.

(Break.)

CHAIR SCHUTT stated that the meeting was back on record and added that the structured portion of the agenda had been finished and added that now is the time to discuss future agenda items or trustee comments. A lot of that had been done during the structure discussion. He asked if trustees or staff had any questions or comments to address before adjournment.

TRUSTEE BRUNE no comments.

TRUSTEE ANDERSON stated that it was a real honor to be appointed to the board, and he looked forward to working with everyone.

TRUSTEE CRUM stated appreciation to Commissioner Anderson joining on short notice and that he was glad he was able to make it. He also appreciated having this discussion in advance because of the good conversations to have to get the overall vote and tenor. We are looking to grow the corporation for Alaskans. It is important for Alaskans to know that the intent of the Anchorage office has been talked about for four or five years; long before most of these trustees were even on the board. He was glad to be able to action this in a very fiscally responsible manner in order to put that forward. It is an important thing for the overall growth and health of the whole corporation. He likes the direction they are going in, and it is good to hear about the direct feedback on the benefits of the merit pay and the incentive comp. He wants to make sure it is documented over time for long-term durability.

TRUSTEE RUBENSTEIN added that it was nice to be able to get out of financial numbers in a budget and to put them into action strategically. We will now have ways to look at things that are working. It is exciting to go into many meetings and coming up with strategies. She is most excited that there is the ability to update it for a positive outlook.

CHAIR SCHUTT thanked the staff for the preparation on the budget, and he thought that it will be a good, tight budget ready for the annual meeting. He thanked all, and recessed the meeting.

(Alaska Permanent Fund Corporation Special Full Board meeting recessed at 3:35 p.m.)

September 7, 2023

CALL TO ORDER

CHAIR SCHUTT reconvened the meeting. He noted that all trustees were present. He continued to the first item on the agenda which was the discussion about Trustee Paper No. 10.

DISCUSSION OF TRUSTEE PAPER No. 10

CEO MITCHELL stated that in the packet there was an introduction of a consultant that was selected for the compilation and composition of Trustee Paper No. 10. He introduced Dr. Malan Rietveld. He continued that, from his perspective, he envisioned that a narrative would be developed surrounding the history and evolution of the Fund, with some emphasis on some of the current concerns with the two-account system and the current parity of the POMV with the commitment of providing to the State of Alaska each year the potential of the Earnings Reserve Account having sufficient balance to provide for that transfer. He stated that, in support of that discussion, Callan had a presentation, in addition to CIO Frampton, on the matter that highlights

some of the significant statistical probability of a deficiency in the near-term future that warrants the issue being elevated and discussed. He asked for any trustee comments before moving to Dr. Rietveld's presentation.

TRUSTEE RICHARDS stated that he agreed with that and thought that the other important piece is inflation-proofing, because that is one of the dangers of the low ERA balance. A key thing is that it should be a systematic approach. And whoever is on the committee and staff would work with Dr. Rietveld, who will produce a draft. Then it will go to all of the trustees to view, edit, critique and mark up. There will be plenty of opportunity to provide feedback and comments.

CEO MITCHELL suggested having a working group in place in the coming week or two so that the initial conversation could begin and work towards the product.

TRUSTEE RICHARDS mentioned that he worked with Dr. Rietveld on two different occasions. The first was that he was the state's consultant on the Alaska Permanent Fund Protection Act, which was the bill that introduced the POMV. Then, he was the author of Trustee Paper No. 9. He added that he was glad that he had applied and got selected. He has the background, experience, and the knowledge.

CHAIR SCHUTT welcomed Dr. Rietveld.

DR. RIETVELD began by talking through some elements of his background that were most relevant to this assignment. He then gave some thoughts about the process he would pursue and the key points he thought they would want to hit on for this paper, following on from Trustee Paper No. 9. He stated that he had been working for sovereign wealth funds for the past 17 years. And more recently he had really focused on issues that were quite similar to the ones being addressed in this paper. There were issues of governance, issues of interactions between funds and legislative bodies, the budget process. Basically, fiscal frameworks of the sovereign wealth fund, which was also the topic of his Ph.D. He continued that he had been involved with the Alaska process for a number of years and was familiar with the issues at stake and the basic dynamics, as well as the specifics around the ERA and the problems it could cause the Fund down the road. He stated that the common theme among sovereign wealth funds is an increasing trend towards using asset pools for income purposes and creating rules-based frameworks and governance agreements to make sure that those spending policies are sustainable. He added that not every fund has the same sort of constitutional requirement as a US-based Permanent Fund, but the policy objective is often to keep the purchasing power of the assets at least constant or to hopefully grow it over time. There are familiar issues, and Alaska is not alone in confronting them. He continued that, in terms of the process, he would engage with a working group of trustees and hoped to take the burden off the trustees for the legwork on drafting the paper. He added that they had worked through seven or eight edits and drafts of Trustee Paper No. 9. The final point touched on at a very high level in that paper are concerns around the stability and sustainability of the ERA. There was also an issue of creating a rules-based, procedural process for inflation-proofing. This paper, he thought, is more focused on following up on that last point and looking at it in detail. He stated that the timeline that was agreed to is absolutely feasible. He suggested a history of the Permanent Fund itself and describing, in very broad strokes, how there have been subtle changes in what the Permanent Fund does for the State. A key point to mention would be where the issue of the ERA came from and the shift towards focusing on total returns rather than income-producing assets. And to explain the structural and economic factors

behind the changes in interest rates, move towards more private and illiquid assets and why the academical case and theoretical case for a total return approach is very solid compared to focusing on income alone. That story could be told with reference to the Alaska Permanent Fund's own history, but also the practice among institutional investors that produce income more broadly. He suggested looking in detail at some of the historical documents that had framed some of the discussion in Alaska. Generally, he thought to look at trust legislation and the Uniform Prudent Management of Institutional Funds Acts. One of the key purposes of that piece of legislation was to do away with very hard and rigid distinctions between principal and earnings. It replaced the requirement that funds could not spend below what was then called the original value of contributions to the kind of preservation of the real purchasing power of capital. That story fits very well with what Alaska has done. He thought that the key message to really emphasize in this paper is two-fold: One is that the ERA corpus distinction is sort of a historical legacy that can now create problems down the road for the ability to make not just the POMV payment but also regular and scheduled inflation-proofing arrangements. The second message would be quite specific and concrete proposals around how to ensure inflation-proofing or purchasing-power adjustments to the Fund's assets. He stated that those were his thoughts and his background, and he looked forward to working with the working group, and was happy to take any questions.

CHAIR SCHUTT asked, as far as the interaction with the data and the modeling that may take place with Callan, if he was comfortable that he had all the tools and communications there to get what he needs for his purposes.

DR. RIETVELD replied yes. He had spoken to Callan and to Greg during the drafting of Trustee Paper No. 9. He very much sees the modeling and the stress-testing or scenario analysis that Callan does as critical to that message.

CHAIR SCHUTT thanked him and stated that he was looking forward to his work product and interactions during the drafting. He moved to the modeling of the Fund.

MODELING OF THE FUND

MR. ALLEN began with a little presentation by noting that one of the questions that came in was what a worst-case scenario looked like. He thanked Val, who pulled together all of the 6/30 fiscal year-end data that allowed them to project forward from that starting point. In this presentation, he did a little bit of a review of the accounting concepts and took a look at the history of some of the important numbers that drove the ability of the Permanent Fund to support the POMV draw, reviewed the spending and appropriation history from the Fund, talked about some of the key variables that they were focusing on, and then showed some ranges of outcomes. Probability estimates in all of the key variables include market value, earnings reserve balance, principal balance, statutory net income, distributions, et cetera; things that were kind of the outcome variables from the various capital market scenarios that will fire through the model. He continued through his history of statutory net income, which is realized return. It is the sum of any income including coupons from bonds, dividends from stocks, real estate income plus realized gains or losses. The variable component is realized gains. He went through the Earnings Reserve Account, and explained how it was calculated. He stated that his model assumed that unrealized losses are net against unrealized gains. He concluded the distribution history and moved to the ERA relative to the projected distribution in the next year. He added that the smaller the ERA gets, the more vulnerable the whole system is with one or two bad

years. As the distribution gets larger relative to the dividend-driven model, that will obviously aggravate the situation.

CHAIR SCHUTT stated that the other corollary issue to deal with is the inflation-proofing. While that does not necessarily need to be constitutionalized, there is a need to produce a rules-based framework that can be adopted as a recommendation for the Legislature to appropriate toward inflation-proofing. He added that, by definition, given the amount of funding that is sent to the State government means that the State government has no money to appropriate without borrowing or something, which is a set-up for a difficult situation if it is not fixed.

MR. ALLEN continued his presentation moving to the volatility in distributions. He stated that the principal balance was pretty stable and growing and growing at or faster than inflation. He went through his models with the whole range of outcomes, including worst-case scenarios. The Permanent Fund is diversified across a bunch of different uncorrelated asset classes and reins in that range relative to equities. That gives an idea of the range of outcomes that are being explored in the capital market space. They actually now ran the model and were tracking statutory net income, which is a much narrower range of outcomes than total return.

DR. RIETVELD shared the basic sovereign wealth fund model which is basically the same as any kind of permanent income endowment model. The POMV, or spending rate, should be equal to the long-run real return. The whole question about inflation-proofing in the Alaska case all rises from this ERA/corpus distinction. In the long run, if the Permanent Fund is able to generate, on average, over the next decade, a 5 percent real return, there would be no real reason to have an inflation-proofing appropriation.

MR. ALLEN stated that that is a really important point. An achievable spending level has to be adopted, and more of that cannot be spent just because you need it or happen to have it. There is a temptation in the good times to forget about the bad times and potentially overspend. To the extent that the constitution changes, it would be handy if, at the same time, a spending rate that is inviolate be locked in. He concluded that the idea is to instruct on probabilities and mechanics.

CHAIR SCHUTT called a break.

(Break.)

CHAIR SCHUTT called the meeting back on the record, and recognized Marcus Frampton.

DISCUSSION OF STRATEGIC PLAN

CIO FRAMPTON stated that the last time he did a kind of comprehensive analysis of the ERA was back in 2020. Back then the Fund was \$68 billion, and it is 15 percent bigger today, which is good for the analysis of the ERA. It was \$14 billion back then, and is \$10 billion today. Back then the approach he did was very different than the approach Callan did. The approach he did was looking at historical capital market scenarios going back to 1900, and he then ran those as scenarios through his model. Back in 2020, there was a POMV shortfall in 65 percent of the scenarios modeled. Today, there is still a 65 percent POMV shortfall in the scenarios. Back then, Callan was 15, and today they are at 25. The other thing he noted, that was not included in the materials, is that he and Trustee Richards worked together on some mitigation strategies for situations like those now with no ERA. He added that they were all rules-based and went

through the different models. Also looked at were different asset allocations to the ERA versus the principal, which is another mitigation strategy. The model is still set up and updated where all those things could be looked at. He pointed out the last bullet point of having a more moderate forecast for statutory net income. He went through some thoughts on what the statutory net income might be this year and in the near term, but it was a little bit lower than 5.

MR. ALLEN asked if CIO Frampton's model was only allowed to spend realized ERA balance, and stated that there was some question about actually spending or committing to spend unrealized ERA balance. He did not think or know where it would have to be realized to be spent.

CIO FRAMPTON stated that, on the more optimistic side, all the guts of the model was forecasting statutory net income, all the complexity. If it was assumed that for the next 10 years it would be \$3.1 billion of static statutory net income, without inflation-proofing, there would be no problem with ERA durability. That was a conservative statutory net income.

TRUSTEE RICHARDS stated that the trustees had asked for modeling from three different perspectives. Ms. Mertz presented a deterministic, scenario-based analysis. Mr. Allen did the Monte Carlo analysis and updated what he had done. Then, CIO Frampton did the historical, applying the past to the future. They all got different outcomes, and none of them were wrong, because it was modeling. He continued that it was useful to have three different outcomes of three different models because of looking at the problem from different perspectives and sides. He pointed out that, before going forward with whatever would be the presentation, particularly to the Legislature, there is a need to simplistically say what each one showed and why they were showing something a little different.

CEO MITCHELL stated that to him that all said the same thing. They all showed the probability of failure, and that is the concern. There should be a zero probability of failure. The probabilistic modeling where it was 5 percent, should be .005 percent.

CHAIR SCHUTT stated the problem was that a lot of red was highlighted, which pointed out the current risk. There are fiduciary duties and a general obligation to the public to make sure that there are no problems. Looking at this, there is a problem, with too many scenarios where there are problems. They are not based on wild assumptions. They are based on fairly conservative and reasonable assumptions, and there are problems.

COMMISSIONER CRUM stated, from a public education standpoint, the need for a statutory net income and to get that out there. He continued that the statutory net income and how that plays into this, and what it meant about the actual function of the Fund and how that plays into the statutory obligations with the POMV needs the educating.

CIO FRAMPTON stated that the model that talked about the historical capital market scenarios predicted the average annual return by decade for stocks and bonds and then the return on a 70/30 mix, which is the proxy for the portfolio. There have been decades when the market just has not provided the return that was needed. He explained how he did his model with the key assumption being the 20 percent portfolio turnover rate. The capital market projections generate the gains that were available for harvesting. He added that 20 percent was a good average that had been experienced over time. He continued explaining the model.

CHAIR SCHUTT stated that they had this decade of, effectively, free money that they are coming out of rapidly, and the transition effects of that are real. That was part of why this thing was precipitating in front of this transition of all the markets.

CIO FRAMPTON pointed out that in the last 100 years there had been three terrible decades and historically there were three decades with zero real return. That was 30 percent of the time that there was a terrible decade. He continued that he thought there would be a 30 percent change in the next decade and it could be pretty terrible.

TRUSTEE RICHARDS thanked CIO Frampton and Greg Allen.

CHAIR SCHUTT transitioned into the discussion of the strategic plan, welcomed Kevin Dee.

INTRODUCTION OF KEVIN M. DEE, PRESIDENT, KMD SERVICES & CONSULTING, LLC.

CEO MITCHELL stated, from his perspective, that there had been one working group meeting and he hoped that already established a road map leading to the culmination of the plan of having a written document. The target is to have that happen in October. He stated the need for the working group and the entire board to be focused on this on a weekly basis leading up to that. He wanted to touch base in a formal way at the annual meeting and provide an update. He continued that there was an opportunity to use Kevin Dee and his skills to help facilitate the desire of the board in creating this strategic plan. He thanked Mr. Dee for being there.

CHAIR SCHUTT stated that he had spoken with Mr. Dee a couple of times in preparation, and he has the kind of pyramid of things that lead to an actionable plan. He continued that, unless any other trustee disagreed, they were not going to revise the mission and not go through core values or re-articulate a vision. The working group had produced a list of things, and part of it was deciding on a process and then deciding on the consensus, the big-picture strategies that they think were important.

CEO MITCHELL clarified that the focus with consultants was in the private equity space.

MR. DEE had done typical overarching goals for the area which fall under HR, and that was to attract and retain world-class talent. He did some of the recruiting strategic planning out in Kotzebue. They realized that traditional methods of hiring were not working. They needed to find the people that would stay there. He explained that people were showing up on the plane, looked out the window and would not get off the plane; they would leave. They realized that they needed the people that hunt and fish. people who like to travel, dog mush, and all of the above. They had a very focused campaign to find where those people were. They started advertising in hunting magazines, fishing magazines, Outdoor Life; and they had a much higher success rate. He stated that the point was: where they were going and how to get there as a strategic plan. He continued that the Board has identified some very strong themes, and earlier today identified a lot of risk. He hoped that there is clarity within the organization, and how they would carry it out and propose to carry it out, and that there was insight into the cost of that. He talked about strategy mapping and stated that the goals would be more likely to be accomplished in a timely manner. He stated that the clarity on the goals and objectives is the key part. The mission, vision, and values are well in place, and they are not up for discussion at this point.

However, some risks were identified, and risks need to be addressed. They need to be quantified and qualified in mitigating factors. He continued that every goal should have a benefit, and how will that be communicated. Finally, how will it work internal to the staff, and how will they work together to make this all happen,

TRUSTEE RUBENSTEIN asked if there were ever two facilitators when this was done. This corporation did not have a problem making documents, mapping and measures. She genuinely wondered if getting a second facilitator be brought in, instead of trustees getting all of the stuff to get the measures. She stated that the point of the facilitator is to make it less work on the board and the staff that had been working tirelessly all summer in order to get here. That would be someone who had clients where they gave the plans they had written. It is that data that we do not have. She continued that her concern was how to get the input data faster.

TRUSTEE RICHARDS stated that six bullet points were identified, and he suggested putting two staff on each bullet point, breaking it down into work teams, and working each of them as individual problems.

CHAIR SCHUTT stated that the data that follows is in the execution. The exercise, at the board, is to identify strategic objections. He stayed on the compensation and continued that the compensation data set will not get resolved in two months because it had been struggled with for a while, and we are still struggling with who our peers are. He added that the strategy is to be competitive globally for talent, given who we are. He stated the immediate exercise is the need to come to a consensus of what they want that number to be and in what timeframe. Then everything else could follow with a longer tail for getting data and developing plans and things. He continued that part of the exercise will be developing strategic objectives or strategic goals that update where we are, and to communicate that to important stakeholders, including the general public. One of them needs to be an assets-under-management type of goal, and then other things could flow from that.

COMMISSIONER CRUM stated that it will be a long process, not an immediate thing. This is not for this budget cycle. This is something to put forward and lay the groundwork on. This will be a long, deliberate process to make sure we are working on sustainability, and to do it in a thoughtful manner to make sure it is done.

TRUSTEE RICHARDS added that the strategic planning goal is to create the framework to get this done and analyzed over a five-year period.

CHAIR SCHUTT went back to the fact that there are some tasks and tactical objectives that need to be reframed into a strategic goal that would be relevant. He added that goals without schedules never get accomplished because there is nothing to be held accountable against.

TRUSTEE RICHARDS followed up and requested consideration for specific targeted plans for each asset class.

CHAIR SCHUTT asked for any other matters, future agenda items, or trustee comments.

COMMISSIONER CRUM requested that an Executive Session be placed on the agenda for the annual meeting.

MR. POAG stated that it needs to be attached to an agenda item.

COMMISSIONER CRUM stated a kind of a combination of consultant contract to even just personnel matters or items of concern so board members could talk.

CEO MITCHELL noted that there are very specific rules about the use of executive session privileges.

COMMISSIONER CRUM wanted to make sure that they had the process. No decisions are made in executive session, but we need to have the room to sit down and talk with the executive director on items.

CEO MITCHELL stated that the conversations have to be limited, and it needs to be very clear to the public.

CHAIR SCHUTT stated that they have attempted to be very disciplined in the use of executive sessions to stick to just the things noted in executive session, and not masking other conversations. Any other topic would need to be added specifically so that it is also part of the notice and what the discussion would be limited to. He thanked Mr. Dee for his participation. He asked for anything else to come before the board.

TRUSTEE RICHARDS asked if the ability to realize gains in a bad cycle where there were ERA durability issues, if that is a tool that moved the needle. If it is, then it should be communicated to the Legislature as maybe a power that they want to give us. Or, if it is not, tell people so that could be put to bed as being the excuse of why things do not happen.

CHAIR SCHUTT asked for any other topics or requests.

TRUSTEE RUBENSTEIN asked to have the financial media, global, ones come and present at the annual meeting.

TRUSTEE ANDERSON stated that it was a really good presentation and stated his appreciation for all the work everyone put into it.

CHAIR SCHUTT asked for a motion to adjourn.

MOTION: A motion to adjourn the meeting was made by TRUSTEE RICHARDS; seconded by TRUSTEE RUBENSTEIN.

There being no objection, the MOTION was APPROVED.

CHAIR SCHUTT adjourned the meeting at 12:07 p.m.

(Alaska Permanent Fund Corporation Special Board of Trustees Meeting adjourned at 12:07 p.m.)



SUBJECT: Chief Executive Officer Report

ACTION: _____

DATE: December 13, 2023

INFORMATION: X

BACKGROUND:

The CEO's report provides reports detailing Board matters, disclosures, staffing and budget updates, and financial reports.

STATUS:

Executive Director, Deven Mitchell, will present highlights from the following reports:

- Pending Board Matters
- Trustee Education Report
- Disclosure Report
- Staff Summary Report
- APFC Staff Education Training Report
- HR Summary Report
- Communications Report
- Financial Update
- Financial Report
- APFC Transfers
- APFC History and Projections
- Investment Management Fee Report
- FY24 Budget Update

SUBJECT: Pending Board Matters

ACTION:

DATE: December 13, 2023

INFORMATION: X

BY	TASK	CAPTURED	TARGET	COMPLETED
Mitchell	Peer Group Definition	7/22	TBD	
Mitchell	Update Compensation Structure	12/22 4/23	TBD	
Mitchell/New HR Director	PMP Overhaul	7/23	2/24	
Mitchell	Strategic Plan	7/23	12/23	
Mitchell	Trustee Paper #10	7/23	12/23	

SUBJECT: Trustee Education

ACTION: _____

DATE: December 13, 2023

INFORMATION: X

BACKGROUND:

The Board of Trustees of the APFC has established a Trustee Education Policy with the following objectives:

- To ensure that the members of the Board have access to the knowledge and information necessary for them to fulfill their fiduciary duties as trustees of the Alaska Permanent Fund; and
- To assist them in becoming well informed in all matters pertaining generally to the management of a large institutional fund, both public and private, and more specifically to the management and investments of the APFC.

In accordance with the Trustee Education Policy, the following is a list of conferences and seminars that Trustees may wish to attend.

TRAINING OPPORTUNITY	TOPIC	LOCATION	DATES
Callan	2024 National Conference	San Francisco	April 8, 2024
ILPA	Varies – please see website	https://ilpa.org/master-calendar/	See Website



Memo

To: Governance Committee

From: Deven Mitchell
Executive Director

Date: November 29, 2023

Re: APFC Financial Disclosures

As required by AS 37.13.110(b) and Alaska Permanent Fund Corporation policy relating to personal investments conduct and reporting, trustees and staff must disclose certain financial interests. Below is a list of disclosures for transactions made by trustees and staff, covering initial, quarterly, and annual disclosures for reportable holdings reported between April 1, 2023 as of June 30, 2023.

Disclosures			
Name	Position Title	Disclosure Type	Received
Boozer, Tanya	Administrative Specialist	Initial	11/27/2023
Frampton, Marcus	Chief Investment Officer	Quarterly	10/19/2023
Gagliardo, Steven	Investment Analyst – Private Equity	Initial	11/20/2023
Guthrie, Alysha	Director of Administrative Operations	Initial	11/27/2023
Haggard, Lillie	Investment Analyst – Private Equity	Initial	11/16/2023
Hegedus, TJ	Risk Analyst	Initial	09/26/2023
Jeralds, Joseph	IT Specialist	Initial	11/21/2023
LaVallee, Chris	Sr. Portfolio Accountant II	Quarterly	10/13/2023
Miller, Damien	IT Specialist	Initial	11/29/2023
O’Day, Tom	Portfolio Manager – Fixed Income	Quarterly	10/11/2023
Olmsted, Matt	Sr. Portfolio Manager – Fixed Income	Quarterly	10/30/2023
Rime, Ed	Portfolio Manager – Real Estate	Quarterly	10/11/2023
Ritchie, Eric	Investment Associate – Real Estate	Quarterly	10/11/2023
Shinn, Joe	Investment Analyst II – Public Equities	Quarterly	10/19/2023
Smith, Alex	Investment Operations Manager	Quarterly	10/11/2023

All disclosures have been reviewed by me in my capacity as APFC’s Designated Ethics Supervisor. All disclosures follow policy requirements. Disclosures will be filed in the appropriate personnel file.

If you have any questions, please call me at 907-796-1501.

Memo

To: Board of Trustees
 From: Deven Mitchell
 Chief Executive Officer
 Date: December 13, 2023
 Re: Travel, Training, and Diligence Summary Report

Background:

This report includes APFC staff completed travel and due diligence numbers for the period July 1-September 30, 2023. The travel report is presented to the Board of Trustees for review at each board meeting as required by APFC Resolution 04-10.

Due Diligence Summary:

Department	Number of Meetings Held	
	In Person	Telephonic/Virtual
Executives	9	26
Fixed Income	12	14
Public Equity	10	35
Private Income	29	104
Absolute Return	4	50
Real Estate	55	145
Private Equity	59	225
Total Fund Cash	0	4

Travel Summary:

Budget-to-Actual Report: July 1, 2023 through September 30, 2023

The following can be found in full in the FY24 Budget Update

CORPORATE OPERATIONS	BOARD-AUTHORIZED BUDGET	EXPENDITURES	BUDGET REMAINING
Travel	\$800,000	\$90,636	\$709,364
Staff	\$602,000	\$59,722	\$542,278
Trustees	\$18,000	\$1,655	\$16,345
Moving/Non-Employee	\$180,000	\$29,259	\$150,741

Trip Summary – 1st Quarter – July 1 through September 30, 2023

TRAVELER	PURPOSE	DATES OF TRAVEL		LOCATION
Waldrop	Juneau Office Visit	July 10	July 14	Juneau
Loesch	Board of Trustees Meeting	July 11	July 12	Anchorage
Mitchell	Board of Trustees Meeting	July 11	July 12	Anchorage
Mertz	Board of Trustees Meeting	July 11	July 12	Anchorage
Vadakumcherry	Board of Trustees Meeting	July 11	July 12	Anchorage

Barnhill	Board of Trustees Meeting	July 11	July 12	Anchorage
Swanson	Board of Trustees Meeting	July 11	July 12	Anchorage
Frampton	Board of Trustees Meeting	July 11	July 12	Anchorage
Adams	Manager Meetings	July 23	July 30	Denver
Andreyka	Manager Meetings	July 23	August 7	Denver
Gallagher	Juneau Office Visit	July 23	July 28	Juneau
Shah	Conference	July 24	July 28	Chicago
Mitchell	Administrative Travel	August 3	August 3	Anchorage
Razzaque	Manager Meetings	August 3	August 8	Laguna Beach, CA
Swanson	Administrative Travel	August 3	August 3	Anchorage
Frampton	Quarterly Partnership Meetings	August 12	August 25	Washington DC
Mangual	Juneau Office Visit	August 13	August 26	Juneau
Murray	Juneau Office Visit	August 13	August 18	Juneau
Andreyka	Property Inspections	August 13	August 18	Chicago
Adams	Manager Meetings	August 19	August 25	Washington DC/San Diego
Andreyka	Property Inspections	August 20	September 2	DC/San Diego/San Francisco
Shah	Juneau Office Visit	August 20	August 27	Juneau
Ramirez	Juneau Office Visit	August 20	August 26	Juneau
Waldrop	Juneau Office Visit	August 21	August 25	Juneau
Adams	Manager Meetings	August 28	September 2	San Francisco/San Diego
Rahn	Juneau Office Visit	September 4	September 9	Juneau
Pollock	Annual General Meeting	September 5	September 8	San Francisco
Waldrop	Board of Trustees Meeting	September 5	September 8	Juneau
Crum	Board of Trustees Meeting	September 6	September 7	Juneau
Rubenstein	Board of Trustees Meeting	September 6	September 7	Juneau
Richards	Board of Trustees Meeting	September 6	September 7	Juneau
Schutt	Board of Trustees Meeting	September 6	September 7	Juneau
Razzaque	Due Diligence	September 9	September 16	Boston/NYC/Baltimore
Alexander	Manager Meetings	September 10	September 15	Denver/New York
Price	Conference	September 11	September 17	Santa Fe, NM
Frampton	Conference	September 11	September 14	Santa Fe, NM
Cummins	Manager Meetings	September 11	September 25	New York City
Mitchell	Conference	September 12	September 14	Santa Fe, NM
Parise	Manager Meetings	September 17	September 23	New York City
Mitchell	Conference	September 19	September 21	Sitka, AK
Rahn	Manager Meetings	September 19	September 21	Chicago
Frampton	IFSWF Annual Meeting/Board of Trustees Mtg	September 21	September 28	Madrid/Anchorage
Rahn	Manager Meetings	September 24	September 29	London
Swanson	Board of Trustees Meeting	September 25	September 28	Anchorage
Loesch	Board of Trustees Meeting	September 26	September 29	Anchorage
Shah	Manager Meetings	September 26	September 28	Chicago
Mesdag	Board of Trustees Meeting	September 26	September 29	Anchorage

Mitchell	Board of Trustees Meeting	September 26	September 28	Anchorage
Vadakumcherry	Board of Trustees Meeting	September 26	September 28	Anchorage
Poag	Board of Trustees Meeting	September 26	September 28	Anchorage
Alexander	Board of Trustees Meeting	September 26	September 28	Anchorage
Waldrop	Board of Trustees Meeting	September 26	September 29	Anchorage
Mertz	Board of Trustees Meeting	September 26	September 28	Anchorage
Andreyka	Board of Trustees Meeting	September 26	September 28	Anchorage
Balovich	Board of Trustees Meeting	September 26	September 28	Anchorage
Anderson	Board of Trustees Meeting	September 27	September 28	Anchorage



	EMPLOYEE	DEPT	TRAINING TYPE*	VENDOR	COURSE TITLE	CLASS HOURS	CITY	ST
1	Jacki Mallinger	FIN	OL	Sequoia CPE	Internal Controls	12.0	N/A	N/A
2	Eric Ritchie	Inv	OL	Training The Street	Real Estate Fundamentals	16.0	N/A	N/A
3	Eric Ritchie	Inv	OL	Callan	Introduction to Investments	9.0	N/A	N/A
4								
5								
6								
7								
8								
9								
10								
11								
12								

CS	- Conferences & Seminars
LT	- Local Training
OTT	- Out of Town Training
OL	- Online

Memo

To: Board of Trustees

From: Deven Mitchell
Chief Executive Officer

Date: November 29th, 2023

Human Resources

Human Resources Highlights

Welcome

- Joseph Jerals: IT Specialist – Help Desk
- Damien Miller, IT Specialist – Cloud Services
- Shannon Ely McCain: Director of Human Resources
- Natanya Boozer, Administrative Specialist
- Alysha Guthrie, Director of Administrative Operations

Offers Pending

- None

Challenges

- Refining logistics regarding training period on-site in Juneau for new hires based out of the Anchorage office.

Opportunities

- Board involvement in building culture that is equitable and fosters cohesive approach to moving organization into the future.

Recruiting Update

VACANT POSITIONS (7)				
APFC Title	Division	Department	Incumbent	Status
Credit Analyst	Investments	Fixed Income	New FY23	Actively Recruiting
Senior Portfolio Manager	Investments	Private Equity	Separation	Actively Recruiting
Investment Analyst	Investments	Real Estate	Separation	Actively Recruiting
Investment Operations Analyst	Operations	Trade Operations	Separation	Actively Recruiting
Portfolio Manager	Investments	Real Estate	Separation	Not Actively Recruiting
Project Manager	Operations	Administration	New FY23	Not Actively Recruiting

HEADCOUNT & VACANCIES AS OF 11/29/23

Division	Filled FTE	Vacant FTE	Vacancies at Previous Meeting
Investments (32)	28	4	3
Operations (35)	33	2	7
	61	6	10
Total Headcount	67		

August 25th, 2023 – November 29, 2023, Hiring Data

5 Hires, 2 Separations & 1 Retirement

Candidate Declined Offers & Withdrew from Process

Offer Made – Declined	0
Withdrew – Salary to Low	0
Withdrew – Relocation / Location	1
Withdrew – Other Job	4
Withdrew – No Details	4
Total	9

Hiring Sources

BambooHR	2
Other	0
LinkedIn	1
ZipRecruiter	0
APFC Referral	0
Workplace Alaska	2
Total	5

SUBJECT: Communications Update

ACTION:

DATE: 12/13/2023

INFORMATION: X

APFC Communications Vision

Build on APFC's positive reputation, inform, and further educate Alaskans on the Corporation and its commitment to support the long-term sustainability and growth of the Alaska Permanent Fund, Alaska's renewable financial resource.

APFC STRATEGIC INITIATIVES

In-State Mission of Education & Awareness

Strengthen understanding of the Fund, the investment management work of APFC, and the staff who protect and grow the State's most valuable renewable financial asset. Achieve and maintain necessary support and resources through Legislative initiatives to protect and grow the Fund.

Nationwide and Global Focus on Investment Performance and Strategy

APFC is recognized domestically and globally as a respected, trusted, reliable, best-in-class investment manager, ensuring high regard among global peers and potential partners.

Growing the Fund for the Future of Alaska

APFC maintains and builds upon brand recognition, ensuring high regard among global peers and potential partners to best position APFC to provide an enduring source of renewable financial revenue to support the state and benefit Alaskans.

Communications Program Strategic Planning

As the Alaska Permanent Fund grows in asset value, staffing, portfolio sophistication, and importance in generating revenue for our State, effective communications are essential to ensure a comprehensive understanding of the Fund's management and investment among our many stakeholders.

We have strategically aligned the communications program to support board, executive, and legislative initiatives. With our partners at Yuit, we established an updated framework for producing communications surrounding board meetings to inform the public proactively.

To complement our Alaskan-based efforts, APFC is competitively procuring a global financial media consultant. It is anticipated a contract will begin in mid-January 2024.

Presentations, Interviews, Outreach

▪ September-December 2023

- Department of Natural Resources Leadership Presentation - Juneau
- Alaska Mental Health Trust Authority Finance Committee Meeting – Anchorage
- Alaska Municipal League Presentation - Anchorage
- Follow Up Interviews Post September and October Meetings

Outreach and Education

AK Youth Education Program Delivery: Development is in progress to create a classroom kit that can easily be mailed to classrooms and teachers across the state. The content and curriculum will be available on both ARE's and APFC's websites, with a statewide campaign for Alaska's teachers, parents, and students expected in the new year.

APFC Ambassadors

Logo apparel for our APFC Ambassadors is now available. We encourage our employees and ambassadors to share our brand, their stories, and the work of investing the Permanent Fund to benefit Alaskans.

APFC's Social Media Presence

Over the past quarter, APFC has produced 103 social media posts to advance APFC's goals and objectives to ensure that Alaskans and interested stakeholders understand APFC's role as investment manager of the State's most valuable renewable financial asset.

Between July and September:

- LinkedIn gained 186 new followers. LinkedIn posts received a total of 362 reactions.
- The LinkedIn post with the most impressions was "Has the Permanent Fund Grown?"
- Facebook received 28 new followers.
- A majority of Facebook audience members come from across Alaska.

Looking Forward

Publications

- **Trustee Paper #10**
We are preparing to support the publication of Trustee Paper #10 and outreach communications based on key takeaways and conclusions.
- **FY24 Mid-Year Review**
To inform the public and incoming legislative session on the performance and management of the Permanent Fund's assets, APFC publishes a mid-year review in print and digital forms. The 4-page document shares unaudited Fund values and performance for the fiscal year through December and highlights corporate activities throughout the first half of the period.

Crisis Communications Planning

We are updating APFC's crisis communications plan into a workbook for practical application. Crisis communications include managing the strategy, messages, timing, and information distribution channels to communicate effectively with the media, employees, core constituencies, and stakeholders.

SUBJECT: FY24 Year-to-Date Financial Update ACTION: _____

DATE: December 13, 2023 INFORMATION: _____ X _____

KEY TAKEAWAYS:

- Total return for the first quarter of FY24 of -0.53%. Total fund outperformed the performance benchmark by 72 basis points and the passive benchmark by 308 basis points.
- Accounting net income year-to-date of -\$785.1 million, a loss of \$1.2 billion in September
- Realized (statutory) net income year-to-date of \$990.3 million, higher than for the first quarter of FY23 and consistent with Callan’s mid-point projection
- Total market value as of September 30th of \$73.8 billion, an increase of \$3.2 billion from the same time last year
- \$1.6 billion transferred to the General Fund during the quarter in accordance with the budget appropriation, leaving \$1.9 billion to be transferred later in the year
- \$119 million of mineral deposits transferred in during the quarter, slightly higher than forecast
- Committed Earnings Reserve balance of \$5.1 billion for FY25 General Fund transfers and FY24 inflation-proofing
- \$1.2 billion in uncommitted realized earnings at the end of September

Financial results for the first quarter of FY24 reflected drawdowns of over 2% in both public equities and fixed income, offset by small gains in all other asset classes. The largest gain was experienced in the absolute return portfolio, at 2.4%. Overall, the portfolio lost \$4.2 billion in value between the end of June and the end of September. The largest decrease by far was experienced in the public equity portfolio which lost over \$716 million during the quarter. Fixed income lost \$491 million during this time.

Net assets decreased by \$4.2 billion year-to-date through September. This is a result of the net loss of \$785 million and the FY24 POMV transfer to the General Fund in the amount of \$3.5 billion offset by \$119 million received in mineral royalty deposits. Corporate operating expenses and other appropriations for the quarter totaled \$40 million.

Three transfers totaling of \$1.6 billion were made to the General Fund during the first quarter of FY24, as specified in the budget appropriation. \$1.9 billion remains to be transferred. Staff is in communication with the cash managers at the Department of Revenue to ensure that amounts designated for the General Fund remain invested in the Fund as long as possible, while being available to meet the liquidity needs of the State.



**Financial Report
September 30, 2023**

Fiscal Year 2024 Net Assets

Balances through September 30, 2023

(in millions)

Total assets	\$ 76,689.1
Less liabilities	(2,869.6)
Net assets	<u>\$ 73,819.5</u>
Fund Balances:	
Non-spendable	
Permanent Fund corpus—contributions and appropriations	\$ 56,539.1
Not in spendable form—unrealized appreciation on invested assets	9,947.1
Total non-spendable fund balance	<u>66,486.2</u>
Committed	
General Fund Commitment	3,657.3
Current FY inflation proofing	1,413.0
Current FY AK Capital Income Fund	5.6
Committed fund balance	<u>5,075.9</u>
Assigned for future appropriations	
Realized earnings	1,160.3
Unrealized appreciation on invested assets	1,097.1
Total assigned fund balance	<u>2,257.4</u>
Total fund balances	<u>\$ 73,819.5</u>

Fiscal Year 2024 Income

For the three months ending September 30, 2023

(in millions)

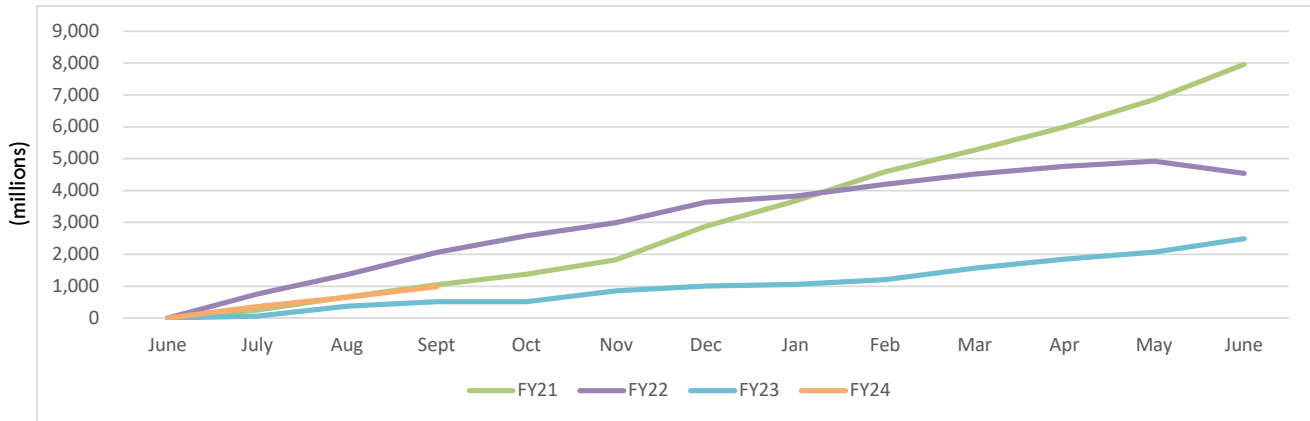
Statutory (Realized) Net Income

Interest, dividends, real estate, and other income	\$ 402.3
Realized gains on the sale of invested assets	633.1
Less operating expenses/legislative appropriations	(39.5)
Less Alaska Capital Income Fund committed realized earnings	(5.6)
Statutory net income	<u>990.3</u>

GAAP (Accounting) Net Income

Statutory net income	\$ 990.3
Unrealized loss on invested assets	(1,781.0)
Alaska Capital Income Fund committed realized earnings	5.6
Accounting net income	<u>\$ (785.1)</u>

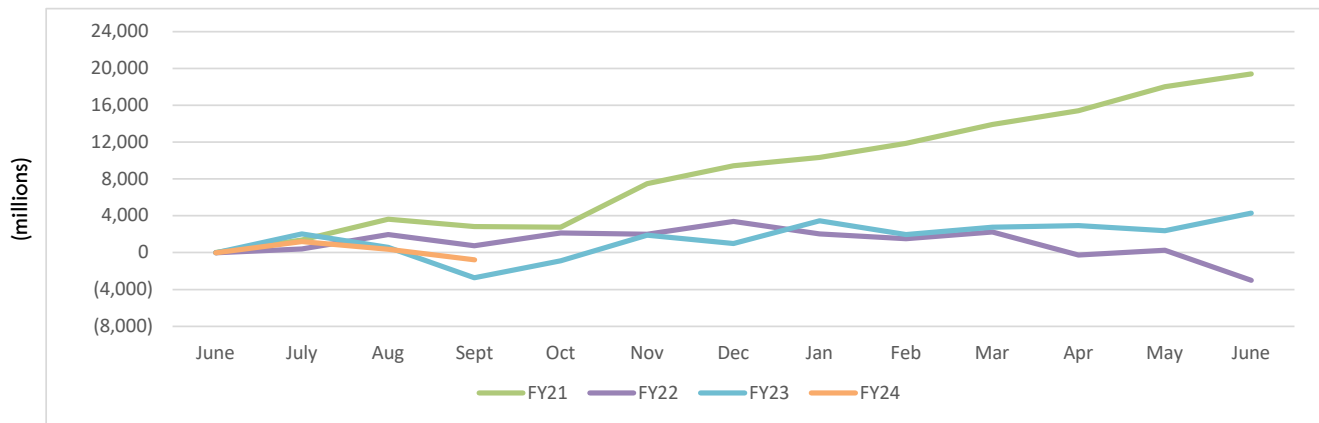
Statutory Net Income, Fiscal Years 2021 - 2024



- Comprised of receipts from interest on fixed income, real estate rentals, stock dividends, and all realized gains and losses on the sales of invested assets, less AK Capital Income Fund committed amounts and operating expenses.

- FY21 statutory net income was \$7,962.4 million.
- FY22 statutory net income was \$4,543.6 million.
- FY23 statutory net income was \$2,491.1 million.
- FY24 statutory net income is \$990.3 million to date.

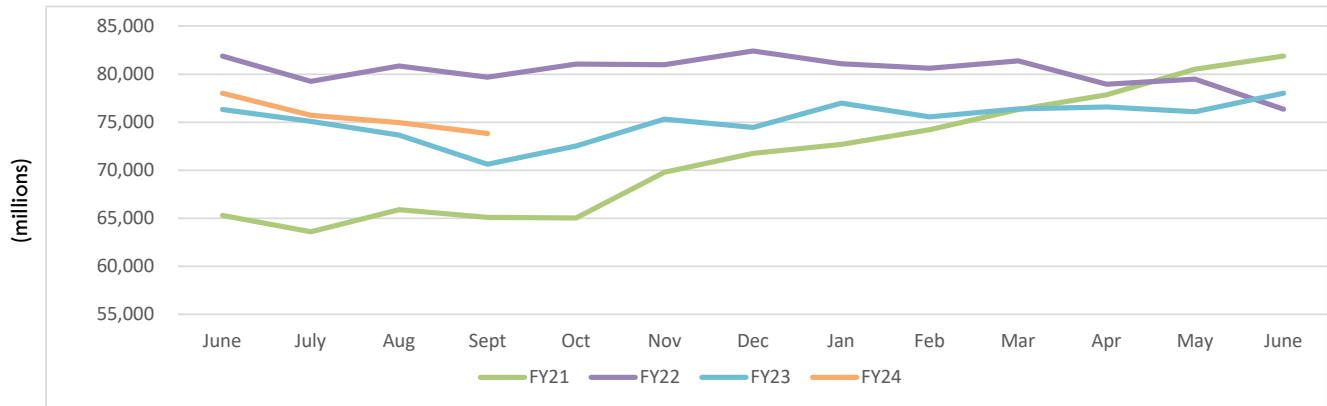
GAAP Accounting Net Income, Fiscal Years 2021 - 2024



- Accounting net income is the same as statutory net income, except it includes unrealized gains and losses.

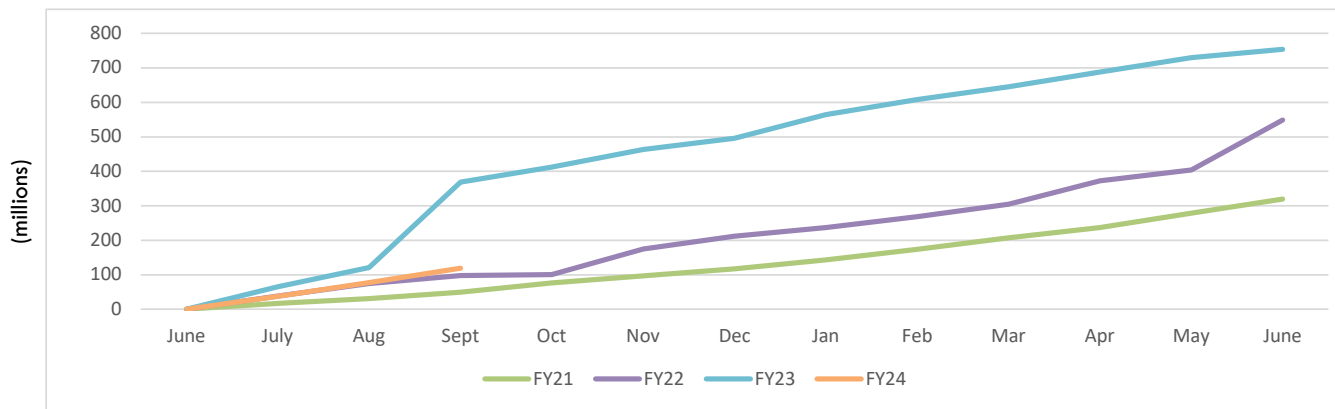
- Accounting net income for FY21 was \$19,416.6 million.
- Accounting net loss for FY22 was \$3,015.2 million.
- Accounting net income for FY23 was \$4,295.9 million.
- Accounting net loss for FY24 is \$785.1 million to date.

Market Value of Fund Net Assets, Fiscal Years 2021 - 2024



- FY21 net assets as of June 2021 were \$81.9 billion, a decrease of \$16.6 billion over the FY20 ending balance.
- FY22 net assets as of June 2022 were \$76.3 billion, an increase of \$5.6 billion over the FY21 ending balance.
- FY23 net assets as of June 2023 were \$78 billion, a decrease of \$1.7 billion from the FY22 ending balance.
- FY24 net assets as of September 2023 were \$73.8 billion, a decrease of \$4.2 billion from the FY23 ending balance.

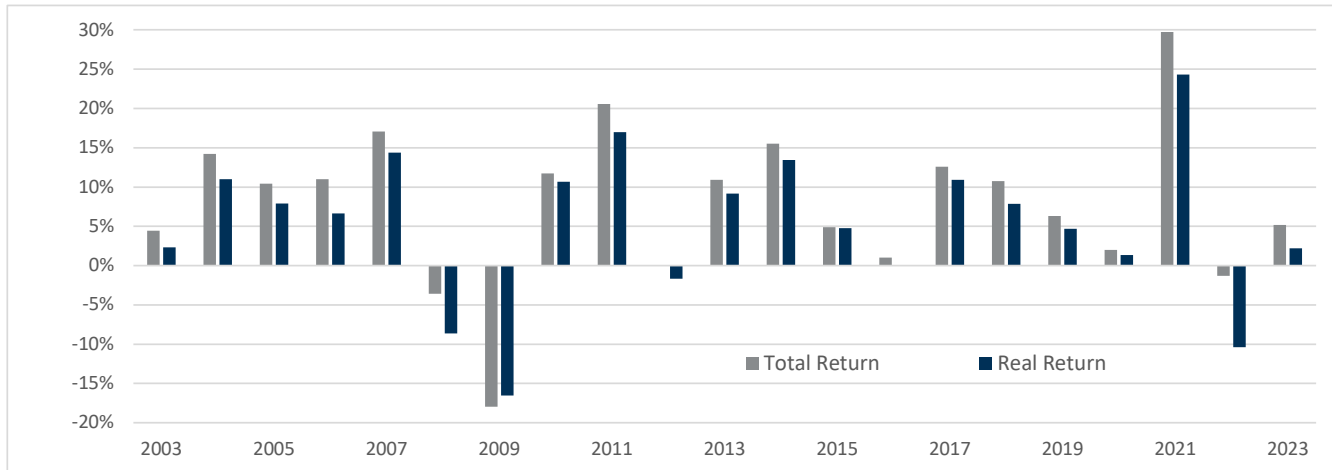
Dedicated Mineral Revenues, Fiscal Years 2021 - 2024



- FY21 mineral revenue was \$319.6 million.
- FY22 mineral revenue was \$548.9 million.
- FY23 mineral revenue was \$753.6 million.
- FY24 mineral revenue is \$118.8 million to date.

Alaska Permanent Fund Historical Returns, Fiscal Years 2003 - 2023

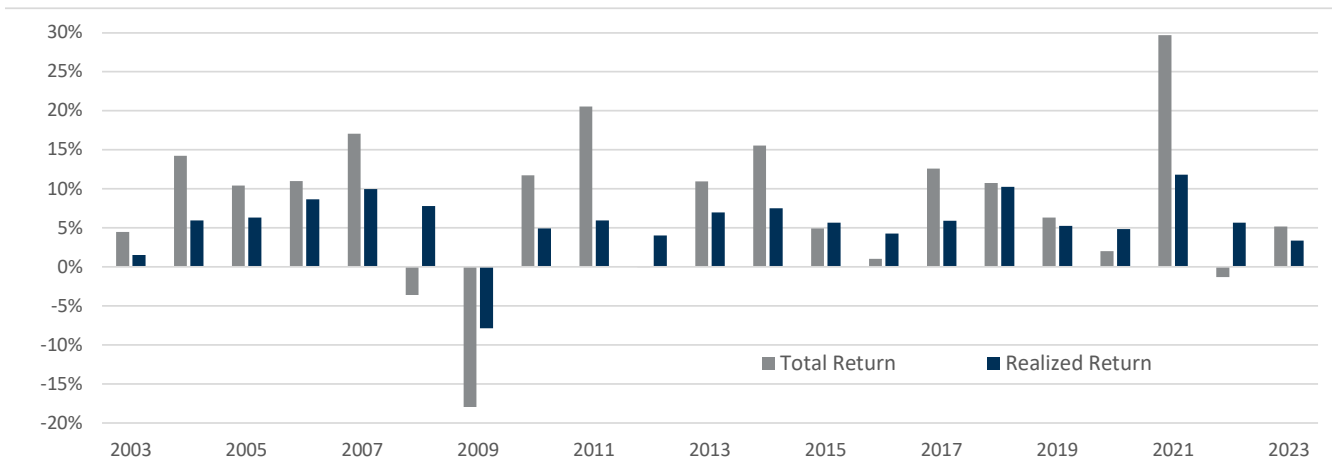
Total return minus inflation equals real return



- Total return annualized over 39 years is 8.81%
- Real return annualized over 39 years is 6.01%

Alaska Permanent Fund Historical Returns, Fiscal Years 2003 - 2023

Total return minus unrealized gains/losses equals realized return



- Total return annualized over 39 years is 8.81%
- Realized return annualized over 39 years is 7.39%

Board of Trustees - APFC Transfers - July 1, 2023 through September 30, 2023

<u>Type of Transfer</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>Total</u>
Public Equities	(500,826,365)	(500,766,729)	(500,769,924)	(1,502,363,018)
Fixed Income	1,646,181	3,530,001	6,600,966	11,777,148
Private Equity & Special Opportunities	(28,875,947)	(61,601,275)	(134,237,748)	(224,714,970)
Real Estate	3,911,789	(19,107,033)	65,145,710	49,950,466
Private Income	(16,260,160)	(7,237,761)	33,520,497	10,022,576
Absolute Return	(5,773,254)	-	-	(5,773,254)
Tactical Opportunities	15,228,899	405,150,378	1,911,316	422,290,593
Total Fund Cash	1,504,417,063	(209,090,068)	(631,634,693)	663,692,301
Risk Parity	(12,873)	-	-	(12,873)
Net Transfers	973,455,332	(389,122,488)	(1,159,463,875)	(575,131,032)

Board of Trustees - APFC Transfers - July 2023

Description	Total Fund Cash	Public Equities	Fixed Income	Pvt. Equity & Spec. Opps.	Real Estate	Private Income	Absolute Return	Tactical Opportunities	Risk Parity	Net
State of Alaska & Administrative										
Mineral revenue	45,700,832									45,700,832
AIM STIF interest	3,198,425									3,198,425
Commission recapture proceeds	14,519									14,519
Securities Lending income	10,903									10,903
Class action proceeds	327									327
PCE Transfer to APFC	936,391,700									936,391,700
Corporate expenses	(11,861,374)									(11,861,374)
Public Equities										
MCM S&P 500	25,000,000	(25,000,000)								-
APF US Tactical Tilts	153,959	(153,959)								-
Voya LG Cap	50,000,000	(50,000,000)								-
APF R1000 Low Vol	(152)	152								-
Mellan R3000	50,000,000	(50,000,000)								-
SSGA LG Cap	50,000,000	(50,000,000)								-
APF Domestic EQ	(153,959)	153,959								-
AQR Capital Management	100,000,000	(100,000,000)								-
SSGA MSCI ACWI IMI	75,000,335	(75,000,335)								-
Arrowstreet Global EQ	50,000,000	(50,000,000)								-
McKinley Global	25,000,000	(25,000,000)								-
MCM MSCI World Ex-US	25,000,000	(25,000,000)								-
Mondrian EM	(12,119)	12,119								-
SSGA MSCI EM	743	(743)								-
JP Morgan Int'l EQ	25,000,000	(25,000,000)								-
DFA EM Value	3,261	(3,261)								-
DFA EM SM Cap	7,720	(7,720)								-
WCM Global EQ	25,000,000	(25,000,000)								-
Public EQ Sec Lending	826,425	(826,425)								-
Fixed Income										
APF FI Overlay	(109,825)		109,825							-
Rogge Global Partners	(1,509)		1,509							-
Rogge Global CNY	1,442		(1,442)							-
APF Global Rates Cash	(25,000,000)		25,000,000							-
APF Global Rates	1,508,743		(1,508,743)							-
APF China Bond Market	(1,510,896)		1,510,896							-
APF TBA Collateral	(1,646,181)		1,646,181							-
Ninety One EMD BL	1,974		(1,974)							-
Colchester EMD CNY	247		(247)							-
APF FI Cash	25,109,825		(25,109,825)							-
Private Equity & Special Opportunities										
Private Equity distributions	93,664,011			(93,664,011)						-
Private Equity capital calls	(67,787,334)			67,787,334						-
Special Opportunities distributions	27,120,596			(27,120,596)						-
Special Opportunities capital calls	(24,121,325)			24,121,325						-
Real Estate										
Direct Real Estate distributions	7,029,795				(7,029,795)					-
Direct Real Estate capital calls	(6,314,300)				6,314,300					-
Real Estate Funds distributions	3,639,605				(3,639,605)					-
Real Estate Funds capital calls	(8,266,889)				8,266,889					-
Private Income										
Infrastructure distributions	7,625,158					(7,625,158)				-
Infrastructure capital calls	(25,725,016)					25,725,016				-
Private Credit distributions	56,310,721					(56,310,721)				-
Private Credit capital calls	(19,193,646)					19,193,646				-
Private Income distributions	2,282,735					(2,282,735)				-
Private Income capital calls	(5,039,792)					5,039,792				-
Absolute Return										
Absolute Return distributions	5,773,254						(5,773,254)			-
Tactical Opportunities										
APF Tactical Opps Public	(15,228,899)							15,228,899		-
Risk Parity										
Bridgewater All Weather	6,905								(6,905)	-
PanAgora	5,968								(5,968)	-
Net Transfers	1,504,417,063	(500,826,365)	1,646,181	(28,875,947)	3,911,789	(16,260,160)	(5,773,254)	15,228,899	(12,873)	973,455,332



Board of Trustees - APFC Transfers - August 2023

Description	Total Fund Cash	Public Equities	Fixed Income	Pvt. Equity & Spec. Opps.	Real Estate	Private Income	Tactical Opportunities	Net
State of Alaska & Administrative								
Mineral revenue	37,169,639							37,169,639
AIM STIF interest	2,080,914							2,080,914
Commission recapture proceeds	17,978							17,978
Securities Lending income	10,405							10,405
General Fund Transfer	(400,000,000)							(400,000,000)
ACIF Transfer	(14,265,230)							(14,265,230)
Corporate expenses	(14,136,230)							(14,136,230)
Public Equities								
Voya LG Cap	50,000,000	(50,000,000)						-
SSGA LG Cap	25,000,000	(25,000,000)						-
AQR Capital Management	50,000,000	(50,000,000)						-
Lazard Global EQ	100,000,000	(100,000,000)						-
SSGA MSCI ACWI IMI	75,000,000	(75,000,000)						-
SSGA MSCI World	50,000,000	(50,000,000)						-
CDAM Global EQ	25,000,000	(25,000,000)						-
Longview Global EQ	75,000,000	(75,000,000)						-
Arrowstreet Global EQ	50,000,000	(50,000,000)						-
Mandrian EM	(741)	741						-
DFA EM Value	454	(454)						-
DFA EM SM Cap	287	(287)						-
Public EQ Sec Lending	766,729	(766,729)						-
Fixed Income								
APF FI Overlay	(215,942)		215,942					-
APF TBA Collateral	(3,530,001)		3,530,001					-
APF FI Cash	215,942		(215,942)					-
Private Equity & Special Opportunities								
Private Equity distributions	162,394,116			(162,394,116)				-
Private Equity capital calls	(103,732,752)			103,732,752				-
Special Opportunities distributions	26,868,644			(26,868,644)				-
Special Opportunities capital calls	(23,928,734)			23,928,734				-
Real Estate								
Direct Real Estate distributions	10,907,020				(10,907,020)			-
Direct Real Estate capital calls	(1,787,963)				1,787,963			-
Real Estate Funds distributions	9,987,977				(9,987,977)			-
Private Income								
Infrastructure distributions	9,958,219					(9,958,219)		-
Infrastructure capital calls	(15,254,416)					15,254,416		-
Private Credit distributions	20,346,196					(20,346,196)		-
Private Credit capital calls	(9,960,291)					9,960,291		-
Private Income distributions	2,574,234					(2,574,234)		-
Private Income capital calls	(426,181)					426,181		-
Tactical Opportunities								
APF Tactical Opps Public	(405,150,378)						405,150,378	-
Net Transfers	(209,090,068)	(500,766,729)	3,530,001	(61,601,275)	(19,107,033)	(7,237,761)	405,150,378	(389,122,488)



Board of Trustees - APFC Transfers - September 2023

Description	Total Fund Cash	Public Equities	Fixed Income	Pvt. Equity & Spec. Opps.	Real Estate	Private Income	Tactical Opportunities	Net
State of Alaska & Administrative								
Mineral revenue	32,314,238							32,314,238
AIM STIF interest	3,356,881							3,356,881
Commission recapture proceeds	24,992							24,992
Securities Lending income	6,718							6,718
General Fund Transfer	(1,181,521,963)							(1,181,521,963)
Appropriations to other State Depts.	(9,834,500)							(9,834,500)
Corporate expenses	(3,810,247)							(3,810,247)
Public Equities								
APF SPDR Yield	5,852,164	(5,852,164)						-
APF SPDR Momentum	1,387,580	(1,387,580)						-
APF SPDR Low Vol	3,316,875	(3,316,875)						-
APF US Tactical Tilts	12,719	(12,719)						-
APF Domestic EQ	5,962,604	(5,962,604)						-
AQR Capital Management	100,000,000	(100,000,000)						-
Lazard Global EQ	100,000,000	(100,000,000)						-
SSGA MSCI ACWI IMI	225,000,068	(225,000,068)						-
Longview Global EQ	35,000,000	(35,000,000)						-
Arrowstreet Global EQ	40,000,000	(40,000,000)						-
APF Tactical Tilts	(18,460,892)	18,460,892						-
APF Tactical Tilts Cash	1,928,950	(1,928,950)						-
Mondrian EM	(4,443)	4,443						-
DFA EM Value	557	(557)						-
DFA EM SM Cap	3,817	(3,817)						-
Public EQ Sec Lending	769,924	(769,924)						-
Fixed Income								
APF FI Overlay	(483,127)		483,127					-
APF TBA Collateral	(6,600,966)		6,600,966					-
APF FI Cash	483,127		(483,127)					-
Private Equity & Special Opportunities								
Private Equity distributions	141,484,094			(141,484,094)				-
Private Equity capital calls	(76,264,789)			76,264,789				-
Special Opportunities distributions	71,544,011			(71,544,011)				-
Special Opportunities capital calls	(2,525,568)			2,525,568				-
Real Estate								
Direct Real Estate distributions	5,839,014				(5,839,014)			-
Direct Real Estate capital calls	(60,789,111)				60,789,111			-
Real Estate Funds capital calls	(10,195,614)				10,195,614			-
Private Income								
Infrastructure distributions	21,277,892					(21,277,892)		-
Infrastructure capital calls	(66,992,505)					66,992,505		-
Private Credit distributions	53,546,790					(53,546,790)		-
Private Credit capital calls	(38,629,947)					38,629,947		-
Private Income distributions	2,712,542					(2,712,542)		-
Private Income capital calls	(5,435,269)					5,435,269		-
Tactical Opportunities								
APF Tactical Opps Public	(1,911,316)						1,911,316	-
Net Transfers	(631,634,693)	(500,769,924)	6,600,966	(134,237,748)	65,145,710	33,520,497	1,911,316	(1,159,463,875)

Projections extend ten years, and are based on best available information (\$ in millions)

Nonspendable Fund Balance - Principal							Assigned Fund Balance - Earnings Reserve										TOTAL FUND	
FY	FY-Begin	Dedicated	Inflation	FY-End	Unrealized	FY-End	Statutory	Distributions				FY-End	Unrealized	FY-End	FY-End	TOTAL		
	Contrib.	State	Proofing	Balance	Gain (Loss)	Non-		Div/POMV	Inflation	Prfg & Spec	ACIF						Committed	Balance
	Balance	Revenues	& Special	Contributions	Balance	Spendable	Net	Transfer	Approp.			Realized	Balance	Balance		Balance		
77-14	0	15,289	22,651	37,940	7,062	45,002	46,807	21,630	19,353	513		5,236	975	6,212	77-14	51,214		
15	37,940	600	624	39,164	6,473	45,637	2,907	1,373	624	24		6,147	1,016	7,163	15	52,800		
16	39,164	284	0 ⁽⁵⁾	39,448	4,750	44,198	2,198	696 ⁽⁴⁾	0 ⁽⁵⁾	18		7,649	921	8,571	16	52,769		
17	39,448	365	0 ⁽⁵⁾	39,813	7,155	46,969	3,214	0	0 ⁽⁵⁾	25		10,863	1,952	12,816	17	59,784		
18	39,813	353	0 ⁽⁵⁾	40,166	5,863	46,030	6,324	726	0 ⁽⁵⁾	43	2,723	13,738	2,403	18,864	18	64,893		
19	40,166	385	989	41,541	6,278	47,820	3,305	2,723	989	22	5,933	10,121	2,427	18,481	19	66,300		
20	41,541	319	4,758 ⁽⁷⁾	46,618	5,789	52,407	3,106	2,933	4,758 ⁽⁷⁾	21	3,091	8,378	1,424	12,894	20	65,301		
21	46,618	320	0 ⁽⁵⁾	46,938	13,810	60,748	7,962	3,091	0 ⁽⁵⁾	50	7,069	9,271	4,807	21,148	21	81,896		
22	46,938	549	4,000 ⁽⁵⁾⁽⁷⁾	51,487	8,700	60,187	4,544	3,069	4,000 ⁽⁵⁾⁽⁷⁾	24	3,361	10,454	2,334	16,150	22	76,336		
23	51,487	754	4,179	56,420	11,100	67,520	2,491	3,361	4,179 ⁽⁹⁾	14	3,526	5,240	1,725	10,491	23	78,011		
Lo	56,420	445	1,413	58,278	8,765	67,043	2,849	3,526	1,413	17	3,657	3,019	1,004	7,680	24	74,723		
Mid	56,420	445	1,413	58,278	12,757	71,034	3,837	3,526	1,413	23	3,657	4,007	1,678	9,342	24	80,376		
Hi	56,420	445	1,413	58,278	16,256	74,534	5,130	3,526	1,413	30	3,657	5,300	2,499	11,456	24	85,990		
25	58,278	429	1,468	60,174	13,218	73,391	4,972	3,657	1,468	28	3,798	3,714	1,650	9,161	25	82,553		
26	60,174	423	1,515	62,112	13,701	75,813	5,105	3,798	1,515	28	3,971	3,333	1,611	8,914	26	84,728		
27	62,112	438	1,564	64,114	14,215	78,329	5,237	3,971	1,564	28	3,999	3,008	1,553	8,560	27	86,888		
28	64,114	502	1,615	66,231	14,732	80,963	5,375	3,999	1,615	28	4,104	2,663	1,505	8,272	28	89,235		
29	66,231	499	1,668	68,399	15,264	83,663	5,520	4,104	1,668	28	4,217	2,298	1,454	7,968	29	91,630		
30	68,399	491	1,722	70,612	15,813	86,425	5,667	4,217	1,722	28	4,329	1,914	1,398	7,641	30	94,066		
31	70,612	502	1,778	72,891	16,380	89,272	5,818	4,329	1,778	28	4,444	1,510	1,338	7,292	31	96,563		
32	72,891	545	1,836	75,273	16,966	92,239	5,974	4,444	1,836	28	4,563	1,085	1,273	6,920	32	99,158		
33	75,273	617	1,897	77,787	18,591	96,378	6,136	4,563	1,897	28	4,685	761	182	5,505	33	101,883		
Cumulative Totals																		
Proj. for FY24-FY33							4,890	16,476										

Assumptions: Total Return - Inflation = Total Real Return					Statutory Return	
Lo	FY24	0.05%	2.50%	-2.45%	Lo	4.05%
Mid	FY24 ⁽²⁾	7.45%	2.50%	4.95%	Mid	5.35%
Hi	FY24	14.80%	2.50%	12.30%	Hi	7.05%
FY24-FY33 ⁽³⁾						6.65%

FY24 POMV Distribution (actual) ⁽¹⁰⁾		FY24 Statutory Dividend Transfer (actual) ⁽¹⁰⁾	
Ending Fund Value (ex Am Hess)		Statutory Net Income	
FY22	\$ 75,911.5	FY23	\$ 2,491.0
FY21	81,471.5	FY22	4,544.0
FY20	64,876.5	FY21	7,962.0
FY19	65,876.0	FY20	3,106.0
FY18	64,469.1	FY19	3,305.0
Average Value \$ 70,520.9		Avail for	
Statutory Distribution \$ 3,526.0		Dist (21%)	\$ 4,495.7
		Statutory Trnsfr Amt	\$ 2,247.8

FY25 POMV Distribution (actual) ⁽¹⁰⁾		FY25 Statutory Dividend Transfer (projected)	
Ending Fund Value (ex Am Hess)		Statutory Net Income	
FY23	\$ 77,586.8	FY24	\$ 3,837.5
FY22	75,911.5	FY23	2,491.0
FY21	81,471.5	FY22	4,544.0
FY20	64,876.5	FY21	7,962.0
FY19	65,876.0	FY20	3,106.0
Average Value \$ 73,144.5		Avail for	
Statutory Distribution \$ 3,657.2		Dist (21%)	\$ 4,607.5
		Statutory Trnsfr Amt	\$ 2,303.7

Notes related to financial history and projections:

⁽¹⁾ Dedicated State Revenues in current and future fiscal years are based on the Spring 2023 Department of Revenue forecast.

⁽²⁾ Current year returns and inflation are based on 2023 Callan capital market assumptions. Actual results will vary.

⁽³⁾ Future returns are based on 2023 Callan capital market assumptions and median expected returns (the mid case). Actual results will vary.

⁽⁴⁾ The dividend transfer reported for FY16 was paid out in dividends during FY17.

⁽⁵⁾ There was no appropriation for inflation proofing in FY16, FY17, FY18, FY21, and FY22.

⁽⁶⁾ Per AS 37.13.140, beginning in FY19, transfers are based on a percent of market value (POMV) calculation and are to the General Fund. In previous years, transfers were based on an earnings calculation and were to the Dividend Fund.

⁽⁷⁾ In FY20 and FY22, an additional \$4 billion was appropriated from the ERA to principal.

⁽⁸⁾ All transfers out of the Earnings Reserve are subject to Legislative appropriation.

Income Year-to-Date as of September 30, 2023

FY24 YTD Statutory Net Income	
Interest, dividends, real estate & other income	\$ 402.3
Realized gains (losses) on the sale of assets	633.1
Less operating expenses	(39.5)
Less AK Capital Income Fund realized earnings	(5.6)
	\$ 990.3

FY24 YTD Accounting (GAAP) Net Income	
Statutory net income (loss)	\$ 990.3
Unrealized gains (losses) on invested assets	(1,781.0)
AK Capital Income Fund realized earnings	5.6
Accounting (GAAP) net income (loss)	\$ (785.1)
42 of 343	



FYTD 2024 Fees & Expenses by Funding Source*

Report Date	September 30, 2023
Total Fund Balance	75,442,594,000
FYTD Change in Total Fund Balance (Net of Transfers)	(2,745,966,000)

Investment Management Fees

	Paid from Investments	Paid from Investment Management Allocation	Paid from Operations Allocation	Total
Public Equity	495,000	13,735,000	790,000	15,020,000
Fixed Income	0	1,047,000	2,347,000	3,394,000
Absolute Return	25,023,000	114,000	305,000	25,442,000
Total Fund Cash	0	11,000	207,000	218,000
Private Equity & Special Opps	37,504,000	7,060,000	1,409,000	45,973,000
Infrastructure & Private Income	24,225,000	566,000	675,000	25,466,000
Real Estate	11,809,000	935,000	1,139,000	13,883,000
Total Mgmt Fees by Source	99,056,000	23,468,000	6,872,000	129,396,000
Basis Points	13	3	1	17

Profit Sharing/Performance

	Paid from Investments	Paid from Investment Management Allocation	Paid from Operations Allocation	Total
Private Equity & Special Opps	29,541,000	0	0	29,541,000
Infrastructure & Private Income	10,978,000	0	0	10,978,000
Real Estate	685,000	0	0	685,000
	41,204,000	0	0	41,204,000

* All amounts presented, including fund balances and change net of transfers, consist of APF, AMHT, and PCE combined.



Budget-to-Actuals and Projected Expenditures: July 1, 2023 through September 30, 2023

Corporate Operations	Authorized Budget	Actuals and Projected Expenditures	Projected Remaining Budget	% Expended
Personal Services	\$ 20,547,397	\$ 5,742,349	\$ 14,805,048	28%
Staff	17,716,097	3,736,555	13,979,542	21%
Incentive Compensation	2,800,000	2,004,070	795,930	72%
Board: Honoraria	31,300	1,724	29,576	6%
Travel	\$ 800,000	\$ 90,636	\$ 709,364	11%
Staff	602,000	59,722	542,278	10%
Trustees	18,000	1,655	16,345	9%
Moving and Non-Employee	180,000	29,259	150,741	16%
Contractual Services	\$ 3,700,830	\$ 910,859	\$ 2,789,971	25%
Audit, Legal, Consulting	713,200	56,306	656,894	8%
Public Communications	395,300	53,990	341,311	14%
Board Support and Meetings	111,400	31,259	80,141	28%
Information Technology	1,490,000	418,406	1,071,594	28%
HR and Recruitment	65,100	23,455	41,645	36%
Training and Education	159,680	-	159,680	0%
Office Support	766,150	327,445	438,705	43%
Commodities	\$ 435,570	\$ 54,012	\$ 381,558	12%
Equipment	\$ 450,000	\$ 306,788	\$ 143,212	68%
Corporate Operations Total	\$ 25,933,797	\$ 7,104,644	\$ 18,829,153	27%
Investment Management				
Investment Systems	\$ 11,649,200	\$ 5,959,229	\$ 5,689,971	51%
Investment Due Diligence	\$ 5,763,400	\$ 1,672,773	\$ 4,090,627	29%
Custody Fees	\$ 2,300,000	\$ 263,828	\$ 2,036,172	11%
Investment Manager Fees	\$ 175,651,000	\$ 21,656,262	\$ 153,994,738	12%
Public Equities	139,157,000	13,678,930	125,478,070	10%
Real Estate	3,594,000	722,606	2,871,394	20%
Alternative Markets	32,900,000	7,254,726	25,645,274	22%
Investment Management Total	\$ 195,363,600	\$ 29,552,092	\$ 165,811,508	15%
Legislative Appropriation	\$ 9,834,500	\$ 9,834,500	\$ -	100%
Total Appropriation	\$ 231,131,897	\$ 46,491,235	\$ 184,640,662	20%



SUBJECT: Chief Investment Officer's Report

ACTION: _____

DATE: December 13, 2023

INFORMATION: _____ X _____

BACKGROUND:

The Chief Investment Officer's report provides an overview of Fund positioning, performance, investment actions taken during the quarter, and other current topics in the Investment Department.

STATUS:

Marcus Frampton, CIO, will present Fund positioning, asset class performance, and investment actions taken during the quarter from July 1 to September 30, 2023.



ALASKA PERMANENT
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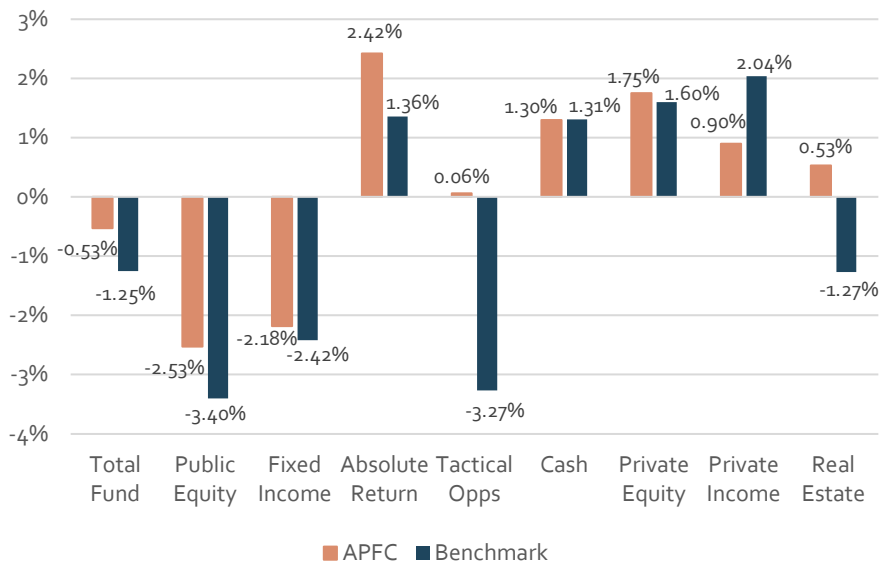
CIO Report
Marcus Frampton, Chief Investment Officer
December 13, 2023

Investment Department Current Topics

- Performance
- Positioning
- Strategic Plan
- Day-to-day Execution

Total Fund Performance

FY' 24 Performance as of 9/30/23



Major Asset Class Performance Commentary

Asset Class	Over/Under	Commentary
Public Equity	+ 87 bps	Largely driven by external manager alpha with some smaller drivers
Fixed Income	+ 24 bps	Portfolio benefited from profitable sector and security selection
Absolute Return	+ 106 bps	Outstanding alpha generation from macro managers
Private Equity	+ 15 bps	VC write-downs are being offset by gains in energy and buyouts
Private Income	- 114 bps	Private markets performance is best viewed over multi-year periods of time; with that noted, pressure on quarterly Private Income performance came from certain individual Income Opportunities investments that had income below expectations or NAV pressure from idiosyncratic softness in their individual sectors
Real Estate	+ 180 bps	Strong performance from debt investments and REITs in the quarter
Total Fund	+72 bps	Strong outperformance in nearly all asset classes



Investment Actions Taken during Q1 FY 2024

Investment Actions

Quarter Ending September 30, 2023

Real Estate

During the quarter, Staff took the following investment actions in the Real Estate portfolio:

- Approved \$112.5 million investment in an opportunistic real estate lending joint venture
- Paid off the debt on the Sand Lake property in Orlando, FL for \$60 million

Private Equity

Fund commitments closed in Q1 FY24:

- \$15 million to growth-oriented buyout
 - \$15 million to large-cap buyout
 - \$50 million to mid-cap buyout
- \$80 million**

Co-investments closed in Q1 FY24:

- \$50 million financial services co-investment
 - \$35 million financial services co-investment
- \$85 million**

Private Income & Infrastructure

Fund commitments closed in Q1 FY24:

- \$75 million to mid-market private credit fund
- \$75 million**

Co-investments closed in Q1 FY24:

- \$25 million aerospace/defense co-investment
- \$25 million**

Investment Actions (continued)

Quarter Ending September 30, 2023

Public Equity

During the quarter, Staff redeemed **\$1,500 million** from external Public Equities accounts and moved the amount to Total Fund Cash. Details are below:

- July 19th & 20th

<u>Redemption from</u>	<u>Amount</u>
Voya US LCG	-\$50 million
SSGA US LCG	-\$50 million
Mellon R 3000	-\$50 million
MCM S&P 500	-\$25 million
MCM World ex US	-\$25 million
JPM International	-\$25 million
Arrowstreet Global	-\$50 million
AQR Global	-\$100 million
SSGA MSCI ACWI IMI	-\$75 million
WCM Global	-\$25 million
McKinley Global	-\$25 million
	-\$500 million

- September 7th & 8th

<u>Redemption from</u>	<u>Amount</u>
AQR Global	-\$100 million
Arrowstreet Global	-\$40 million
Lazard Global	-\$100 million
Longview Global	-\$35 million
SSGA MSCI ACWI IMI	-\$225 million
	-\$500 million

- August 1st – 3rd

<u>Redemption from</u>	<u>Amount</u>
AQR Global	-\$50 million
Voya US LCG	-\$50 million
Arrowstreet Global	-\$50 million
CDAM Global	-\$25 million
SSGA US LCG	-\$25 million
Lazard Global	-\$100 million
Longview Global	-\$75 million
SSGA MSCI ACWI IMI	-\$75 million
SSGA MSCI World	-\$50 million
	-\$500 million



SUBJECT: Risk Overview

ACTION: ____

DATE: December 13, 2023

INFORMATION: X

BACKGROUND:

The Risk Report provides an overview of historical and forward-looking measures of risk for the Total Fund and its underlying asset classes.

STATUS:

The risk overview covers the main measures of risk for the Fund. Aggregate fund risk compared to approved risk appetite is a key strategic metric. Others include Value at Risk (VaR) on a standalone and relative-to-benchmark basis, tracking error, statistics that measure realized volatility and Sharpe ratios, asset class and factor contributions to risk and risk scenarios. It also covers Geographic, Currency, and Liquidity risks for the Total Fund.



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Risk Overview

December 13, 2023



Key Risk Metrics

As of September 29, 2023

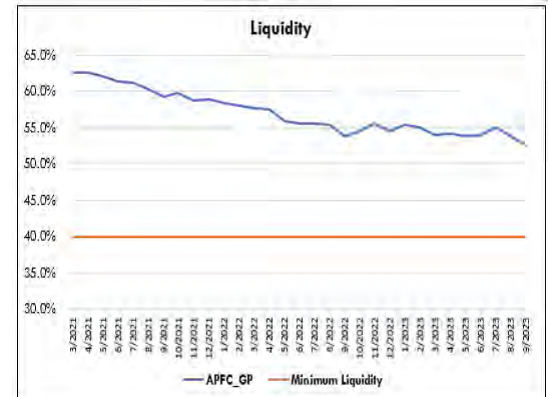
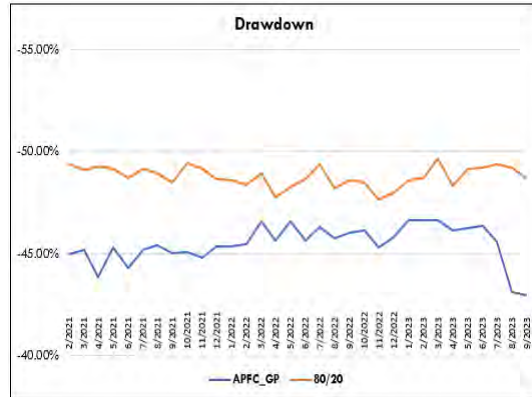
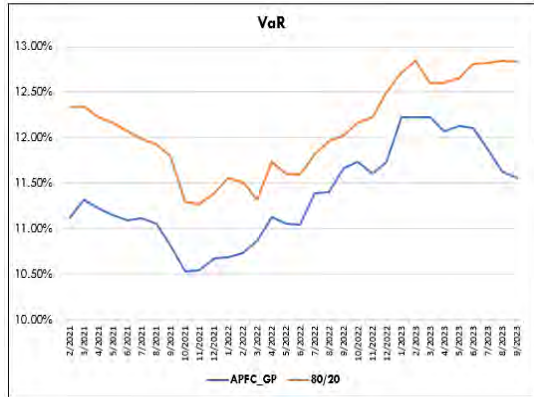
Fund Risk: level relative to appetite

Risk Appetite reflects the 80/20:equity/bond Risk Tolerance Portfolio (RTP)

Value at Risk (VaR): Max			
1 year, 1SD, 10-year monthly historical data equally weighted			
As of Date	Total Fund	Risk Appetite	
9/29/2023	11.56%	12.84%	✓

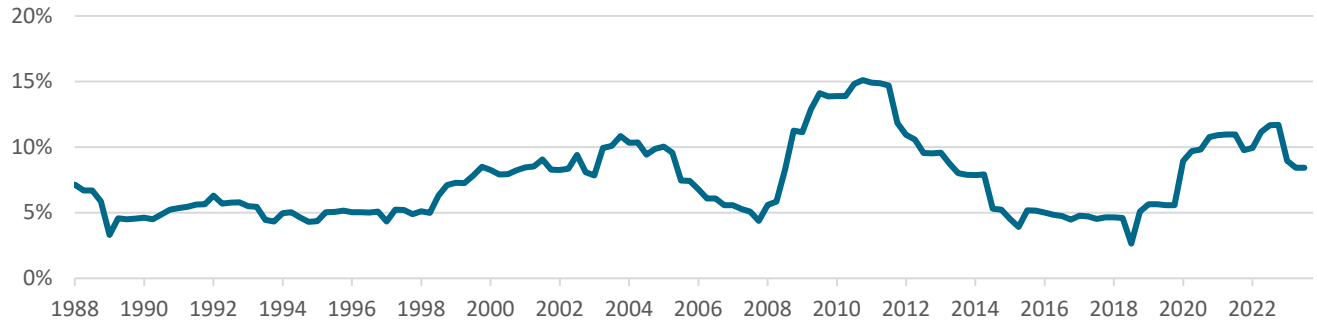
Drawdown Stress PnL: Max			
Stress scenario simulating the GFC – Dec 2007 to Mar 2009			
As of Date	Total Fund	Risk Appetite	
9/29/2023	(42.94%)	(48.66%)	✓

Liquidity Level: Min			
Public Equities, Fixed Income and Cash, as a % of total fund			
As of Date	Total Fund	Risk Appetite	
9/29/2023	52.6%	40%	✓

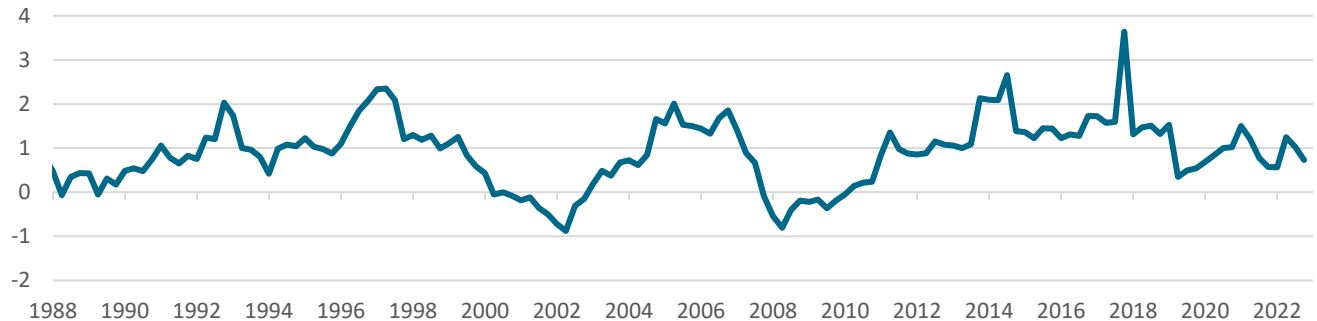


Total Fund: Realized Volatility & Sharpe Ratio

Realized Fund Volatility



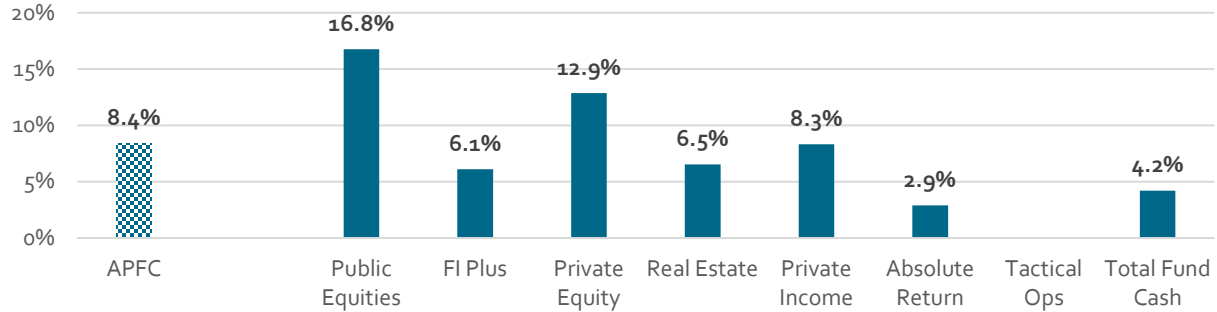
Realized Fund Sharpe Ratio



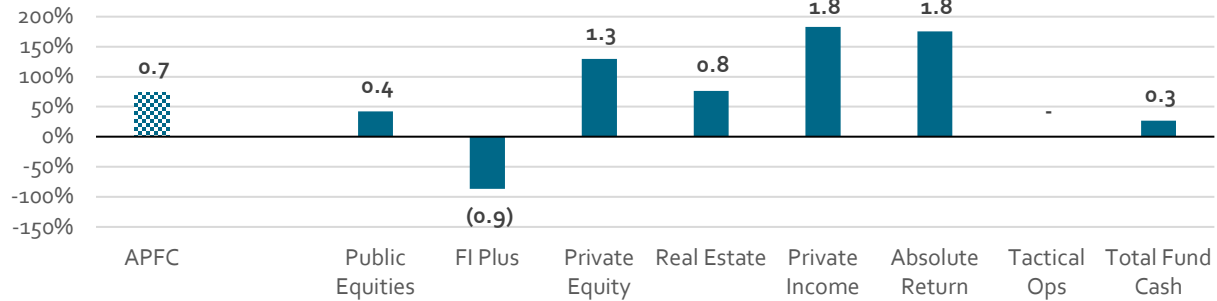
Volatility (standard deviation) and Sharpe ratio have been computed based on rolling 3 year quarterly returns for the Total Fund

Fund & Constituents: Volatility and Sharpe Ratio as of September 29, 2023

Volatility

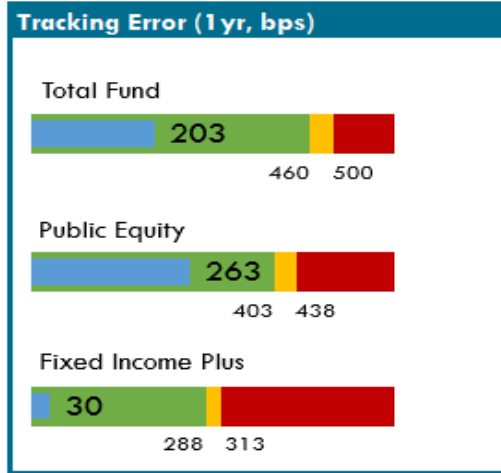


Sharpe Ratio

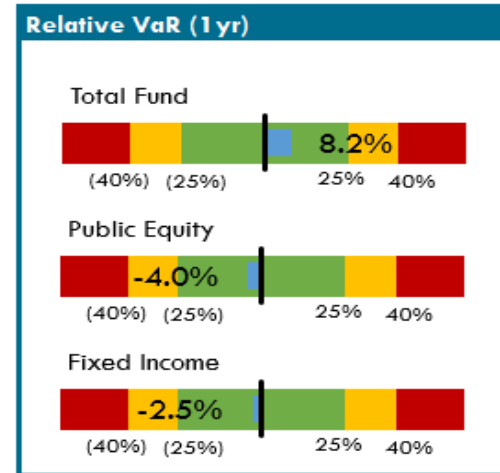


Volatility (standard deviation) and Sharpe ratio have been computed based on historical 3 year quarterly returns, as of September 29, 2023

Tracking Error and VaR: (Vs) Limits



- Tracking error is an indicator of performance relative to benchmark
- It represents the deviation of portfolio returns from benchmark returns
- It is directionally agnostic and does not indicate over or underperformance



- VaR is an estimate of value decline, based on a 97.5% confidence level and 1 year holding period
- The above chart reflects the Relative VaR of the portfolio versus respective benchmark

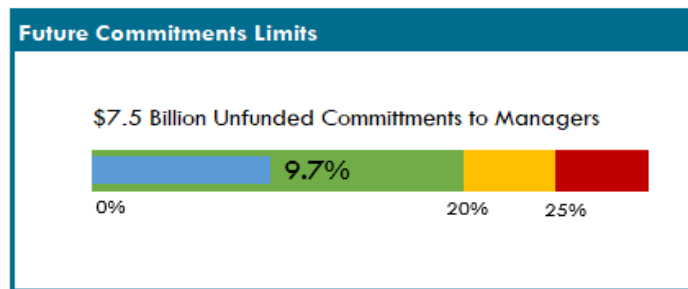
Liquidity Limits: Private Assets

Private Assets: Investments Vs Targets

	\$ Billion	% of Total Fund		
		Actual	Target	Actual (Vs) Target
Private Equity	15.5	20.0%	16.0%	4.0%
Private Income	6.9	8.9%	9.0%	-0.1%
Real Estate	8.3	10.8%	10.0%	0.8%
Total	30.7	39.7%	35.0%	

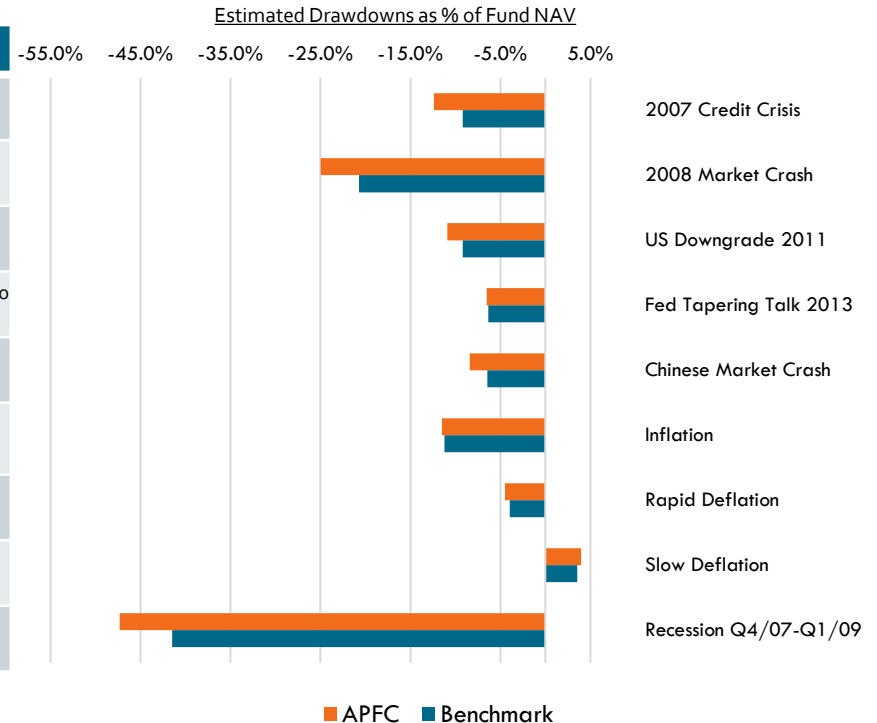
Private Assets: Future Commitments Vs Targets

	\$ Billion	% of Total Fund		
		Actual	Target	Actual (Vs) Target
Private Equity	4.1	5.4%	7.0%	-1.6%
Private Income	2.9	3.7%	5.0%	-1.3%
Real Estate	0.4	0.5%	3.0%	-2.5%
Total	7.5	9.7%	15.0%	



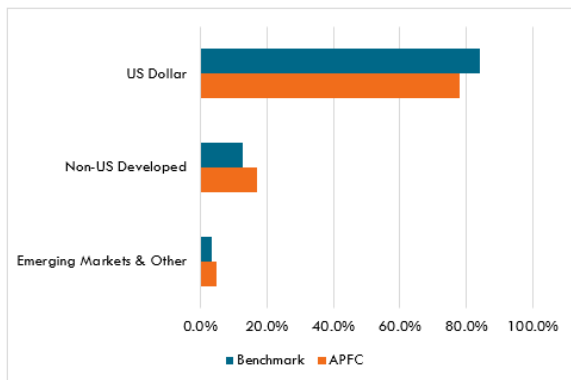
Tail Risk: Current portfolio during extreme events

Scenario	Definition
2007 Credit Crisis	Credit & liquidity crisis stemming from a severe slowdown in the housing market causing significant widening of credit spreads, higher implied volatility.
2008 Market Crash	S&P 500 down 20% (2000 bps).
US Downgrade 2011	The period starts with 50% chance US downgrade indication from S&P standards and ends with Operational Twist announcement from the Fed
Fed Tapering Talk 2013	Equity & bond markets sold off. EM suffered badly due to hot money flight back to U.S.
Chinese Market Crash	Chinese stock market crash beginning with the popping of the stock market bubble on June 12, 2015.
Inflation Overshoot	Economic recovery, pent-up demand, supply chain bottlenecks, and fiscal stimulus cause a surge in inflation, prompting higher interest rates in a taper tantrum-style sell-off.
Rapid Deflation	Oil down 60% (6000 bps); ST Inflation down 350 bps; Mortgage spreads tighten 25 bps.
Slow Deflation	LT deflation down 200 bps; LT Treasury Rates down 100 bps; Mortgage spreads tighten 25 bps.
Recession Q4/07-Q1/09	Recent recessionary period starting Dec 3, 2007 and ending March 9, 2009.



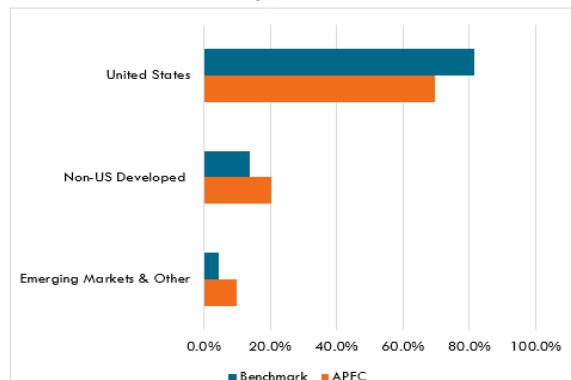
Currency & Geography: breakdowns

Currency breakdown



Currency Name	Exposure (\$ millions)
Euro	\$5,337,026
British Pound	\$2,075,173
Japanese Yen	\$1,918,875
Hong Kong Dollar	\$1,020,842
Canadian Dollar	\$834,703
Australian Dollar	\$586,635
Sub-Total	11,773,254 (15.2% of NAV)
Total Non-US DM Exposure	13,016,477 (16.8% of NAV)

Country breakdown

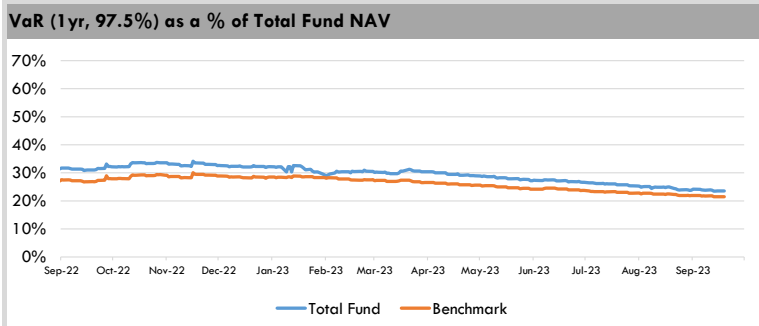
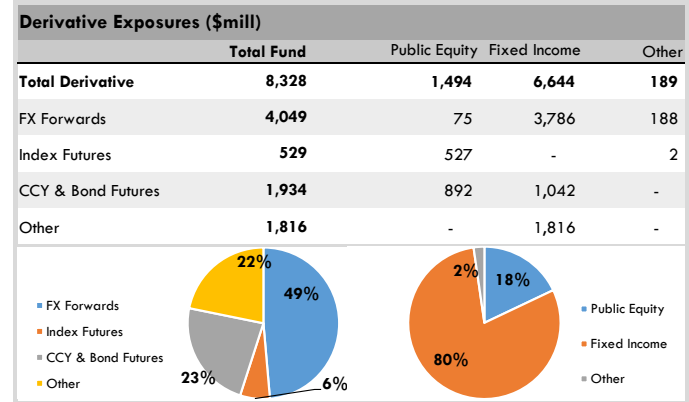
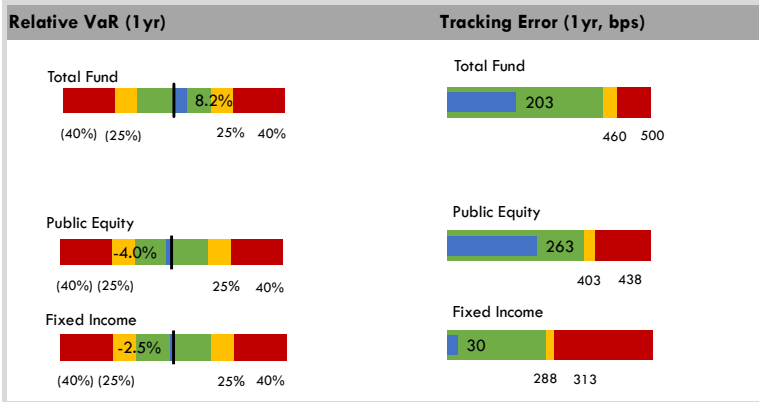


Country Name	Exposure (\$ millions)
China	1,952,673
India	748,417
Taiwan	527,597
Korea (South)	527,062
Brazil	401,649
Mexico	209,892
Sub-Total	4,367,290 (5.6% of NAV)
Total EM Exposure	5,257,969 (6.8% of NAV)

Daily Dashboard - September 29, 2023

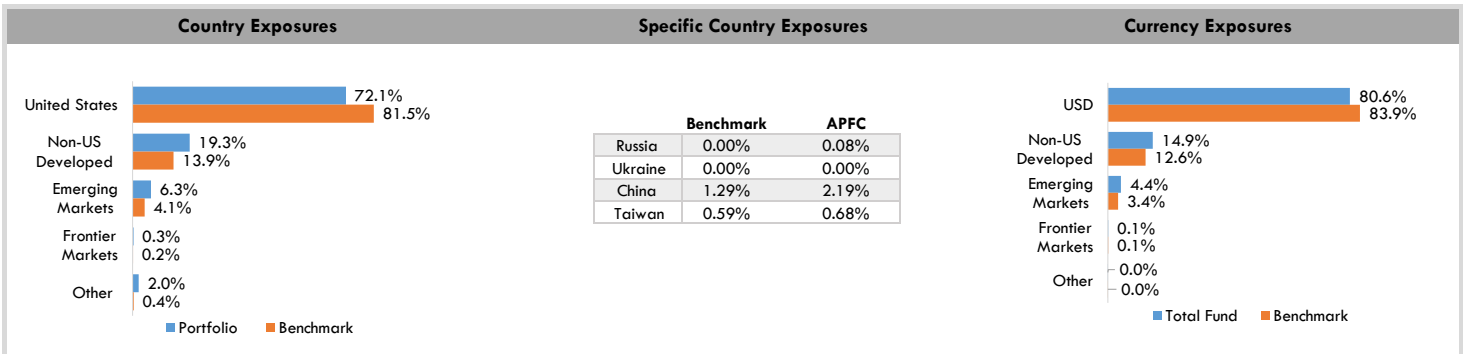
NAV : \$ 77,213,971,755

Risk	Performance (%)								Asset Allocation				
	1 SD	Rel VaR	TE	MTD	FYTD	CYTD	1 Year	NAV (\$mill)	NAV	Target	Compliance	Under/Over	
Total Fund	12.1%	8.2%	2.0%	-1.6	-1.0	3.3	8.5	77,214					
Public Equity	15%	-4.0%	2.6%	-3.4	-2.4	7.1	19.3	24,965	32.3%	34%		-1.7%	
Fixed Income	6%	-2.5%	0.3%	-2.0	-2.2	0.8	3.3	14,041	18.2%	20%		-1.8%	
Private Equity	22%	7.6%	7.3%	-0.1	1.1	1.9	3.2	15,439	20.0%	16%		4.0%	
Real Estate	9%	-28.4%	6.3%	-0.8	-0.8	-3.7	-0.4	8,307	10.8%	10%		0.8%	
Inf. & Private Income	19%	74.5%	11.2%	-0.3	0.2	4.2	6.8	6,820	8.8%	9%		-0.2%	
Absolute Return	3%	-17.4%	4.0%	-0.2	0.5	4.4	4.0	5,636	7.3%	7%		0.3%	
Tactical Opps	17%	-1.8%	0.6%	-4.7	-1.1			416	0.5%	2%		-1.5%	
Total Fund Cash	0%	-5.0%	0.1%	0.4	1.3	5.2	9.1	1,584	2.1%	2%		0.1%	



Economic Indicators

	9/29/23	9/28/23	% Change
VIX	17.52	17.34	1.0%
U.S. Dollar/Euro	1.06	1.06	0.1%
Credit Index OAS	1.12	1.11	0.9%
Crude Oil (WTI) (\$)	90.79	91.71	-1.0%
10-Year Treasury Yield	4.57	4.57	-0.1%
30-Year Treasury Yield	4.70	4.70	-0.1%
S&P 500	4,288.05	4,299.70	-0.3%
MSCI ACWI	2,277.19	2,276.63	0.0%





SUBJECT: APFC Technology & AI Roadmap ACTION: _____

DATE: December 13, 2023 INFORMATION: X

APFC Technology and AI update

This presentation outlines the APFC Technology Roadmap for the next one, three, and five years, and how it aligns with the APFC’s overall strategic plan. Scott Balovich, the Director of Information Technology will discuss the focus and scope of technologies that will increase capabilities, close gaps, and solve current pain-points. Additionally, the presentation will cover the creation of a technology ecosystem for the future, which includes AI. This is in line with the APFC’s strategic plan to increase corporate capabilities.

Investment Advisor Presentation

George Zinn is under contract with APFC to act as a member of the Investment Advisory Group (IAG) for the Board of Trustees. Mr. Zinn’s presentation at this meeting is in fulfillment of the contractual requirement to annually present a topic for the Board’s consideration on best practices in the management of large institutional funds.

The logo for the Alaska Permanent Fund Corporation (APFC) features the letters "APFC" in a white, serif font, centered within a dark teal rectangular background.

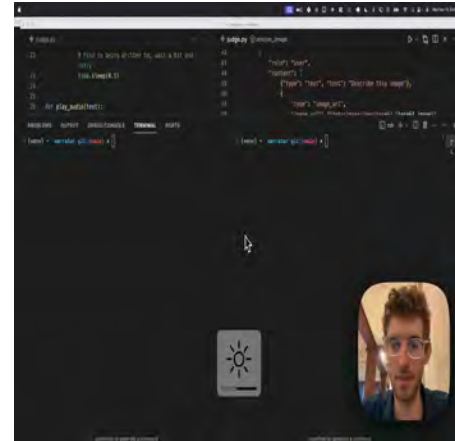
ALASKA PERMANENT
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APFC Technology and AI Roadmap

December 2023

What is AI vs. AGI?

Artificial general intelligence (AGI) is a theoretical pursuit in the field of artificial intelligence (AI) research that is working to develop AI with a human level of cognition. AGI is considered strong AI (compared to weak AI, which can function only within a specific set of parameters).



[https://www.investopedia.com/artificial-general-intelligence-7563858#:~:text=Key%20Takeaways,a%20specific%20set%20of%20parameters\).](https://www.investopedia.com/artificial-general-intelligence-7563858#:~:text=Key%20Takeaways,a%20specific%20set%20of%20parameters).)

Is this new news???

"ever accelerating progress of technology and changes in the mode of human life, which gives the appearance of approaching some essential **singularity** in the history of the race beyond which human affairs, as we know them, could not continue." 1958

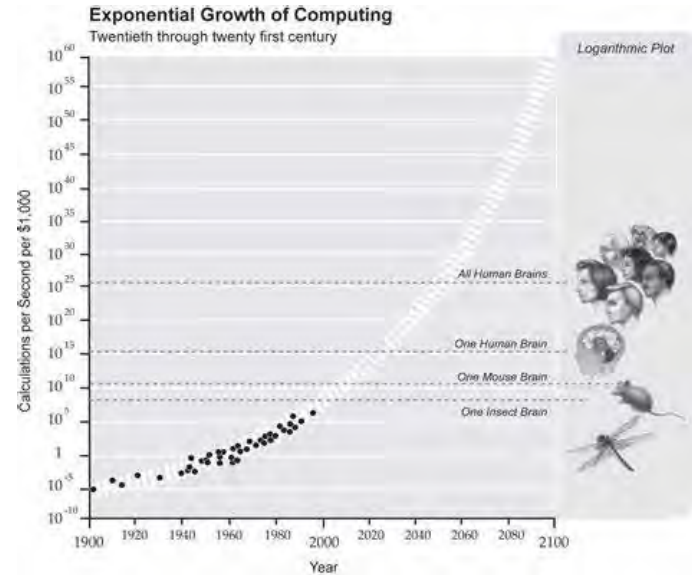


Von Neuman's wartime Los Alamos ID badge photo
By Los Alamos National Laboratory - <https://about.lanl.gov/history-innovation/badges/>, Attribution,
<https://commons.wikimedia.org/w/index.php?curid=133822688>

1. [Chalmers, David](#) (2010). "The singularity: a philosophical analysis". *Journal of Consciousness Studies*. **17** (9–10): 7–65.

Where are we today?

- Technological singularity is the point in time when technological growth becomes exponential, uncontrollable, and irreversible.
- Ray Kurzweil (renowned Futurist at Google) predicts this could happen in 2045, others predict sooner and others never.



Singularity is Near -SIN Graph - Exponential Growth of Computing

Will it take all of our jobs?

Historic Fears About Technology: Some Case Studies

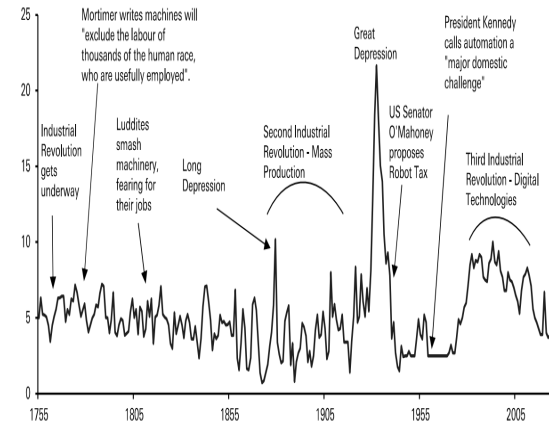
There is a long history of resistance to technology. As far back as 1589, Queen Elizabeth I of England refused to grant the inventor of a mechanical knitting machine a patent lest it put manual knitters out of work.

Such concerns were accelerated by the arrival of the Industrial Revolution. In 1772, Thomas Mortimer wrote how machines would “exclude the labour of thousands of the human race, who are usefully employed”. And the workers themselves were certainly alive to the prospect that they could be made unemployed by new technologies. Most famously, in the early 19th century a group of English textile workers called the Luddites destroyed machinery, in part because of fears it would take their jobs away. To this day, the term ‘Luddite’ is still used to refer to those resistant to new approaches and methods of working.

Whilst the industrial revolution did not lead to the mass unemployment of workers (see [Figure 1](#) below), resistance to new technologies showed no sign of abating

“History suggests AI will ultimately create not destroy jobs”, Deutsche Bank Research, 5/22/2023

Figure 1: Median G7 Unemployment (%) with annotations around technological breakthroughs, fear stories about its impact, and the actual economic-led reasons for job losses



Source: IFSI, Deutsche Bank

What are we planning and why?

Things are “working” why change, Why do we need these new tools?

30K emails a year (every email is read by a human and dealt with appropriately)

Daily cash flow/stock distribution notices 4K a year

Monthly/quarterly capital account statements (3K a year and each is retrieved, reviewed, logged, and saved)

Annual financial statements (700 investments each retrieved, reviewed, logged saved and provided to external auditors)

Other documents- legal, advisor fee calculations/invoices and other financial reports

What are we planning and why?

Things are “working” why change, Why do we need these new tools?

- Multiple Data Sets containing cash flow, valuation, commitment and unfunded commitment information including internal trackers. Data sets BNY Mellon, eFront Insight, BlackRock Aladdin, Pathway, Callan, Yardi and Situs to name a few.
- No one true gold copy, APFC doesn't control data and reconciliations between data sets are manual and can be difficult due to timing and methodology differences in each data set.
- Majority of the team's time is retrieving and reconciling data when it should or could be spent analyzing data and gathering insights.
- Growth of the fund necessitates innovation
- Emerging Technologies are tailored to helping APFC obtain Operational “Alpha”

What are we planning and why?

- Laying the foundation for the future but scoping for the now.
- Building an ecosystem for future Technologies and use cases

Data

No AI without good, trusted and accessible Data

Steps to success

- Transition to centralized Data Store in the cloud
- Simplify Data Onboarding with API's
- Introduce organization-wide Data Governance
- Implement AI toolsets and technologies
- Pivot from Wrangling Data to Delivery of Insight

Open and flexible Data Management **Ecosystem** for APFC

- This is a platform or foundational component of APFC's technology plan (data fabric or ecosystem)
- Managed services- data stewarding and support going forward
- Satisfy diverse consumption needs (Extensibility) for 3rd party consumers like APFC tools and vendor platforms like SQL server, Excel and python etc.
- Use cases emerge as tools evolve (quantitative capabilities unlocking insights and predictive analytics for forecasting and estimation like portfolio optimization and algorithmic trading etc.)



The Growth of Artificial Intelligence/Machine Learning

How Asset Owners are using AI/ML to drive efficiencies, innovate, and enhancing risk management

Scoping Operations: Trade Processing, Reconciliations, Event Processing, Financial Reporting, Security Master and Data Validation

Business Value of AI Technology

- It's been predicted that AI would have a profound impact on the investment industry but there's been skepticism (lack of substantial use cases). This has changed
- Readily available AI-driven technologies are already driving "Operational Alpha" or elevating operational performance above the norm dramatically reducing costs, time and labor.

Business Value of AI Technology

- How is APFC going to bring to bear these technologies, Who's initially going to benefit, How are they (the technologies) different than Generative AI (like ChatGPT)? Are we using ChatGPT? How and when? Let's get started...

Cognitive Services: How and where AI helps APFC Investment Operations

Machine Learning (ML):

1. **Matching and Reconciliation** - Systems with embedded ML and reconciliation capabilities can be trained to learn matching rules, patterns and tolerances with custodians, and other counterparties based on observations of manual user matching behavior and can then automatically adapt or adjust those rules or tolerances dynamically as patterns change or evolve over time due to changes in portfolio size, asset holdings, or cash transaction activity.
2. **Accounting** - Integrated operations and accounting platforms with ML can learn to generate and post appropriate journal entries to the investment general ledger based on specific types of processed transactions, corporate actions, market data events, or cash activities. These may include things like cash or accrual adjustments.

Cognitive Services: How and where AI helps APFC Investment Operations

Intelligent Process Automation (IPA):

1. **Break Remediation** - IPA can be leveraged to identify position or cash breaks and automatically refresh stale security attributes or market data elements to verify against counterparty information. IPA can even be taken a step further to automatically generate email notifications to counterparties with reconciled data updates and recommendations for remediation, if necessary.
2. **Monthly Checklists** - To streamline and automate monthly review, approval and sign-off processes needed to complete audits, IPA can identify key review actions, retrieve and compare expected versus actual data, remind users of due or past-due dates, and store full electronic audit trails of user review, approval and sign-off activities.
3. **Cash Forecasting** - PA can also analyze prior expected cash flow schedules versus the timing of actual cash payments and receipts, based on deal type, duration, counterparty history or other criteria, in order to predict the probability of future cash flow schedules for better pro-active cash management.

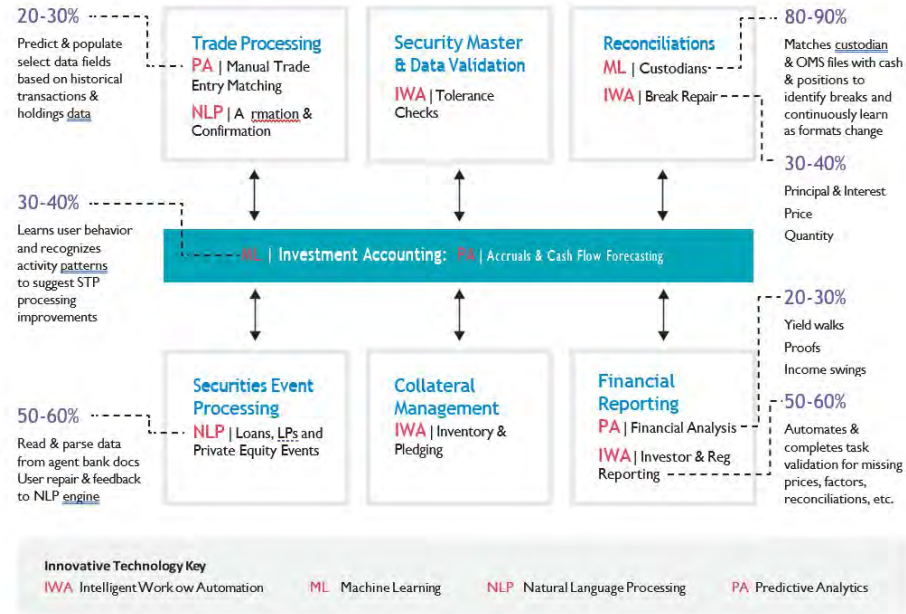
Cognitive Services: How and where AI helps APFC Investment Operations

Natural Language Processing (NLP):

1. **Event Notice Processing** – In conjunction with optical scanning recognition (OCR), NLP can be used to read, scan, parse and extract key data elements from non- standardized event notices such as principal paydowns on bank loans, or capital distribution or call notices on limited partnerships. OCR and NLP technologies turn these non- standardized, unstructured PDF, fax and Word documents into machine-readable data messages that can then be processed similarly to other common corporate actions or market data events, thereby eliminating significant manual human effort and intervention.
2. **Trade Affirmations and Confirmations** – NLP can also be leveraged to read and parse manual trade tickets for complex OTC transactions such as multi-legged swaps, or deal terms and covenants associated with private equity and other alternative asset transactions.

How and where AI helps APFC Investment Operations

New ways to work: How and where AI-powered technologies are transforming investment operations



Summary of Data and AI project

- RFP for Cloud Native foundational Ecosystem
- Scoping up front is to close gaps and gain **operational** efficiencies utilizing proven everyday AI technologies.
- As AI matures, risk appetites for AI expand and use cases emerge APFC will see increasing use of the ecosystem for the entire office.

What does ChatGPT think of all of this?

The integration of AI into the operations of asset management funds is a transformative journey that promises increased efficiency, improved decision-making, and ultimately enhanced returns. As the financial landscape continues to evolve, those embracing AI are not just adapting to change – they are shaping the future of asset management. The benefits of AI are clear, and for funds looking to thrive in the digital age, it's not just an option; it's a strategic imperative.

- ChatGPT

Generative AI (ChatGPT)

- Which GPT's are we using?
- When where and how?
- What are the risks and benefits?





BloombergGPT

Bloomberg's 50-billion parameter large language model is purpose-built from scratch for finance

“The quality of machine learning and NLP models comes down to the data you put into them,”

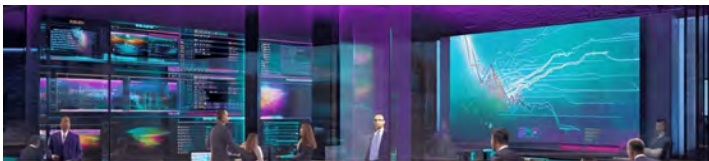
“Thanks to the collection of financial documents Bloomberg has curated over **four decades**, we were able to carefully create a large and clean, domain-specific dataset to train a LLM that is best suited for financial use cases. We're excited to use BloombergGPT to improve existing NLP workflows, while also imagining new ways to put this model to work to delight our customers.”

-Gideon Mann (head of BB ML product team)



BloombergGPT

- **Sentiment analysis** - Bloomberg is capable of analyzing the sentiment of financial data like social media posts and news articles. By gauging whether the sentiment is positive or negative, it can help traders and analysts make informed decisions based on the latest market trends and news.
- **News classification** - Bloomberg can classify news articles into different categories, such as mergers and acquisitions, earnings reports, and market updates. This feature can help financial professionals stay on top of news relevant to their interests
- **Named Entity Recognition** - NER is a crucial NLP task that identifies the names of people, companies, and other entities in a given text. Bloomberg GPT can perform NER on financial data, which is beneficial for various tasks, such as investment research and analysis



BloombergGPT

like any AI model, it is crucial to use it responsibly and with an understanding of its limitations.

Strengths

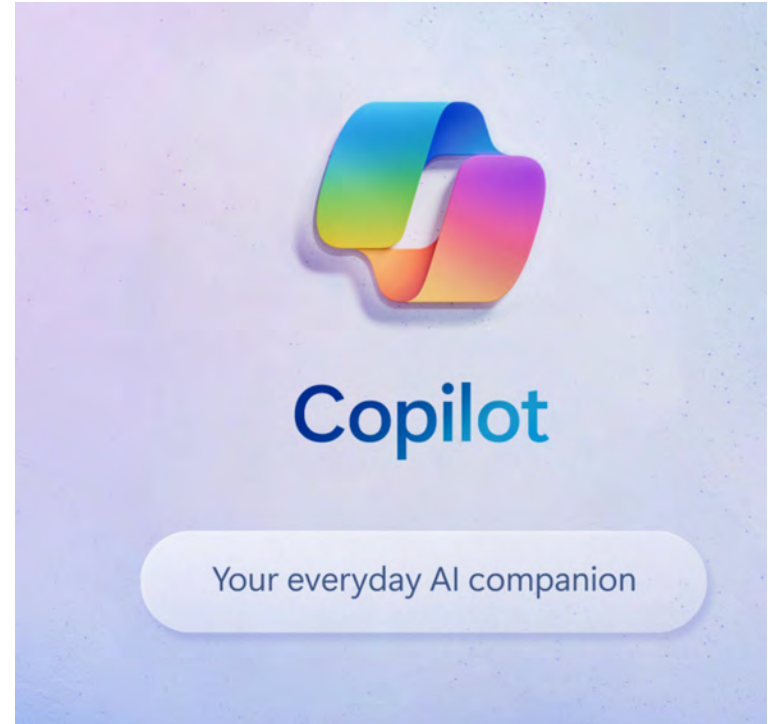
- Domain-specific expertise in finance.
- Strong performance in financial tasks.
- Adaptability to various financial applications.

Limitations

- Potential for bias in data and outputs.
- Reliance on human oversight and interpretation.
- Need for continuous improvement and evaluation.

Microsoft Copilot 365

- Boost creativity and streamline your workday with AI assistant
- Integrated into Word, Excel, PowerPoint, Outlook and Teams
- Bounded by APFC Microsoft Tenant
- Responsible AI, IP protection, inherits existing Azure tenant policies and security



Microsoft 365 Copilot—an AI assistant at work

- Outlook- Ask Copilot to summarize an email thread to get key information with annotations that help you quickly jump to the source of the summarized content, and suggested action items, replies, and follow-up meetings.
- Word- Ask Copilot to “rewrite” a paragraph, then scroll through a series of options to see what fits best or, refine a prompt by asking Copilot to do things like “make answer more concise” or “add a column in the table for the project owner.”
- OneNote- Gain deeper insights on your notes by asking comprehensive questions like: “What are the pros and cons of this process?” or Quickly generate summaries of your OneNote content.
- PowerPoint- Build prototype presentations from OneNote or any files you have access to in the organization.

Microsoft 365 Copilot—an AI assistant at work

- Excel- enables anyone to analyze and visualize data like a data analyst.
- Work with Copilot in Excel to help analyze, format, and edit your data to gain deeper understanding and insights.
- Quickly add a formula column, highlight key data with a prompt like “make all cells red where the value is under 1000,” filter and sort your data, and ask questions to instantly uncover key insights.
- Use Copilot to access advanced analytics; create powerful, professional visualizations, generate forecasts, and save time sorting through data with Python in Excel.

Recap

- Copilot can unlock productivity and unleash creativity in the apps that APFC uses every day—Word, Excel, PowerPoint, Outlook, and Teams.
- Copilot uses the guardrails APFC has in place with being confined to the APFC Tenant and policies already in place.
- Microsoft 365 Copilot goes far beyond simple questions and answers to tame the complexity, eliminate the drudgery, and reclaim time at work. Like an assistant, it has a deep understanding of you, your job, your priorities, and your organization. It can find whatever you need in your files (even the files you forgot existed), connect the dots across all your content.

APFC Technology Horizon with AI- Recap



- Data is the foundational element of AI and an AI ecosystem
- Initial scoping is for Operational Efficiencies
- As tools evolve, risk appetite expands, and use cases emerge the ecosystem grows
- (Game Changing AI) Pointed and application specific LLM's are the future of business

SUBJECT: Callan Fund Performance Overview ACTION: _____
Greg Allen, CEO & Chief Research Officer
Steve Center, CFA, Senior Vice President

DATE: December 13-14, 2023 INFORMATION: X

BACKGROUND:

Callan Associates, Inc. is currently under contract to perform APFC's core general consulting services of 1) Investment policies and procedures review; 2) annual preparation of an asset allocation plan; 3) performance reporting and analysis; 4) risk analysis; 5) statistical modeling, manager searches, selection, and oversight; and 6) other special consulting services as needed.

STATUS:

At every quarterly board meeting or as requested, Callan Associated, Inc. provides an extensive review of the Fund's performance as well as updates on market conditions. Chief Executive Officer and Chief Research Officer, Greg Allen, and Senior Vice President, Steven Center, CFA, will be the presenters at this meeting.



