



Board of Trustees

Quarterly Meeting

May 19-20, 2021

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QUARTERLY MEETING OF THE BOARD OF TRUSTEES May 19-20, 2021

Elizabeth Peratrovich Hall
320 West Willoughby Avenue, Juneau, AK 99801

Due to health and public safety precautions we invite the public to attend virtually, however, this meeting will be open to the public for in person attendance. We ask you to follow all local social distancing and mask mandates.

Day 1 Webinar Access (click link to join webinar)

Join via WebEx and enjoy the ability to listen on your computer and follow presentations:
<https://apfc.webex.com/apfc/onstage/g.php?MTID=e46843f396effcdfac355b7bdf6899c30>
Event Password: APFC0519

Day 2 Webinar Access (click link to join webinar)

Join via WebEx and enjoy the ability to listen on your computer and follow presentations:
<https://apfc.webex.com/apfc/onstage/g.php?MTID=ee62962fed22dc951c1e9604389934319>
Event Password: APFC0520

Teleconference Option

**If you are unable to join in-person or via webinar, please contact us at
(907) 796-1500 to receive a teleconference number.**

AGENDA

WEDNESDAY, MAY 19, 2021

- | | |
|------------|---|
| 8:30 a.m. | <p>CALL TO ORDER</p> <p>ROLL CALL (Action)</p> <p>APPROVAL OF AGENDA (Action)</p> <p>APPROVAL OF MINUTES (Action)</p> <ul style="list-style-type: none"> • February 17-18, 2021- BOT Quarterly Meeting • April 05, 2021- BOT Asset Allocation Workshop <p>SCHEDULED APPEARANCES AND PUBLIC PARTICIPATION</p> |
| 8:45 a.m. | <p>COMMITTEE REPORTS</p> <ul style="list-style-type: none"> • Audit Committee |
| 9:00 a.m. | <p>CHIEF EXECUTIVE OFFICER'S REPORTS (Information/Standard Reports)</p> <ul style="list-style-type: none"> • Pending Board Matters, Trustee Education Report, Disclosure Report, Staff Summary Report, Staff Education & Training Report, HR Summary Report, Communications Report, Legislative Update, Financial Report, APFC Transfers, APFC History & Projections, Investment Management Fee Report, FY21 Budget Report |
| 9:15 a.m. | <p>CHIEF INVESTMENT OFFICER REPORT (Information)</p> <p>Marcus Frampton, Chief Investment Officer</p> |
| 9:45 a.m. | <p>INVESTMENT ADVISOR COMMENTS (Information)</p> <p>Ken Frier</p> <p>John Skjervem</p> <p>George Zinn</p> |
| 10:15 a.m. | <p>BREAK</p> |

10:30 a.m. RISK OVERVIEW (Information)
Sebastian Vadakumcherry, Chief Risk Officer

11:15 a.m. CAPITAL MARKET OVERVIEW (Information)
Greg Allen, Callan LLC
Steve Center, Callan LLC

12:00 p.m. LUNCH

12:30 p.m. FUND PERFORMANCE OVERVIEW (Information)
Marcus Frampton, Chief Investment Officer
Steve Center, Callan LLC

2:15 p.m. BREAK

2:30 p.m. REAL ESTATE ASSET CLASS UPDATE (Information)
Tim Andreyka, Director of Investments – Real Estate

3:30 p.m. REAL ESTATE MARKET OUTLOOK (Information)
Mary Ludgin, Heitman

4:30 p.m. RECESS FOR THE DAY

THURSDAY, MAY 20, 2021

9:00 a.m. MEETING RECONVENES

9:05 a.m. REAL ESTATE MARKET OPPORTUNITIES (Information)
Sue Ansel, Gables
Stephen Panos, Real Term

11:00 a.m. BREAK

11:15 a.m. INVESTMENT ADVISOR PRESENTATION (Information)
George Zinn, Topic: SPACS

11:45 p.m. INVESTMENT POLICY REVIEW & ADOPTION (Action)
Marcus Frampton, Chief Investment Officer
Sebastian Vadakumcherry, Chief Risk Officer

12:15 p.m. LUNCH

12:45 p.m. PACING APPROVAL (Action)
Marcus Frampton, Chief Investment Officer
Tim Andreyka, Director of Investments – Real Estate
Steve Moseley, Director of Investments - Alternatives

1:30 p.m. APFC BUDGET REVIEW (Action)
Sara Race, Administrative Operation Manager

- FY21 BUDGET PROJECTIONS (Information)
- FY22 BUDGET APPROVAL (Action)

2:00 p.m. ADVISOR COMMENTS (Information)
Ken Frier
John Skjervem
George Zinn

2:15 p.m. OTHER MATTERS
Angela Rodell, Chief Executive Officer

2:20 p.m. TRUSTEE COMMENTS
FUTURE AGENDA ITEMS

2:30 p.m. ADJOURNMENT

SUBJECT: Approval of Minutes

ACTION: X

DATE: May 19, 2021

INFORMATION:

BACKGROUND:

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

- February 17-18, 2021 Quarterly Meeting
- April 5, 2021 Asset Allocation Workshop

RECOMMENDATION:

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

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

WEBEX/TELECONFERENCE

February 17 and 18, 2021

8:30 a.m.

Originating at:

Alaska Permanent Fund Corporation
801 West 10th Street
Mendenhall Conference Room
Juneau, Alaska 99801

Trustees Present:

William Moran, Chair
Ethan Schutt
Lucinda Mahoney

Steve Rieger, Vice Chair
Corri Feige
Craig Richards

Trust Staff Present:

Angela Rodell, CEO
Val Mertz, CFO
Valeria Martinez
Sebastian Vadakumcherry
Tim Andreyka
Chad Brown
Jennifer Thorsteinson
Ross Alexander
Paulyn Swanson
Masha Skuratovskaya
Rachel Price
Brian Tyler
Fawad Razzaque

Marcus Frampton, CIO
Steve Moseley
Jim Parise
Sara Race
Tom O'Day
Danielle Graham
Larissa Murray
Youlian Ninkov
Katherine Smith
Nellie Metcalfe
Julia Mesdag
Chris LaValle
Scott Balovich

Investment Advisers:

George Zinn
Kenneth Frier

John Skjervem

Other Participants:

Greg Allen, Callan
Paul Erlendson, Callan
Doug Woodby, Public Testimony
James Simard, Public Testimony
Dick Farnell, Public Testimony
Bhaskaran Swaminathan, LVS Asset Management

Steve Center, Callan
Eileen Schroeder, Public Testimony
Bob Schroeder, Public Testimony
Steven Fife, Public Testimony
Andrew Wellington, Lyrical Partners

PROCEEDINGS

CALL TO ORDER

CHAIR MORAN called the meeting to order and asked for the roll call.

MS. THORSTEINSON stated that the trustees were online, and there was a quorum.

APPROVAL OF AGENDA

MOTION: A motion to accept the agenda, as presented, was made by TRUSTEE FEIGE; seconded by TRUSTEE RIEGER.

There being no objection, the MOTION WAS APPROVED.

MOTION: A motion to approve the minutes of December 9-10, 2020 was made by TRUSTEE MAHONEY, seconded by TRUSTEE RIEGER.

MR. SKJERVEM pointed out an error in the minutes on page 16 of 31. The sentence read “with” and it should be “without”.

MS. THORSTEINSON stated there were no objections.

There being no objections, the MOTION WAS APPROVED.

PUBLIC TESTIMONY

CHAIR MORAN stated that there were a number of people scheduled to give public testimony. He continued that the public testimony is typically limited to three minutes, and he encouraged the participants to provide additional information to the Board if that is warranted. He asked for the first participant.

MS. THORSTEINSON stated that Mr. Woodby was first.

MR. WOODBY introduced himself and thanked all for the opportunity to provide comments. He continued that his comments focus on a letter dated 22 January from CEO Rodell to Dr. Ruth Shiner which provides the Corporation’s fiduciary rationale for continuing investments in the fossil-fuel industry. He explained why the key assertions were problematic and defended the investment actions’ academic financial theory. He stated that there is no requirement to maintain investments in declining industries. He asked that a closer look at the rationale for continued investments in the fossil fuel sector be taken. He thanked the Board.

CHAIR MORAN thanked Mr. Woodby and stated that he would look at the additional submission. He recognized Mr. Steven Fife.

MR. FIFE stated that he was a senior attorney at the Center for International Environmental Law in Washington D.C. He has researched, written on, and supported legislation addressing climate-related financial risk and its significance to investors and fiduciaries. He was asked by 350Juneau to address the specific material financial risks facing fossil fuels and highlighted some of the unique aspects of those risks which make it imprudent for the Alaska Permanent Fund or any other long-term investor to remain invested in fossil fuels. He stressed the

fundamental differentness of the situation. The global community has agreed to address ecological crises driven primarily by a single but economically significant sector. Backward-looking models have no precedent for this kind of phaseout, and the rising tide of climate litigation represents an unprecedented global liability risk. He thanked the Board.

CHAIR MORAN thanked Mr. Fife.

MS. THORSTEINSON stated that Mr. Farnell was next.

MR. FARNELL stated that he was Dick Farnell, a resident of Juneau and a member of 350Juneau, Climate Action for Alaska. He shared a list of recent issues he had encountered that related to the difficulties that the fossil fuel industry has been experiencing and grouped them into six different categories. First was financial; second was drilling opportunities for fossil fuels; third was lawsuits; fourth were actions by oil companies; fifth was climate risk assessment; and last was automobiles.

CHAIR MORAN thanked Mr. Farnell.

MS. THORSTEINSON stated that Ms. Elaine Schroeder was next.

MS. SCHROEDER stated that she was a 40-year resident of Juneau and appreciated the board's interest in hearing from the public. She briefly highlighted some very recent blows to the profitability of the fossil fuel industry, which has been the worst-performing sector on Wall Street for a decade. Because of those, the APFC can no longer rely on historical performance to guide fossil-fuel investments. She added that it is a radically new investment world out there, and it behooves the drilldown on assessing climate risk and acting accordingly. She thanked the Board.

MS. THORSTEINSON stated that Jim Simard was next.

MR. SIMARD thanked the board for the opportunity to speak and stated that he was a retired librarian, lived in Juneau, was a grandfather, and is also a board member of 350Juneau. He continued that last December he spoke about the risks posed by climate-related litigation against the fossil-fuel industry. The original cases against corporations typically failed in Federal courts due to a judicial philosophy that liability for changes in the climate was properly addressed by executive or legislative action. He added that a second wave of cases, many of them tort cases or public nuisance suits brought by municipalities, are gaining traction in state courts in light of information long held by the industry and withheld from the public. He gave a brief update on one of the significant cases presented to the US Supreme Court, BP v. the Mayor and the City Council of Baltimore. The Supreme Court is hearing arguments on where the case should be tried, with a ruling expected by this spring. He mentioned a few of the dozens of current cases worldwide relying in part on human-rights claims. He thanked the Board and stated that he would be happy to answer any questions.

MS. THORSTEINSON stated that Bob Schroeder was next.

MR. SCHROEDER stated that he was Robert Schroeder and a Juneau resident. He thanked all for the opportunity to testify and, as a member of 350Juneau, had come before the board several

times with his concerns. He continued with three related requests for APFC: First, the public needs to know what fossil-fuel-related holdings are part of the Permanent Fund and the investment trajectory; second, they had requested that the Fund institute climate-risk assessment as a component in evaluating its holdings; the request for full divestment follows from the assessment of the riskiness of these investments. He stated that there was concern that APFC has a political loyalty to big oil and fossil-fuel extraction that eliminates a cold, hard, objective look at what is going on in this sector. He also stated concern that continued investments in the risky fossil-fuel sector will decrease APFC returns, lower PFD amounts, and result in less funding available to keep the State of Alaska operating. There is a want that the Permanent Fund in fact be permanent. He thanked the Board for their service in managing their money.

MS. THORSTEINSON stated that the next name on her list was Mr. Cody Williams. Assuming he was not online, she continued to John Kevin. She apologized for the technical issues. She added that they are free to send their written comments. She continued that public testimony was concluded.

CHAIR MORAN thanked all for their testimony that would be considered. He continued that if there were any people that were unable to testify, either for technical or other reasons, to please submit their information to the Fund which will be distributed to the trustees. He moved to the chief executive officer's reports.

CHIEF EXECUTIVE OFFICER'S REPORTS

CEO RODELL welcomed the members of the Board, to the ones in Juneau in person and Trustee Richards and Trustee Schutt online. She began with the HR report which gave a sense of the activity within HR. She stated that there was a huge influx of resumes and applications to various vacant positions. There are four offers out to people with the hope that a lot of the vacancies will be filled by the next Board meeting. She moved to a highlight on the strategic plan. She continued that there were two objectives, goals that the Board identified in December, just trying to gain some momentum. The third goal was build best-in-class asset management, and we are working toward getting the positions filled. She added that staff will be working on specific plans for in-house management for the FY23 budget proposal. The first draft for business continuity was completed and, in May, we will talk about the business continuity plan which will be in executive session.

TRUSTEE RICHARDS stated that the strategic plan and goal is bigger than the next budgetary cycle and what is asked for staffing. He continued that the bigger idea is having a strategic plan of each asset class, looking a couple of years forward. He would like to see staff focus on that for the next meeting with a plan in place for the status of each asset class.

CEO RODELL replied that it will be put beyond a budget cycle. She moved to a legislative update and the highlights of those bills that were included by Pauly Swanson. These are available on the Alaska Legislature's website. She stated that mineral revenues continue to be well below historical averages. She wrapped up by including the net-of-fee reports which include actual fees that are paid from the investment allocation. This is everything being paid, not just net.

CHAIR MORAN asked for a possible work session that would be helpful for trustees to have a better understanding of what is inside of some of the proposals, rather than the top of the line.

He moved to the chief investment officer's report.

CIO REPORT

CIO FRAMPTON stated that he would cover the most important topics that are being worked on in the Investment Department. He continued that there is always quite a bit on performance, which would be covered by Callan. He moved to public equity in detail, and then gave some high-level thoughts. He stated that the three largest asset classes beat their benchmarks, and then the four smallest asset classes underperformed slightly. He went through some of the benchmark mismatches. He added that the fantastic performance will be seen in the next quarter. He reminded that this year about a billion six will be committed to private equity opportunities. He continued with personnel, which was very active. There was an accepted offer for a private equity associate, and we did final-round interviews for a private equity senior portfolio manager. These were the two important private equity positions that are expected to be filled in the near term. Final interviews for a real estate senior portfolio manager should have offers out in a few weeks. There is an additional open senior position that historically was an alternative, and the remaining two open positions are public equity. He then commented on the progress with real estate, and in the three months covered, one investment was made, an open-ended apartment fund, with \$300 million put in it in January. He moved to asset allocation and talked about the strategies to achieve return objective. His last section was investment actions, and he listed cash flows which were previously covered. There was also a significant public equity rebalance that shifted to more of a value tilt than before. He summarized that the deal flow is really strong in private equity.

CHAIR MORAN asked for any questions. There being none, he moved to the investment adviser comments.

INVESTMENT ADVISOR COMMENTS

MR. SKJERVEM introduced himself and began with a comment on rebalancing. He shared his perspective based on his experiences in Oregon where a systematic approach was used where there was a futures overlay. That overlay was triggered based upon a range and targets of 5 percent plus or minus. It was developed principally to avoid the emotion that one of the hardest things to do is to rebalance and buy equities after a sharp 20 percent selloff, or to sell equities when everything is great and a lot of money is being made. He continued that the purpose of the systematic approach was to guard against pro-cyclical behavior. He added that, after learning more about the organization, it has the fortitude to pursue a more discretionary approach. He applauded everyone for that. He stated that his experience so far was that Marcus Frampton and his team have the fortitude to make the tough decisions of either buying low or selling high. The outflow to the budget complicates things, and he just wanted to offer that perspective. He added that what is being done is working fine.

MR. FRIER remarked about the asset class presentation that was heard from the public equity team. He stated that he had a special interest in public equities and there were three things going on that matter. One is the selection of external managers. He continued that it is very hard to achieve this kind of outperformance from a set of outside managers at this scale, and the team deserves commendation for that. The second thing going on is that the team generated very strong results from the tactical tilts. The third things are the more structural factors and geographic tilts that are in the portfolio. Being in the position of oversight to the portfolio he would like to know more about the structure for making the internal bets within the public equity

portfolio. He added that there were a lot of potential bets that can be made.

CHAIR MORAN recognized George Zinn.

MR. ZINN stated that he had a conflict for tomorrow, and secondly, that he would be retiring from his role at Microsoft in the spring and wanted to communicate that to the Board of Trustees. He added that it would probably enhance his ability to participate in meetings. He continued that he wanted to bring the Board's attention to what is being referred to as the "SolarWinds hack" or also "Solargate." He explained that this was essentially a pernicious cyber attack discovered almost by accident by a private-sector firm that is supposed to be in charge. He stated that FireEye discovered this by a lucky coincidence; if the company had not elected to go after that cyber security firm's tools, the hack might not have been discovered. What actually happened was an employee logging in using a trusted device simultaneously in their Mandiant unit, and he noticed a second device logging in. The two-factor authenticated a second device implicated in the employee's profile. What was not obvious to everyone is that it is certain that hackers have created additional back doors and spread to other networks. He added that the number affected is not a public number, and the FBI has subpoena power. He stated that this is referred to as a supply-chain attack, and the intent of this one was to spy and gather. He noted that it was important to understand that if the intent was different, it could be activated in a time of war to kill or otherwise render key information such as power grids inoperable. He talked about some of the new vocabulary where a zero-trust environment is an assumption of being breached. Cleaning your systems would be to get rid of the legacy systems, burn them down. Another term is a shift left. This means moving security to the earliest point in the development process to be able to anticipate and stop breaches before they happen, making the mitigation processes more effective. He stated that this is broadly important for the United States, and there are a number of spokespeople out there discussing what this would mean for international security. He distilled this down to three important things: First, have a process to risk-rank third-party vendors; second is a security exception process, excluding basic malware protections; and third is the two-factor authentication device.

CEO RODELL stated that Scott Balovich, the director of IT, is online if the trustees wanted to hear any follow-up to Mr. Zinn's comments.

CHAIR MORAN called a break.

(Break.)

CHAIR MORAN called the meeting back to order and moved to the risk overview. He stated that this was a multi-action item with a request for two items. He continued that this had been a multi-year process, and we will soon be going back into the asset allocation discussions. So, he would like to see this resolved today. He recognized Sebastian Vadakumcherry.

RISK OVERVIEW

MR. VADAKUMCHERRY stated that there were three parts to the presentation. The first part was about risk appetite and proposed a sub-definition, seeking approval from the Board. The second is also an action item, a waiver request. Third is the regular risk metrics that are reported on a quarterly basis as of December 31st. He began with the hope to define risk appetite, which is an articulation of what risk level to take -- the ultimate risk position to take. He added that the

focus was only on the investment-side risks. The risk tolerance portfolio was outlined in terms of volatility and drawdowns, and then he talked about what the maximum risk should be. He stated that the risk tolerance portfolio is an 80/20 mix of equity and bonds, with 80 percent indexed to the MSCI ACWI; the 20 percent is split between the AGG, the CORP, and ex-US Treasury. The definition is based on certain underlying computational aspects, which he explained. He highlighted that risk appetite was defined in terms of the risk tolerance portfolio, and we measure the actual portfolio against the risk tolerance portfolio on a monthly basis. In terms of reporting to the Board, there will be a measure of this on a monthly basis, and we will report at every quarterly meeting where we stand against the risk appetite. He stated that this was an action item for Board approval.....

CHAIR MORAN asked CEO Rodell to do a historical or management perspective.

CEO RODELL stated that the risk has been something that this Board has worked on possibly all the way back to 2005 when the Legislature approved use of the prudent investor mandate for the trustees and got rid of the allowable list. She continued, that was when trustees started to think about risk in a different way when looking at expanding into different asset classes. She stated that the work the Board did to get to this point in trying to articulate a benchmark for measuring risk is important and helpful in thinking about where to manage. She added that this is a key component, and all the work over the year has been so important to getting to this point. She was hopeful and supportive of this motion.

CIO FRAMPTON stated that what Mr. Vadakumcherry had laid out is consistent with the mandate of the five-year asset class plan and is something that could be managed. He continued that he was supportive, and it is important for the Board to measure risk.

TRUSTEE RICHARDS stated appreciation for the fact of going towards a more quantitative approach to risk and that everyone would agree that measuring risk and quantifying risk and adopting metrics to help do that are good. He continued that what he did not agree with is the proposal that this particular metric is not one that should be managed to. It is good for a point of reference, but he disagreed on it being the one that should actually drive behavior. He added that this metric did not have the quants behind it to justify driving actual behavior. He stated that the second thing was that he did not believe that the risk that is most important to be managing to is drawdown risk. The most important risk that the Permanent Fund has is meeting its cash calls under the POMV to the Legislature.

CHAIR MORAN stated that this was not going to be a perfect solution, but it is a tool that is needed to be comfortable with the management of the portfolio between the longer terms and between quarterly meetings. He continued that it also provided a more formal direction to staff when their recommendations to the Board for the asset allocation are put together, the limits that the Board feels comfortable with over time. It is timely, and there is a need to have this addressed.

MOTION: A motion that the Board adopt the definition of risk appetite that staff has presented, inclusive of the methodology for computing the riskiness of private equity, which is different from just straight Aladdin was made by TRUSTEE RIEGER; seconded by TRUSTEE FEIGE.

After the roll-call vote, the MOTION WAS APPROVED. (Trustee Schutt, yes; Trustee Mahoney, yes; Trustee Feige, yes; Trustee Richards, no; Vice Chair Rieger, yes; Chair Moran, yes.)

MR. VADAKUMCHERRY moved to the second part of the presentation which is also an action item. He stated that there is a limit in the investment policy which is a threshold for listed securities within the private equity portfolio. That limit is 20 percent. He continued that currently they stand at just under 30 percent and requested a waiver to operate about 20 percent for a period of 12 months and then come back and revisit this sort of exposure. The primary drivers of this excess is both to increase IPO activity with the private equity portfolio and the valuations of holdings within that listed space.

CHAIR MORAN asked for a closer definition of the exact problem.

MR. VADAKUMCHERRY replied that in the private equity portfolio there is a limit for listed stocks. Some of the private equity exits are to IPOs. Typically, there is a time frame when it is listed and then there is an exit. That can vary based on the liquidity, the actual optimal, or the highest valuation realized. In the recent past, there had been a number of IPOs within the portfolio that have happened within funds, some that are externally managed funds. There are also some direct investments which are part of the portfolio that have already been listed. Both have contributed to the 29 percent holding within the private equity space. He added that about a third of the private equity portfolio includes stocks in the stock exchange. He requested a waiver for that to continue.

CEO RODELL stated that staff had been working on the positions and looking at when it is opportune to the extent of not having control over some of the positions and taking steps on that front, rather than having a wholesale requirement, to just immediately sell everything in the direct IPOs at whatever price and creating a less than efficient outcome. Staff is seeking the waiver to have this above the 20 percent.

MR. VADAKUMCHERRY stated that this is one of those few good-to-have problems. He added that this is mostly the result of extremely successful investments by the investment committee.

CIO FRAMPTON added that the IPO has to be really robust. In looking at realtime, that number, the path of least resistance is up, not down.

CHAIR MORAN observed that this would be kind of the way that the system is designed to work when getting outside these deals. There is good reason to do something else, and the Board has the ability to know about it. He asked for a motion.

MOTION: A motion that in order to maximize returns, the Board allows a waiver for the policy, Section IV.A.3.d, to allow the exposure limit to exceed 20 percent for a period of 12 months was made by TRUSTEE MAHONEY; seconded by TRUSTEE FEIGE.

After the roll-call vote, the MOTION WAS APPROVED. (Trustee Richards, yes; Vice Chair Rieger, yes; Trustee Mahoney, yes; Trustee Feige, yes; Trustee Schutt, yes; Chair Moran, yes.)

MR. VADAKUMCHERRY moved to the last section and talked about risk metrics with a profile of volatility and Sharpe ratio.

CHAIR MORAN stated there were no more action items and moved to the capital market overview.

CAPITAL MARKET OVERVIEW

MR. ALLEN began with a brief introduction of his colleague, Paul Erlendson. He explained that Steve Center, who normally does the capital market review, had a conflict. He continued that Mr. Erlendson was his first boss and hired him at Callan in 1988. He added that Mr. Erlendson also works with the Alaska Retirement Management Board and the North Dakota Board and has also worked with many boards. He is also a student of the capital markets.

MR. ERLENDSON stated that one of the many things is the importance of defining the objective of what a pool of capital is for with three fundamental policies of what the spending policy is: the source and expectation for contributions coming in and what to do with the capital while it is under review. He continued that everything should be focused on that because it is easy to get distracted. Regardless of what happens, markets will be volatile, and it pays to keep an eye on what the long-term strategy is, given the spending obligations and funding opportunities that are available. He noted that it was also important to remember that even though the markets were down significantly last year, they rebounded significantly. The people who followed the disciplined rebalancing and kept their eye on implementing the long-term strategy that they adopted did the best. Looking at recent history, almost any risk was rewarded. Part of that was due to low interest rates that money could be borrowed and put to work in equity-oriented or riskier strategies and be compensated for it. He took a look at the public equity markets where the same thing held true. Volatility was more pronounced, and he was glad to hear the amount of attention spent on risk management because of lower expected returns going forward. Many additional risks should be moderated with higher degrees of confidence and not just optimism. He noted the single-year returns based on proxies for various indices. He stated that there was an educational program through the Callan Institute on March 25th, which will be a virtual event, dealing with generating yield in a zero-percent-interest-rate environment. He encouraged attendance. He stated that one of the challenges in all private-market asset classes, which came to light with real estate, is the reliance on third-party valuation. Unless there was a transaction, any price is just an estimate. He added that the same kind of metric would hold true for any other private asset classes. He stated that Callan has a fairly positive view on private-market investing over the last decade, and we have been expanding the resources within our private-market groups, that there is a belief in those asset classes as an opportunity set forward for investors. He added that the Permanent Fund is very broadly diversified with a great staff.

CHAIR MORAN thanked him for his presentation, and broke for lunch.

(Lunch break.)\

CHAIR MORAN called the meeting back to order, and recognized Steve Center.

FUND PERFORMANCE OVERVIEW

MR. CENTER offered his apologies for his conflict and thanked Mr. Erlendson for filling in. He stated that he would talk about performance for the Permanent Fund for the last quarter. He began with December when the Permanent Fund ended the year with allocations within the target ranges: about 40 percent allocated to public equity; 21 percent allocated to fixed income; and the remaining 39 percent allocated to alternatives. That was flat from where the Fund was as of September 30th from a percentage standpoint. He noted that there was a one-quarter lag on private equity, special opportunities, real estate, infrastructure, and private income. Everything else is reported in realtime. He stated that the overall performance for the quarter was quite strong and, over the last 12 months, performance was very much in line with all the benchmarks, slightly ahead of the total fund benchmark and slightly behind the passive allocation benchmark.

MR. ALLEN added that when the public equity portfolio outperformed its benchmark by 86 basis points, it contributed 86 basis points of “total” outperformance.

MR. CENTER continued that, overall, the Permanent Fund is ahead of its target benchmark for the fiscal year-to-date by 17 basis points, and up about 15.74 percent. A very strong performance for the first six months of the fiscal year. He then looked at some peer group comparisons. He stated that there was no perfect peer group to compare the Permanent Fund against because the program is simply structured slightly differently than what is seen from other endowments and foundations. He continued that the standard deviation number is based on historical returns and actually has a lower implied risk than what most endowments and foundations are actually invested in.

PUBLIC EQUITIES, ASSET CLASS UPDATE

MR. RAZZAQUE stated that he was the director of public equities and has been with the Fund in this role since March 2012. He continued that he is responsible for the asset class and is fully accountable for everything that went wrong or went right with it. He gave a snapshot of the allocation and stated that less than half of that external allocation were managers paid on a structural incentive-fee basis. Of the internal management, a bulk is in tactical tilt strategies, and there are five other strategies that are part of the internal management. He continued that his presentation was divided into three sections. Section 1 was a deep dive on external managers, management experience that had been at the Fund for about nine years. The second section explained our internal management, how it evolved and tactical tilt strategy that now has more than five years of history. The last section is the positioning relative to the index.

MR. SKJERVEM commented that Fawad is off to a great start and these numbers are terrific. This sets the expectations for the trustees. The context that is important to remember is that it is nine years, and we are about one third into the experiment. He stated that it would take another two decades before a definitive statement on this would be made. He continued that it is important for the organization to have a culture that will hang in there to get that definitive proof statement which will probably be beyond any of our tenures. It is more about a cultural commitment than anything else.

MR. RAZZAQUE agreed with Mr. Skjervem and stated that the more years that are added, confidence in the institution’s skill grows.

MR. ALLEN pointed out that these numbers were generated during a period where the market was largely becoming more concentrated, and active management is challenged in these periods.

MR. RAZZAQUE stated that it is the due diligence, manager selection and the strength of the ongoing due diligence. He continued on to internal management, which started in the second quarter of 2015 with tactical tilts and Youlian’s strategy in 2017. He explained that as an asset allocator, there is a wait for those passages where the risk/reward is extremely attractive, and there is a tilt. If it is no longer attractive, the tilt will be reduced. He pointed out the performance for the internal strategies, the tactical tilt and factor-based strategies for 2020. Tactical tilts use Exchange Traded Funds (ETFs), employs top-down allocation decisions, and has positions with time horizons anywhere from less than a month to 18 months, with flexibility to hold a larger cash position when necessary. He stated that tactical tilts essentially go anywhere to find opportunities and resides within global equity as a category. Global equity is a significant part of public equity, and all three have the same benchmark. He moved to the chart for the US equity market risk premium with long-term Treasury or long bond and stated that the style emphasis is value, and it became more value over the last two years than it was before. The value tilt is from the factor-based quasi-passive strategies. The tactical tilt is also positioned for value which is coming from three resources right now. The other overweight is emerging markets within the international allocation.

CHAIR MORAN moved to a break.

(Break.)

CHAIR MORAN came back on the record and stated that the final item on the agenda was a presentation by Ken Frier on identifying and managing equity downside risk.

INVESTMENT ADVISOR PRESENTATION

MR. FRIER reviewed a framework for assessing the risk of large losses from investments in global growth assets, such as equities. He stated that his framework was about predicting recessions, and he updates his metric daily. He stated that the challenge is when downturns end and investors become risk-seeking and bid up the high-vol things, and the low-vol strategies do poorly. This is a strategy that tends to not be helpful outside of downturn periods. He shared his own experience in developing and living with making investment decisions with these ideas. He summarized stating that a framework for assessing whether the probability of a crash is high or low can be created but a framework for assessing when a crash is certain cannot be created.

CHAIR MORAN stated that was a fantastic presentation by their advisers and recessed the meeting until 8:30 a.m.

(APFC Full Board of Trustees quarterly meeting recessed at 5:24 p.m.)

February 18, 2021

CALL TO ORDER

CHAIR MORAN called the meeting back to order. He turned the meeting over to Mr. Allen for the annual asset allocation study.

ANNUAL ASSET ALLOCATION STUDY

MR. ALLEN began with a quick update on his firm and the plan for the post-vaccine world. On the industry front, he stated that most of the asset management firms, particularly the larger ones, pushed their plans out further and are now talking about the fall. He continued that a survey is done every two months asking managers what they were doing in the work-from-home environment. He added that they are very conservative, and, basically, the entire asset management industry is working out of their homes, and it does not look like that will change materially until at least the summer, and most likely the fall. He stated that Callan is pushing forward, and we think it will be great when this is over. He continued that there were two things to be aware of with our large clients: The hot trends at the moment are diversity and inclusion. Clients are asking for statistics on their investment managers to see what their progress is. What was interesting was this came from the public fund sector and is increasingly becoming a corporate fund priority. He added that the asset managers had responded with data-gathering exercises. The other thing is the impacts of climate change on portfolios which clients are asking to have addressed in presentations. He talked about the capital market projection process, how the numbers were discovered and how those interact with the current economic environment. He then moved to the portfolio and gave some observations on what it looked like last year and what it looks like over the very long term. He stated that the process got better, that there are more people engaged in it, but it is essentially the same process. It is looking to generate long-term expectations for return, risk and correlation between asset classes that are used consistently across all of the clients in their strategic planning. He explained that the capital markets team does this every year, and it is sort of a consensus process. He shared a few graphs that put a “long-term perspective” into perspective. In trying to develop equity projections, valuations are looked at relative to their long-term averages. Currently, valuations are high relative to long-

term. He moved to fixed income and looked at valuation relative to long-term averages. When forecasting returns for bonds, the current yield is looked at, and it has been a very good predictor of forward return. He moved on to global equity and projected a return of 2.2 for the public fixed income portfolio. He also pointed out the projection for the Permanent Fund portfolio based on the current strategic target. He suggested that if the Permanent Fund could beat their benchmark over the next ten years by 50 basis points, net of fee, that would be really good. It is a very diversified portfolio, and generating alpha at the same time in every asset class across the whole diversified portfolio is very difficult. He summed up that return expectations have come down and that the COVID pandemic did not have much of a long-term impact on the markets.

CHAIR MORAN stated that it was an excellent presentation and thanked Mr. Allen.

EXTERNAL MANAGER PRESENTATION

LSV ASSET MANAGEMENT

MR. RAZZAQUE stated that the first of the two presenters is Lyrical Partners, one of the first managers that he had hired when he joined the Fund in 2000. He continued that we had taken a chance on them, and over the years they have not given us any reason to change our opinion of them. In fact, they exceeded expectations. He introduced Andrew Wellington.

MR. WELLINGTON stated that his topic was how to maximize returns over the long run. His simple answer is that the way to maximize returns is to buy cheap stocks. He shared a chart that showed a history of a few different return sources, one of which is called the cheapest quintile. He added, that was close to what they do. He talked about the returns when pursuing a simple strategy. Their universe of stocks are 1,000 of the largest stocks in the US market, and we sort them by forward P/E ratio. Then we do no other work other than taking the bottom 20 percent, the 20 percent lower P/E ratio stocks. He explained all that was wrong with buying stocks on forward P/E ratings and added that because the earnings are going down, these stocks are very expensive and produce bad returns. He moved to the Value Index and stated that value investing worked incredibly well, but the Value Index failed miserably. He said to buy the cheapest stocks, not because they worked well in the '70s, '80s, and '90s, but because the average 10-year period beat the market 94 percent of the time. He added that while value returns are great over the long run, they do go through cycles. He stated that the experience of investors does not measure up to the hypothetical results because they tend to sell when value is not working and they are not polled over ten-year periods. He added that these results do match and were outperformed, but the returns each year have a very high correlation to how the cheapest stocks have done. The goal, as active managers, is to pick out the best of the cheap stocks. Through active management, doing better research, picking out better business, they were able to do even better than just buying the cheapest stocks. The reality is that very few investors and very few boards have the wherewithal to go through a very difficult period when it is out of favor. He stated that, from the very beginning, Lyrical embraced being different. There are very few firms that are willing to just own the cheapest stocks and absorb some of the periods when they do not work for the rewards of the long-term returns. He continued that his firm is in a very small minority of value managers that really pursue the cheapest stocks in the market and are blind to the constituents of the benchmark. He believes that by always buying the 200 cheapest stocks, they will always be cheaper than everything else. The degree of cheapness does vary. He talked about the model that projects five-year forward earnings. He explained that this gave a longer-term horizon and also incorporated an element of growth. He noted that the most important thing is to look for "analyzability." It comes down to the price paid today versus the earnings

from going forward. To be successful as investors in any individual stock, there is a need to estimate somewhat correctly what future earnings will be. He continued that another factor about a company is the ease in which it can be analyzed. Companies that are easier to analyze and understand are right more often than the complicated ones. He added that they work very hard to find the easy stocks. He believed that Lyrical's formula should be very successful over time.

MR. RAZZAQUE thanked him for his time.

MR. WELLINGTON thanked the whole Board, stating appreciation for the confidence.

TRUSTEE MAHONEY asked to see the core data in terms of the last quarter, fiscal year-to-date, last year, the last three years. She added that she was struggling with the data presented versus what the actual returns were.

CEO RODELL stated that she pulled up the December 31 report and Lyrical's performance is there.

CHAIR MORAN called a break.

(Break.)

EXTERNAL MANAGER PRESENTATION

LSV ASSET MANAGEMENT (continued)

MR. RAZZAQUE stated that Lyrical and LSV are deep-value managers with their own versions of quality, a kind of bias. Lyrical emphasizes companies that have growth in them, and LSV has a different version of quality. He continued that both of these managers are at the heart of the active value exposures. LSV manages two strategies, but were first hired for the international value mandate in July 2014. After 18 months, they were hired for the US large-cap strategy. He stated that Dr. Swaminathan will talk about the phenomenon between value underperformance, historic, relative to growth, and if that has any predictability. He has a different perspective than Lyrical's.

DR. SWAMINATHAN stated that the title of his thoughts is: "Are Value/Growth Cycles Predictable?" He began with the concept of value premium, and then provided an exhibit list of key takeaways. He continued to past performance of value; value/growth relative valuations; and then ended by talking about if value premium could be predicted. He stated that LSV does not give much weight to book, and they do have book-to-market ratios that use an old model, and those metrics perform better. More attention is paid to cash-flow-based valuation metrics and earnings-based valuation metrics because intrinsic value is the present value of future cash flows. The key observations are there is a considerable time variation in value premium. He continued that markets stay rational longer than people stay solvent. The LSV approach is to be patient, not take too much risk, manage the volatility, be diversified, ride through the cycles, and wait for the eventual recovery.

MR. RAZZAQUE thanked Dr. Swaminathan for his research and for his presentation.

CHAIR MORAN called a break for lunch.

(Lunch break.)

CHAIR MORAN called the meeting back to order.

UPDATE ON INTERNSHIP PROGRAM

MR. BROWN gave the Board a quick overview of the internship program for this year. Due to the COVID pandemic, after countless hours spending time working with the partners, going through the recruiting process, ultimately it was decided to cancel the internships for 2020. He anticipated moving forward with the internship program this year, and they are actively recruiting on that, including working directly with the University of Alaska partners, the deans of the business school, the head of the finance programs, and others, to drive candidates to the corporate internship program as well as the partner internship program. There is a lot of coordination going into the partner program, and every organization has different time frames and different requirements for interns. He continued that this year's participating managers are Pathway, Acadian, Crestline, Alaska Permanent Capital Management, McKinley, and L&B Realty. There are also some candidates moving forward in the process with the anticipation that there will be some success with this year.

CEO RODELL asked if the internships could be done remotely versus in-person.

MS. GRAHAM replied that after speaking with the hiring managers, for the most part, they will be in-person.

TRUSTEE RICHARDS stated that this is great progress, and it is exciting to see that it is getting up and going. He observed that when he did this some 20-something years ago, the letters had to be sent to each individual outside manager. He continued that the current application process seems to be a better way to do it.

MR. BROWN appreciated Trustee Richards' comments. Providing the partners with good experiences so they continue participating was to add value without overwhelming their teams with additional applications that did not meet the requirements set forth.

ADOPTION OF REAL ESTATE REGULATIONS

MR. POAG stated that this was the first action item. He continued that the public notice, as required by State law, was put out. He walked through three things: Why the board has regulations; how regulations are adopted; and what changes are being proposed as they relate to regulations. He gave a brief background on the Board's authority as outlined in statute and how they were clarified. He pointed out that the regulations are not meant to be how to invest, but what to invest in. He noted that the core is embedded in statute. That core concept is to provide clear public notice of what change is being proposed. He stated that the method for adoption of regulations can be by a motion, by a resolution, or anything permitted by the bylaws. He continued that this Board, in the past, adopted all regulations through motion. He talked about the public notice requirements and stated that no interested persons were identified, and no notices were received. He added that also no comments were received. He went through the language of the regulation, if adopted, and also noted what was changing and why.

MOTION: Under the authority of Alaska Statute 37.13.206, a motion that the Board adopt, with immediate effective date, the proposed changes to the Alaska Permanent Fund Corporation's Real Estate Investment Regulation (15 AAC 137.450) as outlined in this presentation and as set forth in the Board Packet was made by TRUSTEE RIEGER; seconded by TRUSTEE FEIGE.

After the roll-call vote, the MOTION WAS APPROVED. (Trustee Feige, yes; Trustee Rieger, yes; Trustee Richards, yes; Trustee Schutt, yes; Trustee Mahoney, yes; Trustee Moran, yes.)

CHAIR MORAN moved to the advisor comments section.

ADVISOR COMMENTS

MR. SKJERVEM stated that he really enjoyed the public equity review, noting that this was his first time through that part of the portfolio. He thought that both staff and the external managers did a great job, and he particularly appreciated the rigor of the review. He reiterated the cultural import of some of the approaches; the contrarian approaches that historically have been very well-rewarded. He applauded Fawad Razzaque for stepping up to that.

CHAIR MORAN thanked Mr. Skjervem and stated that he looked forward to his comments at the next meeting. He recognized Ken Frier.

MR. FRIER stated that it was a fascinating meeting. He agreed that the results from the public equity team were exemplary, with a lot of things going on right there. He continued that it seems like the Fund is on the right track with manager selection. He added that he was familiar with what Mr. Razzaque was trying to do with the sector, and has achieved impressive results. He also agreed with the case for value investing which was well laid out in this meeting. Value should be poised to do well in the future. He moved to the dashboard he presented for assessing the equity market outlook. He stated that he updated his numbers. and it has inflation in the danger zone. His last comment was going back to the risk tolerance presentation, and he agreed with the compromise on the risk of private equity. He would like to see Trustee Richards' comment about "What does our risk tolerance choice mean for the ten-year expected return experience?" addressed.

OTHER MATTERS

CHAIR MORAN moved to other matters.

CEO RODELL reminded all that the February meeting is usually one of the shorter meetings of the year and this is the Legislature's first February meeting. For the May Board meeting she listed: reviewing asset allocation, and any changes made would take effect on July 1st. There had been mention of doing an in-depth workshop prior to that meeting, and we will be surveying trustees for their interest. She stated the possibility of having a work session on legislation. The legislative activity will continue being monitored to see if there is any movement there. She added that the May meeting is scheduled to be in Kodiak, and if the Board wishes to meet there, staff will continue to work on that. She did talk about the internet-latency problems in Kodiak; the speed of the transmission will lag and will not be heard in realtime. The possibility of swapping the Kodiak meeting with the Anchorage meeting was discussed to have a better chance of a full representation of the Board at the meeting. She asked if there were any education topics that the Board would like addressed at a future meeting.

CHAIR MORAN stated he would like to see something on cryptocurrency to get a better understanding of how it works and what is involved with it.

TRUSTEE RICHARDS asked for a substantive update on real estate to continue monitoring that it is getting fixed.

CHAIR MORAN asked for any thoughts on how to address the ESG issue going forward.

CEO RODELL replied that there was a topic about what managers are doing and how that affects the portfolio that can be discussed. Another would be climate risk as a risk that should be taken into consideration about the portfolio. Then there is divestment, and whether it is a tool that the Board should be considering.

TRUSTEE COMMENTS

TRUSTEE RIEGER stated that this was an excellent meeting, and he appreciated how well-prepared the presentations were. He reiterated that he was comfortable with the tilts that staff had been pursuing and that it makes empirical sense in terms of the information provided about why they were doing it. He hoped and encouraged being satisfied that there are adequate controls in place so that it never kind of blows up.

TRUSTEE FEIGE stated thanks to the Chair, CEO Rodell and staff for a really good meeting. She appreciated how engaged and conversant the advisors were, all leaning in on some of the presentations. She continued that it helps add a lot of background and texture, and she always learns a lot. She was very pleased that the risk tool was arrived at and got defined.

TRUSTEE MAHONEY stated it was a great meeting, she enjoyed all the presentations, and looked forward to the workshops.

TRUSTEE RICHARDS stated that he thought about the risk measures and continued to be leery. It is not that big of a negative, but he did not like it. He added that it is also information, and information used well is fine. He continued that, before any decisions or changes in behavior are made based on that tool, to be thoughtful and understanding. He thanked staff and the independent advisors for a great meeting.

TRUSTEE SCHUTT stated that it was another good meeting with a well-prepared staff and external advisors. The presentations were very educational and well thought out across the asset classes. He thanked everyone for the hard work and preparation for the meeting.

CHAIR MORAN thanked staff for another great meeting and gave Jennifer a shout-out. He stated that she makes these meetings better and better, and we are progressing forward there. He thanked her for the effort and forethought in getting a lot of the previous issues worked out for this meeting, and he stated that it went really well. He adjourned the meeting.

(APFC Full Board quarterly meeting adjourned at 2:15 p.m.)

ALASKA PERMANENT FUND CORPORATION

BOARD OF TRUSTEES RISK WORKSHOP

April 5, 2021
1-4 pm
Juneau/Teleconference

SUMMARY MINUTES

Trustees Present:

William G. Moran, Chair
Steve Rieger, Vice Chair
Craig Richards
Corri Feige
Lucinda Mahoney
Ethan Schutt

Investment Advisors Present:

George Zinn
Ken Frier
John Skjervem

Staff Present:

Angela Rodell, CEO	Nellie Metcalf
Marcus Frampton	Chris LaVallee
Valerie Mertz	Catherine Hatch
Pauly Swanson	Ross Alexander
Sebastian Vadakumcherry	Steve Mosely
Jennifer Thorsteinson	Valeria Buschfort
Larissa Murray	Alex Smith
Jon Strickler	Masha Skuratovskaya
Rachel Price	Keira Kelly
Katherine Smith	Chad Brown
Sarah Clark	Jim Parise
Chris Poag	Chirag Shah
Norix Mangual	Steve Moseley
Brian Tyler	Andrew Gallagher
Joe Shinn	Valeria Martinez

Others Present:

Greg Allen, Callan	Charles Short	John O'Connor
Steve Center, Callan	Amory Lelake	Karli Brakes
Connor Owen	Rep. Bryce Edgmon	Mc Cyril Espanol
Kevin Gray	Seth Whitten	Lauren Albanese
Summer Jarratt	Ariel Svetlik	Joe Smith

PROCEEDINGS

CALL TO ORDER

CHAIR MORAN called the meeting to order at 1:07 pm

SCHEDULED APPEARANCES AND PUBLIC PARTICIPATION

CHAIR MORAN asked if there was anyone on-line that would like to address the board. Hearing none, GREG ALLEN, CEO & Chief Research Officer with Callan, began his presentation.

ASSET ALLOCATION PRESENTATION

ALLEN presented Part I of Callan's presentation – an overview of asset allocation, an overview of APFC's asset classes, and capital market projections.

TRUSTEES RICHARDS and RIEGER asked questions. MARCUS FRAMPTON helped answer with the assistance of ALLEN.

FRAMPTON, Chief Investment Officer at APFC, began his presentation discussing the Fund's asset classes, and the five year asset class plan being implemented by staff. FRAMPTON'S presentation compared APFC's current five year asset allocation plan to three peers (Yale Endowment, Washington State Investment Board, and Texas ERS). During FRAMPTON'S presentation TRUSTEES RICHARDS and RIEGER asked questions and SEBASTIAN VADKUMCHERRY assisted FRAMPTON in answering.

Break from 2:35-2:50 pm

Asset Allocation presentation resumed with ALLEN covering Part II of Callan's presentation, focusing on different simulations, models, and range of expected returns.

CEO ANGELA RODELL, TRUSTEES RICHARDS and RIEGER, INVESTMENT ADVISORS KEN FRIER, JOHN SKJERVEM, and GEORGE ZINN, asked questions, shared comments, and discussed the topics presented. No actions were taken.

The meeting was adjourned at 4:07 pm.

SUBJECT: Chief Executive Officer's Report

ACTION: _____

DATE: May 19, 2021

INFORMATION: _____ X _____

BACKGROUND:

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

STATUS:

Angela Rodell, CEO, 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
- Communication Report
- Legislative Update
- Financial Report
- APFC Transfers
- APFC History and Projections
- Investment Management Fee Report
- FY21 Budget Report

SUBJECT: Pending Board Matters

ACTION:

DATE: May 19, 2021

INFORMATION: X

BY	TASK	CAPTURED	TARGET	COMPLETED
Frampton/Callan	FY22 Asset Allocation	02/21	05/21	
Moseley/Frampton	FY22 Private Income/Infrastructure Pacing	02/21	05/21	
Vadakumcherry	FY22 Updated Investment Policy	02/21	05/21	
Balovich/Race	Business Continuity Disaster Recovery Plan	02/21	09/21	
Frampton/Razzaque/ Parise/Moseley/ Andreyka	Asset Class Staffing/Business Plans	02/21	09/21	
Rodell	RFP for General Consultant	05/21	05/22	

SUBJECT: Trustee Education

ACTION: _____

DATE: May 19, 2021

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	Diverse and Emerging Manager Webinar	Webinar	June 11, 2021
	2021 National Conference	Salt Lake City	July 19, 2021
	Callan College: Intro to Investments	Virtual	August 17, 2021
		Chicago, IL	Oct. 6, 2021
		Virtual	October 26, 2021
Pacific Pensions & Investments	Summer Roundtable	Virtual	July 13-15, 2021
	Asia Pacific Roundtable	Pasadena, CA (and Virtual)	October 27-29, 2021

Memo

To: Bill Moran, Chair
Governance Committee

Through: Angela Rodell
Executive Director

From: Chad Brown
Director of Human Resources

Date: May 19, 2021

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 a period of January 1st – March 31st, 2021.

January 2021			
Name	Position Title	Disclosure Type	Received
Christopher LaValle	Senior Portfolio Accountant II	Individual Transaction	2/19/2021
Rachel Price	Investment Analyst	Individual Transaction	2/4/2021
Alexander Smith	Investment Operations Analyst	Individual Transaction	2/23/2021
Jonathan Strickler	Portfolio Accountant	Individual Transaction	3/15/2021
James Wilkey	Credit Analyst	Individual Transaction	2/10/2021
Steve Rieger	Board of Trustee	Individual Transaction	2/8/2021

February 2021			
Name	Position Title	Disclosure Type	Received
Keira Kelly	Portfolio Accountant	Individual Transaction	3/12/2021
Mason Kullander	IT Specialist	Individual Transaction	4/16/2021
Christopher LaValle	Senior Portfolio Accountant II	Individual Transaction	3/26/2021
Alexander Smith	Investment Operations Analyst	Individual Transaction	4/26/2021
Jonathan Strickler	Portfolio Accountant	Individual Transaction	3/15/2021
James Wilkey	Credit Analyst	Individual Transaction	3/15/2021
Logan Rahn	Associate	Individual Transaction	4/16/2021
Steve Rieger	Board of Trustee	Individual Transaction	3/16/2021
Sebastian Vadakumcherry	Chief Risk & Compliance Officer	Individual Transaction	4/26/2021

March 2021

Name	Position Title	Disclosure Type	Received
Keira Kelly	Portfolio Accountant	Individual Transaction	4/6/2021
Christopher LaValle	Senior Portfolio Accountant II	Individual Transaction	4/15/2021
Angela Rodell	Chief Executive Officer	Individual Transaction	4/14/2021
Alexander Smith	Investment Operations Analyst	Individual Transaction	4/26/2021
James Wilkey	Credit Analyst	Individual Transaction	4/12/2021
Logan Rahn	Associate	Individual Transaction	4/16/2021
Steve Rieger	Board of Trustee	Individual Transaction	4/7/2021
Sebastian Vadakumcherry	Chief Risk & Compliance Officer	Individual Transaction	4/26/2021

All disclosures have been reviewed by the Executive Director or me, in our capacity as compliance officers. All disclosures were in compliance with policy requirements. Disclosures will be filed in the appropriate personnel file and copies will be placed behind the corporate minutes of the next meeting.

If you have any questions, please call me at 796-1541.

Memo

To: Board of Trustees

From: Angela Rodell
Chief Executive Officer

Date: May 19, 2021

Re: Travel, Training, and Diligence Summary Report

Background:

This report includes APFC staff completed travel for the period January 1-March 31, 2021. 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	Telephonically
Executives	0	40
Fixed Income	0	10
Public Equity	0	35
Infrastructure & Private Credit	0	117
Real Estate	0	130
Private Equity	0	301
Asset Allocation	0	16

Travel Summary:

Budget-to-Actual Report: January 1, 2021 through March 31, 2021

*The following can be found in full in the FY21 Budget Report

CORPORATE OPERATIONS	BOARD-AUTHORIZED BUDGET	EXPENDITURES	BUDGET REMAINING
Travel	\$700,000	\$38,297.48	\$661,702.17
Staff	\$483,000	\$9,047.69	\$473,951.96
Trustees	\$22,000	\$4,380.35	\$17,619.65
Moving/Non-Employee	\$195,000	\$24,869.44	\$170,130.56

TRAVELER	PURPOSE	DATES OF TRAVEL		LOCATION
Kullander	Working remote and return to Juneau	1/29/21	2/12/21	Juneau, AK
Feige	APFC Board Meeting	2/16/21	2/19/21	Juneau, AK
Moran	APFC Board Meeting	2/16/21	2/19/21	Juneau, AK
Rieger	APFC Board Meeting	2/16/21	2/19/21	Juneau, AK
Mahoney	APFC Board Meeting	2/16/21	2/19/21	Juneau, AK
Mallinger	Training	2/26/21	2/28/21	Anchorage, AK
Sohraby	Employee Relocation	3/16/21	4/5/21	Juneau, AK (from New York, NY)



ALASKA PERMANENT
FUND CORPORATION

	EMPLOYEE	DEPT	TRAINING TYPE*	VENDOR	COURSE TITLE	CLASS HOURS	CITY	ST
1	Chad Brown	HR	OL	SHRM	SHRM - Diversity & Inclusion Credential Program	12.0	Online	
2	Chad Brown	HR	OL	Forbes HR Leadership	Workplace Wellness	1 Hour	Online	
3	Chad Brown	HR	OL		Equitable Pay as an Organizational Strategy	1 Hour	Online	
4	Danielle Graham	HR	OL	SHRM	Talen Acquisition	12.0	Juneau	AK
5	Danielle Graham	HR	OL	Predictive Index	Drive Results w/ Talent PI Workshop	14	Juneau	AK
6	Valerie Mertz	FIN	OL	AICPA	Governmental Update	8	Online	
7	Jacki Mallinger	FIN	Exam	AICPA	CPA Exam - REG Section	1 day	Anchorage	AK
8	Keira Kelly	FIN	OL	Surgent	CPA Review			
9								
10								
11								
12								

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

Memo

To: Board of Trustees

From: Chad A. Brown
Human Resources Manager

Date: April 26, 2021

Re: Human Resources – Q3 FY 2021 Summary

HR Philosophy

It is the philosophy of the HR Team to closely partner with our managers to assist in developing a culture where people enjoy coming to work, and provide a robust selection hiring process that allows potential hires to see what makes us a remarkable place to work while elegantly acknowledging the challenges we face and to ensure the corporation is protected from potential litigation. The HR team meets regularly with all managers to collaborate on new ideas, identify staffing opportunities and confirm their needs are being met while providing world class support they expect.

Recognition & Successes – FY Q2

Chad Brown received a Diversity, Inclusion & Equity Credential from the Society of Human Resource Management (SHRM).

Danielle Graham received a Talent Acquisition Credential from the Society of Human Resource Management (SHRM).

SHRM is the foremost expert, convener and thought leader on issues impacting today's evolving workplaces and is recognized throughout the HR industry as the premier organization for learning and development.

As of this meeting we've hired and onboarded the following staff:

Operations

Adam Kane – Communications Specialist
Andrew Gallagher – Investment Operations Analyst
Michael Prebeg – Systems Engineer

Investments

Chirag Shah – Senior Portfolio Manager, Private Equity
Nader Sohraby – Senior Associate, Private Equity
Clifton Sperry – Portfolio Manager, Real Estate
Stephen Adams – Senior Portfolio Manager, Real Estate

Corporate Interns

- Christa Sullivan – Accounting
- Veton Redzepi – Investments

Partner Internship Program - Update

In addition to our internal positions we've placed 4 interns through our investment partners

- Aden Haywood – Crestline Investors Inc.
- Jacob Begich – McKinley Capital
- Matthew Park – McKinley Capital
- Nathan Robertson – McKinley Capital

Challenges

While we continue to utilize the amazing technology implemented by our IT Team, the need for in person meetings with candidates posed a unique challenge. I could not be prouder of how everyone at APFC adapted and overcame these obstacles during this past year.

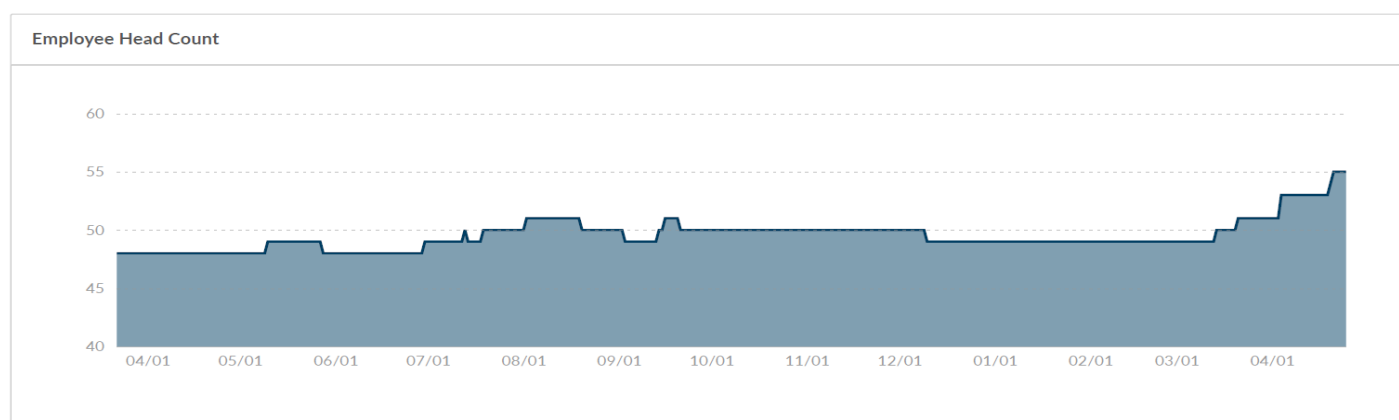
APFC continues to fight an uphill battle regarding compensation particularly for our investment staff. Compensation consistently rates at the top of the employee satisfaction surveys as a reason people would not recommend APFC as a place to work. We are currently working with our compensation consultant to get the most updated 2020 data to update our Pay Band Classifications in our PMP – Employee Handbook.

Impacts of COVID-19

As of March 8th, the office was reopened while allowing staff to maintain remote work status on a case by case basis. While we've had tremendous success working virtually the importance of coming together in person to maintain our culture, and connectedness has become clear.

In the midst of a global pandemic May 2020 – May 2021 the APFC team was able to bring on 16 new full-time staff and 2 interns. Eight new members of the team relocated to Juneau from New York, San Francisco, California, Utah, Texas, Massachusetts & Wisconsin (via Geneva Switzerland)

Dates
2020-03-23 - 2021-04-26



FY Q3 HEADCOUNT & VACANCIES AS OF 3/31/2020		
CURRENT COUNT BY DIVISION	FILLED FTE	VACANT FTE
Executive	3	0
Investments	21	5
Finance	10	1
Operations**	13	4
Risk & Compliance	3	0
	50	10*

*Statistics do not include summer interns - *Includes 2 Part Time FTE

HEADCOUNT & VACANCIES AS OF 4/26/2020 (PACKET DEADLINE)		
CURRENT COUNT BY DIVISION	FILLED FTE	VACANT FTE
Executive	3	0
Investments	23	3*
Finance	10	1
Operations**	13	4
Risk & Compliance	3	0
	52	8**

*Statistics do not include summer interns - * One additional new hire starting 5/4/2021 **Includes 2 Part Time FTE

CURRENT VACANT FULL TIME POSITIONS (5) AS OF 4/26/2021		
TITLE	DIVISION	DEPARTMENT
Investment Officer – PM Public Equities	Investments	Public Equities
Investment Associate – Public Equities	Investments	Alternatives / Private Equity
Accountant	Finance	Accounting
Business/Data Analyst	Operations	IT
COO	Operations	Executive
CURRENT VACANT PART TIME POSITIONS (2) AS OF 4/26/2021		
TITLE	DIVISION	DEPARTMENT
Admin Specialist / Receptionist – Part Time	Operations	Operations
Admin Specialist / Receptionist – Part Time	Operations	Operations

SUBJECT: Communications

ACTION:

DATE: 4/26/2021

INFORMATION: X

Presentations – Discussions – Speaking Engagements – Interviews - OpEd

Angela Rodell, Chief Executive Officer (AR)

February 2021

- AR – Presentation: AK Legislature, Senate Finance Committee
- AR – Interview: KTUU, Hank Davis
- AR – Interview: KINY Action Line, Pete Carran
- AR – Interview: AK Journal of Commerce, Elwood Brehmer
- AR – Presentation: AK Legislature, House Finance Committee
- AR – Presentation: AK Press Club, Liz Raines
- AR – Interview: ADN, James Brooks

March 2021

- AR – Presentation: House Finance Budget Subcommittee DOR

April 2021

- AR – Presentation: House Ways & Means Committee
- AR - Presentation: League of Women Voters
- AR – Invited Testimony: House Ways & Means Committee HB 165, HJR 1
- AR – Invited Testimony: House Judiciary Committee HJR 1
- AR – Opinion Piece. APFC: Vision for Alaska's Financial Anchor

Communications

APFC provides reliable and objective information to the Legislature, the Executive Branch, Alaskan stakeholders, and our global audience about the Alaska Permanent Fund. Our goal is to educate Alaskans and other interested parties on the Fund's workings and APFC's stewardship role to prudently invest and manage this financial resource to benefit Alaskans both today and in the future.

We are pleased to welcome Adam Kane, Communications Specialist, to the APFC team to support our efforts in meeting our statutory requirements, implementing our communications strategies, and educating our audiences about the Alaska Permanent Fund and the work that we do at the Alaska Permanent Fund Corporation to invest and account for this financial wealth on behalf of all Alaskans.

Current Projects

APFC's communications projects are developed to meet our communications plan's goals, deliver on comprehensive education objectives, and meet statutory obligations.

Crisis Communications Planning

In conjunction with the work that APFC has been conducting on Business Continuity and Disaster Recovery (BCDR), APFC's draft crisis communications plan has been reviewed. Work remains to align the communications plan with the BCDR management scenarios and complete the crisis communications plan matrix outside of the BCDR plan.

5 Year Strategic Communications Plan

It is time for an update of APFC's 5-year strategic communications plan. The strength of the plan that we developed back in 2016 is our work as a team within APFC focus groups and targeted implementation.

The development of our FY22-FY27 5-year strategic communication plan will also be an inclusive process starting with a corporate-wide survey, two facilitated staff focus groups with representation from management levels and divisions, and implementation strategy. Preliminary work has begun, focus groups will meet in early June, and a plan will be available for the Board's review during the September work session.

FY21 Annual Report

On Deck. Work will soon begin on the compilation of the annual report in accordance with our statutory disclosure requirement under AS 37.13.170. It will include the audited financial statements for the Alaska Permanent Fund and be released at the Board's Annual Meeting.

Enhancing APFC's Digital Communications and Social Media Presence

Ongoing. Social media allows us to advance APFC's goals and objectives in educating our stakeholders about the Fund and APFC. Facebook and LinkedIn are the two social media platforms that APFC currently utilizes. The highest reach and engagement levels are amongst the posts featuring monthly Fund values, historical notes, videos, Board of Trustee and staff profiles.

APFC's Website

Ongoing. Apfc.org is a wealth of information – from history to current fund values, from trustees' papers to financial statements, from the annual report to fund news, from education to Board of trustees' meetings info. It is a tremendous resource that we update daily, weekly, monthly to provide relevant information to our stakeholders. Website traffic and engagement metrics during the first quarter of 2021 show growth and improvement over that of 2020, up 34.5% in users and 37.5% in new users.

Internal Communications**Newsletter APFC**

Ongoing: HR is leading the effort on producing APFC's internal A-Team newsletter – this is a thoughtful, informative, fun e-publication – with insights from our leadership team, monthly recruitment updates, legislative updates, employee highlights, and an opportunity for staff to share photos of their adventures.

Legislative Initiatives – 32nd Alaska State Legislature

A legislative update including information on the budget and legislation is provided as a separate report in the Board packet.

APFC provides the Legislature in conjunction with the release of the financial statements a monthly email update on the Fund's value, including the Principal and the ERA. Notifications are also provided in advance of Board meetings with links to the agenda and packet.

SUBJECT: Legislative Update

ACTION:

DATE: 4/26/2021

INFORMATION: X

The first session of the 32nd Alaska State Legislature is scheduled to adjourn on their 121st day per Alaska's Constitution - May 19, 2021.

This report provides an update on legislative initiatives and an overview of the appropriations and legislation pertaining to the Alaska Permanent Fund and APFC.

APFC Legislative Initiatives

- Education. As a public entity, the Alaska Permanent Fund Corporation provides accurate, timely, non-partisan information about the Permanent Fund and our stewardship role in investing this financial asset on behalf of the State of Alaska.
 - CEO Rodell presented on APFC, the Fund, Trustees Resolutions and Papers before the House and Senate Finance Committees, the House Budget Subcommittee, the House Ways & Means Special Committee, and the House Judiciary Committee.
 - Meetings were held with House and Senate Leadership, Legislators and Staff to provide an opportunity for informal questions and discussion about APFC's mandate, the Fund Structure, Resolutions, and initiatives, particularly incentive compensation and APFC's budget request.
 - Royalty obligations to the Principal are recognized at both the Constitutional minimum of 25% and the 50% contribution for post-1979 leases as outlined in AS 37.13.010 (a)(2).
 - The importance of inflation proofing for intergenerational wealth is understood. However, the 'annual need' is not as evident given the FY20 special appropriation of \$4 billion to the Principal and accompanying intent to satisfy the inflation proofing requirement for the next 4 years.
 - The fundamentals and importance of adhering to the percent of market value draw methodology for long-term Fund sustainability are understood.
 - To allow the Fund to benefit all generations of Alaskans
 - To limit payouts and make them predictable
 - To protect the Fund's value through constitutional inflation proofing
 - To provide a payout methodology compatible with APFC's investment policy and asset allocation strategy
 - Board support for a constitutional amendment to enact a POMV spending limit and protect the entire Fund by eliminating the distinction between principal and earnings has been presented based on Resolutions 00-13, 03-05, 04-09, 18-04, 20-01.

Appropriations – APFC and the Permanent Fund

The timing of this report is such that final action on the budget has not occurred, and the House Finance Committee has adopted a CS as their working document. The Senate budget subcommittees are closing out, and the Senate is awaiting the House version of the budget.

BOT Proposed	GOV Proposed	Supplemental and Amendments	House Finance CS HB 69 (FIN)	Enacted
FY2022	FY2022	FY2021 and 22	FY2022	FY2022

APFC Operating Budget					
Operating Allocation	\$18,801,700	\$18,801,700		\$18,801,700	
Investment Mgmt Allocation	\$133,039,100	\$133,039,100		\$133,039,100	
Investment Mgmt Fee FY21 Supplemental			\$50,000,000	\$50,000,000	
Investment Mgmt Fee FY22 Amendment			\$60,000,000		
Total APFC Appropriation	\$151,840,800	\$151,840,800		\$151,840,800	

Principal Contributions and ERA Draws					
POMV Draw FY22	\$3,069,296,017	\$3,069,296,016		\$3,069,296,016	
Supplemental PFD FY21		\$1,225,518,055			
PFD FY22		\$2,023,947,000			
Total Draws	\$3,069,296,017	\$6,318,761,071		\$3,069,296,016	
Royalties - Constitutional	\$199,200,000	\$199,200,000		\$199,200,000	
Royalties - Statutory	\$41,400,000	\$41,400,000		\$41,400,000	
Inflation Proofing	\$1,059,000,000	\$0		\$0	
Alaska Capital Income Fund	\$27,161,600	\$27,161,600		\$27,161,600	

	BOT Proposed	GOV Proposed	Supplemental and Amendments	House Finance CS HB 69 (FIN)	Enacted
	FY2022	FY2022	FY2021 and 22	FY2022	FY2022
ERA Agency Support – Royalty Collection					
Law		\$2,619.6		\$2,619.6	
Natural Resources		\$6,167.6		\$6,167.6	
Revenue		\$99.6		\$99.6	

Appropriations Bills – APFC and the Permanent Fund

HB 69 / SB 49 APPROP: OPERATING BUDGET/LOANS/FUNDS REQUEST OF THE GOVERNOR Status: HB 69 H FIN SB 49 S FIN	FY 22 Operating Budget <ul style="list-style-type: none"> At the time of this report – final legislative action on the budget has not occurred. APFC's FY22 operating budget request has been included in the Governor's budget proposal at the Board's requested levels. It provides incentive compensation, the global rates analyst position, merit increases, and an increment for investment management. Instead of being one appropriation in the language section of the budget as requested by APFC, it is in the numbers section of the budget as one appropriation with two allocations: operations and investment management fees. An amendment for \$60 million has been submitted for investment management fees based on the current market performance and increase in the Fund's overall value since the budget projections were developed.
HB 84 / SB 68 APPROP: SUPP; REAPPROP; AMENDING; CBR REQUEST OF THE GOVERNOR Status: HB 84 H FIN SB 68 S FIN	<ul style="list-style-type: none"> Includes APFC's FY 21 supplemental budget amendment \$50 million to cover contractual funding obligations for investment management fees based on Board approval at the December meeting. This increase in cost is directly related to the outperformance of external investment managers exceeding performance benchmarks for the calendar year ending December 2020. Any funds appropriated and not expended will lapse at the close of fiscal year 2021 and remain in the Earnings Reserve Account. This supplemental is included in the House Finance version of the operating budget CS HB 69 (FIN) from HFIN.

HB 68 / SB 48 APPROP: SUPPLEMENTAL; AMENDING REQUEST OF THE GOVERNOR Status: HB 68 H FIN SB 48 SFIN	<ul style="list-style-type: none"> • The Governor proposes an FY21 supplemental draw from the ERA to pay the remaining 2020 permanent fund dividend based on the full statutory calculation to eligible recipients. • The amount of this draw from the ERA is estimated to be \$1,225,518,055. • The bill has an immediate effective date.
HB 72 / SB 52 APPROP: ERA FOR PAYMENT OF PFD REQUEST OF THE GOVERNOR Status: HB 72 H FIN SB 52 S FIN	<ul style="list-style-type: none"> • The Governor proposes an FY22 draw from the ERA to the dividend fund to pay the 2021 permanent fund dividend based on the full statutory calculation to eligible recipients. • The amount of this draw from the ERA is estimated to be \$2,023,947,000. • The bill's effective date is July 1, 2021.
HB 165 APPROP: EARNINGS RESERVE TO PERM FUND REPRESENTATIVE KREISS- TOMKINS Status: H W&M (4DP 2DNP), FIN	<ul style="list-style-type: none"> • The sum of \$4,350,000,000 is appropriated from the earnings reserve account to the principal of the Alaska permanent fund. • The Act takes effect immediately.

Constitutional Amendments Related to the Permanent Fund

There are currently seven proposed resolutions, including those introduced by the Governor, with various distributions to dividends and government, that would place an amendment to the Constitution of the State of Alaska before the voters at the next general election to establish distribution formulas for draws from the Alaska Permanent Fund.

CSSS HJR 1 (W&M) CONST AM: PERMANENT FUND; POMV; EARNINGS REPRESENTATIVE KREISS-TOMKINS Status: H W&M (5DP 2 DNP), JUD , FIN	<ul style="list-style-type: none"> • Amendment to the Constitution of the State of Alaska, Article IX, Section 15. • Provides a single fund endowment with an annual draw limited to 5% POMV smoothed over a period of five of the previous six fiscal years. • Consistent with trust law, authorizes the use of the Fund to pay costs associated with managing the Fund without appropriation. • Transition language - ERA becomes part of principal.
HJR 10 CONST AM: PERMANENT FUND; POMV; DIVIDEND REPRESENTATIVE TUCK Status: H JUD , STA, FIN	<ul style="list-style-type: none"> • Enshrines the Earnings Reserve Account in the Constitution as a separate account • Designates income from the Fund shall be deposited into the ERA • Income available for distribution is a 4% percent of market value as of the last day of the fiscal year – but may not exceed the net income of the Fund for the fiscal year just ended • Designates 50% used for dividend payments and 50% for the general fund • Transfers to be made without appropriation
CS SJR 1 (JUD) CONST AM: GUARANTEE PERM FUND DIVIDEND SENATOR WIELECHOWSKI Status: S STA (2NR 1AM),	<ul style="list-style-type: none"> • Amendment to the Constitution of the State of Alaska, Article IX, Section 15. Provides a single fund endowment. • Requires an annual transfer from the fund for the purpose of paying dividends to state residents of 50% of the greater of two calculations: (1) 5% POMV smoothed over a period of five of the preceding six years; and (2) 21% of the net income of the fund over the last five years, excluding unrealized gains and losses. • The balance of the amount calculated under the POMV method after transfer of the dividend portion may be appropriated by

JUD (3DP 1NR 1AM), FIN	the Legislature to the general fund for state government. Transition Language – ERA becomes part of principal.
HJR 6 / SJR 5 CONST. AM: APPROP LIMIT; BUDGET RESERVE / REQUEST OF THE GOVERNOR Status: HJR 6 H W&M , JUD, FIN SJR 5 S STA (1DP 2NR 1AM), JUD, FIN	<ul style="list-style-type: none"> Amendment to the Constitution of the State of Alaska, Article IX, Sections 16 and 17. Brings forth a new constitutional appropriation limit and a new method to appropriate funds in the Constitutional Budget Reserve Fund. Appropriations for a fiscal year would not exceed the average of the appropriations for the previous three years plus the cumulative percent change in inflation or population, whichever is greater, over the previous three-year period. A list is provided of specified appropriations that are excluded from this calculation, including appropriations to the permanent fund. Also changes the budget reserve fund so that it can only be used as a funding source if the amount in the general fund is less than the appropriation limit. Repeals $\frac{3}{4}$ vote for the appropriation clause and the annual general fund sweep repayment clause.
HJR 7 / SJR 6 CONST. AM: PERM FUND & PFDS BY REQUEST OF THE GOVERNOR Status: HJR 7 H STA , JUD, FIN SJR 6 S STA (1DP 1NR 2AM), JUD, FIN	<ul style="list-style-type: none"> Amendment to the Constitution of the State of Alaska, Article IX, Section 15. Provides a single fund endowment. Brings forth an amendment to establish a percent-of-market-value (POMV) rule to limit annual expenditures from the permanent fund. Requires a portion of funds withdrawn be used for a dividend and requires that any future change to the dividend program be approved by the voters. POMV % to be set forth in the statute. % of POMV shall be allocated for dividend payments with % set forth in statute. Once this % for dividends is set, the only way to amend it is to pass a law that Alaskan voters then approve at the next statewide election. Transition Language – ERA becomes part of principal, POMV % applies to appropriations for FY24 onward, both the % of the annual POMV and the % of this to be allocated to dividends must be done in substantive law and not as a part of an appropriation bill. HB 73 / SB 53 provide for an advisory vote to establish the POMV % and the distribution of that amount.

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Bills Related to the Distribution of Income

<p>HB 73 / SB 53</p> <p>PERM FUND; ADVISORY VOTE</p> <p>BY REQUEST OF THE GOVERNOR</p> <p>Status: HB 73 H STA, JUD, FIN SB 53 S STA (3NR, 1AM), JUD, FIN</p>	<ul style="list-style-type: none"> • Brings forth an advisory vote on the distribution of a 5% POMV from the Fund with 50% to dividends and 50% to government services. • A special statewide election is to be held. • Maintains annual net income calculation that moves net realized gains to the ERA, but eliminates the "income available for distribution calculation," which was historically used to calculate the amount of the dividends (i.e. 'full dividend'). • Maintains 5% POMV annual appropriation from the ERA and stipulates that the amount available for appropriation may not exceed the balance of the ERA. • Provides legislature may appropriate annual 5% POMV from the ERA and distribution is 50% to the general fund and 50% to the dividend fund. • Provides for inflation proofing via annual appropriation outside of the POMV appropriation.
<p>HB 37</p> <p>INCOME TAX; PERMANENT FUND; EARNINGS RES</p> <p>REPRESENTATIVE WOOL</p> <p>Status: H CRA, STA, FIN</p>	<p>Certain sections pertaining to the Fund.</p> <ul style="list-style-type: none"> • Provides that based on the amount available for appropriation that the Legislature may appropriate 20% to the dividend fund and 80% to the general fund • Repeals statutory net income calculation and net income computation related to generally accepted accounting principles • Eliminates the additional 25% of royalties to the Principal for leases after 1980 • Deletes Amerada Hess references • Maintains POMV computation and asserts that draw limits are not to exceed the balance of the ERA • Allows for appropriations for inflation proofing

Bills Related to State Finances and Accounts

<p>HB 57</p> <p>FUNDS SUBJECT TO CBR SWEEP PROVISION</p> <p>BY REPRESENTATIVE JOSEPHSON</p> <p>Status: H JUD (4 DP), FIN</p>	<ul style="list-style-type: none"> Clarifies through the adoption of statutory definitions what fund sources are subject to the budget reserve fund payback provision in art. IX, sec. 17(d), Constitution of the State of Alaska, known as the "sweep provision." ERA referenced in findings and found to be "located outside of the general fund and is thus not subject to the sweep provision."
<p>HB 86</p> <p>STATE GOV'T FINANCES: WEBSITE</p> <p>REPRESENTATIVE RAUSCHER</p> <p>Status: H STA, FIN</p>	<ul style="list-style-type: none"> To be known as the Alaska Online Checkbook Act, this bill intends to allow Alaskans to identify and discover state revenues and expenditures through a searchable website maintained by the Department of Administration. Included as a resource is the balance of the ERA and the amounts deposited into the Permanent Fund.
<p>CS SB 25 (STA)</p> <p>STATE GOV'T FINANCES: WEBSITE</p> <p>SENATOR WIELECHOWSKI</p> <p>Status: S STA (2DP 3 NR), FIN</p>	<ul style="list-style-type: none"> To be known as the Alaska Online Checkbook Act, this bill intends to allow Alaskans to identify and discover state revenues and expenditures through a searchable website maintained by the Department of Administration. Included as a resource is the balance of the ERA and the amounts deposited into the Permanent Fund.

SUBJECT: FY21 Year-to-Date Financial Update ACTION: _____

DATE: May 19, 2021

INFORMATION: _____ X

KEY TAKEAWAYS:

- Total return for the first three quarters of FY21 of 22.69%; 5.95% for the quarter ended March 31, mostly fueled by private (18.77%) and public equity (8.49%) returns
- Accounting net income year-to-date of \$13.9 billion, with \$4.5 billion earned in the third quarter, well ahead of Callan's high forecast of \$8.7 billion for the year
- Realized (statutory) net income year-to-date of \$5.3 billion, \$2.4 billion generated in the quarter ended March 31
- Fund value as of March 31 of \$76.3 billion, an \$11 billion increase from the \$65.3 billion at the end of the prior year
- \$750 million transferred to the General Fund during the third quarter in accordance with SB26; \$450 million in January and \$300 million in March for a total of \$2,300 million through the third quarter
- \$89 million of mineral deposits transferred in during the quarter ended March 31 for a total of \$207 million year-to-date
- Committed Earnings Reserve balance of \$3.1 billion for FY22 General Fund transfers (\$3.069 billion) and the transfer to ACIF (\$33 million)

Financial results for the third quarter of FY21 continued to reflect the unusually strong performance in the public and private equity markets, giving rise to earnings at unprecedented levels. Overall, the fund recorded unrealized gains of \$2.1 billion between the end of December and the end of March, for a total of \$8.6 billion for the first three quarters of the fiscal year. The largest gains by far were experienced in the public equity portfolio which gained nearly \$1 billion in value during the quarter. In addition, \$2 billion in gains were realized during the quarter ended March 31st, primarily through rebalancing the overweight to public equities resulting from strong market performance.

Net assets increased by \$11 billion year-to-date through March. This is a result of net income of \$13,903 million and \$207 million received in mineral royalty deposits offset by the FY21 POMV transfer to the State of Alaska General Fund in the amount of \$3,092 million. Corporate operating expenses and other appropriations for the first three quarters totaled \$139 million.

Two transfers to the General Fund were made during the third quarter of FY21 totaling \$750 million, bringing total transfers for the year to \$2,300 million. 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 March 31, 2021

Fiscal Year 2021 Net Assets

Balances through March 31, 2021

(in millions)

Total assets	\$	79,386.0
Less liabilities		(3,065.4)
Net assets		<u>76,320.6</u>
Fund Balances:		
Non-spendable		
Permanent Fund corpus—contributions and appropriations		46,825.9
Not in spendable form—unrealized appreciation on invested assets		<u>12,235.8</u>
Total non-spendable fund balance		59,061.7
Committed		
General Fund Commitment		3,069.3
Current FY AK Capital Income Fund		<u>33.3</u>
Committed fund balance		3,102.6
Assigned for future appropriations		
Realized earnings		10,580.8
Unrealized appreciation on invested assets		<u>3,575.5</u>
Total assigned fund balance		14,156.3
Total fund balances	\$	<u>76,320.6</u>

Fiscal Year 2021 Income

For the nine months ending March 31, 2021

(in millions)

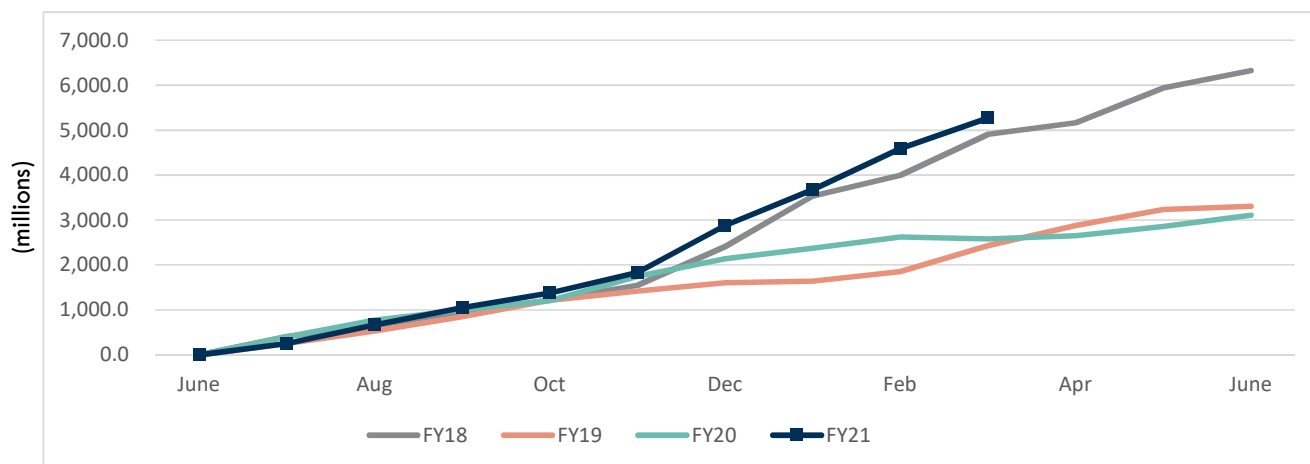
Statutory (Realized) Net Income

Interest, dividends, real estate, and other income	\$	1,052.5
Realized gains on the sale of invested assets		4,391.9
Less operating expenses/legislative appropriations		(139.4)
Less Alaska Capital Income Fund committed realized earnings		<u>(33.3)</u>
Statutory net income		<u>5,271.7</u>

GAAP (Accounting) Net Income

Statutory net income		5,271.7
Unrealized gain on invested assets		8,597.8
Alaska Capital Income Fund committed realized earnings		<u>33.3</u>
Accounting net income	\$	<u>13,902.8</u>

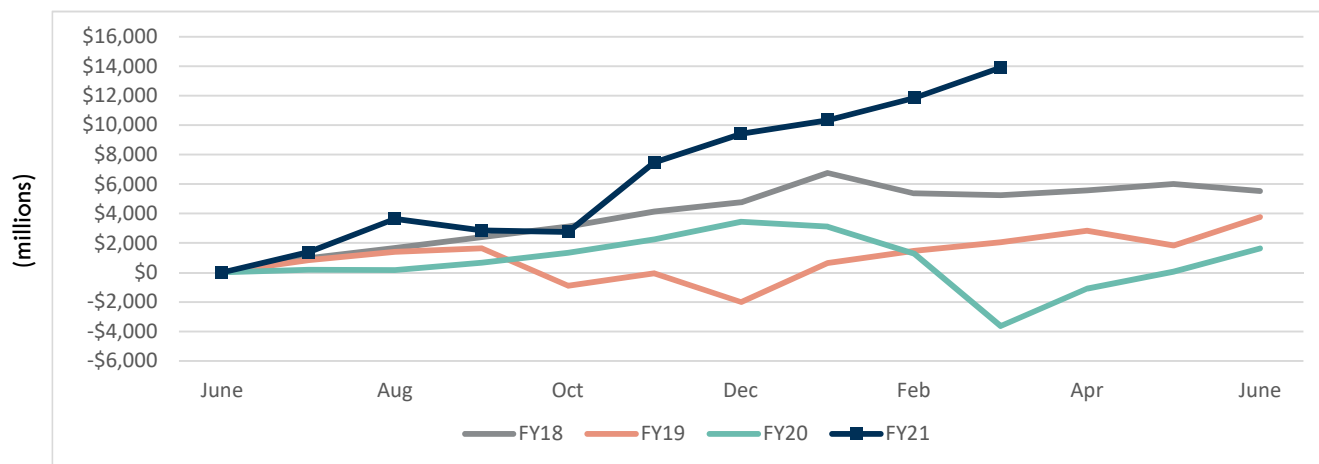
Statutory Net Income, Fiscal Years 2018 - 2021



• 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.