December 13, 2023

**Alaska Permanent Fund
Corporation**

3rd Quarter 2023
Capital Markets and Performance
Review

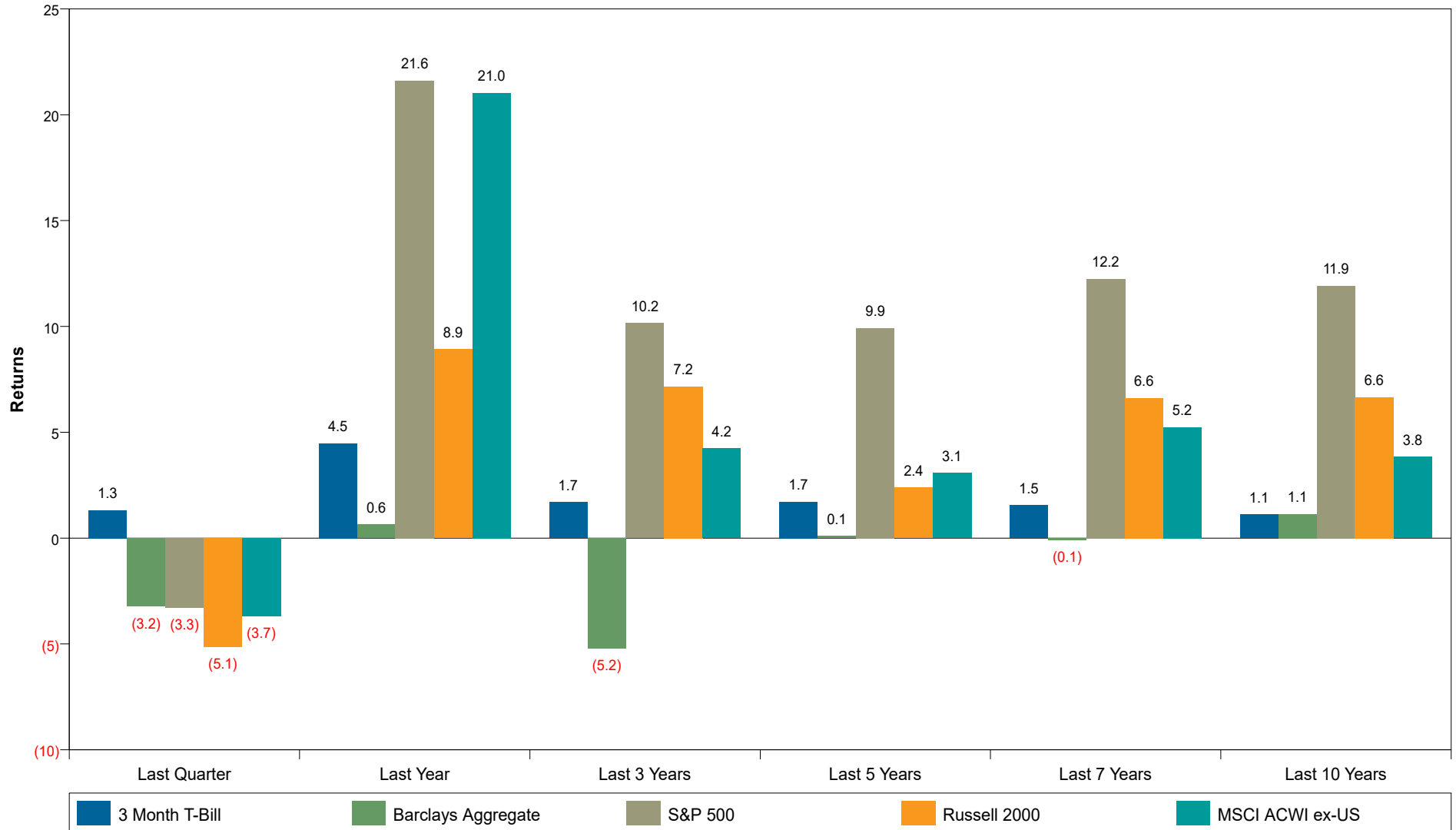
Greg Allen
CEO and Chief Research Officer

Steven Center, CFA
Senior Vice President

Evan Williams, CFA, CAIA
Vice President

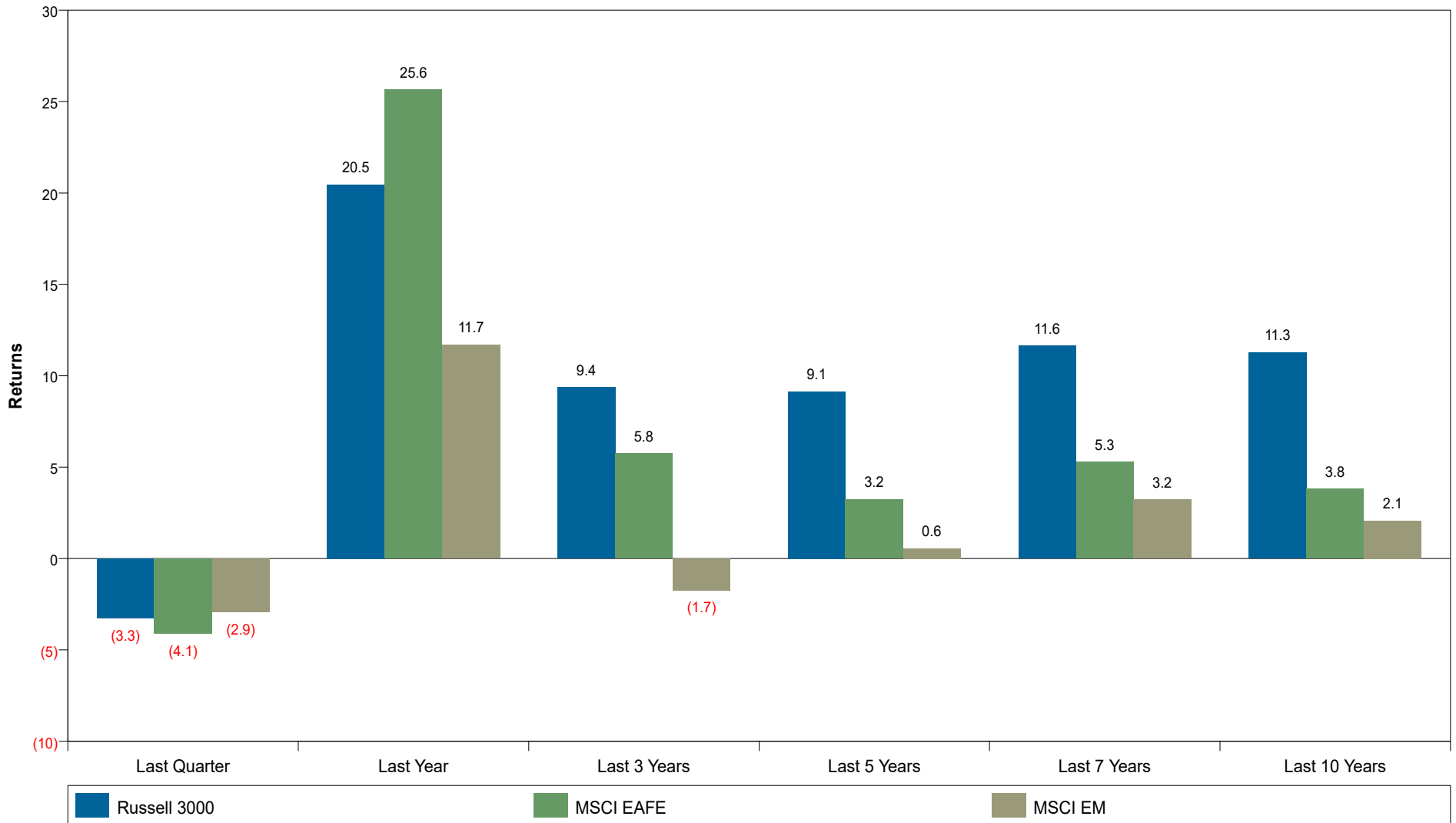
Broad Capital Market Performance

Periods Ended September 30, 2023



Public Equity Capital Market Performance

Periods Ended September 30, 2023



Callan Periodic Table of Investment Returns

Returns for Key Indices

2014	2015	2016	2017	2018	2019	2020	2021	2022	3 Qtrs. 2023
S&P 500 13.69%	MSCI ACWI ex USA SC 2.60%	Russell 2000 21.31%	MSCI Emerging Markets 37.28%	Bloomberg Barclays Aggregate 0.01%	S&P 500 31.49%	Russell 2000 19.96%	S&P 500 28.71%	Bloomberg Barclays Corp High Yield -11.19%	S&P 500 13.07%
Bloomberg Barclays Aggregate 5.97%	S&P 500 1.38%	Bloomberg Barclays Corp High Yield 17.13%	MSCI ACWI ex USA SC 31.65%	Bloomberg Barclays Corp High Yield -2.08%	Russell 2000 25.52%	S&P 500 18.40%	Russell 2000 14.82%	Bloomberg Barclays Aggregate -13.01%	MSCI World ex USA 6.73%
Russell 2000 4.89%	Bloomberg Barclays Aggregate 0.55%	S&P 500 11.96%	MSCI World ex USA 24.21%	Bloomberg Barclays Global Agg ex US -2.15%	MSCI World ex USA 22.49%	MSCI Emerging Markets 18.31%	MSCI ACWI ex USA SC 12.93%	MSCI World ex USA -14.29%	Bloomberg Barclays Corp High Yield 5.86%
Bloomberg Barclays Corp High Yield 2.45%	MSCI World ex USA -3.04%	MSCI Emerging Markets 11.19%	S&P 500 21.83%	S&P 500 -4.38%	MSCI ACWI ex USA SC 22.42%	MSCI ACWI ex USA SC 14.24%	MSCI World ex USA 12.62%	S&P 500 -18.11%	MSCI ACWI ex USA SC 5.03%
MSCI Emerging Markets -2.19%	Russell 2000 -4.41%	MSCI ACWI ex USA SC 3.91%	Russell 2000 14.65%	Russell 2000 -11.01%	MSCI Emerging Markets 18.44%	Bloomberg Barclays Global Agg ex US 10.11%	Bloomberg Barclays Corp High Yield 5.28%	Bloomberg Barclays Global Agg ex US -18.70%	Russell 2000 2.54%
Bloomberg Barclays Global Agg ex US -3.09%	Bloomberg Barclays Corp High Yield -4.47%	MSCI World ex USA 2.75%	Bloomberg Barclays Global Agg ex US 10.51%	MSCI World ex USA -14.09%	Bloomberg Barclays Corp High Yield 14.32%	MSCI World ex USA 7.59%	Bloomberg Barclays Aggregate -1.54%	MSCI ACWI ex USA SC -19.97%	MSCI Emerging Markets 1.82%
MSCI ACWI ex USA SC -4.03%	Bloomberg Barclays Global Agg ex US -6.02%	Bloomberg Barclays Aggregate 2.65%	Bloomberg Barclays Corp High Yield 7.50%	MSCI Emerging Markets -14.57%	Bloomberg Barclays Aggregate 8.72%	Bloomberg Barclays Aggregate 7.51%	MSCI Emerging Markets -2.54%	MSCI Emerging Markets -20.09%	Bloomberg Barclays Aggregate -1.21%
MSCI World ex USA -4.32%	MSCI Emerging Markets -14.92%	Bloomberg Barclays Global Agg ex US 1.49%	Bloomberg Barclays Aggregate 3.54%	MSCI ACWI ex USA SC -18.20%	Bloomberg Barclays Global Agg ex US 5.09%	Bloomberg Barclays Corp High Yield 7.11%	Bloomberg Barclays Global Agg ex US -7.05%	Russell 2000 -20.44%	Bloomberg Barclays Global Agg ex US -3.20%

Source: Bloomberg, FTSE Russell, MSCI, Standard & Poor's

Callan Periodic Table of Investment Returns

Returns for Key Indices

Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 20 Years
Bloomberg Barclays Corp High Yield 0.46%	MSCI World ex USA 24.00%	S&P 500 10.15%	S&P 500 9.92%	S&P 500 12.24%	S&P 500 11.91%	S&P 500 9.72%
MSCI ACWI ex USA SC -1.70%	S&P 500 21.62%	Russell 2000 7.16%	MSCI World ex USA 3.44%	Russell 2000 6.62%	Russell 2000 6.65%	Russell 2000 8.13%
MSCI Emerging Markets -2.93%	MSCI ACWI ex USA SC 19.01%	MSCI World ex USA 6.07%	Bloomberg Barclays Corp High Yield 2.96%	MSCI World ex USA 5.38%	MSCI ACWI ex USA SC 4.35%	MSCI ACWI ex USA SC 7.68%
Bloomberg Barclays Aggregate -3.23%	MSCI Emerging Markets 11.70%	MSCI ACWI ex USA SC 4.01%	MSCI ACWI ex USA SC 2.58%	MSCI ACWI ex USA SC 4.70%	Bloomberg Barclays Corp High Yield 4.24%	MSCI Emerging Markets 7.30%
S&P 500 -3.27%	Bloomberg Barclays Corp High Yield 10.28%	Bloomberg Barclays Corp High Yield 1.76%	Russell 2000 2.40%	Bloomberg Barclays Corp High Yield 3.80%	MSCI World ex USA 3.84%	Bloomberg Barclays Corp High Yield 6.53%
Bloomberg Barclays Global Agg ex US -4.00%	Russell 2000 8.93%	MSCI Emerging Markets -1.73%	MSCI Emerging Markets 0.56%	MSCI Emerging Markets 3.23%	MSCI Emerging Markets 2.07%	MSCI World ex USA 5.99%
MSCI World ex USA -4.10%	Bloomberg Barclays Global Agg ex US 3.39%	Bloomberg Barclays Aggregate -5.21%	Bloomberg Barclays Aggregate 0.10%	Bloomberg Barclays Aggregate -0.09%	Bloomberg Barclays Aggregate 1.13%	Bloomberg Barclays Aggregate 2.85%
Russell 2000 -5.13%	Bloomberg Barclays Aggregate 0.64%	Bloomberg Barclays Global Agg ex US -8.39%	Bloomberg Barclays Global Agg ex US -3.10%	Bloomberg Barclays Global Agg ex US -2.77%	Bloomberg Barclays Global Agg ex US -1.73%	Bloomberg Barclays Global Agg ex US 1.64%

Source: Bloomberg, FTSE Russell, MSCI, Standard & Poor's

Equity Markets Down in 3Q, Following Rebound in First Half of 2023

Stocks and bonds still have ground to make up after declines in 2022

- S&P 500 down 3.3% in 3Q23.
 - Loss through first three quarters of 2022 was 23.9%; rebound in the following three quarters reduced the loss to 2.9% by June, but decline in 3Q shows S&P still over 4% below 1/2022 high-water mark
- Fixed income recovered in first half of 2023 as high inflation began to ease; speculation about interest rate cuts evaporated in 2Q
 - Bloomberg Aggregate: up 3% in 1Q, but declined 0.8% in 2Q and another 3.2% in 3Q as Fed continued to raise rates
 - CPI-U: +3.7% year-over year for 3Q, and still up 5.8% since the start of 2022
- Economic data defied expectations of recession in 2023; GDP growth came in at 2.1% in 1Q and 2.2% in 2Q, and surged to a stunning 4.9% in 3Q
 - Job market remains solid, providing support to Fed efforts to fight inflation

Returns for Periods ended 9/30/23

	Quarter	YTD	Since 1/2022	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	-3.25	12.39	-5.36	9.14	11.28	8.09
S&P 500	-3.27	13.07	-4.30	9.92	11.91	7.92
Russell 2000	-5.13	2.54	-10.98	2.40	6.65	8.00
Global ex-U.S. Equity						
MSCI World ex USA	-4.10	6.73	-4.97	3.44	3.84	4.98
MSCI Emerging Markets	-2.93	1.82	-11.12	0.56	2.07	--
MSCI ACWI ex USA Small Cap	-1.70	5.03	-9.45	2.58	4.35	7.41
Fixed Income						
Bloomberg Aggregate	-3.23	-1.21	-8.29	0.10	1.13	3.59
90-day T-Bill	1.31	3.60	2.89	1.72	1.11	1.89
Bloomberg Long Gov/Credit	-9.37	-5.40	-19.12	-1.21	1.94	4.67
Bloomberg Global Agg ex-US	-4.00	-3.20	-12.79	-3.10	-1.73	2.04
Real Estate						
NCREIF Property	-1.98	-5.66	-0.26	5.13	7.33	8.29
FTSE Nareit Equity	-7.13	-2.14	-15.80	2.77	5.96	8.49
Alternatives						
CS Hedge Fund Index	1.81	3.71	2.72	4.77	4.08	5.96
Cambridge Private Equity*	1.59	3.71	0.39	15.37	14.91	13.67
Bloomberg Commodity	4.71	-3.44	6.74	6.13	-0.75	2.45
Gold Spot Price	-3.28	2.18	1.17	9.30	3.47	7.60
Inflation - CPI-U	0.88	3.70	5.81	4.04	2.77	2.56

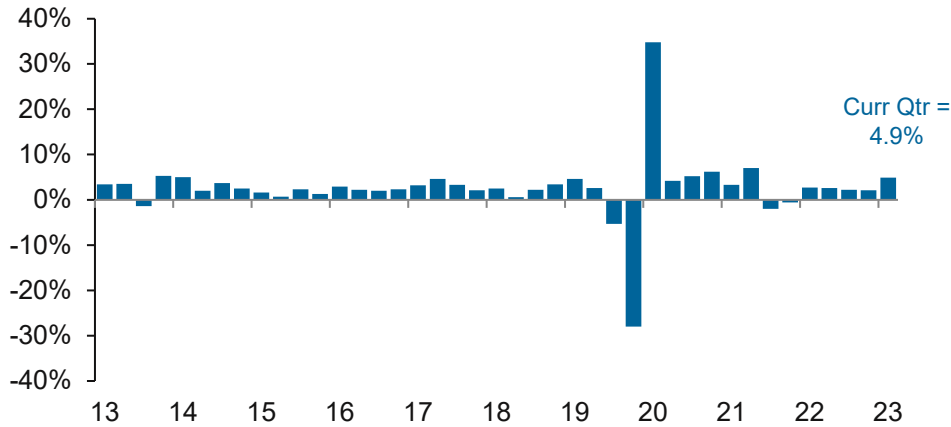
*Cambridge PE data as of 2Q23

Sources: Bloomberg, Callan, Cambridge, Credit Suisse, FTSE Russell, MSCI, NCREIF, S&P Dow Jones Indices

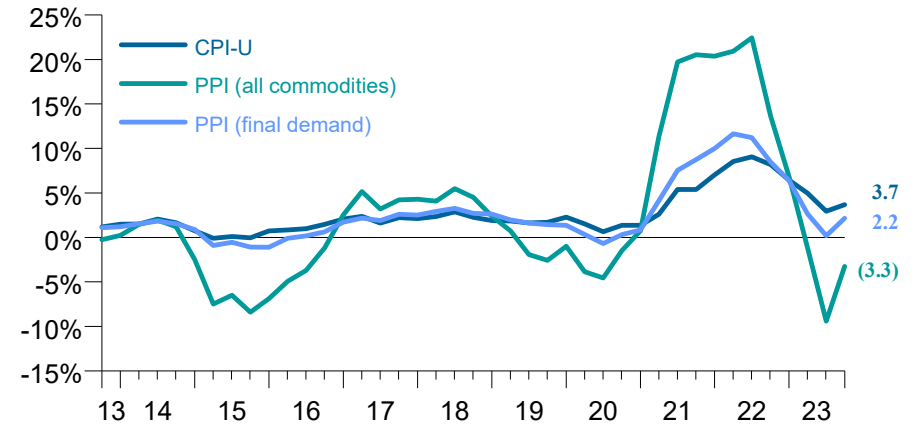
U.S. Economy—Summary

For periods ended 9/30/23

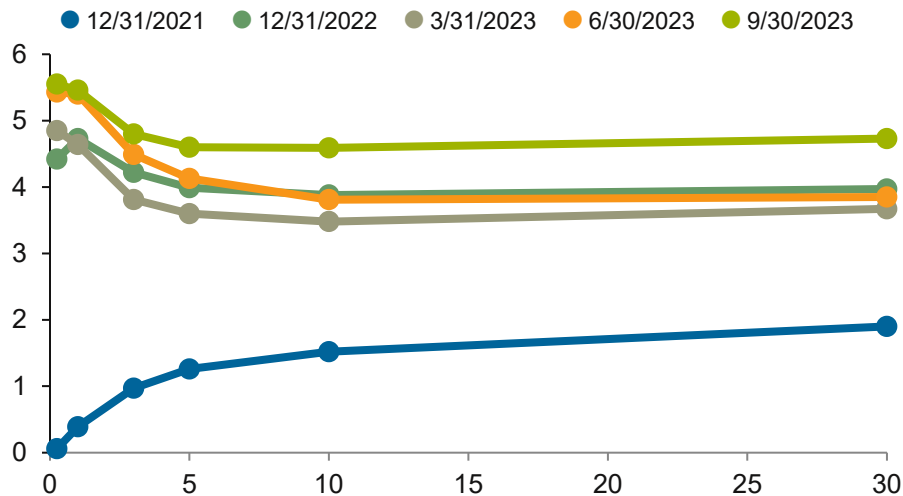
Quarterly Real GDP Growth



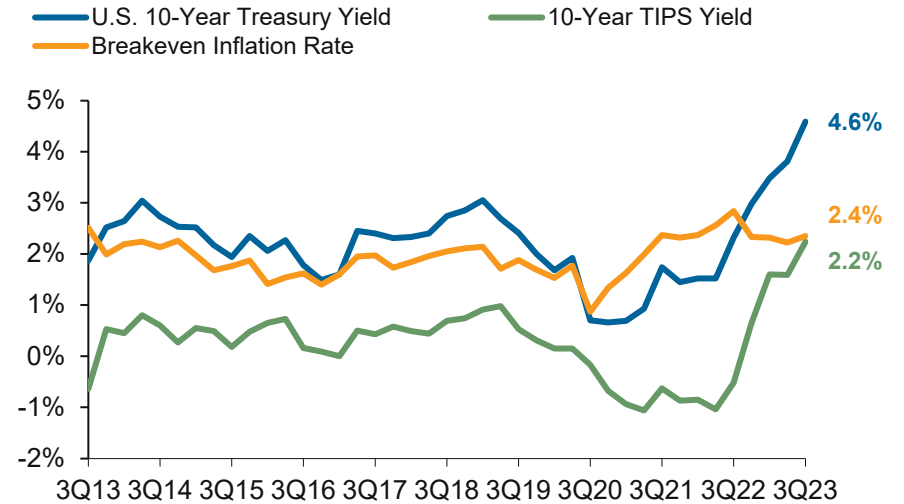
Inflation Year-Over-Year



U.S. Treasury Yield Curves



Historical 10-Year Yields Through 9/30/23



Sources: Bloomberg, Bureau of Labor Statistics, Callan

The Stock Market Is Not the Economy



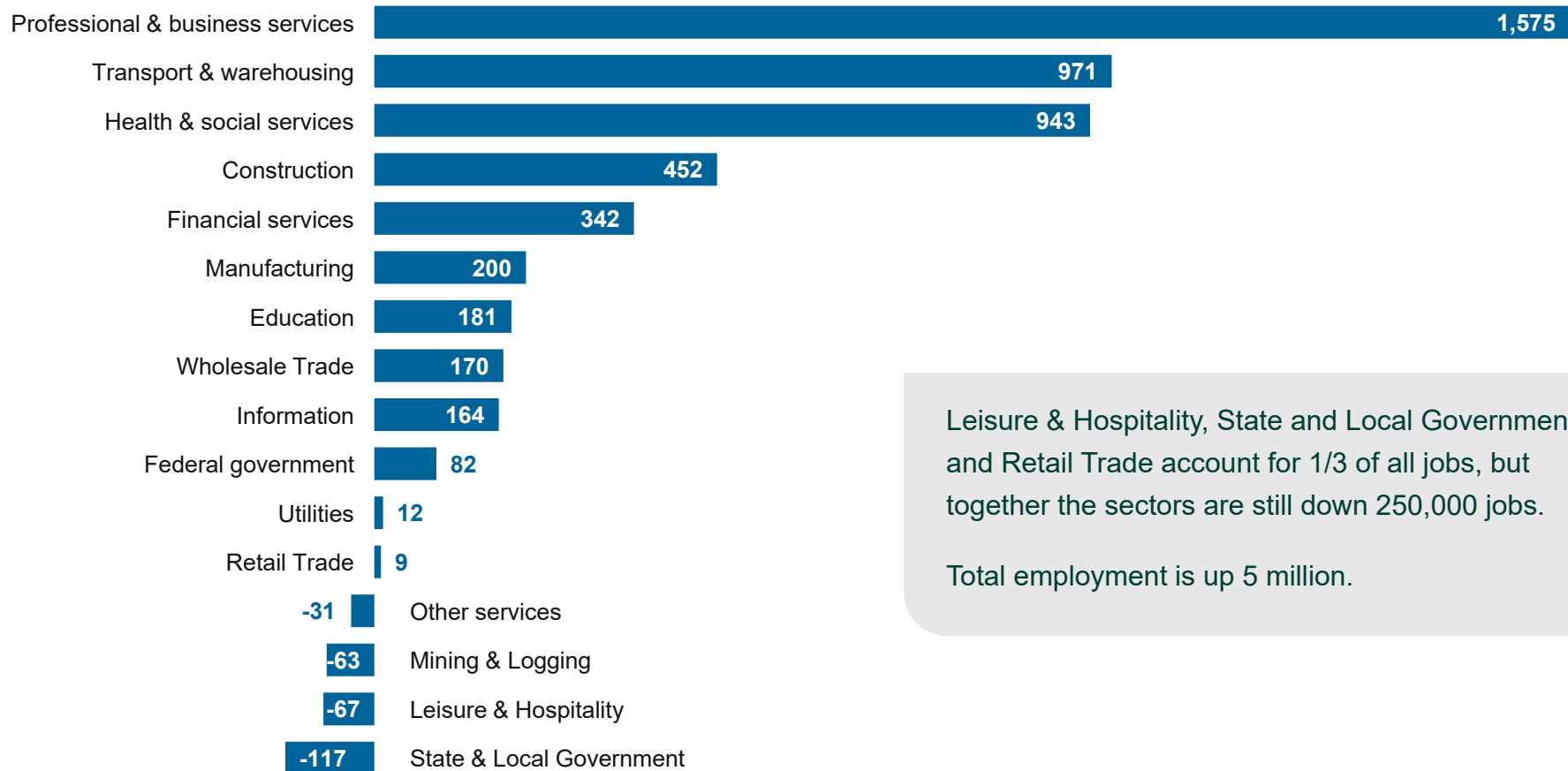
- The job market lost over 22 million jobs in the pandemic but regained the pre-pandemic high-water mark in the spring of 2022.
- Job growth remained robust through the market upheaval in 2022 and has held up through 3Q23. Headline reports of sizeable layoffs in technology are ultimately small relative to the size of the broad job market.

Sources: Federal Reserve Bank of St. Louis, S&P Dow Jones Indices

While the Recovery Continues, Employment Landscape Remains Uneven

Leisure/hospitality and state and local government remain below pre-pandemic levels

Change in Payroll Employment Since 12/31/19, through 9/30/23 (thousands)



Leisure & Hospitality, State and Local Government, and Retail Trade account for 1/3 of all jobs, but together the sectors are still down 250,000 jobs.

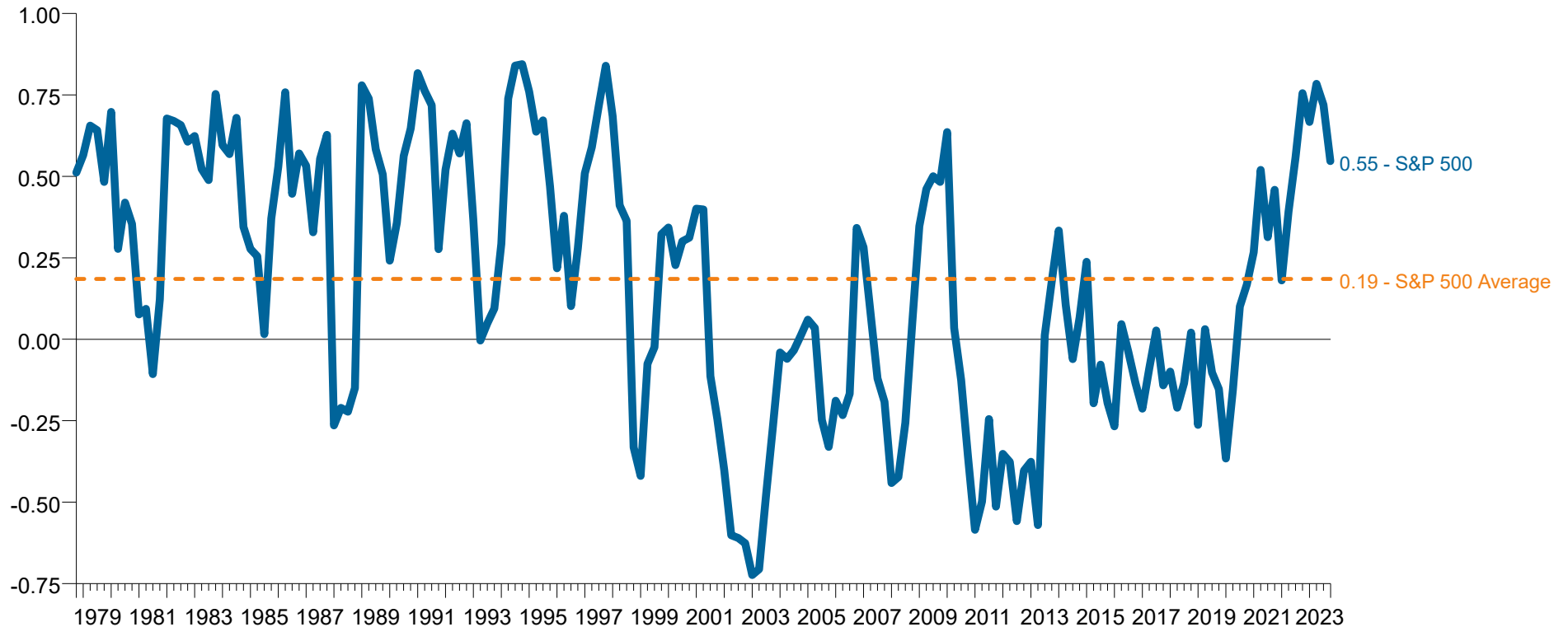
Total employment is up 5 million.

Sources: IHS Markit, Department of Labor

Is the Stock-bond Correlation Shifting to a Higher Level?

Stocks and bonds down together again in 3Q23

Rolling 1 Year Correlation of S&P 500 to Bloomberg Aggregate for 45 Years Ended 9/30/23



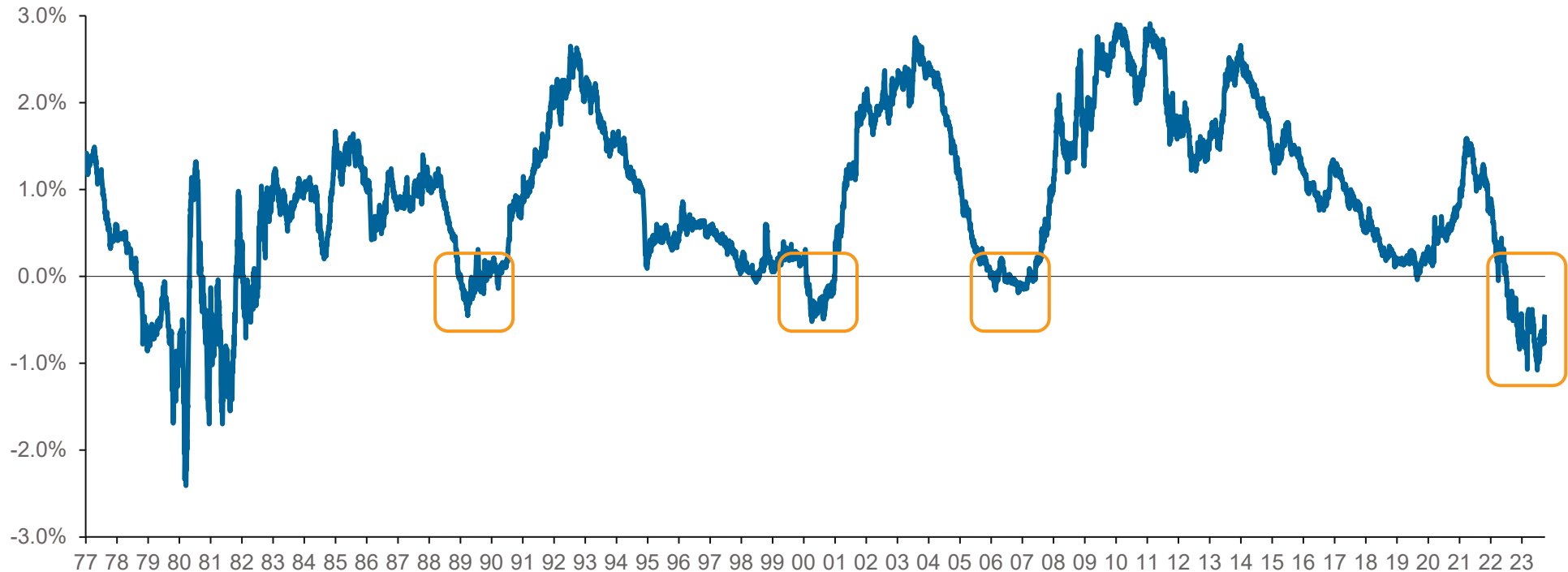
Forward-looking bond returns are now much higher thanks to the rise in interest rates and the resulting higher yields.

However, the equity risk premium has likely narrowed, and we may be seeing a return to a regime of higher correlation between stocks and bonds, potentially lessening the diversification benefit of bonds to stocks.

Sources: Bloomberg, Callan, S&P Dow Jones Indices

The Bond Market Has Been Expecting a Recession Since July 2022

10-Year Treasury vs. 2-Year Treasury Spread



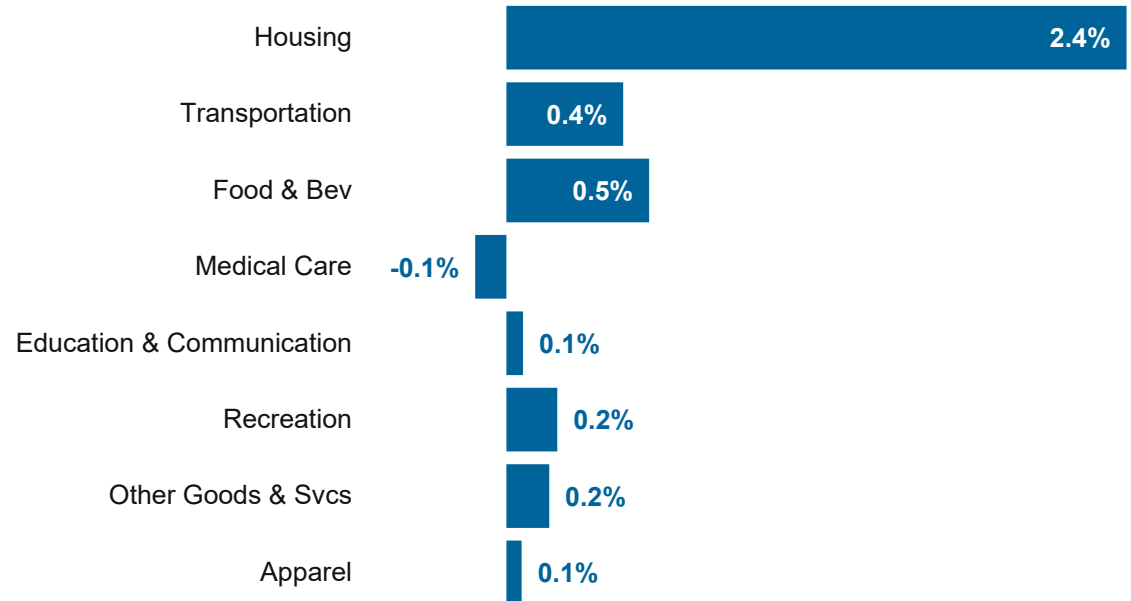
- Inversion in the 10-year to 2-year Treasury yields does not always forecast a recession, but most recessions are preceded by a yield curve inversion.
 - Yield curve inversion means investors expect a recession will occur and that interest rates will be cut, and therefore increase their demand for securities with longer duration, and therefore a higher potential for capital gain when rates fall.
- Bond investors beginning to anticipate “higher for longer” rate regime?
 - Inversion started in July 2022, bottomed at -1.08 in July 2023, and has since climbed to -0.44.

Source: Federal Reserve Bank of St. Louis

Contributors to Recent Inflation: Primary Categories

- Housing is a broad category that includes Shelter, Fuels and Utilities, and Household Furnishings and Operations as sub-components.
 - Shelter makes up 32.6% of the overall index and accounted for over half of September’s increase in year-over-year headline CPI.
- Energy is not shown in this view of CPI because it is a sub-component of other categories.
 - Energy makes up 8% of the index and is split evenly between Housing (fuel for powering homes) and Transportation (motor fuel).

Contribution to September 2023 Year-Over-Year Inflation



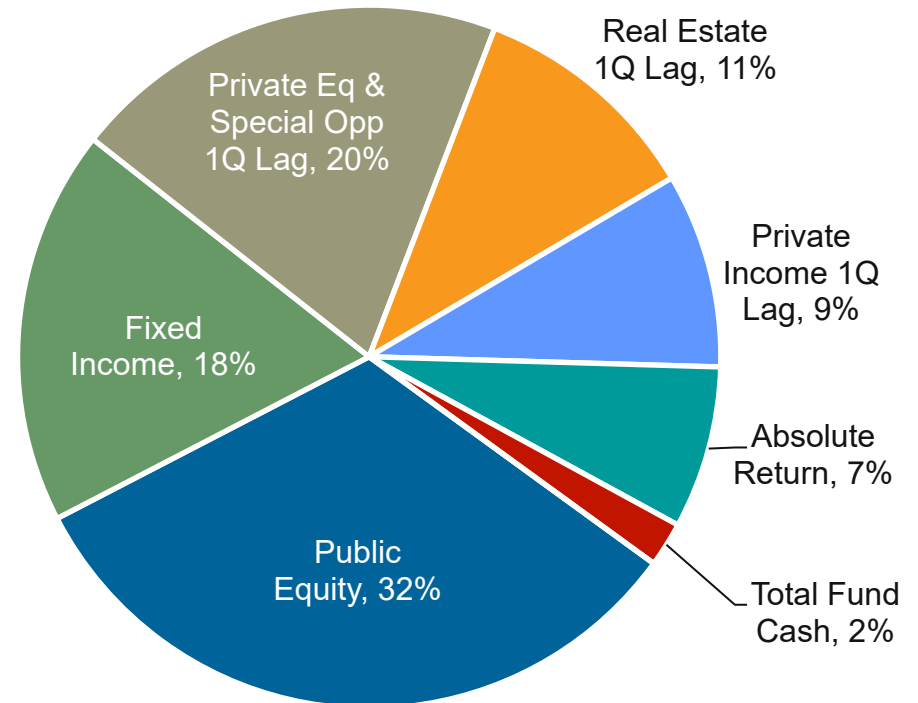
Primary Category	Primary Category Weight	Year-over-Year Change											
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
All Items	100.0%	7.7%	7.1%	6.5%	6.4%	6.0%	5.0%	4.9%	4.0%	3.0%	3.2%	3.7%	3.7%
Housing	42.4%	7.9%	7.8%	8.1%	8.2%	8.2%	7.8%	7.5%	6.8%	6.3%	6.2%	5.7%	5.6%
Transportation	18.4%	11.2%	7.8%	3.9%	3.8%	2.6%	-1.0%	0.2%	-2.0%	-5.1%	-3.0%	1.4%	2.4%
Food & Bev	14.6%	10.6%	10.3%	10.1%	9.9%	9.2%	8.3%	7.5%	6.6%	5.7%	4.8%	4.2%	3.7%
Medical Care	8.4%	5.0%	4.2%	4.0%	3.1%	2.3%	1.5%	1.1%	0.7%	0.1%	-0.5%	-1.0%	-1.4%
Education & Communication	6.0%	0.0%	0.7%	0.7%	1.0%	1.0%	1.4%	1.6%	1.5%	1.1%	1.2%	1.0%	1.0%
Recreation	5.0%	4.1%	4.7%	5.1%	4.8%	5.0%	4.8%	5.0%	4.5%	4.3%	4.1%	3.5%	3.9%
Other Goods & Svcs	2.7%	6.5%	7.0%	6.4%	6.2%	6.1%	6.1%	6.6%	6.7%	6.3%	6.1%	5.8%	6.0%
Apparel	2.5%	4.1%	3.6%	2.9%	3.1%	3.3%	3.3%	3.6%	3.5%	3.1%	3.2%	3.1%	2.3%

Source: U.S. Bureau of Labor Statistics

Total Fund Asset Allocation

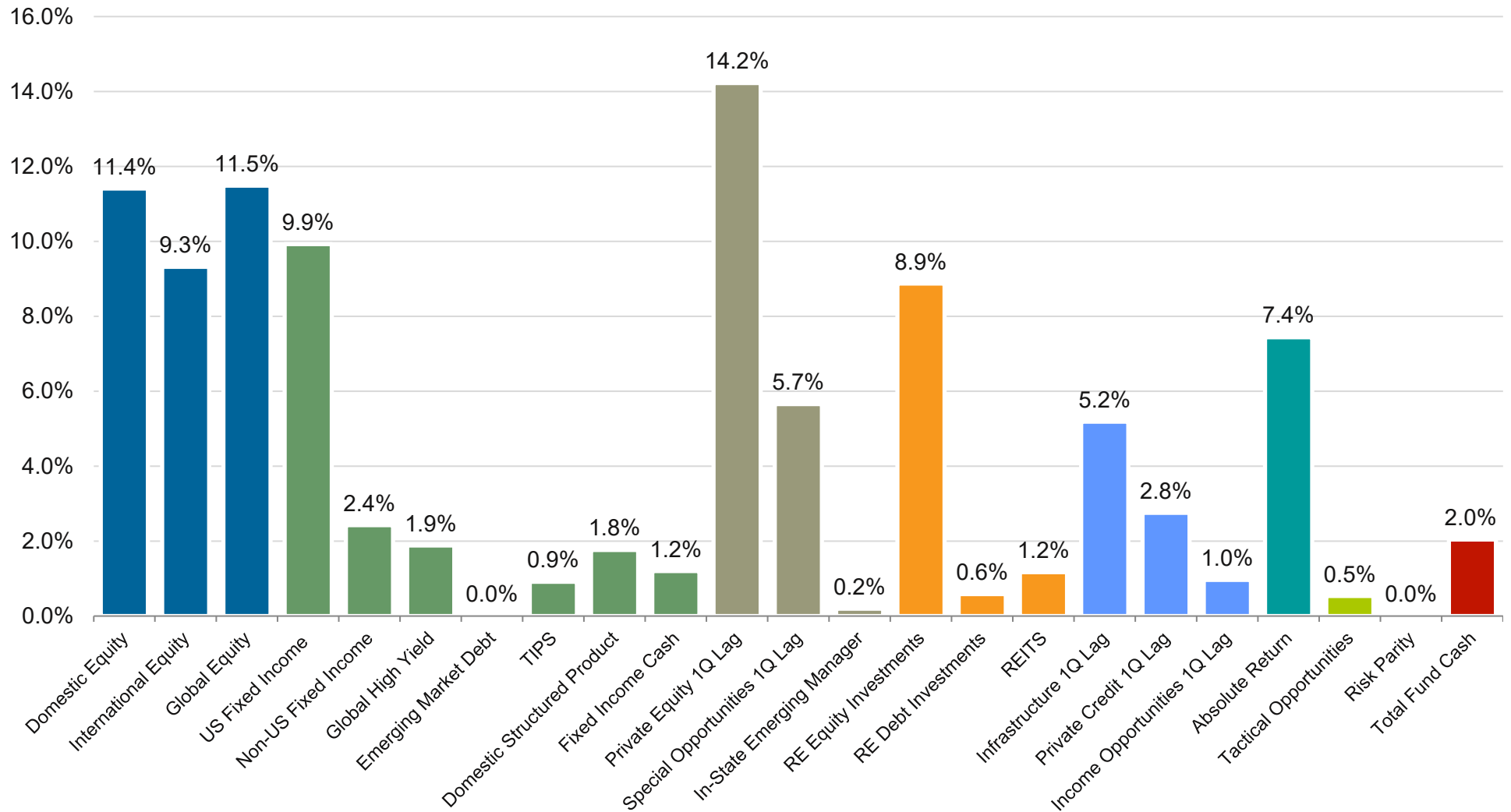
As of September 30, 2023: \$77.45B

- APFC portfolio is well diversified across all major asset classes employed by institutional investors.
- Using institutional standard asset class definitions, the portfolio is currently allocated 32% to public equity, 18% to fixed income, 48% to alternative investments and 2% cash.
- Compared to allocations in the second quarter, weights to public equity decreased while weights to alternative investments increased. Fixed income weights remained relatively unchanged.
- Alternatives include private equity, special opportunities, real estate, private infrastructure, private credit, private income, absolute return, and risk parity.
- Private Equity & Special Opportunities, Real Estate, and Infrastructure & Private Income are reported on a one-quarter lag.



Total Fund Asset Allocation

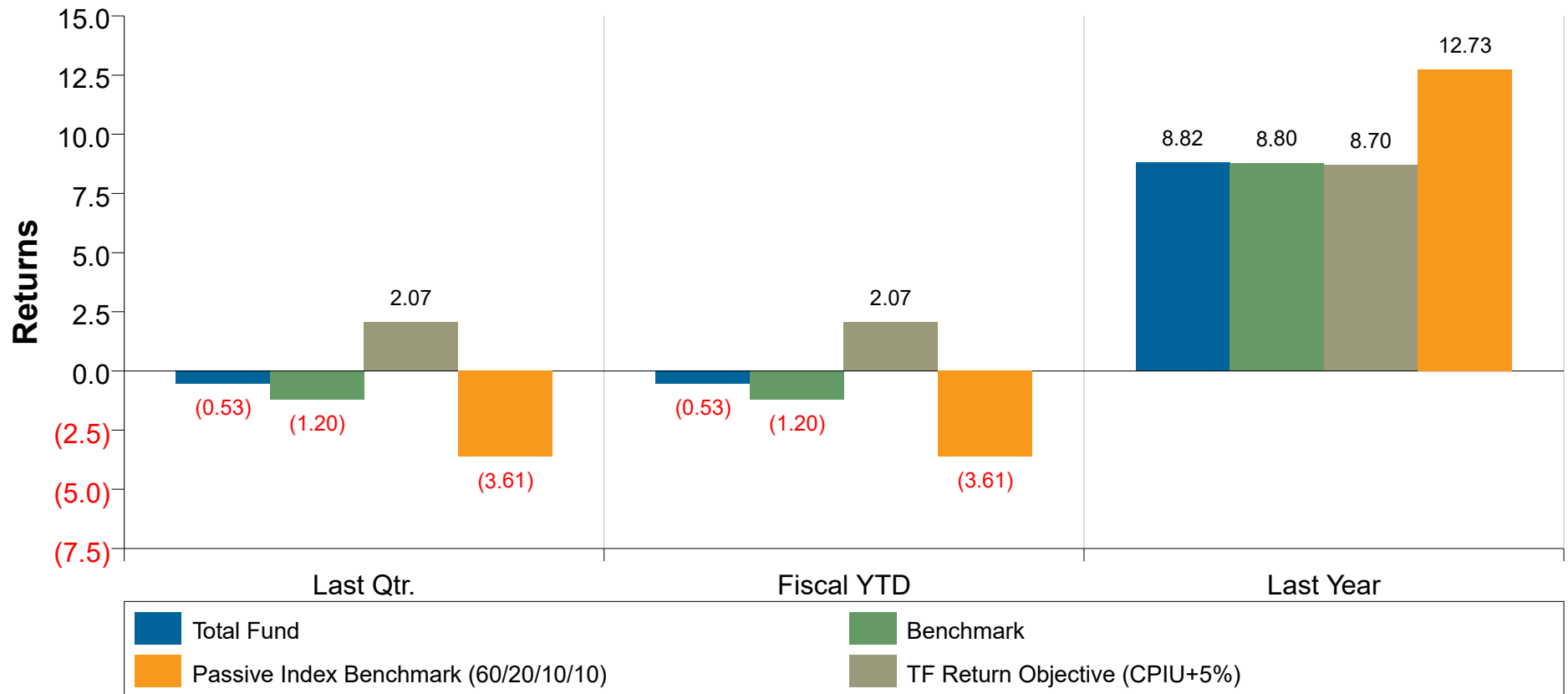
Periods Ended September 30, 2023



APFC Total Fund Cumulative Returns

Total Fund versus Total Fund Targets

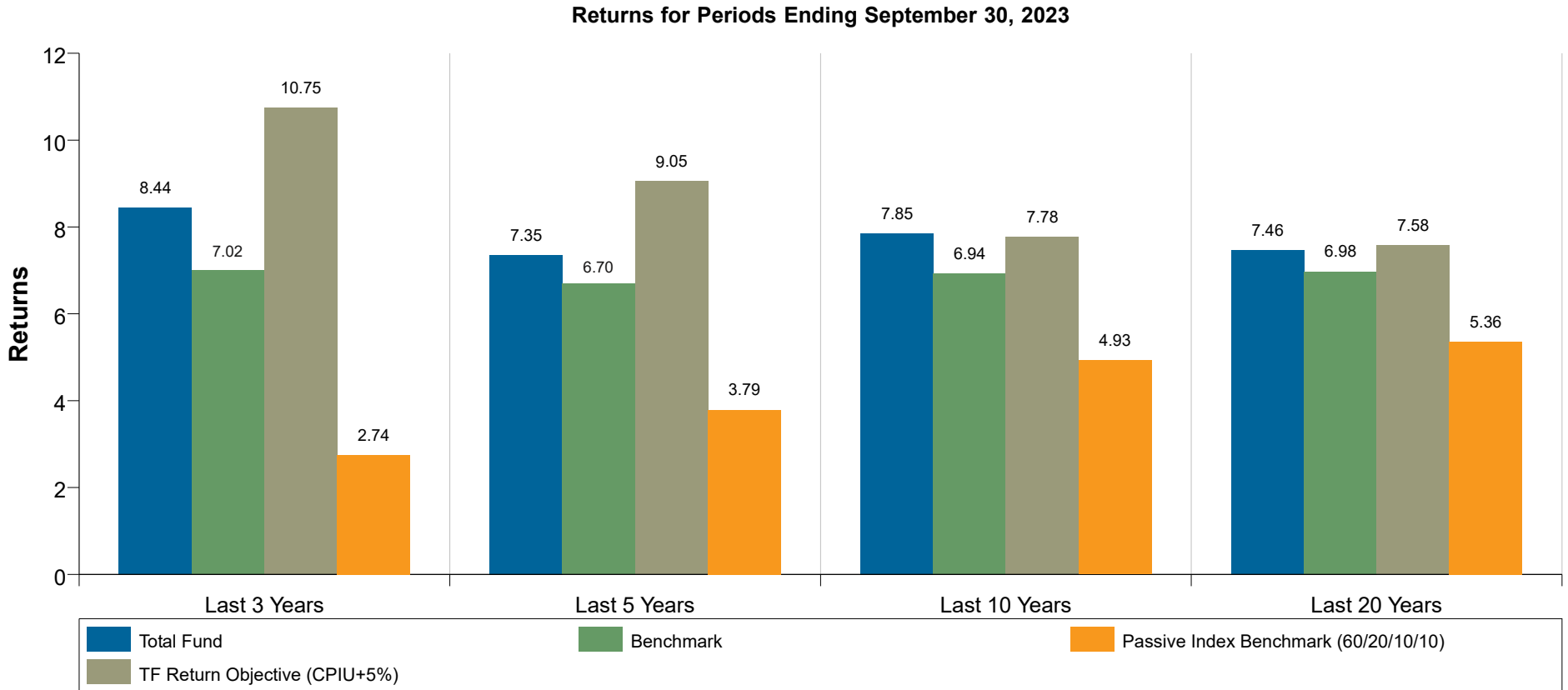
Returns for Periods Ending September 30, 2023



- Benchmark (FY23-FY24) = 36% MSCI ACWI IMI, 1.0% 90 Day T-Bills, 1.0% BB US TIPS, 5.5% BB Agg, 5.5% BB Corp IG, 3.0% BB Global Treasury xUS Hdgd, 2.0% BB US BB HY, 2.0% BB US Securitized, 17% Cambridge PE (lagged), 7.4% NCREIF Total Index (lagged), 1.4% MSCI US REIT (lagged), 5.4% Cambridge Global Pvt. Infrastructure (lagged), 3.6% Cliffwater Direct Lending TR (lagged), 3% HFRI EH Equity Market Neutral, 3% HFRI Macro, 2% 90 Day T-Bills, 1% HFR Risk Parity Vol 12% Institutional Index

APFC Total Fund Cumulative Returns

Total Fund versus Total Fund Targets



- Benchmark (FY23-FY24) = 36% MSCI ACWI IMI, 1.0% 90 Day T-Bills, 1.0% BB US TIPS, 5.5% BB Agg, 5.5% BB Corp IG, 3.0% BB Global Treasury xUS Hdgd, 2.0% BB US BB HY, 2.0% BB US Securitized, 17% Cambridge PE (lagged), 7.4% NCREIF Total Index (lagged), 1.4% MSCI US REIT (lagged), 5.4% Cambridge Global Pvt. Infrastructure (lagged), 3.6% Cliffwater Direct Lending TR (lagged), 3% HFRI EH Equity Market Neutral, 3% HFRI Macro, 2% 90 Day T-Bills, 1% HFR Risk Parity Vol 12% Institutional Index

APFC Total Fund Attribution

One Quarter Ended September 30, 2023

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return		
Public Equity	34%	34%	(2.53%)	(3.40%)	0.29%	0.03%	0.31%		
Fixed Income	18%	20%	(2.18%)	(2.42%)	0.04%	0.02%	0.07%		
Private Eq & Special Opp	19%	16%	1.75%	1.60%	0.03%	0.10%	0.13%		
Real Estate	10%	10%	0.53%	(1.27%)	0.18%	0.01%	0.19%		
Private Income	9%	9%	0.90%	2.04%	(0.10%)	(0.01%)	(0.11%)		
Absolute Return	7%	7%	2.42%	2.00%	0.03%	0.01%	0.03%		
Tactical Opportunities	0%	2%	0.06%	(3.27%)	0.01%	0.03%	0.03%		
Total Fund Cash	3%	2%	1.30%	1.31%	(0.00%)	0.01%	0.01%		
Total			(0.53%)	(1.20%)	+	0.48%	+	0.19%	0.67%

- In the third quarter, the Total Fund outperformed the Performance Benchmark by 67 basis points.
- Manager effects to Public Equity and Real Estate were additive to relative return. Asset allocation effects also bolstered relative performance.
- In aggregate, active management added 48 basis points to relative performance, while deviations from the Policy Target tacked on an additional 19 basis points.

APFC Total Fund Attribution

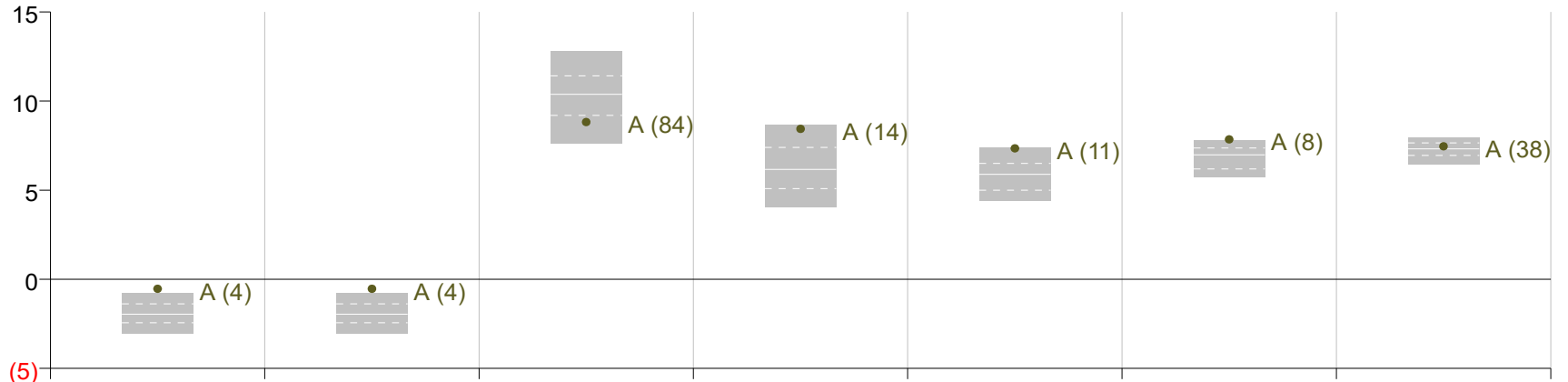
One Year Ended September 30, 2023

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Public Equity	34%	35%	19.55%	20.16%	(0.21%)	(0.34%)	(0.55%)
Fixed Income	19%	20%	3.37%	2.66%	0.14%	0.08%	0.22%
Private Eq & Special Opp	20%	17%	3.18%	2.78%	0.09%	(0.24%)	(0.15%)
Real Estate	10%	9%	(1.66%)	(5.31%)	0.41%	(0.06%)	0.35%
Private Income	8%	9%	6.85%	8.83%	(0.17%)	0.01%	(0.16%)
Absolute Return	7%	6%	4.70%	2.02%	0.20%	(0.11%)	0.08%
Tactical Opportunities	0%	0%	-	-	0.01%	0.03%	0.04%
Total Fund Cash	2%	2%	13.87%	4.47%	0.17%	0.02%	0.19%
Risk Parity	0%	1%	-	-	(0.00%)	0.01%	0.01%
Total			8.82%	= 8.80%	+ 0.62%	+ (0.60%)	0.02%

- For the trailing year, the Total Fund outperformed the Performance Benchmark by 2 basis points.
- Strong manager performance in Real Estate and Absolute Return was partially offset by relative weakness in Public Equity and Private Income. Asset allocation effects in Public Equity and Private Equity & Special Opportunities weighed on relative performance.
- In aggregate, active management added 62 basis points to relative performance, while deviations from the Policy Target detracted 60 basis points.

APFC Total Fund Relative to Callan's Large Public Fund Database

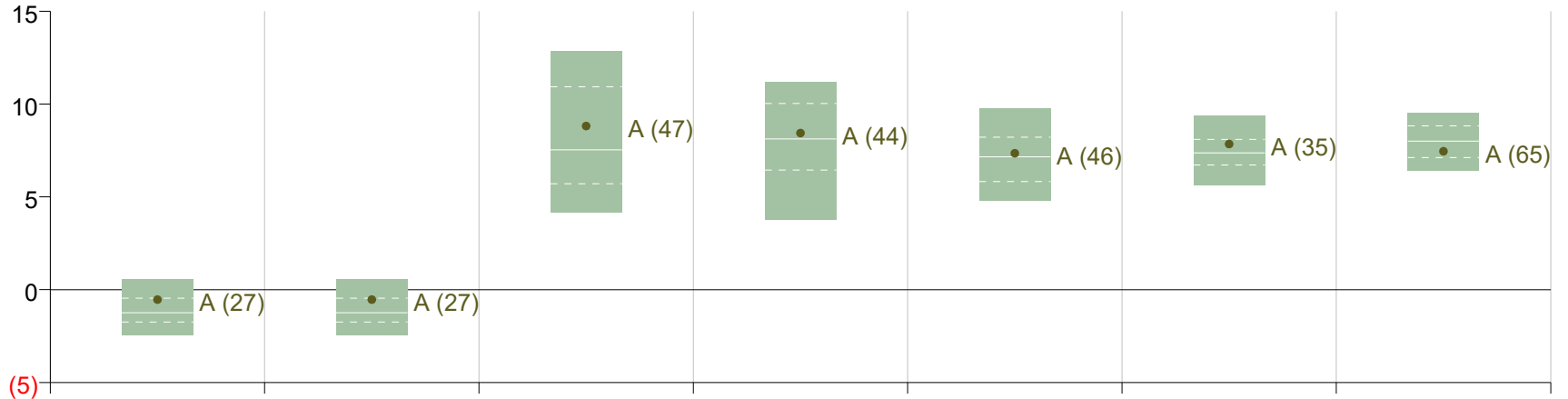
Returns for Periods Ended September 30, 2023
Group: Callan Public Fund Sponsor - Large (>1B)



	Last Quarter	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 20 Years
10th Percentile	(0.77)	(0.77)	12.83	8.68	7.38	7.79	7.96
25th Percentile	(1.38)	(1.38)	11.42	7.40	6.51	7.37	7.65
Median	(1.96)	(1.96)	10.38	6.17	5.89	6.98	7.31
75th Percentile	(2.44)	(2.44)	9.20	5.09	5.00	6.19	6.95
90th Percentile	(3.05)	(3.05)	7.63	4.08	4.41	5.71	6.43
Member Count	124	124	124	123	123	123	74
Total Fund • A	(0.53)	(0.53)	8.82	8.44	7.35	7.85	7.46

APFC Total Fund Relative to Callan's Large Endowment / Foundation Database

Returns for Periods Ended September 30, 2023
Group: Callan Endow/Foundation - Large (>1B)

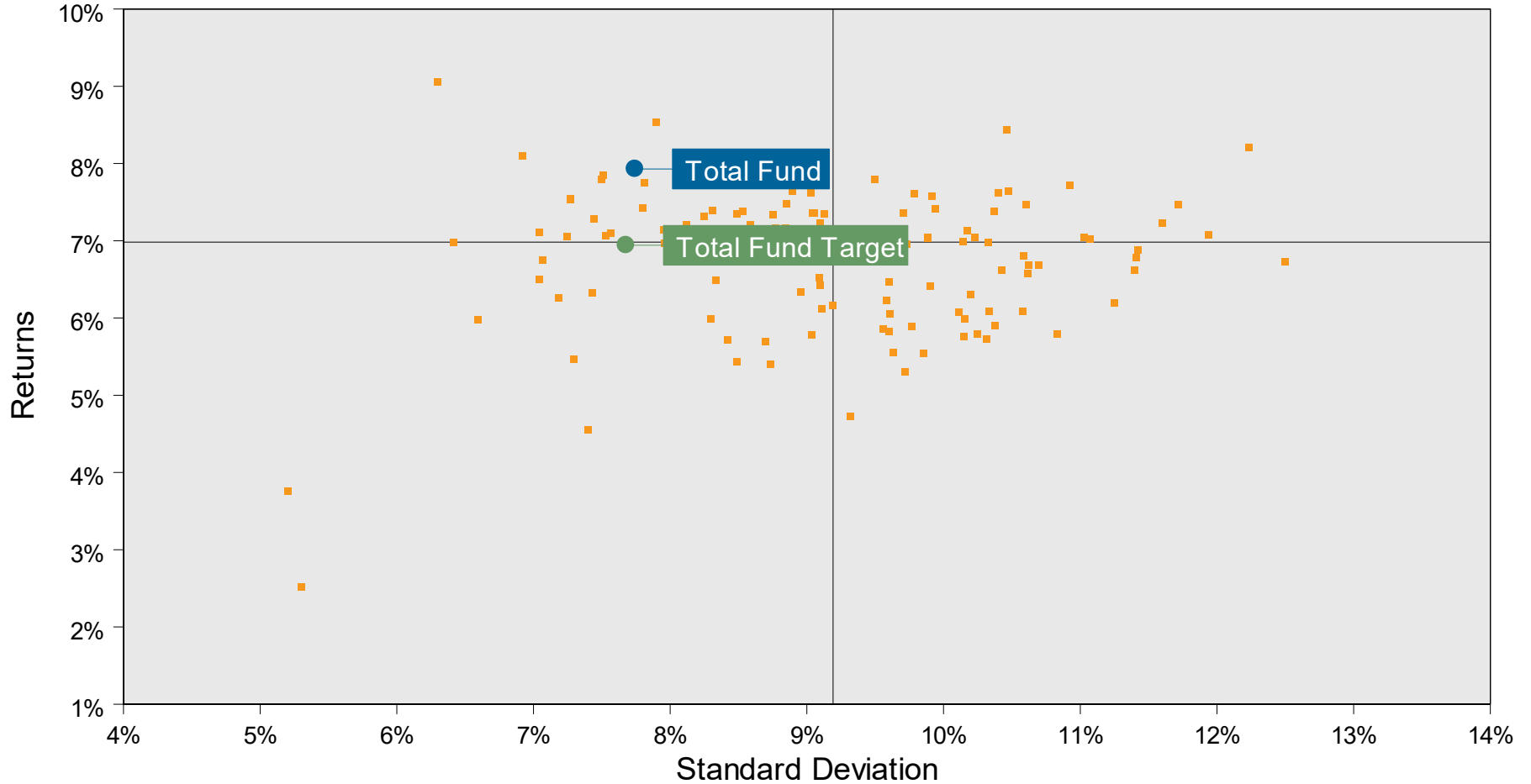


	Last Quarter	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 20 Years
10th Percentile	0.57	0.57	12.84	11.21	9.75	9.38	9.55
25th Percentile	(0.45)	(0.45)	10.94	10.03	8.21	8.10	8.83
Median	(1.23)	(1.23)	7.54	8.12	7.16	7.38	8.01
75th Percentile	(1.74)	(1.74)	5.72	6.44	5.82	6.73	7.12
90th Percentile	(2.44)	(2.44)	4.15	3.80	4.79	5.61	6.43
Member Count	74	74	74	74	73	72	47
Total Fund • A	(0.53)	(0.53)	8.82	8.44	7.35	7.85	7.46

APFC Total Fund Return versus Standard Deviations

Relative to Callan's Large Public Fund Database

Ten Year Annualized Risk vs Return

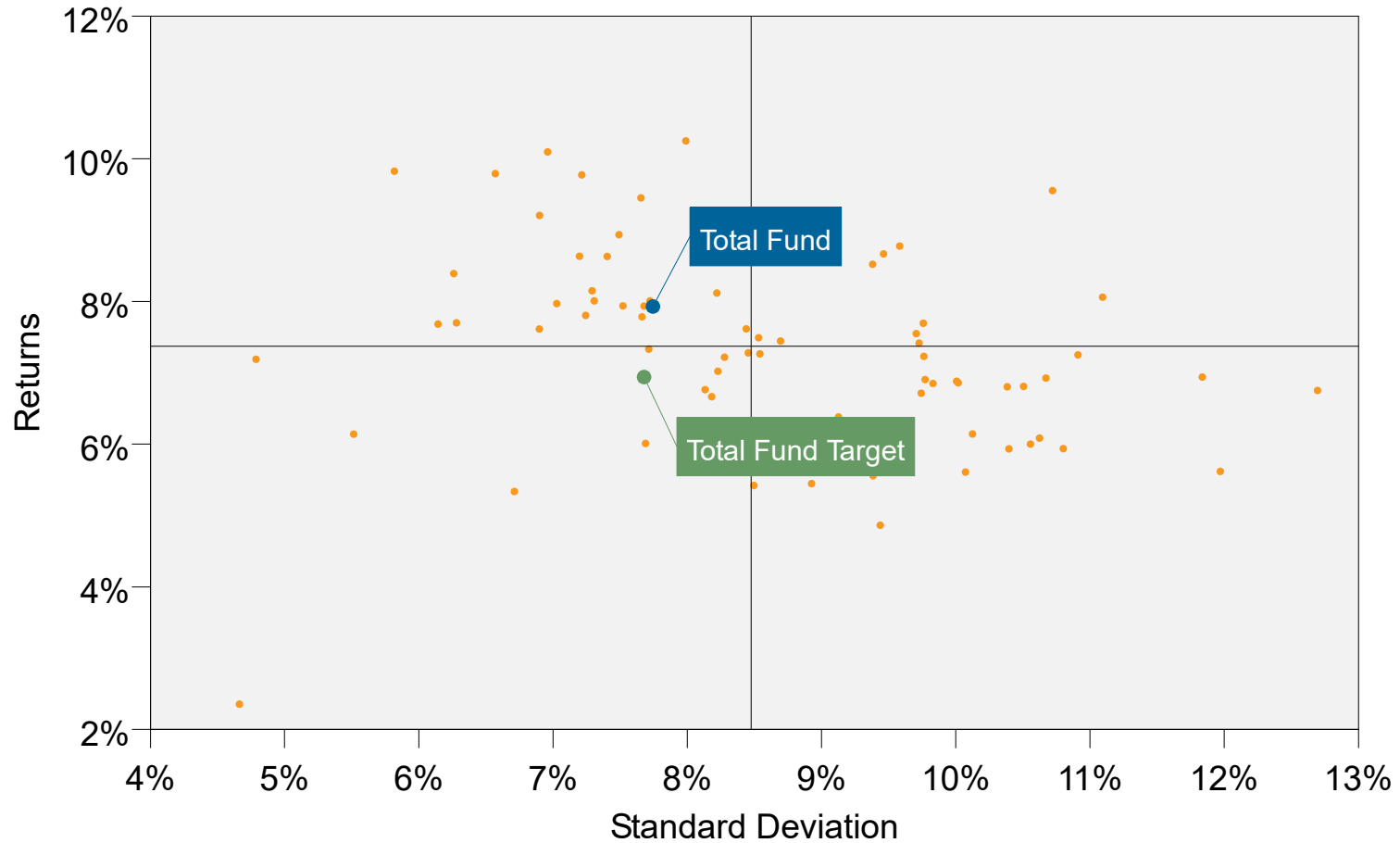


Squares represent membership of the Callan Public Fund Spons - Large (>1B)

APFC Total Fund Return versus Standard Deviations

Relative to Callan's Large Endowment / Foundation Database

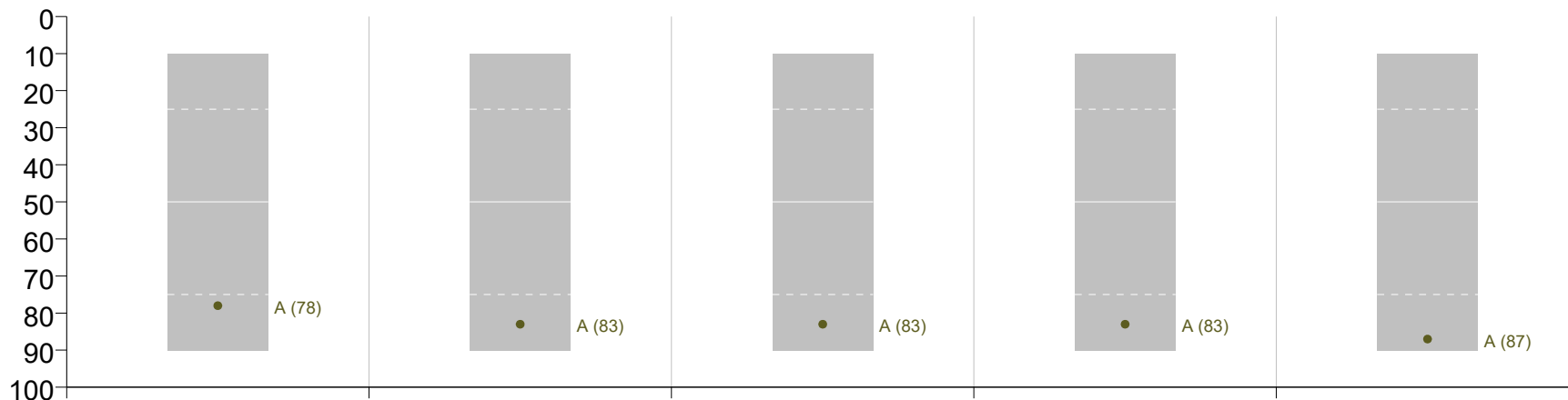
Ten Year Annualized Risk vs Return



Squares represent membership of the Callan Endow/Foundation - Large (>1B)

APFC Total Fund Standard Deviation Relative to Callan's Large Public Fund Database

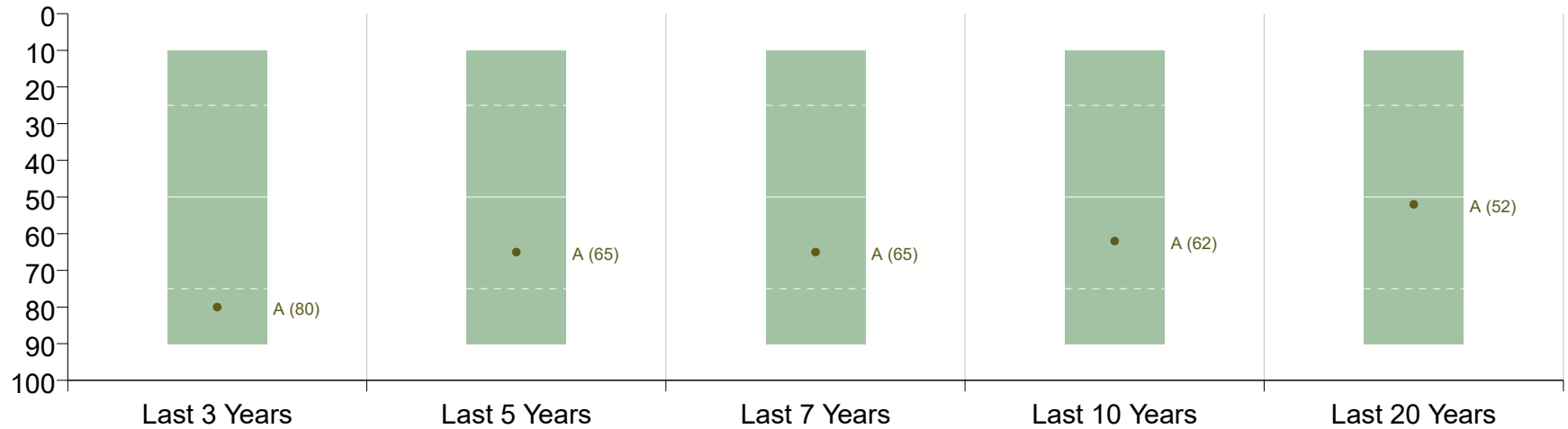
Standard Deviation for Periods Ended September 30, 2023
Group: Callan Public Fund Sponsor - Large (>1B)



	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 20 Years
10th Percentile	12.26	14.77	12.58	10.95	11.59
25th Percentile	11.63	13.81	11.76	10.26	10.86
Median	10.52	12.47	10.62	9.19	10.19
75th Percentile	9.14	10.99	9.41	8.31	9.55
90th Percentile	8.18	9.65	8.26	7.33	8.88
Member Count	123	123	123	123	74
Total Fund ● A	8.84	10.25	8.75	7.74	8.99

APFC Total Fund Standard Deviation Relative to Callan's Large Endowment/Foundation Database

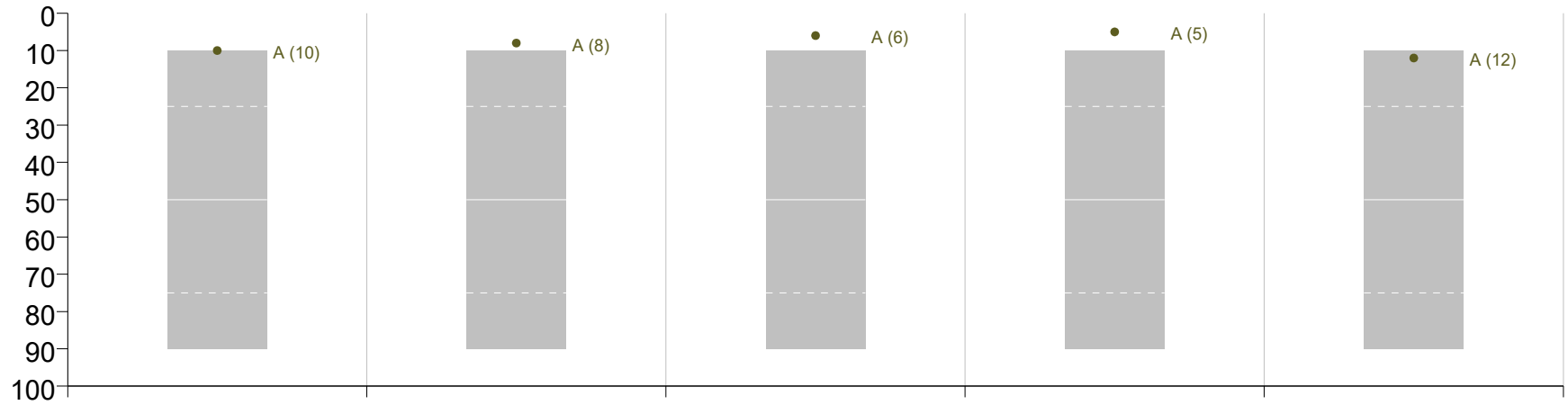
Standard Deviation for Periods Ended September 30, 2023
Group: Callan Endow/Foundation - Large (>1B)



	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 20 Years
10th Percentile	12.46	14.56	12.35	10.71	11.01
25th Percentile	11.29	13.33	11.32	9.82	10.01
Median	10.19	11.16	9.52	8.48	9.01
75th Percentile	9.15	9.63	8.18	7.33	8.44
90th Percentile	7.63	7.99	6.89	6.37	7.53
Member Count	74	73	73	72	47
Total Fund ● A	8.84	10.25	8.75	7.74	8.99

APFC Total Fund Sharpe Ratio Relative to Callan's Large Public Fund Database

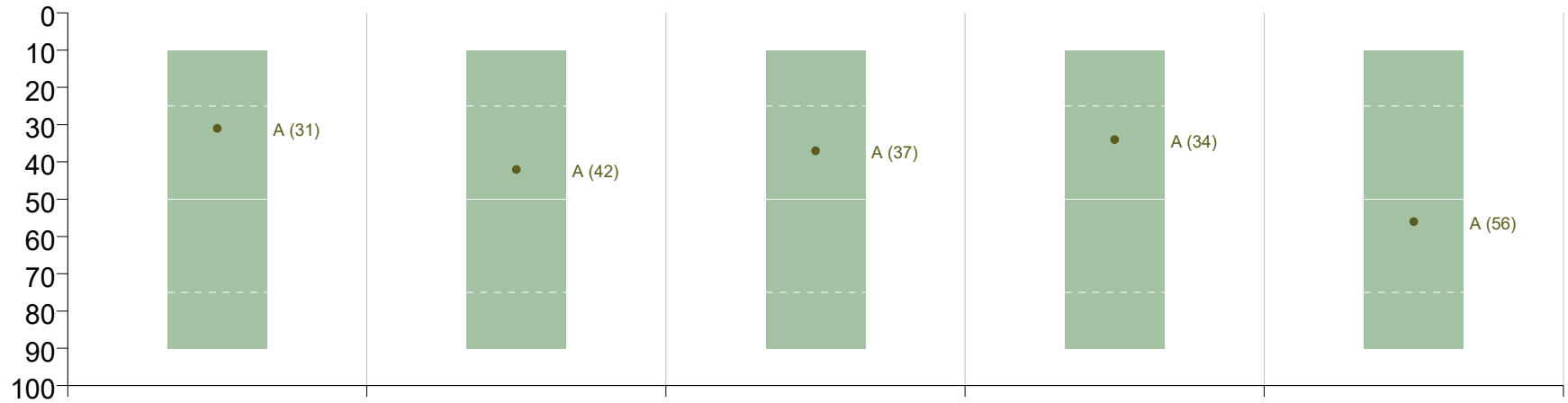
Sharpe Ratio for Periods Ended September 30, 2023
Group: Callan Public Fund Sponsor - Large (>1B)



	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 20 Years
10th Percentile	0.77	0.55	0.74	0.82	0.70
25th Percentile	0.58	0.42	0.62	0.73	0.65
Median	0.43	0.32	0.51	0.60	0.57
75th Percentile	0.29	0.24	0.43	0.51	0.51
90th Percentile	0.19	0.21	0.38	0.46	0.48
Member Count	123	123	123	123	74
Total Fund ● A	0.79	0.56	0.79	0.88	0.68

APFC Total Fund Sharpe Ratio Relative to Callan's Large Endowment/Foundation Database

Sharpe Ratio for Periods Ended September 30, 2023
Group: Callan Endow/Foundation - Large (>1B)



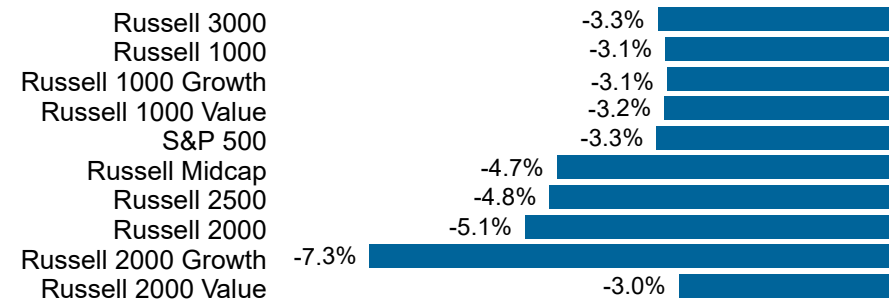
	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 20 Years
10th Percentile	0.99	0.82	1.04	1.16	1.07
25th Percentile	0.88	0.67	0.89	0.94	0.85
Median	0.66	0.49	0.67	0.73	0.71
75th Percentile	0.44	0.32	0.50	0.57	0.57
90th Percentile	0.18	0.22	0.37	0.46	0.51
Member Count	74	73	73	72	47
Total Fund • A	0.79	0.56	0.79	0.88	0.68

U.S. Equity Performance: 3Q23

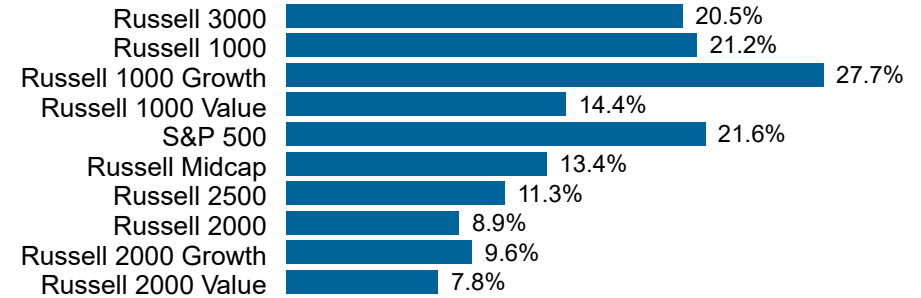
The U.S. equity markets cooled in 3Q after an exuberant start to the year

- All U.S. equity indices posted losses during 3Q23. August and September were marked by investor fears about the potential of a “higher for longer” interest rate environment, leading to broader market declines.
- While all indices were negative, the Russell 2000 Value Index led the pack during the quarter, a reversal of the previous two quarters when the Russell 1000 Growth Index led.
- Only two of the 11 S&P 500 Index sectors generated positive 3Q returns; Energy was up 12% and Communication Services was up 3%. However, on a YTD basis, six sectors generated positive returns, with Information Technology, Communication Services and Consumer Discretionary substantially leading the group.

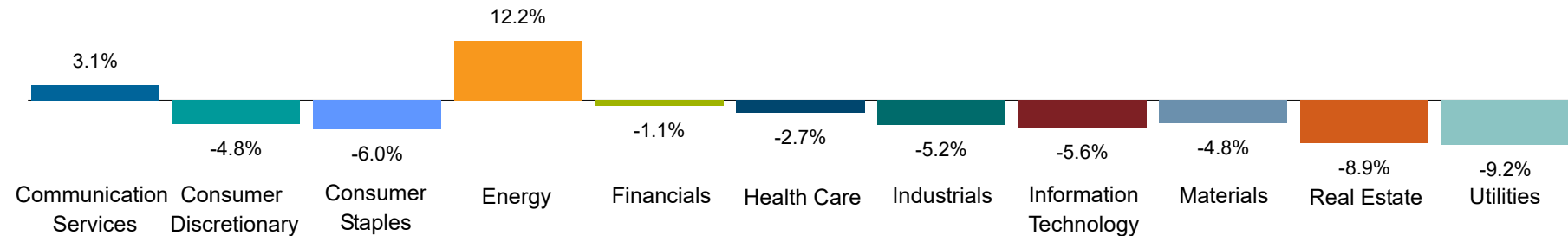
U.S. Equity: Quarter Ended 9/30/23



U.S. Equity: One-Year Returns Ended 9/30/23



Industry Sector Quarterly Performance (S&P 500) as of 9/30/23



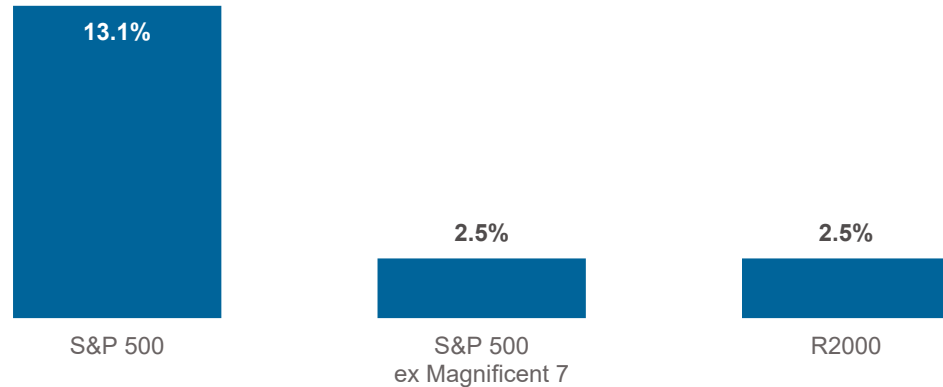
Sources: FTSE Russell, S&P Dow Jones Indices

U.S. Equity Overview

Active management remains challenging for U.S. large cap

- Index concentration remains notable within the S&P 500 as the top 10 issuers comprised 30% of the benchmark. Concentration within the Russell 1000 Growth Index is even greater; top 10 issuers comprised 51% of the index and the top 5 issuers comprised 40% of the index.
- YTD, 97% of the S&P 500's 13.1% return has been driven by the 10 largest weighted stocks.
- The "Magnificent 7" has buoyed large cap index returns and has outperformed the broader market significantly. YTD, the Magnificent 7 alone is up 83%.
- No exposures or significant underweights to top benchmark names have been disadvantageous to absolute and relative performance for managers' portfolios.
- Mega cap or bust: As performance has heavily favored mega caps, managers who seek to be opportunistic across the market capitalization and take a benchmark-agnostic approach in general may have struggled against this market backdrop.

YTD Returns of S&P 500 Boosted by 'Magnificent 7' Performance



Concentration of Returns Within the S&P 500 Rests with Mega Caps

Annual S&P 500 Contribution of 10 largest weights during positive performance years

Year	Top 10 as % of Total	S&P 500 % Performance	Year	Top 10 as % of Total	S&P 500 % Performance
YTD 2023	96.5%	11.7%	2003	23.6%	26.4%
2007	78.7%	3.5%	1995	22.3%	34.1%
2020	58.9%	16.3%	2014	22.2%	11.4%
1999	54.5%	19.5%	2004	21.1%	9.0%
2021	45.0%	26.9%	2005	20.5%	3.0%
1998	36.8%	26.7%	2010	19.6%	12.8%
1996	33.9%	20.3%	2012	19.2%	13.4%
2017	33.3%	19.4%	1997	19.1%	31.0%
2019	32.8%	28.9%	2013	17.6%	29.6%
1991	28.6%	26.3%	2009	15.5%	23.5%
2006	27.6%	13.6%	1992	14.9%	4.5%
2016	26.6%	9.5%	1993	12.2%	7.1%

Sources: Furey Research Partners, Westfield Capital, Factset; Strategas Research Partners

*Magnificent 7 are Apple, Microsoft, Amazon, Nvidia, Alphabet, Tesla, and Meta

U.S. Equity Key Theme

Small cap valuations continue to look compelling

- Small cap valuations, on both an absolute and relative (to large cap valuations) basis, continue to look compelling and may point to an attractive entry point for investors.
- What continues to pressure the asset class is the rhetoric around interest rates; as investors anticipate a higher-for-longer interest rate environment, there are concerns about small cap companies' ability to repay and re-finance debt in a way that would not jeopardize their underlying financial stability.
- If inflation data continues to improve in 2023, particularly against a backdrop of steady labor and general economic data, the small cap market could be positioned for a boost to performance.

Small Cap Valuations at Historic Lows

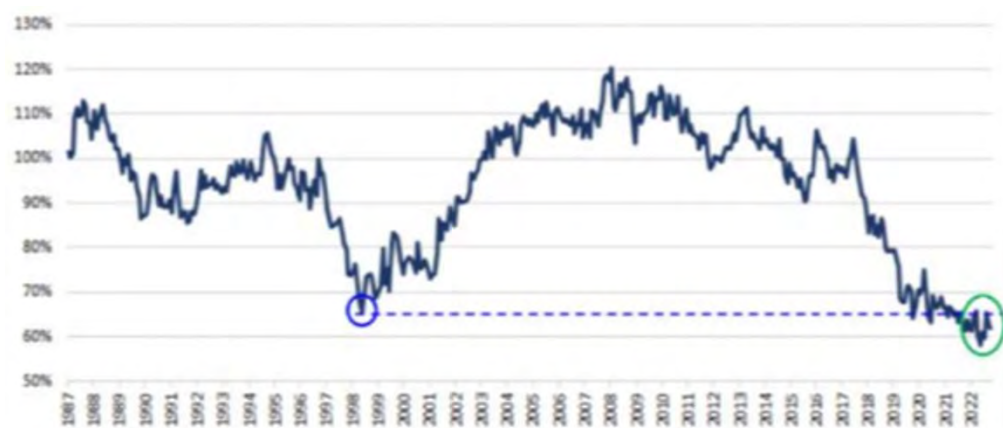
Small Cap P/E's have come down amid lackluster returns

Weighted Harmonic average price-to-earnings ratio (excluding non-earners) for the Russell 2000 from 12/31/78–9/30/23



Relative to large caps, small caps have never been more attractive

Russell 2000 / S&P 500 Relative P/E



Sources: Furey Research Partners, Royce Associates, Westfield, MSCI
Past performance is no guarantee of future results.

Global/Global ex-U.S. Equity Performance: 3Q23

Global growth concerns

- Most global markets were in the red for 3Q23.

Narrow market

- Global markets retreated in 3Q23 amid fears of a global recession driven by higher interest rates and slowing growth in regions outside the U.S.
- Emerging markets outperformed developed markets, buoyed by good results from India, whose economy grew nearly 8% on the heels of supportive infrastructure spending.
- Japan was strong again in local currency as it continues to benefit from post-COVID exuberance, easy monetary policy, and a new economic stimulus plan.

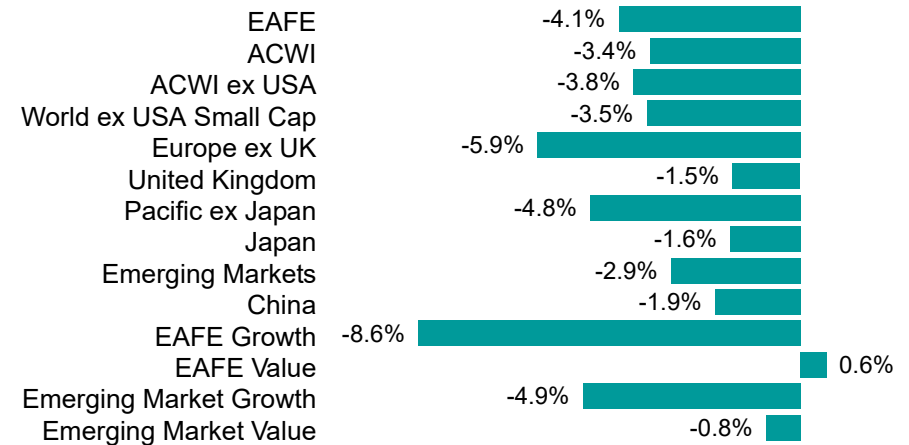
Growth vs. value

- With energy as a strong outperformer on the heels of oil price increases, value outpaced growth by a wide margin in global ex-U.S. markets.

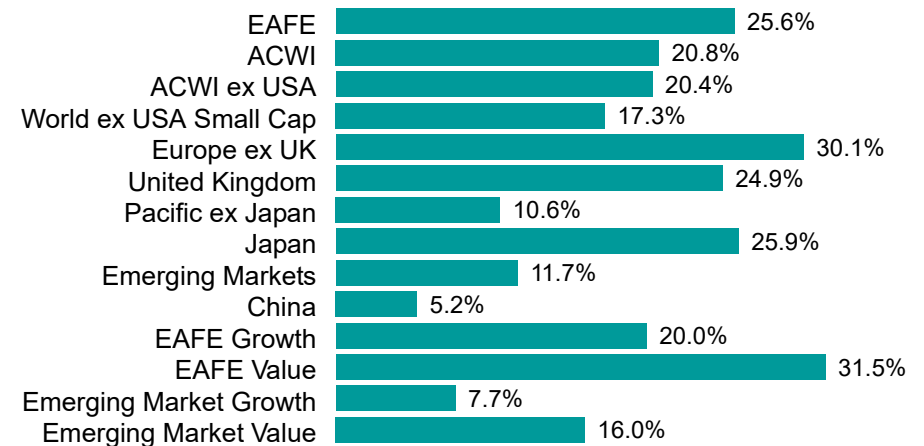
U.S. dollar vs. other currencies

- The stronger U.S. dollar, which gained 3% over the quarter, was a notable headwind for the period.

Global Equity Returns: Quarter Ended 9/30/23



Global Equity Returns: One Year Ended 9/30/23



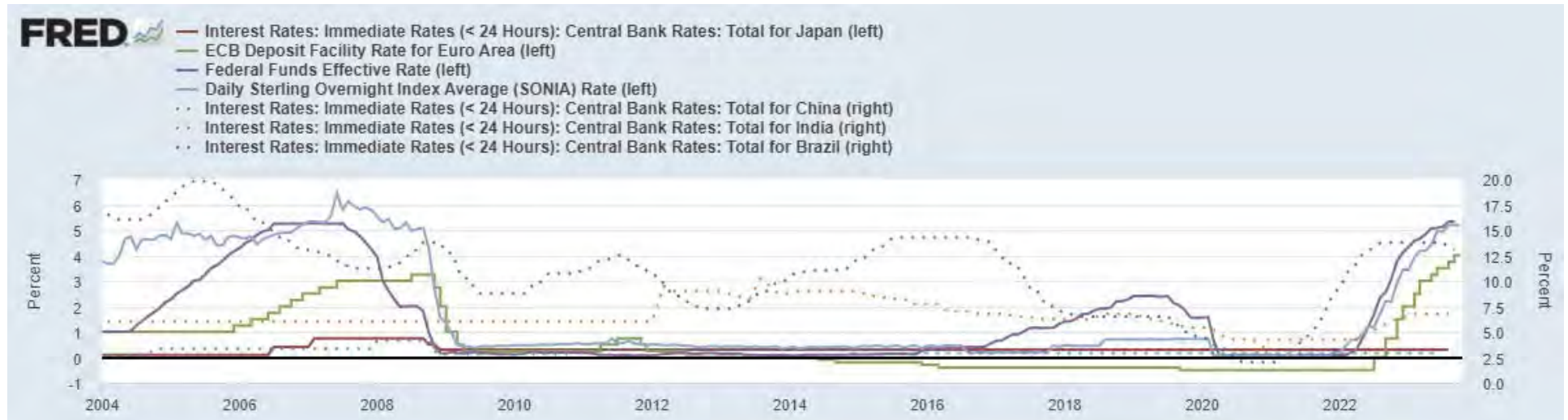
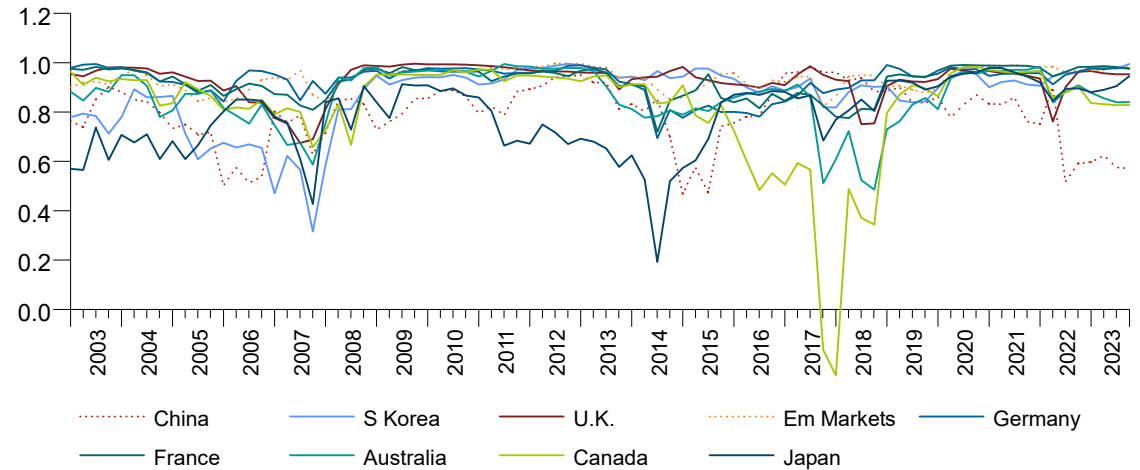
Source: MSCI

Global/Global ex-U.S. Equity Performance: 3Q23

Market dispersion

- Global markets have seen a prolonged period of low dispersion, excluding the 2016-2018 challenges with Brexit and oil price volatility. The global markets have seen high correlations for most of the last 10 years.
- This was in conjunction with a period of universally loose monetary policies, which helped mitigate any volatility.
- With increased dispersion of central bank actions, we expect there to be less correlation between countries, a period that may benefit active management.

Rolling 8 Quarter Correlation Relative To MSCI ACWI ex USA



Source: St. Louis Fed, MSCI

Global/Global ex-U.S. Equity Key Themes

China: Danger or opportunity?

Merits

Long-term growth potential: China has the second-largest GDP and the world's largest population of consumers.

Compelling valuation: Forward earnings yield is at a decade high.

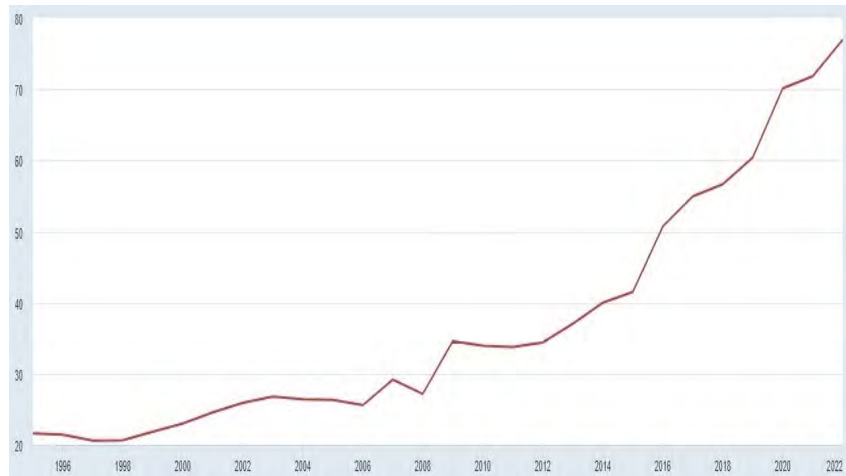
Considerations

Downside risk: Chinese federal debt has continued to grow aggressively and may become unsustainable.

Political risk: China is run by an authoritarian regime that may act against investors.

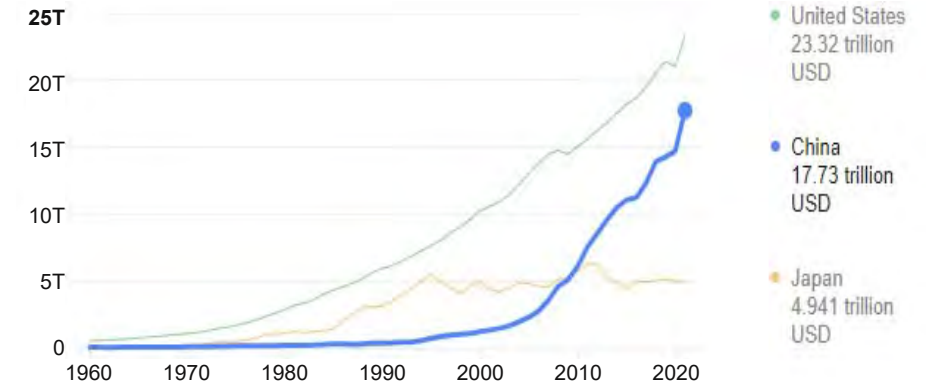
Old before rich: China currently has 2.26 workers for every retiree—the U.S. has 2.8.

General Government Gross Debt for China (percent of GDP)

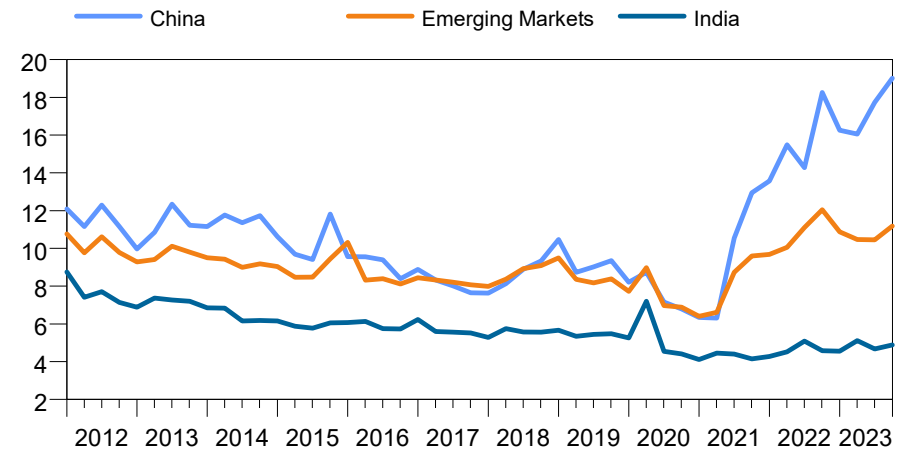


Sources: St. Louis Fed, MSCI, World Bank, Nikkei Asia, Peter G. Peterson Foundation

China GDP



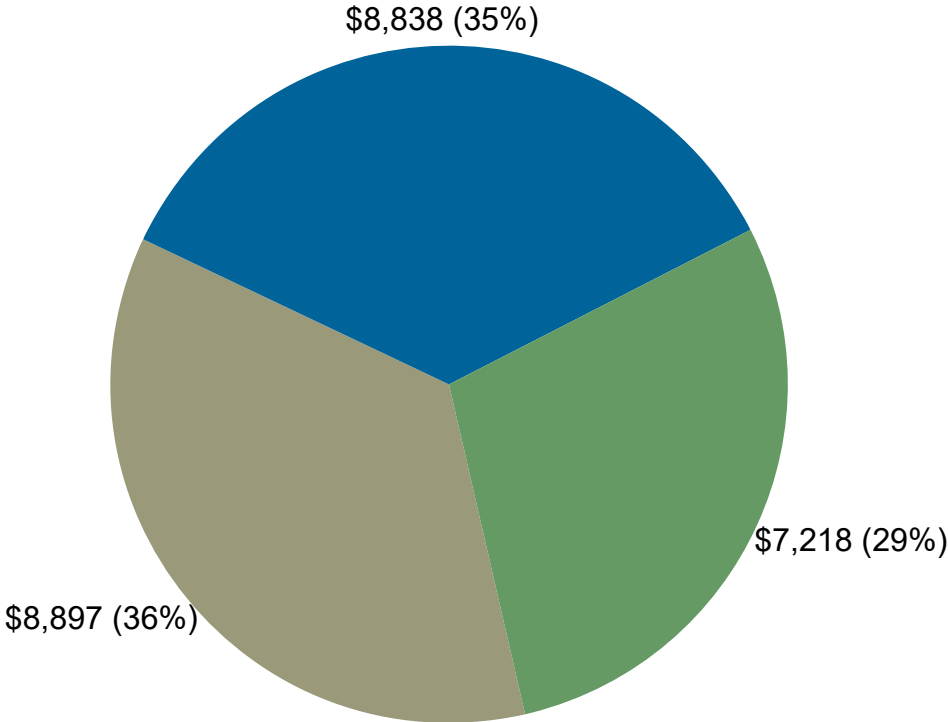
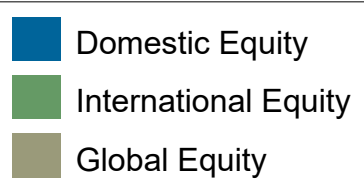
Forecasted Earnings Yield



APFC Public Equity Structure

As of September 30, 2023

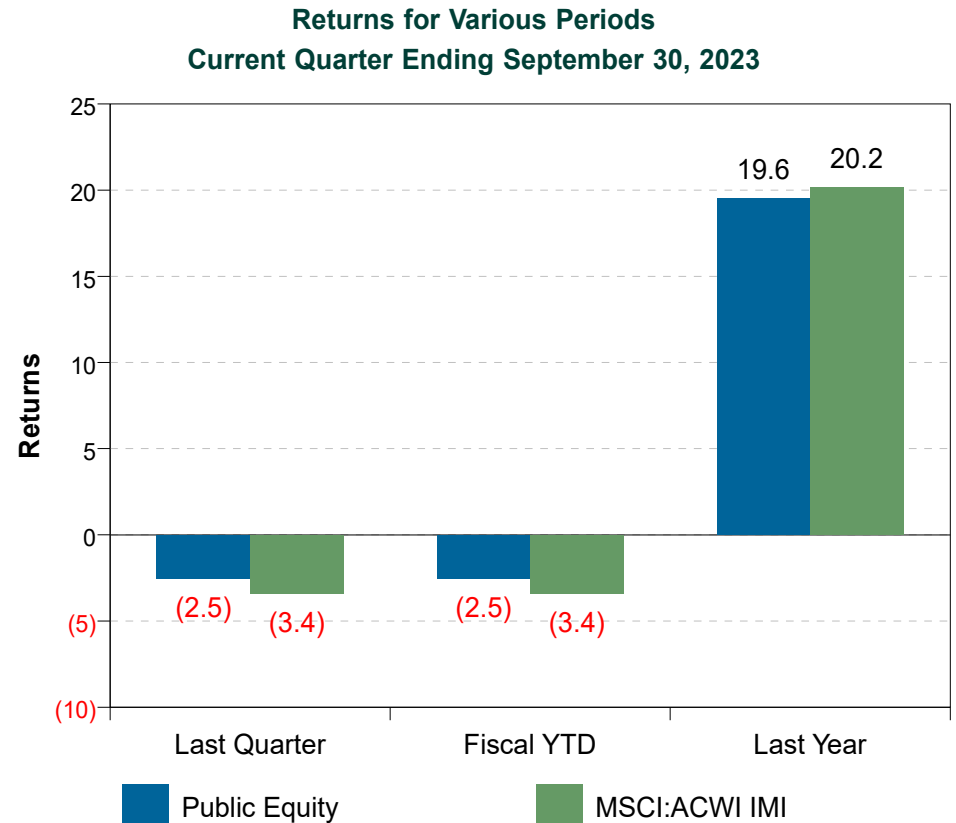
- APFC Public Equity portfolio is comprised of Domestic, International and Global Equity.



APFC Public Equity vs. MSCI ACWI-IMI

Periods Ended September 30, 2023

- APFC Public Equity portfolio bested the MSCI ACWI IMI index for the quarter but lagged over the trailing year.
- Domestic, International and Global Equity composites ended ahead of their respective benchmarks for the quarter.
- The Global Equity composite outperformed its benchmark for the trailing year while Domestic and International Equity lagged their respective benchmarks.

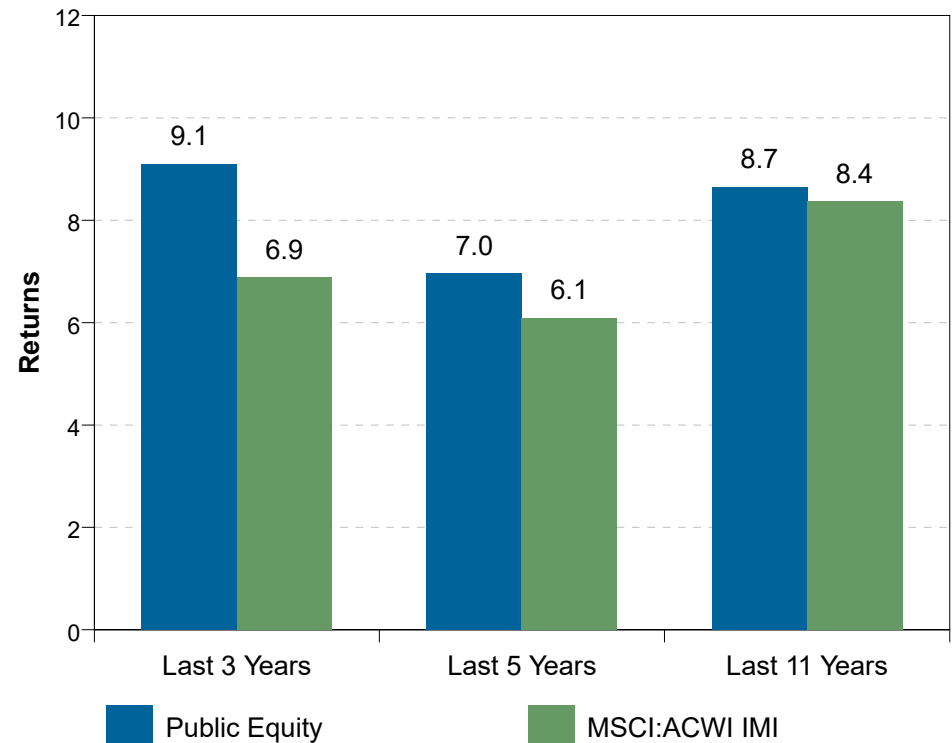


APFC Public Equity vs. MSCI ACWI-IMI

Periods Ended September 30, 2023

- Public Equities exceeded the benchmark over the intermediate and long-term.
- Overall, the portfolio is well diversified across regions, countries, and underlying strategies.

Returns for Various Periods
Current Quarter Ending September 30, 2023

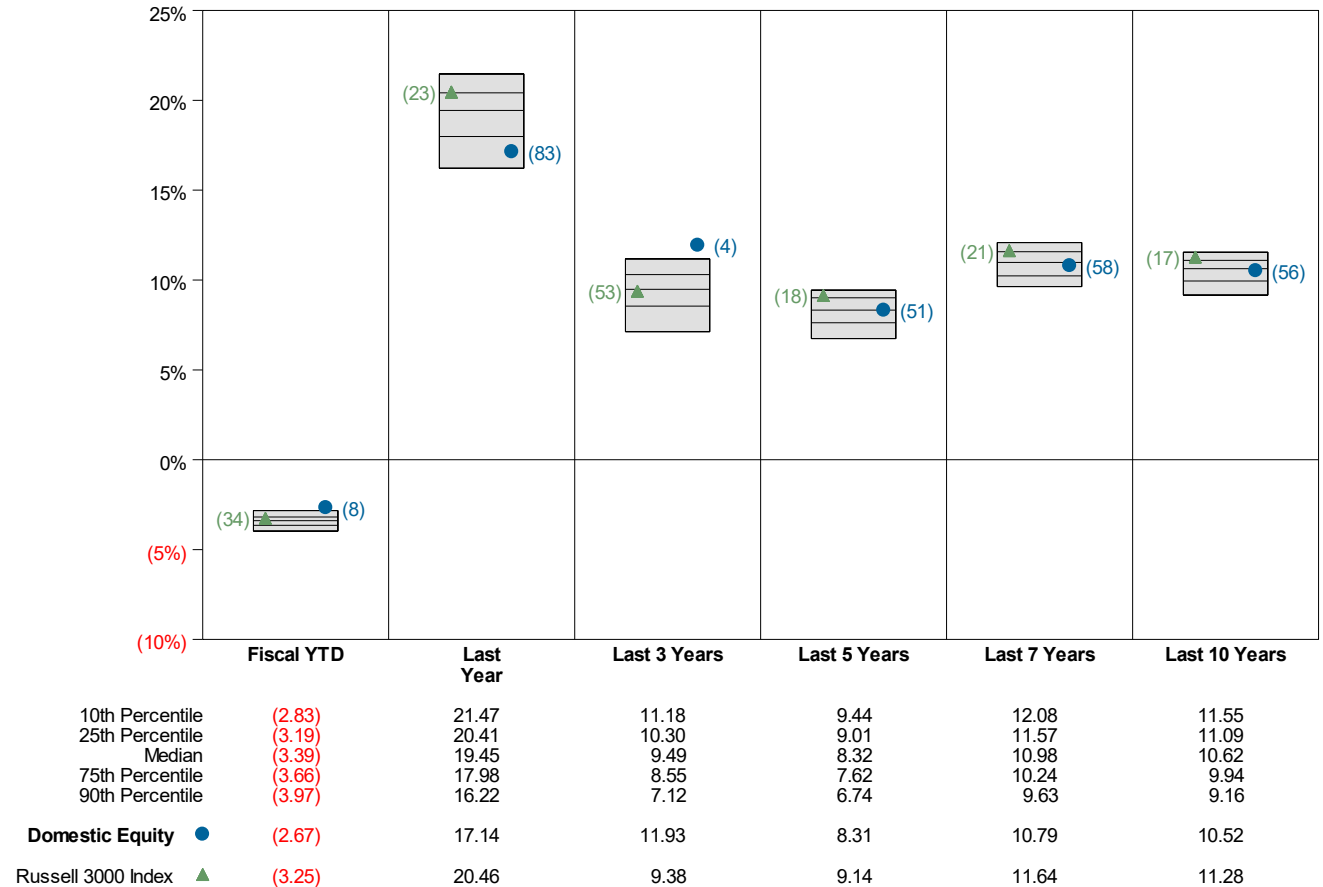


APFC US Equity Performance vs. Fund Sponsor US Equity

Periods Ended September 30, 2023

- The universe is comprised of total domestic equity portfolios of large institutional investors in Callan's Fund Sponsor Database.
- APFC US Equity portfolio outperformed the Russell 3000 Index for the quarter but lagged over the trailing year.
- When compared to US Equity portfolios of other large institutional investors, APFC's US Equity composite ranked near median in longer term periods.

Performance vs Fund Sponsor - Domestic Equity (Gross)

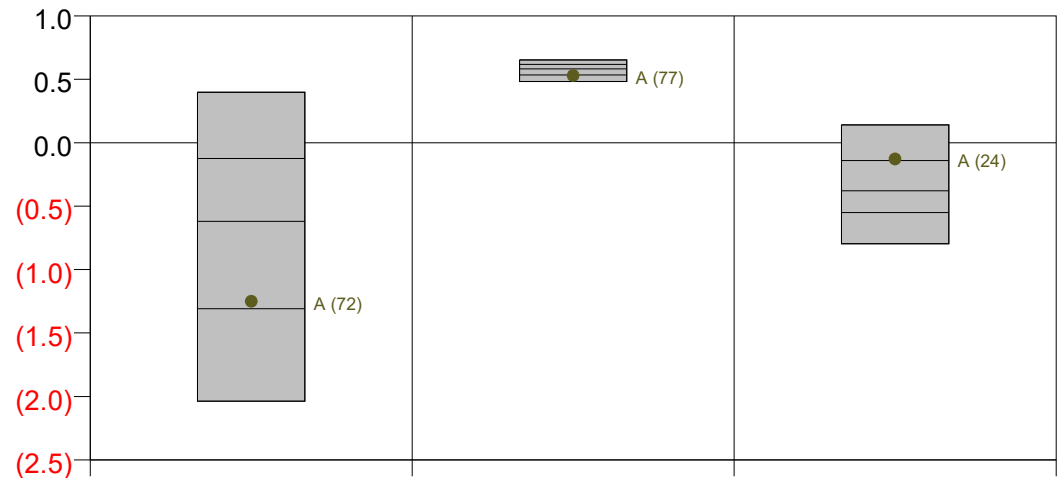


APFC US Equity Portfolio Risk Adjusted Return Rankings

Periods Ended September 30, 2023

- The universe is comprised of total domestic equity portfolios of large institutional investors in Callan's Fund Sponsor Domestic Equity Database.
- For the trailing ten-year period, APFC portfolio ranked below median for alpha and Sharpe ratio, and above median for excess return ratio.
 - Alpha measures contribution to performance – portfolio's return above index adjusted for risk.
 - Sharpe Ratio represents return gained per unit of risk taken (return/risk).
 - Excess Return Ratio measures alpha (return above benchmark) divided by tracking error (risk versus benchmark).

**Risk Adjusted Return Measures vs Russell 3000 Index
Rankings Against Fund Sponsor Domestic Equity Database**

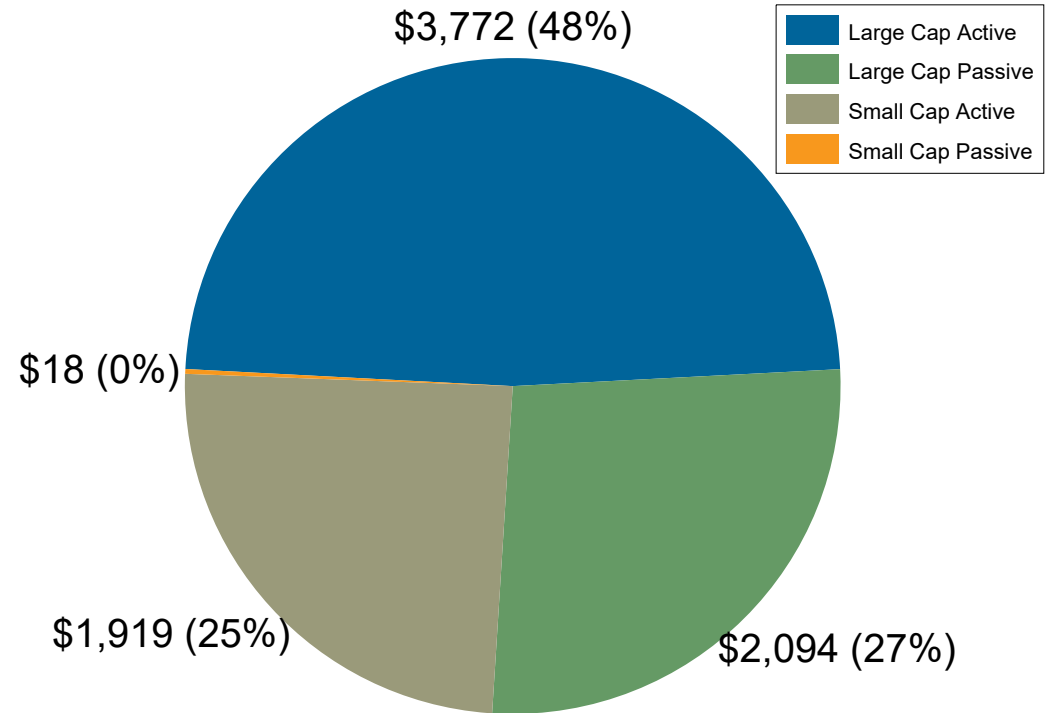


	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	0.40	0.65	0.14
25th Percentile	(0.12)	0.62	(0.14)
Median	(0.62)	0.58	(0.38)
75th Percentile	(1.31)	0.53	(0.55)
90th Percentile	(2.04)	0.48	(0.79)
Domestic Equity ● A	(1.25)	0.53	(0.13)

APFC US Equity Structure

As of September 30, 2023

- US equity portfolio is roughly 73% actively managed and 27% passive (or quasi-passive).
- Roughly 64% of the large cap allocation is actively managed while 99% of the small cap allocation is actively managed.

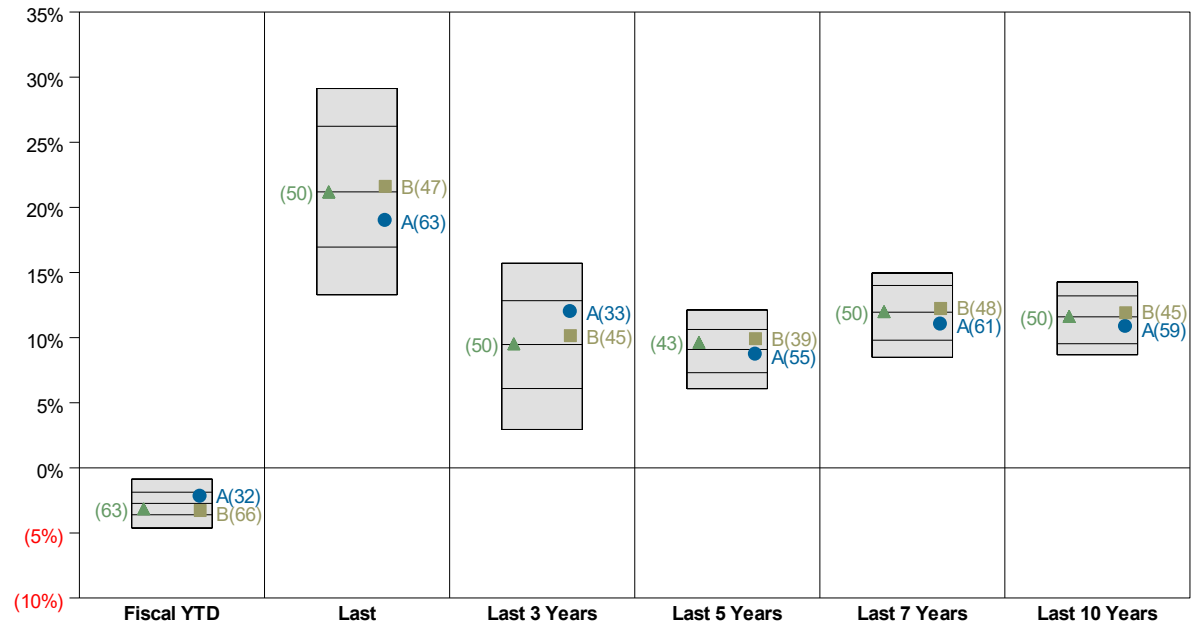


APFC Large Cap Equity Relative to Large Cap Universe

Periods Ended September 30, 2023

- APFC's Large Cap portfolio outperformed its benchmark for the quarter but lagged over the trailing year.
- Despite above median results in the quarter, over the trailing year, the portfolio ranked below median within the large cap universe.
- Performance from the APFC US Tactical Tilt portfolio negatively impacted relative performance over the quarter and trailing year.

Performance vs Callan Large Capitalization (Gross)



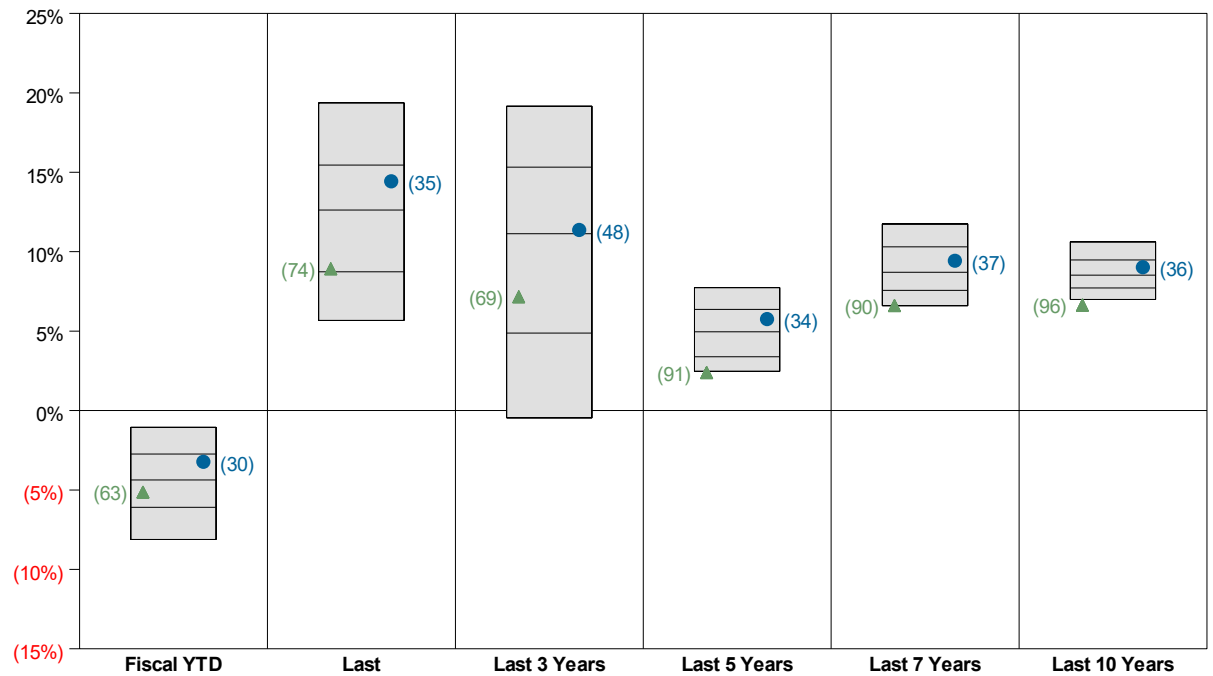
	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	(0.86)	29.13	15.72	12.12	14.96	14.27
25th Percentile	(1.87)	26.23	12.84	10.62	14.00	13.20
Median	(2.73)	21.20	9.47	9.09	11.96	11.59
75th Percentile	(3.61)	16.96	6.09	7.31	9.80	9.53
90th Percentile	(4.62)	13.28	2.95	6.08	8.49	8.69
Large Cap Equity Standard & Poor's 500	● A (2.19)	18.99	12.00	8.72	11.04	10.85
	■ B (3.27)	21.62	10.15	9.92	12.24	11.91
Russell 1000 Index	▲ (3.15)	21.19	9.53	9.63	12.00	11.63

APFC Small Cap Equity Relative to Small Cap Universe

Periods Ended September 30, 2023

- APFC small cap portfolio sharply outperformed the Russell 2000 for the quarter and trailing year.
- The portfolio ranked above peer group median for both the quarter and the year.
- In all time periods the portfolio ranked above median in the small cap universe and was ahead of the benchmark.

Performance vs Callan Small Capitalization (Gross)

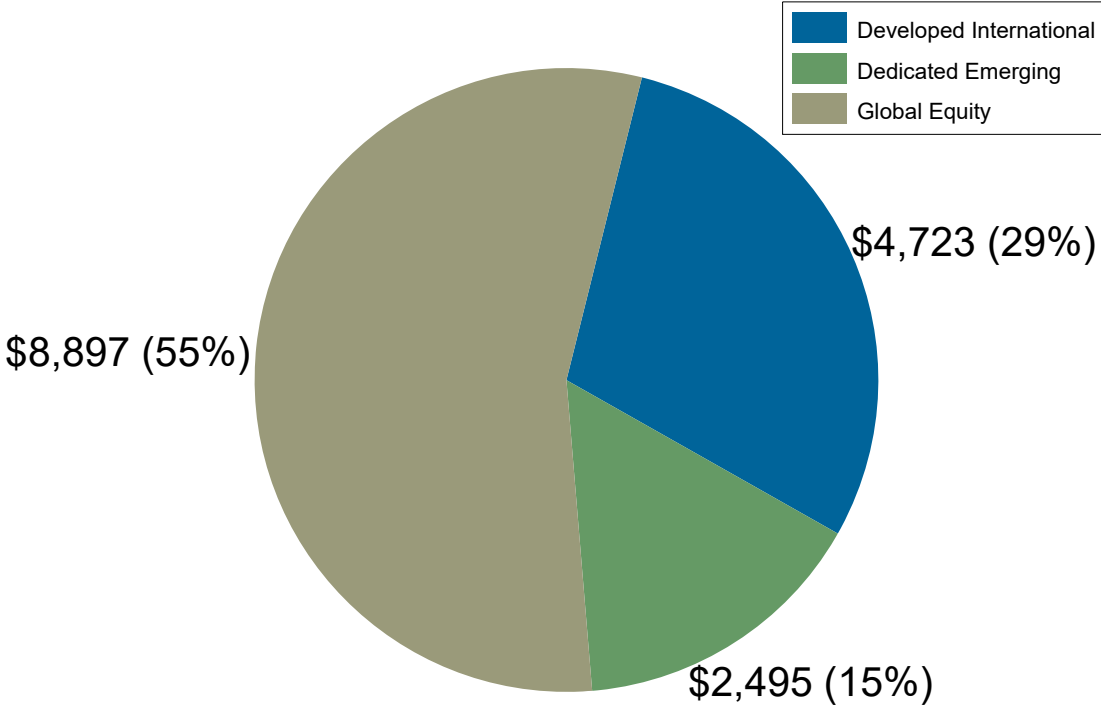


	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	(1.06)	19.38	19.16	7.74	11.75	10.61
25th Percentile	(2.73)	15.46	15.32	6.37	10.30	9.48
Median	(4.37)	12.62	11.13	4.96	8.70	8.52
75th Percentile	(6.09)	8.73	4.88	3.38	7.56	7.73
90th Percentile	(8.12)	5.67	(0.46)	2.47	6.60	7.00
Small Cap Equity ●	(3.27)	14.40	11.33	5.71	9.39	8.98
Russell 2000 Index ▲	(5.13)	8.93	7.16	2.40	6.62	6.65

APFC Non-US and Global Equity Structure

As of September 30, 2023

- Portfolio is divided between global, non-US, and emerging markets mandates.
- Both global and non-US equity managers invest in emerging markets.
- Global managers invest in US markets as part of their mandate.

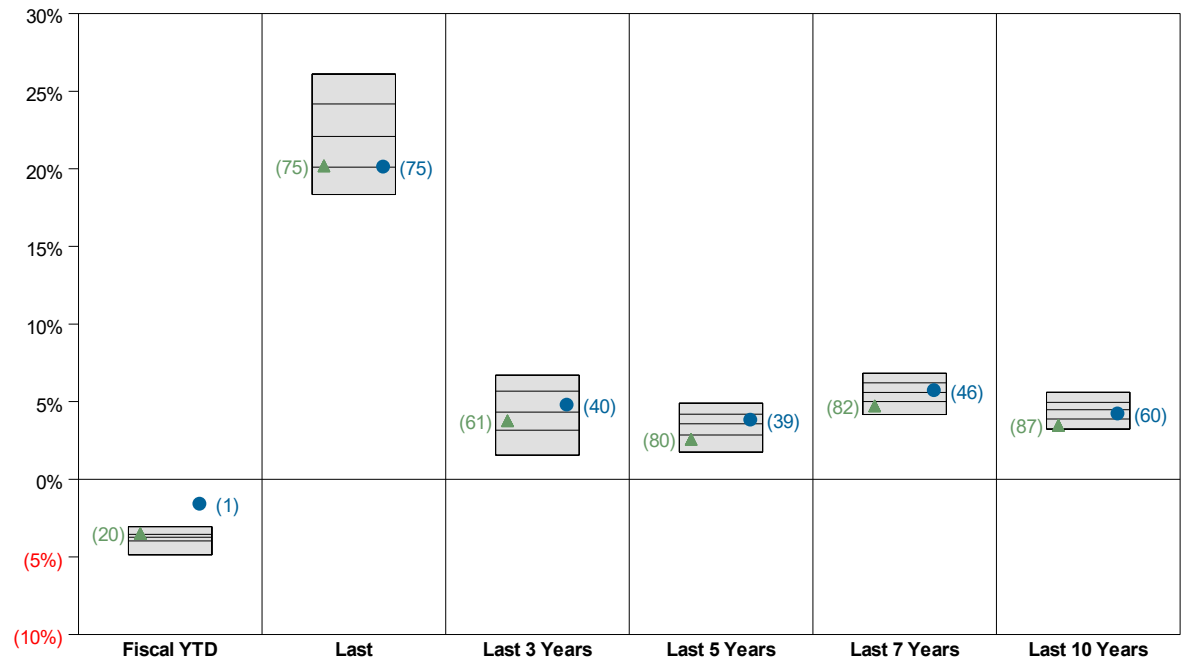


APFC International Equity Relative to Fund Sponsor Universe

Periods Ended September 30, 2023

- International Equity ended the quarter ahead of its benchmark and its peer group median. Over the trailing year, International Equity performed roughly in line with both the benchmark and peer group median.
- In periods outside the year, the portfolio outperformed its benchmark.
- Relative to other fund sponsor portfolios, International Equity ranked above median for most periods except for the one- and ten-year timeframes.

Performance vs Fund Sponsor - International Equity (Gross)



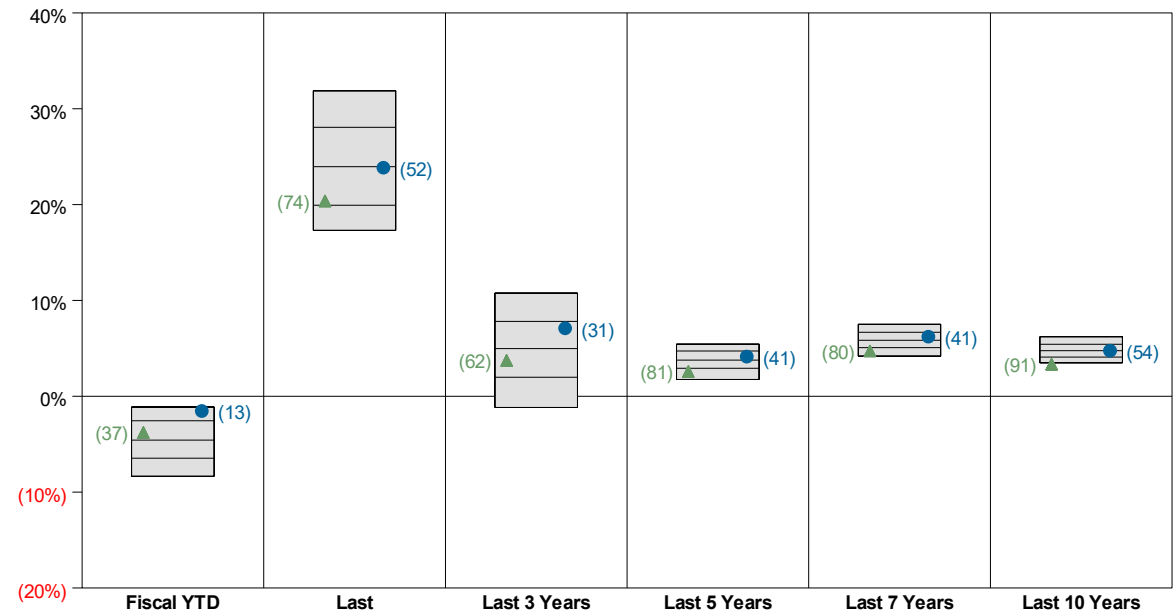
10th Percentile	(3.06)	26.11	6.70	4.90	6.83	5.60
25th Percentile	(3.55)	24.18	5.67	4.19	6.20	4.96
Median	(3.73)	22.09	4.33	3.57	5.59	4.48
75th Percentile	(3.97)	20.10	3.16	2.86	5.01	3.89
90th Percentile	(4.86)	18.34	1.55	1.75	4.17	3.23
International Equity	(1.61)	20.11	4.76	3.79	5.70	4.21
MSCI ACWI xUS IMI	(3.49)	20.19	3.77	2.57	4.73	3.48

APFC Int'l Developed Equity Relative to Non-US Equity Universe

Periods Ended September 30, 2023

- The International Developed portfolio bested its benchmark for the quarter and the trailing year.
- The portfolio continued to show strong performance relative to its benchmark across all time periods.
- The portfolio ranked above median over the quarter, but narrowly missed the median over the trailing year.

Performance vs Callan Non-US Equity (Gross)



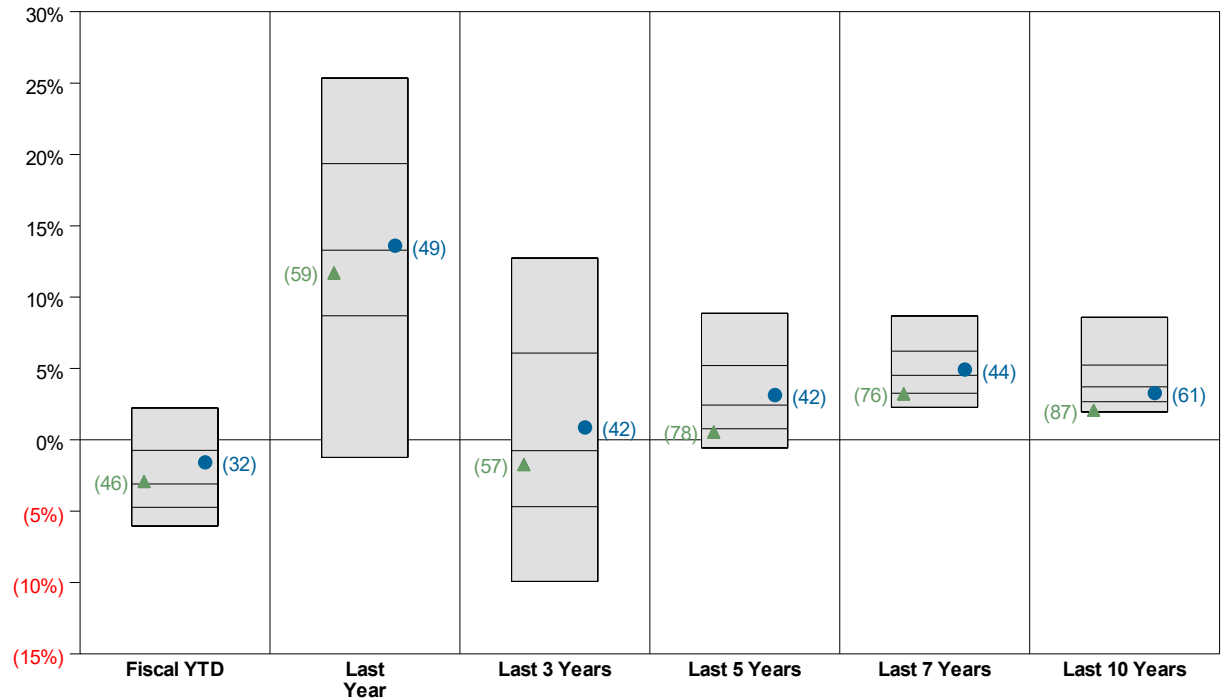
	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	(1.13)	31.87	10.76	5.45	7.51	6.22
25th Percentile	(2.56)	28.05	7.80	4.72	6.67	5.41
Median	(4.58)	23.96	4.97	3.76	5.84	4.76
75th Percentile	(6.47)	19.93	2.00	2.92	5.08	4.09
90th Percentile	(8.34)	17.31	(1.17)	1.76	4.18	3.49
International Developed ●	(1.60)	23.77	7.02	4.07	6.15	4.69
MSCI ACWI xUS (Net) ▲	(3.77)	20.39	3.74	2.58	4.74	3.35

APFC Emerging Markets Equity Relative to EM Universe

Periods Ended September 30, 2023

- APFC Emerging Markets Equity portfolio exceeded the MSCI EM Index in the third quarter and for the trailing year.
- The portfolio leads its benchmark across all other standard periods.
- The portfolio ranked above median for the quarter and year.

Performance vs Emerging Markets Equity DB (Gross)



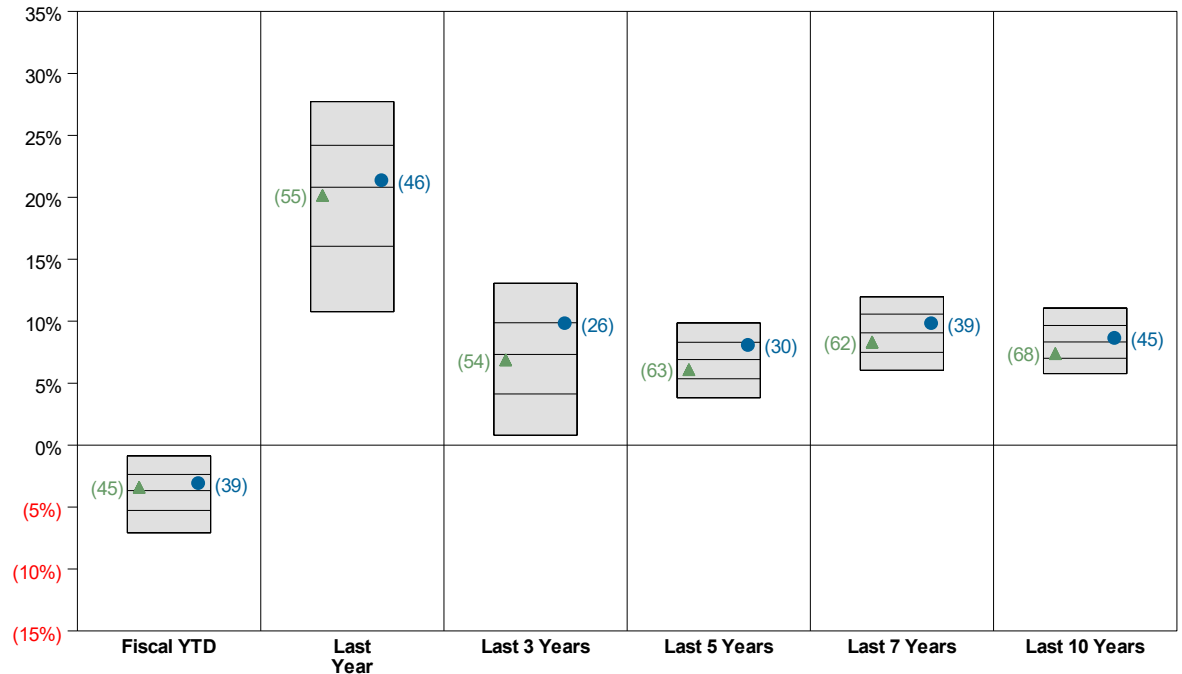
10th Percentile	2.23	25.35	12.74	8.87	8.68	8.60
25th Percentile	(0.74)	19.36	6.08	5.21	6.21	5.24
Median	(3.09)	13.29	(0.76)	2.44	4.52	3.71
75th Percentile	(4.73)	8.70	(4.69)	0.78	3.27	2.67
90th Percentile	(6.04)	(1.23)	(9.92)	(0.57)	2.28	1.96
Emerging Markets	● (1.63)	13.56	0.82	3.08	4.88	3.23
MSCI EM	▲ (2.93)	11.70	(1.73)	0.56	3.23	2.07

APFC Global Equity Relative to Global Universe

Periods Ended September 30, 2023

- APFC Global Equity portfolio bested its benchmark and peer group median for the quarter and trailing year time periods.
- The portfolio was ahead of its benchmark over all time periods and ranked above median.
- Performance from the APFC Tactical Tilts portfolio positively impacted performance over the 3-, 5- and 7-year periods

Performance vs Global Equity Database (Gross)



10th Percentile	(0.87)	27.72	13.06	9.86	11.97	11.06
25th Percentile	(2.37)	24.20	9.87	8.30	10.58	9.65
Median	(3.66)	20.81	7.31	6.90	9.07	8.33
75th Percentile	(5.27)	16.04	4.13	5.35	7.50	7.01
90th Percentile	(7.08)	10.76	0.81	3.82	6.04	5.77
Global Equity ●	(3.12)	21.33	9.78	8.03	9.78	8.60
MSCI ACWI IMI ▲	(3.40)	20.16	6.88	6.09	8.32	7.39

U.S. Fixed Income Performance: 3Q23

Yields continue to march upward as spreads remain range-bound

U.S. fixed income fell for a second straight quarter

- The Bloomberg Aggregate Index is on track for a third calendar year of negative returns, with the rise in yields continuing to detract from performance.