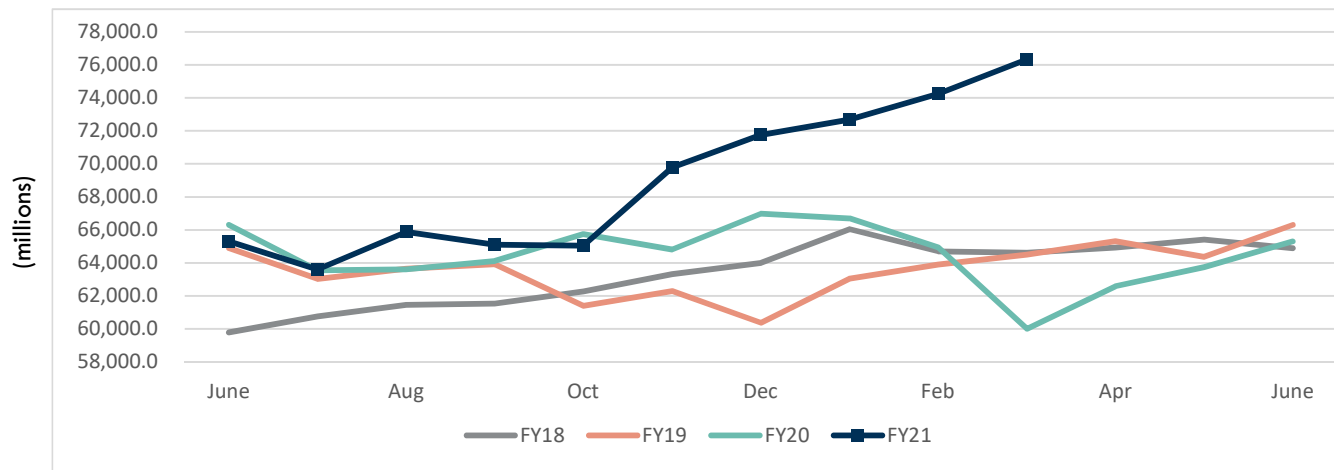
- FY18 statutory net income was \$6,324.4 million.
- FY19 statutory net income was \$3,305.1 million.
- FY20 statutory net income was \$3,106.0 million.
- FY21 statutory net income through March 31st was \$5,271.7 million.

GAAP Accounting Net Income (Loss), Fiscal Years 2018 - 2021



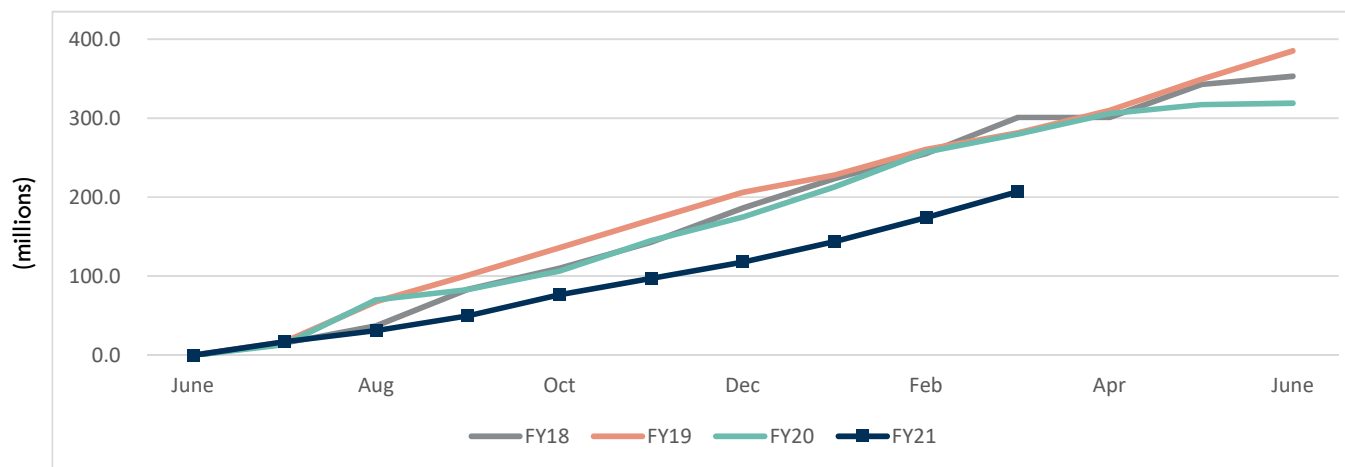
- Accounting net income is the same as statutory net income, except it includes unrealized gains and losses.
- Accounting net income for FY18 was \$5,525.5 million.
- Accounting net income for FY19 was \$3,765.8 million.
- Accounting net income for FY20 was \$1,636.5 million.
- Accounting net income for FY21 through March 31st was \$13,902.8 million.

Market Value of Fund Net Assets, Fiscal Years 2018 - 2021



- FY18 net assets as of June 2018 were \$64.9 billion, an increase of \$5.1 billion over the FY17 ending balance.
- FY19 net assets as of June 2019 were \$66.3 billion, an increase of \$1.4 billion over the FY18 ending balance.
- FY20 net assets as of June 2020 were \$65.3 billion, a decrease of \$1.0 billion from the FY19 ending balance.
- FY21 net assets as of March 31st were \$76.3 billion, an increase of \$11.0 billion from the FY20 ending balance.

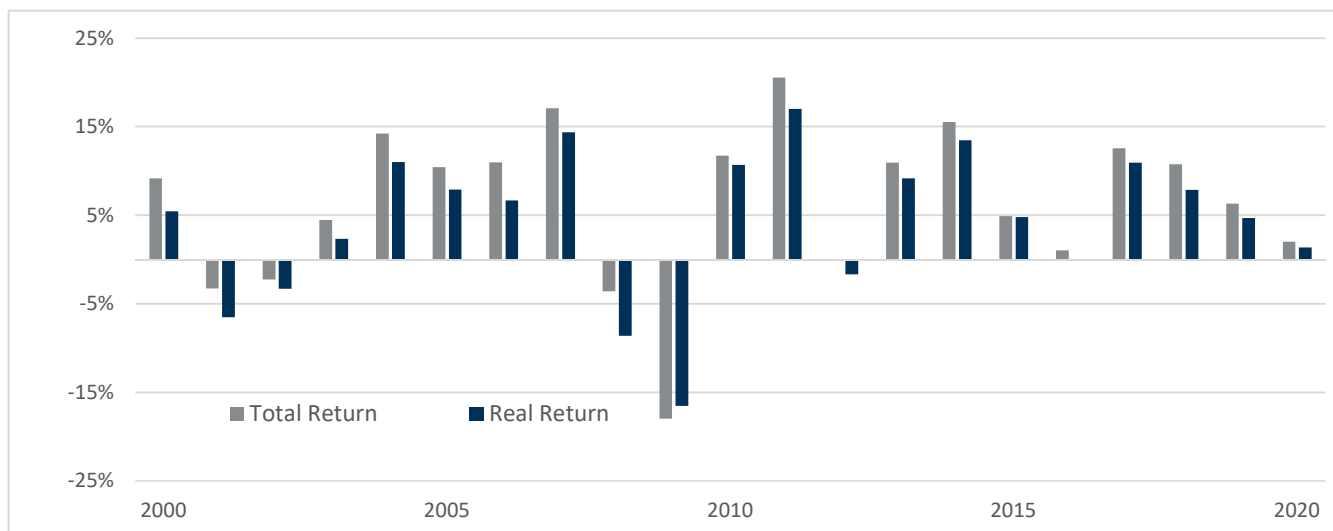
Dedicated Mineral Revenues, Fiscal Years 2018 - 2021



- FY18 mineral revenue was \$353.1 million.
- FY19 mineral revenue was \$385.2 million.
- FY20 mineral revenue was \$319.0 million.
- FY21 mineral revenue as of March 31st was \$207.1 million.

Alaska Permanent Fund Historical Returns, Fiscal Years 2000 - 2020

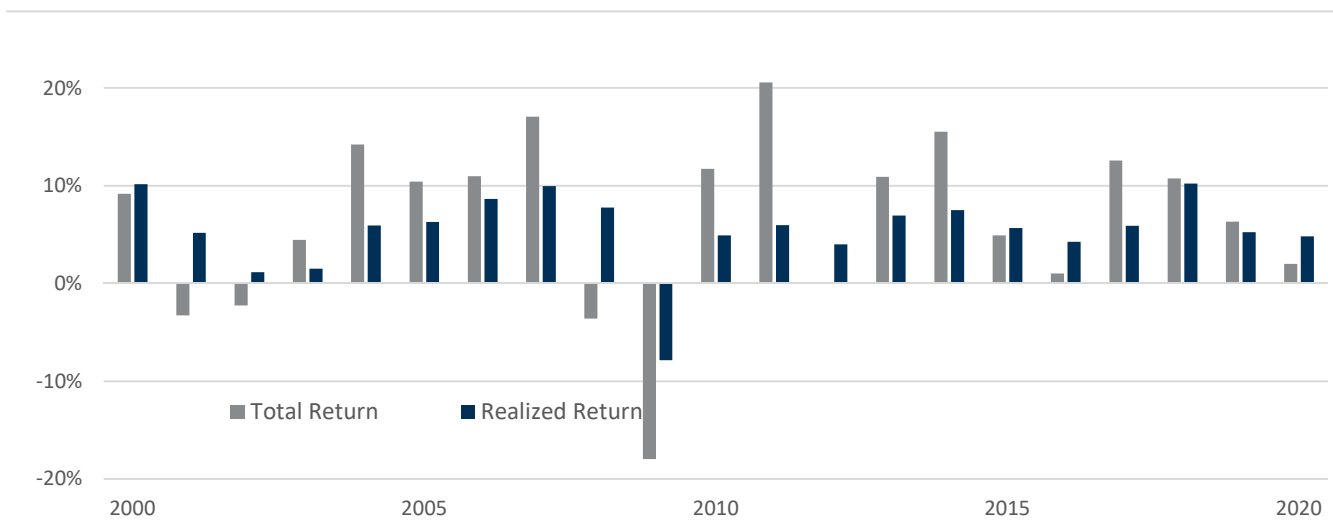
Total return minus inflation equals real return



- Total return annualized over 36 years is 8.68%
- Real return annualized over 36 years is 6.14%

Alaska Permanent Fund Historical Returns, Fiscal Year 2000 - 2020

Total return minus unrealized gains/losses equals realized return



- Total return annualized over 36 years is 8.68%
- Realized return annualized over 36 years is 7.43%

Board of Trustees - APFC Transfers - January 1 to March 31, 2021

<u>Type of Transfer</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>Total</u>
Public Equities	(1,011,145,544)	(925,182,907)	(1,087,100)	(1,937,415,550)
Fixed Income	449,958,458	212,406,120	547,140,874	1,209,505,453
Private Equity & Special Opportunities	(24,874,831)	(218,983,642)	(113,235,586)	(357,094,058)
Real Estate	304,717,475	(5,385,347)	63,380,195	362,712,323
Infrastructure & Private Income	(12,127,091)	22,883,515	6,964,279	17,720,703
Absolute Return	(9,944,781)	61,441,913	80,604,985	132,102,117
Risk Parity	-	35,000,000	-	35,000,000
Total Fund Cash	(127,958,615)	782,654,024	(862,324,972)	(207,629,563)
Net Transfers	(431,374,928)	(35,166,323)	(278,557,324)	(745,098,576)

Board of Trustees - APFC Transfers - January 2021

Description	Total Fund Cash	Public Equities	Fixed Income	Pvt. Equity & Spec. Opps.	Real Estate	Infr. & Pvt. Income	Absolute Return	Net
State of Alaska & Administrative								
Mineral revenue	22,152,221							22,152,221
AIM STIF Interest	27,985							27,985
Securities Lending income	50,931							50,931
Appropriation to SOA GF from ERA	(450,000,000)							(450,000,000)
AMHT Transfer to APF	600,000							600,000
Corporate expenses	(4,206,065)							(4,206,065)
Public Equities								
DSM Growth LC	50,000,000	(50,000,000)						-
Allianz (RCM) Large Cap	100,000,000	(100,000,000)						-
Lazard Global Equity	150,000,000	(150,000,000)						-
Longview Global Equity	100,000,000	(100,000,000)						-
Arrowstreet Global Equity	100,000,000	(100,000,000)						-
APF Tactical Tilts	299,766,037	(299,766,037)						-
APF Tac Tilts Cash	30,233,963	(30,233,963)						-
SSGA International	4,162	(4,162)						-
Hardman Johnston Global	60,000,000	(60,000,000)						-
JP Morgan Int'l Large Cap	60,000,000	(60,000,000)						-
Trustbridge EM	60,000,000	(60,000,000)						-
Public EQ Sec Lend	1,141,382	(1,141,382)						-
Fixed Income								
APF Domestic Structured	(50,000,000)		50,000,000					-
APF Global Fixed Income	(80,000,000)		80,000,000					-
APF TIPS	(300,000,000)		300,000,000					-
APF Fixed Income Plus Cash	(20,000,000)		20,000,000					-
Fixed Income Sec Lending	41,542		(41,542)					-
Private Equity & Special Opportunities								
Private Equity distributions	132,957,546			(132,957,546)				-
Private Equity capital calls	(89,120,646)			89,120,646				-
Special Opportunities distributions	15,610,422			(15,610,422)				-
Special Opportunities capital calls	(34,572,491)			34,572,491				-
Real Estate								
Direct Real Estate distributions	4,976,950				(4,976,950)			-
Direct Real Estate capital calls	(1,871,679)				1,871,679			-
Real Estate Coinvestment distributions	210,068				(210,068)			-
Real Estate Coinvestment capital calls	(308,032,814)				308,032,814			-
Infrastructure, Private Credit & Private Income								
Infrastructure capital calls	(58,761,761)					58,761,761		-
Private Credit distributions	96,723,487					(96,723,487)		-
Private Credit capital calls	(23,766,666)					23,766,666		-
Private Income distributions	87,224,676					(87,224,676)		-
Private Income capital calls	(89,292,645)					89,292,645		-
Absolute Return								
Absolute Return distributions	9,944,781						(9,944,781)	-
Net Transfers	(127,958,615)	(1,011,145,544)	449,958,458	(24,874,831)	304,717,475	(12,127,091)	(9,944,781)	(431,374,928)

Board of Trustees - APFC Transfers - February 2021

Description	Total Fund Cash	Public Equities	Fixed Income	Pvt. Equity & Spec. Opps.	Real Estate	Infr. & Pvt. Income	Absolute Return	Risk Parity	Net
State of Alaska & Administrative									
Mineral revenue	28,612,227								28,612,227
AIM STIF interest	1,921								1,921
Commission recapture proceeds	55,466								55,466
Securities Lending income	59,198								59,198
Class action proceeds	330								330
Corporate expenses	(63,895,465)								(63,895,465)
Public Equities									
Jennison Associates LLC	25,000,000	(25,000,000)							-
Mellon S&P 400	25,000,000	(25,000,000)							-
DSM Growth LC	50,000,000	(50,000,000)							-
Allianz (RCM) Large Cap	50,000,000	(50,000,000)							-
Lazard Global Equity	100,000,000	(100,000,000)							-
APF Tactical Tilts	333,068,612	(333,068,612)							-
APF Tac Tilts Cash	(33,068,612)	33,068,612							-
William Blair EM	50,000,000	(50,000,000)							-
JP Morgan EM	50,000,000	(50,000,000)							-
Macquarie EM	25,002,446	(25,002,446)							-
Mandrian Investment Partners EM	50,000,000	(50,000,000)							-
SSGA International	96,881	(96,881)							-
Hardman Johnston Global	50,000,000	(50,000,000)							-
JP Morgan Int'l Large Cap	50,000,000	(50,000,000)							-
Trustbridge EM	50,000,000	(50,000,000)							-
Wells Capital	25,000,000	(25,000,000)							-
SSGA World Small Cap Index	25,000,000	(25,000,000)							-
Public EQ Sec Lend	77,328	(77,328)							-
International Transition	6,251	(6,251)							-
Fixed Income									
APF Domestic Structured	(50,000,000)		50,000,000						-
APF Global Fixed Income	(50,000,000)		50,000,000						-
APF TBA Collateral	(1,879,841)		1,879,841						-
APF TIIPS	(30,000,000)		30,000,000						-
APF Fixed Income Plus Cash	(89,027,280)		89,027,280						-
Fixed Income Sec Lending	8,501,000		(8,501,000)						-
Private Equity & Special Opportunities									
Private Equity distributions	150,042,885			(150,042,885)					-
Private Equity capital calls	(156,000,509)			156,000,509					-
Special Opportunities distributions	276,200,087			(276,200,087)					-
Special Opportunities capital calls	(51,258,821)			51,258,821					-
Real Estate									
Direct Real Estate distributions	8,600,513				(8,600,513)				-
Direct Real Estate capital calls	(3,534,476)				3,534,476				-
Real Estate Coinvestment distributions	319,310				(319,310)				-
Infrastructure, Private Credit & Private Income									
Infrastructure distributions	15,002,745					(15,002,745)			-
Infrastructure capital calls	(4,960,605)					4,960,605			-
Private Credit distributions	13,479,390					(13,479,390)			-
Private Credit capital calls	(15,613,565)					15,613,565			-
Private Income distributions	81,567,432					(81,567,432)			-
Private Income capital calls	(112,358,913)					112,358,913			-
Absolute Return									
Absolute Return distributions	2,322,809						(2,322,809)		-
Absolute Return capital calls	(63,764,722)						63,764,722		-
Risk Parity									
PanAgora	(35,000,000)							35,000,000	-
Net Transfers	782,654,024	(925,182,907)	212,406,120	(218,983,642)	(5,385,347)	22,883,515	61,441,913	35,000,000	(35,166,323)

Board of Trustees - APFC Transfers - March 2021

Description	Total Fund Cash	Public Equities	Fixed Income	Pvt. Equity & Spec. Opps.	Real Estate	Infr. & Pvt. Income	Absolute Return	Net
State of Alaska & Administrative								
Mineral revenue	31,944,420							31,944,420
AIM STIF Interest	3,994							3,994
Commission recapture proceeds	64,901							64,901
Securities Lending Income	60,650							60,650
Class action proceeds	1,399							1,399
Appropriation to SOA GF from ERA	(300,000,000)							(300,000,000)
AMHT Transfer to APF	500,000							500,000
Corporate expenses	(11,132,688)							(11,132,688)
Public Equities								
APF Tactical Tilts	3,023,719	(3,023,719)						-
APF Tac Tilts Cash	(3,023,719)	3,023,719						-
Macquarie EM	(2,446)	2,446						-
SSGA International	7,417	(7,417)						-
Public EQ Sec Lend	1,082,129	(1,082,129)						-
Fixed Income								
APF High Yield	(100,000,000)		100,000,000					-
In House Corporate Bonds	(100,000,000)		100,000,000					-
APF Aggregate	(150,000,000)		150,000,000					-
APF TBA Collateral	3,151,341		(3,151,341)					-
APF Fixed Income Plus Cash	(200,332,309)		200,332,309					-
Fixed Income Sec Lending	40,094		(40,094)					-
Private Equity & Special Opportunities								
Private Equity distributions	223,659,261			(223,659,261)				-
Private Equity capital calls	(140,561,979)			140,561,979				-
Special Opportunities distributions	78,517,395			(78,517,395)				-
Special Opportunities capital calls	(48,379,090)			48,379,090				-
Real Estate								
Direct Real Estate distributions	15,481,627				(15,481,627)			-
Direct Real Estate capital calls	(60,024,031)				60,024,031			-
Real Estate Coinvestment distributions	4,369,609				(4,369,609)			-
Real Estate Coinvestment capital calls	(23,505,110)				23,505,110			-
SSGA REITs	190,068				(190,068)			-
AEW Global RE securities	107,642				(107,642)			-
Infrastructure, Private Credit & Private Income								
Infrastructure capital calls	(22,774,481)					22,774,481		-
Private Credit distributions	36,633,515					(36,633,515)		-
Private Credit capital calls	(25,413,869)					25,413,869		-
Private Income distributions	72,956,095					(72,956,095)		-
Private Income capital calls	(68,400,132)					68,400,132		-
SSGA Listed Infrastructure	34,594					(34,594)		-
Absolute Return								
Absolute Return distributions	40,369,015						(40,369,015)	-
Absolute Return capital calls	(120,974,000)						120,974,000	-
Net Transfers	(862,324,972)	(1,087,100)	547,140,874	(113,235,586)	63,380,195	6,964,279	80,604,985	(278,557,324)



ALASKA PERMANENT
FUND CORPORATION

ALASKA PERMANENT FUND FUND FINANCIAL HISTORY & PROJECTIONS as of March 31, 2021

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-Begin	Dedicated	Inflation		Unrealized		Acct.	Statutory	Distributions				Unrealized					
	Contrib.	State	Proofing	FY-End	Gain (Loss)	FY-End Non-	Net	Net		Inflation		FY-End	Gain (Loss)	FY-End				
FY	Balance	Revenues	& Special	Balance	Loss	spendable	Income	Income	Div/POMV	Prfg & Spec	ACIF	Balance	FY-End	Assigned			FY-End	
			Approp.	Contributions	Balance	Balance			Transfer	Approp.		Realized	Balance	Balance	FY		Balance	
77-11	0	12,755	20,289	33,044	4,788	37,832	41,659	38,780	19,186	16,991	434	2,016	292	2,308	77-11		40,140	
12	33,044	915	1,073	35,033	3,220	38,253	(100)	1,568	605	1,073	17	1,905	175	2,081	12		40,333	
13	35,033	840	743	36,615	4,184	40,800	4,314	2,928	604	743	30	3,487	567	4,054	13		44,854	
14	36,615	779	546	37,941	7,062	45,002	6,848	3,531	1,235	546	32	5,237	975	6,212	14		51,214	
15	37,941	600	624	39,165	6,473	45,638	2,384	2,907	1,373	624	24	6,147	1,016	7,163	15		52,801	
16	39,165	284	0 ⁽⁸⁾	39,449	4,750	44,199	398	2,198	696 ⁽⁷⁾	0 ⁽⁸⁾	18	7,649	921	8,571	16		52,770	
17	39,449	365	0 ⁽⁸⁾	39,814	7,155	46,969	6,676	3,214	0	0 ⁽⁸⁾	25	10,863	1,952	12,816	17		59,785	
18	39,814	353	0 ⁽⁸⁾	40,167	5,863	46,030	5,526	6,324	726	0 ⁽⁸⁾	43	16,461	2,403	18,864	18		64,894	
19	40,167	385	989	41,542	6,278	47,821	3,766	3,305	2,723	989	22	16,053	2,426	18,481	19		66,301	
20	41,542	319	4,758 ⁽¹⁰⁾	46,619	5,789	52,408	1,637	3,106	2,933	4,758 ⁽¹⁰⁾	21	11,470	1,424	12,894	20		65,302	
Lo	21	46,619	319	0 ⁽⁸⁾	46,938	3,549	(240)	2,579	3,092	0 ⁽⁸⁾	18	10,958	828	11,786	21		62,273	
Mid	21	46,619	319	0 ⁽⁸⁾	46,938	6,302	4,010	3,328	3,092	0 ⁽⁸⁾	23	11,707	1,572	13,279	21		66,518	
Hi	21	46,619	319	0 ⁽⁸⁾	46,938	9,248	8,746	4,205	3,092	0 ⁽⁸⁾	29	12,583	2,479	15,062	21		71,248	
	22	46,938	340	1,064	48,341	6,536	4,262	4,007	3,069	1,064	27	11,581	1,566	13,147	22		68,023	
	23	48,341	351	1,096	49,788	6,784	4,356	4,096	3,207	1,096	27	11,374	1,550	12,924	23		69,496	
	24	49,788	396	1,129	51,313	7,043	4,450	4,185	3,289	1,129	27	11,140	1,529	12,670	24		71,026	
	25	51,313	445	1,165	52,922	7,308	4,549	4,279	3,335	1,165	27	10,919	1,508	12,427	25		72,658	
	26	52,922	472	1,201	54,595	7,578	4,655	4,378	3,382	1,201	27	10,714	1,487	12,201	26		74,374	
	27	54,595	503	1,240	56,338	7,856	4,765	4,482	3,456	1,240	27	10,501	1,464	11,965	27		76,159	
	28	56,338	535	1,280	58,153	8,143	4,879	4,591	3,535	1,280	27	10,277	1,439	11,716	28		78,011	
	29	58,153	567	1,321	60,041	8,438	4,998	4,703	3,616	1,321	27	10,043	1,411	11,455	29		79,933	
	30	60,041	584	1,364	61,989	8,742	5,121	4,819	3,701	1,364	27	9,797	1,382	11,179	30		81,910	
Cumulative Totals																		
Proj. for FY21-FY30		4,511	10,859				46,045	42,868	33,682	10,859	268							

Assumptions: Total Return - Inflation = Total Real Return					Statutory Return	
Lo	FY21	-0.17%	1.23%	-1.40%	Lo	4.27%
Mid	FY21 ⁽³⁾	6.48%	1.23%	5.25%	Mid	5.45%
Hi	FY21	13.89%	1.23%	12.66%	Hi	6.83%
FY21-FY30 ⁽⁴⁾		6.75%	2.25%	4.50%	6.40%	

Notes related to financial history and projections:

- ⁽¹⁾ Dedicated State Revenues in current and future fiscal years are based on the Spring 2021 Department of Revenue forecast.
- ⁽²⁾ Accounting net income is based on United States Generally Accepted Accounting Principles (GAAP).
- ⁽³⁾ Current year returns and inflation are based on 2020 Callan capital market assumptions. Actual results will vary.
- ⁽⁴⁾ Future returns are based on 2020 Callan capital market assumptions and median expected returns (the mid case). Actual results will vary.
- ⁽⁵⁾ During FY 2009, the ACIF realized losses of \$33.3 million, which are excluded from statutory net income, and are included in the ending unreserved balance as a deficit account. During FY 2010 and FY 2011, the ACIF had realized income of \$20.8 and \$25.3 million, which is excluded from statutory net income, and served to reduce the FY 2009 deficit.
- ⁽⁶⁾ The statutory inflation calculation for FY 2010 was -36%; therefore, there was no inflation proofing transfer during FY 2010.
- ⁽⁷⁾ The dividend transfer reported for FY16 was paid out in dividends during FY17.
- ⁽⁸⁾ There was no appropriation for inflation proofing in FY16, FY17, FY18 and FY21.
- ⁽⁹⁾ 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.
- ⁽¹⁰⁾ In FY20, an additional \$4 billion was appropriated from the ERA to principal. The intent of the legislation was to forward fund inflation proofing.
- ⁽¹¹⁾ All transfers out of the Earnings Reserve are subject to Legislative appropriation

Income Year-to-Date as of March 31, 2021

FY21 YTD Statutory Net Income	
Interest, dividends, real estate & other income	\$ 1,052.5
Realized gains (losses) on the sale of assets	4,391.9
Less operating expenses	(139.4)
Less AK Capital Inc. Fund realized earnings	(33.3)
	\$ 5,271.7

FY21 YTD Accounting (GAAP) Net Income	
Statutory net income (loss)	\$ 5,271.7
Unrealized gains (losses) on invested assets	8,597.8
AK Capital Income Fund realized earnings	33.3
Accounting (GAAP) net income (loss)	\$ 13,902.8

FY21 POMV Distribution (actual) ⁽¹¹⁾		FY21 Statutory Dividend Transfer (actual) ⁽¹¹⁾	
Ending Fund Value (ex Am Hess)		Statutory Net Income	
FY19	\$ 65,876.7	FY20	\$ 3,106.0
FY18	64,469.9	FY19	3,305.0
FY17	59,360.8	FY18	6,324.4
FY16	52,345.1	FY17	3,214.2
FY15	52,376.1	FY16	2,198.0
Average Value \$ 58,885.7		Avail for Dist (21%) \$ 3,811.0	
Statutory Distribution \$ 3,091.5		Statutory Trnsfr Amt \$ 1,905.5	

FY22 POMV Distribution (actual) ⁽¹¹⁾		FY22 Statutory Dividend Transfer (projected)	
Ending Fund Value (ex Am Hess)		Statutory Net Income	
FY20	\$ 64,877.4	FY21	\$ 3,328.5
FY19	65,876.7	FY20	3,106.0
FY18	64,469.9	FY19	3,305.0
FY17	59,360.8	FY18	6,324.4
FY16	52,345.1	FY17	3,214.2
Average Value \$ 61,386.0		Avail for Dist (21%) \$ 4,048.4	
Statutory Distribution \$ 3,069.3		Statutory Trnsfr Amt \$ 2,024.2	

FYTD 2021 Fees & Expenses by Funding Source*

Report Date	March 31, 2021
Total Fund Balance	77,019,026,000
YTD Change in Total Fund Balance (Net of Transfers)	13,251,274,000

Investment Management Fees

	Paid from Investments	Paid from Investment Management Allocation	Paid from Operations Allocation	Total
Public Equity	1,444,000	42,978,000	961,000	45,383,000
Fixed Income	189,000	7,844,000	2,658,000	10,691,000
Absolute Return	40,974,000	138,000	216,000	41,328,000
Risk Parity	1,926,000	274,000	54,000	2,254,000
Total Fund Cash	0	103,000	162,000	265,000
Private Equity & Special Opps	97,635,000	16,755,000	1,742,000	116,132,000
Infrastructure & Private Income	49,944,000	2,013,000	1,140,000	53,097,000
Real Estate	25,571,000	3,276,000	1,874,000	30,721,000
Total Mgmt Fees by Source	217,683,000	73,381,000	8,807,000	299,871,000
Basis Points	28	10	1	39

Profit Sharing/Performance

	Paid from Investments	Paid from Investment Management Allocation	Paid from Operations Allocation	Total
Public Equity	0	49,844,000	0	49,844,000
Absolute Return	62,511,000	0	0	62,511,000
Private Equity & Special Opps	153,622,000	0	0	153,622,000
Infrastructure & Private Income	8,941,000	106,000	0	9,047,000
Real Estate	943,000	0	0	943,000
	226,017,000	49,950,000	0	275,967,000

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



Budget-to-Actuals and Projected Expenditures: July 1, 2020 through June 30, 2021

Corporate Operations	Board-authorized Budget	Actuals and Projected Expenditures	Projected Remaining Budget
Personal Services	\$ 12,839,400	\$ 10,891,199	\$ 1,948,201
Staff	12,811,860	10,868,991	1,942,869
Board: Honoraria	27,540	22,208	5,332
Travel	700,000	131,211	568,789
Staff	483,000	28,118	454,882
Trustees	22,000	9,981	12,019
Moving/Non-Employee	195,000	93,112	101,888
Contractual Services	3,404,400	2,894,512	509,888
Audit, Legal, Consulting	445,945	415,470	30,475
Public Communications	146,500	146,460	40
Board Support and Meetings	76,000	45,410	30,590
Information Technology	1,725,500	1,545,236	180,264
HR and Recruitment	77,436	41,010	36,426
Training/Education	185,925	38,321	147,604
Office Support	747,094	662,605	84,489
Commodities	336,900	251,400	85,500
Equipment	400,000	377,383	22,617
Corporate Operations Total	\$ 17,680,700	\$ 14,545,705	\$ 3,134,995
Investment Management			
Investment Systems	\$ 6,716,400	\$ 5,088,403	\$ 1,627,997
Investment Due Diligence	6,587,000	2,856,452	3,730,548
Custody Fees	1,800,000	1,198,999	601,001
Investment Manager Fees	114,297,200	145,099,270	(30,802,070)
Public Equities	77,861,110	111,446,247	(33,585,137)
Fixed Income	12,986,190	7,823,640	5,162,550
Alternative Assets ¹	23,449,900	25,829,383	(2,379,483)
Investment Management Total	\$ 129,400,600	\$ 154,243,124	\$ (24,842,524)
Legislative Appropriation	\$ 8,865,400	\$ 8,444,184	\$ 421,216
Total Appropriation	\$ 155,946,700	\$ 177,233,013	\$ (21,286,313)

¹ includes Real Estate Fees

SUBJECT: Chief Investment Officer's Report

ACTION: _____

DATE: May 19, 2021

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 strategies, and investment actions taken during the quarter from January 1 to March 31, 2021.



APFC

ALASKA PERMANENT
FUND CORPORATION

CIO Report
Marcus Frampton, Chief Investment Officer
May 19, 2021

Investment Department Current Topics

- FY '21 to-date performance
- Private markets investment pacing
- Current portfolio positioning
- Personnel, open positions, and recruiting
- Real Estate update & asset class focus for this Board meeting
- SPACs (Special-Purpose Acquisition Companies)

The Build-Out of a Successful Private Market Program

	(\$ in millions)																
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Private Equity	\$0	\$6	\$110	\$344	\$709	\$711	\$1,029	\$1,394	\$1,732	\$2,111	\$2,657	\$3,208	\$3,527	\$4,164	\$4,482	\$5,294	\$5,839
FY Net Return	N/A	N/M	N/M	N/M	N/M	N/M	N/M	N/M	9.82%	15.27%	24.27%	16.46%	14.38%	20.98%	27.87%	21.59%	7.47%
Special Opportunities	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$443	\$1,925	\$1,824	\$2,824	\$2,823	\$3,535	\$3,644
FY Net Return	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	259.92%	-18.71%	14.40%	40.13%	15.45%	-6.09%
In-State	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$5
FY Net Return	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	N/A	\$6	\$110	\$344	\$709	\$711	\$1,029	\$1,394	\$1,732	\$2,111	\$3,099	\$5,133	\$5,351	\$6,988	\$7,304	\$8,828	\$9,488
FY Net Return	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	32.70%	19.18%	1.94%

Source: (1) APFC Annual Reports for years 2004 - 2008; (2) APFC June 30 Monthly Performance Reports for years 2009 - 2020

Recent Investment Activity in Real Estate

(\$ in millions)

Investment Name	Investment Type	Commitment or Initial Investment	Investment Date	Invested	Net Returns			
					Distributed	Current NAV	IRR	MOIC
HIG Europe RE II	Comingled Opportunistic Fund	\$100	Jul-18	\$46	\$16	\$39	17.36%	1.2x
Harbert Europe RE V	Comingled Opportunistic Fund	\$100	Sep-18	\$56	\$2	\$61	10.57%	1.1x
Heitman Debt	Debt - Separate Account	\$300	Sep-18	\$51	\$7	\$51	6.74%	1.1x
Brookfield RE II	Comingled Opportunistic Fund	\$300	Apr-19	\$173	\$10	\$175	5.48%	1.1x
Lincoln Inland Empire	Industrial Separate Account	\$105	May-19	\$105	\$59	\$65	17.09%	1.2x
KAROD	Closed End Debt Fund	\$200	Apr-20	\$207	\$17	\$213	15.35%	1.1x
REITs (AEW)	Public REITs (70% Multifamily, 30% Industrial)	\$690	Jul-20	\$691	\$0	\$844	31.56%	1.2x
Realterm	Open End Industrial Fund	\$100	Dec-20	\$64	\$0	\$65	8.57%	1.0x
Clarion Gables	Open End Multifamily Fund	\$300	Jan-21	\$300	\$0	\$300	0.00%	1.0x
Mesa West	Debt - Separate Account	\$250	Feb-21	\$40	\$0	\$40	0.00%	1.0x
GS White Plains	Direct JV - Build-to-Core Multifamily	\$100	Feb-21	\$1	\$0	\$1	0.00%	1.0x
GS Bowery	Direct JV - Build-to-Core Multifamily	\$186	Mar-21	\$69	\$0	\$69	0.00%	1.0x
Total		\$2,731		\$1,804	\$110	\$1,923	17.59%	1.1x
Total (ex REITs)		\$2,041		\$1,113	\$110	\$1,079	9.62%	1.1x

Real Estate Fundamentals - Occupancy

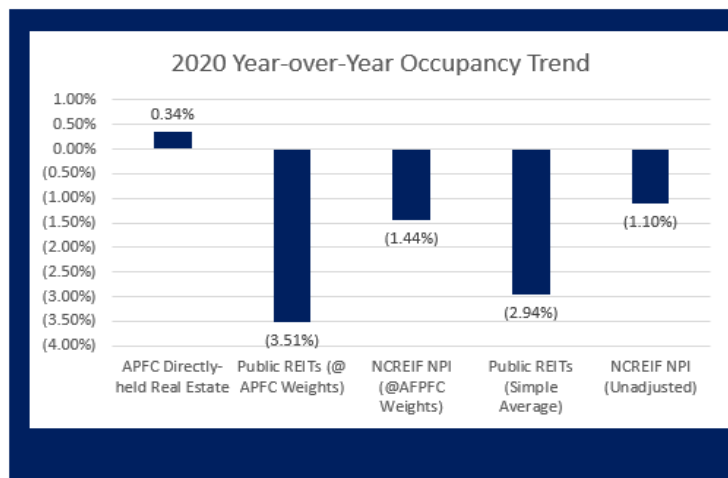
Retail	12/31/2019	12/31/2020	Change
Simon Properties	95.1%	91.3%	(3.80%)
Macerich	94.0%	89.7%	(4.30%)
CBL Properties	90.1%	85.5%	(4.60%)
Average Retail REITs	93.1%	88.8%	(4.23%)

Industrial	12/31/2019	12/31/2020	Change
Prologis	96.5%	96.2%	(0.30%)
First Industrial Realty Trust	97.6%	95.7%	(1.90%)
Industrial Logistics Property Trust	99.3%	98.5%	(0.80%)
Average Industrial REITs	97.8%	96.8%	(1.00%)

Office	12/31/2019	12/31/2020	Change
Vornado Realty Trust	96.7%	92.1%	(4.60%)
JBG Smith Properties	91.4%	88.1%	(3.30%)
Boston Properties	93.0%	90.1%	(2.90%)
Average Office REITs	93.7%	90.1%	(3.60%)

NCREIF NPI	12/31/2019	12/31/2020	Change
Apartments	93.9%	92.0%	(1.90%)
Retail	92.9%	91.0%	(1.90%)
Industrial	96.7%	96.6%	(0.10%)
Office	90.2%	88.8%	(1.40%)
Total	94.1%	93.0%	(1.10%)

APFC Comparison (Office/Industrial/Retail)	12/31/2019	12/31/2020	Change
APFC Directly-held Real Estate	90.6%	90.9%	0.34%
Public REITs (@ APFC Weights)	94.0%	90.5%	(3.51%)
NCREIF NPI (@APFC Weights)	92.4%	90.9%	(1.44%)
Public REITs (Simple Average)	94.9%	91.9%	(2.94%)
NCREIF NPI (Unadjusted)	94.1%	93.0%	(1.10%)



Real Estate Fundamentals – Recurring Cash Flow

- Following numbers pasted directly from APFC’s March 2021 financial statements
- Real estate recurring NOI, along with dividends and interest paid on Fund investments, remains a core element of the Fund’s ~\$1.4 bn of recurring annual Statutory Net Income

Statements of Revenues, Expenditures and Changes in Fund Balances

Unaudited (millions of dollars)	Month ended March 31, 2021	Nine months ended March 31, 2021	Fiscal year-end audited June 30, 2020
Revenues			
Interest	\$ 36.2	323.4	492.9
Dividends	73.5	380.1	515.3
Real estate and other income	29.5	349.0	394.7
Total interest, dividends, real estate and other income	139.2	1,052.5	1,402.9



Report on Investment Actions for Quarter Ending March 31, 2021

Investment Actions

Quarter Ending March 31, 2021

Public Equity

- In order to maintain the Fund's exposure to Public Equities at the target weight of 39%, Staff redeemed \$1.935 billion from Public Equities and transferred to Total Fund Cash. The breakdown is as follows:

Redeemed from APF Tactical Tilts:

- \$150 million on 1/5/21
- \$50 million on 1/6/21
- \$100 million on 1/11/21
- \$30 million on 1/28/21
- \$300 million on 2/12/21

Total: \$630 million

Redeemed from External Managers:

- \$110 million from Trustbridge China
- \$150 million from AGI US Large Cap Growth
- \$100 million from DSM US Large Cap Growth
- \$110 million from Hardman Johnston International Growth
- \$110 million from JP Morgan International Growth
- \$50 million from JP Morgan Emerging Markets
- \$100 million from Longview Global
- \$100 million from Arrowstreet Global
- \$250 million from Lazard Global
- \$25 million from Mellon Capital Management S&P 400 Index
- \$25 million from Jennison US Small Cap
- \$50 million from William Blair Emerging Markets
- \$50 million from Mondrian Emerging Markets
- \$25 million from Macquarie Emerging Markets
- \$25 million from SSGA World ex US Small Cap
- \$25 million from Wells Fargo China

Total: \$1.305 billion

Investment Actions (continued)

Quarter Ending March 31, 2021

Private Income

Fund Commitments closed in Fiscal Q3

- \$75 million to Digital Colony Partners II
- \$50 million to EnCap Energy Transition Fund I

Total: \$125 million

Direct Investments and Co-investments Closed in Fiscal Q3

- \$68 million invested in Viva 3 (life settlement portfolio bought from Blackstone)
- \$16 million follow-on co-investment in Vena (GIP's Asian renewables platform)
- \$15 million co-investment in Bluestem credit card receivables (alongside Atalaya)
- \$1 million follow-on with Audax (Magma unitranche upside)

Total: \$100 million

Private Equity & Special Opps

Fund Commitments closed in Fiscal Q3

- \$25 million to Arch Ventures XI
- \$60 million to JMI X
- \$50 million to Charlesbank X
- \$25 million to Charlesbank Opportunistic Credit Overage
- \$14 million to Bain Middle Market Japan
- \$20 million to Battery Select I
- \$25 million to IVP XVII
- \$40 million to Goodwater Infinity II
- \$50 million to Boyu V and Boyu Growth

Total: \$309 million

Direct Investments and Co-Investments Closed in Fiscal Q3

- \$50 million invested in Foundation Consumer Brands

Total: \$50 million

Investment Actions (continued)

Quarter Ending March 31, 2021

Absolute Return

New Investments/Commitments in Fiscal Q3

- \$50 million to Bridgewater Pure Alpha II (additional subscription)
- \$50 million to Alphadyne (additional subscription)

Total: \$100 million

Real Estate

- During Q3, Staff approved an additional commitment of \$200 mm to APFC's debt separate account with Heitman Capital

Total Fund Cash & Risk Parity

- During Q3, Total Fund Cash had a net outflow of over \$400 million
- Given strong market returns during the quarter, \$1.9 billion was rebalanced from Public Equities to Total Fund Cash
- In February, Staff added \$35 million into PanAgora Risk Parity to bring the allocation to target
- During Q3 there was a net outflow of over \$155 million into private markets as a result of funding to funds in several asset classes (mainly Infrastructure, Real Estate, and Private Equity). Private Equity provided significant inflows from regular distributions and from the sale of public holdings
- During Q3, Staff transferred \$750 million to the State General Fund as part of the FY21 appropriation.
- DNR proceeds of \$83 million were received during Q3
- Management and incentive fees paid totaled \$71 m during Q3

SUBJECT: Risk Overview

ACTION: ____

DATE: May 19, 2021

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' has the following parts:

- **Part-1:** provides an analysis of impact on Fund by simulating various inflation scenarios
- **Part-2:** covers the main measures of risk for the Fund. Aggregate fund risk compared to approved risk appetite is a key strategic measure. Other measures 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.



APFC

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Risk Overview

May 19, 2021

A teal-colored background featuring a close-up, slightly out-of-focus image of a pine branch with needles and a small, textured pine cone or bud in the center. The text is overlaid on the left side of the image.

Part 1: Inflation Scenarios

Inflation: 3 scenarios considered

1

Inflation Disappointment

- Inflation fails to materialize across regions, driven by COVID-19 related setbacks.

2

Reopening Reflation

- Reopening of economies and easy financial conditions drive inflation expectations toward target levels, while nominal interest rates remain anchored by central bank asset purchases.

3

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.

Source: BlackRock Aladdin

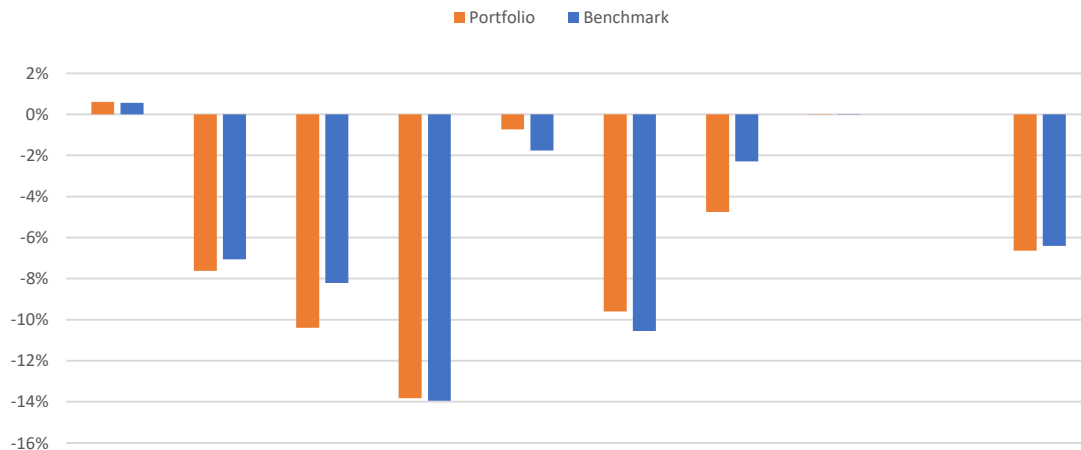
Inflation: 3 scenarios considered

	Inflation Disappointment	Reopening Reflation	Inflation Overshoot
DESCRIPTION	<ul style="list-style-type: none"> Inflation fails to materialize across regions, driven by COVID-19 related setbacks. 	<ul style="list-style-type: none"> Reopening of economies and easy financial conditions drive inflation expectations toward target levels, while nominal interest rates remain anchored by central bank asset purchases. 	<ul style="list-style-type: none"> 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.
CATALYSTS	<ul style="list-style-type: none"> As restrictions on economic activity and social mobility persist, inflation continues to be absent despite accommodative policy. Both short-term fiscal stimulus and monetary policy measures fall short of the spending required to support economies during the ongoing pandemic. 	<ul style="list-style-type: none"> As vaccinated economies reopen, consumer spending increases suddenly, particularly on services. With supply unable to respond to the surge in demand, inflation ensues. Central banks, with their higher tolerance for above-target inflation, reaffirm their commitment to keeping interest rates low, quelling fears of tapering. 	<ul style="list-style-type: none"> As consumers and businesses spend down accumulated savings, broad-based price increases lead to an expectation of sustained inflation going forward. Markets begin to price in higher interest rates as central bank language pivots towards having to take action to contain inflation.
CALLIBRATION	<ul style="list-style-type: none"> Inflation break-evens reverse post-vaccine announcement gains. Equities sell-off, with cyclical underperforming due to weak consumer demand. High yield spreads widen, consistent with the risk-off environment. US Treasury yield curve bull flattens, given deflationary expectations. 	<ul style="list-style-type: none"> Inflation rises moderately, but nominal yields fall. Equity and credit markets rally slightly in a risk-on environment. Consumer discretionary stocks outperform on increased spending, while financials underperform given the fall in rates. Oil price rises on increased demand. Risk-on tone and lower US rates lead to further US dollar weakening. 	<ul style="list-style-type: none"> Interest rates rise sharply in anticipation of central bank action. Equity and credit markets fall due to tighter monetary conditions. Consumer discretionary and transportation stocks outperform on higher demand, while tech falls modestly from higher rates. EM countries that are heavily reliant on US dollar funding underperform with a more hawkish Fed.

Source: BlackRock Aladdin

Stress-1, Inflation Disappointment: impact on fund NAV

Inflation Disappointment: Stand-alone asset class and related benchmark declines in % terms



- Fund NAV declines by ~6.6% or \$5.1 billion, almost in line with benchmark
- Fixed Income is expected to have a modest positive impact

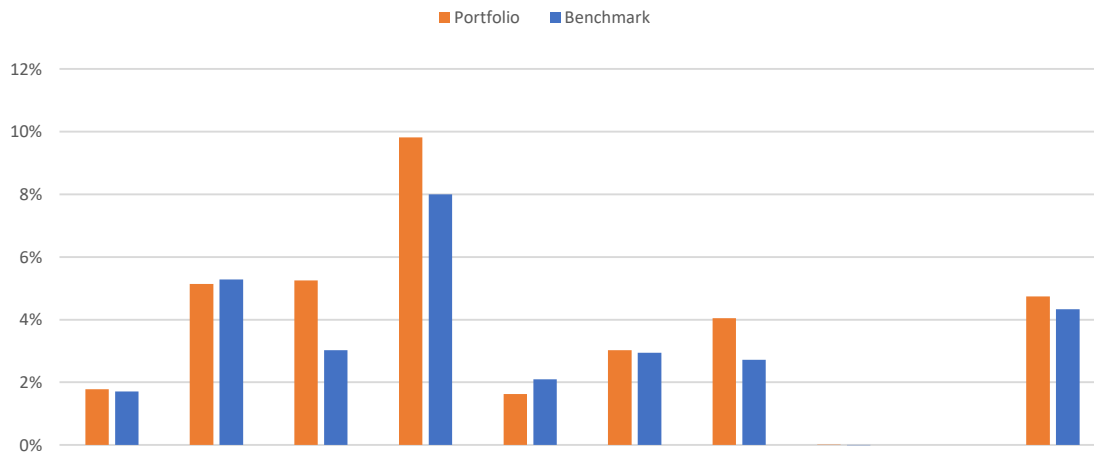
Modelled using Aladdin, based on multiple assumptions of how various factors are impacted

March 31, 2021	Fixed Income	Public Equities	Private Income	Private Equity	Absolute Return	Real Estate	Risk Parity	Cash		Total Fund
% Contribution	0.1%	-3.0%	-0.7%	-2.3%	0.0%	-0.6%	0.0%	0.0%		-6.6%
\$ Contribution (bn)	0.1	(2.3)	(0.5)	(1.8)	(0.0)	(0.5)	(0.0)	0.0		(5.1)

\$ values in billions, based on Fund NAV of \$77 billion

Stress-2, Reopening Reflation: impact on fund NAV

Reopening Reflation: Stand-alone asset class and related benchmark declines in % terms



- Fund NAV *increases* by ~4.7% or \$3.7 billion, almost in line with benchmark
- All asset classes are expected to be positively impacted

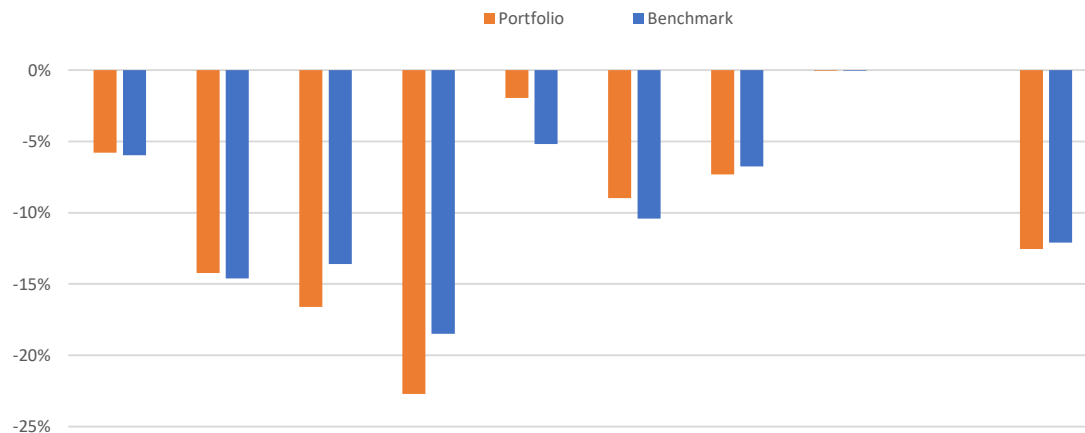
Modelled using Aladdin, based on multiple assumptions of how various factors are impacted

March 31, 2021	Fixed Income	Public Equities	Private Income	Private Equity	Absolute Return	Real Estate	Risk Parity	Cash		Total Fund
% Contribution	0.4%	2.0%	0.4%	1.7%	0.1%	0.2%	0.0%	0.0%		4.7%
\$ Contribution (bn)	0.3	1.6	0.3	1.3	0.1	0.2	0.0	0.0		3.7

\$ values in billions, based on Fund NAV of \$77 billion

Stress-3, Inflation Overshoot: impact on fund NAV

Inflation Overshoot: Stand-alone asset class and related benchmark declines in % terms



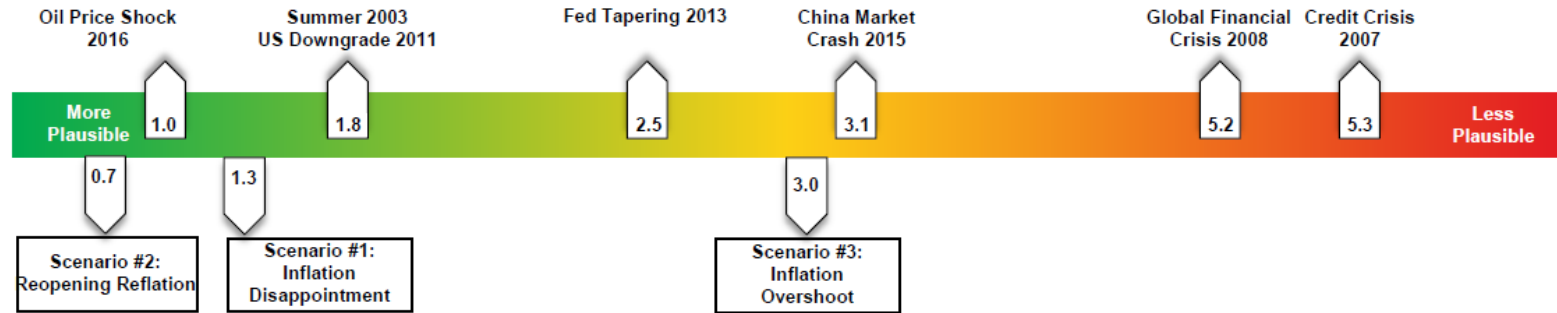
- Fund NAV declines by ~12.5% or \$9.7 billion, almost in line with benchmark decline
- Absolute Return and Real Estate portfolios decline less than respective benchmarks

Modelled using Aladdin, based on multiple assumptions of how various factors are impacted

March 31, 2021	Fixed Income	Public Equities	Private Income	Private Equity	Absolute Return	Real Estate	Risk Parity	Cash		Total Fund
% Contribution	-1.2%	-5.6%	-1.1%	-3.8%	-0.1%	-0.6%	-0.1%	0.0%		-12.5%
\$ Contribution (bn)	(0.93)	(4.29)	(0.88)	(2.95)	(0.09)	(0.47)	(0.06)	(0.00)		(9.7)

\$ values in billions, based on Fund NAV of \$77 billion

Scenario Extremeness: Z-score comparisons



Source: BlackRock Aladdin

A teal-colored background featuring a close-up, slightly blurred image of a pine branch with needles and a small, textured pine cone or bud in the center. The text is overlaid on this background.

Part 2: Key Risk Metrics As of March 31, 2021

Fund Risk: level relative to appetite

Risk Appetite reflects the Risk Tolerance Portfolio (RTP)

Value at Risk (VaR): Max			
As of Date	Total Fund	Risk Appetite	
2/26/2021	11.11%	12.33%	✓
3/31/2021	11.32%	12.35%	✓

- 1 Year, 1 SD
- 10-year historical monthly data, constant weighted

Drawdown Stress PnL: Max			
As of Date	Total Fund	Risk Appetite	
2/26/2021	(44.94%)	(49.37%)	✓
3/31/2021	(45.18%)	(49.09%)	✓

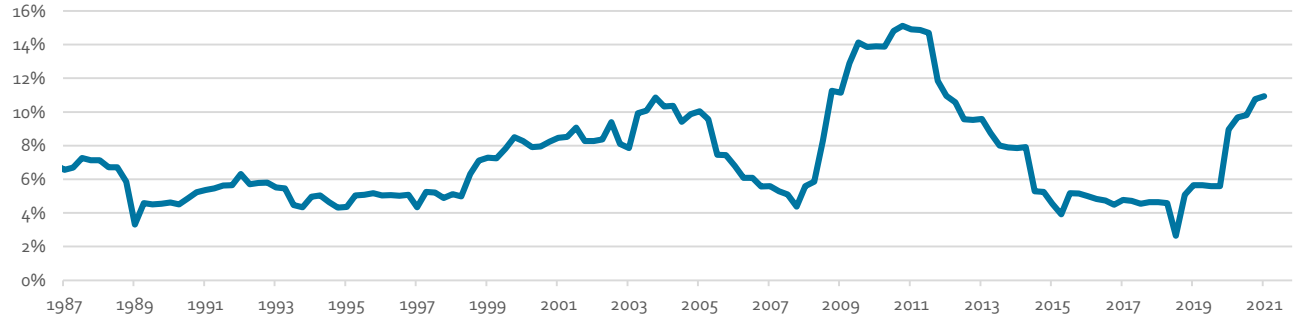
- Historical stress scenario simulating the GFC – Dec 2007 to Mar 2009

Liquidity Level: Min			
As of Date	Total Fund	Risk Appetite	
2/26/2021	63%	40%	✓
3/31/2021	63%	40%	✓

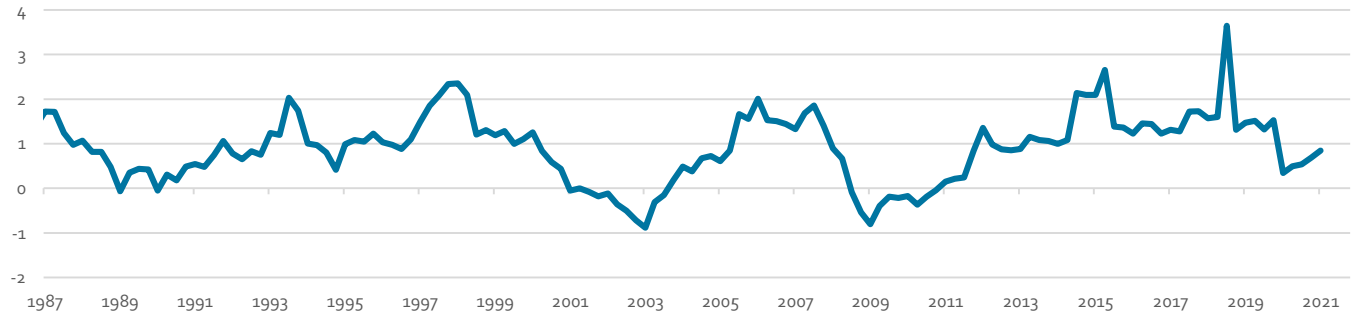
- Liquidity level is the combined allocation, to Public Equities, Fixed Income and Cash, as a % of total fund

Total Fund: Realized Volatility & Sharpe Ratio

Realized Fund Volatility



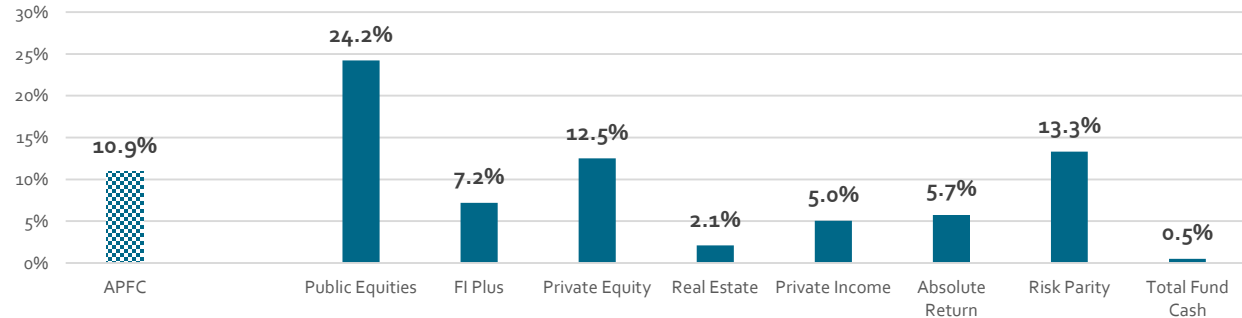
Realized Fund Sharpe Ratio



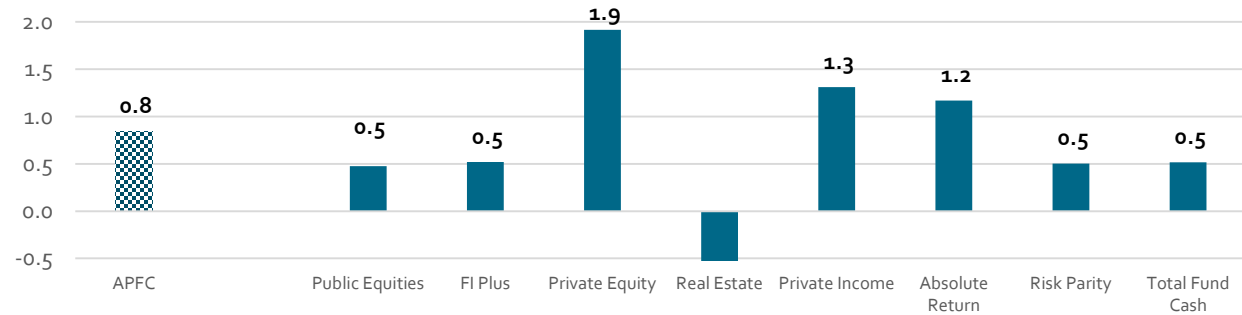
Volatility (standard deviation) and Sharpe ratio have been computed based on rolling 3 year quarterly returns for the Total Fund

Fund & Constituents: Volatility and Sharpe Ratio as of March 31, 2021

Volatility

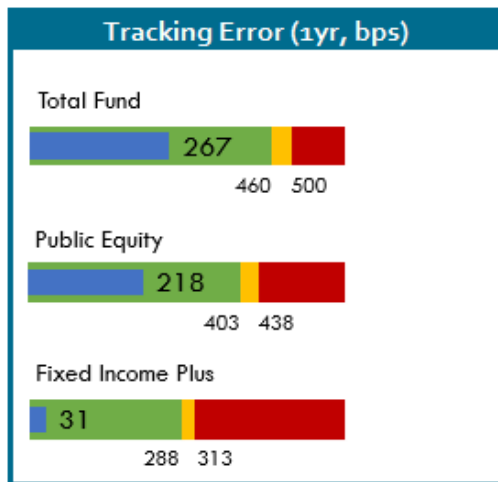


Sharpe Ratio

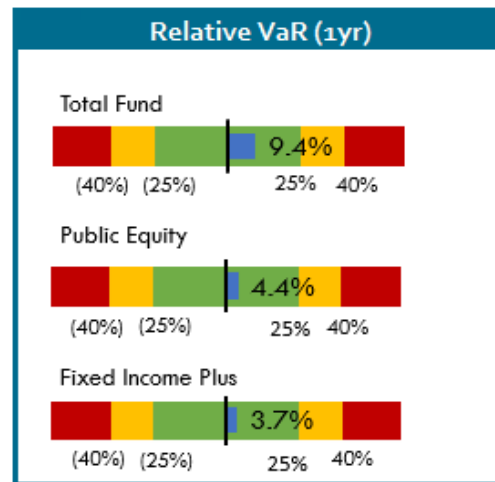


Volatility (standard deviation) and Sharpe ratio have been computed based on historical 3 year quarterly returns, as of March 31, 2021

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	13.0	16.9%	15.0%	1.9%
Private Income	5.3	6.9%	9.0%	-2.1%
Real Estate	5.2	6.8%	7.0%	-0.2%
Total	23.5	30.5%	31.0%	

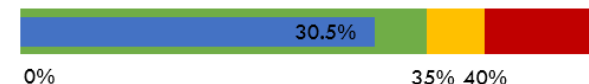
Private Assets: Future Commitments Vs Targets

	\$ Billion	% of Total Fund		
		Actual	Target	Actual (Vs) Target
Private Equity	5.1	6.7%	10.0%	-3.3%
Private Income	3.0	3.8%	5.0%	-1.2%
Real Estate	0.5	0.7%	3.0%	-2.3%
Total	8.6	11.2%	18.0%	

Liquidity Limits as % of Fund NAV

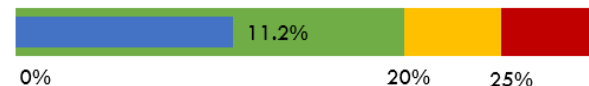
Private Investment Limits

\$23.5 Billion Invested in Private Markets



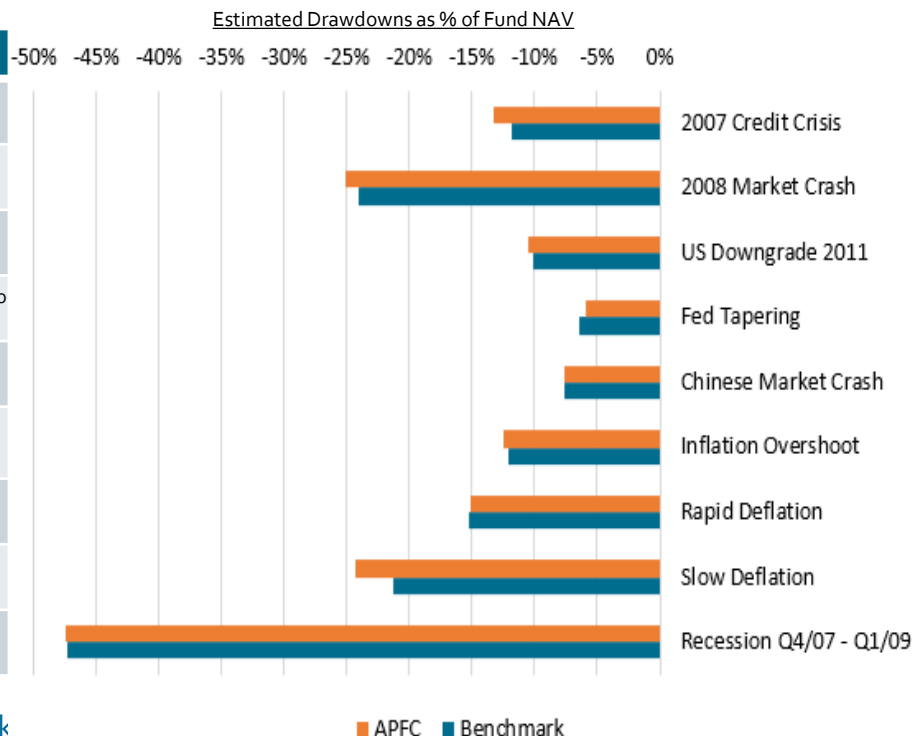
Future Commitments Limits

\$8.6 Billion Committed to Managers



Tail Risk: Current portfolio during extreme events

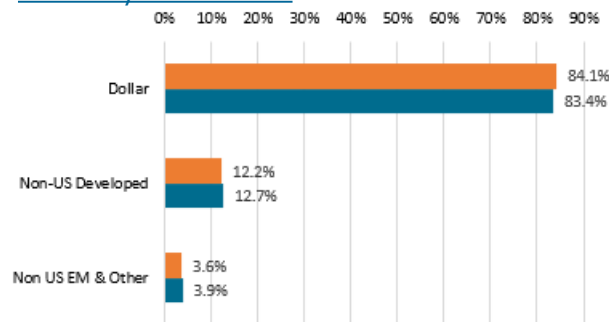
cenario	Definition
2007 Credit Crisis	Credit & liquidity crisis stemming from a severe slowdown in the housing market causing significant widening of credit spreads, higher implied volatility.
2008 Market Crash	S&P 500 down 20% (2000 bps).
US Downgrade 2011	The period starts with 50% chance US downgrade 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 Dec3, 2007 and ending March9, 2009



The estimated drawdowns for the fund exceed that of the benchmark all scenarios

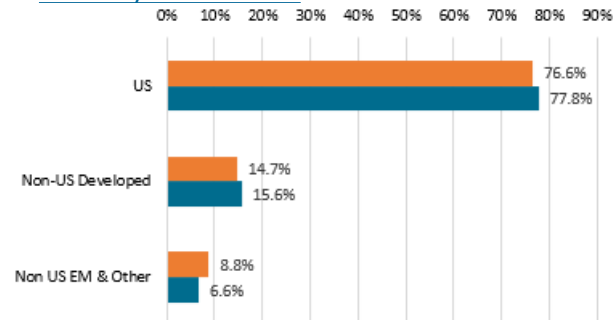
Currency & Geography: breakdowns

Currency breakdown



Currency Name	Exposure (\$, millions)
Euro	3,496
Japanese Yen	1711
Hong Kong Dollar	1443
British Pound	1009
Australian Dollar	597
Swiss Franc	527
Sub-Total	8,783 (11.29% of NAV)
Total Non-US DM Exposure	9,494 (12.19% of NAV)

Country breakdown



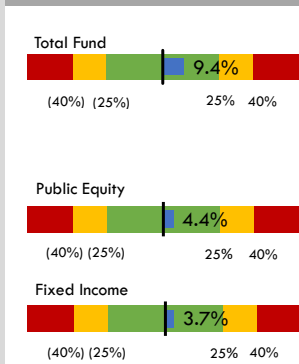
Country Name	Exposure (\$, millions)
China	1,820
South Korea	692
Taiwan	638
India	474
Brazil	233
Mexico	210
Sub-Total	4,067 (5.23% of NAV)
Total EM Exposure	6,828 (8.78% of NAV)

Daily Dashboard - March 31, 2021

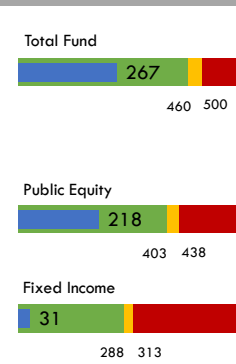
NAV : \$ 77,001,365,788

Risk	Performance (%)							Asset Allocation				
	1 SD	Rel VaR	TE	MTD	FYTD	CYTD	1 Year	NAV (\$mill)	NAV	Target	Compliance	Over/Under
Total Fund	20%	9.4%	2.7%	1.8	21.9	5.3	31.5	77,001				
Public Equity	23%	4.4%	2.2%	3.2	38.4	8.5	67.2	30,144	39.1%	39%		0.1%
Fixed Income	5%	3.7%	0.3%	-0.9	1.4	-2.9	9.1	16,113	20.9%	21%		-0.1%
PE & Special Opps	40%	16.8%	9.6%	3.6	39.0	14.8	36.7	13,001	16.9%	15%		1.9%
Real Estate	24%	-7.9%	6.3%	1.0	1.3	-1.5	-3.7	5,203	6.8%	7%		-0.2%
Inf. & Private Income	25%	10.5%	11.1%	1.7	9.1	2.2	4.3	5,279	6.9%	9%		2.1%
Absolute Return	5%	-40.1%	6.1%	-0.1	9.9	3.1	8.6	4,443	5.8%	6%		-0.2%
Risk Parity	15%	39.6%	9.5%	0.0	15.6	3.8	0.7	752	1.0%	1%		0.0%
Total Fund Cash	0%	-33.9%	0.1%	0.0	0.1	0.0	0.4	2,066	2.7%	2%		0.7%

Relative VaR (1yr)

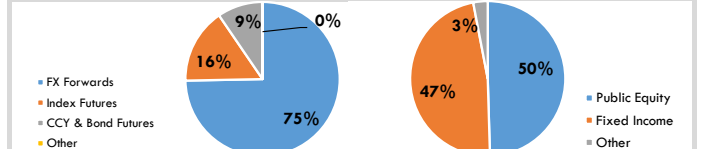


Tracking Error (1yr, bps)

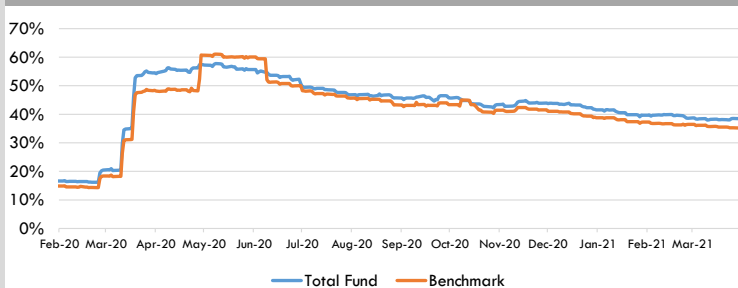


Derivative Exposures (\$mill)

	Total Fund	Public Equity	Fixed Income	Other
Total Derivative	6,203	3,073	2,944	186
FX Forwards	4,633	1,981	2,465	186
Index Futures	979	979	-	-
CCY & Bond Futures	586	113	473	-
Other	6	-	6	-



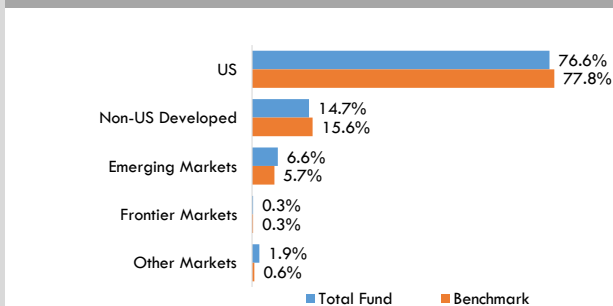
VaR (1yr, 97.5%) as a % of Total Fund NAV



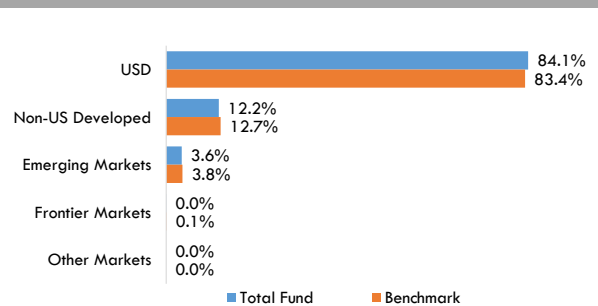
Economic Indicators

	3/31/21	3/30/21	% Change
VIX	19.40	19.61	-1.1%
U.S. Dollar/Euro	1.17	1.17	0.1%
Credit Index OAS	0.86	0.89	-3.5%
Crude Oil (WTI) (\$)	59.16	60.55	-2.3%
10-Year Treasury Yield	1.74	1.70	2.2%
30-Year Treasury Yield	2.41	2.37	1.7%
S&P 500	3,972.89	3,958.55	0.4%

Country Exposures



Currency Exposures



SUBJECT: Capital Market Overview
Callan, Senior VP – Steve Center
Callan, CEO – Greg Allen

ACTION: _____

DATE: May 19, 2021

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 Associates, Inc. provides updates on market conditions. Senior Vice President, Steven Center, and CEO, Greg Allen, will be the presenters at this meeting.

May 19, 2021



Alaska Permanent Fund Corporation

1st Quarter 2021

Capital Markets Review

Greg Allen

CEO and Chief Research Officer

Steven Center, CFA

Senior Vice President

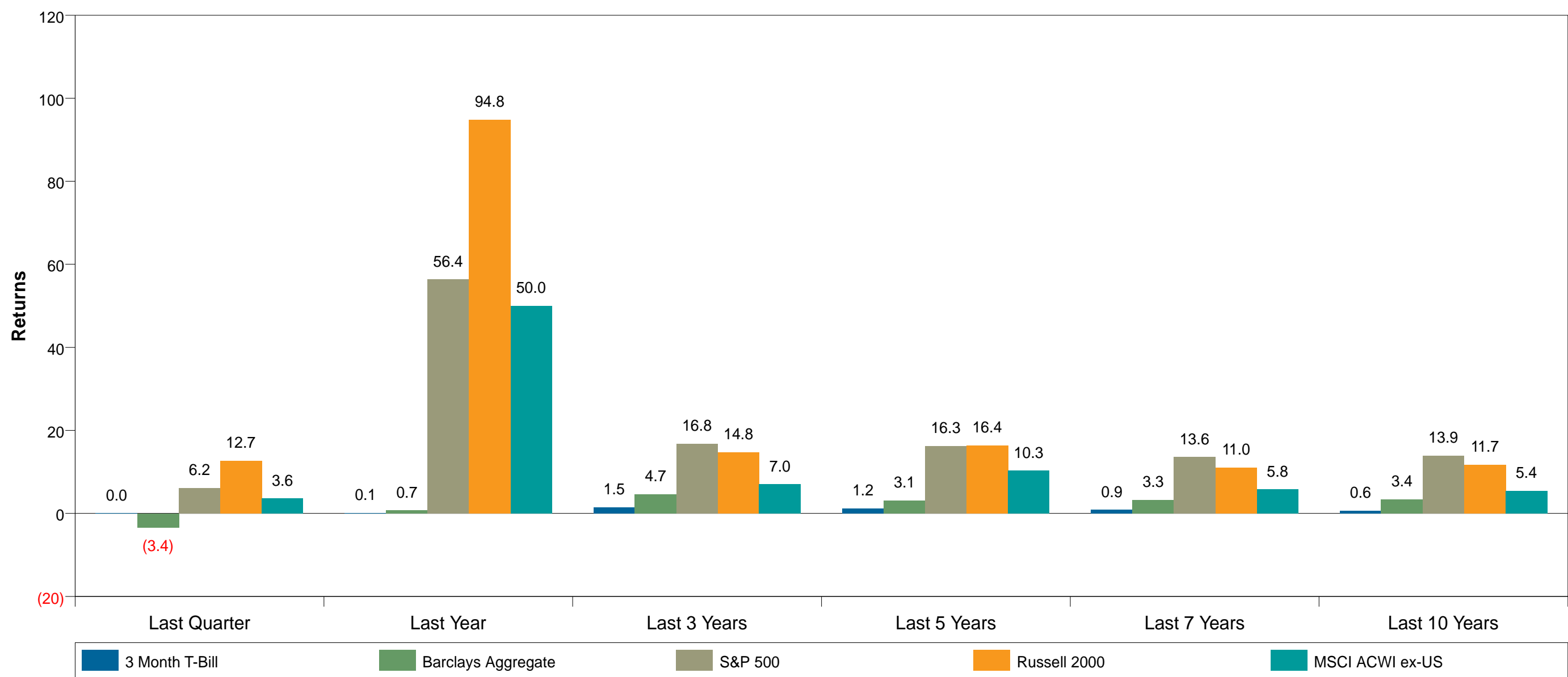
Chris Park, CFA

Vice President

Vice President

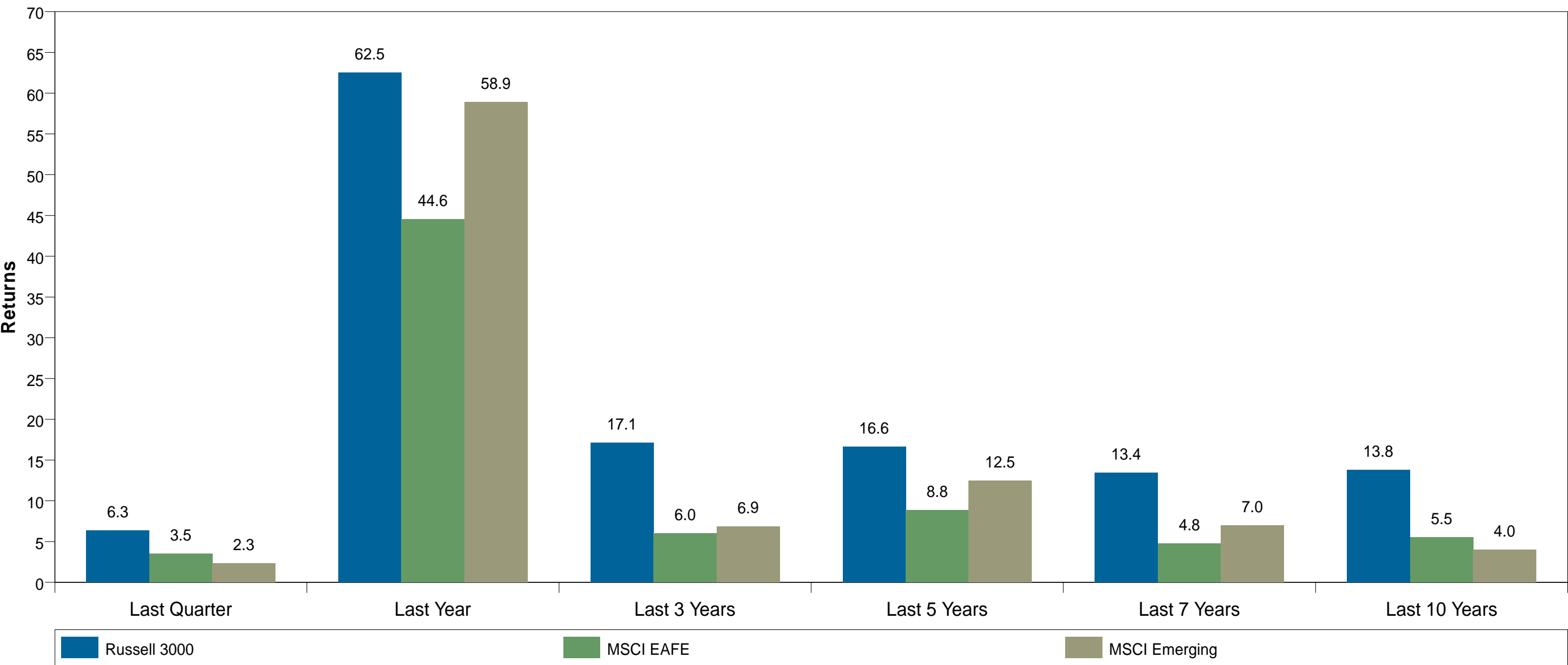
Broad Capital Market Performance

Periods Ended March 31, 2021



Public Equity Capital Market Performance

Periods Ended March 31, 2021



Callan Periodic Table of Investment Returns

Returns for Key Indices

2012	2013	2014	2015	2016	2017	2018	2019	2020	1 Qtr. 2021
MSCI ACWI ex USA SC 18.52%	Russell 2000 38.82%	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%	Russell 2000 12.70%
MSCI Emerging Markets 18.23%	S&P 500 32.39%	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%	S&P 500 6.17%
MSCI World ex USA 16.41%	MSCI World ex USA 21.02%	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 5.53%
Russell 2000 16.35%	MSCI ACWI ex USA SC 19.73%	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 4.04%
S&P 500 16.00%	Bloomberg Barclays Corp High Yield 7.44%	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%	MSCI Emerging Markets 2.29%
Bloomberg Barclays Corp High Yield 15.81%	Bloomberg Barclays Aggregate -2.02%	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 Corp High Yield 0.85%
Bloomberg Barclays Aggregate 4.21%	MSCI Emerging Markets -2.60%	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%	Bloomberg Barclays Aggregate -3.37%
Bloomberg Barclays Global Agg ex US 4.09%	Bloomberg Barclays Global Agg ex US -3.08%	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 -5.29%

Source: Bloomberg Barclays, 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
Russell 2000 12.70%	Russell 2000 94.85%	S&P 500 16.78%	Russell 2000 16.35%	S&P 500 13.59%	S&P 500 13.91%	MSCI Emerging Markets 10.02%
S&P 500 6.17%	MSCI ACWI ex USA SC 69.82%	Russell 2000 14.76%	S&P 500 16.29%	Russell 2000 11.05%	Russell 2000 11.68%	Russell 2000 9.76%
MSCI ACWI ex USA SC 5.53%	MSCI Emerging Markets 58.39%	Bloomberg Barclays Corp High Yield 6.84%	MSCI Emerging Markets 12.07%	MSCI ACWI ex USA SC 6.67%	Bloomberg Barclays Corp High Yield 6.48%	MSCI ACWI ex USA SC 9.28%
MSCI World ex USA 4.04%	S&P 500 56.35%	MSCI ACWI ex USA SC 6.61%	MSCI ACWI ex USA SC 10.40%	MSCI Emerging Markets 6.58%	MSCI ACWI ex USA SC 6.32%	S&P 500 8.47%
MSCI Emerging Markets 2.29%	MSCI World ex USA 45.86%	MSCI Emerging Markets 6.48%	MSCI World ex USA 8.92%	Bloomberg Barclays Corp High Yield 5.42%	MSCI World ex USA 5.21%	Bloomberg Barclays Corp High Yield 7.55%
Bloomberg Barclays Corp High Yield 0.85%	Bloomberg Barclays Corp High Yield 23.72%	MSCI World ex USA 6.34%	Bloomberg Barclays Corp High Yield 8.06%	MSCI World ex USA 4.75%	MSCI Emerging Markets 3.65%	MSCI World ex USA 5.58%
Bloomberg Barclays Aggregate -3.37%	Bloomberg Barclays Global Agg ex US 7.15%	Bloomberg Barclays Aggregate 4.65%	Bloomberg Barclays Aggregate 3.10%	Bloomberg Barclays Aggregate 3.31%	Bloomberg Barclays Aggregate 3.44%	Bloomberg Barclays Global Agg ex US 4.64%
Bloomberg Barclays Global Agg ex US -5.29%	Bloomberg Barclays Aggregate 0.71%	Bloomberg Barclays Global Agg ex US 1.15%	Bloomberg Barclays Global Agg ex US 2.13%	Bloomberg Barclays Global Agg ex US 0.91%	Bloomberg Barclays Global Agg ex US 1.26%	Bloomberg Barclays Aggregate 4.50%

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

Market Environment

Small cap leads in both U.S. and global ex-U.S. markets

Global equity continued to surge in 1Q

- Year-over-year returns from the bottom of the pandemic market crash are eye-popping:
 - *S&P 500*: +56%
 - *MSCI World ex-USA*: +46%
 - *Emerging Markets*: +58%
 - *U.S. Small Cap*: +95% (!)
- The initial recovery was concentrated in a few stocks (FAANG) and U.S. mega cap.
- Market rotation to small cap and value with the flip from a “COVID trade” to a “GDP growth trade” in November, with the announcement of vaccines
- As COVID-19 infections surged in the new year, re-openings were reversed in many states and localities, but only temporarily.
- Economic recovery now looking very strong in 2021, into 2022. Fed projects GDP growth of 6.5% in 2021.
- Distribution challenges have kept widespread inoculation from being achieved until mid-year in the U.S.; it could be much later in countries around the globe.

Returns for Periods ended 3/31/21

	1 Quarter	1 Year	5 Years	10 Years	25 Years
U.S. Equity					
Russell 3000	6.35	62.53	16.64	13.79	9.71
S&P 500	6.17	56.35	16.29	13.91	9.59
Russell 2000	12.70	94.85	16.35	11.68	9.36
Global ex-U.S. Equity					
MSCI World ex USA	4.04	45.86	8.92	5.21	5.21
MSCI Emerging Markets	2.29	58.39	12.07	3.65	--
MSCI ACWI ex USA Small Cap	5.53	69.82	10.40	6.32	6.51
Fixed Income					
Bloomberg Barclays Aggregate	-3.37	0.71	3.10	3.44	5.09
90-day T-Bill	0.03	0.12	1.19	0.63	2.22
Bloomberg Barclays Long Gov/Credit	-10.41	-2.05	5.47	6.98	7.22
Bloomberg Barclays Global Agg ex-US	-5.29	7.15	2.13	1.26	3.80
Real Estate					
NCREIF Property	1.72	2.61	5.81	8.82	9.06
FTSE Nareit Equity	8.87	37.78	5.33	8.56	9.92
Alternatives					
CS Hedge Fund	2.85	20.19	5.12	3.88	7.20
Cambridge:PE Idx (Pulled Forward)	17.57	31.52	17.10	14.73	15.41
Bloomberg Commodity	6.92	35.04	2.31	-6.28	0.97

*Cambridge PE data through 12/31/20

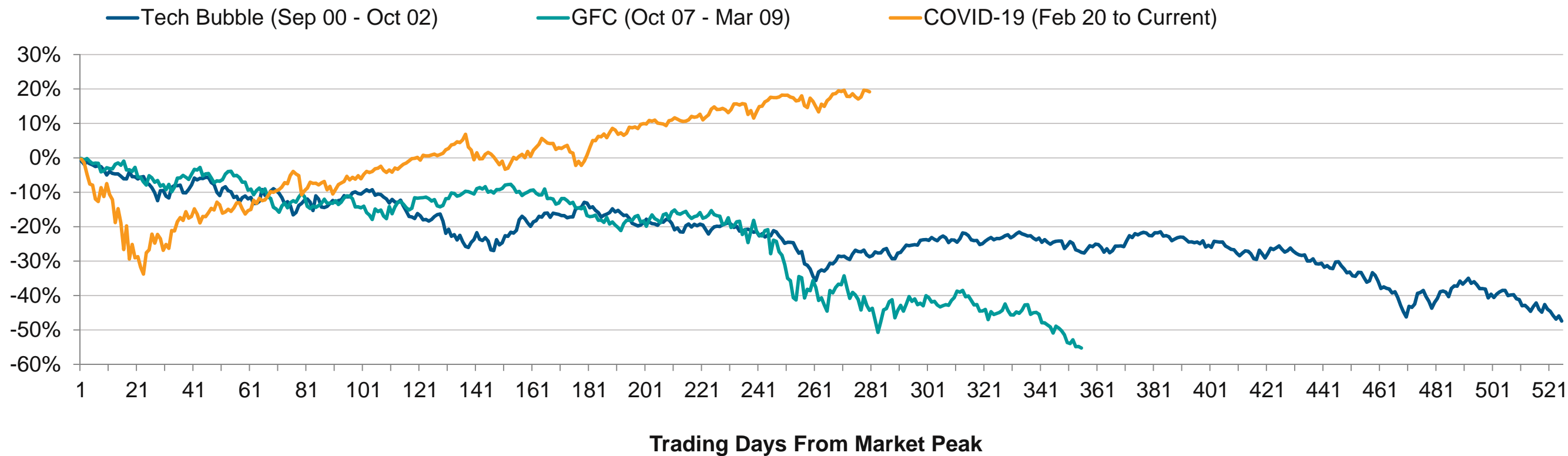
Sources: Bloomberg, Bloomberg Barclays, Callan, Cambridge, Credit Suisse, FTSE Russell, MSCI, NCREIF, S&P Dow Jones Indices

Unprecedented Shock to Global Capital Markets

V-shaped recovery in equity—back in black by mid-August, up 81% from market bottom!

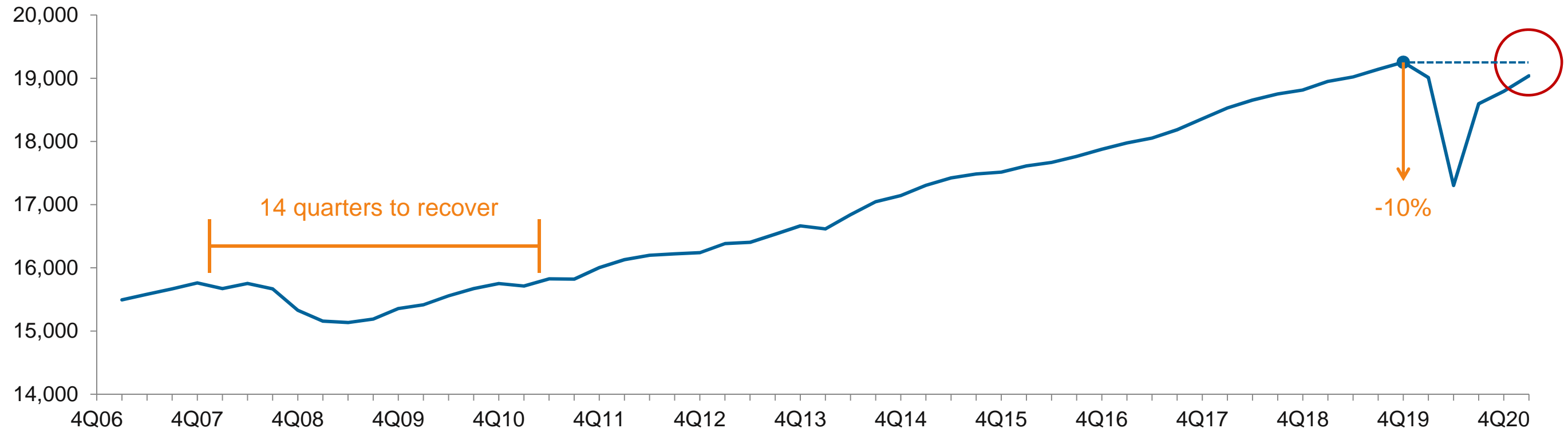
The sharpest and fastest equity market decline ever: 16 trading days to reach bear market; -33% after just 23 days

S&P 500 Cumulative Returns
Market Peak-to-Trough for Recent Corrections vs. Current Path of COVID-19 Correction Through 03/31/21



GDP Recovery After Deepest Drop in 75 Years

Seasonally Adjusted Real GDP in Billions of Dollars

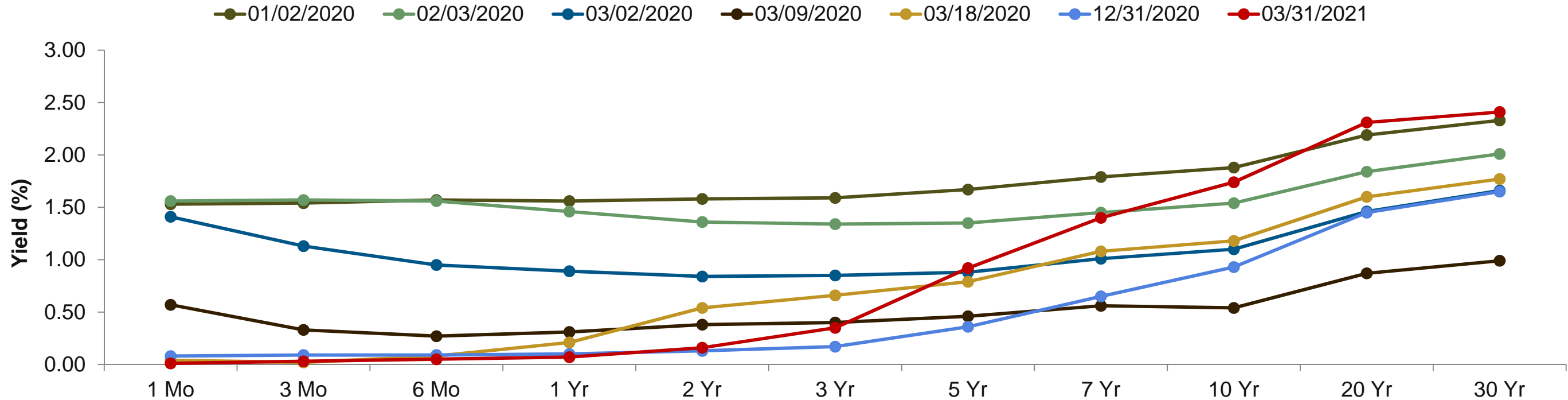


- After the Global Financial Crisis, it took 3.5 years before real GDP reclaimed its pre-recession highs.
- GFC peak to trough was down 4%.
- 2Q20 real GDP level was down over 10% from 4Q19, annual GDP declined 3.5% over 2019.
- Second half 2020 GDP rose 8.6%; GDP at end of 4Q20 was down only 2.4% from the level set in 4Q19.
- Pre-pandemic peak level of GDP likely to be reached in 2Q21 (forecast by IHS Markit)

Source: St. Louis FRED. 1Q21 is an estimate from IHS Markit

Impact on Financial Markets

Treasury yield curve steepens dramatically since Jan. 1: a moving target



The Treasury yield curve contains an implicit broad economic forecast.

- Steeper yield curves (long-term rates higher than short-term rates) suggest stronger anticipated growth.

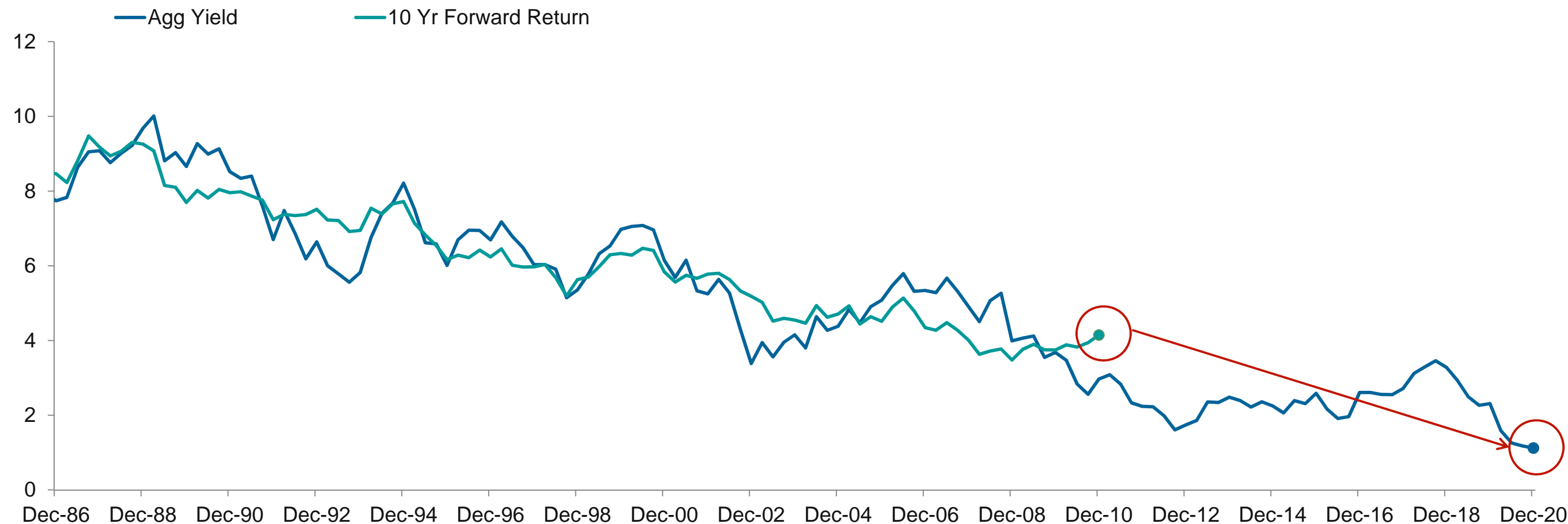
The shape of the Treasury yield curve has varied quickly and substantially since the beginning of 2020.

- Curve shifted down dramatically early in crisis.
- Current yield curve still low on the short end but substantially steeper than at the start of 2021

Source: U.S. Department of Treasury

Starting Yield Is a Strong Determinant of Forward Return

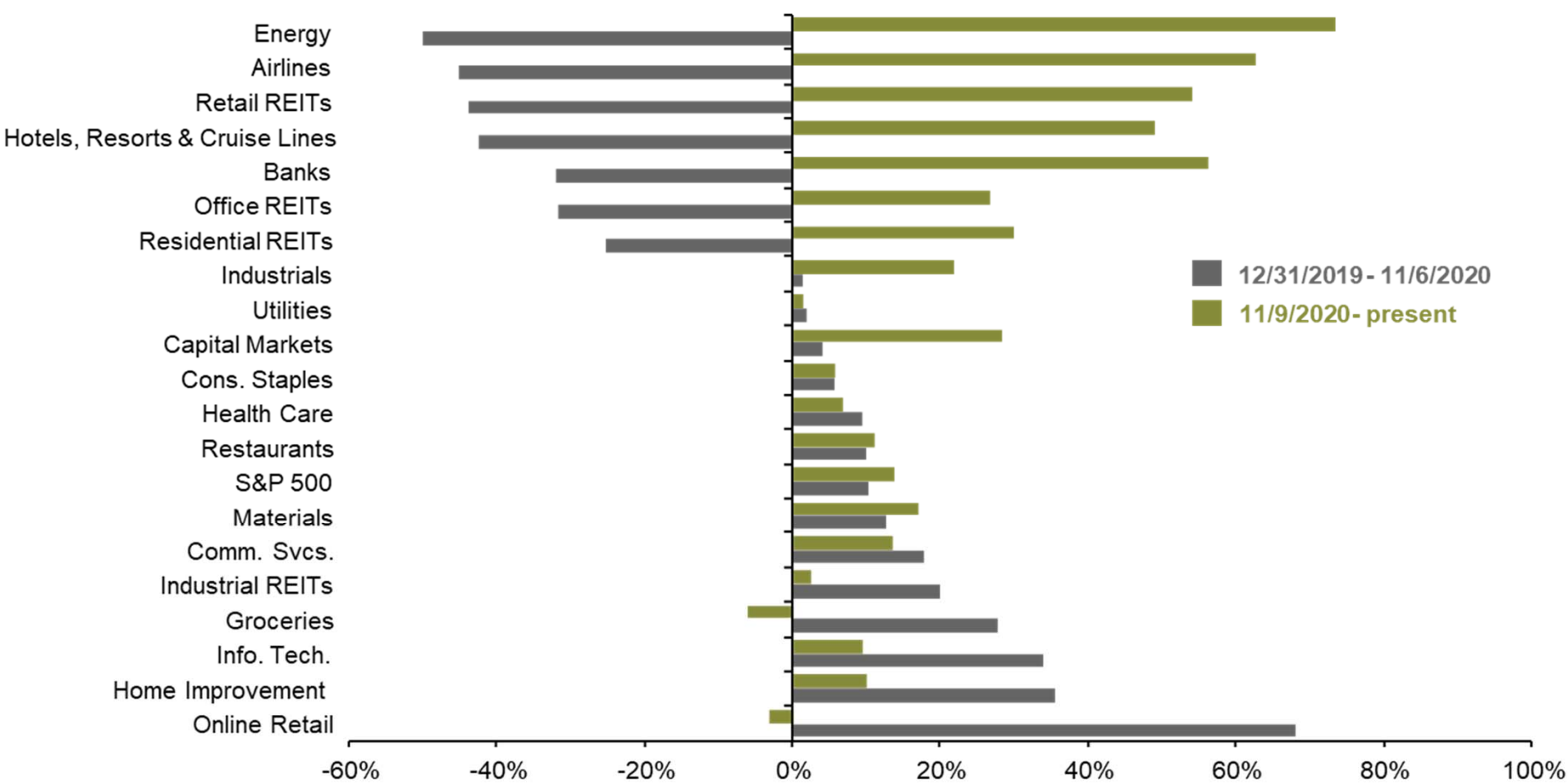
Bloomberg Barclays Aggregate Starting Yield vs. 10-Year Forward Return



- Somewhat strong relationship between GDP growth and the 10-Year Treasury Yield; the relationship improves even more when you add smoothing and lags.

U.S. Stock Market Sector Leadership Through the Pandemic

COVID trade flipped to a ‘GDP growth trade’ with the announcement of vaccines in November



–Best-performing sectors were those hardest hit by COVID (health care, banks, hospitality, transportation, energy).

Sources: FactSet, J.P. Morgan Asset Management Guide to the Markets – U.S., Standard & Poor’s; Data are as of 12/31/20.

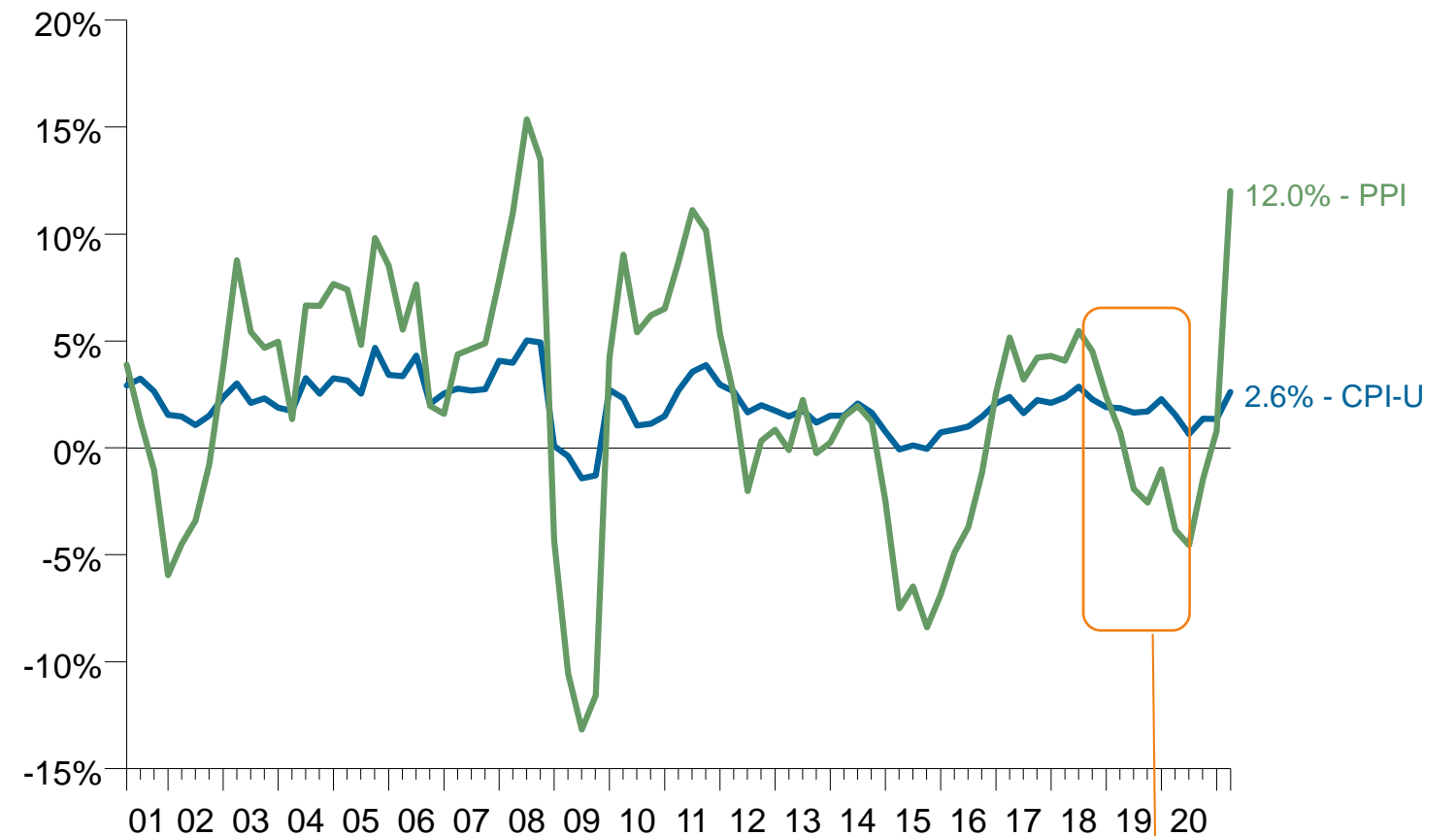
Inflation Rebounds and Spurs Headline Concerns

CPI and PPI shoot up in 1Q21, but off a depressed base from one year ago

Inflation fell sharply at the onset of the pandemic, starting in February 2020.

- The recovery to pre-pandemic levels in the Consumer Index generates a 2.6% year-over-year change.
- Producer prices had been tumbling for more than a year prior to the pandemic; recovery to 2018 price **levels** generates eye-popping year-over-year percent change that misrepresents whether we're seeing a “true” spike in inflation.

Consumer and Producer Price Indexes – Inflation Year-Over-Year



Sharp drop in Producer Price Index in 2019 and first half of 2020

Sources: FRED, Federal Reserve Bank of St. Louis

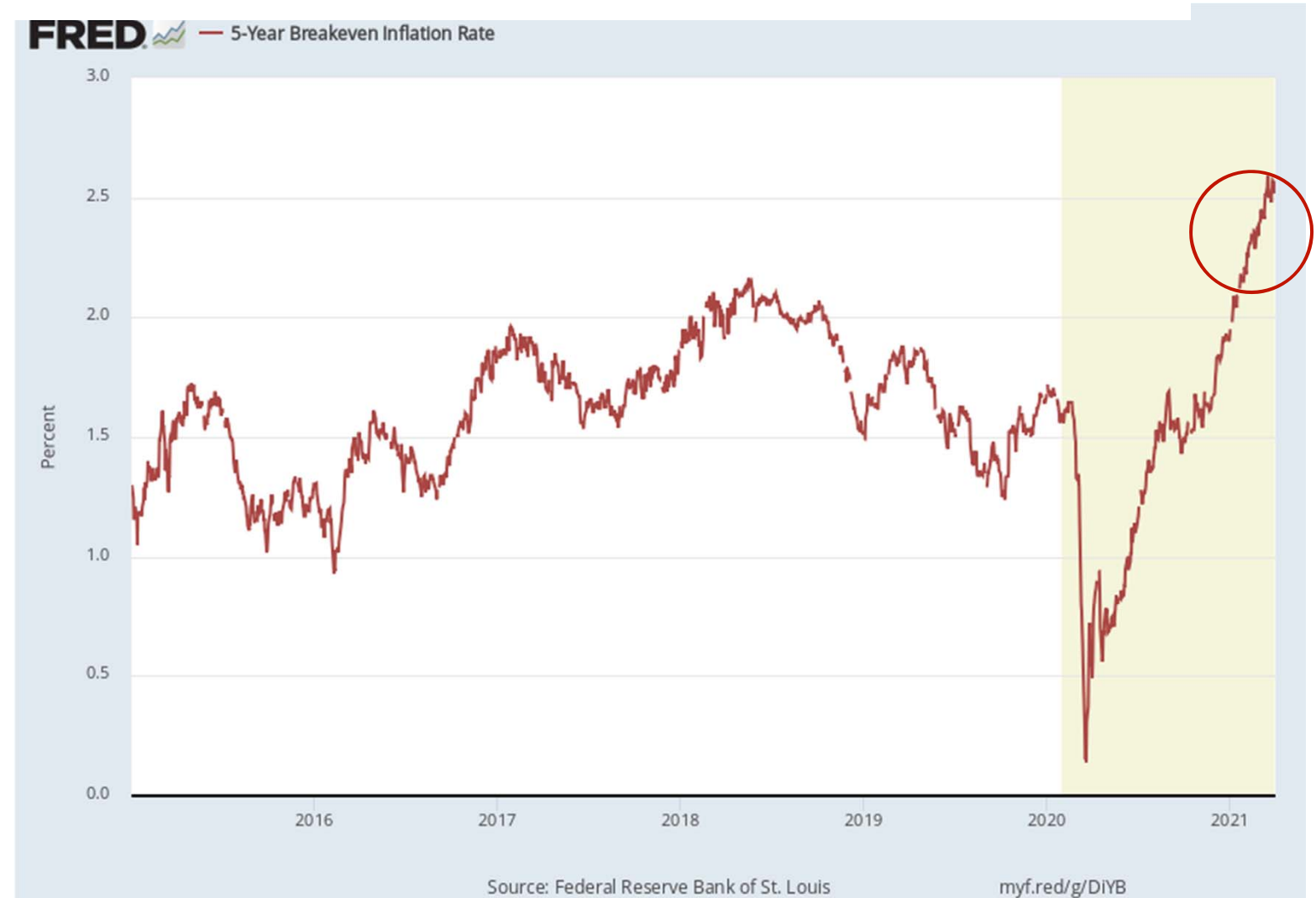
Inflation Rebounds and Spurs Headline Concerns

Fixed income market: rising short- to medium-term inflation expectations

Fixed income market expecting inflation to rise in the near term

- The five-year breakeven inflation rate has recovered from near zero, and is now above 2.5%—substantially higher than current level.
- Five-year breakeven inflation rate is the difference between five-year nominal and five-year Treasury Inflation Protected Securities (TIPS) yields.
- Actual breakeven rate not as important as markets forecasting neither deflation nor high inflation

5-Year Breakeven Inflation Rate



Sources: FRED, Federal Reserve Bank of St. Louis

Stock Market Is Not the Economy

- U.S. equity market has already recovered from the March 2020 plunge. Large cap (S&P 500) is up 56% year-over-year; small cap (Russell 2000) is up 95%.
- U.S. job market created 22.8 million jobs in the decade from Feb 2010 – Feb 2020. The job market lost over 22.4 million jobs in March and April, and has recovered just 13 million since May.
- GDP is projected to regain the February 2020 pre-COVID peak in mid- to late 2021.
- Steep structural challenges face many job-laden sectors of the economy that are underrepresented in the current stock market valuation.
- Containment of COVID-19 surges and rollout of the vaccines are key to retaining confidence in the recovery.



Sources: St. Louis FRED, S&P Dow Jones Indices

U.S. Equity Performance

First Quarter 2021

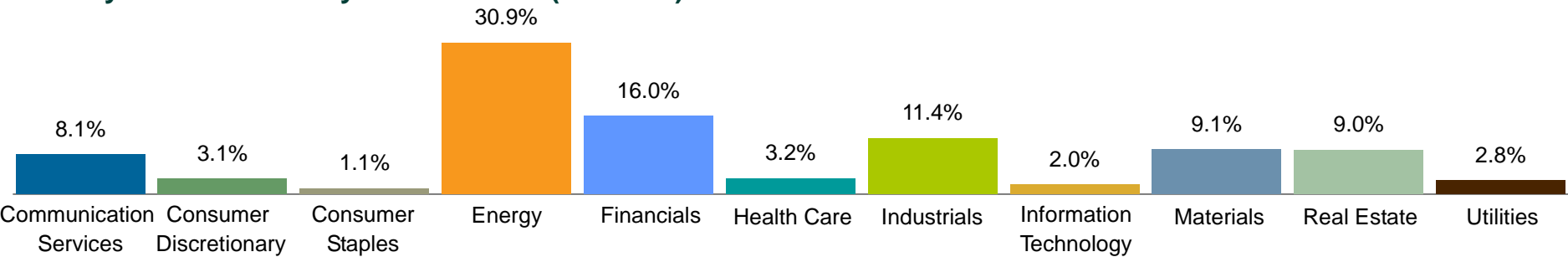
Markets continue setting all-time highs

- The S&P 500 Index hit record highs in 1Q21, gaining 6.2%.
 - Since the prior peak (February 2020) the S&P is up over 19.6%, with only Energy (-4.7%) and Utilities (-4.9%) declining from peak-to-peak.
 - Since March 2020 market low, S&P up over 80.7%, with all sectors posting gains over 40%; Energy +116.2%
 - 1Q21 top sectors were Energy and Financials, while Industrials and Consumer Staples underperformed.
 - “Re-opening” sectors (airlines, retail REITs, hospitality) outperformed while “work from home” sectors (online retail, home improvement) lagged.

Value and small cap trends continue through 1Q21

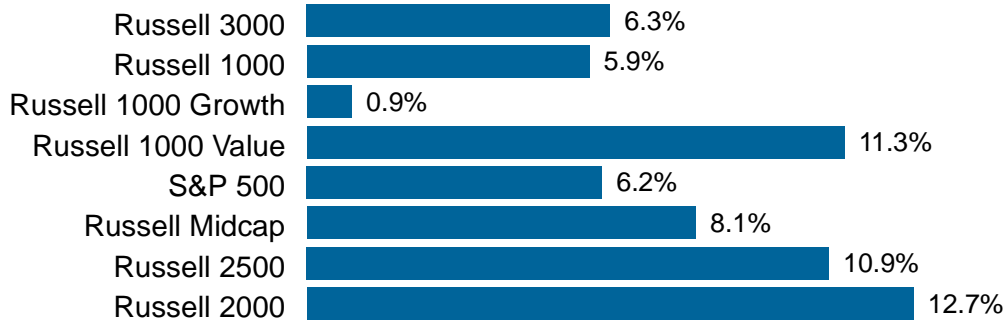
- Value outperformed growth across the market cap spectrum.
- Small caps outperformed large in 1Q.
- Small value was the top-performing asset class for the quarter (+21.2%) and from the March 2020 low (+127.7%).

Industry Sector Quarterly Performance (S&P 500)

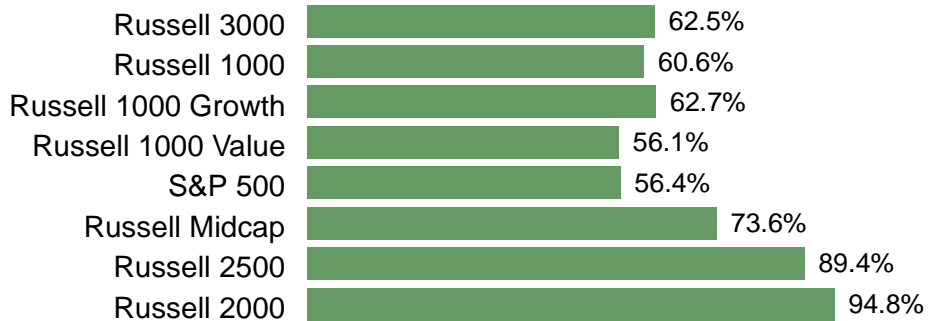


Sources: FTSE Russell, Standard & Poor's

U.S. Equity: Quarterly Returns



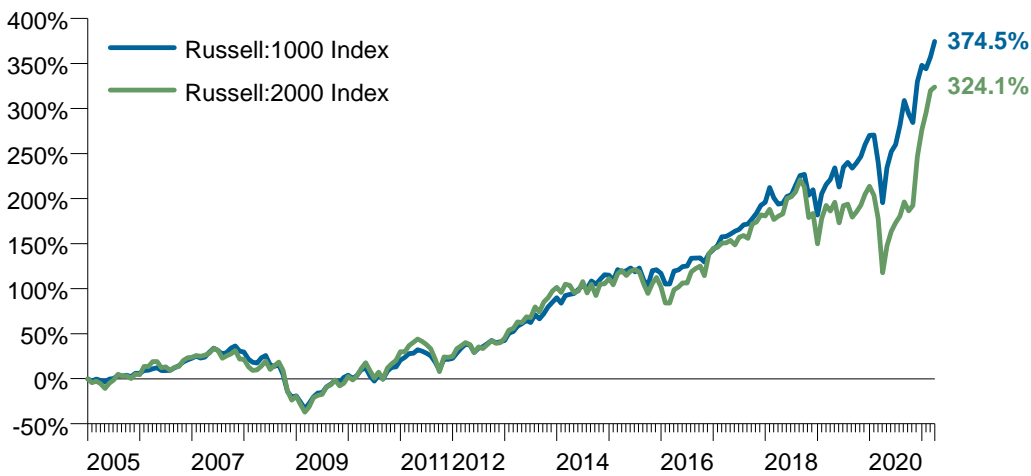
U.S. Equity: One-Year Returns



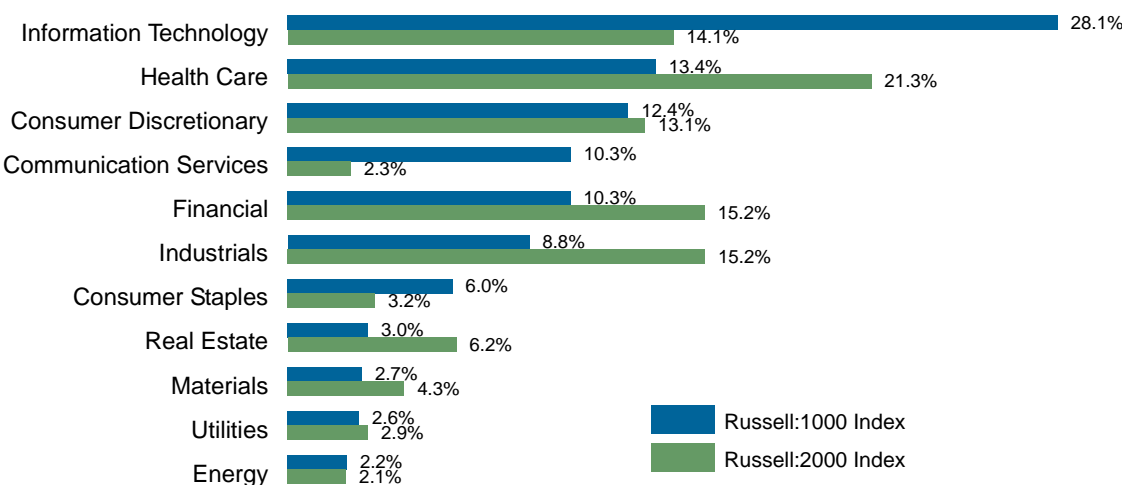
Trend Continuation: Small Cap Outperforms Large Cap

- Since 2005, cumulative returns for broad large cap and small cap indices were in lock-step until 4Q18.
- In 1Q21, Russell 2000 gained 12.7%, extending the rally from 4Q20 when the index experienced its best quarterly return on record (+31%).
 - During 1Q, GameStop rose 900%, while next best Russell 2000 stock was up ~60%.
- Small cap stocks surged on stronger GDP and economic recovery forecasts due to higher exposure to cyclical sectors relative to large cap indices.
 - Industrials, Financials, and Real Estate sectors benefit most from expectations of GDP expansion.
- Historically, small cap stocks have outperformed in recoveries following market crashes.

Cumulative Returns for Russell Indices as of March 31, 2021



Sector Weights as of March 31, 2021



Sources: JPMorgan, FTSE Russell, S&P Dow Jones Indices

Trend Watch: Value vs. Growth

Value vs. growth since 2010

- 2010 to 2017: relative P/E multiples were stable (even as growth outperformed value).
- Growth stock rally was driven by much faster earnings growth (i.e., growth outperformed value as investors paid up for faster earnings growth).
- Since 2017, huge divergence in multiples between value and growth

Recent trend: 4Q20 and 1Q21

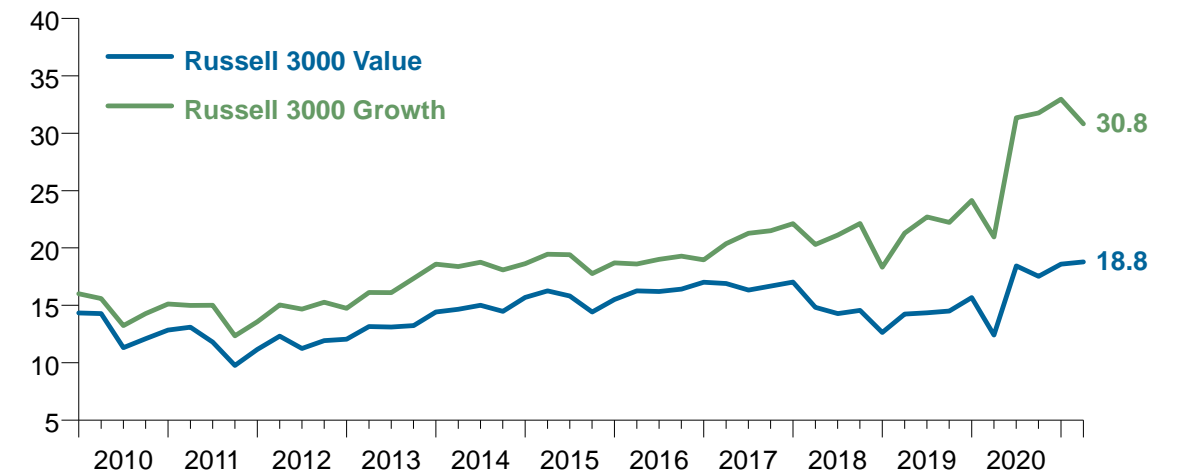
- Cyclical sectors and industries (Energy, Financials, Industrials, Materials) continued to outperform their growth counterparts as GDP forecasts improved, stimulus was enacted, and vaccinations progressed.
- November 2020 vaccine data news a catalyst for market rotation into value/cyclicals

Bottom line

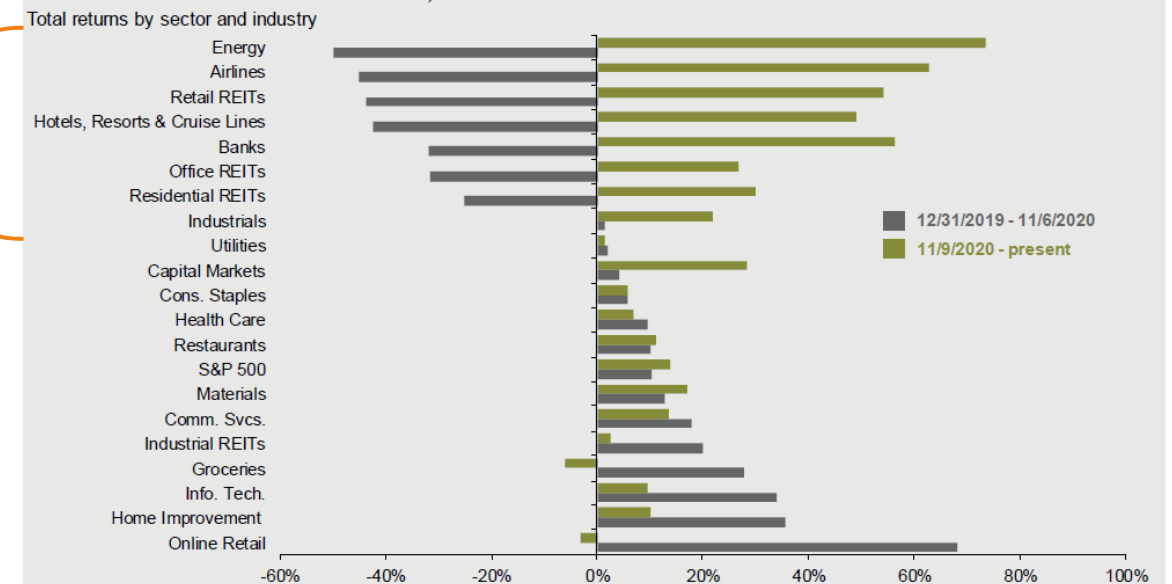
- Despite sharp rally, value has not recaptured the underperformance experienced versus growth stocks over the last decade.

Source: J.P. Morgan

Forecasted P/E (inc neg) for Russell 3000 Style Indices 11 1/4 Years ended March



Returns before and after November 6, 2020



Global ex-U.S. Equity Performance

First Quarter 2021

Nearly 100 million people fully vaccinated worldwide

- Markets responded positively to the global rollout of the COVID-19 vaccine.
- Most risk assets continued to outperform as global businesses reopen.
- Small cap outperformed large over the quarter on continued economic optimism.
- Emerging markets trailed developed markets; COVID-19 outbreaks and vaccination challenges hindered EM results.

Market continues to favor cyclical

- Sustained market recovery and rising interest rates buoyed cyclical stocks; Energy, Financials, and Industrials drove the market.
- Factor performance showed a preference for beta and volatility, similar to 4Q20.

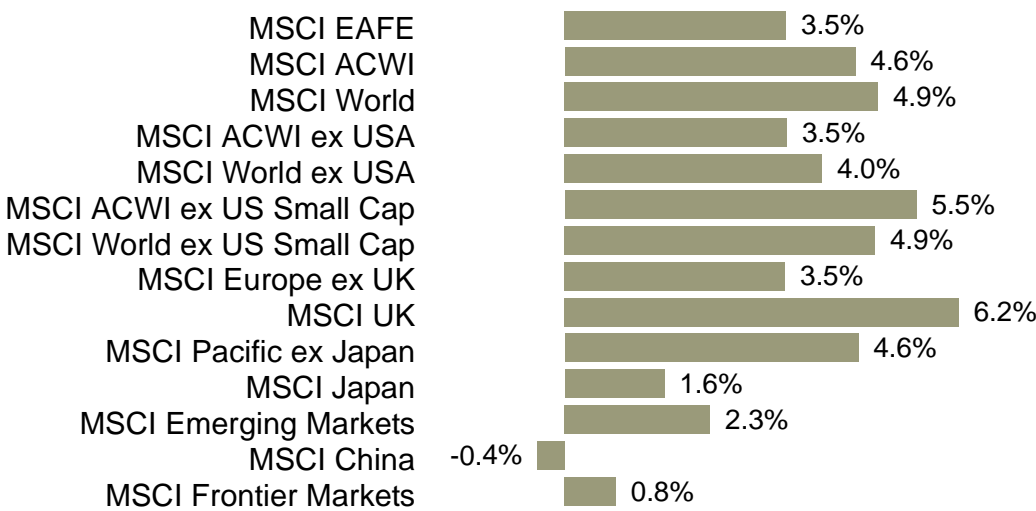
U.S. dollar vs. other currencies

- The U.S. stimulus package announcement, combined with yields rising on economic confidence, fueled the U.S. dollar.

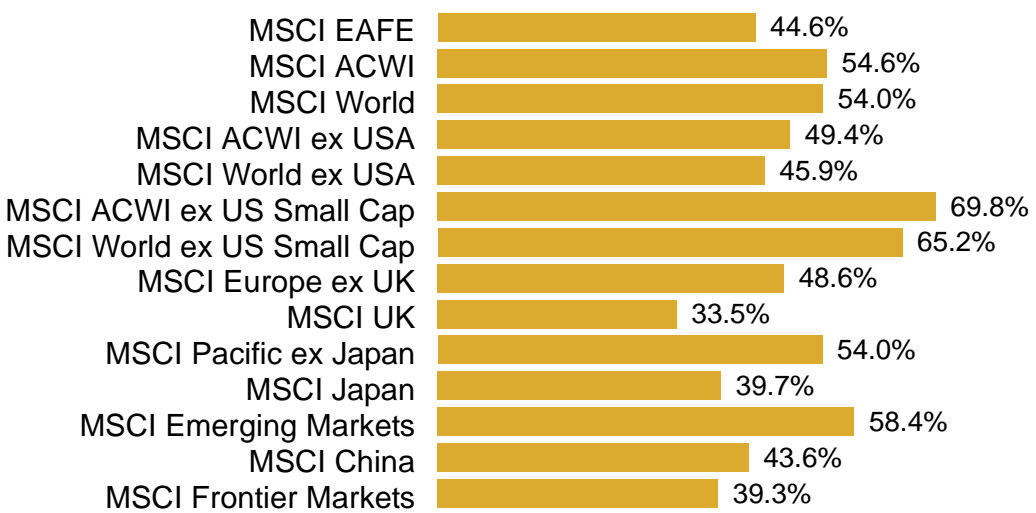
Growth vs. value

- Value outpaced growth for the second consecutive quarter.

Global Equity: Quarterly Returns



Global Equity: Annual Returns



Source: MSCI

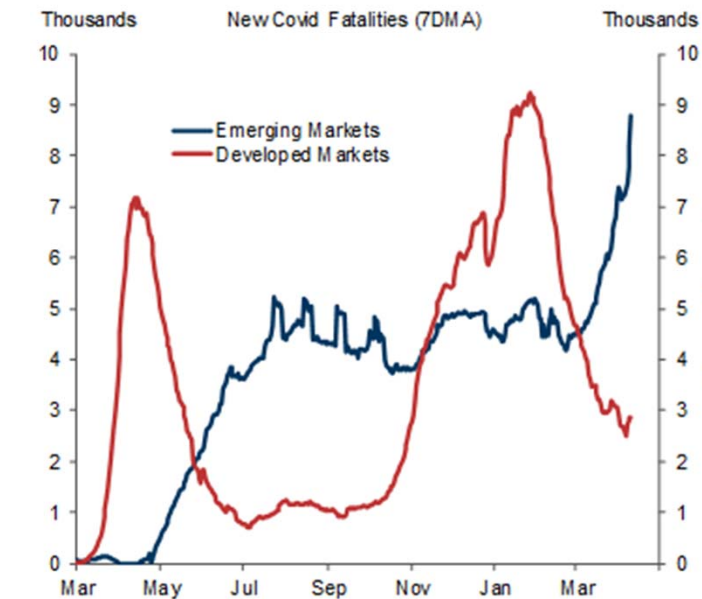
Uneven Global Recovery

COVID-19 resurgence may delay EM recovery

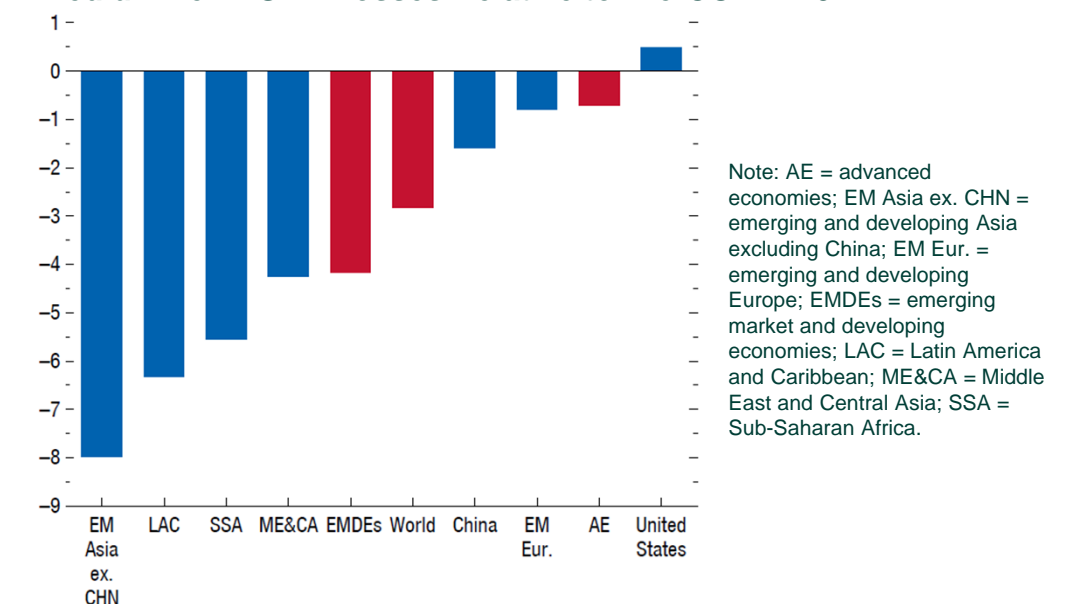
- Although daily COVID-19 fatalities for developed markets have declined dramatically by 70% from the peak in January, they are notably increasing in emerging markets.
- China, South Korea, and Taiwan have by and large contained the pandemic, while pockets of developing economies are challenged with rising infections.
 - Outbreaks in Brazil, Chile, and India are concerning as ~80% of their populations were vulnerable to infection at the start of the year.

Divergent economy amid uncertainty

- Revisions to projected 2024 GDP levels between January 2020 and April 2021 reveal stark contrast between developed and emerging markets.
 - U.S. maintains resilience and is expected to generate modest positive growth in the mid-term, while other advanced and emerging economies post negative growth.
 - Emerging markets are challenged by procurement of vaccine; as such, lockdowns and containment measures are expected to manage outbreaks, dampening growth.
 - China is expected to perform better relative to other developing economies given its COVID-19 management and capacity to inject fiscal and monetary stimulus.



Medium-Term GDP Losses Relative to Pre-COVID-19



Sources: JHU CSSE, Goldman Sachs Global Investment Research, IMF staff estimates

U.S. Fixed Income Performance

First Quarter 2021

The U.S. Treasury yield curve steepens

- The 10-year U.S. Treasury yield closed 1Q21 at 1.74%, up 81 bps from 4Q20.
- The short-end of the curve remained anchored, with no rate hikes expected until at least 2023, steepening the yield curve.
- TIPS outperformed nominal U.S. Treasuries as 10-year breakeven spreads widened from 1.99% to 2.37%.

Bloomberg Barclays Aggregate falls

- The Bloomberg Barclays US Aggregate Bond Index dropped 3.4%, with spread sectors outperforming treasuries.
- Demand for corporate credit remains strong, and spreads did not change meaningfully over the quarter

High yield bonds gain as rally extended

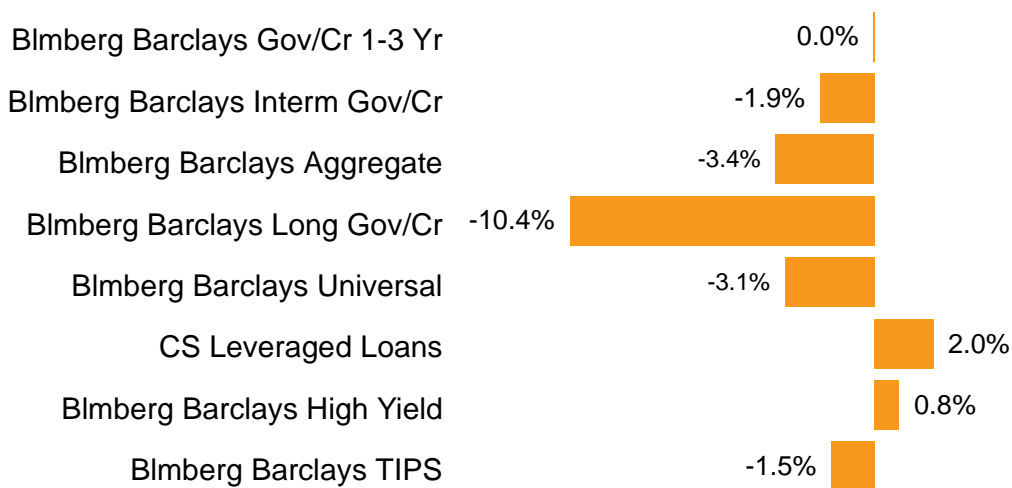
- High yield (HY) bonds outperformed investment grade (IG) in 1Q, gaining 0.8% amid a wave of new issuance.
- Leveraged loans rose 1.8% during the quarter, driven by favorable supply/demand dynamics, floating rate coupons, and relatively short durations.

Munis boosted by stimulus

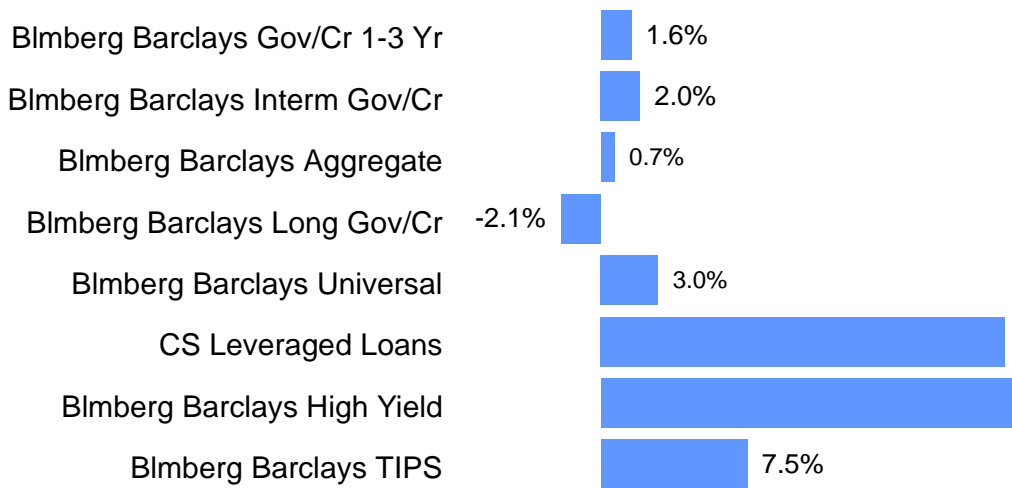
- Municipals outperformed treasuries for the quarter, as municipal yields rose less than treasury yields.
- The municipal market was supported by the American Rescue Act.

Sources: Bloomberg Barclays,

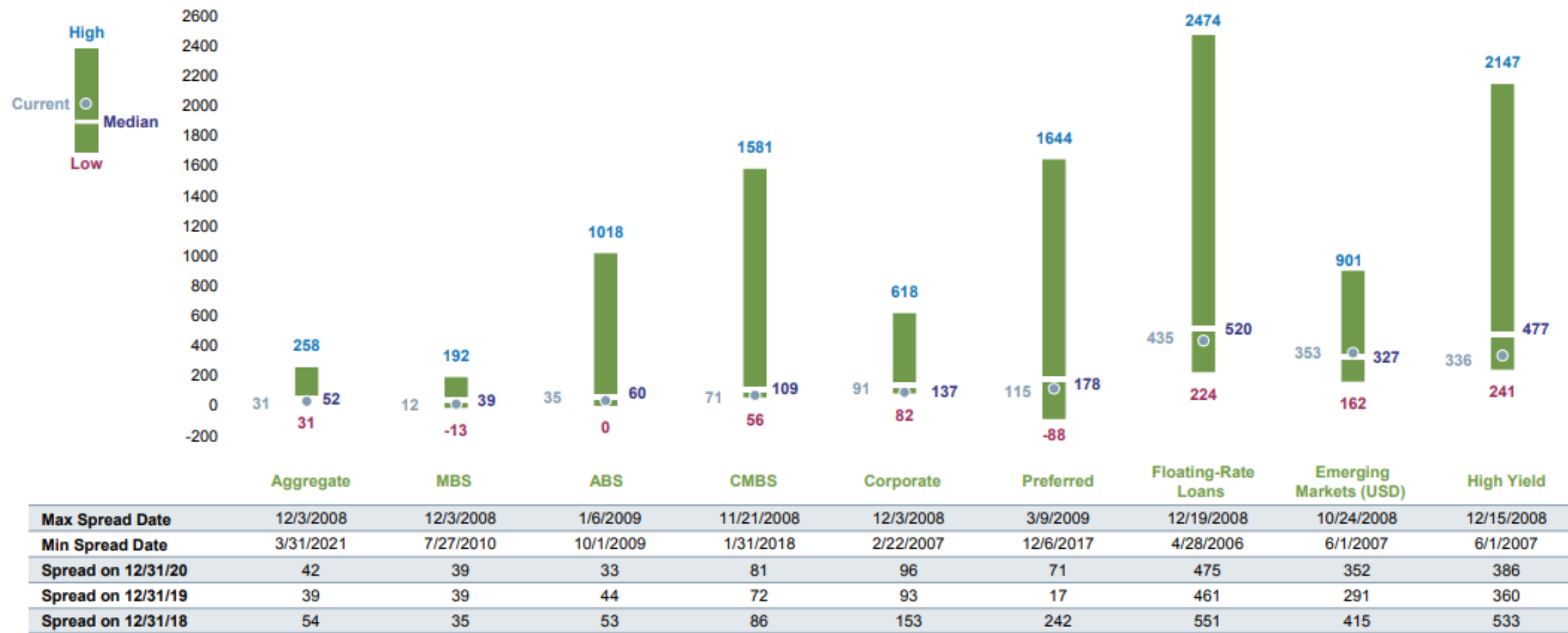
U.S. Fixed Income: Quarterly Returns



U.S. Fixed Income: Annual Returns



Spreads continue to tighten



Spreads across sectors have recovered to pre-pandemic levels and below their 15-year medians

- Narrower spreads imply lower rates of returns on a go-forward basis.
- Tight valuations draw attention to managers’ ability to add value through credit selection.

Update on downgrades, defaults, and recovery rates

Record downgrades from IG to HY in 2020

- 2Q20 saw highest number of quarterly downgrades on record. Ratings agencies cited the pandemic and oil prices driving downgrades of issuers sensitive to these factors.

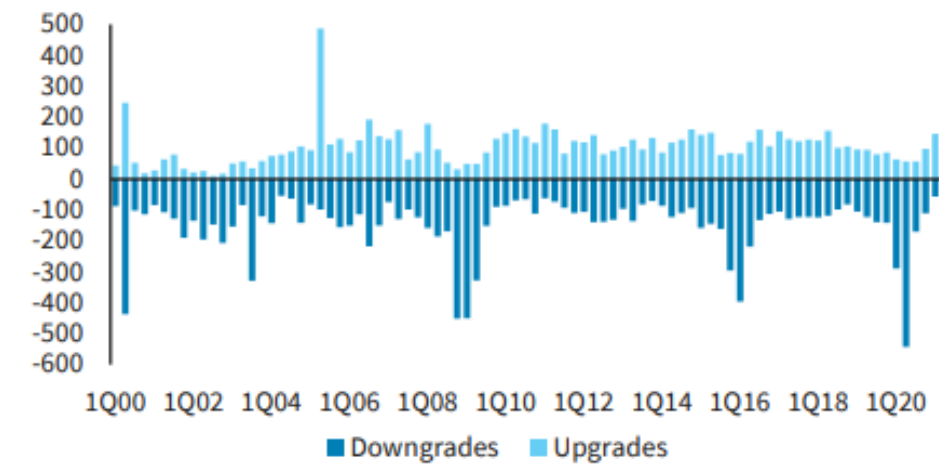
HY downgrade/default cycle appears to be waning

- Upgrades began outpacing downgrades at the end of 2020 as issuers less sensitive to the pandemic began displaying improving fundamentals.
- Quarterly defaults within high yield bonds and leveraged loans have declined; 1Q21 saw the lowest quarterly default total since 3Q18.

Recovery rates remain near their lowest levels

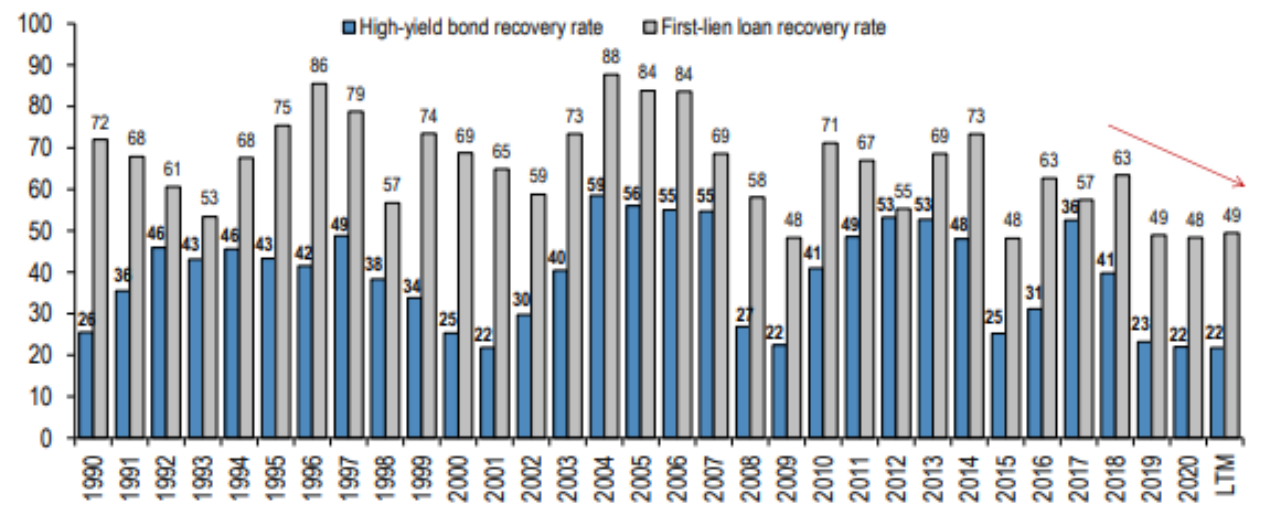
- 2020 was the lowest recovery rate for HY since 2001.
- HY ex-Energy recoveries were less severe at 28%.

Ratings Changes in the US High Yield Index

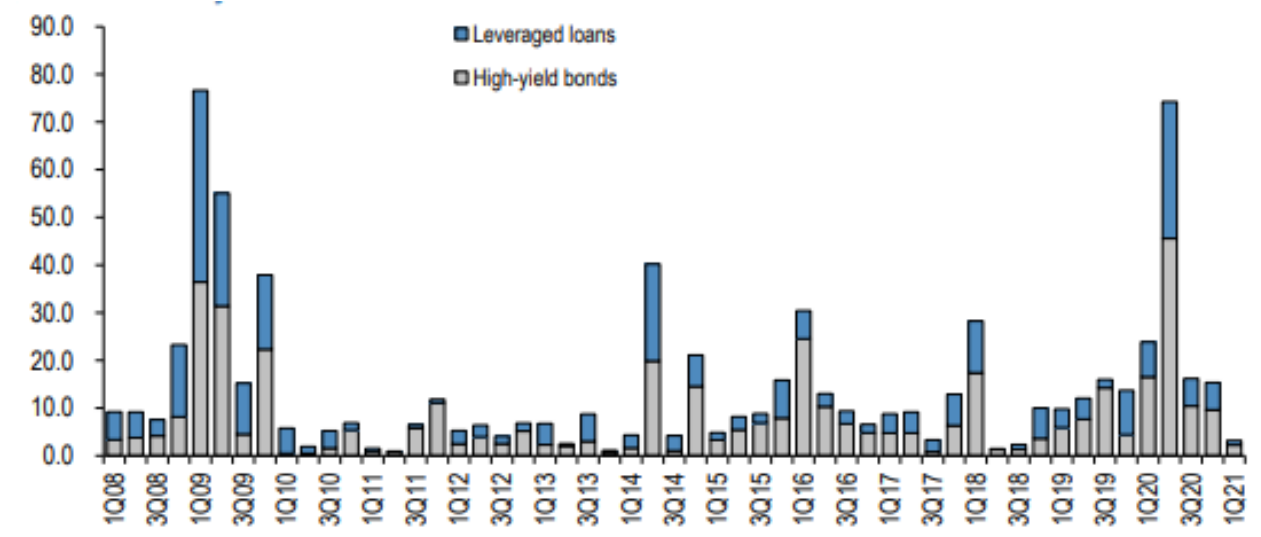


Sources: (Top-right) Barclays Research, Bloomberg; (Bottom-right, left) J.P. Morgan, Moody's Investors Services

Recovery (cents on the dollar)



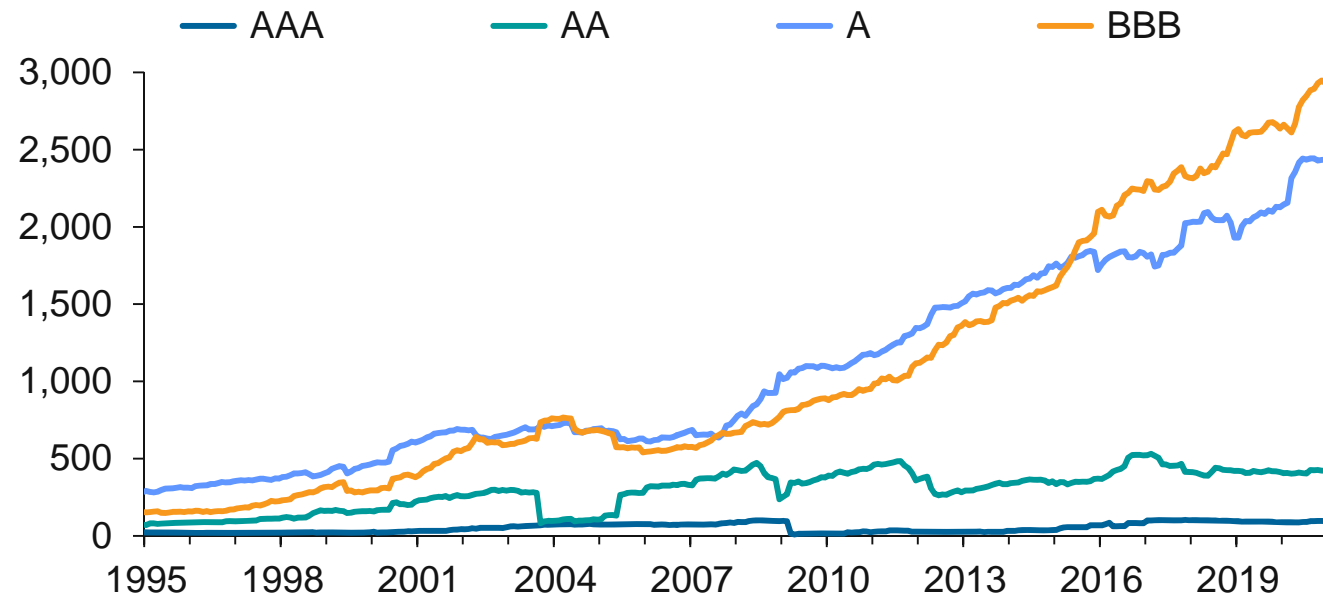
Quarterly Default Volumes in High Yield and Loans (\$bn)



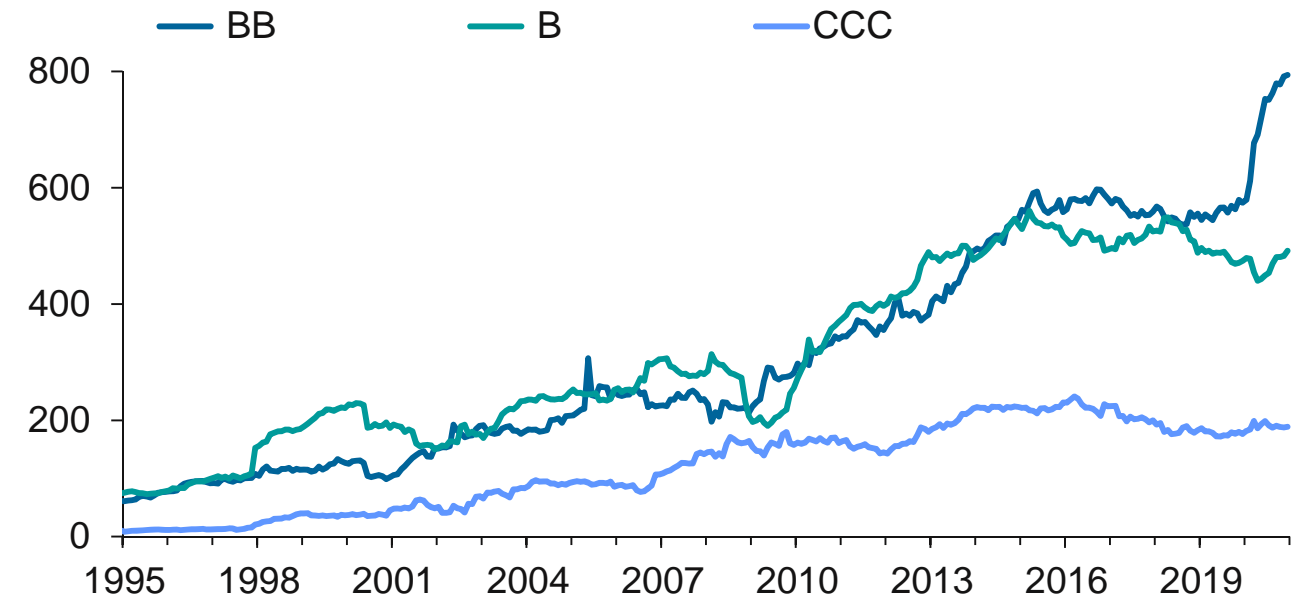
Changing Landscape for U.S. Corporate Fixed Income Markets

Historical growth of the investment grade and high yield corporate markets

Investment Grade Par Amount Outstanding (\$bn)



High Yield Par Amount Outstanding (\$bn)



- Declining U.S. interest rates caused debt issuance to rise, most notably when the Federal Reserve introduced quantitative easing and zero interest rate policy.
- Issues outstanding increased in lower-rated investment grade issuers.

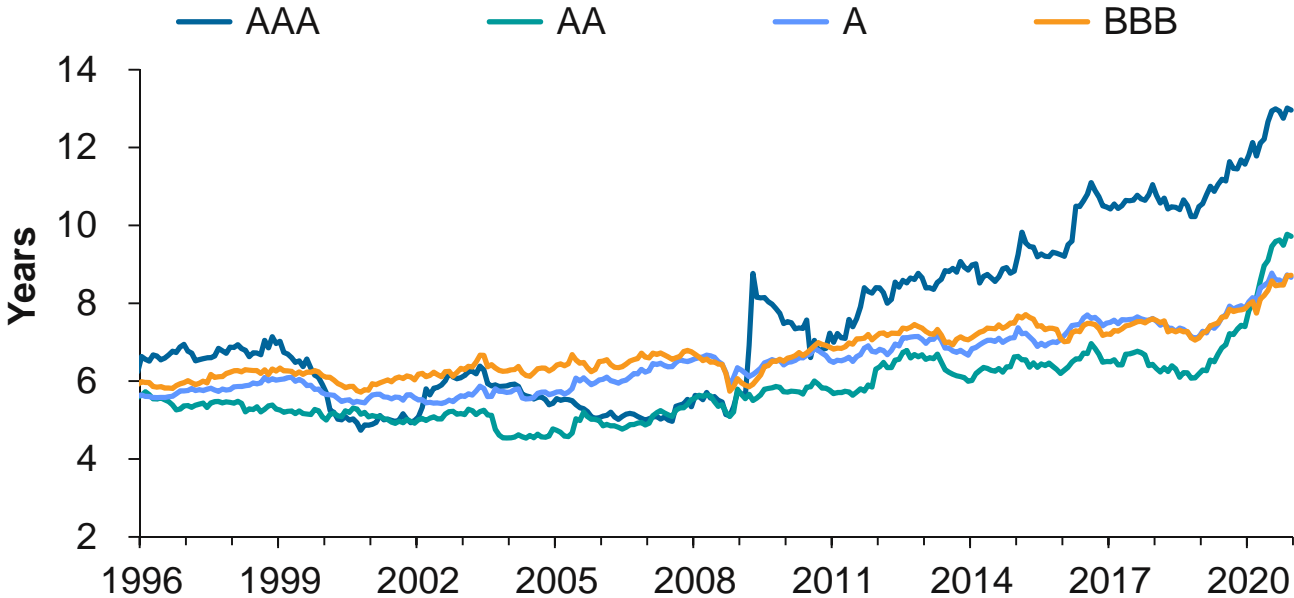
- Non-investment grade corporate market has seen a dramatic rise in the amount of debt outstanding.
- The spike in BB-rated debt outstanding has been driven by fallen angels (\$202 bn in 2020).

Source: Bloomberg Barclays

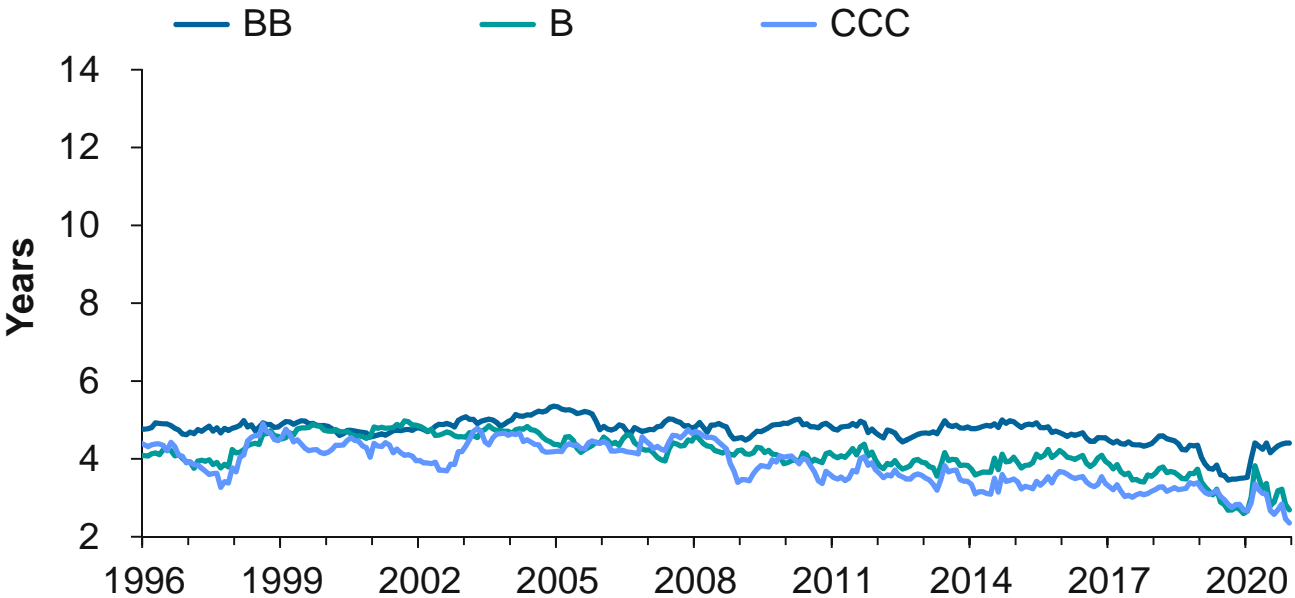
Changing Landscape for U.S. Corporate Fixed Income Markets

Is longer duration a good thing in the current interest rate environment?

Investment Grade Corporates Duration by Rating



High Yield Duration by Rating



—10-year interest rate was near an all-time low and higher-rated issuers had termed out their debt structures by issuing/replacing existing debt with longer maturities.

—Non-investment grade issuers have a higher probability of historical defaults, thereby limiting maturities.

Source: Bloomberg Barclays

Global Fixed Income Performance

First Quarter 2021

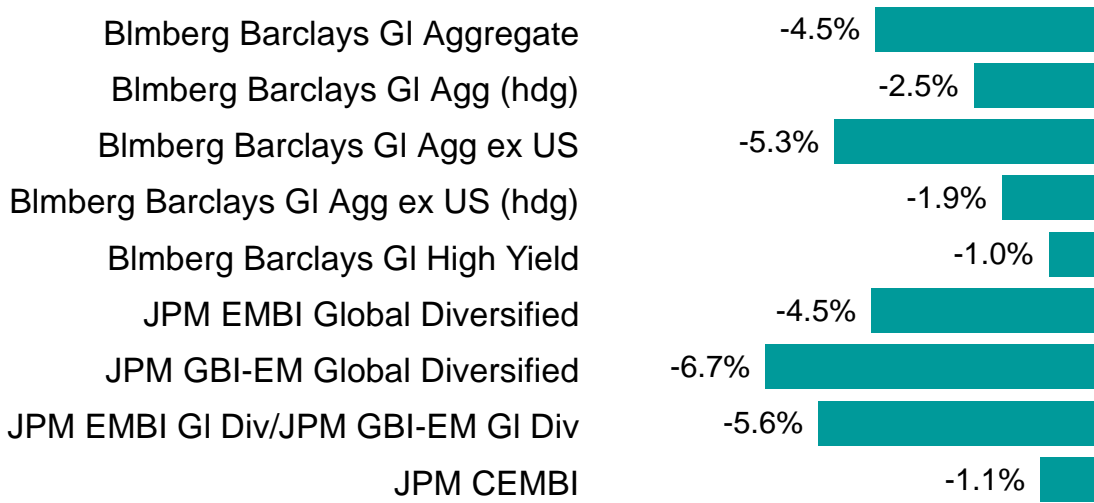
Global fixed income posts negative returns

- Global fixed income fell as developed market rates rose and the U.S. dollar strengthened.
- The U.S. dollar gained nearly 4% versus a basket of currencies, 6.6% versus the yen, and nearly 4% versus the euro.

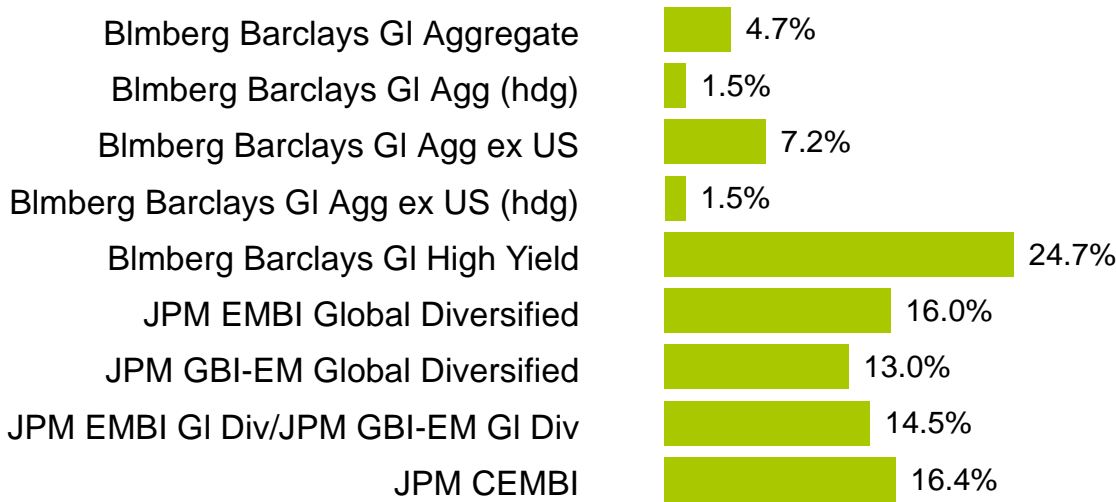
Emerging market debt sells off

- Emerging market debt indices fell in 1Q21, with EM corporates faring better than hard and local currency sovereigns amid improving corporate fundamentals.
- U.S. dollar-denominated index (EMBI Global Diversified) fell 4.5% as rising U.S. rates spilled into emerging markets; returns were largely negative across the 70+ constituents.
- Local currency index (GBI-EM Global Diversified) fared worse than hard currency, as real yields rose higher than in the U.S.