U.S. Treasury 10-year yield climbed roughly 80 bps

- 10-year ended the quarter at 4.59%, its highest level since 2007.
- The yield curve's inversion narrowed as long-term rates rose more than short-term rates.

TIPS outperformed nominal Treasuries

- 10-year break-even spreads widened over 10 bps.

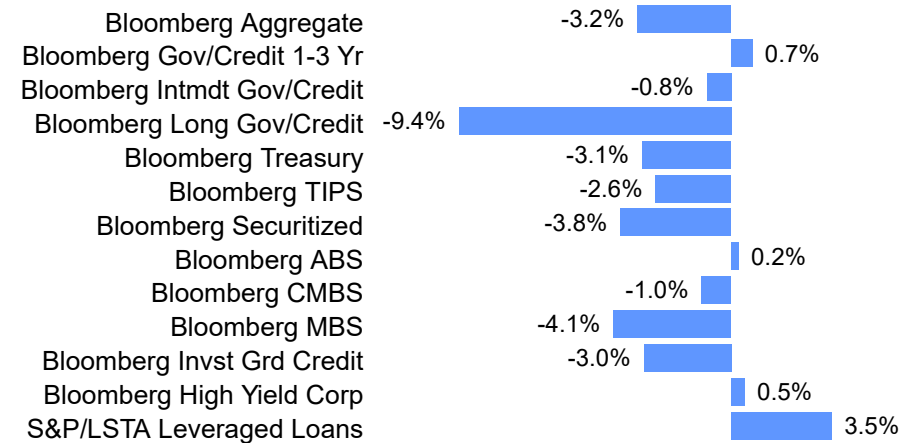
Fed policy rate held to 5.25%-5.50%

- The updated dot plot suggested an additional rate hike may be in the cards before year-end.

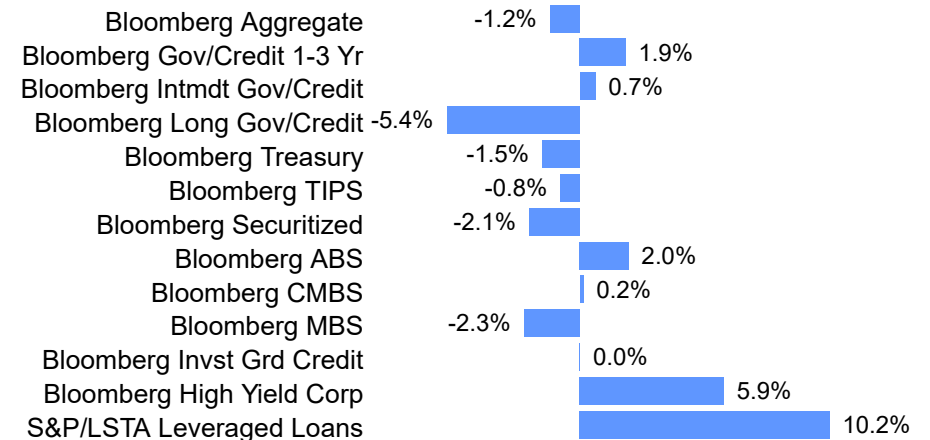
Lower-quality credit continued to outperform

- High yield spreads were flat, but the sector was buoyed by strong performance in July. Additionally, a combination of higher yields and no duration continued to drive bank loan outperformance.
- IG corporate spreads tightened slightly and remained close to their 10-year average.
- Agency RMBS underperformed other securitized sectors as interest rate volatility weighed on the sector.

U.S. Fixed Income Returns: Quarter Ended 9/30/23



U.S. Fixed Income Returns: YTD Ending 9/30/23

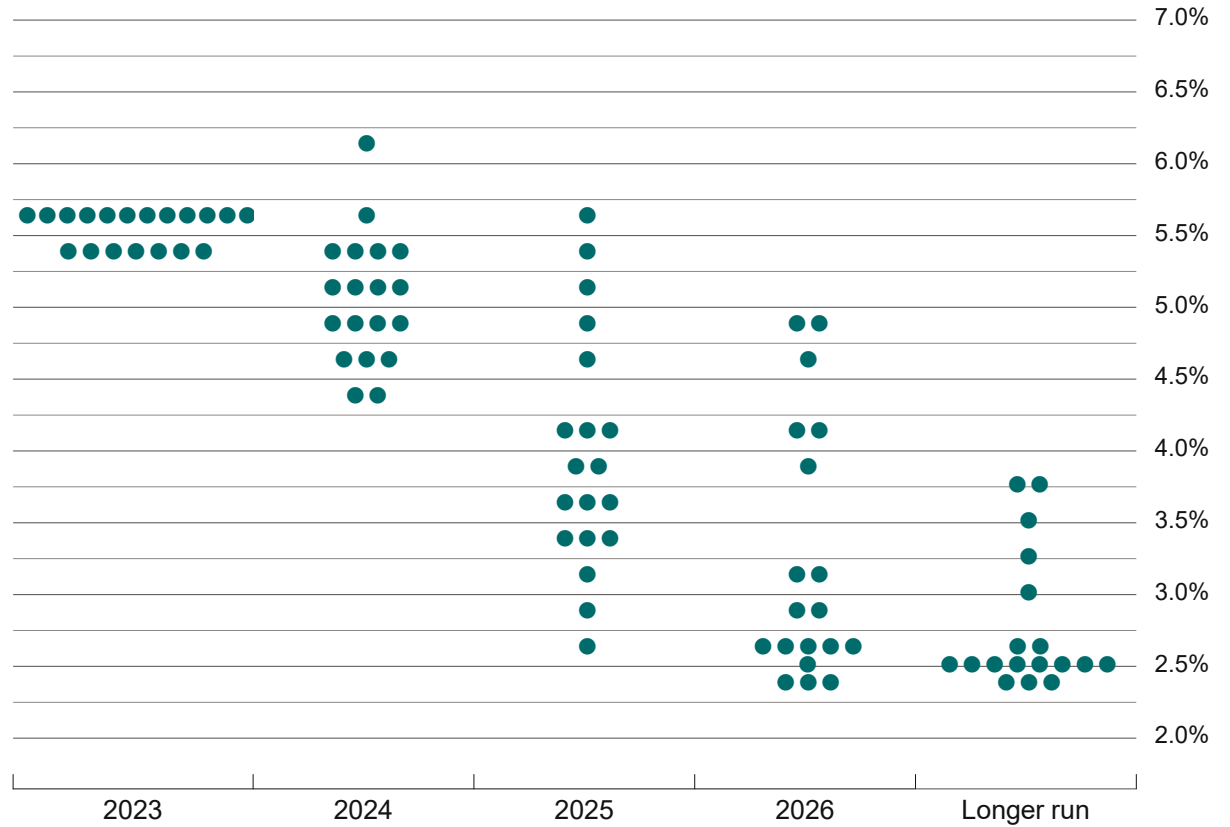


Sources: Bloomberg, S&P Dow Jones Indices

The Fed's 'Dot Plot'

September 20, 2023

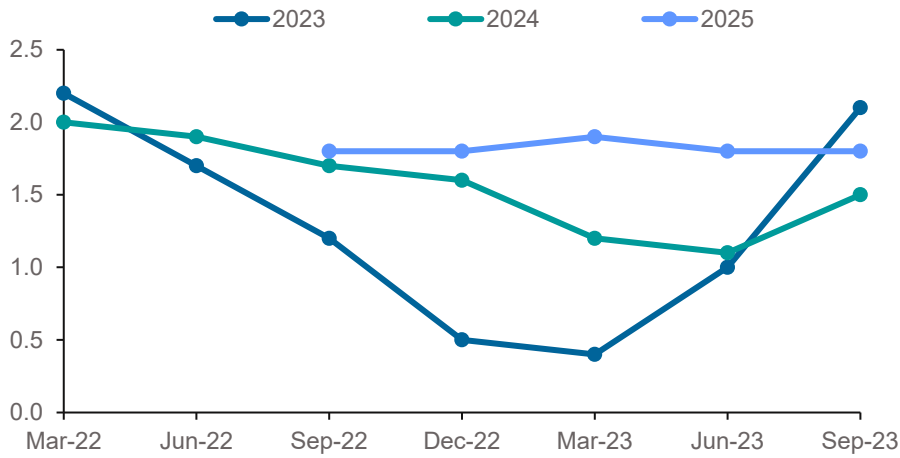
- Federal Open Market Committee (FOMC) participants' assessments of appropriate monetary policy
- Median year-end 2023 = 5.5% (implying one more hike)
- Median in 2024 = 5.1% (up from 4.6% at last meeting)
- Longer-run = 2.5%
- Dispersion of views widens over next few years but narrows over the "longer run."
- Market expects more cuts next year (year-end 4.5% to 5.0%) based on CME FedWatch as of September 2023.



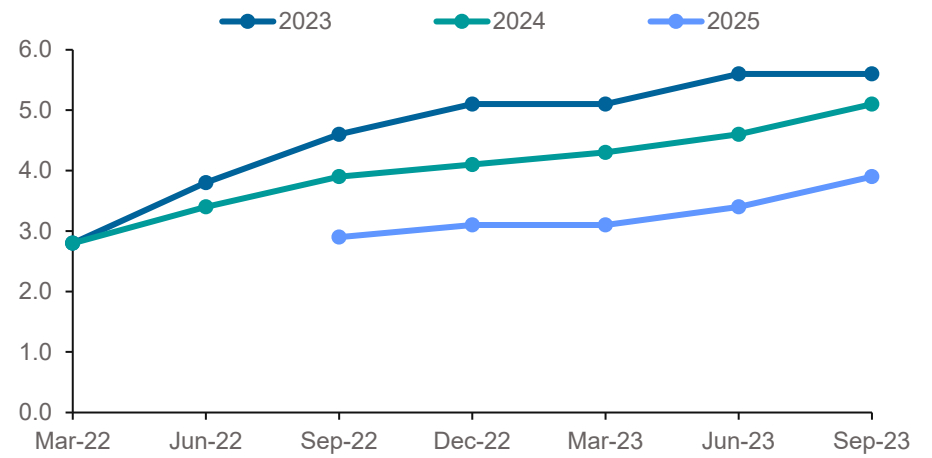
Source: Federal Reserve

The Shifting Mindset at the Fed

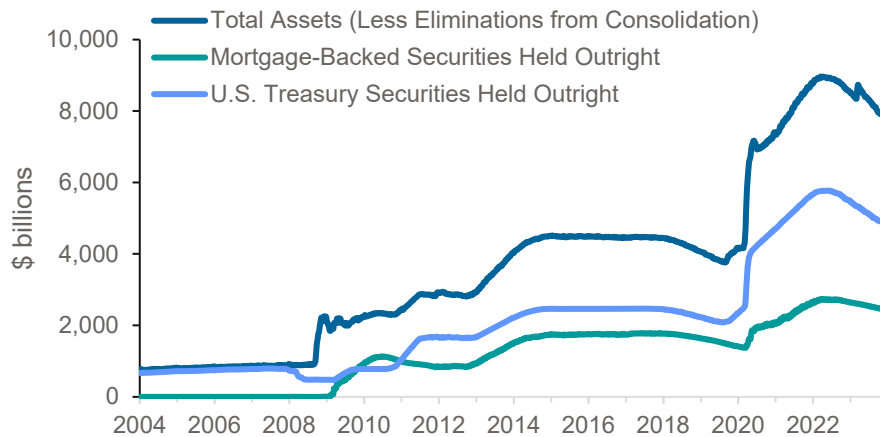
**Fed Projection of Change in Real GDP
By Fed Meeting Date and Projection Year**



**Fed Projection of Fed Funds Rate
By Fed Meeting Date and Projection Year**



Fed Balance Sheet



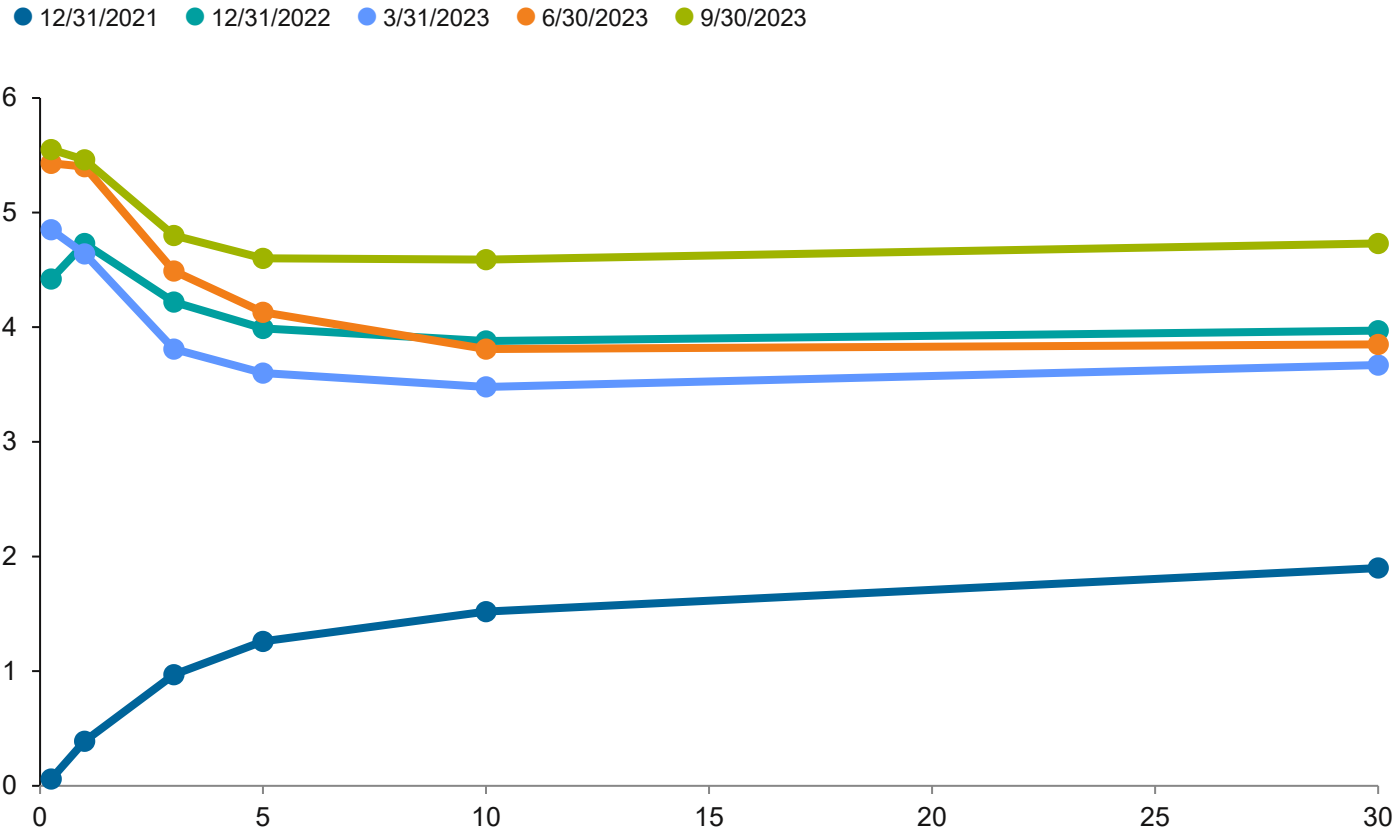
Source: Federal Reserve, Financial Times

- ▶ The big swing in the Fed's GDP projection reflects the surprising nature of economic resilience despite high inflation and rapidly rising interest rates.
- ▶ The Fed has steadily increased projections for the appropriate Fed Funds Rate in response to this economic strength.
 - Inflation has come down from recent highs but remains well above the Fed's long-term 2% target.
- ▶ In addition to raising short-term rates (Federal Funds Rate), the Fed is also unwinding its balance sheet, also known as quantitative tightening (QT) as seen in the chart on the left.
 - QT is one of the reasons longer term rates have risen and could preclude the Fed from needing to keep raising short rates if this slows economic activity.

U.S. Treasury Curve Remains Sharply Inverted

Most since 1980s

U.S. Treasury Yield Curves



Source: Treasury.Gov

Global Fixed Income Performance: 3Q23

Troubled waters overseas

Down on both a hedged and unhedged basis

- Developed market rates rose as long-term inflation and rate expectations in the U.S. moved higher.
- The ECB continued to tighten monetary policy in September, bringing rates to the highest level since launching the euro.

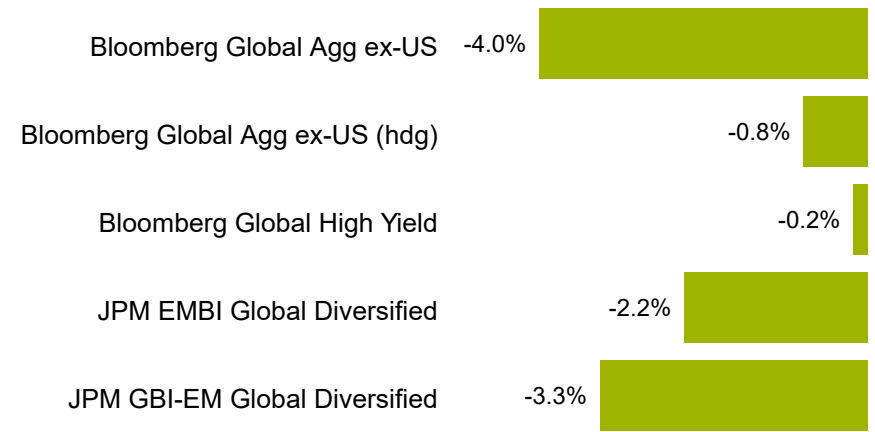
U.S. dollar strength detracted from unhedged returns

- U.S. dollar gained over 3% versus a basket of developed market currencies.

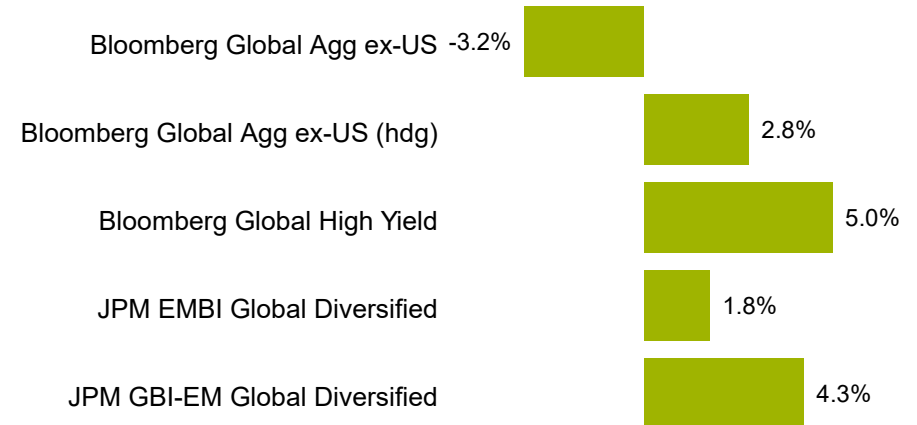
Emerging market debt indices also negative

- EM yield curves broadly steepened, but there are disparate themes within EM with some central banks in Latin America and Eastern Europe having begun monetary easing.
- Heightened geopolitical risk, war, commodity price volatility, and an economic slowdown in China remain significant headwinds to the sector.

Global Fixed Income Returns: Quarter Ended 9/30/23



Global Fixed Income Returns: YTD Ending 9/30/23

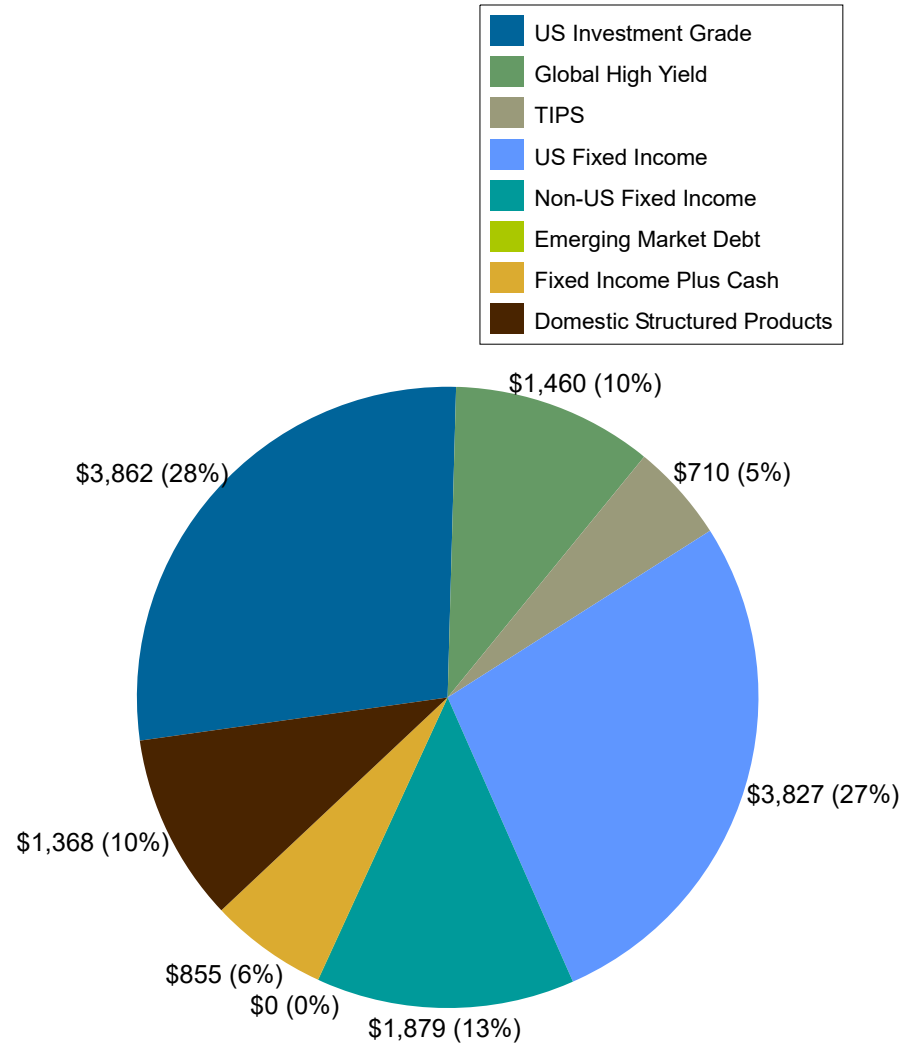


Sources: Bloomberg, JP Morgan

APFC Fixed Income Structure

As of September 30, 2023

- The fixed income portfolio is now managed internally, including allocations within Fixed Income Plus Cash, US Fixed Income Aggregate, US Investment Grade Corporate, Non-US Fixed Income, Structured Products, Emerging Market Debt, Global High Yield and TIPS.
- Small allocations to external managers in liquidation remain in Non-US Fixed Income, US High Yield and Emerging market Debt (~\$4.2M).



Fixed Income Relative to Public Fixed Income Funds

Periods Ended September 30, 2023

- The APFC Total Fixed Income portfolio outperformed its benchmark in both the quarter and trailing year. The portfolio ranked above median for the quarter and top quartile for the year.
- The portfolio outperformed its benchmark over the 3-, 5-, and 7-year periods.
- As a reminder, Total Fixed Income included REITs and Listed Infrastructure up to the end of the second quarter of 2020.

Performance vs Public Fund - Domestic Fixed (Gross)

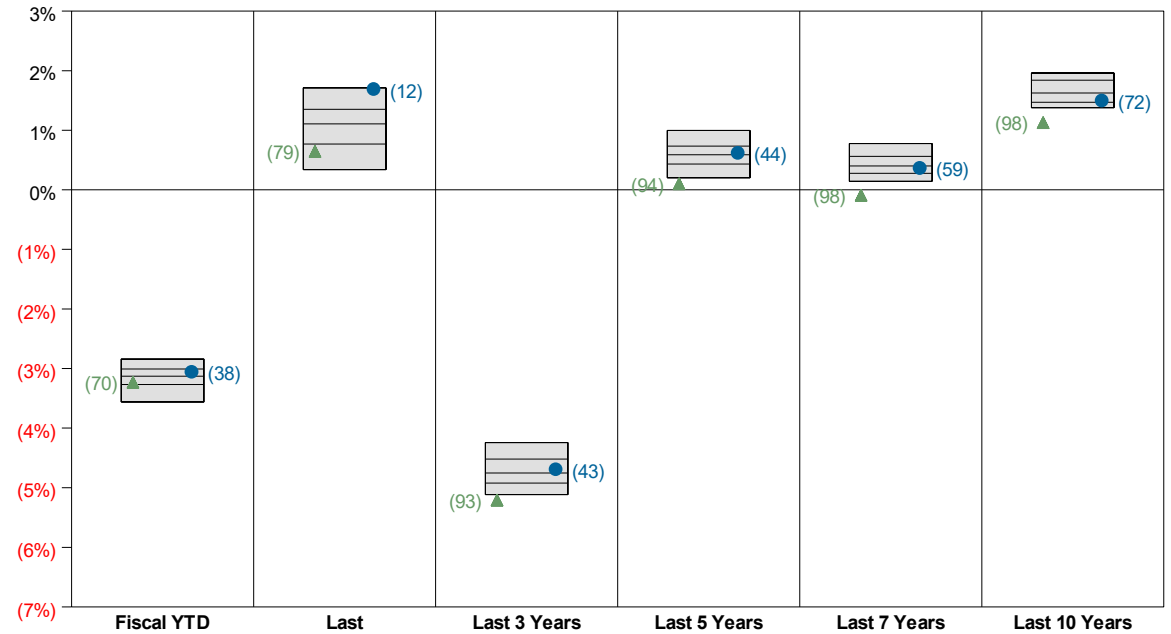


US Fixed Income Aggregate Relative to Core Bond Funds

Periods Ended September 30, 2023

- APFC US Fixed Income Aggregate portfolio outperformed its benchmark in the third quarter and all other standard periods.
- Peer ranks were above median for the quarter and top quartile for the year.
- As a reminder, this strategy is far more benchmark-aware than the typical active manager in the Callan Core Bond peer group.

Performance vs Callan Core Bond Fixed Income (Gross)



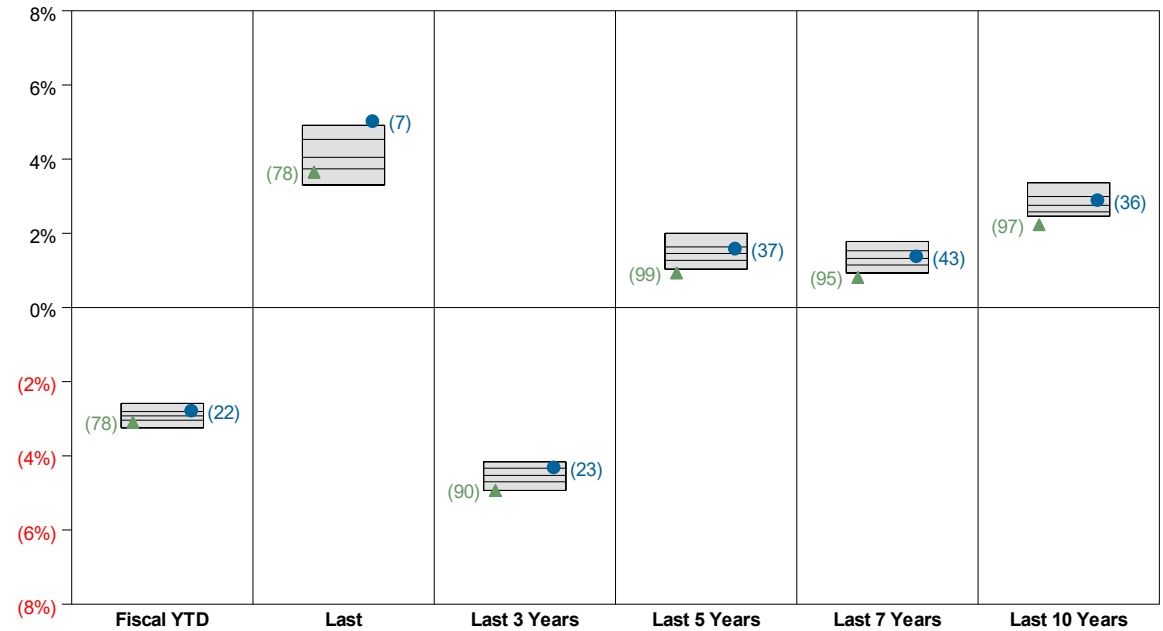
10th Percentile	(2.84)	1.71	(4.24)	1.00	0.78	1.96
25th Percentile	(3.01)	1.35	(4.52)	0.73	0.56	1.84
Median	(3.13)	1.10	(4.75)	0.59	0.40	1.63
75th Percentile	(3.27)	0.77	(4.92)	0.43	0.28	1.47
90th Percentile	(3.56)	0.34	(5.12)	0.20	0.14	1.38
US Fixed Income Aggregate ●	(3.07)	1.68	(4.70)	0.61	0.36	1.49
Blmbg:Aggregate ▲	(3.23)	0.64	(5.21)	0.10	(0.09)	1.13

US Investment Grade Corp Relative to Investment Grade Funds

Periods Ended September 30, 2023

- APFC US Investment Grade Corporate portfolio ended ahead of its benchmark for the quarter and the trailing year.
- The Investment Grade Corporate composite outperformed its benchmark over all other periods.
- Peer group ranks ended most periods above the median.

Performance vs Callan Investment Grade Credit Fixed Inc (Gross)



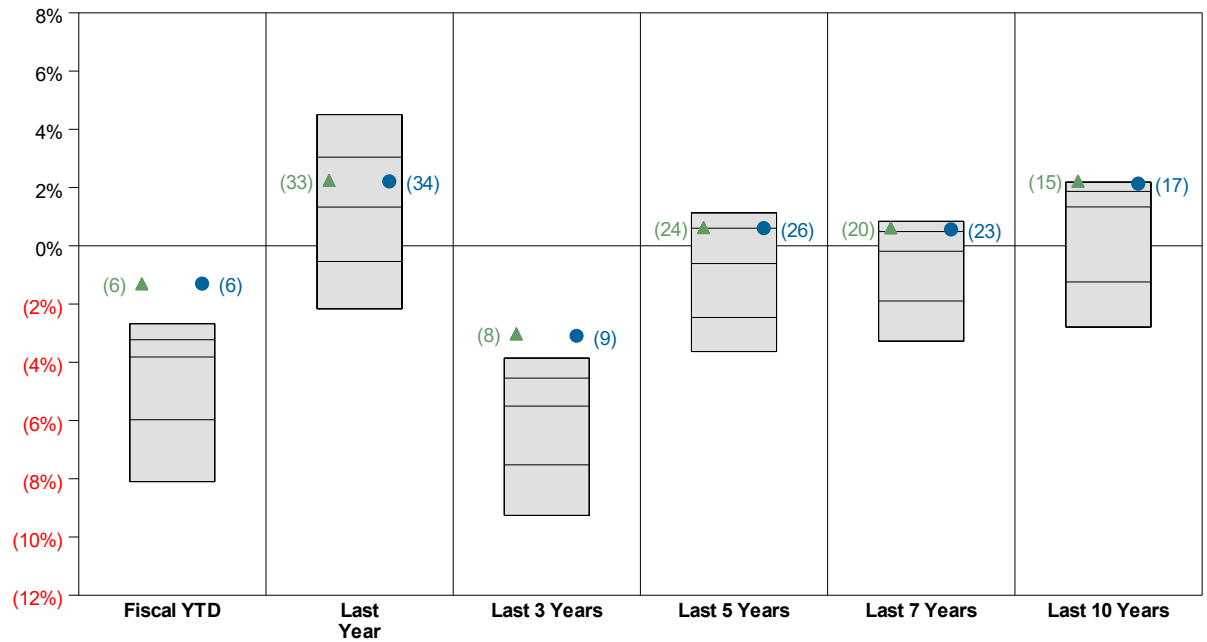
	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	(2.59)	4.91	(4.16)	2.00	1.78	3.36
25th Percentile	(2.81)	4.53	(4.33)	1.64	1.53	2.99
Median	(2.92)	4.05	(4.52)	1.45	1.32	2.75
75th Percentile	(3.04)	3.74	(4.70)	1.27	1.15	2.58
90th Percentile	(3.25)	3.30	(4.93)	1.03	0.93	2.46
US Investment Grade Corporate ●	(2.80)	5.01	(4.33)	1.57	1.36	2.88
Blmbg Corporate ▲	(3.09)	3.65	(4.93)	0.93	0.81	2.23

Non-U.S. Fixed Income Relative to International Fixed Income Funds

Periods Ended September 30, 2023

- The APFC Non-U.S. Fixed Income portfolio finished the quarter and trailing year roughly in line with its benchmark.
- Compared to peers, the portfolio ranked top decile in the third quarter and above median over the trailing year.

Performance vs Public Fund - International Fixed (Gross)



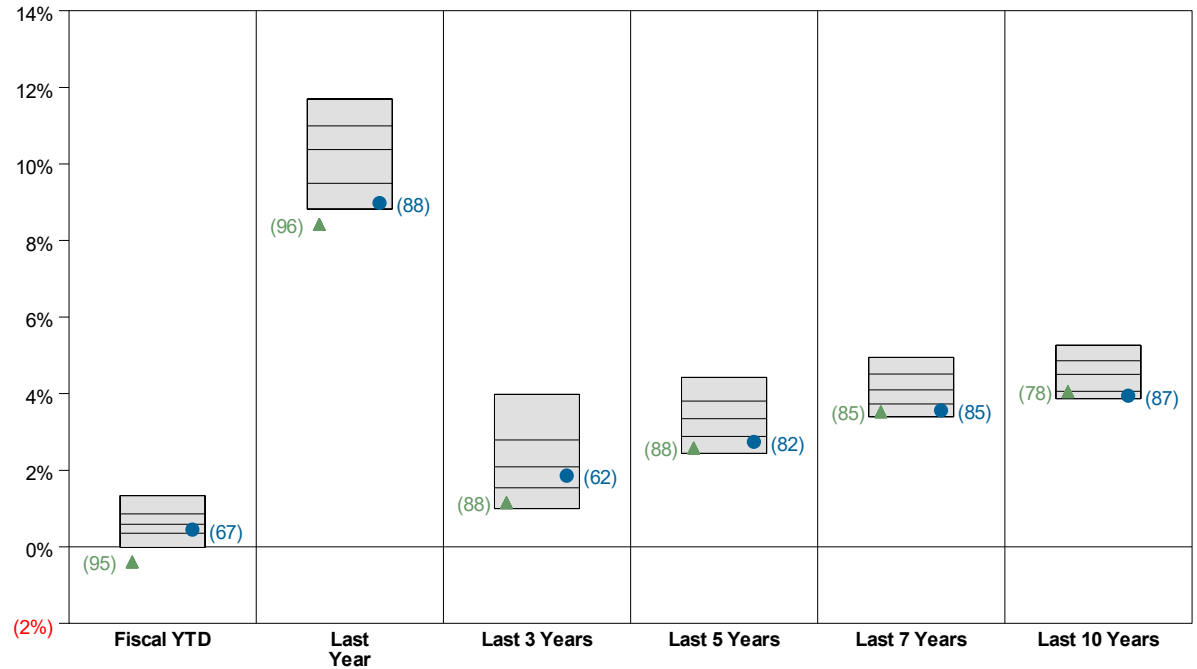
10th Percentile	(2.68)	4.50	(3.86)	1.13	0.84	2.19
25th Percentile	(3.23)	3.04	(4.54)	0.60	0.49	1.87
Median	(3.82)	1.33	(5.51)	(0.61)	(0.19)	1.34
75th Percentile	(5.98)	(0.54)	(7.52)	(2.46)	(1.90)	(1.24)
90th Percentile	(8.10)	(2.16)	(9.26)	(3.63)	(3.27)	(2.79)
Non US Fixed Income ●	(1.32)	2.19	(3.12)	0.58	0.54	2.11
Blmbg Global Treasury ex-US ▲	(1.31)	2.25	(3.02)	0.62	0.62	2.23

US High Yield Relative to High Yield Funds

Periods Ended September 30, 2023

- APFC Global High Yield portfolio ended the quarter and trailing year ahead its benchmark.
- The portfolio ranked below median in all periods.

Performance vs Callan High Yield Fixed Income (Gross)



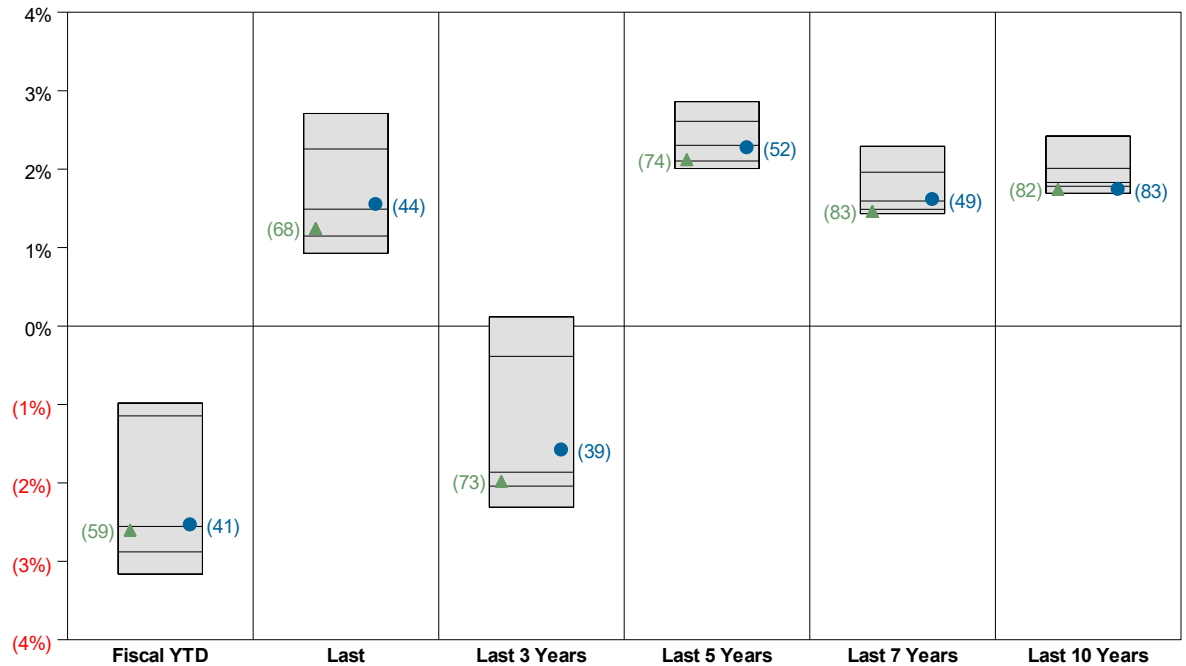
	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	1.34	11.69	3.98	4.43	4.95	5.27
25th Percentile	0.86	10.99	2.79	3.81	4.51	4.86
Median	0.59	10.37	2.09	3.35	4.10	4.50
75th Percentile	0.36	9.49	1.54	2.88	3.73	4.06
90th Percentile	(0.02)	8.82	1.00	2.44	3.39	3.87
US High Yield ●	0.43	8.96	1.84	2.72	3.54	3.93
US High Yield Benchmark ▲	(0.39)	8.42	1.15	2.58	3.53	4.05

TIPS Relative to Callan's Inflation Linked Bonds database

Periods Ended September 30, 2023

- APFC TIPS portfolio outperformed its benchmark for the quarter and year.
- The TIPS composite ranked above median in Callan's Inflation Linked Bonds peer universe for the quarter and year.
- The TIPS allocation includes an In-House TIPS portfolio; APCM was completely liquidated in Q4 2021.

Performance vs Callan Inflation Linked Bonds (Gross)



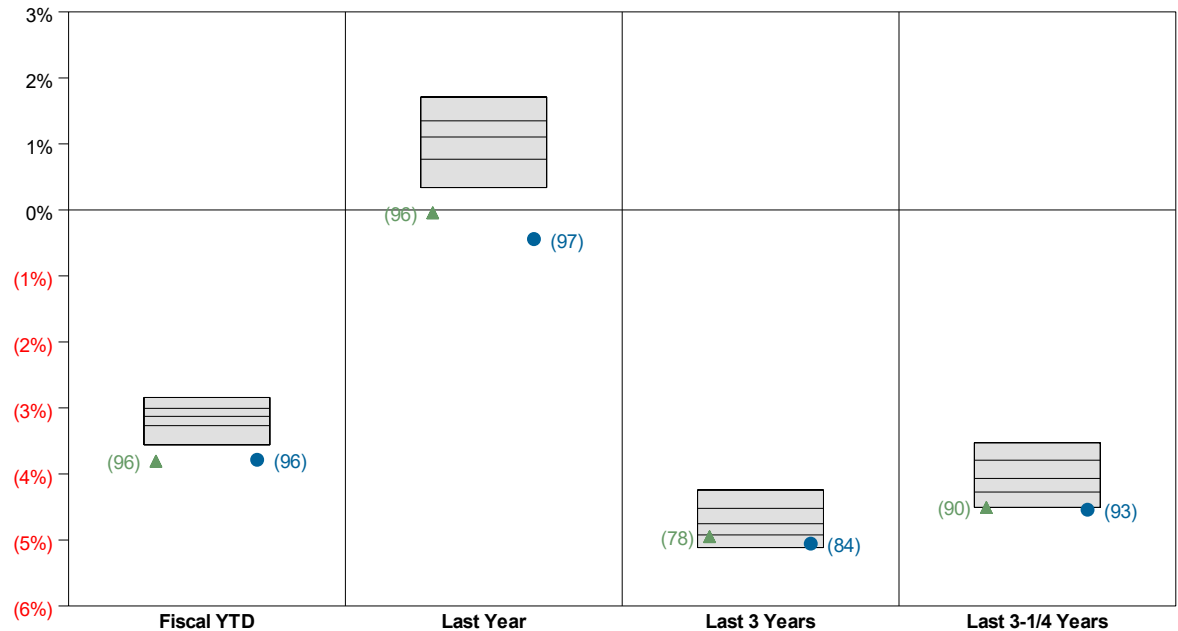
	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	(0.98)	2.71	0.12	2.86	2.29	2.42
25th Percentile	(1.15)	2.26	(0.39)	2.61	1.96	2.01
Median	(2.55)	1.49	(1.86)	2.30	1.59	1.83
75th Percentile	(2.88)	1.15	(2.04)	2.10	1.49	1.78
90th Percentile	(3.16)	0.93	(2.31)	2.01	1.43	1.69
TIPS ●	(2.54)	1.55	(1.58)	2.27	1.61	1.74
Blmbg TIPS ▲	(2.60)	1.25	(1.98)	2.12	1.46	1.74

Domestic Structured Product to Callan's Core Bond database

Periods Ended September 30, 2023

- The Domestic Structured Product portfolio was funded at the end of the second quarter of 2020.
- The portfolio finished roughly in line with its benchmark for the quarter but fell behind for the trailing year.
- The portfolio ranked below the median of the Core Bond Fixed Income peer group for the quarter, though benchmark-relative performance is far more applicable.

Performance vs Callan Core Bond Fixed Income (Gross)



	Fiscal YTD	Last Year	Last 3 Years	Last 3-1/4 Years
10th Percentile	(2.84)	1.71	(4.24)	(3.53)
25th Percentile	(3.01)	1.35	(4.52)	(3.79)
Median	(3.13)	1.10	(4.75)	(4.07)
75th Percentile	(3.27)	0.77	(4.92)	(4.27)
90th Percentile	(3.56)	0.34	(5.12)	(4.51)
Domestic Structured Products ●	(3.80)	(0.45)	(5.07)	(4.55)
BB US Securitized ▲	(3.81)	(0.04)	(4.95)	(4.51)

U.S. Private Real Estate Performance: 3Q23

Income returns positive but appreciation returns negative once again

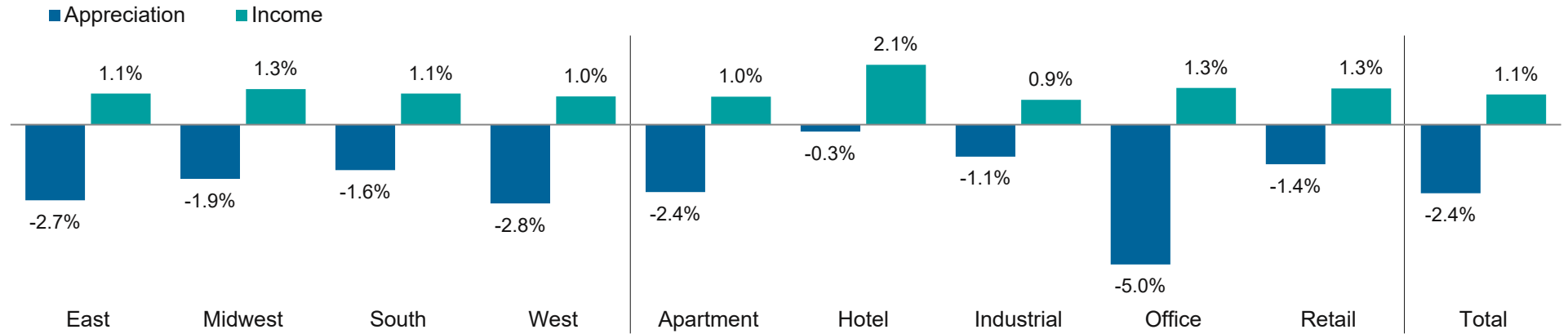
Valuations reflect higher interest rates

- Income returns were positive across sectors and regions.
- All property sectors and regions experienced negative appreciation.
- Valuations are reflective of higher interest rates, which have put upward pressure on capitalization rate and discount rate assumptions.
- Return dispersion by manager within the ODCE Index was due to the composition of underlying portfolios.

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
NCREIF ODCE	-2.1%	-12.9%	6.2%	4.7%	7.2%
Income	0.7%	2.0%	2.8%	3.0%	3.3%
Appreciation	-2.8%	-15.2%	3.3%	1.7%	3.8%
NCREIF Property Index	-1.4%	-8.4%	6.0%	5.3%	7.4%
Income	1.1%	4.1%	4.1%	4.2%	4.6%
Appreciation	-2.4%	-12.1%	1.9%	1.0%	2.7%

Returns are geometrically linked

NCREIF Property Index Quarterly Returns by Region and Property Type

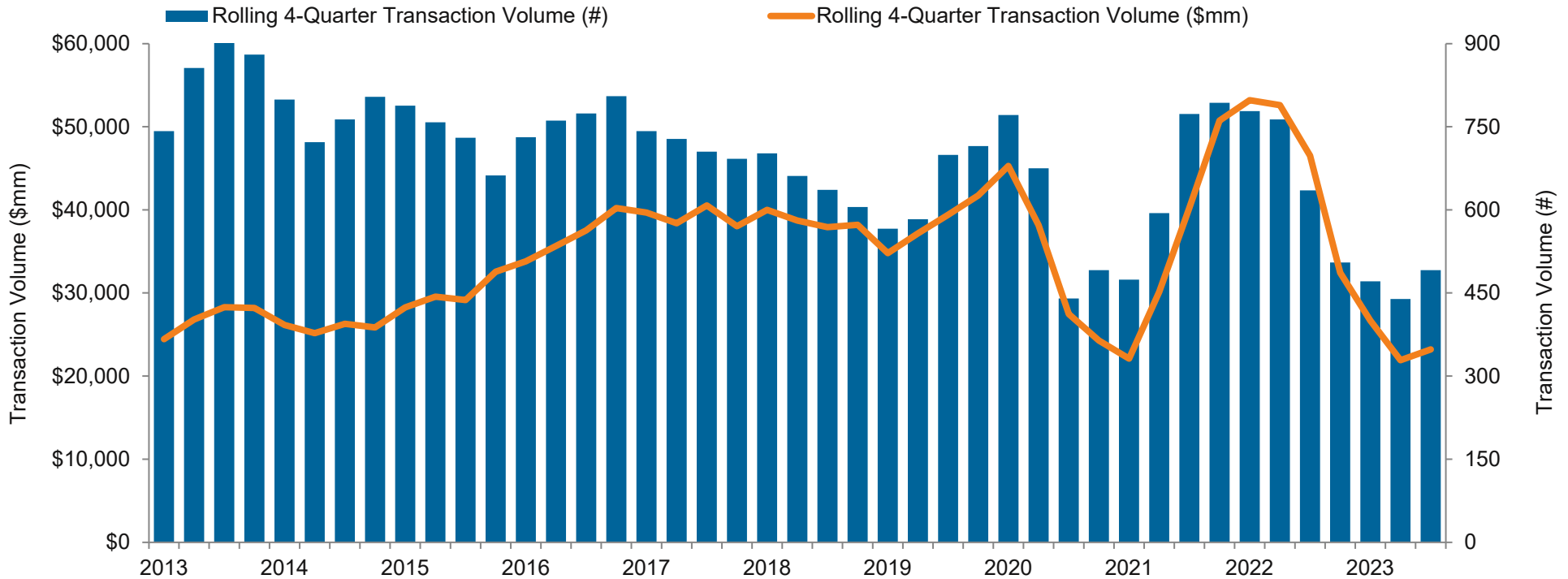


Source: NCREIF, ODCE return is net

U.S. Private Real Estate Market Trends

Pricing and transaction volumes decline through 3Q23

NCREIF Rolling 4-Quarter Transaction Totals Through 9/30/23

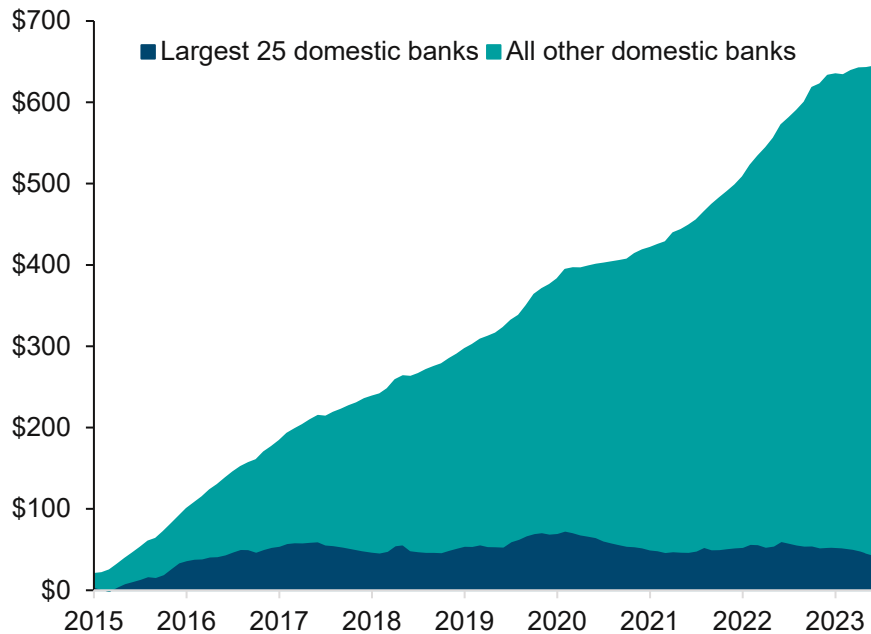


- ▶ Transaction volume continues to flatten on a rolling four-quarter basis and remains well below five-year averages.
- ▶ In 3Q23 transaction volume increased slightly on a quarter-over-quarter basis; however, transaction volume remains significantly lower compared to 3Q22.
- ▶ The rise in interest rates is the driving force behind the slowdown in transactions. A bid-ask spread remains and price discovery continues to occur among market participants.

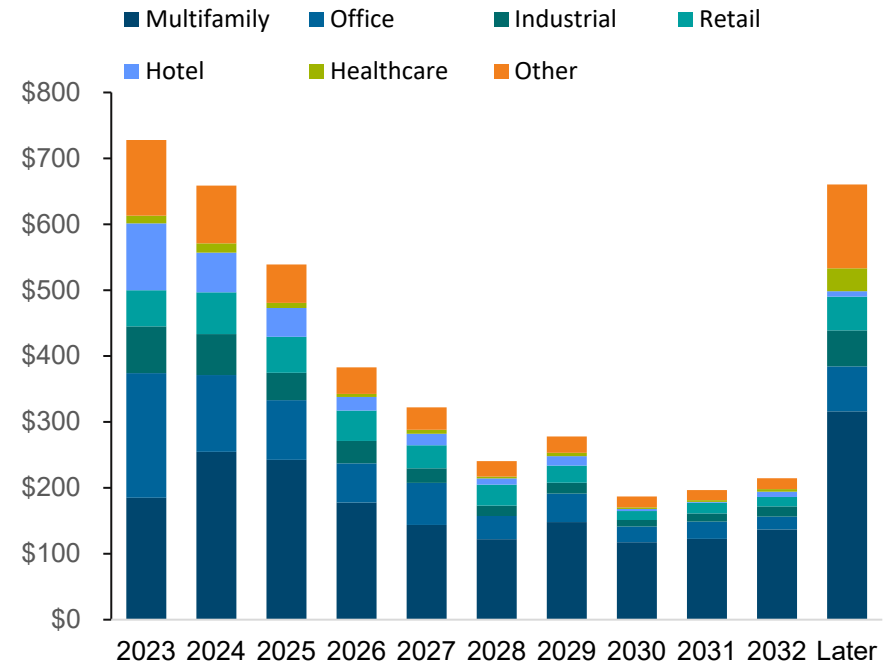
Source: NCREIF

Real Estate Capital Markets

Cumulative Increase in Bank Commercial Real Estate Loan Book (ex. MF), \$billion



Loan Maturities by Sector, \$ bil



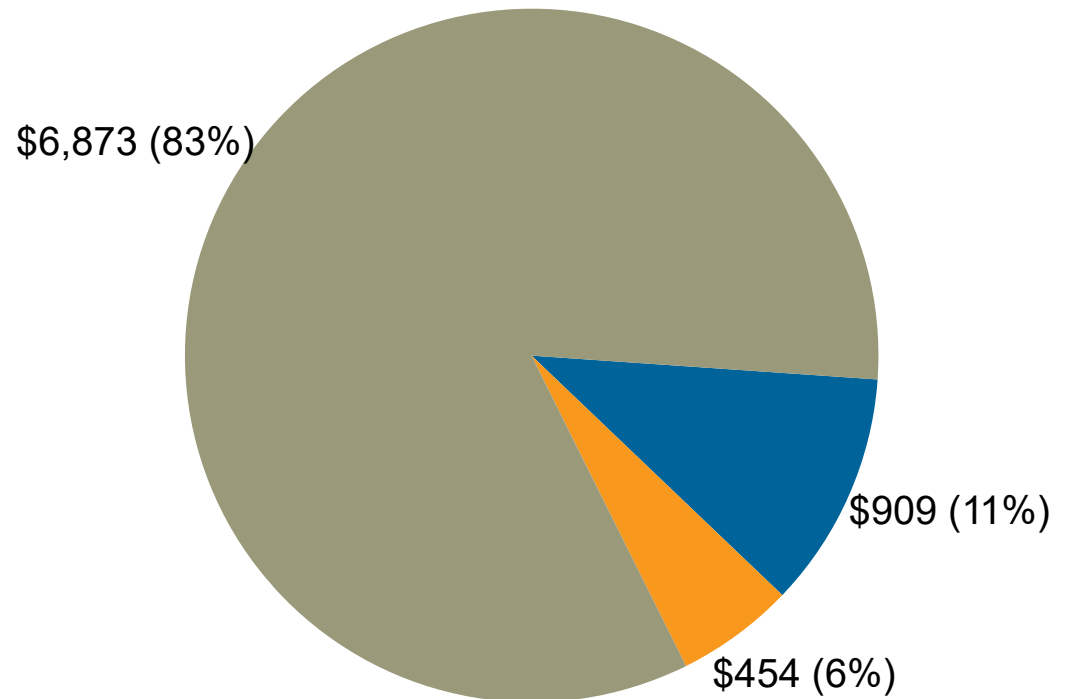
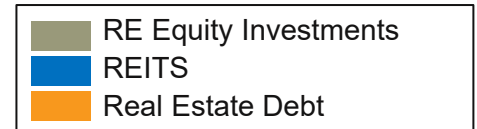
- Smaller and regional banks represent a large and growing share of commercial real estate lending; additional sources of lending are needed, and debt investment opportunities are increasingly attractive.
- A sizeable pool of loans maturing in 2023–2025, particularly office, will put further pressure on lending markets.

Sources: FDIC, JP Morgan Asset Management, MBA, Moody's

APFC Real Estate Structure (1Q LAG)

As of June 30, 2023

- The real estate portfolio is comprised of Real Estate Equity Investments, REITS, and Real Estate Debt Investments.
- Real Estate Debt Funds moved from Real Estate Separate Accounts and Direct Investments, and REITS from Fixed Income Plus.



Real Estate Relative to Callan's Total Real Estate Database (1Q LAG)

Periods Ended June 30, 2023

- APFC Real Estate portfolio performance is shown net of fees for all investments.
- The real estate portfolio outperformed versus its benchmark for the quarter and for the year.
- The portfolio ranked in the top quartile of its Real Estate peer group for the quarter and above median for the trailing year.

Performance vs Public Fund - Real Estate (Gross)



Real Estate Performance (1Q LAG)

Periods Ended June 30, 2023

	Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
RE Equity Investments	0.09	-2.81	6.20	--	--
RE EQ Separate Accts & Direct	0.46	-5.02	4.31	1.54	5.02
RE EQ Funds & Co-Invest	0.57	-1.63	17.24	--	--
RE EQ Development	-4.96	24.71	--	--	--
RE Debt Investments	1.47	10.43	11.40	--	--
RE Debt Separate Accounts	1.37	10.38	9.86	--	--
RE Debt Funds & Co-Invests	1.93	10.66	12.10	--	--
<i>NCREIF Monthly</i>	-1.98	-6.60	6.79	5.90	7.82
REITS	3.23	1.04	10.12	--	--
<i>MSCI:US REIT Index</i>	2.66	-0.09	8.88	4.55	6.39
Real Estate Composite	0.53	-1.66	7.09	4.13	6.35
<i>Real Estate Target</i>	-1.27	-5.31	7.38	6.65	8.20

- APFC's Real Estate Equity, Debt, and REITS outperformed their respective benchmarks for the quarter and over the trailing year.
- Overall, the Real Estate Composite outperformed its custom benchmark for the quarter and year.

Private Credit Fundraising Landscape

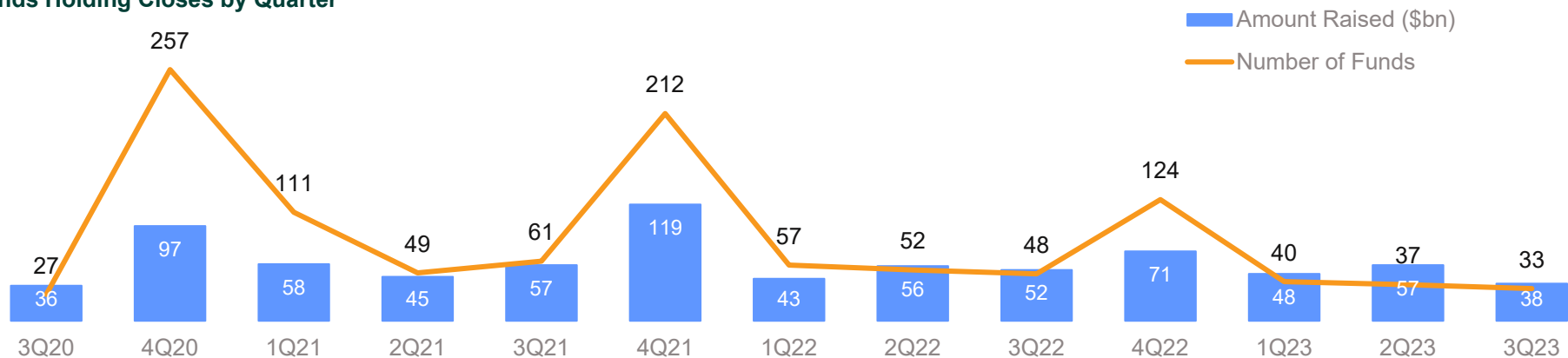
Fundraising activity remains strong through 3Q23

- Private credit remained in high demand across Callan's investor base, and a number of large pensions are looking to take up their existing private credit allocations from 2%–3% to 5%–10%.
- While we always work to build out diversified client portfolios, we think there is particularly interesting relative value in upper middle market sponsor-backed lending, asset-based lending, and opportunistic/special situations.
- We are seeing an uptick in stress for some individual names in direct lending portfolios due, in many cases, to a combination of input cost inflation and increased interest expense burden.

Largest Funds Holding Closes in 3Q23

Name	Amount (\$millions)	Strategy
Blackstone Green Private Credit Fund III	\$7,100	Infrastructure Debt
Hayfin Direct Lending Fund IV	\$6,605	Direct Lending
Antares Senior Loan Fund II	\$6,000	Direct Lending
Davidson Kempner Opportunities Fund VI	\$3,000	Distressed Debt

Funds Holding Closes by Quarter

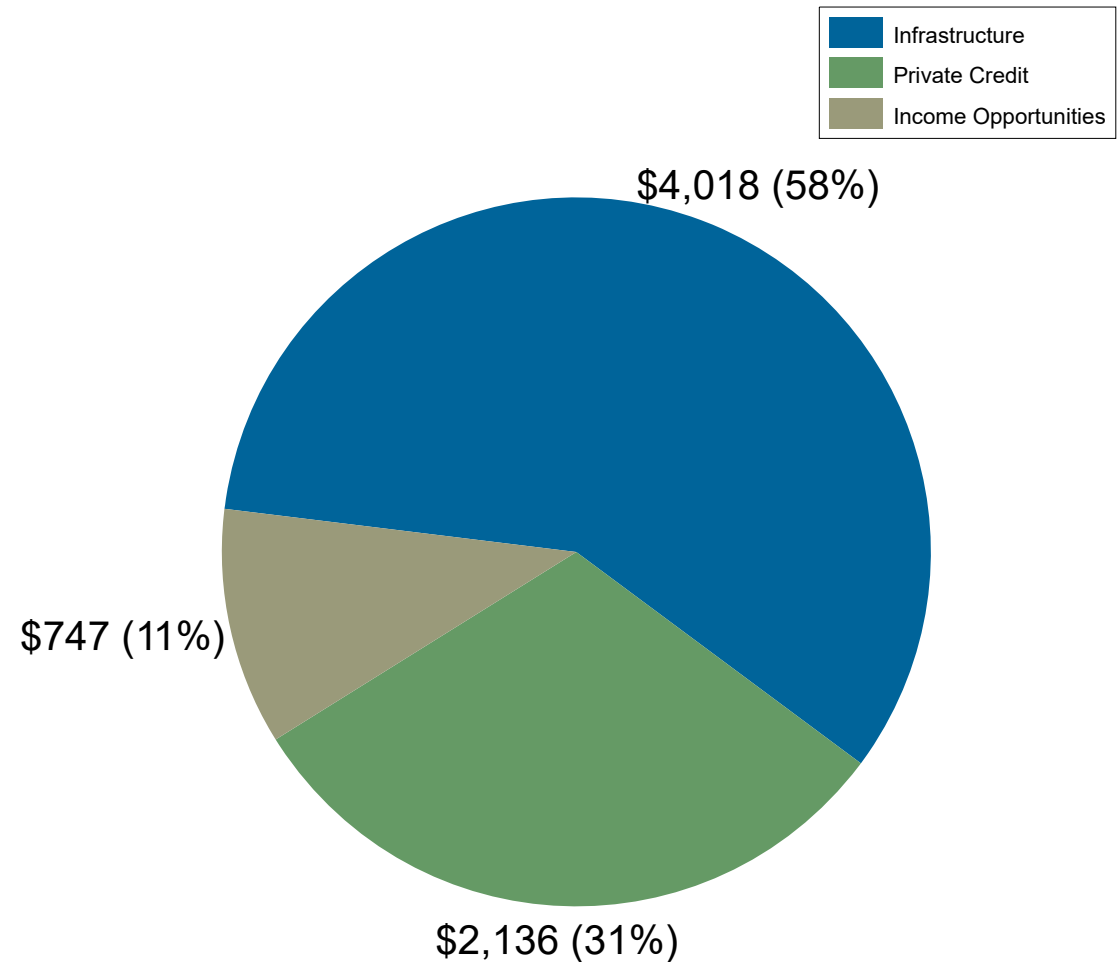


Source: Pitchbook

APFC Private Income Structure (2Q LAG)

As of June 30, 2023

- 58% of the structure is invested in infrastructure funds, which includes a diversified portfolio of infrastructure, energy, and generation assets. Listed Infrastructure makes up just 8.0% of this allocation.
- 31% of the structure was invested in private credit mandates including mezzanine debt, opportunistic credit, and direct lending strategies.
- 11% of the structure was invested in income opportunities including structured credit, alternative credit, AH4R2, APFC ADAC and timber.



Private Income Performance (1Q LAG)

Periods Ended June 30, 2023

	Quarter	Last Year	Last 3 Years	Last 5 Years
Private Income	0.90	6.85	12.20	9.28
Private Income Custom	2.04	8.83	13.11	8.75
Infrastructure	0.31	6.98	16.09	11.57
Cambridge Global Pvt Infrastructure	1.54	8.24	13.12	9.15
Private Credit	2.05	9.12	11.55	8.03
Cliffwater Direct Lending TR	2.81	9.70	13.07	8.07
Income Opportunities	0.78	0.32	5.05	5.40
Private Income Custom	2.04	8.83	13.11	8.75

- APFC's Private Income composite underperformed the benchmark (60% Cambridge Global Private Infra and 40% Cliffwater Direct Lending TR) for the quarter and over the trailing year.
- Private Income sub-strategy, Infrastructure outperformed its benchmark for the quarter but underperformed for the trailing year. Private Credit and Income Opportunities underperformed their respective custom benchmarks over the trailing quarter and year.

Hedge Fund Performance: 3Q23

Equities sell off and credit indices produce mixed results for the quarter

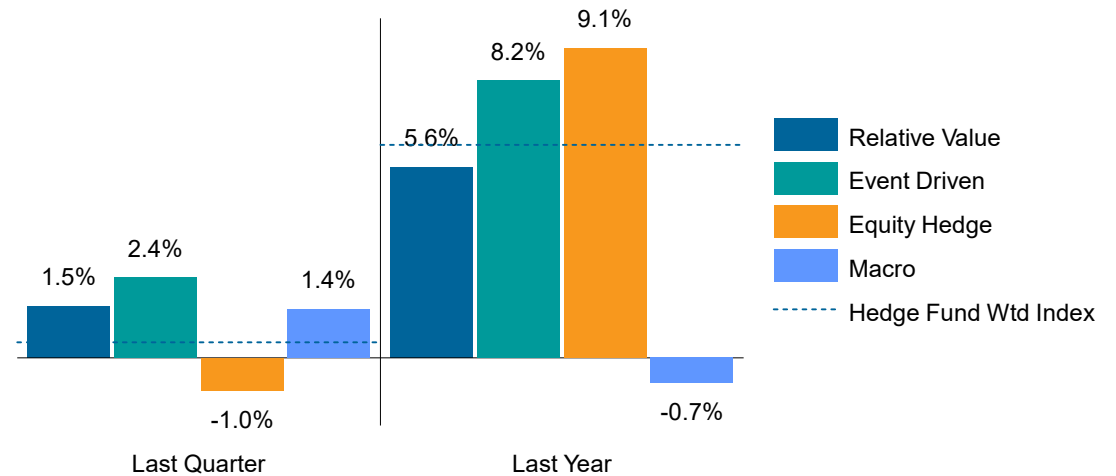
Solid quarter for most strategies

- ▶ Equity hedge strategies ended lower, as those focused on biotech, technology, and real estate struggled.
- ▶ Macro strategies continued to claw back performance, as they profited from a steeper yield curve and rising sovereign bond yields.
- ▶ Event-driven strategies had another solid quarter, as special situation equities drove performance, while credit positions were muted.
- ▶ Relative value gains were driven by strong yield opportunities within short-dated convertibles and strong new issuance.

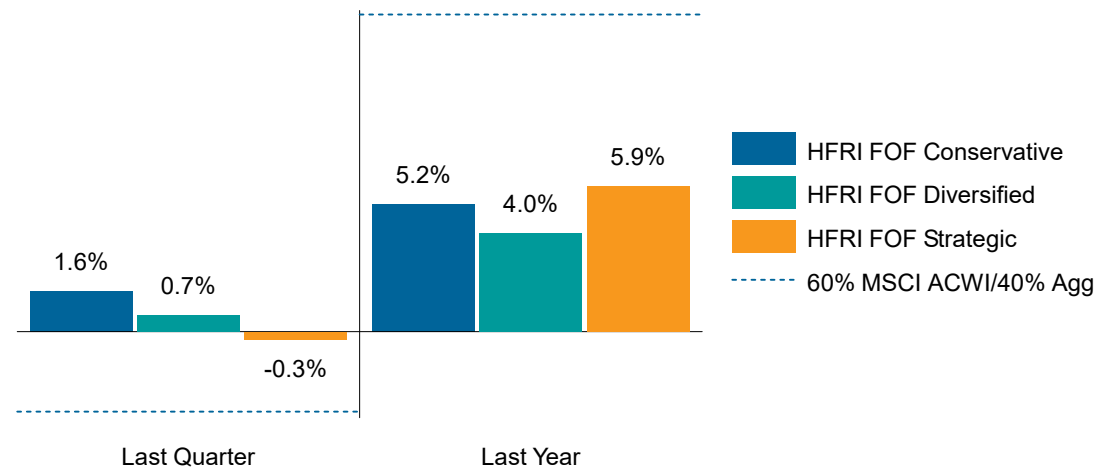
FOFs ended on a strong note

- ▶ FOFs with less exposure to equity hedge strategies had a strong quarter.
- ▶ Those FOFs with more equity beta struggled to stay in positive territory for the quarter.

HFRI Strategy Index Returns vs. Broad Hedge Fund Universe as of 9/30/23



HFRI Fund-of-Funds Returns vs. 60% Stock/40% Bond Mix as of 9/30/23



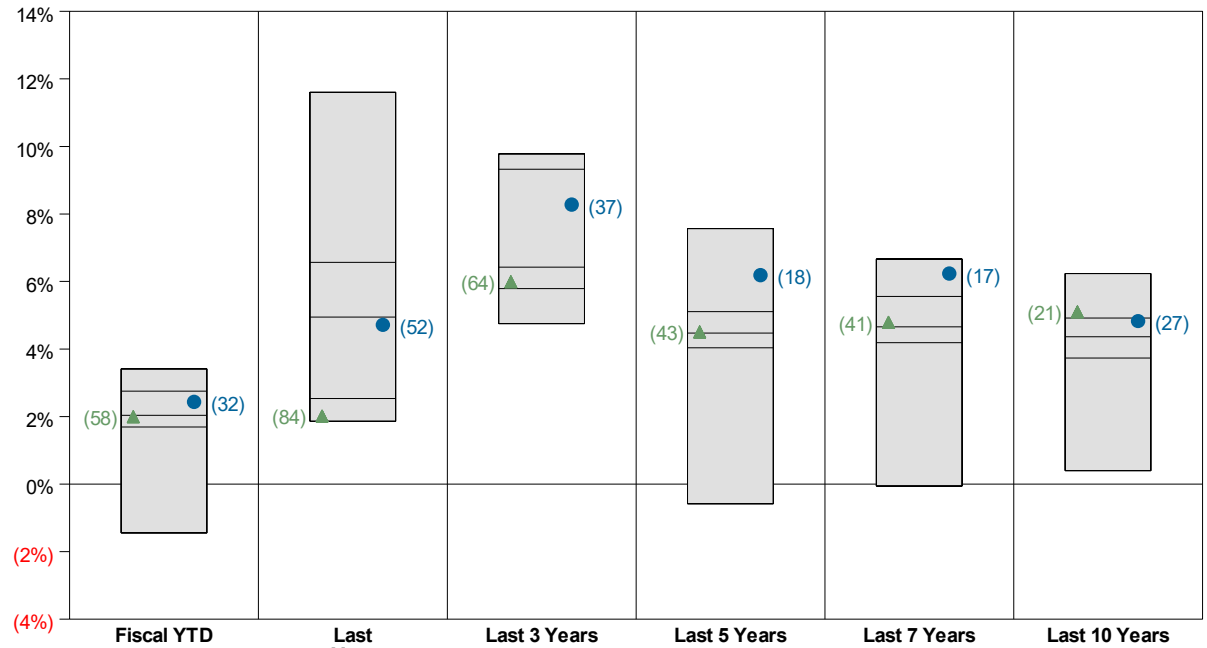
Source: Hedge Fund Research (www.hedgefundresearch.com)

Absolute Return Portfolio Relative to HFOF Universe

Periods Ended September 30, 2023

- The Absolute Return portfolio outperformed its benchmark and peer group median in the third quarter of the calendar year.
- The portfolio outperformed its benchmark, but modestly trailed the peer group median for the trailing year.
- Over most periods, the Absolute Return portfolio ranked above the median of its peer group.

Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)



10th Percentile	3.41	11.60	9.78	7.57	6.67	6.24
25th Percentile	2.75	6.57	9.32	5.11	5.56	4.92
Median	2.04	4.95	6.43	4.47	4.66	4.37
75th Percentile	1.69	2.53	5.79	4.04	4.19	3.73
90th Percentile	(1.45)	1.86	4.75	(0.59)	(0.05)	0.40
Absolute Return ●	2.42	4.70	8.26	6.17	6.21	4.81
Absolute Return Benchmark ▲	2.00	2.02	5.99	4.51	4.79	5.10

Private Equity Overview

Fundraising remains steady

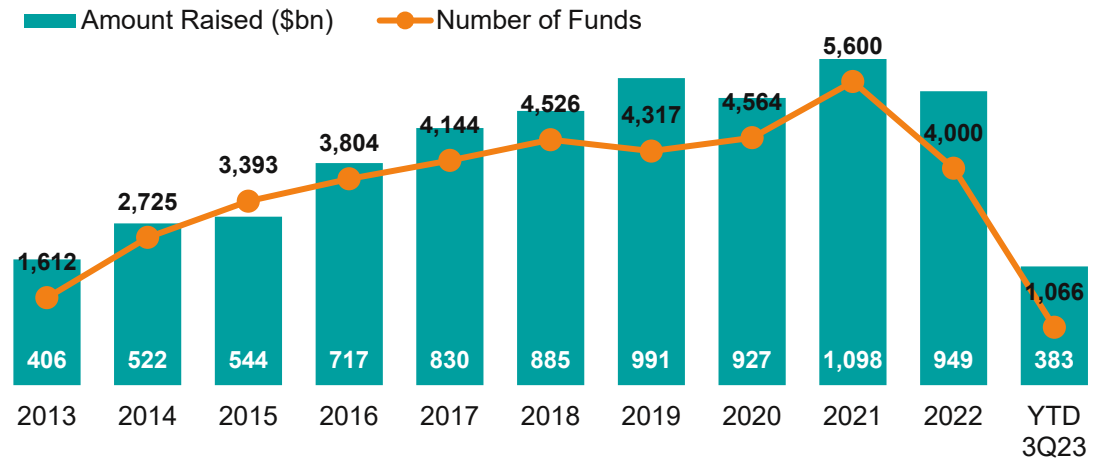
Fundraising varies by strategy type

- 2023 will be another down year for fundraising after a frenzied peak in the last two years.
- 3Q23 is showing some signs of improvement as dollar volumes closely match 2Q, rather than dropping further. However, the number of GPs funded continues to fall.
- LPs are being selective as portfolio consolidations continue. The current period offers LPs a good opportunity to add previously hard-to-access top-tier GPs.
- GPs are reticent to come to market given commitment scarcity, so only the highly confident and those that must be are in the market.

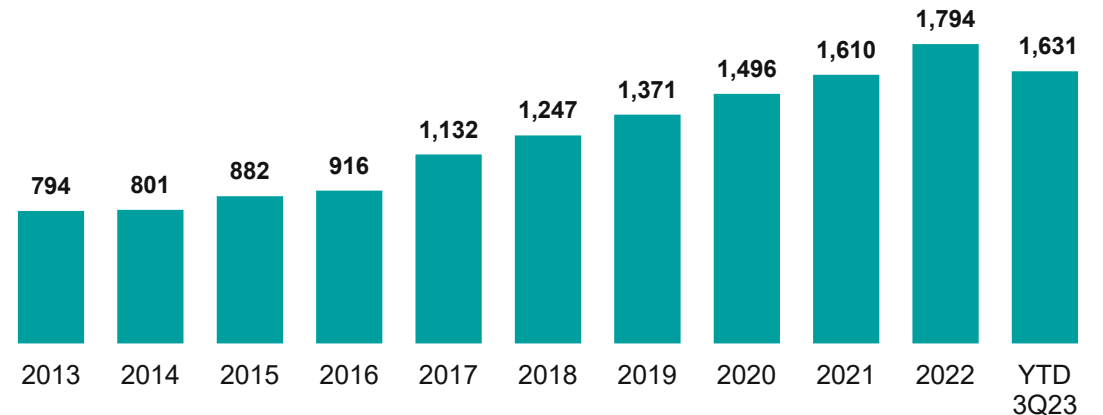
Dry powder is declining

- Level of dry powder influenced by two factors: fundraising and capital deployment.
- Uncalled commitments are declining from surfeit levels peaking in 2022, which may ultimately provide a healthier environment for new investments.

Funds Holding Final Closes by Year



Dry Powder (\$billions)



Source: PitchBook

Private Equity Key Themes

Capital deployment continues to decline

- The bar charts represent all venture and buyout investments combined.
- New investments are on pace to reach the \$1.1 to \$1.2 billion levels that were normal in the 2015 to 2020 period.

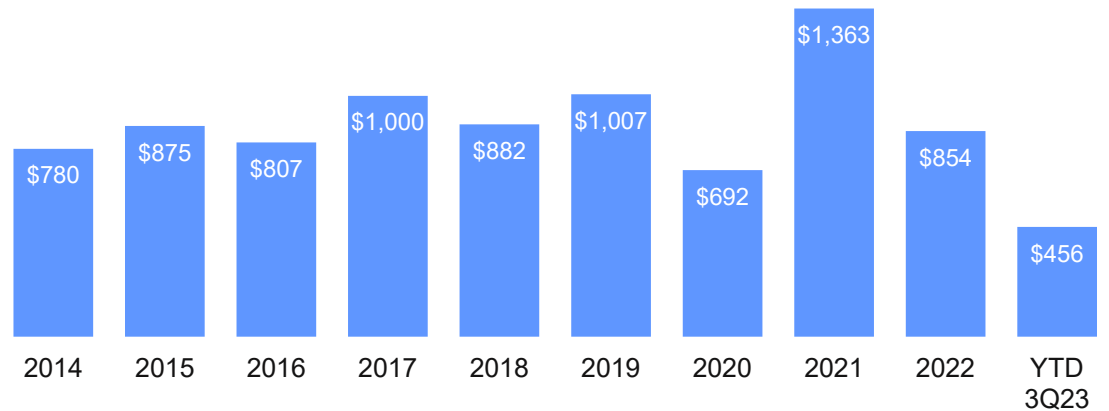
Exits slow but are an area of focus

- The bar charts represent all venture and buyout exits combined (both private sales and IPOs).
- Private equity exits appear to be tracking to just over \$600 billion, which is modest compared to the last 10 years but still demonstrates that M&A markets are functioning.
- GPs keenly feel LPs' desire for liquidity and are focused on positioning companies for exits in the new capital markets regime.
- LP capital calls may persist in outpacing distributions in the near term.

Private Equity Deal Activity (\$bn)



Private Equity Exits (\$bn)

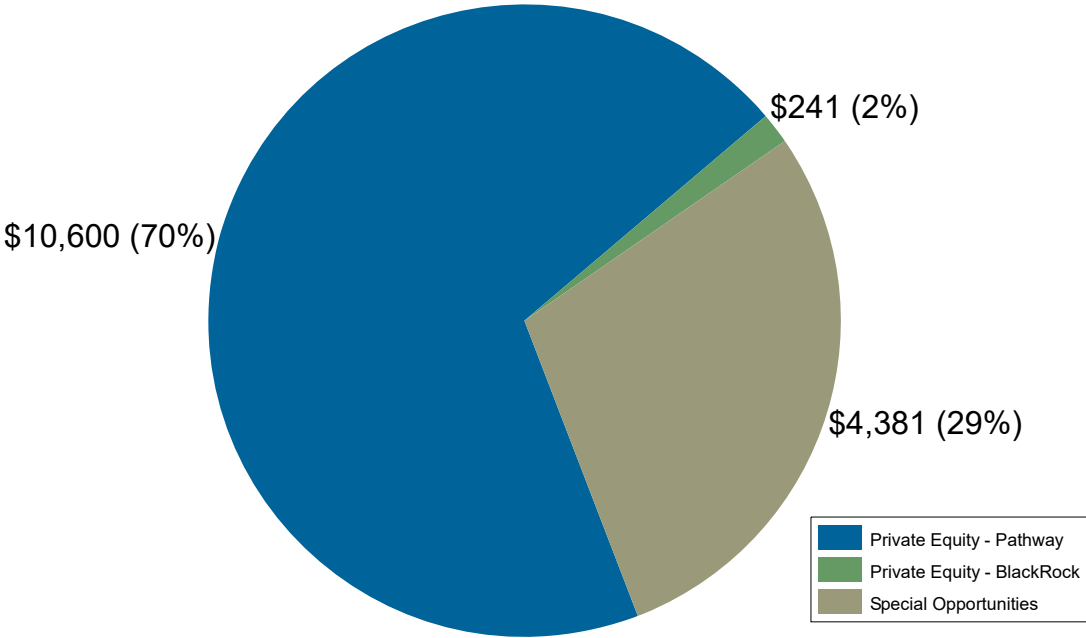


Source: PitchBook

APFC Private Equity and Special Opportunities Structure (1Q LAG)

As of June 30, 2023

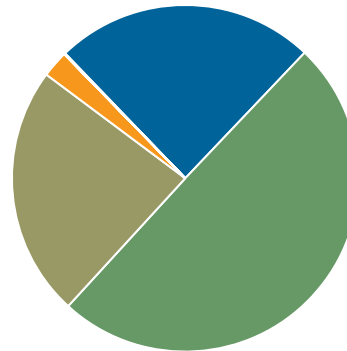
- 71% of the structure was invested in private equity.
- 29% of the structure was invested in special opportunities.



APFC Private Equity and Special Opportunities Structure (1Q LAG)

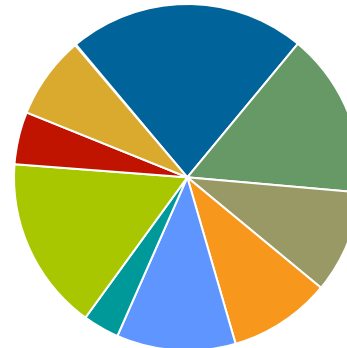
As of June 30, 2023

- APFC's Total Private Equity Portfolio continued to be well-diversified by strategy, geography, and industry.
- Buyouts, Venture Capital and Special Situations remained the largest strategy allocations.
- The largest non-U.S. geographic exposure was Europe. The largest industry exposure was in Technology.



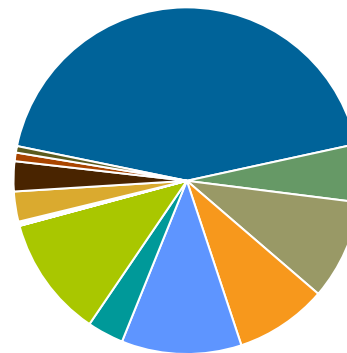
Strategy Mix by Net Asset Value

Venture Capital	24.32%
Buyout	49.66%
Special Situations	23.38%
Distressed for Control	2.49%
Secondary Interest	0.03%
Mezzanine	0.12%



Geographic Mix by Net Asset Value

West/Pacific Northwest	22.12%
North Atlantic	15.45%
Mid-West	9.58%
Southeast	9.50%
Southwest/Rockies	11.14%
Mid-Atlantic	3.42%
Europe	16.15%
Asia/Pacific	4.90%
Other	7.74%



Industry Mix by Net Asset Value

Technology	43.41%
Communication Services	5.37%
Consumer Discretionary	9.34%
Financial	8.60%
Health Care	11.18%
Energy	3.40%
Industrials	11.26%
Utilities	0.37%
Consumer Staples	2.79%
Materials	2.81%
Other/Misc	0.85%
Real Estate	0.63%

APFC Private Equity and Special Opportunities Performance (1Q LAG)

Periods Ended June 30, 2023

	Last Quarter	FYTD	Last Year	Last 3 Years	Last 5 Years
Private Equity and Special Opportunities	1.75	1.75	3.18	20.09	17.26
Cambridge Private Equity	1.60	1.60	2.78	19.04	15.18

- APFC's Private Equity and Special Opportunities composite outperformed the Cambridge Private Equity benchmark over all performance periods.
- In the last reported quarter, Private Equity was up 1.5% and Special Opportunities was up 2.4%.

Total Fund Cash

Periods Ended September 30, 2023

	Quarter	Last Year	Last 3 Years	Last 5 Years
TOTAL FUND CASH	1.30	13.87	3.23	--
3 Month T-Bill	1.31	4.47	1.70	1.72
APF Operating Cash	1.20	4.35	1.90	--
APF Internal Cash	1.35	4.46	1.65	--

- APFC's cash accounts were within expectations relative to the 3-month Treasury Bill Index.
- Funded in the first quarter of 2022 and included in the Total Fund Cash composite, the allocation to Gold was liquidated during the second quarter of 2023 (approximately \$320M).

Closing Remarks

- Total Fund ended the third quarter of 2023 with \$77.4 billion in assets down from \$78.0B in the prior quarter. The trailing quarter performance placed the Total Fund in the top decile relative to other large public funds and comfortably above median relative to a large endowments/foundations peer group.
- For the quarter, the Total Fund outperformed the Performance and Passive Index Benchmarks but trailed the CPI + 5% Benchmark. Over the long-term, the Fund outperformed and was ahead of all three targets.
- The Public Equity portfolio outperformed its benchmark for the quarter but fell short over the trailing one-year period. Domestic, International and Global Equity composites bested their respective benchmarks in the quarter. Over the trailing year, the global equity composite outperformed its benchmark while Domestic and International Equity lagged their respective benchmarks.
- The Fixed Income portfolio outperformed its benchmark in the latest quarter and over the trailing year. In the quarter, sub strategies: US Fixed Income Aggregate, US Investment Grade Corporate, US High Yield, and Structured Products outperformed their respective benchmarks, while Non-US Fixed Income performed roughly in line with its benchmark.
- In the Alternatives portfolio, Private Equity & Special Opportunities, Real Estate and Absolute Return outperformed in the third quarter; Private Income underperformed its benchmark.
- Prudent asset allocation with appropriate levels of diversification and a long-term perspective remain Callan's recommended course.

Callan

Callan Update

Published Research Highlights from 3Q23

**Office-to-Residential
Conversions: Vast Opportunity
or Unfeasible Challenge?**



**Four-Part Series: The ESG Rule
Explained**



**Callan Discount Rate Reporter:
Regular Update on Corporate
DB Plans**



**How Your Public DB Plan's
Returns Compare: Quarterly
Update**



Recent Blog Posts

**An Investor's
Guide to the
Nasdaq-100's
Special
Rebalance**

Mark Wood

**A Deeper Dive
Into the Tradeoff
Between Return
and Risk**

Kevin Machiz

**S&P Global
Moves Away
from Numeric
ESG Credit
Indicators**

Kristin Bradbury

Additional Reading

Alternatives Focus quarterly newsletter

Active vs. Passive quarterly charts

Capital Markets Review quarterly newsletter

Monthly Updates to the Periodic Table

Market Pulse Flipbook quarterly markets update

Real Estate Indicators market outlook

Callan Institute Events

Upcoming conferences, workshops, and webinars

Callan College

Intro to Investments—Learn the Fundamentals

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with basic investment theory, terminology, and practices.

- November 1–2, 2023 – Atlanta, Georgia
- March 5–7, 2024 – Virtual Session via Zoom

Intro to Alternatives

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with alternative investments like private equity, hedge funds, and real estate and how they can play a key role in any portfolio. You will learn about the importance of allocations to alternatives and how to consider integrating, evaluating, and monitoring them.

- February 21–22, 2024 – Virtual Session via Zoom

Please visit our website at callan.com/events-education as we add dates to our 2023 and 2024 calendar!

Mark Your Calendar

2024 National Conference

April 8–10, 2024 – San Francisco

2024 Regional Workshops

June 25, 2024 – Atlanta

June 27, 2024 – San Francisco

Watch your email for further details and an invitation.

Webinars & Research Café Sessions

Research Café: Conversion of Commercial Real Estate

December 6, 2023 – Virtual Session via Zoom

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SUBJECT: Executive Director Evaluation ACTION: X
 Process Governance Committee
 Recommendation to the Full Board

DATE: December 13, 2023 INFORMATION:

The Department of Law has advised the Alaska Permanent Fund Corporation that the personnel file of the Executive Director, including the Board’s evaluation records, is not confidential under state law and is subject to disclosure in a public records request. The long-term fix to this problem is to amend state law to render confidential the personnel records of the Executive Director.

However until that time, to allow the Board to provide the Executive Director with candid feedback that can help improve the Executive Director’s performance, which is clearly in the best interest of the permanent fund, the Board could consider a modification of the evaluation process that will eliminate the use of publicly available records that could be harmful to the reputation or character of the Executive Director if released publicly. This would require changes to the current Governance Charters and the Governance Committee is the body charged with recommending such changes to the full Board for consideration.

The Governance Committee met on November 29 and unanimously approved sending the proposed changes to the full board for consideration. Attached for the board’s consideration are the proposed changes that would transition the evaluation process to an oral evaluation. It bears noting that simplifying the evaluation process was also recommended to the Governance Committee last April by Funston Advisory Services.

ALASKA PERMANENT FUND
CORPORATION

BOARD OF TRUSTEES CHARTERS
AND GOVERNANCE POLICIES

| DECEMBER ?~~SEPTEMBER 24TH~~, 20230

BOARD CHARTERS AND GOVERNANCE POLICIES

Table of Contents

Charters

Charter of the Board of Trustees	1
Charter of the Audit Committee of the Board	5
Charter of the Governance Committee of the Board	8
Charter of the Chair of the Board	10
Charter of the Vice Chair of the Board	11
Charter of the Investment Advisory Group	12
Charter of the Executive Director	14

Policies

Board Policy Development Process	18
Strategic Planning and Budgeting Policy	20
Monitoring and Reporting Policy	23
Trustee Education Policy	26
Board Communications Policy.....	30
Executive Director Performance Evaluation Policy	33
Board Standards	35

ALASKA PERMANENT FUND CORPORATION

Charter of the Board of Trustees

INTRODUCTION

1. The State of Alaska has established the Alaska Permanent Fund Corporation (APFC) to manage and invest the assets of the Alaska Permanent Fund and other funds designated by law (Fund). [AS 37.13.040]
2. The Board of Trustees of the APFC (Board) consists of six members appointed by the Governor. Two of the members are required by law to be heads of principal departments of state government, one of whom shall be the commissioner of revenue. Four members shall be appointed by the Governor from the public with recognized competence and wide experience in finance, investments, or other business management-related fields. [AS 37.13.050]

DUTIES AND RESPONSIBILITIES

Governance

3. The Board will establish a committee structure that it considers necessary and appropriate.
4. The Board will establish charters setting out the duties and responsibilities of:
 - (a) The Board of Trustees;
 - (b) The Chair and Vice Chair of the Board;
 - (c) The Committees of the Board;
 - (d) The Investment Advisory Group; and
 - (e) The Executive Director.
5. The Board will establish governance policies as necessary, including bylaws and other Board standards, to ensure effective operation of the affairs of the Board.
6. The Board will establish a process for the evaluation of the performance of the Executive Director and will conduct such performance evaluation annually.

Investments

7. In managing and investing the assets of the Fund, the Board is required to exercise the judgment and care under the circumstances then prevailing that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the designation and management of large investments entrusted to it, not in regard to speculation, but in regard to the permanent disposition of funds, considering preservation of the purchasing power of the Fund over time while

maximizing the expected total return from both income and the appreciation of capital. [AS 37.13.120]

8. The Board will establish an investment policy which shall include **the Board's overall** investment philosophy, as well as other related policies as necessary for the effective management and investment of the assets of the Fund.
9. The Board will establish a framework and process for the management of the investment risk of the Fund, which shall be set out in the investment policy.
10. At least every five years the Board will review the investment policy and approve the long-term or strategic asset allocation of the Fund in terms of the proportion of total assets to be invested within a minimum-maximum range at any point in time.

Finance, Accounting and Audit

11. The Board will ensure that appropriate financial and operational controls and procedures are in place to safeguard the assets of the Fund.
12. The Board will ensure that audits of these controls and procedures are conducted from time to time by an independent external auditor in order to ensure that the assets are properly accounted for, and that the investments of the Fund are in accordance with applicable laws and regulations.
13. The Board will ensure that annual financial statements of the Fund are prepared and that these statements are audited by an independent external auditor. It will approve the annual financial statements, and include them as part of an annual report for distribution to the Governor, the Legislature and the public. [AS 37.13.170]

Operations and Human Resources

14. The Board will appoint an Executive Director and review the performance of the Executive Director annually.
15. The Board will establish a four-year strategic plan for the APFC and review the strategic plan annually.
16. The Board will approve an annual operating budget for the APFC.
17. The Board will establish human resources policies and procedures necessary for the effective management of the APFC, including a compensation and benefit policy and a succession plan for the senior management of the organization.

Communications

18. The Board will establish a communications policy which sets out guidelines with respect to how the Board and individual trustees should communicate with:
- (a) The staff of the APFC;
 - (b) Service providers;
 - (c) The media, including social media such as Facebook, LinkedIn, and Twitter and
 - (d) Other external parties.

Appointments

19. The Board will approve the appointment of the following key service providers and advisors:
- (a) The External Auditor;
 - (b) The Custodian;
 - (c) The Investment Consultant;
 - (d) The members of the Investment Advisory Group; and
 - (e) **At the Board's election, any other service providers.**

Monitoring and Reporting

20. The Board will establish a policy which sets out its requirements regarding the reports the Board will receive on a regular basis in order to meet its responsibility for the oversight of the management of the APFC.
21. The Board will review on a regular basis, without limitation, the following:
- (a) The investment performance of the Fund and each asset class, including the costs of managing the Fund;
 - (b) The asset allocation and investment risk of the Fund; and
 - (c) The compliance program of the Fund and the APFC in relation to applicable laws and regulations, as well as all policies, procedures and bylaws established by the Board.
22. The Board will review the compliance of the Board, its committees, the Chair and Vice Chair of the Board, and the Executive Director with the duties and responsibilities set out in their respective charters.
23. The Board will review all policies established by the Board as frequently as required under the terms of the individual policy.

REVIEW AND AMENDMENT OF THE CHARTER

24. The Governance Committee will review this Charter at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Charter remains relevant and appropriate.
25. The Board of Trustees adopted this Charter on September 24th, 24th 2020.

ALASKA PERMANENT FUND CORPORATION

Charter of the Audit Committee of the Board

INTRODUCTION

1. The Board has established an **Audit Committee (“the Committee”)** to assist the Board in the financial oversight of the APFC.
2. The Board has established this Charter which sets out the duties and responsibilities of the Committee.

ROLE

3. The role of the Audit Committee will be to:
 - (a) Monitor the integrity of the financial reporting process and the system of internal controls and procedures regarding finance, accounting, and legal compliance;
 - (b) Review the performance and independence of the APFC's external auditors; and
 - (c) Provide an avenue of communication among the external auditors, management, the Chief Financial Officer, and the Board.

AUTHORITIES

4. The Committee will have the authority to conduct any investigation appropriate to fulfill its responsibilities.
5. The Committee will have direct access to the external auditors, as well as all APFC management and staff, legal counsel, as well as all advisors, consultants and investment managers of the Fund.
6. The Committee may retain, at the expense of the APFC and consistent with applicable procurement requirements, consultants or experts it considers necessary in the performance of its duties.

OPERATING PROCEDURES

7. The Committee will consist of at least three Trustees, each of whom must have a basic understanding of finance and accounting and be able to read and understand financial statements.

8. The Committee will meet at least two times annually, or more frequently as circumstances dictate. The Committee Chair will approve an agenda in advance of each meeting.
9. The Committee will invite members of management, auditors, or other professionals as deemed necessary, to attend meetings and provide pertinent information. The Committee may meet in executive sessions as necessary within the requirements of the Alaska Open Meetings Act [AS 44.62.310].
10. The Committee will maintain minutes or digital recordings of Committee meetings and periodically report to the board of Trustees on significant results of the **Committee's activities**.
11. The Committee will annually perform a self-**assessment of the Committee's** performance.

DUTIES AND RESPONSIBILITIES

Financial Reporting and Internal Controls

12. The Committee will carry out the following responsibilities with respect to financial reporting and internal controls:
 - (a) Review the annual audited financial statements prior to filing or distribution of the final report. This review should include discussion with management and external auditors of significant issues regarding accounting principles, practices, and judgments;
 - (b) In consultation with management, the external auditors, and the Chief Financial Officer, consider the integrity of the financial reporting processes and controls; discuss significant financial risk exposures and the steps management has taken to monitor, control, and report such exposures; and review significant findings prepared by the external auditors and the Chief Financial Officer together with management's responses;
 - (c) Discuss any significant changes to applicable accounting principles and any items required to be communicated by the independent auditors;
 - (d) At least annually, review with the APFC's counsel any legal matters that could have a material **impact on the Fund's financial statements, the APFC's** compliance with applicable laws and regulations, and any inquiries received from regulators or governmental agencies; and

External Audit

13. The Committee will have the following responsibilities with respect to the APFC's external auditors:

- (a) Review the external auditors' audit plan - discuss scope, staffing, locations, reliance upon management, and general audit approach;
- (b) Consider the external auditors' judgments about the quality and appropriateness of the APFC's accounting principles as applied in its financial reporting;
- (c) Discuss with management and the external auditors the quality of the accounting principles and underlying estimates used in the preparation of the **Fund's** financial statements;
- (d) Discuss with the external auditors the clarity of the financial disclosure practices used or proposed by the APFC;
- (e) Review the performance and independence of the auditors and periodically recommend to the Board the appointment of the external auditors or approve any discharge of auditors when circumstances warrant; and
- (f) On an annual basis, review and discuss with the external auditors all significant relationships the auditors have with the APFC that could impair the auditors' independence.

REVIEW AND AMENDMENT OF THE CHARTER

- 14. The Governance Committee, in consultation with the Audit Committee, and staff will review this Charter at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Charter remains relevant and appropriate.
- 15. The Board of Trustees adopted this Charter on September 24th, 2020.

ALASKA PERMANENT FUND CORPORATION

Charter of the Governance Committee of the Board

INTRODUCTION

1. The Board has established a Governance **Committee (“the Committee”)** to assist the Board in the governance of the APFC.
2. The Vice Chair of the Board will serve as the Chair of the Governance Committee. The Vice Chair may act on behalf of the Governance Committee in performing the duties set forth in this Charter with the approval of the full Board.

DUTIES AND RESPONSIBILITIES

Governance

3. The Governance Committee will review the charters of the Board, its committees, the Chair, the Vice Chair, the Investment Advisory Group, and the Executive Director, as well as the governance policies of the Board as frequently as required under the terms of the individual charter or policy. The Committee will recommend any proposed changes in the charters and policies to the Board for approval as necessary.
4. The Committee will review compliance by the Board, its committees, the Chair, the Vice Chair and the Executive Director with the duties and responsibilities set forth in their respective charters.
- ~~5. The Committee will ensure that the Board undertakes an evaluation of the performance of the Executive Director annually. It will supervise and coordinate the process by which the evaluation is conducted, including developing and recommending to the Board an evaluation survey, meeting with the Executive Director to discuss the evaluation results, and preparing an evaluation report.~~
- 6.5. Every three years, the Committee will review and update the senior management personnel (including Executive Director, Chief Investment Officer, Chief Risk Officer and Chief Financial Officer) succession plan.

Strategic Planning and Budgeting

- ~~7.6.~~ The Committee will assist the Board in establishing a Strategic Plan. It will undertake a comprehensive review of the Plan every three to four years, and supervise the preparation of a new Strategic Plan.

Monitoring and Reporting

~~8.7.~~ The Committee will review and approve any changes to the list of reports that the Board will receive on a regular basis as set out in the *Monitoring and Reporting Policy*.

REVIEW AND AMENDMENT OF THE CHARTER

~~9.8.~~ The Governance Committee will review this Charter at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Charter remains relevant and appropriate.

~~10.9.~~ The Board of Trustees ~~amended~~~~adopted~~ this Charter on ~~December~~ ~~September~~ ~~24th~~, 2020~~3~~.

ALASKA PERMANENT FUND CORPORATION

Charter of the Chair of the Board

INTRODUCTION

1. Alaska Statute 37.13.050 requires the Board to elect a Chair annually from among its members.

DUTIES AND RESPONSIBILITIES

2. The Chair will perform the duties and responsibilities and exercise the powers as specified below:
 - (a) Appoint the members of the committees of the Board and the committee chairs (other than the chair of the Governance Committee);
 - (b) Coordinate Board meetings, agendas, schedules and presentations, in consultation with the Executive Director;
 - (c) Preside at the meetings of the Board and ensure that such meetings are conducted in an efficient manner and in accordance with **Alaska's** Open Meetings Act and agreed-upon rules of order;
 - (d) Facilitate effective and open communications between the Board and the Executive Director;
 - (e) Act as one of the official spokespersons for the APFC, together with the Executive Director;
 - (f) Review and approve travel and other expenses of the members of the Board of Trustees;
 - (g) Review and approve travel outside of the United States and other expenses of the Executive Director; and
 - (h) Carry out any other duties and responsibilities as assigned by the Board.

REVIEW AND AMENDMENT OF THE CHARTER

3. The Governance Committee will review this Charter at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Charter remains relevant and appropriate.
4. The Board of Trustees adopted this Charter on September 24th, 2020.

ALASKA PERMANENT FUND CORPORATION

Charter of the Vice Chair of the Board

INTRODUCTION

1. The Bylaws of the APFC establish the Vice Chair as an officer of the Board. The Vice Chair is elected annually.

DUTIES AND RESPONSIBILITIES

2. The Vice-Chair will perform the duties and responsibilities and exercise the powers as specified below:
 - (a) Assume the duties of the Chair when the Chair is absent, or when the Chair designates the Vice-Chair to act in that capacity;
 - (b) Temporarily act as the Chair in the event of death, resignation, removal from office, or permanent disability of the Chair, until the election of a new Chair;
 - (c) Serve as the Chair of the Governance Committee; and
 - (d) Carry out any other duties and responsibilities as assigned by the Board.

REVIEW AND AMENDMENT OF THE CHARTER

3. The Board of Trustees will review this Charter at least once every three (3) years and make any amendments as necessary to ensure that the Charter remains relevant and appropriate.
4. The Board of Trustees adopted this Charter on September 24th, 2020.

ALASKA PERMANENT FUND CORPORATION

Charter of the Investment Advisory Group

INTRODUCTION

1. The Board of Trustees has established an Investment Advisory Group consisting of at least one but not more than three individuals who have considerable knowledge and experience in the management and investment of large endowment or trust funds to serve as independent advisors to the Board of Trustees.
2. This Charter sets out the duties and responsibilities of the Investment Advisory Group, which includes evaluating Fund performance, asset allocation, the merits of specific investment proposals, and other investment topics identified by the Board.
3. The Board will have full authority over the selection and appointment of the members of the Investment Advisory Group who will serve at the pleasure of the Board.

DUTIES AND RESPONSIBILITIES

4. **The Investment Advisory Group (or "IAG")** members are expected to attend in-person at least three of the quarterly Board meetings and present at least one **topic annually for the Board's consideration on best practices in the management** of large institutional funds, with input from the Board on the specific topic for presentation.
5. The IAG will provide comments to the Board on the following issues:
 - (a) The long-term or strategic asset allocation of the Fund;
 - (b) The risk management framework of the Fund;
 - (c) Any changes to the investment policy;
 - (d) Any proposed investment in new asset classes;
 - (e) Any proposed investment in new or innovative investment products or strategies, particularly those involving alternative or non-traditional asset classes;
 - (f) Any significant changes to the investment management structure of the Fund, including the following:

Alaska Permanent Fund Corporation
Charter of the Investment Advisory Group

- i) The relative proportion of assets in an asset class managed by external investment managers versus internal staff;
 - ii) The relative proportion of assets in an asset class managed using active versus passive investment strategies;
 - iii) The total number of active investment managers or portfolios in an asset class; and
 - (g) Any other issue at the discretion of the Investment Advisory Group or as requested by the Board.
6. The IAG shall make contact with the Chief Investment Officer prior to each quarterly Board meeting to discuss topics on the agenda for the upcoming meeting, including:
- (a) Fund performance for the quarter;
 - (b) Changes being considered or implemented to the asset allocation or investment policy; and
7. Each Quarter, the Staff shall provide documentation included as a regular Board report, demonstration that the IAG had met with the CIO as required in Section 6.
8. Any special topics that are to be discussed at the upcoming Board meeting.
9. Each member of the Investment Advisory Group will annually visit the Juneau office of the APFC and attend in-person an investment committee meeting of the APFC Staff.

REVIEW AND AMENDMENT OF THE CHARTER

10. The Governance Committee will review this Charter at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Charter remains relevant and appropriate.
11. The Board of Trustees adopted this Charter on September 24th, 2020.

ALASKA PERMANENT FUND CORPORATION

Charter of the Executive Director

INTRODUCTION

1. Alaska Statute 37.13.100 states that the Board of the APFC may employ and determine the salary of an Executive Director.
2. The Bylaws of the APFC state that the Executive Director will be the chief executive officer of the Corporation and serve at the pleasure of the Board. The Bylaws, set out, in general terms, the duties of the Executive Director.
3. The Board has, for greater clarity, established this Charter which sets out, in more specific terms, the duties and responsibilities of the Executive Director.
4. The Executive Director may delegate certain of these duties to staff. The Executive Director will, however, remain responsible for ensuring that these duties are carried out.

DUTIES AND RESPONSIBILITIES

Leadership

5. The Executive Director will provide executive leadership to the APFC in setting and achieving its mission, goals and objectives and will manage the APFC in accordance with guidelines and parameters established by the Board. In doing so, the Executive Director may solicit advice and counsel from the Board as necessary.

Policy Development

6. The Executive Director will provide support to the Board in establishing the policies of the Board. This will involve working with the Board and the Governance Committee to identify issues requiring Board policy, conducting the necessary analysis of such issues and providing clear and well-supported policy recommendations for Board approval.

Investments

7. The Executive Director will develop and recommend to the Board:
 - (a) An investment policy, **including the Board's overall investment philosophy, and** mechanism for monitoring and managing investment risk;
 - (b) The long-term or strategic asset allocation of the Fund in terms of the proportion of total assets to be invested within a minimum-maximum range at any point in time; and

8. The Executive Director will implement all investment policies and strategies as approved by the Board.

Finance, Accounting and Audit

9. The Executive Director will direct that appropriate financial and operational controls and procedures are put in place to safeguard the assets of the Fund.
10. The Executive Director will direct and supervise a review of the **Corporation's** internal controls and procedures to ensure that the operations of the Corporation are performed in a secure and appropriate manner.
11. The Executive Director will direct and supervise the preparation of annual financial statements of the APFC and cooperate in the audit of these statements by an independent external auditor prior to their submission to the Audit Committee for its review.
12. The Executive Director will prepare **and coordinate management's response to any** issues of significant concern on the part of the external auditor, and will meet and discuss with the Audit Committee the findings of the audit.

Operations and Human Resources

13. The Executive Director will develop and recommend to the Board the overall organizational structure of the APFC.
14. The Executive Director will be responsible for managing the day-to-day operations of the APFC.
15. The Executive Director will have the authority to make all necessary operational expenditures, consistent with budgets, policies, and internal controls established by the Board.
16. The Executive Director will have the authority to execute all formal documents and contracts on behalf of the APFC.
17. The Executive Director will develop and recommend to the Board:
 - (a) A strategic plan; and
 - (b) An annual operating budget for the APFC.
18. The Executive Director will select and employ the staff necessary to manage the APFC and develop appropriate staff training and development programs.
19. The Executive Director will develop and recommend to the Board human resources policies and procedures necessary for the effective management of the APFC,

including a compensation and benefit policy and a succession plan for the senior management of the organization.

20. The Executive Director will determine the appropriate level of compensation for staff within the benefits and compensation policy approved by the Board.

Communications

21. The Executive Director will develop and recommend to the Board a communications policy which sets out guidelines with respect to how the Board and individual trustees will communicate with:
 - (a) The staff of the APFC;
 - (b) Service providers;
 - (c) The media, including social media such as Facebook, LinkedIn, and Twitter; and
 - (d) Other external parties.
22. The Executive Director will serve as one of the official spokespersons for the APFC, together with the Chair of the Board.

Appointments

23. The Executive Director will direct and supervise the conduct of all necessary due diligence that is appropriate in the search and selection of all service providers of the Fund.
24. The Executive Director will develop and recommend to the Board the appointment of the following key service providers and advisors:
 - (a) The External Auditor;
 - (b) The Custodian;
 - (c) The members of the Investment Advisory Group;
 - (d) The Investment Consultant; and
 - (e) Other service providers as the Board may direct.
25. The Executive Director will be responsible for the selection and appointment of all other service providers not appointed by the Board.
26. The Executive Director will negotiate and execute the terms and provisions of all agreements and contracts with the service providers of the Fund, including those appointed by the Board.

Monitoring and Reporting

27. The Executive Director will develop and recommend to the Board a monitoring and **reporting policy which sets out the Board's requirements regarding the reports it** will receive on a regular basis in order to meet its responsibility for the oversight of the management of the APFC.

28. The Executive Director will provide the Board with all relevant and appropriate information in a timely manner so as to enable the Board to meet its responsibilities.
29. The Executive Director will monitor on an ongoing basis, without limitation, the following:
 - (a) The investment performance of the Fund, asset classes, and investment managers and portfolios, including the costs of managing the Fund;
 - (b) The asset allocation and investment risk of the Fund; and
 - (c) The compliance of the Fund and the APFC with all applicable laws and regulations, as well as all policies, procedures and bylaws established by the Board, including those set forth in the Board standards.
30. The Executive Director will periodically review the performance, level of service and fees of the service providers appointed by the Executive Director.
31. The Executive Director will direct and supervise the preparation of an annual report of the APFC for distribution as required by Alaska Statute 37.13.170.

REVIEW AND AMENDMENT OF THE CHARTER

32. The Governance Committee will review this Charter at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Charter remains relevant and appropriate.
33. The Board of Trustees adopted this Charter on September 24th, 2020.

ALASKA PERMANENT FUND CORPORATION

Board Policy Development Process

OBJECTIVES OF THE POLICY

1. The Board of Trustees of the APFC has established this *Board Policy Development Process* in order to meet the following objectives:
 - (a) To set out the process by which the Board will develop and establish the policies of the Board; and
 - (b) To ensure that the process is sound and reasonable and provides the Board with effective policies that achieves the goals and objectives of the APFC.

POLICY GUIDELINES

Roles and Responsibilities

2. The role of the Executive Director in the policy development process will be to:
 - (a) Assist the Board in identifying appropriate areas or subject matters in which a board policy may be required;
 - (b) Provide the Board with sound and comprehensive analysis of the underlying issues;
 - (c) Undertake any research and analysis required in the development of the proposed policy, with the assistance of external advisors and consultants if necessary; and
 - (d) Prepare a draft of the proposed policy **for the Board's** consideration.
3. The role of the Board is to review the proposed policy, including the research and analysis undertaken, and approve it if the Board determines that the policy will achieve the goals and objectives of the APFC.

Development and Approval

4. Any member of the Board, a Board committee, or the Executive Director may propose to the Board that it consider the development of a new Board policy.
5. In determining whether a particular matter warrants a Board policy, the Board should consider whether it meets the following criteria:
 - (a) The matter may have a significant impact on **the APFC's** ability to achieve its goals and objectives;

- (b) It is an ongoing concern which is expected to come up again or remain indefinitely; and
 - (c) It is not an operational matter that would otherwise fall within the responsibility of the Executive Director.
6. If the Board determines that the matter warrants a Board policy, it will pass a motion directing the Executive Director to prepare and submit a draft policy to the Board for its consideration.
 7. A Board policy should contain, at a minimum, the following sections:
 - (a) Objectives of the policy – what the policy is intended to achieve;
 - (b) Policy guidelines – the actual terms and provisions of the policy; and
 - (c) Review and amendment of the policy – how often the policy will be reviewed, and the date(s) on which the policy was adopted and/or amended.
 8. The Board will approve the final language of a policy by a roll call vote.

Maintenance and Review

9. All Board policies will be maintained in up-to-date form in a single volume or a series of volumes within **the APFC's** offices, and will be accessible to trustees, staff and the public. Trustees will be provided with a copy of the Board policies which will be updated as necessary.
10. The Board will formally review a Board policy within the time period specified in the policy, but no less frequently than once every three years. Any Trustee, Board committee, or the Executive Director may propose to the Governance Committee that a particular policy be reviewed earlier than required.

REVIEW AND AMENDMENT OF THE POLICY

11. The Governance Committee will review this Policy at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Policy remains relevant and appropriate.
12. The Board of Trustees adopted this Policy on September 24th, 2020.

ALASKA PERMANENT FUND CORPORATION

Strategic Planning and Budgeting Policy

OBJECTIVES OF THE POLICY

1. The Board of the APFC has established this *Strategic Planning and Budgeting Policy* in order to meet the following objectives:
 - (a) To ensure that the APFC plans, in a deliberate and systematic way, for the future needs of the organization; and
 - (b) To achieve a consensus among the Board and staff on how those needs and priorities are going to be met.

POLICY GUIDELINES

The Strategic Plan

2. The APFC will establish a Strategic Plan, extending over a period of four years into the future, to be reviewed and updated annually, which will address, without limitation, the following:
 - (a) The mission of the APFC;
 - (b) The philosophy and core values of the organization;
 - (c) The goals and objectives of the APFC over the four-year period;
 - (d) An evaluation of the external environment in which the APFC operates;
 - (e) **An assessment of the organization's internal resources and capabilities; and**
 - (f) **The strategies for achieving the APFC's goals and objectives.**
3. The Strategic Plan will include a list of the specific projects and initiatives to be started and/or implemented over the next fiscal year, including for each project or initiative:
 - (a) Its potential benefit or impact;
 - (b) Responsibility for implementation;
 - (c) Timeline for completion; and
 - (d) Budgetary implications.
4. The Board, with the assistance of the Executive Director, will undertake a comprehensive review of the Strategic Plan at least every four years.

The Planning and Budgeting Process

5. The Executive Director will review and update the Strategic Plan annually and present a report to the Governance Committee that includes:
 - (a) A review of the implementation of the Strategic Plan for the current fiscal year; and
 - (b) The updated Strategic Plan, including the current projects and initiatives in progress to be carried forward and new initiatives to be undertaken in the next fiscal year.
6. The Executive Director will present to the Board semi-annually a variance report **on the current year's Budget that provides:**
 - (a) A comparison of actual expenditures versus the budget; and
 - (b) An explanation for significant differences in actual and budgeted amounts for any budget item.
7. The Executive Director will prepare and present to the Board annually a proposed Budget for the next fiscal year which provides:
 - (a) A breakdown of the Budget by line item, and within each line item by major expense category;
 - (b) **A comparison of each budget item to the current year's budget and actual expenditure (projected to year-end);**
 - (c) An explanation of significant changes from the previous year for any budget item; and
 - (d) The identification of budgetary amounts tied to any project or initiatives in the Strategic Plan for the next fiscal year.
8. Any significant revisions to the Strategic Plan or Budget must be reviewed and approved by the Board.
9. The Executive Director shall inform the Board Chair in a timely manner, if for any reason, a particular project or initiative cannot be implemented or completed as planned.

REVIEW AND AMENDMENT OF THE POLICY

10. The Governance Committee will review this Policy at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Policy remains relevant and appropriate.
11. The Board of Trustees adopted this Policy on September 24th, 2020.

ALASKA PERMANENT FUND CORPORATION

Monitoring and Reporting Policy

OBJECTIVES OF THE POLICY

1. The Board of the APFC has established this *Monitoring and Reporting Policy* in order to set out its minimum requirements with respect to the reports it expects to receive on a regular basis.

POLICY GUIDELINES

2. The Board will receive the reports specified in the Appendix to this Policy. The reports will be provided on a regular basis at the frequency indicated in the Appendix.
3. The Board may receive additional reports on an ad hoc basis as necessary.
4. Any request by Trustees for additional reports to be provided on a regular basis will require approval by the Board and an amendment to the Appendix of this Policy.

REVIEW AND AMENDMENT OF THE POLICY

5. The Governance Committee will review this Policy at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Policy remains relevant and appropriate.
6. The Board of Trustees ~~amended~~^{adopted} this Policy on ~~December~~^{September 24th}, 202~~0~~³.

Monitoring and Reporting Policy

APPENDIX

Governance Reports

Name of Report	Frequency	Prepared By	Description of Report
1. Review of Governance Policies and Charters	Every 3 years	Staff	Report on the findings and recommendations of the Board's review of its governance policies and charters. There could be separate reports, for policies one year and charters another year.
2. Governance Report	Every 3 years	Third Party or staff	Report on compliance with governance policies and charters. This report should be part of the Board's review of its policies and charters, and produced with the same frequency, i.e. every 3 years, with separate reports for policies and charters.
3. Executive Director Performance Evaluation Report	Annual	Vice Chair, or Third Party	Report on the results of the Executive Officer's performance evaluation.
4. Board Education Report	Annual	Staff	Report on the activities of the Board and its members with respect to education.
5. IAG Report	Quarterly	Staff	Report on compliance with IAG requirements

Investment Reports

Name of Report	Frequency	Prepared By	Description of Report
6. Investment Performance Report	Monthly and Quarterly	Staff and/or Investment Consultant	Report on the asset allocation and investment performance of the Fund, including the performance of asset classes
7. Risk Management Report	Quarterly	Staff and/or Investment Consultant	Report on the investment risk of the Fund, its asset classes and investment portfolios.
8. Asset Allocation Study	At least every 5 years	Staff and/or Investment Consultant	Report on the findings and recommendations of a review of the long-term or target asset allocation policy of the Fund.
9. Review of the Fund's Investment Policies	At least every 5 years	Staff and/or Investment Consultant	Report on the findings and recommendations of a review of the investment policy statement and related policies and procedures of the Fund.
10. Review of the Fund's Investment Managers	Quarterly	Staff and/or Investment Consultant	Report on the performance and strategies of the investment managers of the Fund.

Financial, Audit and Operational Reports

Name of Report	Frequency	Prepared By	Description of Report
11. Annual Financial Report, including: <ul style="list-style-type: none"> ▪ Audited Financial Statements ▪ Management's Discussion and Analysis ▪ Auditor's Opinion 	Annual	Staff and External Auditor	Report on the financial position and activities of the Fund.
12. Cybersecurity/IT Audit	Every 3 years	Staff and/or Third Party	Report on the safety and security controls of the Fund.

Planning and Budgeting Reports

Name of Report	Frequency	Prepared By	Description of Report
13. Budget Variance Report	Semi-Annual	Staff	Report on the implementation of the current year's budget, showing the variance between actual and budgeted expenditures.
14. Operating Budget	Annual	Staff	Report on the proposed budget for the next fiscal year.

ALASKA PERMANENT FUND CORPORATION

Trustee Education Policy

OBJECTIVES OF THE POLICY

1. The Board of the APFC has established this *Trustee Education Policy* with the following objectives:
 - (a) To ensure that the members of the Board have access to the knowledge and information necessary for them to fulfill their fiduciary duties as trustees of the Alaska Permanent Fund; and
 - (b) To assist them in becoming well informed in all matters pertaining generally to the management of a large institutional fund, both public and private, and more specifically to the management and investments of the Fund.

POLICY GUIDELINES

2. The education program for Trustees will be based on the following principles:
 - (a) The program should include both in-house education, so that Trustees can share in a common base of knowledge and information relevant to their tasks, as well as external conferences and seminars, so that Trustees can benefit from exposure to alternative perspectives and interaction with trustees of other organizations;
 - (b) There should be diverse sources for education, beyond APFC staff and current service providers, including other external consultants, advisors and experts, so that Trustees may benefit from a wide range of views and opinions; and
 - (c) Trustees are expected to participate in any in-house education sessions that may be organized for their benefit, including an orientation session for new Trustees. They are also encouraged to attend external conferences and seminars.
3. The education program will consist of the following:
 - (a) A formal orientation for new Trustees;
 - (b) A Trustee Reference Manual containing key information about the APFC;
 - (c) In-house education, including:
 - i) At the request of the Board, an annual education session
 - ii) Seminars and briefings from time to time;
 - iii) Selected reading material provided by staff; and
 - (d) External conferences and seminars.

Orientation Program

4. The Executive Director will develop an orientation program designed to introduce new trustees to all relevant operations of the APFC, and to the duties and responsibilities of the Trustee. The aim of the orientation program will be to ensure that a new Trustee is in a position to contribute fully to the deliberations of the Board, and effectively carry out their duties and responsibilities as soon as possible after joining the Board.
5. The orientation program should include the following:
 - (a) A briefing by the Executive Director on the history, mission, organization and operations of the APFC;
 - (b) A briefing by the Chief Investment Officer on the investment philosophy, asset allocation, investment managers, and the major investment portfolios of the Fund;
 - (c) A briefing on the laws and regulations governing the APFC, the fiduciary duties and responsibilities of the Trustees, the Board Charter, Committee structure, Bylaws and other Board standards including disclosure requirements;
 - (d) A briefing on administrative policies and procedures relating to Board members;
 - (e) **An introduction to the APFC's website and the educational resources available there for Trustees;** and
 - (f) A briefing by the Chair of the Board and the Executive Director on the major issues currently before the Board.
6. The new Trustee will also, as part of the orientation program, be provided with the following:
 - (a) The Trustee Reference Manual;
 - (b) Selected articles and papers on the APFC and institutional fund management;
 - (c) A list of upcoming conferences and seminars; and
 - (d) The most recent Annual Report, including the audited financial statements.

Trustee Reference Manual

7. The Trustee Reference Manual will include the following:
 - (a) The laws and regulations governing the Alaska Permanent Fund;
 - (b) The Bylaws of the APFC;
 - (c) The Charters and Governance Policies established by the Board;
 - (d) A list of Board committees and committee members;
 - (e) Names and contact information for Trustees, members of the Investment Advisory Group and the Executive Director;

- (f) Organization chart of the APFC;
- (g) **List of the APFC's major service providers;** and
- (h) The Investment Policy for the Fund.

In-house Education

- 8. The Board will periodically conduct assessments of its educational requirements to ensure it will be provided with the knowledge and information necessary to discharge its functions.
- 9. Trustees are encouraged to attend, if scheduled, an annual educational session which may be organized either by the Executive Director or in conjunction with other Alaska public funds such as the Alaska Retirement Management Board.
- 10. The Executive Director will, from time to time, organize short seminars or presentations on various topics by APFC staff and service providers, as well as other external consultants, advisors and experts. The Executive Director will consult with Trustees to identify topics of special interest or relevance to the Board, taking into account the results of the educational needs assessment. These sessions may be organized either as part of regular Board meetings or as stand-alone events.
- 11. The Executive Director will also provide Trustees with relevant and appropriate reading material (e.g., journal articles, research studies, news clippings, etc.).

External Conferences and Seminars

- 12. The Executive Director will maintain a list of conferences and seminars that Trustees may wish to attend, with expenses to be paid for by the APFC upon approval of the Chair. The Executive Director will update the list from time to time taking into account new information and feedback from previous conference attendees.
- 13. The Executive Director will notify the Board of upcoming conferences on a regular basis at Board meetings.
- 14. Trustees are free to attend any other conferences, seminars, or workshops, other than those recommended by the Executive Director. The potential reimbursement of expenses incurred by Trustees will be subject to prior approval by the Chair.

Trustee Education Report

- 15. The Executive Director will present to the Board annually a report on the various educational activities undertaken by the Board and individual Trustees during the year.

REVIEW AND AMENDMENT OF THE POLICY

16. The Governance Committee will review this Policy at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Policy remains relevant and appropriate.
17. The Board of Trustees adopted this Policy on September 24th, 2020.

ALASKA PERMANENT FUND CORPORATION

Board Communications Policy

OBJECTIVES OF THE POLICY

1. The Board has established this *Board Communications Policy* in order to facilitate effective communication by the Trustees with each other, and with APFC staff and service providers, the media and other external parties.

POLICY GUIDELINES

Communication among Trustees

2. Trustees are free to communicate with each other on matters concerning the APFC, subject to the requirements of Alaska's Open Meetings Act.

Communication with Staff

3. While Trustees have the right to communicate with any member of the APFC staff, they should **direct questions and requests for information regarding the APFC's** management and operations to the Executive Director or senior management staff.
4. Any question or request for information which can reasonably be expected to take up a significant amount of time, effort or resources on the part of APFC staff or service providers should be made through a formal request at a Board or committee meeting or with the consent of the Chair of the Board.
5. Trustees may directly contact the Executive Director or members of the senior management staff or APFC legal counsel, with any other question or request for which an answer or response is readily available or can be quickly and easily obtained.

Communication with Service Providers

6. Trustees should communicate with **the APFC's** investment managers and other service providers on matters concerning the APFC generally at Board or committee meetings, or through staff. If Trustees have any questions or wish to request any information from service providers, they should contact the Executive Director or a member of the senior management staff.
7. If Trustees do communicate directly with a service provider, they should be careful not to disclose any privileged information, make any commitments on behalf of the Board, or provide any special treatment or favoritism to the service provider. Trustees should disclose the nature of any communication with the service provider that is important or material to the APFC to the Board at their earliest convenience.

8. Trustees should refer any investment opportunities or proposals they receive from a service provider which may be of relevance to the APFC directly to the Executive Director.
9. **The provisions of Section 6 through 8 above will not apply to Trustees'** communication with the Investment Consultant, the Investment Advisory Group, the Auditor and APFC legal counsel.

Communication with the Media and Other External Parties

10. The Chair and the Executive Director will both serve as the official spokespersons for the APFC.
11. In their role as spokespersons, they should communicate in a manner consistent with the established policies and decisions of the Board and should not make comments which represent their personal views.
12. The Executive Director will be responsible for all **"press releases" or written** communications with the media. Such communications should clearly and accurately represent the actions and decisions of the Board.
13. All Trustees, including the Chair, are free to communicate with the media on matters concerning the Board or the APFC in their capacity as individual Trustees. If approached by the media for interviews or information on the APFC, they may refer the matter to one of the official spokespersons. If Trustees do communicate with the media, they should observe the following guidelines:
 - (a) Trustees, other than the Chair, should not speak on behalf of the Board unless specifically authorized to do so by the Board;
 - (b) If authorized to speak on behalf of the Board, Trustees should follow the provisions of Section 11 above; and
 - (c) If Trustees, including the Chair, are speaking as individual Trustees, they should indicate that they are doing so, and not speaking on behalf of the Board.
14. Any written material on the APFC prepared by Trustees for publication or general distribution should be submitted to the Executive Director for review prior to its publication or distribution. The review will be only for the purpose of verifying the accuracy of the material to ensure that the APFC is not being inadvertently misrepresented.

REVIEW AND AMENDMENT OF THE POLICY

15. The Governance Committee will review this Policy at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Policy remains relevant and appropriate.

16. The Board of Trustees adopted this Policy on September 24th, 2020.

ALASKA PERMANENT FUND CORPORATION

Executive Director Performance Evaluation Policy

OBJECTIVES OF THE POLICY

1. The Board of Trustees of the APFC has established this *Executive Director Performance Evaluation Policy* with the following objectives:
 - (a) To ensure that the Executive Director receives appropriate and useful feedback on their performance from the Board on an annual basis; and
 - (b) To help develop clear and meaningful performance objectives for the Executive Director.

POLICY GUIDELINES

Roles and Responsibilities

2. The Board will be responsible for evaluating the performance of the Executive Director on an annual basis.

~~3. The Governance Committee will be responsible for initiating and coordinating the performance evaluation process.~~

4.3. The Board may retain the services of an independent third party to facilitate and administer the performance evaluation in order to ensure the integrity and confidentiality of the process.

Evaluation Survey and Criteria

~~5.4.~~ 5.4. The Board will ~~establish a survey to provide Trustees with a tool for evaluating~~ the performance of the Executive Director based on a number of criteria, including the following:

- (a) Achievement of the goals and objectives of the APFC;
- (b) Completion of the specific projects and initiatives set out in the strategic plan for that fiscal year;
- (c) Implementation of Board policies and reporting requirements;
- (d) General leadership and management skills; and
- (e) **Compliance with the Executive Director's charter.**

~~6. The Governance Committee, with the assistance of the Executive Director, will develop and recommend to the Board the design of the survey.~~

The Evaluation Process

~~7. The Vice Chair, acting as Chair of the Governance Committee, will meet with the Executive Director to review the evaluation survey and criteria and agree on any changes.~~

~~8.5.~~ Towards the end of the calendar year and before the fourth quarter meeting of the Board, the ~~Vice~~ Chair will distribute a package of materials to each Trustee which may include the following:

- (a) A report prepared by the Executive Director ~~on that lists~~ their achievements for the previous year, ~~including the Executive Director's own assessment of the extent to which the evaluation criteria were met;~~
- (b) The strategic plan and budget for the fiscal year or a summary thereof; and
- (c) Any other materials that might be relevant to Board's performance ~~The evaluation of the Executive Director survey, containing the evaluation criteria, to be filled out by the Trustee.~~

~~9.6.~~ Trustees should review the materials provided prior to the meeting during which the Executive Director will be evaluated ~~complete the survey and return it to the facilitator within a specified period of time. The facilitator will tabulate the results of the survey, present a report summarizing the results to the Governance Committee, together with the completed evaluation surveys. The Committee will review the report and submit it to the Board.~~

~~10.7.~~ The Board, **consistent with Alaska's Open Meetings Act**, will meet in executive session to review and discuss the results of the Executive Director's performance for the prior year evaluation. ~~The Governance Committee will prepare a draft Evaluation Report, with the Executive Director's assessment and the summary of the evaluation results attached as appendices.~~

~~11.8.~~ The Board, **consistent with Alaska's Open Meetings Act**, will then meet with the Executive Director in executive session to discuss their ~~results of the performance for the prior year evaluation~~ and any opportunities for improvement.

~~12.~~ The Board, after coming out of executive session, will then take any action on the record that may be required to complete the evaluation ~~approve the final Evaluation Report, following which the Chair, Vice Chair and the Executive Director will each sign the Evaluation Report.~~

~~13.9.~~ ~~The Vice Chair will cause the signed Evaluation Report to be placed in the Executive Director's personnel file.~~

REVIEW AND AMENDMENT OF THE POLICY

~~14.10.~~ The Governance Committee will review this Policy at least once every three (3) years and recommend any amendments to the Board for approval as necessary to ensure that the Policy remains relevant and appropriate.