Global Fixed Income: Quarterly Returns



Global Fixed Income: Annual Returns



Sources: Bloomberg Barclays, J.P.Morgan

Real Estate Market

Fourth Quarter 2020

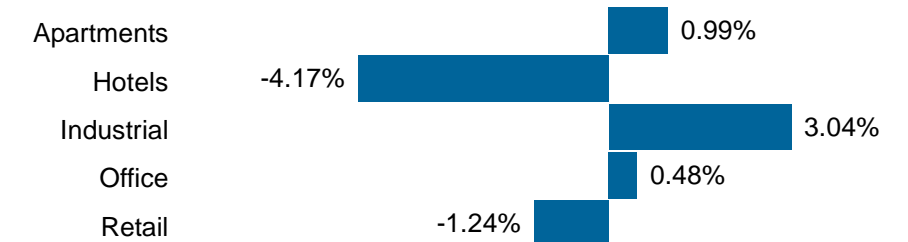
U.S. Private Real Assets	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
Real Estate ODCE Style	1.31	0.98	0.98	4.58	5.87	9.13	5.52
NFI-ODCE (value weight net)	1.10	0.34	0.34	3.99	5.27	8.87	5.46
NCREIF Property	1.15	1.60	1.60	4.89	5.91	9.00	7.14
NCREIF Farmland	0.61	1.72	1.72	3.94	5.01	10.11	11.22
NCREIF Timberland	0.58	0.81	0.81	1.77	2.30	4.55	5.36
Public Real Estate							
Global Real Estate Style	11.39	-3.91	-3.91	4.58	5.84	7.51	5.68
EPRA/NAREIT Developed	13.26	-9.04	-9.04	1.52	3.74	5.44	--
Global ex-U.S. Real Estate Style	12.72	-0.86	-0.86	5.38	6.29	7.20	5.94
EPRA/NAREIT Developed ex US	14.02	-6.52	-6.52	2.35	5.72	5.09	4.45
U.S. REIT Style	9.78	-3.31	-3.31	5.74	6.41	9.45	7.38
NAREIT Equity REITs	11.57	-8.00	-8.00	3.40	4.77	8.31	6.52

Results

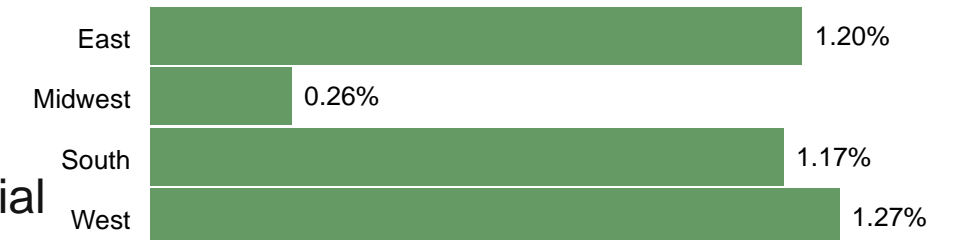
- Hotel and Retail are the most challenged sectors while Office faces uncertainty; Industrial remains the best performer.
- Income remains positive except in Hotel sector.
- Appraisers have more certainty on pandemic's impact on valuations.
- Return dispersion by manager within the ODCE Index due to composition of underlying portfolios .
- Negative appreciation returns expected for 4Q and beyond.

Sources: Callan, FTSE Russell, NAREIT, NCREIF

Sector Quarterly Returns by Property Type



Sector Quarterly Returns by Region



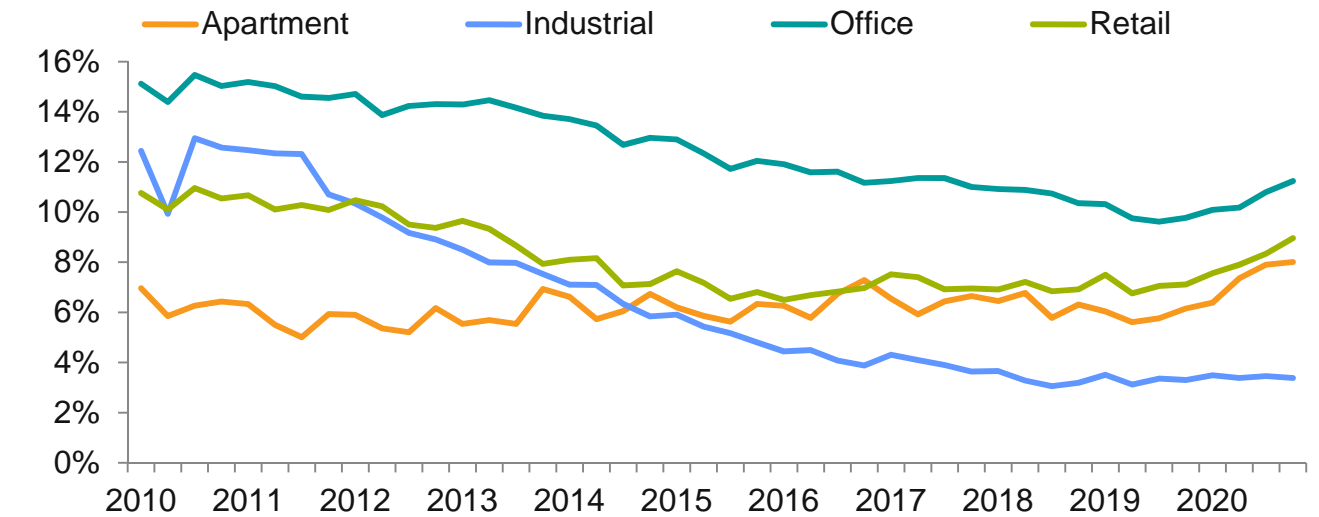
Real Estate Market

Fourth Quarter 2020

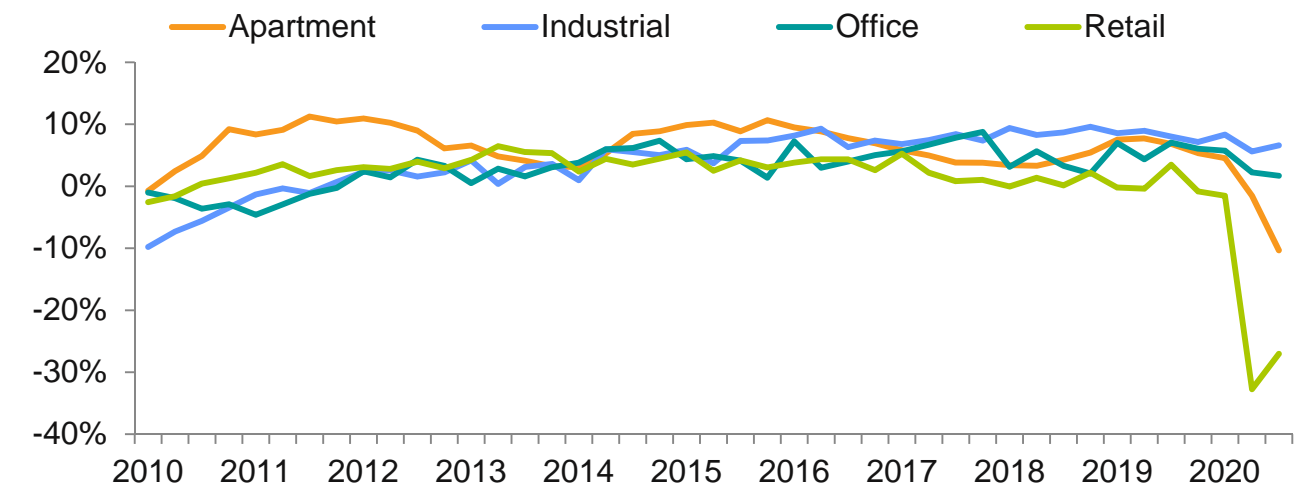
U.S. real estate fundamentals

- Vacancy rates for all property types are or will be impacted.
- Net operating income has declined as retail continues to suffer.
- 4Q rent collections showed relatively stable income throughout the quarter in the Industrial, Apartment, and Office sectors. The Retail sector remains challenged, with regional malls impacted most heavily.
- Class A/B urban apartments relatively strong, followed by certain types of Industrial and Office.
- Supply was in check before the pandemic.
- Construction is limited to finishing up existing projects but has been hampered by shelter in place and material shortages.
- New construction of preleased industrial and multifamily is occurring.

Vacancy by Property Type



Rolling 4-Quarter NOI Growth by Property Type



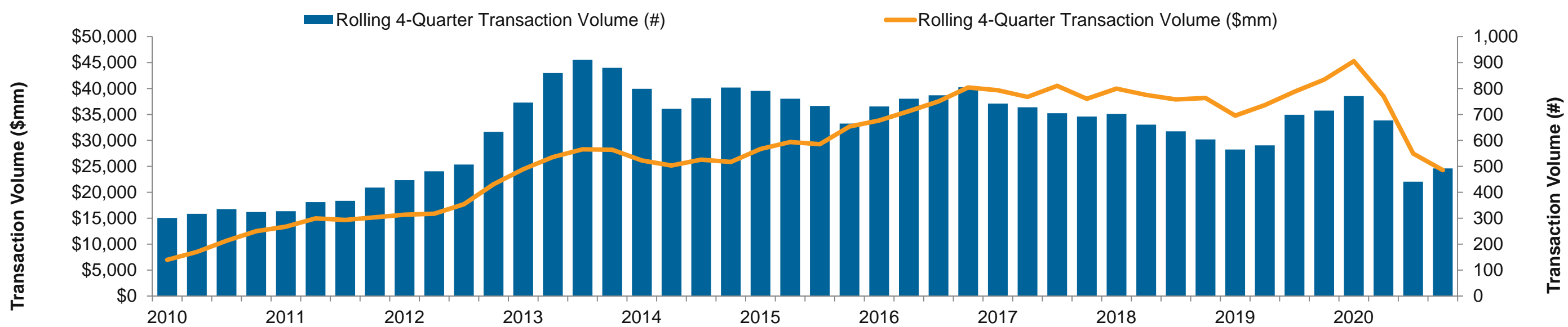
Sources: NCREIF

Real Estate Market

Pricing and transaction volumes have essentially halted in 4Q20

- Transaction volume has dropped off during the quarter with the exception of multifamily and industrial assets with strong-credit tenants trading at pre-COVID-19 levels.
- Cap rates remained steady during the quarter. The spread between cap rates and 10-year Treasuries is relatively high, leading some market participants to speculate that cap rates will not adjust much. Price discovery is happening and there are limited transactions.
- Callan believes the pandemic may cause a permanent re-pricing of risk across property types. Property types with more reliable cash flows will experience less of a change in cap rates; however, those with less reliable cash flows will see greater adjustments.

NCREIF Rolling 4-Quarter Transaction Totals



Source: NCREIF

Hedge Fund and MAC Industry Trends

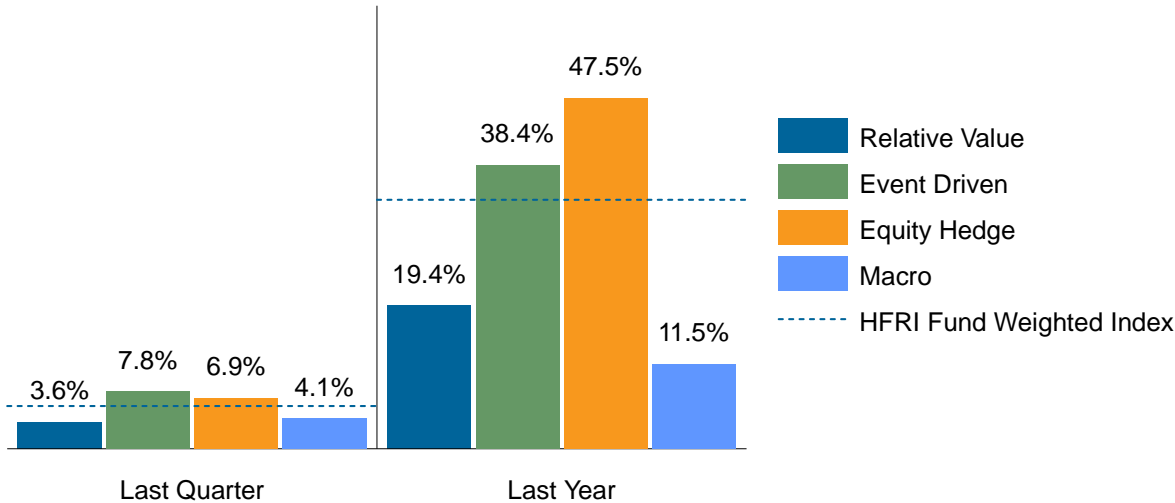
Ignore 1Q headlines—HFs are doing fine

- Media focused on Melvin’s GameStop losses and Archegos’ family office implosion miss “big picture” success for hedge funds.
- HFs thriving on short-term trading events created by flood of corporate activity (e.g., M&A, SPACs) and above-average trading volumes involving more retail participation.
- Hedge funds will also benefit from economic uncertainty that is prompting unusual fiscal and monetary stimulus.

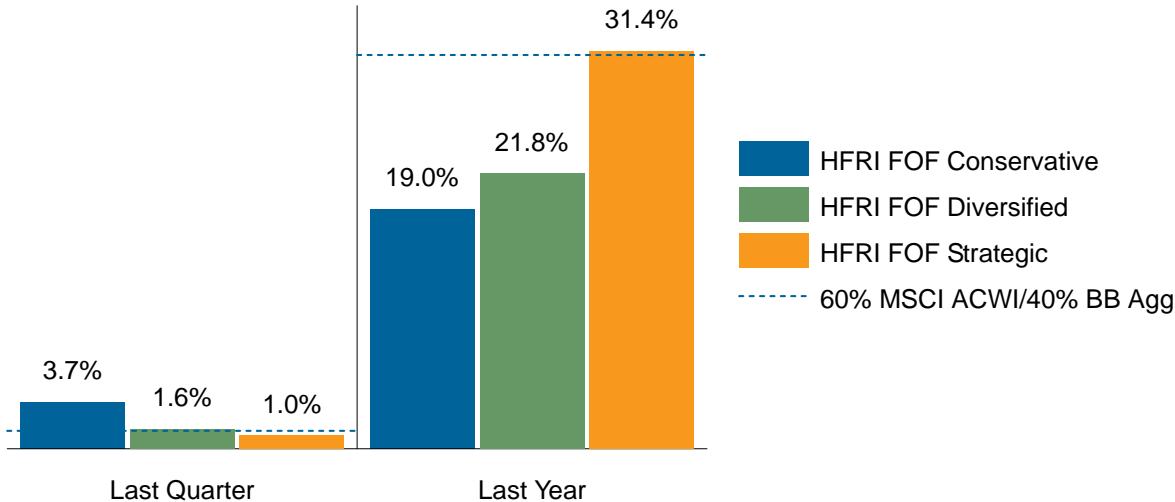
HFs top bonds but lag equities

- Equity Hedge and Event Driven led again with alpha and beta tailwinds.
- While HFs outpaced bonds in 1Q, they still heavily trailed stocks in their “unprecedented” rate of recovery in the last four quarters.
- Top-down Macro funds were caught flat-footed with various market reversals. Poor market timing at sharp inflection points illustrates the challenge faced by average Macro managers.
- Relative Value funds are earning healthy single-digit returns, given current conditions.

HFRI Strategy Index Returns vs. Broad Hedge Fund Universe



HFRI Fund-of-Fund Returns vs. 60% Stock/40% Bond Mix

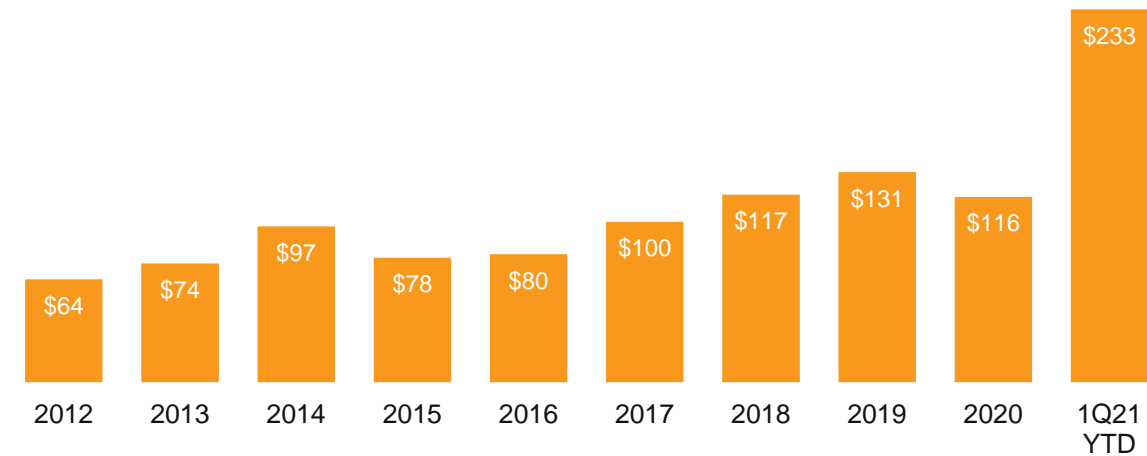


Source: Hedge Fund Research (www.hedgefundresearch.com)

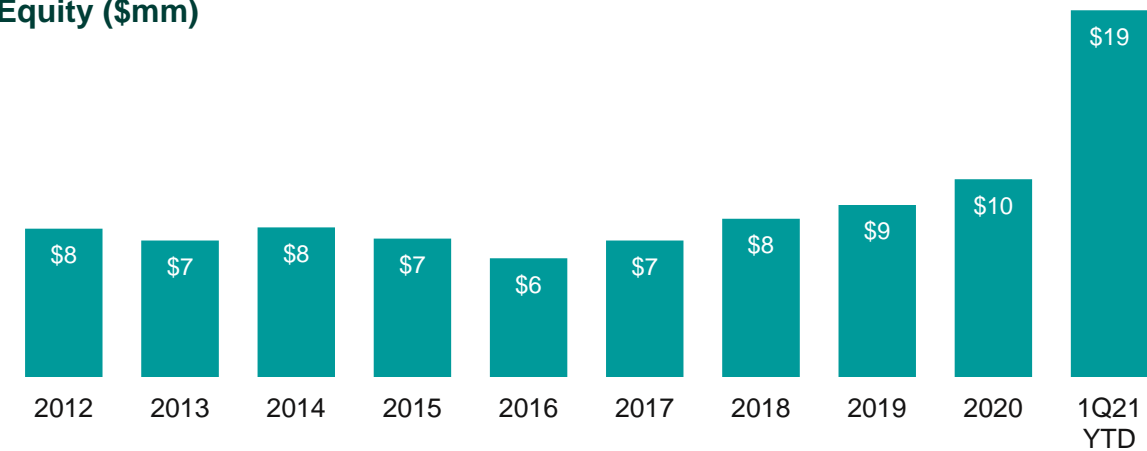
Private Equity Company Valuations and Leverage

- Surge in valuations during 1Q21 with several large buyouts, including Perspecta, CoreLogic, and Mavis Tire Supply
- Venture capital and growth equity similarly jumped in 2021, driven by large investments such as XingSheng Selected (China), Rivian Automotive, and J&T Express (Indonesia).

Median Valuation – Global Buyouts (\$mm)



Median Pre-Money Valuation – Global Venture Capital/Growth Equity (\$mm)

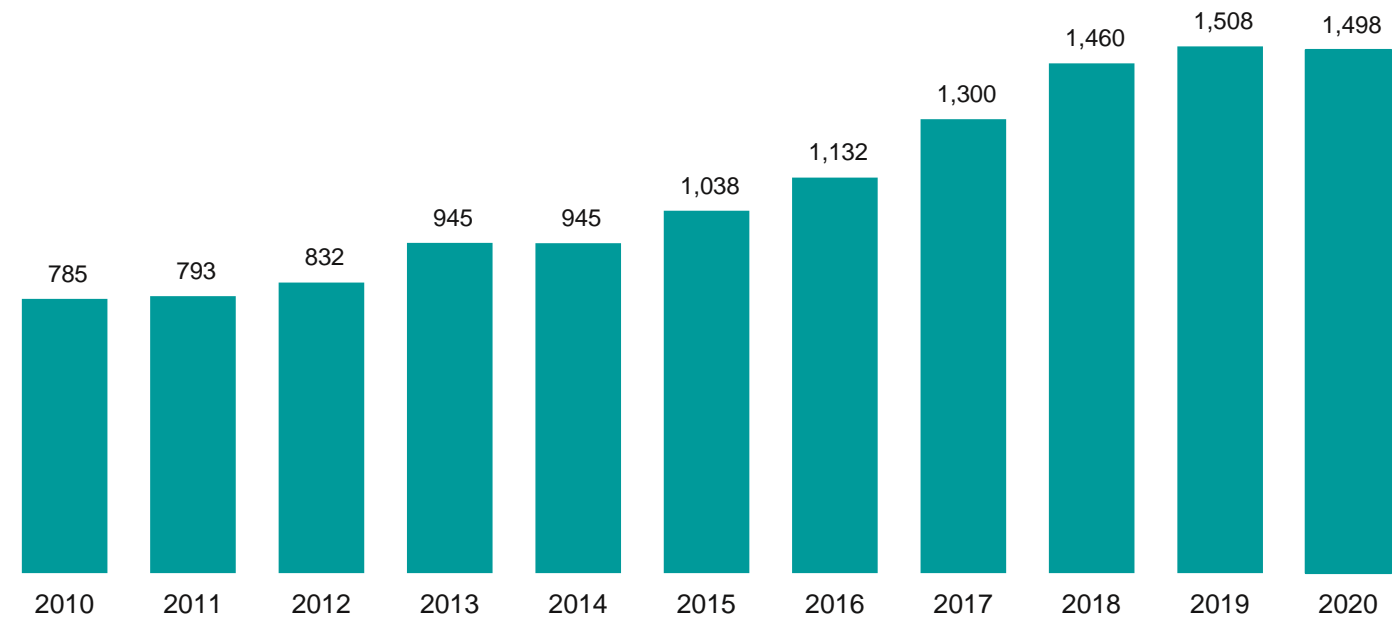


Source: S&P LCD

Private Equity Dry Powder Falls

- Dry powder remained static in 2020 compared to 2019 levels, as a result of slower fundraising during 2020.
- Dry powder may reach a new peak in 2021 given the strong start to fundraising this year.

Dry Powder (\$bn)
Cumulative as of Year-end

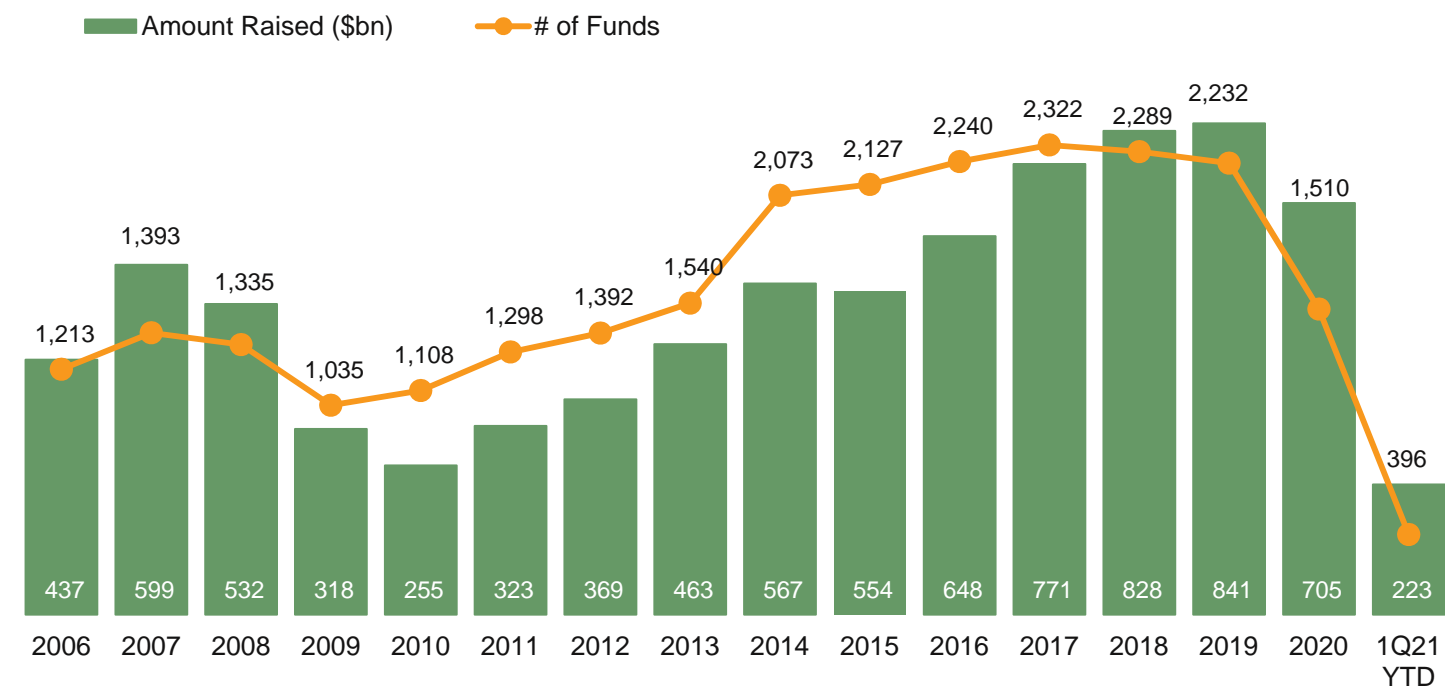


Source: Pitchbook; global, includes private equity and private debt

Global Fundraising

- Fundraising for 2020 at 84% of 2019 levels
- Many fundraises pushed out to 2021 due to worries over investor appetite and inability of funds to deploy capital during the onset of the pandemic
- Fundraising off to a strong start in 1Q21, and may reach a new high in 2021 if it continues on the same trajectory

Annual Fundraising



Source: Pitchbook

Private Credit Market Environment: 1Q21

Strong demand and favorable direct lending pricing

Continued strong private credit demand

- Yield and income-generating characteristics remain attractive in a low-rate environment.
- Alpha generation can be magnified through strategies that extract a complexity premium.
- Strong execution around early liquid credit opportunity
- In early phases of dislocation, nimble multi-strategy private credit managers were able to purchase high-quality credit securities at steep discounts.

Favorable direct lending pricing trends

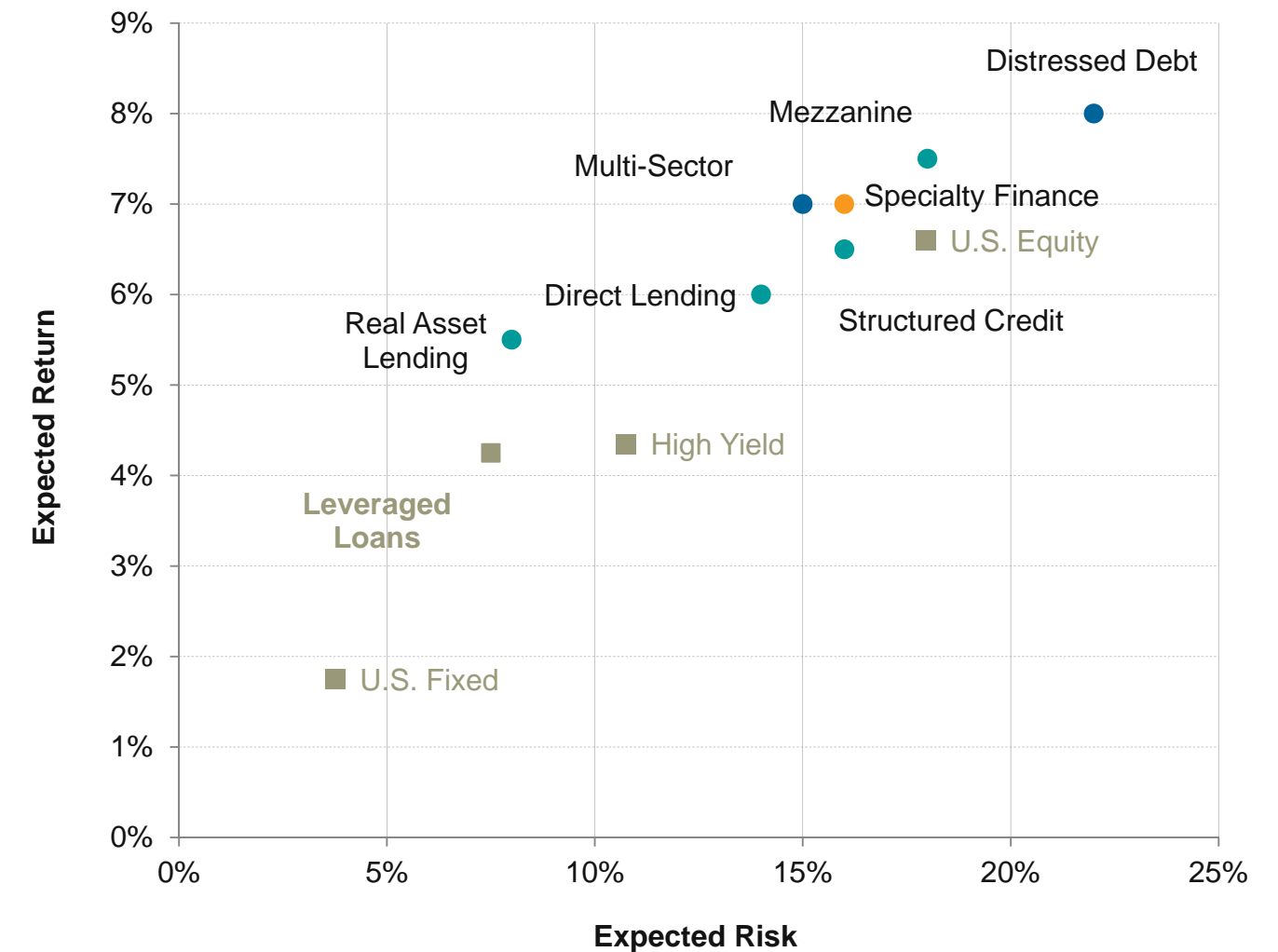
- Unlevered direct lending historically generated premiums of 150-200 bps over traditional high yield and leveraged loans, with downside protection.
- Direct lenders are seeing a premium in new deals with less-risky structures, but trends are reverting to pre-pandemic levels. Most existing portfolios weathered the dislocation well.

Distressed cycle muted

- Liquidity flowing into U.S. economy has limited U.S. corporate stress, potentially muting corporate distressed opportunity set.

Continued evolution of pockets of opportunity

- Pockets of opportunity remain in structured credit, opportunistic lending, and investing in stressed/distressed companies in pandemic-impacted industries.



Source: Callan

Private Credit Market Environment: 1Q21

Muted volumes during the pandemic

Recent slowing in fundraising

- Private credit fundraising tapered off in 2020 due primarily to COVID-related market disruption.

Lending strategies active in the market

- Senior debt and mezzanine capital fundraising are the bulk of private credit capital raised in 2020.
- Significant distressed capital raised leading up to dislocation

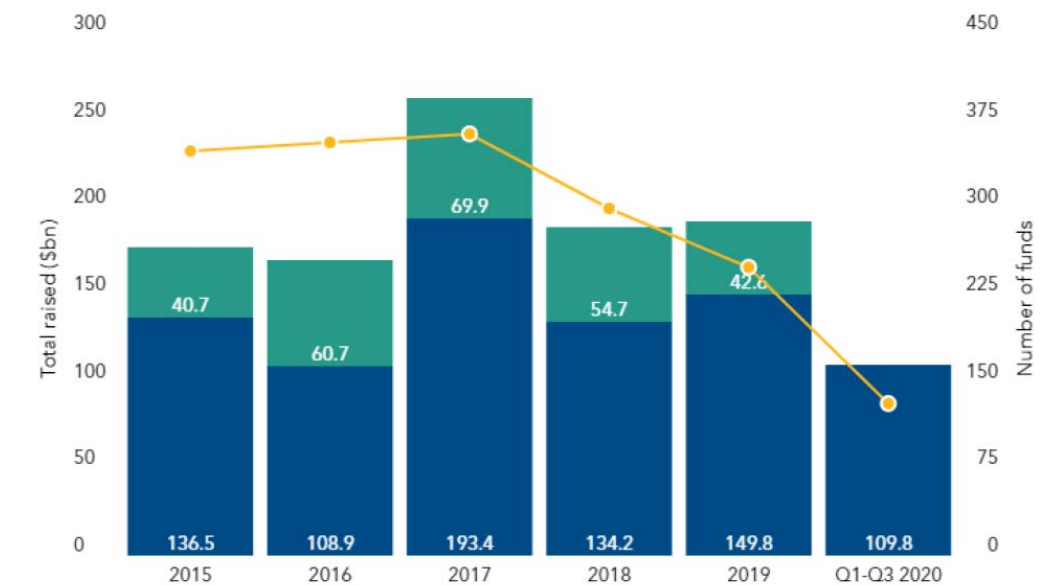
Dislocation-focused capital raised

- While a large amount of opportunistic dislocation capital was raised in the first half of 2020, overall distressed fundraising declined relative to 2019.
- Expect to see distressed fundraising activity ramp back up in 2021

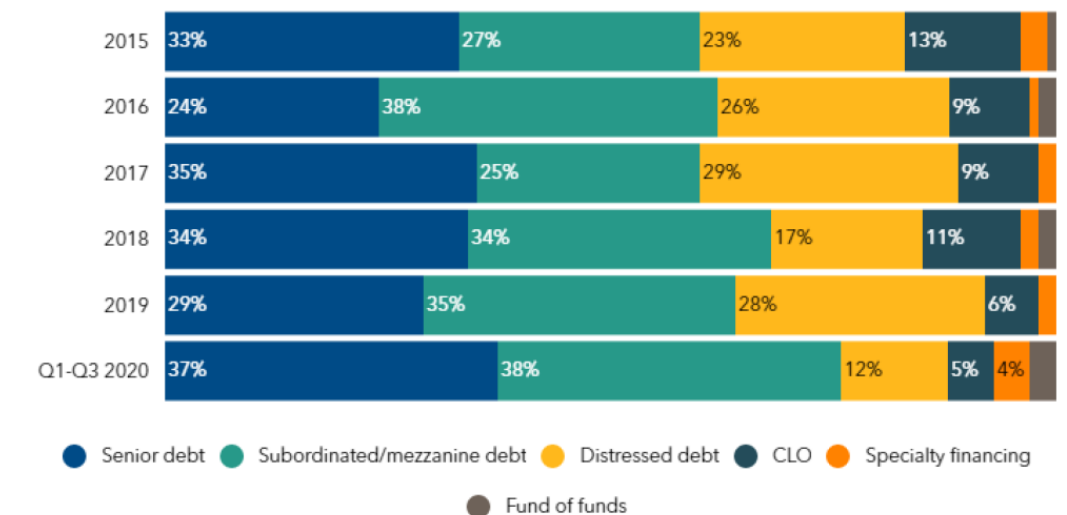
The big get bigger

- Ares, AXA, Blackstone, Goldman Sachs, and HPS led private credit fundraising in 2020.
- Oaktree is raising the largest fund in the space with a \$15 billion target.

Private Debt Funds Raised 2015 to 2020 YTD



Fundraising by Sector



Source: Callan



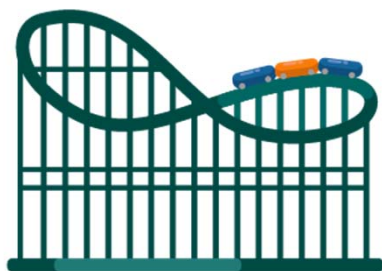
Callan Update

Published Research Highlights from 1Q21

2021 Defined Contribution Survey



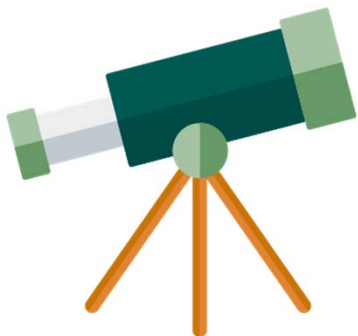
GameStopped—Or Just Getting Started?



Coping with COVID-19: Investment Manager Survey 3rd Edition



Callan's 2021-2030 Capital Markets Assumptions



Recent Blog Posts

Relief Bill Provides Shot in the Arm to Corporate Pensions

William Emmett & Sweta Vaidya

Why the Yield Curve Is Really Curving

Dario Buechi

Plus our [blog](#) contains a wide array of posts related to the pandemic

Additional Reading

Private Equity Trends quarterly newsletter

Active vs. Passive quarterly charts

Capital Market Review quarterly newsletter

Monthly Updates to the Periodic Table

Market Pulse Flipbook quarterly markets update

Callan Institute Events

Upcoming Conferences, Workshops, and Webinars

2021 National Conference

July 19-21, 2021

Salt Lake City, UT

We are excited to announce our confirmed speakers and workshop topics below. We will continue to update you as we finalize our lineup for this event!

Confirmed Conference Speakers:

- Niall Ferguson
- Scott Gottlieb, M.D.

This year’s Callan-led workshops will cover the following topics:

- Callan’s Fund Sponsor Cost of Doing Business Survey Results
- Defined Contribution: Are Managed Accounts Adding Value?
- How to Navigate Your Corporate DB Plan in This Low-Rate Era
- Real Estate Debt as an Alternative to Traditional Fixed Income in the Hunt for Yield

Webinars

Research Café: Insurance Session

May 19, 2021 – 9:30am (PT)

Inflation and Why Debt Matters

May 25, 2021 – 9:30am (PT)

Callan College

Learn the Fundamentals

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

Join our next virtual session:

Aug. 17, 2021 – Aug. 19, 2021

2-3 hour sessions over 3 days

Join our next LIVE session in Chicago:

Oct. 6, 2021 – Oct. 7, 2021

1.5-day session held in Callan’s Chicago office

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SUBJECT: Fund Performance Overview
Callan, Senior VP – Steve Center
Callan, CEO – Greg Allen

ACTION: _____

DATE: May 19, 2021

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. At every quarterly board meeting or as requested, Callan Associates, Inc. provides updates on market conditions.

STATUS:

At every quarterly board meeting or as requested, Callan Associates, Inc. provides an extensive review of the Fund's performance. Senior Vice President, Steven Center, and CEO, Greg Allen, will be the presenters of FY '21 Q3 Fund performance at this meeting.

May 19, 2021



Callan

Alaska Permanent Fund Corporation

1st Quarter 2021

Performance Review

Marcus Frampton, CFA, CAIA, FRM
Chief Investment Officer

Greg Allen
CEO and Chief Research Officer

Steven Center, CFA
Senior Vice President

Agenda

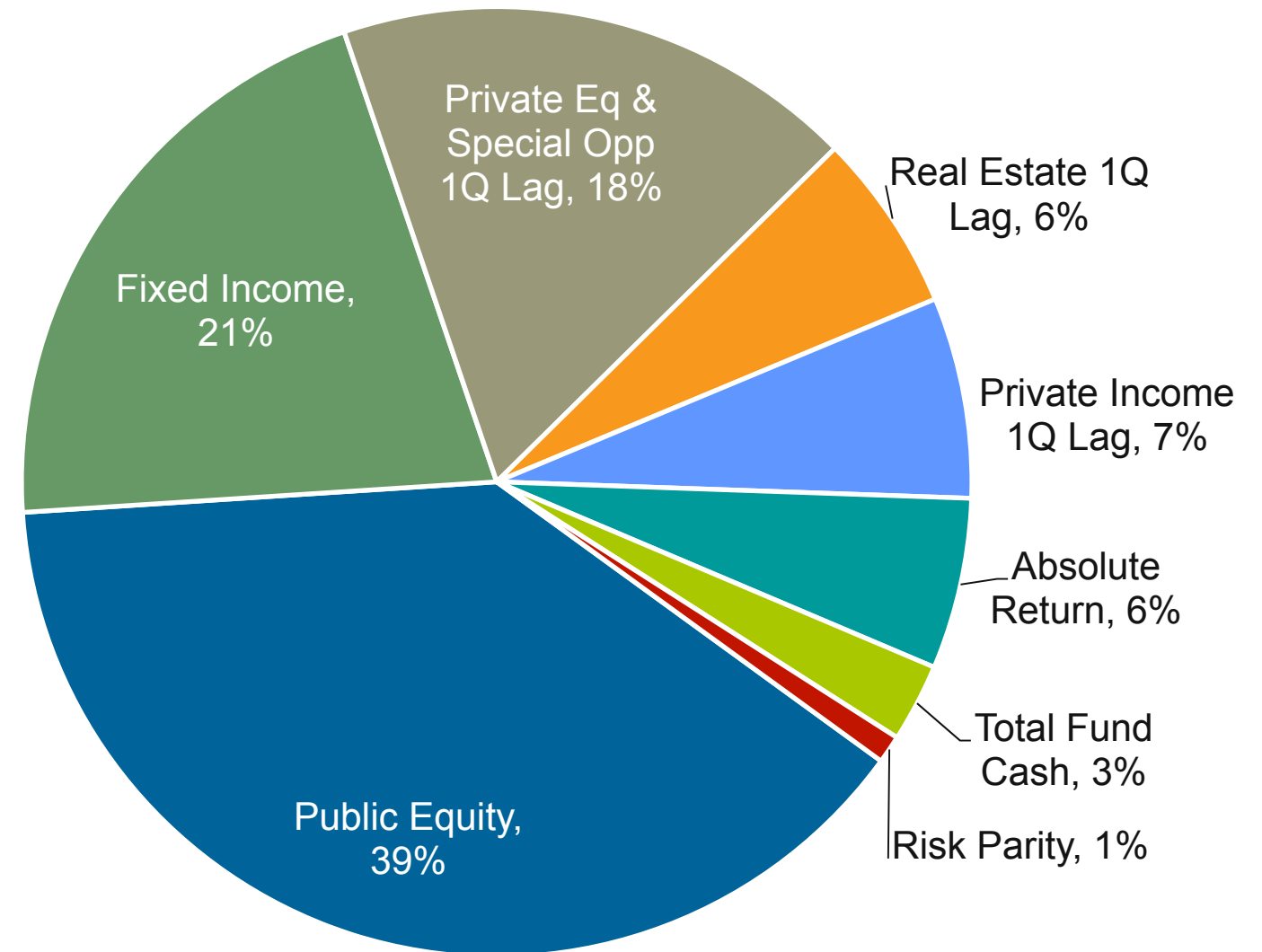
- Total Fund Asset Allocation and Performance
- Asset Class Structure and Performance

Total Fund Asset Allocation and Performance

Total Fund Asset Allocation

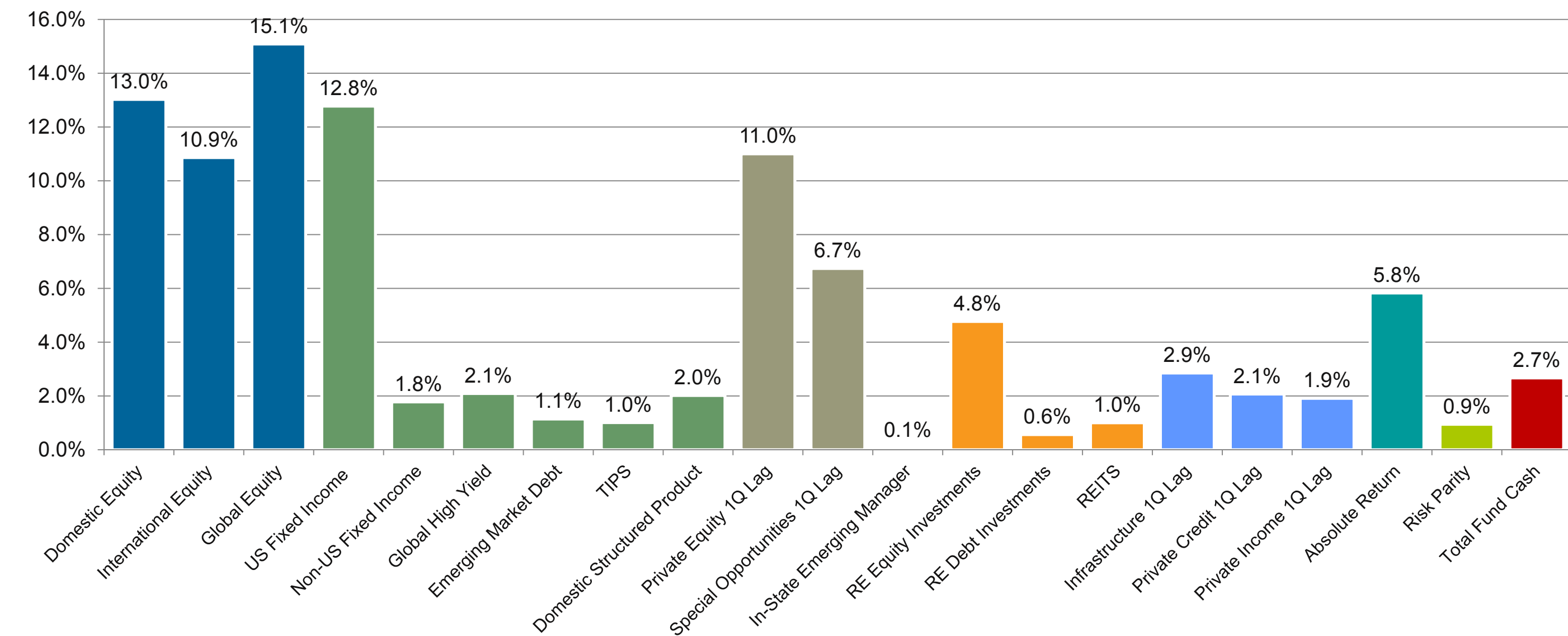
As of March 31, 2021

- 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 39% to public equity, 21% to fixed income, and 40% to alternative investments.
- Compared to allocations in the fourth quarter, weights to public equity decreased, fixed income remained flat and alternatives increased.
- 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.



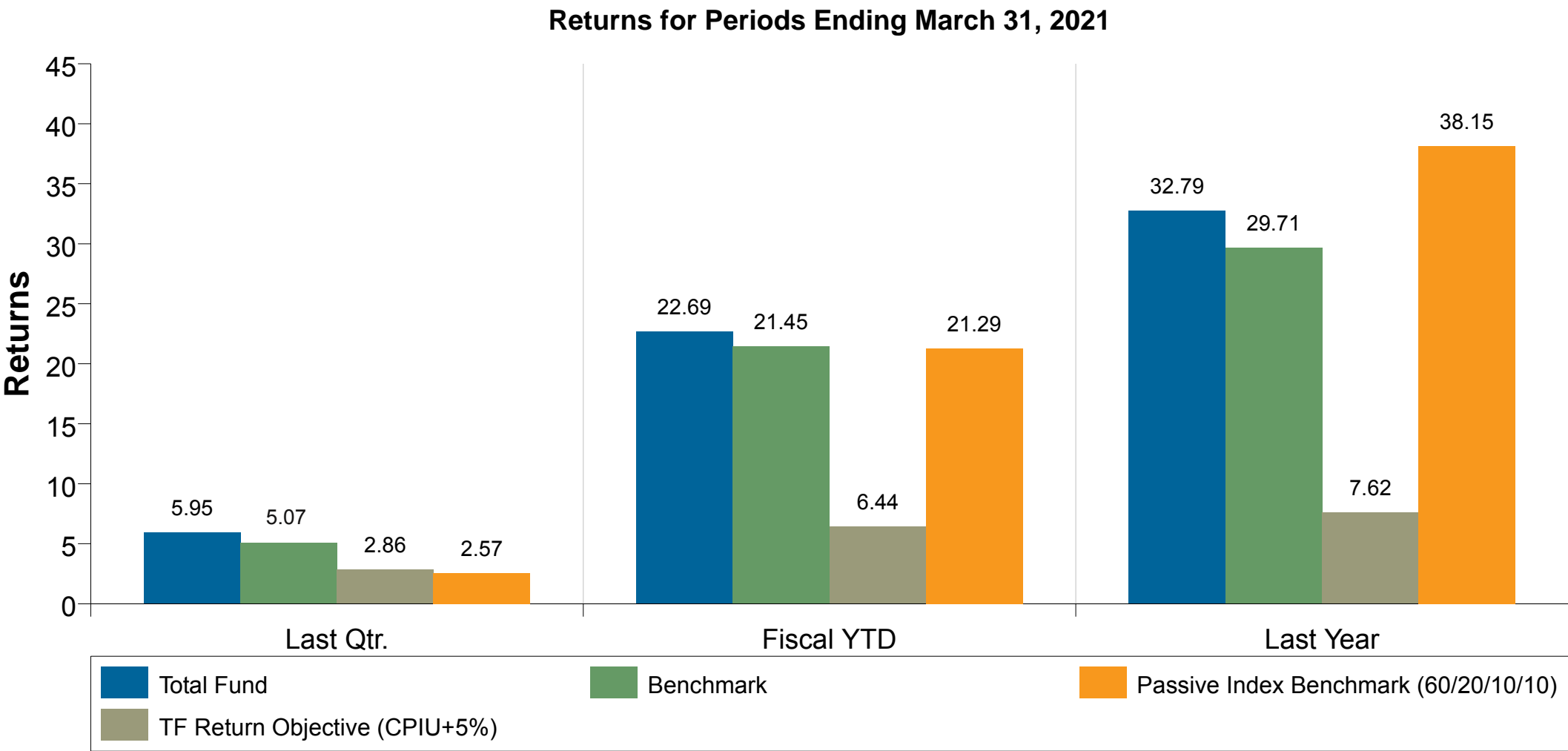
Total Fund Asset Allocation

As of March 31, 2021



APFC Total Fund Cumulative Returns

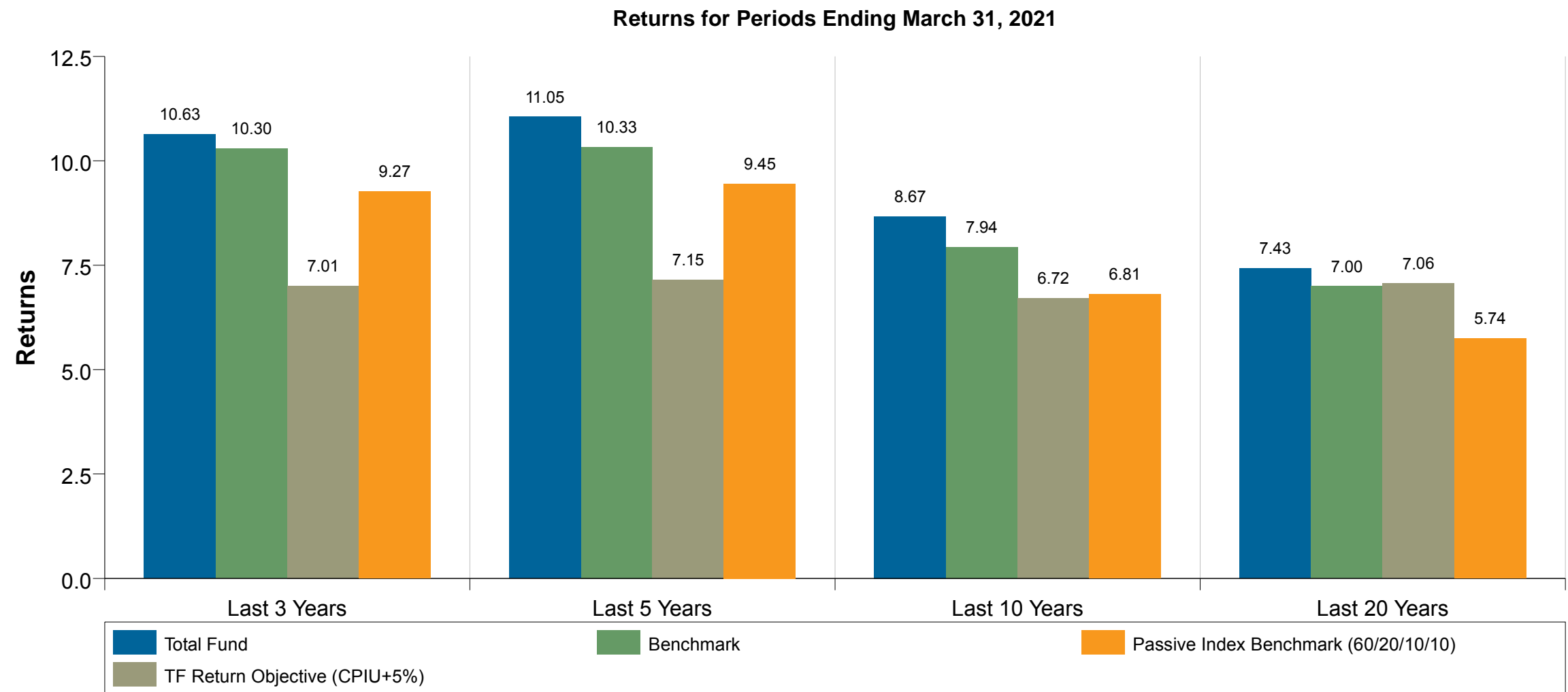
Total Fund versus Total Fund Targets



- Benchmark (FY20-FY21) = 39% MSCI ACWI IMI, 1.1% 90 Day T-Bills, 1.1% BB US TIPS, 5.8% BB Agg, 5.8% BB Corp IG, 2.1% BB Global Treasury ex-US Hedged, 0.5% JPM EMBI Global Diversified, 0.5% JPM GBI-EM Global Diversified TR, 2.1% BB US High Yield 2% Issuer Cap, 2.1% BB US Securitized, 15% Cambridge PE (lagged), 6% NCREIF Total Index (lagged), 1.1% MSCI US REIT (lagged), 5.4% Cambridge Global Pvt. Infrastructure (lagged), 3.6% Cambridge Pvt Credit (lagged), 6% HFRI Total HFOF Universe (weighted), 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 (FY20-FY21) = 39% MSCI ACWI IMI, 1.1% 90 Day T-Bills, 1.1% BB US TIPS, 5.8% BB Agg, 5.8% BB Corp IG, 2.1% BB Global Treasury ex-US Hedged, 0.5% JPM EMBI Global Diversified, 0.5% JPM GBI-EM Global Diversified TR, 2.1% BB US High Yield 2% Issuer Cap, 2.1% BB US Securitized, 15% Cambridge PE (lagged), 6% NCREIF Total Index (lagged), 1.1% MSCI US REIT (lagged), 5.4% Cambridge Global Pvt. Infrastructure (lagged), 3.6% Cambridge Pvt Credit (lagged), 6% HFRI Total HFOF Universe (weighted), 2% 90 Day T-Bills, 1% HFR Risk Parity Vol 12% Institutional Index.

APFC Total Fund Attribution

For One Quarter Ended March 31, 2021

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Public Equity	39%	39%	8.49%	5.14%	1.30%	(0.02%)	1.28%
Fixed Income	21%	21%	(2.91%)	(2.81%)	(0.02%)	(0.01%)	(0.03%)
Private Eq & Special Opp	16%	15%	18.77%	17.57%	0.19%	0.18%	0.37%
Real Estate	6%	7%	(1.08%)	2.71%	(0.25%)	0.02%	(0.23%)
Private Income	7%	9%	5.55%	6.80%	(0.08%)	(0.04%)	(0.12%)
Absolute Return	6%	6%	0.73%	5.78%	(0.30%)	(0.00%)	(0.30%)
Total Fund Cash	3%	2%	0.05%	0.02%	0.00%	(0.06%)	(0.06%)
Risk Parity	1%	1%	(2.91%)	(1.73%)	(0.01%)	0.00%	(0.01%)
Total			5.95% = 5.07% + 0.82% + 0.06%				0.88%

- In the first quarter, the Total Fund outperformed the Performance Benchmark by 88 basis points.
- Manager outperformance, primarily in Public Equity, contributed to outperformance.
- In aggregate, active management added 82 basis points to relative performance, while deviations from the Policy Target added 6 basis points.

APFC Total Fund Attribution

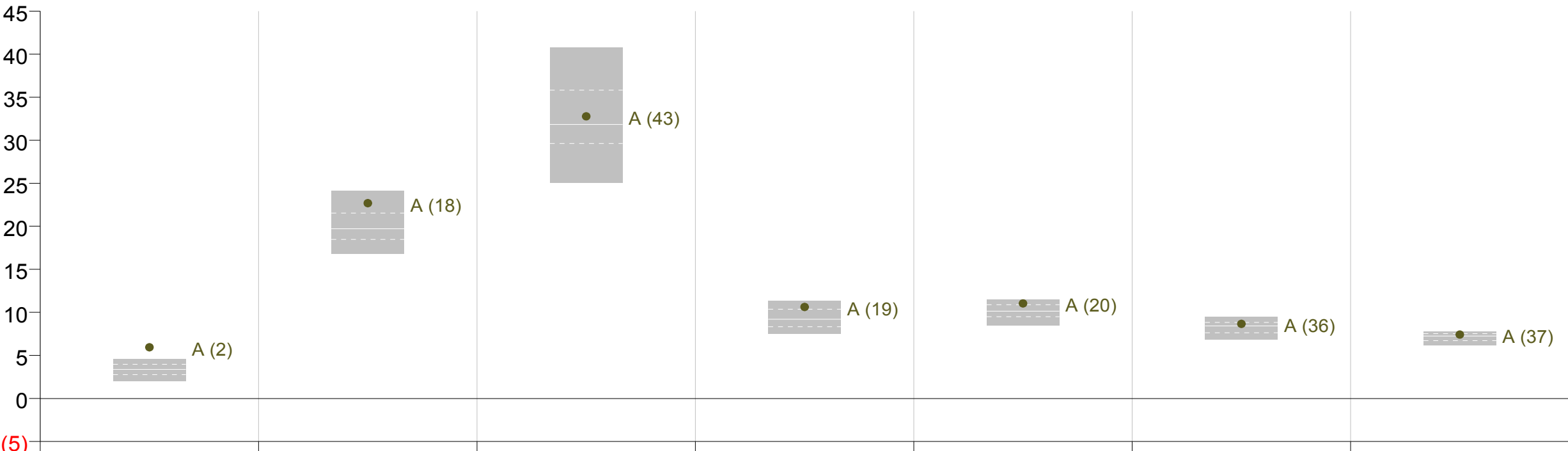
For Fiscal Year-to-Date Through March 31, 2021

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return		
Public Equity	39%	39%	37.98%	31.50%	2.31%	(0.16%)	2.14%		
Fixed Income	21%	21%	1.37%	0.71%	0.16%	(0.01%)	0.15%		
Private Eq & Special Opp	15%	15%	47.49%	42.65%	0.63%	0.18%	0.81%		
Real Estate	7%	7%	(0.21%)	4.53%	(0.36%)	(0.00%)	(0.37%)		
Private Income	8%	9%	11.29%	15.69%	(0.34%)	(0.04%)	(0.38%)		
Absolute Return	6%	6%	10.74%	22.51%	(0.70%)	0.00%	(0.70%)		
Asset Allocation	0%	0%	-	-	0.00%	(0.15%)	(0.15%)		
Total Fund Cash	3%	2%	0.05%	0.09%	(0.00%)	(0.22%)	(0.22%)		
Risk Parity	1%	1%	12.39%	14.76%	(0.03%)	(0.01%)	(0.04%)		
Total			22.69%	= 21.45%	+	1.65%	+	(0.40%)	1.24%

- For the fiscal year-to-date, the Total Fund outperformed the Performance Benchmark by 124 basis points.
- Manager outperformance, primarily in Public and Private Equity, contributed to outperformance. Allocation effects to Cash (overweight) and Public Equity (slight underweight) detracted from performance.
- In aggregate, active management added 165 basis points to relative performance, while deviations from the Policy Target subtracted 40 basis points.

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

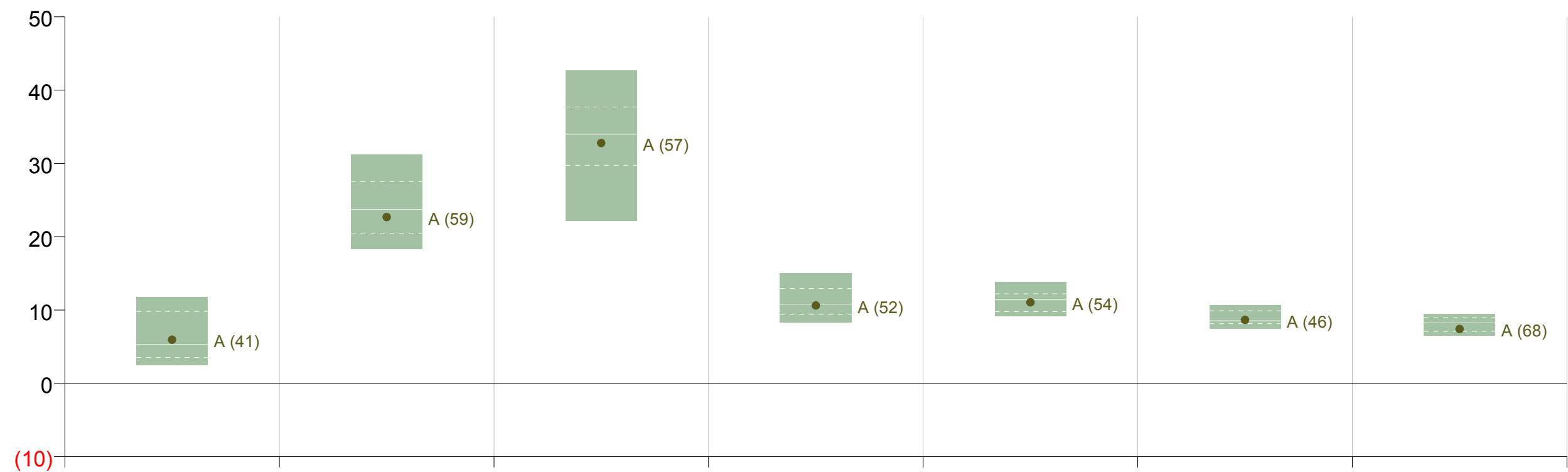
Returns for Periods Ended March 31, 2021
 Group: Callan Public Fund Sponsor - Large (>1B)



	Last Quarter	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 20 Years
10th Percentile	4.61	24.13	40.75	11.39	11.50	9.50	7.75
25th Percentile	3.98	21.53	35.82	10.37	10.89	8.84	7.54
Median	3.38	19.72	31.85	9.21	10.15	8.44	7.27
75th Percentile	2.78	18.48	29.62	8.34	9.51	7.64	6.73
90th Percentile	2.06	16.79	25.06	7.53	8.52	6.83	6.18
Member Count	97	97	97	97	97	96	79
Total Fund ● A	5.95	22.69	32.79	10.63	11.05	8.67	7.43

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

Returns for Periods Ended March 31, 2021
Group: Callan Endow/Foundation - Large (>1B)

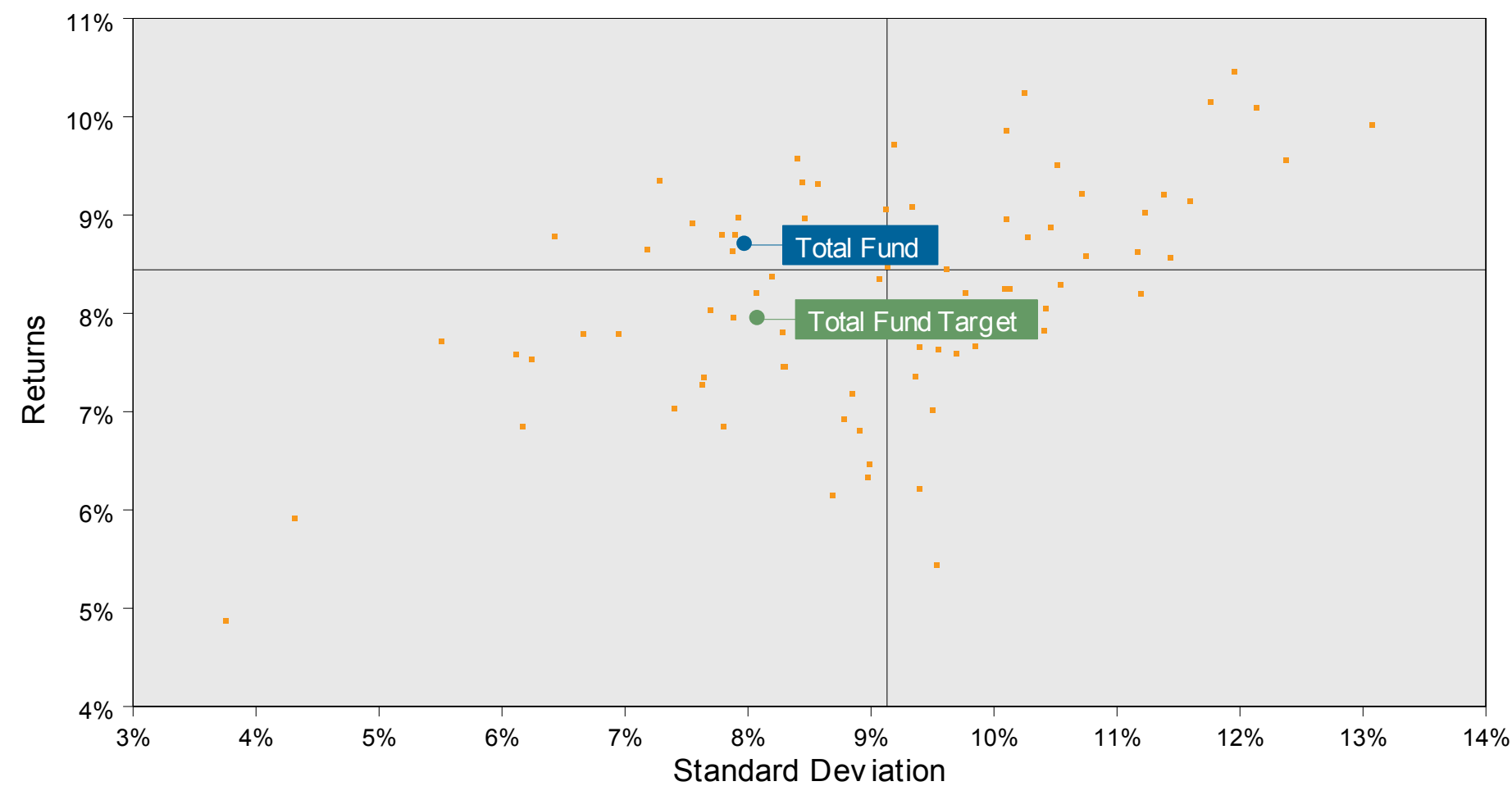


	Last Quarter	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 20 Years
10th Percentile	11.75	31.21	42.71	14.99	13.81	10.66	9.49
25th Percentile	9.82	27.55	37.72	12.95	12.23	9.90	8.96
Median	5.29	23.74	33.99	10.81	11.39	8.54	8.24
75th Percentile	3.54	20.49	29.77	9.35	9.79	8.14	7.10
90th Percentile	2.46	18.29	22.17	8.31	9.16	7.45	6.57
Member Count	33	33	33	32	32	32	26
Total Fund ● A	5.95	22.69	32.79	10.63	11.05	8.67	7.43

APFC Total Fund Return versus Standard Deviations

Relative to Callan's Large Public Fund Database

Ten Year Annualized Risk vs Return

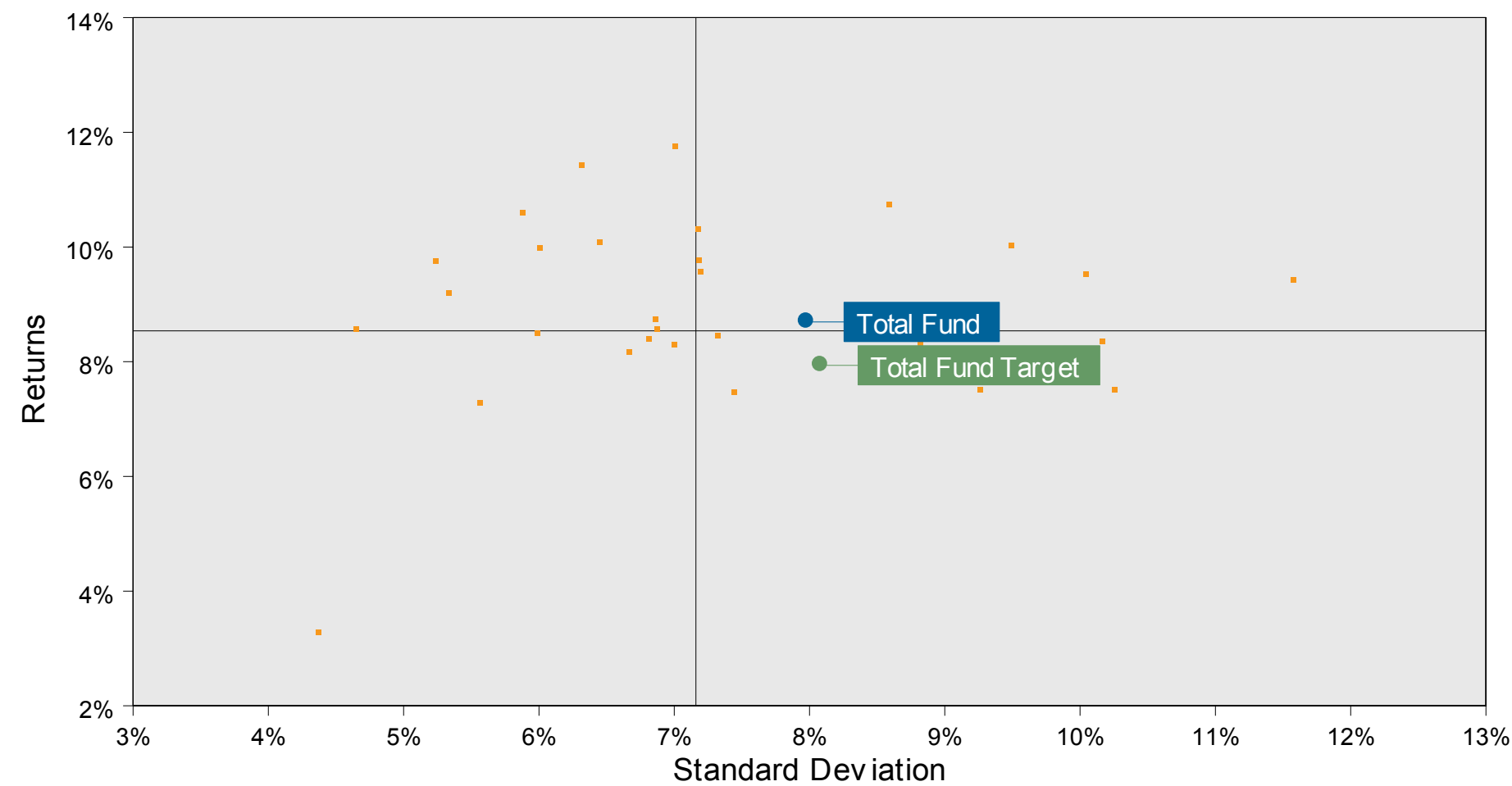


Squares represent membership of the Callan Public Fund Spons - Large (>1B)

APFC Total Fund Return versus Standard Deviations

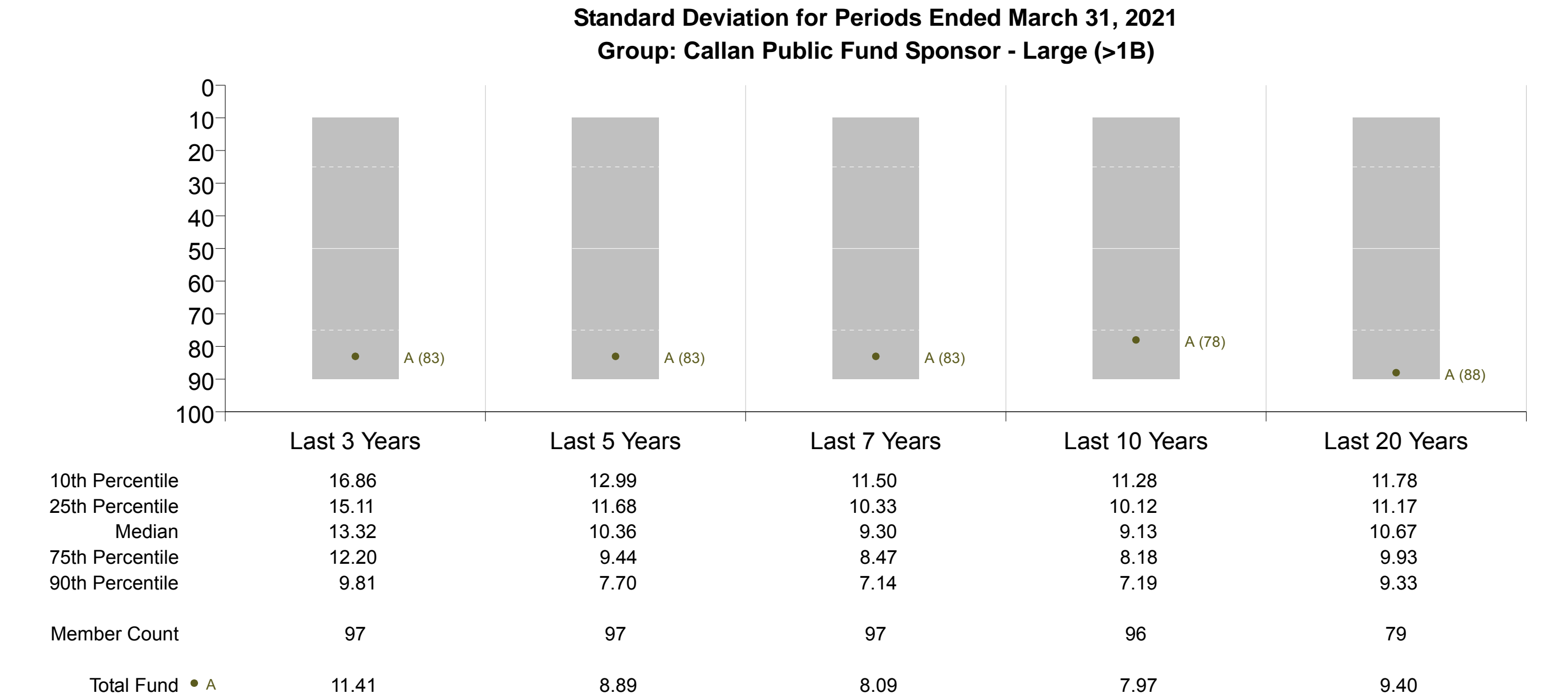
Relative to Callan’s Large Endowment / Foundation Database

Ten Year Annualized Risk vs Return

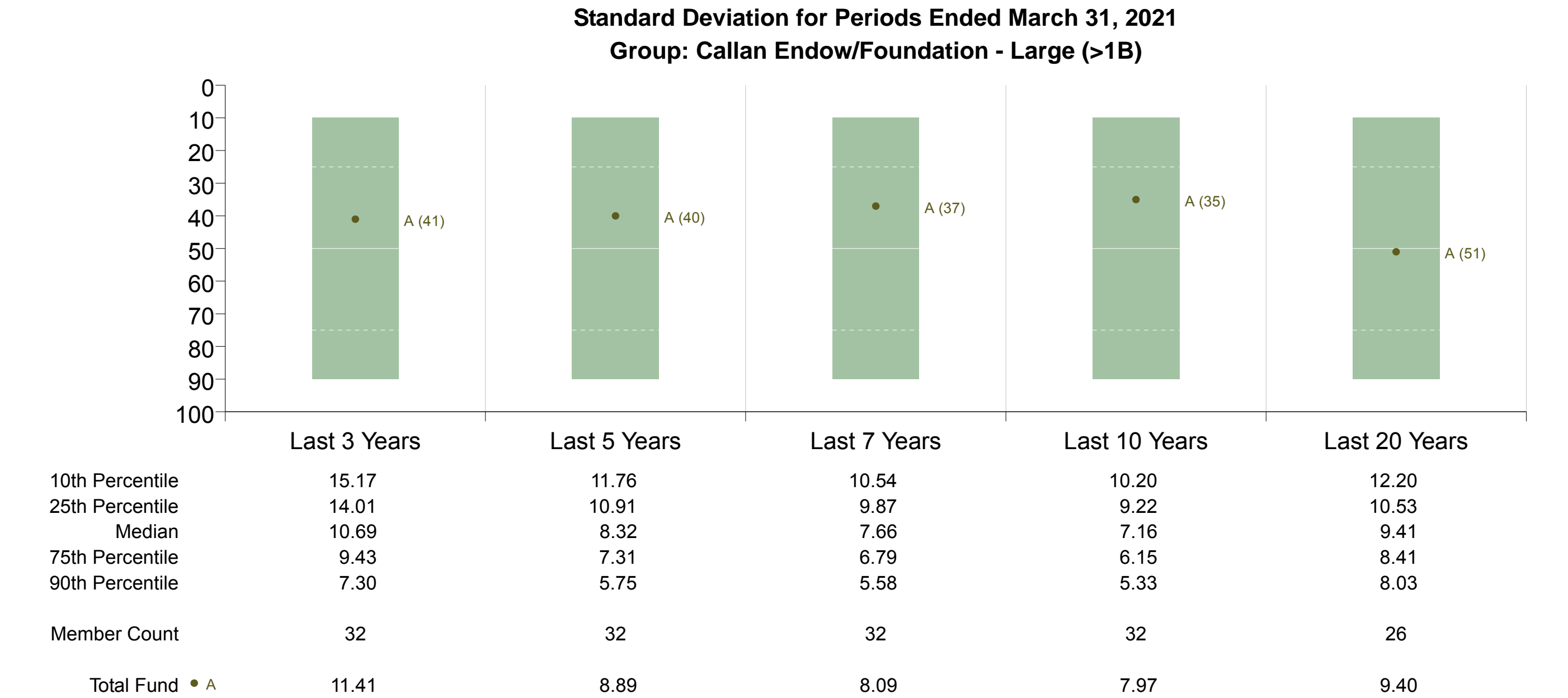


Squares represent membership of the Callan Endow/Foundation - Large (>1B)

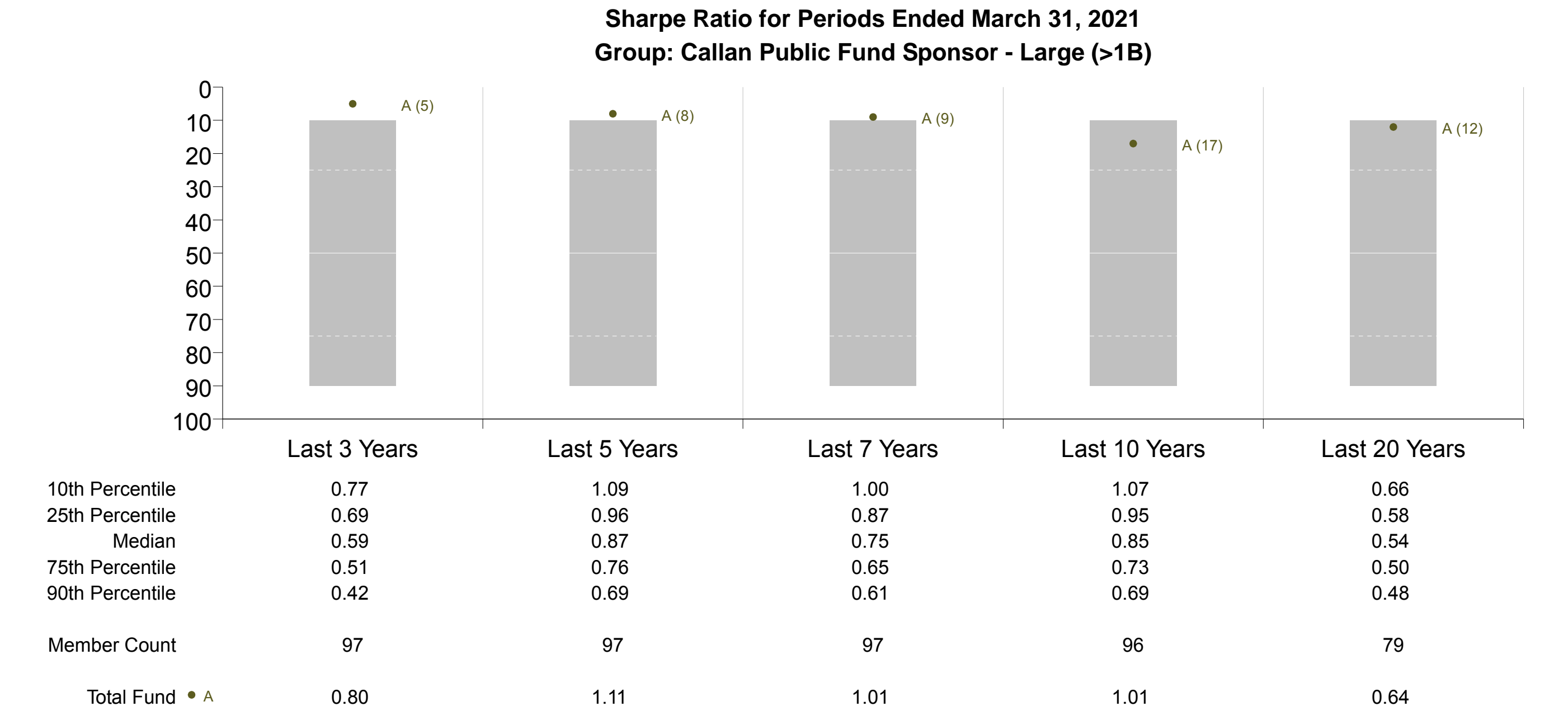
APFC Total Fund Standard Deviation Relative to Callan’s Large Public Fund Database



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

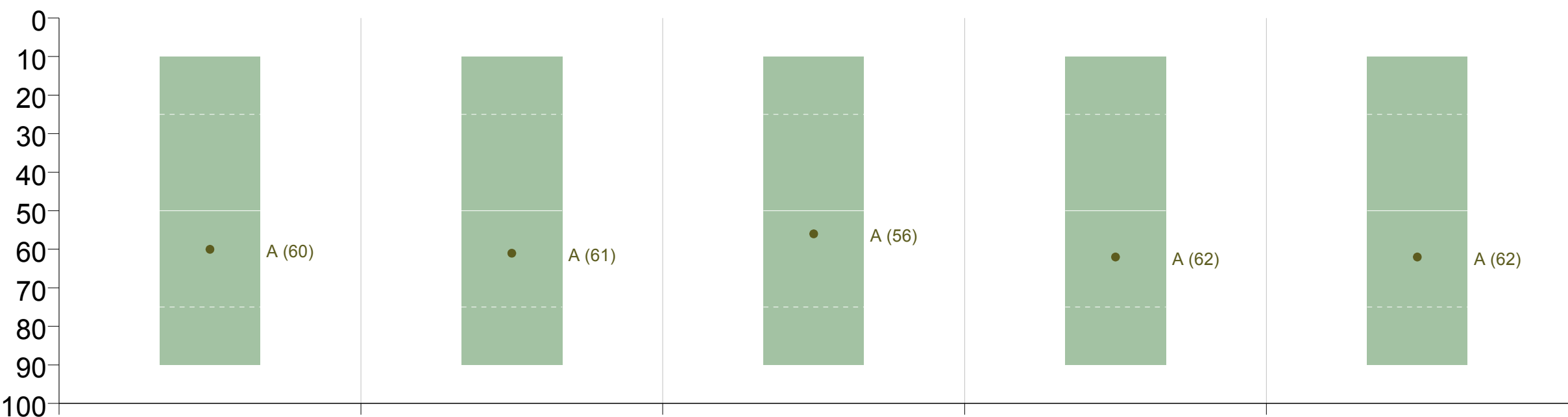


APFC Total Fund Sharpe Ratio Relative to Callan’s Large Public Fund Database



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

Sharpe Ratio for Periods Ended March 31, 2021
Group: Callan Endow/Foundation - Large (>1B)



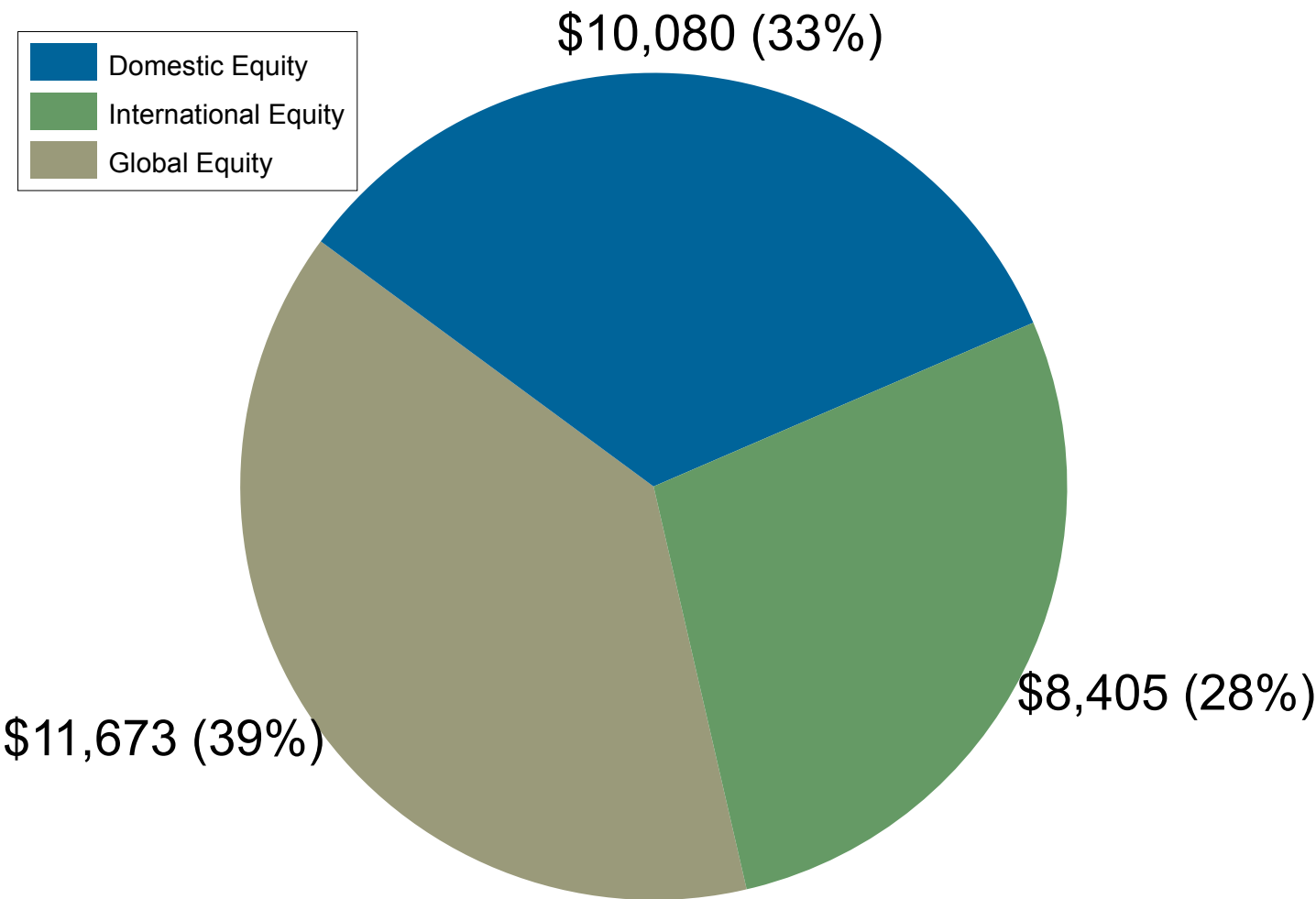
	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 20 Years
10th Percentile	1.33	1.67	1.53	1.67	0.99
25th Percentile	1.15	1.45	1.32	1.42	0.87
Median	0.94	1.24	1.10	1.13	0.72
75th Percentile	0.59	0.83	0.74	0.86	0.53
90th Percentile	0.51	0.74	0.64	0.74	0.44
Member Count	32	32	32	32	26
Total Fund ● A	0.80	1.11	1.01	1.01	0.64

Asset Classes Structure and Performance

APFC Public Equity Structure

As of March 31, 2021

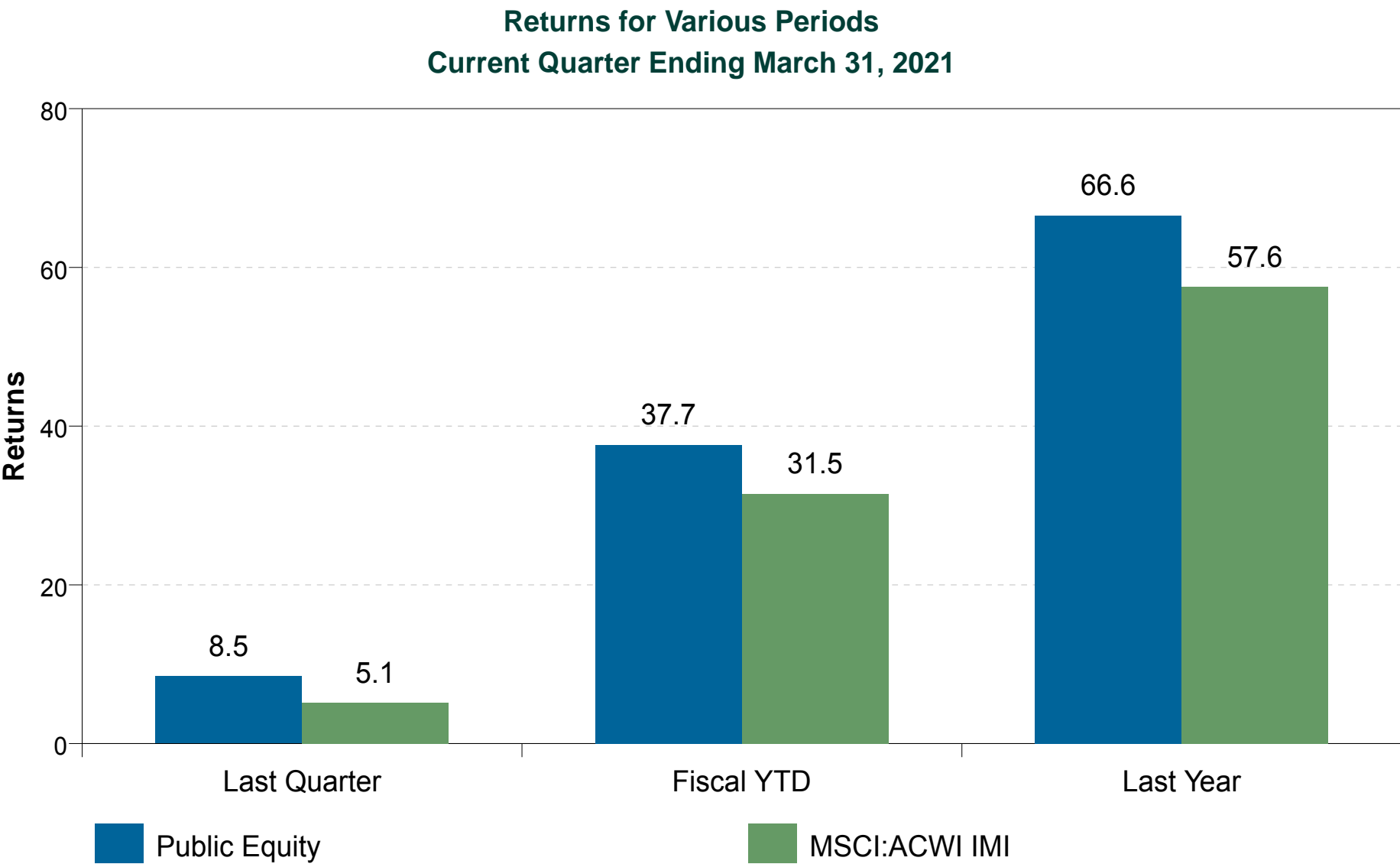
- APFC Public Equity portfolio has a weighting of roughly 56% in US equity, and 44% in non-US equity.
- The MSCI ACWI IMI benchmark has a weighting of roughly 57% in US equity, and 43% in non-US equity.
- The median allocation to US equity across public equity portfolios in Callan’s Large Public Fund Sponsor database is roughly 56%.



APFC Public Equity vs. MSCI ACWI-IMI

Periods Ended March 31, 2021

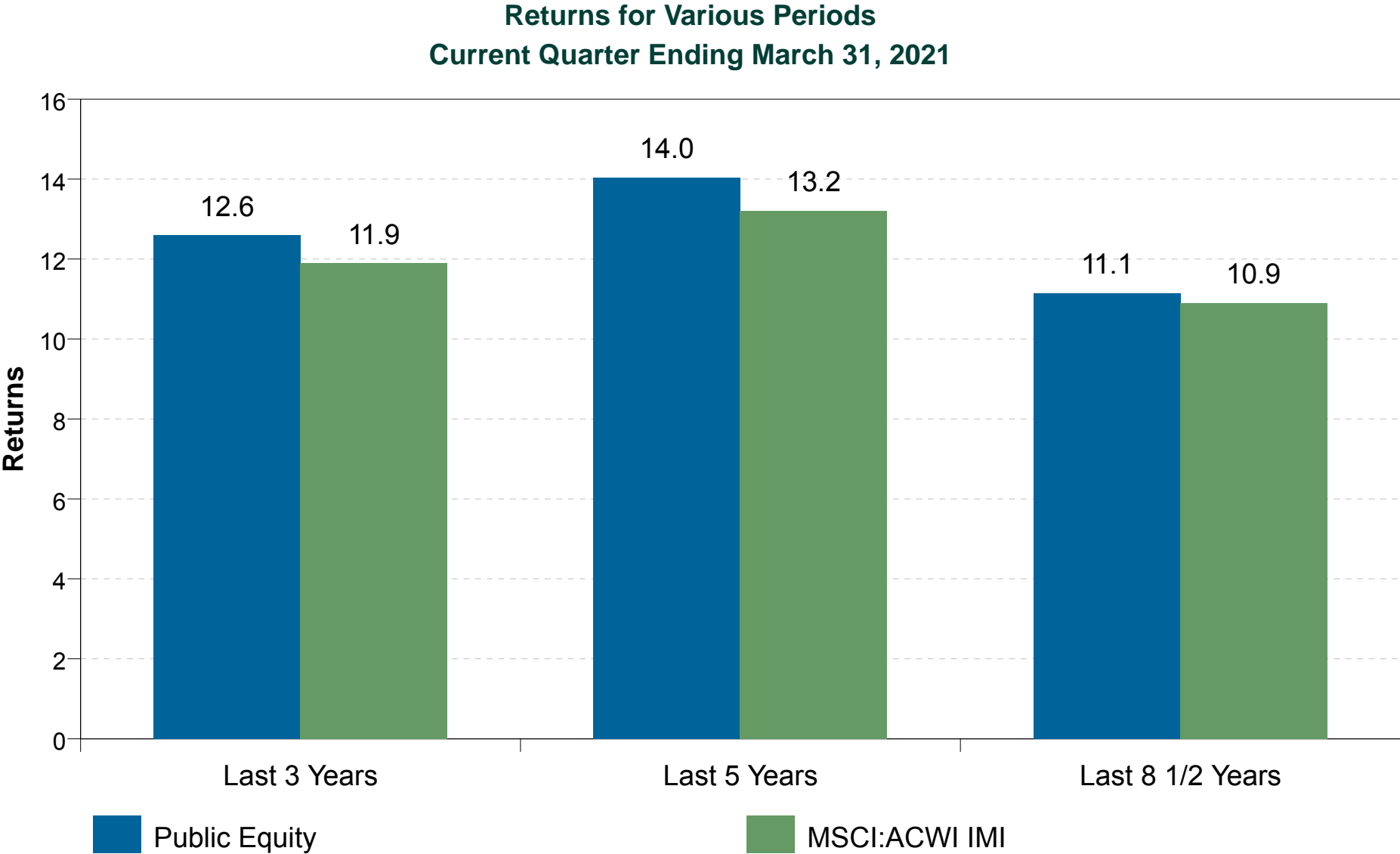
- APFC Public Equity portfolio outperformed the MSCI ACWI IMI index for the recent quarter and for the trailing one-year period.
- Domestic, International and Global Equity composites ended ahead of their respective benchmarks in the latest quarter and one year periods.



APFC Public Equities Performance vs. MSCI ACWI-IMI

Periods Ended March 31, 2021

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

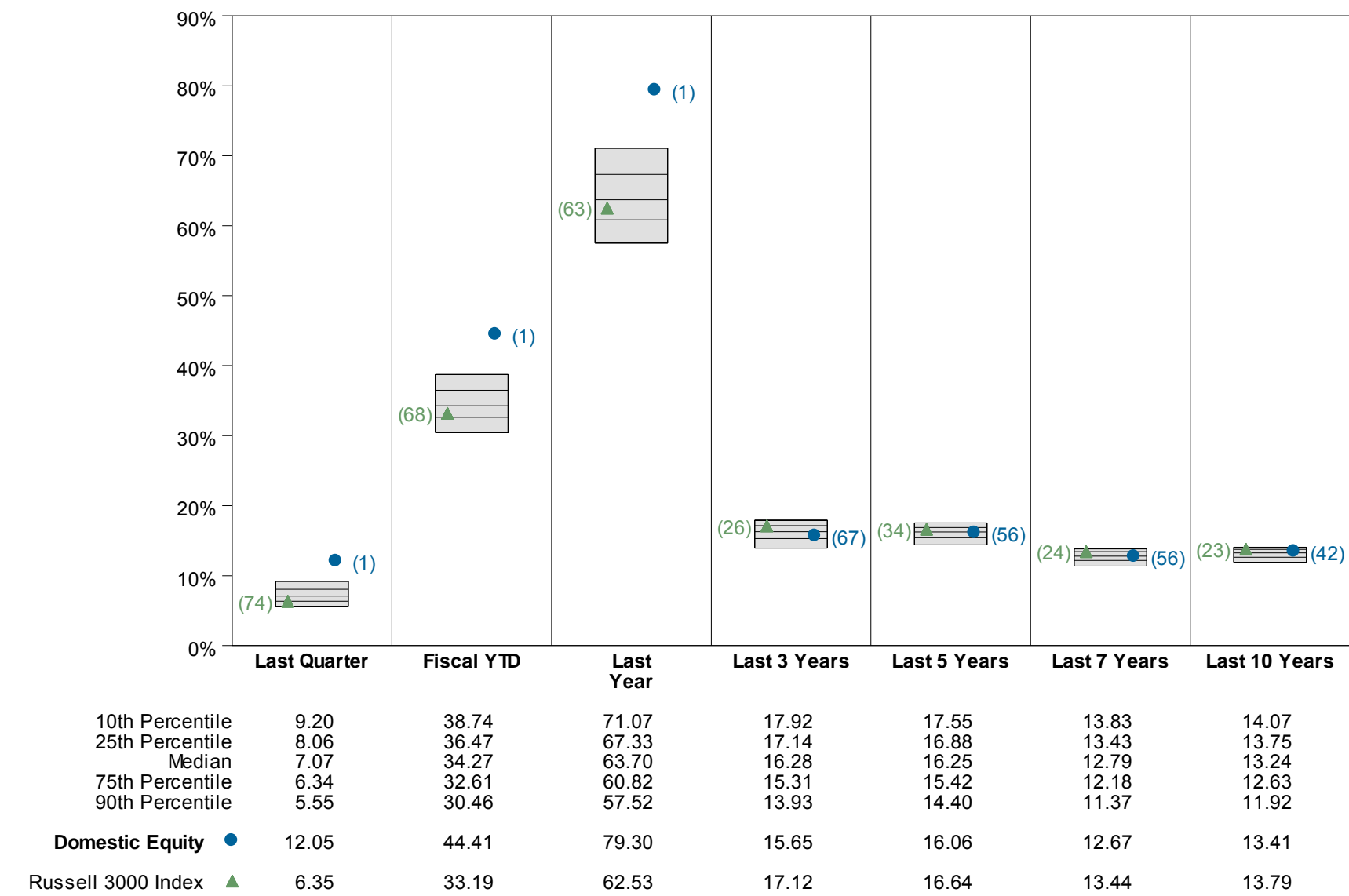


APFC US Equity Performance vs. Fund Sponsor US Equity

Periods Ended March 31, 2021

- The universe is comprised of total domestic equity portfolios of large institutional investors in Callan's Fund Sponsor Database.
- APFC US Equity portfolio ended the recent quarter and fiscal year ahead its benchmark.
- When compared to US Equity portfolios of other large institutional investors, APFC's US Equity composite ranked above median in the short- and long-term periods, and below median in the intermediate periods.

Performance vs Fund Spnsor - Domestic Equity (Gross)

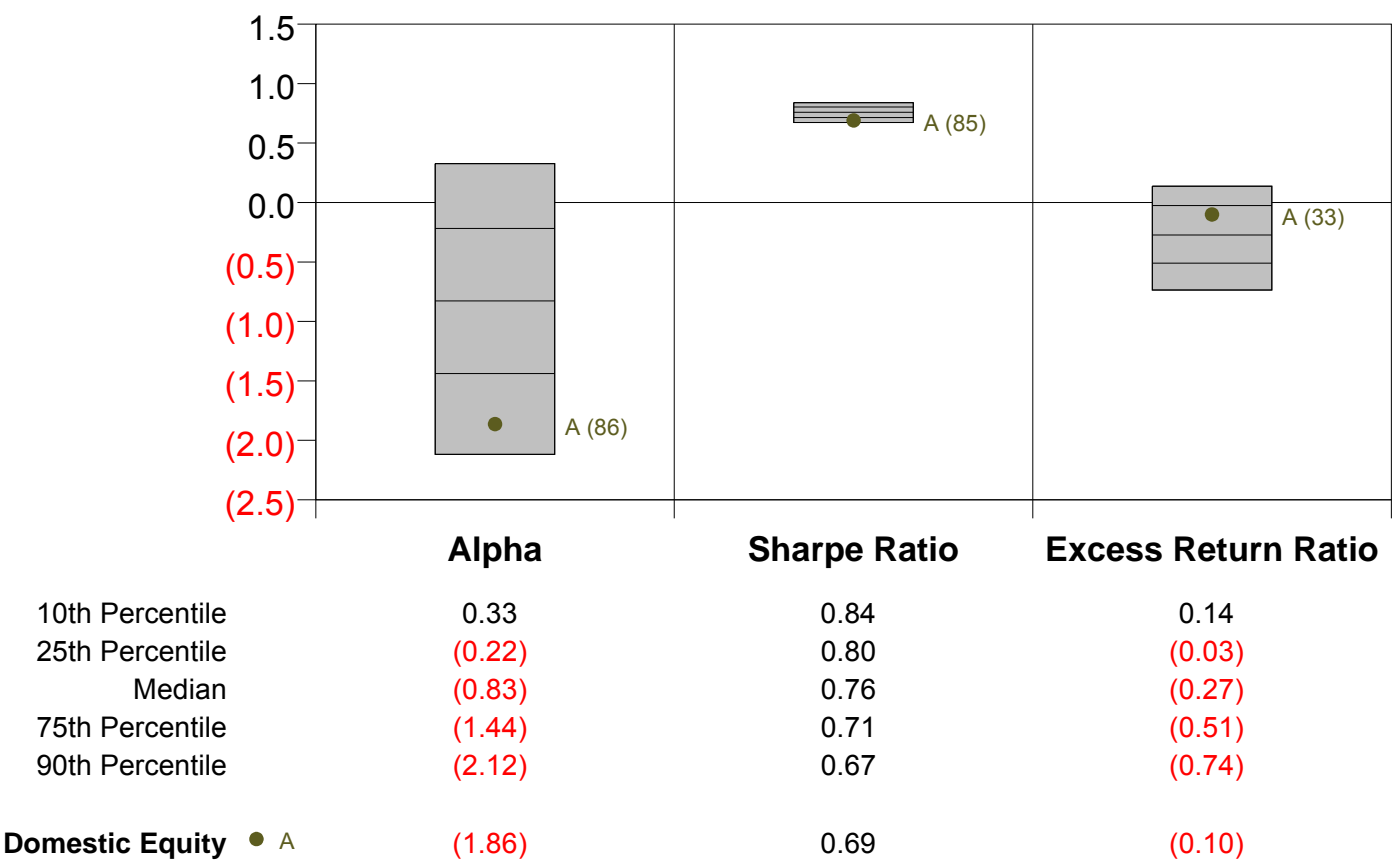


APFC US Equity Portfolio Risk Adjusted Return Rankings

Ten Years Ended March 31, 2021

- 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).

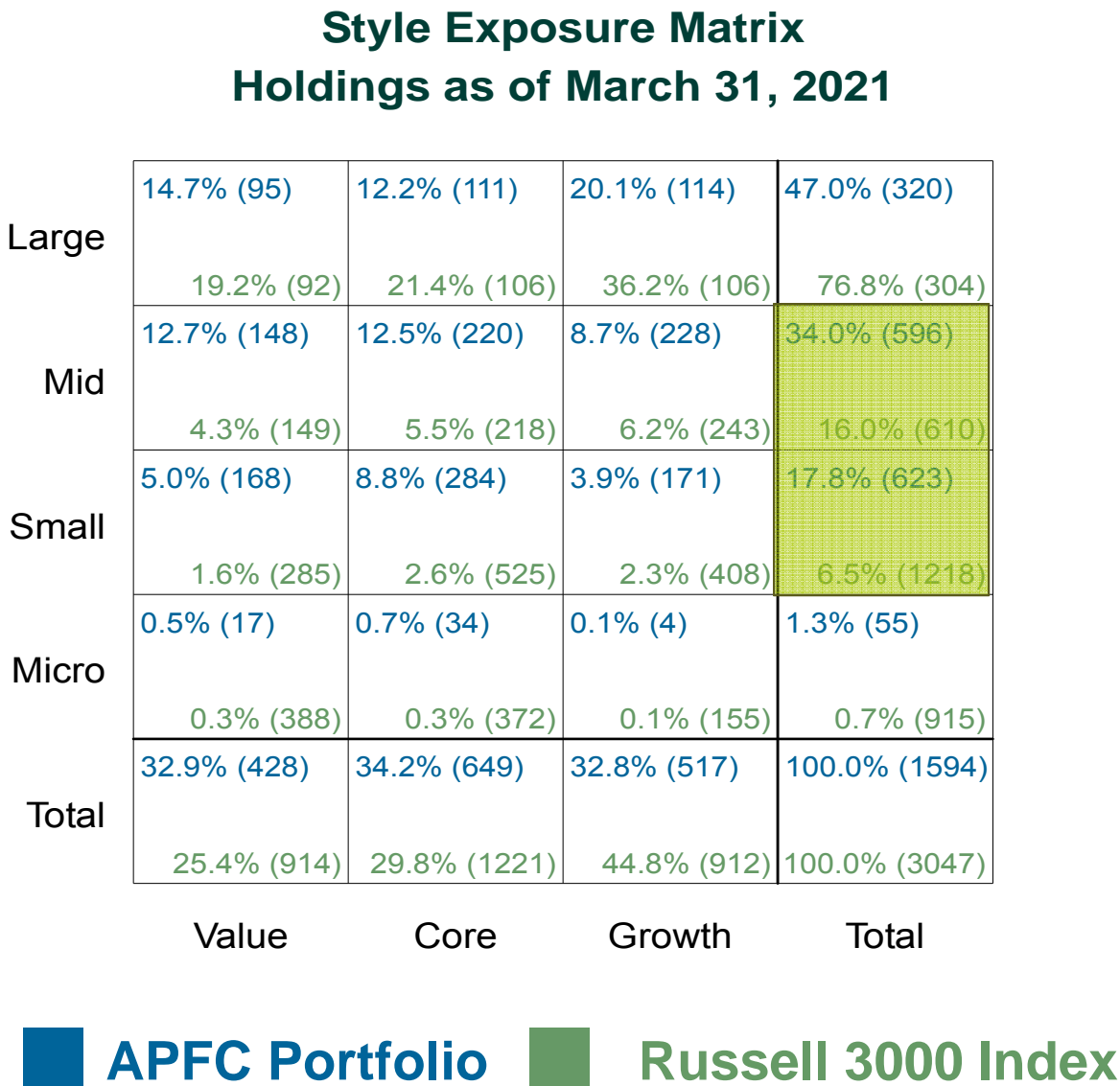
Risk Adjusted Return Measures vs Russell 3000 Index
Rankings Against Fund Sponsor Domestic Equity Database



Capitalization and Style Allocation: US Equity

As of March 31, 2021

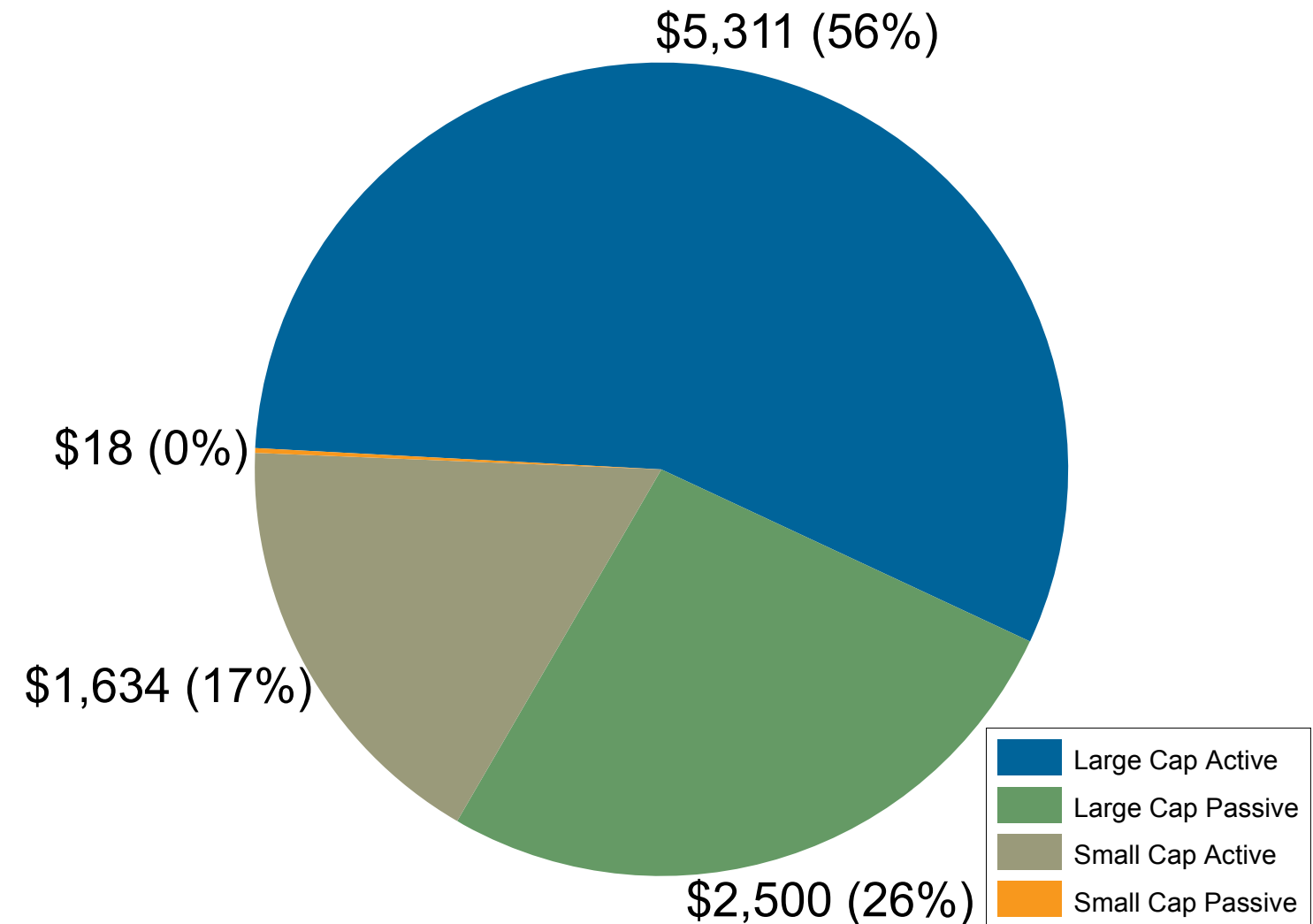
- Highlighted cells indicate largest biases relative to the Russell 3000 index.
- Value continued to outperform growth in the quarter. Small cap outperformed large cap for both the quarter and year.
- Most of APFC’s active growth and value managers outperformed.
- Small and mid cap overweights relative to the index are common in actively managed US equity portfolios.



APFC US Equity Structure

As of March 31, 2021

- US equity portfolio is roughly 73% actively managed and 27% passive (or quasi-passive).
- Roughly 68% of the large cap allocation is actively managed while 99% of the small cap allocation is actively managed.

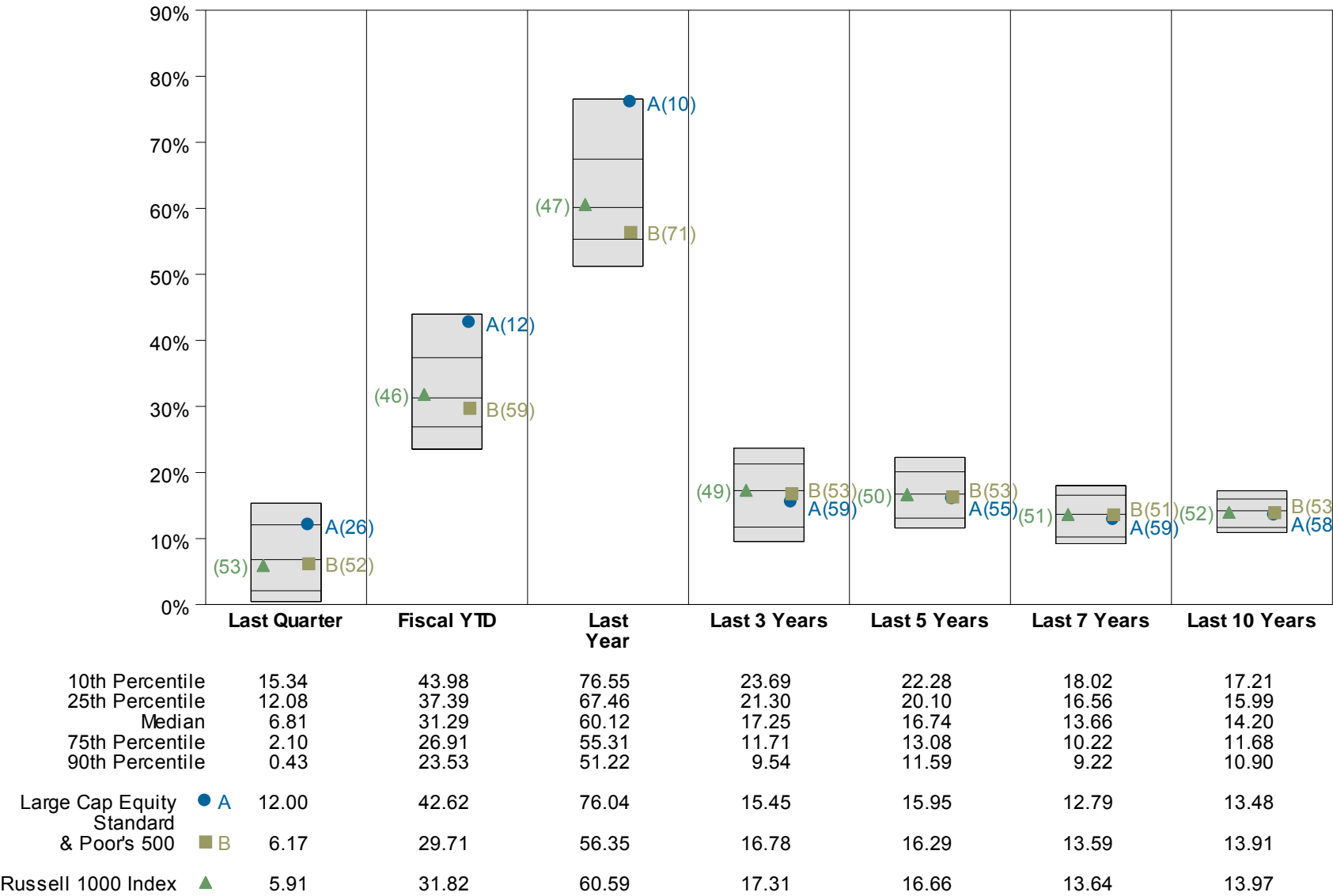


APFC Large Cap Equity Relative to Large Cap Universe

Periods Ended March 31, 2021

- APFC's Large Cap portfolio outperformed its benchmark in the first quarter, FYTD and one year.
- The portfolio ranked above median within the large cap universe over short-term time periods.
- Large cap composite has a small/mid cap size bias relative to the index, which aided performance during the quarter.

Performance vs Callan Large Capitalization (Gross)

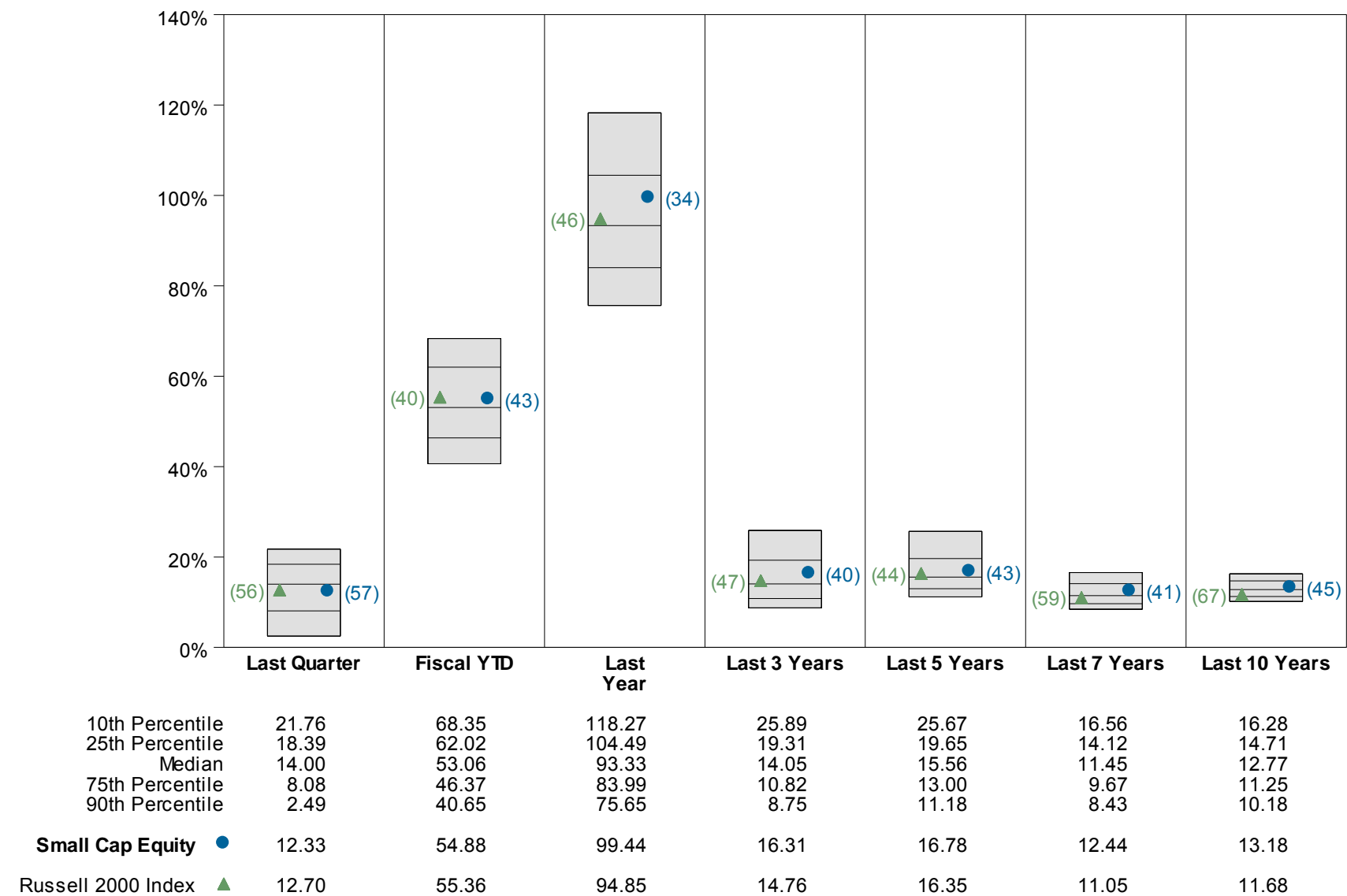


APFC Small Cap Equity Relative to Small Cap Universe

Periods Ended March 31, 2021

- APFC small cap portfolio posted strong absolute returns but trailed the index in the quarter.
- Outside of the quarter, the portfolio ranked above median and ahead of the benchmark in the small cap universe over all standard periods.

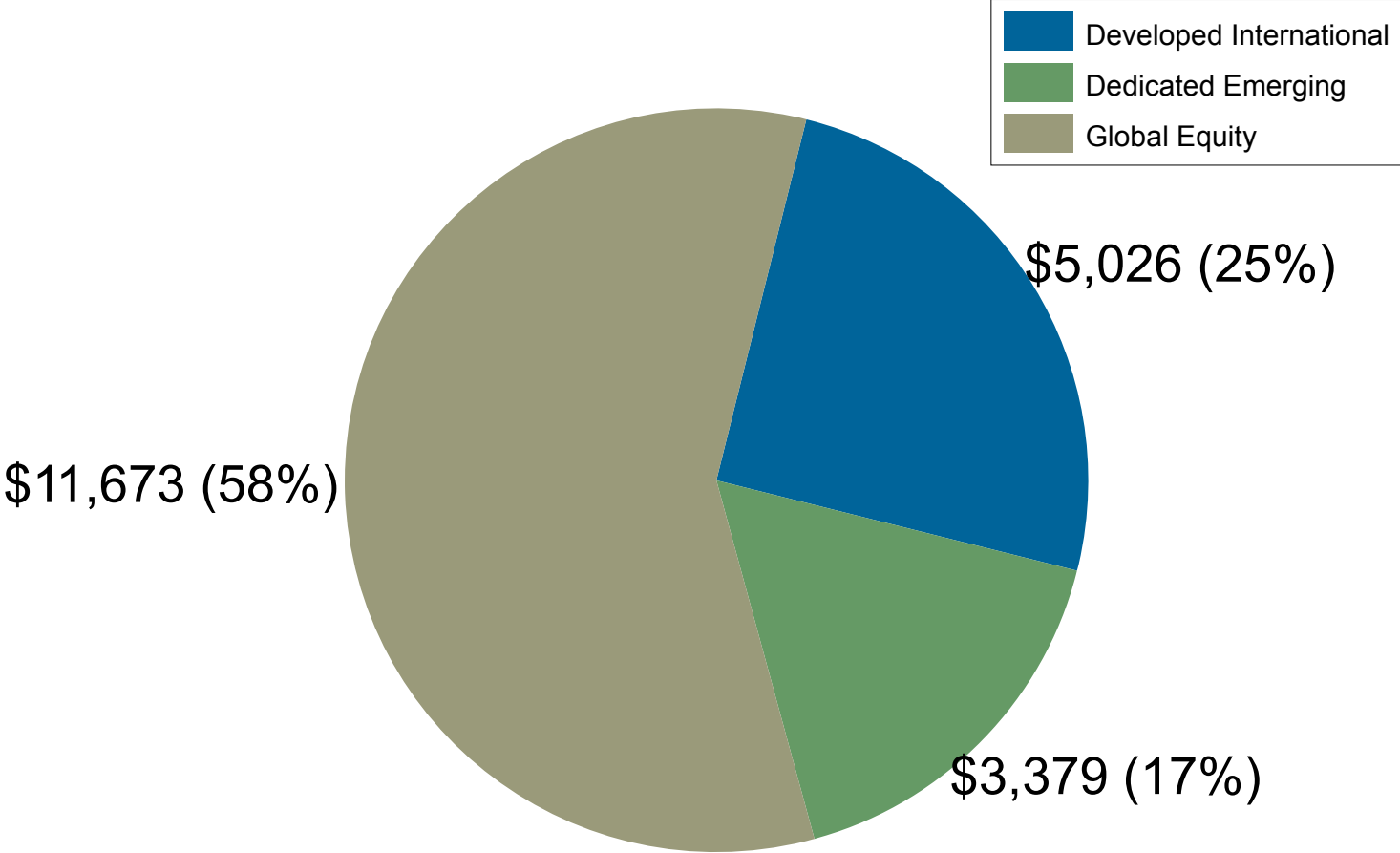
Performance vs Callan Small Capitalization (Gross)



APFC Non-US and Global Equity Structure

As of March 31, 2021

- 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.

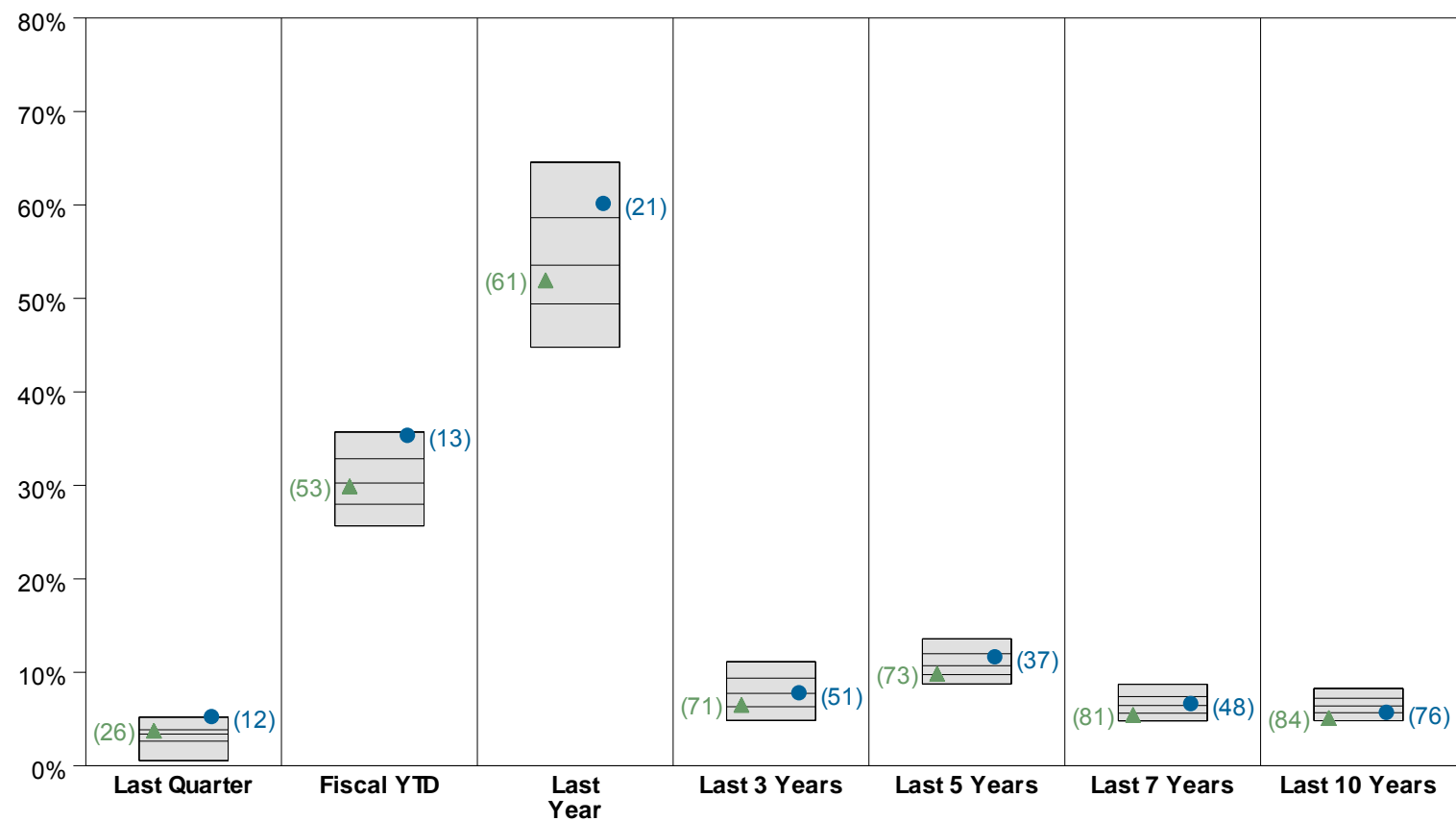


APFC International Equity Relative to Fund Sponsor Universe

Periods Ended March 31, 2021

- International Equity ended the quarter and year ahead of the benchmark.
- The portfolio outperformed its benchmark over all periods.
- Relative to other fund sponsor portfolios, International Equity ranked above or near median over the short- and intermediate-term periods and below median over the 10-year period.

Performance vs Fund Sponsor - International Equity (Gross)



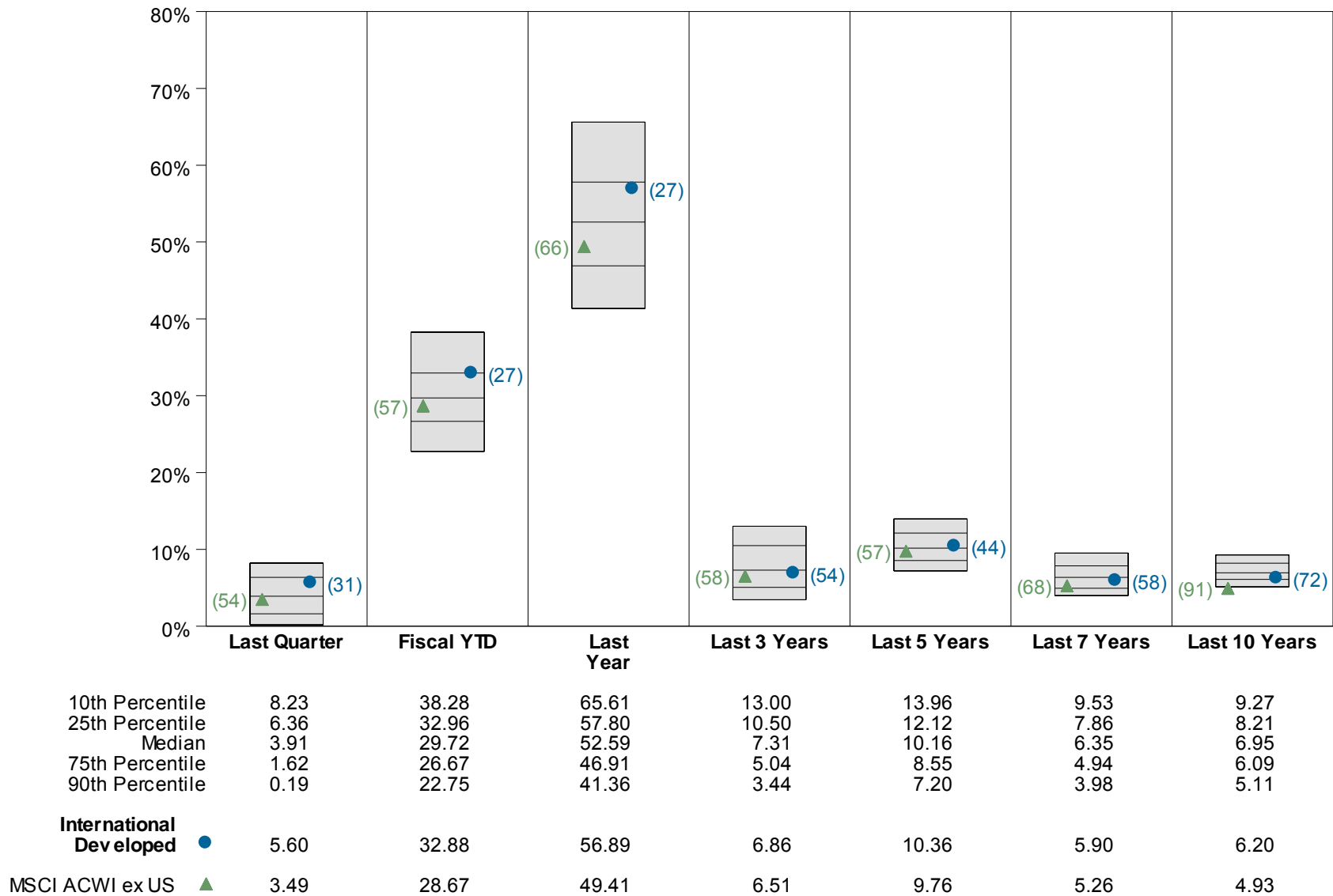
10th Percentile	5.22	35.70	64.56	11.14	13.59	8.72	8.28
25th Percentile	3.86	32.84	58.64	9.38	12.01	7.41	7.23
Median	3.40	30.25	53.56	7.76	10.72	6.46	6.40
75th Percentile	2.65	28.00	49.42	6.33	9.76	5.64	5.68
90th Percentile	0.55	25.67	44.78	4.87	8.75	4.82	4.84
International Equity	5.09	35.18	59.97	7.63	11.49	6.50	5.55
MSCI ACWI ex US IMI	3.77	29.91	51.94	6.51	9.84	5.45	5.11

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

Periods March 31, 2021

- The International Developed portfolio increased 5.6% versus the benchmark gain of 3.5%. The portfolio continued to show strong performance relative to its benchmark across all time periods.
- The portfolio ranked near-median for most longer-term time periods.

Performance vs Callan Non-US Equity (Gross)

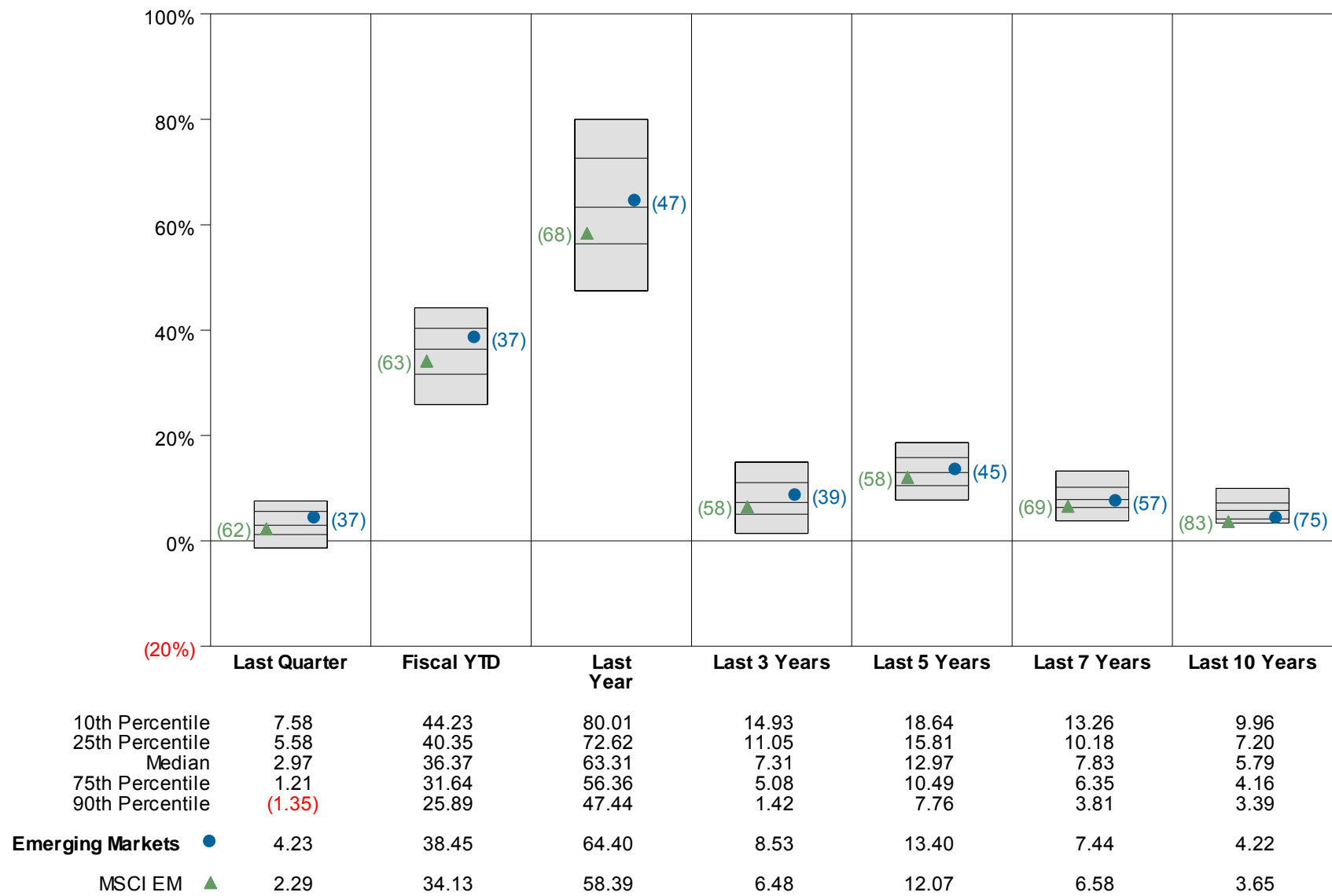


APFC Emerging Markets Equity Relative to EM Universe

Periods March 31, 2021

- APFC Emerging Markets Equity portfolio ended the quarter ahead of its benchmark.
- The portfolio leads its benchmark across all standard periods.
- Over the short- and intermediate-term, the portfolio sits above the median while over longer-term periods ranks below the median.

Performance vs Emerging Markets Equity DB (Gross)

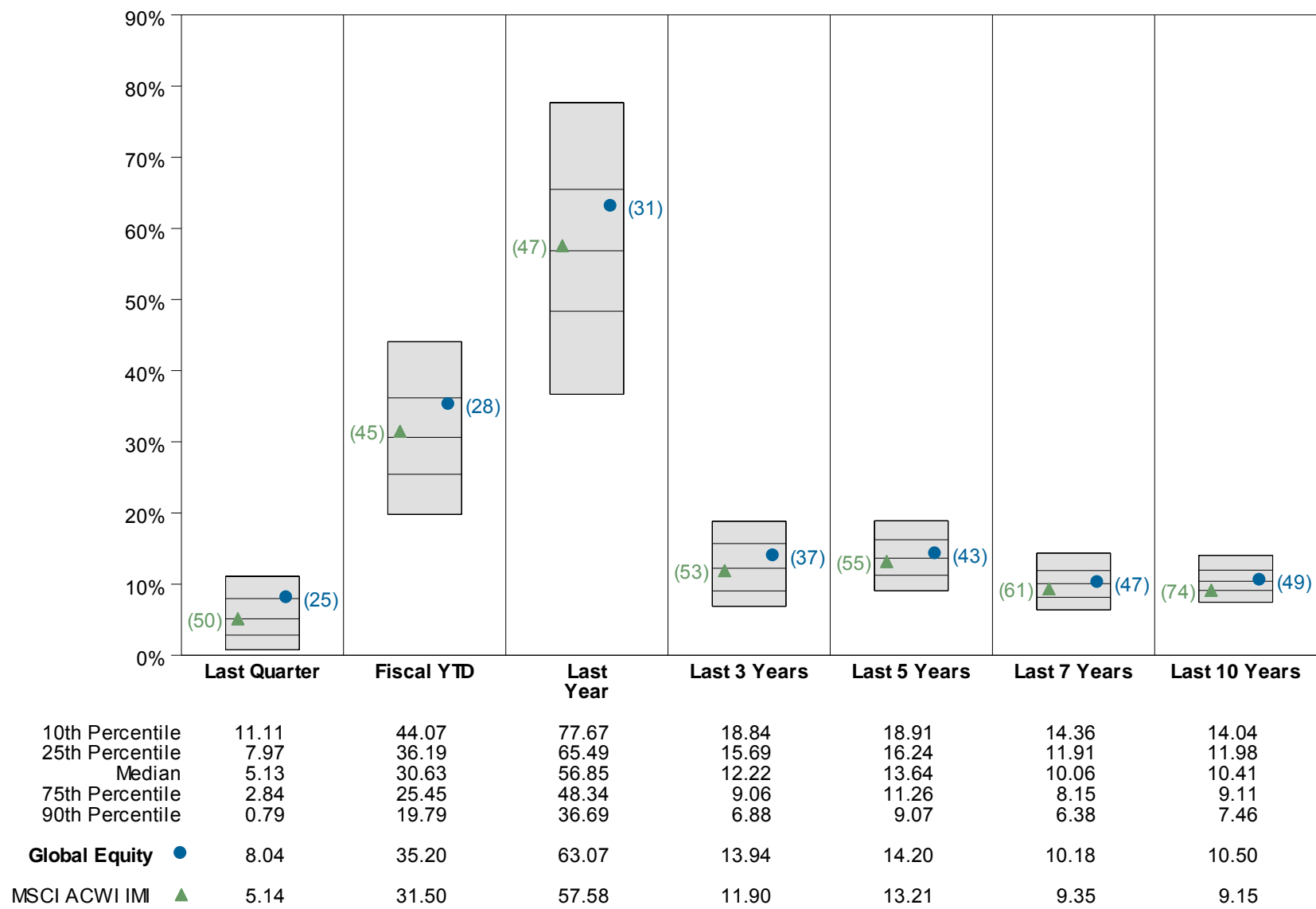


APFC Global Equity Relative to Global Universe

Periods Ended March 31, 2021

- APFC Global Equity portfolio exceeded its benchmark in the first quarter and all other standard periods.
- The portfolio ranked above median for all time periods.
- Performance from the APFC Tactical Tilts portfolio positively impacted performance over the quarter, 1-, 3-, and 5-year.

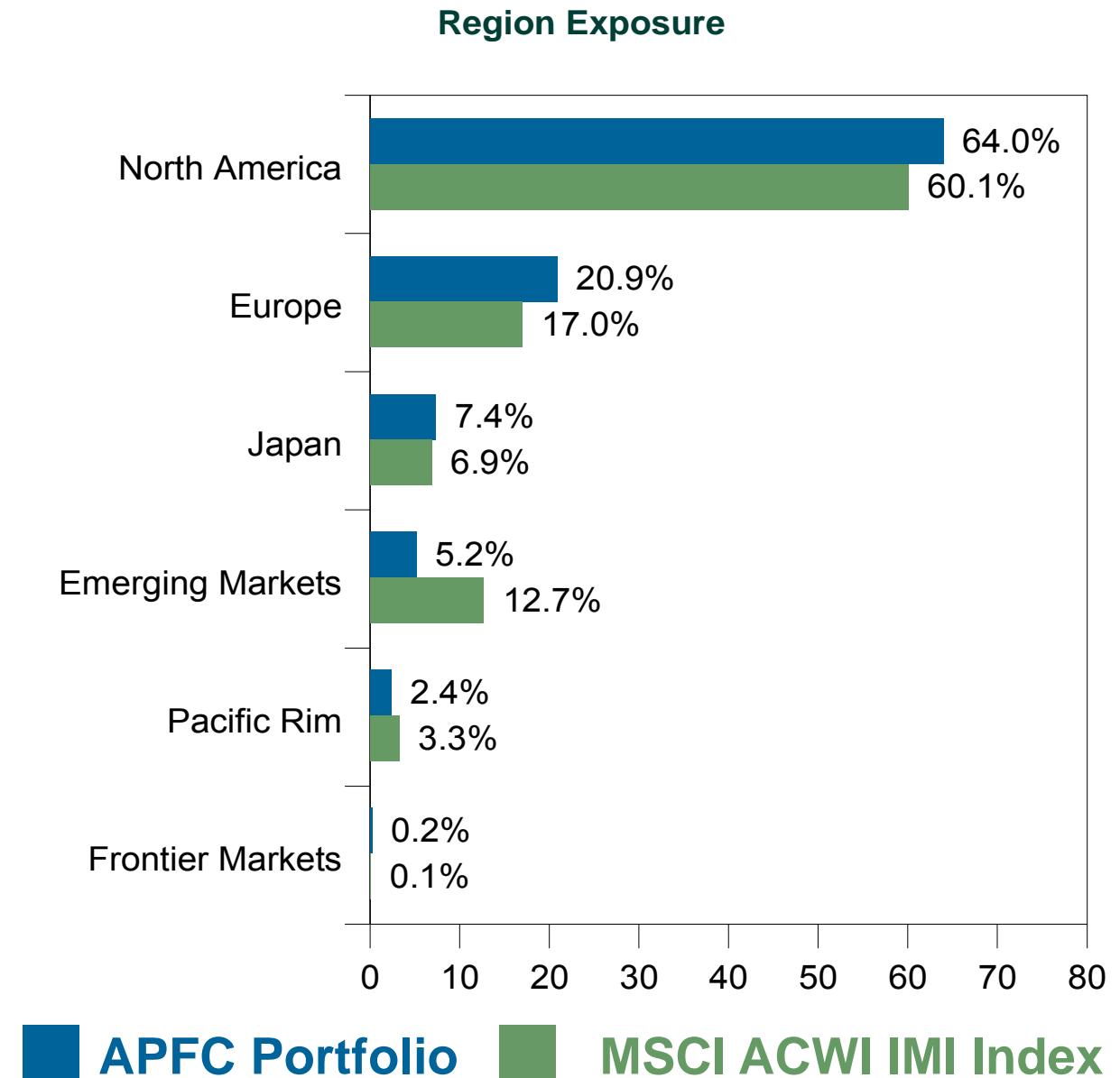
Performance vs Global Equity Database (Gross)



APFC Global Equity Portfolio Region Exposure

As of March 31, 2021

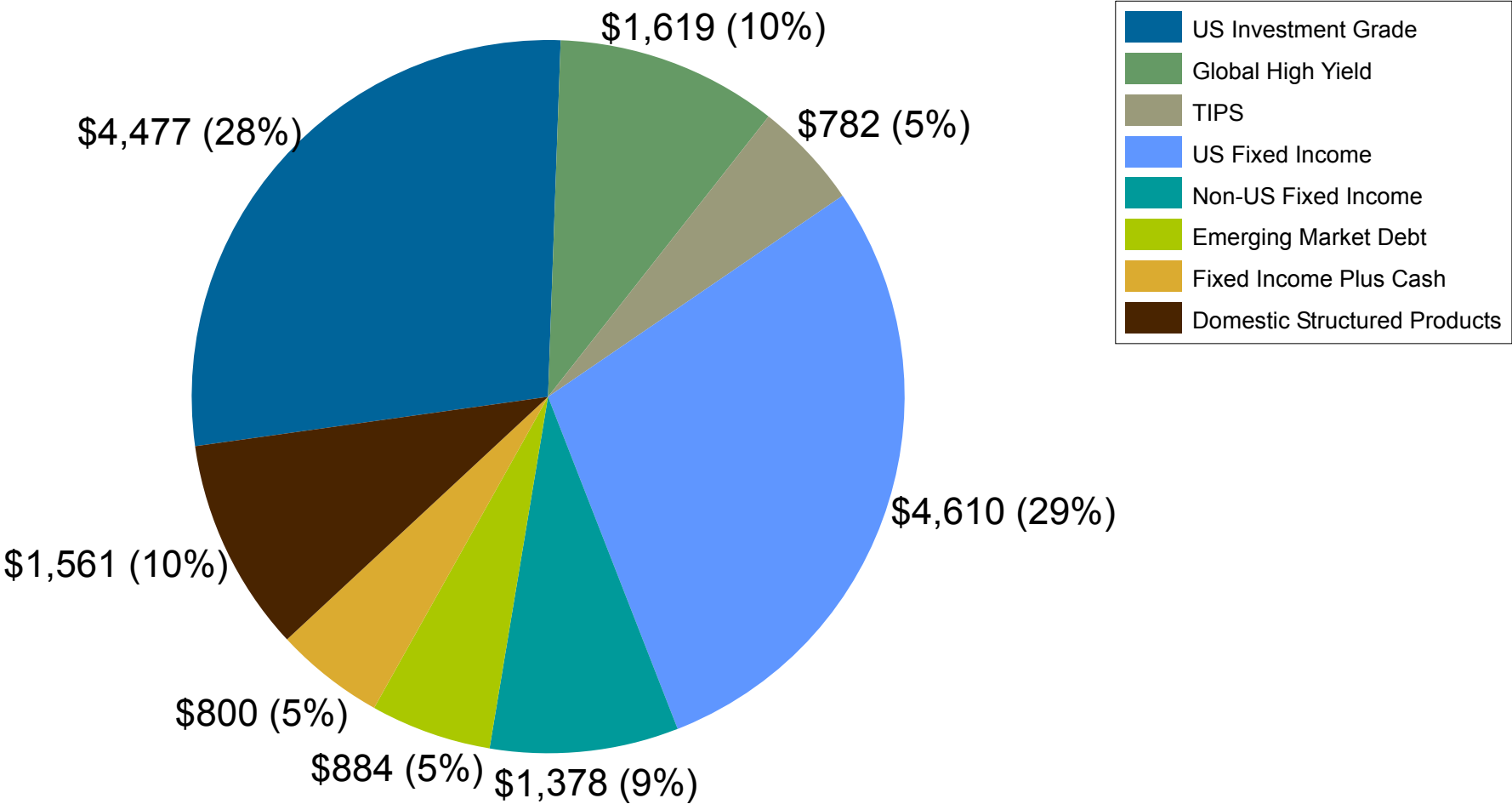
- The APFC global equity portfolio continued to be underweight Emerging Markets and the Pacific Rim relative to its benchmark.
- The portfolio had corresponding relative overweights to North America, Europe, and in this quarter Japan.
- This positioning and broad based regional gains drove quarterly results.



APFC Fixed Income Structure

As of March 31, 2021

- Approximately 72% of the fixed income plus portfolio is managed internally, including allocations within Fixed Income Plus Cash, US Fixed Income Aggregate, US Investment Grade Corporate, Non-US Fixed Income, Structured Products and TIPS.
- External mandates are focused in specialty areas including Non-US Fixed Income, Global High Yield, and Emerging Market Debt.
- The APF Domestic Structured Products portfolio was funded in the Q3 2020.
- REITS and Listed Infrastructure transferred out on 7/1/2020

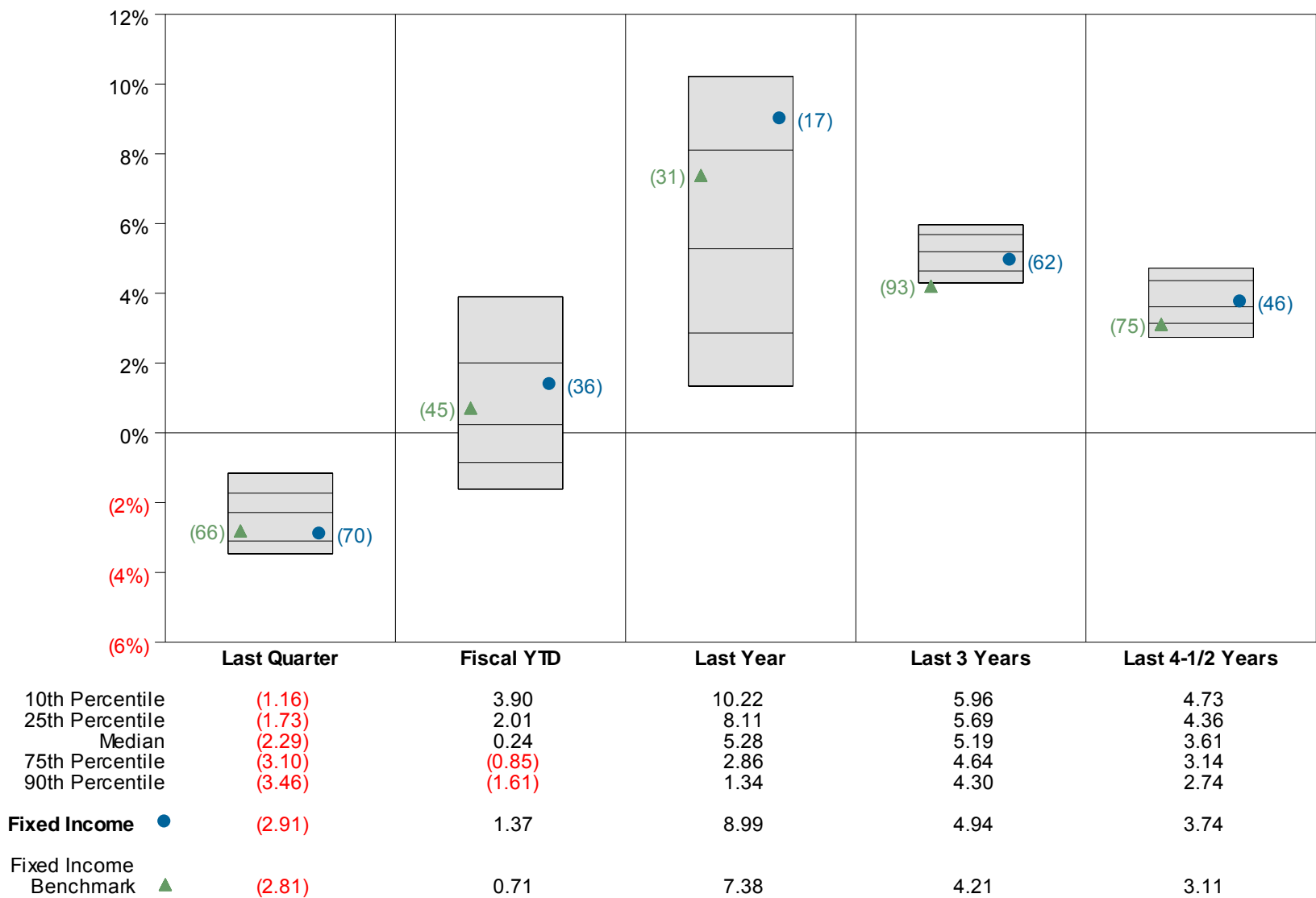


Fixed Income Relative to Public Fixed Income Funds

Periods Ended March 31, 2021

- The APFC Total Fixed Income portfolio lagged its benchmark but outperformed over all other time periods shown.
- The portfolio's ranks were mixed over the short-term but ended above median over the since inception period.
- 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)

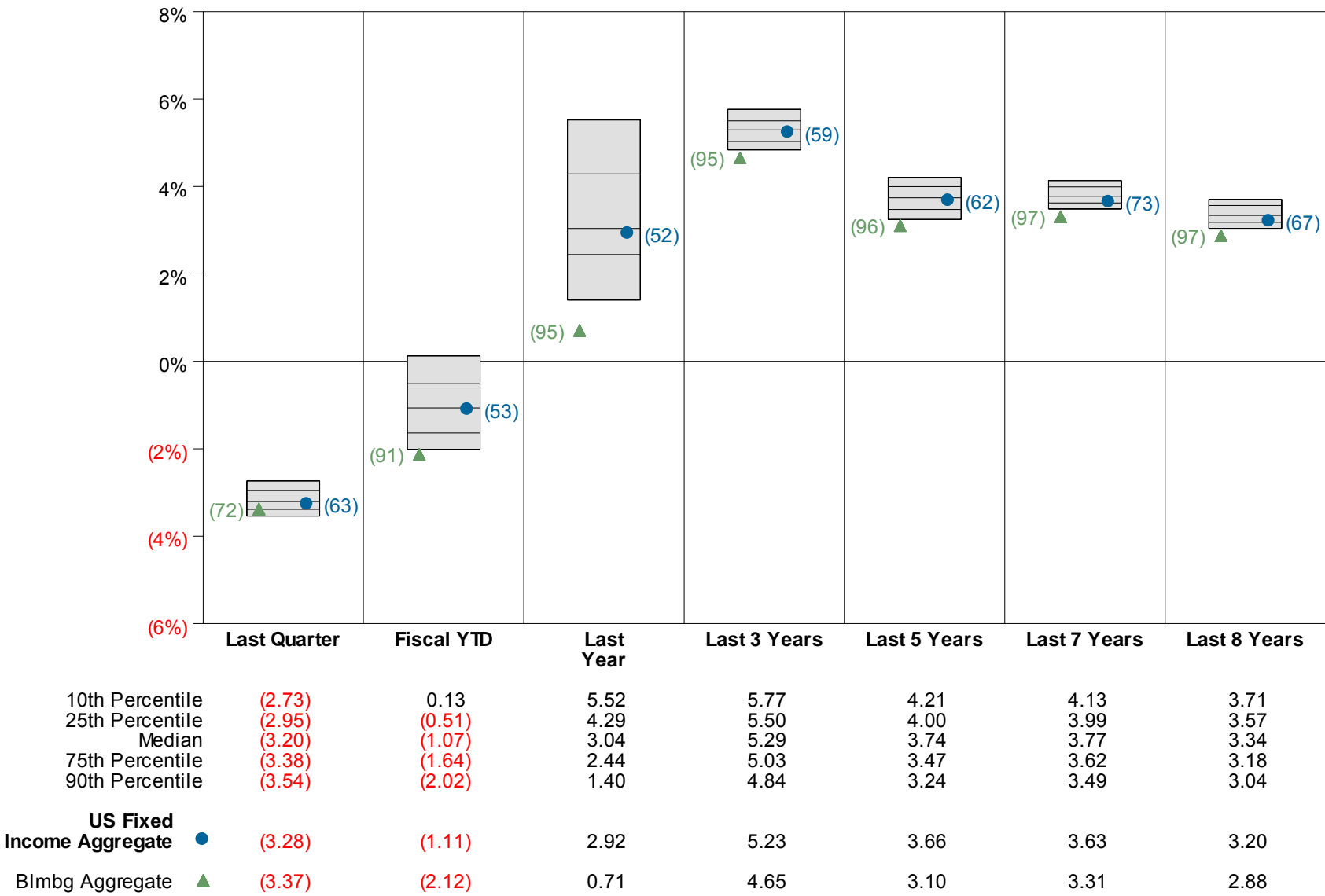


US Fixed Income Aggregate Relative to Core Bond Funds

Periods Ended March 31, 2021

- APFC US Fixed Income Aggregate portfolio outperformed the Bloomberg Aggregate Index for the quarter and was ahead of the benchmark over all other standard periods.
- Peer ranks were less favorable and below median over all standard periods.

Performance vs Callan Core Bond Fixed Income (Gross)

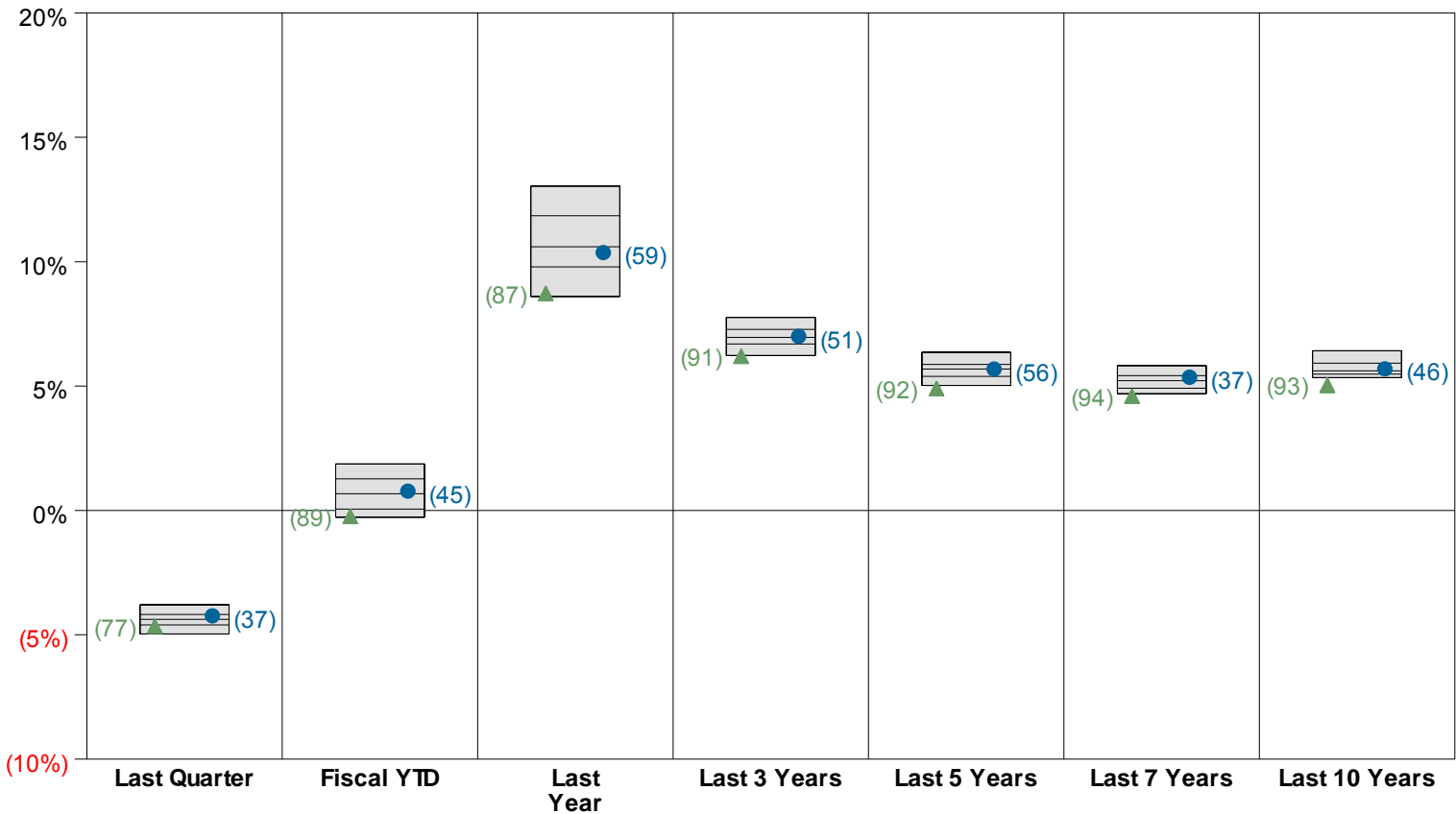


US Investment Grade Corp Relative to Investment Grade Funds

Periods Ended March 31, 2021

- APFC US Investment Grade Corporate beat its benchmark for the quarter and all other standard periods.
- The Investment Grade Corporate composite ranked just below median over the 1-, 3- and 5-year periods and above median over the 7- and 10-year.

Performance vs Callan Investment Grade Credit Fixed Inc (Gross)



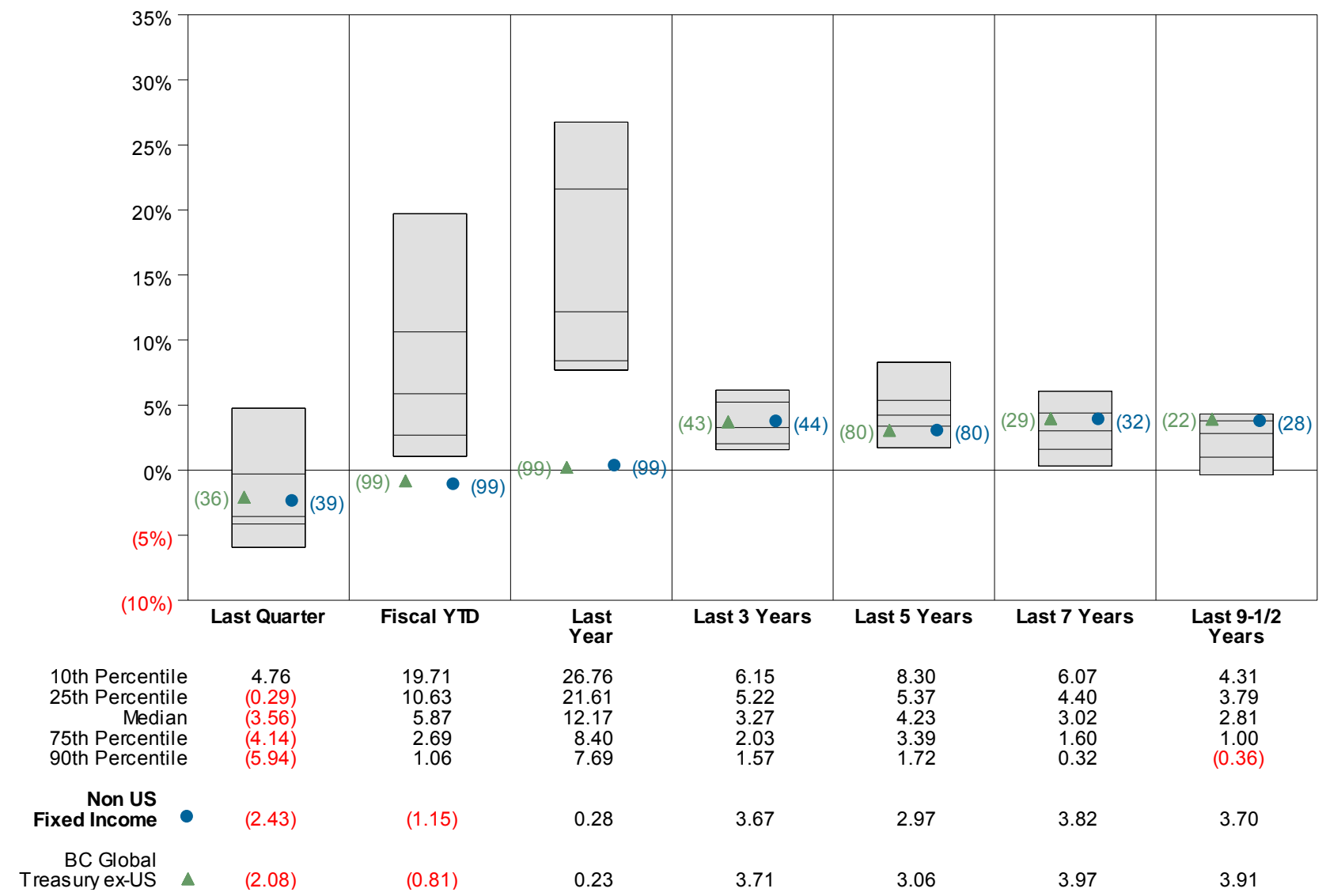
10th Percentile	(3.80)	1.87	13.04	7.76	6.36	5.82	6.42
25th Percentile	(4.18)	1.27	11.85	7.28	5.87	5.42	5.92
Median	(4.38)	0.68	10.60	6.96	5.69	5.22	5.61
75th Percentile	(4.60)	0.05	9.79	6.69	5.39	4.91	5.48
90th Percentile	(4.96)	(0.27)	8.60	6.23	5.02	4.69	5.34
US Investment Grade Corporate	● (4.30)	0.71	10.30	6.93	5.62	5.29	5.63
Blmbg Corporate	▲ (4.65)	(0.23)	8.73	6.20	4.91	4.60	5.04

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

Periods Ended March 31, 2021

- The APFC Non-U.S. Fixed Income portfolio ended the quarter behind the benchmark but ahead over one year period.
- Compared to peers, the portfolio ranks were mixed, however, were above median over the since inception period.
- The composite included allocations to Rogge Asset and an In House Global Gov't Bonds mandate.