15.11. The Board of Trustees ~~amended~~~~adopted~~ this Policy on ~~December~~ ~~September 24th~~,
2023~~0~~.

ALASKA PERMANENT FUND CORPORATION

Board Standards

OBJECTIVES OF THE STANDARDS

1. The Permanent Fund was established by Article IX, Section 15 of the Alaska Constitution. The statutory purpose of the APFC is to manage and invest the assets of the Permanent Fund. **The Trustees' conduct is subject to Alaska Constitution and Statutes, regulations under the Alaska Administrative Code, and various other rules and policies.** The Board of Trustees has established the *Board Standards* to identify applicable rules and policies and provide further guidance to Trustees in conducting their affairs and activities as Board members.

POLICY GUIDELINES

2. Trustees will conduct themselves with honesty, integrity, decorum, and professionalism in all aspects of their duties, and in their interaction with fellow trustees, APFC staff, service providers, and other external parties.

With Respect to Compliance with Laws, Regulations and Policies

3. Trustees will abide by all applicable laws and regulations, including, in particular, the following:
 - (a) Alaska Statutes at Title 37, Chapter 13;
 - (b) Alaska Administrative Code at Title 15, Chapter 137;
 - (c) APFC Bylaws;
 - (d) The Alaska Open Meetings Act and regulations thereunder;
 - (e) The Alaska Executive Branch Ethics Act and regulations thereunder, administered by the Department of Law; and
 - (f) The Alaska Conflict of Interest Act and regulations thereunder, administered by the Alaska Public Offices Commission (APOC).
4. Trustees will abide by all policies of the APFC.

With Respect to Confidentiality and Use of Information

5. Trustees will respect the confidentiality of all information pertaining to the APFC to which they become privy to by virtue of their position. They will not disclose any confidential information to any external party unless required to do so by law.
6. Any information on the APFC that Trustees request in their capacity as Trustees will only be to fulfill their responsibilities as Trustees of the APFC and not for use in their own personal or business affairs.

With Respect to Enforcement of the Board Standards

7. The Chair of the Board will enforce and attempt to rectify any breach of the Board Standards.
8. If a Trustee has reason to believe that a material violation of the Board Standards has taken place, they will notify the Chair (or the Vice Chair if the allegation is against the Chair) and the Executive Director.

REVIEW AND AMENDMENT OF THE POLICY

9. This Policy will be reviewed periodically and amended by the Board as necessary or appropriate.
10. The Board of Trustees adopted this Policy on September 24th, 2020.



SUBJECT: Key Person Risk & Alpha Targets

ACTION:

DATE: December 13, 2023

INFORMATION: X

BACKGROUND: Strategic Plan working group discussions featured considerable conversations around key person risk mitigation at APFC going forward. Deven Mitchell, CEO, and Marcus Frampton, CIO will present the following slides outlining the key person risk mitigation procedures at APFC.

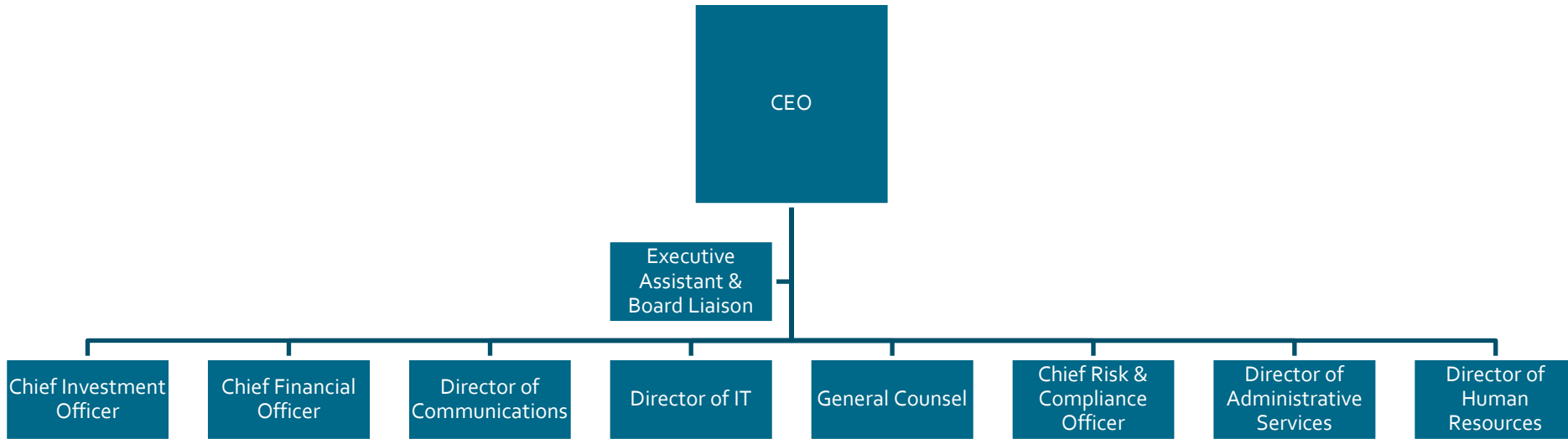
Marcus Frampton will also present on individual asset class strategies and plans.



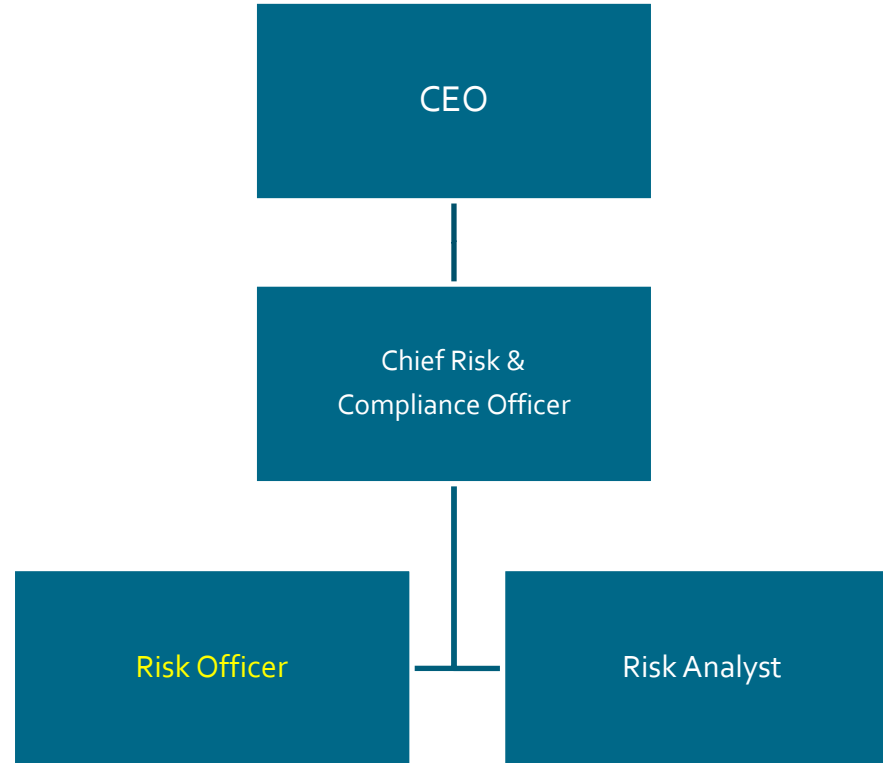
APFC Operations Organizational Chart

December 13-14, 2023

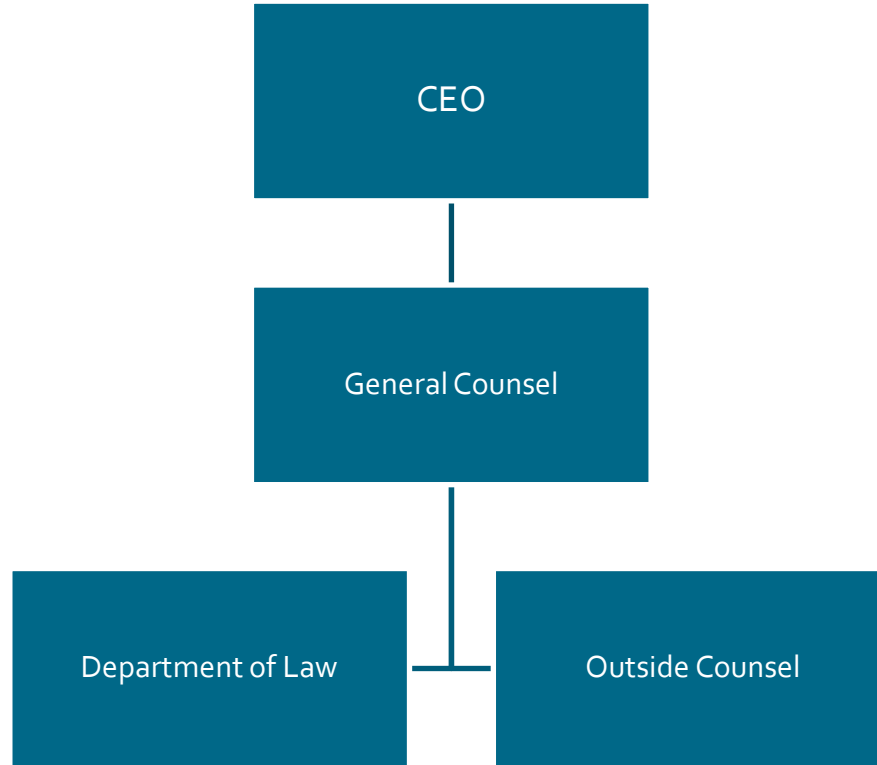
Organizational Chart – APFC Leadership



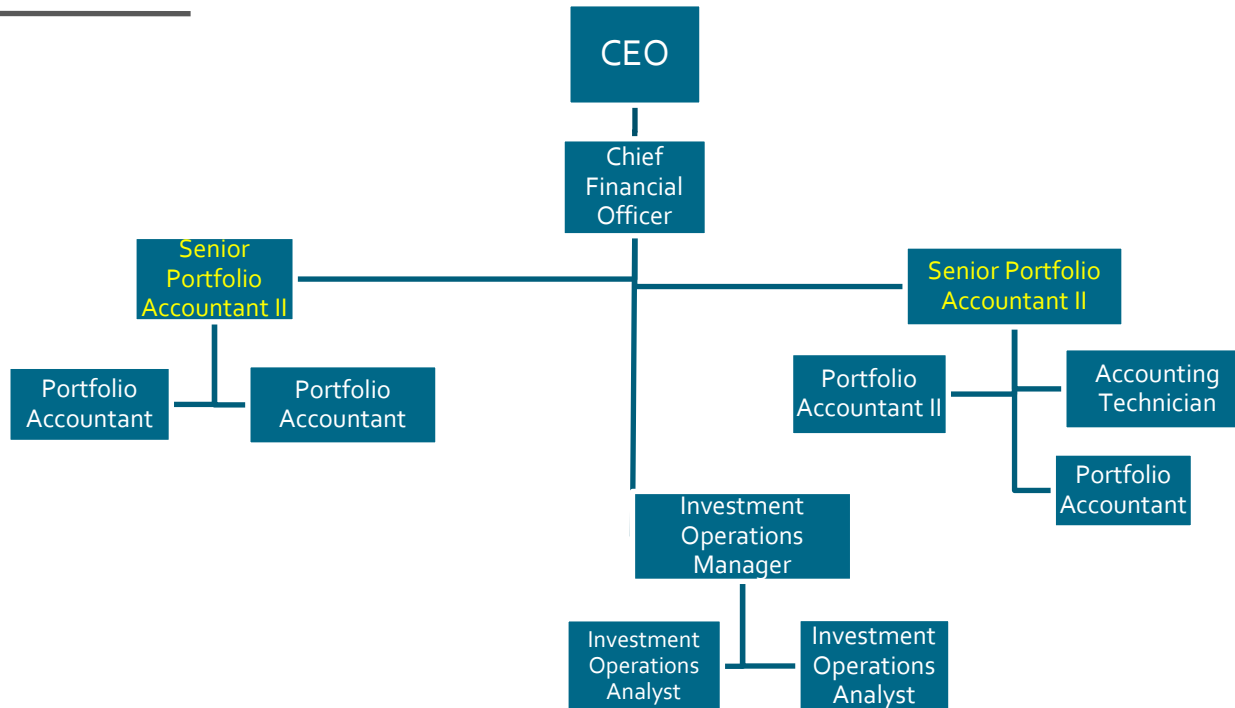
Organizational Chart - Risk



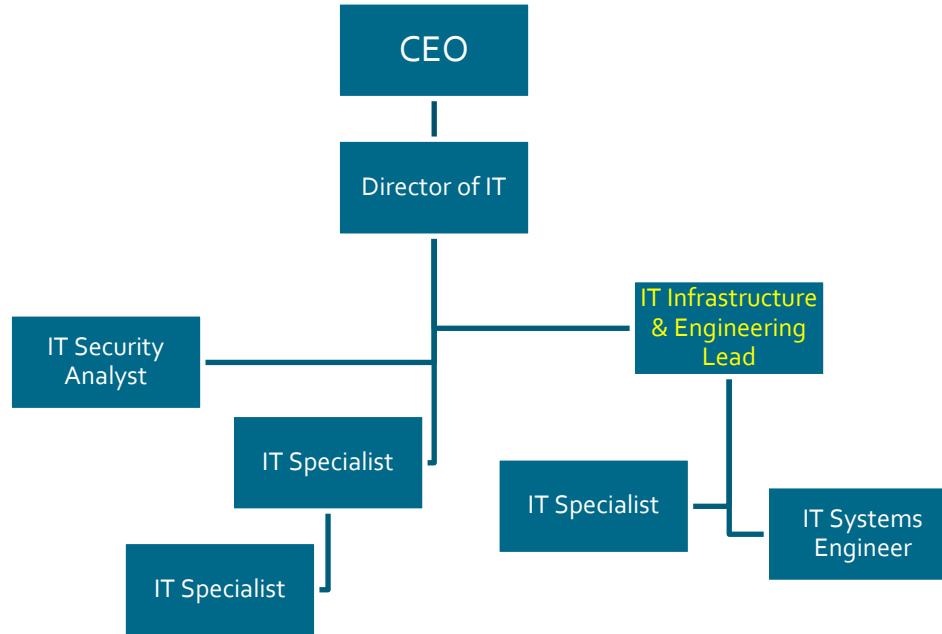
Organizational Chart - General Counsel



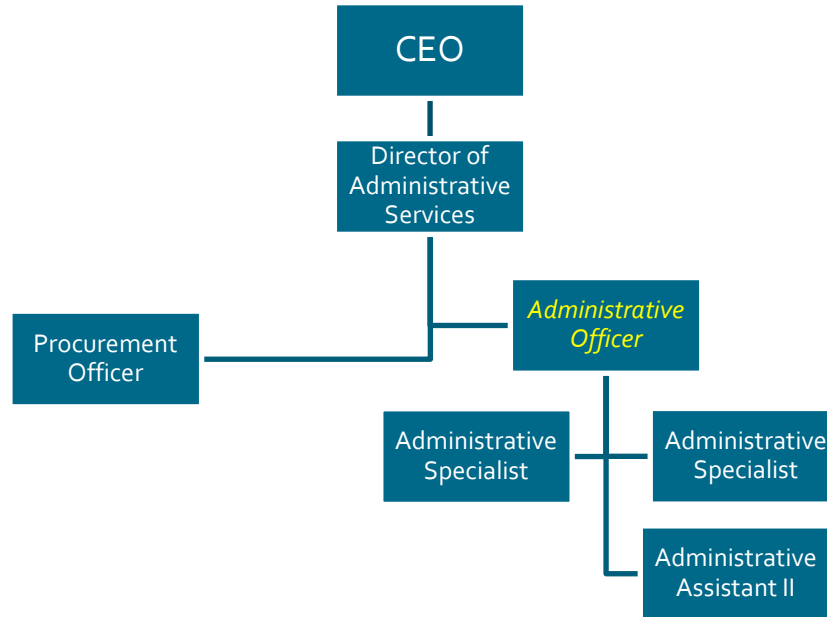
Organizational Chart – Finance



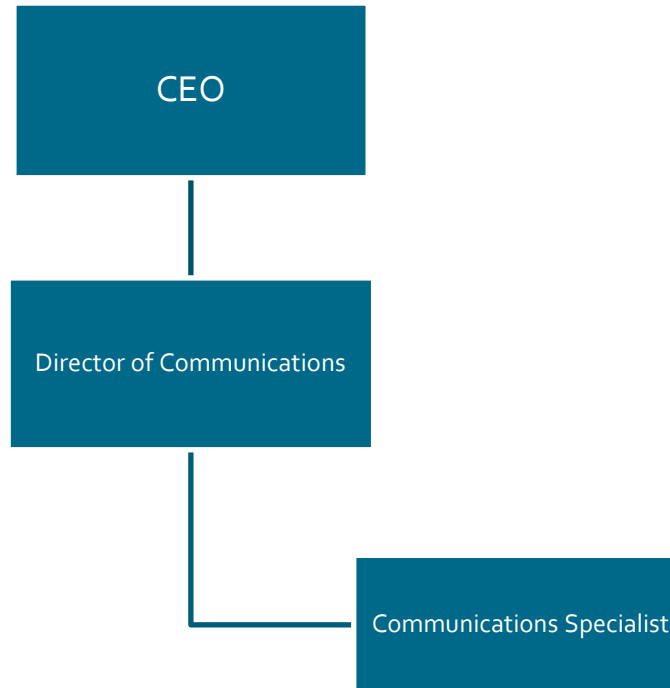
Organizational Chart - IT



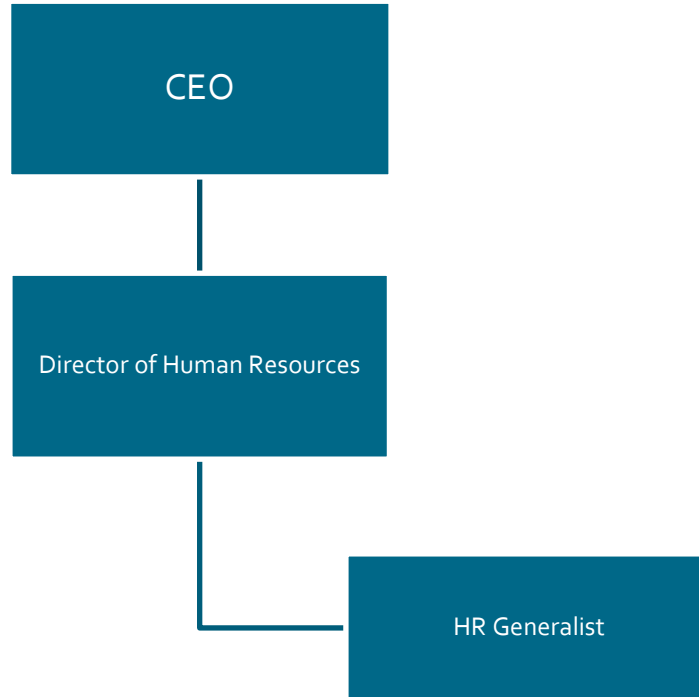
Organizational Chart – Administrative Services



Organizational Chart - Communications



Organizational Chart – Human Resources





ALASKA PERMANENT
FUND CORPORATION

APFC Asset Class Plans

December 2023

APFC Investment Philosophy

- Create an asset allocation consistent with the Fund's return objectives and stick to it (subject to annual reviews)
- Attempt to outperform benchmarks through outstanding execution within asset classes
 - Grind out performance/fight for basis points
 - Seek relative value. Avoid overvalued assets and seek attractively priced assets
 - Back top quartile/best-in-class managers and co-invest with them when available
- On the margin, over- and underweight asset classes based on assessment of relative attractiveness

Key Principles

1. At all costs, avoid big mistakes (don't do anything stupid)
2. Know positioning versus benchmarks and have a rationale for all "bets"

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 candidates.

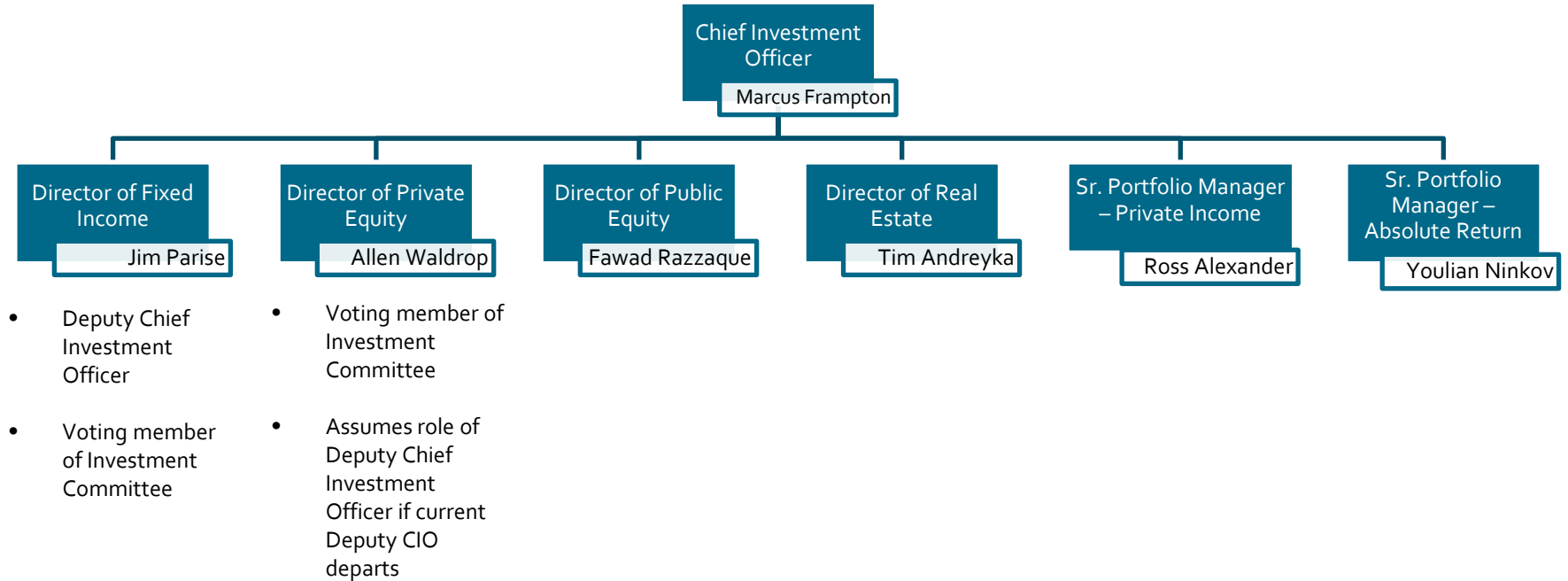
Asset Class Director(s)

- 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.

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.

Investments Organizational Chart

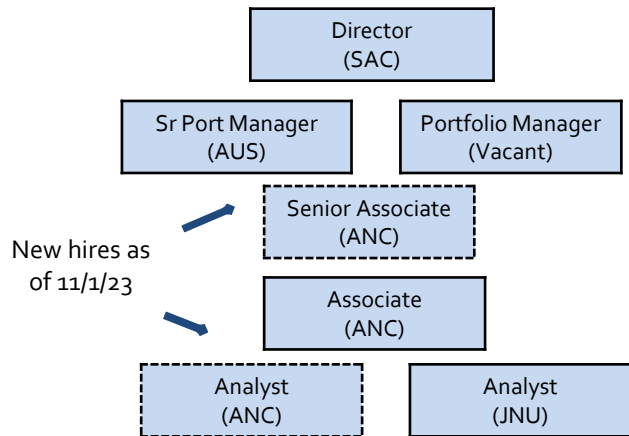




Private Equity

Private Equity Strategy Summary

Team



- Current team includes 6 professionals (one vacancy)
- Focus primarily on funds investments, but also covers co-investments and other projects
- Recommend adding 3 investment FTEs (SPM / PM, Sr. Associate and Associate / Analyst) and potentially 1 dedicated administrative support
- Additions spread over two years (1-2 new hires in Year 1, remainder in Year 2)

229 of 343

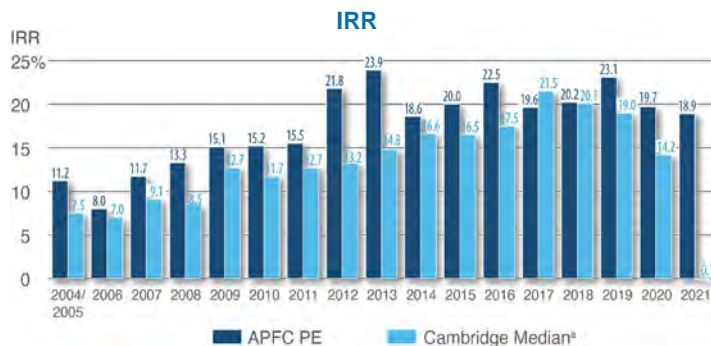
Investment Strategy

- Target 50% - 75% of annual capital deployment into funds annually, focusing on our best existing relationships and select new relationships
- Increase co-investment activity to get capital deployed in a more attractive investment environment and drive stronger returns / asset growth
- Targeted 200 bps outperformance of median Cambridge benchmarks on a rolling 5-year basis
- 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

Private Equity Strategy Summary (2)

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%
Specialized 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. Amounts may not foot due to rounding.



NOTES: 1.2% of the portfolio's market value reflects roll-forward values and is subject to change. Pathway began constructing the APFC portfolio in the latter part of 2004 and made only two partnership commitments. Given this, the 2004 vintage year has been combined with the 2005 vintage year.

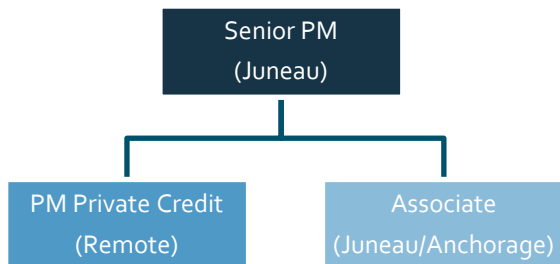
*Based on Cambridge global all private equity return benchmark (excludes debt-related strategies), as of March 31, 2023.

- \$21bn committed to 550 partnerships / investments across ~160 managers approximately 7,500 underlying companies
- Contributions of \$18bn have generated total value of \$33bn resulting in \$15bn of gains
- 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



Private Income

Private Income Today



Strategy

- Outperform benchmark through manager and fund selection
- Thoughtfully adjust annual allocation to Infrastructure or Private Credit, as opportunity set varies
- Leverage APFC's reputation and flexibility to selectively co-invest alongside top-tier managers in best opportunities

Alpha Target

+40 bps above blend of 60% Cambridge Global Private Infrastructure (Lagged) / 40% Cliffwater Direct Lending Index (Lagged)

Infrastructure (57% of NAV)

- 1.5 FTEs – 1 Senior PM, 0.5 Associate
- 36 commingled funds
- 12 co-investments
- 1 listed portfolio

Private Credit (32% of NAV)

- 1.5 FTEs – 1 PM, 0.5 Associate
- 46 commingled funds
- 19 co-investments

Income Opportunities (11% of NAV)

- No dedicated FTEs
- 14 funds
- 1 JV
- 1 co-investment

Priorities

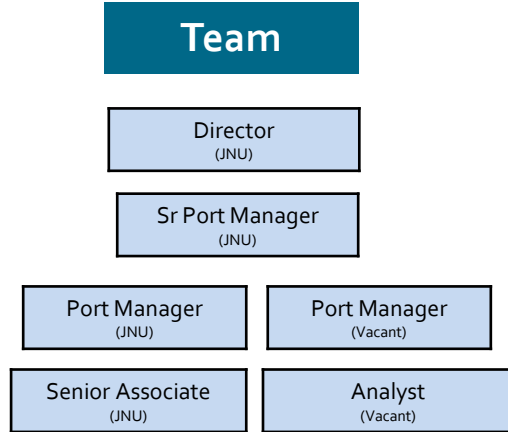
- Funds
 - Continue leveraging APFC's reputation as an LP of choice to retain access to and focus on top-tier managers
 - No change to current strategy
 - No upgrades/enhancements necessary
- Co-Investments
 - Increase activity to add value from higher returns and reduced fee burden (typically no fee/no carry)
 - May need to enhance current team to handle additional workload in coming years; no need to add staff at this time
- Directs
 - Currently not an area of focus, will re-evaluate periodically based on outcomes of Private Equity experience
- Consultants
 - Reduce reliance on current full-service consultant (non-discretionary) by shifting a portion of new commitments annually to project-based consultants
- Systems
 - Increase budget to add investment research/analytics tools (estimated cost of \$500k/year)
- People
 - Propose dedicated admin support within each asset class team to provide closer collaboration and enhanced support



Real Estate

Real Estate Strategy Summary

Team



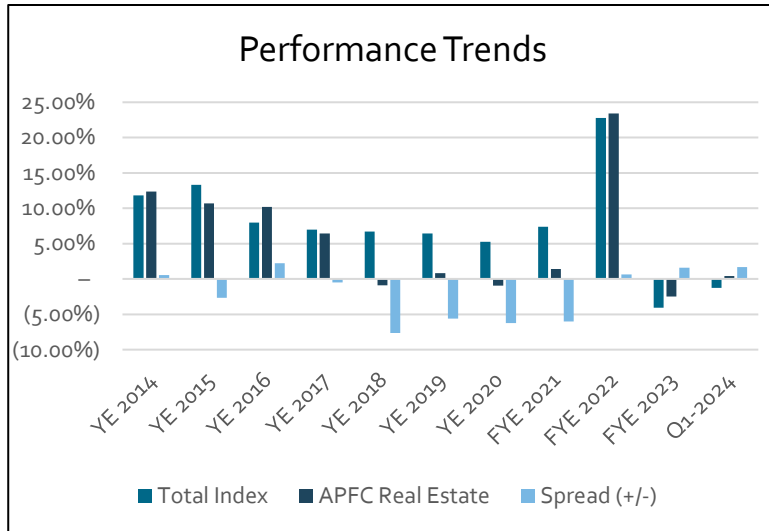
- Current team includes 4 professionals (two vacancies)
- Focus primarily on direct investments, Joint Ventures, Build-to-Core (development), debt and REITs
- Recommend adding two FTEs (SR PM/PM & Associate/Analyst) and potentially a dedicated Admin support as more investments are brought in-house

Investment Strategy

- Performance target is to outperform the benchmark (85% NCREIF + 15% MSCI US REIT index) by 70 bps
- Alpha Strategies:
 - Fund Investments – explore opportunities with best-in-class managers
 - Debt Investments – continue to expand the program, take advantage of market dislocations
 - Build-to- Core – grow the program to include other real estate sectors
 - Expand in-house asset management program
 - Rebalance REIT portfolio as needed to achieve desired sector mix
 - Real Estate Operating Companies – identify operating platforms where staff can be leveraged to manage and source investments
 - Opportunistic Investments – prepare to take advantage of dislocations and stress in markets

Real Estate Strategy Summary (2)

Highlights

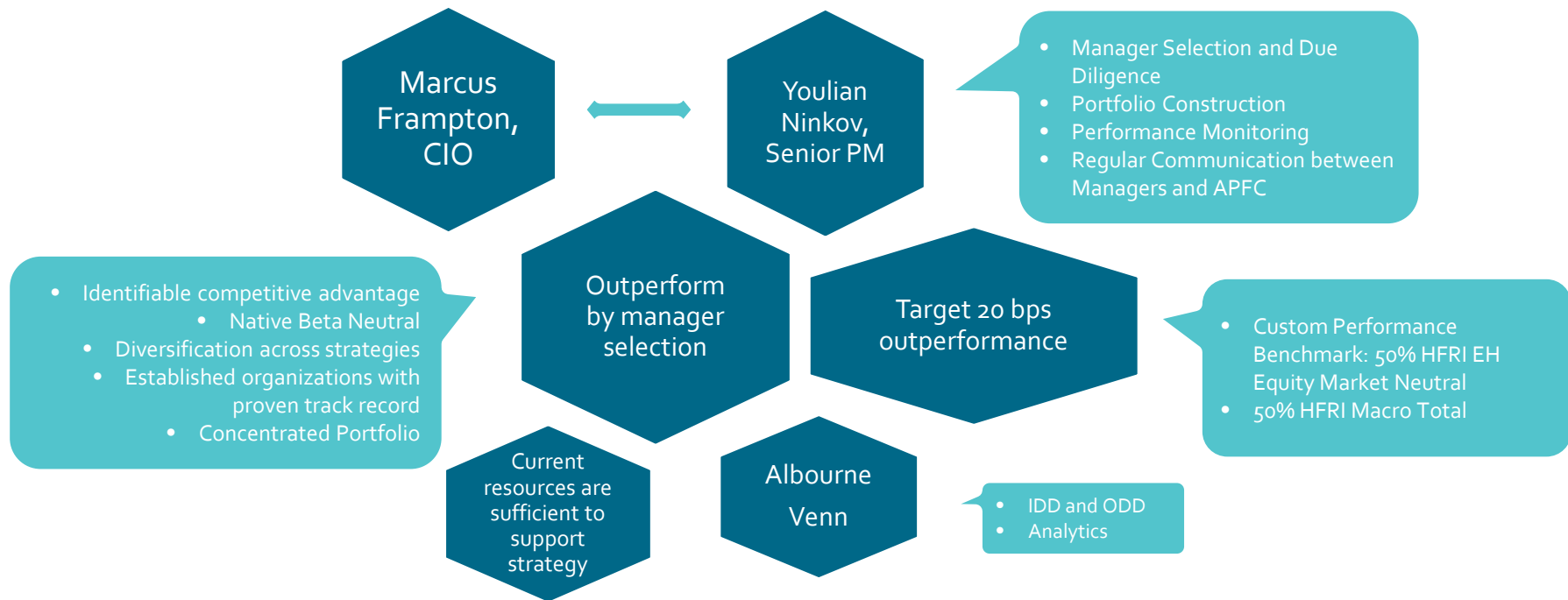


- Fund Investments 3yr returns +17.24% vs 6.79% for NCREIF
- REIT Investments 3yr return +10.11% vs 8.88% for MSCI
- Build-to-Core investments 1yr return +24.71% vs -6.6% for NCREIF
- Construction Lending program 1yr return + 24.11% vs -6.6% for NCREIF
- Direct Managed Assets 57% IRR since takeover

A photograph of an office interior, likely a reception area, with a blue color overlay. In the background, there is a reception desk with a person behind the counter. To the right, a wall features the APFC logo and the text "ALASKA PERMANENT FUND CORPORATION". Two flags are visible in the background. In the foreground, there is a light-colored sectional sofa and a round coffee table with some papers on it.

Absolute Return

Absolute Return Strategy Overview



Absolute Return Portfolio Overview

Key Facts as of September 2023	
AUM	\$5.8bn
Number of Direct Allocations (subscribed / redeemed)	19 (24 / 5)
Net contributed capital	\$4.1bn
Returns (net of fees)*	6.6%
Volatility*	3.4%
Correlation to S&P 500*	0.2
Beta to S&P 500*	0.04
Average Management Fee	1.8%
Average Performance Fee	20.3%

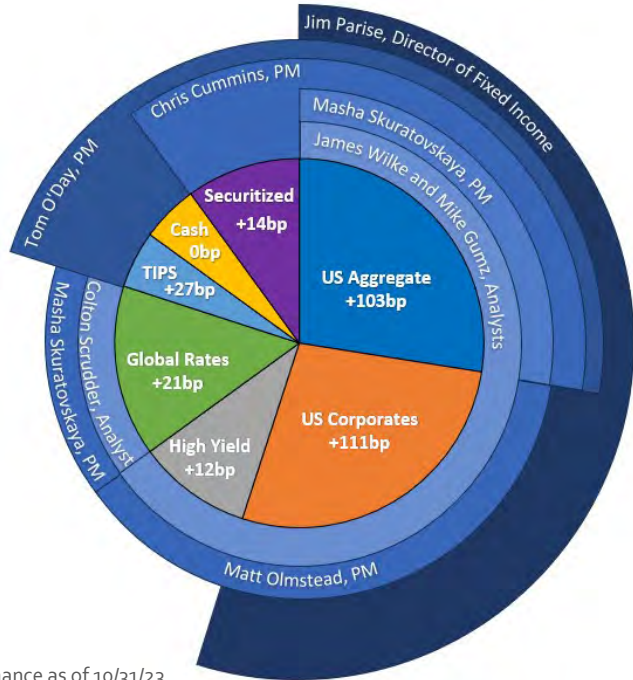
* Annualized Since inception of Direct Program; July 1, 2016



Fixed Income

Fixed Income Team

Team, Portfolios, and 1-yr Alpha

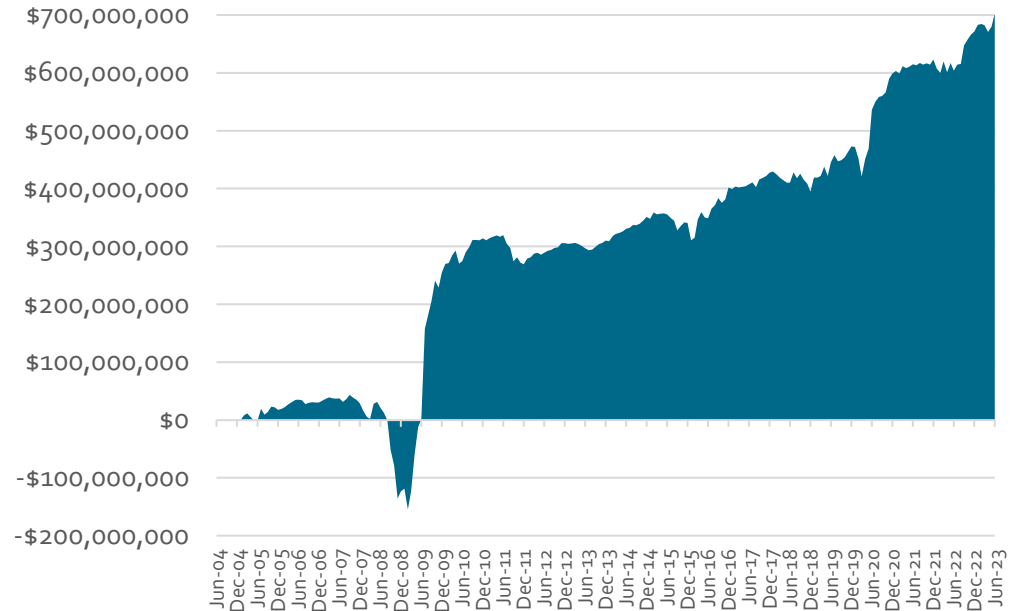


- 100% internally managed across investment grade corporates, high yield, structured products, global rates, and TIPS
- Plan to continue building internal research capabilities with emphasis on hiring new analysts
- Custom benchmark for overall FI portfolio and industry-standard Bloomberg benchmarks for individual portfolios
- 15bp alpha target
- Incentive comp is customized to individual portfolio performance for accountability and focus

Fixed Income Strategy

- Strategy focuses on relative value and reversion to mean
- Team uses repeatable and disciplined approach to sector and security selection
- Duration neutral
- Performance highlights include:
 - The internal Fixed Income team has beaten its benchmark every fiscal year since 2013
 - Internal US IG Corporate portfolio has outperformed its benchmark 12 of the last 14 fiscal years

Total Cumulative Excess Return USD



An aerial photograph of a valley, overlaid with a semi-transparent teal filter. The scene shows a winding river, a small town or village, and a paraglider in flight on the left side. The background features rolling mountains under a cloudy sky.

Public Equity

Public Equities

Excess Return Target: + 30 bps net of fee
Investment Universe/Index: Global/ MSCI ACWI IMI

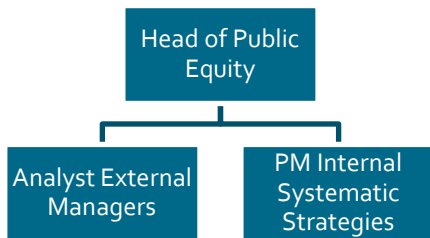
External Management: Primarily Active Selection
Internal Management: Primarily Active Allocation

Drivers of excess return target: Active Allocation, Active Selection

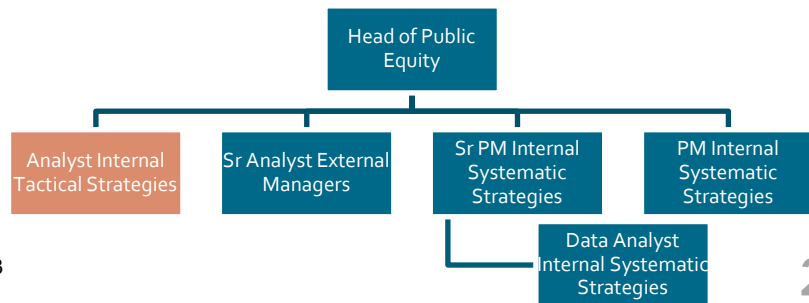
Balance between Internal vs. External: Organic, thoughtful, gradual

History	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
External	82%	85%	79%	84%	87%	87%	90%	97%	100%	100%	100%
Internal	18%	15%	21%	16%	13%	13%	10%	3%	0%	0%	0%

Current Team Structure



Team Structure (3-5 Yrs)



Public Equities: Active Management – Allocation and Selection

1. Active Allocation

- Valuation and reversion-to-the-mean increases the probability of greater long term expected return but may add volatility to the expected return profile.
 - Own relatively less of what is expensive and more of what is cheap.
 - Mitigate risk coming from overvaluation.
 - Emphasize diversification and balance.
 - Implemented Primarily via internal management.

2. Active Selection

- Seek consistent outperformance – stock selection.
 - External Management Program: what we are likely to execute better externally – hire specialists.

Ext. Mgrs.	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	Annualized 11 Yrs
Net Excess Returns	+169 bps	+96 bps	+45 bps	+30 bps	-107 bps	+123 bps	-44 bps	+72 bps	-34 bps	+126 bps	+60 bps	+49 bps

- Internal Management Program: what we are likely to execute better internally – gradual, thoughtful, and opportunistic expansion.

3. What's the optimal mix of Active Allocation and Active Selection? 245 of 343

The background of the slide is a photograph of the Alaska State Capitol building, featuring a classical facade with columns and a pediment. Two flagpoles stand in front of the building, one with the Alaska state flag and the other with the United States flag. The entire image is overlaid with a semi-transparent blue filter. The text 'Appendix' and 'Long-term incentive compensation' is centered over the image in a white, sans-serif font.

Appendix

Long-term incentive compensation

Long-term incentive compensation examples

At the direction of the Board of Trustees, Staff researched long-term incentive compensation policies of various peer plans and sovereign funds. Below are two examples of funds that use or plan to use long-term incentive awards as one tool to retain, align, and motivate senior investment leadership.



- A portion of annual incentive award earned is deferred
 - Portion deferred depends on position (ex. Analysts = 0%; CIO = 50%)
 - Uses same performance criteria as annual award
- Deferred portion of award goes into an account and earns the Fund's return, credited or debited monthly, until payout
- Payout schedule:
 - 50% of deferred award paid out 1 year after earned
 - Remaining 50% of deferred award paid out two years after earned



- In addition to annual incentive compensation award
 - Target value of \$200 k - \$300 k depending on role (applies only to senior investment staff)
 - Based on portfolio outperformance versus benchmark, subject to positive absolute Fund return and "exceeds expectations" in annual performance evaluations
- Payout schedule:
 - 50% paid out immediately
 - 50% deferred and paid out 1 year after earned

SUBJECT: APFC Absolute Return Program Update

ACTION:

DATE: December 14, 2023

INFORMATION: X

BACKGROUND:

The presentation provides an overview of APFC's Absolute Return program objectives, strategy, and performance.

STATUS:

Youlian Ninkov, Senior Portfolio Manager, will present an update on the Program's recent developments, an overview of the strategy, and performance since inception through calendar quarter Q3 2023.



Absolute Return Portfolio

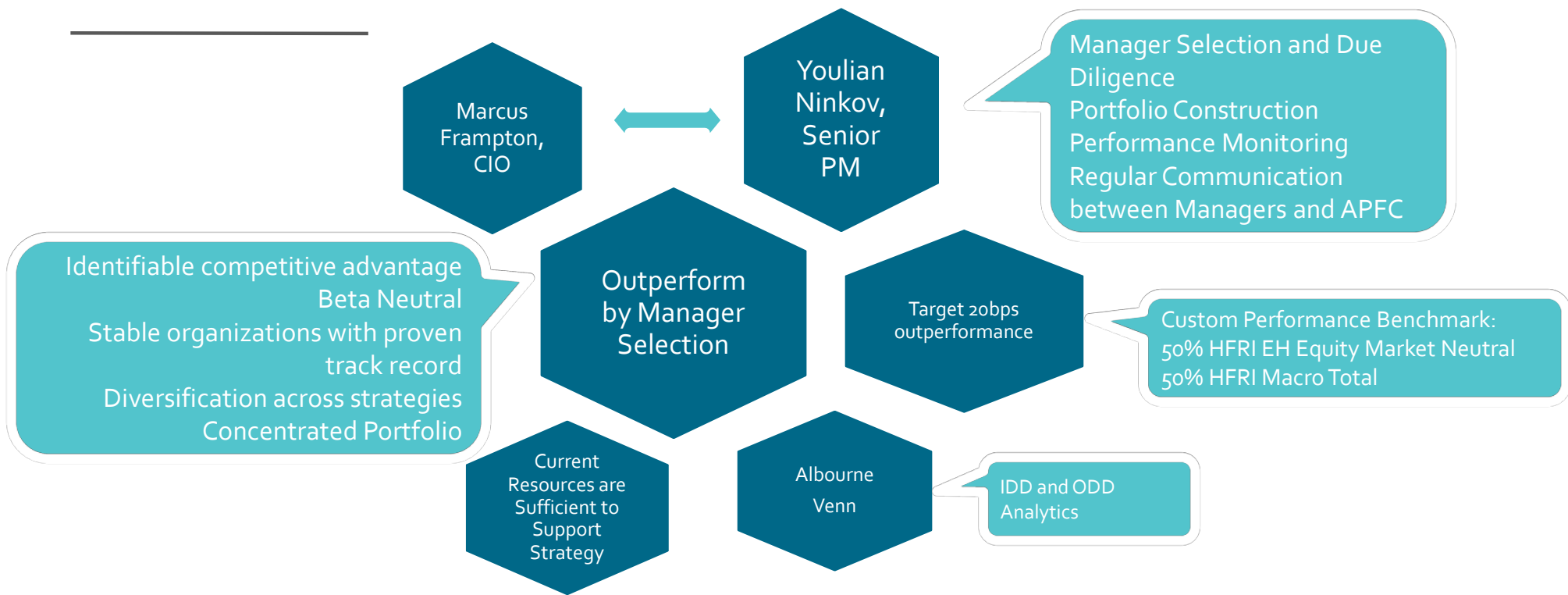
As of September 30, 2023

Portfolio Overview

Key Facts as of September 2023	
AUM	\$5.8bn
Number of Direct Allocations (subscribed / redeemed)	19 (24 / 5)
Net contributed capital	\$4.1bn
Returns (net of fees)*	6.6%
Volatility*	3.4%
Correlation to S&P 500*	0.2
Beta to S&P 500*	0.04
Average Management Fee	1.8%
Average Performance Fee	20.3%

* Annualized Since inception of Direct Program; July 1, 2016

Absolute Return Strategy: Overview



Strategy Objectives

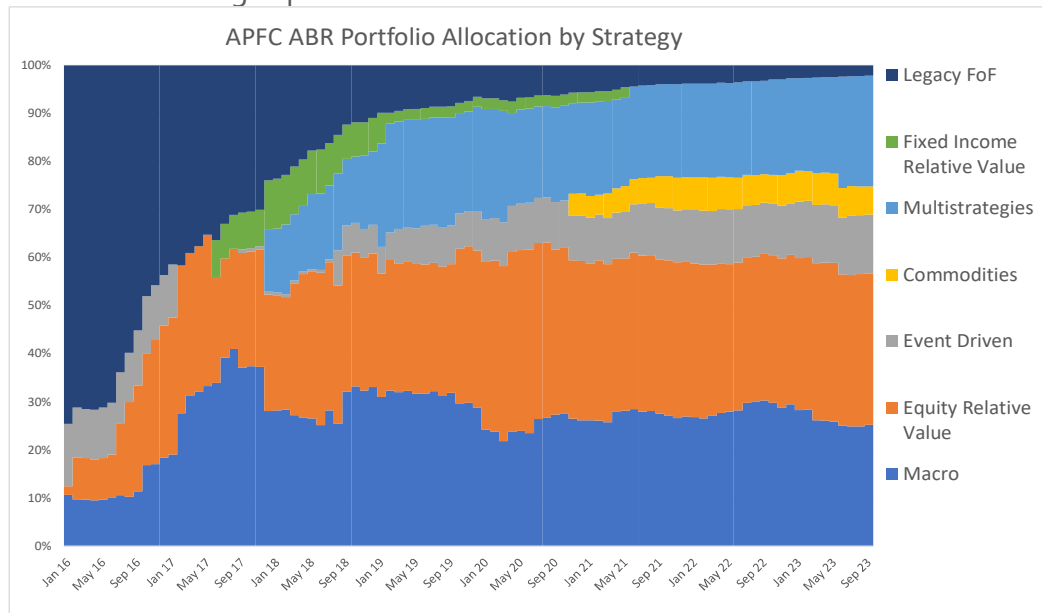
- The Absolute Return portfolio aims to provide the Fund with a stream of uncorrelated and defensive returns while offering better liquidity than other alternative investments. Focus on:
 - Partner with managers with identifiable competitive edge
 - Invest in strategies that have persistent low Beta and Correlation to traditional assets: current average manager equity Beta is 0.05; aggregate portfolio equity Beta is 0.04
 - Diversify across strategies (drivers of return). Average pairwise correlation between managers is 0.2
 - Minimize manager-specific risk (organizational structure, operations, culture, investor base)
 - Avoid strategies with limited opportunity set or too dependent on a particular set of market and economic conditions
 - Benchmarked to 50/50 HFRI EH Equity Market Neutral and HFRI Macro Total indices

Portfolio Construction

- Seek maximum diversification within a relatively concentrated portfolio
- Portfolio construction based on a diversified core and satellite approach with limited conviction-based allocation decisions
- Aim to balance the portfolio based on expected strategy response to market volatility
- High conviction / low turnover: since inception of direct program in 2016, we have invested with 24 managers and redeemed from 5
- In the last 18 months, APFC has invested with 3 new managers (1 Macro, 1 LSE, 1 Multistrategy), and redeemed from 2 (1 Macro, 1 LSE)

Allocation by Strategy

- The portfolio is diversified across Equity Relative Value (31%), Macro/CTA (25%), Multistrategy (23%), Event Driven (12%), and Commodity (6%) focused strategies. Two legacy Fund-of-Funds investments representing approximately \$130mm, or 2% of the portfolio, are in process of returning capital



Performance Summary

Periodic Returns and Attribution by Strategy through calendar Q3 2023

Performance through			Barclays US	HFRI
September 2023	APFC ABR	S&P 500	Agg	Composite
MTD	0.8%	-4.8%	-2.5%	-0.2%
QTD	2.6%	-3.3%	-3.2%	0.8%
YTD	5.3%	13.1%	-1.2%	4.3%
1YR	5.1%	21.6%	0.6%	6.7%
3YR (ann)	8.6%	10.2%	-5.2%	6.9%
SI Ret / Vol (July 2016)	6.6% / 3.4%	12.5% / 14.5%	0.1% / 4.3%	5.5% / 5.9%
SI Correlation / Beta S&P 500	0.2 / 0.04	1 / 1	0.4 / 0.1	0.8 / 0.3

Strategy	QTD	YTD	1YR	3YR (ann)	Allocation \$mm	Funds #	Weight %
Macro	1.1%	0.3%	-1.4%	1.0%	\$1,458	6	25%
Equity Relative Value	0.6%	3.2%	4.1%	3.5%	\$1,814	6	31%
Event Driven	0.3%	0.7%	0.8%	0.9%	\$713	2	12%
Commodities*	-0.2%	0.0%	0.4%	0.2%	\$337	2	6%
Multistrategies	0.7%	1.3%	1.5%	2.5%	\$1,331	4	23%
Legacy FoF	0.0%	-0.1%	-0.3%	0.4%	\$124	2	2%
Total	2.6%	5.3%	5.1%	8.4%	\$5,776	22	

* includes direct allocation to Gold ETF

Source: APFC staff. APFC ABR performance numbers are net of fees.

ALASKA PERMANENT FUND CORPORATION

7

Appendix

Calendar Returns

Returns for ABR Composite

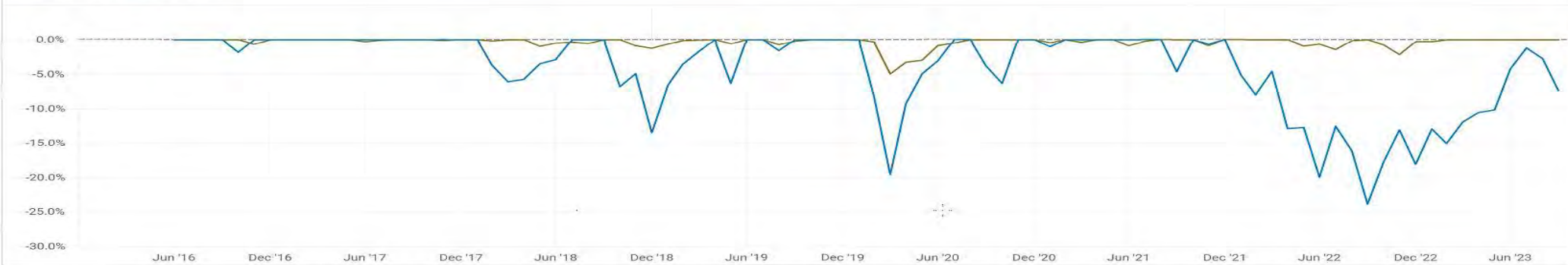


Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2023	-0.01%	0.70%	0.12%	1.19%	0.20%	0.45%	0.29%	1.48%	0.83%				5.36%
2022	0.75%	0.78%	1.61%	2.02%	-0.93%	0.30%	-0.80%	1.32%	1.38%	-0.76%	-1.42%	1.95%	6.29%
2021	-0.44%	1.45%	-0.38%	1.81%	1.00%	-0.87%	0.61%	0.91%	1.04%	-0.01%	-0.85%	1.69%	6.07%
2020	0.24%	-0.34%	-4.66%	1.78%	0.31%	2.20%	0.39%	0.94%	1.05%	1.33%	1.92%	4.54%	9.87%
2019	0.62%	0.52%	0.07%	1.25%	-0.58%	0.92%	1.04%	-0.71%	0.50%	0.35%	0.59%	1.12%	5.82%
2018	1.06%	-0.18%	0.44%	0.97%	-0.96%	0.47%	0.14%	-0.20%	0.71%	-0.01%	-0.86%	-0.38%	1.18%
2017	0.66%	1.26%	0.73%	0.49%	0.67%	-0.30%	0.24%	1.28%	0.51%	1.84%	-0.15%	0.79%	8.30%
2016							0.66%	0.32%	0.48%	2.23%	-0.67%	1.42%	4.50%

Historical Drawdown Chart




— ABR Composite — US Equity Market




Appendix

Historical Risk Statistics



Metrics	Investment	Benchmark
Beta to Benchmark	0.04	1.00
Correlation	0.17	1.00
Downside Correlation	0.55	1.00
Downside Capture	-6.2%	100.0%
Upside Capture	17.5%	100.0%
Average Down Month	-0.7%	-4.7%
Average Up Month	1.0%	3.4%
Downside Volatility	4.0%	19.7%
Upside Volatility	4.2%	15.1%
Battling Average	72.6%	71.3%
CVaR (5%)	1.8%	9.5%
VaR (95%)	0.9%	8.2%
VaR (97.5%)	1.0%	9.0%
VaR (99%)	1.9%	9.6%
Skewness	-0.74	-0.48
Kurtosis	6.73	0.33
Sortino Ratio	1.23	0.59
Calmar Ratio	-3.99	-0.43
Autocorrelation	-0.10	-0.18

Hypothetical Drawdown Periods



Given your current factor exposures, which periods in history would cause significant drawdowns in ABR Composite?
Assumes zero non-factor returns, and zero rebalancing during the drawdown period.

Drawdown Threshold: %

Drawdown Period	Startpoint / x Trough / Endpoint	Drawdown Length (Months)	Recovery Period (Months)	Investment	+/-	Benchmark	+/-
10 Oct 2002 – 27 Dec 2002	∞	0.4	2.2	-2.2%	0.5	-8.3%	0.0
11 Mar 2003 – 10 Jun 2003	∞	0.4	2.6	-3.3%	0.0	-6.3%	0.0
12 May 2006 – 25 Sep 2006	∞	1.1	3.4	-2.4%	0.4	-12.2%	0.0
14 Jul 2007 – 25 Oct 2007	∞	1.1	2.3	-2.6%	0.0	-12.0%	0.0
3 Jul 2008 – 10 Oct 2008	∞	2.7	0.6	-2.7%	1.9	-34.7%	1.0
3 Mar 2009 – 19 Oct 2009	∞	2.2	5.4	-3.3%	1.4	-8.0%	-0.9
20 Mar 2015 – 17 Nov 2015	∞	1.8	6.1	-2.6%	-0.2	-15.3%	0.0
21 Jan 2016 – 6 Sep 2016	∞	3.2	4.4	-2.5%	1.6	-8.2%	-0.3
27 Jan 2018 – 16 May 2018	∞	0.5	3.2	-2.0%	0.6	-9.9%	1.0
4 Sep 2019 – 14 Feb 2020	∞	0.3	5.0	-2.1%	0.5	-3.9%	-0.5
21 Feb 2020 – 5 Nov 2020	∞	3.6	4.9	-2.1%	1.0	-36.3%	1.0

Appendix

What-if Drawdown Chart

If the selected period happened today, what would the drawdown for ABR Composite look like?



Selected period: 2 Jul 2008 - 10 Oct 2008

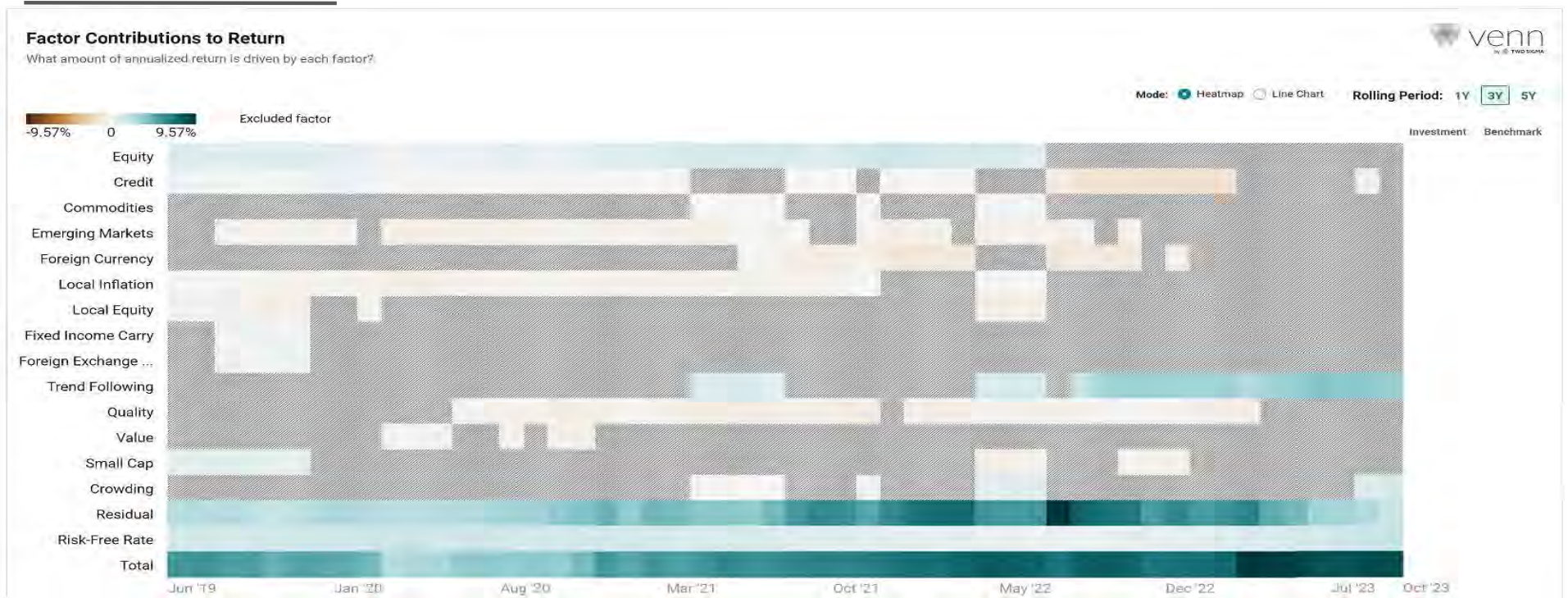
ABR Composite US Equity Market



Appendix



Appendix



Appendix



SUBJECT: Overview of Crestline Summit ACTION:

DATE: December 14, 2023 INFORMATION: X

BACKGROUND:

Founded in 1997 in Forth Worth, TX, Crestline has been managing APFC capital since 2004 in various Alternative Investment strategies. At this meeting they will present to the Board an overview of Crestline Summit, a multi-PM, equity market-neutral hedge fund which has produced 6.6% annualized returns with Beta to S&P 500 of 0.01

Biographies of Attendees:

CAROLINE COOLEY / CIO

Ms. Cooley joined Crestline in 1998 and is Managing Partner and CIO of Crestline Summit Strategies, a multi-strategy, multi-PM, market neutral hedge fund manager. She also serves on Crestline Inc.'s (parent company) Management Committee. A veteran in the alternative investment industry, Ms. Cooley has experience as a portfolio manager, risk manager and trader in equity, fixed income and derivative markets. Ms. Cooley previously was the CIO of Crestline's Hedge Funds of Fund business, overseeing manager selection and portfolio management, since joining the firm. From 1986 through 1997, Ms. Cooley was a derivatives trader and risk manager with Taylor and Company, an investment firm associated with the Bass Family of Fort Worth, TX (one of the earliest multi-asset, multi-strategy alternative asset managers). Ms. Cooley began her career in the investment industry at Manufacturers Hanover Trust Company (later merged into JP Morgan) where she specialized in futures markets in both New York and Chicago after receiving her BA in Economics from The College of William and Mary in 1983. Ms. Cooley serves on the Advisory Board of Texas Wall Street Women and on the Board of Directors of Catholic Charities of Fort Worth.

NEILSON ARBOUR / Deputy CIO

Mr. Arbour joined Crestline in 2007 and currently leads Crestline Summit Strategies including portfolio construction, strategic and tactical capital allocation, hedging and all underlying investment strategies. Prior to Summit's inception in 2015, he was the Head of Equity Strategies for Crestline Partners, the firm's fund of hedge funds. Prior to Crestline, Mr. Arbour was in the equities division at JPMorgan with a primary focus of generating and tailoring trades for hedge funds and institutional clients. His previous experience includes equity research at an institutional long-only investment firm. He holds a BBA in Finance from Texas Christian University, is a CFA charterholder and is a member of the Dallas Fort Worth Society of Financial Analysts.



Alaska Permanent Fund Corporation Board Presentation

CONFIDENTIAL AND PROPRIETARY
FOR PROFESSIONAL OR INSTITUTIONAL INVESTORS ONLY

Scott Nelson
Head of Client Partnership Group
Crestline Summit Strategies
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snelson@crestlineinc.com

Founded Crestline
with Edward P. Bass family capital and began investing in hedge fund strategies

1997

Launched an opportunistic credit FoHF

2005

Launched direct investing private credit business

2012

Launched an open architecture, multi-portfolio manager hedge fund - Crestline Summit

2015

Launched insurance business

2020

Intend to launch "enhanced" version of original Summit Equity Alpha fund in late 2023

2024

2001

Opened Fund of Hedge Funds (FoHF) to outside capital

2004

Inception of APFC Relationship with Crestline

2009

Launched first secondaries fund

APFC Investment into Crestline Summit Equity Alpha

2021

Launched Crestline Summit's packaged alpha plus equity index exposure (APEX) solution

Long Track Record

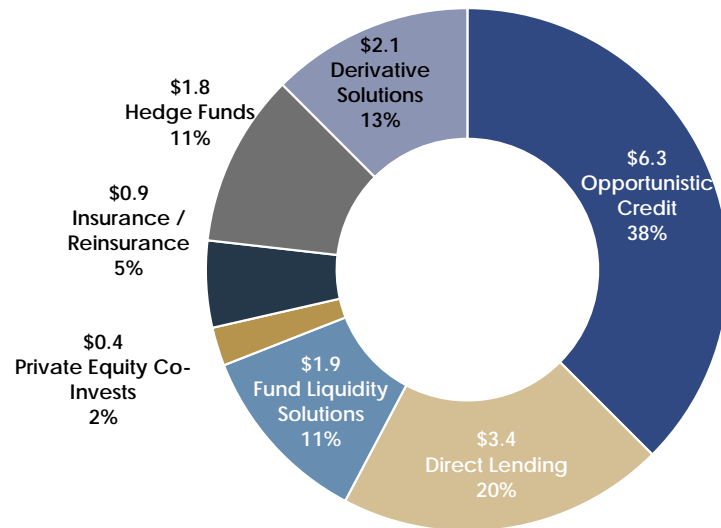
- Founded in 1997 and headquartered in Fort Worth.
- Origins rooted in investing in hedge fund strategies.

Global Footprint

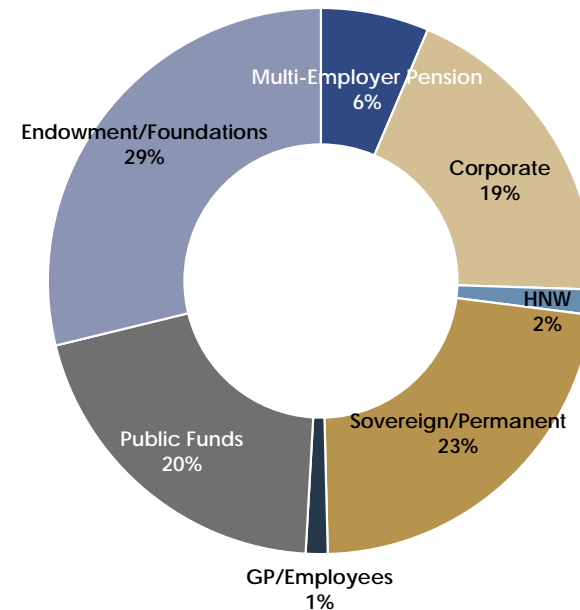
- 160+ employees
- Boutique institutional alternative investment management firm. Affiliate offices in New York, London, Toronto, and Tokyo.

Diversified Institutional Client Base

Crestline Investors, Inc.



Crestline Summit



All values in billions. Assets on strategy level may not sum to firm AUM due to Crestline products that invest directly into other Crestline products. AUM for Crestline Investors, Inc., its affiliates and its affiliated management team is estimated at \$17.4 billion, which includes uncalled capital commitments and \$2.3 billion of beta overlay notional amounts. The above estimate is based on valuations as of 6/30/2023 for certain assets managed by Crestline affiliates, which are valued as of earlier dates based on the most recently available data for such assets. AUM for the Insurance and Direct Lending strategies may include leverage. See Disclaimers for further information.

Key competitive advantage: A business model and “spirit of partnership” that allows us to attract and retain top investment talent

1

Open Architecture, Multi-Manager, Multi-Strategy Model

- Dynamic capital allocation and comprehensive risk management
- Singularly focused on engaging top talent with flexibility in terms of partnership structure and format

2

Quality of Returns

- **Alpha:** Returns have been overwhelmingly driven by idiosyncratic risk, not market or factor-driven
- Low correlation to the markets; low correlation to the multi-strategy hedge fund peer group¹
- Risk management: high percentage of positive months; proven ability to truncate downside risk

3

Spirit of Partnership, Preferred PM Partner

- Terms that resonate with top talent
- Support and tools to succeed
- Focus on quality of underwriting and talent over quantity
- High rates of retention

4

Alignment of Interests

- Aligned liquidity terms
- Favorable transparency
- 25+ years of experience servicing the largest institutional investors

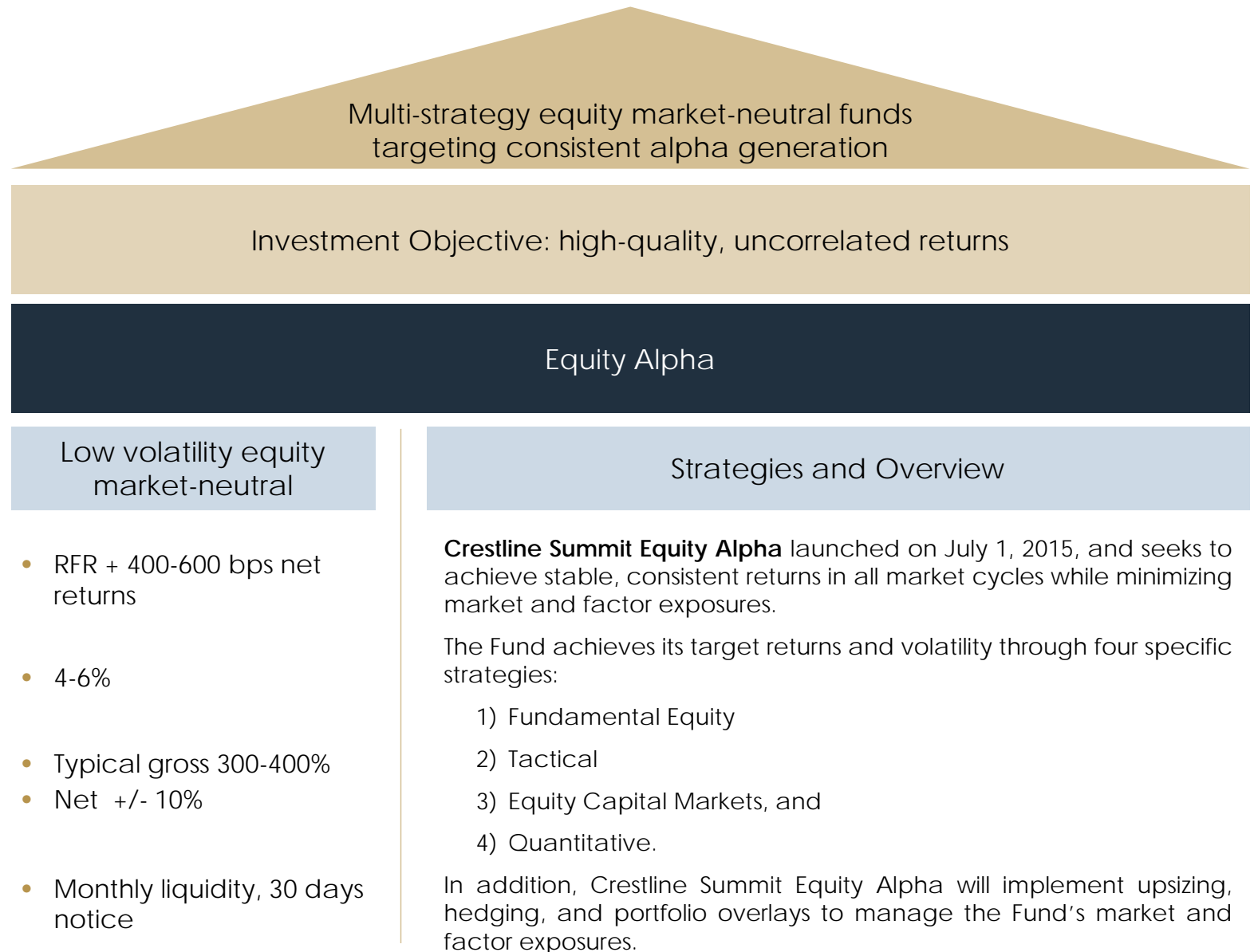
1. Source: PivotalPath data

Please see Performance Disclaimers at the front of this document for further information. Past performance not indicative of future results. See Disclaimers for further information.

- 1 Top talent increasingly seeking out multi-manager models like ours
 - Alignment of incentives – PMs compensated based on performance
 - Avoid costs and complexity of managing their own firm
 - Don't have to worry about increasingly difficult regulatory environment

- 2 Investors benefit from dynamic capital allocation amongst strategies

- 3 Diversity of strategies helps deliver more consistent returns, lower volatility, lower beta and correlation, among other benefits



Expected/Targeted returns are forward-looking statements that are subject to uncertainty as described further in the relevant offering memorandum and should not be regarded as a representation, warranty or prediction of any particular performance. Hypothetical returns are subject to inherent risks and limitations. Crestline is an institutional investment adviser who markets to sophisticated investors who are able to understand the limitations and risks associated with the use of hypothetical performance. Upon request, Crestline will provide information on the criteria used and assumptions made in calculating hypothetical performance. Please see Performance Disclaimers at the front of this document for further information. Past performance not indicative of future results. See Disclaimers for further information.

Risk Free Rates is the 3-Month Treasury Bill.

Statistics

	APFC – Equity Alpha	HFRI Equity Market Neutral	HFRI EH Multi- Strategy
Target Return	RFR+400-600 bps	NA	NA
12M Annualized Return	12.71%	3.53%	1.70%
18M Annualized Return	8.94%	2.36%	-0.39%
36M Annualized Return	8.75%	2.21%	5.77%
60M Annualized Return	7.74%	2.42%	6.80%
Annualized Return Since Inception	6.62%	2.55%	4.81%
Annualized Standard Deviation	4.39%	2.56%	9.98%
Largest Drawdown	-5.07%	-3.54%	-16.02%
Sharpe Ratio	1.15	0.47	0.41
Beta to S&P 500	0.01	0.07	0.55
Correlation to S&P 500	0.04	0.45	0.87

Key Points

- Equity Alpha has delivered on its mandate of RFR + 400-600 bps. Much of the first 8+ year track record has been in an extremely low interest rate environment.
- Low/moderate volatility
- Low/moderate correlation and beta
- We believe suitable for a core holding in many portfolios
- History of minimizing drawdowns relative to equity and hedge fund peers
- Attractive risk-adjusted returns as demonstrated by Sharpe Ratio

Crestline is an institutional investment adviser who markets to sophisticated investors who are able to understand the limitations and risks associated with the use of hypothetical performance. Upon request, Crestline will provide information on the criteria used and assumptions made in calculating hypothetical performance. Please see Performance Disclaimers at the back of this document or further information.

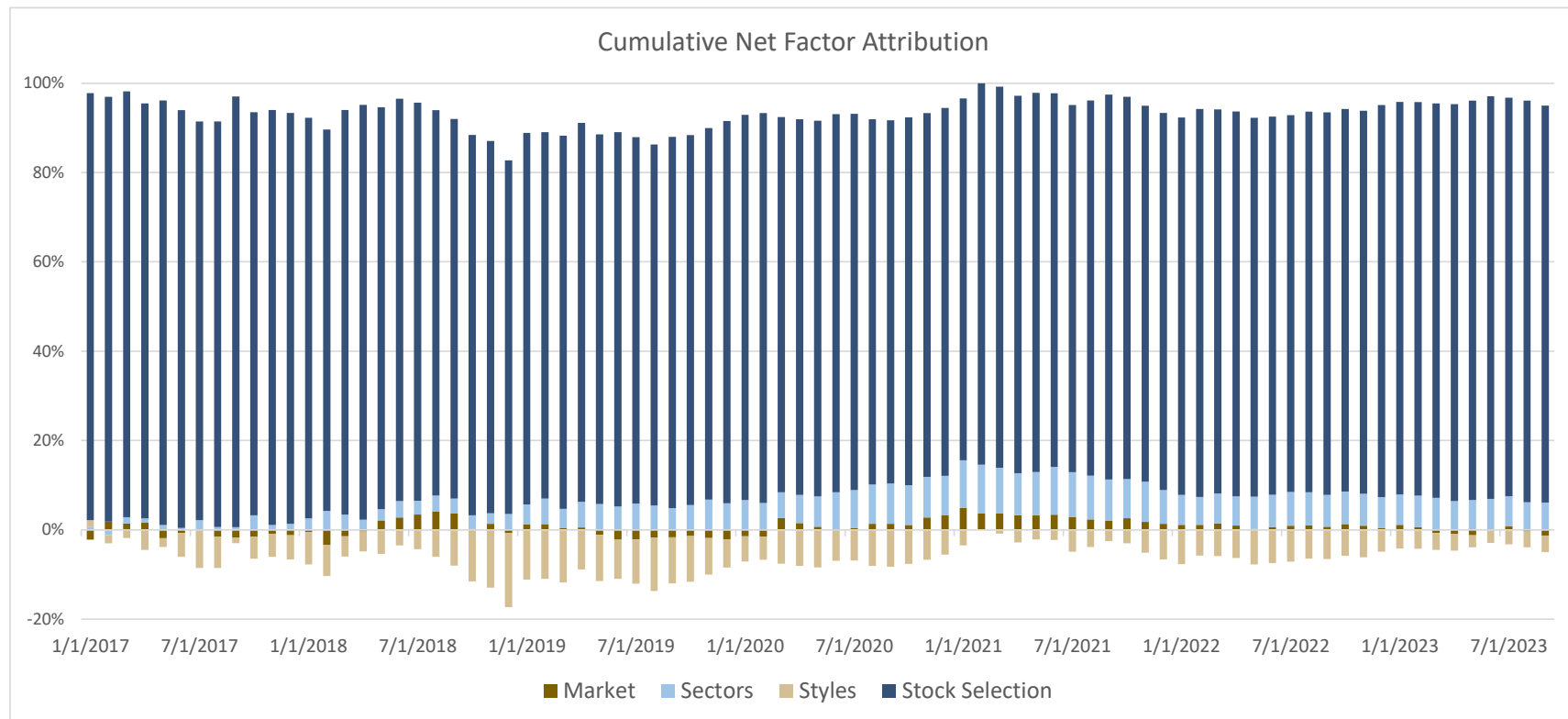
Past performance not indicative of future results.

Correlations to the performance of the indices presented in this report are shown for comparison purposes only. The securities included in those indices are not necessarily included in the Crestline Summit portfolio. Sharpe and Sortino Ratios calculated using the USD 3M T Bill as the risk-free rate.

All returns are for the period of July 2015 – October 2023 unless noted otherwise. October 2023 return is estimated.

Net Factor Attribution for Summit Equity Alpha

- Stock selection has contributed 99% of the return per month on average.

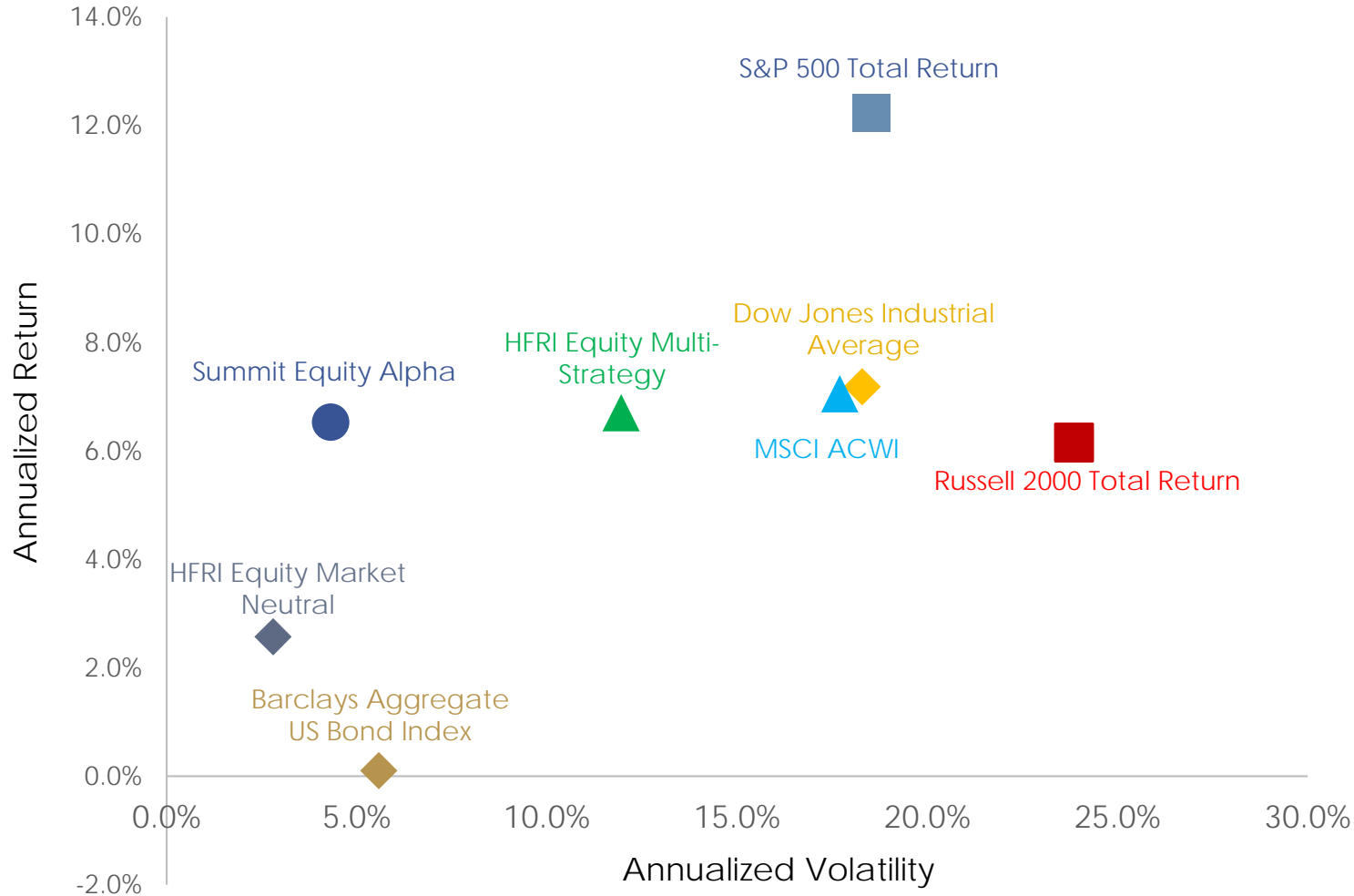


Factor attribution is derived from Crestline Summit's M11 factor model, which is Crestline's proprietary multi-factor risk model. Net factor attribution is calculated by subtracting an assumed 1% management fee and 10% incentive allocation from the gross returns and attributing it to the stock selection factor over time.

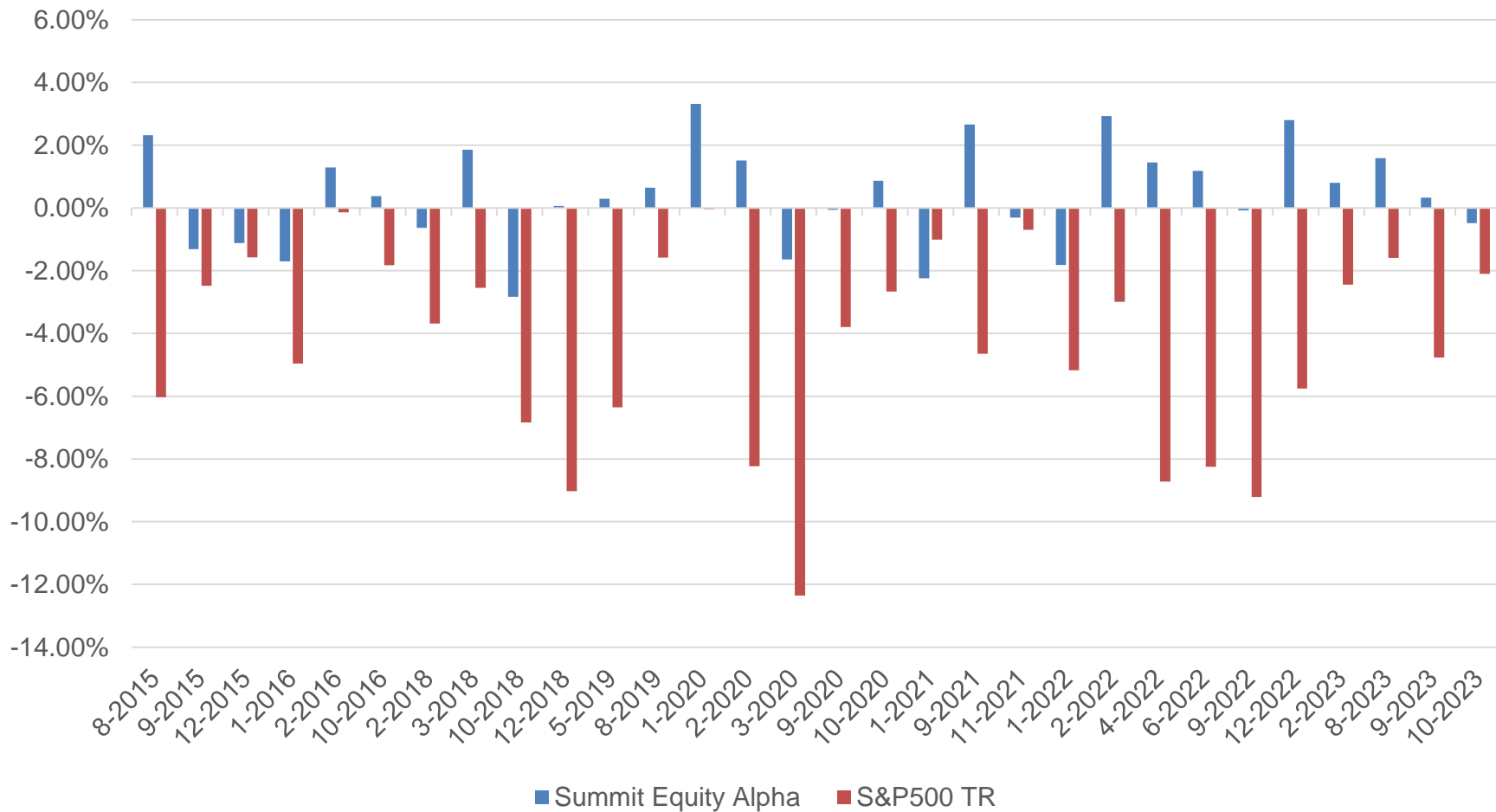
Summit Equity Alpha Relative To Broad Asset Class Benchmarks

Summit Equity Alpha has produced an annualized return of 6.5% over the last five years with less than a quarter of the volatility of broad equity indices.

5-Year Annualized Returns v Volatility



- Inception to date, Summit Equity Alpha has been positive in 19 of the S&P500's 31 negative months
- In the S&P500's negative months, Summit Equity Alpha net compounded performance was cumulatively up **+13.4%** while the S&P500 was cumulatively down **-75.4%**.



Equity Multi-Strategy

27 Portfolio Management Team Employing Diverse Strategies

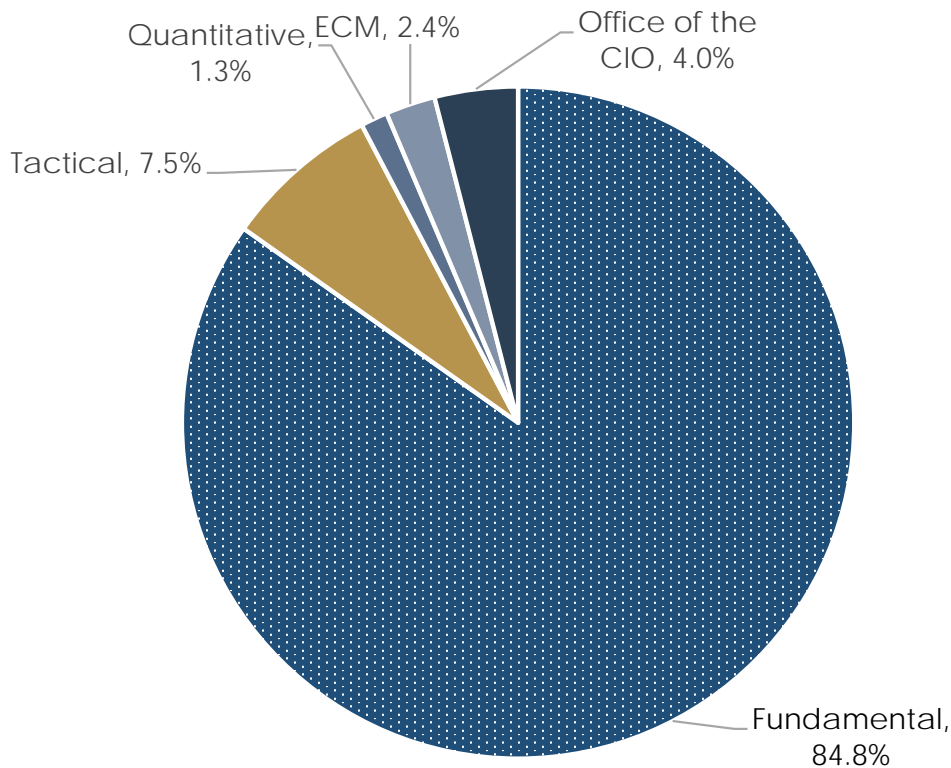
Fundamental (16)	Tactical (5)	Quantitative (2)	Equity Capital Markets ("ECM") (3)	Office of CIO (1)	Other Investments
<ol style="list-style-type: none"> 1. Consumer 2. Energy 3. Financials 4. Healthcare 5. Industrials 6. Materials 7. Technology 8. Utilities 	<ol style="list-style-type: none"> 1. Merger Arb 2. Index Event 	<ol style="list-style-type: none"> 1. Quantamental 2. Shorter Term Systematic (Pricing, Fundamental, Behavioral, Alt Data) 3. Medium Term Systematic (Liquidity, Event-driven, Behavioral Patterns) 	<ol style="list-style-type: none"> 1. IPOs 2. Follow-ons 3. Block trading 4. SPACs 	<ol style="list-style-type: none"> 1. Upsizing 2. Alpha capture 3. Hedging 4. Overlays 5. Market/Factor Management 	<ol style="list-style-type: none"> 1. Innovation 2. New markets 3. New strategies

*data as of 10/31/2023; excludes hedging strategies from PM count

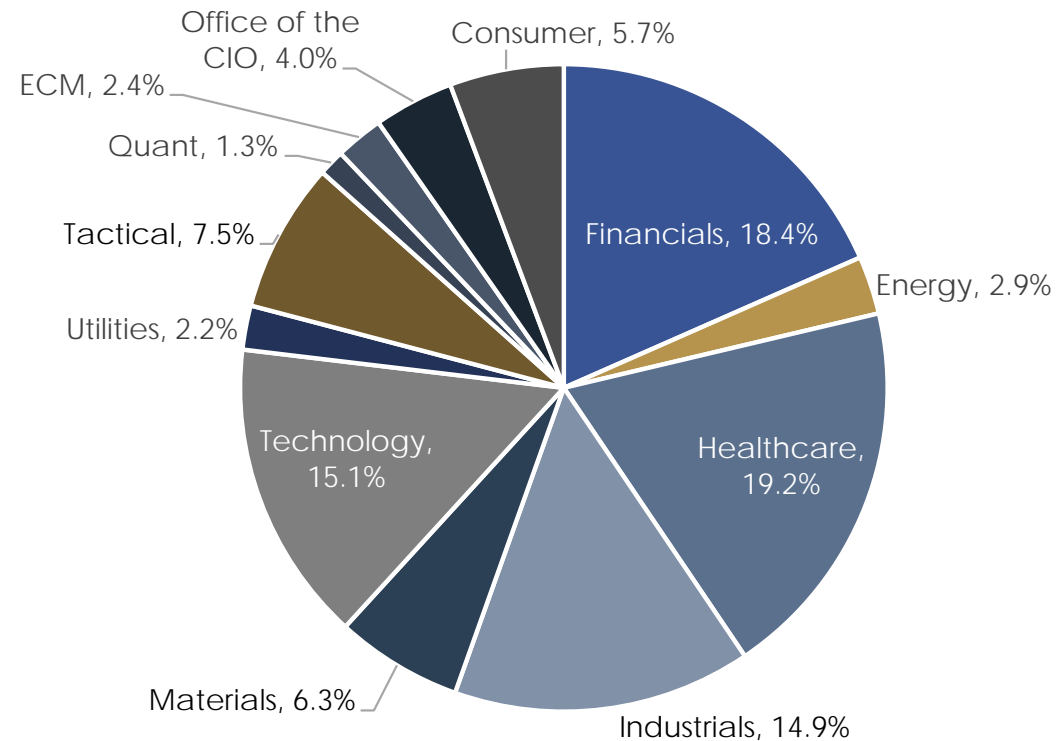
PORTFOLIO BREAKDOWN BY STRATEGY (10/31/2023)

- The Funds' current capital allocations reflect a reduced opportunity set in the Tactical and ECM strategies.
- The modest allocation to Quant strategies is reflective of it being a relatively newer strategy.
- The OCIO allocation typically is larger but there has been much less need for market and factor hedges in current environment.

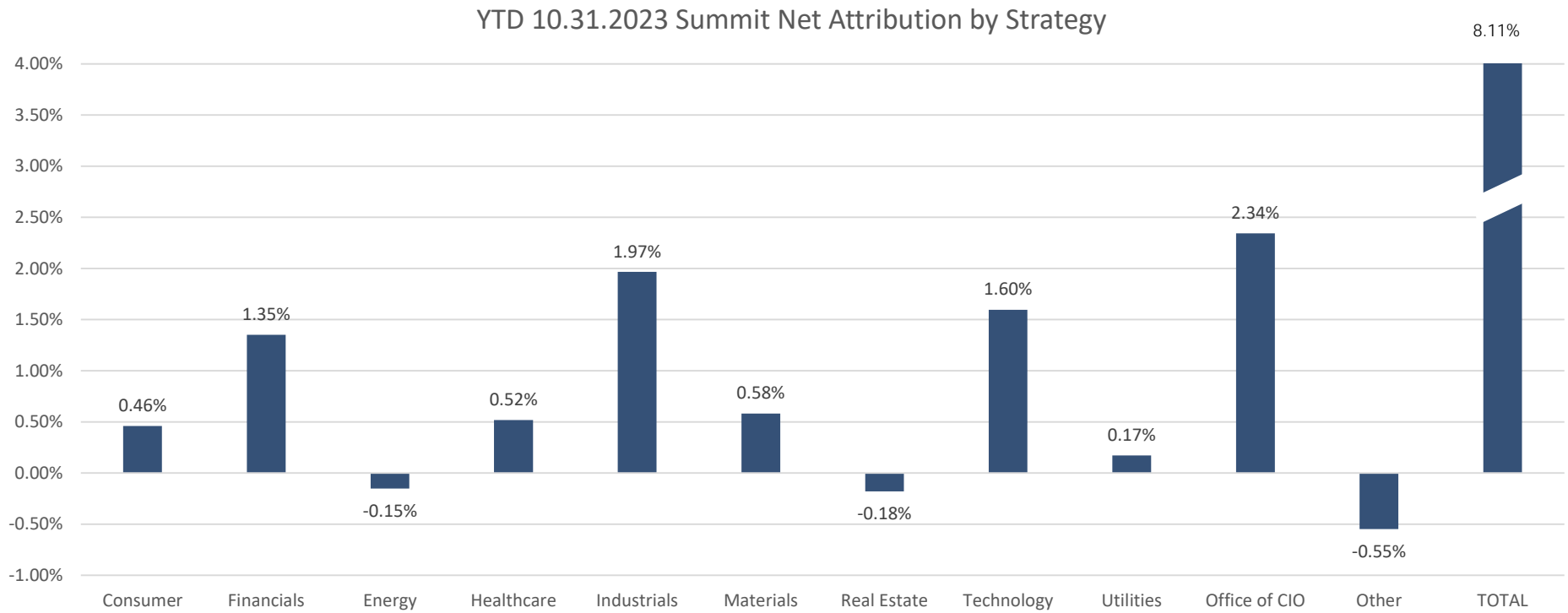
Strategy Allocations



Strategy and Sector Allocations



YTD Summit Equity Alpha +8.11% Net - Attribution by Strategy (As of 10/31/2023)



Past performance not indicative of future results. Sector level attribution is net of fees and expenses. Office of the CIO includes portfolio overlays and interest income. Other category inclusive of Equity Capital Markets, Tactical, and Quant strategies. 275 of 343

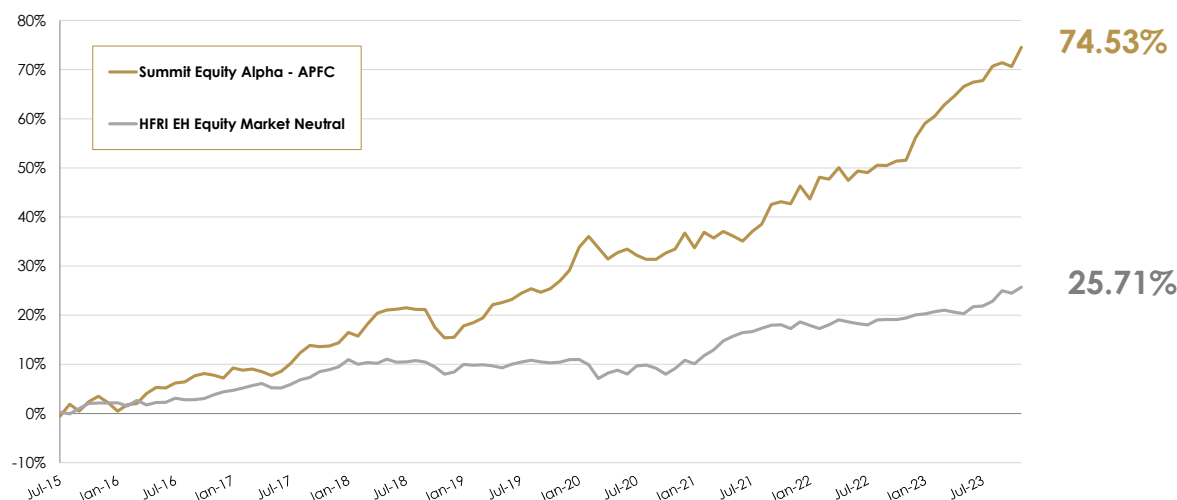
Appendix

APFC Performance – Crestline Summit Equity Alpha



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov*	Dec	YTD	HFRI EMN
2023	1.83%	0.95%	1.44%	1.04%	1.23%	0.53%	0.17%	1.76%	0.43%	-0.47%	2.29%		11.75%	4.69%
2022	-1.79%	3.06%	-0.26%	1.59%	-1.74%	1.31%	-0.24%	1.02%	-0.04%	0.60%	0.11%	3.06%	6.75%	1.21%
2021	-2.20%	2.38%	-0.86%	0.98%	-0.64%	-0.77%	1.42%	1.09%	2.92%	0.38%	-0.29%	2.54%	7.01%	7.05%
2020	3.59%	1.67%	-1.71%	-1.70%	1.00%	0.55%	-0.97%	-0.61%	-0.01%	1.06%	0.61%	2.37%	5.86%	-0.11%
2019	1.99%	0.55%	0.83%	2.25%	0.37%	0.49%	1.04%	0.72%	-0.56%	0.58%	1.27%	1.72%	11.81%	2.32%
2018	1.88%	-0.63%	2.12%	1.83%	0.54%	0.15%	0.25%	-0.28%	-0.04%	-2.99%	-1.83%	0.14%	1.02%	-0.98%
2017	1.87%	-0.40%	0.24%	-0.52%	-0.71%	0.78%	1.48%	2.00%	1.32%	-0.23%	0.11%	0.57%	6.64%	4.88%
2016	-1.70%	1.28%	0.29%	1.94%	1.20%	-0.09%	0.99%	0.21%	1.15%	0.43%	-0.30%	-0.52%	4.92%	2.23%
2015							-0.57%	2.45%	-1.38%	1.89%	1.09%	-1.23%	2.21%	2.12%

CUMULATIVE RETURNS



Prior to September 2016, APFC was indirectly invested in Crestline Summit through CAPF. In September 2016, APFC invested directly in Crestline Summit. Returns prior to September 2016 reflect Crestline Summit's gross returns less a management fee applied at the rate APFC is currently paying as an investor directly in Crestline Summit. HFRI EMN refers to the HFRI Equity Market Neutral Index

Correlations to the performance of the indices presented in this report are shown for comparison purposes only. The securities included in those indices are not necessarily include in the Summit portfolio.

*November 2023 performance is estimated.

Crestline returns are net of all fees & expenses.

Please see Performance Disclaimers at the front of this document or further information. Past performance not indicative of future results.

Caroline Cooley
Managing Partner, Chief Investment Officer

Investment Team	PM Sourcing	PM Teams	Risk	Trading	Operations & Accounting	Investor Relations	Legal & Compliance
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Neilson Arbour
Deputy Chief Investment Officer

Alex Didych
Chief Risk Officer

Robert Bernstone
Head of Trading

Melinda Lilly
Chief Operating Officer

Scott Nelson
Head of Client Partnership Group

Shaun McGowan
Head of Legal and Compliance

Josh Tyson
Director, Head of Research

Kyle Viebig
Vice President

Drew McTiernan
Senior Analyst

Logan Caldwell
Analyst

Jace Jackson
Director, Fundamental Strategies

Cason Beckham
Director, Tactical Strategies

27 Portfolio Manager Teams*
(12 internal; 15 external)

Research Analysts¹
(6)

Matthieu Bonfils
Director

Norman Bae,
Vice President

Caleb Curreri
Associate

Risk Systems Development²
(24)

Jack Lawler
Trader

Jordan Smith
Director, Operations

Operations Analysts³
(3)

Alexa Bischel
Controller

John Molyneaux
Senior Accountant

Office Managers
(2)

Seconded back and middle office staff²
(1)

Anne Hong
Gottschall
Director, Investor Relations

Megan Doyle,
Legal & Compliance Associate

*Data as of 10/31/2023

1. Research Analyst total reflects analysts supporting internal employee PM teams and excludes external PM teams' staff count.
 2. Boxes with dashed lines denote seconded resources contracted to support Crestline Summit and its funds.
 3. Hires pending: One Senior Operations Analyst.



Caroline Cooley

Managing Partner
Chief Investment Officer

Ms. Cooley joined Crestline in 1998 and is Managing Partner and CIO of Crestline Summit Strategies, a multi-strategy, multi-PM, market neutral hedge fund manager. She also serves on Crestline Inc.'s (parent company) Management Committee. A veteran in the alternative investment industry, Ms. Cooley has experience as a portfolio manager, risk manager and trader in equity, fixed income and derivative markets. Ms. Cooley previously was the CIO of Crestline's Hedge Funds of Fund business, overseeing manager selection and portfolio management, since joining the firm. From 1986 through 1997, Ms. Cooley was a derivatives trader and risk manager with Taylor and Company, an investment firm associated with the Bass Family of Fort Worth, TX (one of the earliest multi-asset, multi-strategy alternative asset managers). Ms. Cooley began her career in the investment industry at Manufacturers Hanover Trust Company (later merged into JP Morgan) where she specialized in futures markets in both New York and Chicago after receiving her BA in Economics from The College of William and Mary in 1983. Ms. Cooley serves on the Advisory Board of Texas Wall Street Women and on the Board of Directors of Catholic Charities of Fort Worth.



Neilson Arbour

Deputy Chief Investment Officer

Mr. Arbour joined Crestline in 2007 and currently leads Crestline Summit Strategies including portfolio construction, strategic and tactical capital allocation, hedging and all underlying investment strategies. Prior to Summit's inception in 2015, he was the Head of Equity Strategies for Crestline Partners, the firm's fund of hedge funds. Prior to Crestline, Mr. Arbour was in the equities division at JPMorgan with a primary focus of generating and tailoring trades for hedge funds and institutional clients. His previous experience includes equity research at an institutional long-only investment firm. He holds a BBA in Finance from Texas Christian University, is a CFA charterholder, and is a member of the Dallas Fort Worth Society of Financial Analysts.



Scott Nelson

Head of Client Partnership
Group

Mr. Nelson joined Crestline Summit in 2022 and is a Managing Director, Head of Client Partnership Group, Crestline Summit. Mr. Nelson has 30+ years of investment industry leadership and distribution experience. In his role at Crestline Summit, he is responsible for distribution, as well as investor and consultant relations. Prior to joining Crestline Summit, he was Global Co-Head of Business Development & Investor Relations at Eisler Capital. Previously, he was Head of the Investor Group at Autonomy Capital, a global multi-asset class, global macro alternative investment manager. Prior he was the Chief Operating Officer at Deephaven Capital Management, a global multi-strategy alternative investment manager. Prior to Deephaven, Mr. Nelson was Chief Operating Officer at Provident Advisors LLC, a multi-strategy alternative investment manager. He previously served as the Executive Vice President of Allianz Dresdner Asset Management where he was the head of the single strategy hedge fund business and as President of American Express Asset Management's Advisory Capital Strategies Group, and Senior Managing Director of Alternative Investments where he led the single-manager hedge fund and multi-manager, fund of hedge funds businesses. Scott holds a B.A. from Gustavus Adolphus College.



Melinda Lilly

Chief Operating Officer

Ms. Lilly joined Crestline in 2015 and is the Chief Operating Officer for Crestline Summit. Prior to joining Crestline, Ms. Lilly was the Director of Operations at Paradigm Advisors in Dallas with responsibilities in various capacities of the business including compliance, research, operations, and Investor Relations. Prior to joining Paradigm Advisors, Ms. Lilly was a Financial Representative at Fidelity Investments working in trading, client service, and branch operations, as well as serving as a point person to Fidelity's high net worth clientele. Ms. Lilly graduated Magna Cum Laude with a B.A. in Psychology from Lee University.



Alex Didych

Chief Risk Officer

Mr. Didych joined Crestline in 2007 and is Managing Director of Crestline Summit's Investment Risk team. Prior to joining the Firm, Mr. Didych was Head of Market Risk Management, New York, at AMRO Bank N.V. Mr. Didych led the team responsible for the market risk management of trading activities that cover Credit, Local Markets, Equity and IR Derivatives Desks. In addition, he aggregated risk across the various products and trading desks to assess broader portfolio risks. Mr. Didych graduated summa cum laude with an M.S. in Applied Math-Operations Research from National Taras Shevchenko University of Kyiv, Ukraine and has an M.B.A. with high honors from the University of Chicago.



Shaun McGowan

Head of Legal and Compliance

Mr. McGowan joined Crestline in 2020 as Managing Director of Compliance and Legal of Crestline Summit. He is also a member of the ESG Committee. Mr. McGowan was previously the Deputy Chief Compliance Officer and Head of Surveillance at Carlson Capital in Dallas from 2016 – 2020 overseeing the firm's transactional compliance program and serving as a member of the firm's Best Execution and Soft Dollar Committee and the Compliance Committee. From 2008 – 2016, Mr. McGowan had worked on the Equities Compliance Advisory Teams of UBS, Deutsche Bank, and JP Morgan in New York providing compliance coverage and guidance to the cash equities, derivatives, and capital markets business lines. Mr. McGowan was a regular representative of his firms in various industry groups including SIFMA and FIF and served as the chairperson for JP Morgan's Equities Best Execution Committee. Mr. McGowan is admitted to practice law in New York and Texas. Mr. McGowan received his JD at St. John's University in 2006 and BA at the College of the Holy Cross in 2003.



Rob Bernstone

Head Trader

Mr. Bernstone joined Crestline in 2021 and is a Managing Director, overseeing all of Crestline Summit's trading. Mr. Bernstone joined from Credit Suisse, where he was a Managing Director and worked from 2005-2021 in both New York and London. He held several senior roles in Equities and Prime Services including Global Head of Delta One, Head of Systematic Strategies, Head of Program Trading Risk and Head of Central Risk Books. Mr. Bernstone joined CS from Deutsche Bank, where he was a Managing Director and Head of International Program Trading. He has also held senior trading roles at Barings, in both New York and Tokyo. Mr. Bernstone began his career at Morgan Stanley in New York in 1989 and has a BA from Brandeis University.

Performance Disclaimers

Beginning January 2017 the hypothetical composite returns are calculated on equity, net of account expenses, net of all manager fees, net of stated Crestline Summit fees consisting of a 1% management fee and a 10% performance fee; for the period July 2015 - December 2016 hypothetical composite returns are calculated on equity, net of account expenses, net of manager performance fees, net of stated Crestline Summit fees consisting of a 2% management fee and 10% performance fee.

Correlations to the performance of the indices presented in this report (including, but not limited to the S&P 500 Index and the HFRI Equity Market Neutral Index) are shown for comparison purposes only. The securities included in those indices are not necessarily included in the portfolios of the Crestline funds and criteria for inclusion in those indices are different and not limited to particular investment strategies. In addition, investors may not invest directly in an index. Therefore, the returns of Crestline funds and the returns of such indices may not be comparable.

Gross performance figures do not include the deduction of fund level fees and expenses and do not represent the performance of any investor. An individual investor's returns will be reduced by advisory fees and other expenses incurred in the management of its account.

The estimated net asset value ("NAV"), monthly return and the statistics derived therefrom are estimates of the NAV and other information based on information available to Crestline at the time of calculation. This is only an estimate and the actual performance results will vary from this estimate. No responsibility or liability is or will be accepted by Crestline as to the accuracy or completeness of the estimated NAV and monthly return information and Crestline expressly disclaims any liability therefore.

HFRI EH: Equity Market Neutral Index

Equity Market Neutral strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. These can include both Factor-based and Statistical Arbitrage/Trading strategies. Factor-based investment strategies include strategies in which the investment thesis is predicated on the systematic analysis of common relationships between securities. In many but not all cases, portfolios are constructed to be neutral to one or multiple variables, such as broader equity markets in dollar or beta terms, and leverage is frequently employed to enhance the return profile of the positions identified. Statistical Arbitrage/Trading strategies consist of strategies in which the investment thesis is predicated on exploiting pricing anomalies which may occur as a function of expected mean reversion inherent in security prices; high frequency techniques may be employed and trading strategies may also be employed on the basis on technical analysis or opportunistically to exploit new information the investment manager believes has not been fully, completely or accurately discounted into current security prices. Equity Market Neutral Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.

S&P 500 Index

The Standard & Poor's 500 Index (S&P 500) is an index of 500 stocks seen as a leading indicator of U.S. equities and a reflection of the performance of the large cap universe, made up of companies selected by economists. The S&P 500 is a market value weighted index and one of the common benchmarks for the U.S. stock market; other S&P indexes include small cap companies with market capitalization between \$300 million and \$2 billion, and an index of mid cap companies. Investment products based on the S&P 500 include index funds and exchange-traded funds are available to investors.

SUBJECT: Current Macroeconomic Conditions
and Investment Outlook

ACTION: N/A

DATE: December 14, 2023

INFORMATION: X

BACKGROUND:

Bridgewater Associates is a Systematic-Fundamental Macro manager based in Westport, CT and currently managing approximately \$118bn firmwide. APFC is invested in the flagship Pure Alpha strategy, which was launched in 1991. At this meeting, they will present to the Board an overview of current global economic conditions and investment outlook.

Biographies of Attendees:

ANDREW MIKOLASY / CLIENT ADVISOR, HEAD OF CANADA

Andrew joined Bridgewater in 2004 and is currently responsible for managing many of Bridgewater's largest relationships in the US, Canada and Europe - working directly with Bridgewater's key strategic clients in those regions to develop tailored investment strategies that meet their objectives. During his time at Bridgewater, he has worked directly with a range of the firm's largest and most sophisticated global investors as well as being responsible for managing Bridgewater's relationships with key investment consulting firms, both domestically and internationally. Andrew received his B.A. from Bucknell University, graduating Summa Cum Laude with a double major in Economics and English.

STEVE SECUNDO / PORTFOLIO STRATEGIST

Steve joined Bridgewater in 2008, and he is a Senior Investment Associate in our research group. He has expertise in Bridgewater's investment process, portfolio structuring, and the FX, interest rate, commodity, and equity markets. Throughout his time at Bridgewater, he has worked closely with our Co-CIOs to lead research projects impacting Bridgewater's investment strategies. He received a B.A. in Economics and Mathematics from Wesleyan University (2007) and an M.S. in Quantitative Finance from Fordham University (2008).



Update 12/13:

A revised slide deck will be presented during the meeting. The updated deck can be found at the end of the packet.



APFC Board Meeting Materials

December 2023

Bridgewater Intro: Who We Are & What We Do

THE ESSENCE OF BRIDGEWATER

At the heart of Bridgewater's almost 50-year history is a relentless mission for deep, fundamental understanding of markets & economies.

That mission is underpinned by a consistent team, culture, and process.

Co-CIOs and senior investors that have worked together for decades (19 years average tenure)

Culture centered on the pursuit of fundamental truths through open and honest debate and continuous improvement.

A differentiated approach of systemizing fundamental understanding so it can be continually compounded on and improved.

We apply this understanding to serve our clients through partnership and quality investment strategies.

A three-decade track record of generating good and uncorrelated returns, engineered to complement client portfolios

Meaningful long-term "in your shoes" partnerships

Performance shown is estimated through October 2023. Correlation is based on long-term averages and at any given point in time could be higher or lower than in the periods shown above. Through April 1999, Pure Alpha total returns are based on the actual performance of a partially funded account and are simulated to include the imputed interest return on the full notional value using the U.S. repo rate. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream. Past performance is not indicative of future results. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

THE BRIDGEWATER STRATEGIC PARTNERSHIP PROGRAM



Investment Insights

Economic, Global Markets Research & Insights

Holistic Portfolio Construction Advice

Risk Management and ALM Solutions, Expertise



Investment Solutions & Portfolio Engineering

BW Investment Strategies

Tailored Strategies, Risk Management

Collaboration, new innovative solutions



Technology Advisory

Differentiated, industry leading technology platform

Portfolio Design, Stress Testing Applications

Data Management, Cyber Security, AI Technologies



Organizational Design & Management

Sharing our knowledge, learnings, best practices

Deep-dives on BW's Leading, Core Capabilities

Co-Develop New and/or Transform Capabilities



Curated Experiences

Distinguished Speaker Series

Bridgewater University & CIO-Led Master Classes

Bridgewater-led Industry Round-tables, Summits

WHAT WE OFFER

OUR EDGE

Unprecedented Partnership

On-going dialogue and Collaboration

Embedded BW investment, advisory team

Unbiased advice, anchored in time-tested investment thinking

Tailored solutions to meet specific goals

Holistic portfolio impact

Tactical risk management strategies with total portfolio impact

Systemized investment Capabilities

Improved insight generation; compounding understanding

Improved investment decision making and end to-end portfolio management capabilities

BW's Investment Organization

How to design, build and manage high performance, investment teams

BW's Unique Culture - Its vitality for firm's success and how to cultivate one

Trade Execution Solutions - Managing liquidity, Cost, Unintended Impact and Anonymity

Access Network of Key Industry Leaders, Experts

BW's Proprietary Training, Development Program(s) - Tailored, Delivered to Partner Organizations

Talent retention

KEY BENEFITS FOR PARTNERS

Innovative Fuel & Higher Quality Decisions Strategic Decisions

Potentially Higher ROI (\$) Economic Value

Transformative Capabilities, Platform at Reduced Cost

Sustainable Design & Higher Performing, Engaged Teams

Continuous Learning & Talent, Competence Development

OUR TEAM

Our team has worked together for decades

BRIDGEWATER LEADERSHIP



CEO
Nir Bar Dea



Co-CIO
Bob Prince



Co-CIO
Greg Jensen



Co-CIO
Karen Karniol-Tambour

26 YRS

Average Tenure for
Chief Investment
Officers

19 YRS

Average Tenure for
Senior Investment
Team

300+

Investment Team

SENIOR INVESTORS



Jenn Armstrong



Seth Birnbaum



Kevin Brennan



Larry Cofsky



Gardner Davis



Porter Diehl



Patrick Dimick



Phil Dobrin



Kate Dunbar



Robert Dunlop



Andrew Foote



Jeff Gardner



Sam Haber



Jim Haskel



Dan Hochman



Steven Kryger



Atul Lele



Josh Lewin



Sean Macrae



Elena Gonzales Malloy



Erin Miles



Osman Nalbantoglu



Atul Narayan



Natalee Pei



Fred Post



Kerry Reilly



Jason Rogers



Jason Rotenberg



Melissa Saphier



Alex Schiller



Steve Secundo



Lauren Simon



Alex Smith



Joe Sondheimer



Carsten Stendevad

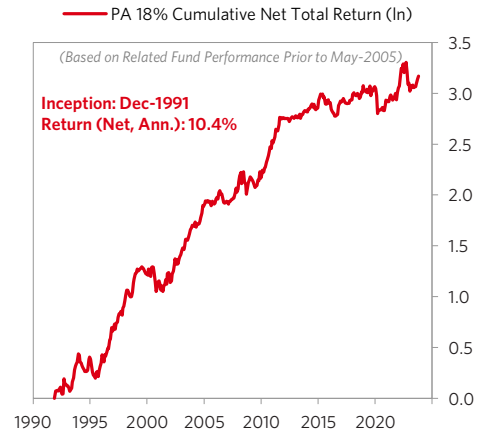
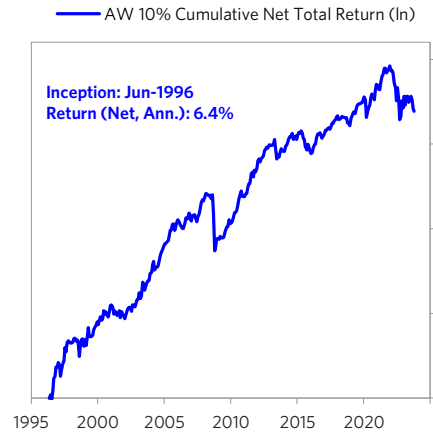
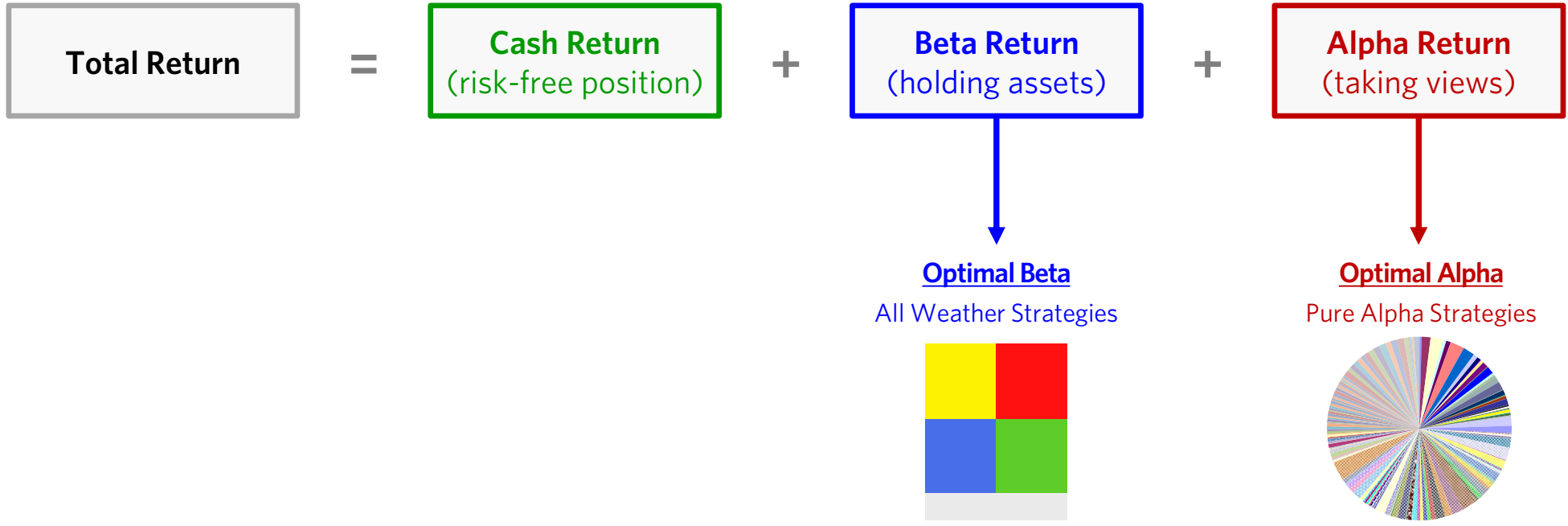


David Trinh



Noah Yechiely

OUR INVESTMENT STRATEGIES



Performance through 10/31/2023. Past results are not necessarily indicative of future results. Note risk pie charts are provided for illustrative purposes only to demonstrate the diversification of active opportunities in the Pure Alpha and Pure Alpha Major Markets strategies. These risk pie charts do not represent every market, asset class or instrument in which Bridgewater trades. Pure Alpha returns based on related fund performance before May 2005. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream Please review the "Important Disclosures and Other Information" located at the end of this presentation.

PURE ALPHA SUMMARY

- ◆ Bridgewater’s **optimal alpha** portfolio that has a **30+ year track record**.
- ◆ Utilizes Bridgewater’s **fundamental** understanding & **systematic** process to trade a **diversified** opportunity set of globally **liquid** markets.
- ◆ Designed to produce a **high & consistent return with no bias** to markets or other active managers.



Performance through Oct-2023. Note the pie chart on the left is provided for illustrative purposes only to demonstrate the diversification of active opportunities in the Pure Alpha strategy. This chart does not represent every market, asset class or instrument in which Bridgewater trades. Correlation is based on long-term averages and at any given point in time could be higher or lower than in the periods shown above. Traditional manager correlations are monthly vs. the average gross excess return of managers in eVestment Alliance’s database. Alternative manager returns based on the average from the Lipper Tass Hedge Fund Manager Database. "Related fund performance" is based on the performance of the Pure Alpha Strategy at 12% volatility scaled to 18% volatility. Standard deviation is calculated using gross of fees excess returns. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. Past results are not necessarily indicative of future results.

LONG TRACK RECORD OF GENERATING HIGH RETURNS WITHOUT BIASES

(Returns Based on Related Fund Performance* Prior to May 2005)

Returns

Year	Pure Alpha 18% (Net)	Global Stocks
1992	5.1%	-4.7%
1993	36.8%	23.1%
1994	-3.1%	5.6%
1995	-5.7%	21.3%
1996	36.6%	14.0%
1997	28.2%	16.2%
1998	37.8%	24.8%
1999	0.1%	25.3%
2000	-7.9%	-12.9%
2001	6.9%	-16.5%
2002	22.1%	-19.5%
2003	33.8%	33.8%
2004	20.4%	15.2%
2005	3.1%	10.0%
2006	1.7%	20.7%
2007	12.7%	9.6%
2008	9.4%	-40.3%
2009	1.9%	30.8%
2010	44.8%	12.3%
2011	25.3%	-5.0%
2012	0.8%	16.5%
2013	5.2%	27.4%
2014	3.5%	5.5%
2015	4.7%	-0.3%
2016	2.5%	8.2%
2017	1.3%	23.1%
2018	14.6%	-8.2%
2019	-0.7%	28.4%
2020	-12.6%	16.5%
2021	8.1%	22.3%
2022	9.4%	-17.7%
2023 YTD	7.5%	8.3%
Dec-1991 to Oct-2023	10%	8%
Equity Up/Down Years	+10% / +10%	

Correlations

TO MARKETS	
Pure Alpha 18% Strategy	Correlation
vs World Equities Hedged	0.12
vs S&P 500	0.09
vs Russell 2000	0.09
vs Citi WGBI US	-0.02
vs Bloomberg Barclays US Aggregate	-0.02
vs Bloomberg Barclays TIPS (since Mar-97)	0.03
vs GSCI	0.14
Average	0.06

Net of Fees Excess Returns Dec-1991 to Oct-2023

TO TRADITIONAL MANAGERS	
vs Global Equities	-0.02
vs US Equities	0.01
vs Global Fixed Income	0.12
vs US Fixed Income	0.06
Average	0.04

TO ALTERNATIVE MANAGERS	
vs Convertible Arbitrage	0.06
vs Emerging Markets	0.07
vs Equity Market Neutral	0.07
vs Event Driven	0.07
vs Fixed Income Arbitrage	0.03
vs Fund of Funds	0.16
vs Global Macro	0.09
vs Multi-Strategy	0.12
vs Long/Short Equity	0.08
Average	0.08

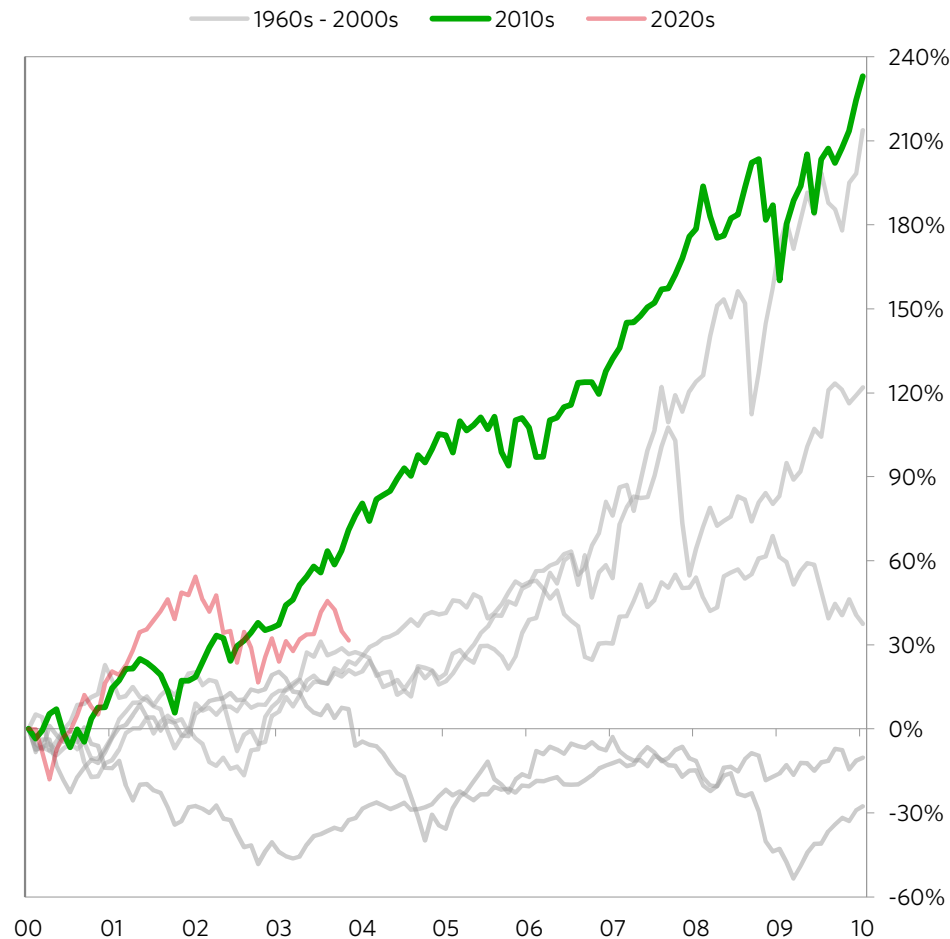
Net of Fees Excess Returns Dec-1991 to Mar-2023

Performance (net total return) shown in the table is estimated through 10/31/2023. Global stocks shown for diversification perspective, not as a benchmark to PA. Traditional manager correlations are monthly vs. the average gross excess return of managers in eVestment Alliance's database. Alternative manager returns based on the average from the Lipper Tass Hedge Fund Manager Database. Lipper is a product of Refinitiv. Copyright 2022 © Refinitiv. Correlation is based on long-term averages and at any given point in time could be higher or lower than in the periods shown above. *Related fund performance is based on the performance of the Pure Alpha Strategy at 12% volatility scaled to 18% volatility. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. Past performance is not indicative of future results. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

I. The Big Question Facing Most Investors

WE ARE COMING OUT OF AN EXCEPTIONALLY FAVORABLE PERIOD FOR MOST INVESTORS

US Stock Performance by Decade



Last Decade Scorecard

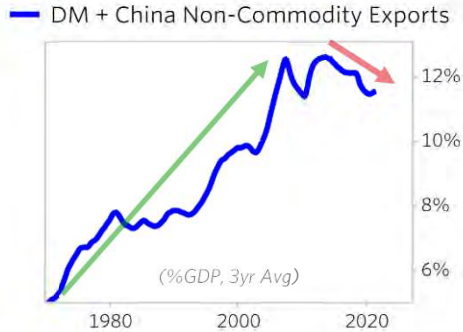
- **Starting Valuations: Cheap**
- **Cyclical Conditions: "Royal Flush"**
 - Steady Growth
 - Low Inflation
 - Easy Policy
- **Secular Pressures: Strong Tailwinds**
 - Increasing Globalization
 - Pro-Business Policy
 - Tech Advances

THE LAST DECADE ENJOYED STRONG SECULAR TAILWINDS THAT HAVE BEEN IN MOTION SINCE THE 80s

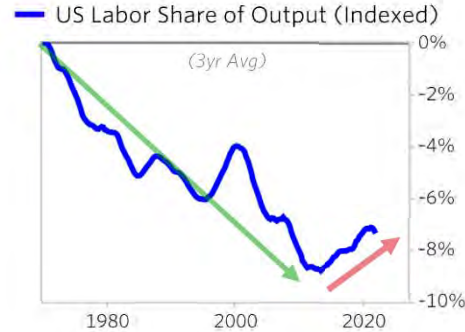
Earnings

Secular supports to profit margins were very strong

Globalization



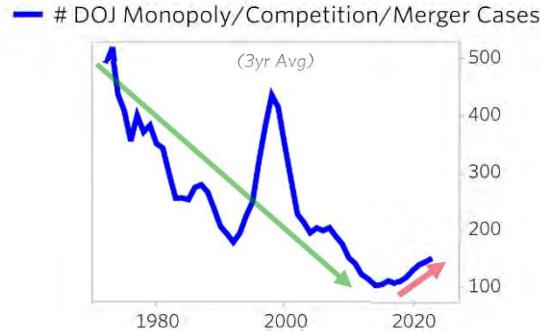
Labor's Share



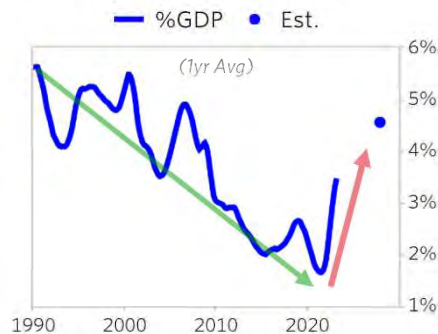
Corporate Taxes



Corporate Regulation



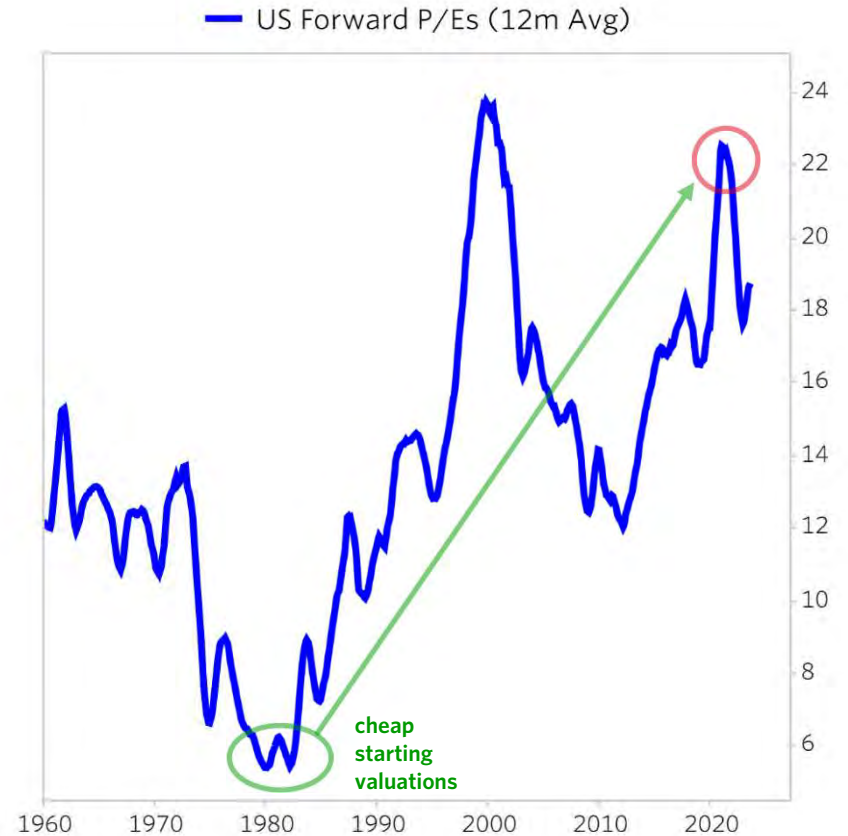
Corporate Debt Service



Discounting

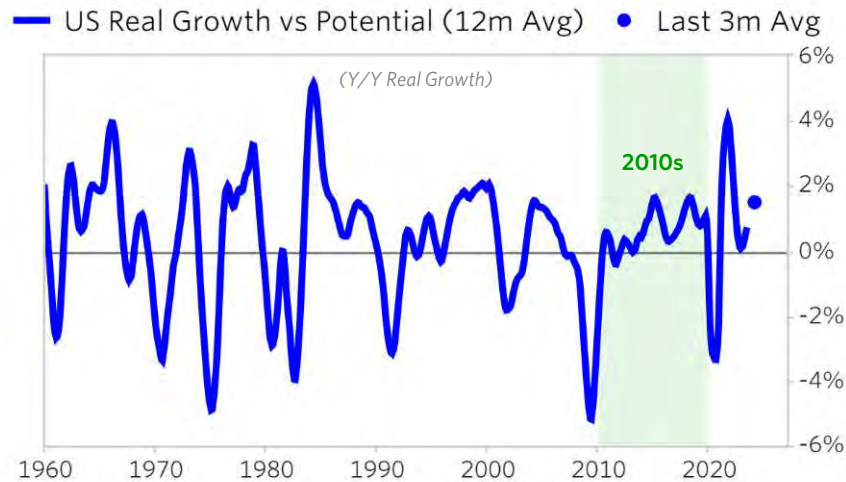
Falling yields supported rising valuations while stimulus supported markets more than the economy

Equity Valuations

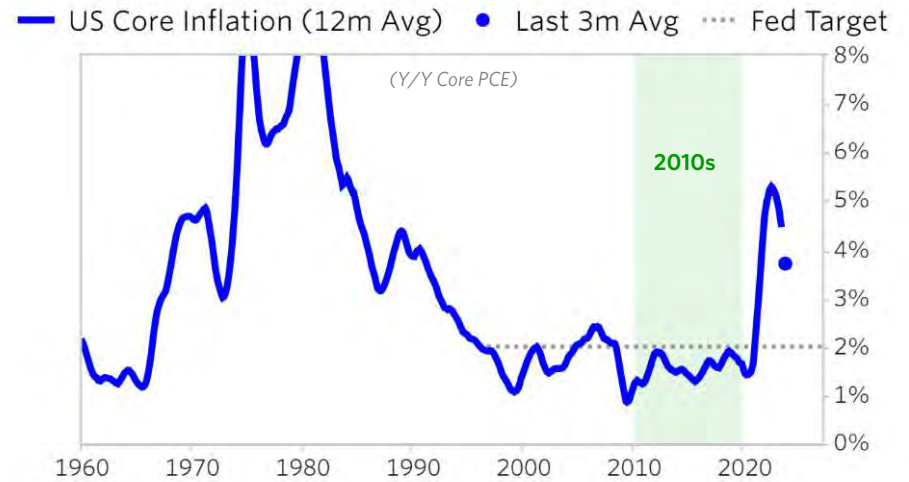


THE LAST DECADE ENJOYED A CYCLICAL “ROYAL FLUSH”

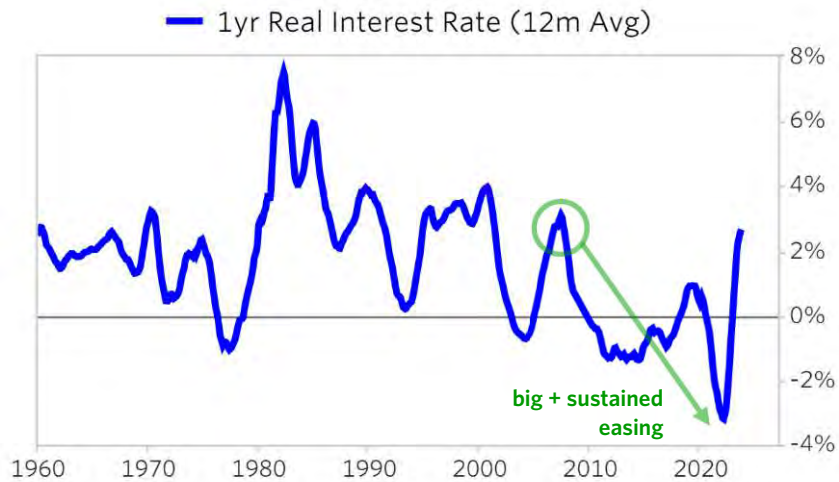
Growth



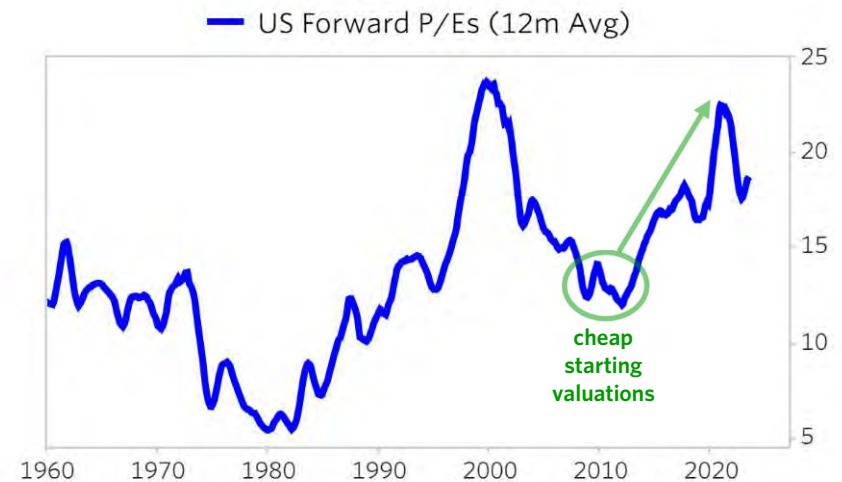
Inflation



US Monetary Policy



Equity Valuations



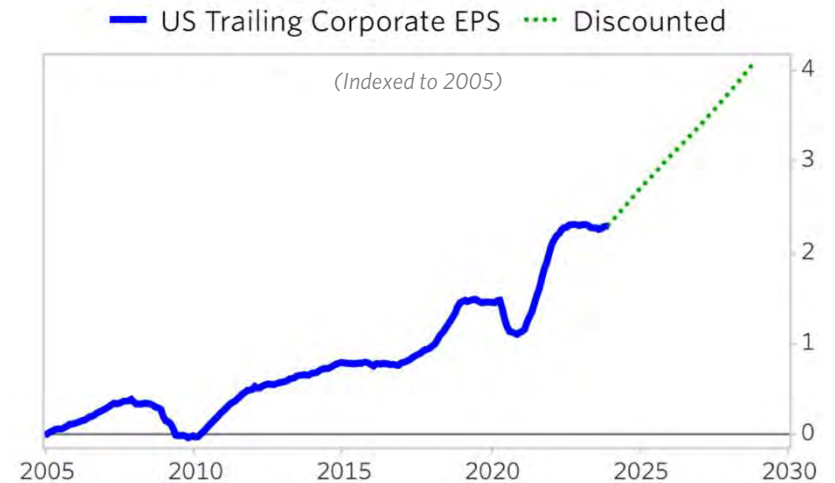
THE BIG QUESTION: WILL THE GOOD TIMES CONTINUE?