Performance vs Public Fund - International Fixed (Gross)

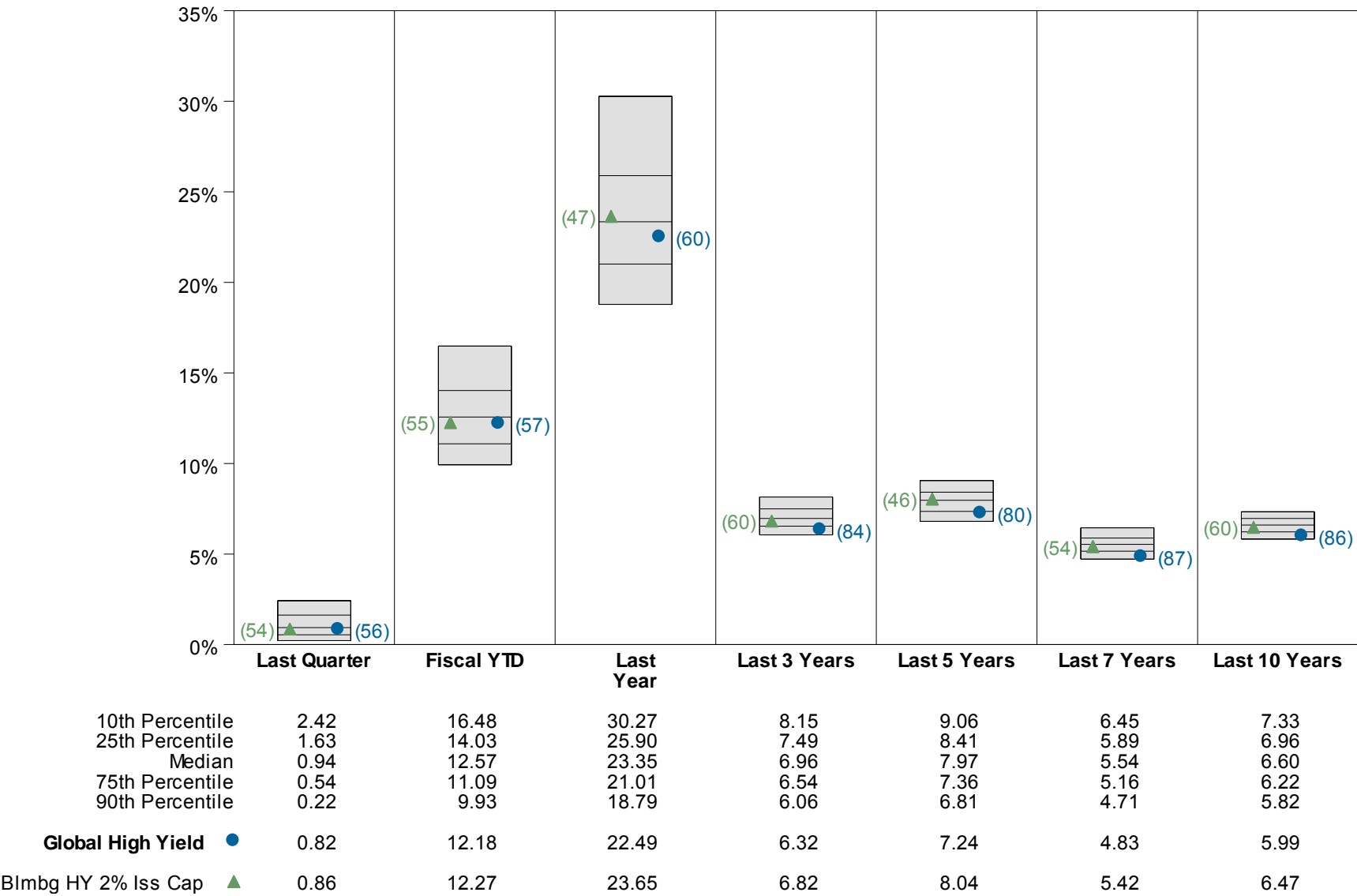


Global High Yield Relative to High Yield Funds

Periods Ended March 31, 2021

- APFC Global High Yield portfolio lagged its benchmark in the quarter.
- The portfolio ranked below median for all reported periods.
- The composite included allocations to Oaktree, Capital Guardian, and an iShares ETF.

Performance vs Callan High Yield Fixed Income (Gross)

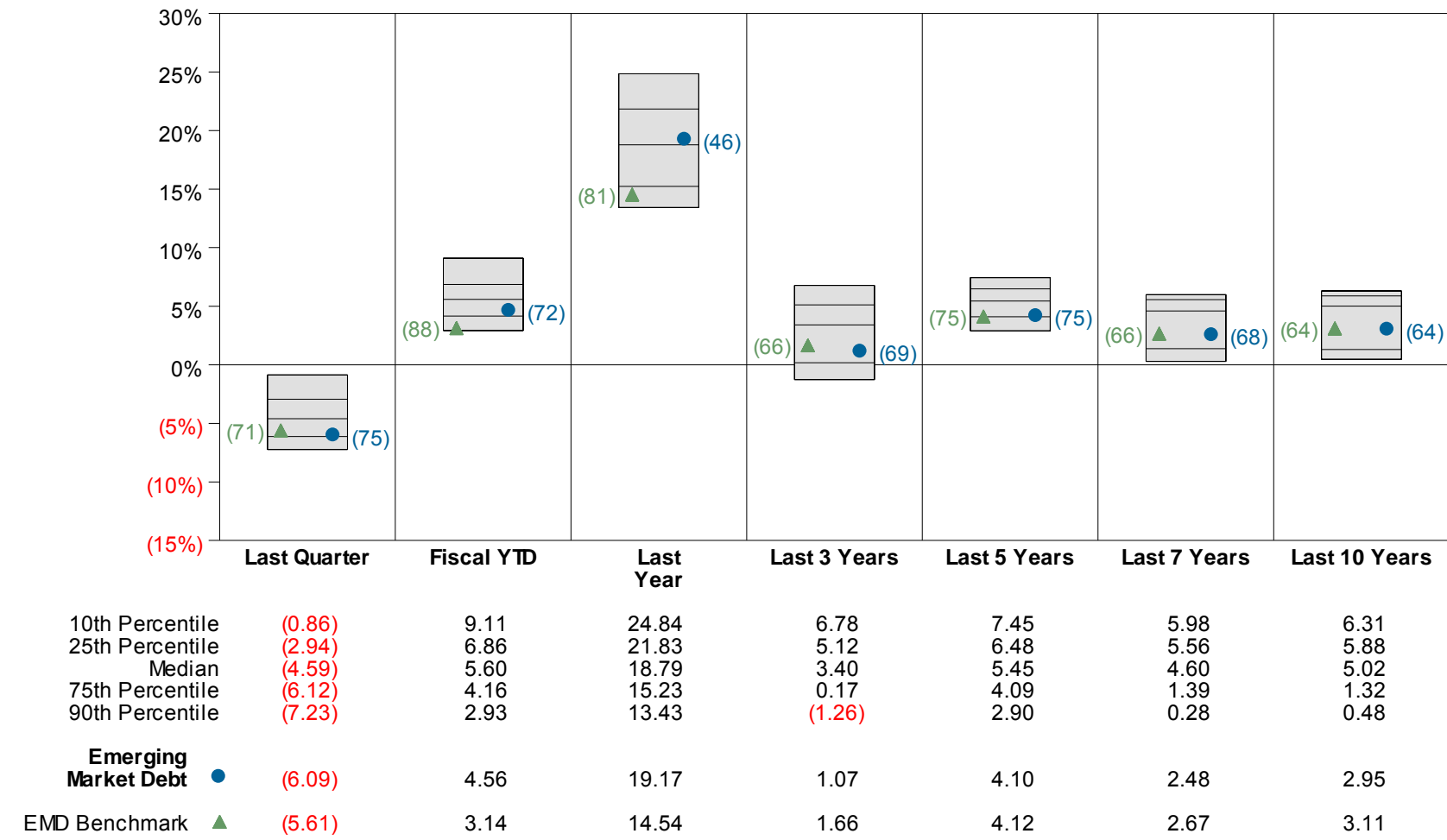


Emerging Market Debt Relative to EMD Funds

Periods Ended March 31, 2021

- APFC Emerging Market Debt portfolio underperformed in the first quarter, but remained ahead of the benchmark over the one year period.
- Relative to peers, the portfolio ranked below median over all periods exhibited except the one year period.

Performance vs Emerging Debt Database (Gross)

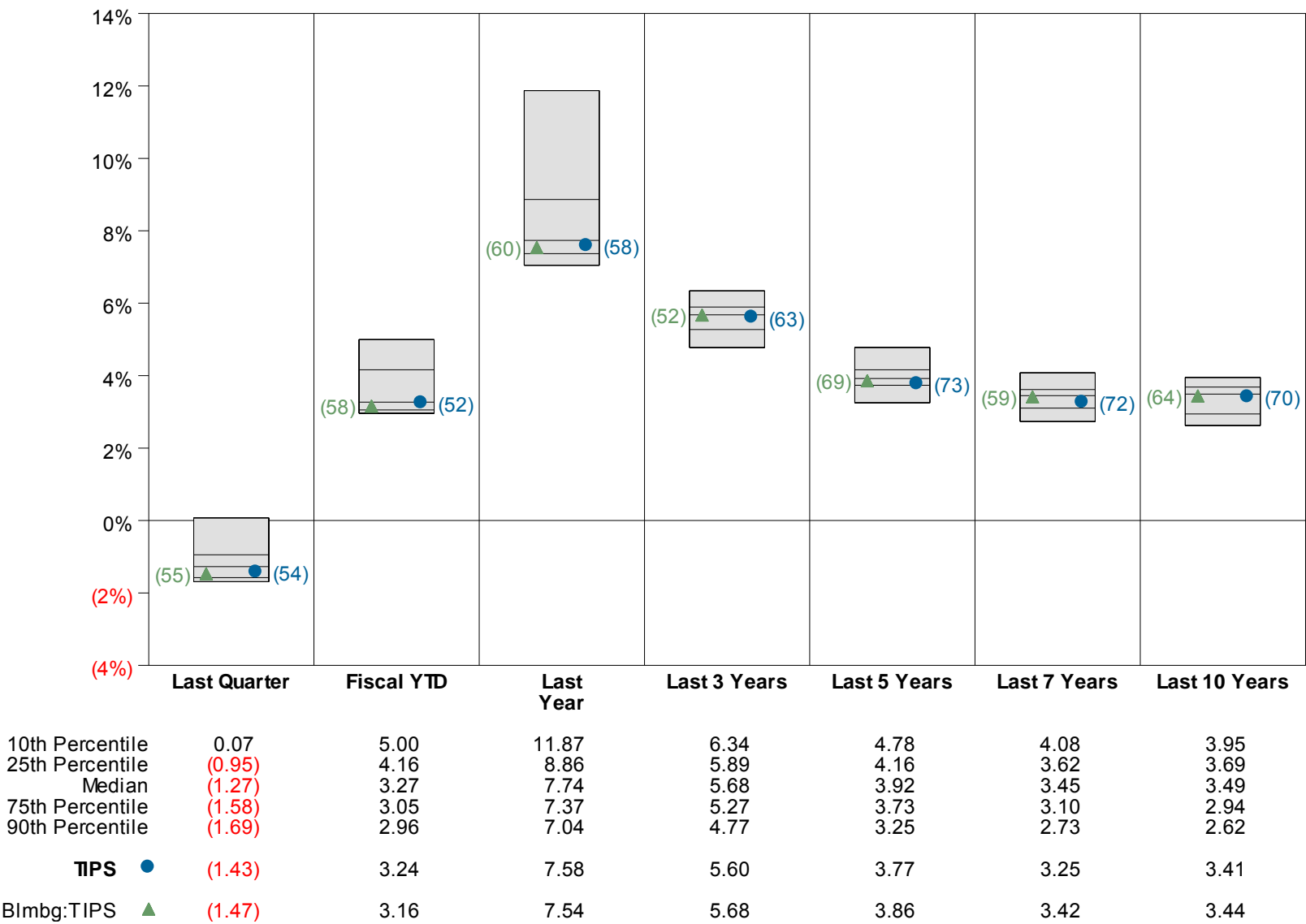


TIPS Relative to Callan’s Inflation Linked Bonds database

Periods Ended March 31, 2021

- APFC TIPS portfolio was nearly inline with the Bloomberg US TIPS Index for the quarter and year.
- The TIPS composite ranked near median in Callan’s Inflation Linked Bonds peer universe over the short-term and below the median over longer-term periods.
- The TIPS allocation includes APCM and an In House TIPS portfolio.

Performance vs Callan Inflation Linked Bonds (Gross)

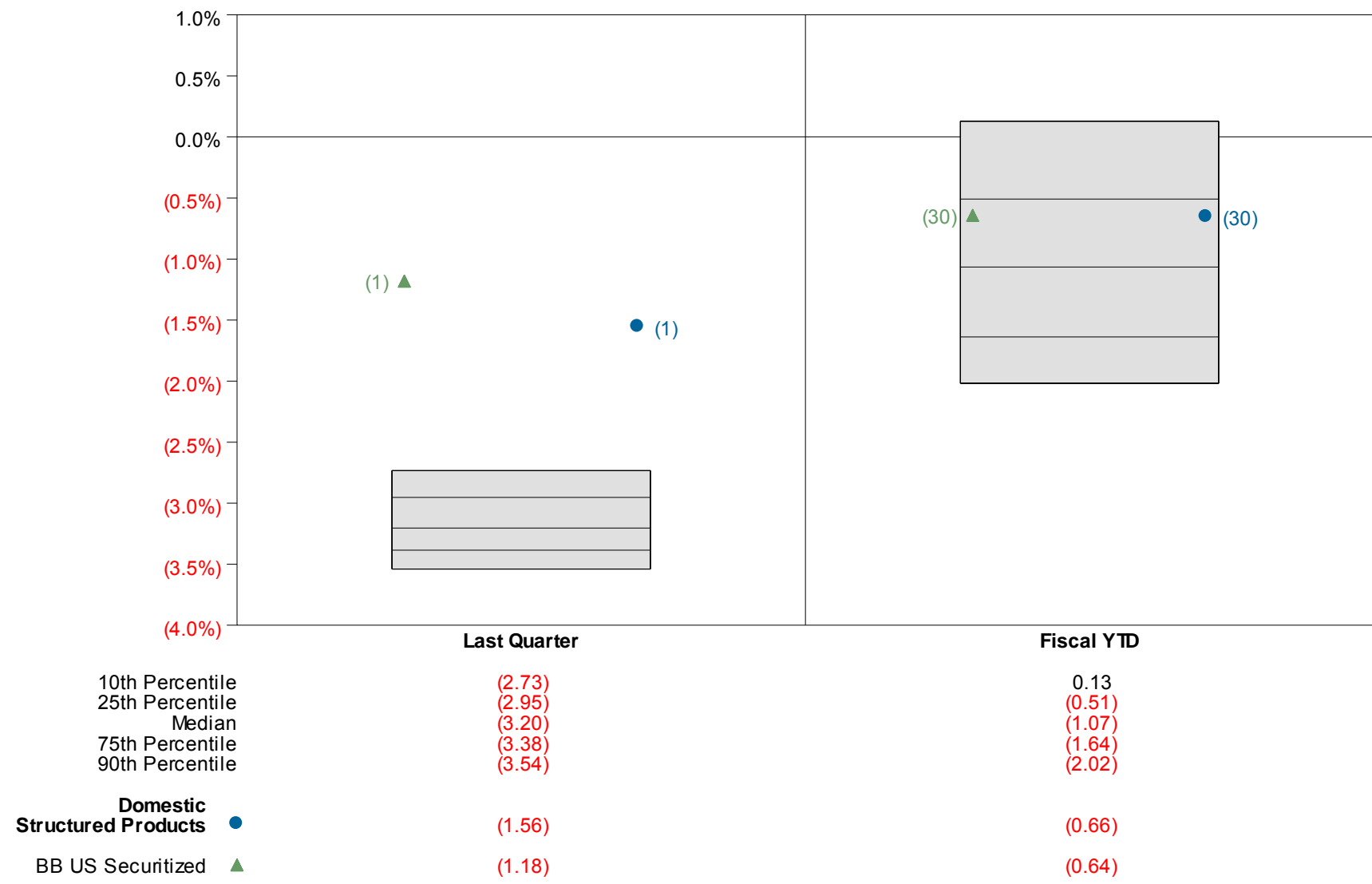


Domestic Structured Product to Callan’s Core Bond database

Periods Ended March 31, 2021

- The Domestic Structured Product portfolio was funded at the end of the second quarter of 2020.
- Performance over the quarter fell short of the benchmark. The portfolio was nearly inline with the BB US Securitized over the FYTD period.
- The portfolio ranked in the top quartile of the Core Bond Fixed Income peer group, though benchmark-relative performance is far more applicable.

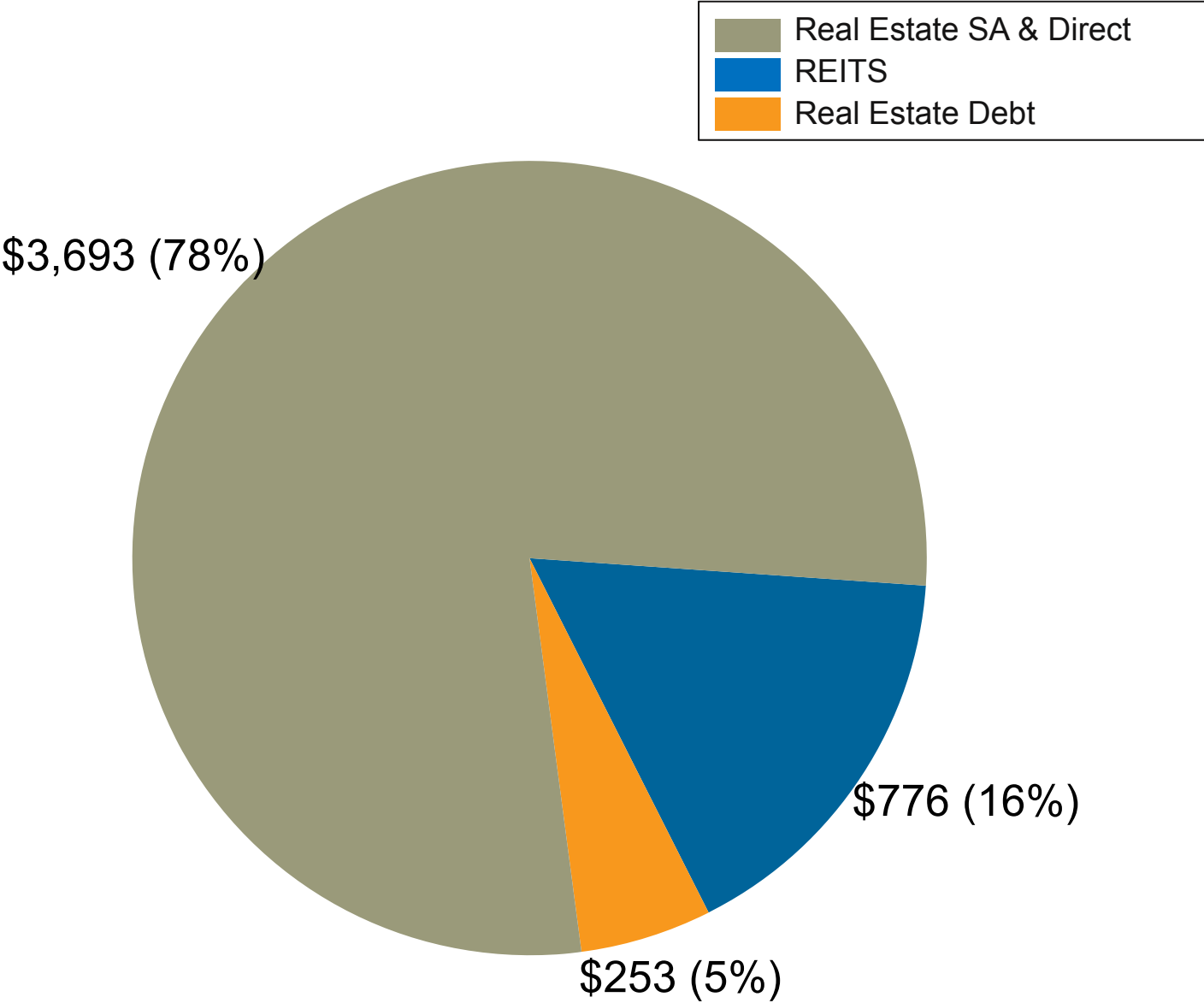
Performance vs Callan Core Bond Fixed Income (Gross)



APFC Real Estate Structure (1Q LAG)

As of March 31, 2021

- The real estate portfolio is comprised of Real Estate Separate Accounts and Direct 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.

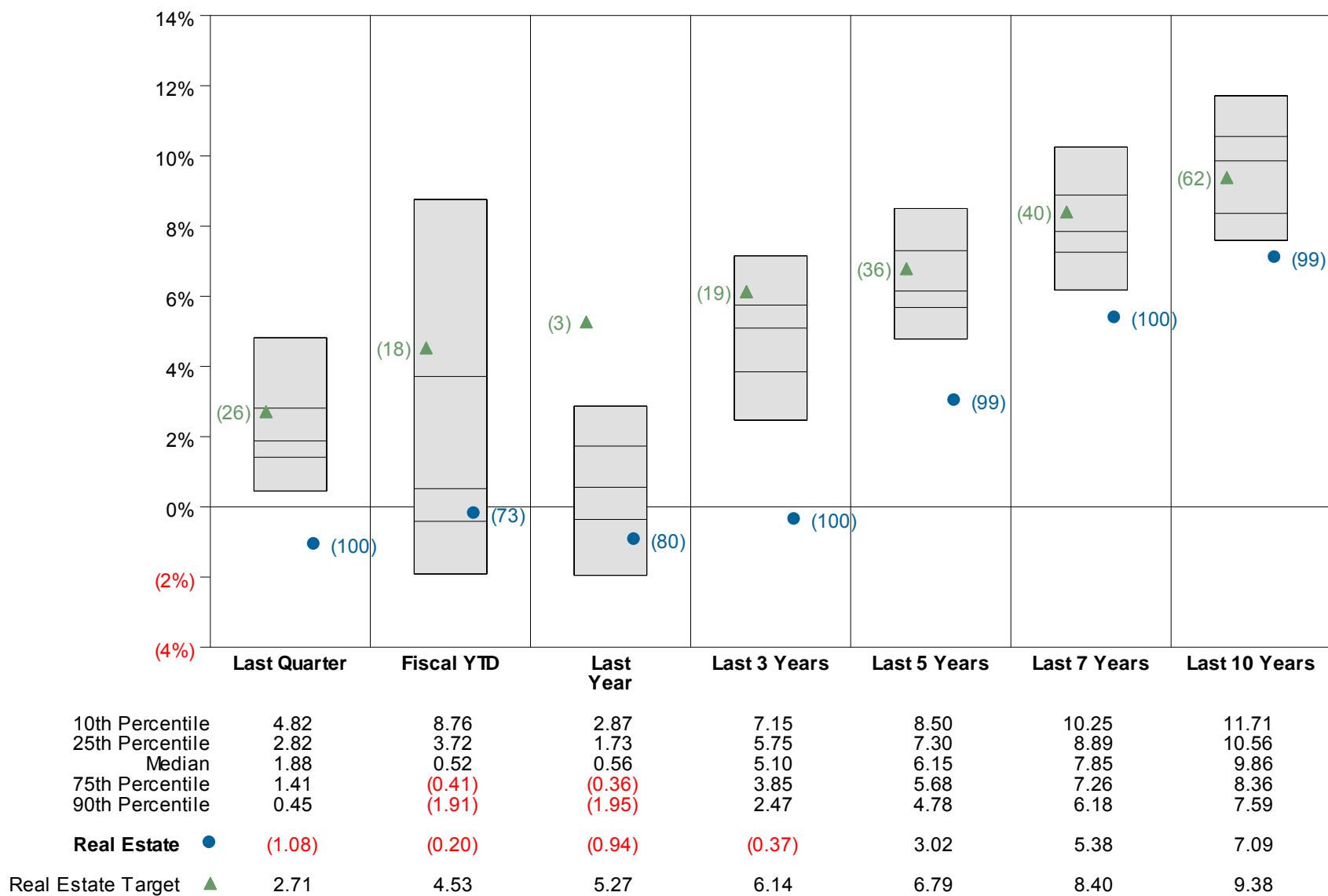


Real Estate Relative to Callan's Total Real Estate Database (1Q LAG)

Periods Ended March 31, 2021

- APFC Real Estate portfolio performance is shown net of fees for all investments.
- The real estate portfolio ended the quarter behind of its benchmark, and continued to lag and rank below the peer group median over all standard reporting periods.

Performance vs Public Fund - Real Estate (Gross)



Real Estate Performance (1Q LAG)

Periods Ended March 31, 2021

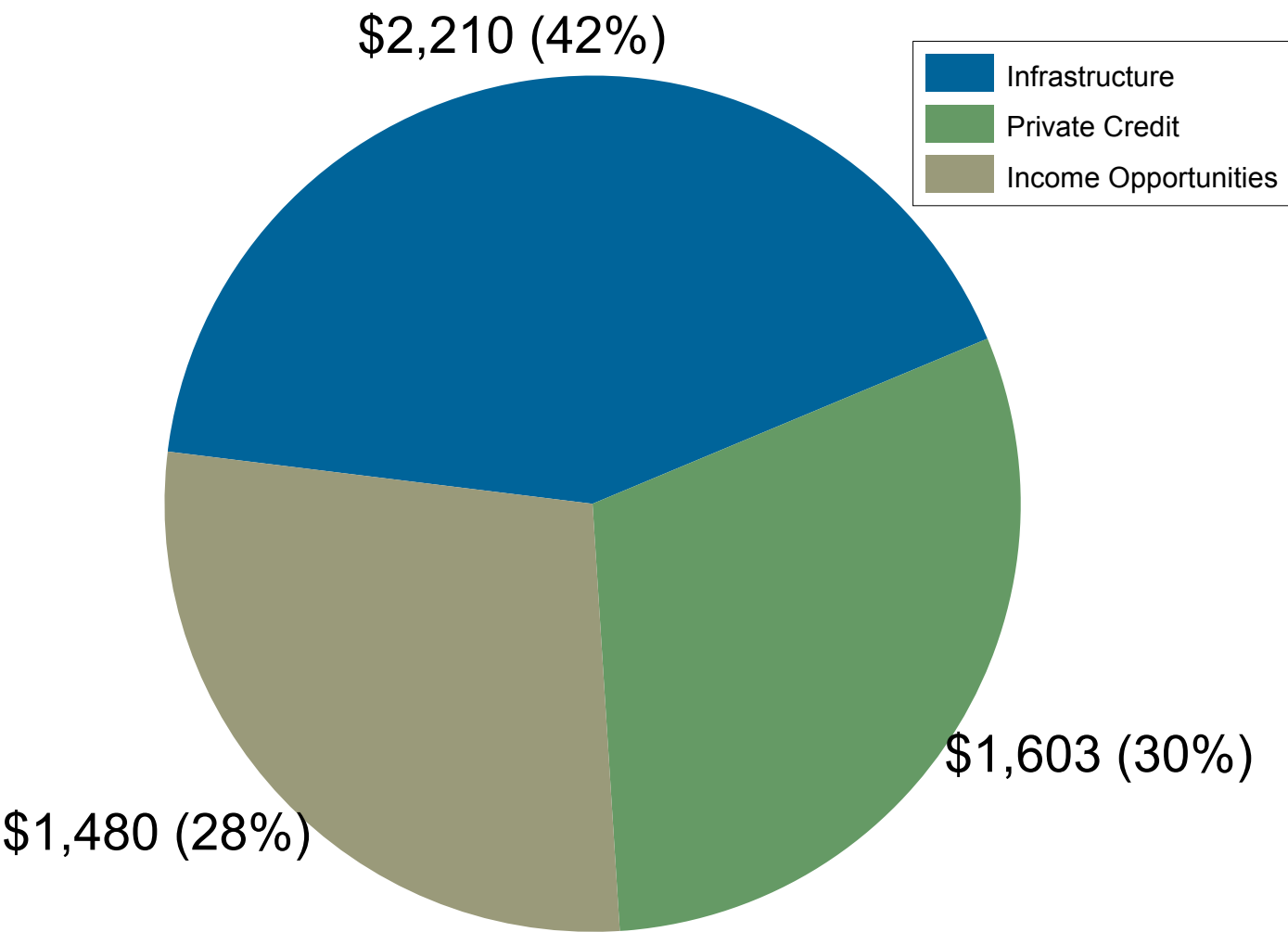
	Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
RE Equity Investments	-3.25%	-	-	-	-
RE Separate Accts & Direct	-4.10%	-8.35%	-3.01%	1.37%	6.23%
RE EQ Funds & Co-Invest	10.49%	8.98%	-	-	-
RE Debt Investments	3.12%	16.65%	-	-	-
<i>NCREIF Total Index</i>	1.15%	1.60%	4.89%	5.91%	9.00%
REITS	9.20%	-9.89%	2.30%	6.15%	6.99%
<i>MSCI US REIT Index</i>	11.52%	-7.57%	3.54%	4.84%	8.30%
Real Estate Composite	-1.08%	-0.94%	-0.37%	3.02%	7.09%
<i>Real Estate Custom</i>	2.71%	5.27%	6.14%	6.79%	9.38%

- APFC's Real Estate Equity underperformed the NCREIF benchmark while Debt Investments outperformed for the quarter. REITS fell short of its benchmark over the quarter and trailing year.
- Overall, the Real Estate Composite underperform its custom benchmark over the quarter and continued to lagged over all other periods.

APFC Private Income Structure (1Q LAG)

As of March 31, 2021

- 42% of the structure is invested in infrastructure funds, which includes a diversified portfolio of infrastructure, energy, and generation assets. Listed Infrastructure was moved into this category from Fixed Income Plus.
- 30% of the structure was invested in private credit mandates including mezzanine debt, opportunistic credit, and direct lending strategies.
- 28% of the structure was invested in income opportunities including structured credit, alternative credit, AH4R2, and timber.



Private Income Performance (1Q LAG)

As of March 31, 2021

	Quarter	Last Year	Last 3 Years	Last 5 Years
Infrastructure	6.24%	3.61%	8.72%	12.94%
Cambridge Global Private Infrastructure	7.13%	-3.82%	6.57%	9.73%
Private Credit	4.97%	5.78%	5.87%	6.95%
Cambridge Private Credit	6.31%	1.07%	4.20%	7.33%
Income Opportunities	5.15%	9.43%	7.37%	9.00%
Private Income Custom	6.80%	-1.86%	5.66%	8.81%
Private Income Composite	5.55%	5.98%	8.07%	10.79%
Private Income Custom	6.80%	-1.86%	5.66%	8.81%

- APFC's Private Income composite underperformed in the quarter, but outperformed the benchmark (60% FTSE Dev Core Infr and 40% BB US Corp HY 2%) in the 1-, 3- and 5-year periods.
- Infrastructure, Private Credit and Income Opportunities underperformed in the quarter. All sub-strategies outperformed over the trailing 1-, 3-, and 5-year periods.

Absolute Return Portfolio Relative to HFOF Universe

Periods Ended March 31, 2021

- In the first quarter, the Absolute Return portfolio continued to lag the custom benchmark.
- The portfolio ranked above or near median for most time periods.

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

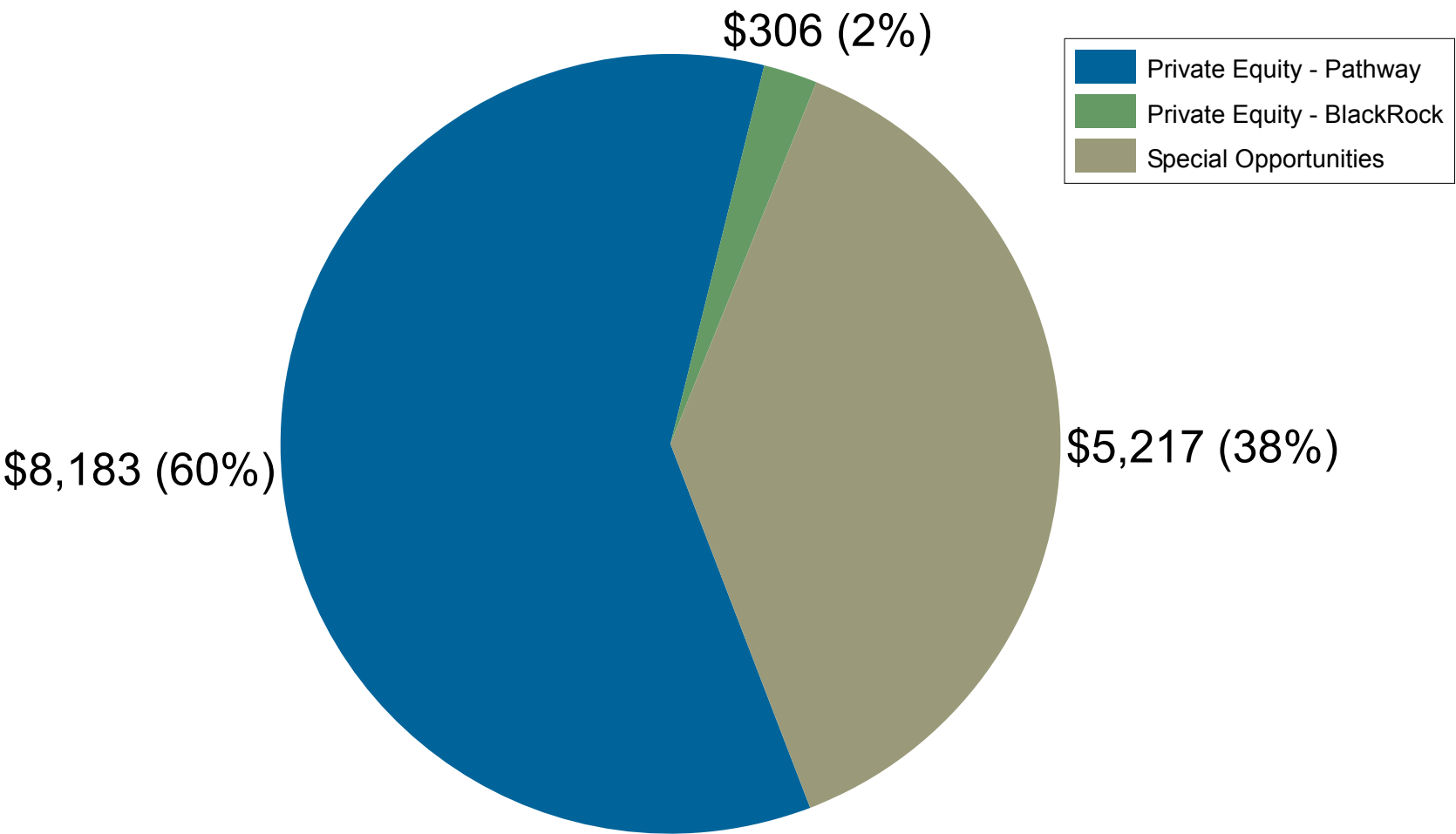


Absolute Return Benchmark is LIBOR + 4% through 6/30/13, LIBOR + 6% through 6/30/15, LIBOR + 5% through 9/30/16, and HFRI Total HFOF Universe thereafter.

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

As of March 31, 2021

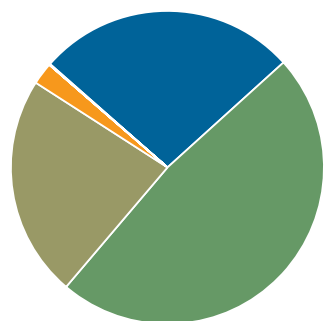
- 62% of the structure was invested in private equity.
- The legacy HarbourVest investments were transferred to Pathway for oversight management.
- The Pathway portfolio also includes direct investments overseen by Pathway.
- 38% of the structure was invested in special opportunities.



Private Equity Portfolio Positioning (1Q LAG)

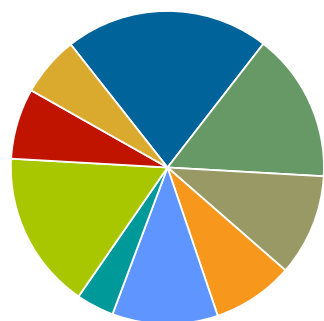
As of September 30, 2020 – *Not Yet Updated for 4Q2020*

- 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.



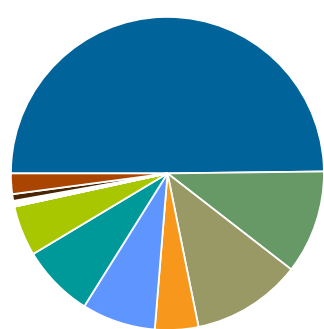
Strategy Mix by Net Asset Value

Venture Capital	26.82%
Buyout	47.87%
Special Situations	22.94%
Distressed for Control	2.25%
Secondary Interest	0.04%
Mezzanine	0.08%



Geographic Mix by Net Asset Value

West/Pacific Northwest	21.06%
North Atlantic	15.43%
Mid-West	10.50%
Southeast	8.38%
Southwest/Rockies	10.94%
Mid-Atlantic	3.85%
Europe	16.27%
Asia/Pacific	7.34%
Other	6.23%



Industry Mix by Net Asset Value

Technology	49.81%
Health Care	10.70%
Consumer Discretionary	11.28%
Energy	4.47%
Financial	7.63%
Industrials	7.46%
Communication Services	5.22%
Utilities	0.27%
Consumer Staples	0.33%
Materials	0.67%
Other/Misc	2.15%

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

As of March 31, 2021

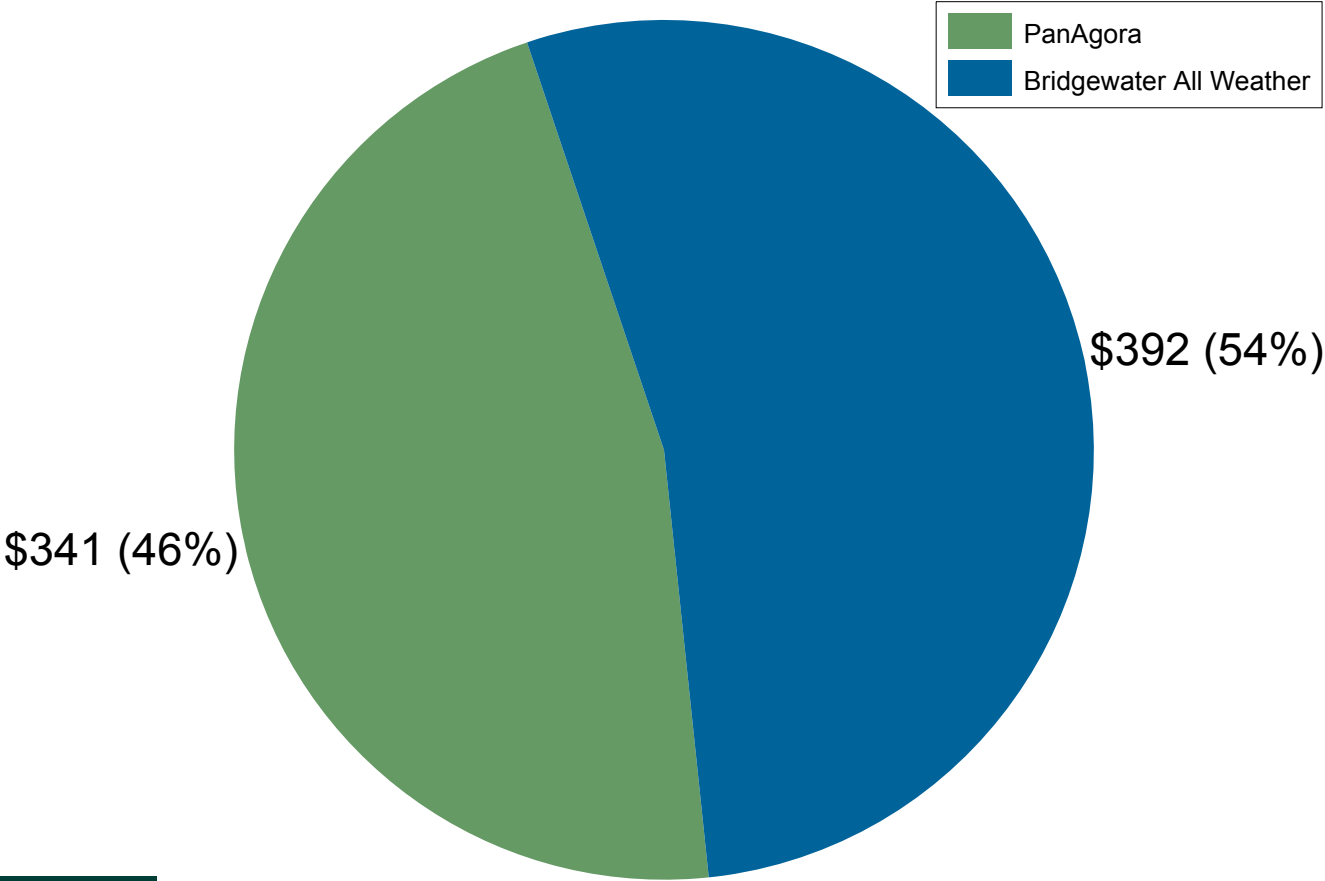
	Last Quarter	FYTD	Last Year	Last 3 Years	Last 5 Years
Private Equity and Special Opportunities	18.77	47.49	39.51	25.25	21.43
Cambridge Private Equity	17.57	42.65	31.52	18.92	17.10

- APFC’s Private Equity and Special Opportunities composite outperformed the Cambridge Private Equity benchmark over all standard time periods.
- In the last reported quarter, Private Equity was up 15.8% and Special Opportunities was up 24.2%.

APFC Risk Parity Structure and Performance

As of March 31, 2021

- Roughly \$733 million distributed across two mandates.
- Multi asset class portfolios, limited use of illiquid assets. Leverage is used to amplify the impact of asset classes and/or strategies in an effort to optimize performance vis-à-vis overall portfolio risk.
- PanAgora and Bridgewater underperformed over the quarter and trailing one year period.
- BlackRock was liquidated and reallocated to the remaining managers earlier in the year.



	Last Quarter	Last Year
PanAgora	-2.27	24.30
Bridgewater All Weather	-3.60	21.77
HFR Risk Parity Vol 12 Inst'l Idx	-1.73	25.97

Closing Remarks

- Total Fund ended the first quarter of 2021 with \$77.4 billion in assets, increasing 4.9% for the quarter. Compared with the prior year ended March 31, the Fund increased by 27.8%. The trailing quarter performance placed the Total Fund above median relative to other large public funds and large endowments/foundations.
- For the quarter, the Total Fund outperformed the Performance Benchmark, CPIU+5% return target, and the Passive Benchmark. Over the trailing year, the Total Fund outperformed the Performance Benchmark, CPIU+5% return target, but underperformed the Passive Benchmark. Over the 3-, 5-, and 10-year periods, the Fund outperformed and was ahead of all three targets.
- The Public Equity portfolio outperformed its index during the quarter. The Domestic, International, and Global Equity composites all outperformed their respective benchmarks.
- The Fixed Income portfolio lagged its benchmark over the quarter. Most sub-strategies also their benchmarks.
- In the Alternatives portfolio, Private Equity & Special Opportunities outperformed its benchmarks in the first quarter; Real Estate, Private Income and Absolute return underperformed.
- Prudent asset allocation with appropriate levels of diversification and a long-term perspective remain Callan's recommended course.

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SUBJECT: APFC Real Estate
Asset Class Update

ACTION: _____

DATE: May 19, 2021

INFORMATION: _____ X _____

BACKGROUND:

The Real Estate presentation provides portfolio updates and investment performance analysis.

STATUS:

At this meeting, staff will present key elements of the Real Estate portfolio. Staff will also discuss performance of, and provide updates on, portfolio components.



APFC

ALASKA PERMANENT
FUND CORPORATION

Real Estate Update

Tim Andreyka

May 19, 2021

Strategy Considerations & High Level Review

Executive Summary

- The Real Estate portfolio plays a unique and important role in APFC's investment portfolio – inflation-resistant cash yield that embodies characteristics of both debt and equity; lease payments, the contractual responsibilities of tenants, resemble fixed income obligations, while the property's residual value contains equity-like attributes
 - The APFC historically has pursued a strategy of holding high quality, generally Class A, properties on a direct basis
 - In recent years, the Investment team has also been active in funds; in 2018 three opportunistic funds were selected, more recently, open-ended funds and debt funds have been more of a focus
 - On July 1, 2020, APFC's Real Estate Investment Trust ("REIT") portfolio was moved from Fixed Income back to Real Estate
- APFC's Real Estate efforts in recent years have been negatively impacted by (i) sub-optimal sector positioning (overweight Retail, underweight Multi-Family), (ii) difficulty building up Multi-family and Industrial exposures given prevailing valuation environment, (iii) overall underweight to Real Estate asset class following material divestiture in 2018, and (iv) certain portfolio positions that, while appropriately-sized at ultimate 12% allocation and are not undue concentration risks for the overall Fund, are fairly large based on current sizing.
- In the course of the past year, there has been a strategic dialogue around Real Estate with the Board of Trustees, which has led to the priorities and goals that will be articulated in the following pages.
- Staff Update: On September 1, 2020, APFC's Director of Real Estate, Rose Duran, retired; Tim Andreyka stepped into the Director of Real Estate Investments role. That same day, Brian Tyler joined the team. In 2021, two new staff members, Steve Adams and Cliff Sperry were hired.

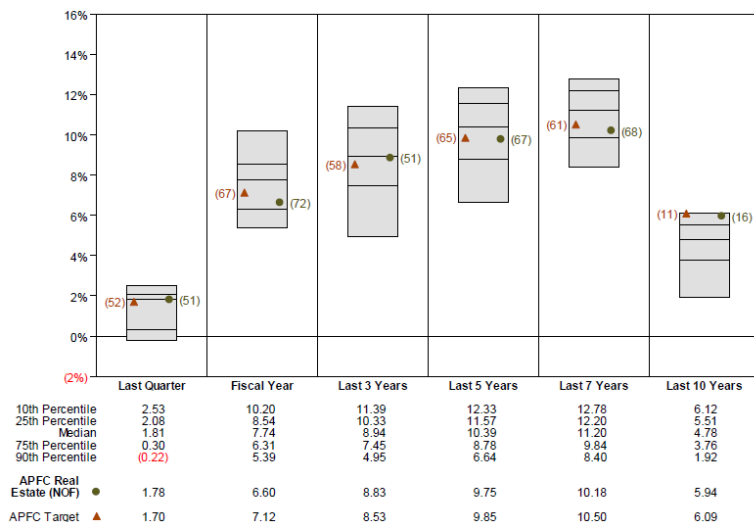
Key Strategic Considerations

- Following recent Board meetings, the following strategic considerations were identified
 1. How is the real estate staff evolving its approach in terms of investment strategy and its role in managing portfolios?
 2. Pacing / Investment schedule to arrive at ultimate 12% target allocation on a responsible timeframe (5 years contemplated in current Investment Policy)
 3. Path towards getting sector allocations closer to benchmark
 4. Evaluation of property-level concentration risk
 5. Continued dialogue around direct strategy vs. fund investment strategy
- This presentation will address current status of each of these points and will provide a general update on the APFC Real Estate portfolio and strategy

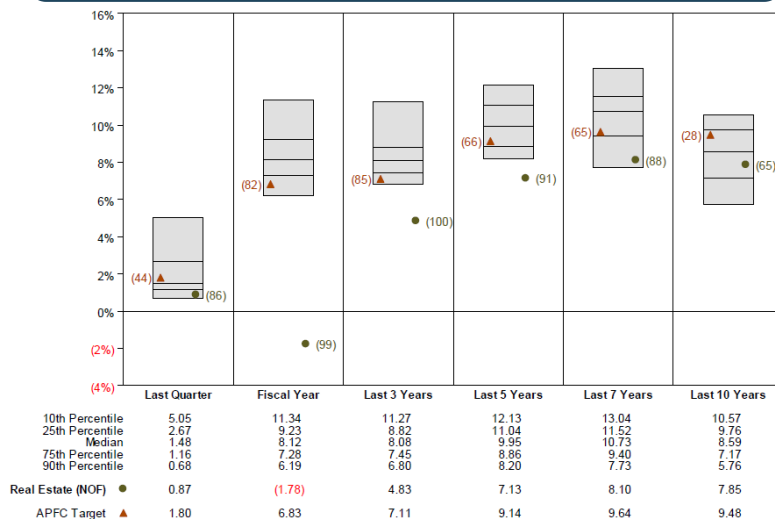
Performance Context

- Between June 2018 and June 2019, APFC's real estate performance (on a 10-year basis) dropped from near top-decile to around average; 1, 3, and 5-year returns have trended worse, however, longer-term measures are most appropriate
- In addition to sub-optimal sector mix, the Great Financial Crisis (when APFC's portfolio performed quite well, and groups focused on more private equity-style RE investing generally got hit hard) rolled out of the ten year numbers in 2019

Real Estate Callan Performance Report June 30, 2018



Real Estate Callan Performance Report June 30, 2019



1. Investment Actions Taken Since February 2020 and Evolving Approach

- Following extensive discussions around Real Estate at the December 2019 and February 2020 Board of Trustees meetings, APFC staff went to work; the investments below add additional qualified third parties who will deliver deal flow and management capabilities

(\$ in millions)

Manager	Strategy	Commitment Date	Commitment or Initial Investment	Current NAV
Kayne Anderson (KAROD)	Closed End Fund - Real Estate Debt	Mar-20	\$200	\$213
AEW	Public REIT's (70% Multi-family, 30% Industrial)	Jul-20	\$690	\$885
Mesa West Capital	Separate Account - Real Estate Debt	Jul-20	\$250	\$40
RealTerm Logistics	Open End Fund - Industrial / Logistics	Aug-20	\$100	\$65
Clarion Gables	Open End Fund - Multi-family	Jan-21	\$300	\$300
Clarion Gables (Co-Investment)	Co-Investment Vehicle - Multi-family	Jan-21	\$250	\$0
Gateway - White Plains	Direct JV - Build-to-Core Multi-family	Feb-21	\$100	\$5
The Bowery	Direct JV - Build-to-Core Multi-family	Mar-21	\$186	\$66
Heitman Expansion	Separate Account - Real Estate Debt	Apr-21	\$200	\$0
Total			\$2,276	\$1,574
Total (ex REITS)			\$1,586	\$689

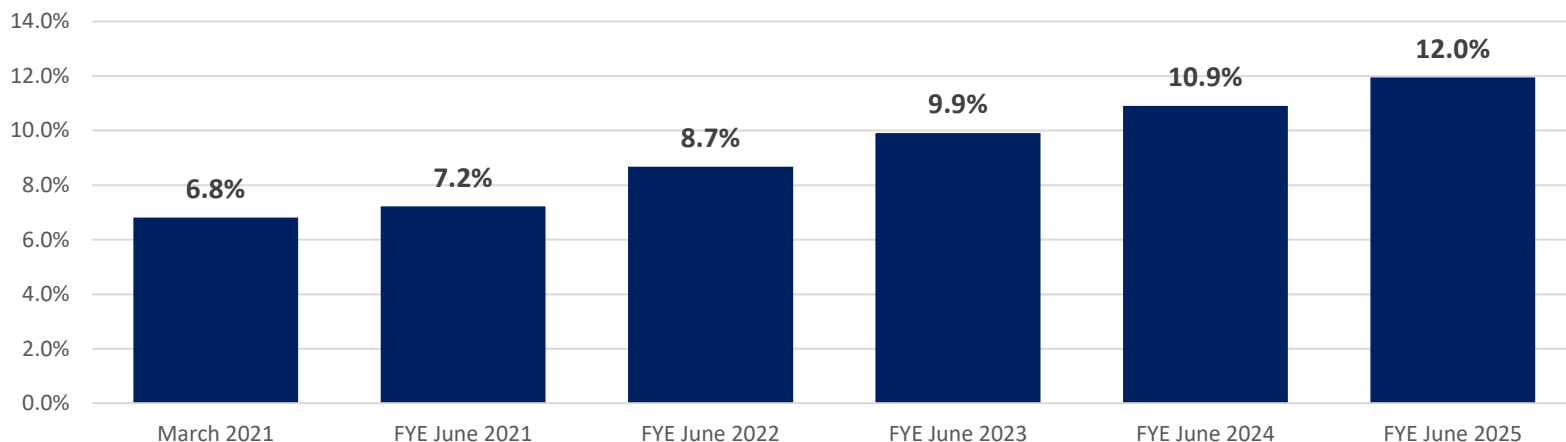
Investment mix going forward is anticipated to be a blend of REITS, open-ended funds, JV opportunities, REOC's, and directly-held property assets; APFC is continuing to grow our real estate manager relationships to assist with both new deal origination and asset management

2. Pacing / Investment Schedule to Arrive at Ultimate 12% Target Allocation

- Key Assumptions:

- REIT's maintained at 15% of total Real Estate portfolio (in-line with benchmark)
- Total APFC fund growth (net of POMV) of 2.0% annually
- NAV growth of private real estate holdings of 5.0% annually (except for retail assets)
- \$775 million annual deployment to private opportunities
- Absent changing market conditions and opportunity sets, in recognitions of lumpy nature of private real estate opportunities, Staff intends to manage Real Estate exposures close to target allocations going forward using deviations from the 15% REIT's assumption as tool to manage inevitable deviations along the way

(Real Estate Exposure as a % of Total APFC)



3. Path Towards Getting Sector Allocations Closer to Benchmark

- Key Assumptions:
 - Assumes REIT's are maintained at 15% of Total Real Estate portfolio with a 70% / 30% multi-family / industrial split on existing REIT exposures; model has future REIT deployment weighted based on MSCI US REIT index weights
 - Assumes APFC ends FY 2025 with material overweight to multi-family and underweights to office and retail; views on this tactical positioning likely will evolve over time and can be further adjusted with liquid REIT exposures

	Jan-18	Jun-20	Mar-21	Jun-21	Jun-22	Jun-23	Jun-24	Jun-25	NCREIF
Multi-family	34.0%	9.0%	28.6%	29.4%	31.1%	32.7%	33.9%	35.0%	26.0%
Industrial	5.0%	12.0%	15.0%	15.1%	16.5%	16.9%	17.2%	17.5%	18.0%
Office	26.0%	35.0%	26.1%	26.9%	28.1%	29.1%	29.8%	30.4%	35.0%
Retail	34.0%	43.0%	28.6%	26.8%	22.7%	19.8%	17.6%	15.8%	20.0%
Hotel	1.0%	1.0%	1.7%	1.7%	1.6%	1.5%	1.4%	1.3%	1.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

4. Evaluation of Property Level Concentration Risk

- At APFC's February 2020 Board of Trustees meeting, a former member of APFC's IAG presented on the Fund's Real Estate strategy noting a concern about concentration in the portfolio
 - See page 288 of 575 in the February 2020 BOT Packet
 - Quoting from the presentation: "APFC portfolio has approximately 55 assets; one of the largest core-open ended funds (over \$40 billion in assets) has more than 160 assets and the top 5 positions are approximately 17% of the portfolio" (implication was that more like 20% portfolio concentration in top 5 assets was more appropriate)
- As indicated in the table to the right, growth in the overall real estate portfolio as we build back up to 12% total allocation and replace multi-family exposure that was divested in 2018 with new assets will bring concentration (as measured by top 5 assets as a % of the portfolio) within reasonable levels
- Given the recent emphasis on fund investments, we expect that the # of underlying properties in the portfolio will start converging up to the 160 level recommended by this presentation
- The NAV of the largest position in the portfolio (a retail center in Washington DC metro area) represents a 1.0% exposure of the overall Fund; a level that APFC's Chief Investment Officer is comfortable with from a total fund perspective

APFC Real Estate Portfolio – Concentration Analysis

(\$ in millions)

Top 10 Assets Held in APFC's Name Through Separate Accounts

Asset	Sector	City	APFC NAV
Asset #1	Retail	Washington D.C.	\$759
Asset #2	Office	New York, NY	\$359
Asset #3	Office, Multifamily	White Plains, NY	\$144
Asset #4	Office	Redwood City, CA	\$132
Asset #5	Retail	Chicago, IL	\$128
Asset #6	Retail	New York, NY	\$119
Asset #7	Industrial	Orlando, FL	\$109
Asset #8	Medical Office	Houston, TX	\$102
Asset #9	Office	Denver, CO	\$95
Asset #10	Multifamily	Washington D.C.	\$84

Concentration Analysis

Total Real Estate Portfolio NAV (2/5/21)	\$5,248
Top 5 Assets as a % of Total Current Real Estate Portfolio	29.0%
Top 10 Assets as a % of Total Current Real Estate Portfolio	38.7%

Total Real Estate Portfolio NAV - at 12% of Current APFC Fund Value	\$9,486
Top 5 Assets as a % of Total Current Real Estate Portfolio	16.0%
Top 10 Assets as a % of Total Current Real Estate Portfolio	21.4%

Total Real Estate Portfolio NAV - at 12% of 2025 APFC Fund Value ⁽¹⁾	\$10,267
Top 5 Assets as a % of Total Current Real Estate Portfolio	14.8%
Top 10 Assets as a % of Total Current Real Estate Portfolio	19.8%

1. Assumes Fund value grows at 2% annually (roughly consistent with CPI + 5% returns coupled with ~5% POMV draw).

5. Continued Dialogue Around Direct Strategy vs. Fund Investment Strategy

- Given staffing and resource constraints, Staff acknowledges the strategic importance of a continued dialogue around deploying capital via fund investments vs. directly-held property investments
- There have been a wide range of viewpoints expressed about what is “typical” deployment strategy for large institutional allocators; however, Staff continues to believe that APFC’s peer plans most closely resembling APFC in size and sophistication are focusing on increasing their direct real estate exposure; plans in this cadre of peers include Washington State Investment Board, CalSTRS, and Florida State Board of Administration (among others)
- Nonetheless, we believe that a mix of funds, REITs, and direct holdings make sense and, as indicated in point #1 from a prior page, most recent activity has been on the fund and REITs side for APFC
- Summary of investment approaches to gain real estate exposure for APFC going forward
 - Directly-held property assets advised and managed in a separate account structure
 - Directly-held property assets managed directly by APFC Staff (with assistance from on-the-ground property management and leasing from third parties)
 - Open-ended Real Estate Funds
 - Closed-ended Private Equity-Style Real Estate Funds (3 commitments made historically, not focus going forward)
 - Closed-ended Funds and Separate Accounts targeting debt opportunities in real estate
 - Publicly-traded Real Estate Investment Trusts (“REITs”) (15% of benchmark going forward)
 - Joint Ventures and/or REOC investments

Vision for the Portfolio / Asset Class Going Forward

- In the current environment where market yields are greatly reduced and the prospective achievement of CPI + 5% total fund returns are as challenging as ever, the role for a conservatively-constructed, high quality real estate portfolio is as important as ever
 - With market cap rates today around 4-5% and rents generally adjusting for inflation, private real estate remains one of the most pure ways an investor can earn a CPI + 5% return
 - Based on portfolio role, primary focus is on “core” properties that provide inflation-protected yield; in the realm of funds, generally speaking, open-ended funds are preferred over private equity-style draw-down funds to provide this desired steady cash flow and to rely less on capital gains in favor of regularized cash flow returns
- We recognize that as a predominantly private market asset class, the portfolio can’t be repositioned on an immediate basis (as one could with a liquid asset class) and there is value to vintage year diversification; therefore between now and 2025 Staff will progressively:
 1. Build up to a 12% allocation of the total fund for real estate
 2. Address sector diversification issues by allocating primarily to multi-family and industrial sector opportunities
 3. Reduce exposure to retail to benchmark weight and reduce outsized individual exposures as a % of the total real estate portfolio by growing the portfolio in areas that are currently underweight

Vision for the Portfolio / Asset Class Going Forward (continued)

- Tactics

1. Recognizing APFC's limited staffing resources, we will continue to rely on third-party managers to assist with deal origination, due diligence and post-closing asset management on most properties, but while retaining Staff's "finger on the pulse" of the portfolio by responsibly monitoring this work
2. In spite of #1, Staff will continue to invest in internal capabilities including ability to handle asset management directly on certain of the less complex portfolio assets

- Structures

- Staff has been working to expand from the historical predominant approach in the portfolio of relying on third party separate account managers with third party on-the-ground property management and leasing agents
- In 2017, Heitman was hired to originate and manage real estate debt opportunities in a \$100 million mandate that has now been expanded to \$300 million and adjusted to include construction lending
- In 2018, RCLCO was hired as our first real estate asset class consultant
- In 2018, APFC committed ~\$500 million to three opportunistic private equity-style real estate funds
- In 2020, Staff closed two material opportunistic debt investments (Mesa West and Kayne Anderson) and engaged with RCLCO around searches for open-ended private funds focused on both industrial and multi-family markets
- REIT's were added back into Real Estate on July 1, 2020 with the focus shifted to Industrial and Multi-family
- Other potential structures going forward that leverage third-party capabilities include JV Platforms and REOC opportunities

Market Environment & Current Initiatives

APFC Real Estate – Current Initiatives and Focus Areas

Current Focus Areas

Management of Existing Portfolio

- Consider portfolio leverage options
- Retail and office leasing environment
- Directly-managed properties

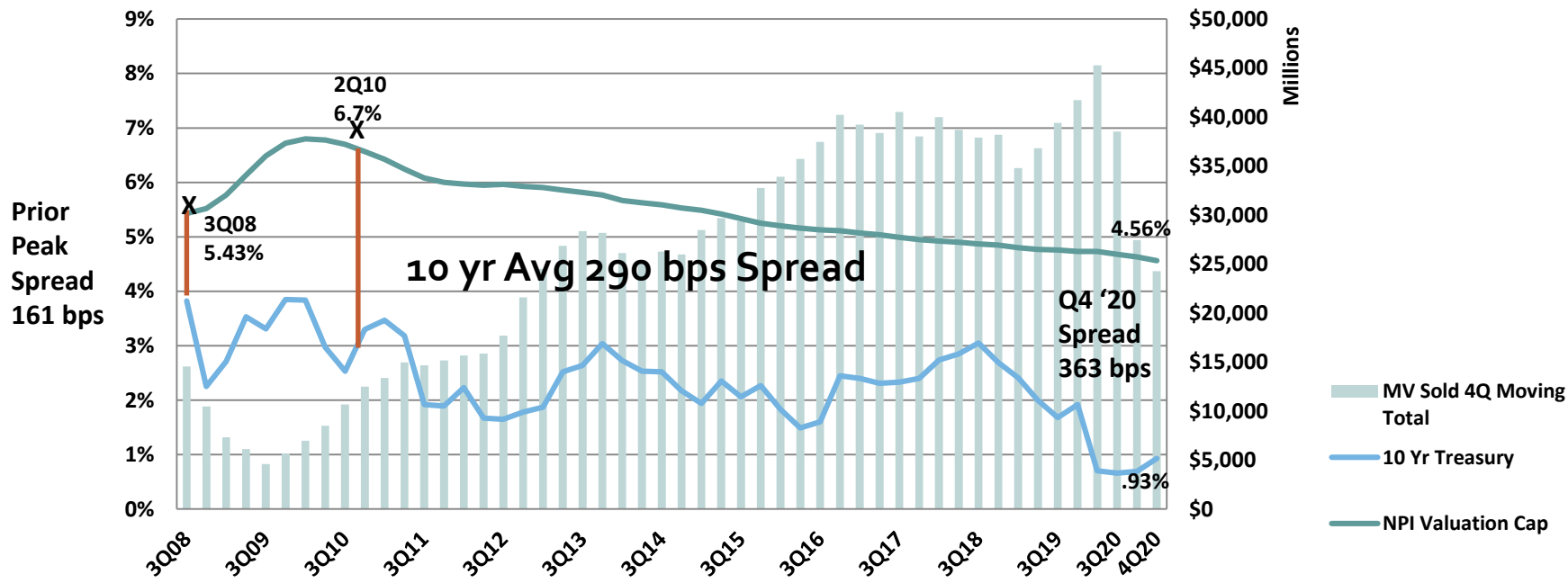
Capital Deployment

- Construction lending
- Multi-family
 - Build-to-core
 - Value add manager search
 - Workforce housing
- Industrial
 - Build-to-core manager search
 - Stabilized properties

Issues & Considerations

- Retail and office leasing environment – what will the impact of a strong post-COVID re-opening be?
- Extremely competitive acquisition environment – particularly for stabilized properties in strong sectors
- Impact of movements in market rates (10-year treasury yields and market cap rates)

Interest Rate Environment – Cap Rates vs. 10 Year Treasury Yield



Source: NCREIF, Treasury.gov

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ALASKA PERMANENT FUND CORPORATION

Investment Theme Case Study – Construction Debt

- Subject property is an eight story off campus student housing development with 865 bed
- Located immediately off campus at **one of the nation's premier and largest state University campuses**, which itself is located in one of America's cities with the best growth trends and demographics
- APFC's investment sourced (and will be managed) by one of our three external Real Estate debt managers (two added within the last 12 months) and **features a ~12.5% base case IRR to APFC** (~6.5% unlevered return before effect of <2% cost of capital subscription debt)
- Attractive capital at-risk vs. project market value
 - 70% Loan-to-Cost on base case construction budget
 - Loan value-at-risk of ~\$88,000 / bed vs. sales comps at \$150-200K / bed
- Experienced developer in sub-market
 - Sixth major student housing development by this developer in the subject sub-market
 - Developer headquartered a quarter mile from subject property

(\$ in millions)

	%	\$
Sources		
Loan	70%	\$76.3
APFC Equity	28%	\$30.5
Subline Financing	42%	\$45.8
Sponsor Cash Equity	30%	\$32.7
Total Sources	100%	\$109.0

Uses		
Land Acquisition Costs	24%	\$26.2
Hard Costs	56%	\$61.1
Soft Costs	7%	\$8.1
Interest Reserve	3%	\$3.2
Tax Reserve	2%	\$1.7
Development Fee	3%	\$2.8
Construction Mgmt Fee	1%	\$0.9
FF&E	3%	\$3.3
Financing Closing Costs	1%	\$0.8
Loan Fee	1%	\$0.8
Total Uses	100%	\$109.0

Investment Theme Case Study – *Multi-family Build-to-Core*

- Subject property is a 295-unit, 42-story high-rise multi-family project in a situation where APFC will be co-investing with our new open-ended multi-family manager, Clarion Gables
- Located in one of the last viable development sites downtown in a growing city that has benefitted from migration trends both during COVID and over the prior several years
- Investment **features a return on cost of ~5.75% vs. estimated cap rates for stabilized product of 3.75% - 4.25%**
 - Combination of attractive going in cap rate, plus rent growth, plus impact of leverage results in a base case IRR in the teens
- Margin of safety inherent in 25-30% “profit margin” on construction; **similar property in same sub-market leased up during COVID at higher rents than assumed in model**
- APFC expects to see many similar opportunities to co-invest with Clarion Gables going forward

(\$ in millions)

	%	\$
<u>Sources</u>		
Loan	60%	\$102.3
Equity	40%	\$68.2
Total Sources	100%	\$170.5

<u>Uses</u>		
Land	13%	\$23.0
Residential Construction Costs	59%	\$101.1
Construction Management Fee	1%	\$1.0
General Contractor Fees	2%	\$4.0
Impact Fees	1%	\$1.8
Soft Costs	23%	\$39.5
Total Uses	100%	\$170.5

Portfolio Update & Summary

Real Estate Portfolio Overview for 4Q20 – Directly-held Assets

December 31, 2020	Market Value \$(mm)	% of Fund
Private Real Estate	\$3,411	
Debt Investments	\$253	
Fund Investments	\$281	
REITs	\$776	
TOTAL REAL ESTATE PORTFOLIO	\$4,722	6%

Real Estate Allocation \$8,870 12%

Portfolio Composition	APFC	NCREIF
HOTEL	2%	1%
INDUSTRIAL	13%	21%
MULTI-FAMILY	9%	25%
OFFICE	36%	35%
RETAIL	40%	18%
	100%	100%

Note: Portfolio weightings do not include Fund Investments

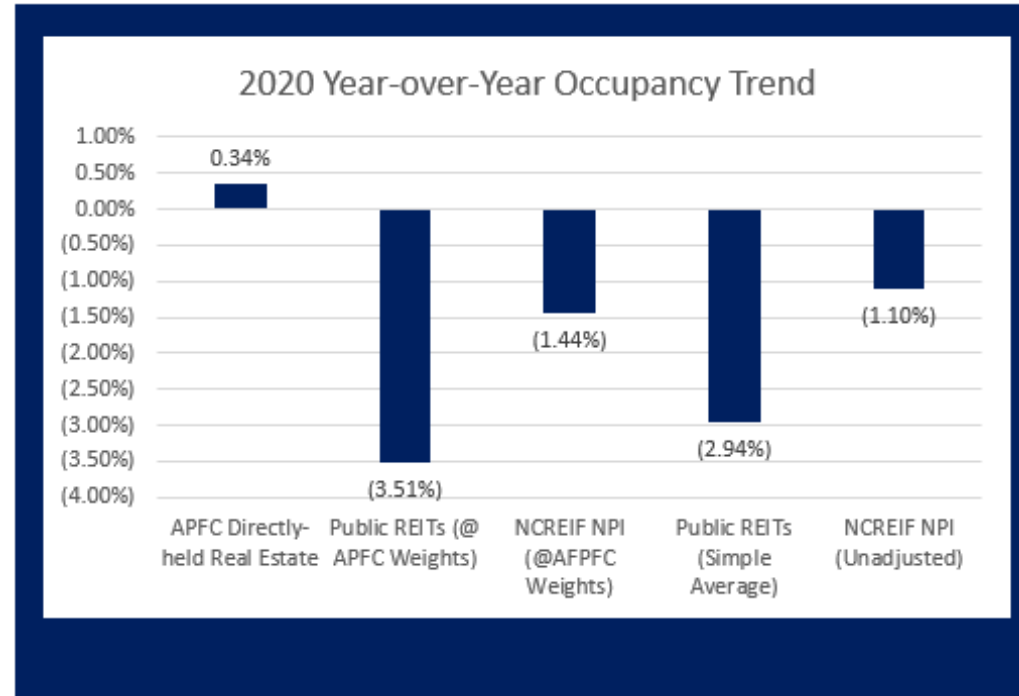
Recent Investment Activity in Real Estate

(\$ in millions)

Investment Name	Investment Type	Commitment or Initial Investment	Investment Date	Invested	Net Returns			
					Distributed	Current NAV	IRR	MOIC
HIG Europe RE II	Comingled Opportunistic Fund	\$100	Jul-18	\$46	\$16	\$39	17.36%	1.2x
Harbert Europe RE V	Comingled Opportunistic Fund	\$100	Sep-18	\$56	\$2	\$61	10.57%	1.1x
Heitman Debt	Debt - Separate Account	\$300	Sep-18	\$51	\$7	\$51	6.74%	1.1x
Brookfield RE II	Comingled Opportunistic Fund	\$300	Apr-19	\$173	\$10	\$175	5.48%	1.1x
Lincoln Inland Empire	Industrial Separate Account	\$105	May-19	\$105	\$59	\$65	17.09%	1.2x
KAROD	Closed End Debt Fund	\$200	Apr-20	\$207	\$17	\$213	15.35%	1.1x
REITs (AEW)	Public REITs (70% Multifamily, 30% Industrial)	\$690	Jul-20	\$691	\$0	\$844	31.56%	1.2x
Realterm	Open End Industrial Fund	\$100	Dec-20	\$64	\$0	\$65	8.57%	1.0x
Clarion Gables	Open End Multifamily Fund	\$300	Jan-21	\$300	\$0	\$300	0.00%	1.0x
Mesa West	Debt - Separate Account	\$250	Feb-21	\$40	\$0	\$40	0.00%	1.0x
GS White Plains	Direct JV - Build-to-Core Multifamily	\$100	Feb-21	\$1	\$0	\$1	0.00%	1.0x
GS Bowery	Direct JV - Build-to-Core Multifamily	\$186	Mar-21	\$69	\$0	\$69	0.00%	1.0x
Total		\$2,731		\$1,804	\$110	\$1,923	17.59%	1.1x
Total (ex REITs)		\$2,041		\$1,113	\$110	\$1,079	9.62%	1.1x

Real Estate Occupancy

- For the calendar year end, 1.8 million square feet of new and renewal leases were executed.
- As of 12/31/20, leases for over 2 million square feet were in active negotiations.



Private Real Estate Portfolio Debt Maturities

Debt Maturities							
	LTV	2020 (mm)	2021 (mm)	2022 (mm)	2023 (mm)	2024+ (mm)	Totals (mm)
Multi-Family	31.5%	\$0.0	\$0.0	\$55.0	\$0.0	\$76.4	\$131.4
Retail	41.8%	\$0.0	\$79.8	\$0.0	\$81.7	\$829.7	\$991.3
Office	34.9%	\$0.0	\$14.7	\$0.0	\$110.1	\$538.2	\$663.0
Industrial	23.3%	\$0.0	\$0.0	\$9.7	\$30.3	\$95.8	\$135.8
Total Debt:	36.0%	\$0.0	\$94.6	\$64.7	\$222.1	\$1,540.1	\$1,921.5
% of Total Debt		0.0%	4.9%	3.4%	11.6%	80.2%	100%
Weighted Average Interest		0.0%	2.9%	3.4%	3.9%	4.1%	4.0%

Note: Portfolio level limit of 40% LTV

SUBJECT: Real Estate External Manager Presentation ACTION: _____
Heitman Capital

DATE: May 19, 2021 INFORMATION: _____X

BACKGROUND:

Heitman Capital, external manager of several properties varied across sectors as well as a debt SMA for APFC, will present an overview of the real estate market outlook in a post-COVID environment. Heitman will discuss changes in sector trends, outlooks, and implications for real estate investment opportunities.

Biographies of Presenters:

Mary Ludgin (*Head of Global Investment Research, Heitman Capital*)

Mary Ludgin is Heitman's Head of Global Investment Research. She is a partner of the firm and sits on its global management, investment, and valuation committees. She holds an AB from Vassar College and an MA and Ph.D. from Northwestern University.

Mary was a Global Trustee of the Urban Land Institute and she chaired ULI's Chicago District Council. She Chairs the board of ULI's Center for Sustainability and Economic Performance. She served as Chair of the Pension Real Estate Association, President of the National Council of Real Estate Investment Fiduciaries, and President of the Real Estate Research Institute. Mary is a fellow of the Homer Hoyt Institute for Real Estate Research and a member of LAI, the honorary real estate society.

In 2019, Mary recieved the Pension Real Estate Association's James A. Graaskamp award, which recognizes researchers whose work contributes to the common body of knowledge regarding real estate investment.

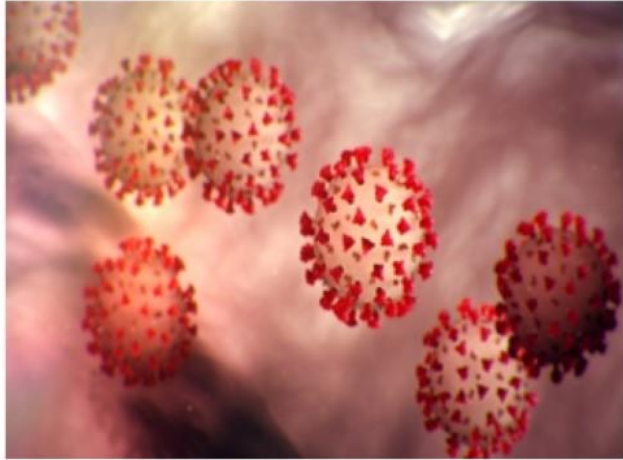


Real Estate in the Post-COVID Era

Mary Ludgin, Heitman Presentation for APFC May 19, 2021

2020 Was A Year Like No Other: Coping With Disease, Recession, Politics, WFH, and Mother Nature

HEITMAN



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US economy positioned for strong rebound in GDP helped by stimulus, vaccine, and pent-up demand but job growth will recover more slowly, with leaders and laggards

Property operations **surprisingly steady given the severity of the public health crisis and economic downturn**; retail, hospitality, and senior housing are exceptions

Property fundamentals are **being reset in some sectors while prospects in others, after a brief pause, continue along their previous trend lines**

Liquidity, available credit, and price discovery exist in some, but far from all, real estate sectors and segments

A still-low interest-rate environment and a search for yield are **positives for real estate investment demand and real estate values**

Pre-Covid secular and structural changes are being reinforced; **investor perspectives/portfolios need to evolve in response**

HEITMAN

	3-Mo LIBOR	10-Yr Treasury Yield	CPI Y/Y	GDP Y/Y	Unemployment Rate
# of Estimates	36	55	47	57	48
Low	0.05%	1.00%	18.0%	2.30%	3.90%
High	0.80%	2.50%	3.20%	8.15%	6.00%
Consensus(Avg)	0.27%	1.85%	2.60%	6.45%	4.78%
Current Value	0.18%	1.63%	2.60%	-2.40%	6.00%

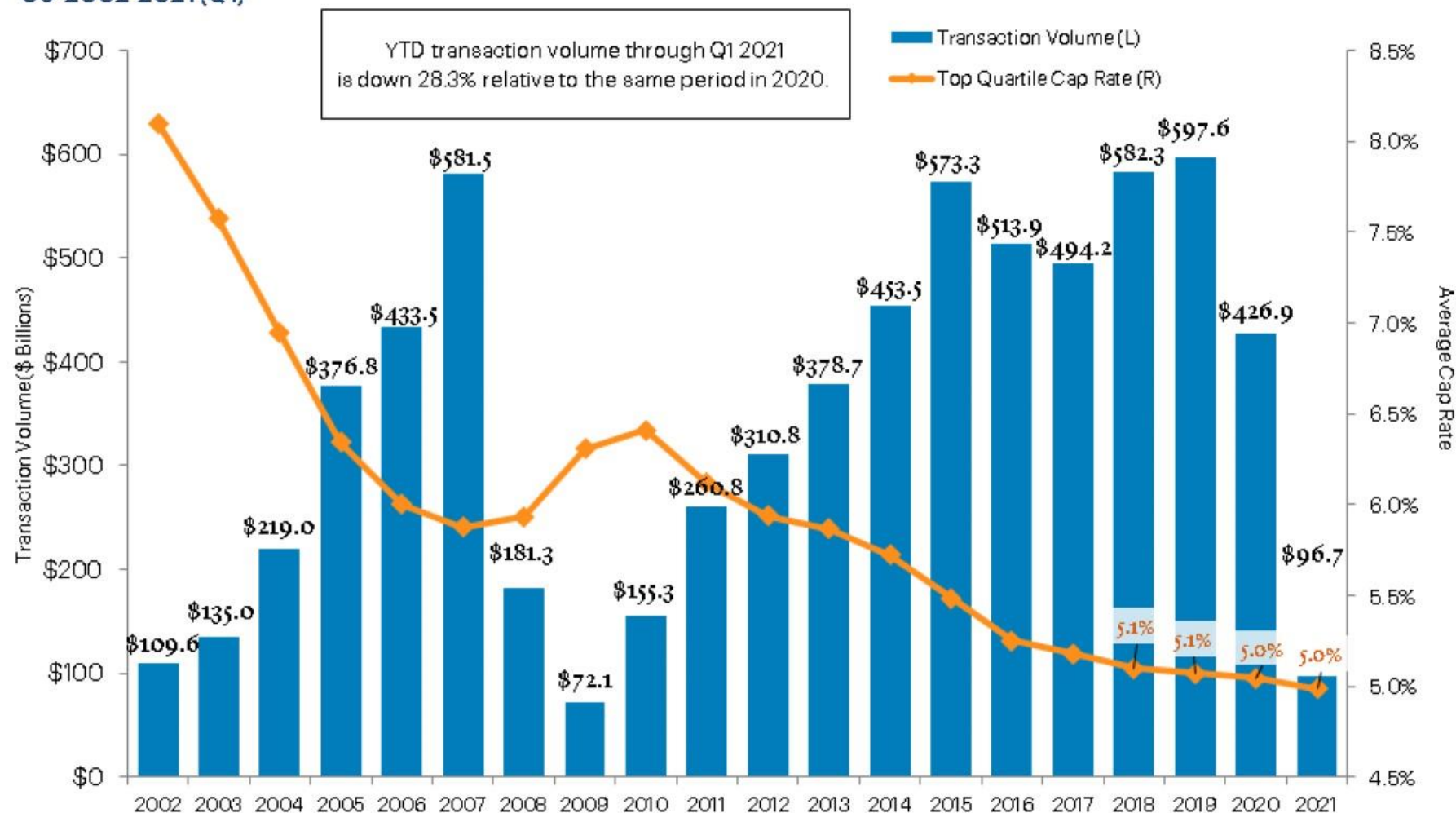
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Transaction Activity Down In a Binary Market, But...

HEITMAN

ALL PROPERTY TYPE TRANSACTION VOLUME AND TOP QUARTILE CAP RATES
US 2002-2021(Q1)



Source: Real Capital Analytics; Heitman Research

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Commercial Real Estate Risk Spreads

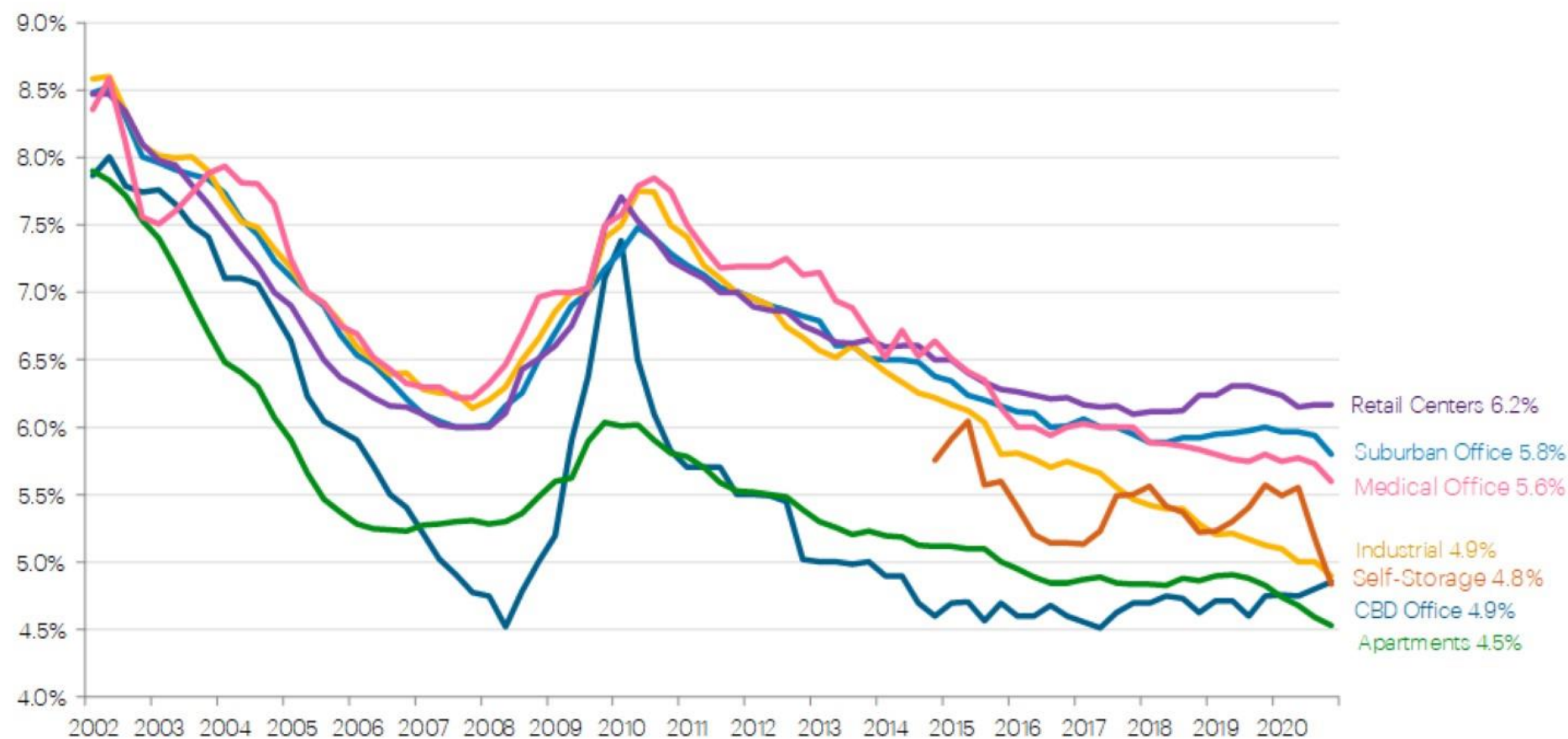
	Unlevered Return Expectation	10-Yr Treasury Bonds	REIT Implied Cap Rates	Corp. Baa Bond Index	Corp. High Yield Bond Index
January	6.0%	1.1%	5.7%	3.3%	4.4%
February	6.0%	1.3%	5.4%	3.6%	4.4%
<u>March</u>	<u>6.2%</u>	<u>1.6%</u>	<u>5.2%</u>	<u>3.7%</u>	<u>4.4%</u>
2021Q AVG	6.1%	1.3%	5.4%	3.5%	4.4%
2021Q1		4.75%	0.63%	2.53%	1.67%
Long-Term Average		4.08%	0.69%	1.68%	-0.75%
Standard Deviation		0.86%	0.56%	0.72%	1.42%
Z-Score		0.78	(0.10)	1.18	1.70

Source: Green Street; Heitman Research

Cap Rate Trends Show Divergence Between In-Favour and Out-of-Favour Sectors

HEITMAN

**TOP QUARTILE CAP RATES BY PROPERTY TYPE
US 2002-2021 (Q1)**



Source: Real Capital Analytics; Heitman Research



















Source: Real Capital Analytics; Heitman Research

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Debt Availability – A Shifting Landscape

HEITMAN

LENDER APPETITE

Property Type	Pre-COVID	Post-COVID	Comments
Multifamily			Lowest pricing, high liquidity
Industrial			Lowest pricing, high liquidity
Office			Uncertainty in underwriting
Retail			Out of favor, liquidity and value concerns
<i>Non-Traditional</i>			
Self-Storage			Stabilized assets preferred
Senior + Student			Fallout from COVID ongoing
Medical Office			Strong pricing, re-entry of more lenders
Single Family Rental			Increased inquiry from lenders
Hospitality			COVID correction still playing out

The Triumph of Technology Has Been on Display During the Pandemic

HEITMAN



How will
15-18 months of
tele-everything
change our
spatial behaviors?

No Empirical Evidence For Permanent Mass Exodus From Cities

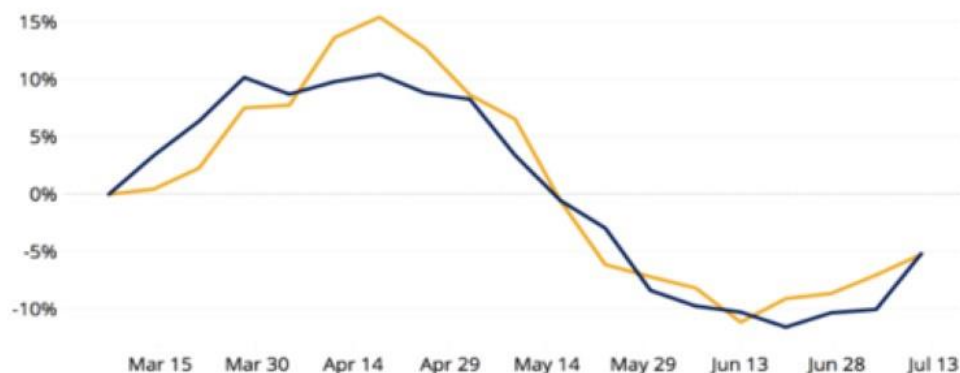
HEITMAN



COVID impact

- Pandemic moves skewed to higher-income cohorts
- Some moves temporary relocation to a second home, Mom & Dad's house
- Others are permanent, but just expediting a planned move
- No empirical evidence of widespread urban exodus
- Mostly about normal move outs/fewer move ins to big cities
- Most people leaving big cities moving to...other big cities

Change in YoY Share of Sales Sold Above the List Price, by **urban** and **suburban** ZIP codes

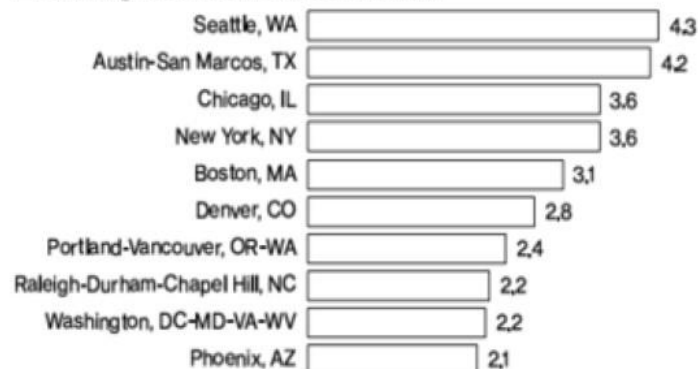


Source: New York Times; Zillow; United Van Lines; Heitman Research

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Moving Out of San Francisco

□ Percentage total moves out of San Francisco



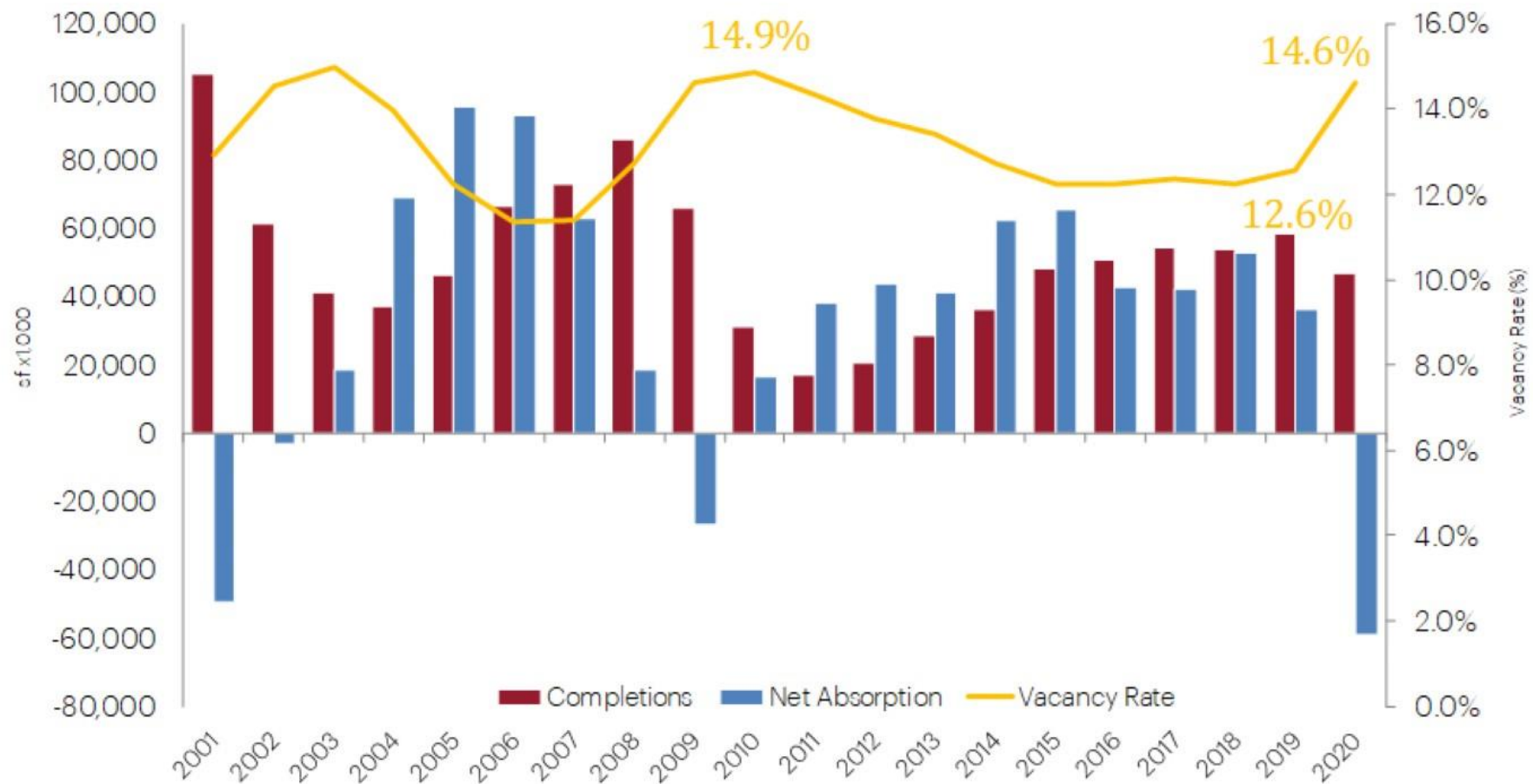
Source: United Van Lines

Note: Numbers are interest in moving, which is the number of people requesting a quote to move out of a specific location

2020 Was a Difficult Year for Office

HEITMAN

OFFICE COMPLETIONS, NET ABSORPTION, AND VACANCY
US 2001-2020 (YEARS ENDING Q4)



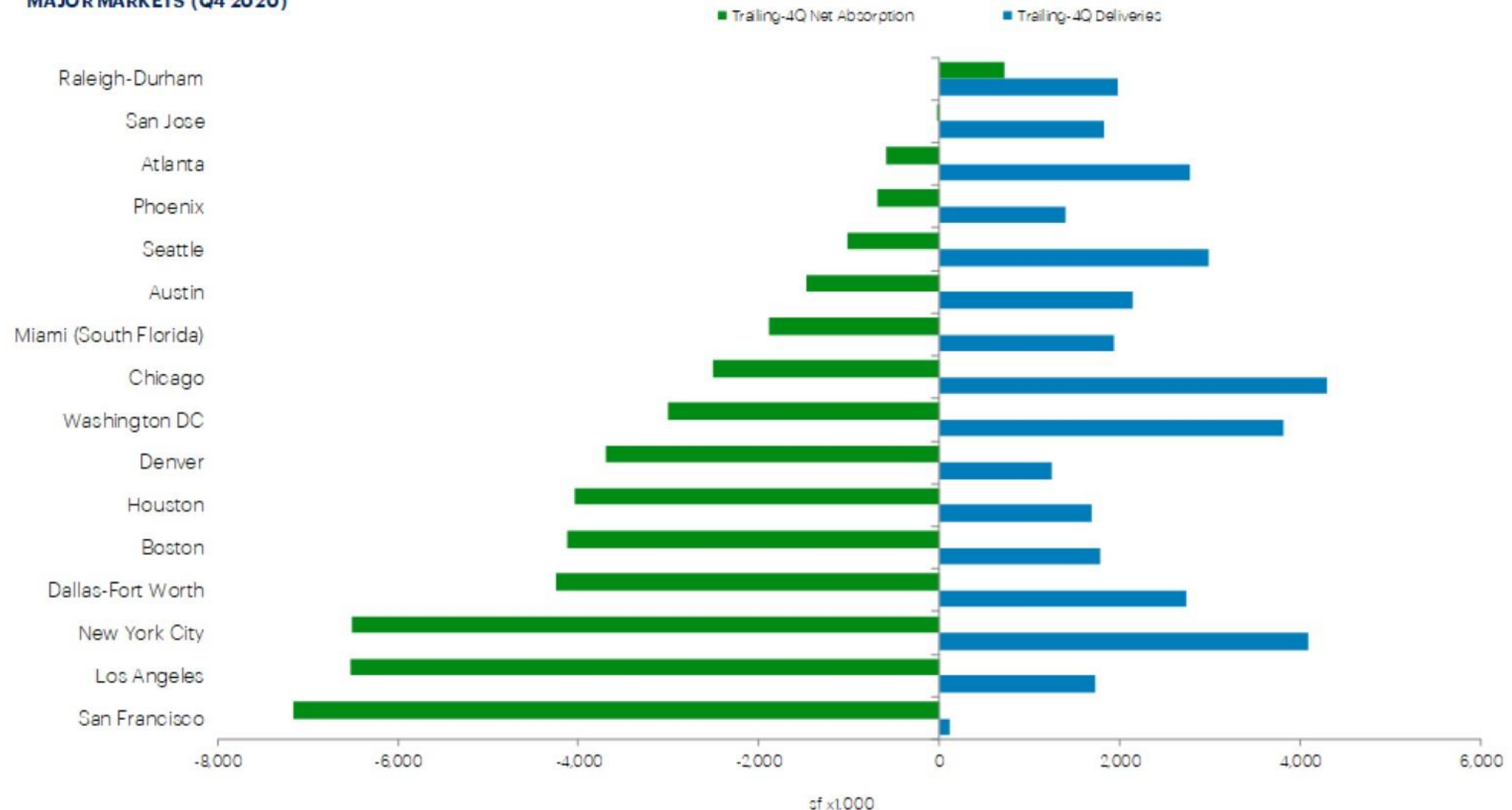
Source: CoStar; Heitman Research

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Pandemic, Office Space Give Backs Coincided with Significant Deliveries of New Office Space

HEITMAN

OFFICE NET ABSORPTION VS. DELIVERIES MAJOR MARKETS (Q4 2020)



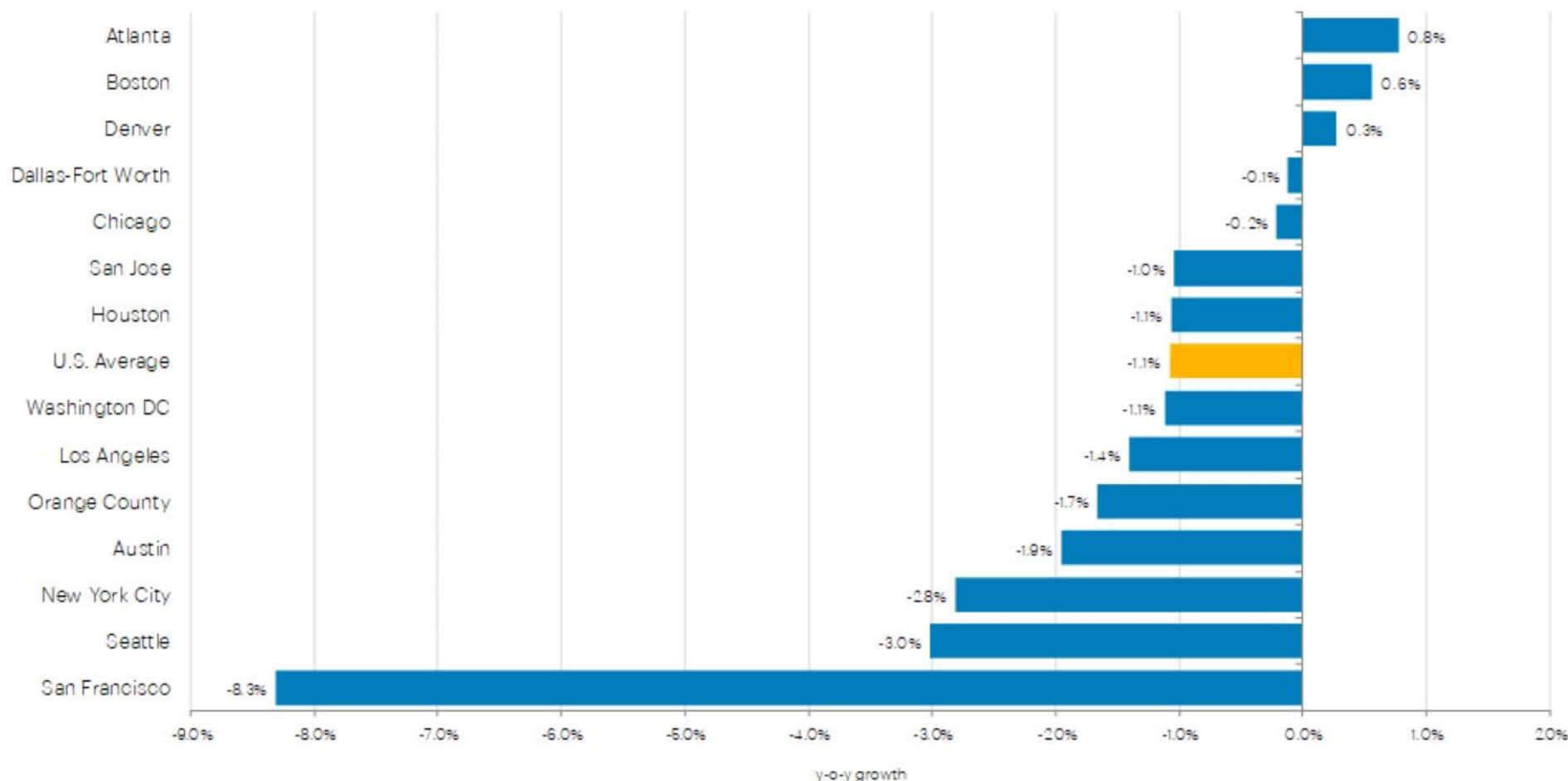
Source: CoStar; Heitman Research

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Asking Rents Declined Nationally, But Rate Varied

HEITMAN

OFFICE AVERAGE ASKING RENT GROWTH
MAJOR MARKETS (2020 Q4)

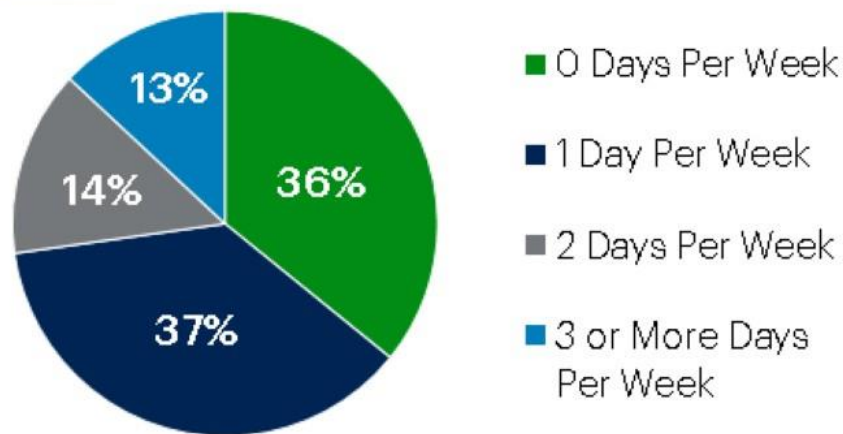


Source: CoStar, Heitman Research

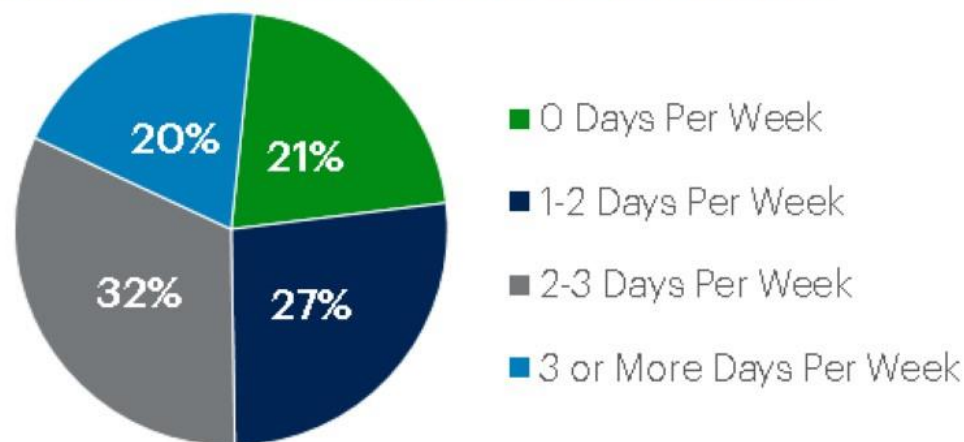
Office: Clarity Yet to Emerge on How Much Space We Need

HEITMAN

Prior to the COVID-19 outbreak, approximately how many days did you work from home?



Once it is deemed generally safe to return to normal work activities, how many days would you like to work from home?



Source: JLL; Heitman Research

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Market Fundamentals

- Countervailing forces: working-from-home (WFH) success versus de-densification
- Sublease spikes to all-time high; tech markets fare the worst
- 2020 demand was the worst this Millennium
- Space givebacks are widespread
- Construction activity poised to fall
- Asking rates down in most markets but rate of decline highly variable
- Co-working likely to survive under new business models

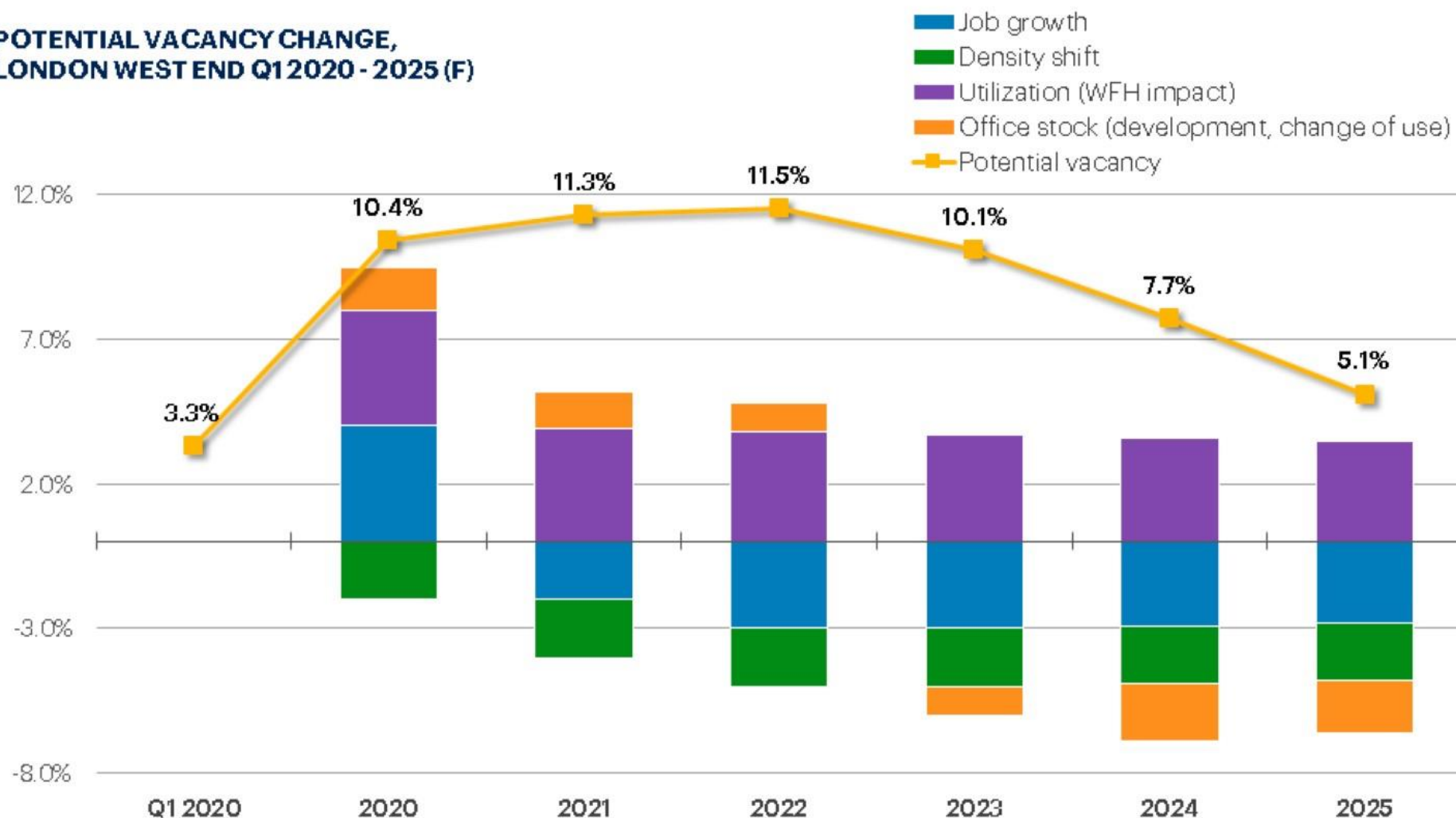
Heitman Portfolio Signals

- Office attendance levels only 0-40%
- Leasing level down 340 bps to 86.6%
- 2/3 of negotiated leases are short-term
- Net effective rents down 0-15%
- Reports of increased inquiries past 4-6 weeks

Path to Office Market Recovery Involves Conversions to Other Uses

HEITMAN

POTENTIAL VACANCY CHANGE, LONDON WEST END Q1 2020 - 2025 (F)



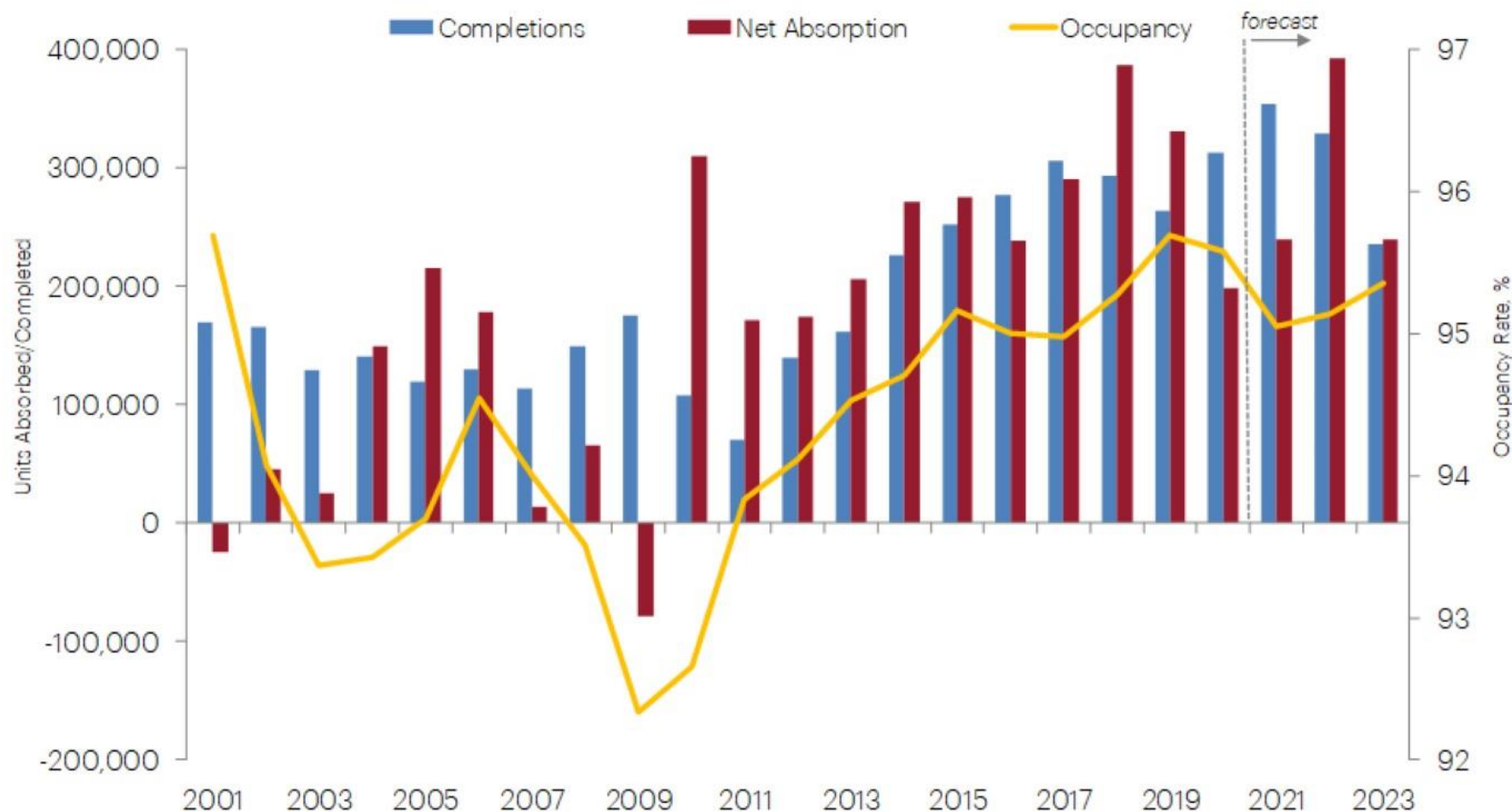
Source: UBS; Heitman Research. Figures are indicative only, not precise forecasts.

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Apartment Demand Moderating as Downturn Continues; Recovery Expected to Start 2021

HEITMAN

APARTMENT COMPLETIONS, NET ABSORPTION AND OCCUPANCY US 2001-2023



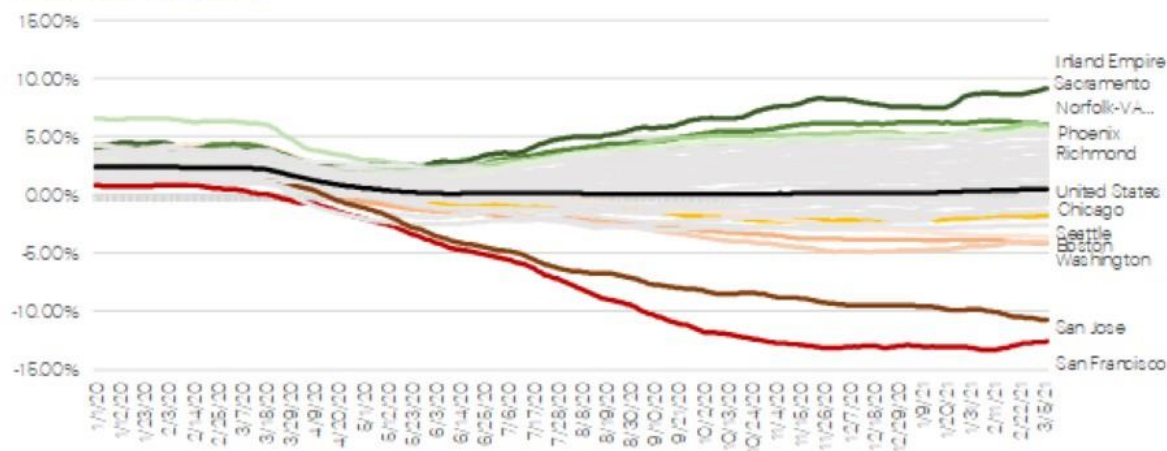
Source: RealPage; Heitman Research

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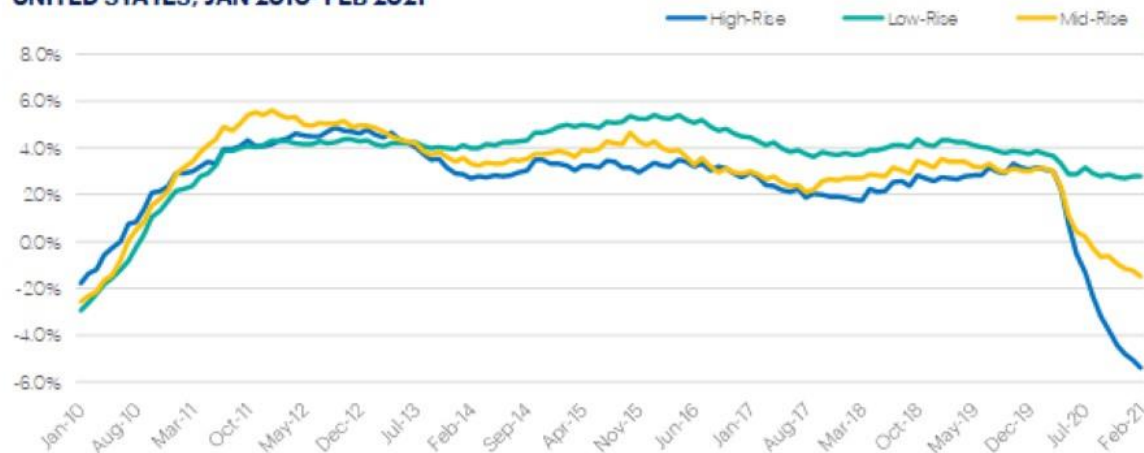
Apartments: Bifurcated Trends to Persist During a Recovery Year

HEITMAN

DAILY ASKING RENTS PSF - TOP 50 METROS - YEAR-OVER-YEAR CHANGE
JAN 2020 - MAR 2021



YOY REVENUE CHANGE (REV/ASF) BY BUILDING HEIGHT
UNITED STATES, JAN 2010- FEB 2021



Market Fundamentals

- Highly variable market fundamentals
- Garden properties in Sunbelt markets generally best
- Urban high-rise in Gateway markets worst
- Greater use of concessions to preserve occupancy
- Supply a growing constraint in some markets
- Long-term demographics and greater propensity to rent support LT demand
- Strong investor interest and record low cap rates (ex urban high-rise)

Heitman Portfolio Signals

- Bifurcated operating performance
- Urban property rebound underway
- Valuations spike in some Sunbelt markets
- Numerous unsolicited offers

Demographic Tailwinds Support Long-term Apartment Demand

HEITMAN

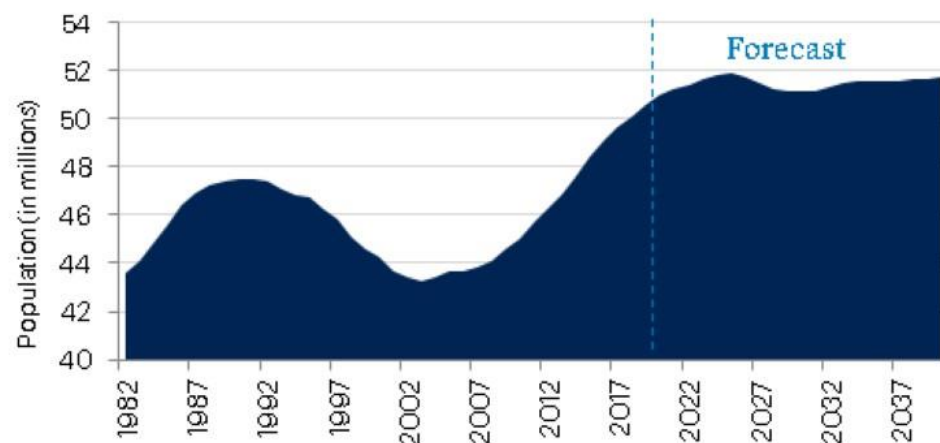
Demographic trends support residential demand, as does the increased propensity by all age cohorts to rent

Renting for reasons of preference and necessity supports a variety of investment strategies

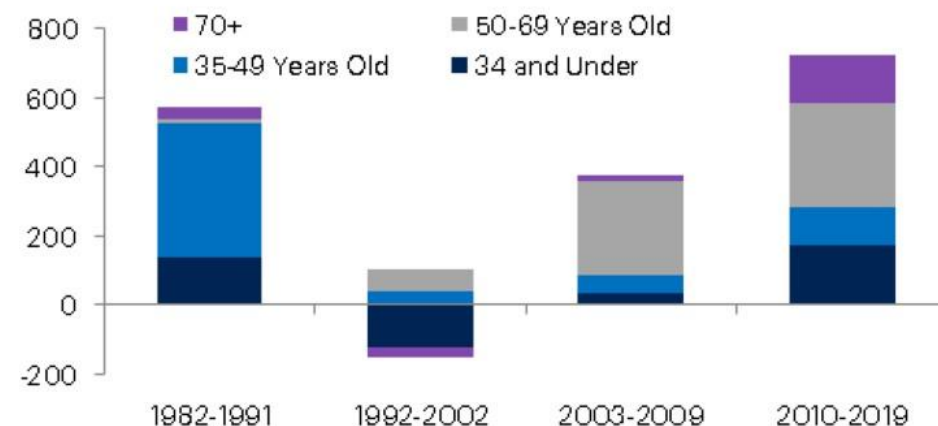
Two “un-precedented” recessions now in early careers of Millennials may limit homeownership

Scars of the pandemic recession may drive Gen Z renter demand for a long time

**POPULATION OF AGE GROUP MOST LIKELY TO RENT
US (25-34 YEAR AGE COHORT) 1982-2040**



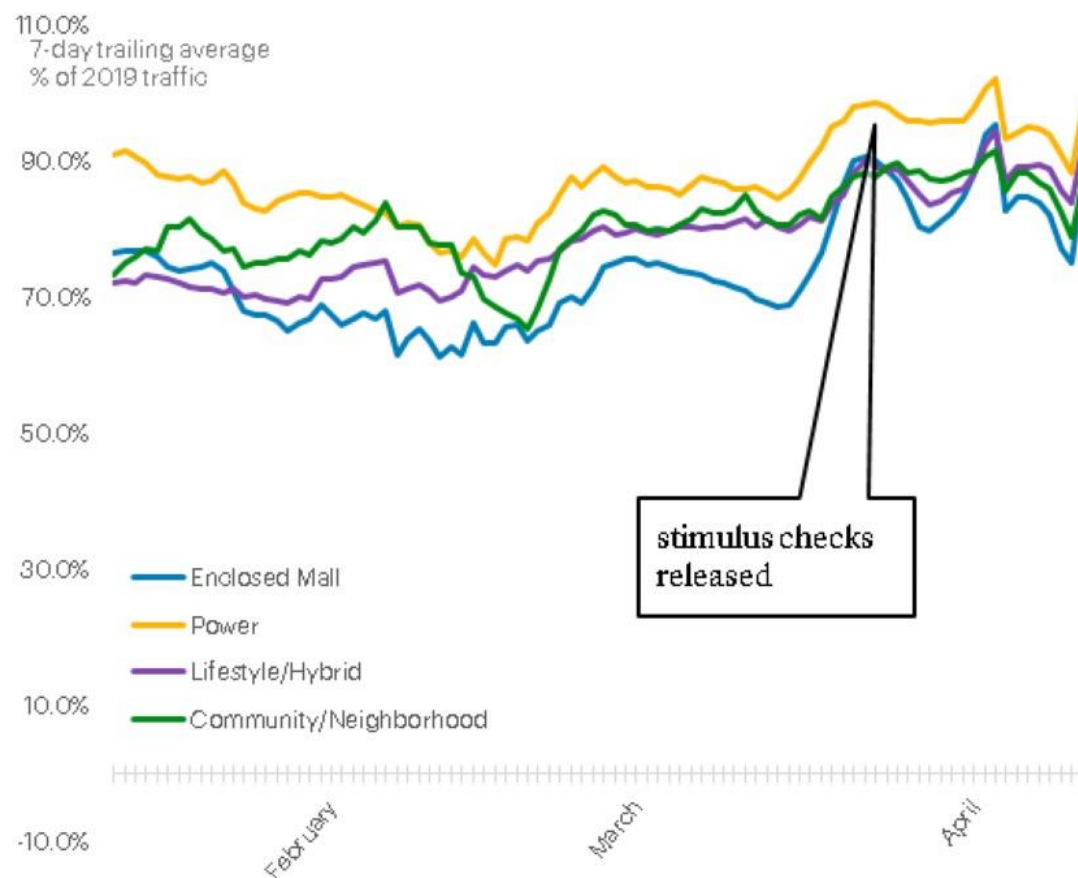
**ANNUAL RENTER HH FORMATIONS BY AGE COHORT
US 1982-2019**



Retail: Acceleration of Pre-Pandemic Trends Starting to Slow

HEITMAN

PERCENT OF 2019 TRAFFIC BY FORMAT
TRAILING 90-DAY PERIOD ENDING APRIL 11, 2021



Source: Placer.ai, Heitman Research; Excludes properties facing geographic or other challenges

Market Fundamentals

- Accelerating demise of tired retailers and centers
- Online sales 25%+ above pre-COVID
- Fulfillment from stores to outlive the pandemic
- Food & fitness recovery underway; entertainment outlook remains unclear
- Vacancy at neighborhood & community centers may be peaking
- Some pricing clarity emerging for neighborhood and power centers

Heitman Portfolio Signals

- Tenant interest beating expectations for open-air centers
- Mall leasing remains challenging

Online Sales Fulfilled from Stores

50% @ Kohl's
60% @ Home Depot
75% @ Target

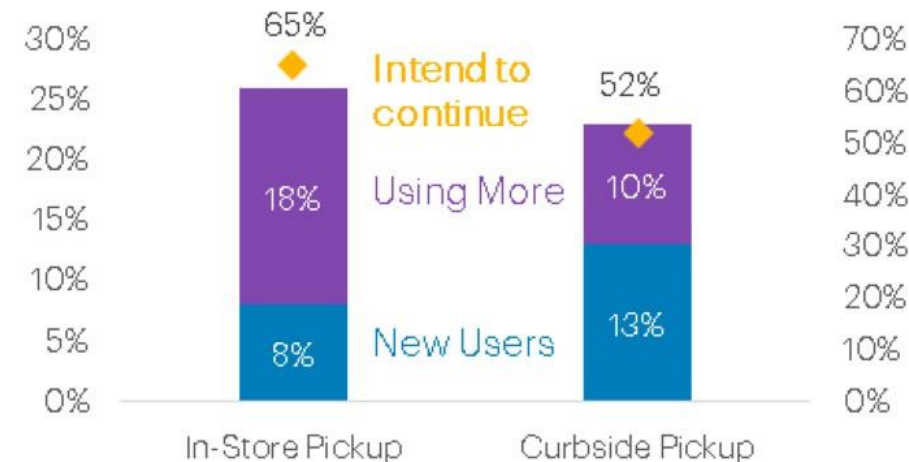


Pickup Order Share of Digital Sales

15% @ Nordstrom
20% @ Ulta
41% @ Best Buy



NEW SHOPPING HABITS DURING COVID



Sources: Company Reports; McKinsey Survey, 10/23-10/30/2020; Adobe Analytics

30% of online consumers prefer pickup over delivery

-Adobe Analytics Survey, August 2020



Source: Dead Malls.com; Heitman Research

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Retail Vacancies Will Create Investment Opportunities

HEITMAN



**Last Mile Distribution
High Bay Warehouse**

1085
Old Country Road
Westbury, New York



Industrial: Pandemic-Induced Impacts Will Continue Supercharging Sector

HEITMAN

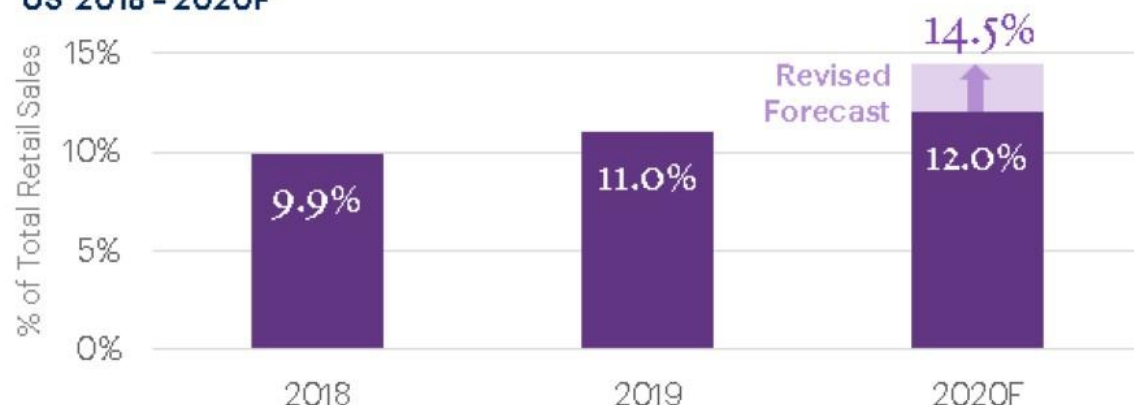
Market Fundamentals

- E-commerce, higher inventory levels and inventory rebuilding drive demand
- 2020 supply, demand & vacancy all up
- Rent growth strong nearly everywhere; coastal adjacent markets perform best
- Few supply/demand imbalances
- Infill/Last-mile rents outperforming
- Cap rates remain under strong downward pressure
- Large numbers of development opportunities

Heitman Portfolio Signals

- 99% collections & 96% occupancy
- 30%+/- re-leasing spreads in SoCal
- Rents up 19% in Northern NJ & 12% in SoCal
- Values up 11% from pre-COVID levels

E-COMMERCE PENETRATION RATE US 2018 - 2020F



MOST ACTIVE OCCUPIERS YTD - NOV 2020

Occupier	SF*
Amazon	80,727,979
Walmart	7,978,465
Lowe's	5,089,447
Big Lots	3,440,119
FedEx	3,239,162
Uline	2,845,602
Geodis	2,529,432
XPO Logistics	2,505,572
US Elogistics	2,213,654
Home Depot	2,117,768

*Includes New Leases, Renewals, and User Sales

amazon

FedEx Walmart

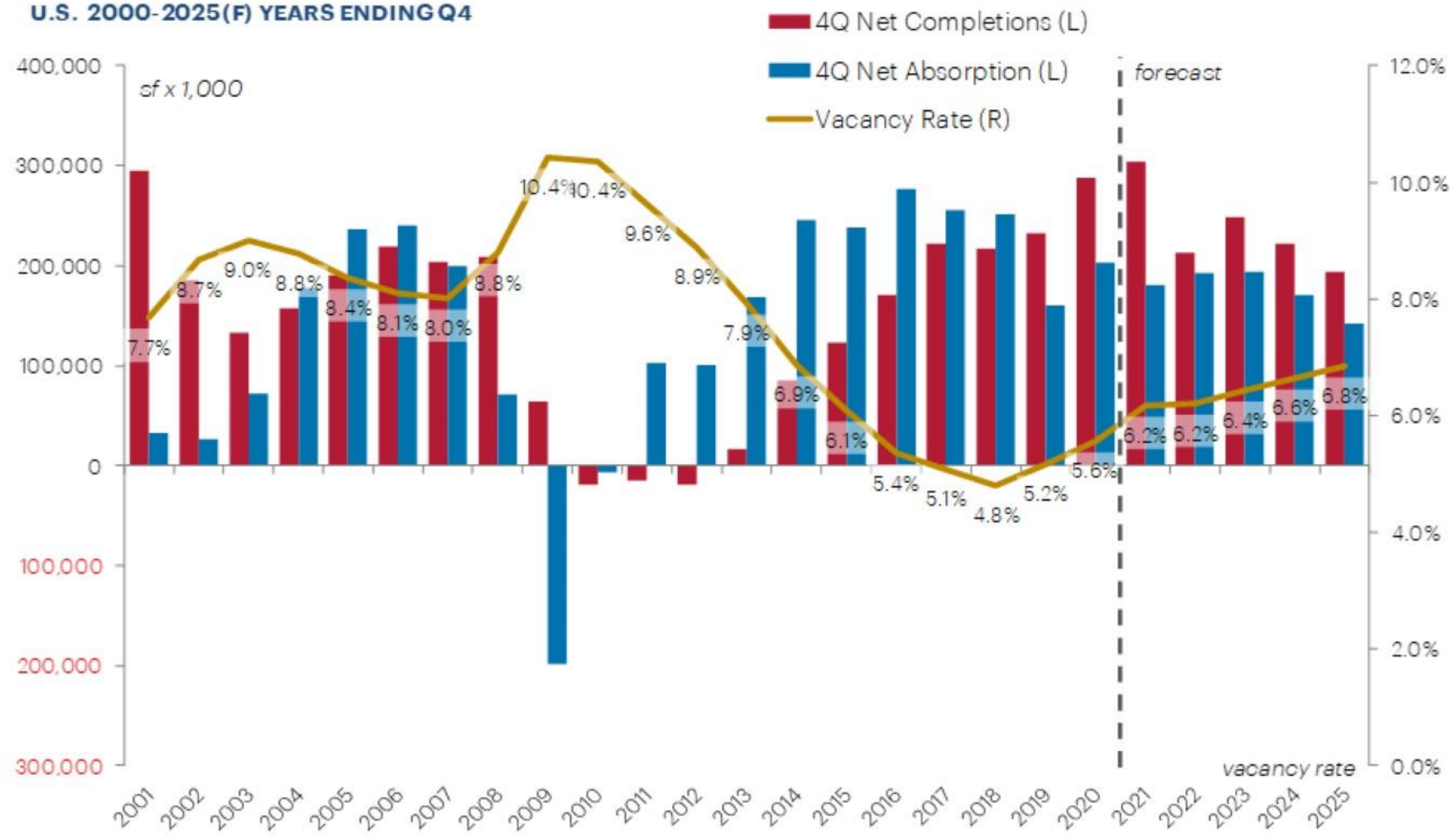
GEODIS

XPO Logistics

THE HOME DEPOT

Industrial: Vacancy, Supply and Demand All Up In 2020 HEITMAN

INDUSTRIAL MARKET CONDITIONS
U.S. 2000-2025(F) YEARS ENDING Q4

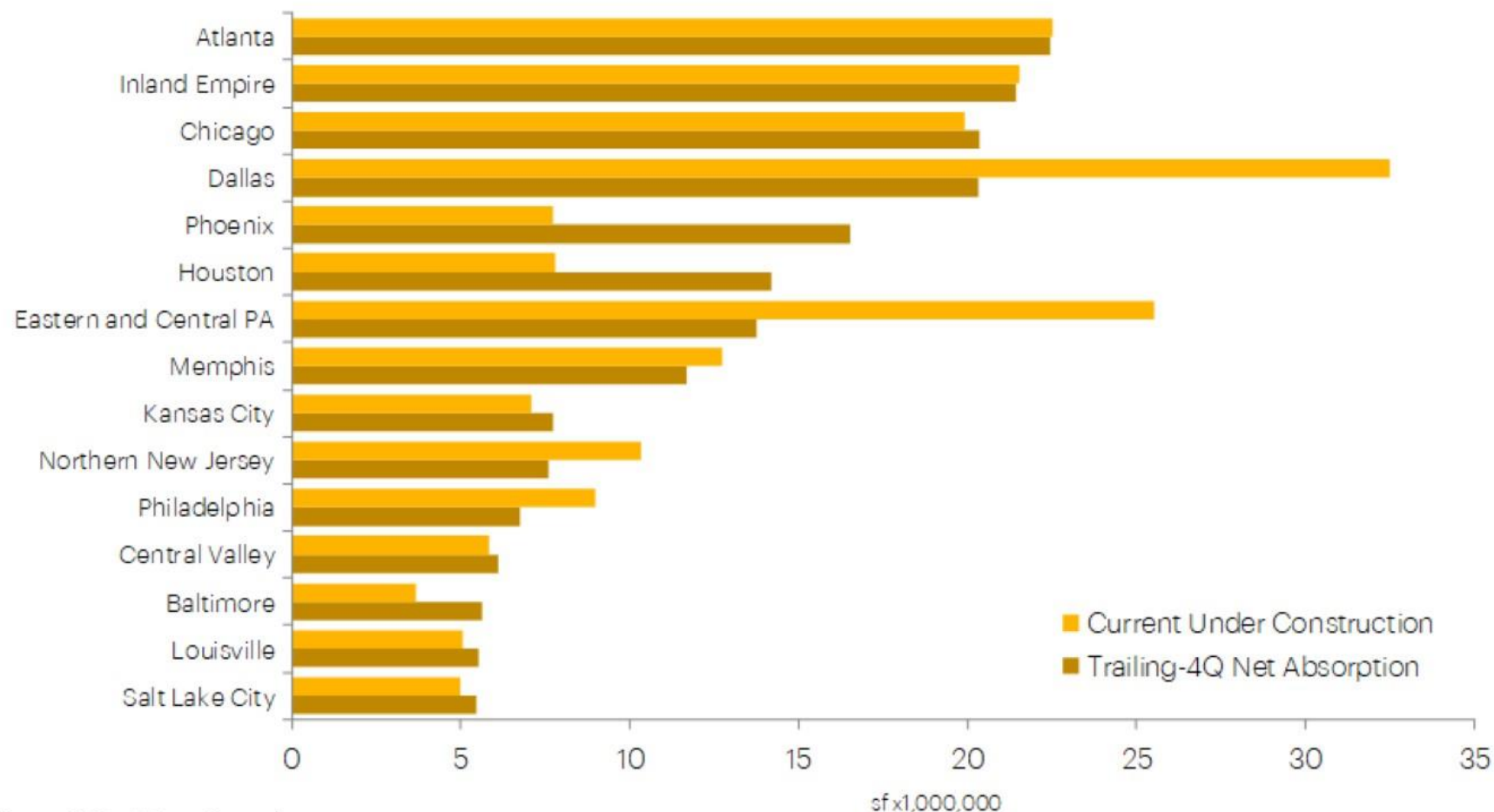


Source: CoStar Portfolio Strategy; Heitman Research

Few Major Markets See Large Imbalance Between Supply Pipeline and Trailing Demand

HEITMAN

INDUSTRIAL NET ABSORPTION VS. SPACE UNDER CONSTRUCTION MAJOR MARKETS (Q4 2020)



Source: CoStar, Heitman Research

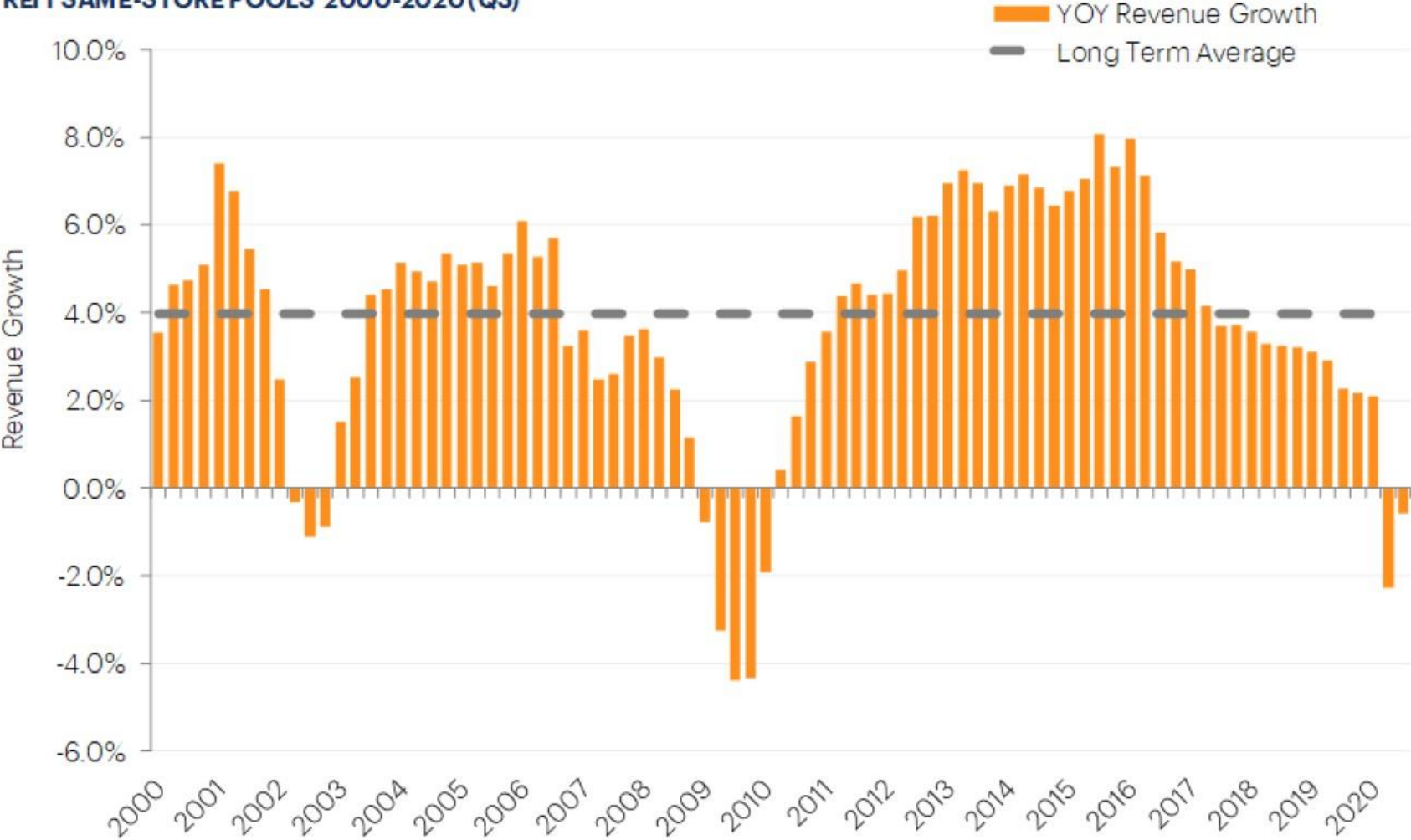
“Specialty” Sectors: No Longer Niche, But Still Special

HEITMAN

- 1 De-linked demand drivers → diversification
- 2 Fragmented ownership
- 3 Yield premium (though narrower than before)
- 4 Demand outpacing supply in many locations, creating development opportunities
- 5 Income stability
- 6 Required operational expertise = barrier to entry

Self-Storage Isn't Recession Proof But It Tends to Bounce Back Early

SELF-STORAGE REVENUE GROWTH
REIT SAME-STORE POOLS 2000-2020 (Q3)

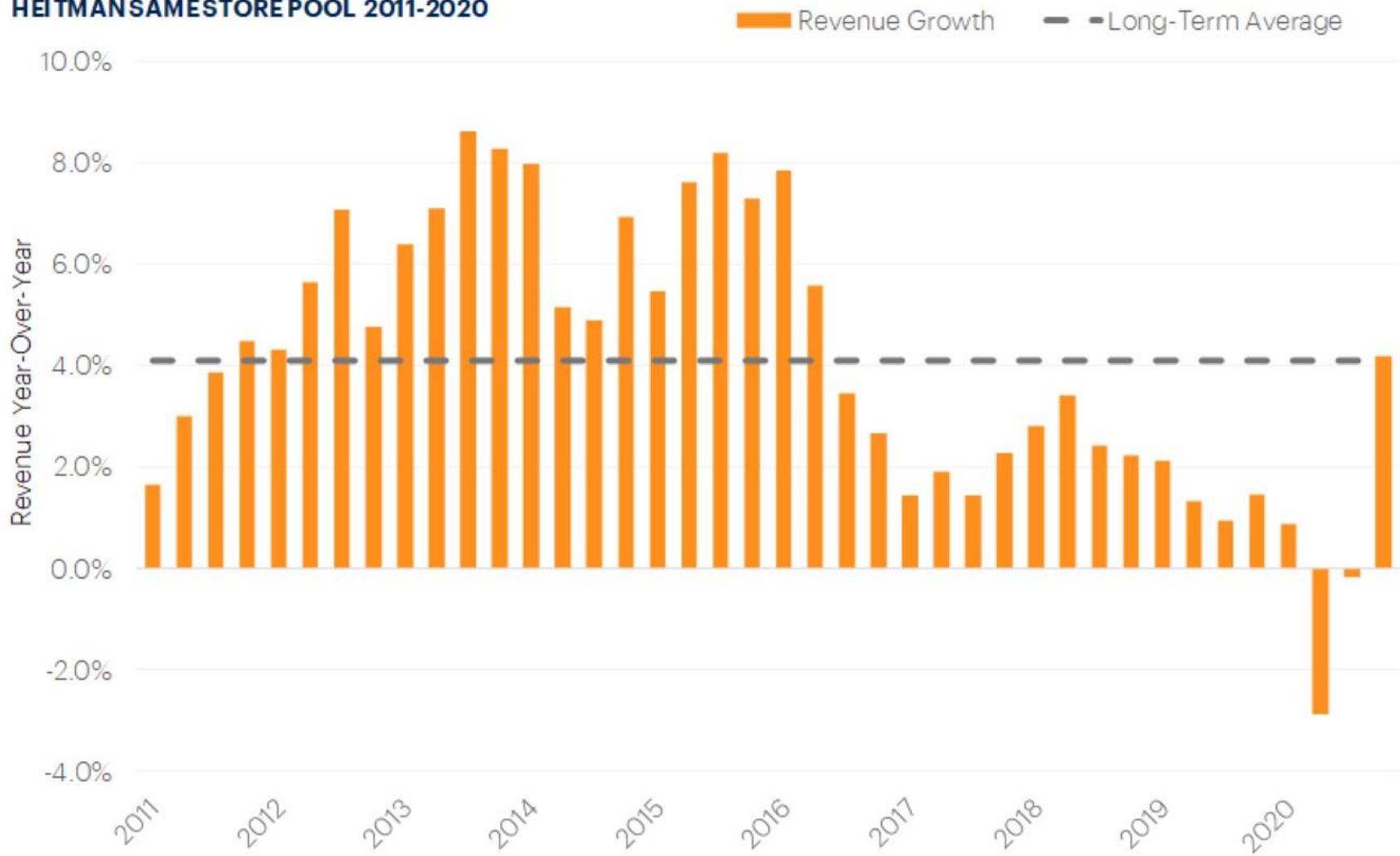


Source: REIT Reports; Heitman Research

As Evidenced in Heitman's Same-Store Pool

HEITMAN

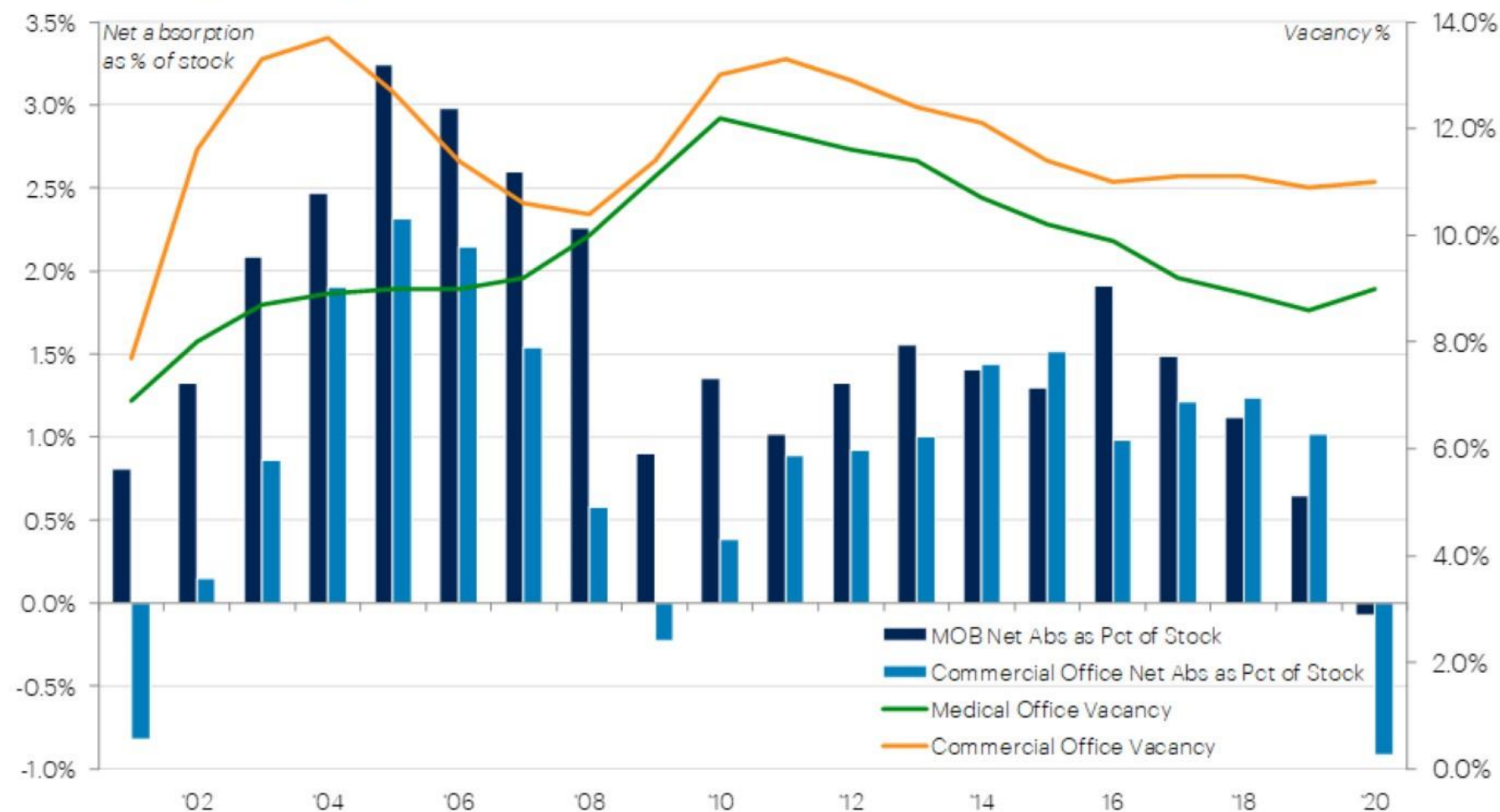
REVENUE GROWTH
HEITMAN SAMESTORE POOL 2011-2020



Steady Absorption Keeps Medical Office Vacancy Tighter Than Commercial Office

HEITMAN

ABSORPTION AND VACANCY - MEDICAL OFFICE VS COMMERCIAL OFFICE
US 2001-2020 (years ending Q4)



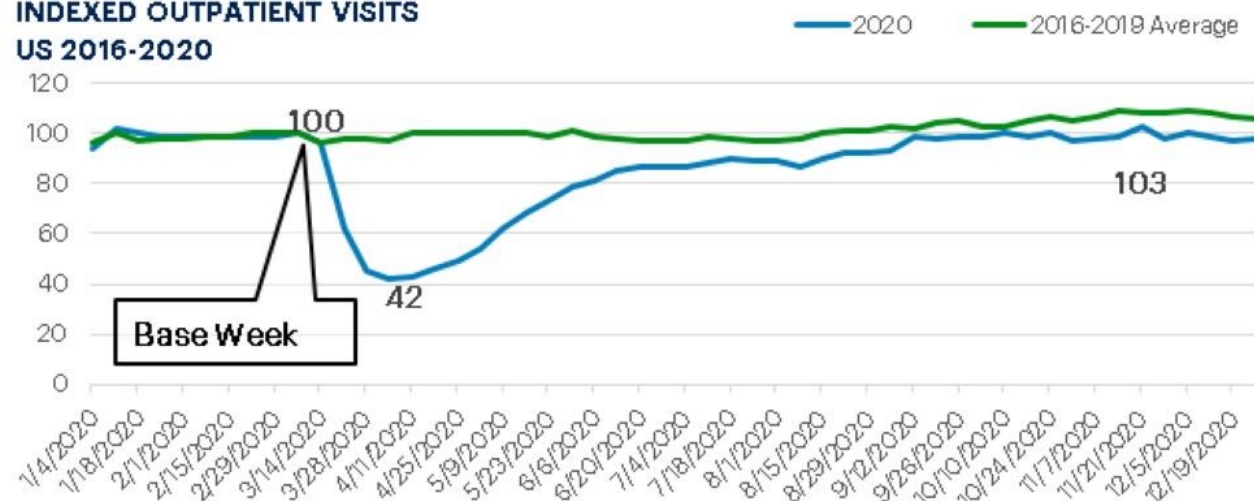
Source: CoStar, Heitman Research

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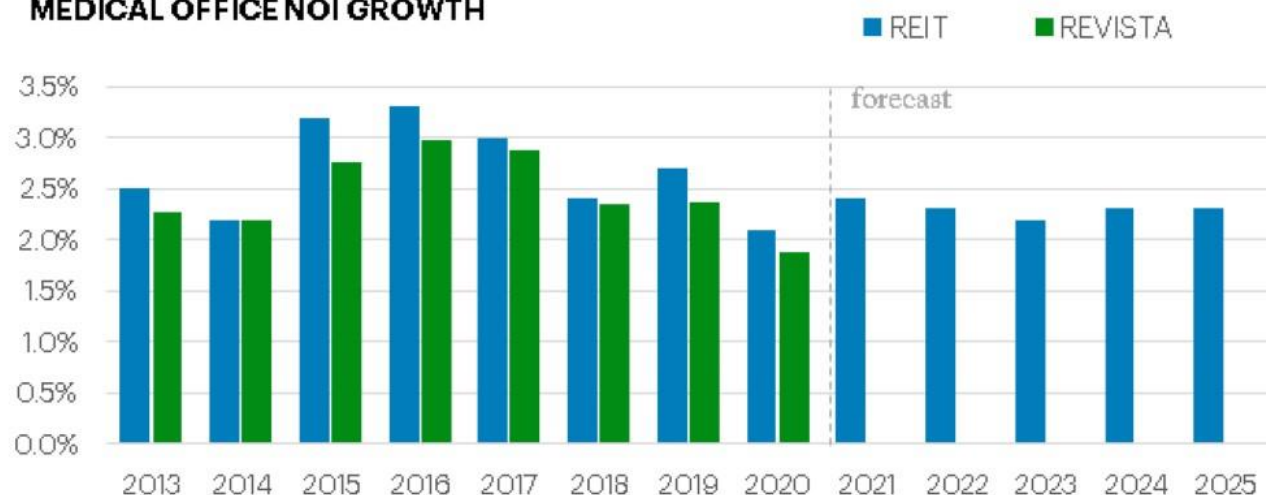
Medical Office: Continued Steady Sailing Despite Proximity to the Front

HEITMAN

INDEXED OUTPATIENT VISITS
US 2016-2020



MEDICAL OFFICE NOI GROWTH



Market Fundamentals

- Modest 2020 NOI growth slowdown
- Outpatient visits after big dip recovered by year-end
- Transaction markets still very active
- Cap rates stable during pandemic; now declining again in 2021
- Long-term demand thesis remains intact (demographic wave, movement of services to out-patient settings)
- COVID is one more reason for procedures to move off campus

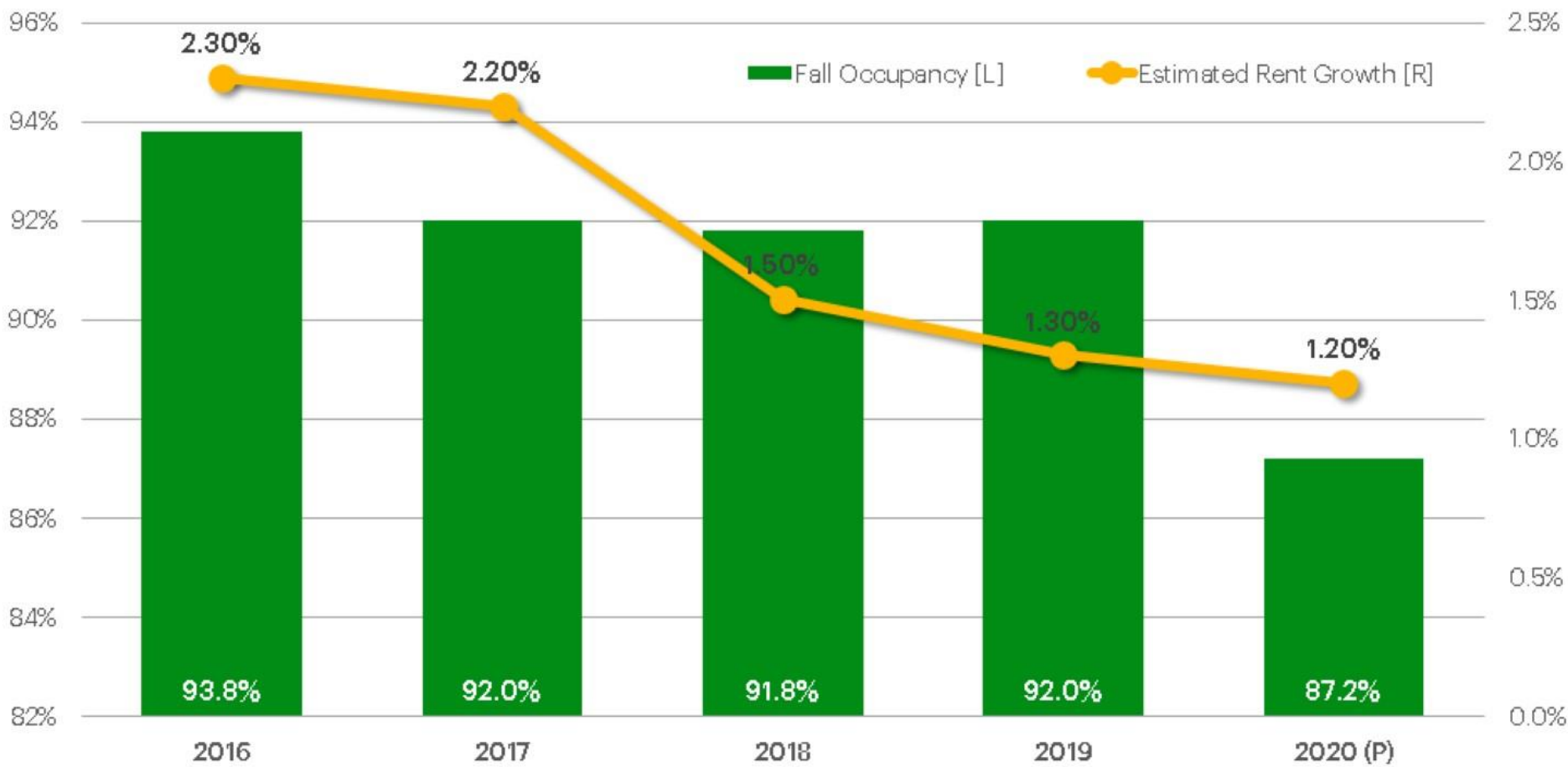
Heitman Portfolio Signals

- Minimal portfolio impact
- Steady 2020 leasing levels & only slight hit to NOI growth
- Notable pick-up in 2021 leasing activity
- Tenant operations fully recovered

US Student Housing Exceeded Expectations This Fall

HEITMAN

US NATIONAL AVERAGE STUDENT HOUSING
OCCUPANCY VS ANNUAL ESTIMATED RENT GROWTH

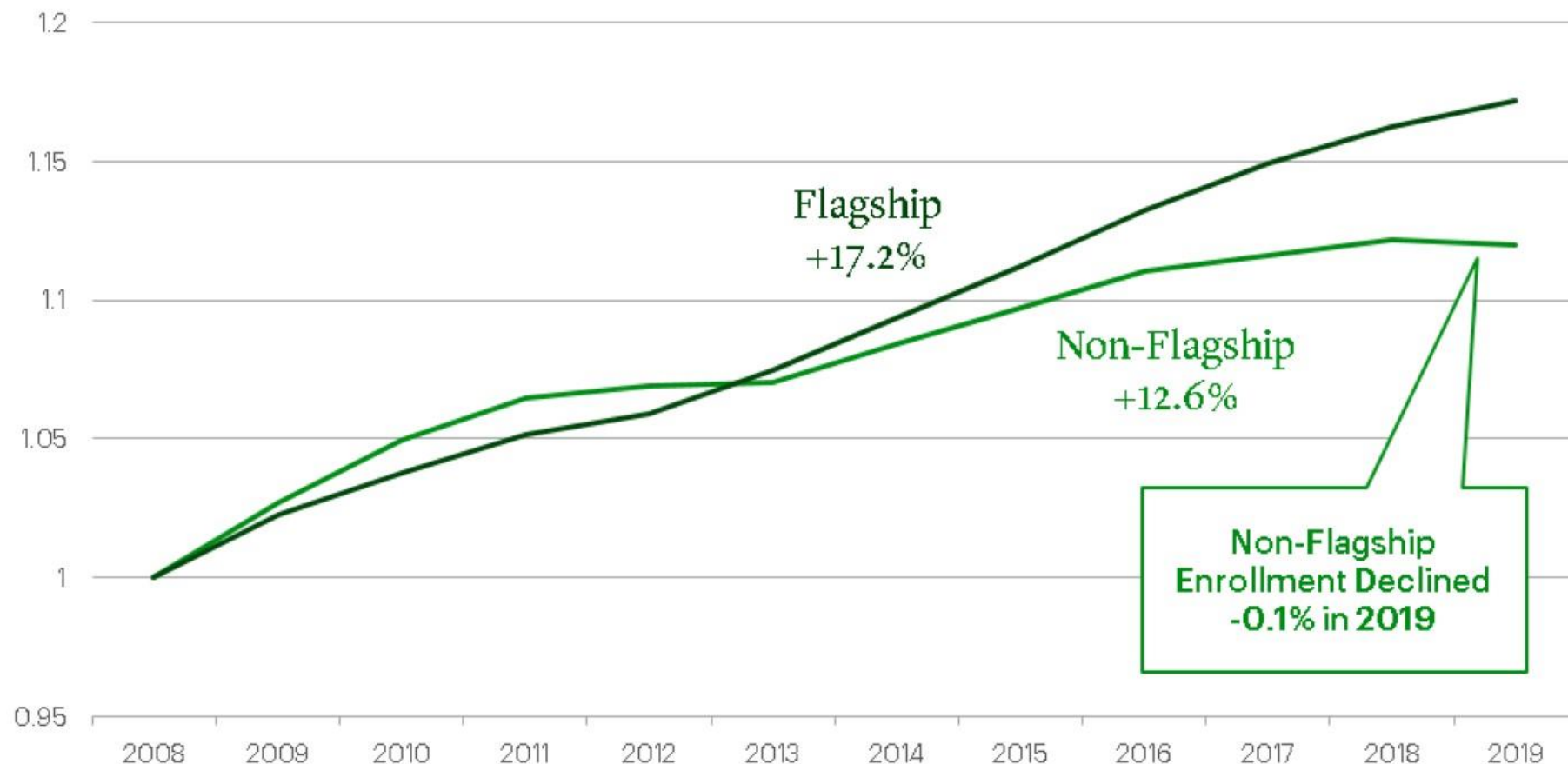


Source: AGC, Axio metrics, Heitman Research

Education Still Key in Knowledge Economy, But Pick Student Housing Spots Carefully

HEITMAN

INDEXED TOTAL ENROLLMENT GROWTH US 2008 - 2019



Source: Axiometrics; Heitman Research

A flagship university defined as the best-known, most-selective, largest, and highest-funded public universities in a state. These schools will also typically have a land-, sea-, or space-grant designation

Recessions Make Great Entry Points

But Hedge Your Bets: Allocate to Debt

Catch a Rising Star: Non-Traditional Sectors Getting New Looks

Be Patient with In-Favor Sectors: Find Optimal Entry Points

Opportunities in Out-of-Favor Sectors: Watch for Mispriced Risk

Reduce, Reuse, Recycle: Redevelopment and Repositioning

Factor in Climate Risk



SUBJECT: Real Estate External Manager Presentation ACTION: _____
Clarion Gables Multifamily Trust

DATE: May 20, 2021 INFORMATION: _____ X

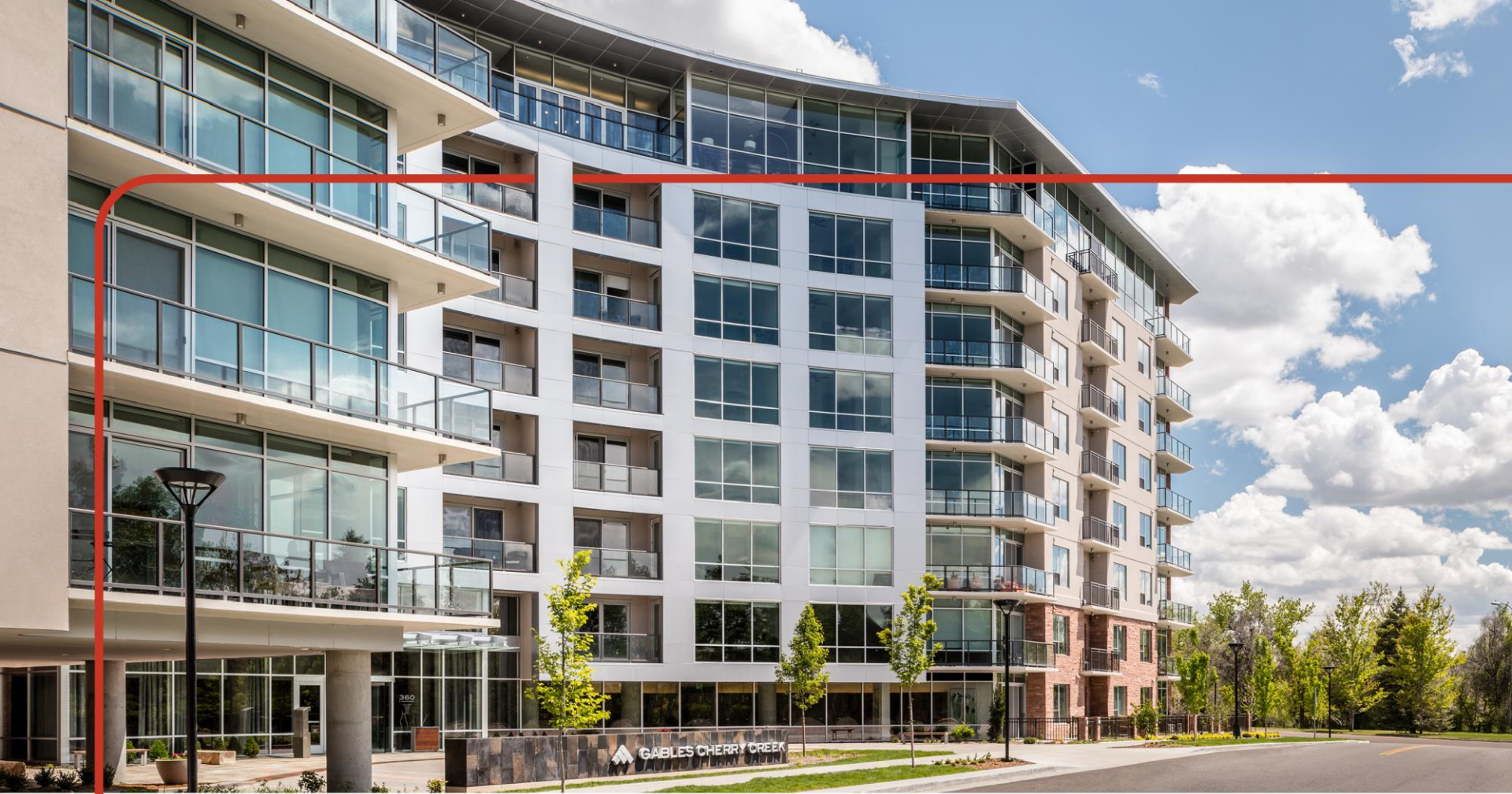
BACKGROUND:

Clarion Gables, JV partner and fund manager for the APFC, will present to the Board a residential real estate market overview. Gables will also provide updates on their fund strategy and performance as well as value creation opportunities in the residential market.

Biographies of Attendees:

Susan Ansel (*President & CEO, Gables Residential*)

Sue Ansel is President and Chief Executive Officer. She has over 30 years of experience with Gables, serving in her current role since 2012. Sue was promoted to Chief Operating Officer in 2005 and prior thereto, she held positions in acquisitions, development and operations, and served as the lead for important company initiatives including the advancement of real estate technology efforts and third-party client services. In January 2018, Sue was elected to serve as Chairwoman of the National Multifamily Housing Council in which capacity she also serves as a member of the Executive Committee and the Board of Directors. Sue is also an officer and member of the board for the Real Estate Council and the Real Estate Council Foundation. Sue serves on several other boards and committees including the Dallas Summer Musical Board of Directors and DePauw University's Board of Trustees. She is a member of the Urban Land Institute.