MARKETS ARE EXPECTING IT

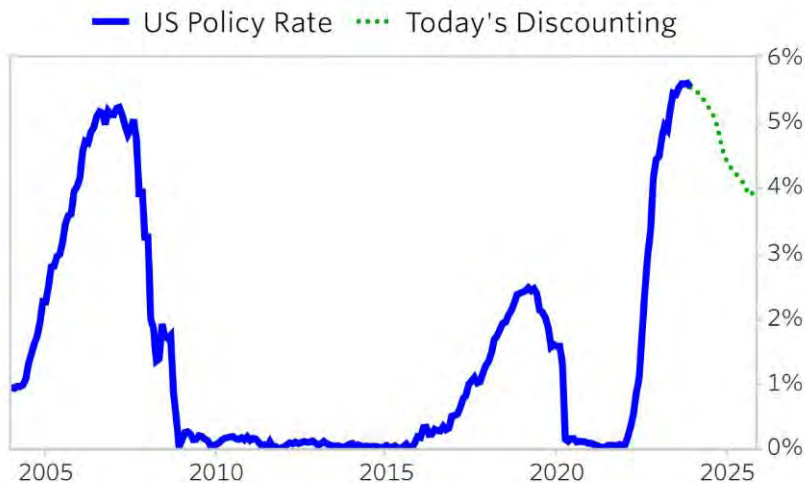
Inflation Discounted to Fall Rapidly



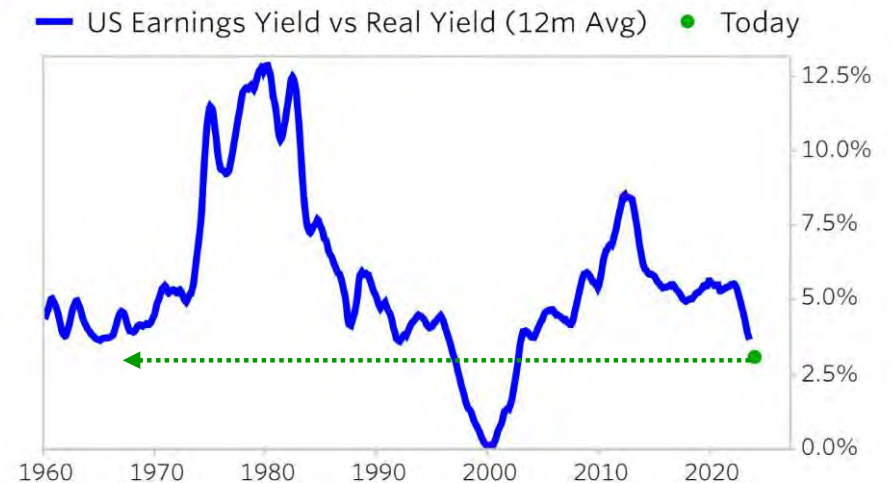
Strong Earnings Priced



Easing Expected



Tight Risk Premiums

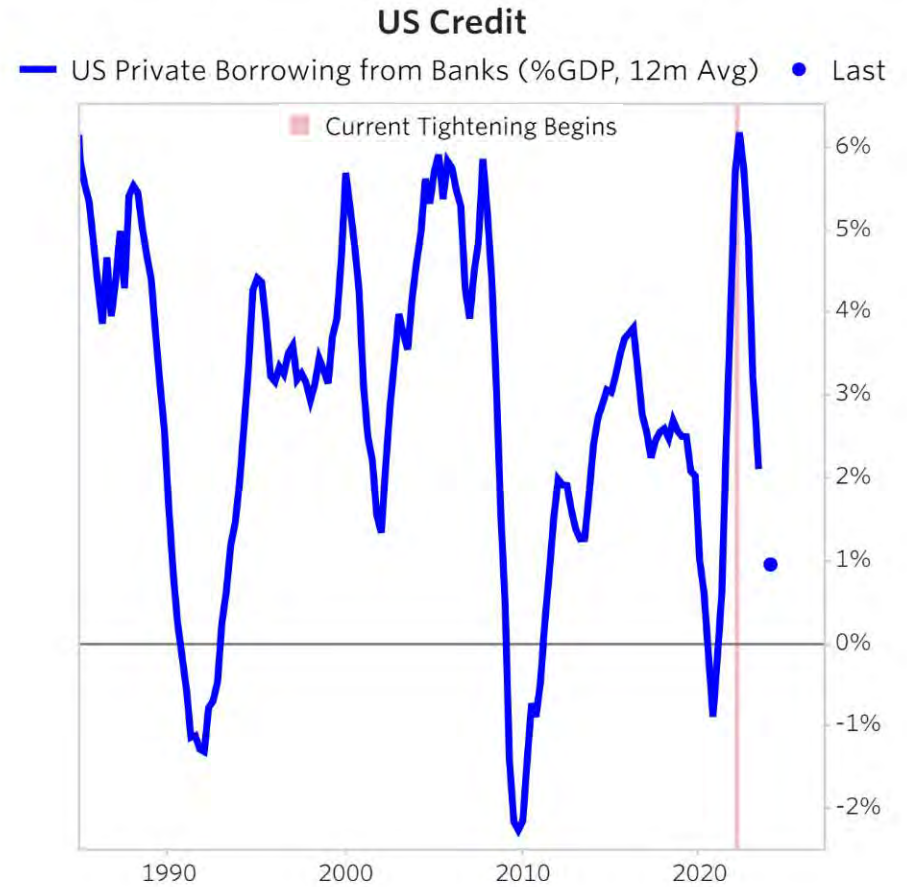
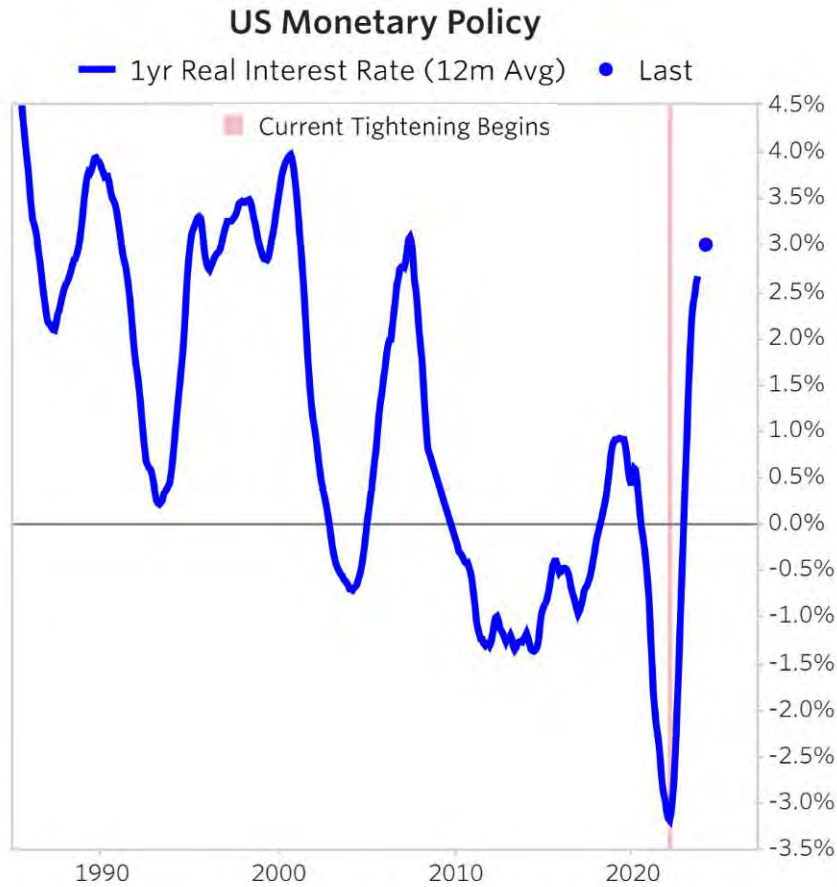


II. Where We Are Today

SUMMARY

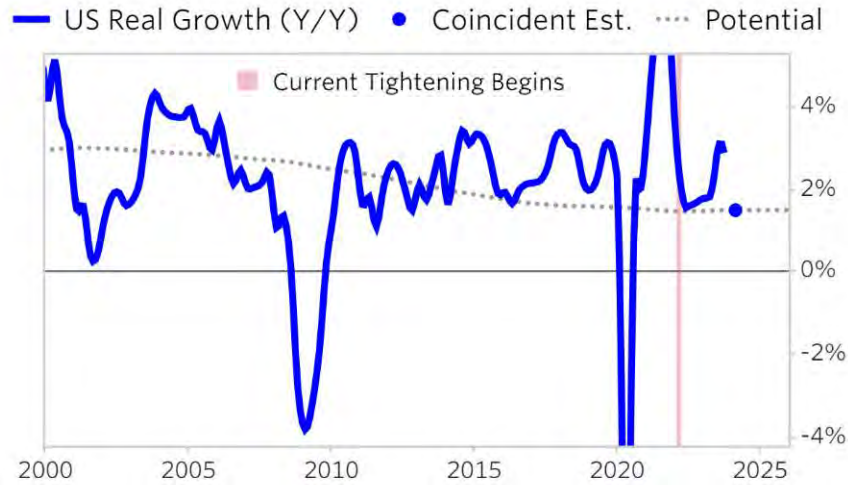
- ◆ **So far, the economy & markets have been resilient** as key supports countered the bite of the massive tightening.
- ◆ Going forward, **we expect a gradual grind down in growth** as prior supports fade & higher rates continue to flow through.
- ◆ However, **tight labor markets may prevent a major Fed pivot** unless more material weakness emerges.
- ◆ **A less supportive environment for assets is compounded by receding liquidity** as QT continues & deficit funding normalizes.
- ◆ **Conditions are diverging globally**, creating big differential pressures.

WE HAVE BEEN THROUGH A MASSIVE TIGHTENING, WHICH SLOWED BORROWING...

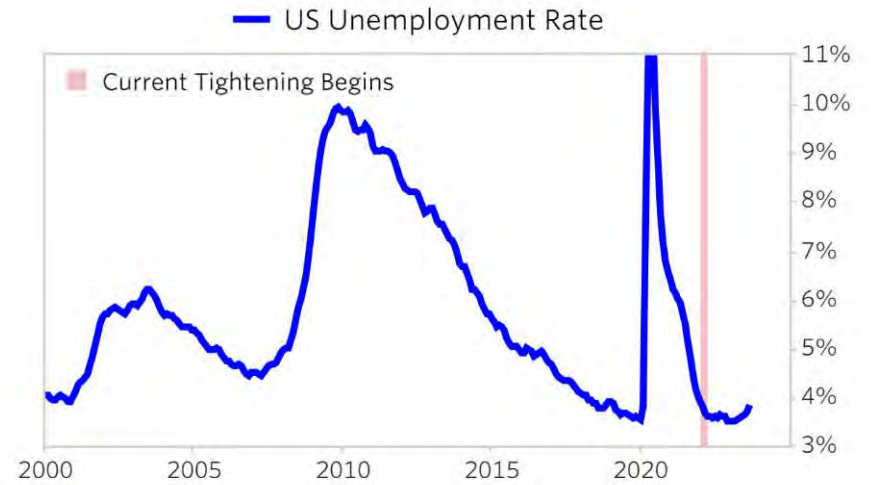


...BUT THE BROADER ECONOMY AND ASSETS HAVE BEEN RESILIENT

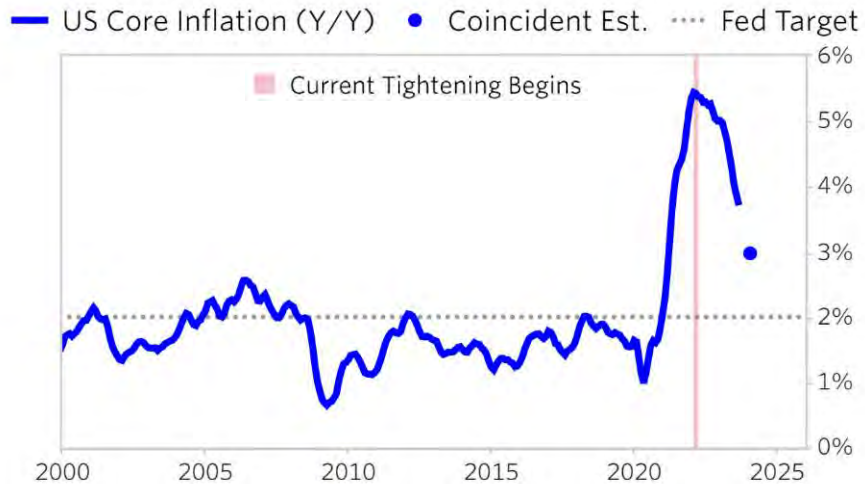
Resilient Growth



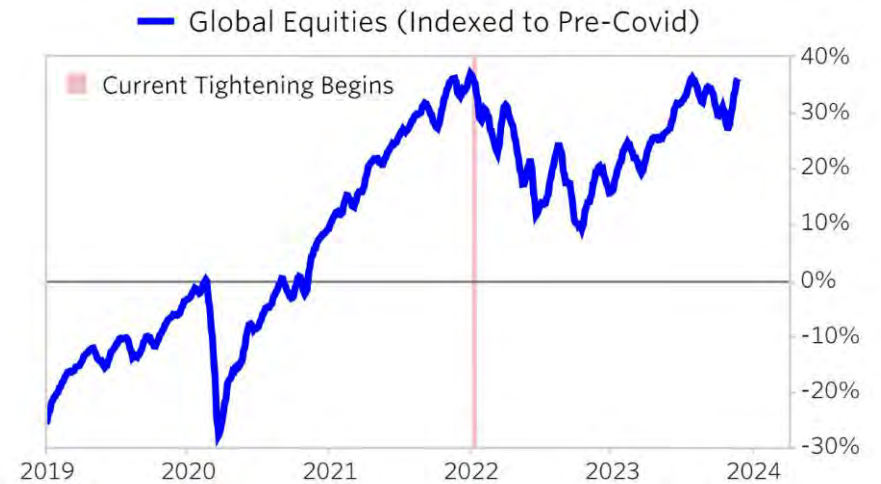
Tight Capacity, Especially Labor Markets



Inflation Has Come Down, but Remains Above Target



Liquidity Not Strained

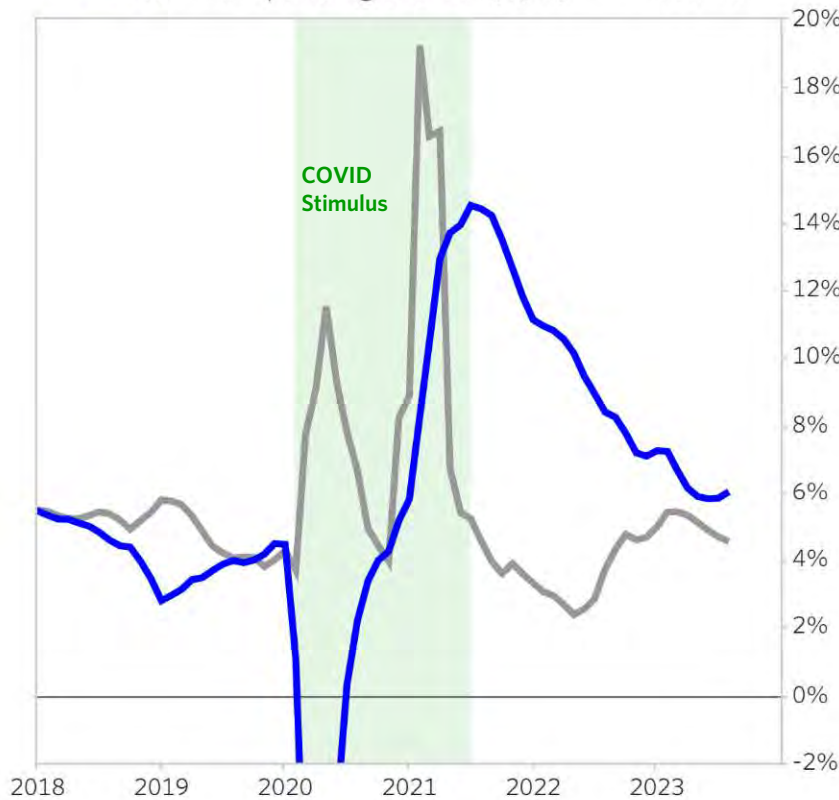


FOR THE PAST YEAR, THE TIGHTENING HAS BEEN OFFSET BY HOUSEHOLDS SPENDING DOWN THEIR EXCESS SAVINGS...

Strong Balance Sheets Funded by Government Transfers Supported Household Spending

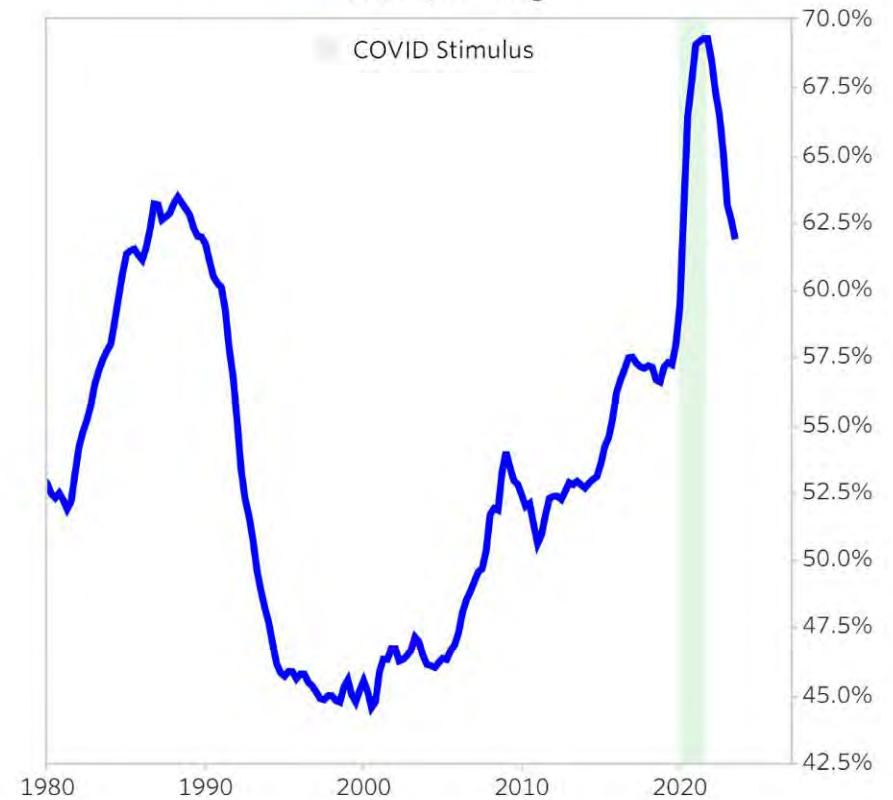
US Household Spending vs Income

— Nominal Spending Growth (Y/Y) — Income



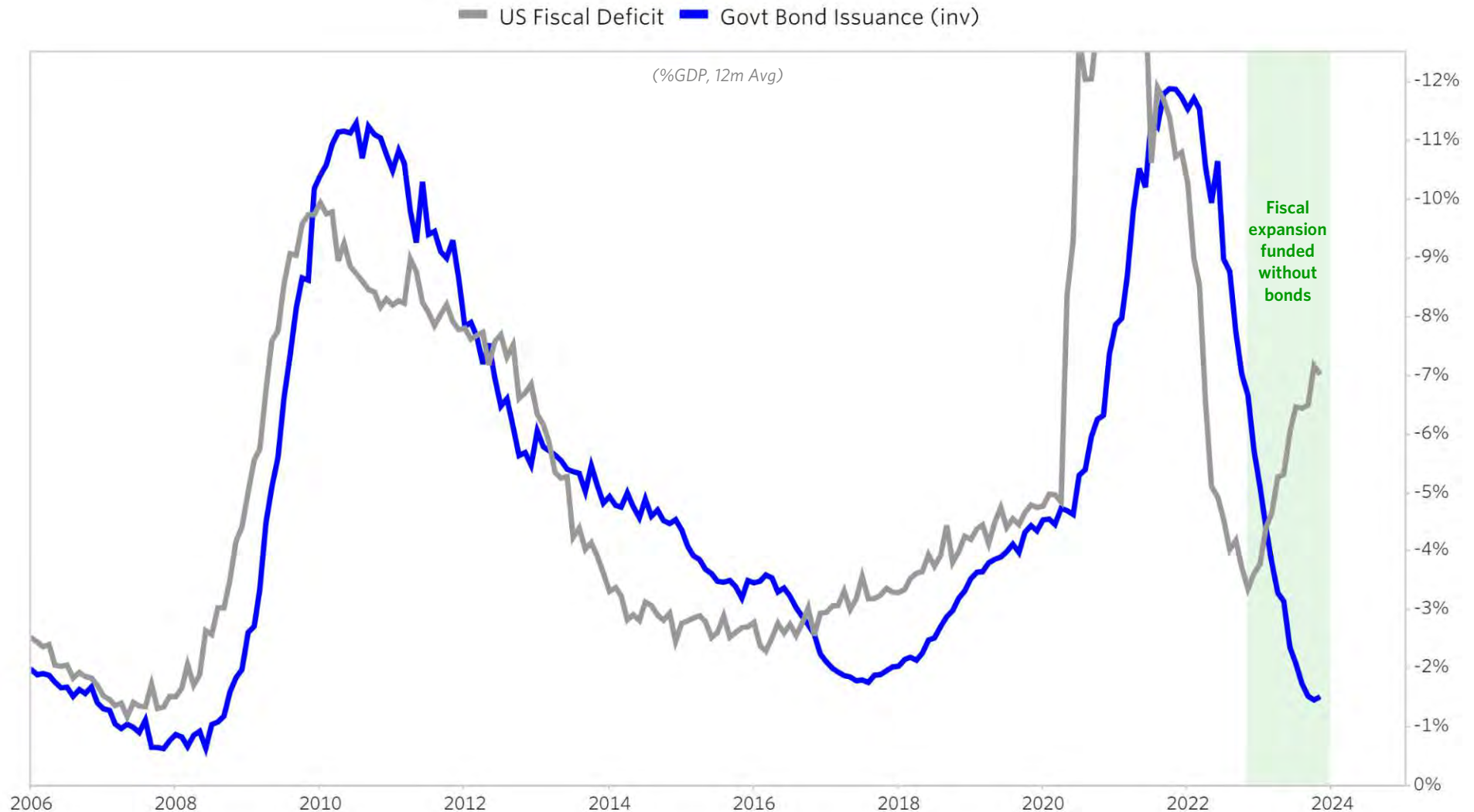
Cash Held by US Households

— %GDP, 6m Avg



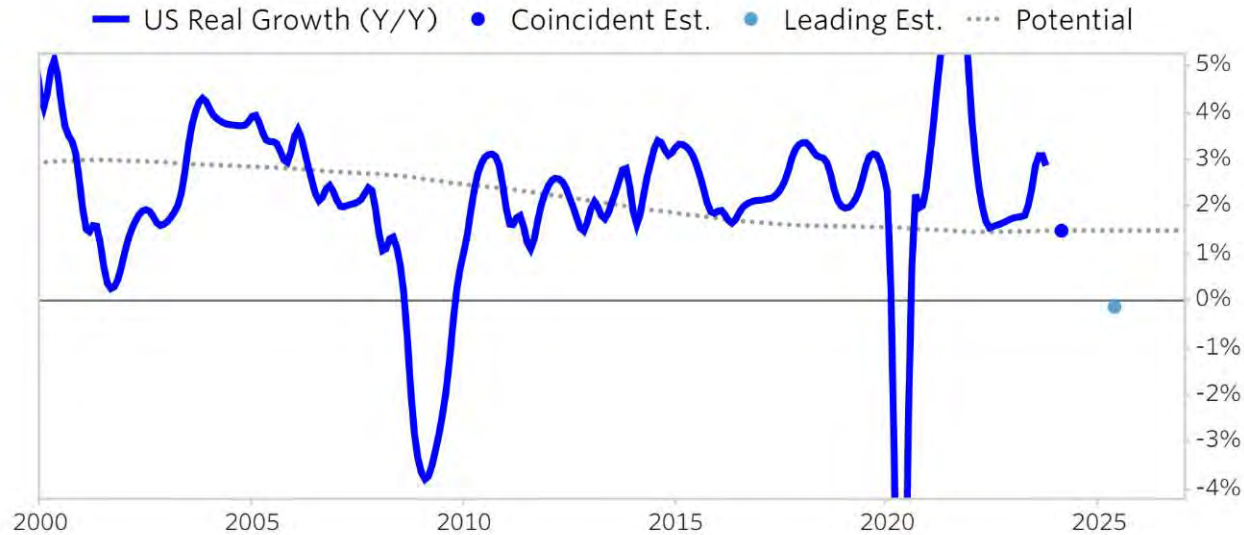
...AND A LARGE BUDGET DEFICIT FUNDED WITHOUT DURATION

The Treasury Funded a Big Deficit Expansion Without Bond Issuance, Offsetting the Impact of QT

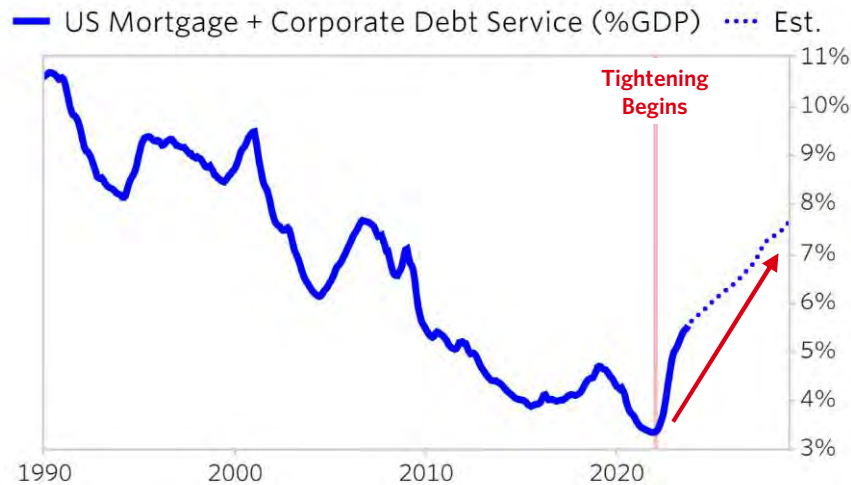


WE EXPECT GROWTH TO GRIND LOWER AS PAST SUPPORTS FADE

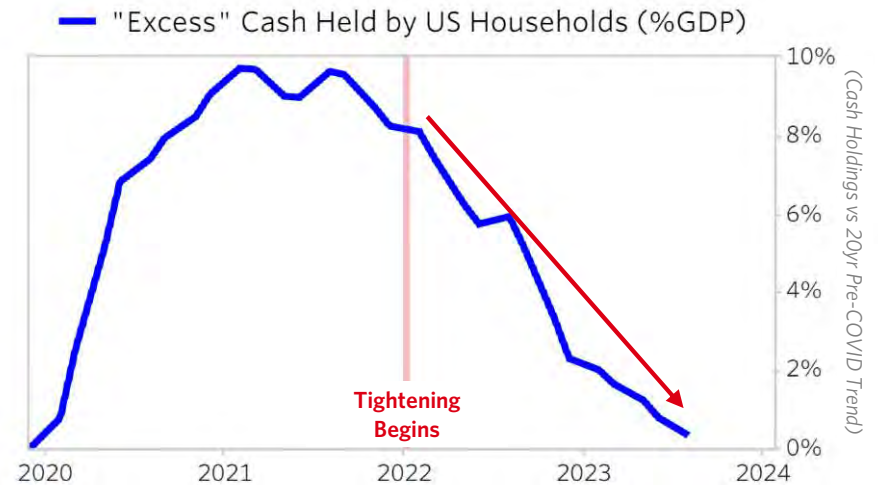
We Expect Growth to Gradually Grind Lower Over the Next 12-18m



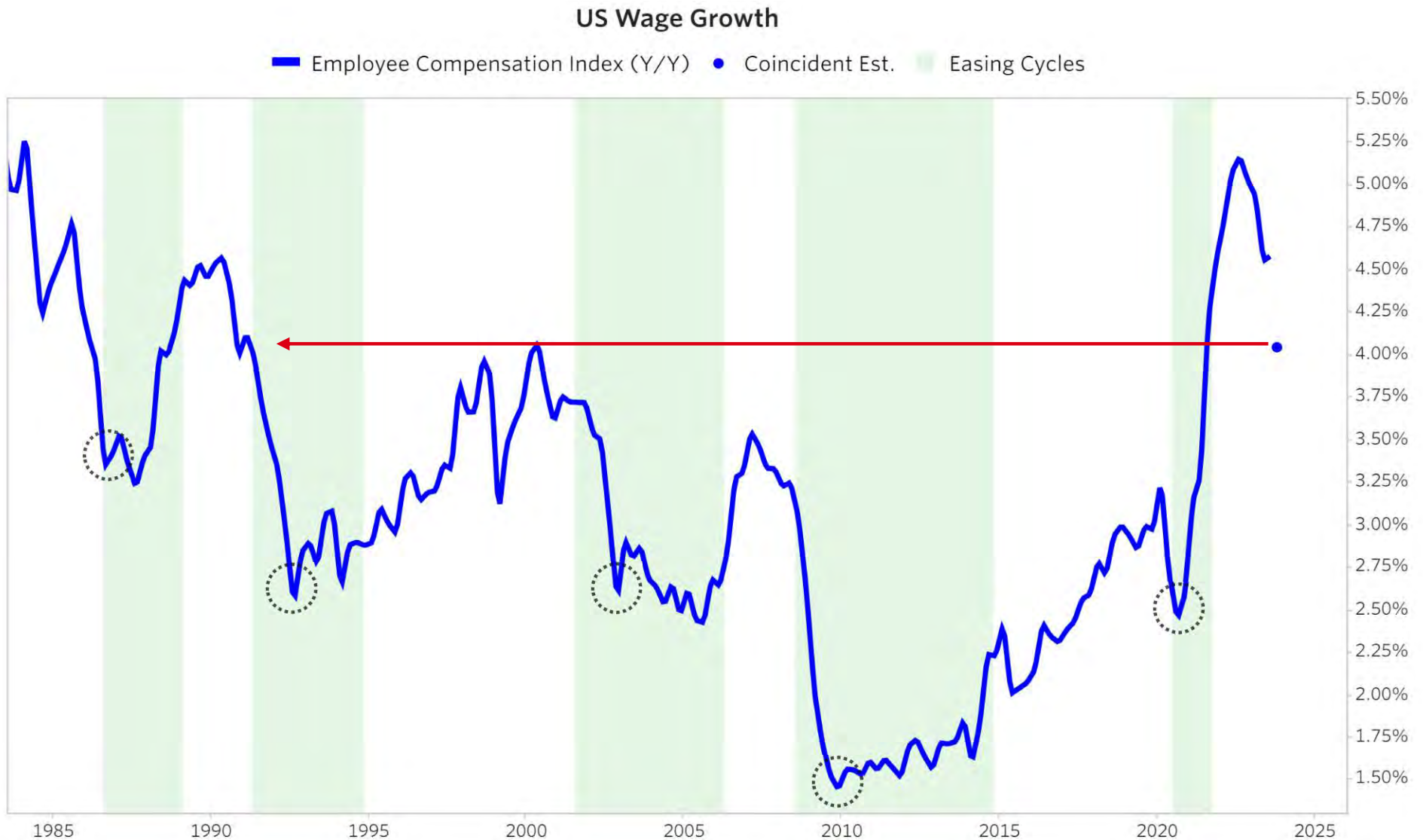
High Rates Will Be a Steady Drag on Cash Flows



Excess Savings Are Nearly Depleted

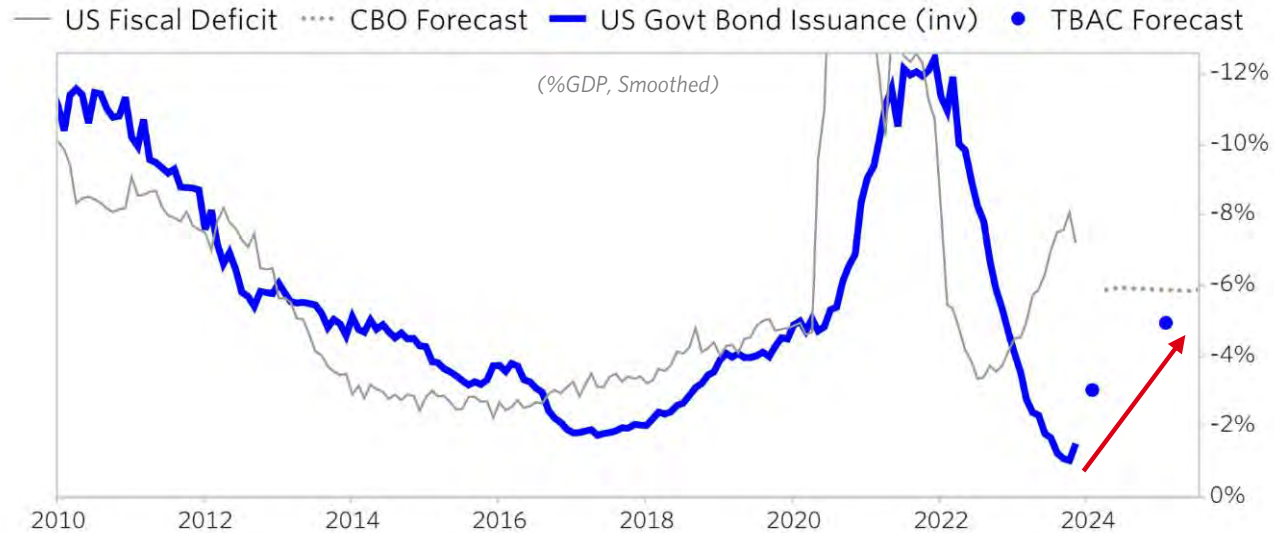


WITH LABOR MARKETS VERY TIGHT, A GRADUAL SLOWDOWN IN GROWTH LIKELY WON'T TRIGGER A MAJOR FED PIVOT

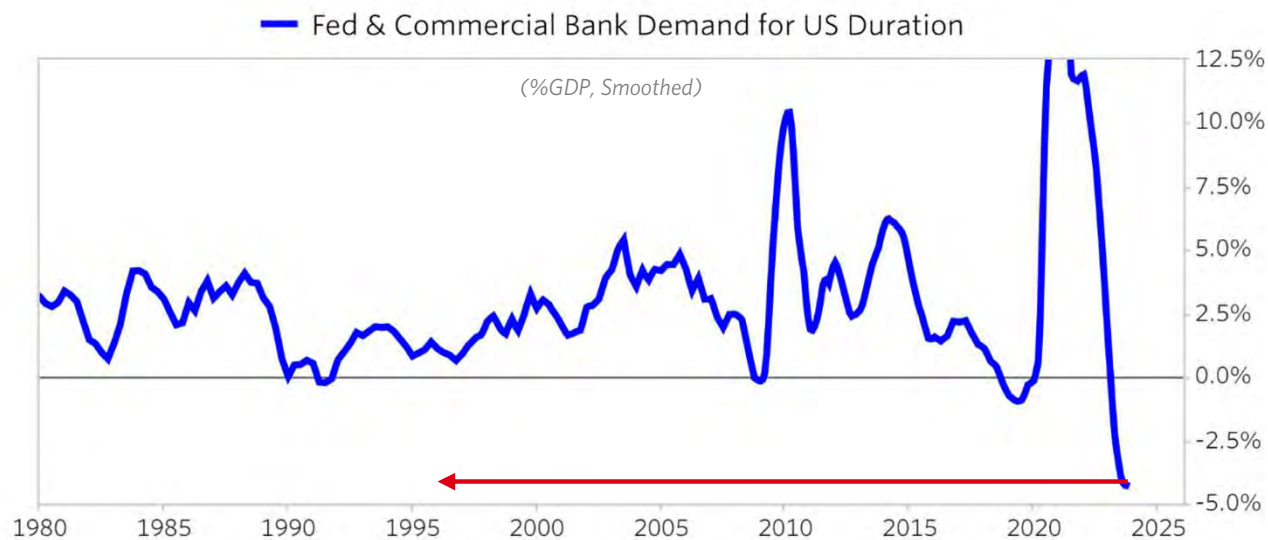


A LESS SUPPORTIVE ECONOMIC ENVIRONMENT FOR ASSETS IS COMPOUNDED BY RECEDING LIQUIDITY

Bond Issuance Is Set to Pick Up as the Treasury Normalizes Its Funding Mix



With Past Buyers Out, Who Will Buy the Bonds?



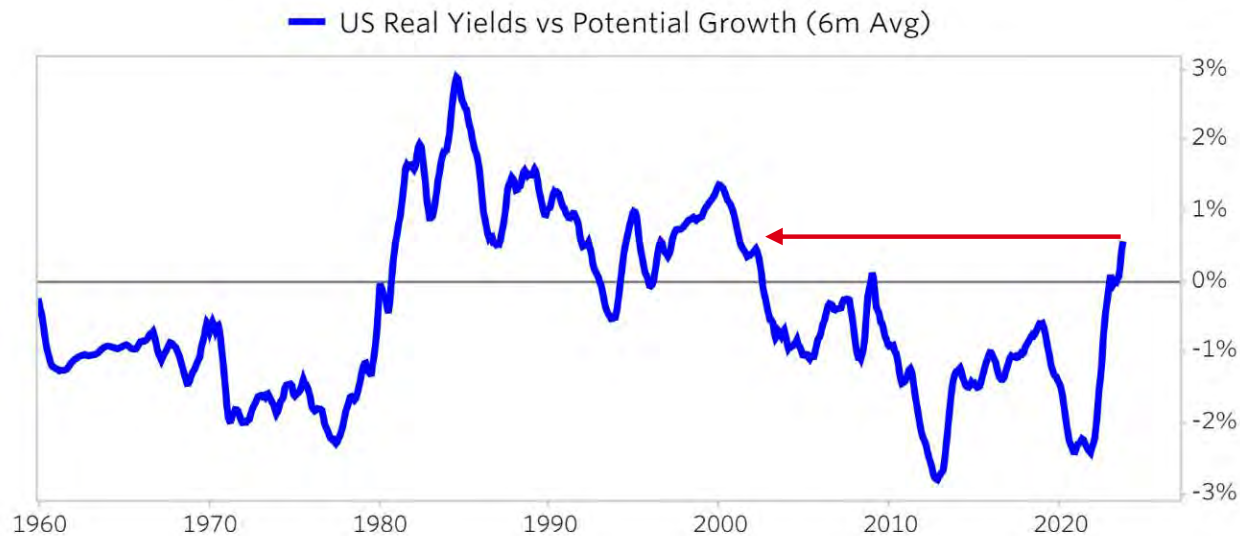
Estimates are based on Bridgewater analysis. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

WE EXPECT US EQUITIES TO FACE A MORE CHALLENGING ROAD AHEAD

Structural Supply/Demand Pressures on Bonds Will Be an Ongoing Headwind for Equities



Higher Real Yields & Stretched Valuations Make It More Difficult for Equities to Outperform



Estimates are based on Bridgewater analysis. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

III. Investment Considerations

A REPEAT PERFORMANCE OF THE LAST DECADE IS UNLIKELY

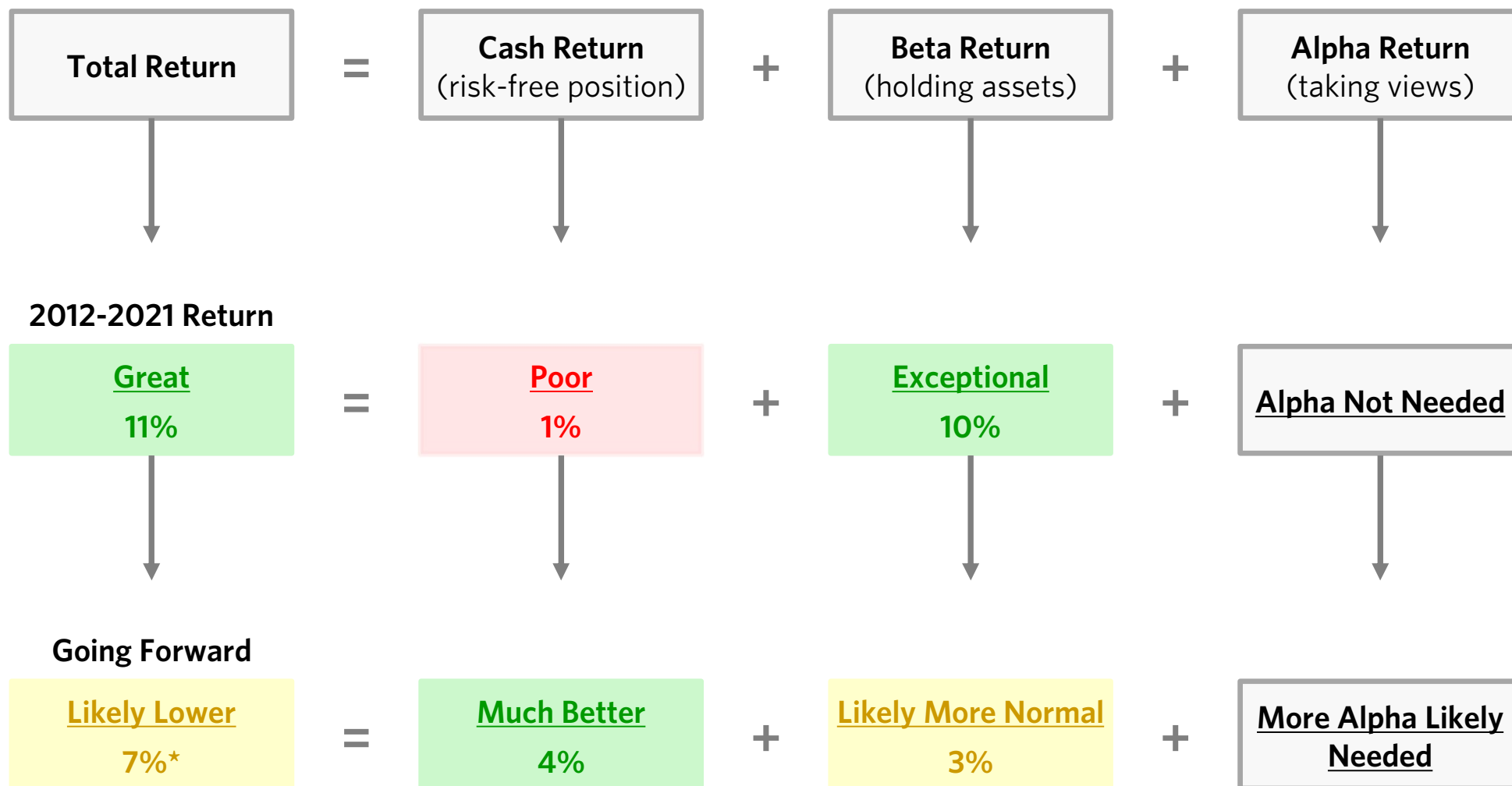
Traditional Portfolio Scorecard by Decade

		1960	1970s	1980s	1990s	2000s	2010s	2020s
Returns Above Cash		Low	Negative	Very High	Above Normal	Negative	Very High	?
Starting Valuations		Normal	Normal	Cheap	Normal	Expensive	Cheap	Expensive
Cyclical Drivers	Growth	Strong	Weak	Strong	Strong	Weak	Above Normal + Steady	Strong (so far)
	Inflation	Rising	High	Falling	Falling	Low	Low	High (so far)
	Fed Policy	Neutral	Tight	Easy	Neutral	Neutral	Easy	Tight (so far)
Secular Drivers	Increasing Globalization	Neutral	No	Yes	Yes	Yes	Yes	No
	Pro-Business Backdrop	No	No	Yes	Yes	Yes	Yes	No
	Tech Advances	Neutral	Neutral	Yes	Yes	Yes	Yes	Yes

The Traditional Portfolio is comprised of 70% global equities (hedged) and 30% global nominal government bonds (hedged). Past performance is not indicative of future results and an investor should not solely rely upon past performance when making an investment decision. There can be no guarantee that any expected performance can or will be achieved and expected performance should not be solely relied upon in making an investment decision. Please review the "Important Disclosures and Other Information" located at the end of this report.

A CHALLENGING ENVIRONMENT FOR TRADITIONAL PORTFOLIOS

Traditional Portfolio Returns

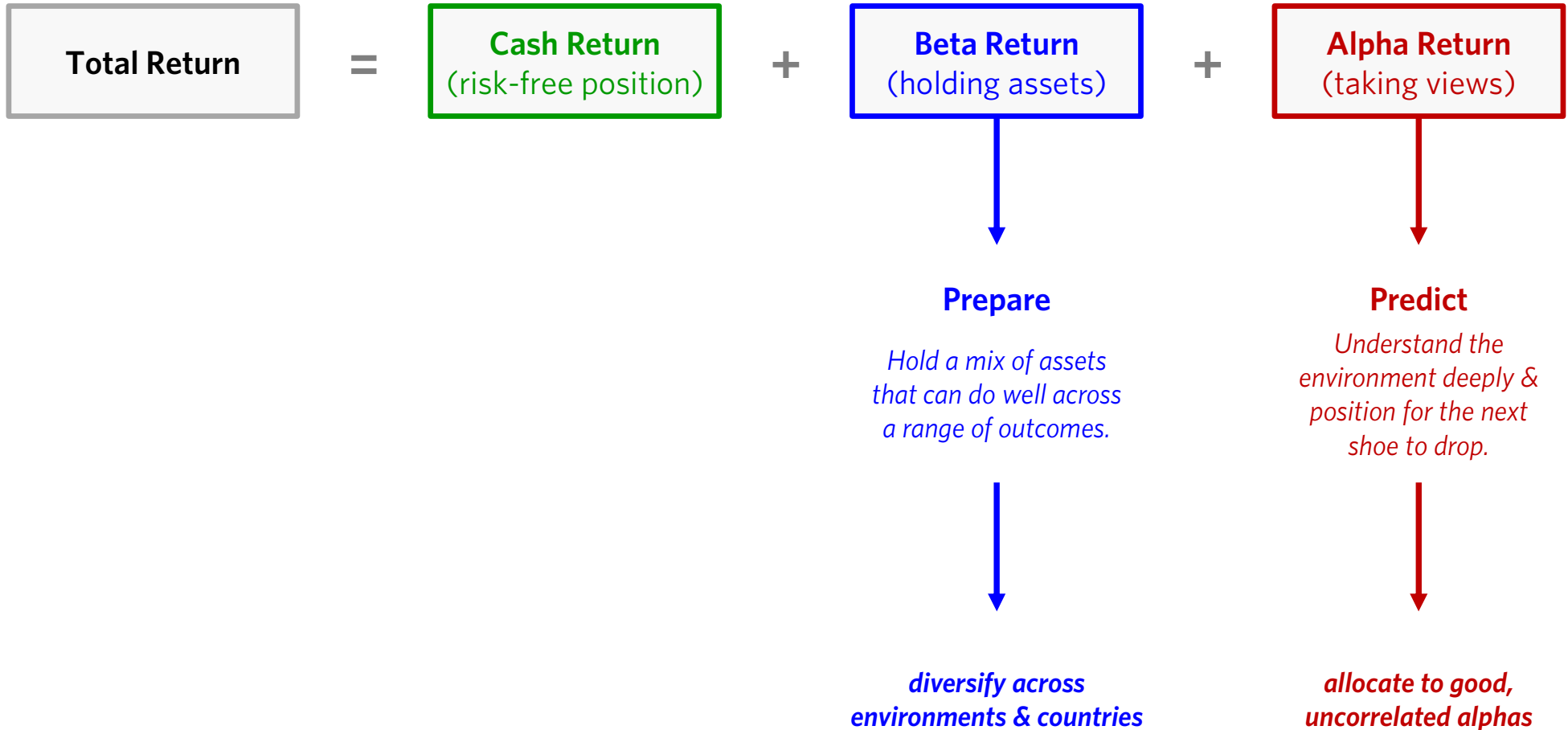


*excluding alpha returns

The Traditional Portfolio is comprised of 70% global equities (hedged) and 30% global nominal government bonds (hedged). Past performance is not indicative of future results. There can be no guarantee that any expected performance can or will be achieved and expected performance should not be solely relied upon in making an investment decision. Please review the "Important Disclosures and Other Information" located at the end of this report.

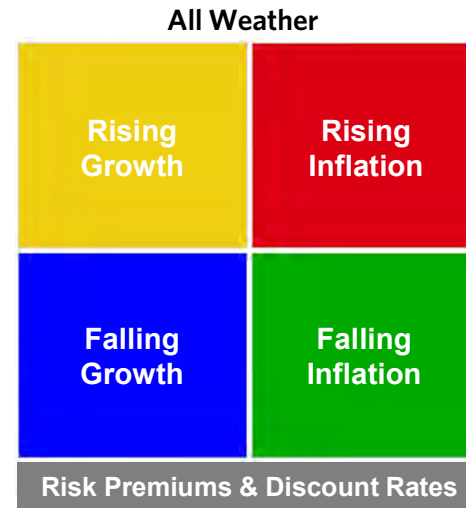
THE LEVERS AVAILABLE TO INVESTORS

Investors Have Three Levers

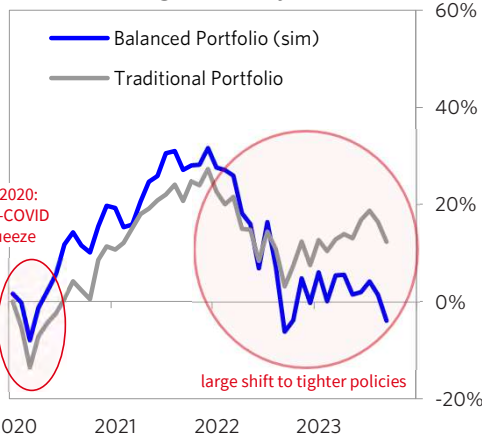


IV. Appendix

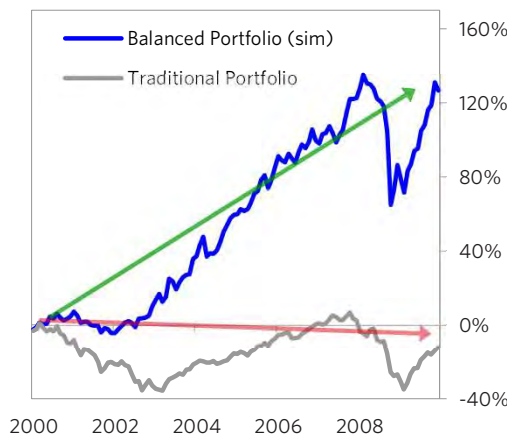
DIVERSIFYING BETA CAN HELP PREPARE AGAINST A WIDE RANGE OF DIFFERENT ENVIRONMENTS



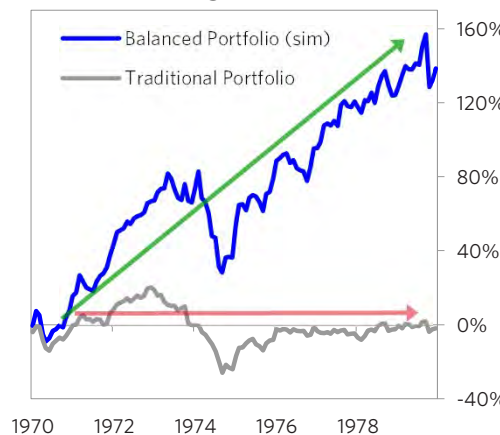
Tight Money



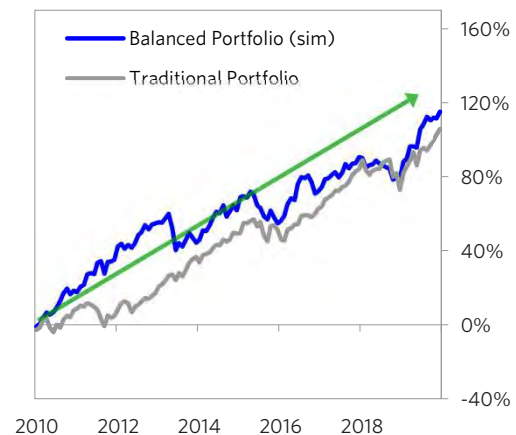
Recessions



Stagflation

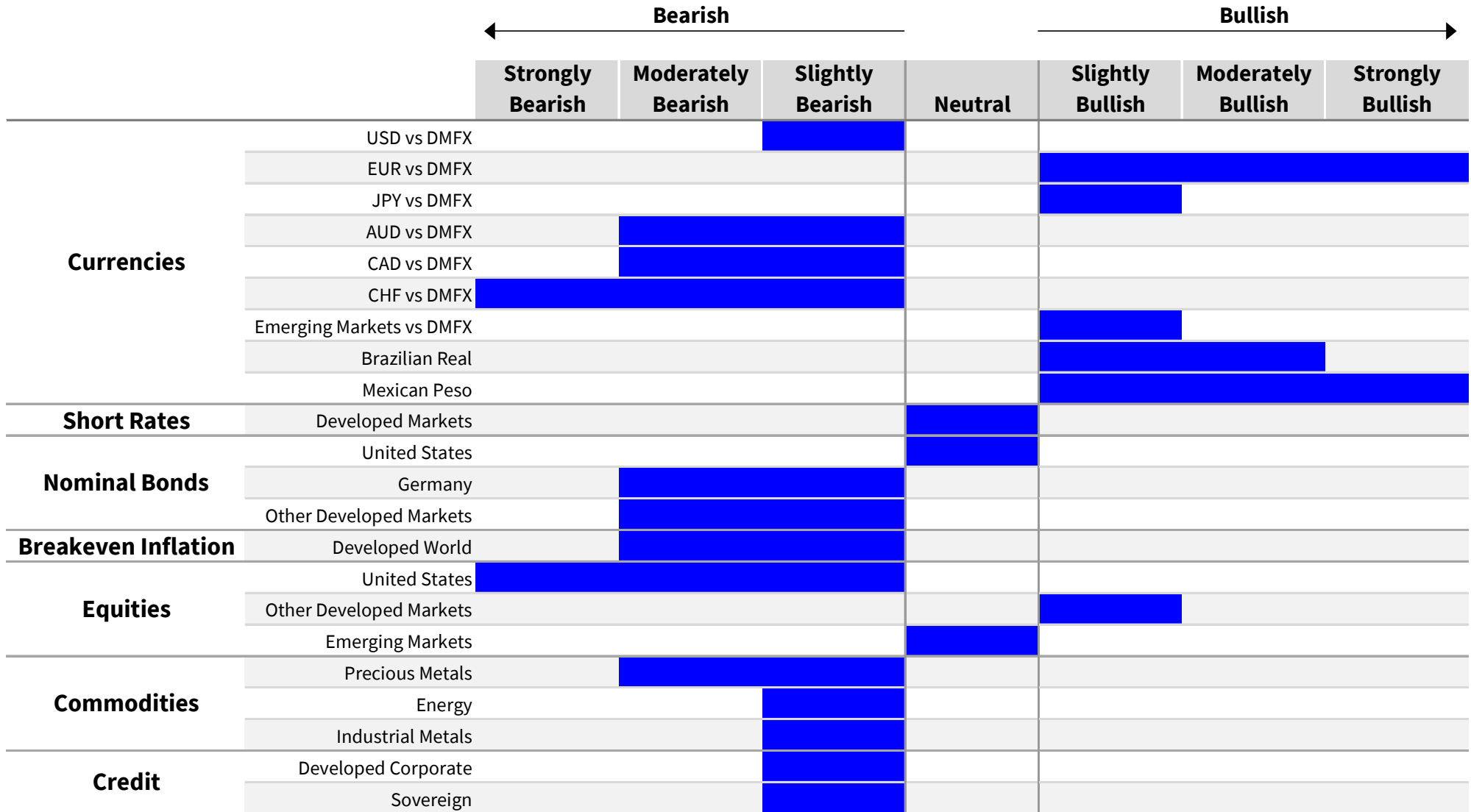


Goldilocks



Data estimated through October 2023. It is expected that the simulated performance will periodically change as a function of both refinements to our simulation methodology and the underlying market data. "Balanced Portfolio" is simulated using the Balanced Portfolio as described in the "Balanced Portfolio Disclosure." Returns are cumulative excess returns. It is expected that the simulated performance will periodically change as a function of both refinements to our simulation methodology and the underlying market data. For more information on the Traditional Portfolio, see the "U.S. Traditional Portfolio Disclosure" located at the end of this presentation. Traditional Portfolio returns in bottom charts is represented by 70% global stocks & 30% global government bonds (hedged). Attribution is based on Bridgewater analysis and is approximated based on Bridgewater's views of how to assess the performance of different segments of our portfolio. There could be other methods of attributing performance, however any other method would result in the same total portfolio returns. There can be no guarantee that any expected performance can or will be achieved and expected performance should not be solely relied upon in making any investment decision. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream. Past performance is not indicative of future results. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

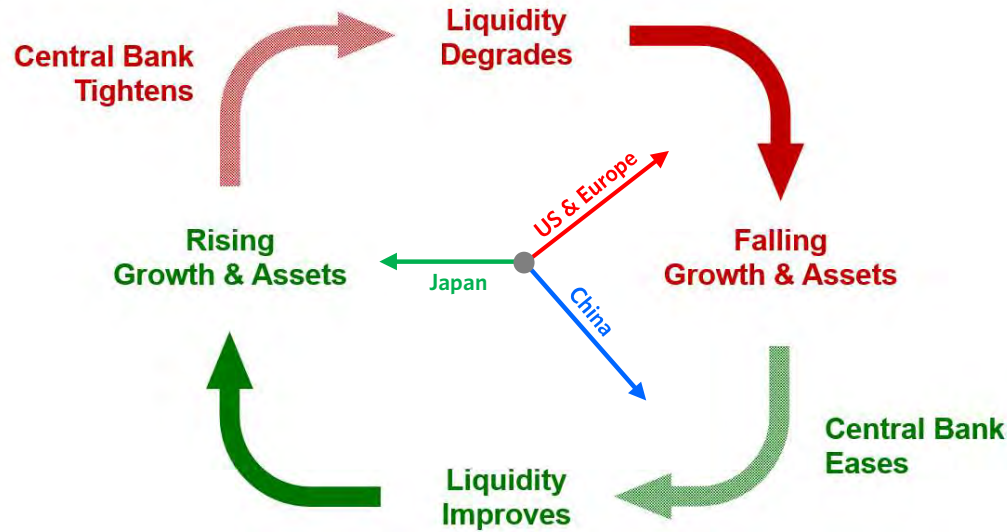
KEY TACTICAL VIEWS



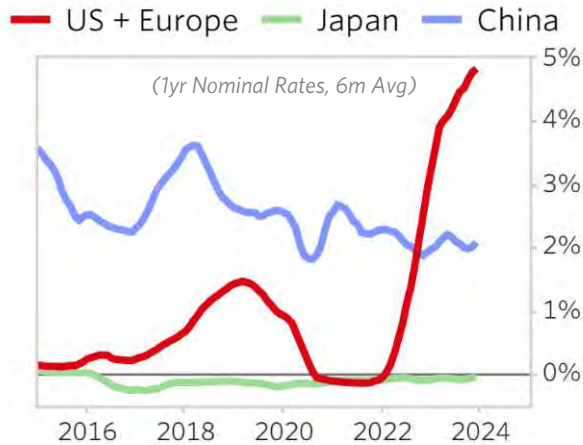
Data is shown as of October 31, 2023. The views expressed are based on Bridgewater analysis of and expectations for the relevant markets, does not constitute a personal recommendation, and is for informational and educational purposes only. Bridgewater's actual positions and trading may, and often will, vary from representations shown based on any number of factors, such as client investment restrictions, portfolio rebalancing and transaction costs, risk controls, and liquidity constraints, among others. Exposures not shown may have material impacts on the performance of the account. Bridgewater has no obligation to provide recipients hereof with updates or changes to such data. No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written consent of Bridgewater Associates LP. Please review the "Important Disclosures" located at the end of this presentation. This report is not intended for redistribution. CONFIDENTIAL AND PROPRIETARY. 311 of 343

VARYING CONDITIONS AND BACKDROPS ARE CREATING DIFFERENTIAL PRESSURES

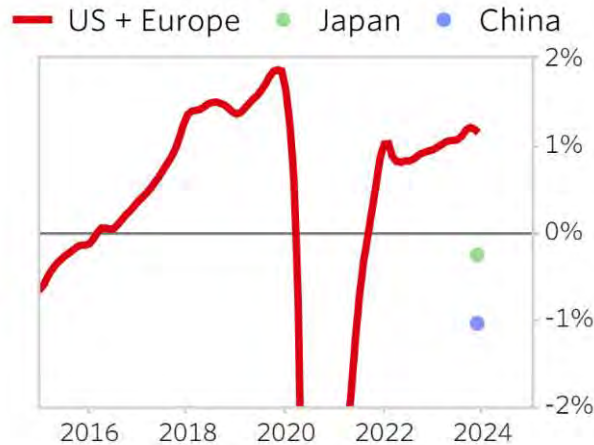
Economies Around the World Are at Different Points in the Liquidity Cycle



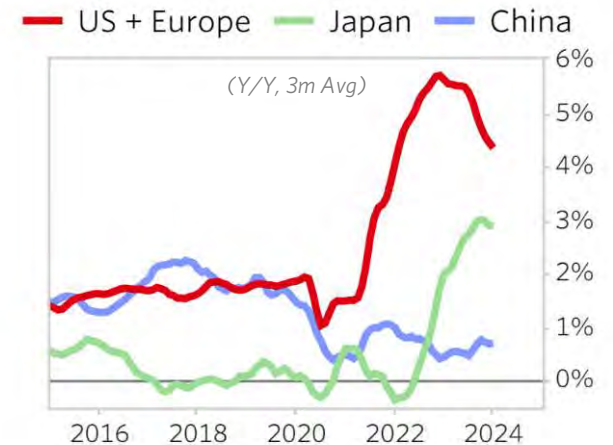
Monetary Policy



Real GDP Gap



Core Inflation

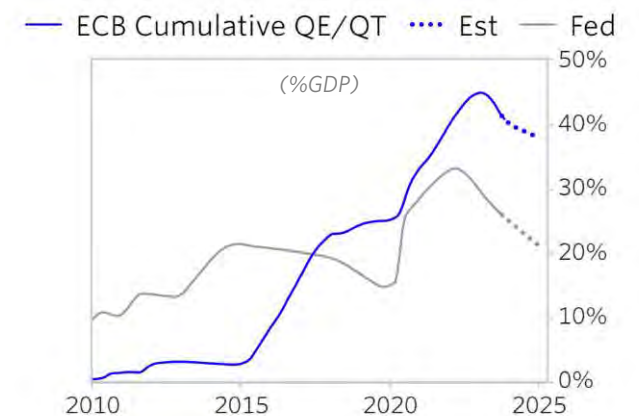
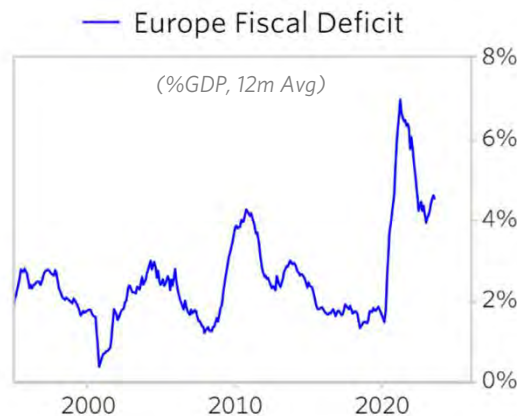
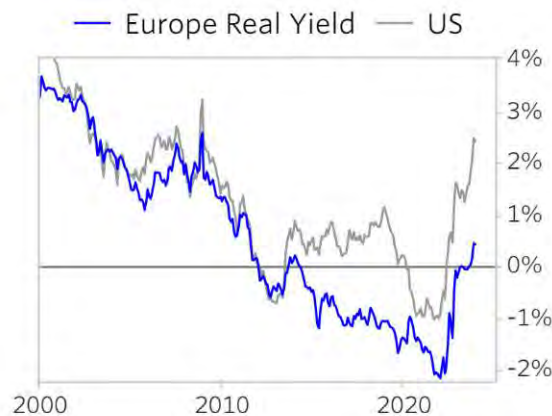


CONDITIONS IN EUROPE LOOK CONSISTENT WITH HIGHER YIELDS

Core Inflation Pressures in Europe Are Still High

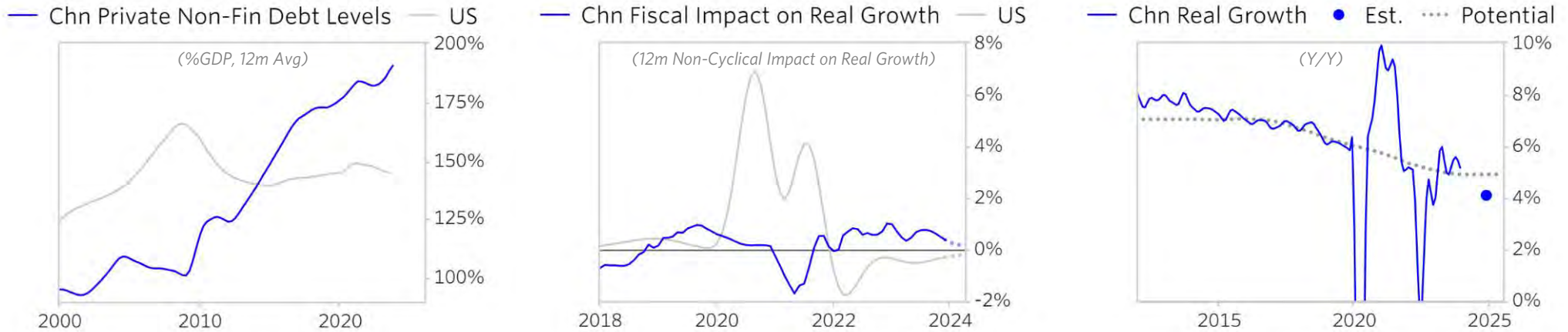


Europe Also Faces Upward Pressure on Yields From Rising Issuance to Catch Up With Deficit Spending, But Also Has QT Largely Ahead

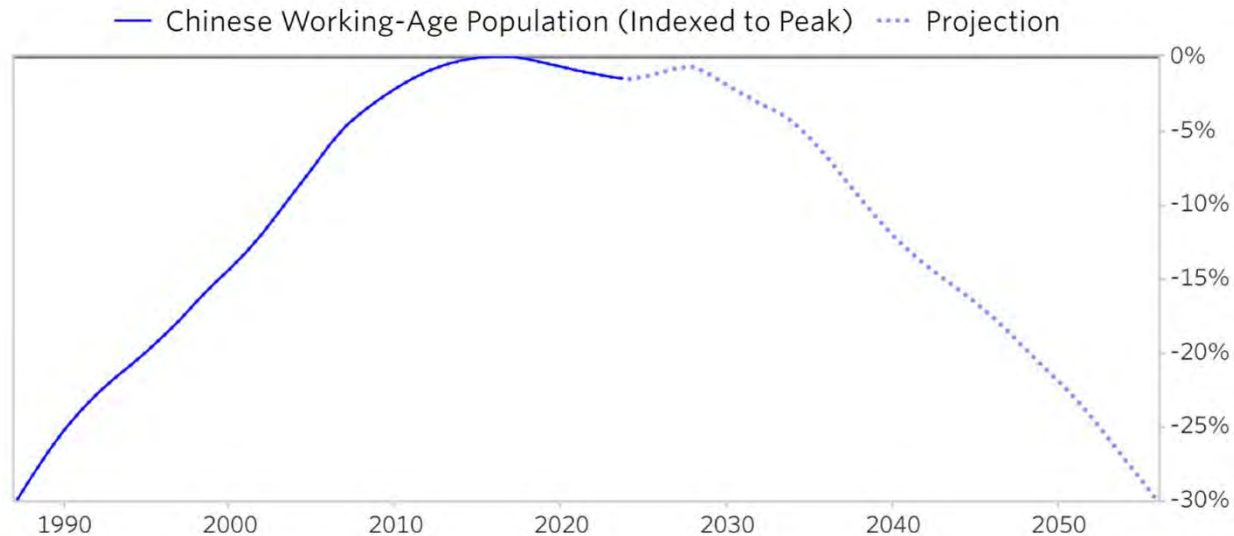


CHINA FACES CONSIDERABLE CHALLENGES

Until High Debt Levels & Weakened Balance Sheets Are Dealt With, China Will Likely Experience an Extended Period of Below-Trend Growth



An Aging Workforce Is Another Headwind Facing China

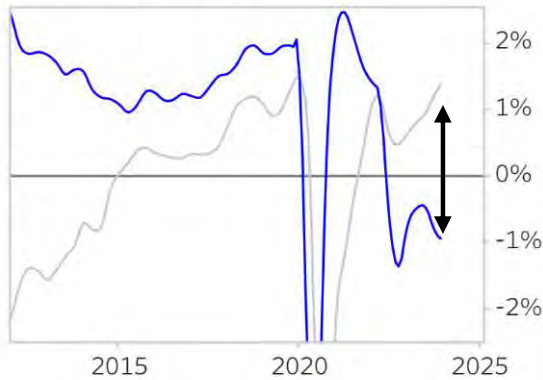


Estimates based on Bridgewater Analysis. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

SINCE CHINA AND THE WEST ARE IN VERY DIFFERENT PLACES, CHINESE ASSETS HAVE THE POTENTIAL TO BE A VALUABLE DIVERSIFIER

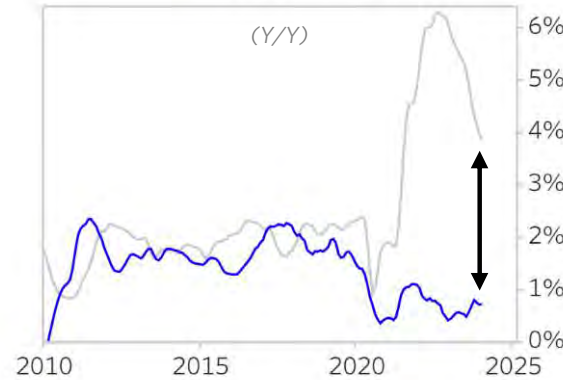
Economic Capacity

— CHN — US



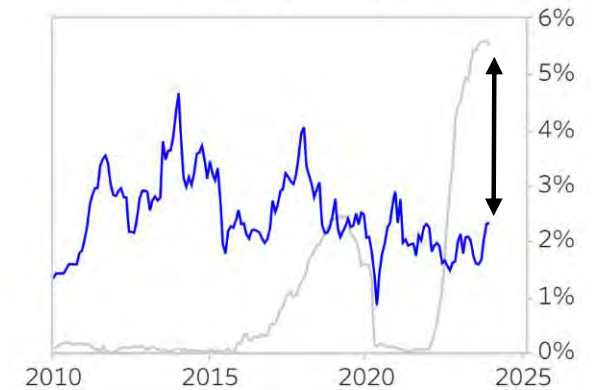
Core Inflation

— CHN — US



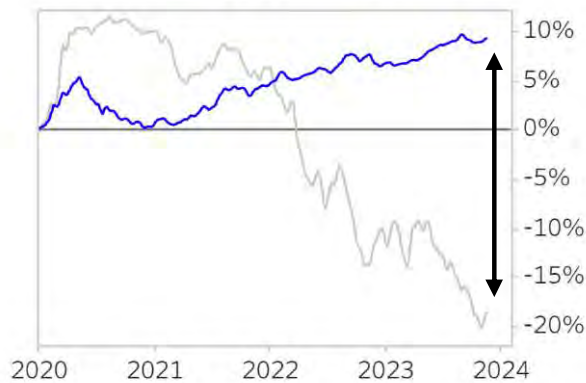
Policy Rate

— CHN — US



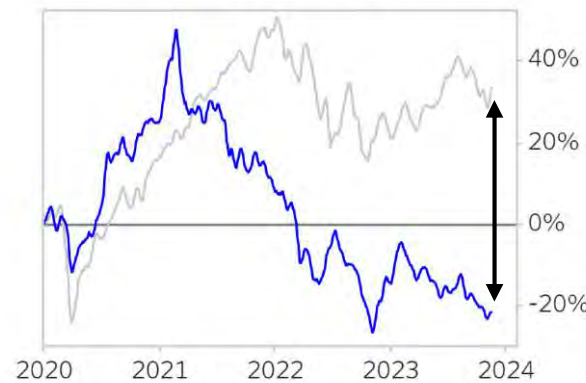
Bond Returns

— CHN — US



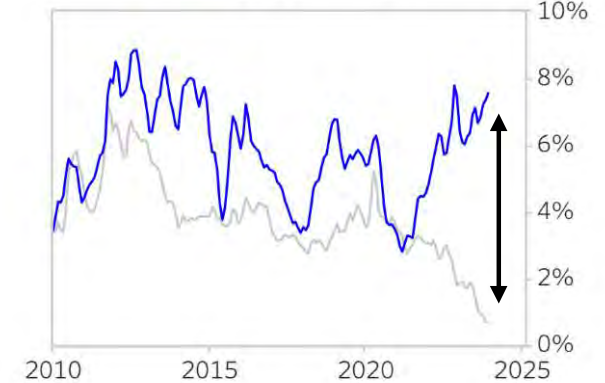
Equity Returns

— CHN — US



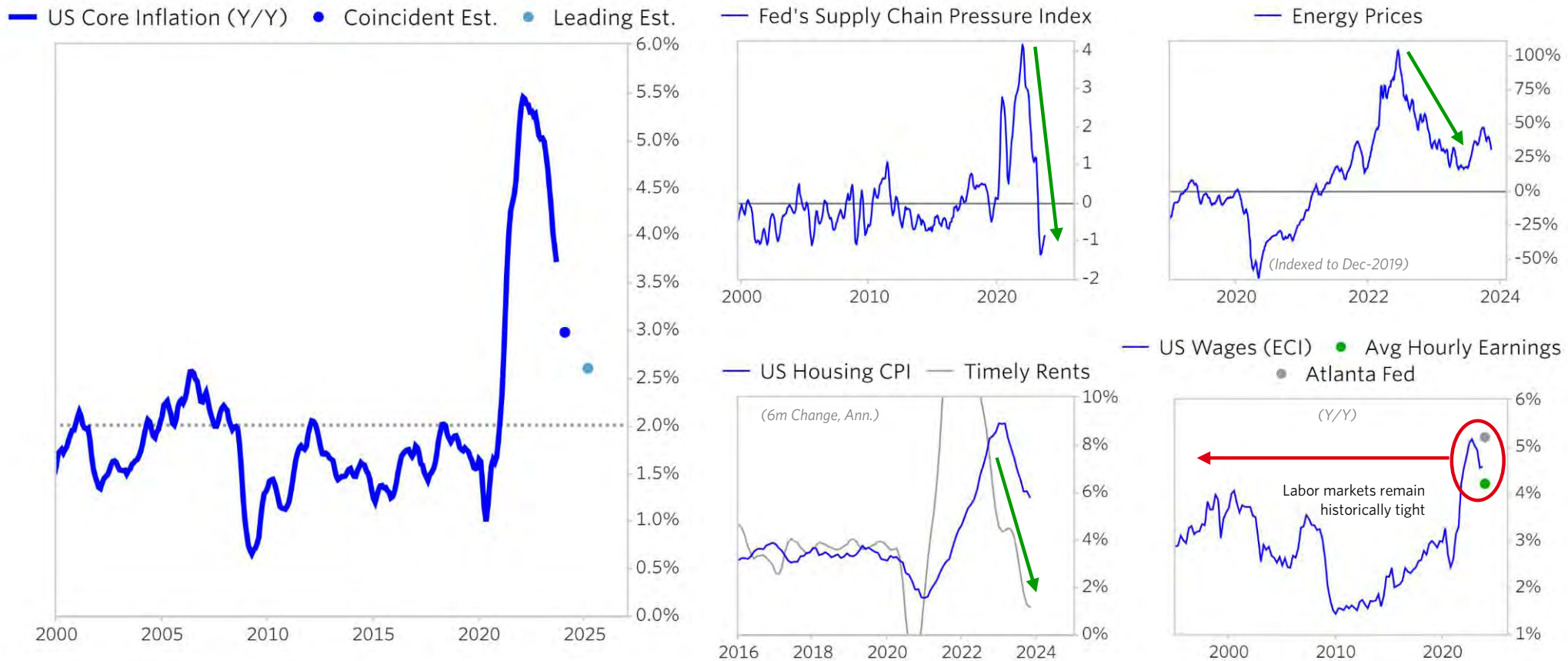
Earnings Yield vs Bond Yield

— CHN — US



INFLATION IS OFF HIGHS, BUT THE NEXT LEG DOWN LOOKS STICKIER, ESPECIALLY IF THE ECONOMY STAYS RESILIENT

Easing Supply Chains and Falling Energy Prices Led the First Wave of Disinflation, But With Labor Markets Tight, the Next Leg Down Will Likely Be More Challenging



Core and headline inflation are calculated by using Bridgewater's proprietary price index. Estimates are based on Bridgewater analysis. Please review the "Important Disclosures and Other Information" at the end of this presentation.

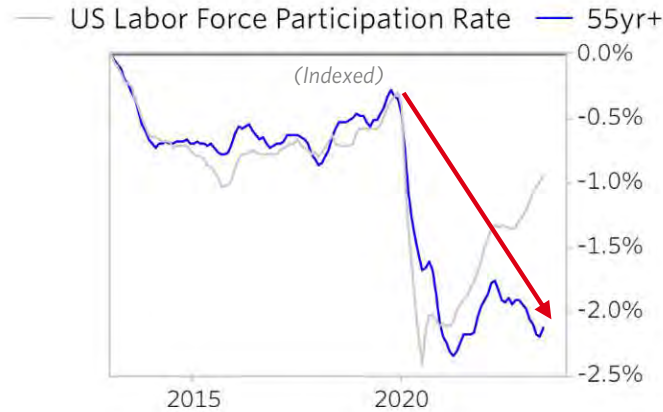
SHIFTING SECULAR PRESSURES LIKELY RAISE INFLATION'S FLOOR

The Gravitational Pull Is Now Toward Structurally Higher Inflation, Although the Impact of Transformative Technology Is a Big Open Question

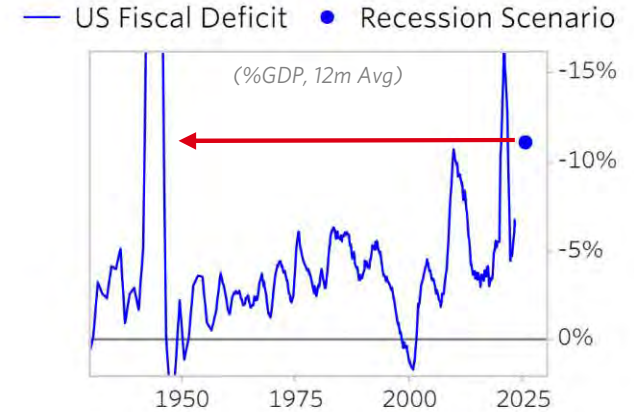
Globalization



Labor Markets

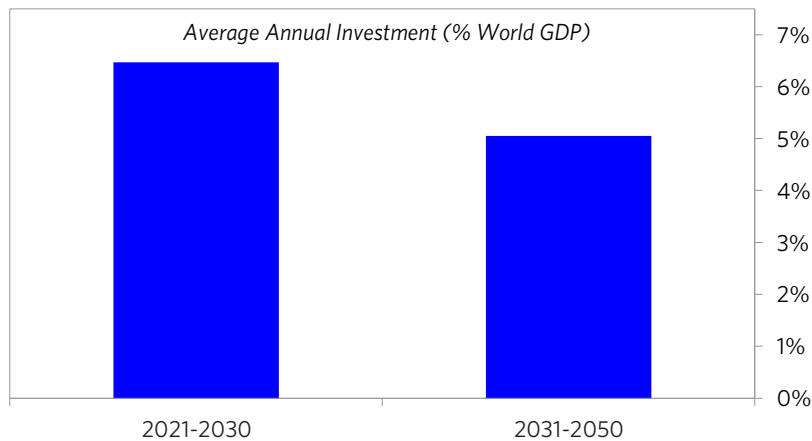


Fiscal Policy



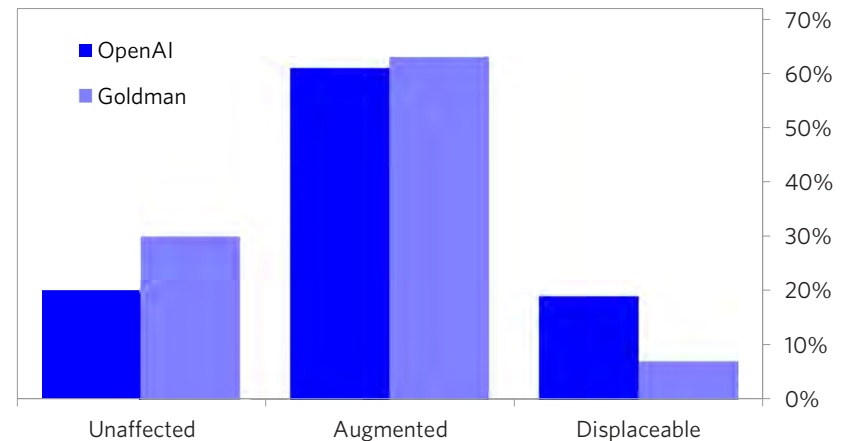
Green Energy Transition

Global Investment Needed to Reach Net Zero by 2050



How Big Will Tech's Deflationary Ripple be?

% US Occupations Exposed To Generative AI



The 'Global Investment Needed to Reach Net Zero from Energy by 2050' chart is an average of estimates from the International Renewable Energy Agency (2021) and the International Energy Association, "Net Zero by 2050," (2021). Other estimates based on Bridgewater analysis. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

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Certain information contained herein constitutes forward-looking statements (including projections, targets, hypotheticals, ratios, estimates, returns, performance, opinions, activity and other events contained or referenced herein), which can be identified by the use of terms such as “may,” “will,” “should,” “expect,” “anticipate,” “project,” “estimate,” “intend,” “continue” or “believe” or other variations (or their negatives) thereof. Due to various risks, assumptions, uncertainties and actual events, including those discussed herein and in the OM, actual results, returns or performance can differ materially from those reflected or contemplated in such forward-looking statements. As a result, prospective investors should not rely on such forward-looking statements in making their investment decisions. While Bridgewater believes that there is a sound basis for these forward-looking statements, no representations are made as to their accuracy, and there can be no assurance that such results will be achieved. Any forward-looking statements contained herein reflect Bridgewater’s current judgment and assumptions which may change in the future, and Bridgewater has no obligation to update or amend such forward-looking statements.

Bridgewater’s investment process seeks to understand the cause and effect linkages that drive markets over time. To assess and refine its understanding of these linkages, Bridgewater performs historical stress tests across a wide range of timeframes and market environments. From these stress tests, Bridgewater is able to simulate how its strategies would have performed prior to their inception. Bridgewater has the ability to run multiple simulations and select the simulation with the best results, returns or performance. For strategies that include active decision making, Bridgewater often “humbles” its simulated alpha returns (by systematically adjusting downward the simulated results that Bridgewater’s current alpha investment logic produces) to account for the possibility that it could be wrong. Because this stress testing is a core component of Bridgewater’s investment process, it shares these simulations with current and prospective investors to demonstrate its thinking. However, because they do not demonstrate actual results, these simulations are hypothetical, and inherently limited and should not be relied upon to make an investment decision.

The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

All hypothetical performance is subject to revision and provided solely as a guide to current expectations. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. Hypothetical performance results can provide insight into the level of risk that a strategy will seek with respect to its investments, with higher hypothetical performance results generally reflecting greater risk. Some or all results may be substantially lower than these hypothetical results and, as with an investment, there is a risk of loss of the entire investment.

Hypothetical performance results rely on numerous criteria, assumptions, risks and limitations and are inherently uncertain. There are multiple assumptions and possible adjustments Bridgewater may make in its underlying calculations that are reasonable, but other criteria, assumptions, methodologies and adjustments could also be reasonable and could lead to materially different and lower actual results and higher risks than those presented. In addition, the hypothetical performance results may prove to be invalid, inaccurate, incomplete or change without notice. Variation in any of these factors (or factors or events that are unknown or unaccounted for) could cause actual returns to substantially differ. In constructing hypothetical returns and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream. Furthermore, any hypothetical or mathematical calculations or data might contain errors, and could rely on third-party inputs, which Bridgewater believes to be reliable but whose accuracy cannot be guaranteed.

While Bridgewater believes that there is a sound basis for these hypothetical performance results, no representations are made as to their accuracy, and there can be no assurance that such results will be achieved. This presentation will not be updated or amended even if there are changes in the information or processes upon which they rely.

IMPORTANT DISCLOSURES

Bridgewater believes that a particular return stream should be evaluated against its expected performance or its benchmark. To that end, Bridgewater demonstrates whether its strategies are operating as expected via a cone chart, which shows the performance of a particular strategy over time relative to the strategy's benchmark and also within bands of standard deviation from that benchmark. Separately, to demonstrate the impact of market conditions on the strategies it manages, Bridgewater explains the macro-economic pressures and market conditions that effected performance in the context of client letters, account reviews, or other publications that Bridgewater provides to each current and prospective investor on a regular basis. Additional information about how Bridgewater thinks about setting expectations for its strategies via a benchmark is available upon request.

Any tables, graphs or charts relating to past performance, whether hypothetical, simulated or actual, included in this presentation are intended only to illustrate the performance of indices, strategies, or specific accounts for the historical periods shown. When creating such tables, graphs and charts, Bridgewater may incorporate assumptions on trading, positions, transactions costs, market impact estimations and the benefit of hindsight. For example, transaction cost estimates used in simulations are based on historical measured costs and/or modeled costs, and attribution is derived from a process of attributing positions held at a point in time to specific market views and is inherently imprecise. Such tables, graphs and charts are not intended to predict future performance and should not be used as a basis for making any investment decision. Bridgewater has no obligation to update or amend such tables, graphs or charts.

Statements regarding target performance or target ratios related to assumed risk budgets, liabilities, volatility, target volatility, tracking error or other targets are hypothetical in nature and should not be considered a guarantee that such results can or will be achieved. For example, Bridgewater may adjust returns to match, for instance, the annualized standard deviation of two or more return series but this adjustment does not suggest that the returns or assets are similar with respect to other aspects of the risk such as liquidity risk. Any statements with respect to the ability to risk match or risk adjust in the future are not a guarantee that the realized risks will be similar and material divergences could occur. All performance and risk targets contained herein are subject to revision by Bridgewater and are provided solely as a guide to current targets.

Discussions related to the risk controlling capabilities of low risk portfolios, diversification, passive investing, risk management, risk adjusting, and any other risk control theories, statements, measures, calculations and policies contained herein should not be construed as a statement that Bridgewater has the ability to control all risk or that the investments or instruments discussed are low or will lower any risk. Active trading comes with a monetary cost and high risk and there is no guarantee the cost of trading will not have a materially adverse impact on any account, fund, portfolio or other structure. Bridgewater manages accounts, funds and strategies not referred to herein. For such accounts, funds and strategies, and, even where accounts, funds or strategies are traded similarly, performance may materially diverge based on, among other factors, timing, the approved instruments, markets, and target risk for each strategy or market. The price and value of the investments referred to in this presentation and the income, if any, derived therefrom may fluctuate.

Bridgewater uses different types of performance in its materials. Unless otherwise indicated, such types of performance can be understood as follows:

Hypothetical Performance refers to any return stream that is not actual performance. Hypothetical performance includes, for example, Simulated Performance and Related Fund or Related Share Class Performance.

Simulated Performance refers to hypothetical performance that shows the returns of a Bridgewater strategy prior to its inception date. Simulated performance does not reflect actual trading by Bridgewater and is constructed by applying Bridgewater's investment management process to available market data.

Related Fund or Related Share Class Performance refers to actual performance that has been adjusted to account for volatility and/or currency differences. Because it is based on actual performance, Related Fund or Related Share Class Performance does reflect actual trading by Bridgewater, which has been adjusted on the basis of currency, volatility, or both and is thus hypothetical. Note that the terms Related Fund or Related Share Class Performance are not being used in the same way that the term 'Related Performance' is used in the Securities and Exchange Commission's Marketing Rule.

Statistical and mathematical measures of performance and risk measures based on past performance, market assumptions or any other input should not be relied upon as indicators of future results. While Bridgewater believes the assumptions and possible adjustments it may make in making the underlying calculations are reasonable, other assumptions, methodologies and adjustments could have been made that are reasonable and would result in materially different results, including materially lower results. Where shown, targeted performance and the abilities and capabilities of the active and passive management approaches discussed herein are based on Bridgewater's analysis of market data, quantitative research of the underlying forces that influence asset classes as well as management policies and objectives, all of which are subject to change. The material contained herein may exhibit the potential for attractive returns, however it also involves a corresponding high degree of risk. Targeted performance, whether mathematically based or theoretical, is considered hypothetical and is subject to inherent limitations such as the impact of concurrent economic or geo-political elements, forces of nature, war and other factors not addressed in the analysis, such as lack of liquidity. Please see additional discussions of hypothetical performance herein for important information on the risks and limitations thereof. There is no guarantee that the targeted performance for any fund or strategy shown herein can or will be achieved. A broad range of risk factors, individually or collectively, could cause a fund or strategy to fail to meet its investment objectives and/or targeted returns, volatilities or correlations.

Where shown, information related to markets traded may not necessarily indicate the actual historical or current strategies of Bridgewater. Markets listed might not be currently traded and are subject to change without notice. Markets listed are used for illustrative purposes, may not represent the universe of markets traded or results available and may not include actual trading results of Bridgewater. Other markets or trading, not shown herein, can have had materially different results. Attribution of performance or designation of markets and the analysis of performance or other performance with respect to scenario analysis or the determination of biases is based on Bridgewater's analysis. Statements made with respect to the ability of Bridgewater, a fund, a strategy, a market or instrument to perform in relation to any other market, instrument or manager in absolute terms or in any specific manner in the future or any specified time period are not a guarantee of the desired or targeted result.

IMPORTANT DISCLOSURES

Bridgewater research utilizes data and information from public, private, and internal sources, including data from actual Bridgewater trades. Sources include BCA, Bloomberg Finance L.P., Bond Radar, Candeal, Calderwood, CBRE, Inc., CEIC Data Company Ltd., Clarus Financial Technology, Conference Board of Canada, Consensus Economics Inc., Corelogic, Inc., Cornerstone Macro, Dealogic, DTCC Data Repository, Ecoanalitica, Empirical Research Partners, Entis (Axioma Qontigo), EPFR Global, ESG Book, Eurasia Group, Evercore ISI, FactSet Research Systems, The Financial Times Limited, FINRA, GaveKal Research Ltd., Global Financial Data, Inc., Harvard Business Review, Haver Analytics, Inc., Institutional Shareholder Services (ISS), The Investment Funds Institute of Canada, ICE Data, ICE Derived Data (UK), Investment Company Institute, International Institute of Finance, JP Morgan, JSTA Advisors, MarketAxess, Medley Global Advisors, Metals Focus Ltd, Moody's ESG Solutions, MSCI, Inc., National Bureau of Economic Research, Organisation for Economic Cooperation and Development, Pensions & Investments Research Center, Refinitiv, Rhodium Group, RP Data, Rubinson Research, Rystad Energy, S&P Global Market Intelligence, Sentix GmbH, Shanghai Wind Information, Sustainalytics, Swaps Monitor, Totem Macro, Tradeweb, United Nations, US Department of Commerce, Verisk Maplecroft, Visible Alpha, Wells Bay, Wind Financial Information LLC, Wood Mackenzie Limited, World Bureau of Metal Statistics, World Economic Forum, YieldBook. While we consider information from external sources to be reliable, we do not assume responsibility for its accuracy. Data leveraged from third-party providers, related to financial and non-financial characteristics, may not be accurate or complete. The data and factors that Bridgewater considers within its investment process may change over time.

None of the information related to a fund or strategy that Bridgewater provides is intended to form the basis for any investment decision with respect to any retirement plan's (or any investor's) assets. Any information Bridgewater provides should be independently and critically evaluated based on whatever other sources are deemed appropriate, including legal and tax advice; it is also not intended to be impartial investment information or advice as Bridgewater can recommend one or more Bridgewater products in connection with such information, which would result in additional fees being paid to Bridgewater. Bridgewater's status as an ERISA fiduciary with respect to the management of any existing or future Bridgewater product(s) in which you invest would be (or continue to be) set forth in that product's applicable governing instruments. You are responsible for ensuring that your decision to invest in any Bridgewater product does not violate the fiduciary or prohibited transaction rules of ERISA, the U.S. Internal Revenue Code or any applicable laws or regulations that are similar. On and after June 9, 2017, the information provided herein is being made available only to "independent fiduciaries with financial expertise" (within the meaning of the Definition of the Term "Fiduciary"; Conflict of Interest Rule – Retirement Investment Advice, 81 Fed. Reg. 20,946 (Apr. 8, 2017), available at <https://www.gpo.gov/fdsys/pkg/FR-2016-04-08/pdf/2016-07924.pdf>), and this presentation should not be accepted by any person who does not meet such requirements.

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US TRADITIONAL PORTFOLIO

This page contains the allocation information for the historical simulation of the US Traditional portfolio, as well as forward looking assumptions for alpha volatility and alpha ratio used in this analysis. The portfolio capital allocation weights (illustrated below) are estimates based either upon Bridgewater Associates' understanding of standard asset allocation (which may change without notice) or information provided by or publicly available from the recipient of this presentation. Asset class returns are actual market returns where available and otherwise a proxy index constructed based on Bridgewater Associates understanding of global financial markets. Information regarding specific indices and simulation methods used for proxies is available upon request (except where the proprietary nature of information precludes its dissemination). Results are hypothetical or simulated and gross of fees unless otherwise indicated. "Gross of fees" in this context means results that do not include advisory fees or expenses, which would reduce the figures shown. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

Asset Type	Benchmark	Nominal Exposure	Fx Exposure	Alpha Volatility	Alpha Ratio
Equities	U.S. Equities	15.0%	---	---	---
Equities	U.S. Equities	15.0%	---	5.0%	0.25
Equities	Dev. World Equities Ex-US	18.0%	Unhedged	5.0%	0.30
Equities	Emerging Market Equities	3.0%	Unhedged	5.0%	0.30
Nominal Bonds	U.S. Gov't Bonds	4.5%	---	---	---
Nominal Bonds	U.S. Gov't Bonds	4.5%	---	2.0%	0.25
Corporate Bonds	U.S. Corporate Bonds	5.0%	---	3.0%	0.25
MBS	U.S. MBS	6.0%	---	2.0%	0.25
IL Bonds	U.S. IL Bonds	1.0%	---	---	---
IL Bonds	U.S. IL Bonds	1.0%	---	1.0%	0.25
High Yield Bonds	U.S. High Yield	2.0%	---	4.0%	0.25
Nominal Bonds	World Gov't Bonds Ex-US	2.0%	Hedged	2.0%	0.30
Equities	U.S. PE / VC	9.0%	---	10.0%	0.25
Real Estate	U.S. Real Estate	5.0%	---	6.0%	0.25
Real Estate	World Real Estate	2.0%	Unhedged	6.0%	0.30
Commodities	Bloomberg Commodity Index	2.0%	---	---	---
Hedge Fund	Cash	5.0%	---	7.0%	0.70

BALANCED PORTFOLIO DISCLOSURE

Balanced Portfolio Net
(Net Total Returns from Jan 1970 through Oct 2023)
(Annualized Total Returns in USD)

Last 1 Year	3.1%
Last 3 Years	-2.8%
Last 5 Years	4.6%
Last 7 Years	3.7%
Last 10 Years	4.3%
Avg Annual	11.0%
StDev	11.3%
Ratio	0.56

Average annual returns and Sharpe ratio are calculated using net of fees performance, while the standard deviation is calculated using gross of fees performance. Past results are not necessarily indicative of future results. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM.

ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

Balanced Portfolio Simulation Performance Disclosure

Where shown all performance of the Bridgewater Balanced Portfolio is based on simulated, hypothetical performance and not the returns of Bridgewater's All Weather strategy or any managed portfolio. Bridgewater's investment selection and trading strategies are systematic and rules-based. However, they are not fully automated and they do include human input. As a result, simulated returns are designed based on assumptions about how Bridgewater would have implemented the Balanced Portfolio through time. These assumptions are intended to approximate such implementation, but are inherently speculative.

The simulated performance for the Balanced Portfolio was derived by applying Bridgewater's current investment systems and portfolio construction logic to historical market returns across the markets selected for the Balanced Portfolio. A list of the markets used appears below. We use actual market returns when available as an input for our hypothetical returns and otherwise use Bridgewater Associates' proprietary estimates, based on other available data and our fundamental understanding of asset classes. In certain cases, market data for an exposure which otherwise would exist in the simulation can be omitted if the relevant data is unavailable, deemed unreliable, immaterial or able to be accounted for using proxies. Proxies are assets that existed and for which data is available, which Bridgewater believes would approximate returns for an asset that did not exist or for which reliable data is not available. For example, before reliable commodity futures returns data can be found Bridgewater estimates futures returns by using the spot commodity returns and their typical relationship to futures returns. Examples of omitted markets or accounted for using proxies include, but are not limited to, emerging market equities, emerging market debt, and certain commodities. The mix and weightings of markets traded for Balanced Portfolio are subject to change in the future. The Balanced Portfolio includes periodic adjustments that are made to the Balanced Portfolio desired strategic asset allocation pursuant to a subset of Bridgewater's systematic strategic management process. This process systematically adjusts exposures as needed to maintain our implementation of balance. The Balanced Portfolio maintains the target level of risk regardless of market conditions. Accordingly, the Balanced Portfolio does not alter the target level of risk based on the strategic management process employed in the All Weather Strategy. When applicable, the returns of the Balanced Portfolio reflect adjustments based on this systematic strategic management process.

Simulated asset returns are subject to considerable uncertainty and potential error, as a great deal cannot be known about how assets would have performed in the absence of actual returns. The Balanced Portfolio is an approximation of our current process but not an exact replication and can have differences including but not limited to the precise mix of markets used and the weights applied to those markets. It is expected that the simulated performance will periodically change as a function of both refinements to our simulation methodology (including the addition/removal of asset classes) and the underlying market data. There is no guarantee that previous results would not be materially different. Future strategy changes could materially change previous simulated returns in order to reflect the changes accurately across time.

Net of fees performance includes (i) a model management fee and other operating fees, (ii) reinvestment of interest, gains and losses and (iii) modeled transaction costs. Transaction costs are accounted for and are estimates themselves based on historical measured costs and/or modeled costs. Actual transaction costs experienced could have been higher or lower than those reflected. Where noted, the Balanced Portfolio net of fees returns have been calculated using our standard fee schedule for a minimum size account, which are the highest standard fees we have or would currently charge an account. Investment advisory fees are described in Bridgewater's ADV Part 2A. Gross of fees performance (i) excludes the deduction of management fees, and other operating expenses (the "fees and expenses") and (ii) includes the reinvestment of interest, gains and losses. Including the fees and expenses would lower performance. There is no guarantee regarding the Balanced Portfolio's ability to perform in absolute returns or relative to any market in the future, during market events not represented or during market events occurring in the future. Market conditions and events vary considerably, are unpredictable and can have unforeseen impacts resulting in materially adverse results. ACCORDINGLY, PLEASE REACH OUT TO YOUR CLIENT ADVISOR IF YOU HAVE ANY QUESTIONS ABOUT THIS SIMULATION.

Markets included in the Balanced Portfolio Simulation

The Balanced Portfolio Simulation includes returns from the following markets: global nominal interest rates, global inflation linked bonds, emerging market credit spreads, corporate credit spreads, global equities, and commodities.

ALL WEATHER STRATEGY DISCLOSURE

All Weather Strategy 10% Volatility Net
(Net Total Returns from Jun 1996 through Oct 2023)

1996	20.4%	2007	11.8%	2018	-5.1%
1997	15.0%	2008	-20.2%	2019	16.6%
1998	-1.8%	2009	9.4%	2020	9.5%
1999	15.6%	2010	17.6%	2021	11.6%
2000	9.9%	2011	18.1%	2022	-22.1%
2001	-6.0%	2012	14.7%	2023 YTD	-1.8%
2002	10.2%	2013	-3.9%		
2003	16.7%	2014	7.5%		
2004	17.7%	2015	-6.9%	Avg Annual	6.4%
2005	15.5%	2016	9.9%	StDev	10.7%
2006	1.2%	2017	11.8%	Ratio	0.39

Past results are not necessarily indicative of future results.

Average annual returns and Sharpe ratio are calculated using net of fees performance, while the standard deviation is calculated using gross of fees performance.

Bridgewater All Weather Strategy Performance Disclosure:

For the period June 1996 (the inception of the strategy) through August 2001 the performance is based on the total return of the Bridgewater All Weather strategy as implemented for Bridgewater's principals and their affiliates and was not fully hedged to the US Dollar. The All Weather strategy is structured to be fully hedged, and the performance reflected after August 2001 includes these hedging transactions. For the period of August 2001 through present the performance shown is the actual total returns of the longest running fully funded All Weather account. For the entire history, excess returns are calculated by subtracting an approximation of a US cash rate from the total returns described above. Of note, the All Weather strategy's target leverage, volatility and return, as well as the asset mix varied from June 1996 to July 2005. From August 2005 through the present the strategy has targeted 10% volatility. Bridgewater manages additional All Weather portfolios not included in this performance history.

Gross of fees performance is gross of management and performance fees and includes the reinvestment of interest, gains, losses, expenses and taxes. Returns will be reduced by the investment advisory fees that will be incurred in the management of the account.

Net of fees performance has been calculated using a model fee based on our standard fee schedule for a minimum size account, which are the highest standard fees we have or would currently charge an account. Investment advisory fees are described in Bridgewater's ADV Part 2A.

No representation is being made that any account will or is likely to achieve returns similar to those shown. Trading in futures is risky and can result in losses as well as profits. PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. Performance as of the current month is estimated and subject to change.

ALL WEATHER STRATEGY SIMULATION DISCLOSURE

All Weather Strategy Simulation Net
(Net Total Returns from Jan 1970 through Oct 2023)
(Annualized Total Returns in USD)

Last 1 Year	3.1%
Last 3 Years	-2.8%
Last 5 Years	4.6%
Last 7 Years	3.7%
Last 10 Years	4.3%
Avg Annual	11.1%
StDev	10.9%
Ratio	0.58

Average annual returns and Sharpe ratio are calculated using net of fees performance, while the standard deviation is calculated using gross of fees performance. Past results are not necessarily indicative of future results. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM.

ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

All Weather Strategy Simulation Performance Disclosure

Performance of the Bridgewater All Weather Strategy Simulation is based on simulated, hypothetical performance and not the actual returns of Bridgewater's All Weather Strategy or any managed portfolio. Bridgewater's investment selection and trading strategies are systematic and rules-based. However, they are not fully automated and they do include human input. As a result, simulated returns are designed based on assumptions about how Bridgewater would have implemented the All Weather Strategy through time. These assumptions are intended to approximate such implementation, but are inherently speculative.

The simulated performance for the All Weather Strategy Simulation was derived by applying Bridgewater's current investment systems and portfolio construction logic to historical market returns across the markets selected for the All Weather Strategy Simulation. A list of the markets used appears below. We use actual market returns when available as an input for our hypothetical returns and otherwise use Bridgewater Associates' proprietary estimates, based on other available data and our fundamental understanding of asset classes. In certain cases, market data for an exposure which otherwise would exist in the simulation can be omitted if the relevant data is unavailable, deemed unreliable, immaterial or able to be accounted for using proxies. Proxies are assets that existed and for which data is available, which Bridgewater believes would approximate returns for an asset that did not exist or for which reliable data is not available. For example, before reliable commodity futures returns data can be found Bridgewater estimates futures returns by using the spot commodity returns and their typical relationship to futures returns. Examples of omitted markets or accounted for using proxies include, but are not limited to, emerging market equities, emerging market debt, and certain commodities. The mix and weightings of markets traded for All Weather Strategy Simulation are subject to change in the future.

The All Weather Strategy Simulation includes periodic adjustments that are made to the All Weather Strategy Simulation's desired strategic asset allocation and level of risk pursuant to Bridgewater's systematic strategic management process. Such strategic management is based on a systematic process that assesses whether the assumptions underlying the All Weather Strategy (for example, that assets will outperform cash, and that assets can be reasonably balanced against each other) are under threat, and systematically adjusts or reduces exposures accordingly. When applicable, the returns of the All Weather Strategy Simulation reflect adjustments based on this systematic strategic management process.

Simulated asset returns are subject to considerable uncertainty and potential error, as a great deal cannot be known about how assets would have performed in the absence of actual returns. The All Weather Strategy Simulation is an approximation of our current process but not an exact replication and can have differences including but not limited to the precise mix of markets used and the weights applied to those markets. It is expected that the simulated performance will periodically change as a function of changes in our investment process and refinements to our simulation methodology (including the addition/removal of asset classes) / underlying market data. There is no guarantee that previous results would not be materially different. Future strategy changes could materially change previous simulated returns in order to reflect the changes accurately across time.

Net of fees performance includes (i) a model management fee and other operating fees, (ii) reinvestment of interest, gains and losses and (iii) modeled transaction costs. Transaction costs are accounted for and are estimates themselves based on historical measured costs and/or modeled costs. Actual transaction costs experienced could have been higher or lower than those reflected. Where noted, the All Weather Strategy Simulation net of fees returns have been calculated using a model fee based on our standard fee schedule for a minimum size account, which are the highest standard fees we have or would currently charge an account. Investment advisory fees are described in Bridgewater's ADV Part 2A. Gross of fees performance (i) excludes the deduction of management fees, and other operating expenses (the "fees and expenses") and (ii) includes the reinvestment of interest, gains and losses. Including the fees and expenses would lower performance. There is no guarantee regarding the All Weather Strategy Simulation's ability to perform in absolute returns or relative to any market in the future, during market events not represented or during market events occurring in the future. Market conditions and events vary considerably, are unpredictable and can have unforeseen impacts resulting in materially adverse results. ACCORDINGLY, PLEASE REACH OUT TO YOUR CLIENT ADVISOR IF YOU HAVE ANY QUESTIONS ABOUT THIS SIMULATION.

Markets included in the All Weather Strategy Simulation

The All Weather Strategy Simulation includes returns from the following markets: global nominal interest rates, global inflation linked bonds, emerging market credit spreads, corporate credit spreads, global equities, and commodities.

PURE ALPHA STRATEGY PERFORMANCE DISCLOSURES

Pure Alpha Strategy 12% Volatility Net
(Net Total Returns from Dec 1991 through Oct 2023)

1991	5.2%	2004	13.8%	2017	1.3%
1992	4.7%	2005	3.5%	2018	10.0%
1993	24.5%	2006	3.4%	2019	0.3%
1994	-0.5%	2007	9.6%	2020	-7.6%
1995	-1.7%	2008	8.7%	2021	5.9%
1996	24.5%	2009	1.7%	2022	6.7%
1997	19.9%	2010	27.4%	2023 YTD	6.4%
1998	25.9%	2011	16.1%		
1999	1.4%	2012	0.6%		
2000	-3.5%	2013	3.5%		
2001	6.1%	2014	2.5%	Avg Annual	7.8%
2002	14.2%	2015	3.3%	StDev	10.2%
2003	21.7%	2016	2.0%	Ratio	0.52

Past results are not necessarily indicative of future results. Returns prior to May 1999 are simulated, i.e., hypothetical based on a partially funded account that is adjusted as described herein.

Average annual returns and Sharpe ratio are calculated using net of fees performance, while the standard deviation is calculated using gross of fees performance.

HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM.

ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

Bridgewater Pure Alpha Strategy 12% Volatility Performance Disclosure:

The performance history provided is based on actual Bridgewater Pure Alpha accounts. Returns since the strategy's inception in December 1991 through April 1999 are based on the actual performance of a partially funded account (where interest income has been removed to arrive at the excess returns), and are adjusted to include the imputed interest return on the full notional value using the US repo rate. Returns from May 1999 through present are the actual returns of the longest running fully funded Pure Alpha account with a target tracking error of 12%, an approximation of an United States cash benchmark, and fully unconstrained active management guidelines. Bridgewater manages additional Pure Alpha portfolios not included in this performance history.

Gross of fees performance is gross of management and performance fees and includes the reinvestment of interest, gains, and losses, operating expenses and taxes. Returns will be reduced by the investment advisory fees that will be incurred in the management of the account.

Where shown, from December 1991 through April 1999, net of fees returns have been calculated using the cumulative gross return of the Strategy starting in December 1991 and applying a model fee based on our standard Pure Alpha fee schedule, which are the highest standard fees charged. From December 1991 through April 1999, using a monthly high water concept (and after April 1999 a quarterly high water concept) deduction of incentive fees have varied over time and might be higher or lower than the fees actually charged to the account for the same time period. These returns reflect all fees (which are at our Pure Alpha standard rates), expenses and interest actually charged or credited to the account by Bridgewater, but not fees charged by third-parties. Investment advisory fees are described in Bridgewater's ADV Part 2A.

No representation is being made that any account will or is likely to achieve returns similar to those shown. Trading in futures is risky and can result in losses as well as profits. PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. Performance as of the current month is estimated and subject to change.

PURE ALPHA STRATEGY 18% USD DISCLOSURES

Pure Alpha Strategy 18% Volatility Net
(Net Total Returns from Dec 1991 through Oct 2023)

1991	7.6%	2004	20.4%	2017	1.3%
1992	5.1%	2005	3.1%	2018	14.6%
1993	36.8%	2006	1.7%	2019	-0.7%
1994	-3.1%	2007	12.7%	2020	-12.6%
1995	-5.7%	2008	9.4%	2021	8.1%
1996	36.6%	2009	1.9%	2022	9.4%
1997	28.2%	2010	44.8%	2023 YTD	7.5%
1998	37.8%	2011	25.3%		
1999	0.1%	2012	0.8%		
2000	-7.9%	2013	5.2%		
2001	6.9%	2014	3.5%	Avg Annual	10.4%
2002	22.1%	2015	4.7%	StDev	15.3%
2003	33.8%	2016	2.5%	Ratio	0.52

Past results are not necessarily indicative of future results. Returns Based on Related Fund Performance Prior to May 2005.

Average annual returns and Sharpe ratio are calculated using net of fees performance, while the standard deviation is calculated using gross of fees performance.

HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM.

ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

Bridgewater Pure Alpha Strategy 18% Volatility Performance Disclosure:

Returns after April 2005 are the actual returns of the longest running fully funded Pure Alpha account with a target tracking error of 18%, a United States cash benchmark, and fully unconstrained active management guidelines. From December 1991 through the end of April 2005 the performance history provided is based on the performance of the Pure Alpha strategy run at a 12% target volatility. A description of the 12% target volatility performance is provided below. The value added (or excess returns) of the 12% target volatility gross of fees performance history have been scaled to an 18% target volatility. Monthly value added returns are scaled linearly by a factor of 1.5 (18% divided by 12%). The Benchmark return (an approximation of US cash) is subsequently added back to the adjusted value added to arrive at a total return. For the entire period the Benchmark is an approximation of US cash. Due to the effects of compounding, annualized historical returns, volatilities, and information ratios will not scale linearly. The returns are considered simulated or hypothetical.

Bridgewater Pure Alpha Strategy 12% Volatility Gross Performance Disclosure:

The performance history provided is based on actual Bridgewater Pure Alpha accounts. Returns since the strategy's inception in December 1991 through April 1999 are based on the actual performance of a partially funded account (where interest income has been removed to arrive at the excess returns), and are adjusted to include the imputed interest return on the full notional value using the US repo rate. Returns from May 1999 through present are the actual returns of the longest running fully funded Pure Alpha account with a target tracking error of 12%, an approximation of an United States cash benchmark, and fully unconstrained active management guidelines. Bridgewater manages additional Pure Alpha portfolios not included in this performance history.

Gross of fees performance is gross of management and performance fees and includes the reinvestment of interest, gains, losses, operating expenses and taxes. Returns will be reduced by the investment advisory fees that will be incurred in the management of the account.

Net of fees performance for the entire period shown have been calculated by applying a model fee based on our standard Pure Alpha 18% Volatility Strategy fee schedule, which are the highest standard fees charged. Investment advisory fees are described in Bridgewater's ADV Part 2A. From December 1991 through June 2008, using a monthly high water concept (and after June 2008, using a quarterly high water concept), deduction of incentive fees may vary and may be higher or lower than the fees actually charged to the account for the same time period. These returns reflect all fees (which are at our Pure Alpha standard rates), expenses and interest actually charged or credited to the account.

No representation is being made that any account will or is likely to achieve returns similar to those shown. Trading in futures is risky and can result in losses as well as profits. PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. Performance as of the current month is estimated and subject to change.

SUBJECT: Adoption of the 2023 Strategic Plan ACTION: X

DATE: December 14, 2023

INFORMATION:

BACKGROUND:

At the October 30, 2023 board meeting staff were directed to revise the draft strategic plan as discussed. The Board Strategic Goal tasks were matched with timelines and staff for consideration.

RECOMMENDATION:

Trustees will determine if the goals that have been identified as well as tasks, timelines and involved staff should be adopted as written.

If Trustees find the 2023 Strategic Plan acceptable they will adopt it through a role call vote.



ALASKA PERMANENT
FUND CORPORATION

Four-Year Strategic Plan

Objective:

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

Achieve the Highest Standard for Endowment Style Sovereign Wealth Fund

- **Grow Fund to \$100 Billion**
 - Consideration of Additional Leverage
 - Outperformance through the Generation of Alpha
 - Develop asset class-level strategic plans aligned to the goal
- **Improve Corporate Functionality**
 - Open Meetings Act as related to selecting Executive Director
 - Key Person Risk/Additional Incentive Compensation Structure
 - Explore benefits of continental US and or International offices
 - Enhance data management capabilities
- **Comprehensive Communications Plan**
 - In-State mission of education and awareness
 - Nationwide focus on investment performance and strategy
- **Review and Assess Optimal Structure of the Fund**
 - Trustee Paper #10

Grow Fund to \$100 Billion

	Tasks	Timeline	Staff
Consideration of Leverage	<ul style="list-style-type: none"> Pursue changes to state law 	<ul style="list-style-type: none"> Bring forth concept during legislative discussions this session 	Deven, Paulyn, Sebastian, Chris, and Marcus
Outperformance through the Generation of Alpha	<ul style="list-style-type: none"> Review asset class strategies and APFC investment philosophy 	<ul style="list-style-type: none"> Review 12-14-2023 Execute over next four years 	All Staff
Develop Asset Class-Level Strategic Plans aligned to the Goal	<ul style="list-style-type: none"> Review Asset Class documents Assess adequacy and provide feedback (if any) 	<ul style="list-style-type: none"> Review 12-14-2023 Ongoing 	Executive Leadership Team, Asset Class Leads

Improve Corporate Functionality

	Tasks	Timeline	Staff
Open Meetings Act – Executive Director Selection	<ul style="list-style-type: none"> Pursue changes to state law 	<ul style="list-style-type: none"> This Legislative session 	Deven, Paulyn, and Chris
Key Person Risk/Additional Incentive Compensation Structure	<ul style="list-style-type: none"> Review current status quo and provide feedback (if any) Consider whether changes to budget flexibility are possible (e.g. Incent. Comp) 	<ul style="list-style-type: none"> 2-4 years 	Executive Leadership Team
US & International Offices	<ul style="list-style-type: none"> Establish Anchorage office and assess Evaluate additional offices 	<ul style="list-style-type: none"> 2-4 years 	Executive Leadership Team
Enhance Data Management Capabilities	<ul style="list-style-type: none"> Plan, procure and implement foundational Data/AI technologies 	<ul style="list-style-type: none"> Over a one, three and five-year IT strategic plan 	Scott , Executive Leadership Team

Communications Plan & Fund Structure

	Tasks	Timeline	Staff
In-State Mission of Education and Awareness	<ul style="list-style-type: none"> • Inform Alaskans about the Fund and the work of APFC – to empower understanding and informed discussion 	<ul style="list-style-type: none"> • Ongoing with collaboration and coordination amongst the Board, staff, and communications contractor 	Paulyn
Nationwide Focus on Investment Performance and Strategy	<ul style="list-style-type: none"> • Procure Global Consultant • Collaborative Plan with emphasis on finance management, strategy, investment performance, and our team 	<ul style="list-style-type: none"> • January 2024 – contract and consultant onboarding • Annual planning and ongoing development 	Paulyn
Review & Assess Optimal Structure of the Fund through Trustee Paper #10	<ul style="list-style-type: none"> • Final Drafting • Publication & Distribution • Education & Awareness 	<ul style="list-style-type: none"> • Early 2024 publication • Early 2024 e-distribution • Early 2024 & ongoing messaging and awareness 	Deven, Paulyn

The logo for the Alaska Permanent Fund Corporation (APFC) is displayed in a white rectangular box. The letters 'APFC' are rendered in a large, bold, serif font.

ALASKA PERMANENT
FUND CORPORATION

SUBJECT: Communications Legislative Initiative

ACTION:

DATE: December 13, 2023

INFORMATION: X

The 33rd Alaska State Legislature is scheduled to convene its second regular session on Tuesday, January 16, 2024.

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.

A summary presentation of Legislative Initiatives will be offered during the Board Meeting, and four main categories have been identified –

- Pursue Board Initiatives & Legislation to Improve Corporate Functionality
- Secure Resources based on the Board's Approved FY25 Budget
- Educate on Stewardship, Performance and the Fund Structure
- Monitor & Respond to Legislative Inquiries, Legislation, & Committee Requests

Discussion and Input from the Trustees is welcomed.



ALASKA PERMANENT
FUND CORPORATION

Board of Trustees
Legislative Initiatives
December 2023

33rd Legislature - 2nd Session

January 8 & 12

1st & 2nd Profile Releases

January 16

1st Day of Session

May 15

121st Day of Session

Legislative Initiatives



Pursue

Board Initiatives
Corporate Functionality

Educate

Stewardship
Performance
Fund Structure



Secure Resources

Board Priorities
FY25 Governor's Budget

Monitor & Respond

Legislative Inquiries
Committee Presentations & Hearings
Bills & Resolutions



Board Initiatives

Foster legislative support to modernize the functionality of APFC and align with the targeted goals of the Board.

A Legislative Agenda - to support the Board's Initiatives of growing the Fund, enhancing global financial communications, assessing optimal structure, and improving corporate functionality.

- **Consideration of Leverage:** a discussion pertaining to statute changes to grow the Fund with an additional tool of Leverage at the Fund level and with recourse to the Fund.
- **Outperformance through the Generation of Alpha:** attaining resources to support building out our Private Equity team to include a direct investment team doing more work internally on co-investments and direct investments.
- **Comprehensive Communications:** improving coverage of investment expertise with the added resources and services of a global financial media consultant. Bringing together the interests of APFC's diverse stakeholders through statewide, national, and global support.
- **Assess Optimal Fund Structure** – identifying potential solutions to bring the Fund in line with modern endowment principles. Trustees Paper #10 will provide policymakers with information relevant to the ongoing debate about the Fund's structure.

Potential Legislation

Corporate Functionality

Amend Existing Law to –

- Protect the confidentiality of candidates for the position of the Executive Director;
- Provide the Board with the authority to interview the finalists for the position of Executive Director in an executive session;
- Provide for the confidentiality of personnel records of all APFC staff.

Sec. 37.13.100 Corporation Staff.

The board may employ and determine the salary of the executive director. **The list of applicants and information regarding the applicants for the position of executive director is confidential and is not a public record, and the board may meet in executive session for the purpose of interviewing candidates for the position of executive director notwithstanding any other provision of law to the contrary.** 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.**

The logo for APFC, consisting of the letters 'APFC' in a white, serif font, centered within a dark blue rectangular box. The background of the slide is a scenic landscape with mountains, a lake, and a sunburst effect in the sky, all tinted with a blue color scheme.

APFC

Integrity - Stewardship - Passion

SUBJECT: Trustee Paper #10

ACTION: _____

DATE: December 14, 2023

INFORMATION: _____

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. A working group of the Board has been meeting with staff and Dr. Rietveld to generate the Trustee Paper. Dr. Rietveld has distributed drafts in which he included three major sections comprised of history, models/showing the problem, and solutions.

STATUS:

The latest draft was sent to Trustees for review on December 8th and it is possible another draft will be distributed by December 14th for action by the Trustees to accept the final version of Trustee Paper #10. If not, this agenda item will be picked up in a future meeting.

CEO Mitchell and Trustee Richards will provide a brief overview of the process to date and lead the discussion with the Board on accepting the final version.

SUBJECT: Board of Trustees May Meeting Discussion

ACTION: X

DATE: December 14, 2023

INFORMATION:

BACKGROUND:

Previously the Board of Trustees approved the May 29-30, 2024 Quarterly Meeting in Nome. However, after speaking with meeting venues, hotel, and city staff it has been determined that logistics prohibit a meeting on the dates approved. Staff have the following recommendations for Trustees to decide on in order to have a meeting in Nome.

Option A: May 15-16, 2024

Option B: Have a one day May meeting and make the April meeting a two-day meeting

April 10-11, 2024
May 29, 2024

Option C: May 28-29, 2024 (this may interfere with the three-day Memorial Day weekend if Trustees and Staff have plans)

Trustees were emailed these options and these are the responses received as of November 30. An “X” indicates this option is preferred.

TRUSTEE RESPONSES	Option A	Option B	Option C
Schutt	X	X	X
Richards	X	X	X
Brune	See below *		
Rubenstein		X	X
Crum		X	
Anderson	Indicated Nome or Utqiagvik* works for him		

*Trustee Brune responded with the idea of switching locations and doing Utqiagvik in May 2024 instead of July 2025 and doing Nome in 2025



APFC Board Meeting Materials

December 2023

Bridgewater Intro: Who We Are & What We Do

THE ESSENCE OF BRIDGEWATER

At the heart of Bridgewater's almost 50-year history is a relentless mission for **deep, fundamental understanding of markets & economies.**

That mission is underpinned by a **consistent team, culture, and process.**

Co-CIOs and senior investors that have worked together for decades (19 years average tenure)

Culture centered on the pursuit of fundamental truths through open and honest debate and continuous improvement.

A differentiated approach of systemizing fundamental understanding so it can be continually compounded on and improved.

We apply this understanding to serve our clients through **partnership and quality investment strategies.**

A three-decade track record of generating good and uncorrelated returns, engineered to complement client portfolios

Meaningful long-term "in your shoes" partnerships

Performance shown is estimated through October 2023. Correlation is based on long-term averages and at any given point in time could be higher or lower than in the periods shown above. Through April 1999, Pure Alpha total returns are based on the actual performance of a partially funded account and are simulated to include the imputed interest return on the full notional value using the U.S. repo rate. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream. Past performance is not indicative of future results. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

OUR TEAM

Our team has worked together for decades

BRIDGEWATER LEADERSHIP



CEO
Nir Bar Dea



Co-CIO
Bob Prince



Co-CIO
Greg Jensen



Co-CIO
Karen Karniol-Tambour

26 YRS

Average Tenure for
Chief Investment
Officers

19 YRS

Average Tenure for
Senior Investment
Team

SENIOR INVESTORS



Jenn Armstrong



Seth Birnbaum



Kevin Brennan



Larry Cofsky



Gardner Davis



Porter Diehl



Patrick Dimick



Phil Dobrin



Kate Dunbar



Robert Dunlop



Andrew Foote



Jeff Gardner



Sam Haber



Jim Haskel



Dan Hochman



Steven Kryger



Atul Lele



Josh Lewin



Sean Macrae



Elena Gonzales Malloy



Erin Miles



Osman Nalbantoglu



Atul Narayan



Natalee Pei



Fred Post



Kerry Reilly



Jason Rogers



Jason Rotenberg



Melissa Saphier



Alex Schiller



Steve Secundo



Lauren Simon



Alex Smith



Joe Sondheimer



Carsten Stendevad



David Trinh

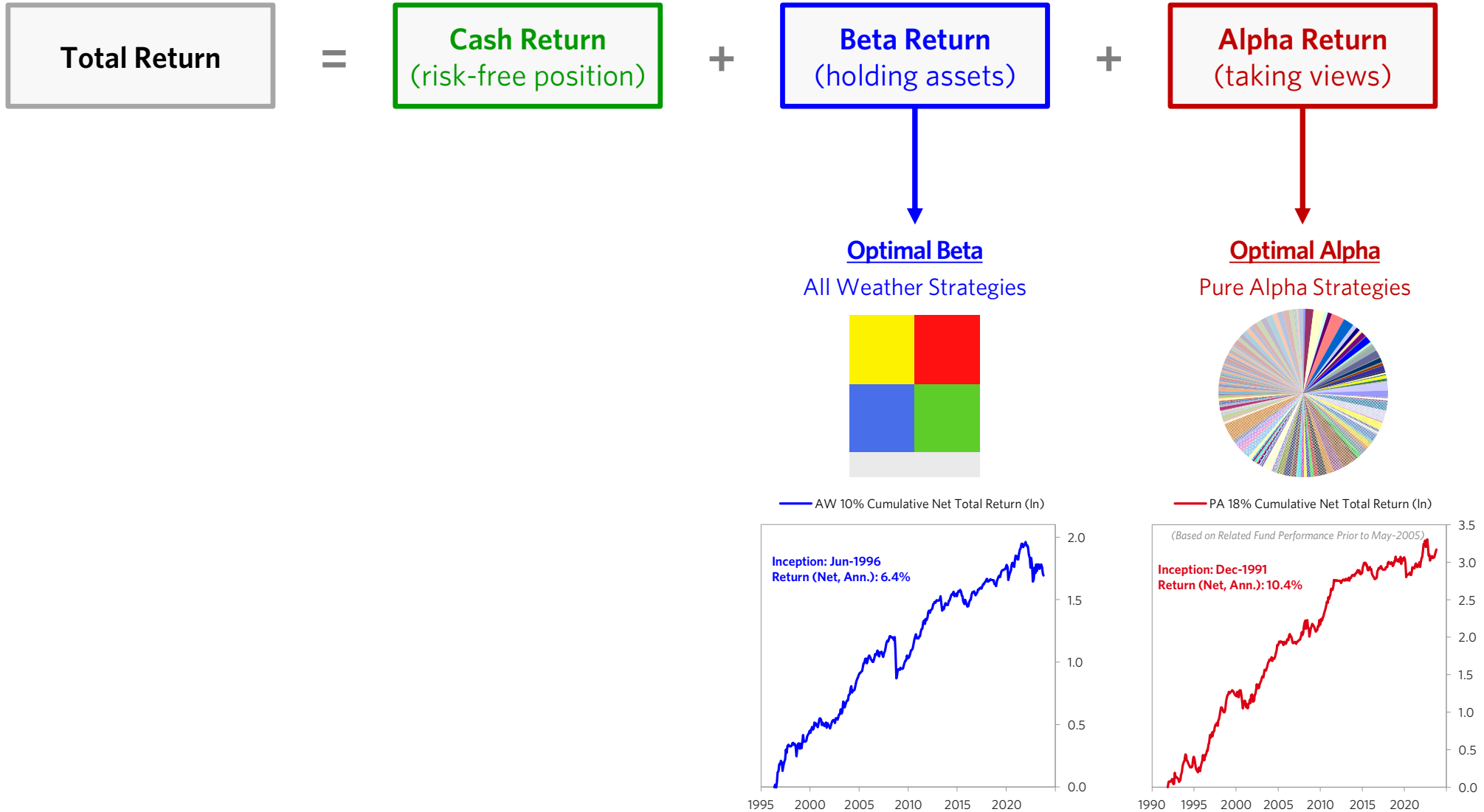


Noah Yechiely

300+

Investment Team

OUR INVESTMENT STRATEGIES



Performance through 10/31/2023. Past results are not necessarily indicative of future results. Note risk pie charts are provided for illustrative purposes only to demonstrate the diversification of active opportunities in the Pure Alpha and Pure Alpha Major Markets strategies. These risk pie charts do not represent every market, asset class or instrument in which Bridgewater trades. Pure Alpha returns based on related fund performance before May 2005. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream Please review the "Important Disclosures and Other Information" located at the end of this presentation.

PURE ALPHA SUMMARY

- ◆ Bridgewater's **optimal alpha** portfolio that has a **30+ year track record**.
- ◆ Utilizes Bridgewater's **fundamental** understanding & **systematic** process to trade a **diversified** opportunity set of globally **liquid** markets.
- ◆ Designed to produce a **high & consistent return with no bias** to markets or other active managers.



Performance through Oct-2023. Note the pie chart on the left is provided for illustrative purposes only to demonstrate the diversification of active opportunities in the Pure Alpha strategy. This chart does not represent every market, asset class or instrument in which Bridgewater trades. Correlation is based on long-term averages and at any given point in time could be higher or lower than in the periods shown above. Traditional manager correlations are monthly vs. the average gross excess return of managers in eVestment Alliance's database. Alternative manager returns based on the average from the Lipper Tass Hedge Fund Manager Database. "Related fund performance" is based on the performance of the Pure Alpha Strategy at 12% volatility scaled to 18% volatility. Standard deviation is calculated using gross of fees excess returns. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. Past results are not necessarily indicative of future results.

LONG TRACK RECORD OF GENERATING HIGH RETURNS WITHOUT BIASES

(Returns Based on Related Fund Performance* Prior to May 2005)

Returns

Year	Pure Alpha 18% (Net)	Global Stocks
1992	5.1%	-4.7%
1993	36.8%	23.1%
1994	-3.1%	5.6%
1995	-5.7%	21.3%
1996	36.6%	14.0%
1997	28.2%	16.2%
1998	37.8%	24.8%
1999	0.1%	25.3%
2000	-7.9%	-12.9%
2001	6.9%	-16.5%
2002	22.1%	-19.5%
2003	33.8%	33.8%
2004	20.4%	15.2%
2005	3.1%	10.0%
2006	1.7%	20.7%
2007	12.7%	9.6%
2008	9.4%	-40.3%
2009	1.9%	30.8%
2010	44.8%	12.3%
2011	25.3%	-5.0%
2012	0.8%	16.5%
2013	5.2%	27.4%
2014	3.5%	5.5%
2015	4.7%	-0.3%
2016	2.5%	8.2%
2017	1.3%	23.1%
2018	14.6%	-8.2%
2019	-0.7%	28.4%
2020	-12.6%	16.5%
2021	8.1%	22.3%
2022	9.4%	-17.7%
2023 YTD	7.5%	8.3%
Dec-1991 to Oct-2023	10%	8%
Equity Up/Down Years	+10% / +10%	

Correlations

TO MARKETS	
Pure Alpha 18% Strategy	Correlation
vs World Equities Hedged	0.12
vs S&P 500	0.09
vs Russell 2000	0.09
vs Citi WGBI US	-0.02
vs Bloomberg Barclays US Aggregate	-0.02
vs Bloomberg Barclays TIPS (since Mar-97)	0.03
vs GSCI	0.14
Average	0.06

Net of Fees Excess Returns Dec-1991 to Oct-2023

TO TRADITIONAL MANAGERS	
vs Global Equities	-0.02
vs US Equities	0.01
vs Global Fixed Income	0.12
vs US Fixed Income	0.06
Average	0.04

TO ALTERNATIVE MANAGERS	
vs Convertible Arbitrage	0.06
vs Emerging Markets	0.07
vs Equity Market Neutral	0.07
vs Event Driven	0.07
vs Fixed Income Arbitrage	0.03
vs Fund of Funds	0.16
vs Global Macro	0.09
vs Multi-Strategy	0.12
vs Long/Short Equity	0.08
Average	0.08

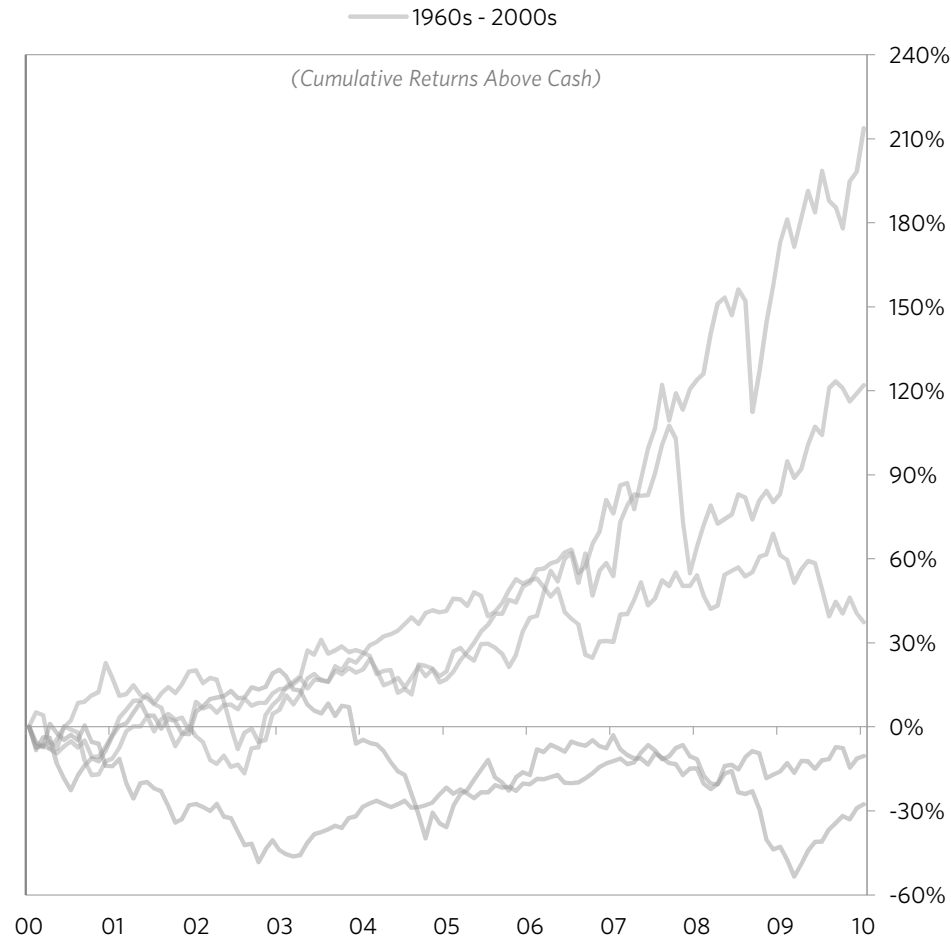
Net of Fees Excess Returns Dec-1991 to Mar-2023

Performance (net total return) shown in the table is estimated through 10/31/2023. Global stocks shown for diversification perspective, not as a benchmark to PA. Traditional manager correlations are monthly vs. the average gross excess return of managers in eVestment Alliance's database. Alternative manager returns based on the average from the Lipper Tass Hedge Fund Manager Database. Lipper is a product of Refinitiv. Copyright 2022 © Refinitiv. Correlation is based on long-term averages and at any given point in time could be higher or lower than in the periods shown above. *Related fund performance is based on the performance of the Pure Alpha Strategy at 12% volatility scaled to 18% volatility. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. Past performance is not indicative of future results. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

I. The Big Question Facing Most Investors

WE ARE COMING OUT OF AN EXCEPTIONALLY FAVORABLE PERIOD FOR MOST INVESTORS

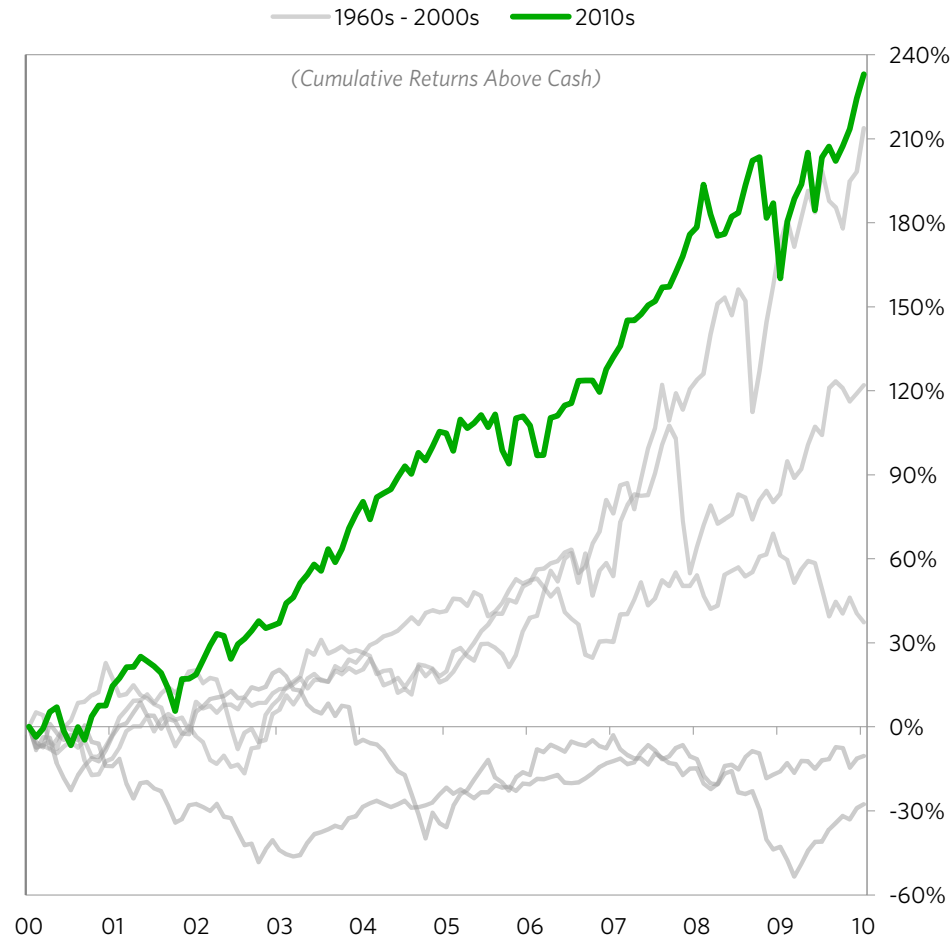
US Stock Performance by Decade



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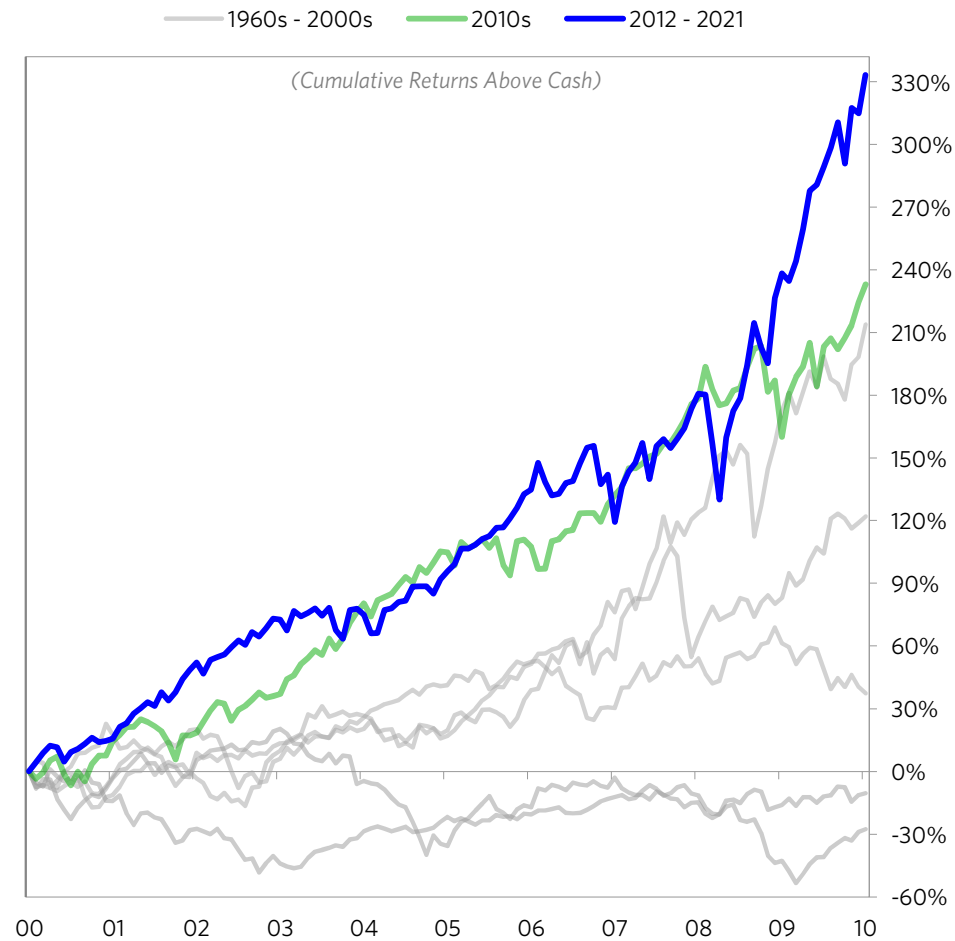
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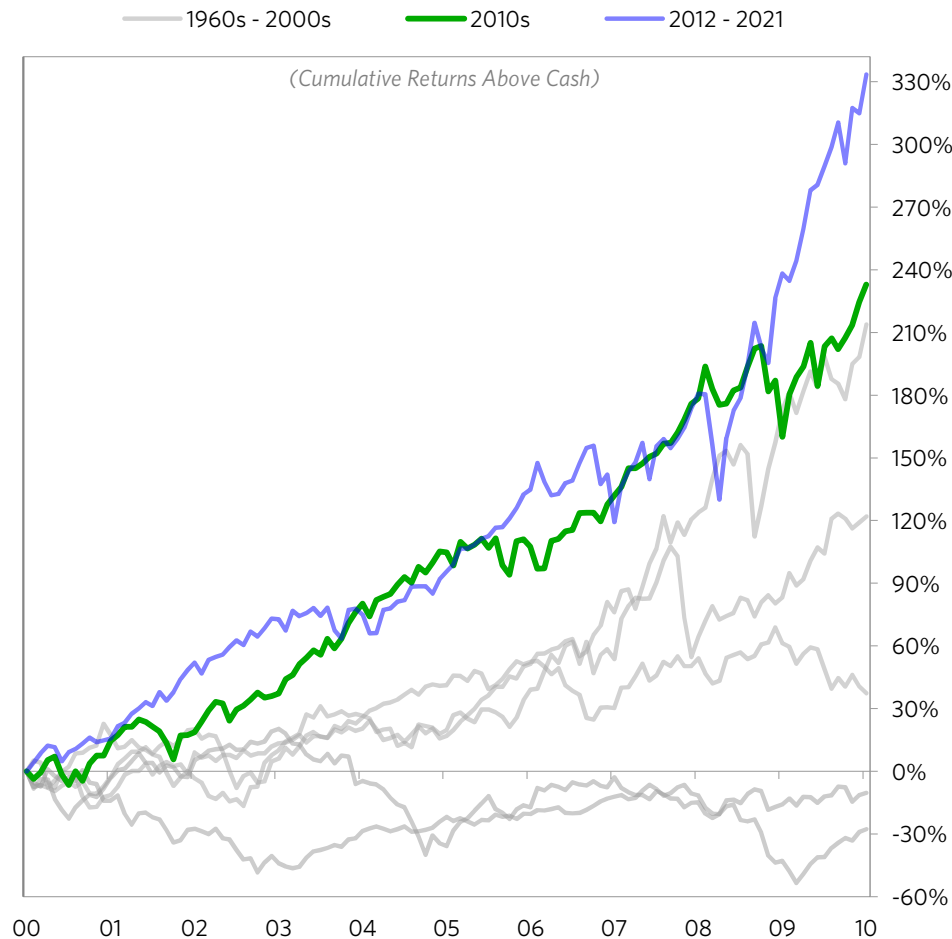
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WE ARE COMING OUT OF AN EXCEPTIONALLY FAVORABLE PERIOD FOR MOST INVESTORS

US Stock Performance by Decade



Last Decade Scorecard

- Starting Valuations: **Cheap**
- Cyclical Conditions: **"Royal Flush"**
 - Steady Growth
 - Low Inflation
 - Easy Policy
- Secular Pressures: **Strong Tailwinds**
 - Increasing Globalization
 - Pro-Business Policy
 - Tech Advances

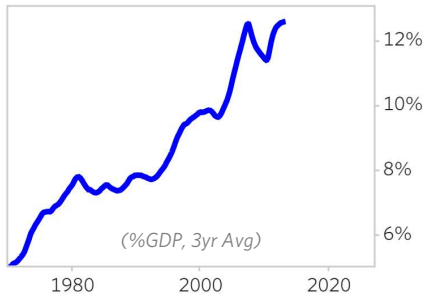
THE LAST DECADE ENJOYED STRONG SECULAR TAILWINDS THAT HAVE BEEN IN MOTION SINCE THE 80s

Earnings

Secular supports to profit margins were very strong

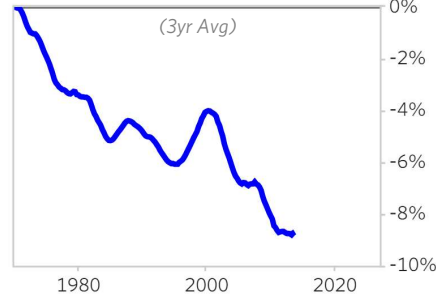
Globalization

— DM + China Non-Commodity Exports



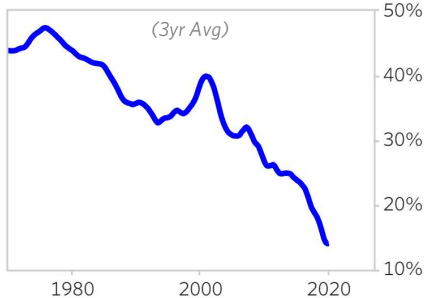
Labor's Share

— US Labor Share of Output (Indexed)



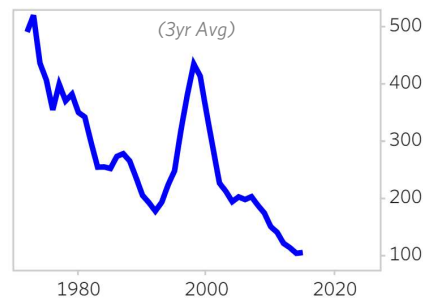
Corporate Taxes

— US Corporate Tax Rate



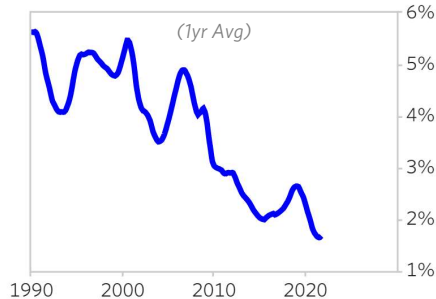
Corporate Regulation

— # DOJ Monopoly/Competition/Merger Cases



Corporate Debt Service

— %GDP

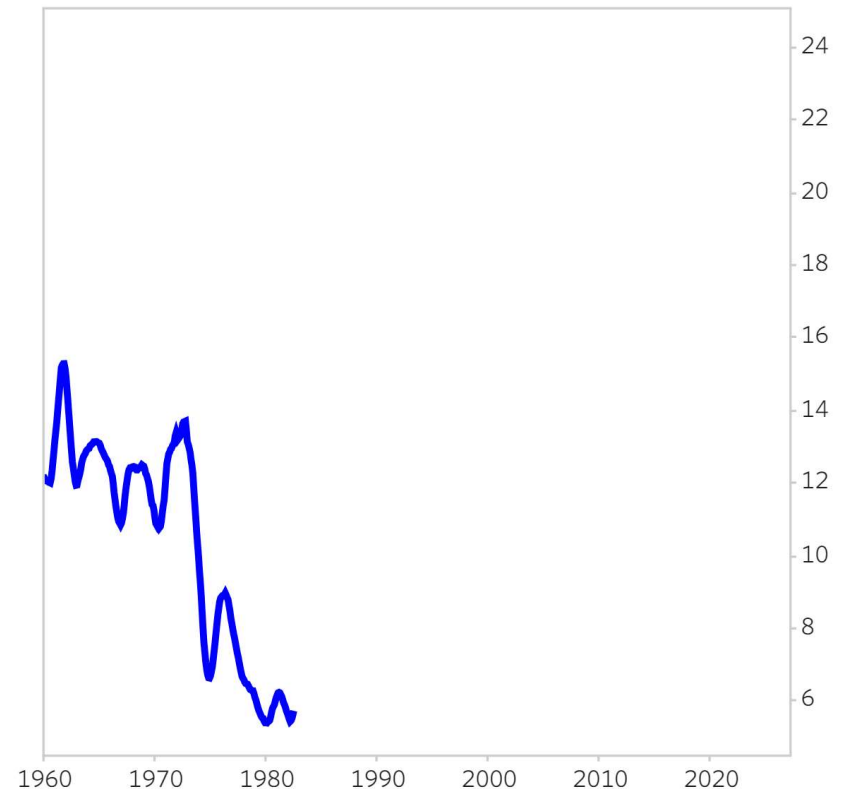


Discounting

Falling yields supported rising valuations while stimulus supported markets more than the economy

Equity Valuations

— US Forward P/Es (12m Avg)



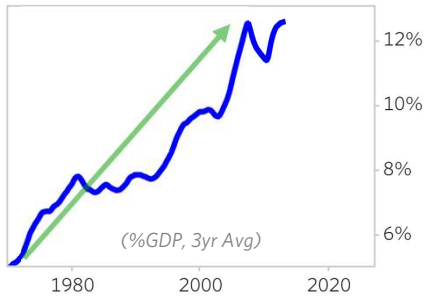
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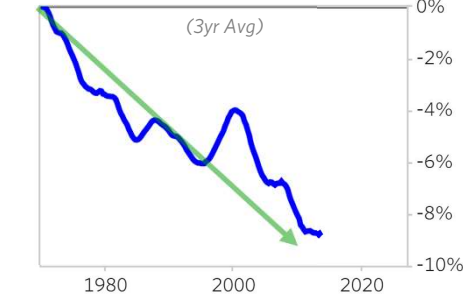
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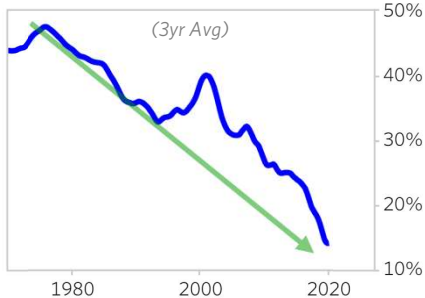
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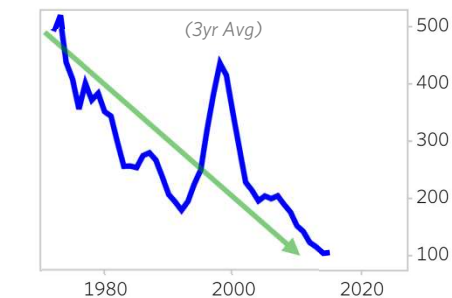
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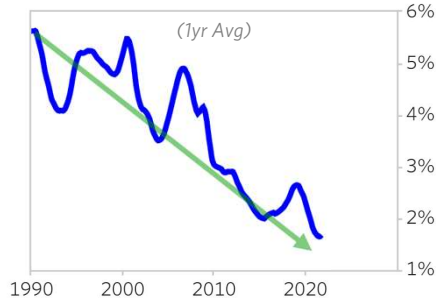
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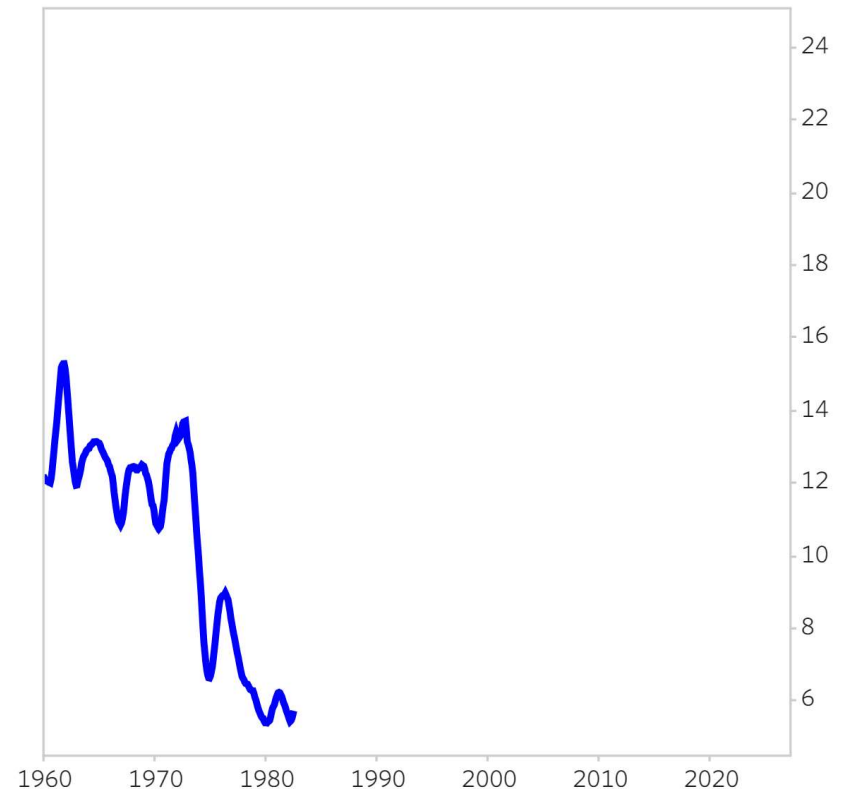


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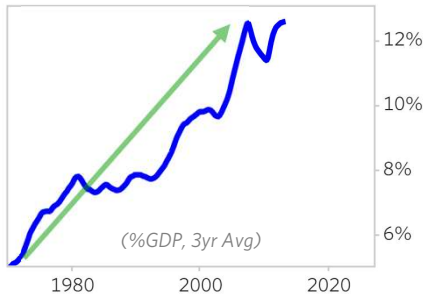
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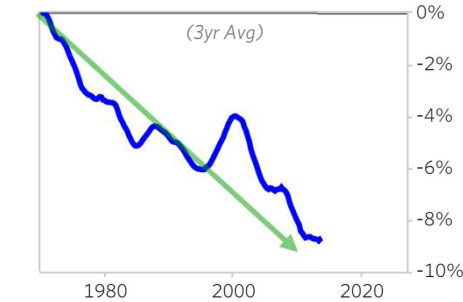
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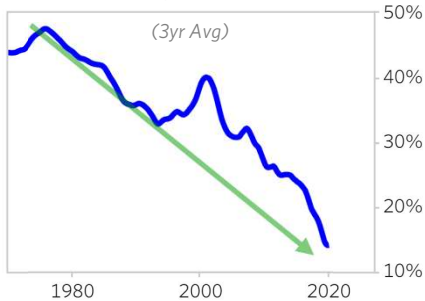
Labor's Share

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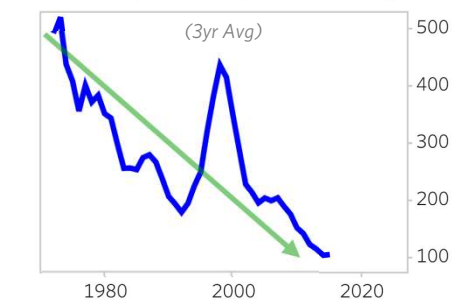
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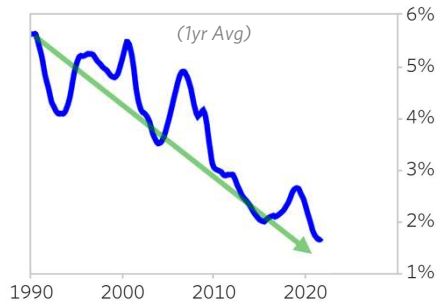
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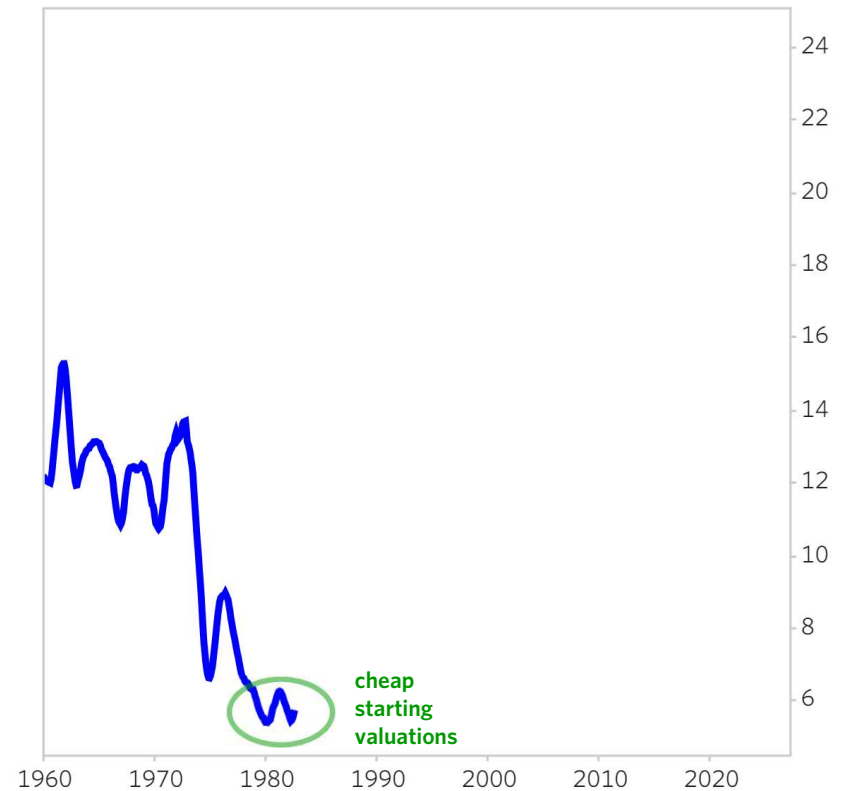


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Equity Valuations

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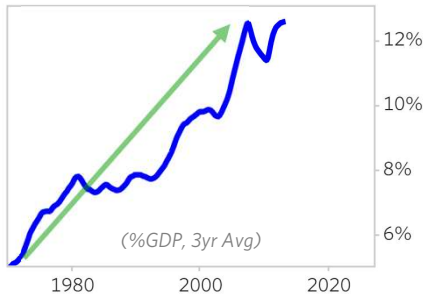
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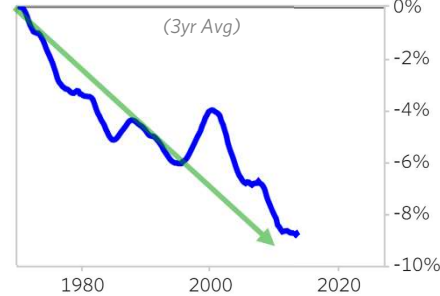
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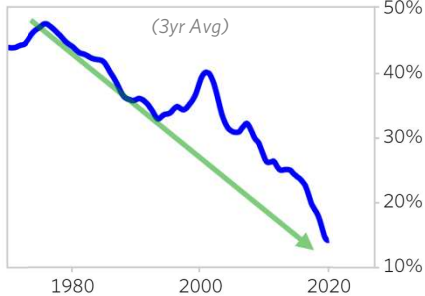
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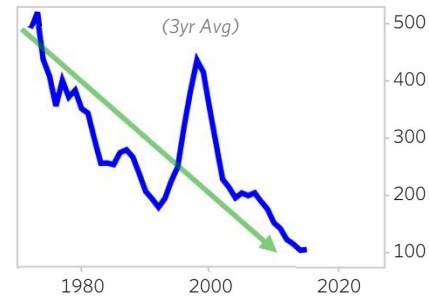
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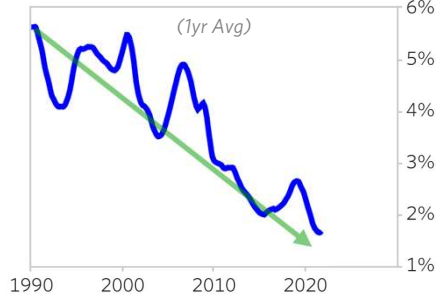
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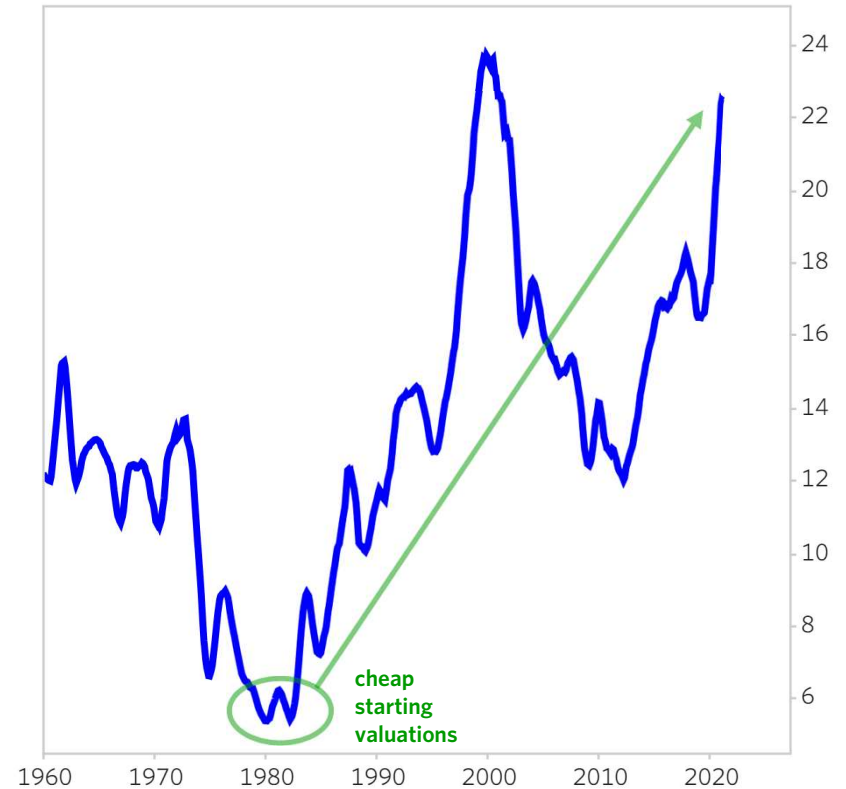


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Equity Valuations

— US Forward P/E's (12m Avg)



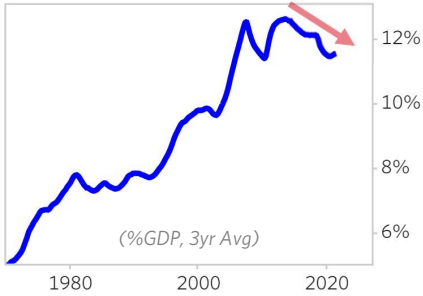
ARE SECULAR PRESSURES SHIFTING?

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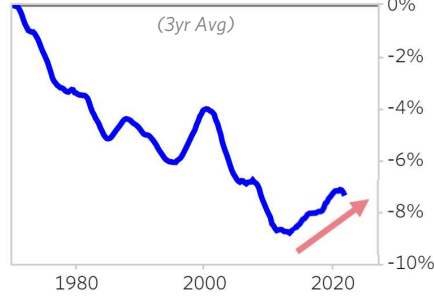
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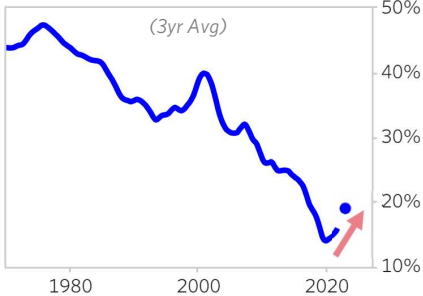
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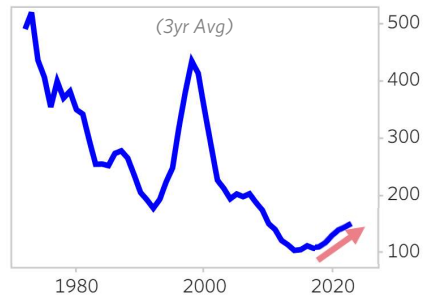
Corporate Taxes

— US Corporate Tax Rate • Today



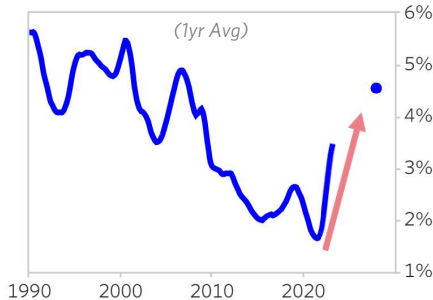
Corporate Regulation

— # DOJ Monopoly/Competition/Merger Cases



Corporate Debt Service

— %GDP • Est.

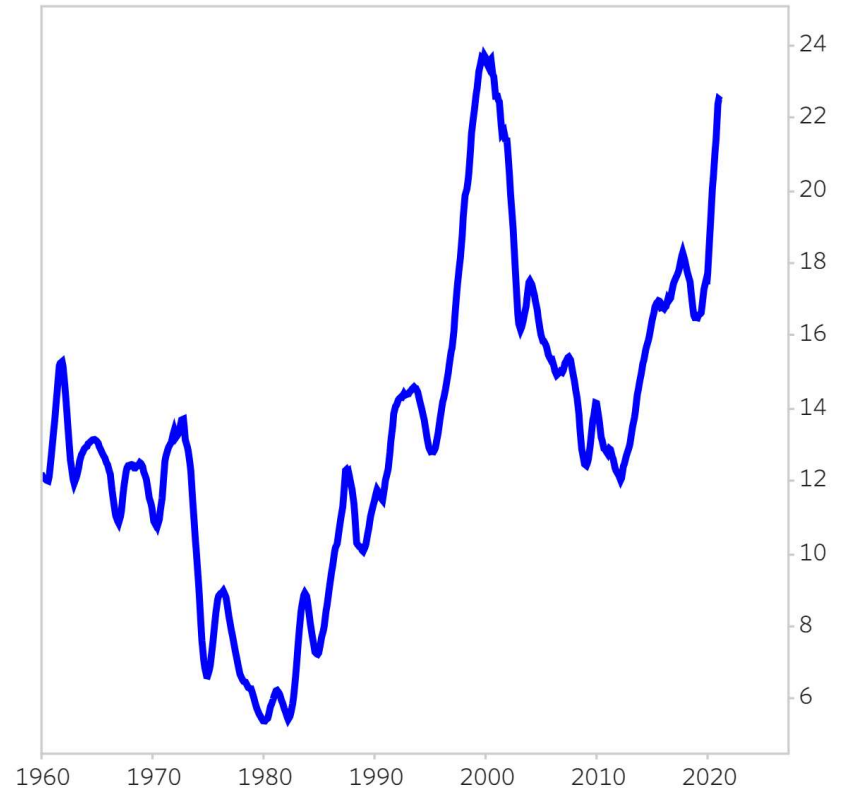


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Equity Valuations

— US Forward P/Es (12m Avg)



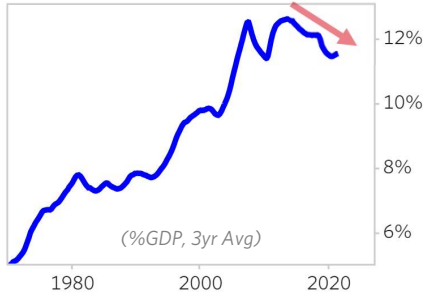
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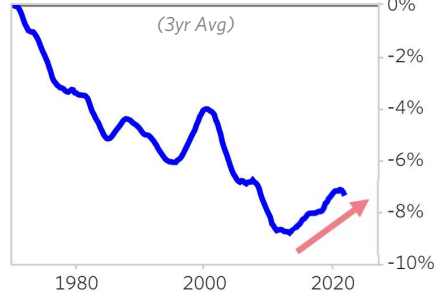
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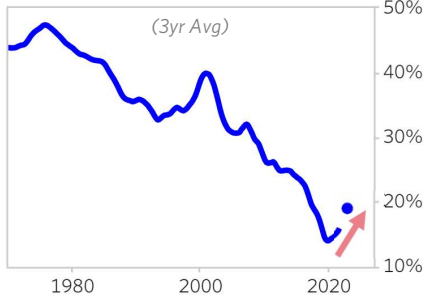
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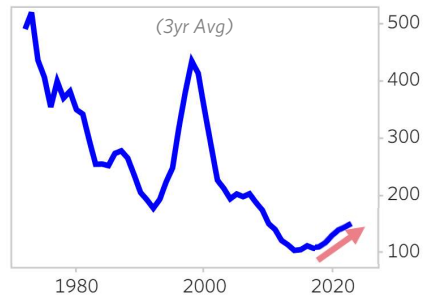
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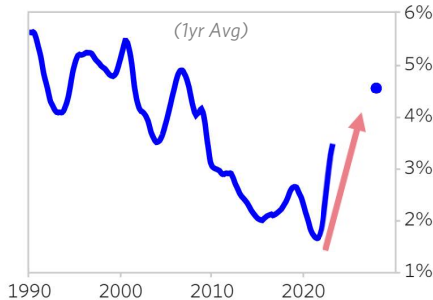
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— # DOJ Monopoly/Competition/Merger Cases



Corporate Debt Service

— %GDP • Est.

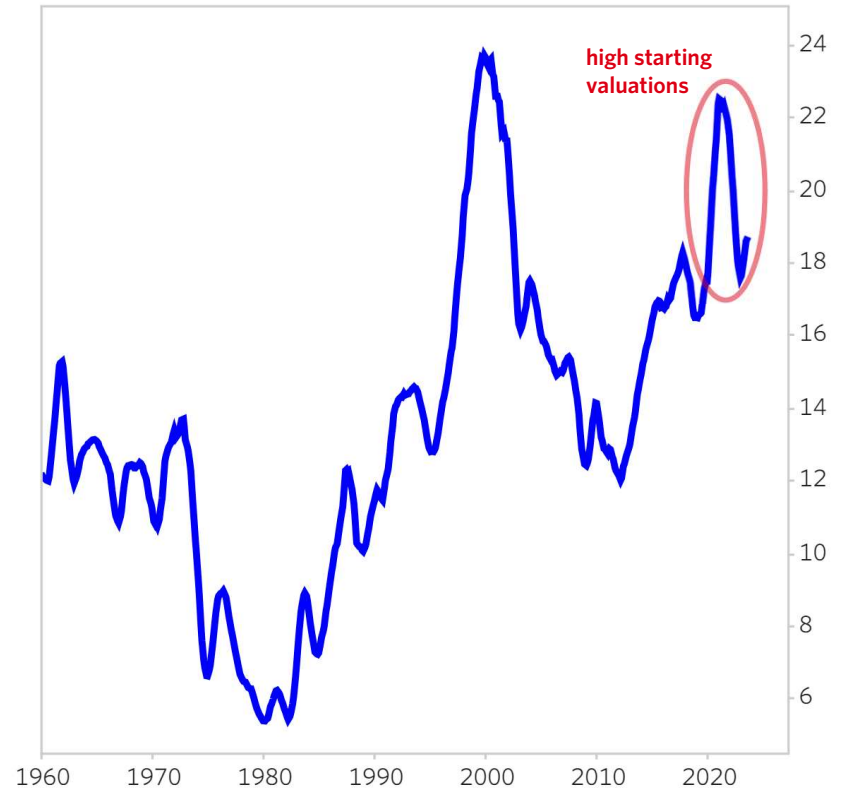


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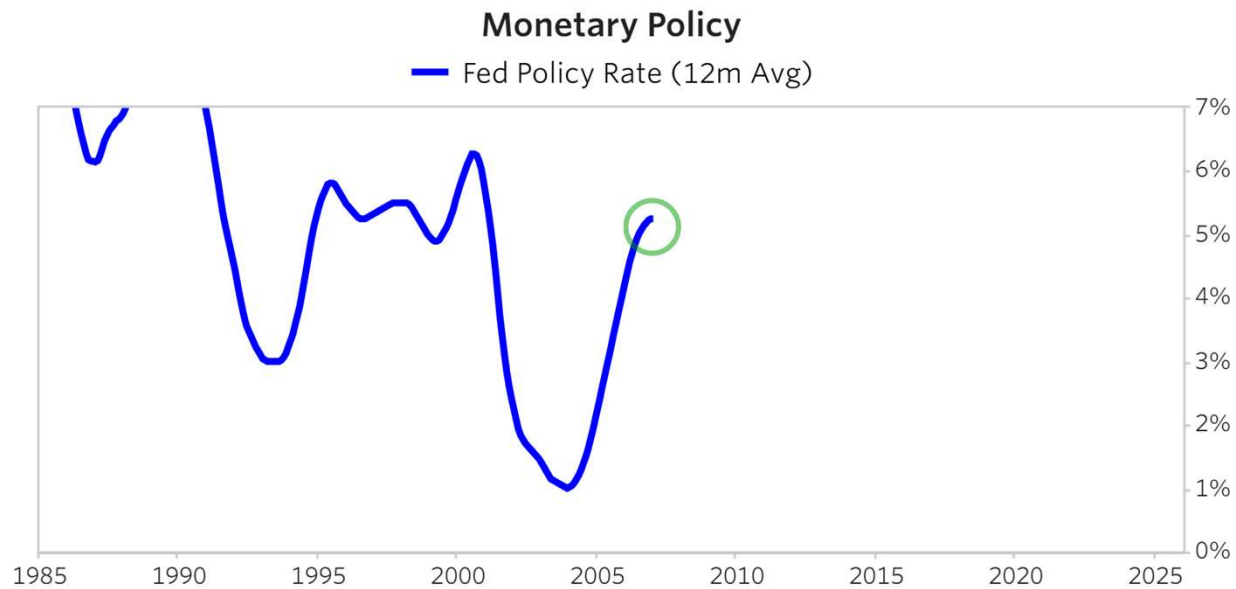
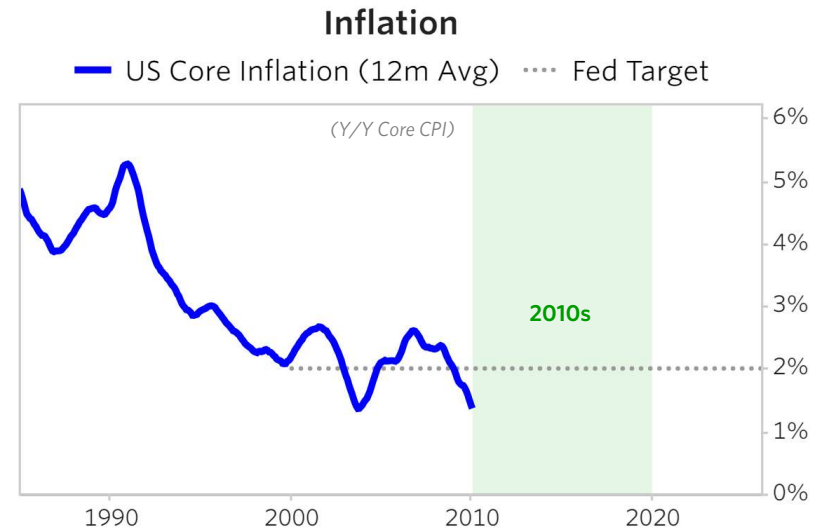
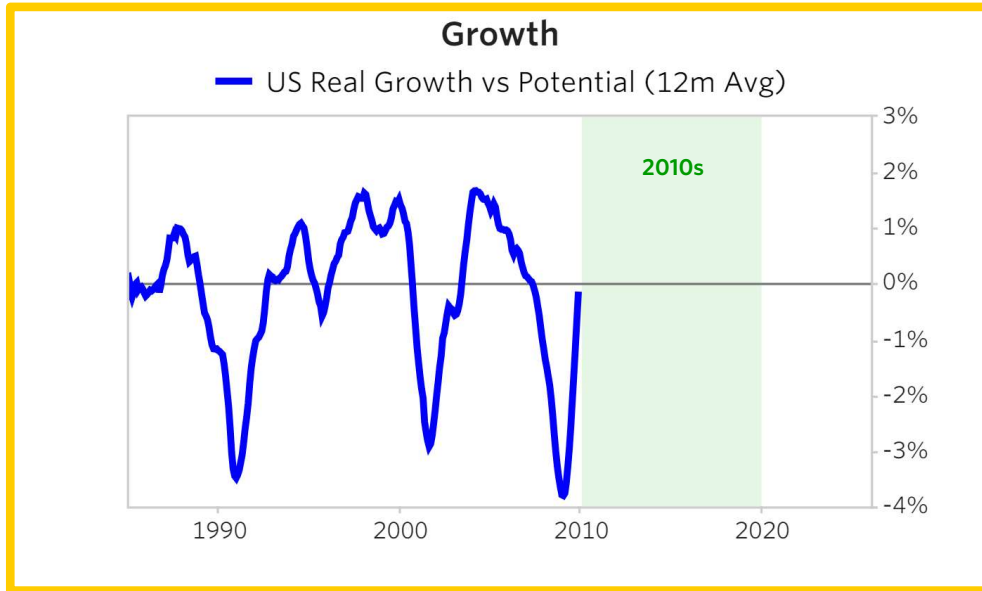
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Equity Valuations

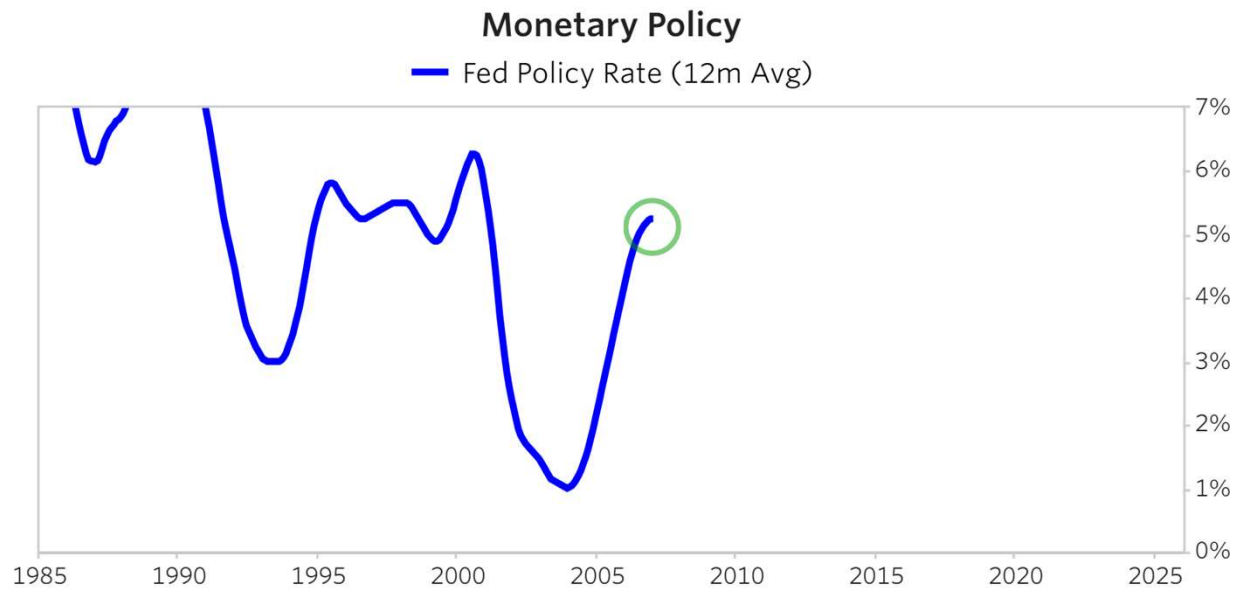
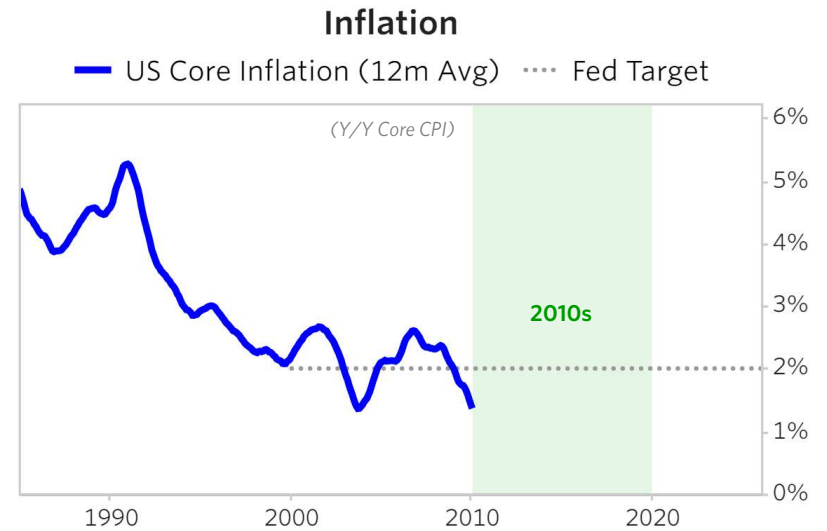
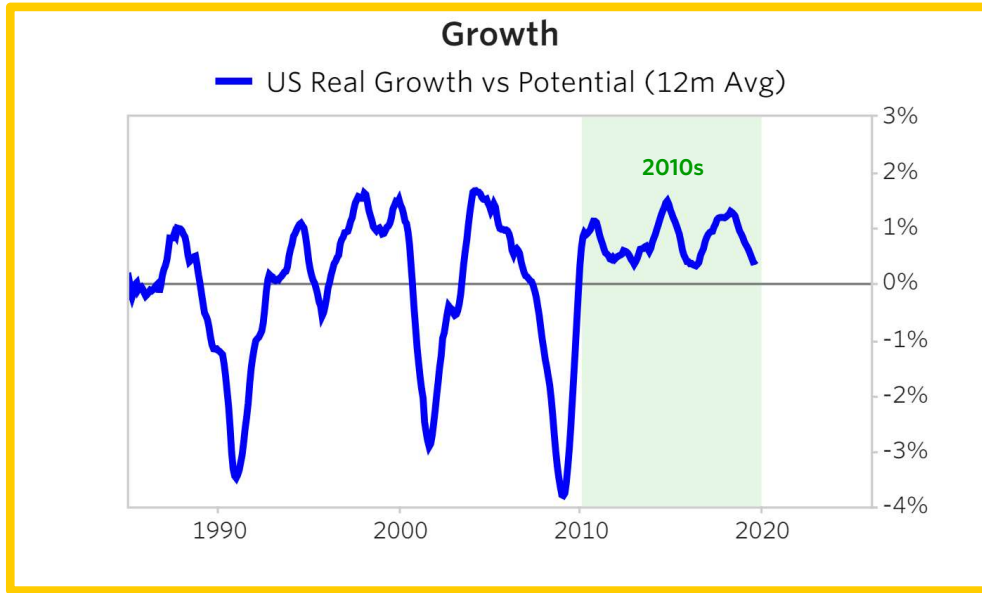
— US Forward P/Es (12m Avg)



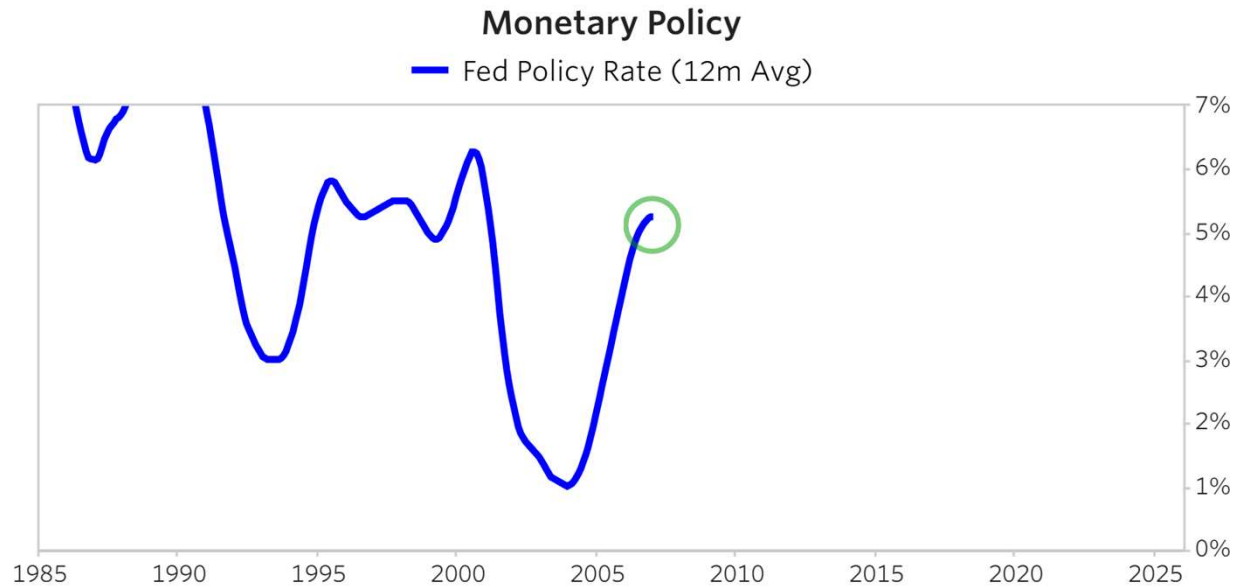
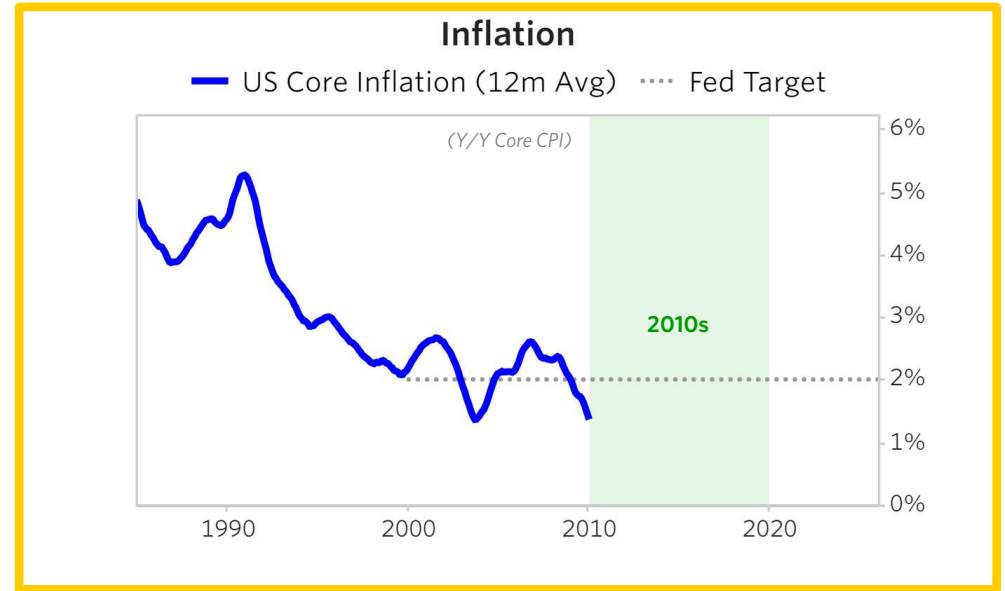
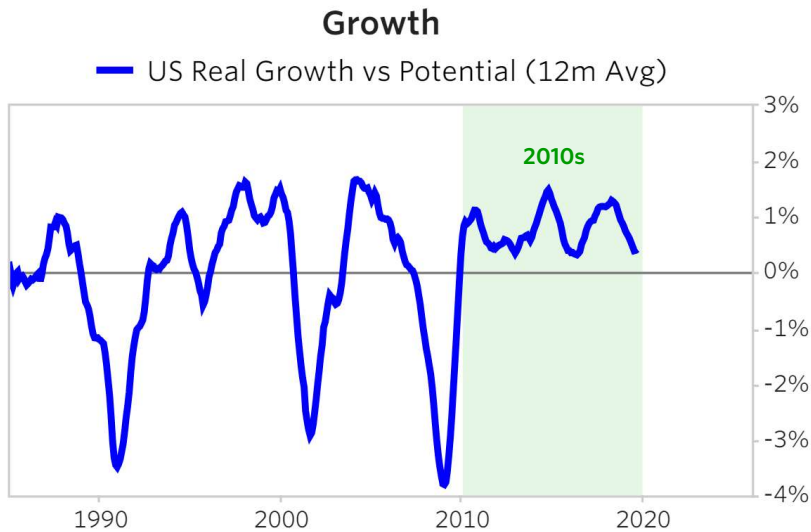
THE LAST DECADE ENJOYED A CYCLICAL “ROYAL FLUSH”



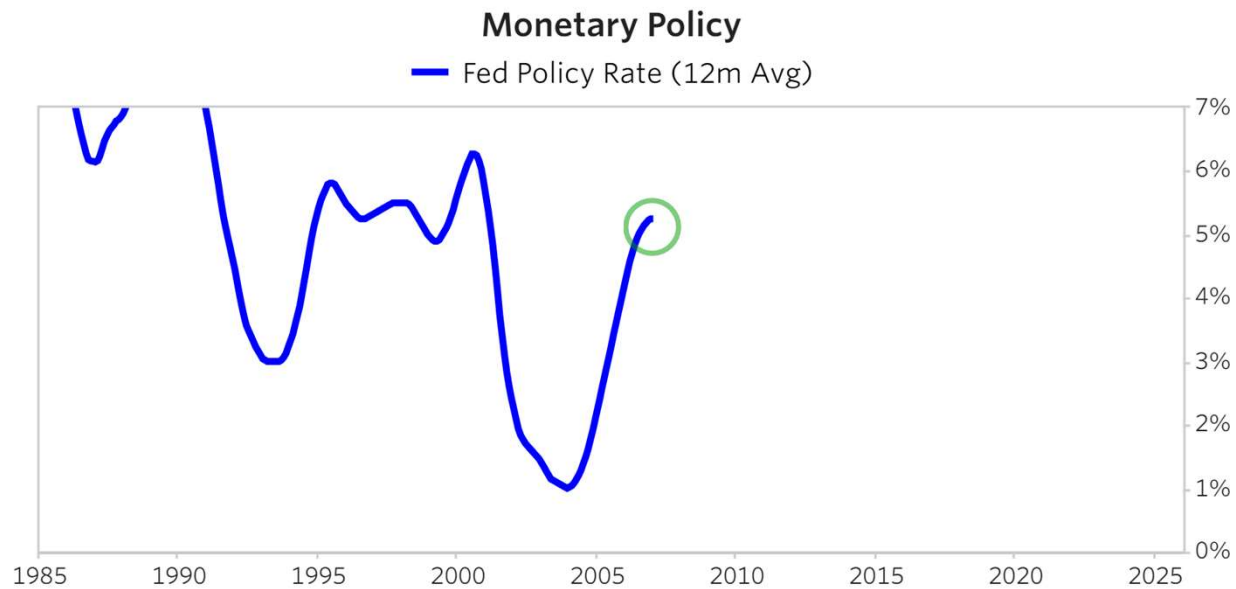
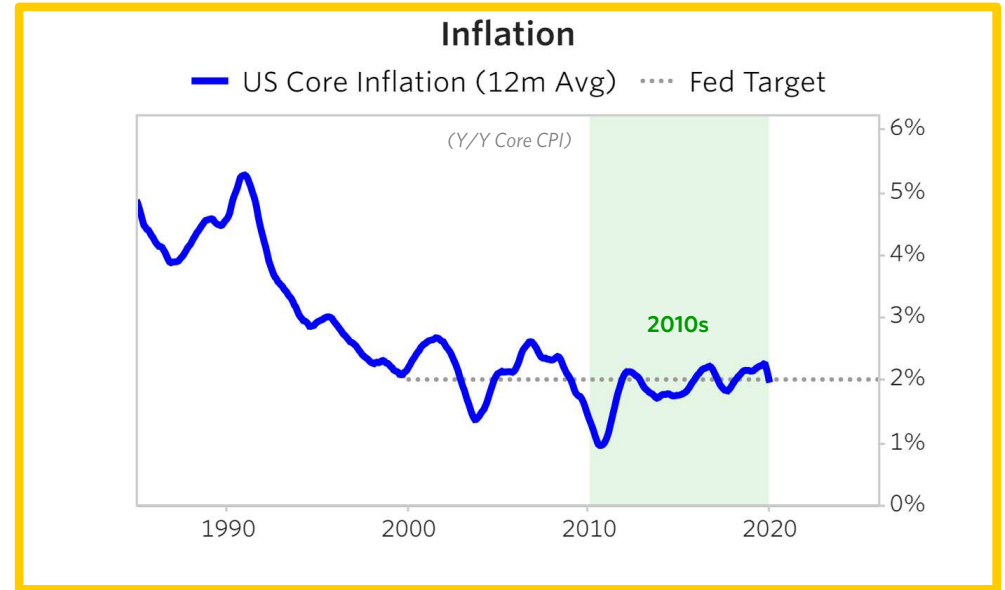
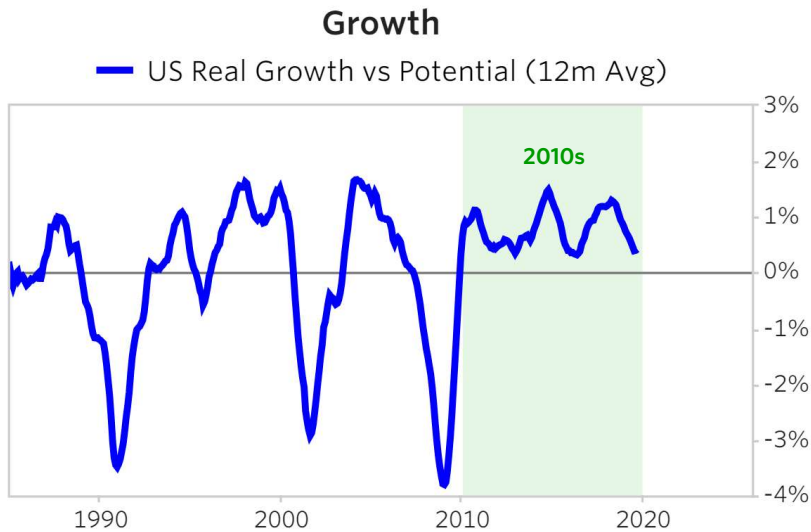
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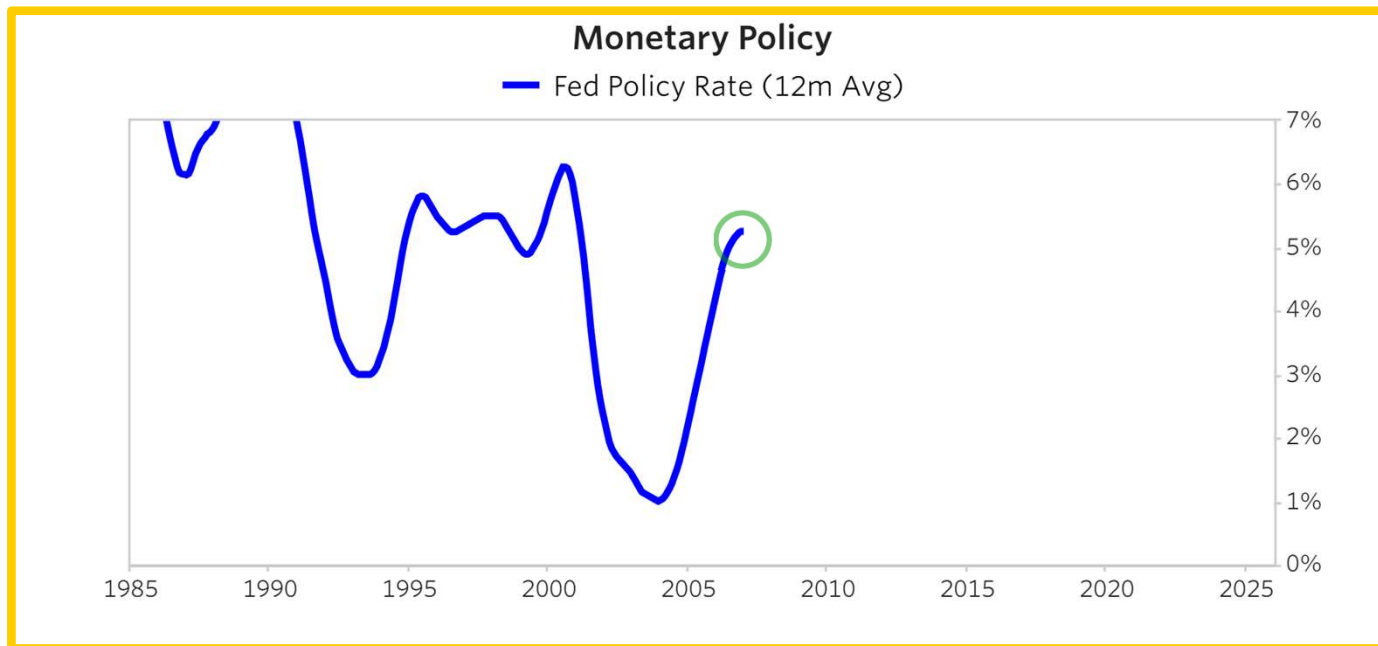
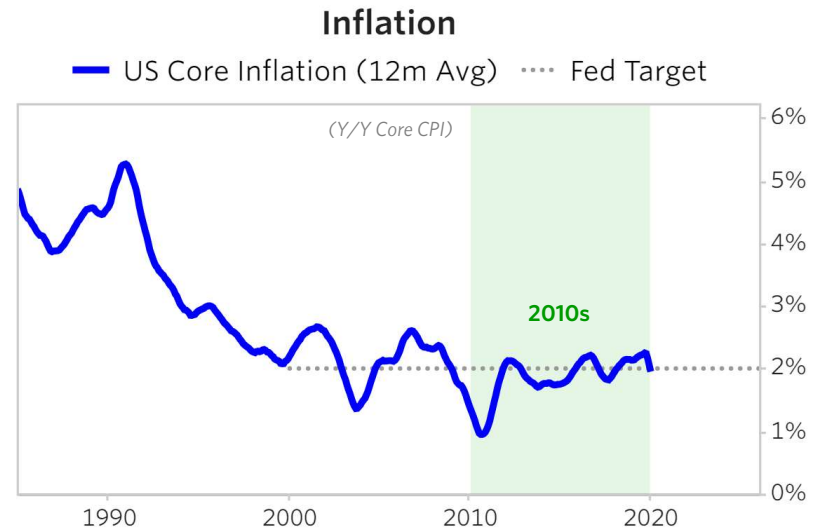
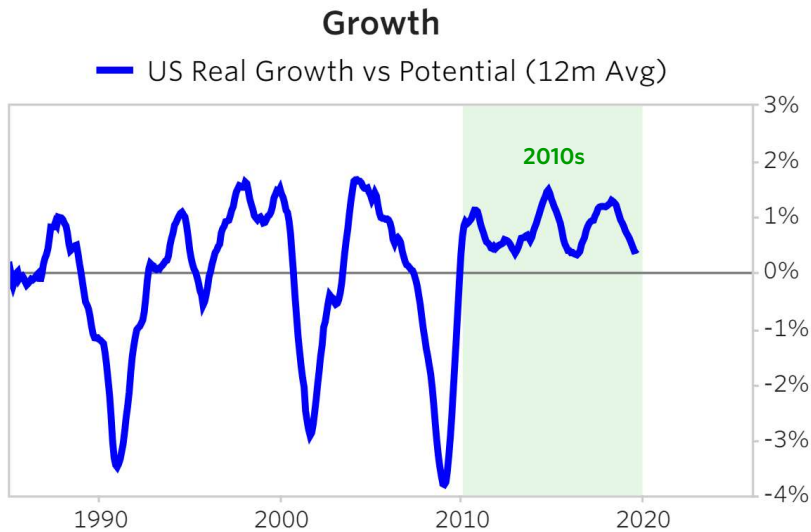
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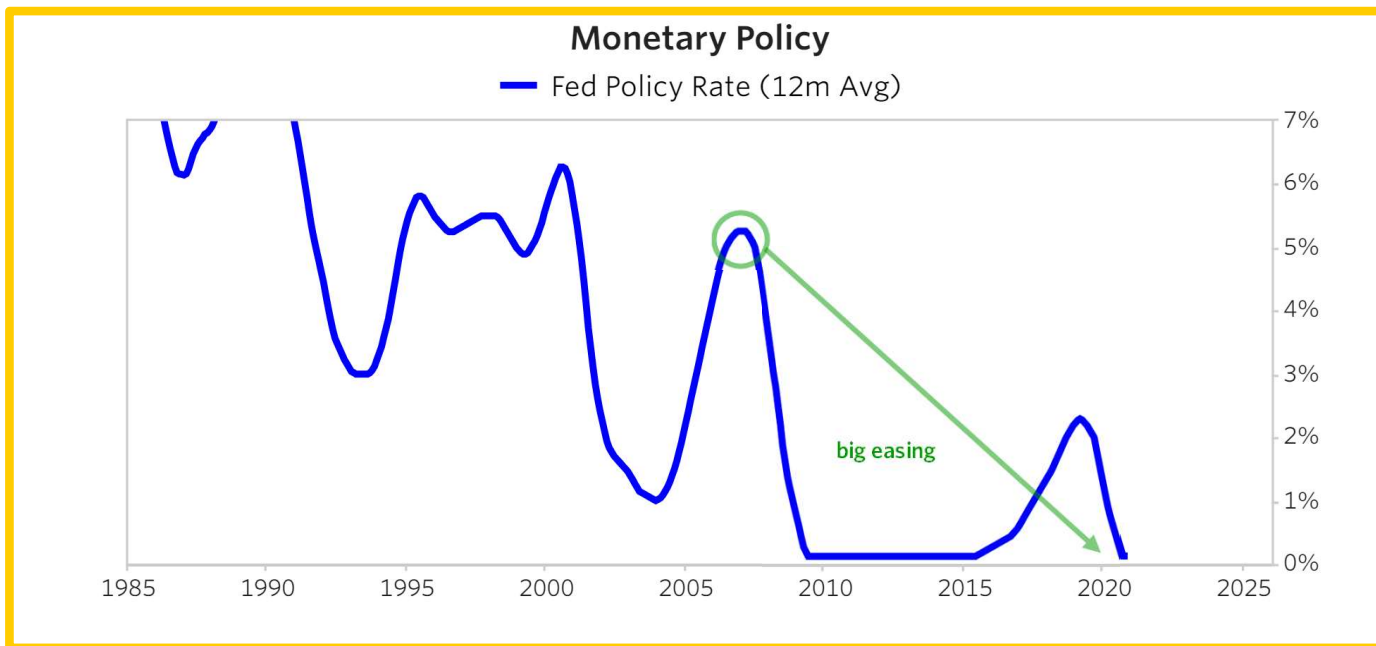
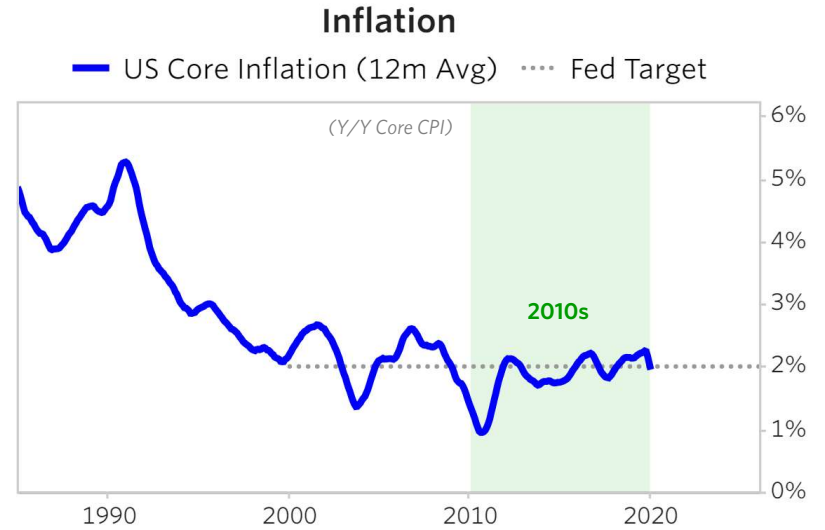
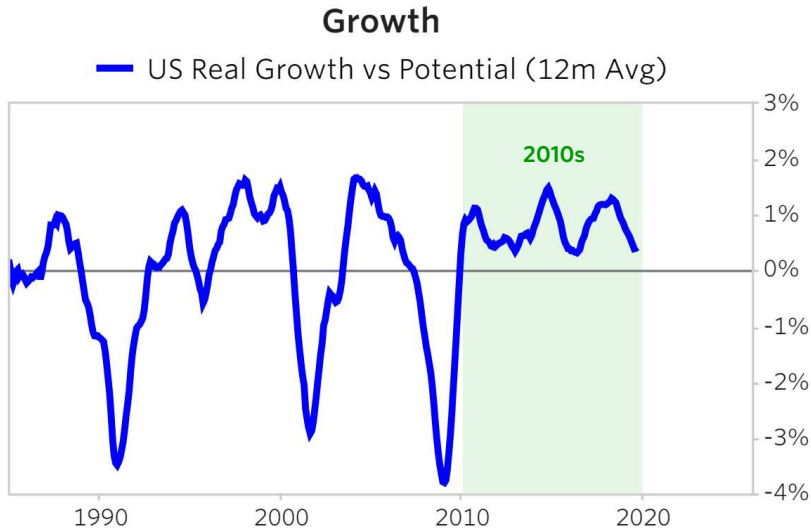
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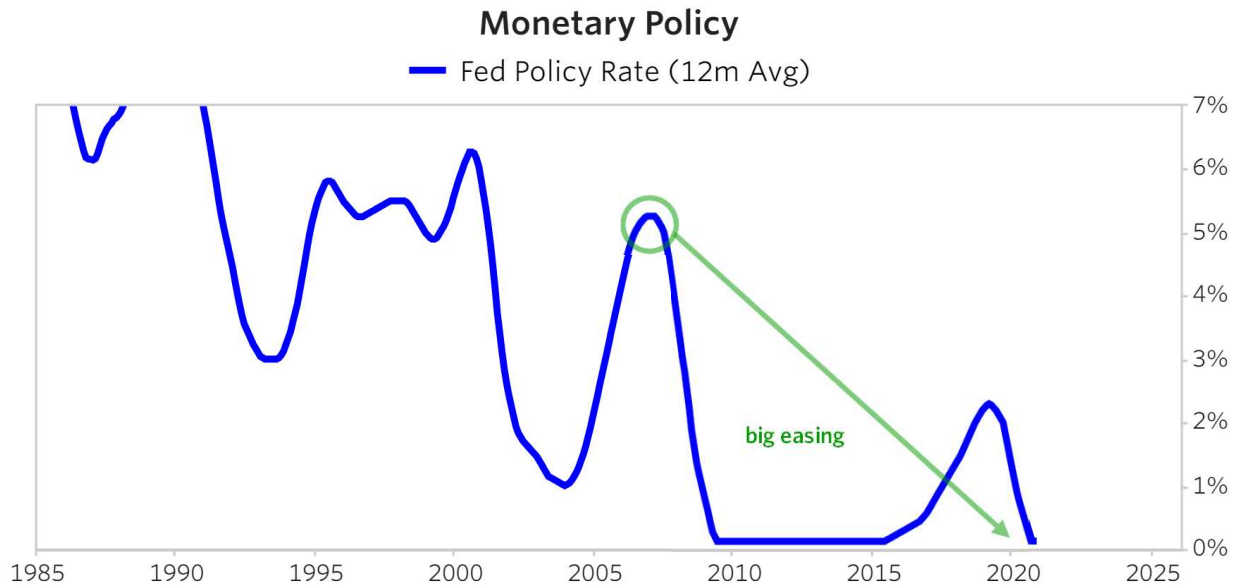
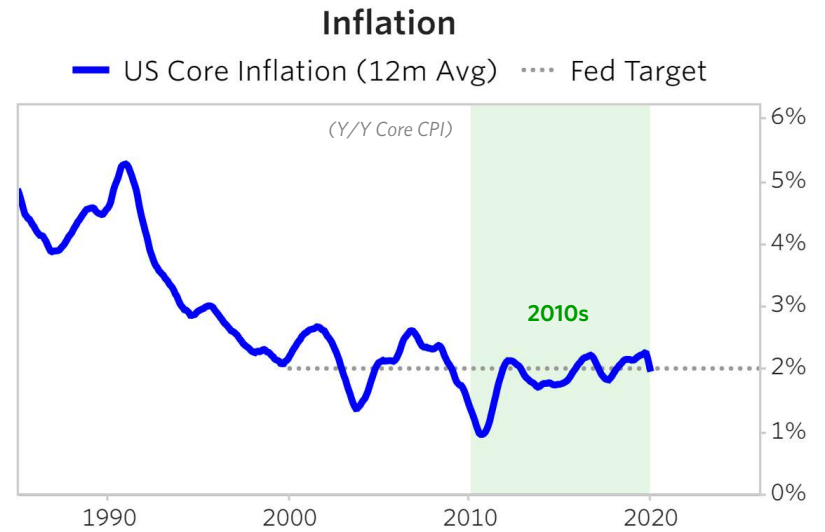
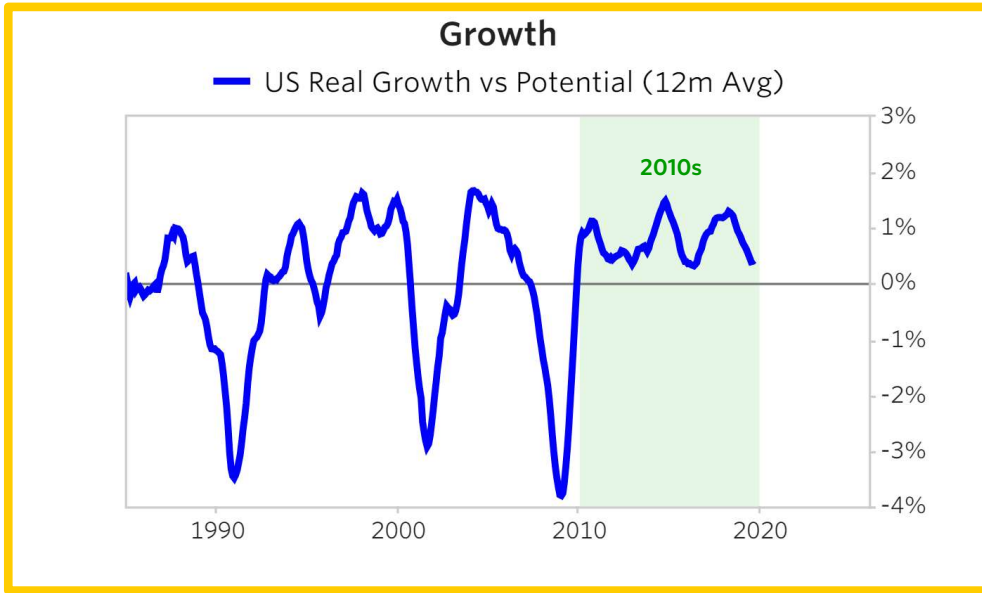
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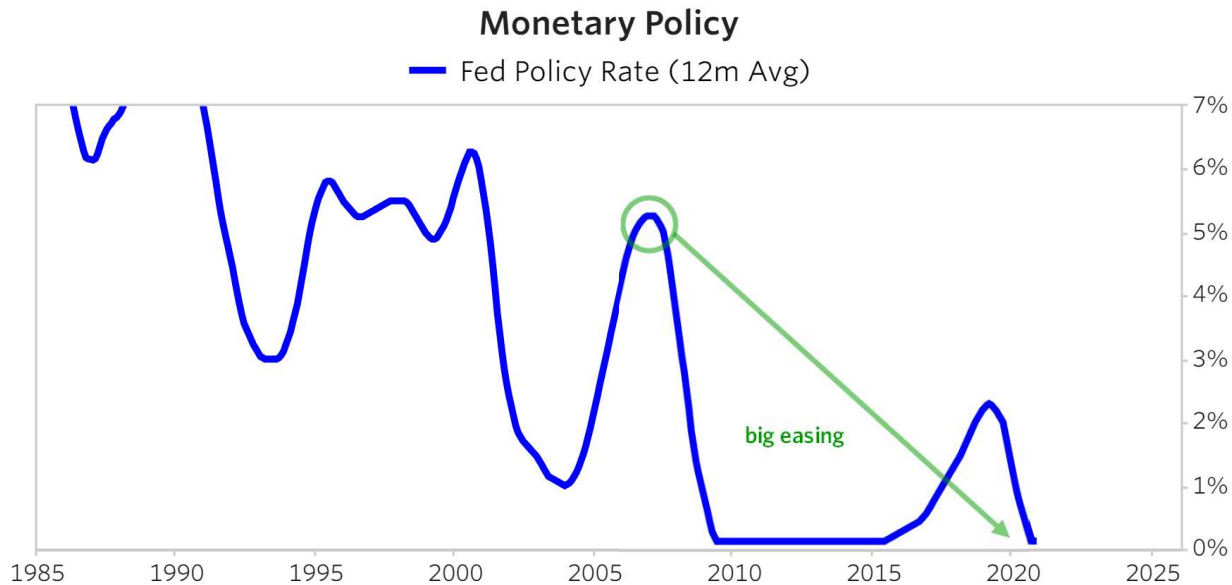
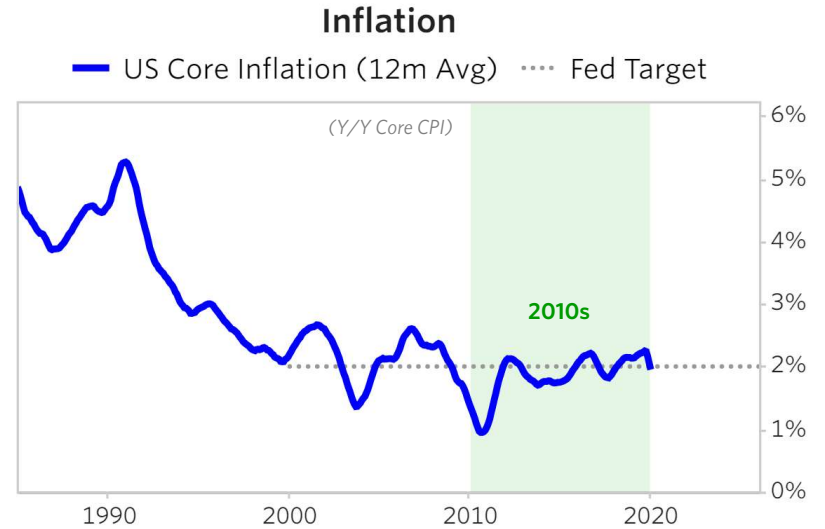
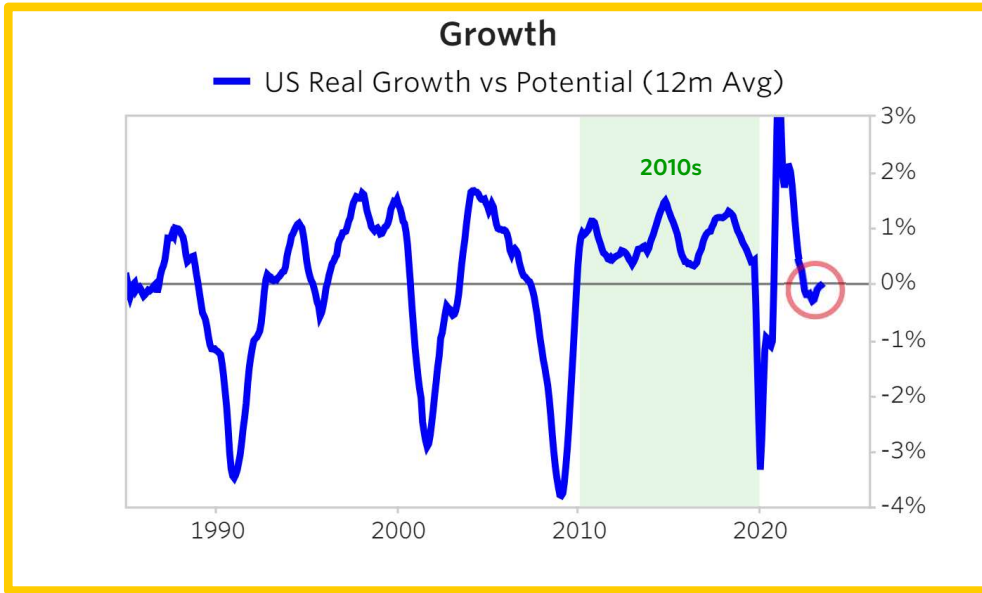
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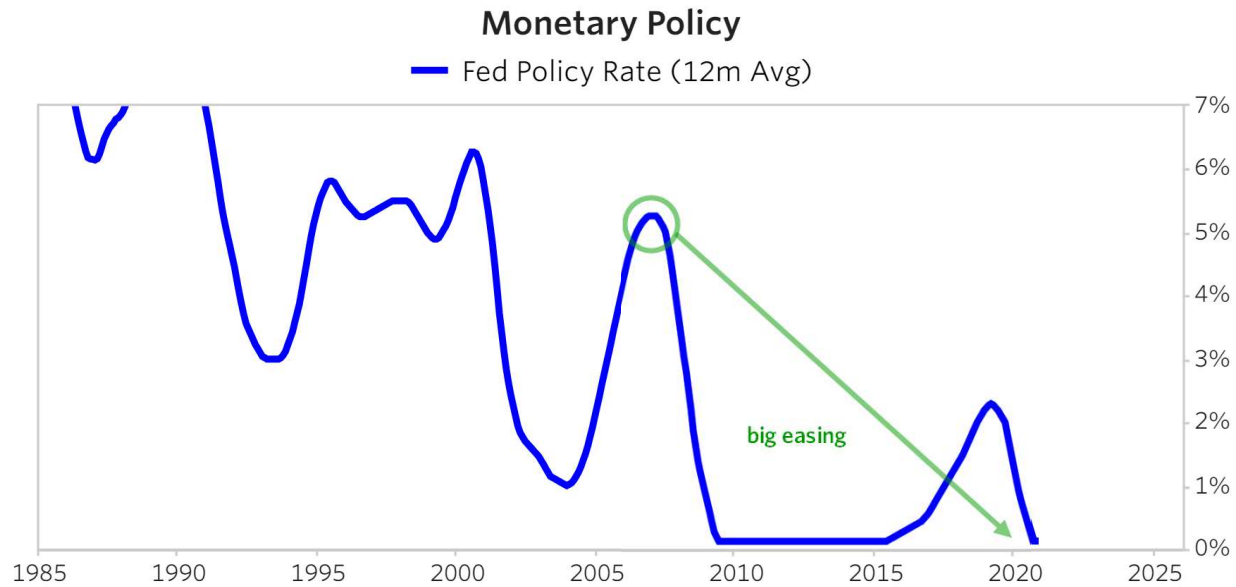
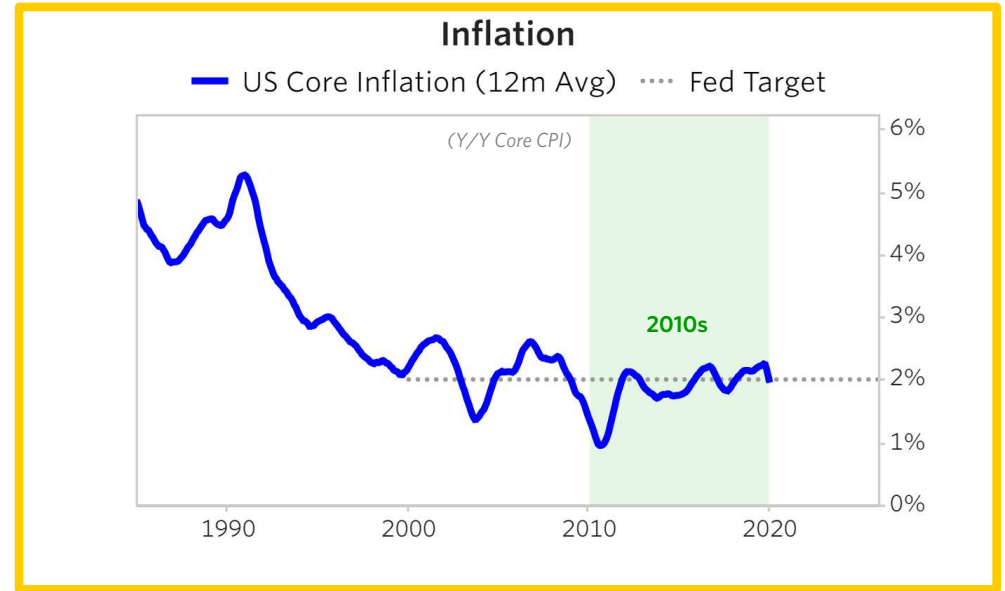
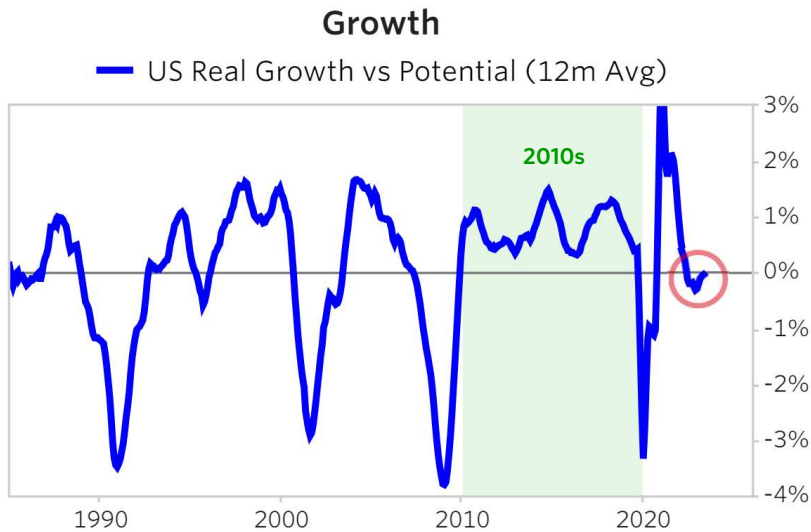
ARE CYCLICAL PRESSURES SHIFTING?



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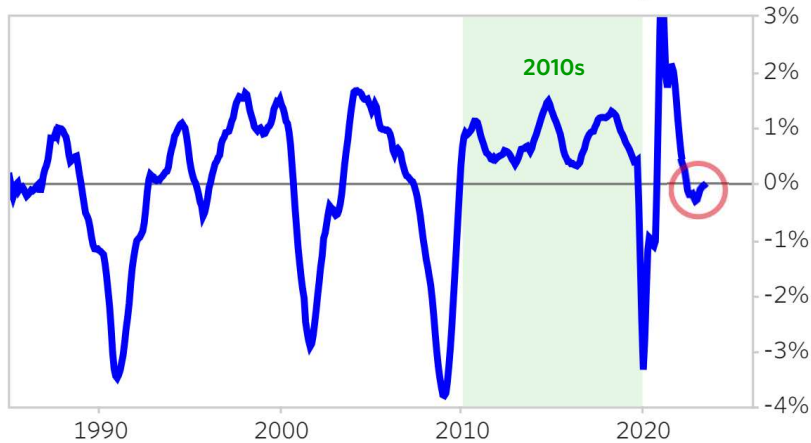
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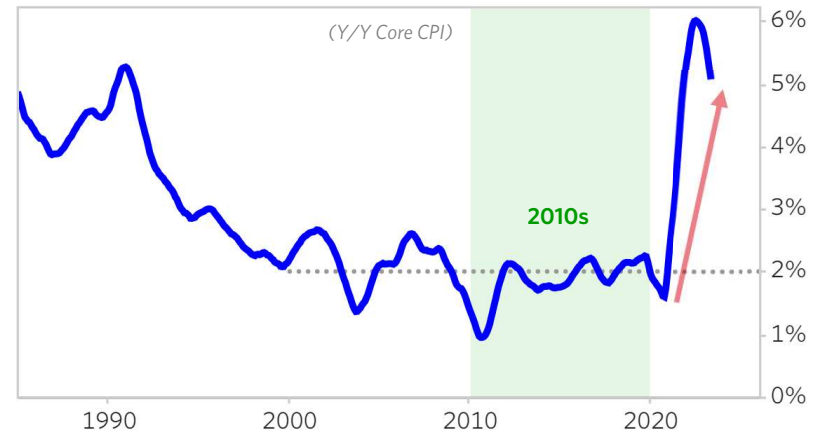
Growth

— US Real Growth vs Potential (12m Avg)



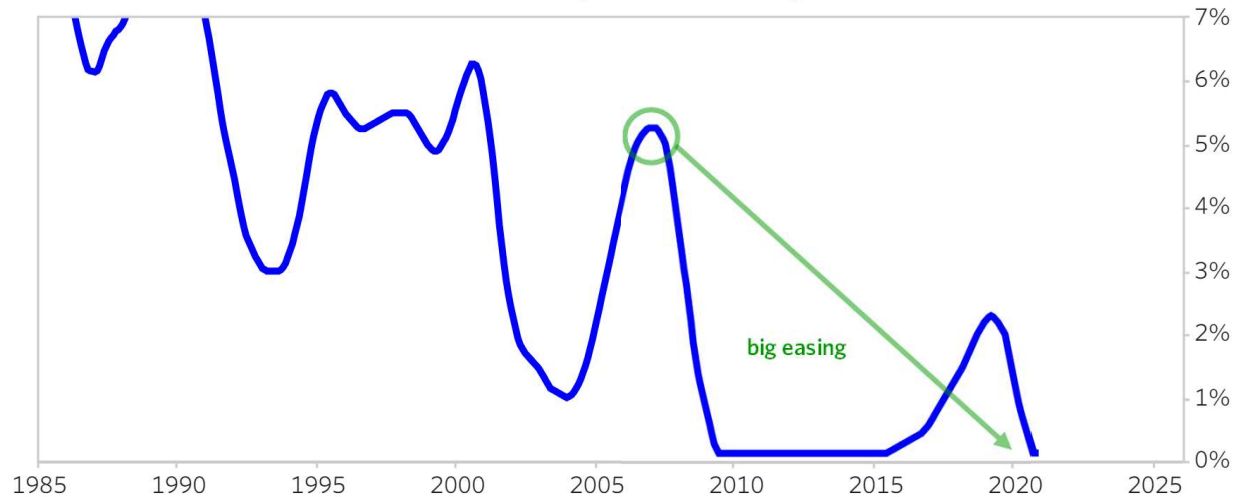
Inflation

— US Core Inflation (12m Avg) ... Fed Target



Monetary Policy

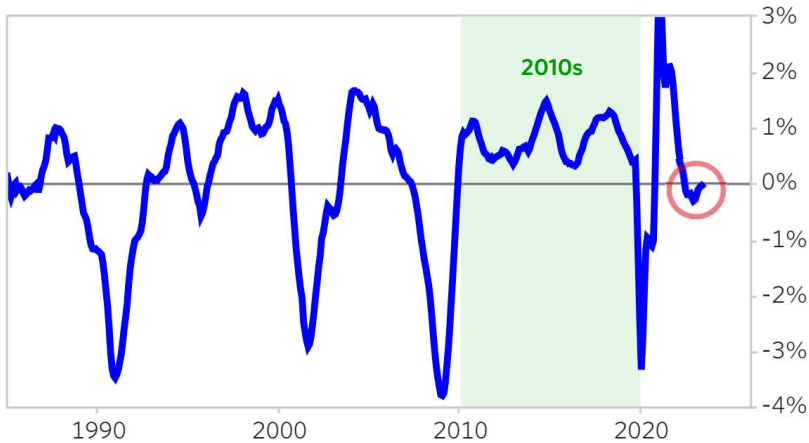
— Fed Policy Rate (12m Avg)



ARE CYCLICAL PRESSURES SHIFTING?

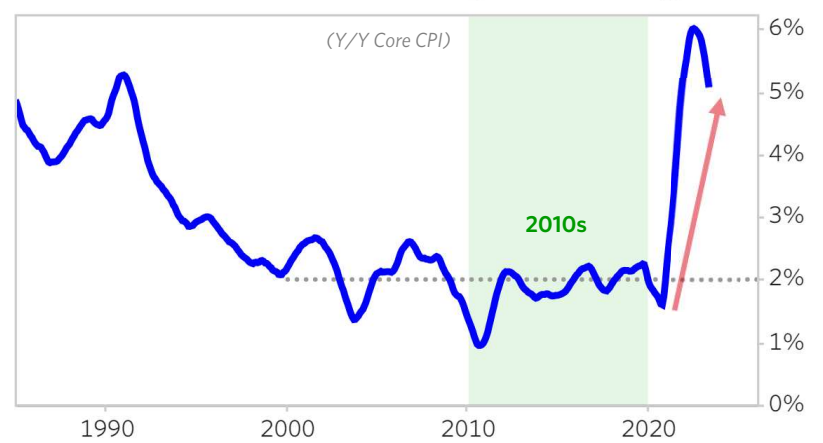
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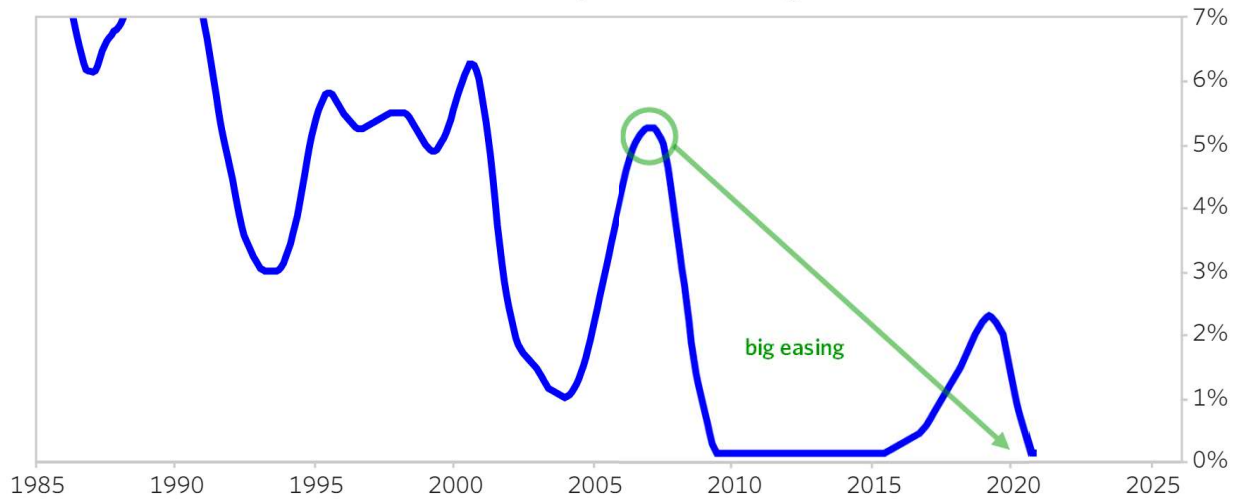
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Monetary Policy

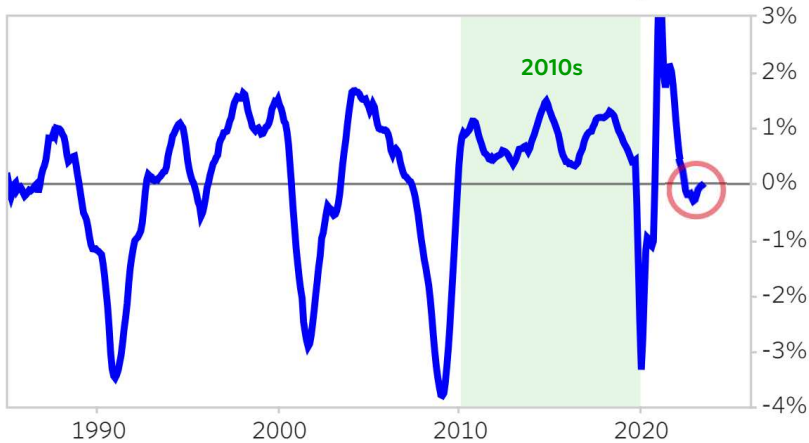
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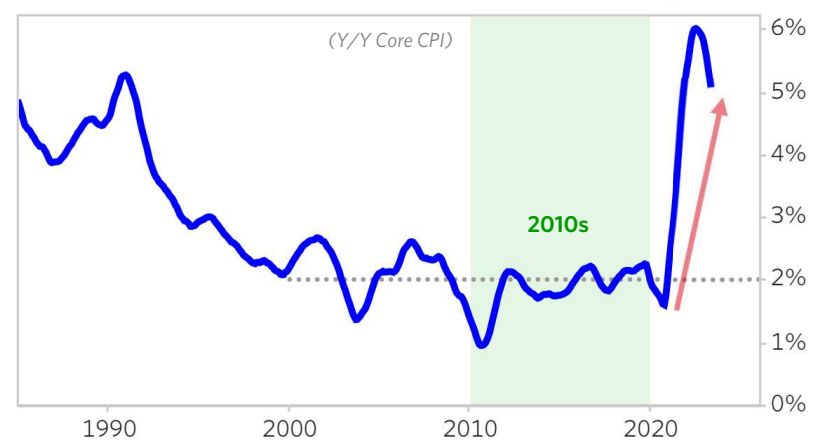
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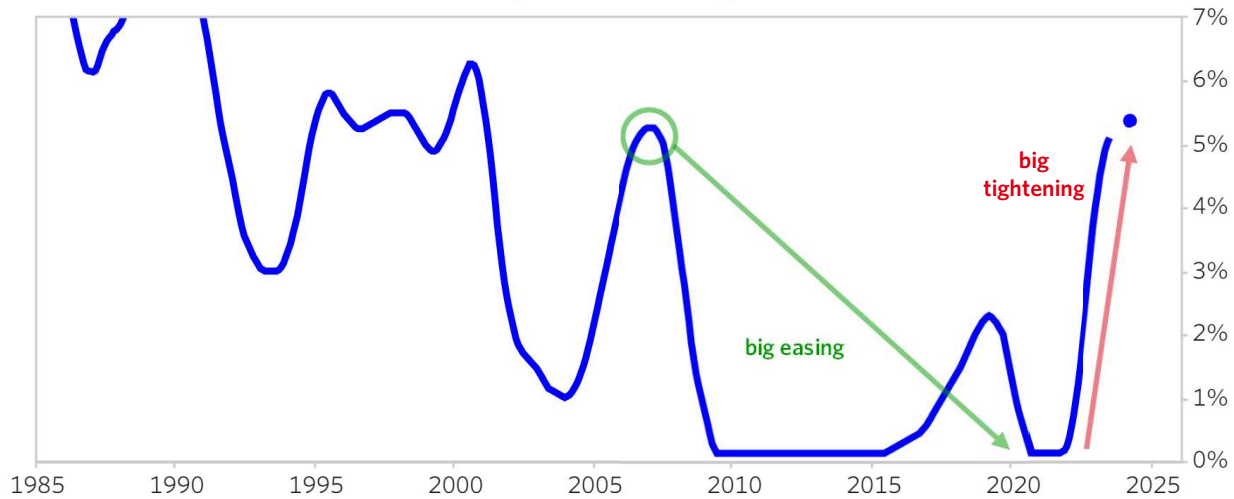
Inflation

— US Core Inflation (12m Avg) Fed Target

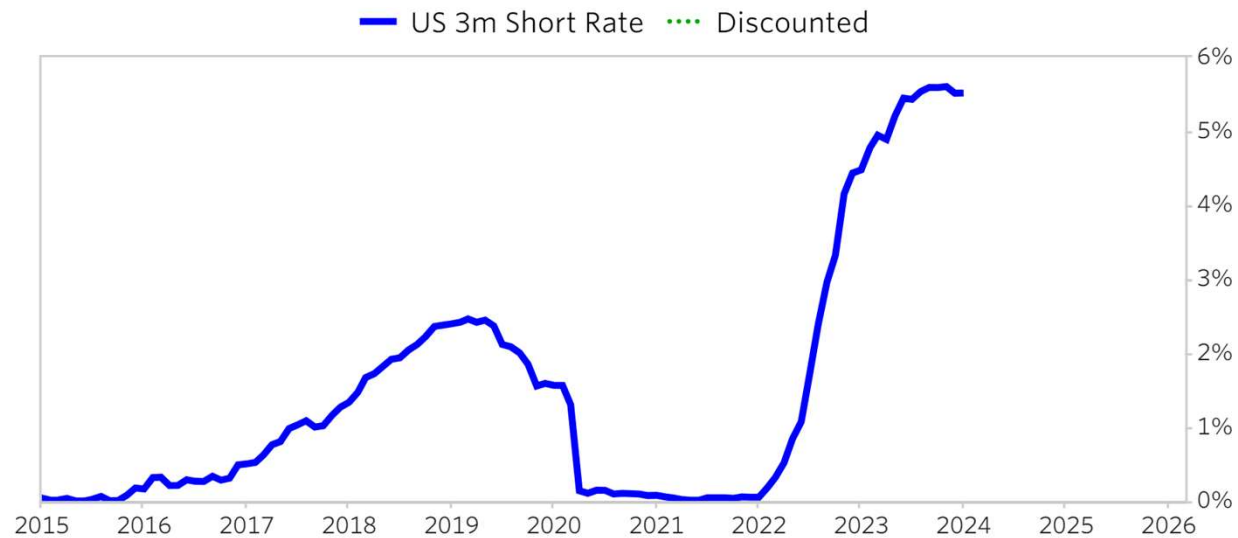
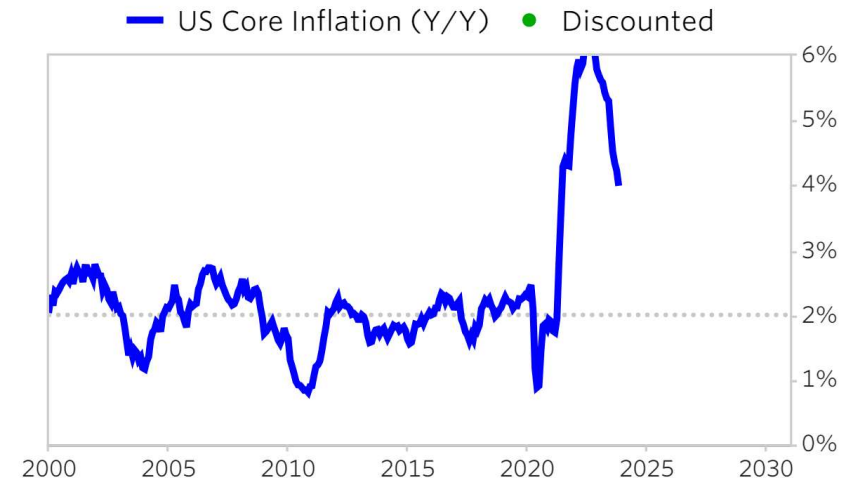
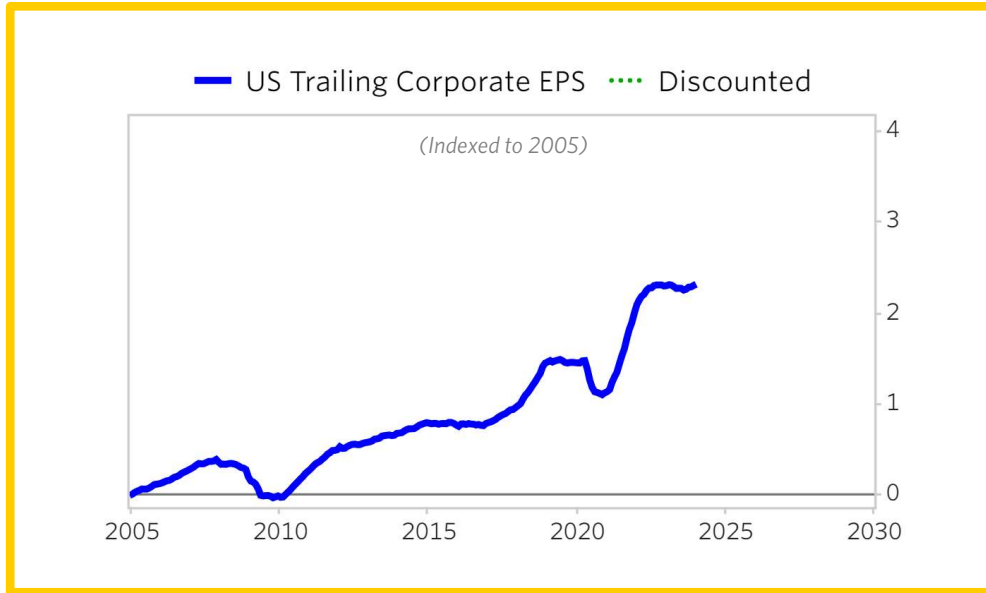


Monetary Policy

— Fed Policy Rate (12m Avg) • Last



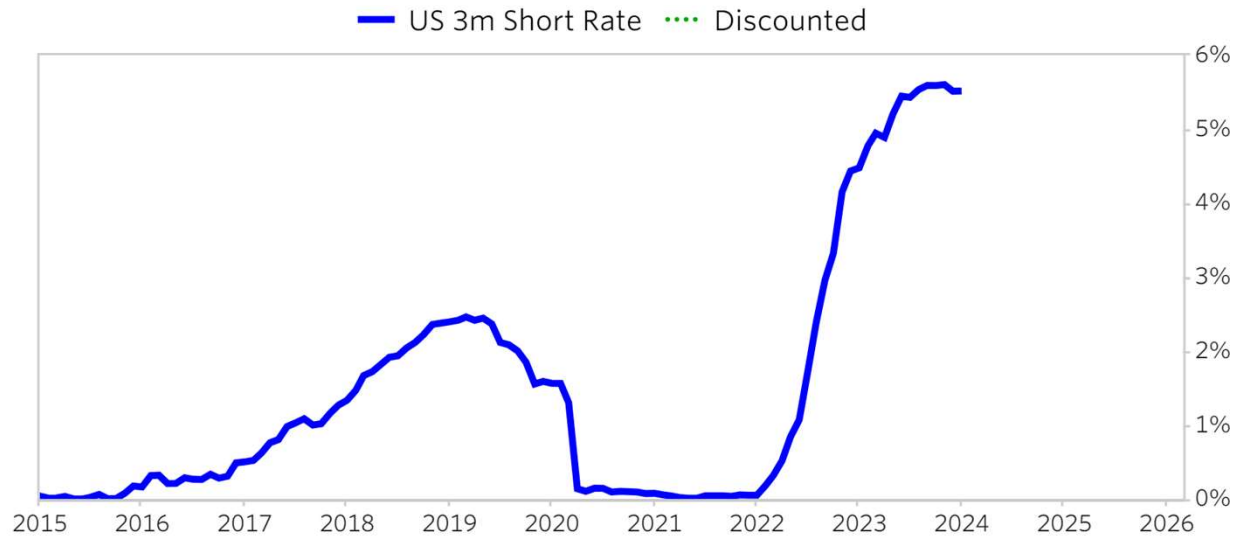
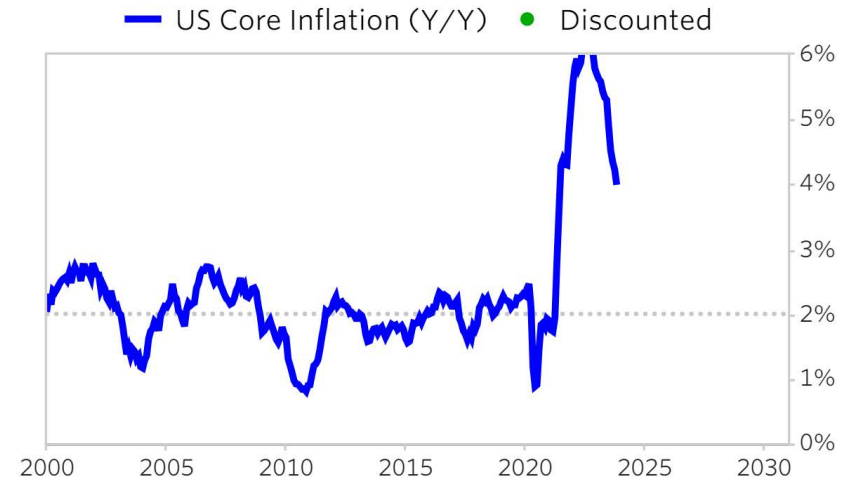
WILL THE GOOD TIMES CONTINUE?



Estimates are based on Bridgewater analysis. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

WILL THE GOOD TIMES CONTINUE?

MARKETS SAY YES!

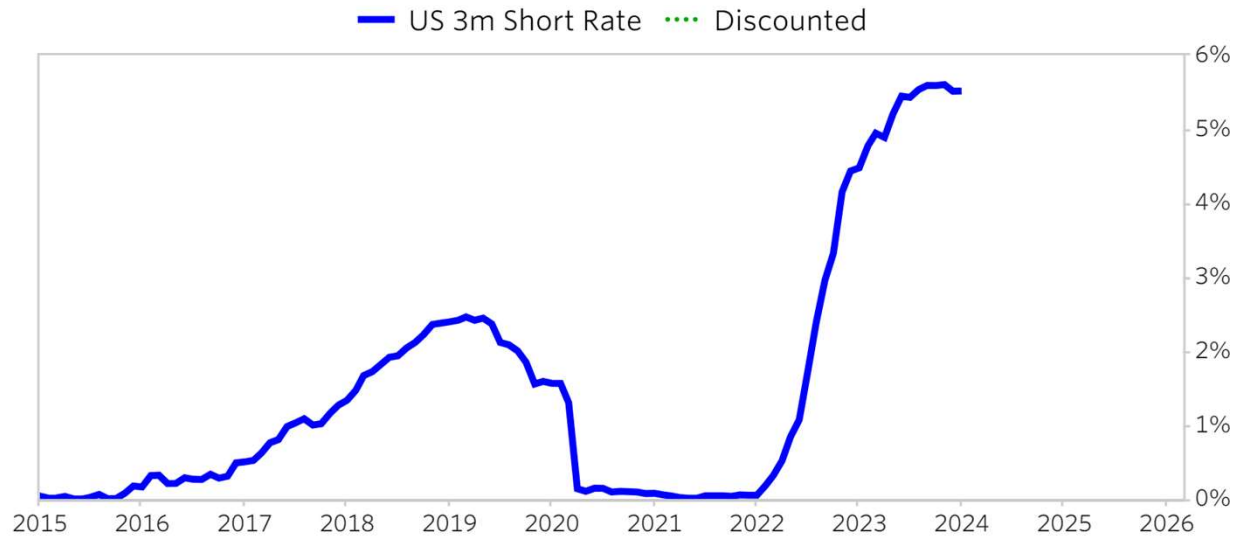
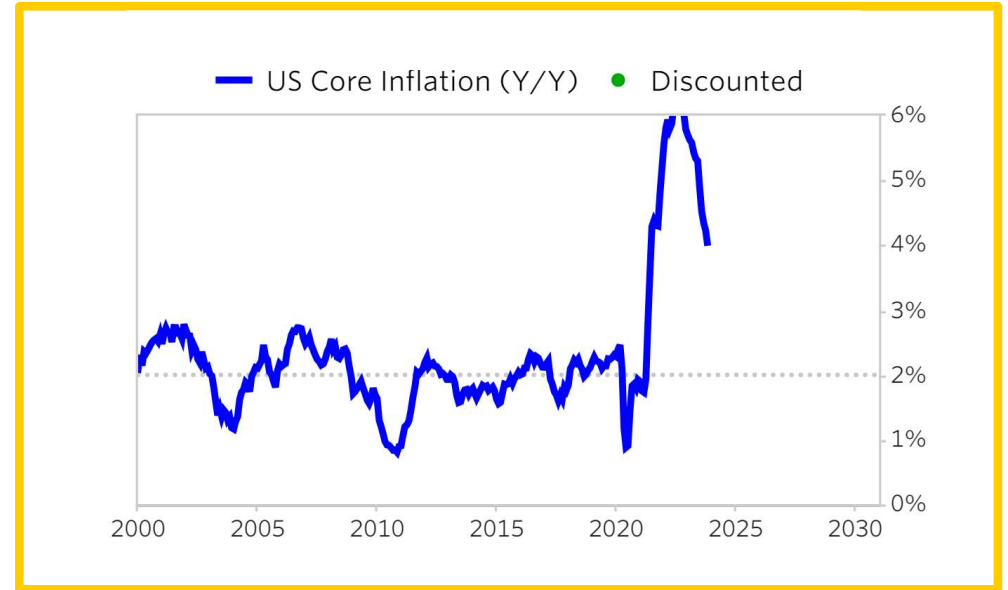
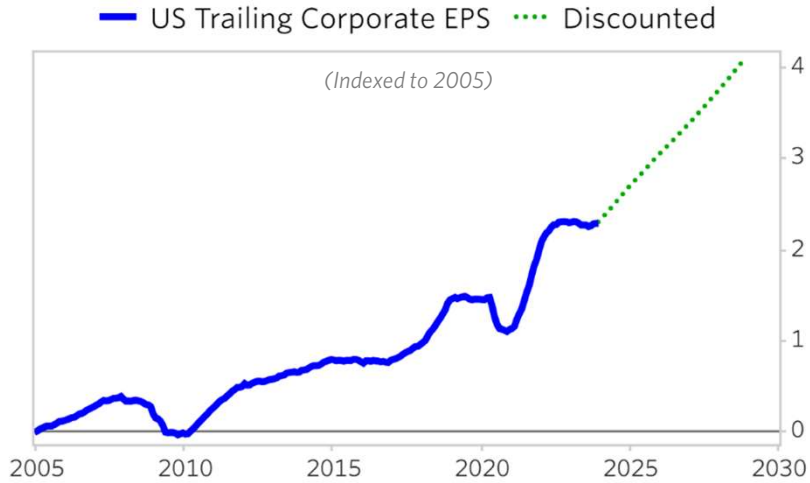


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Strong Earnings Priced

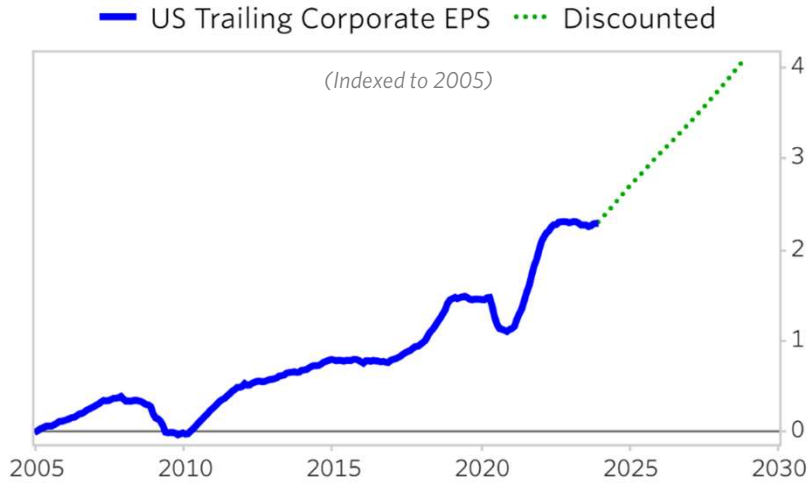


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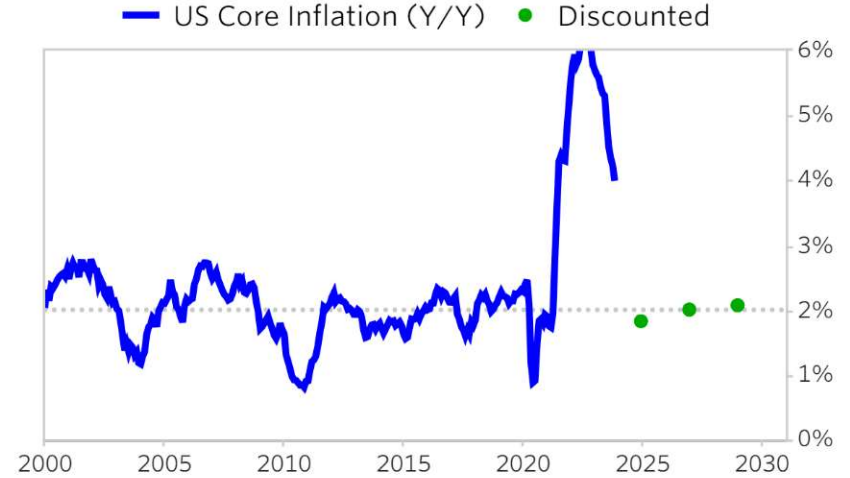
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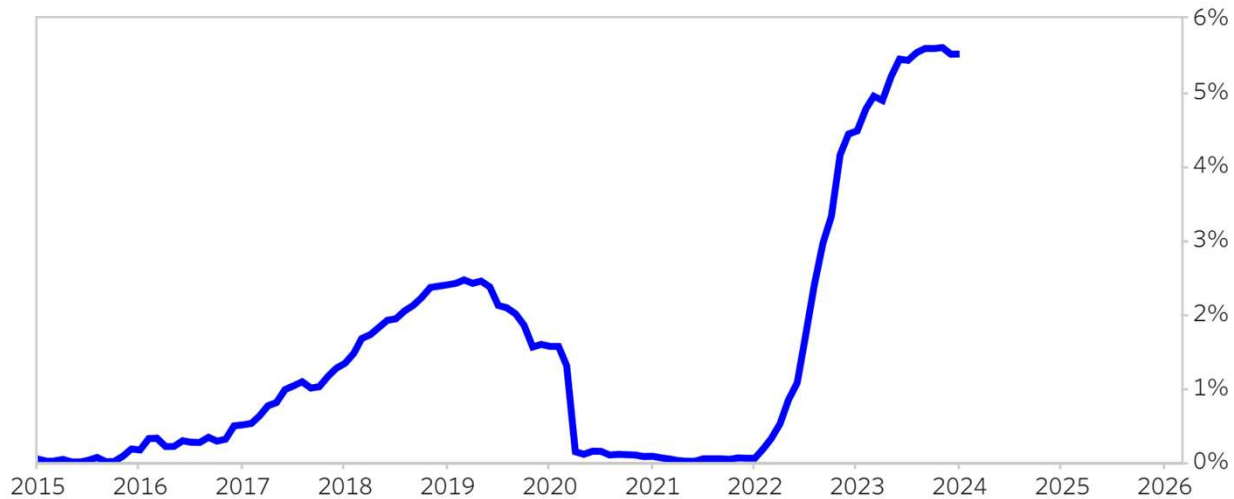
Strong Earnings Priced



Inflation Discounted to Reach Target Soon



— US 3m Short Rate Discounted

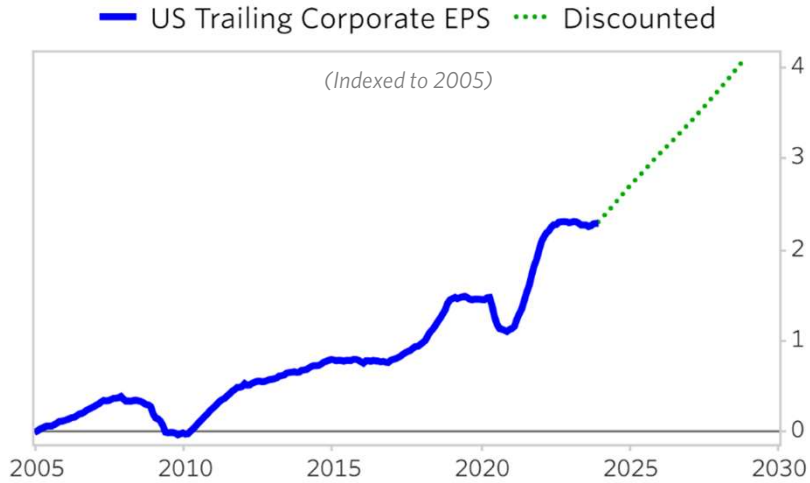


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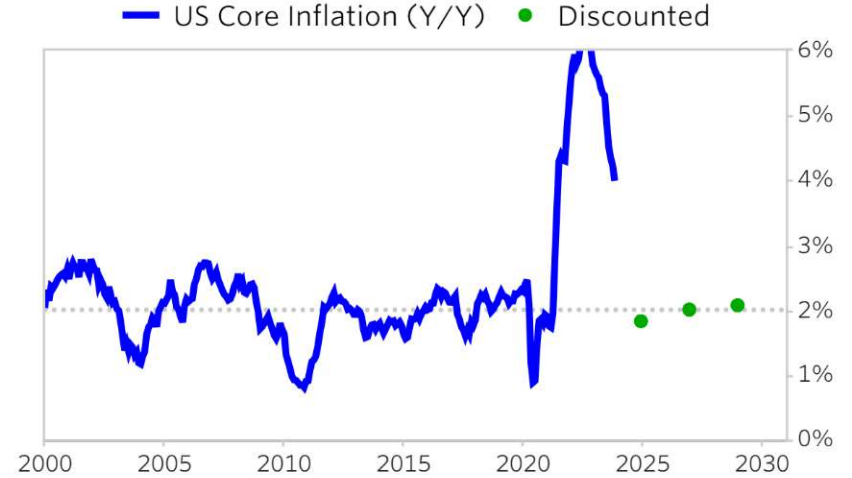
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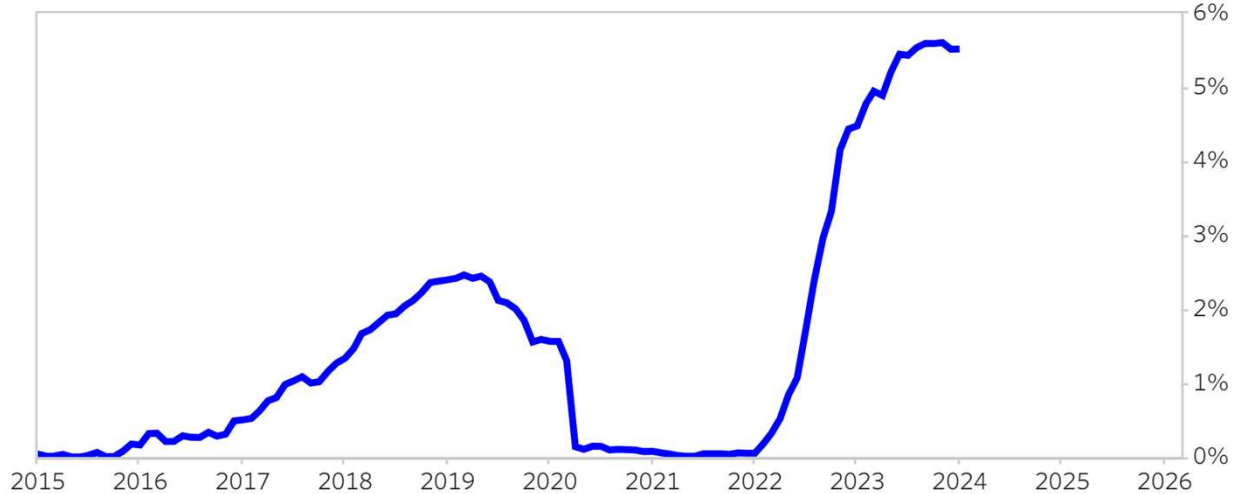
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Inflation Discounted to Reach Target Soon



US 3m Short Rate



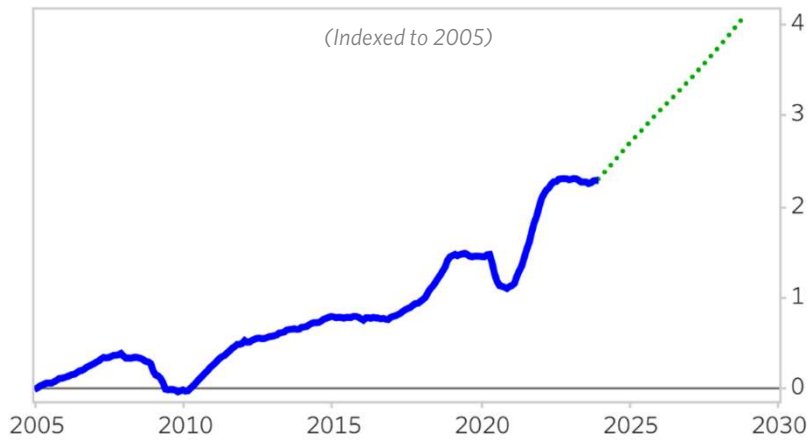
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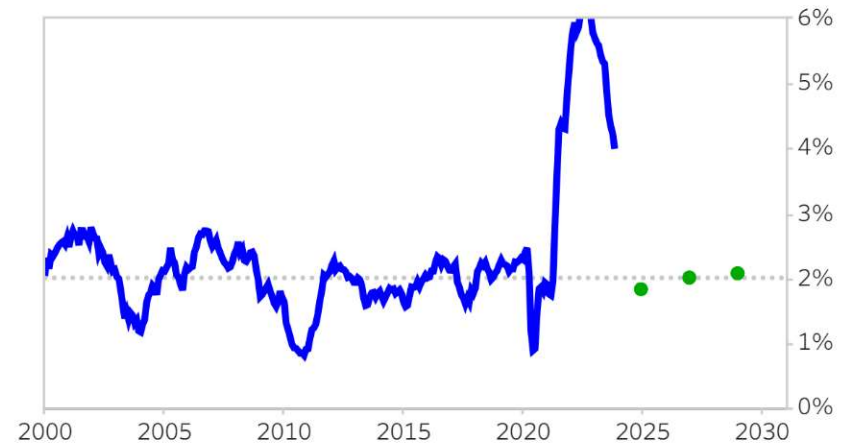
Strong Earnings Priced

— US Trailing Corporate EPS Discounted



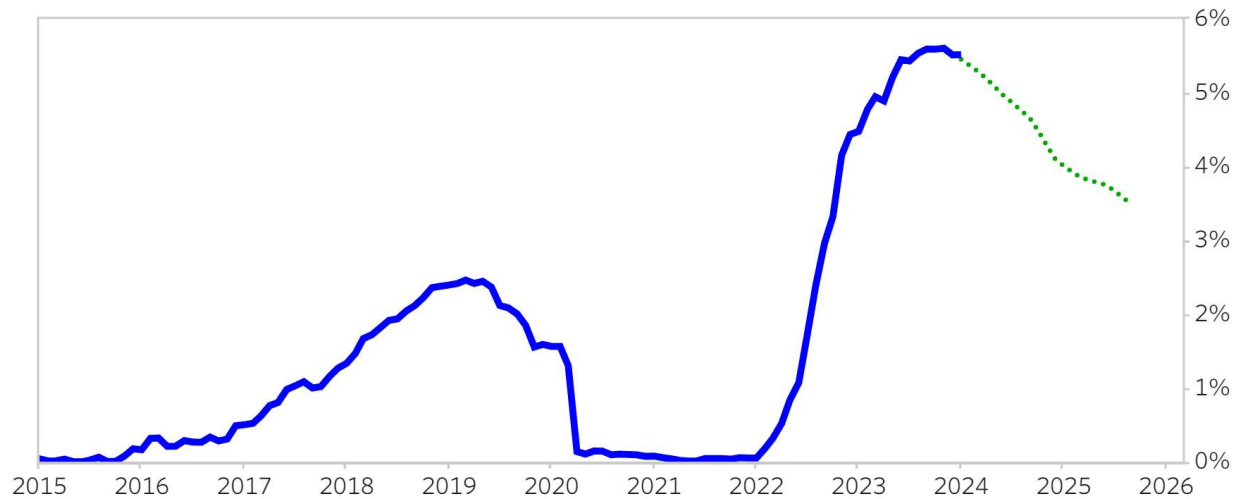
Inflation Discounted to Reach Target Soon

— US Core Inflation (Y/Y) Discounted



Imminent Fed Pivot Expected

— US 3m Short Rate Discounted



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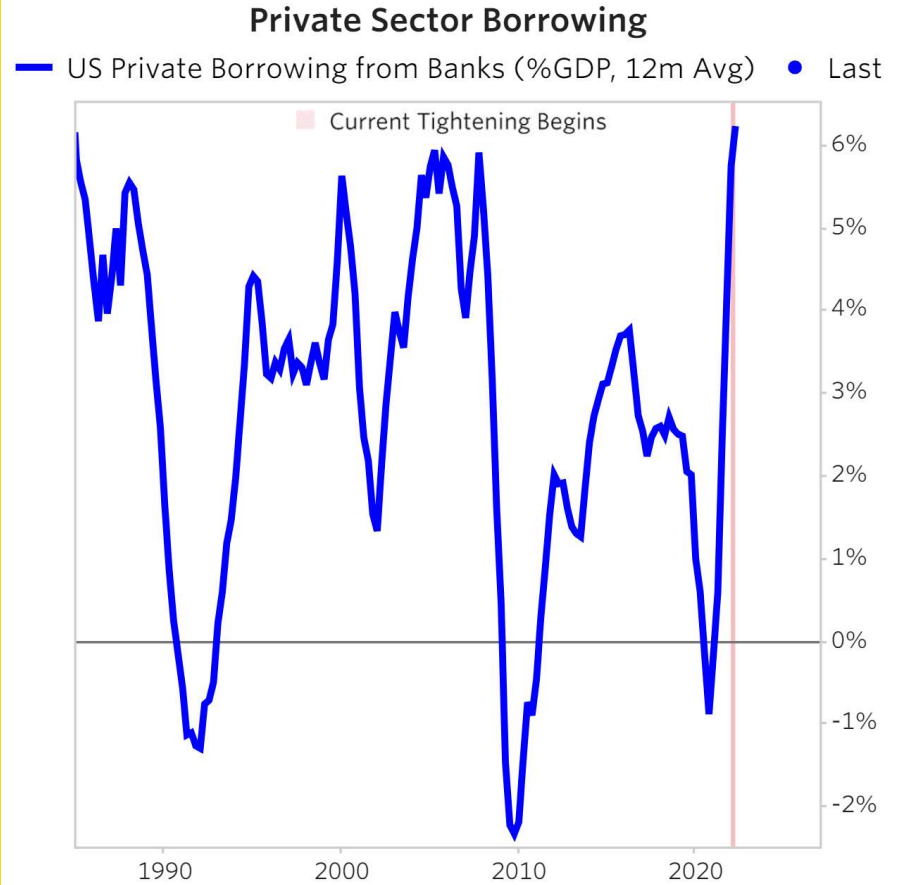
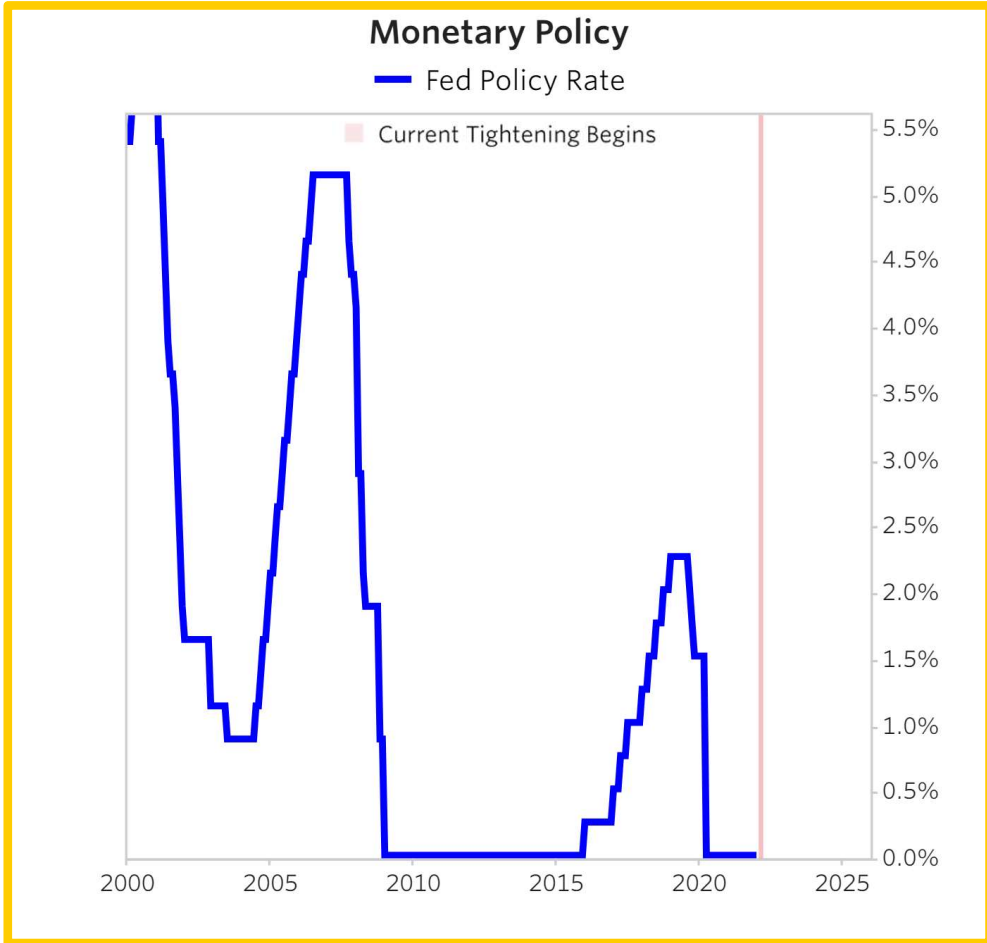
II. Cyclical Conditions

SUMMARY

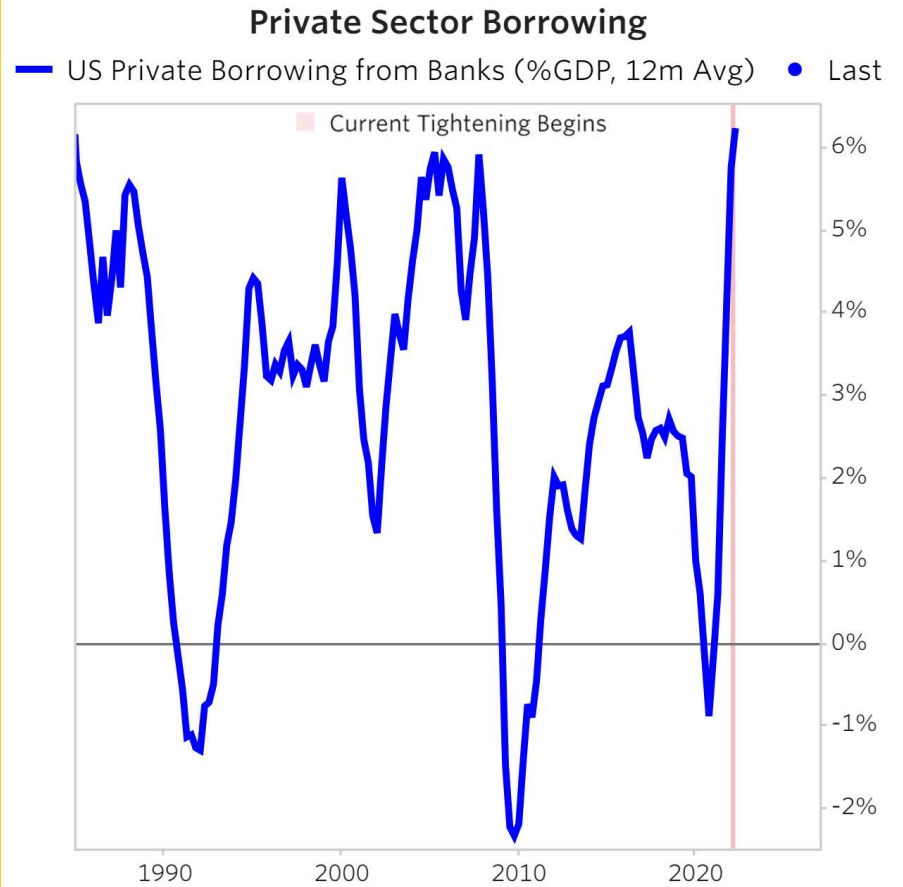
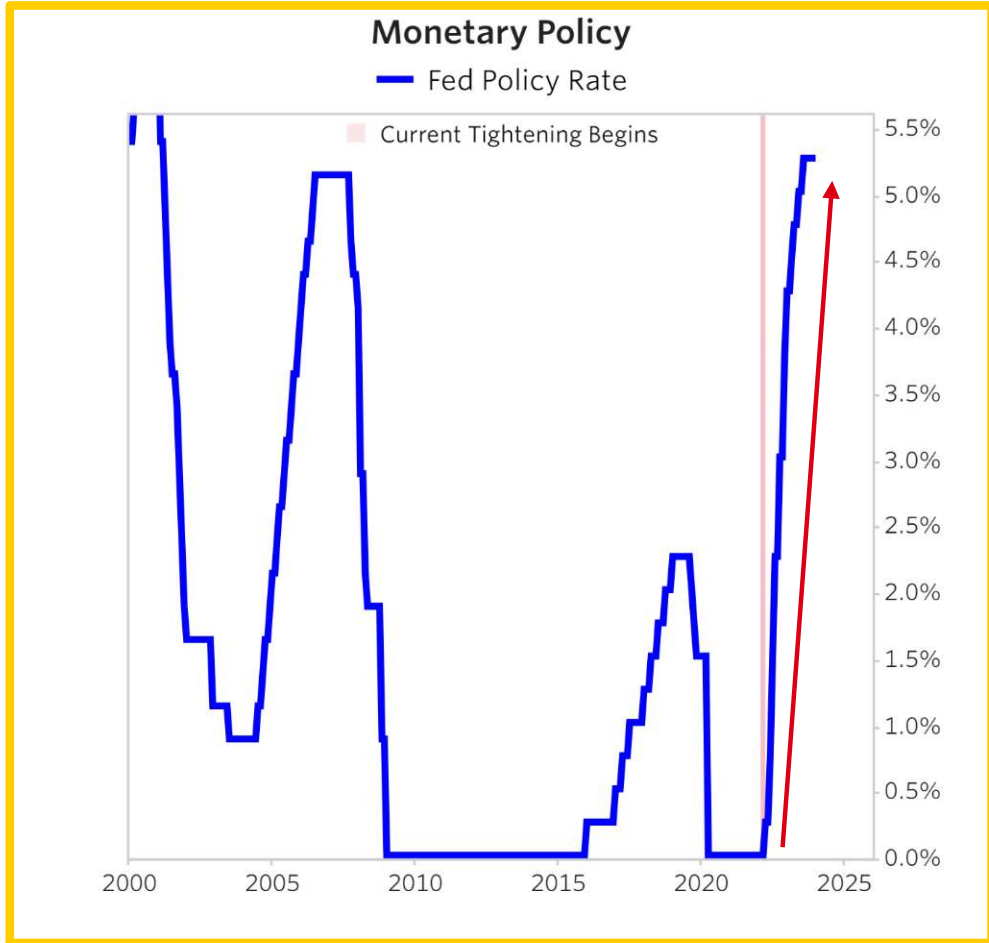
- ◆ **So far, the economy and markets have been resilient** as key supports countered the bite of the massive tightening.
- ◆ Going forward, **we expect a gradual grind down in growth** as prior supports fade & higher rates bite.
- ◆ However, **tight labor markets may prevent a major Fed pivot** unless more material weakness emerges.
- ◆ **A less supportive environment for assets is compounded by receding liquidity** as QT continues and deficit funding normalizes.
- ◆ **Conditions are diverging globally**, creating big differential pressures.

Where We Have Been

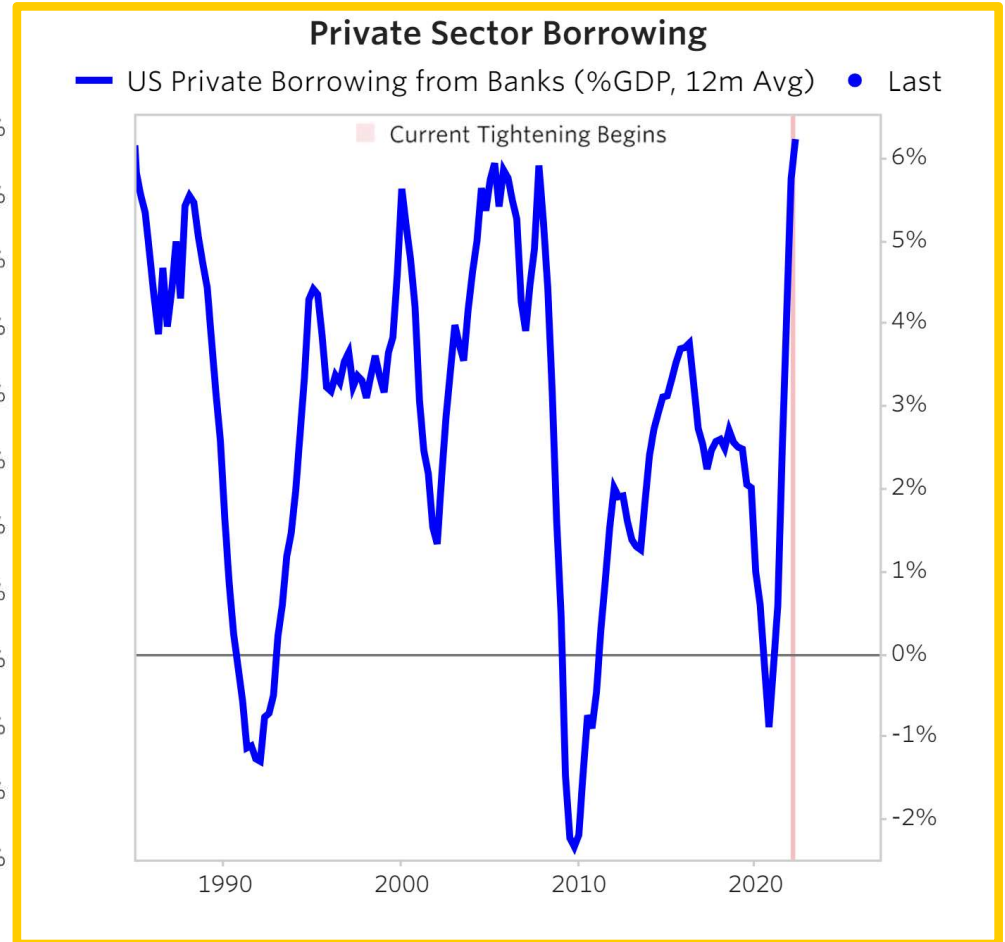
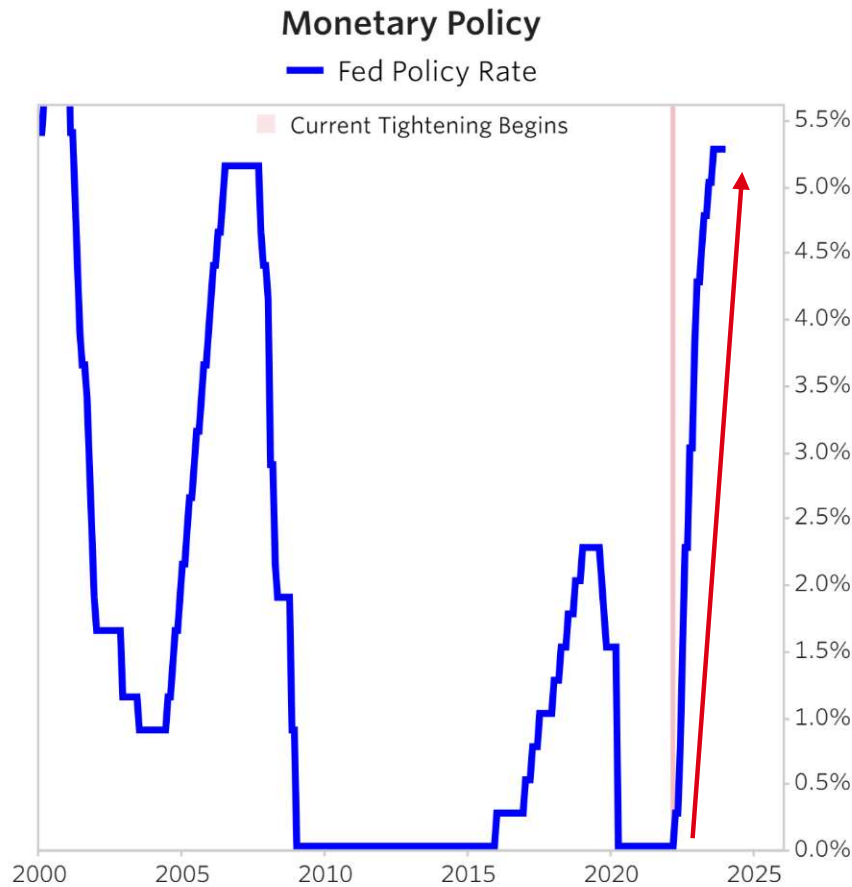
WE HAVE BEEN THROUGH A MASSIVE TIGHTENING, WHICH SLOWED BORROWING...



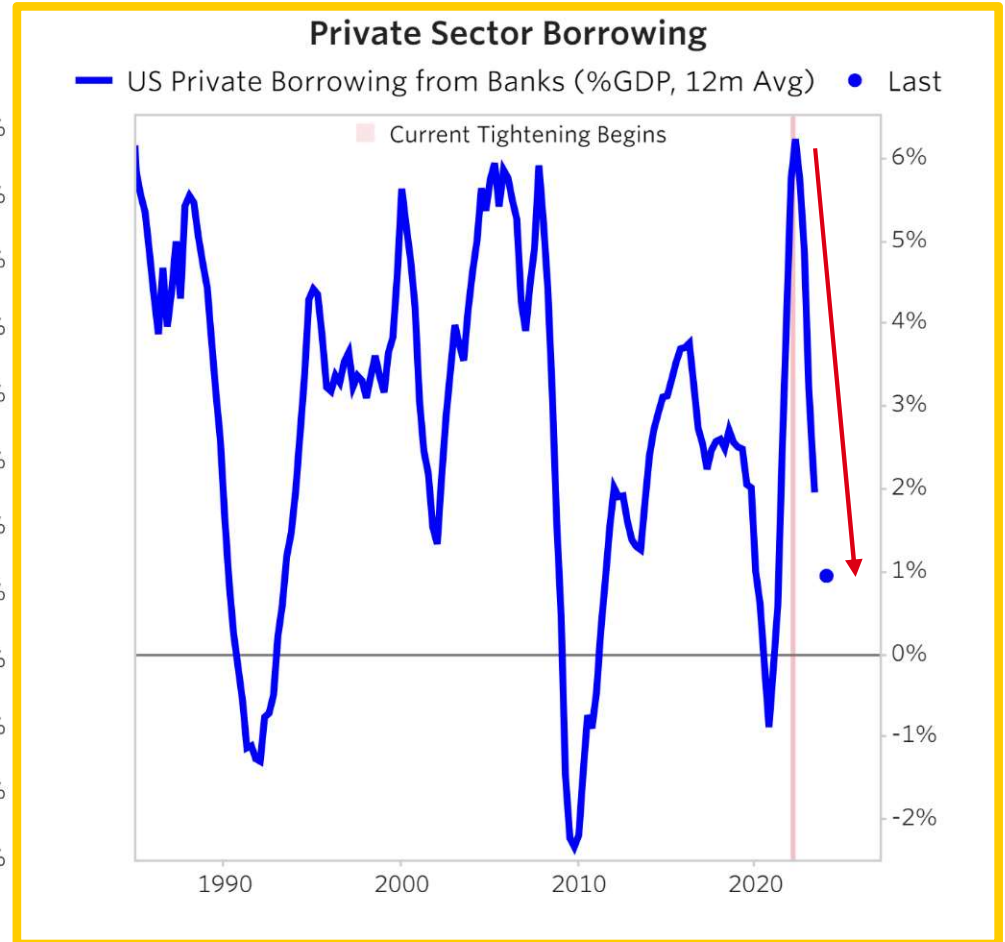
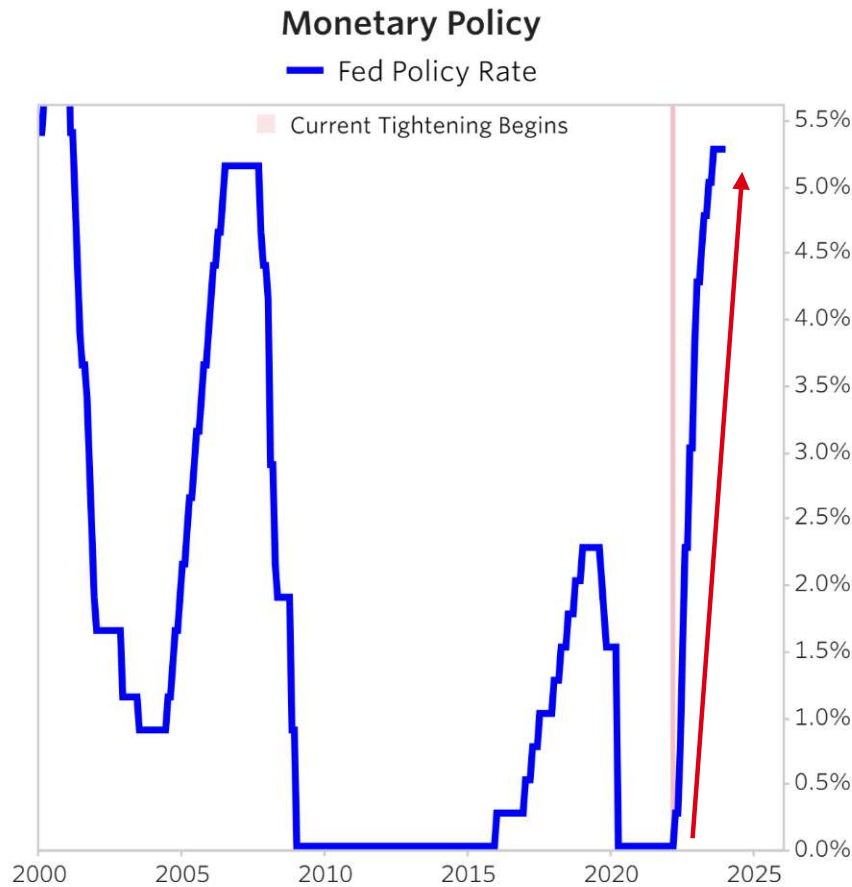
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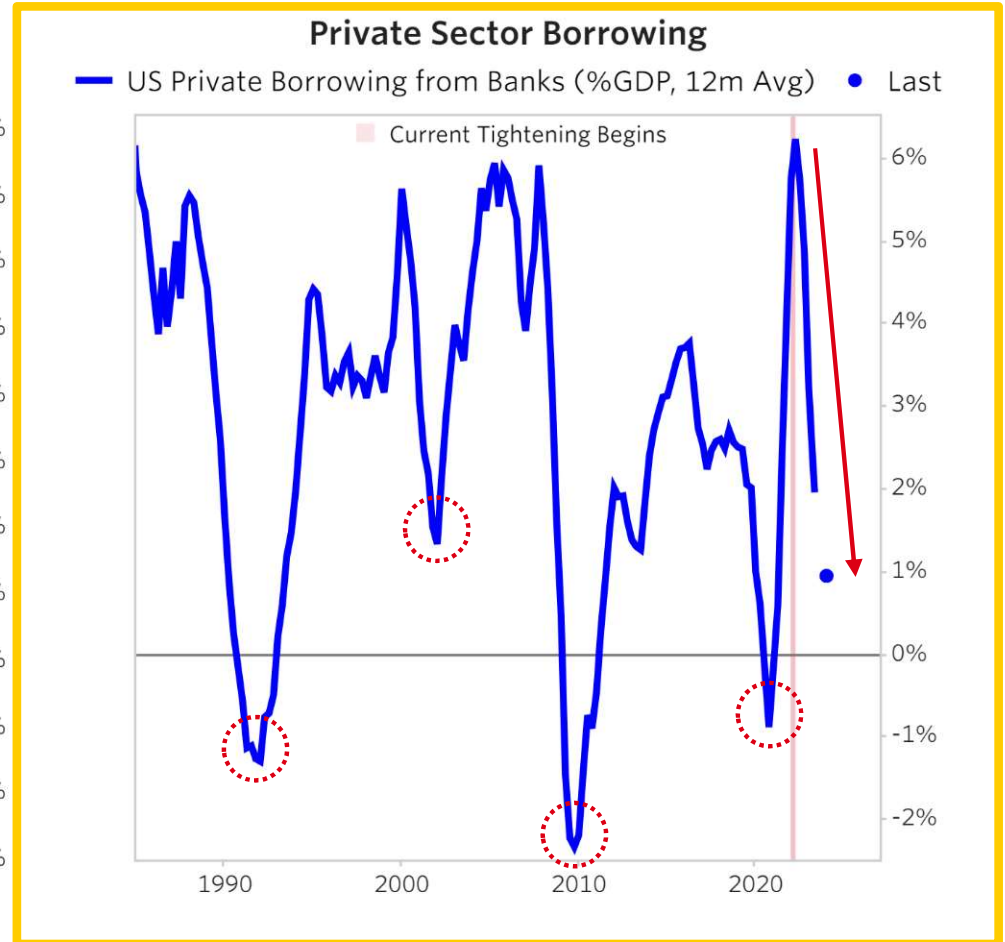
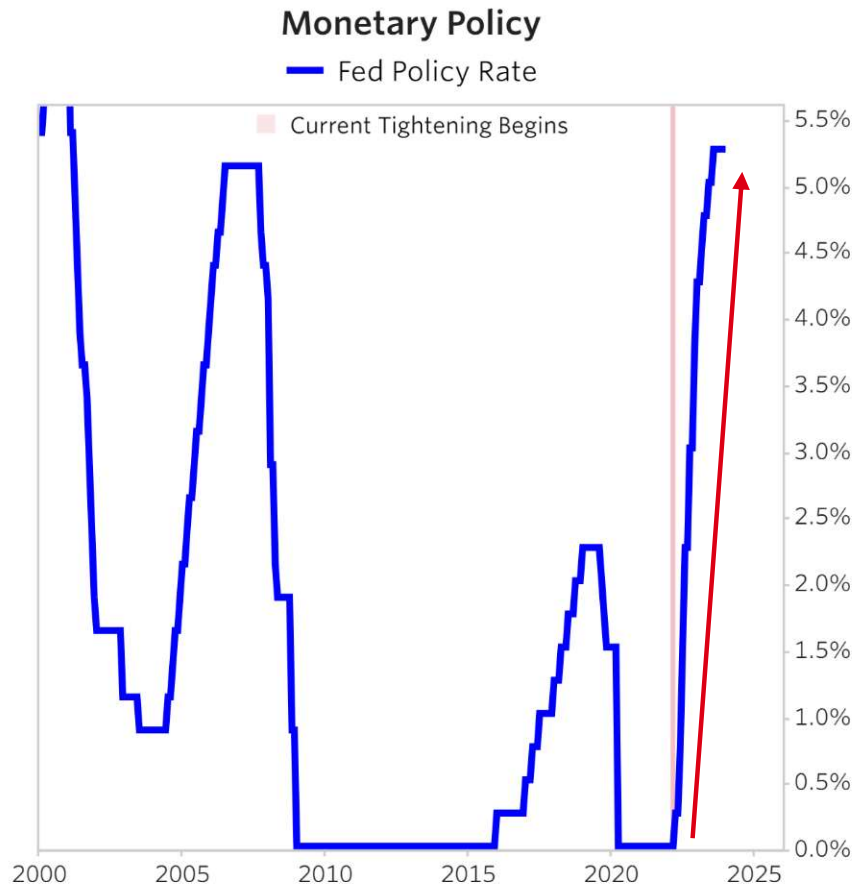
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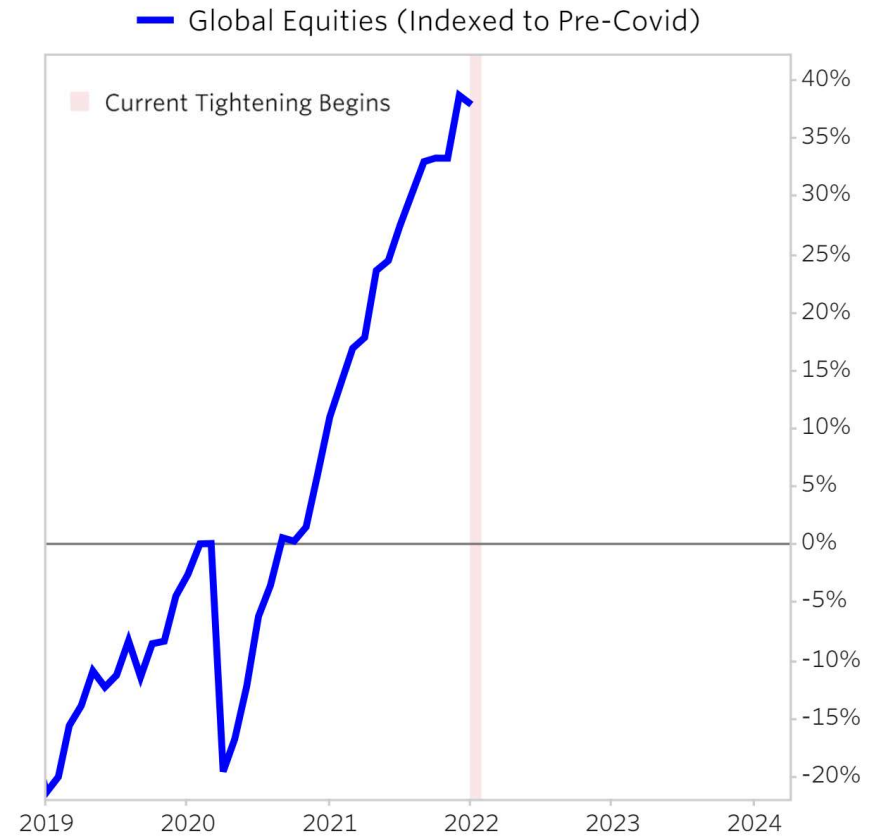
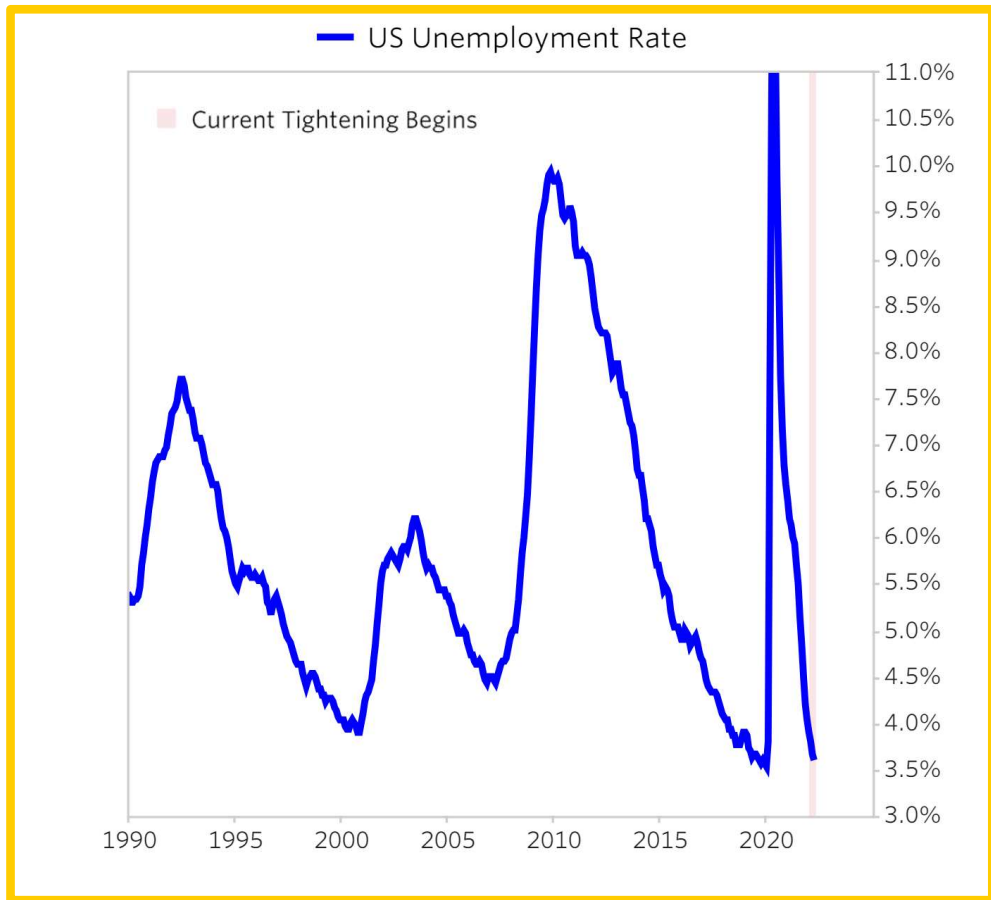
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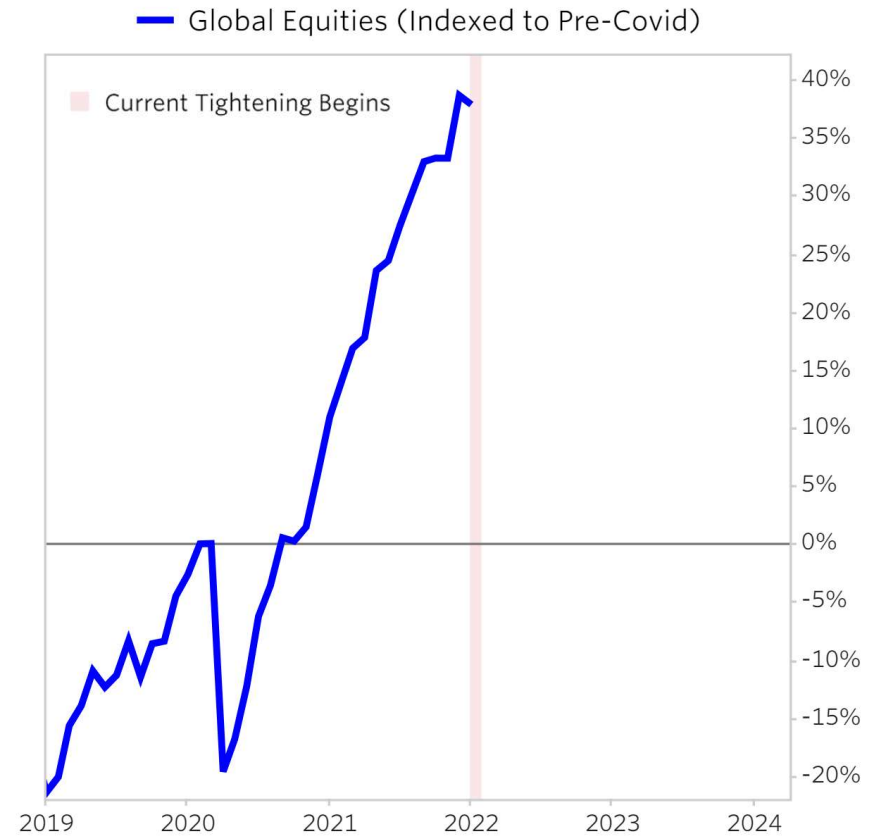
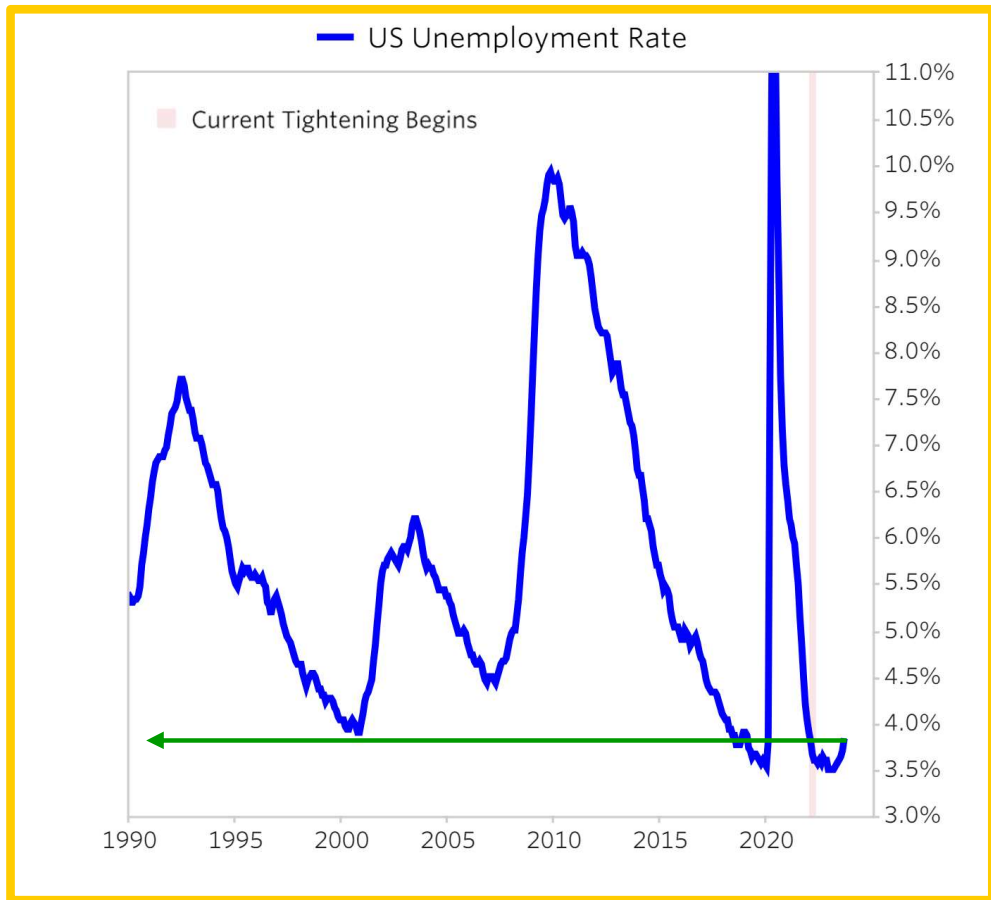
...BUT THE BROADER ECONOMY AND ASSETS HAVE BEEN RESILIENT



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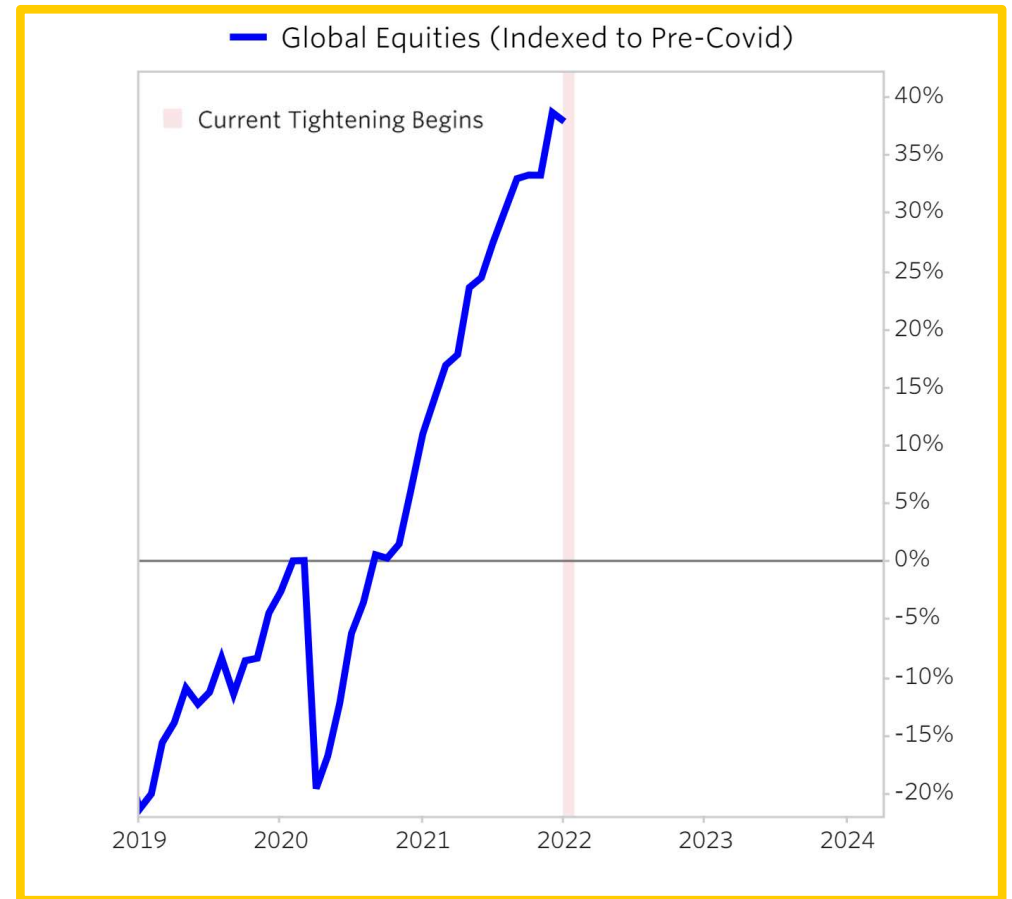
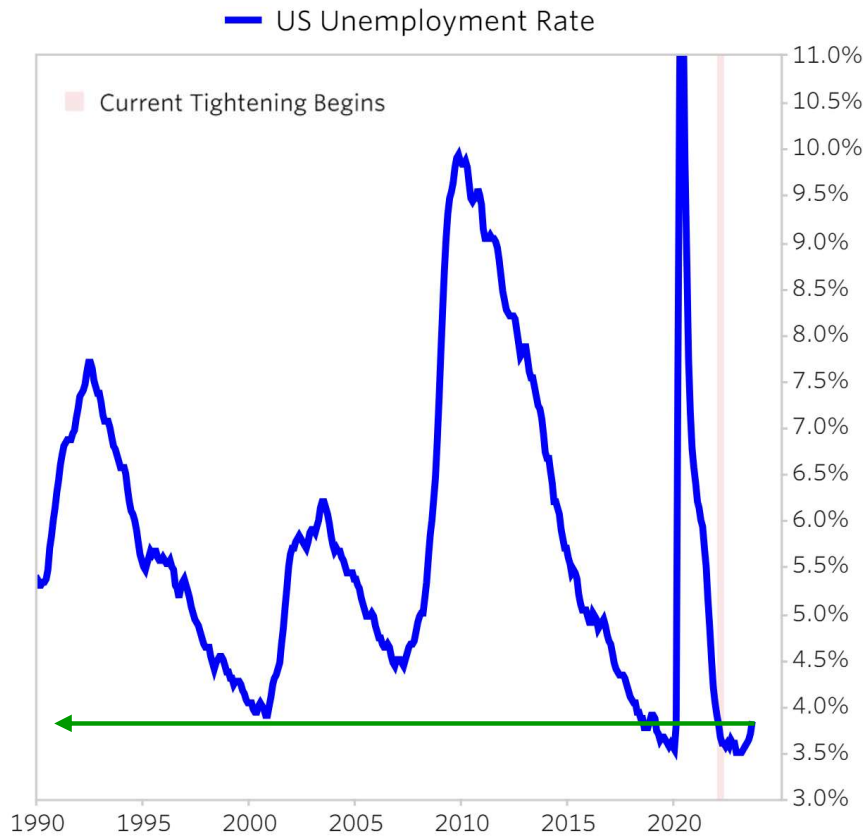
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Economy Remains Strong, Especially Labor Markets



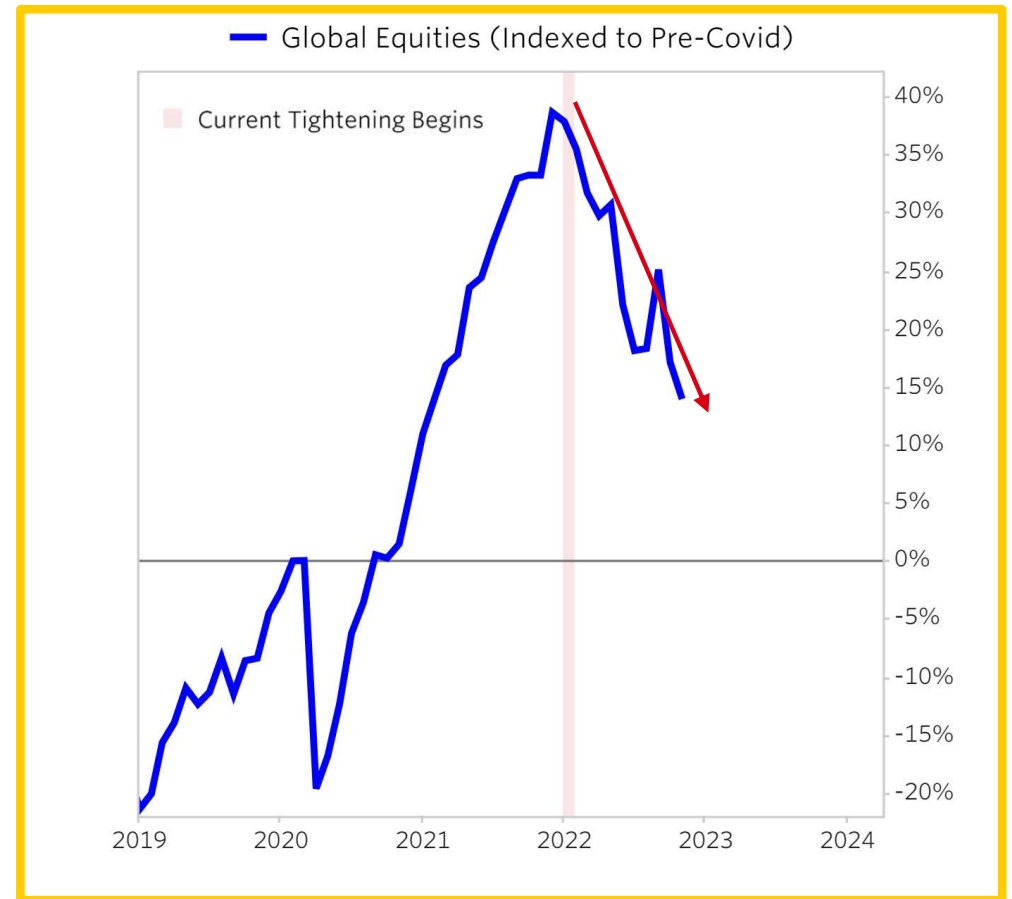
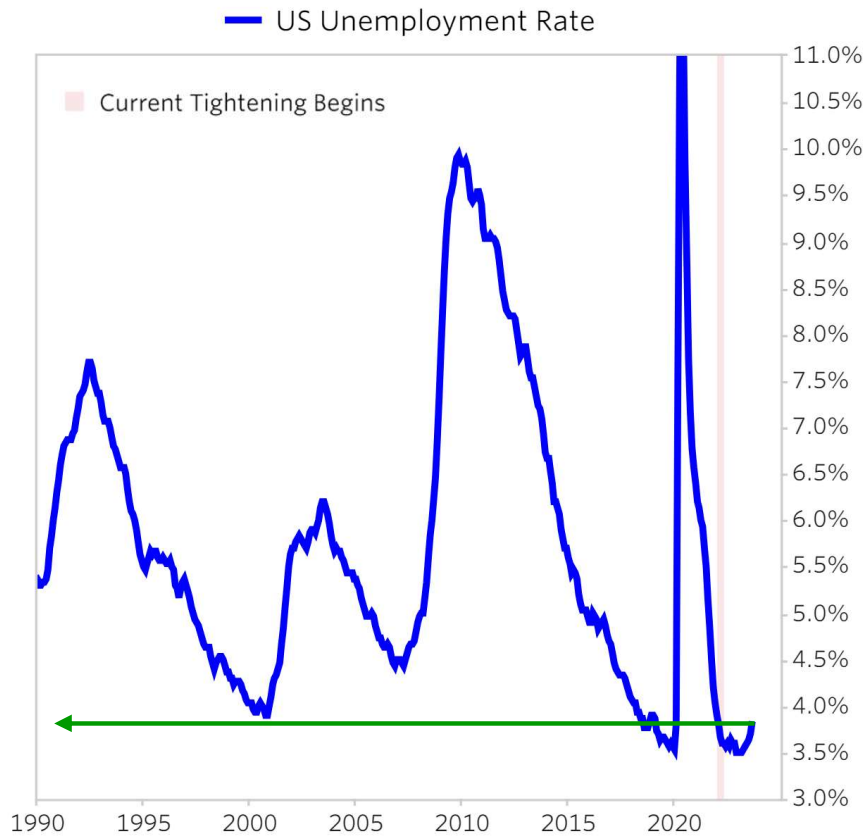
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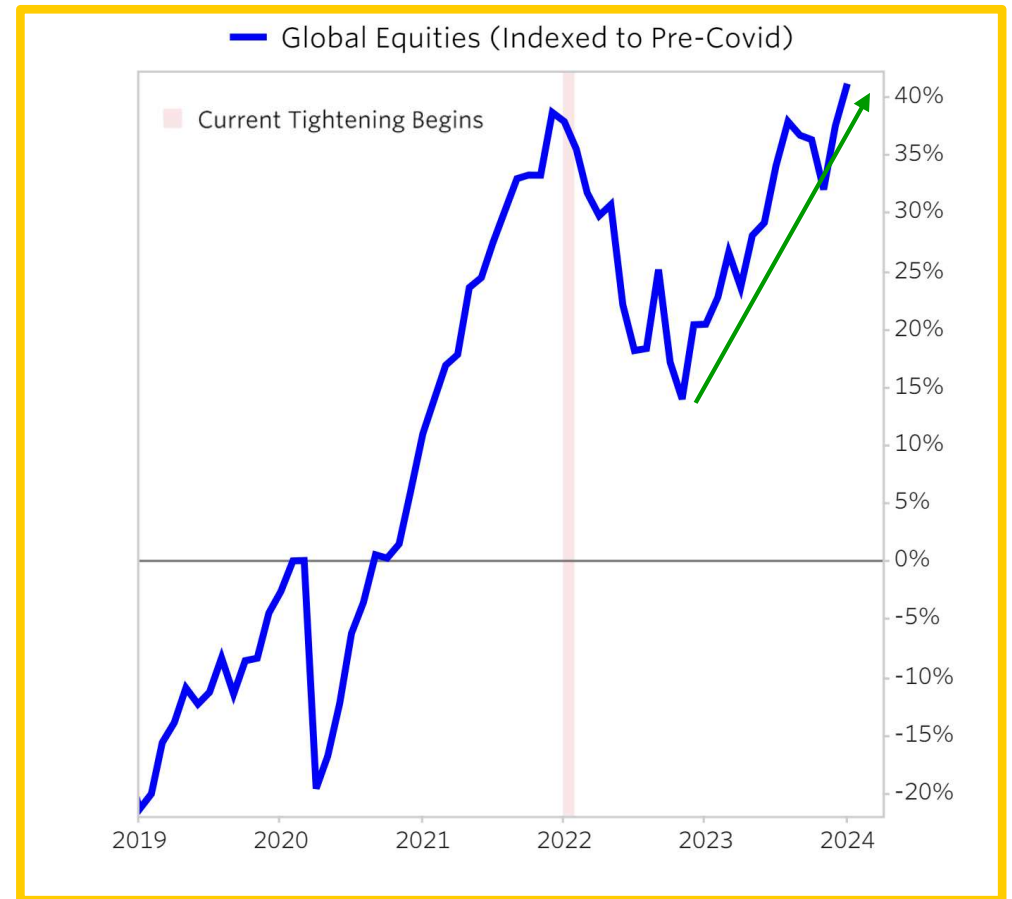


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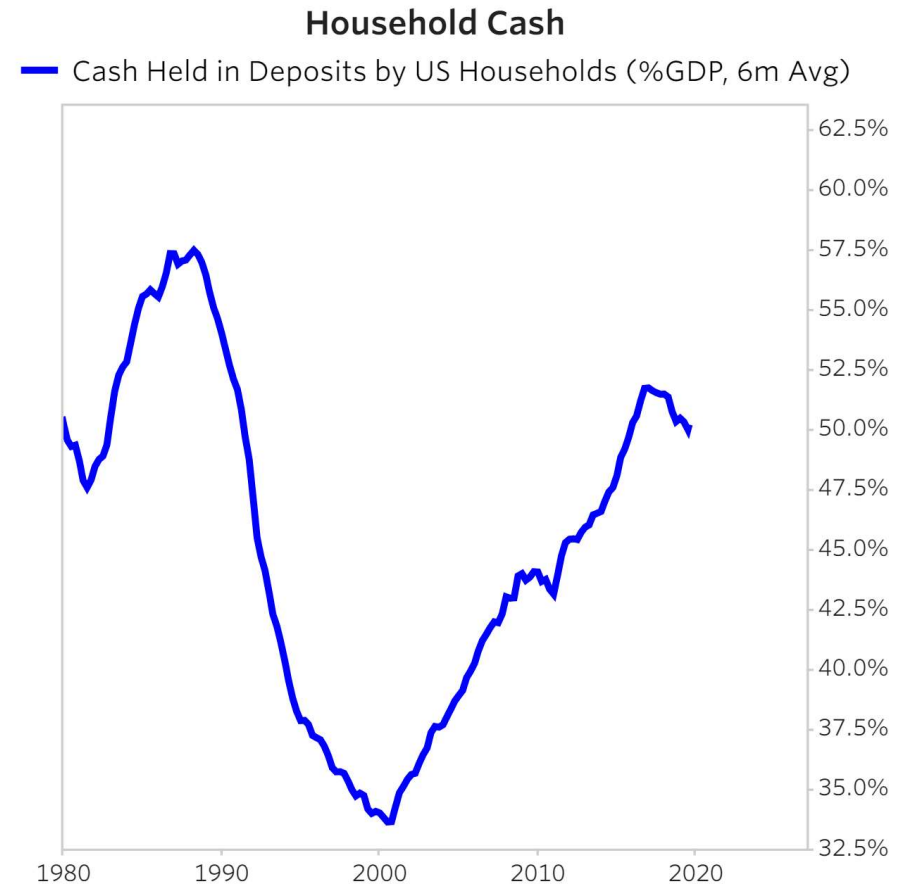
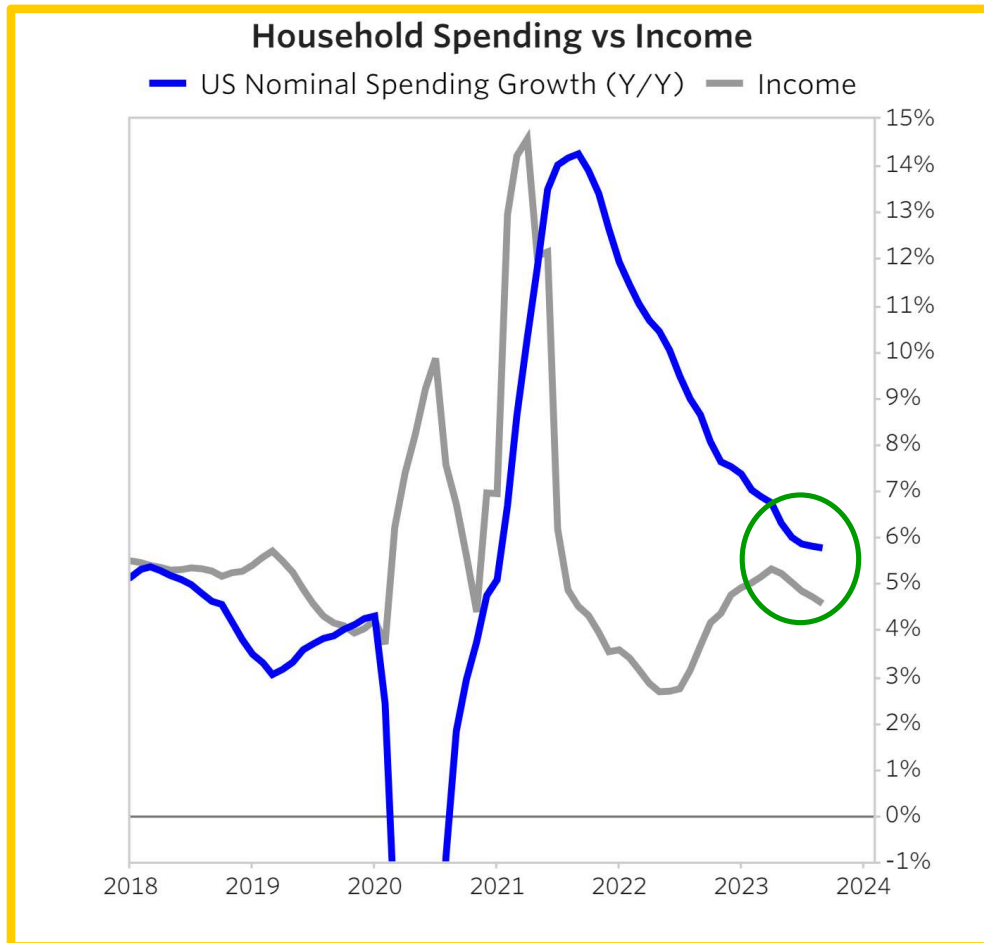


Assets Prices Have Bounced Back to Highs



FOR THE PAST YEAR, THE TIGHTENING HAS BEEN OFFSET BY HOUSEHOLDS SPENDING DOWN THEIR EXCESS SAVINGS...

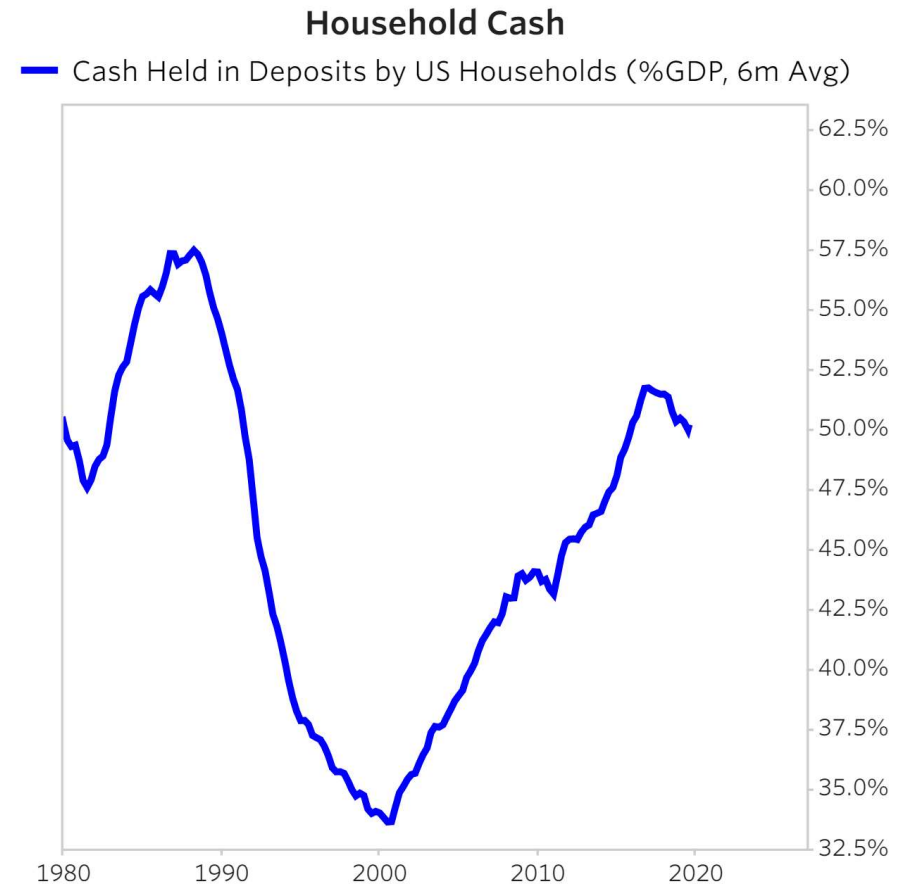
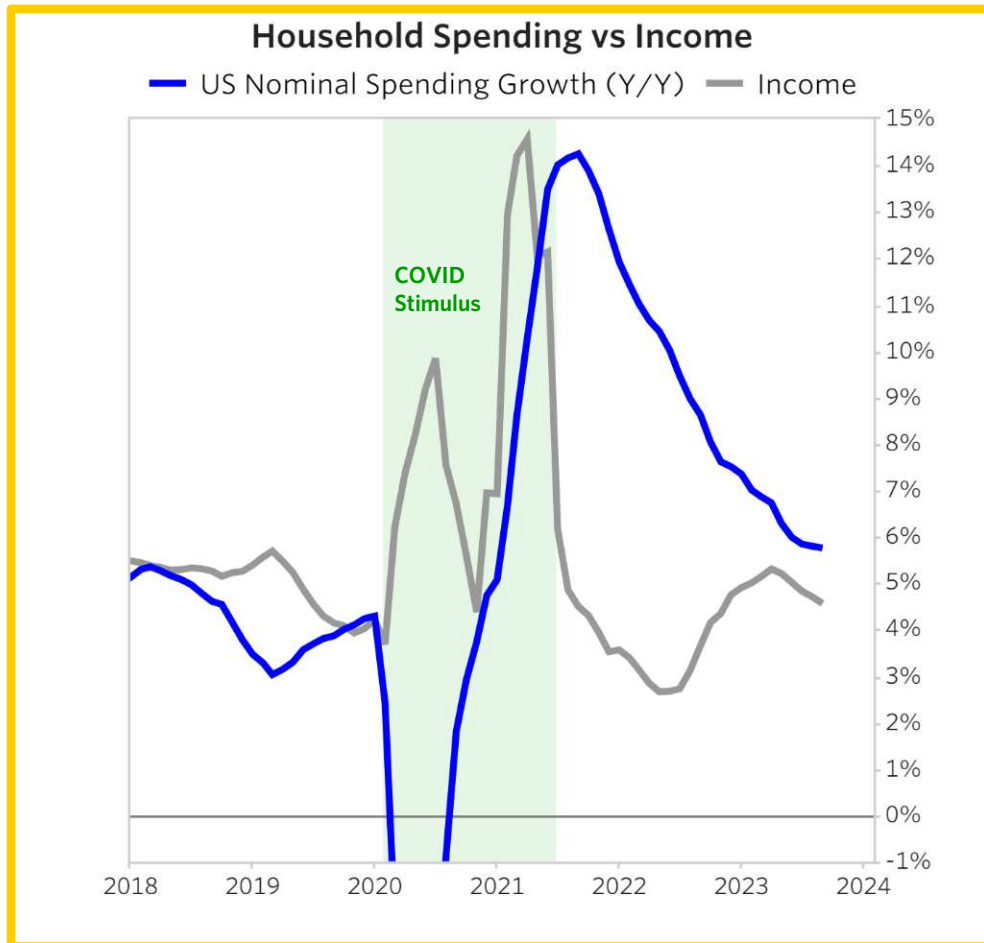
Strong Balance Sheets Funded by Government Transfers Supported Household Spending



Estimates are based on Bridgewater analysis. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

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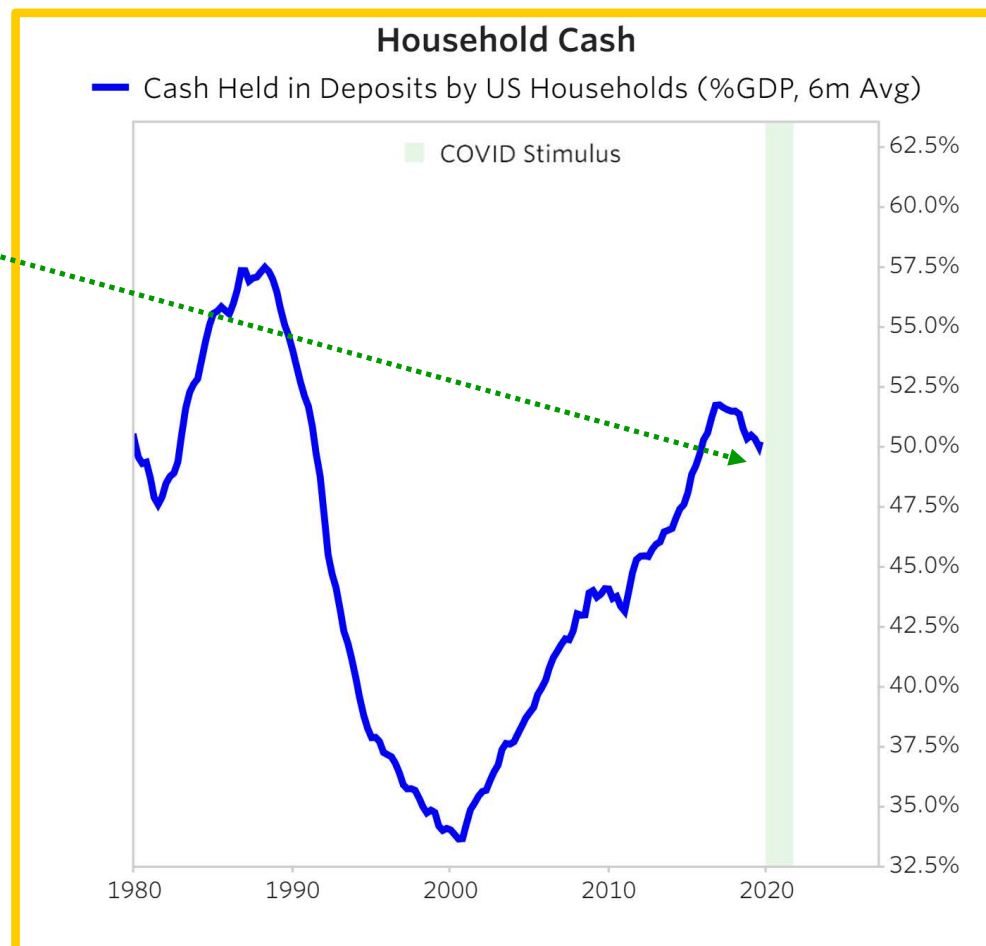
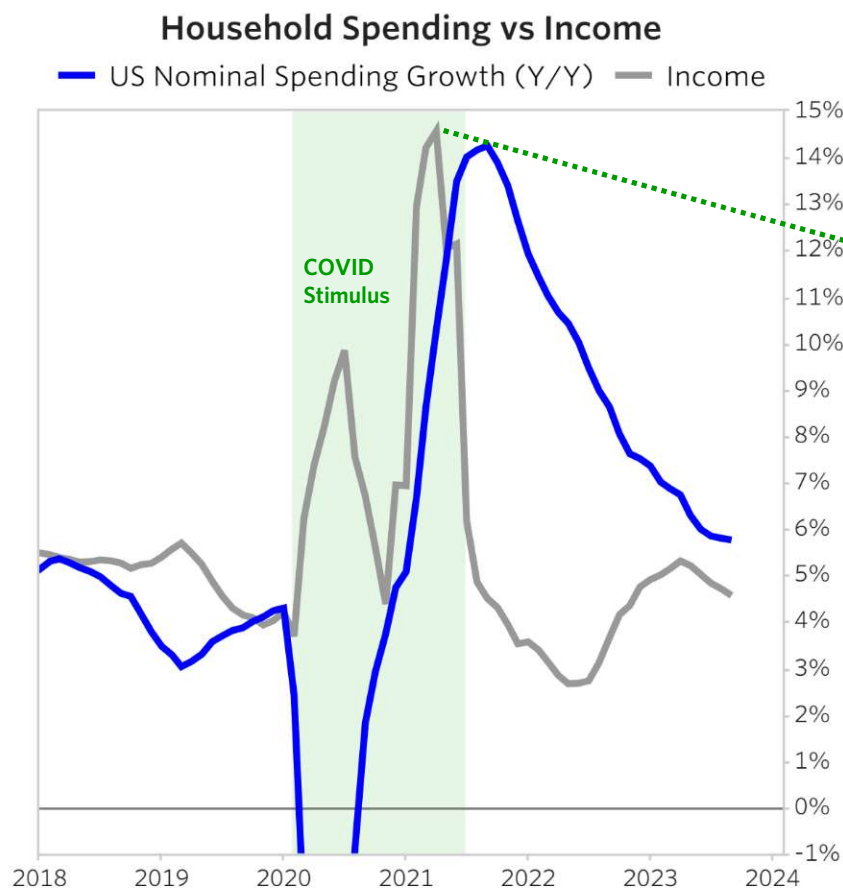
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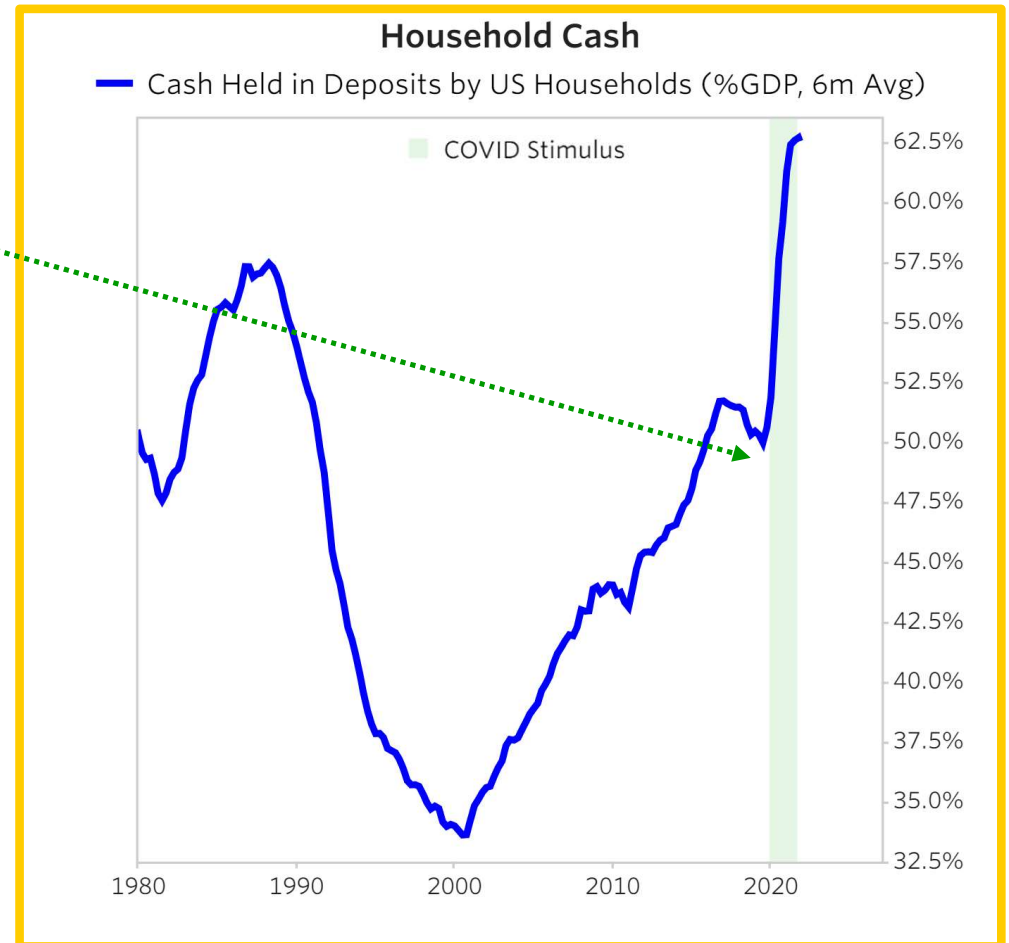
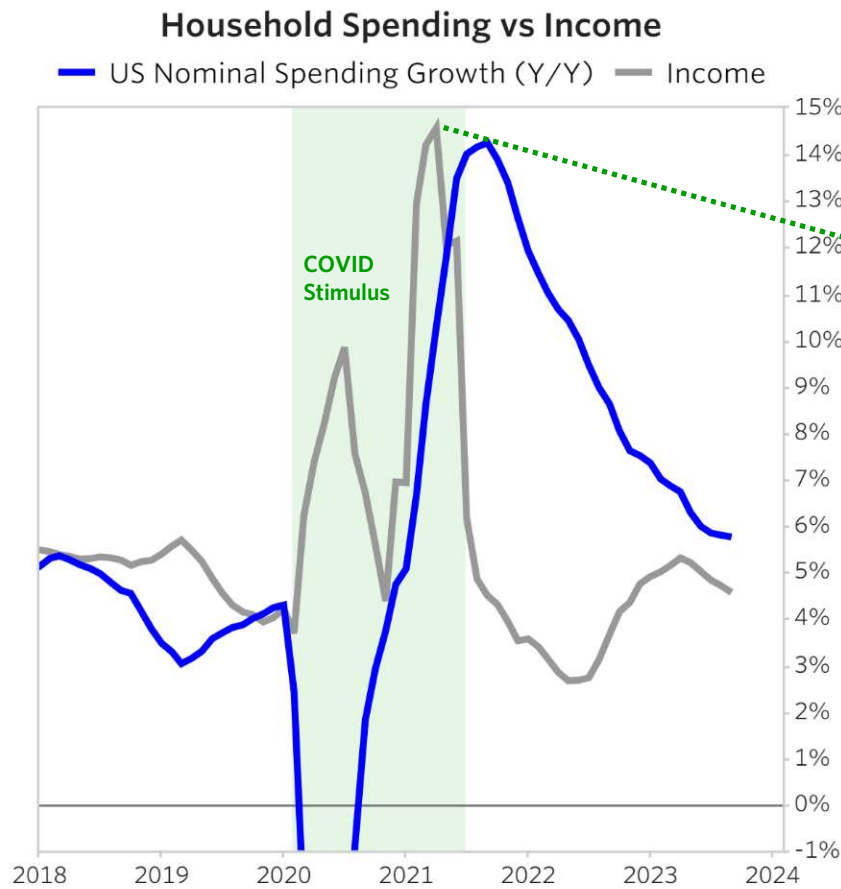
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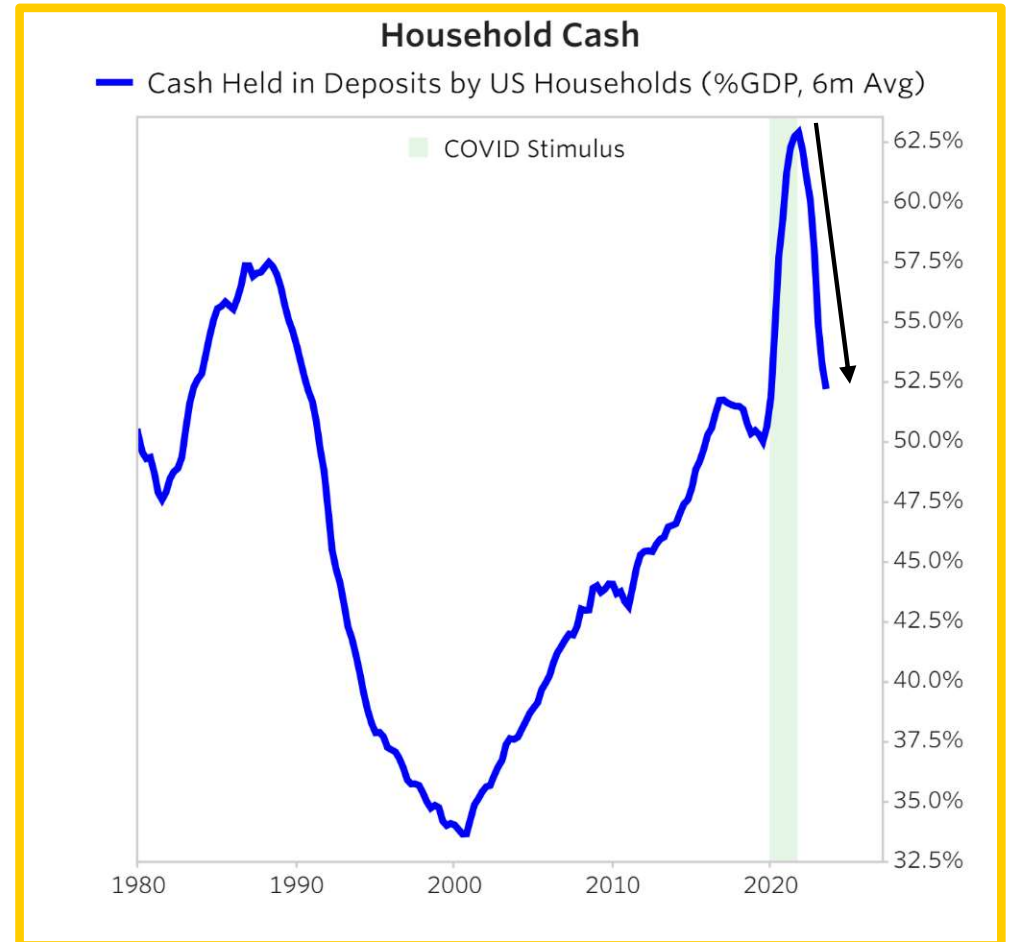
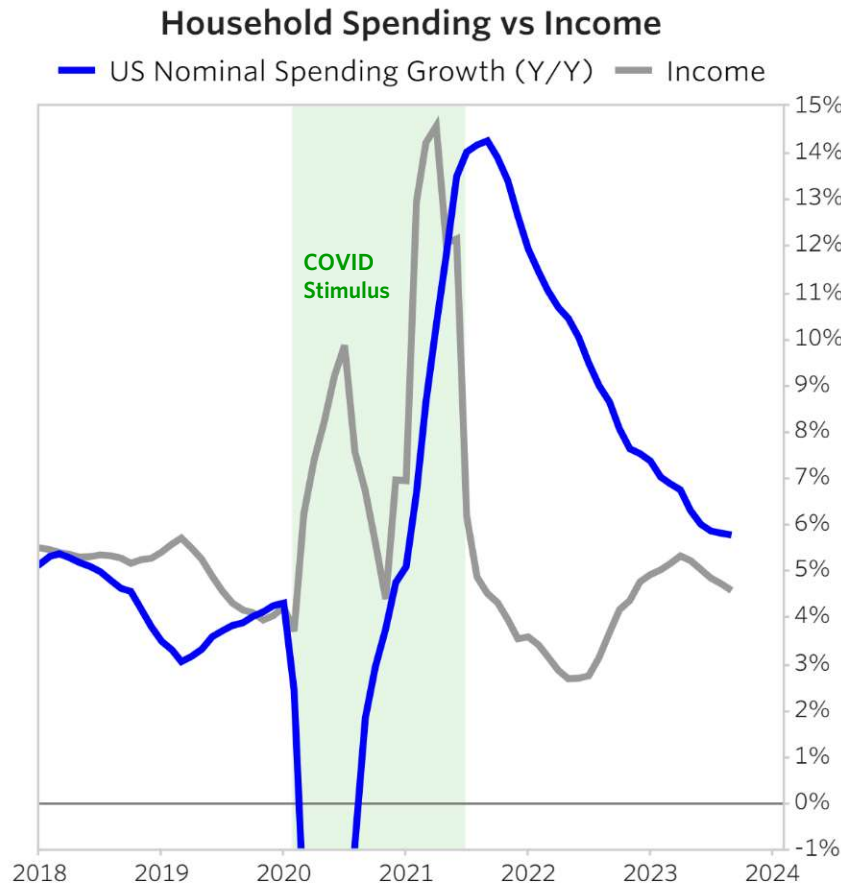
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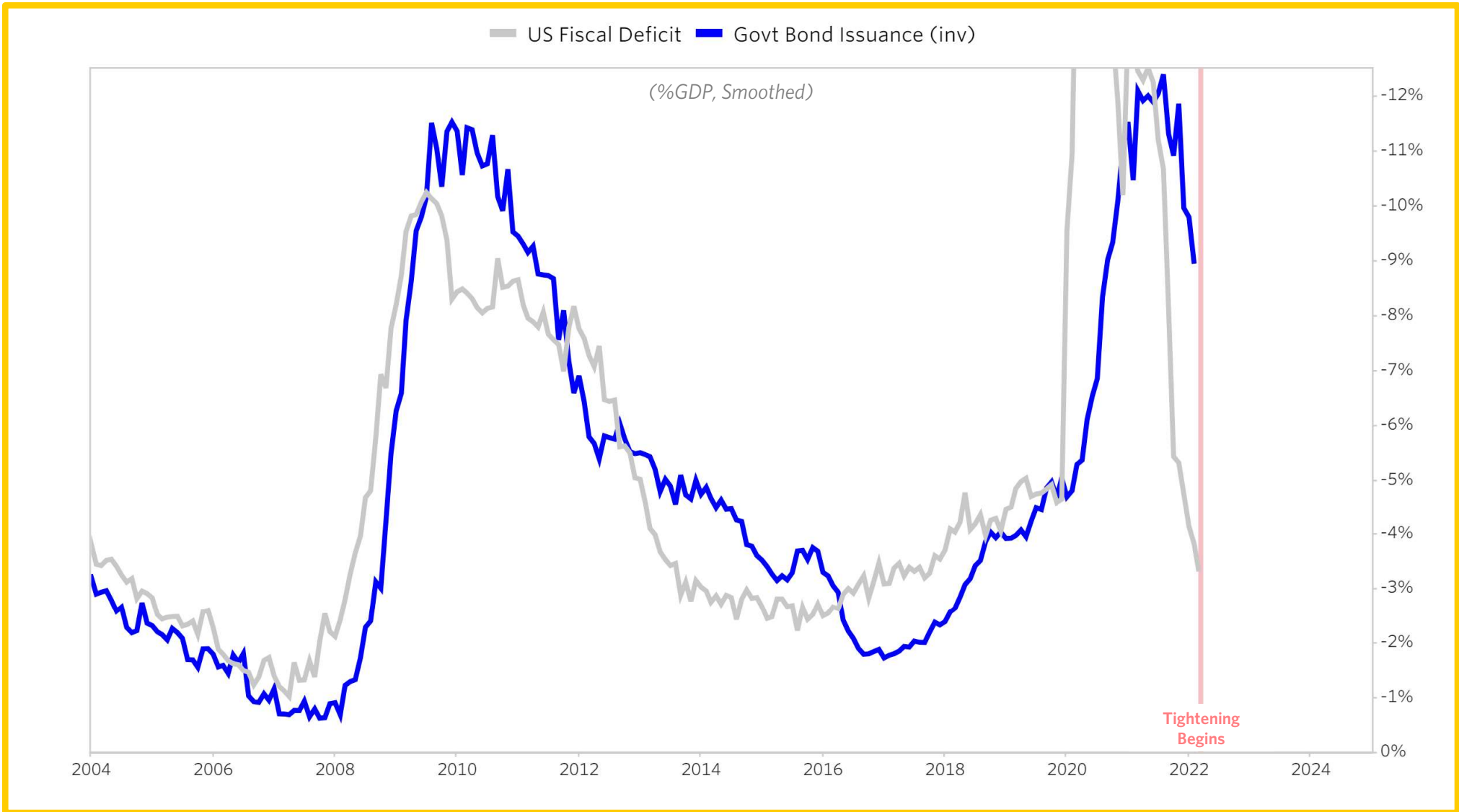
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...AND A LARGE BUDGET DEFICIT FUNDED WITHOUT DURATION

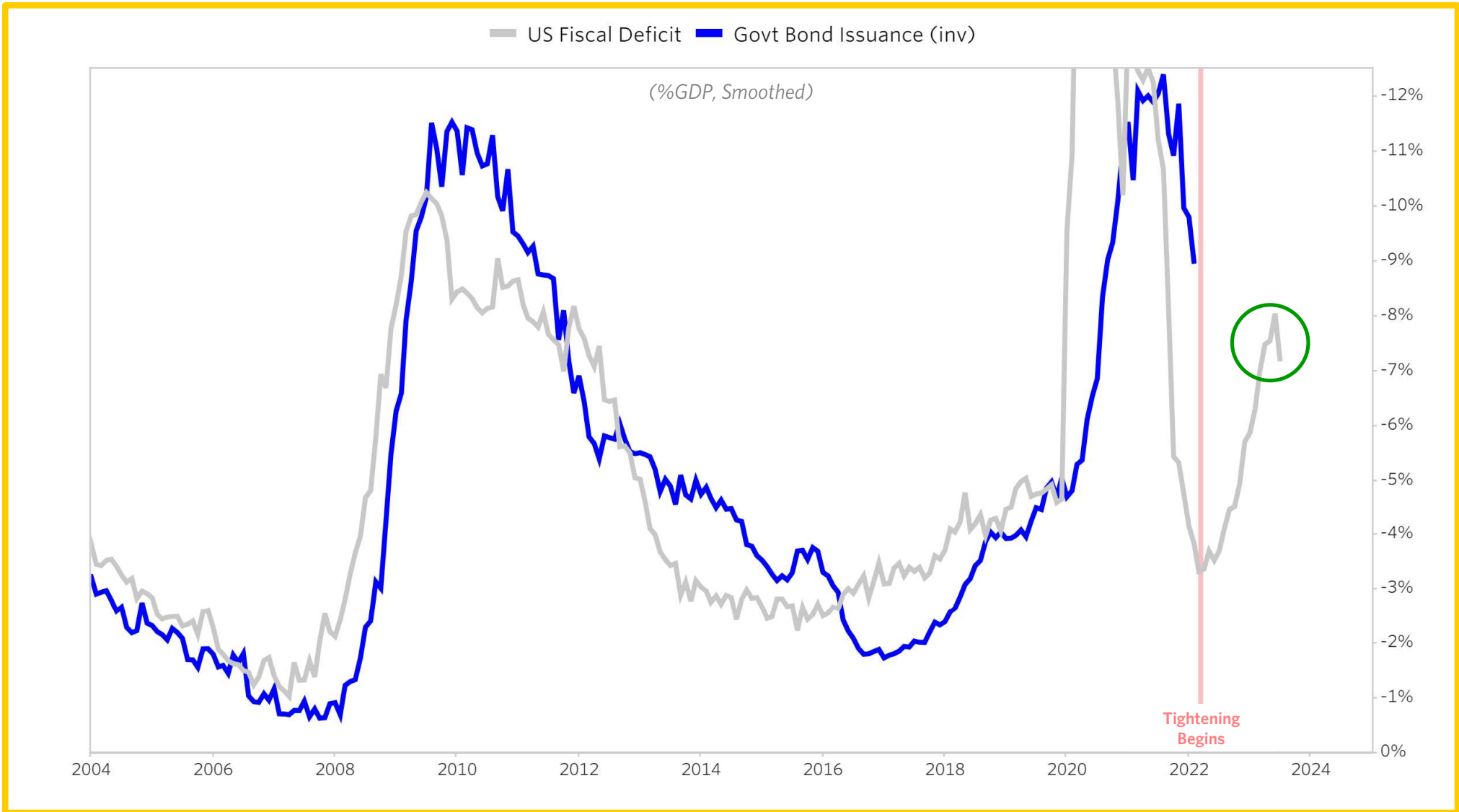
The Treasury Funded a Big Deficit Expansion Without Bond Issuance, Offsetting the Impact of QT



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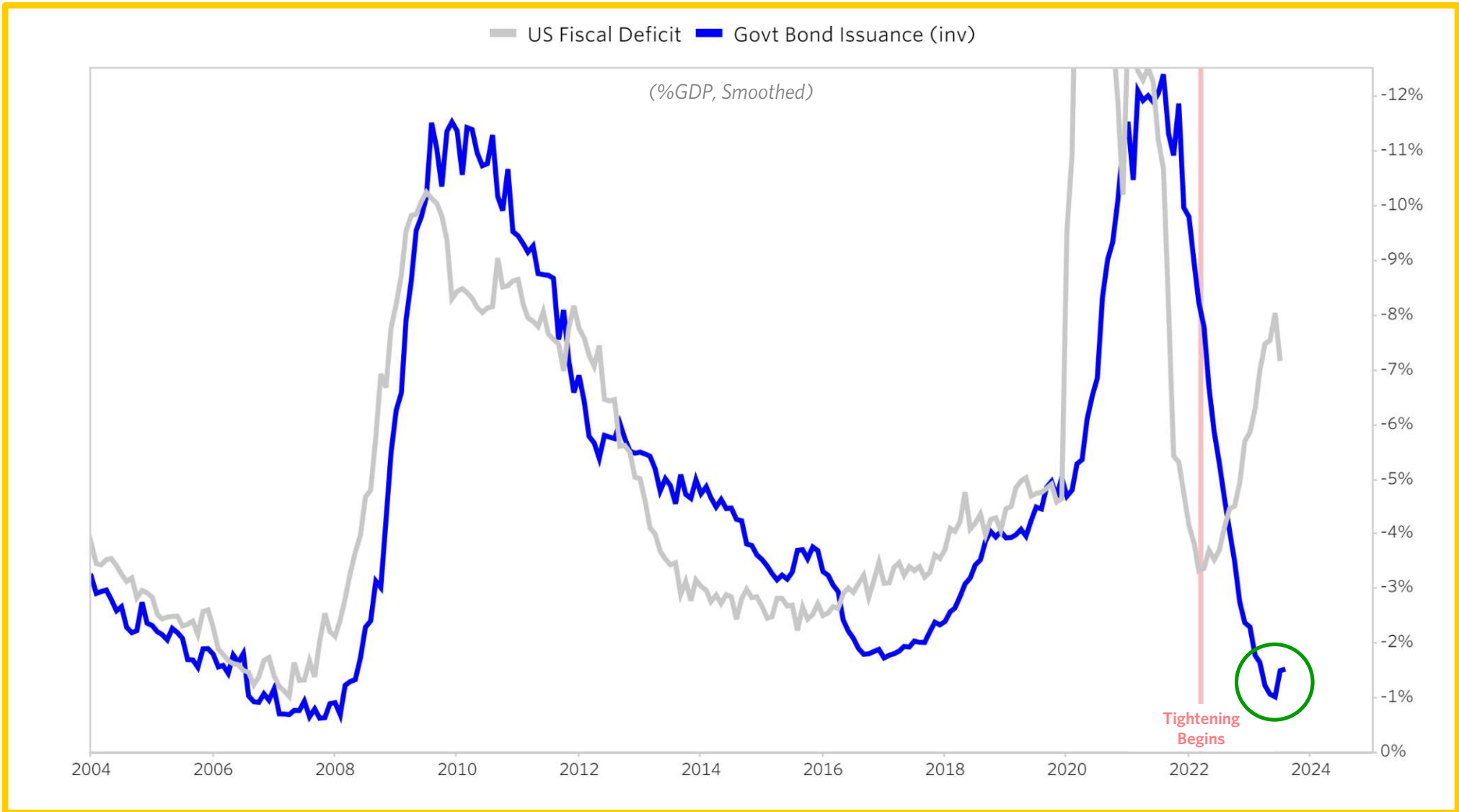
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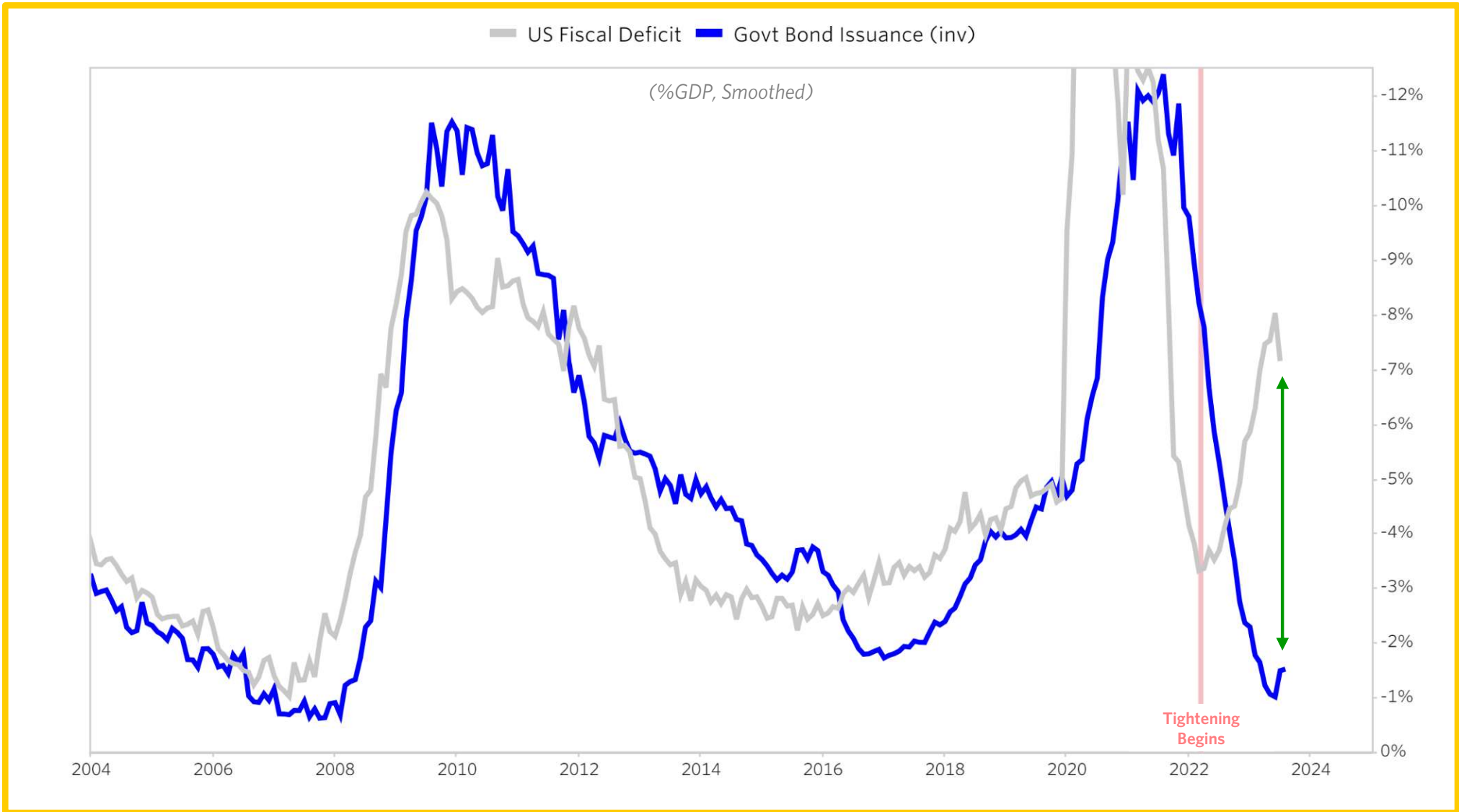
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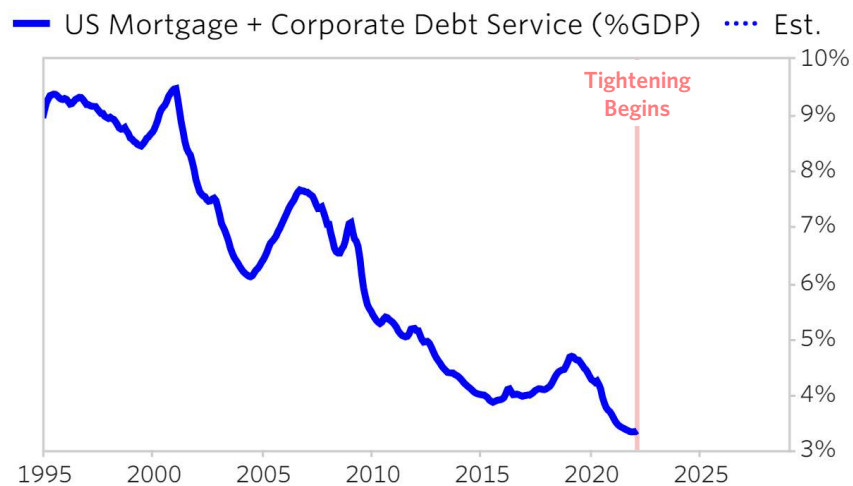
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Where We Are Headed

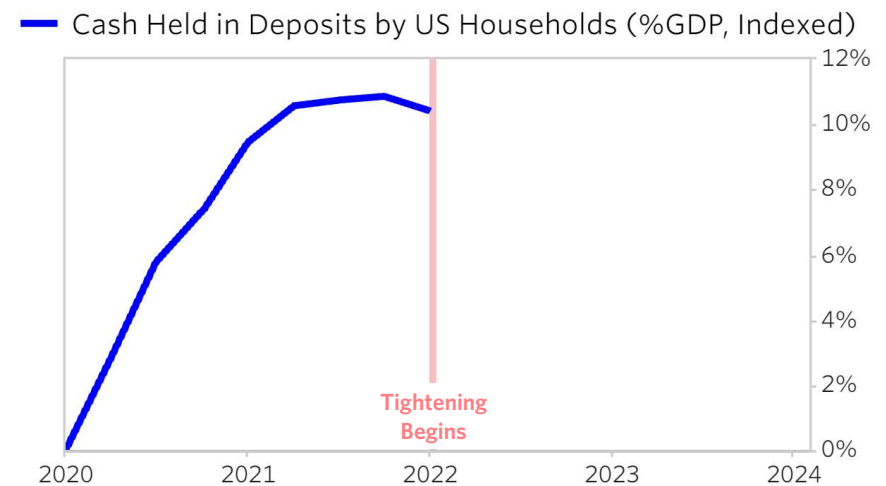
WE EXPECT GROWTH TO GRIND LOWER AS PAST SUPPORTS FADE AND HIGHER RATES BITE



Private Sector Debt Service



Household Cash



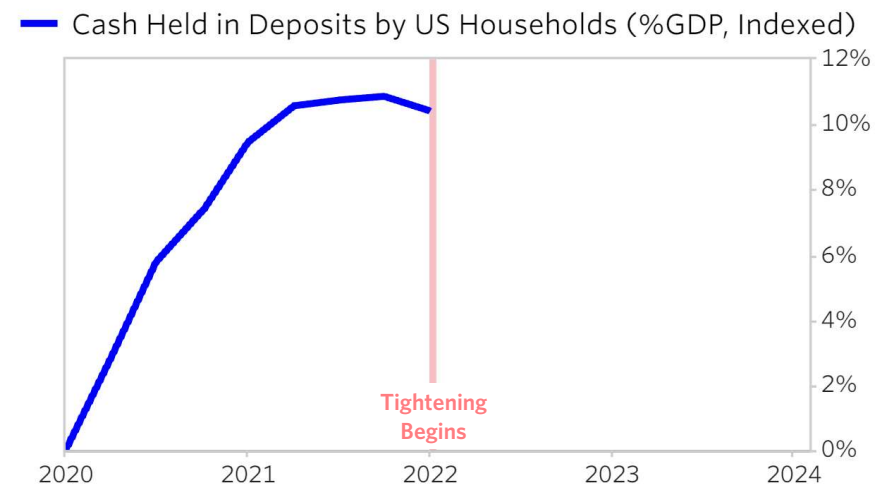
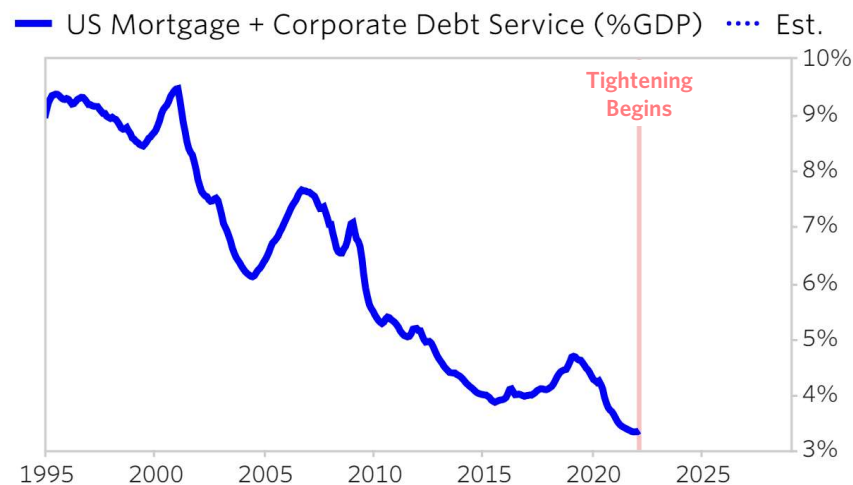
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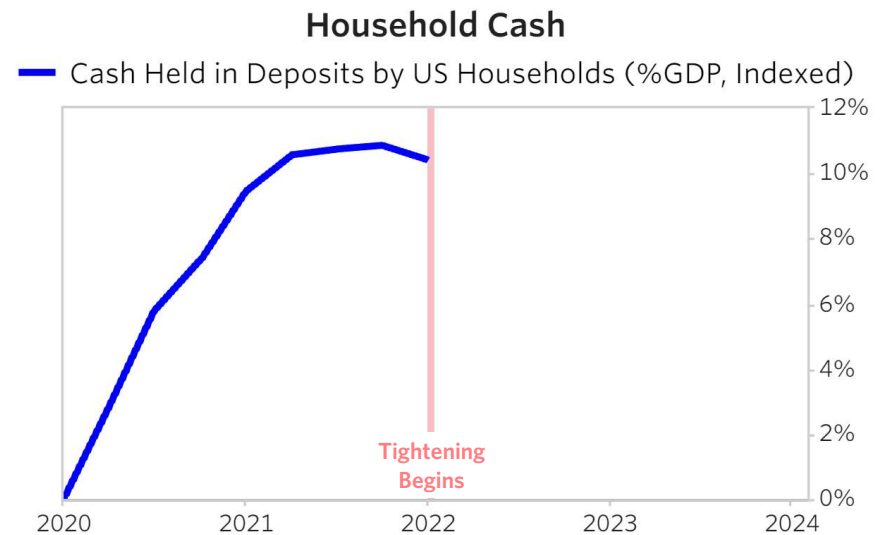
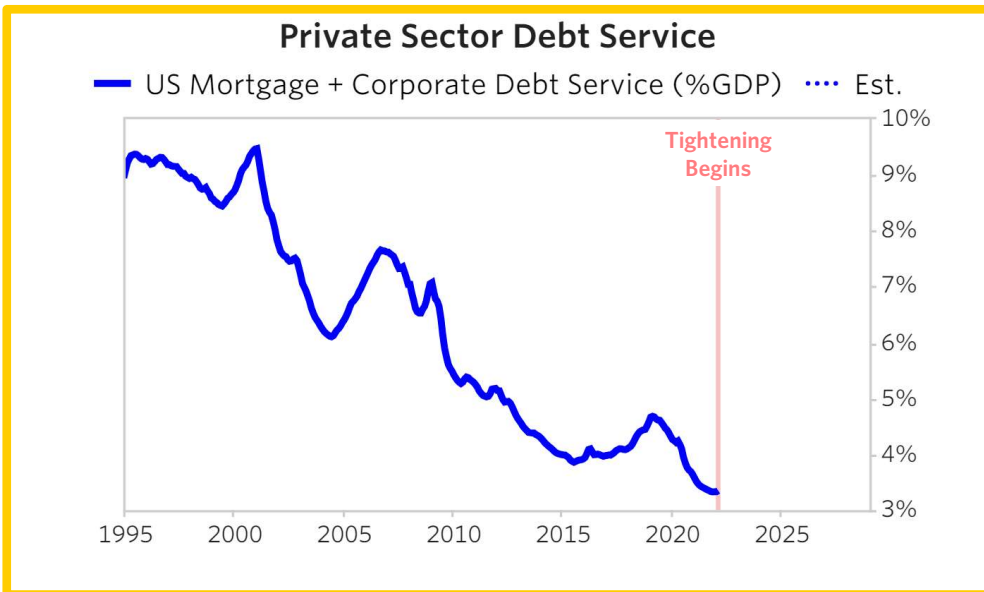
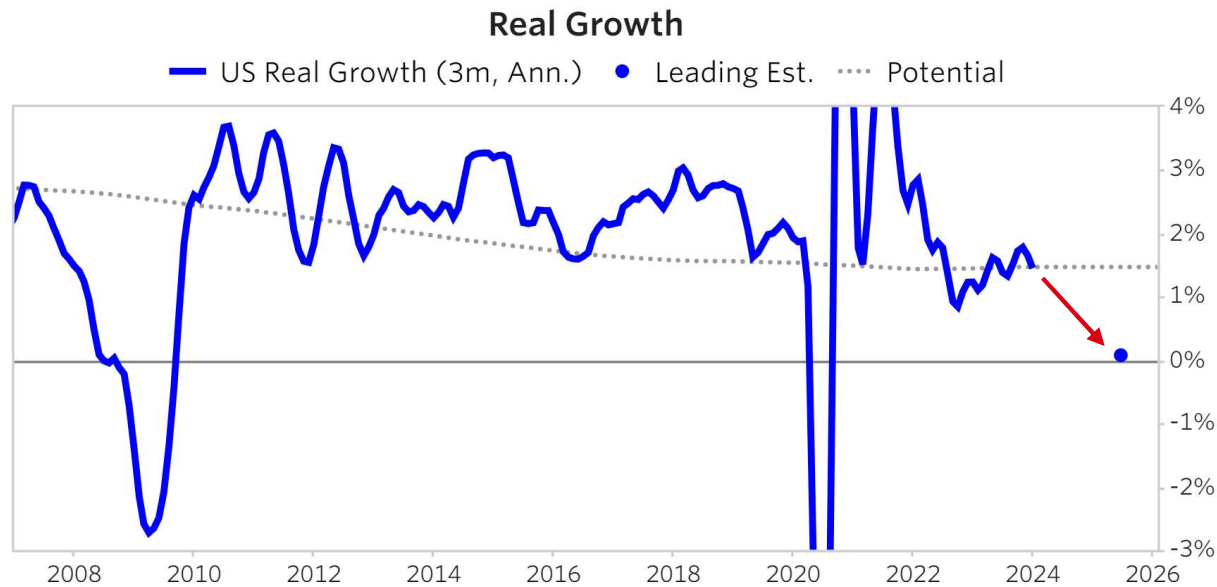
Private Sector Debt Service

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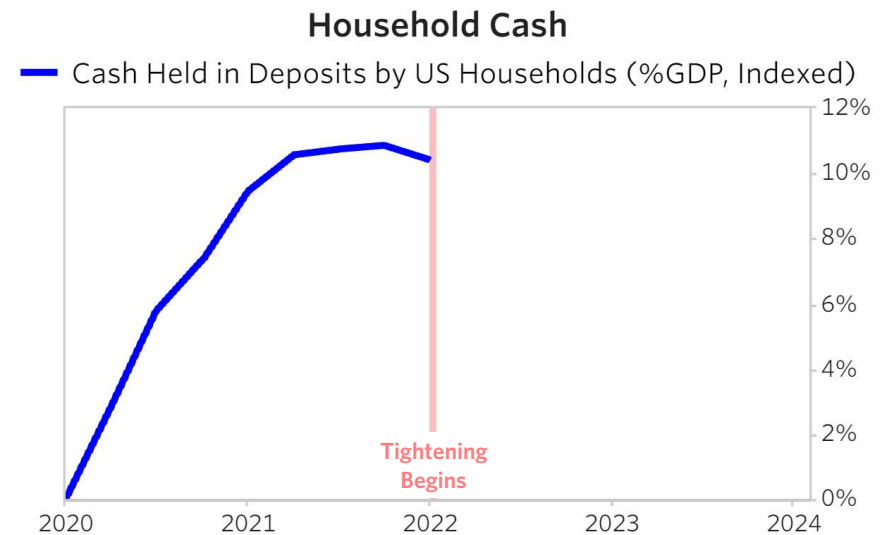
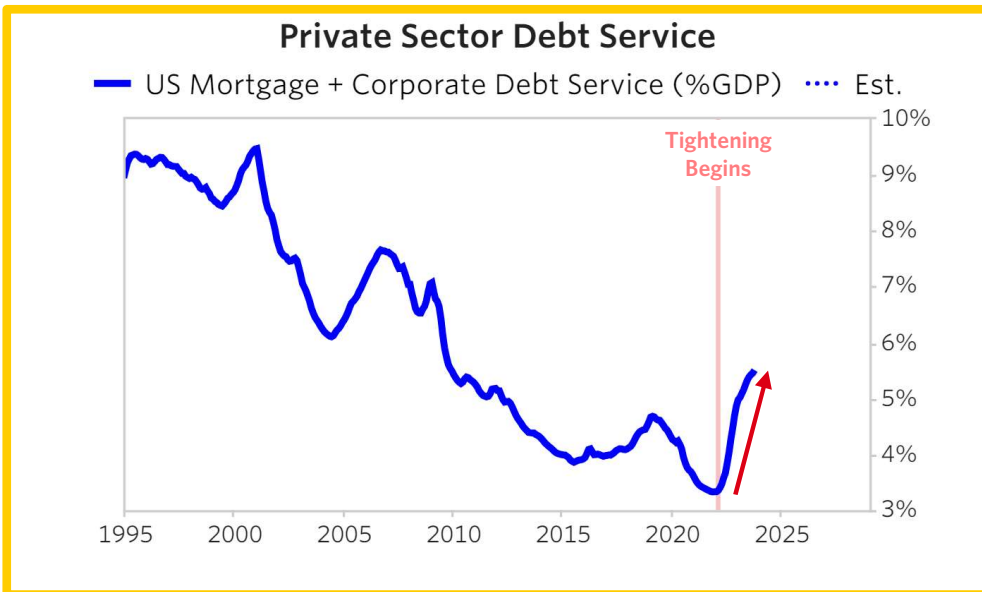
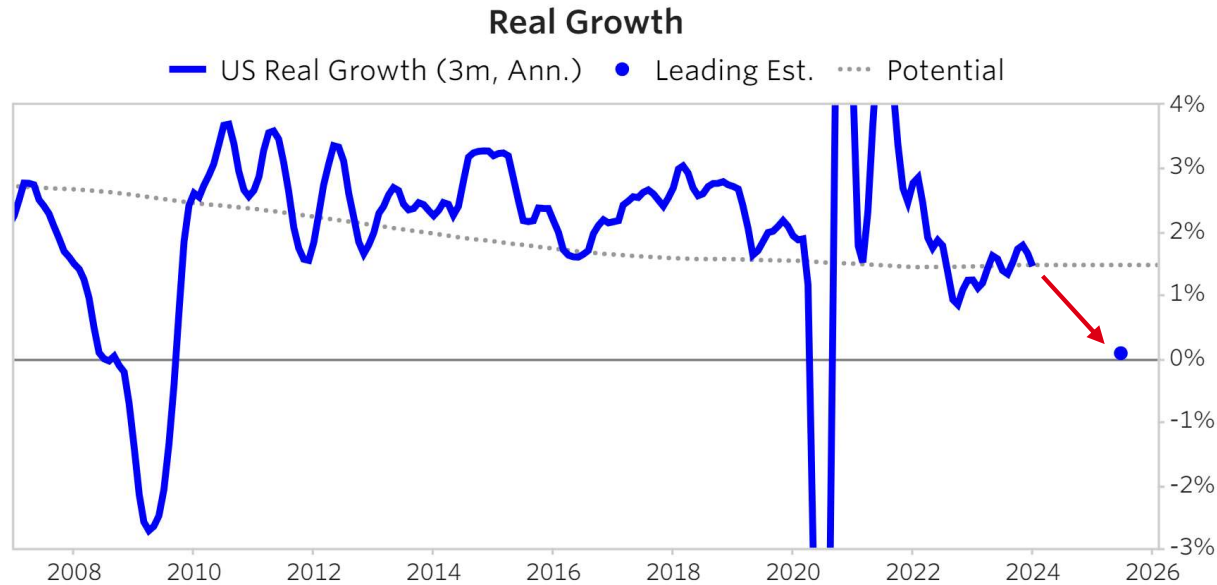
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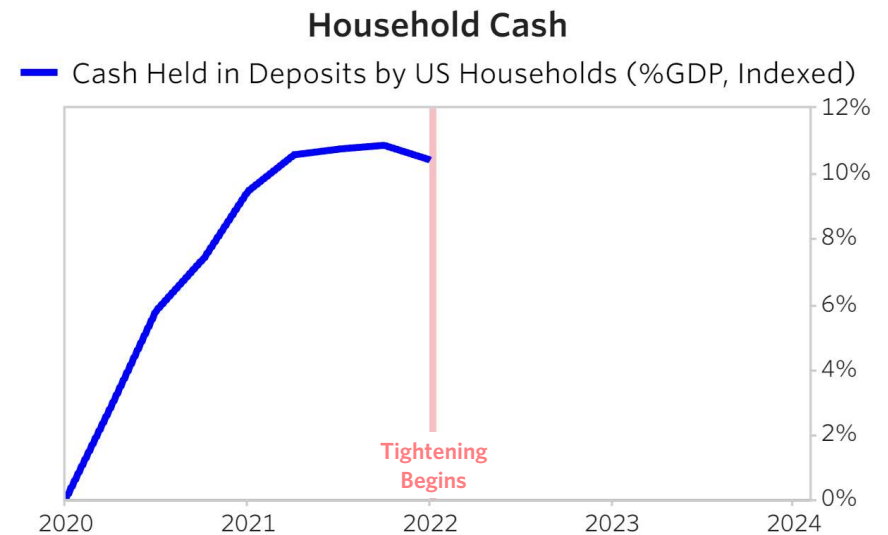
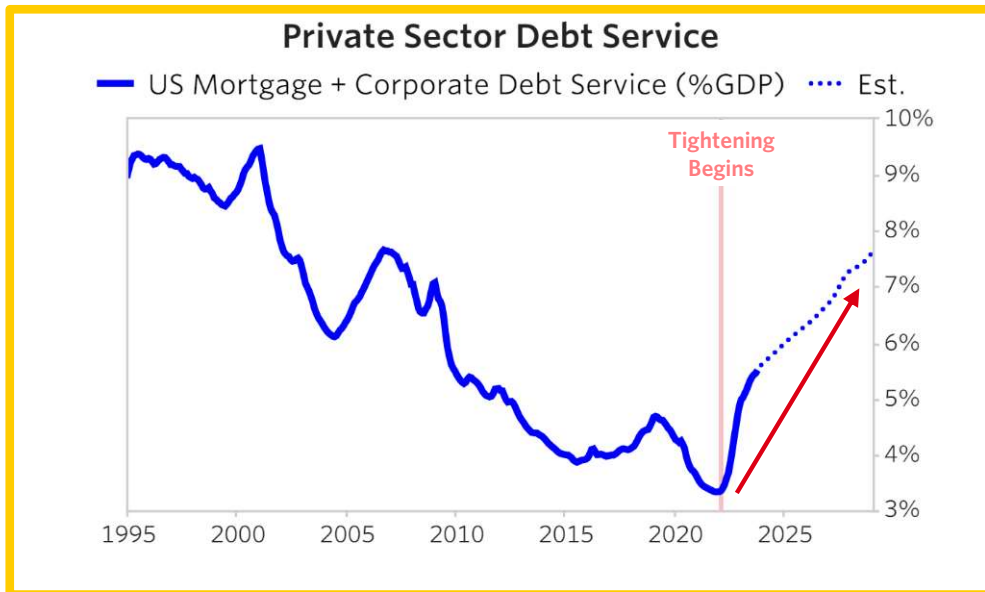
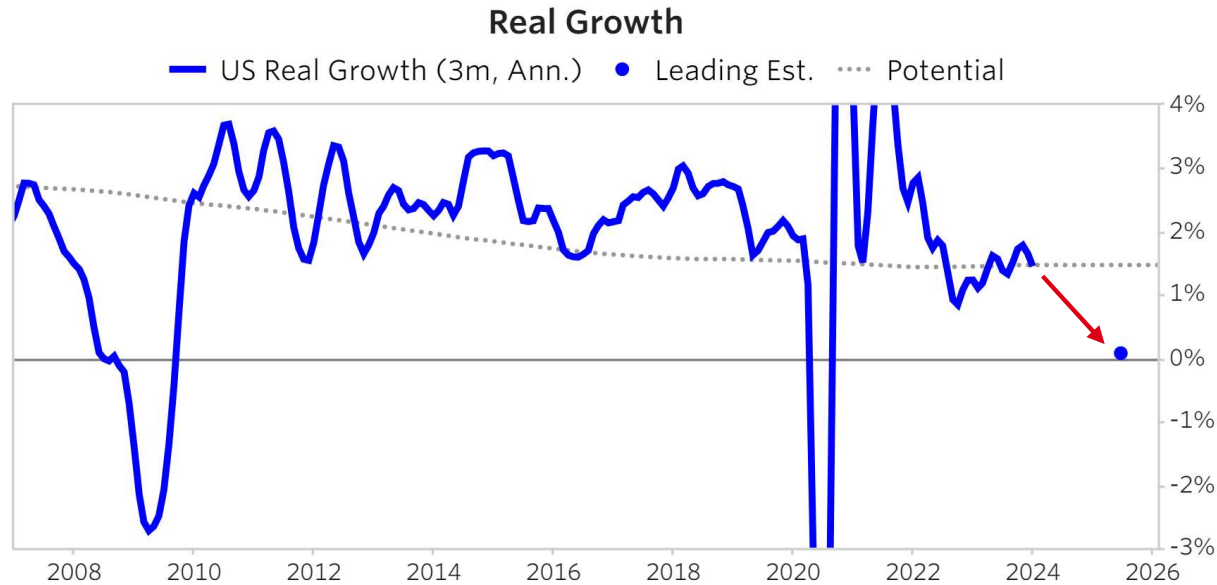
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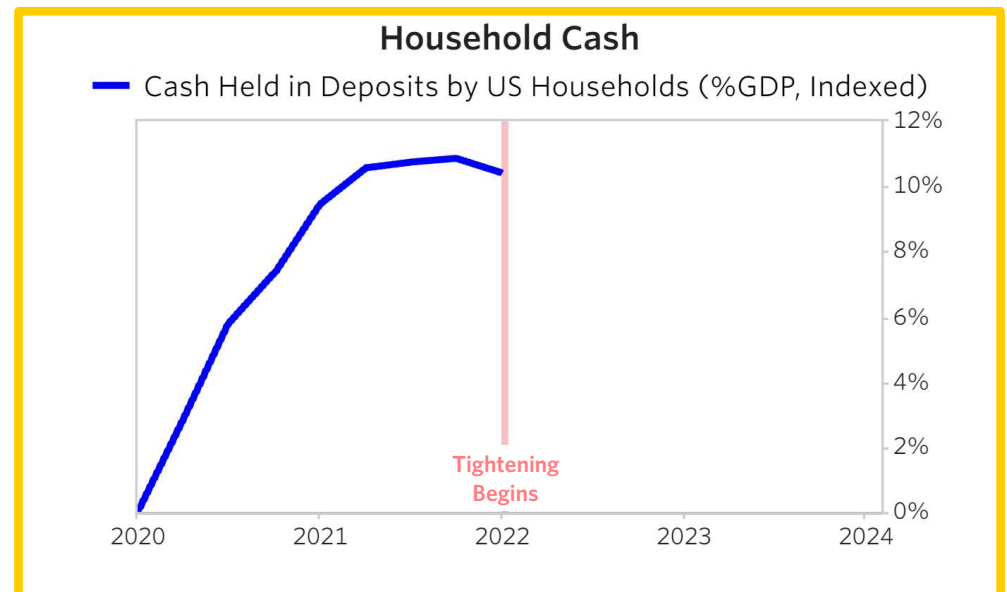
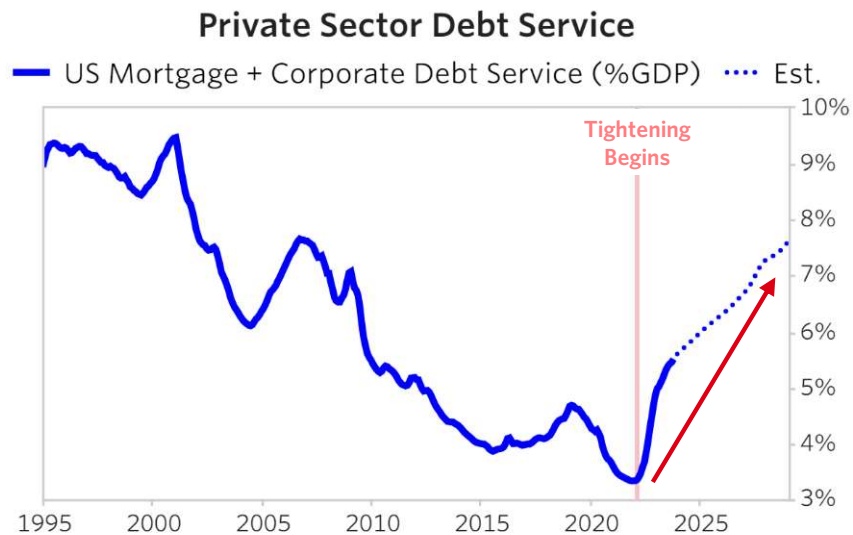
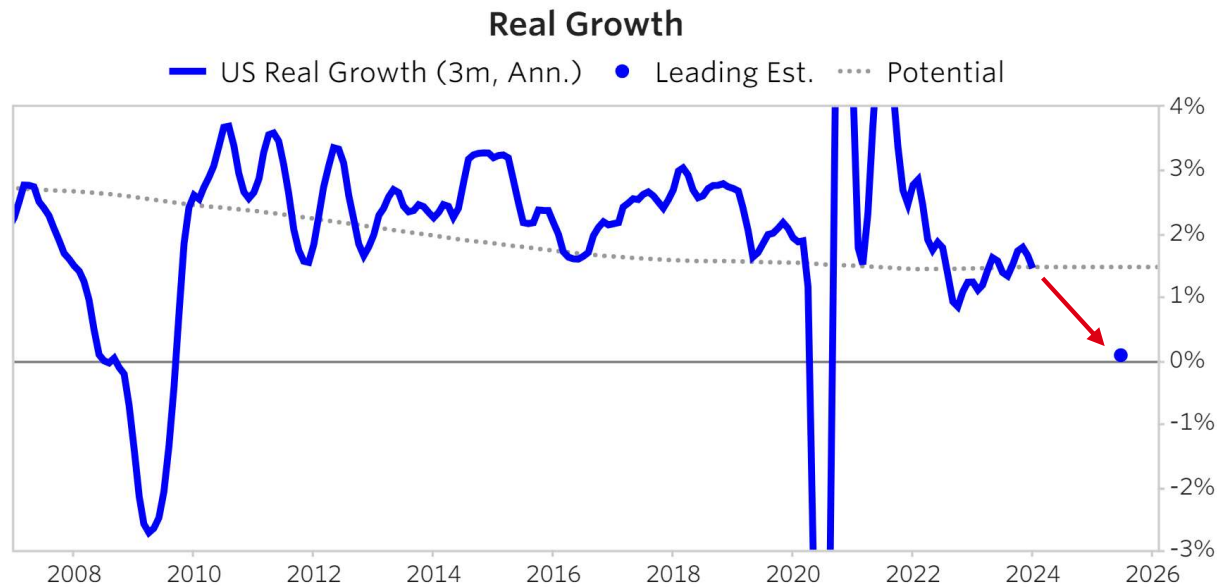
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WE EXPECT GROWTH TO GRIND LOWER AS PAST SUPPORTS FADE AND HIGHER RATES BITE

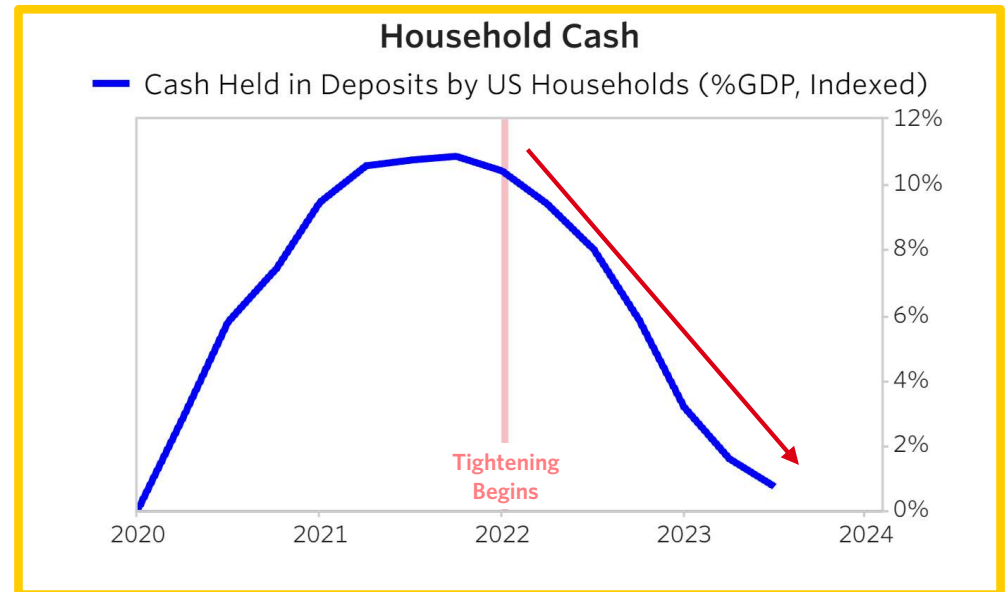
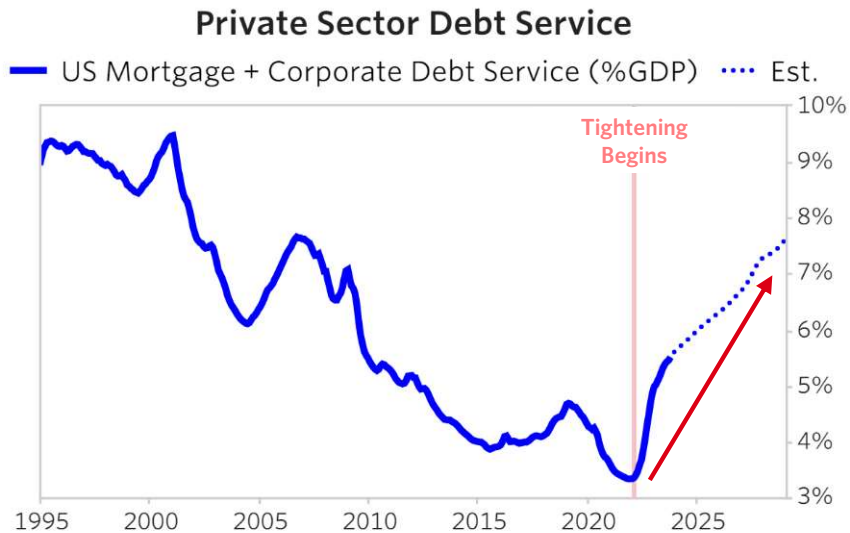
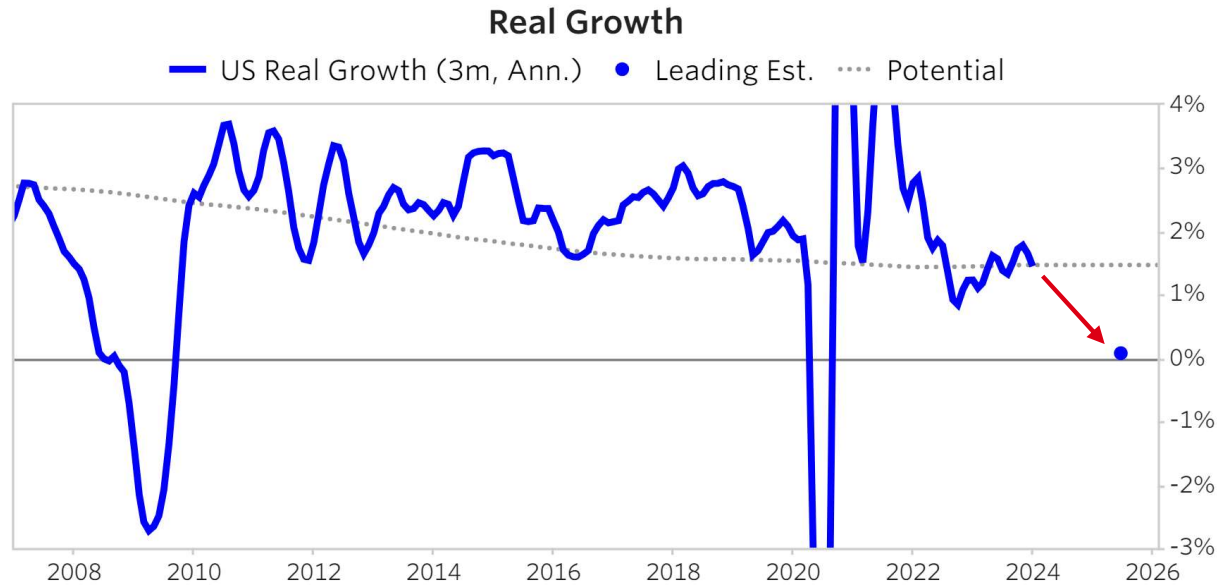


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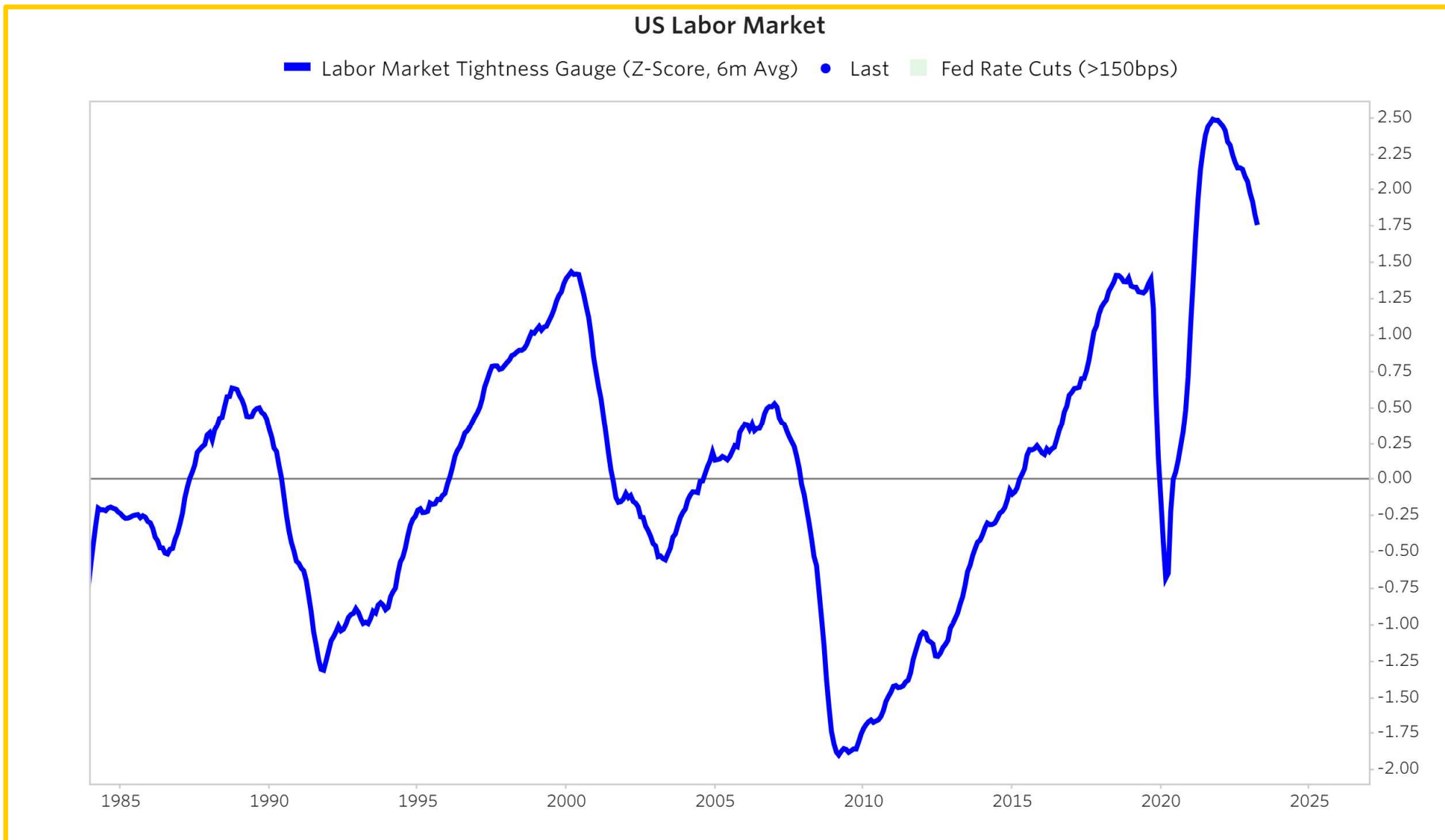
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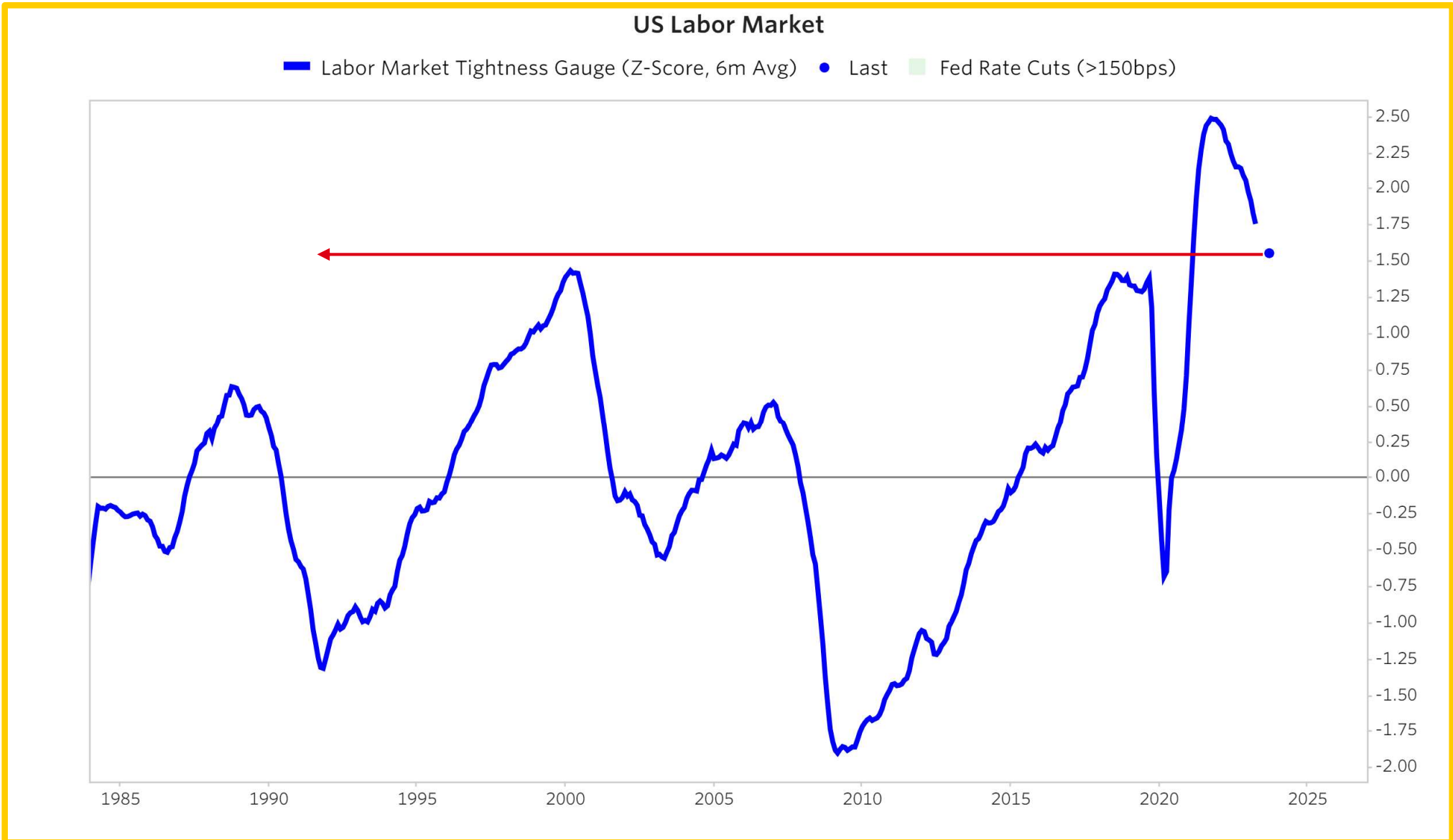


WITH LABOR MARKETS VERY TIGHT, A GRADUAL SLOWDOWN IN GROWTH LIKELY WON'T TRIGGER A MAJOR FED PIVOT



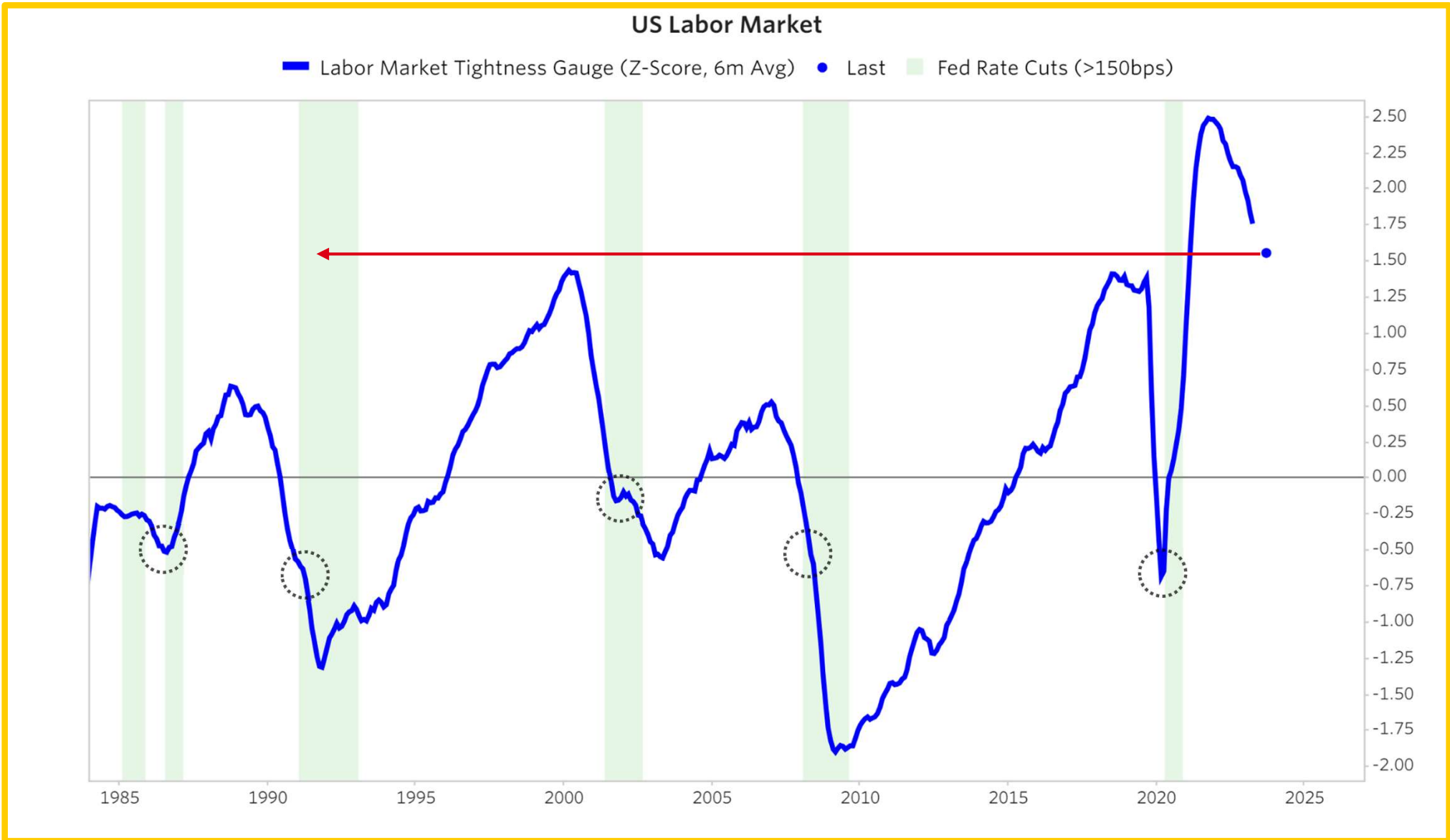
Estimates are based on Bridgewater analysis. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

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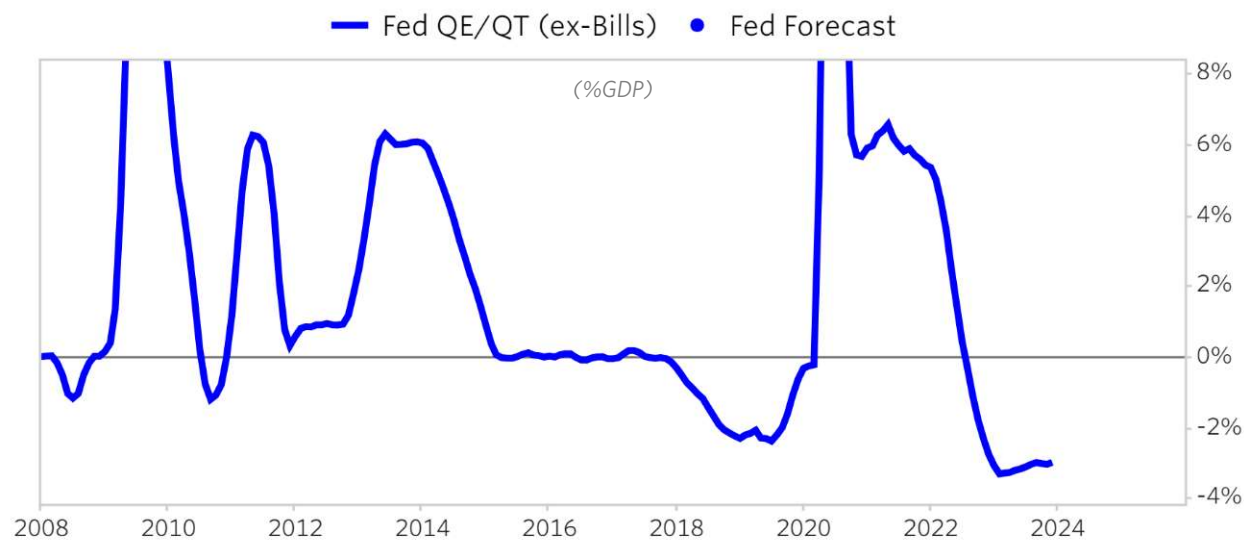
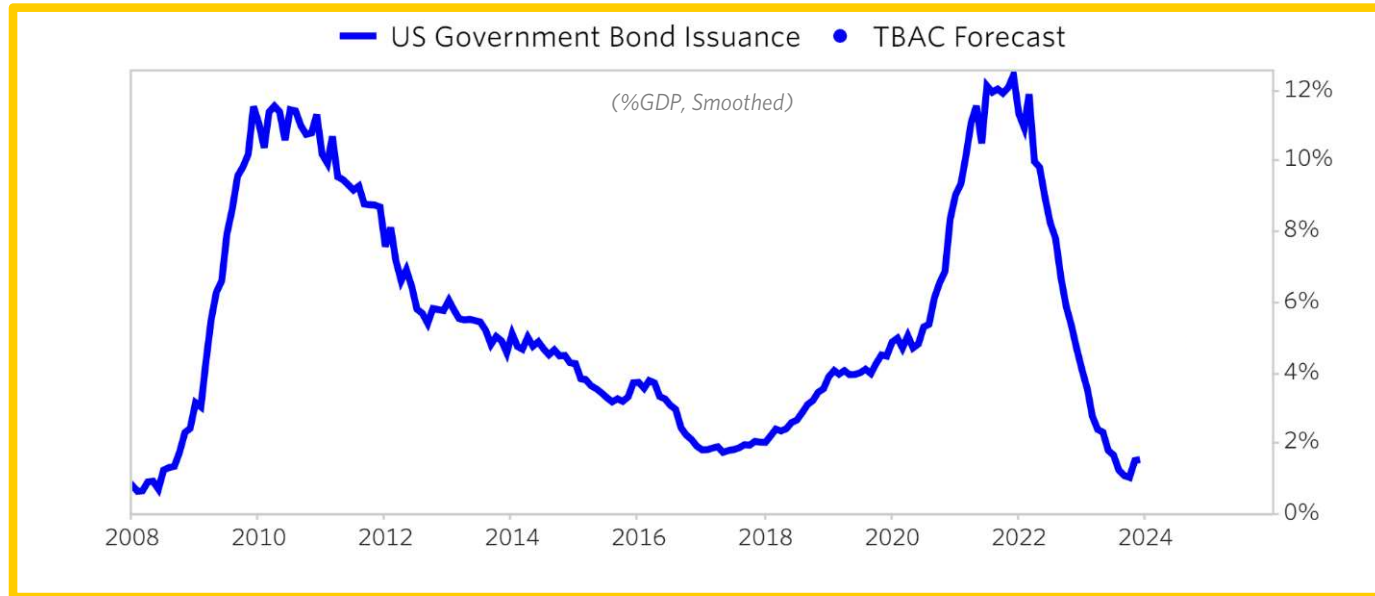
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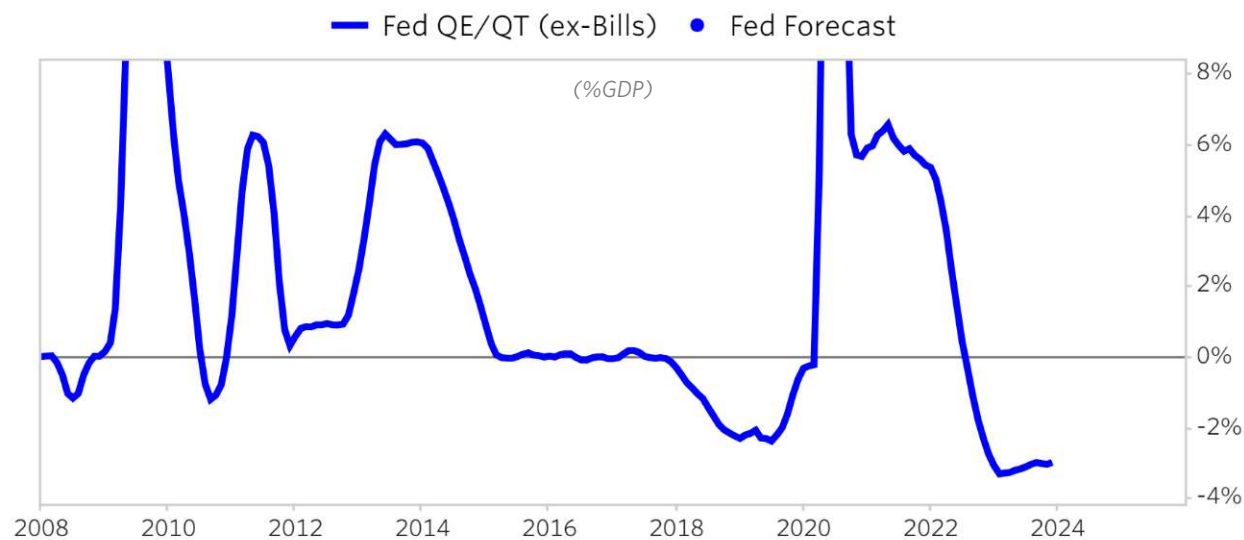
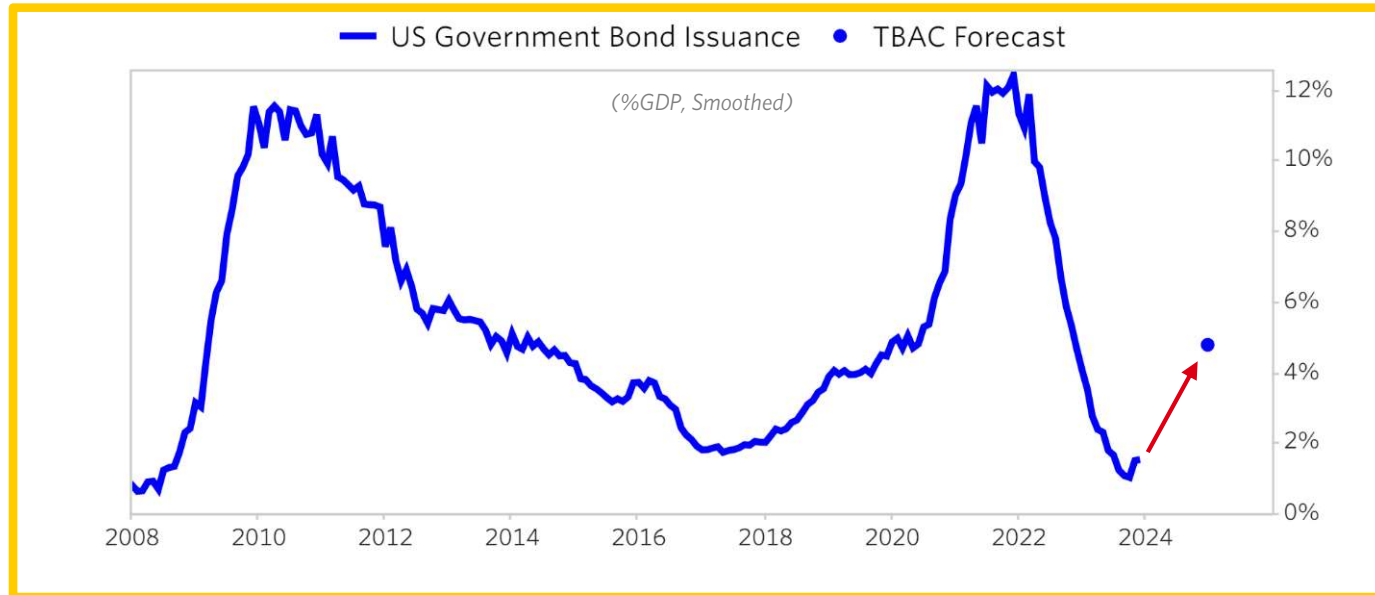
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A LESS SUPPORTIVE ECONOMIC ENVIRONMENT FOR ASSETS IS COMPOUNDED BY RECEDING LIQUIDITY...



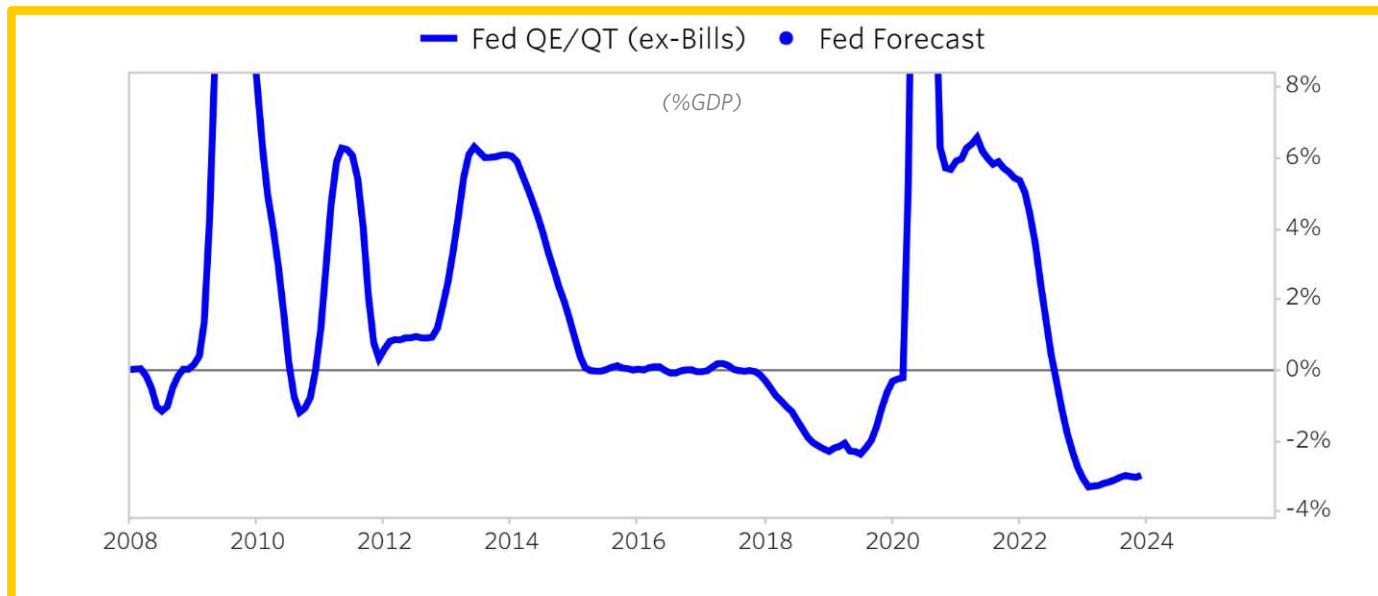
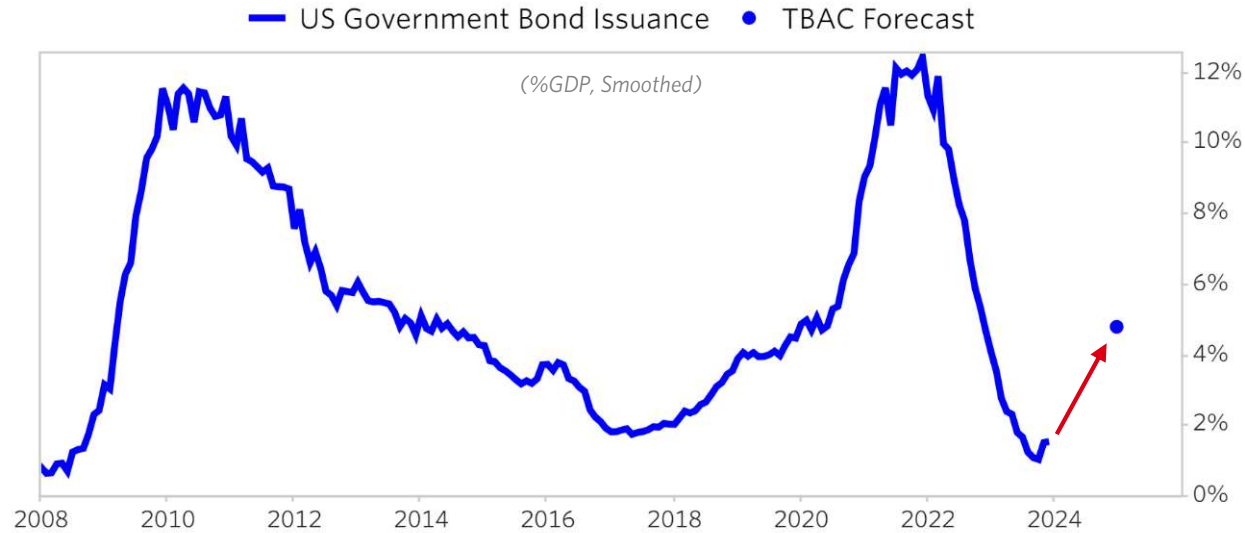
A LESS SUPPORTIVE ECONOMIC ENVIRONMENT FOR ASSETS IS COMPOUNDED BY RECEDING LIQUIDITY...

Bond Issuance Is Set to Pick Up as the Treasury Normalizes Its Funding Mix



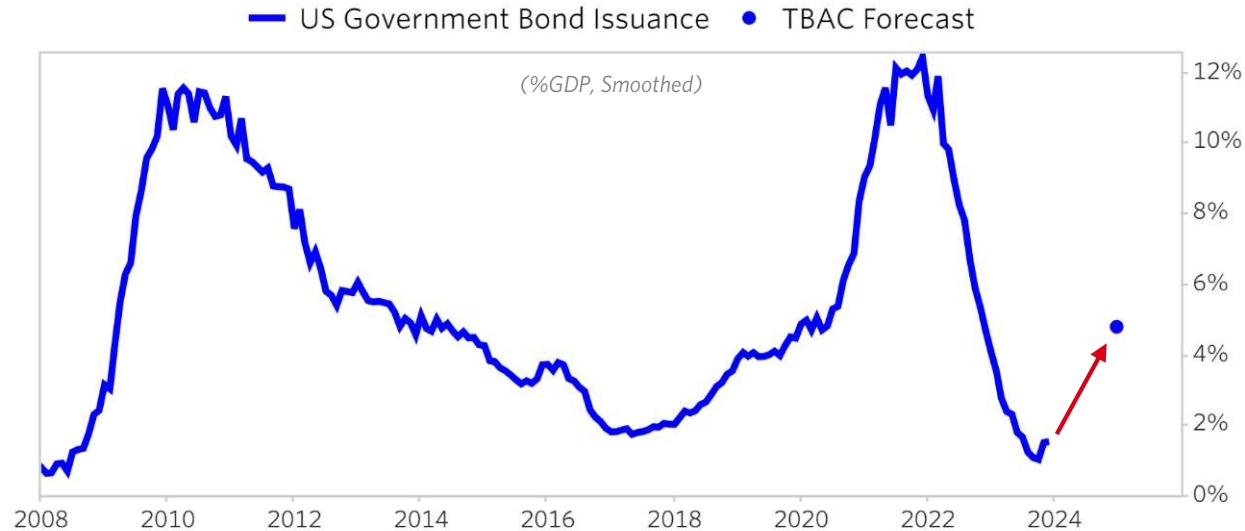
A LESS SUPPORTIVE ECONOMIC ENVIRONMENT FOR ASSETS IS COMPOUNDED BY RECEDING LIQUIDITY...

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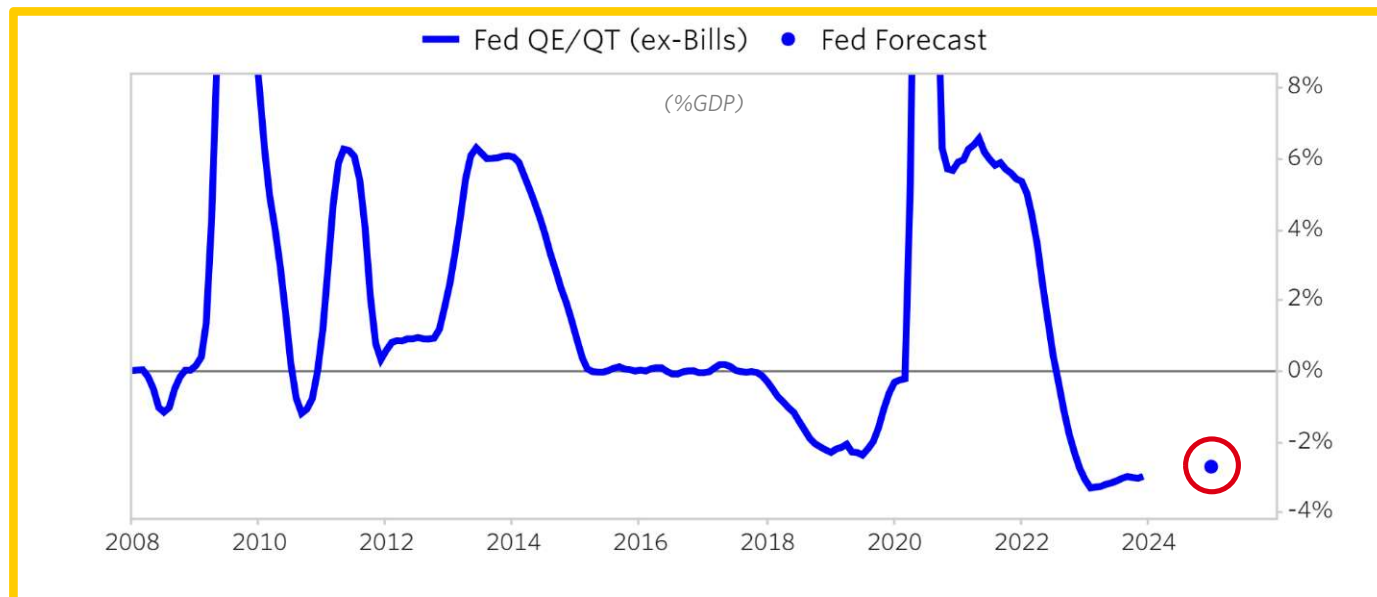


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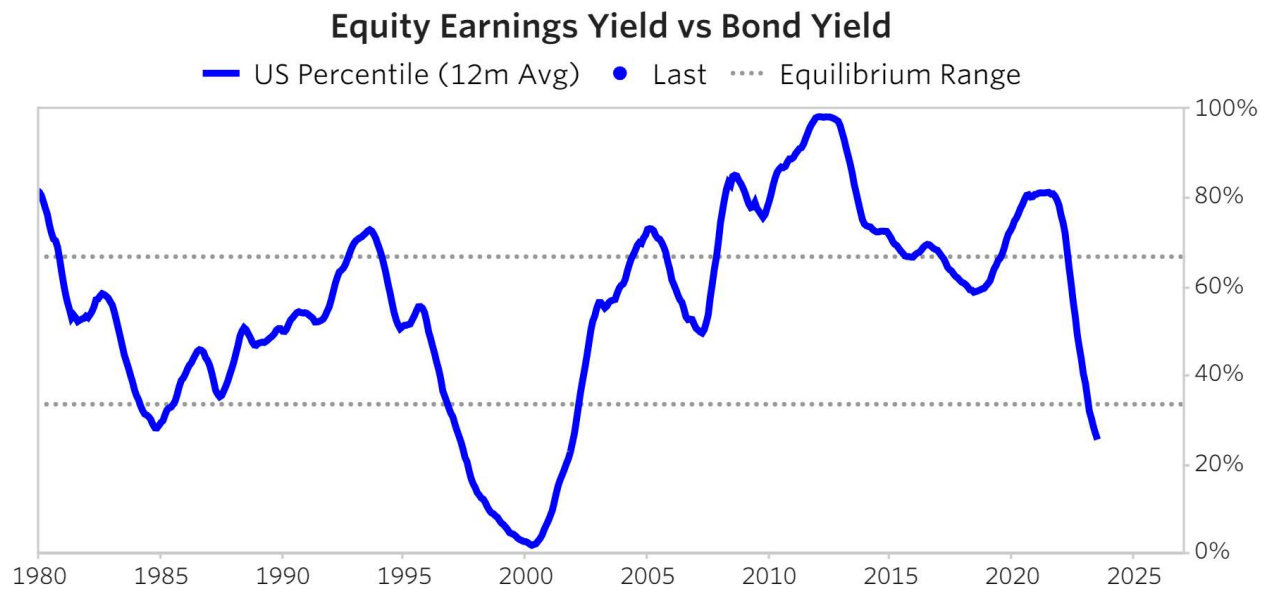
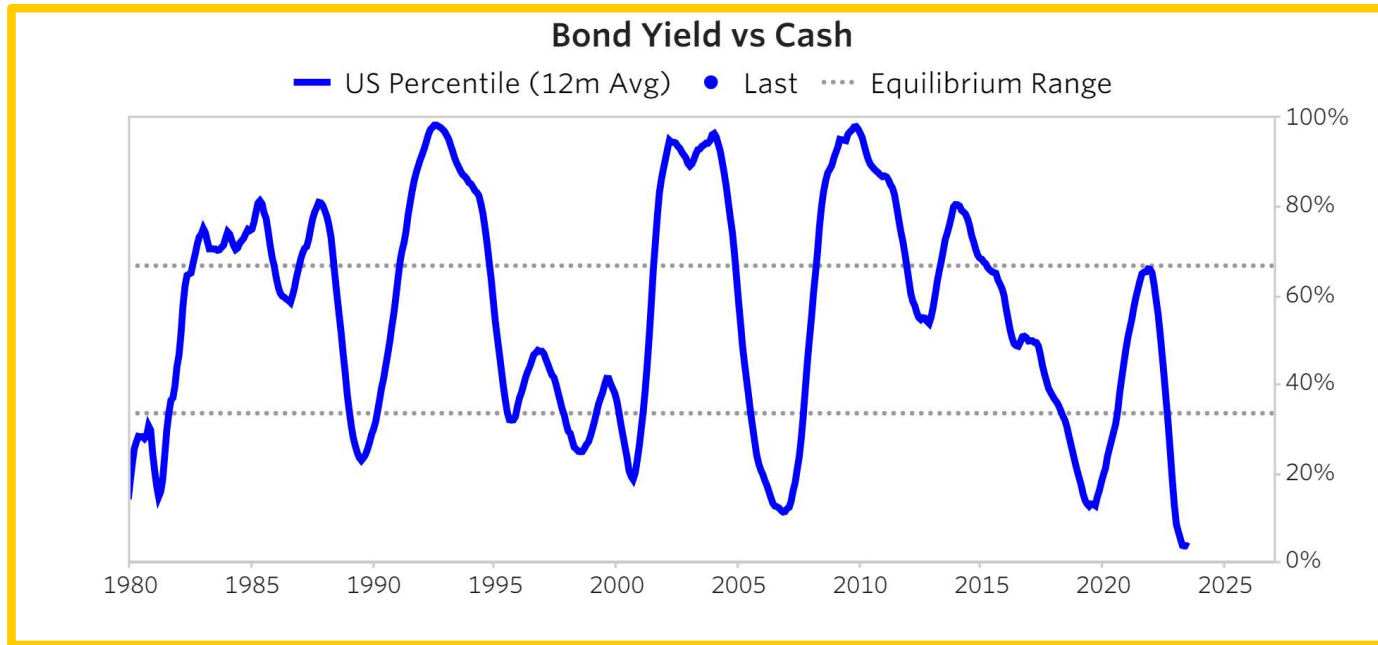
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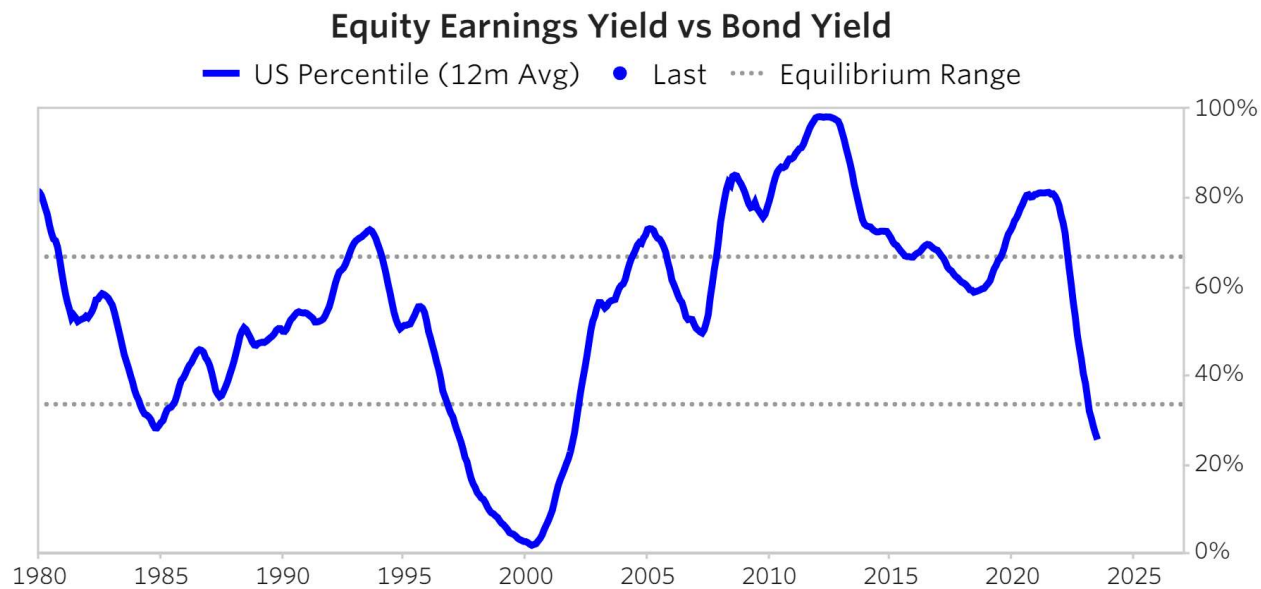
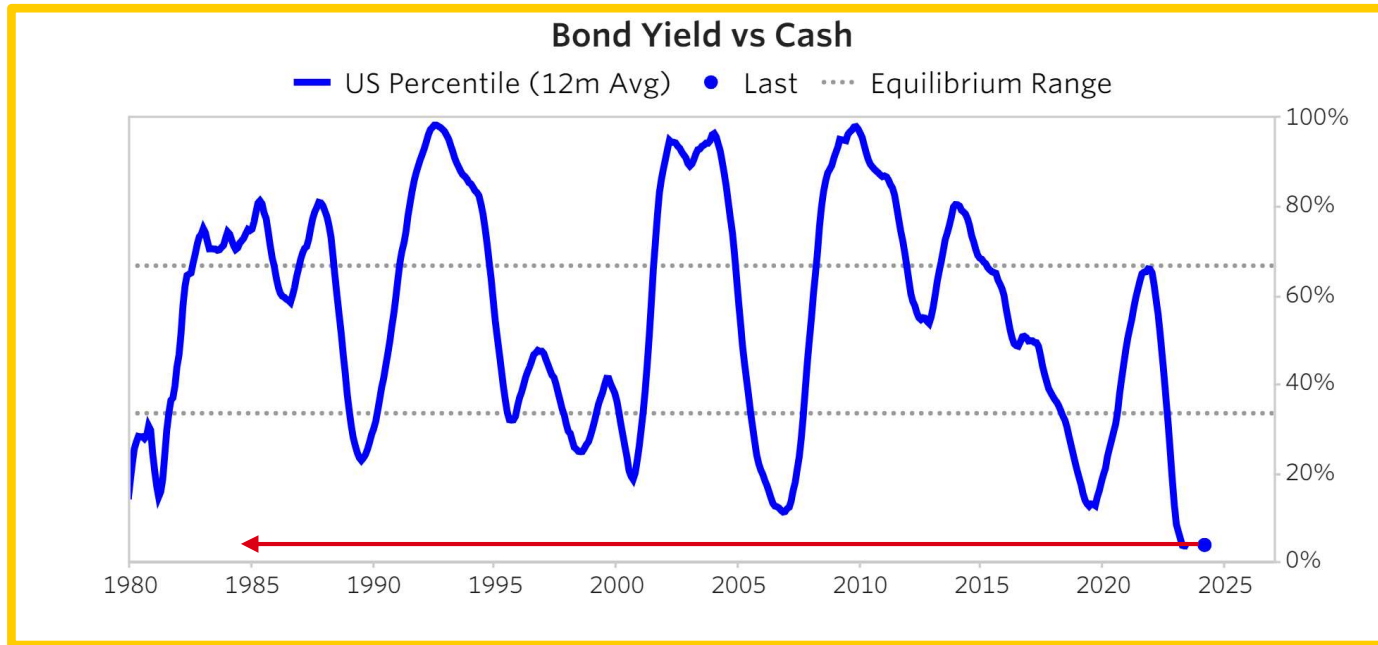
With QT Ongoing, Who Will Buy the Bonds?



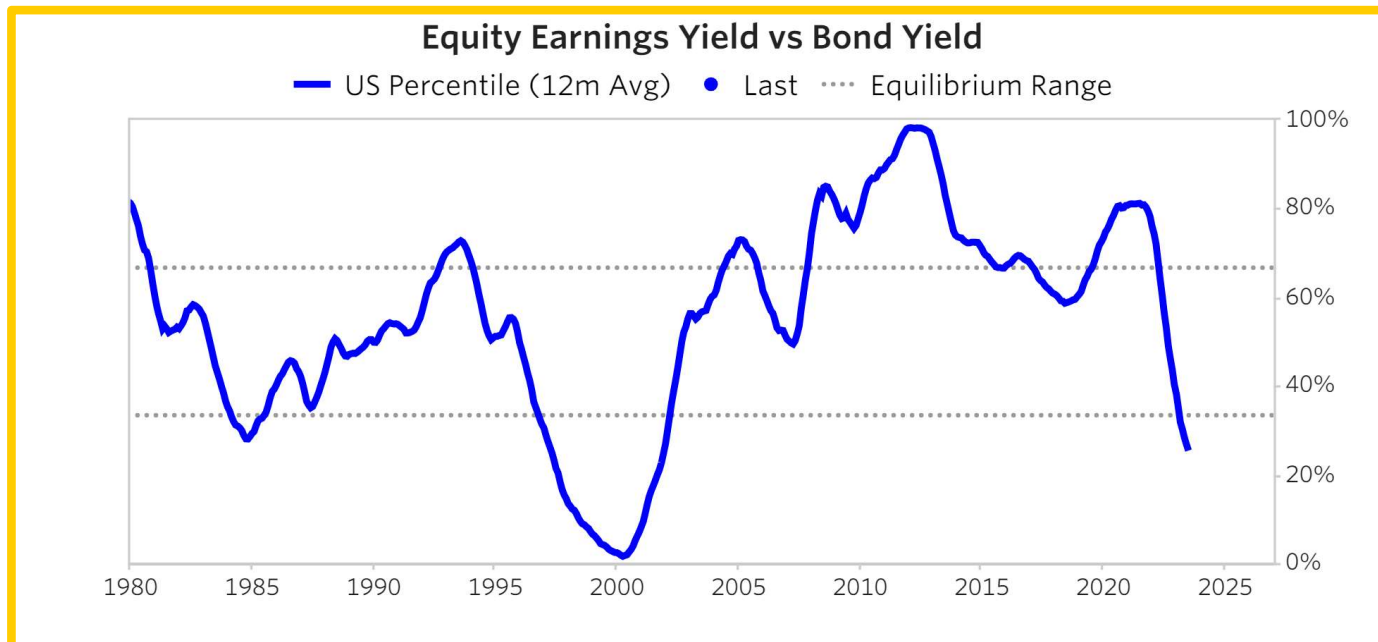
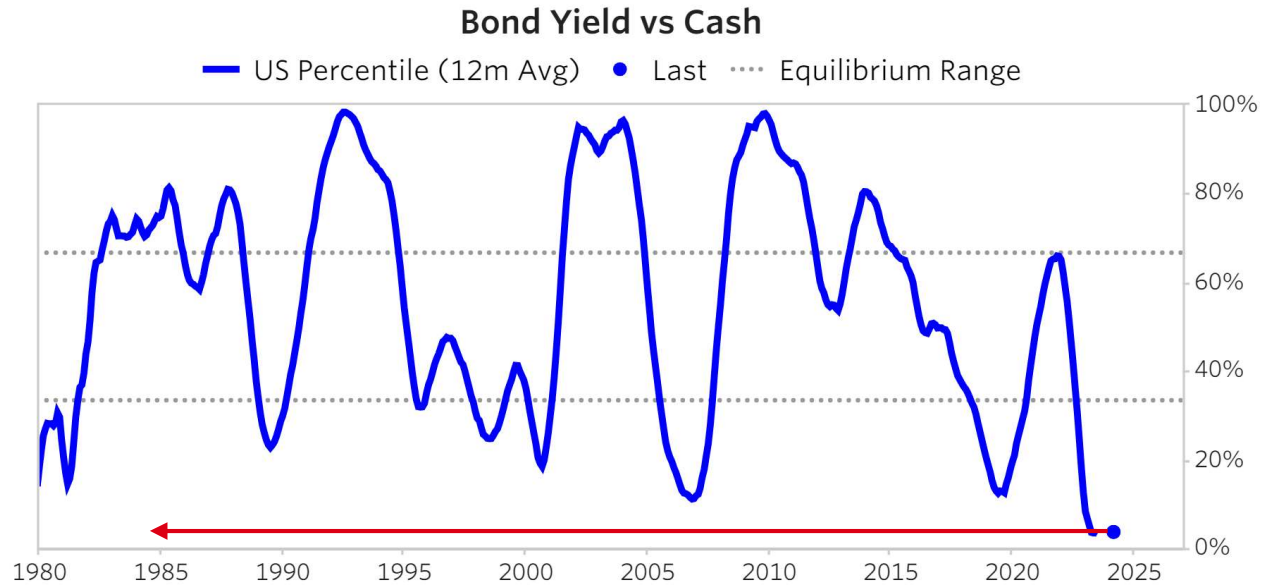
...AT A TIME WHEN ASSET PRICES LOOK EXPENSIVE RELATIVE TO CASH



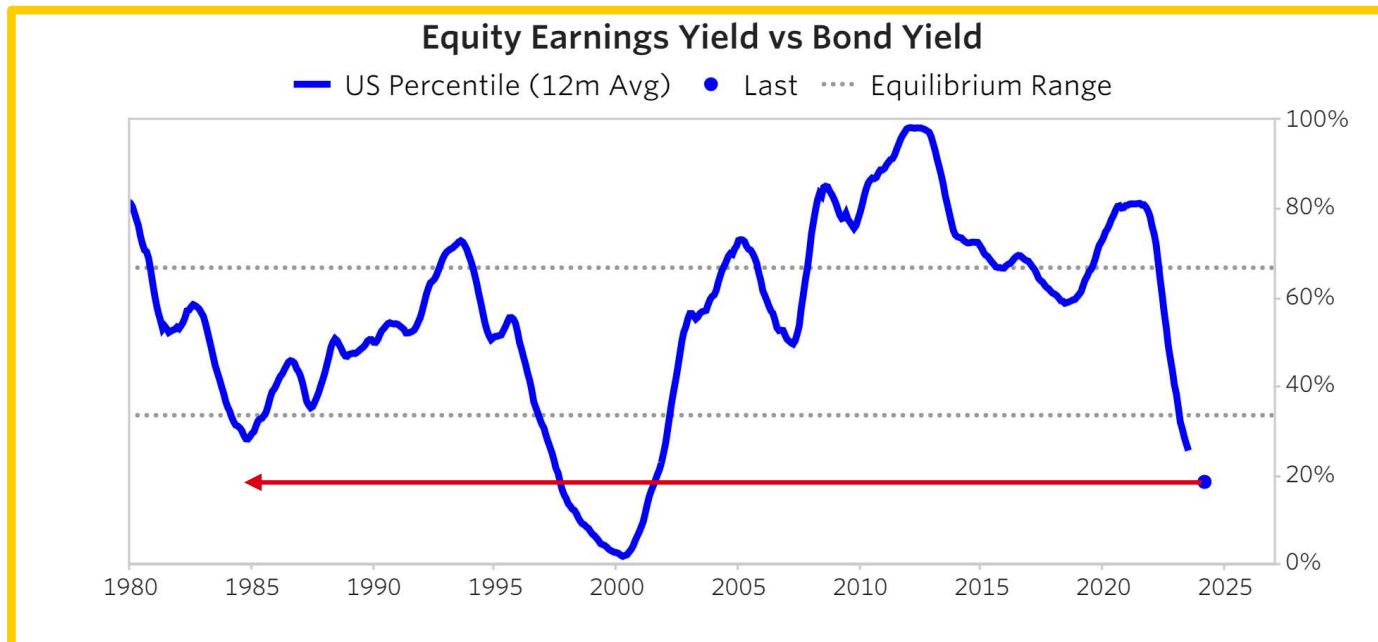
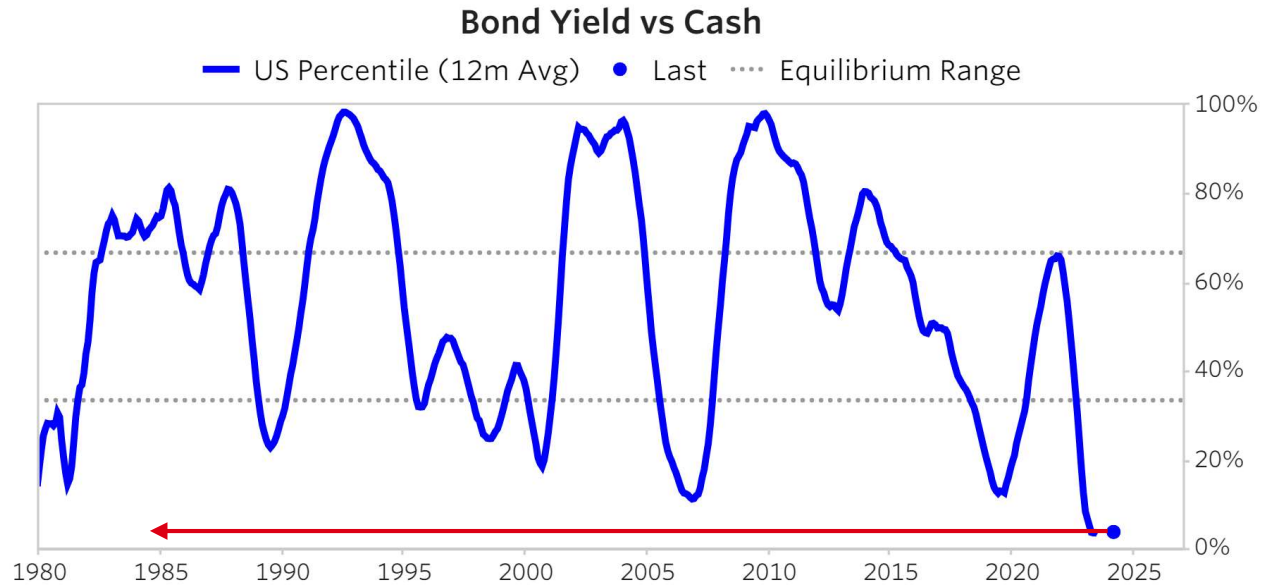
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III. Investment Considerations

A REPEAT PERFORMANCE OF THE LAST DECADE IS UNLIKELY

Traditional Portfolio Scorecard by Decade

		1960	1970s	1980s	1990s	2000s	2010s	2020s
Returns Above Cash		Low	Negative	Very High	Above Normal	Negative	Very High	?
Starting Valuations		Normal	Normal	Cheap	Normal	Expensive	Cheap	Expensive
Cyclical Drivers	Growth	Strong	Weak	Strong	Strong	Weak	Above Normal + Steady	Strong (so far)
	Inflation	Rising	High	Falling	Falling	Low	Low	High (so far)
	Fed Policy	Neutral	Tight	Easy	Neutral	Neutral	Easy	Tight (so far)
Secular Drivers	Increasing Globalization	Neutral	No	Yes	Yes	Yes	Yes	No
	Pro-Business Backdrop	No	No	Yes	Yes	Yes	Yes	No
	Tech Advances	Neutral	Neutral	Yes	Yes	Yes	Yes	Yes

The Traditional Portfolio is comprised of 70% global equities (hedged) and 30% global nominal government bonds (hedged). Past performance is not indicative of future results and an investor should not solely rely upon past performance when making an investment decision. There can be no guarantee that any expected performance can or will be achieved and expected performance should not be solely relied upon in making an investment decision. Please review the "Important Disclosures and Other Information" located at the end of this report.

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	Inflation	Rising	High	Falling	Falling	Low	Low	High (so far)
	Fed Policy	Neutral	Tight	Easy	Neutral	Neutral	Easy	Tight (so far)
Secular Drivers	Increasing Globalization	Neutral	No	Yes	Yes	Yes	Yes	No
	Pro-Business Backdrop	No	No	Yes	Yes	Yes	Yes	No
	Tech Advances	Neutral	Neutral	Yes	Yes	Yes	Yes	Yes

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A CHALLENGING ENVIRONMENT FOR TRADITIONAL PORTFOLIOS

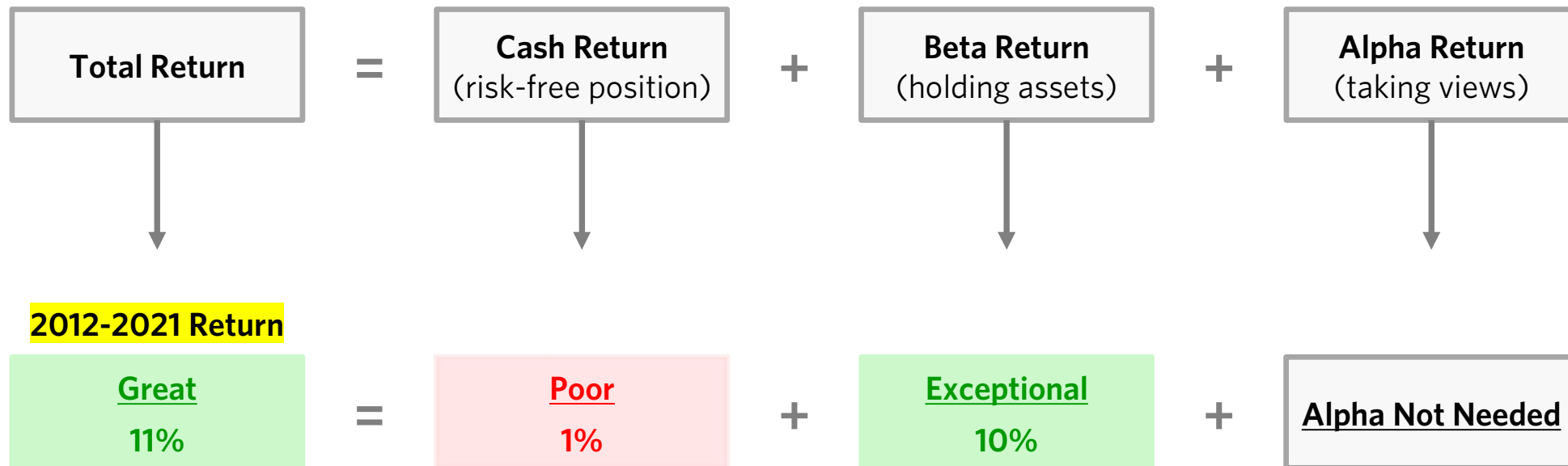
Traditional Portfolio Returns



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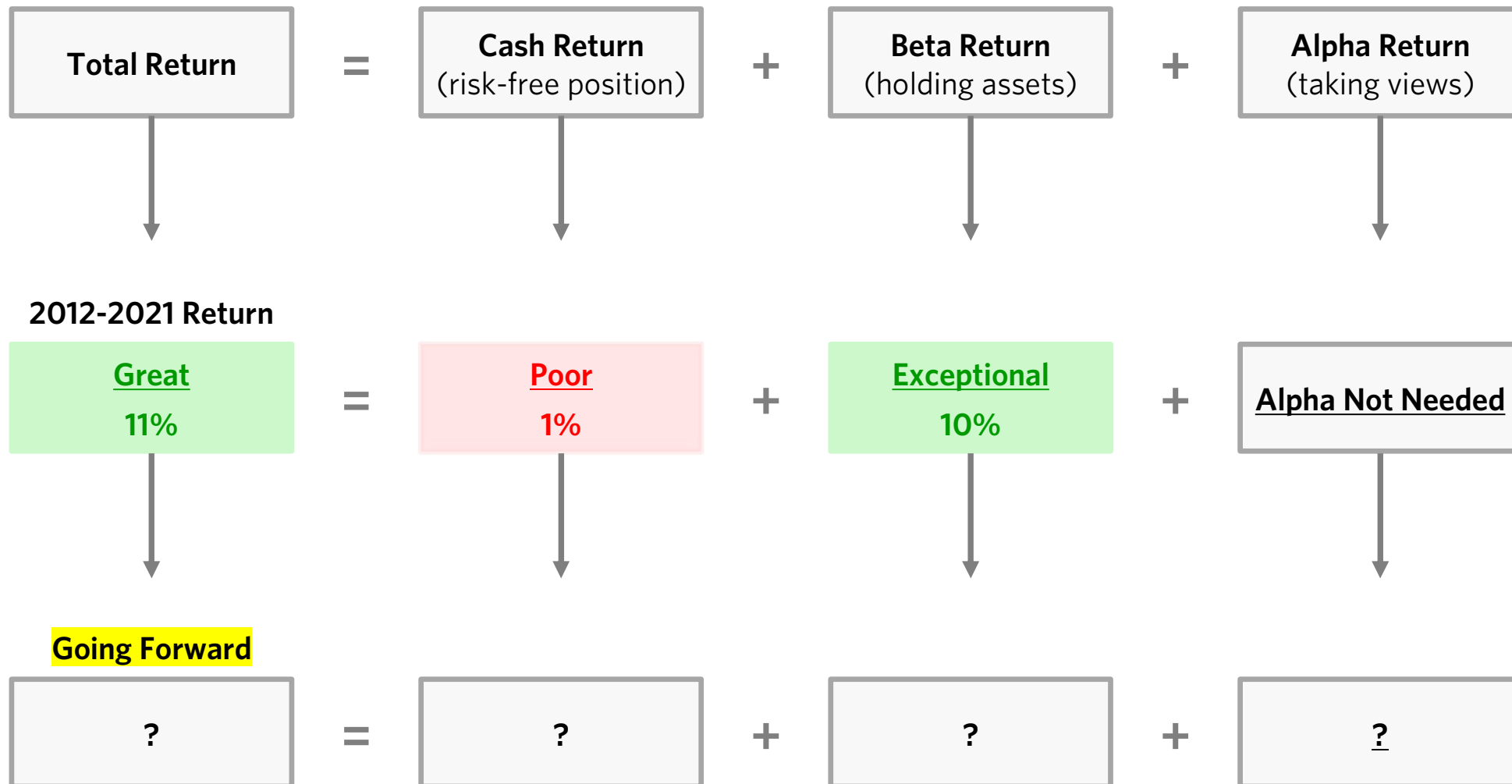
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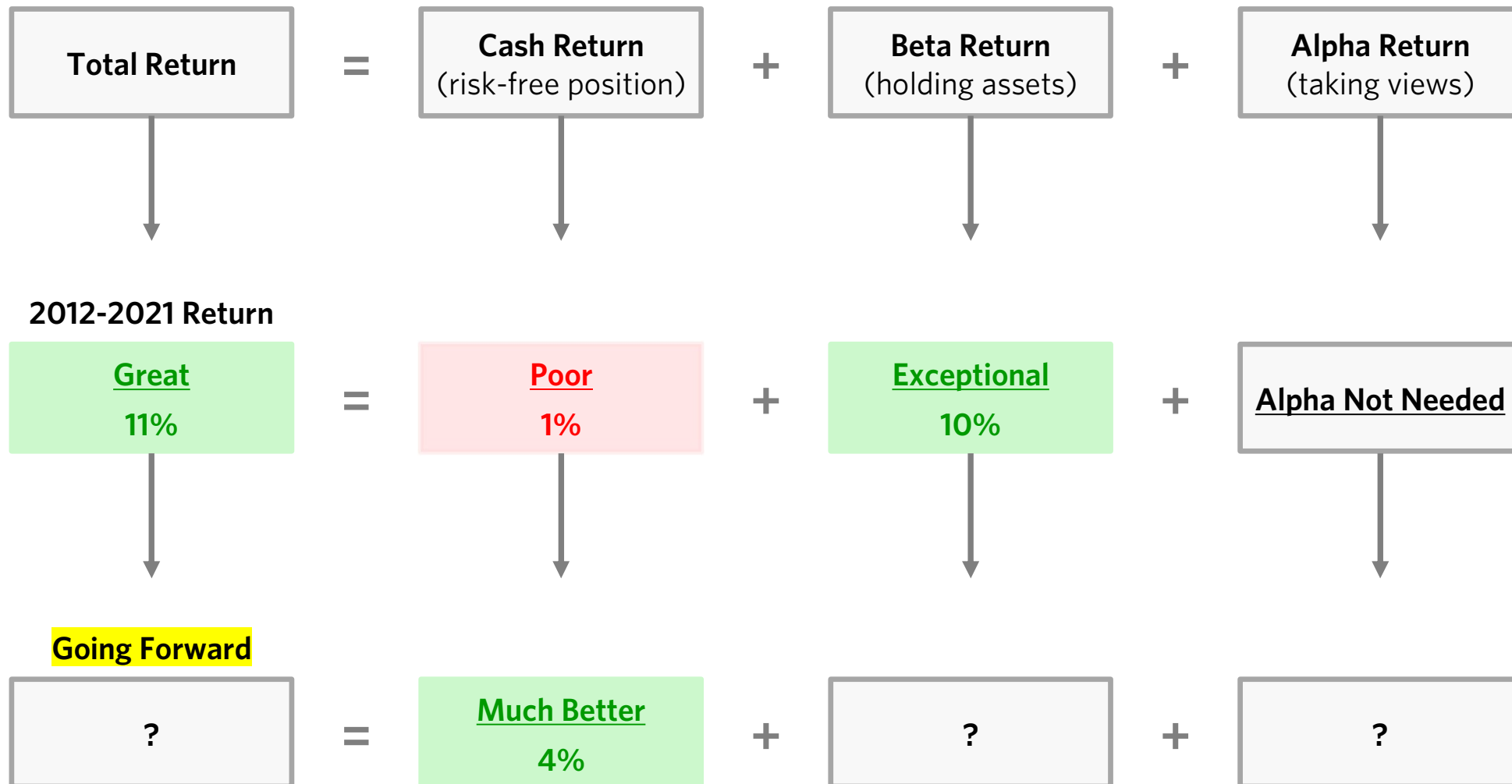
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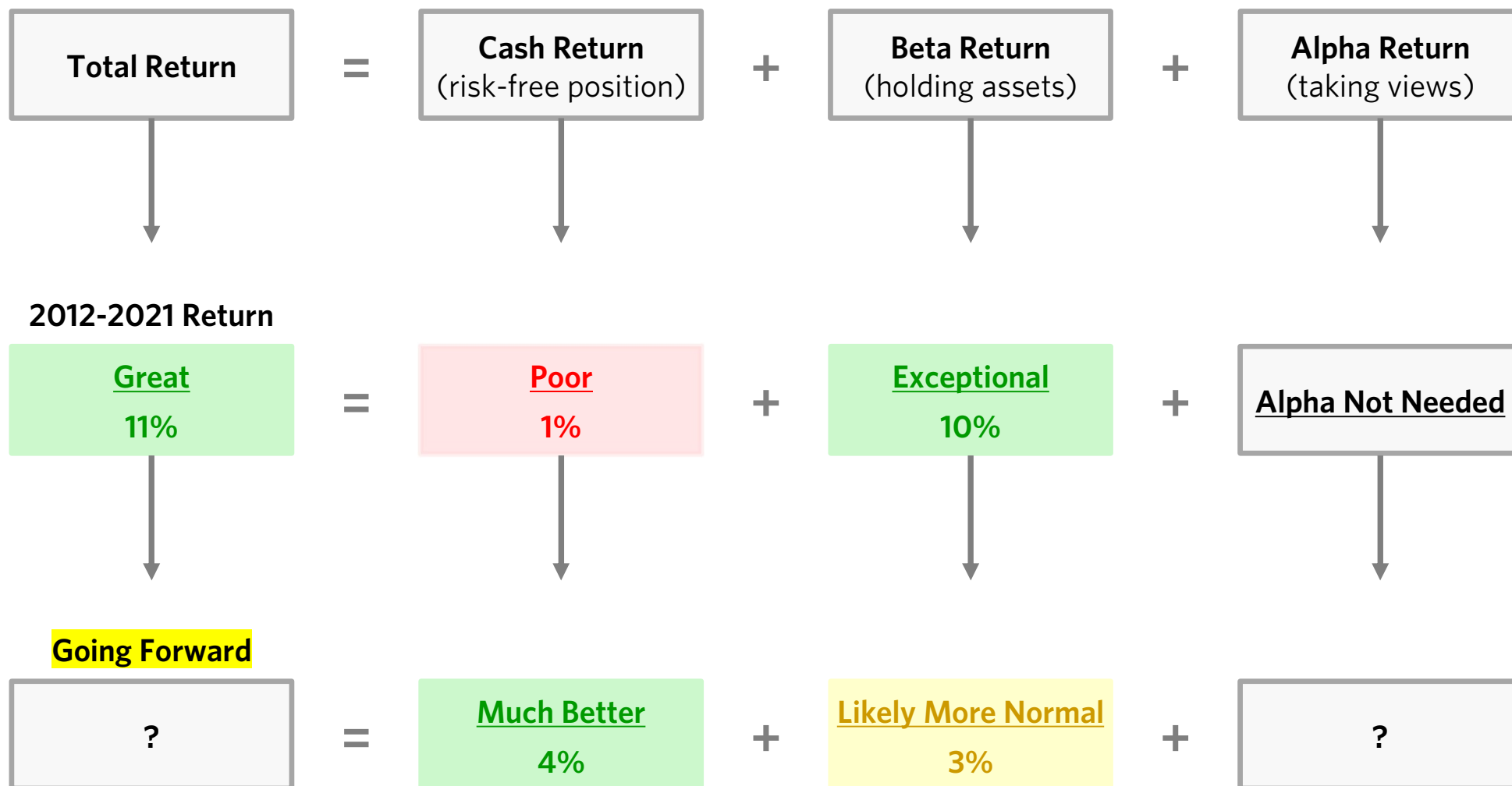
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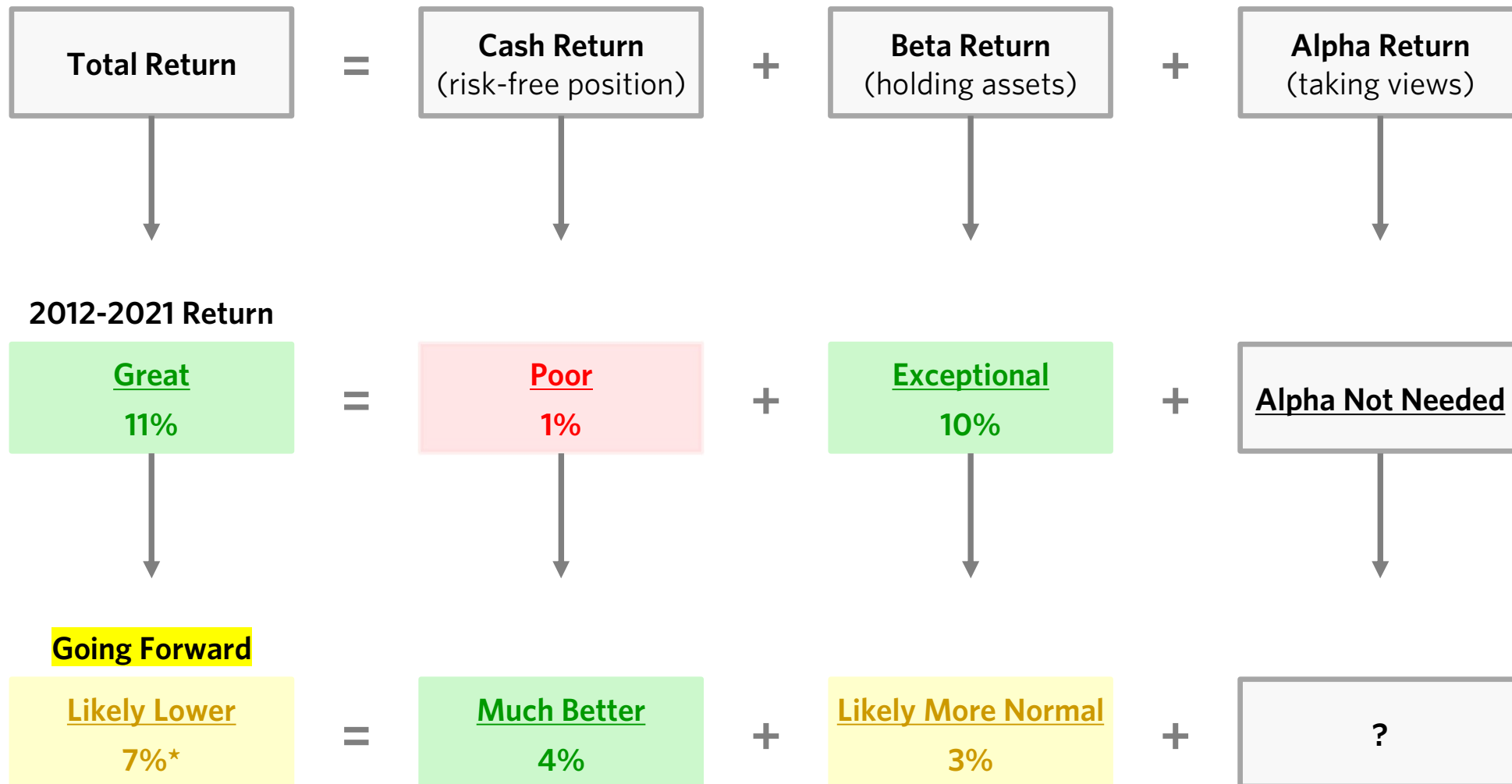
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A CHALLENGING ENVIRONMENT FOR TRADITIONAL PORTFOLIOS

Traditional Portfolio Returns

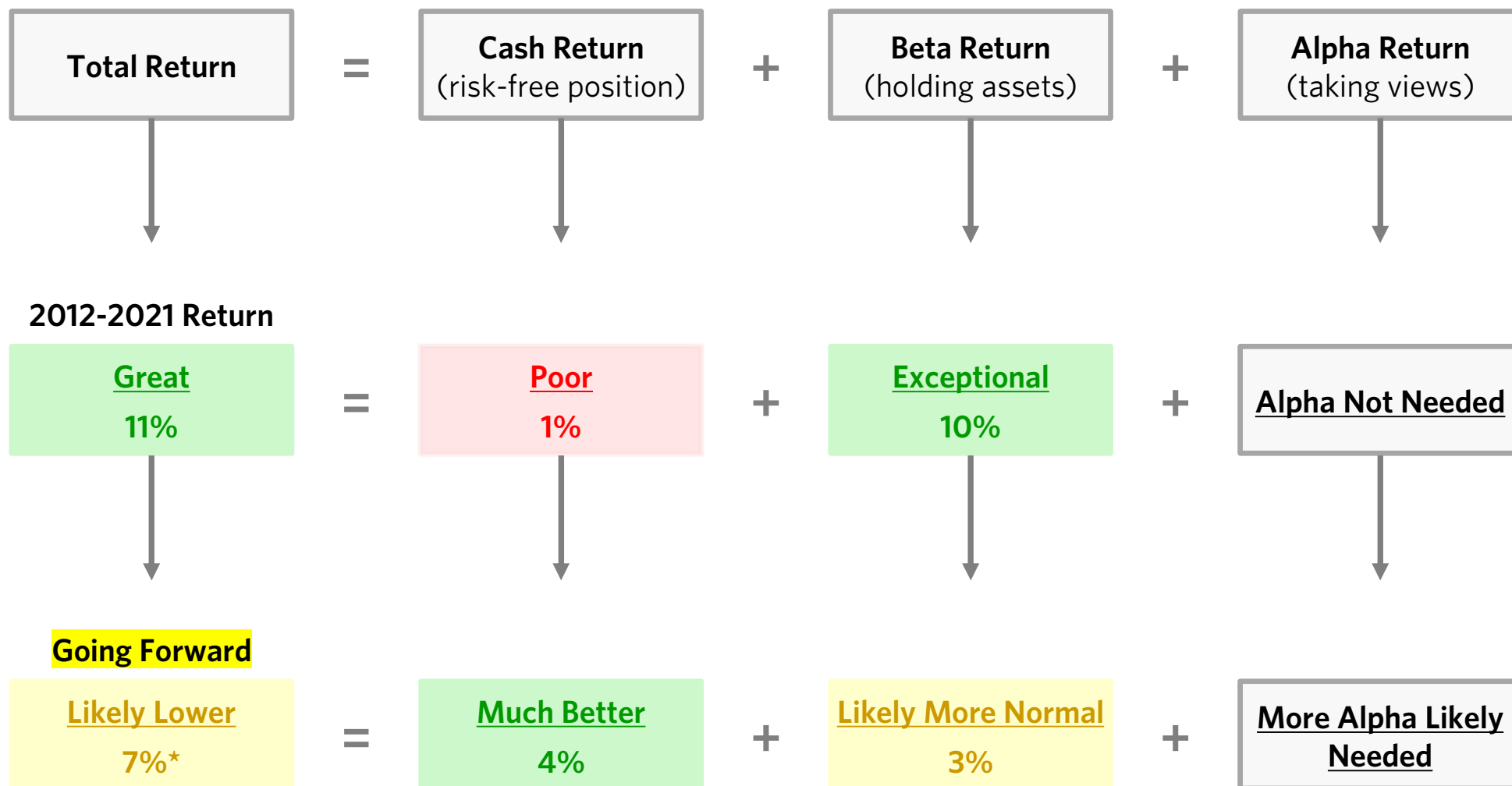


*excluding alpha returns

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THE LEVERS AVAILABLE TO INVESTORS

Investors Have Three Levers



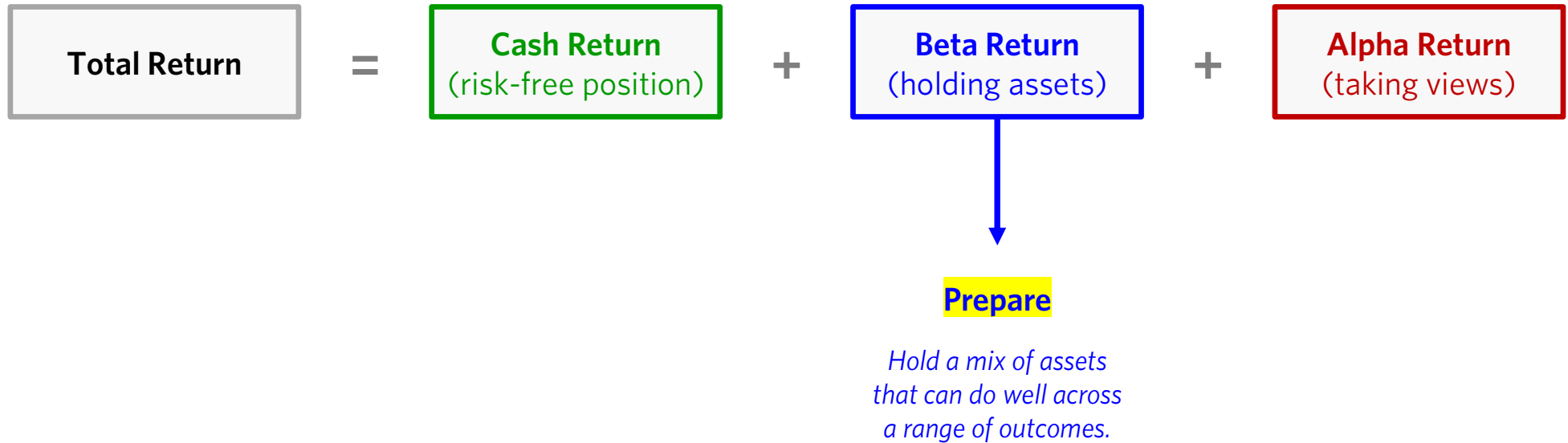
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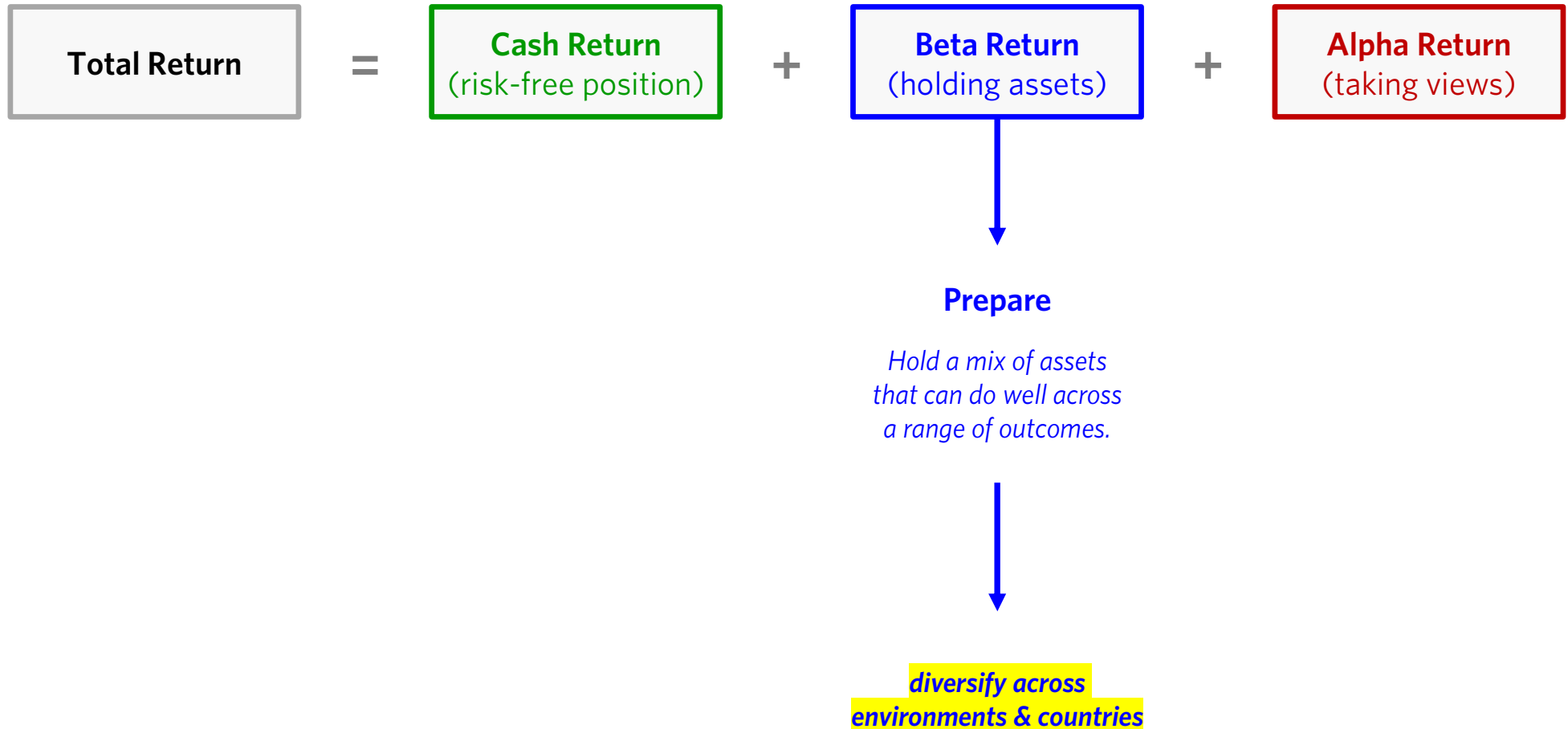
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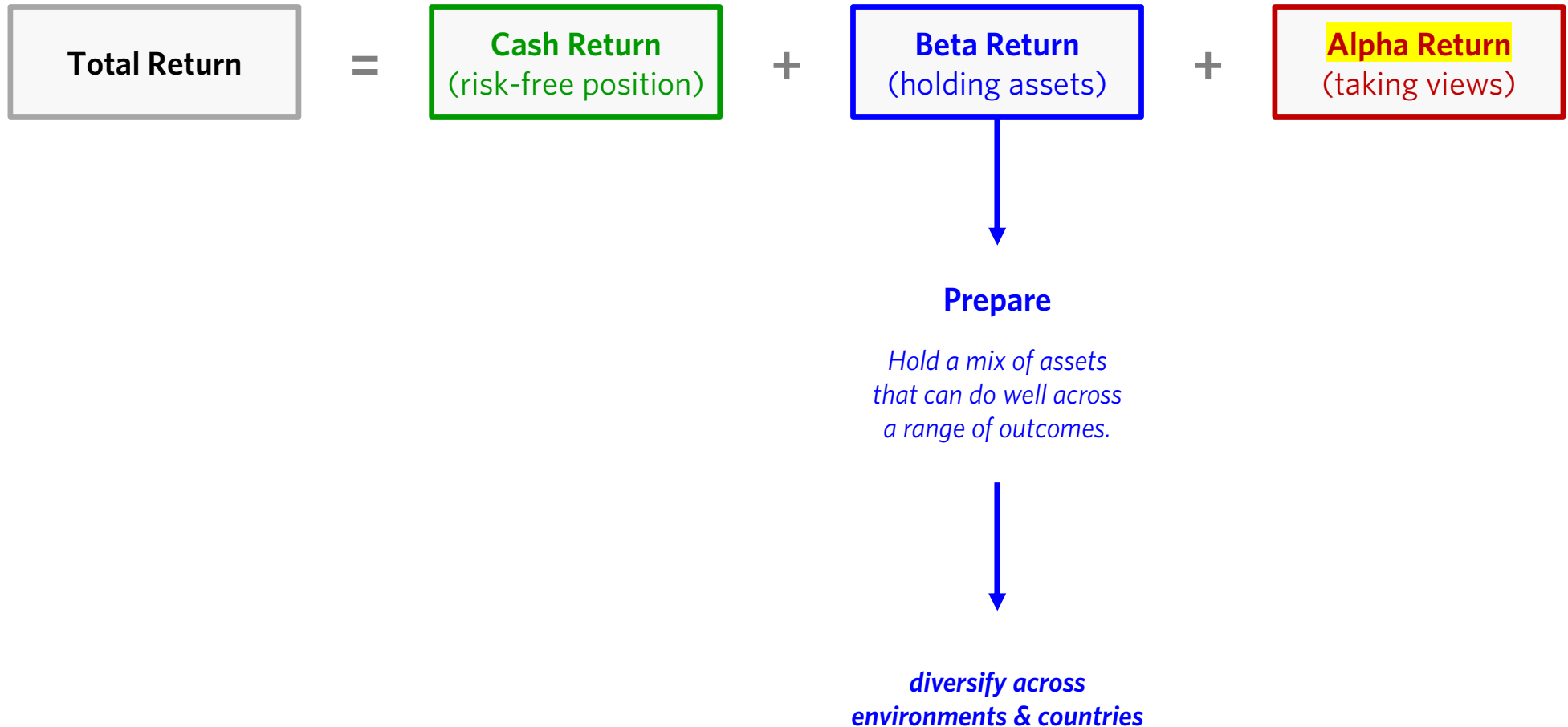
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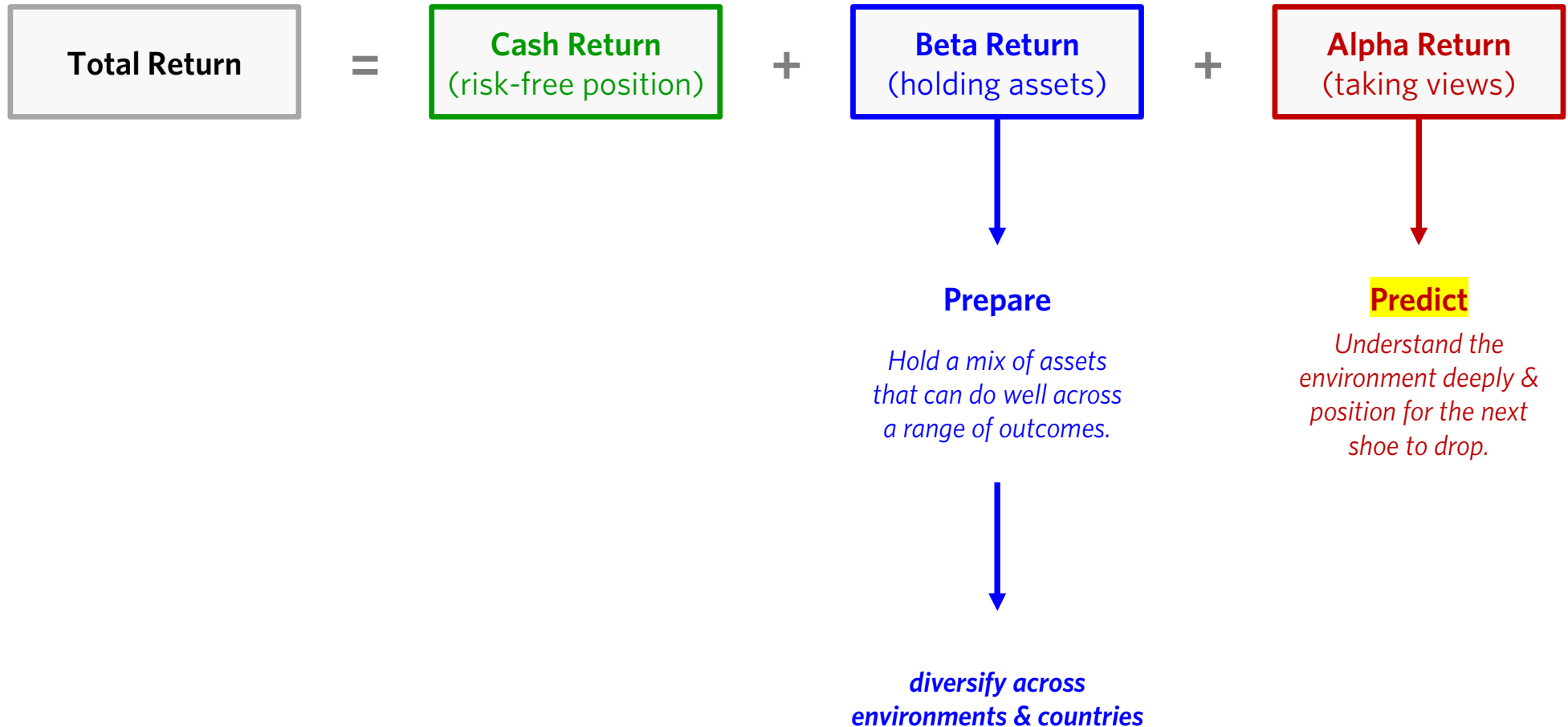
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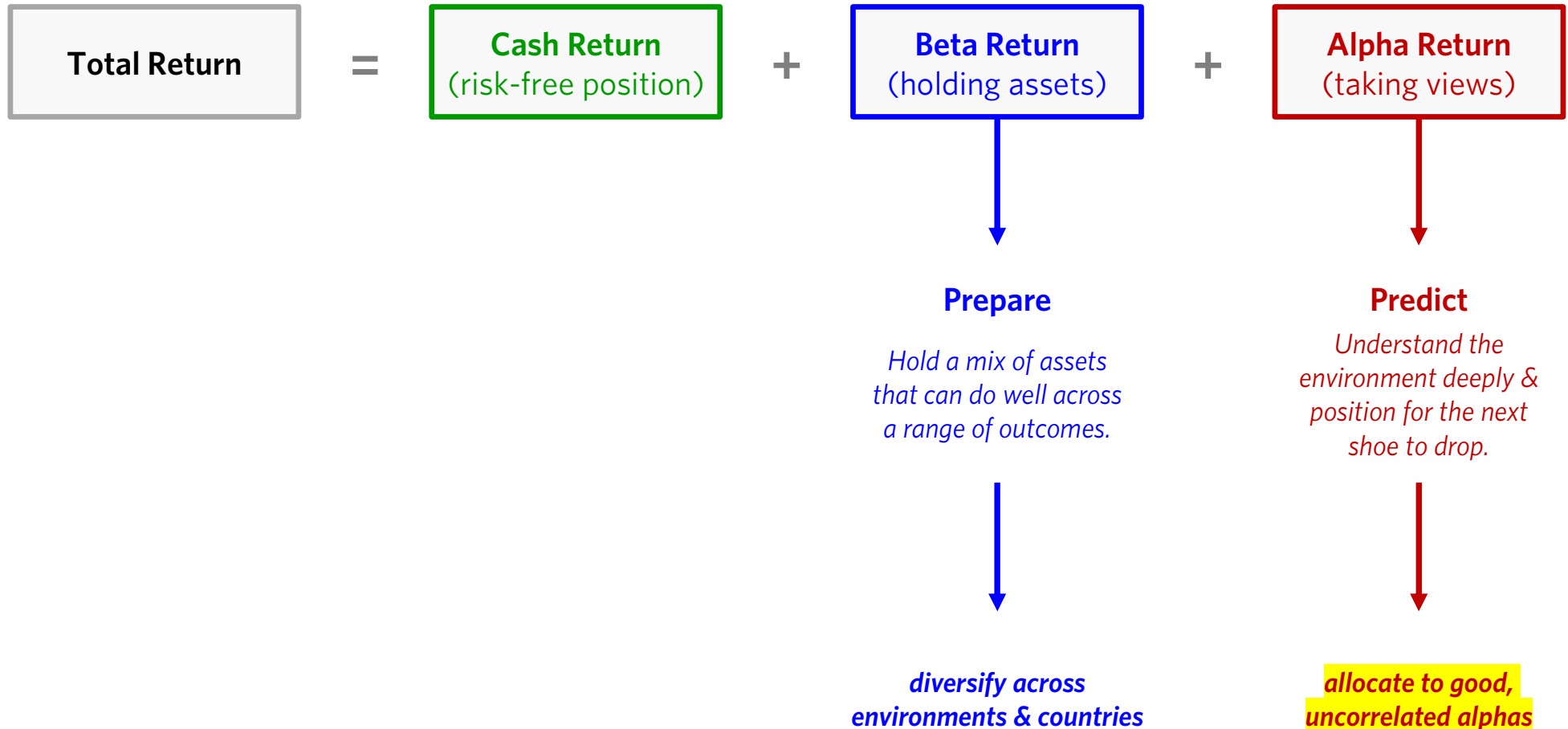
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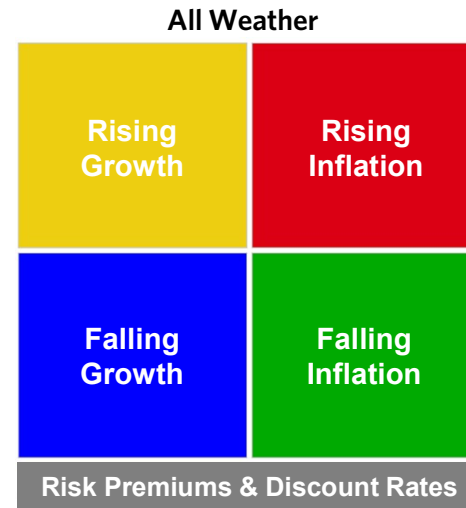
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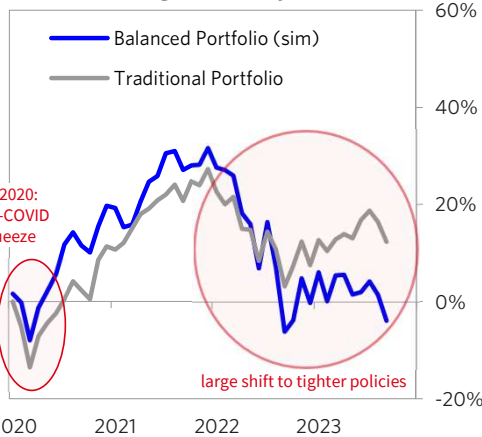


IV. Appendix

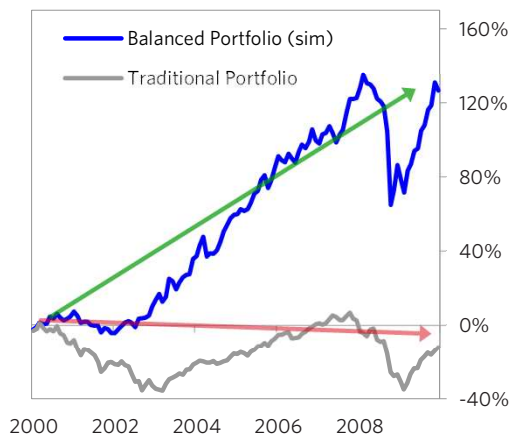
DIVERSIFYING BETA CAN HELP PREPARE AGAINST A WIDE RANGE OF DIFFERENT ENVIRONMENTS



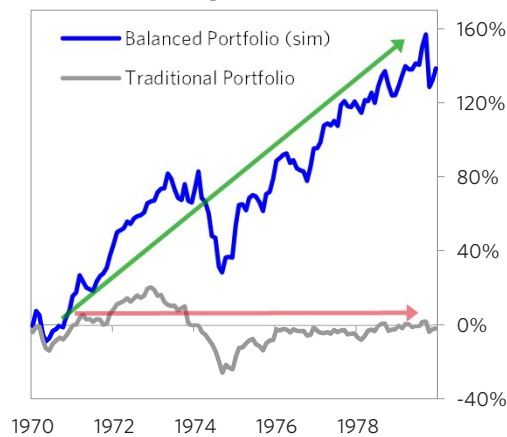
Tight Money



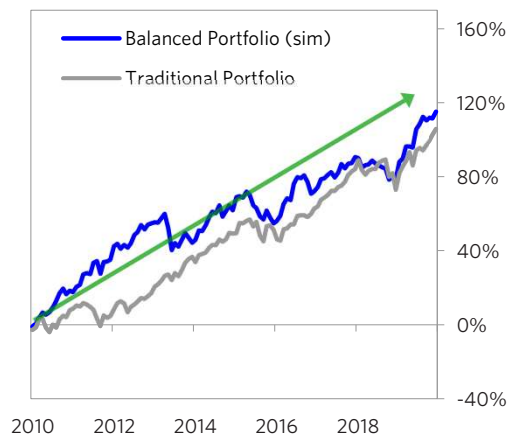
Recessions



Stagflation



Goldilocks



Data estimated through October 2023. It is expected that the simulated performance will periodically change as a function of both refinements to our simulation methodology and the underlying market data. "Balanced Portfolio" is simulated using the Balanced Portfolio as described in the "Balanced Portfolio Disclosure." Returns are cumulative excess returns. It is expected that the simulated performance will periodically change as a function of both refinements to our simulation methodology and the underlying market data. For more information on the Traditional Portfolio, see the "U.S. Traditional Portfolio Disclosure" located at the end of this presentation. Traditional Portfolio returns in bottom charts is represented by 70% global stocks & 30% global government bonds (hedged). Attribution is based on Bridgewater analysis and is approximated based on Bridgewater's views of how to assess the performance of different segments of our portfolio. There could be other methods of attributing performance, however any other method would result in the same total portfolio returns. There can be no guarantee that any expected performance can or will be achieved and expected performance should not be solely relied upon in making any investment decision. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream. Past performance is not indicative of future results. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

KEY TACTICAL VIEWS

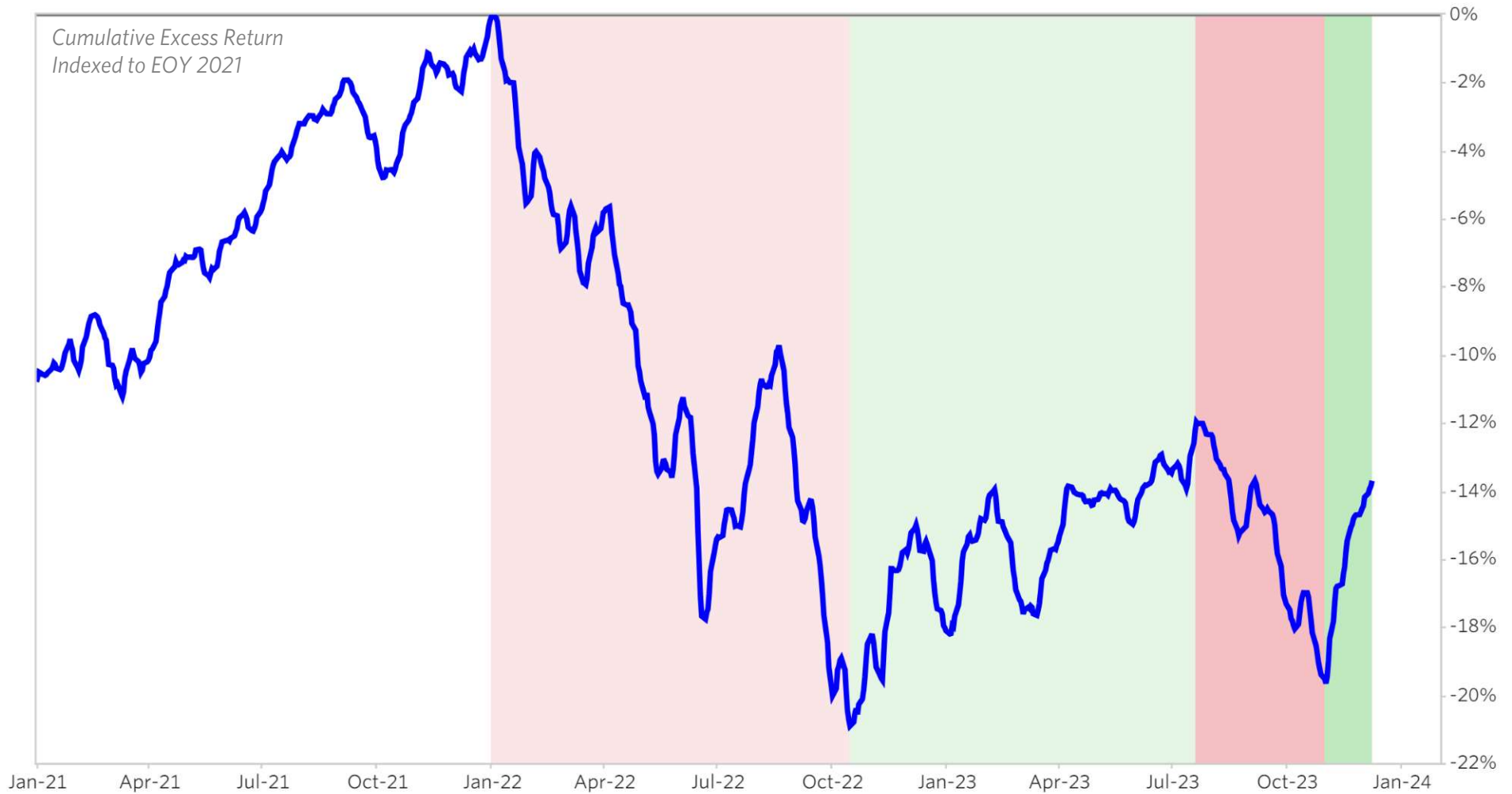
		← Bearish			Bullish →			
		Strongly Bearish	Moderately Bearish	Slightly Bearish	Neutral	Slightly Bullish	Moderately Bullish	Strongly Bullish
Currencies	USD vs DMFX				Neutral			
	EUR vs DMFX							Strongly Bullish
	JPY vs DMFX							Slightly Bullish
	AUD vs DMFX	Strongly Bearish						
	CAD vs DMFX	Strongly Bearish						
	CHF vs DMFX	Strongly Bearish						
	Singaporean Dollar							Moderately Bullish
	Korean Won		Moderately Bearish					
	Mexican Peso							Strongly Bullish
Short Rates	Developed Markets							Slightly Bullish
Nominal Bonds	United States			Slightly Bearish				
	Germany			Slightly Bearish				
	Other Developed Markets		Moderately Bearish					
Nominal vs IL Bonds	Developed World	Strongly Bearish						
Equities	United States		Moderately Bearish					
	Other Developed Markets							Slightly Bullish
	Emerging Markets				Neutral			
Commodities	Precious Metals		Moderately Bearish					
	Energy			Slightly Bearish				
	Industrial Metals			Slightly Bearish				
Credit	Developed Corporate			Slightly Bearish				
	Sovereign			Slightly Bearish				
Assets vs Cash	United States			Slightly Bearish				
	Eurozone				Neutral			
	China							Moderately Bullish
	Japan							Strongly Bullish

Data is shown as of November 30, 2023. The views expressed are based on Bridgewater analysis of and expectations for the relevant markets, does not constitute a personal recommendation, and is for informational and educational purposes only. Bridgewater's actual positions and trading may, and often will, vary from representations shown based on any number of factors, such as client investment restrictions, portfolio rebalancing and transaction costs, risk controls, and liquidity constraints, among others. Exposures not shown may have material impacts on the performance of the account. Bridgewater has no obligation to provide recipients hereof with updates or changes to such data. No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written consent of Bridgewater Associates LP. Please review the "Important Disclosures" located at the end of this presentation. This report is not intended for redistribution. CONFIDENTIAL AND PROPRIETARY.

MARKET ACTION SINCE THE START OF THE TIGHTENING

US Stock/Bond Performance (50/50 Capital Weighted Portfolio)

■ (1) Tightening Led by Short Rates ■ (2) Liquidity Reprieve + AI ■ (3) Tightening Led by Long Rates ■ (4) Recent Market Rally

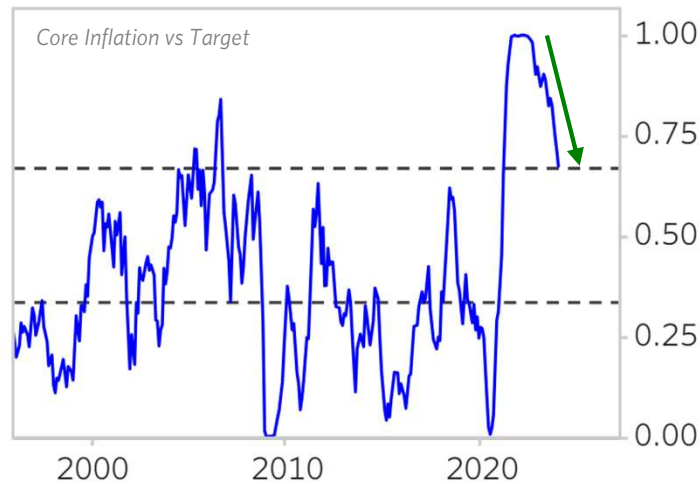


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WHILE PROGRESS HAS BEEN MADE LOWERING INFLATION, THE DRIVERS OF INFLATION HAVE NOT YET REACHED EQUILIBRIUM

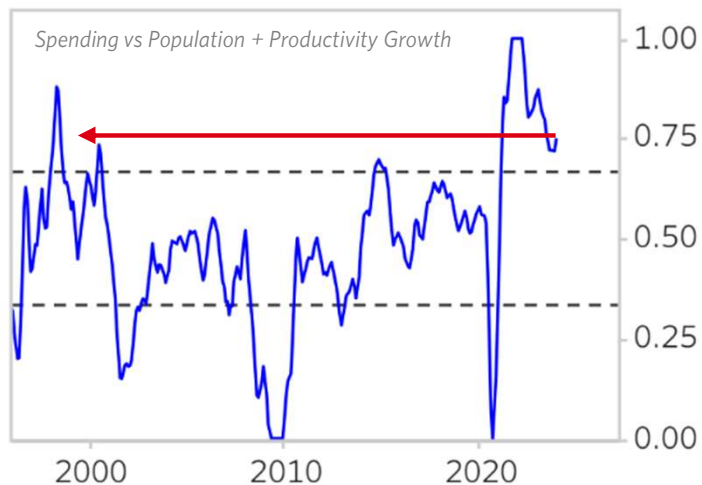
Inflation

— Percentile ··· Equilibrium Range



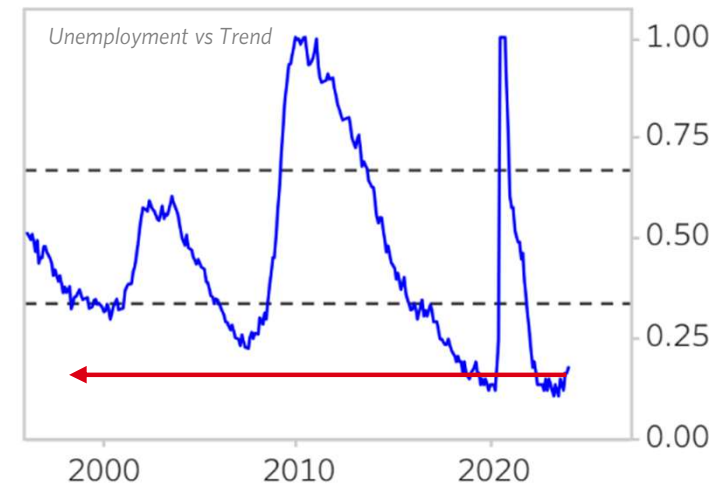
Nominal Spending

— Percentile ··· Equilibrium Range



Unemployment

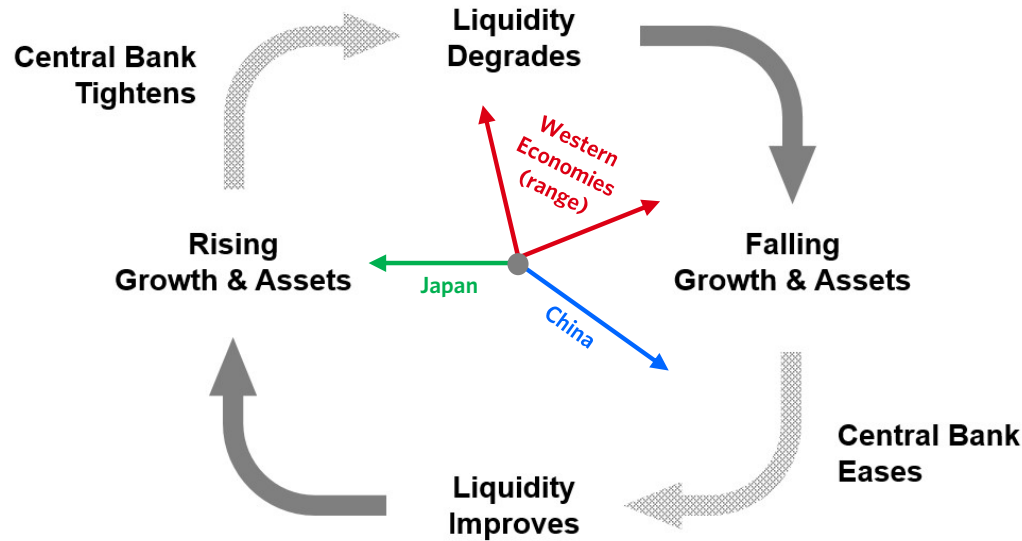
— Percentile ··· Equilibrium Range



Estimates are based on Bridgewater analysis. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

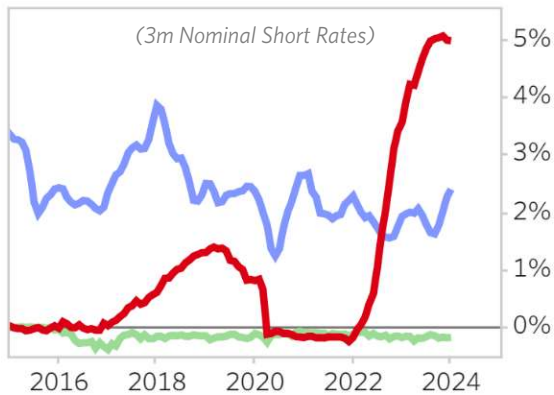
VARYING CONDITIONS AND BACKDROPS ARE CREATING DIFFERENTIAL PRESSURES

Economies Around the World Are at Different Points in the Liquidity Cycle



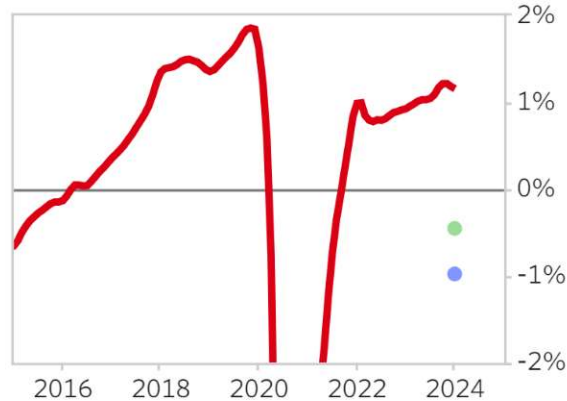
Monetary Policy

— US + Europe — Japan — China



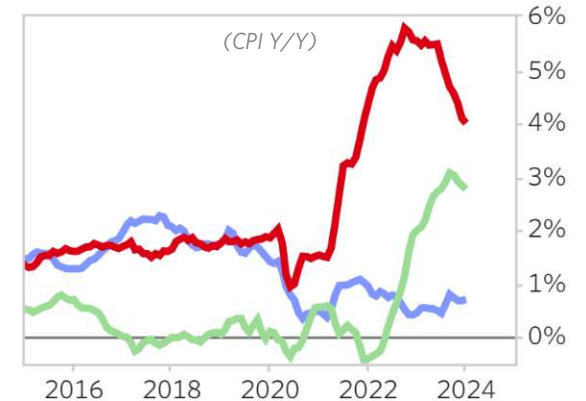
Real GDP Gap

— US + Europe ● Japan ● China



Core Inflation

— US + Europe — Japan — China



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The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

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Hypothetical performance results rely on numerous criteria, assumptions, risks and limitations and are inherently uncertain. There are multiple assumptions and possible adjustments Bridgewater may make in its underlying calculations that are reasonable, but other criteria, assumptions, methodologies and adjustments could also be reasonable and could lead to materially different and lower actual results and higher risks than those presented. In addition, the hypothetical performance results may prove to be invalid, inaccurate, incomplete or change without notice. Variation in any of these factors (or factors or events that are unknown or unaccounted for) could cause actual returns to substantially differ. In constructing hypothetical returns and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream. Furthermore, any hypothetical or mathematical calculations or data might contain errors, and could rely on third-party inputs, which Bridgewater believes to be reliable but whose accuracy cannot be guaranteed.

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Bridgewater believes that a particular return stream should be evaluated against its expected performance or its benchmark. To that end, Bridgewater demonstrates whether its strategies are operating as expected via a cone chart, which shows the performance of a particular strategy over time relative to the strategy's benchmark and also within bands of standard deviation from that benchmark. Separately, to demonstrate the impact of market conditions on the strategies it manages, Bridgewater explains the macro-economic pressures and market conditions that effected performance in the context of client letters, account reviews, or other publications that Bridgewater provides to each current and prospective investor on a regular basis. Additional information about how Bridgewater thinks about setting expectations for its strategies via a benchmark is available upon request.

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Related Fund or Related Share Class Performance refers to actual performance that has been adjusted to account for volatility and/or currency differences. Because it is based on actual performance, Related Fund or Related Share Class Performance does reflect actual trading by Bridgewater, which has been adjusted on the basis of currency, volatility, or both and is thus hypothetical. Note that the terms Related Fund or Related Share Class Performance are not being used in the same way that the term 'Related Performance' is used in the Securities and Exchange Commission's Marketing Rule.

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US TRADITIONAL PORTFOLIO

This page contains the allocation information for the historical simulation of the US Traditional portfolio, as well as forward looking assumptions for alpha volatility and alpha ratio used in this analysis. The portfolio capital allocation weights (illustrated below) are estimates based either upon Bridgewater Associates' understanding of standard asset allocation (which may change without notice) or information provided by or publicly available from the recipient of this presentation. Asset class returns are actual market returns where available and otherwise a proxy index constructed based on Bridgewater Associates understanding of global financial markets. Information regarding specific indices and simulation methods used for proxies is available upon request (except where the proprietary nature of information precludes its dissemination). Results are hypothetical or simulated and gross of fees unless otherwise indicated. "Gross of fees" in this context means results that do not include advisory fees or expenses, which would reduce the figures shown. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

Asset Type	Benchmark	Nominal Exposure	Fx Exposure	Alpha Volatility	Alpha Ratio
Equities	U.S. Equities	15.0%	---	---	---
Equities	U.S. Equities	15.0%	---	5.0%	0.25
Equities	Dev. World Equities Ex-US	18.0%	Unhedged	5.0%	0.30
Equities	Emerging Market Equities	3.0%	Unhedged	5.0%	0.30
Nominal Bonds	U.S. Gov't Bonds	4.5%	---	---	---
Nominal Bonds	U.S. Gov't Bonds	4.5%	---	2.0%	0.25
Corporate Bonds	U.S. Corporate Bonds	5.0%	---	3.0%	0.25
MBS	U.S. MBS	6.0%	---	2.0%	0.25
IL Bonds	U.S. IL Bonds	1.0%	---	---	---
IL Bonds	U.S. IL Bonds	1.0%	---	1.0%	0.25
High Yield Bonds	U.S. High Yield	2.0%	---	4.0%	0.25
Nominal Bonds	World Gov't Bonds Ex-US	2.0%	Hedged	2.0%	0.30
Equities	U.S. PE / VC	9.0%	---	10.0%	0.25
Real Estate	U.S. Real Estate	5.0%	---	6.0%	0.25
Real Estate	World Real Estate	2.0%	Unhedged	6.0%	0.30
Commodities	Bloomberg Commodity Index	2.0%	---	---	---
Hedge Fund	Cash	5.0%	---	7.0%	0.70

BALANCED PORTFOLIO DISCLOSURE

Balanced Portfolio Net
(Net Total Returns from Jan 1970 through Oct 2023)
(Annualized Total Returns in USD)

Last 1 Year	3.1%
Last 3 Years	-2.8%
Last 5 Years	4.6%
Last 7 Years	3.7%
Last 10 Years	4.3%
Avg Annual	11.0%
StDev	11.3%
Ratio	0.56

Average annual returns and Sharpe ratio are calculated using net of fees performance, while the standard deviation is calculated using gross of fees performance. Past results are not necessarily indicative of future results. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM.

ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

Balanced Portfolio Simulation Performance Disclosure

Where shown all performance of the Bridgewater Balanced Portfolio is based on simulated, hypothetical performance and not the returns of Bridgewater's All Weather strategy or any managed portfolio. Bridgewater's investment selection and trading strategies are systematic and rules-based. However, they are not fully automated and they do include human input. As a result, simulated returns are designed based on assumptions about how Bridgewater would have implemented the Balanced Portfolio through time. These assumptions are intended to approximate such implementation, but are inherently speculative.

The simulated performance for the Balanced Portfolio was derived by applying Bridgewater's current investment systems and portfolio construction logic to historical market returns across the markets selected for the Balanced Portfolio. A list of the markets used appears below. We use actual market returns when available as an input for our hypothetical returns and otherwise use Bridgewater Associates' proprietary estimates, based on other available data and our fundamental understanding of asset classes. In certain cases, market data for an exposure which otherwise would exist in the simulation can be omitted if the relevant data is unavailable, deemed unreliable, immaterial or able to be accounted for using proxies. Proxies are assets that existed and for which data is available, which Bridgewater believes would approximate returns for an asset that did not exist or for which reliable data is not available. For example, before reliable commodity futures returns data can be found Bridgewater estimates futures returns by using the spot commodity returns and their typical relationship to futures returns. Examples of omitted markets or accounted for using proxies include, but are not limited to, emerging market equities, emerging market debt, and certain commodities. The mix and weightings of markets traded for Balanced Portfolio are subject to change in the future. The Balanced Portfolio includes periodic adjustments that are made to the Balanced Portfolio desired strategic asset allocation pursuant to a subset of Bridgewater's systematic strategic management process. This process systematically adjusts exposures as needed to maintain our implementation of balance. The Balanced Portfolio maintains the target level of risk regardless of market conditions. Accordingly, the Balanced Portfolio does not alter the target level of risk based on the strategic management process employed in the All Weather Strategy. When applicable, the returns of the Balanced Portfolio reflect adjustments based on this systematic strategic management process.

Simulated asset returns are subject to considerable uncertainty and potential error, as a great deal cannot be known about how assets would have performed in the absence of actual returns. The Balanced Portfolio is an approximation of our current process but not an exact replication and can have differences including but not limited to the precise mix of markets used and the weights applied to those markets. It is expected that the simulated performance will periodically change as a function of both refinements to our simulation methodology (including the addition/removal of asset classes) and the underlying market data. There is no guarantee that previous results would not be materially different. Future strategy changes could materially change previous simulated returns in order to reflect the changes accurately across time.

Net of fees performance includes (i) a model management fee and other operating fees, (ii) reinvestment of interest, gains and losses and (iii) modeled transaction costs. Transaction costs are accounted for and are estimates themselves based on historical measured costs and/or modeled costs. Actual transaction costs experienced could have been higher or lower than those reflected. Where noted, the Balanced Portfolio net of fees returns have been calculated using our standard fee schedule for a minimum size account, which are the highest standard fees we have or would currently charge an account. Investment advisory fees are described in Bridgewater's ADV Part 2A. Gross of fees performance (i) excludes the deduction of management fees, and other operating expenses (the "fees and expenses") and (ii) includes the reinvestment of interest, gains and losses. Including the fees and expenses would lower performance. There is no guarantee regarding the Balanced Portfolio's ability to perform in absolute returns or relative to any market in the future, during market events not represented or during market events occurring in the future. Market conditions and events vary considerably, are unpredictable and can have unforeseen impacts resulting in materially adverse results. ACCORDINGLY, PLEASE REACH OUT TO YOUR CLIENT ADVISOR IF YOU HAVE ANY QUESTIONS ABOUT THIS SIMULATION.

Markets included in the Balanced Portfolio Simulation

The Balanced Portfolio Simulation includes returns from the following markets: global nominal interest rates, global inflation linked bonds, emerging market credit spreads, corporate credit spreads, global equities, and commodities.

ALL WEATHER STRATEGY DISCLOSURE

All Weather Strategy 10% Volatility Net (Net Total Returns from Jun 1996 through Oct 2023)

1996	20.4%	2007	11.8%	2018	-5.1%
1997	15.0%	2008	-20.2%	2019	16.6%
1998	-1.8%	2009	9.4%	2020	9.5%
1999	15.6%	2010	17.6%	2021	11.6%
2000	9.9%	2011	18.1%	2022	-22.1%
2001	-6.0%	2012	14.7%	2023 YTD	-1.8%
2002	10.2%	2013	-3.9%		
2003	16.7%	2014	7.5%		
2004	17.7%	2015	-6.9%	Avg Annual	6.4%
2005	15.5%	2016	9.9%	StDev	10.7%
2006	1.2%	2017	11.8%	Ratio	0.39

Past results are not necessarily indicative of future results.

Average annual returns and Sharpe ratio are calculated using net of fees performance, while the standard deviation is calculated using gross of fees performance.

Bridgewater All Weather Strategy Performance Disclosure:

For the period June 1996 (the inception of the strategy) through August 2001 the performance is based on the total return of the Bridgewater All Weather strategy as implemented for Bridgewater's principals and their affiliates and was not fully hedged to the US Dollar. The All Weather strategy is structured to be fully hedged, and the performance reflected after August 2001 includes these hedging transactions. For the period of August 2001 through present the performance shown is the actual total returns of the longest running fully funded All Weather account. For the entire history, excess returns are calculated by subtracting an approximation of a US cash rate from the total returns described above. Of note, the All Weather strategy's target leverage, volatility and return, as well as the asset mix varied from June 1996 to July 2005. From August 2005 through the present the strategy has targeted 10% volatility. Bridgewater manages additional All Weather portfolios not included in this performance history.

Gross of fees performance is gross of management and performance fees and includes the reinvestment of interest, gains, losses, expenses and taxes. Returns will be reduced by the investment advisory fees that will be incurred in the management of the account.

Net of fees performance has been calculated using a model fee based on our standard fee schedule for a minimum size account, which are the highest standard fees we have or would currently charge an account. Investment advisory fees are described in Bridgewater's ADV Part 2A.

No representation is being made that any account will or is likely to achieve returns similar to those shown. Trading in futures is risky and can result in losses as well as profits. PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. Performance as of the current month is estimated and subject to change.

ALL WEATHER STRATEGY SIMULATION DISCLOSURE

All Weather Strategy Simulation Net (Net Total Returns from Jan 1970 through Oct 2023) (Annualized Total Returns in USD)

Last 1 Year	3.1%
Last 3 Years	-2.8%
Last 5 Years	4.6%
Last 7 Years	3.7%
Last 10 Years	4.3%
Avg Annual	11.1%
StDev	10.9%
Ratio	0.58

Average annual returns and Sharpe ratio are calculated using net of fees performance, while the standard deviation is calculated using gross of fees performance. Past results are not necessarily indicative of future results. HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM.

ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

All Weather Strategy Simulation Performance Disclosure

Performance of the Bridgewater All Weather Strategy Simulation is based on simulated, hypothetical performance and not the actual returns of Bridgewater's All Weather Strategy or any managed portfolio. Bridgewater's investment selection and trading strategies are systematic and rules-based. However, they are not fully automated and they do include human input. As a result, simulated returns are designed based on assumptions about how Bridgewater would have implemented the All Weather Strategy through time. These assumptions are intended to approximate such implementation, but are inherently speculative.

The simulated performance for the All Weather Strategy Simulation was derived by applying Bridgewater's current investment systems and portfolio construction logic to historical market returns across the markets selected for the All Weather Strategy Simulation. A list of the markets used appears below. We use actual market returns when available as an input for our hypothetical returns and otherwise use Bridgewater Associates' proprietary estimates, based on other available data and our fundamental understanding of asset classes. In certain cases, market data for an exposure which otherwise would exist in the simulation can be omitted if the relevant data is unavailable, deemed unreliable, immaterial or able to be accounted for using proxies. Proxies are assets that existed and for which data is available, which Bridgewater believes would approximate returns for an asset that did not exist or for which reliable data is not available. For example, before reliable commodity futures returns data can be found Bridgewater estimates futures returns by using the spot commodity returns and their typical relationship to futures returns. Examples of omitted markets or accounted for using proxies include, but are not limited to, emerging market equities, emerging market debt, and certain commodities. The mix and weightings of markets traded for All Weather Strategy Simulation are subject to change in the future.

The All Weather Strategy Simulation includes periodic adjustments that are made to the All Weather Strategy Simulation's desired strategic asset allocation and level of risk pursuant to Bridgewater's systematic strategic management process. Such strategic management is based on a systematic process that assesses whether the assumptions underlying the All Weather Strategy (for example, that assets will outperform cash, and that assets can be reasonably balanced against each other) are under threat, and systematically adjusts or reduces exposures accordingly. When applicable, the returns of the All Weather Strategy Simulation reflect adjustments based on this systematic strategic management process.

Simulated asset returns are subject to considerable uncertainty and potential error, as a great deal cannot be known about how assets would have performed in the absence of actual returns. The All Weather Strategy Simulation is an approximation of our current process but not an exact replication and can have differences including but not limited to the precise mix of markets used and the weights applied to those markets. It is expected that the simulated performance will periodically change as a function of changes in our investment process and refinements to our simulation methodology (including the addition/removal of asset classes) / underlying market data. There is no guarantee that previous results would not be materially different. Future strategy changes could materially change previous simulated returns in order to reflect the changes accurately across time.

Net of fees performance includes (i) a model management fee and other operating fees, (ii) reinvestment of interest, gains and losses and (iii) modeled transaction costs. Transaction costs are accounted for and are estimates themselves based on historical measured costs and/or modeled costs. Actual transaction costs experienced could have been higher or lower than those reflected. Where noted, the All Weather Strategy Simulation net of fees returns have been calculated using a model fee based on our standard fee schedule for a minimum size account, which are the highest standard fees we have or would currently charge an account. Investment advisory fees are described in Bridgewater's ADV Part 2A. Gross of fees performance (i) excludes the deduction of management fees, and other operating expenses (the "fees and expenses") and (ii) includes the reinvestment of interest, gains and losses. Including the fees and expenses would lower performance. There is no guarantee regarding the All Weather Strategy Simulation's ability to perform in absolute returns or relative to any market in the future, during market events not represented or during market events occurring in the future. Market conditions and events vary considerably, are unpredictable and can have unforeseen impacts resulting in materially adverse results. ACCORDINGLY, PLEASE REACH OUT TO YOUR CLIENT ADVISOR IF YOU HAVE ANY QUESTIONS ABOUT THIS SIMULATION.

Markets included in the All Weather Strategy Simulation

The All Weather Strategy Simulation includes returns from the following markets: global nominal interest rates, global inflation linked bonds, emerging market credit spreads, corporate credit spreads, global equities, and commodities.

PURE ALPHA STRATEGY PERFORMANCE DISCLOSURES

Pure Alpha Strategy 12% Volatility Net (Net Total Returns from Dec 1991 through Oct 2023)

1991	5.2%	2004	13.8%	2017	1.3%
1992	4.7%	2005	3.5%	2018	10.0%
1993	24.5%	2006	3.4%	2019	0.3%
1994	-0.5%	2007	9.6%	2020	-7.6%
1995	-1.7%	2008	8.7%	2021	5.9%
1996	24.5%	2009	1.7%	2022	6.7%
1997	19.9%	2010	27.4%	2023 YTD	6.4%
1998	25.9%	2011	16.1%		
1999	1.4%	2012	0.6%		
2000	-3.5%	2013	3.5%		
2001	6.1%	2014	2.5%	Avg Annual	7.8%
2002	14.2%	2015	3.3%	StDev	10.2%
2003	21.7%	2016	2.0%	Ratio	0.52

Past results are not necessarily indicative of future results. Returns prior to May 1999 are simulated, i.e., hypothetical based on a partially funded account that is adjusted as described herein.

Average annual returns and Sharpe ratio are calculated using net of fees performance, while the standard deviation is calculated using gross of fees performance.

HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM.

ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

Bridgewater Pure Alpha Strategy 12% Volatility Performance Disclosure:

The performance history provided is based on actual Bridgewater Pure Alpha accounts. Returns since the strategy's inception in December 1991 through April 1999 are based on the actual performance of a partially funded account (where interest income has been removed to arrive at the excess returns), and are adjusted to include the imputed interest return on the full notional value using the US repo rate. Returns from May 1999 through present are the actual returns of the longest running fully funded Pure Alpha account with a target tracking error of 12%, an approximation of an United States cash benchmark, and fully unconstrained active management guidelines. Bridgewater manages additional Pure Alpha portfolios not included in this performance history.

Gross of fees performance is gross of management and performance fees and includes the reinvestment of interest, gains, and losses, operating expenses and taxes. Returns will be reduced by the investment advisory fees that will be incurred in the management of the account.

Where shown, from December 1991 through April 1999, net of fees returns have been calculated using the cumulative gross return of the Strategy starting in December 1991 and applying a model fee based on our standard Pure Alpha fee schedule, which are the highest standard fees charged. From December 1991 through April 1999, using a monthly high water concept (and after April 1999 a quarterly high water concept) deduction of incentive fees have varied over time and might be higher or lower than the fees actually charged to the account for the same time period. These returns reflect all fees (which are at our Pure Alpha standard rates), expenses and interest actually charged or credited to the account by Bridgewater, but not fees charged by third-parties. Investment advisory fees are described in Bridgewater's ADV Part 2A.

No representation is being made that any account will or is likely to achieve returns similar to those shown. Trading in futures is risky and can result in losses as well as profits. PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. Performance as of the current month is estimated and subject to change.

PURE ALPHA STRATEGY 18% USD DISCLOSURES

Pure Alpha Strategy 18% Volatility Net (Net Total Returns from Dec 1991 through Oct 2023)

1991	7.6%	2004	20.4%	2017	1.3%
1992	5.1%	2005	3.1%	2018	14.6%
1993	36.8%	2006	1.7%	2019	-0.7%
1994	-3.1%	2007	12.7%	2020	-12.6%
1995	-5.7%	2008	9.4%	2021	8.1%
1996	36.6%	2009	1.9%	2022	9.4%
1997	28.2%	2010	44.8%	2023 YTD	7.5%
1998	37.8%	2011	25.3%		
1999	0.1%	2012	0.8%		
2000	-7.9%	2013	5.2%		
2001	6.9%	2014	3.5%	Avg Annual	10.4%
2002	22.1%	2015	4.7%	StDev	15.3%
2003	33.8%	2016	2.5%	Ratio	0.52

Past results are not necessarily indicative of future results. Returns Based on Related Fund Performance Prior to May 2005.

Average annual returns and Sharpe ratio are calculated using net of fees performance, while the standard deviation is calculated using gross of fees performance.

HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM.

ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS. The recipient should not solely rely upon these hypothetical performance results in making an investment decision. In constructing hypothetical performance and determining their appropriateness for use in materials, Bridgewater has an incentive to do so in a manner that shows beneficial characteristics of a given, hypothetical return stream.

Bridgewater Pure Alpha Strategy 18% Volatility Performance Disclosure:

Returns after April 2005 are the actual returns of the longest running fully funded Pure Alpha account with a target tracking error of 18%, a United States cash benchmark, and fully unconstrained active management guidelines. From December 1991 through the end of April 2005 the performance history provided is based on the performance of the Pure Alpha strategy run at a 12% target volatility. A description of the 12% target volatility performance is provided below. The value added (or excess returns) of the 12% target volatility gross of fees performance history have been scaled to an 18% target volatility. Monthly value added returns are scaled linearly by a factor of 1.5 (18% divided by 12%). The Benchmark return (an approximation of US cash) is subsequently added back to the adjusted value added to arrive at a total return. For the entire period the Benchmark is an approximation of US cash. Due to the effects of compounding, annualized historical returns, volatilities, and information ratios will not scale linearly. The returns are considered simulated or hypothetical.

Bridgewater Pure Alpha Strategy 12% Volatility Gross Performance Disclosure:

The performance history provided is based on actual Bridgewater Pure Alpha accounts. Returns since the strategy's inception in December 1991 through April 1999 are based on the actual performance of a partially funded account (where interest income has been removed to arrive at the excess returns), and are adjusted to include the imputed interest return on the full notional value using the US repo rate. Returns from May 1999 through present are the actual returns of the longest running fully funded Pure Alpha account with a target tracking error of 12%, an approximation of an United States cash benchmark, and fully unconstrained active management guidelines. Bridgewater manages additional Pure Alpha portfolios not included in this performance history.

Gross of fees performance is gross of management and performance fees and includes the reinvestment of interest, gains, losses, operating expenses and taxes. Returns will be reduced by the investment advisory fees that will be incurred in the management of the account.

Net of fees performance for the entire period shown have been calculated by applying a model fee based on our standard Pure Alpha 18% Volatility Strategy fee schedule, which are the highest standard fees charged. Investment advisory fees are described in Bridgewater's ADV Part 2A. From December 1991 through June 2008, using a monthly high water concept (and after June 2008, using a quarterly high water concept), deduction of incentive fees may vary and may be higher or lower than the fees actually charged to the account for the same time period. These returns reflect all fees (which are at our Pure Alpha standard rates), expenses and interest actually charged or credited to the account.

No representation is being made that any account will or is likely to achieve returns similar to those shown. Trading in futures is risky and can result in losses as well as profits. PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. Performance as of the current month is estimated and subject to change.