CONFIDENTIAL



Clarion Gables Multifamily Trust

Alaska Permanent Fund Corporation Board Presentation | May 2021

Clarion Partners & Gables Residential Overview

Section I

Clarion Gables Multifamily Trust: Executive Summary

CGMT is a core plus open-end real estate fund focused on the U.S. multifamily sector

Owner Operator
& Developer



- Vertically-integrated operating platform with a 39-year history
 - Disciplines include development, acquisitions, asset and property management
 - Value creation across the investment cycle; wholesale development execution
 - 900+ employees; senior executives have 20+ years experience

Build to Core
Strategy

- Develop, acquire and manage high-end multifamily assets in growing U.S. markets
 - 15-20% GAV in development; 80-85% stabilized; fund leverage 45-50%
 - Infill locations in primary markets with strong job and population growth
 - High quality assets targeting “Renter-by-Choice” cohort

Long-Term Fund
Experience with
Institutional
Investor Base

- 6-year open-end fund track record; 10 year closed-end predecessor fund
 - CGMT achieved its five-year anniversary prior to the Pandemic in 1Q 2020
 - CGMT was created through the acquisition and recapitalization of Gables from Lion Gables Apartment Fund (LGAF) on February 18, 2015. LGAF, a closed-end fund (10-year life), was created through the take private of Gables Residential in 2005
 - CGMT currently has 21 institutional investors with an average investment of \$106 million

As of March 31, 2021. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Gables Residential: A Vertically-Integrated Operating Platform

39 year history of management, development and construction, acquisition and disposition of U.S. multifamily communities

Leadership

Senior management 20+ years average tenure; ~900 associates

Development/ Acquisitions

Acquisition of new development and stabilized; oversee all construction

Accounting & Audit

Institutional accounting processes and reporting for all investors

Asset Management

Actively manage lease-up, value add projects and stabilized assets

Marketing & Brand

Implement local pricing/marketing strategy to drive revenue

Property Management

Management of 27,000+ units; customer service as differentiator



The Ashley Gables Buckhead, Atlanta, GA



Gables Park Plaza & Park Tower, Austin, TX



Gables Residences, Denver, CO

As of December 31, 2020. Please see the disclosures above and the Important Legal Information at the end of this presentation.

2020 Focus: Continued Achievements with Stakeholders

CORPORATE



Builder of the Year



3 Time Workplace
Wellness Winner



G R E S B
Green Star Certified

INDUSTRY



Development and
Management Company of
the Year



Sue Ansel, Immediate Past NMHC
Chairwoman and Executive
Committee Member

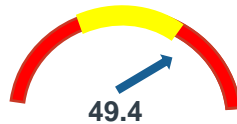


Magazine's Multifamily Executive of
the Year

RESIDENTS



250%
Increase in Fans



49.4
Net Promoter Score



25,300 Reviews in 2 1/2 Years
Averaging 4.4/5 Star Rating



#1 in Division II

POWERED BY J Turner Research

ASSOCIATES



CEO Approval
92%



8.6 "Great"
Ambassadorship Score



11 Years in
a Row



4.1/5
Employer Rating

As of December 31, 2019. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Clarion Partners Firm Highlights

One of the largest pure-play real estate investment managers

38-Year History of Stability and Growth

Partnership structure: 18% Firm equity ownership spread broadly across ~100 senior employees

Co-investment: Over \$308 million invested by employees in our Firm and its products

Diversification: Broad client base with over 500 investors globally

Stability: Specialist investment manager of Franklin Templeton

International Operating Platform

Focus: 110 acquisitions and asset management team members with presence and expertise in local markets across the U.S. and Europe.

Scale: Over \$35 billion of deals reviewed annually to generate equity and debt investment opportunities across all property sectors

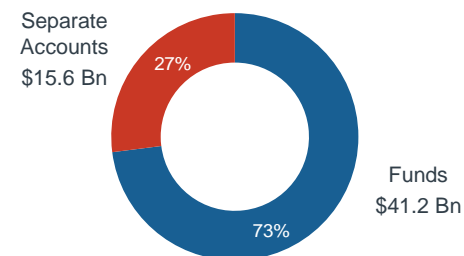
Long-Term Outperformance

Discipline: In-house research group informs investment strategy and execution

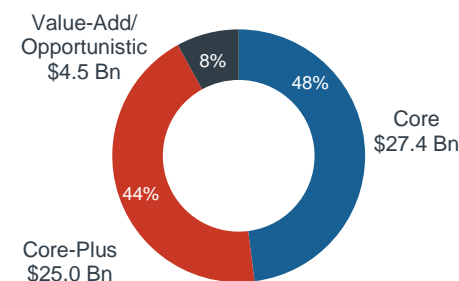
Consistency: Successful management through market cycles

Results: Firm-level property performance since inception exceeds NCREIF Property Index by 87 bps²

INVESTMENT FORMAT¹



RISK PROFILE¹



Personnel data as of April 13, 2021. All other data as of December 31, 2020.

Please see Important Legal Information at the end of this presentation.

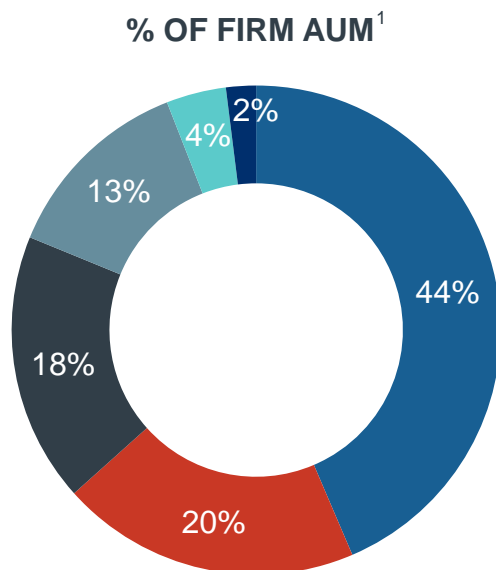
¹Diversification percentages are based on Gross Asset Value (GAV) at share.

²Gross of Fees.

GAV, Gross Real Estate Value (GRE) and AUM are defined at the end of this presentation.

Clarion Partners - Scale Across All Property Types

Scale enhances deal flow and tenant relationships across all major sectors



INDUSTRIAL

\$24.1 billion, 838 properties, 44 markets

- Includes a \$17.3 billion² open-end, sector-focused fund; one of the largest private, pure-play industrial funds in the U.S.
- Growing European industrial presence through acquisition and development of logistics properties

MULTIFAMILY

\$11.0 billion, 168 properties, 34 markets

- Spans spectrum: apartments, student housing, condominium projects
- Includes a \$4.5 billion² open-end, sector-focused fund operated by a vertically integrated, 38-year old operating company with over 33,479 owned/managed units in the U.S.

OFFICE

\$10.1 billion, 91 properties, 17 markets

- Over 946 tenant relationships
- Investments in 17 MSAs nationwide

RETAIL

\$7.0 billion, 142 properties, 34 markets

- Proven execution through JVs with public companies and direct investment
- Partner relationships include Brookfield Properties Retail Group, Simon, Kimco & New England Development

LIFE SCIENCE/LAB

\$2.0 billion, 12 properties, 3 markets

- Early Investor in the sector, with first transaction closed in 2012
- Strategic market exposure, including Boston, San Francisco, and Seattle, and strong operator relationships

HOTEL

\$1.0 billion, 54 properties, 36 markets

- One of the largest institutional owners of hotel assets in the U.S.
- Diversified portfolio of upper-scale branded hotels catering to business travel

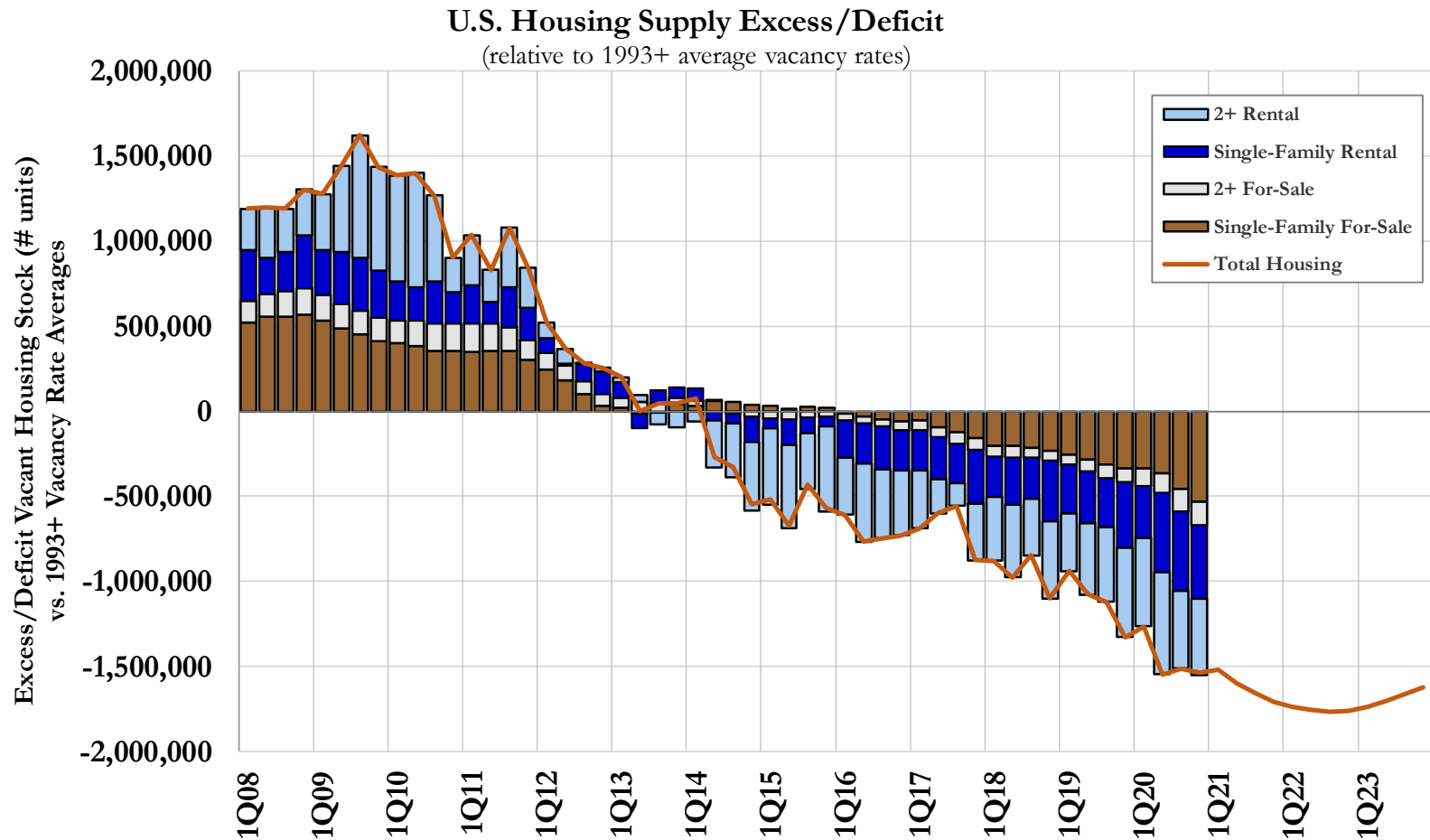
As of December 31, 2020. Dollar values and diversification percentages are GRE. Please see Important Legal Information above and at the end of this presentation.

¹Excludes Land and Other Investments. ²Based on Fund's GAV at December 31, 2020.

U.S. Residential Real Estate Overview

Section II

Slower household formation in late '20 kept the housing shortage from worsening; limited SF starts and renewed growth will deepen it



Source: Witten Advisors, U.S. Census Bureau, April 2021.

Note: Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Rental Housing Market

RENTAL HOUSING OFFERS POSITIVE YIELD AND INFLATION HEDGE



- Mature Industry
- Highly Liquid

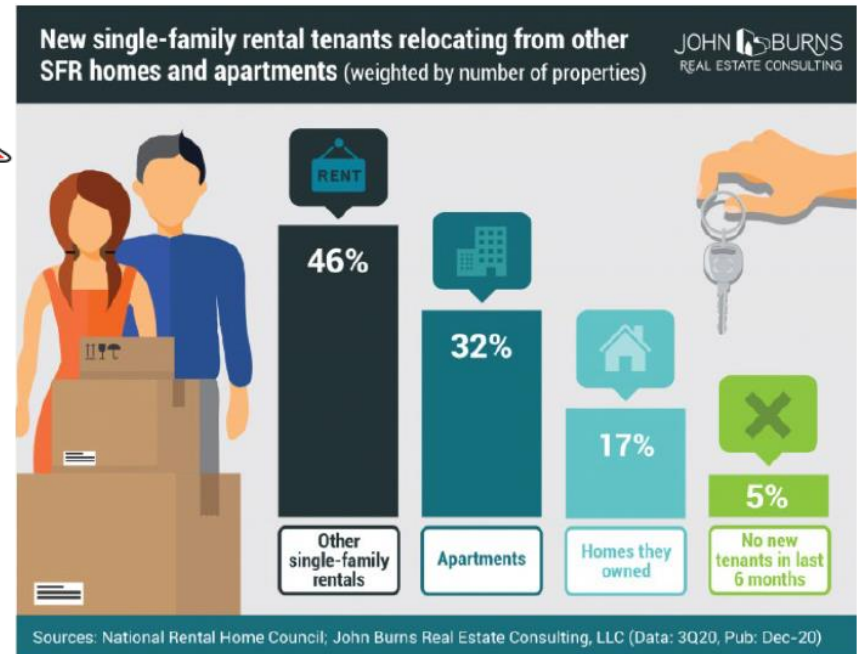


- Maturing Industry
- Improved Liquidity

In an inflationary environment:

- **Asset Values Rise:** The replacement cost of the house goes up in an inflationary environment
 - Home construction costs rose 13% in the last year per April 2021 survey of 200+ home builders
- **Yields Rise:** If wages go up with inflation, landlords should be able to pass along rent increases

MOST HOME RENTERS DO NOT COME FROM APTS



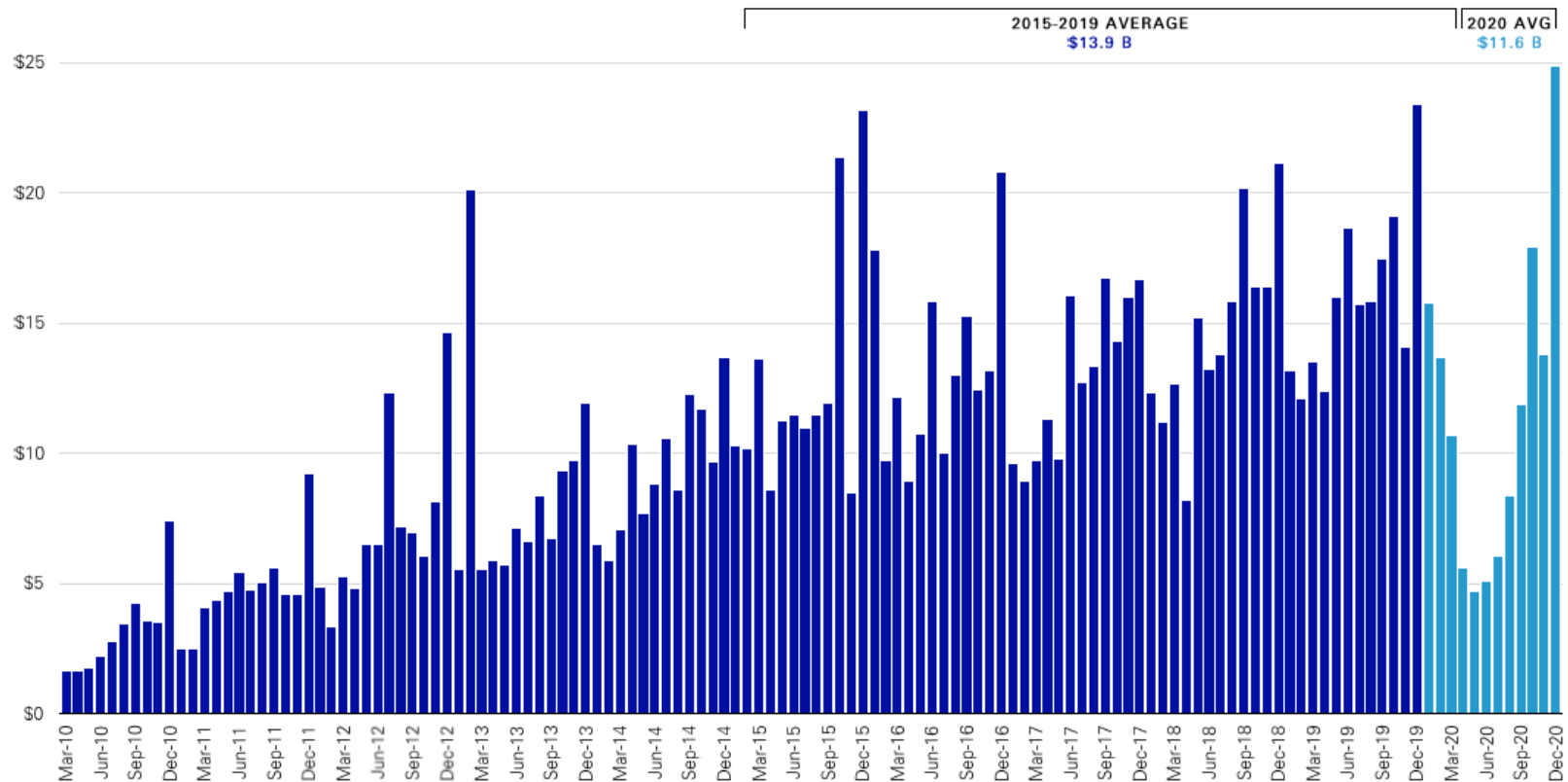
- 63% + previously lived in a SF home (own or rent)

As of December 31, 2020. Source: John Burns Real Estate Consulting, 2021. "Build-for-Rent (Newly Built Rental Homes) Industry Outlook."
Note: Past performance is not indicative of future results. Please see Important Legal Information at the end of this presentation.

Investor Interest in Multifamily Remains Robust; Q4 2020 Saw the Strongest Quarterly Sales on Record

- Well-located, institutional-quality assets are reported to have received aggressive bids, in part driven by highly attractive financing

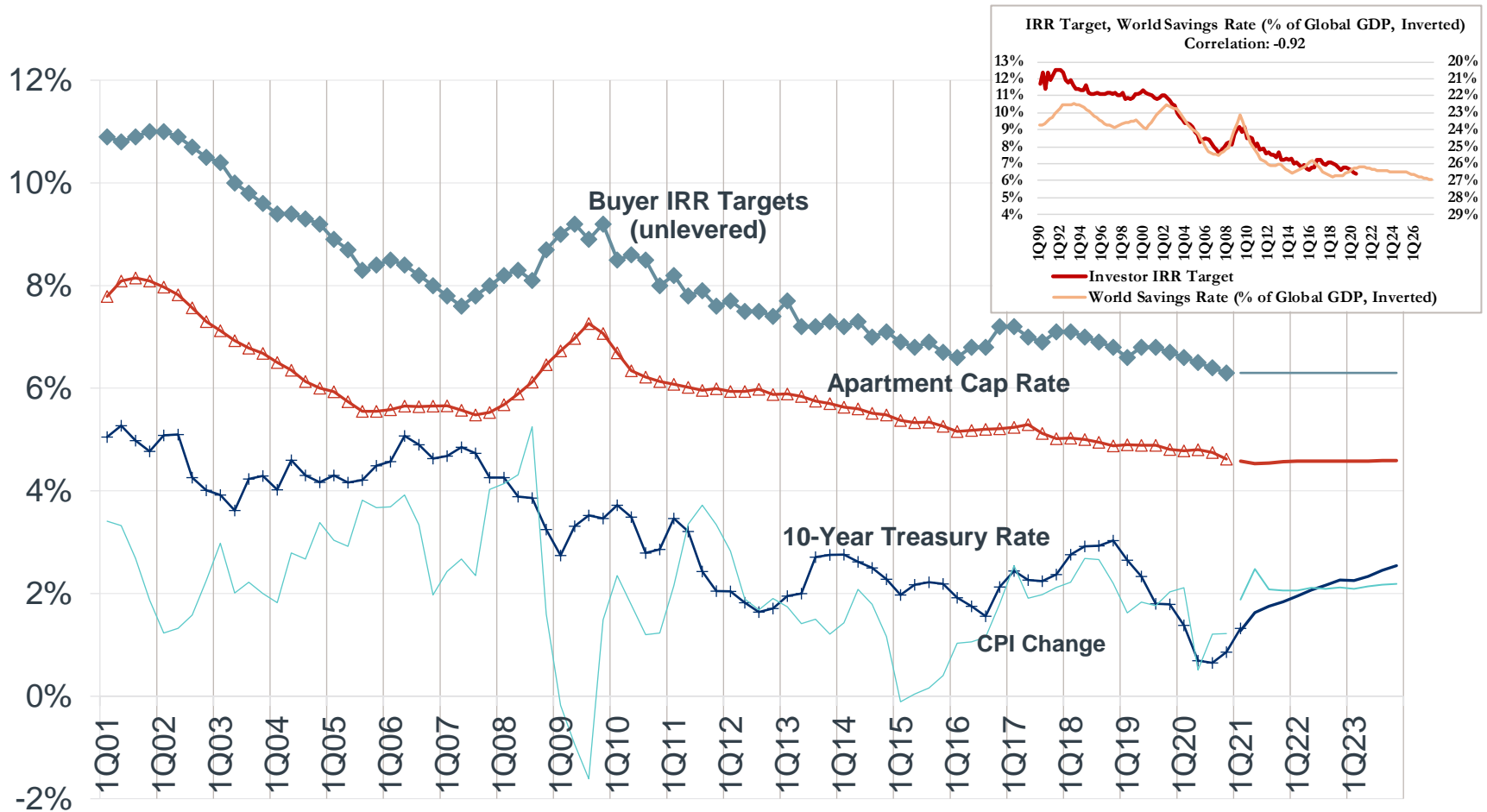
MONTHLY U.S. MULTIFAMILY TRANSACTION VOLUME



Source: RCA, Clarion Partners Investment Research, December 2020.

Note: Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Unlike the GFC, IRRs and cap rates declining

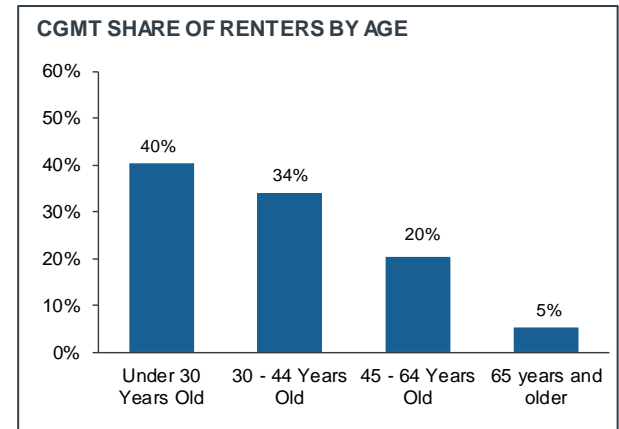


Sources: Real Capital Analytics, NCREIF, RERC, IMF, Federal Reserve Board, U.S. Bureau of Labor Statistics, Witten Advisors, April 2021.

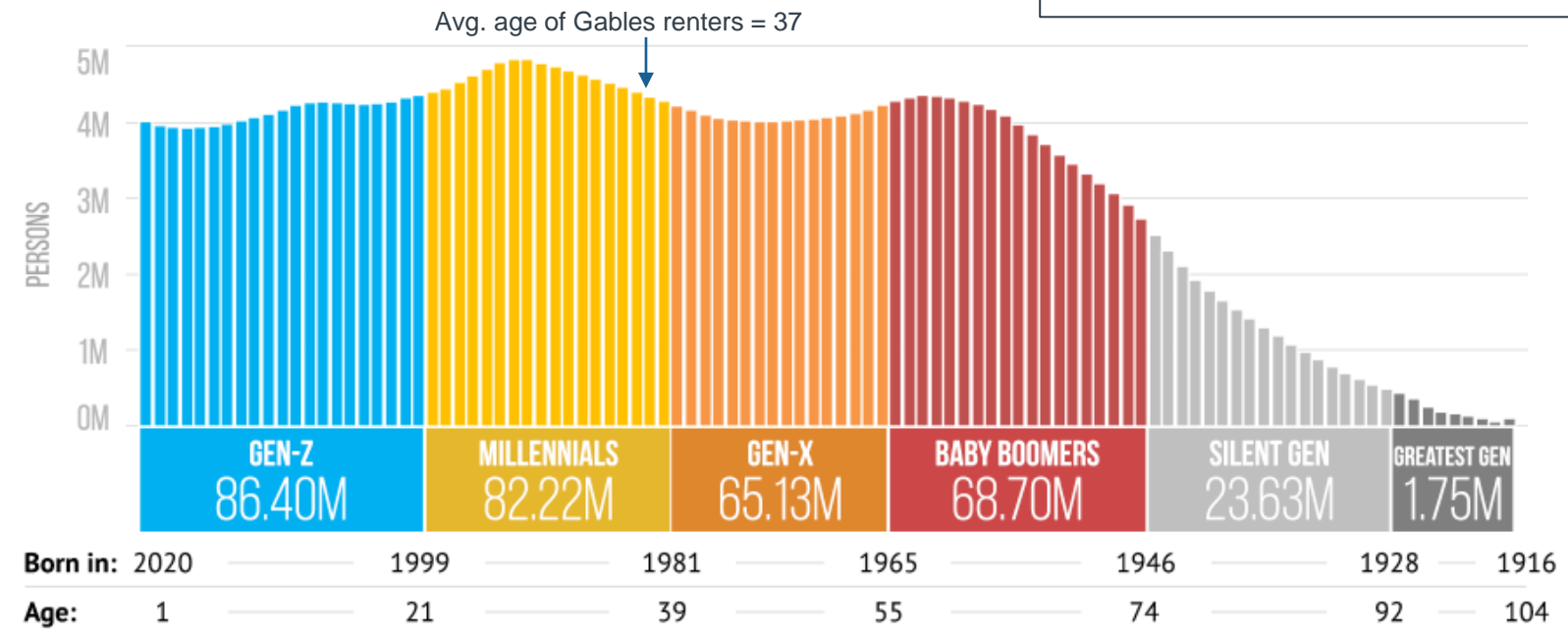
Note: Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Expectation for Long-Term Rental Demand Has Not Changed Despite the COVID-19 Crisis

- According to Pew Research Center, 52% of young people (age 18-29) were living with their parents during pandemic, significant pent-up demand
- Rising single family housing costs and limited supply will also support continued rental demand



U.S. POPULATION BY AGE AND GENERATION (IN 2020)



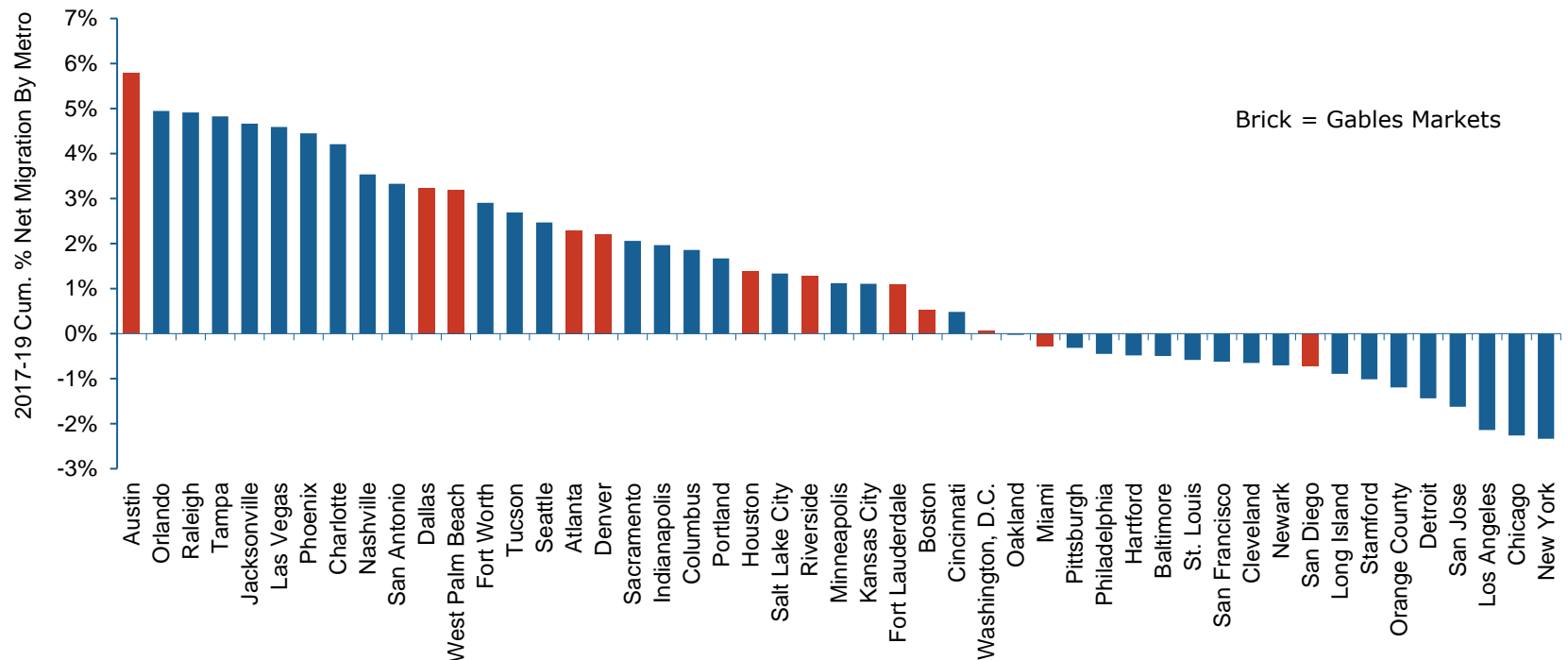
Source: Knoema, U.S. Census Bureau, Pew Research Center, Clarion Partners Investment Research, December 2020.

Note: Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Pre-COVID, Net Migration Was Consistently Strong to Sunbelt Metros That Have Low Taxes, Affordable Living, and Are Business-Friendly

- The pandemic has resulted in budget shortfalls in several states and metros, including New York, California, New Jersey, and Illinois. Potential tax hikes and service reductions may accelerate the ongoing net migration trend
- Big tech has been expanding beyond its HQ locales to have more geographic breadth so it can attract a greater diversity and level of talent, especially in fast-growth, low-cost cities

CUMULATIVE NET MIGRATION 2017-2019 (%)



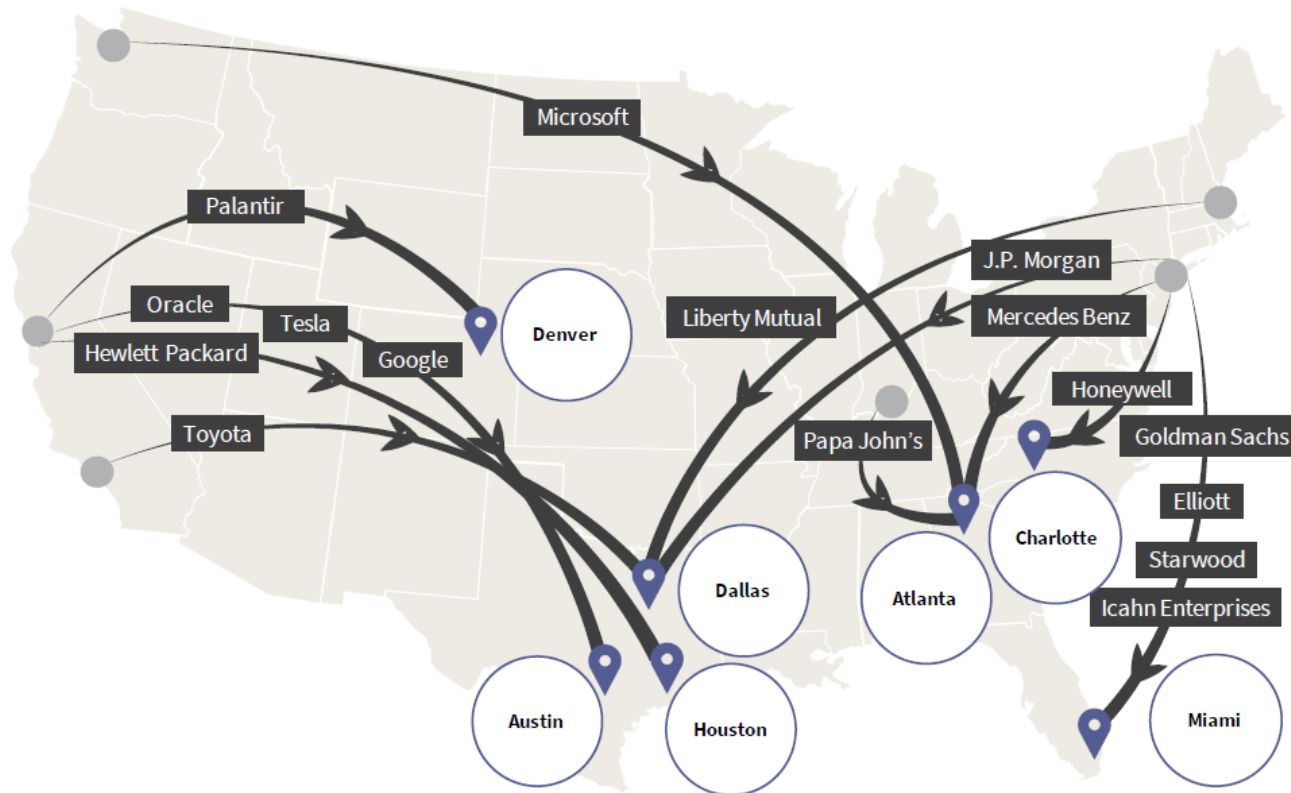
Source: Moody's Analytics, Clarion Partners Investment Research, April 2021.

Note: Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Big Firms Have Been Growing Beyond Their HQ Locales; WFH May Allow Firms to Cast More Eyes to Business Friendly/Cheaper Metros

- Tech and financial companies are expanding in more geographic breadth so it can attract a greater diversity of more talent especially in fast-growth, low-cost cities

RECENT CORPORATE SITE SELECTION AND EXPANSION ACTIVITY FAVORING SUN BELT MARKETS



Source: JLL, Census Bureau Clarion Partners Investment Research, April 2021.

Note: Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

CGMT Highlights & Fund Strategy

Section III

CGMT – Fund Metrics

PORTFOLIO SUMMARY AS OF 03/31/2021

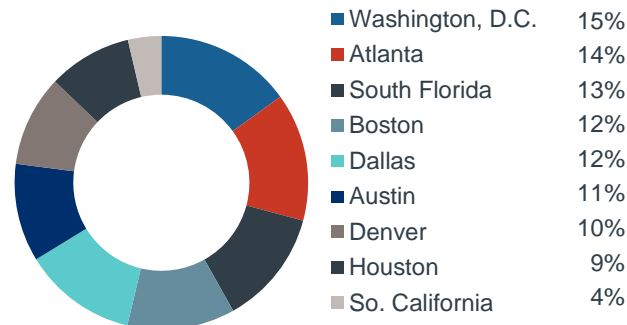
Gross Asset Value	\$4.51 billion
Indebtedness (47.6% LTV)	\$2.15 billion
Net Asset Value	\$2.27 billion
Altus Cap Rate ¹	4.19%

TOTAL PORTFOLIO	PROPERTIES	UNITS
Owned Stabilized	52	13,115
Owned Development/Lease-Up	8	2,181
Third-Party Managed	50	13,917

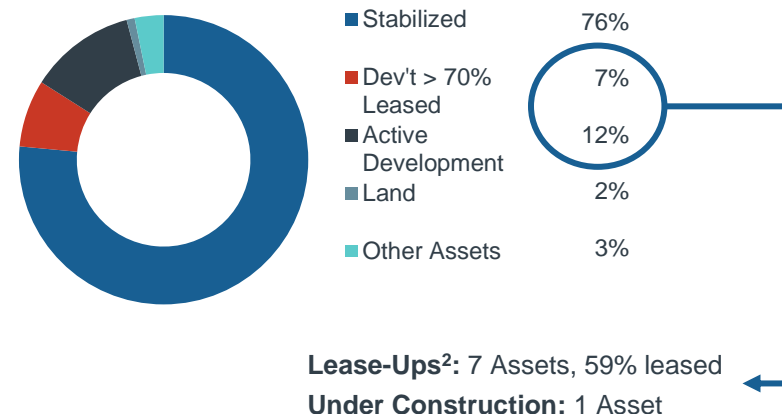
STABILIZED RESIDENTIAL METRICS

Occupancy	94.6%
Leased	96.2%
Effective Rent per Unit ³	\$1,851
Effective Rent per SF ³	\$1.93

GEOGRAPHIC DIVERSIFICATION BY GAV

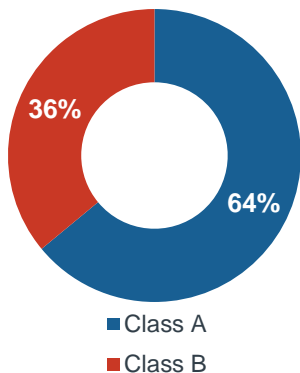


GAV BY ASSET TYPE



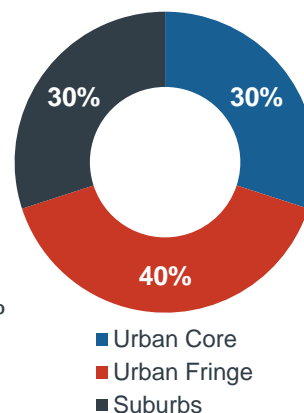
As of March 31, 2021. ¹Representative of Altus Year 1 implied cap rate for the stabilized portfolio. ²Development assets categorized as 'lease-ups' have completed construction as of quarter end. ³Reflect in-place rent for the stabilized portfolio as of quarter-end. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Current Portfolio Composition



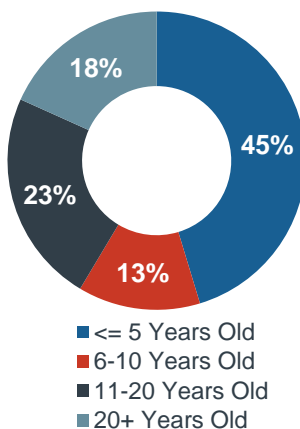
ASSET RENT CLASS¹

- Diversified across “A”/“B” assets
- “A” \$/sf rents > submarket avg.
- Rent-to-income ratio = 14.1%
- Avg. COVID-19 rent collections = 98.4%



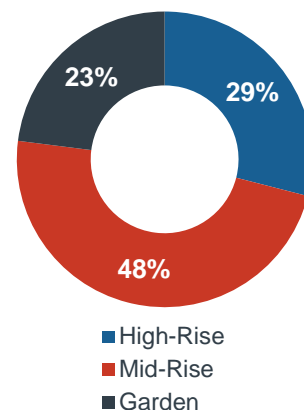
LOCATION²

- 13 MSAs (9 Regional Markets)
- 31 Submarkets



YEAR BUILT³

- 58% of portfolio built in last 10 yrs
- Portfolio average age = 13.5 years



TYPE⁴

- High-Rise > 9 stories tall
- 71% of port. garden or mid-rise

As of December 31, 2020. Chart percentages represent Gross Real Estate Value with unconsolidated JVs weighted at share. ¹Class A is defined as assets with T12 net effective rents greater than T12 submarket average rents per Axiometrics on a \$/sf basis. Includes only stabilized assets. ²Location definitions are grouped by Axiometrics submarkets. CP Research defines Urban Core as a submarket that includes the respective market's CBD. Urban Fringe refers to submarkets contiguous to the Urban Core submarkets. Includes active development assets. ³Includes active development assets. ⁴Type breakdown reflects Garden properties as defined by NCREIF (low rise apartments situated on a sizable landscaped plot, under one management); High-Rise properties are non-Garden properties greater than 9 stories tall. Includes active development assets. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Stabilized Portfolio: 13,115 Units Across 9 Major Markets

MARKET ALLOCATION AS % OF GAV¹



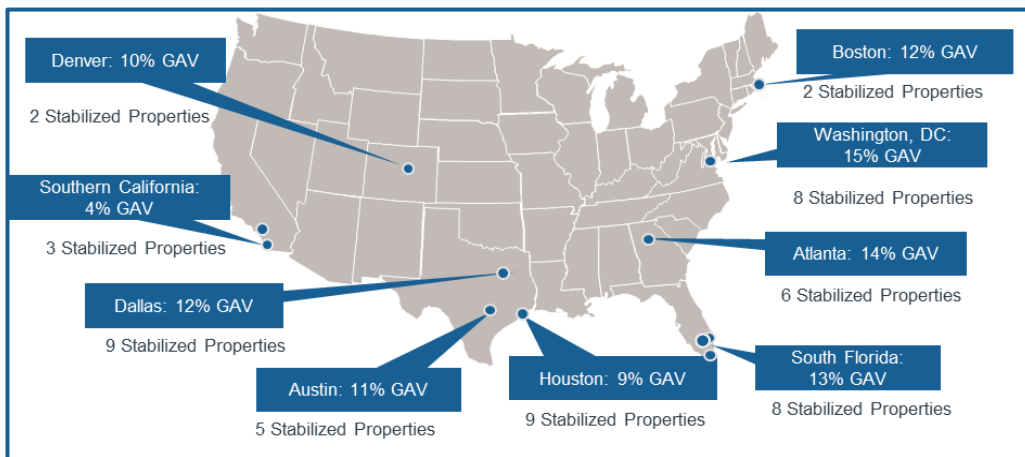
Gables Cherry Creek, Denver, CO



Gables Point Loma, San Diego, CA



Gables Villa Rosa, Dallas, TX



Gables Park Tower, Austin, TX



Gables Tanglewood, Houston, TX



Gables Columbus Ctr., Miami, FL



Gables University Station, Boston, MA



Gables Dupont Circle, Washington, D.C.



Gables Brookhaven, Atlanta, GA

As of March 31, 2021. The information in this presentation is based upon current management strategy and reflects prevailing conditions and our views as of this date. ¹GAV Allocation reflects first quarter 2021 Altus' appraisals for stabilized properties, active development and lease-up properties, and land values for shadow developments with cost adjustments from development activities. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Incremental Expansion of Markets and Submarkets

Expand into More Markets, Supply Constrained Submarkets, and Livable Nodes

- Focus on markets with critical mass in job growth (including technology, life sciences and new media)
- Target markets exhibiting economic diversity and population in-migration
- Reduce asset over-concentration; broaden geographies and emphasize micro-locations with barriers to entry
- Expand to more live-work-play nodes including in urban fringe and select suburban town centers of target markets



MARKET THEMES

Low Cost Migration:

Atlanta	Houston
Austin	Nashville
Dallas	North Carolina
Denver	Phoenix
Florida	Salt Lake City

Life Science Clusters:

Bay Area	Maryland
Boston	San Diego

Tech/New Media Driven Markets:

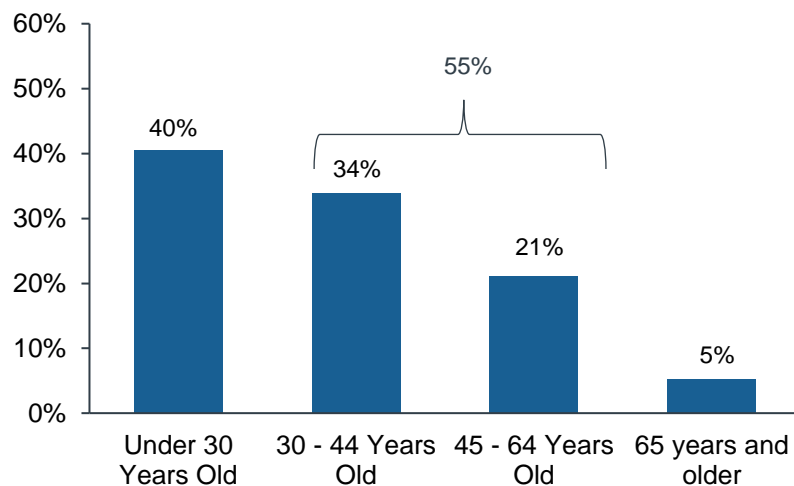
Austin	Los Angeles
Bay Area	Northern Virginia
Boston	Raleigh
Denver	Seattle

As of March 31, 2021. Black filled-in circles represent Gables markets, while unfilled circles represent markets where Gables is or has been exploring opportunities. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

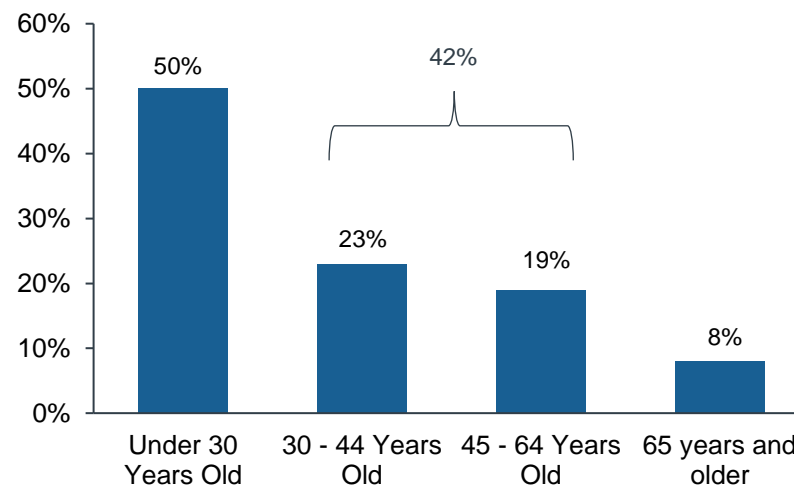
Gables Resident Profile

MARKET		ATLANTA	AUSTIN	BOSTON	DALLAS	DENVER	DC	HOUSTON	SOUTH FLORIDA	SOUTHERN CALIFORNIA	STABILIZED PORTFOLIO	YEAR-END 2019
Rent to Monthly Income Ratio¹	Average	15.0%	14.4%	14.9%	12.1%	15.7%	17.3%	14.6%	12.0%	21.3%	14.1%	15.8%
Average HHI¹	\$ '000s	\$121.3	\$169.9	\$208.2	\$183.8	\$156.1	\$144.6	\$122.7	\$198.3	\$102.0	\$155.1	\$141.1
Age	Average	33	37	41	36	36	39	38	40	37	37	37

CGMT SHARE OF RENTERS BY AGE



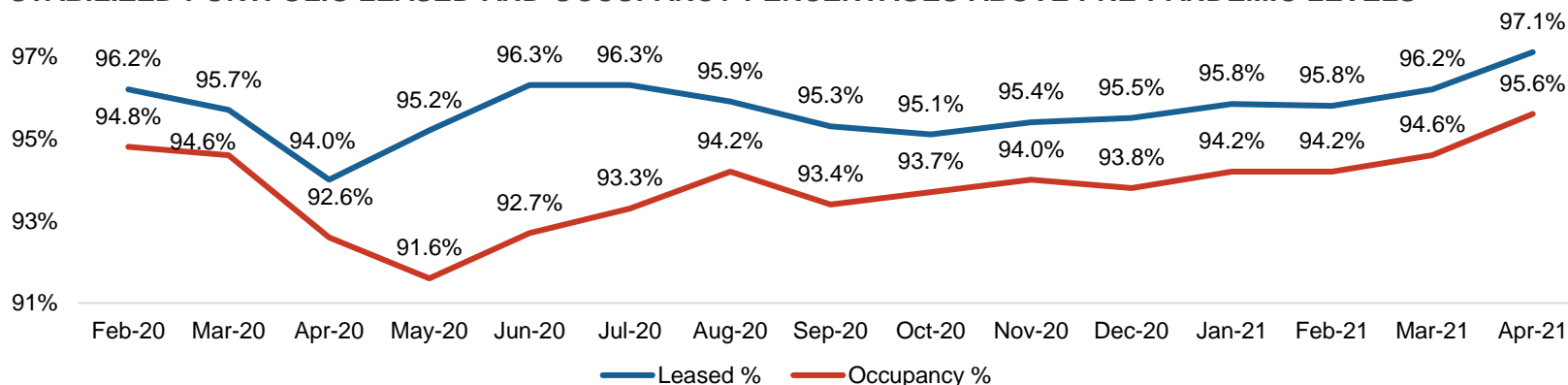
U.S. SHARE OF RENTERS BY AGE



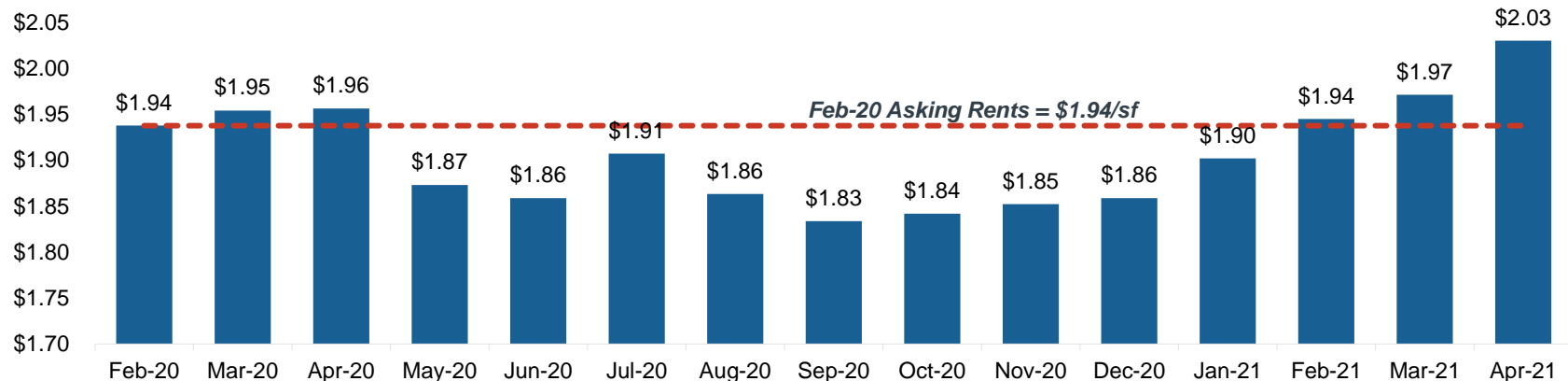
¹Rent to Monthly Income Ratios and Average Household Income are based on stabilized property residential profiles as of December 31, 2020. Source: Gables Residential, Census Bureau, Clarion Partners Investment Research, Q4 2017. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Portfolio Leasing Activity Throughout the Pandemic

STABILIZED PORTFOLIO LEASED AND OCCUPANCY PERCENTAGES ABOVE PRE-PANDEMIC LEVELS¹



SAME-STORE ASKING RENTS (\$/SF) HAVE GROWN ABOVE PRE-PANDEMIC RATES²

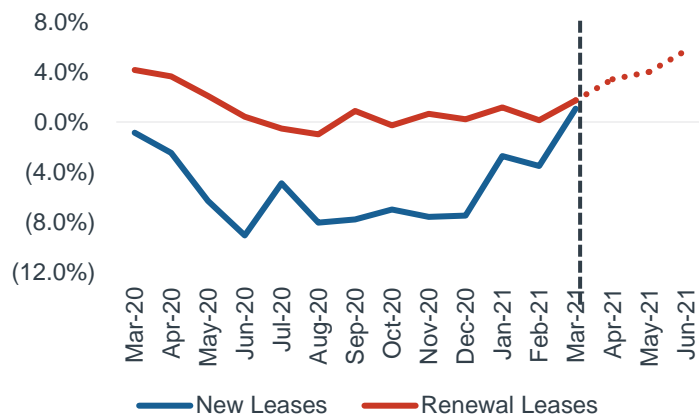


MoM % Delta	-	0.8%	0.1%	(4.2%)	(0.8%)	2.6%	(2.3%)	(1.6%)	0.4%	0.6%	0.4%	2.3%	2.3%	1.4%	3.0%
% Delta v. Feb-20	-	0.8%	1.0%	(3.3%)	(4.1%)	(1.6%)	(3.8%)	(5.4%)	(5.0%)	(4.4%)	(4.1%)	(1.8%)	0.4%	1.7%	4.8%

As of April 25, 2021. ¹Percentages leased and occupied are as of month-end for the stabilized portfolio, except for April 2021 which is as of April 25. ²Monthly asking rents are the average of the week-end figures for each respective month. CGMT provides minimal concessions at its stabilized communities. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Same-Store Portfolio Activity Throughout the Pandemic

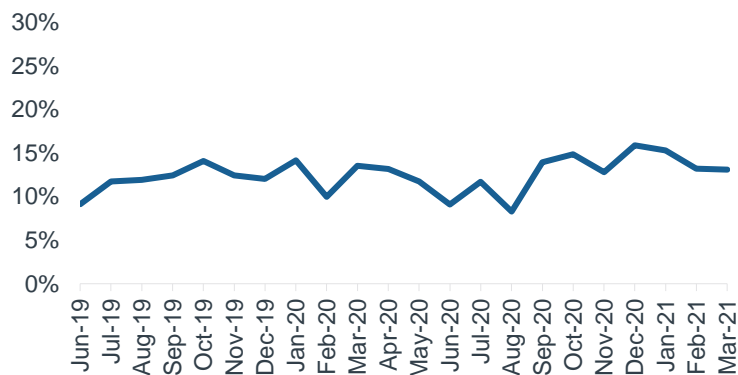
RENEWAL RENT GROWTH LEADS RECOVERY¹



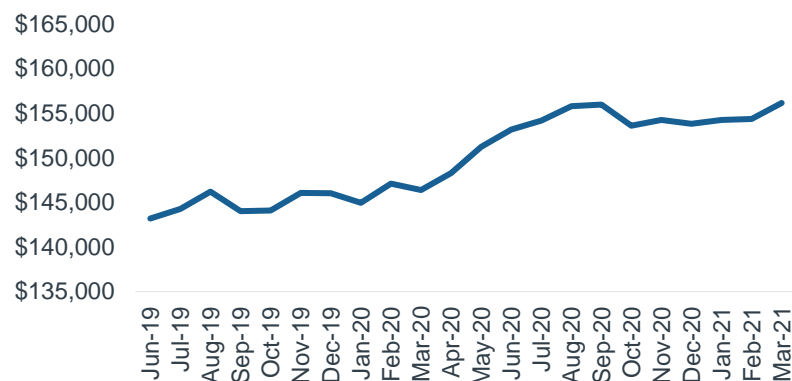
STRONG RENT COLLECTIONS THROUGHOUT PANDEMIC

Percentage \$ Rent Collected	
April	97.6%
May	98.3%
June	99.2%
July	99.1%
August	99.0%
September	98.9%
October	98.7%
November	98.6%
December	98.4%

MOVE-OUTS FOR HOME OWNERSHIP STABLE



RESIDENT HOUSEHOLD INCOME GREW DURING PANDEMIC



As of April 18, 2021. ¹Renewals for each month are sent out approximately 75 days prior to in-place lease expiration. Variation in renewal circulation dates is due to local jurisdictions and regulations. The percentage rent growth for April-June 2021 reflects the average for renewals offered. There is no guarantee that the such rent growth will be achieved by the Fund. Past performance is not indicative of future results. Please see important disclosures at the end of this presentation.



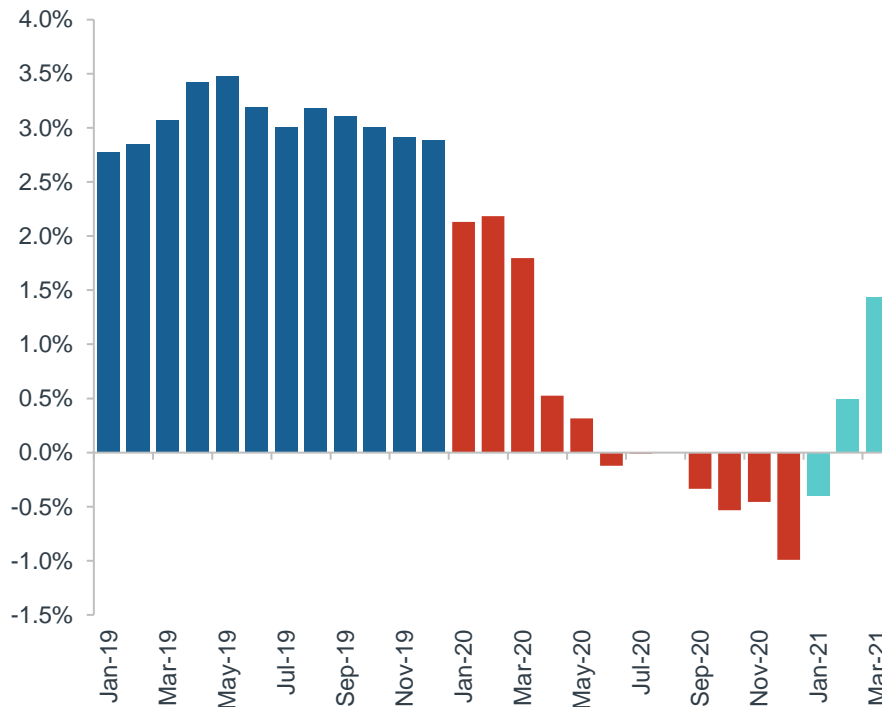
Fund Performance

Section IV

The Worst of COVID Impact Appears to Be Over: Q1 2021 Apartment Fundamentals Have Turned the Corner

- In Q1, 52,661 units were absorbed, more than double the average first quarter demand of about 25,000 units recorded over the previous 10 years
- Sunbelt and low-cost metros continue to shine, while coastal CBDs have shown clear signs of recovery

MULTIFAMILY NEW MOVE-IN RENT GROWTH YOY (SEASONALLY-ADJUSTED)



Q1 2021 NET ABSORPTION (UNITS) IN SELECTED METROS

Metros	2021Q1 Net Absorption (Units)
Dallas-Fort Worth	3,566
Miami	3,227
Austin	2,923
Orlando	2,593
Phoenix	2,462
Atlanta	2,326
Seattle	2,293
Charlotte	2,086
West Palm Beach	1,872
Tampa	1,748

Source: Zelman Associates, RealPage, Clarion Partners Investment Research, Q1 2021.

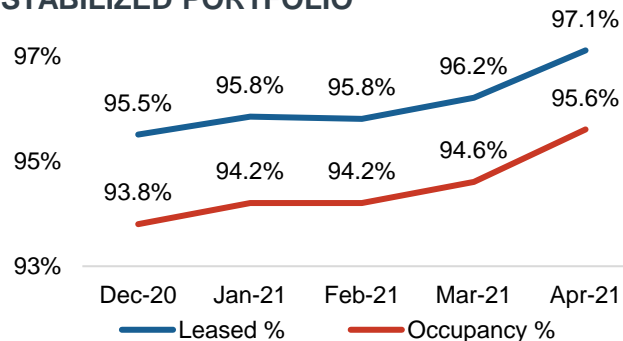
Note: Past performance is not indicative of future results. Please see important disclosures at the end of this presentation.

1Q 2021 Strength in CGMT Operating Trends

Occupancy

- Portfolio occupancy up 180bps since year-end

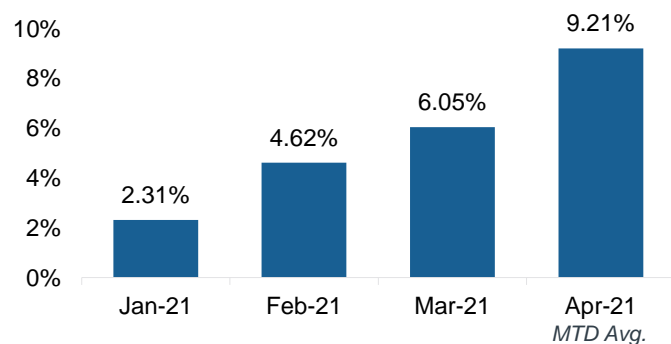
STABILIZED PORTFOLIO¹



Rents

- Average monthly asking rents up 9% since Dec.

SAME-STORE ASKING RENTS V. DEC-20 (%)²



As of April 25, 2021. ¹Percentages leased and occupied are as of month-end for the stabilized portfolio, except for April 2021 which is as of April 25. ²Monthly asking rents are the average of the week-end figures for each respective month. CGMT provides minimal concessions at its stabilized communities. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

CGMT 1Q 2021 Performance: Improving Following 2020 Write-Downs

CGMT RETURNS	1Q 2021
Income Return	0.67%
Appreciation Return	0.82%
Total Return Before Fees	1.48%
Total Net of Fee Return (before incentive fee) ¹	1.34%
Distribution Yield Before Fees on NAV	0.75%

Valuation fundamentals turn positive in 1Q 2021

- Stabilized same-store write-down of 2.5% in 2020, 0.7% appreciation in 1Q 2021
- In-place rents, a key driver of value, turned positive for the first-time since Pandemic onset in March 2021 (fell 3.1% in 2020); asking rent growth continues to accelerate, as shown on previous slide
- Market transactions driving lower valuation metrics and likely to continue. Portfolio discount rate lowered 6bps in 1Q 2021 following 17bps decline in 4Q 2020

As of March 31, 2021.

¹Incentive fees are excluded because they vary by investor depending on the timing of investment and the management fees paid by individual investors. At a gross leveraged target return range of 10-12% IRR and blended average in-place management fee, the impact of incentive fees over a five-year investment period is projected to be 0.20%-0.48%. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.



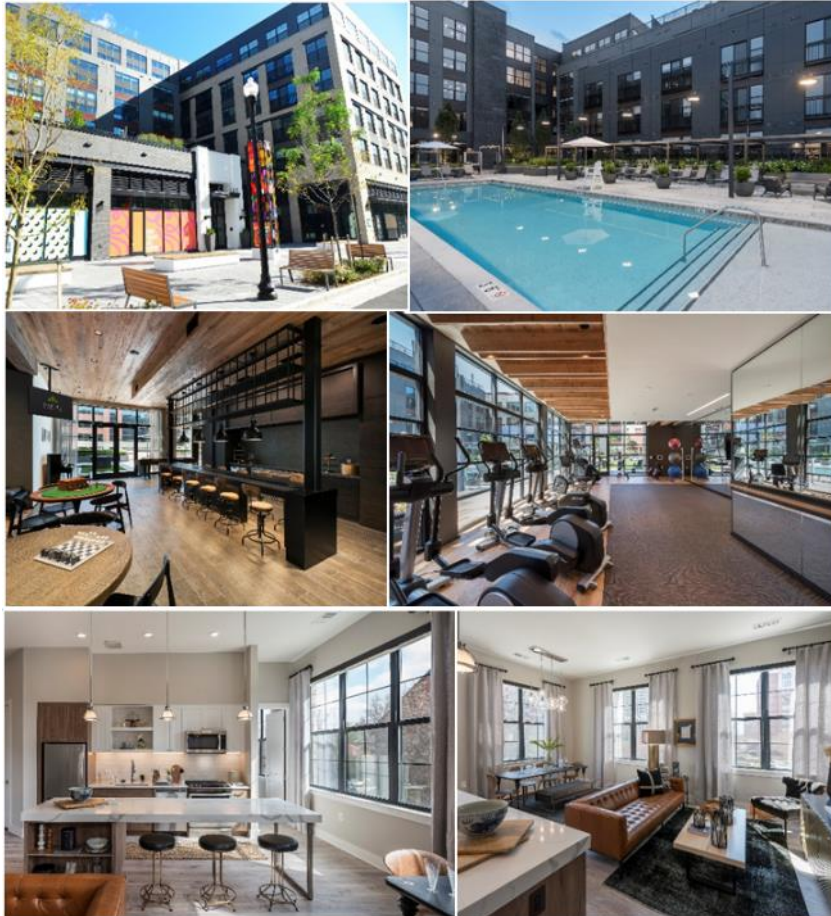
Gables Park 17, Dallas, TX



Value Creation Opportunities

Section V

Gables Old Town North Case Study – Recently Stabilized Development Investment



UNITS	STAB.	OCC/LSE	TPC (\$MM)	VALUE (\$MM)	STAB. PROF. MARGIN
232	3Q20	98/98%	\$96.4	\$131.6	32.5%

- 232 units (studio, 1-BR, 2-BR) averaging 865 SF
- In 2015, CGMT was approached by EDENS, an experienced retail operator, to develop asset and operate the multifamily portion on entitled site
- Alexandria is a wealthy D.C. suburb driven by federal government employment and other industries, including Amazon. Old Town Alexandria includes waterfront parks, shops, and trendy restaurants; two grocers located within two blocks of property
- High quality unit finishes and top-tier amenities including numerous community areas, an outdoor pool and sundeck, and a fitness center
- First move-ins occurred in April 2019 and strong velocity resulted in stabilization (93% occupied) in Q3 2020
- EDENS owns and operates 51,000 sq/ft ground-floor retail
- LEED for Homes Silver and Fitwel One-Star certified
- Video Tour: <https://vimeo.com/449352489/c73b3dea74>

As of March 31, 2021, occupancy and leased percentage as of April 25, 2021. The property above is an example of a recently stabilized development and was selected for inclusion in this presentation based upon objective criteria unrelated to performance. Past performance is not indicative of future results. There can be no assurance that the property described above will prove to be profitable. Please see the disclosures above and the Important Legal Information at the end of this presentation.

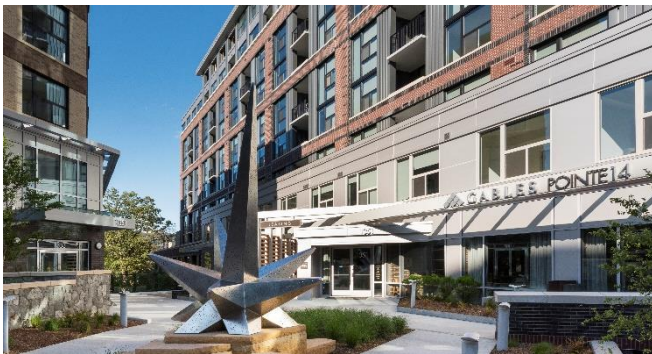
Recently Completed Developments



Gables Republic Square, Austin, TX



Gables Vinings Village, Atlanta, GA



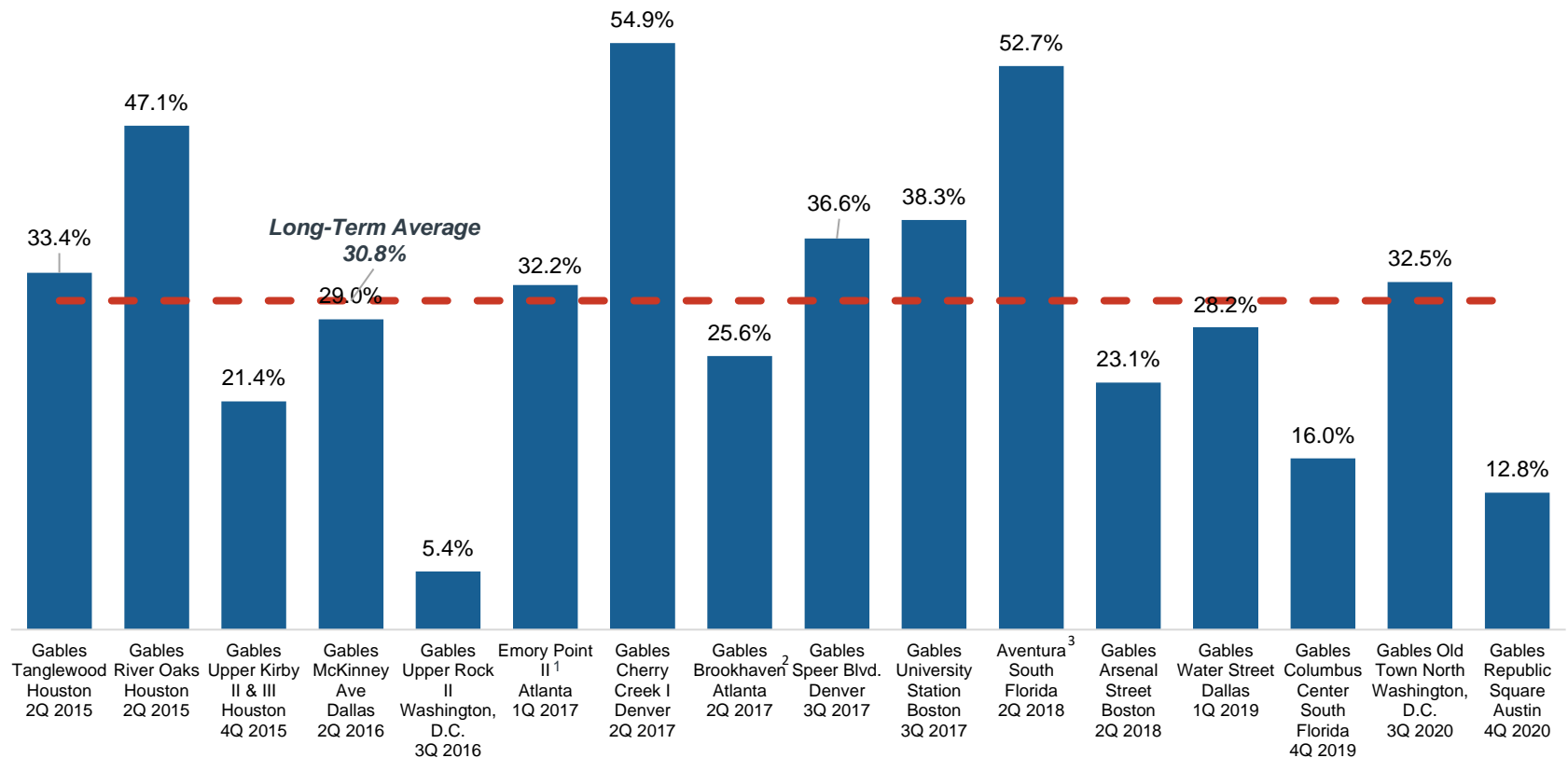
Gables Pointe 14, Arlington, VA



Gables Residences, Denver, CO

As of March 31, 2021. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Development Track Record Since Inception: High Gross Profit Margins



As of March 31, 2021. All gross profit margins reflect total project costs and first stabilized appraisal value. Projects shown include all completed developments since inception.

¹Emory Point II was sold shortly after stabilization as a single-asset with the first phase. ²Gables Brookhaven stabilized shortly before quarter-end in 2Q17. ³3Q17 valuation would result in a profit margin of 38.7%. ³Aventura was sold prior to stabilization; the profit margin herein represents the gain on cost from the gross sale price of \$149.0 million (\$29.8 million at share). Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

CGMT Development Pipeline

CONTROL PIPELINE

PROJECT ⁴	MARKET	EST. UNITS ³	EST. TPC ³ (\$MM)
Beverly	Boston	175	\$68
Turtle Creek Phase I ¹	Dallas	318	\$121
Evans Station	Denver	303	\$102
Governor's Park ²	Denver	197	\$86
Riverwalk Residences	Fort Lauderdale	295	\$170
Union Market ²	Washington, D.C.	300	\$140
White Flint ²	Washington, D.C.	357	\$137
Control Pipeline Total		1,945	\$824

PURSUIT PIPELINE

PROJECT ⁴	MARKET	EST. UNITS ³	EST. TPC ³ (\$MM)
Cambridge	Boston	420	\$266
Downtown	Austin	250	\$65
Coconut Creek	Broward Cty (FL)	275	\$106
Orange	Orange Cty (CA)	300	\$120
Old Town II	Washington, D.C.	167	\$71
Pursuit Pipeline Total		1,412	\$628



Evans Station, Denver, CO

- Off-market access to deal at favorable land basis rezoned to create value
- Rapidly gentrifying neighborhood with attractive cost basis
- Transit oriented development with commuter rail access to urban center



Gables Bass River, Beverly, MA

- Affordable, live-work-play suburb
- Direct transit access to Boston
- Off-market transaction/favorable basis
- Established comps provide rental rate transparency



Coconut Creek, Broward County, FL

- Mid-rise mixed-use project in a desirable suburban market with a prominent anchor tenant
- Accessibility to major commuter corridors and proximity to office markets
- Precedence for a 70-80% property tax abatement over 10-year period

As of March 31, 2021. ¹Turtle Creek Phase I is a currently owned CGMT stabilized property where the team is evaluating a potential redevelopment opportunity. ²Land site is owned by CGMT. ³Unit count and cost shown at 100% ownership. ⁴Except as otherwise stated, projects in the Control Pipeline are under contract and projects in the Pursuit Pipeline are not under contract. There is no guarantee that any such investments will be made. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Co-Investment Sidecar Opportunities

Section VI

Near-Term Development Sidecar Opportunities

GABLES UNION MARKET



Washington, D.C. | Union Market | 300 Units
Land Closing: 1Q21 | Est. Const. Start: 2Q21
Estimated TPC: \$140MM (\$128MM Net)

- Fully entitled, shovel ready site, loan secured
- Favorable land basis
- One of a few remaining land parcels for development in market in path of growth
- Location adjacent to unique experiential retail
- Limited retail risk; EDENS owns/operate retail; invested in the area

As of March 31, 2021. The land for Union Market was acquired in 1Q 2021 and the land for Riverwalk Residences is under control but there is no guarantee that such investment will be made by the Fund. Units and project costs are at 100% ownership. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

GABLES RIVERWALK RESIDENCES



South Florida | Fort Lauderdale | 295 Units
Est. Land Closing: 3Q21 | Est. Const. Start: 4Q21
Estimated TPC: \$170MM

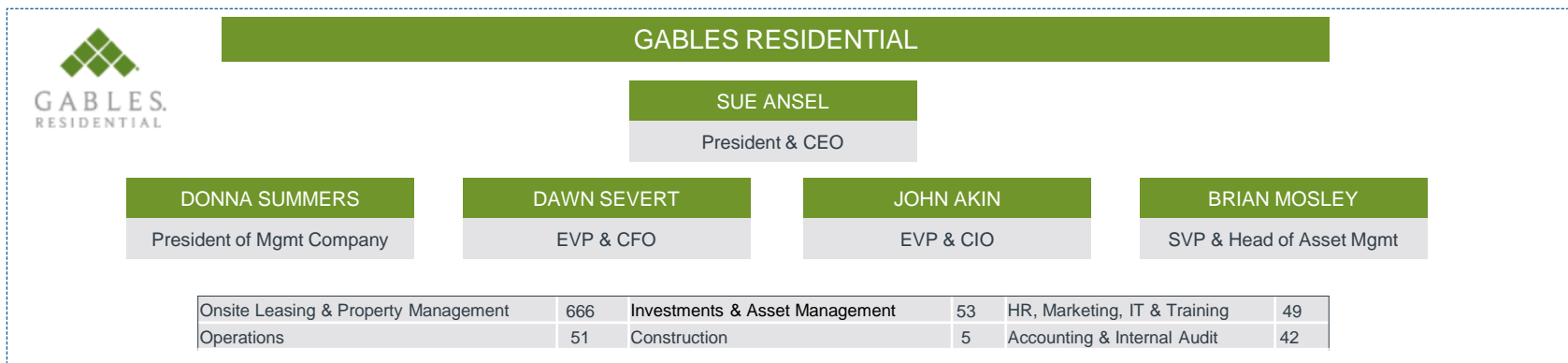
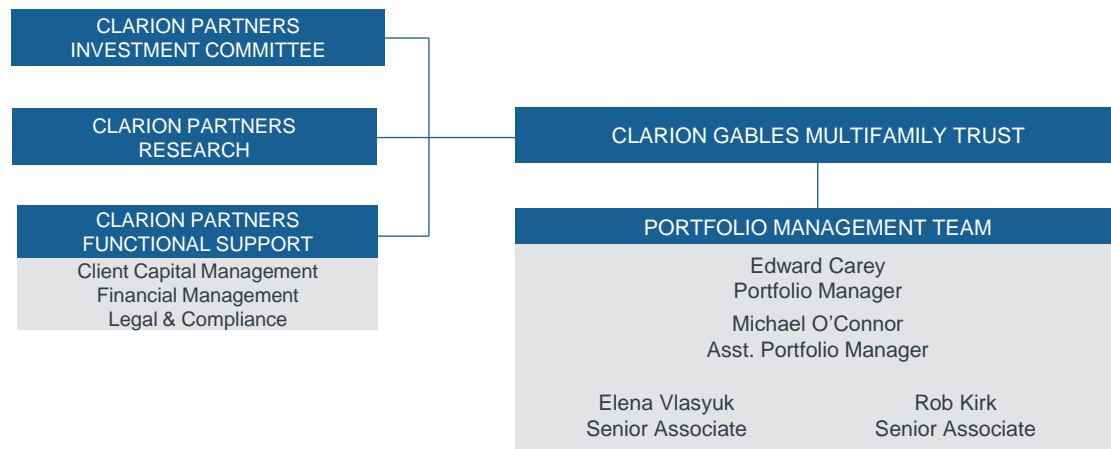
- Changed from Senior Housing use to Multifamily in response to COVID impacts; Gables brought in to co-develop
- Fully entitled site; currently under the 2nd round of master permit review; rare waterfront site in Las Olas
- Market with connectivity throughout South FL
- Significant dining, retail, and office space in direct proximity to the Project



Reference Materials

Appendix A

CGMT Organizational Chart



Headcounts as of December 31, 2020. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

Presenter Biography



Susan Ansel

President & CEO, Gables Residential

Sue Ansel is President and Chief Executive Officer. She has over 30 years of experience with Gables, serving in her current role since 2012. Sue was promoted to Chief Operating Officer in 2005 and prior thereto, she held positions in acquisitions, development and operations, and served as the lead for important company initiatives including the advancement of real estate technology efforts and third-party client services. In January 2018, Sue was elected to serve as Chairwoman of the National Multifamily Housing Council in which capacity she also serves as a member of the Executive Committee and the Board of Directors. Sue is also an officer and member of the board for the Real Estate Council and the Real Estate Council Foundation. Sue serves on several other boards and committees including the Dallas Summer Musical Board of Directors and DePauw University's Board of Trustees. She is a member of the Urban Land Institute.

As of March 31, 2021. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

CGMT & Gables Management Biographies



Edward L. Carey

Portfolio Manager, Clarion Partners

Edward L. Carey, equity owner and Managing Director, is the Portfolio Manager for Clarion Gables Multifamily Trust, one of Clarion's sector-specific, open-end funds. He is a member of the Firm's Executive Board and serves on Clarion's Career Management Committee. As Portfolio Manager, Ed has overall responsibility for Fund management and strategy, including the investment and operating policies of the Fund and managing the performance of the portfolio and operating management teams. He joined Clarion in 2007 and has more than 35 years of real estate experience in investment management, finance and strategic corporate / asset-related transactions, including 21 years on Wall Street. Ed is a graduate of the University of Notre Dame and the Wharton School of the University of Pennsylvania and is a member of several real estate organizations including the Wharton School Zell/Laurie Real Estate Center and the Urban Land Institute.



Michael O'Connor

Assistant Portfolio Manager, Clarion Partners

Michael O'Connor, equity owner and Managing Director, is an Assistant Portfolio Manager for Clarion's open-end multifamily fund. Michael shares responsibility for all facets of Fund management and strategy. Prior to joining Portfolio Management, Michael was an Acquisitions Officer with the Firm and structured investment transactions in the private and public markets. He also previously served as a Vice President with Clarion's Research Team. Michael joined Clarion Partners in 1997 and has over 30 years of real estate experience. He is a member of the Pension Real Estate Association and serves as co-President of the Defined Contribution Real Estate Council.

As of March 31, 2021. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

CGMT & Gables Management Biographies



Dawn Severt

Executive Vice President & CFO, Gables Residential

Dawn Severt is Executive Vice President and Chief Financial Officer. She has 27 years of experience with Gables and has been in her current role since 2005. Dawn was previously Senior Vice President and Chief Accounting Officer and prior to joining Gables in 1994, she was a Manager in the audit practice of Arthur Andersen LLP. Dawn serves on the Executive Committee of the National Multifamily Housing Council and as Chair of its Investment Committee. She is also a member of the Urban Land Institute. Dawn serves on the Board of Directors of DFB Pharmaceuticals, Inc. and as Chair of its Audit Committee. She serves on the Board of the Piedmont Park Conservancy, and as Co-Chair of the Finance Committee. Dawn is a Certified Public Accountant and a graduate of The Ohio State University.



John Akin

Executive Vice President & CIO, Gables Residential

John Akin joined Gables in 2016 as Executive Vice President and Chief Investment Officer. Prior to joining Gables, he was the Chief Financial Officer and Chief Investment Officer at the Flournoy Companies. Before Flournoy, John was a Senior Vice President at Carter where he led multi-family investment and development efforts on behalf of the Carter Funds and Senior Vice President of Development and Investments at Novare Group. In his real estate career, John has overseen the financing, development, and acquisition of nearly \$2 billion worth of multi-family and mixed-use projects totaling more than 7,000 units. Previously, John worked as a Principal at The Boston Consulting Group (BCG) and a Senior Consultant for Ernst & Young. He is active in the National Multifamily Housing Council and serves on the board of the Fort McPherson Redevelopment Authority.

As of March 31, 2021. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.

CGMT & Gables Management Biographies



Donna Summers

President of Gables Management Company, Gables Residential

Donna Summers is President of Gables Management Company. She has over 34 years of property management experience and over 26 years with Gables. She has held a variety of property management and operations roles in several markets throughout the Southeast and West and is now responsible for property operations nationally. She holds her CPM certification and is an active member of the Institute of Real Estate Management. She also served on the Board of Directors for the Apartment Association of Greater Dallas and the Legislative Committee for AAGD. Donna attended The University of North Texas and Oral Roberts University.



Brian Mosely

Senior Vice President and Head of Asset Management, Gables Residential

Brian joined Gables in 2019 as Senior Vice President of Asset Management. He is responsible for leading the asset management team's creation and execution of property-level investment strategies to create value portfolio-wide. Prior to Gables, he was a senior vice president of acquisitions and asset management at Silverpeak Real Estate Partners, where his team was responsible for investment and asset management activities across a variety of property types throughout the US. Brian began his real estate career at Jones Lang LaSalle in 2000 as an analyst in the Tenant Representation Group, executing office lease transactions in over 30 markets across the country. Brian holds an MBA from the University of Texas and a BA from Dartmouth College.

As of March 31, 2021. Past performance is not indicative of future results. Please see the disclosures above and the Important Legal Information at the end of this presentation.



Important Legal Information

Appendix B

Recent Developments Notice

Note: The impact of the outbreak of COVID-19 on the economy and the properties and operations of any fund or portfolio is highly uncertain. Valuations and incomes may change more rapidly and significantly than under standard market conditions. Please see additional information regarding the risks of investment and inherent subjectivity and assumptions of appraisals below.

Business Disruption. Clarion's investment vehicles ("Clarion Vehicles") and their investments are vulnerable to damages from any number of sources, including computer viruses, unauthorized access, energy blackouts, acts of God, fire, flood, earthquakes, outbreaks of an infectious disease, pandemic or any other serious public health concern, war, terrorism, labor strikes and telecommunication failures. In December 2019, a novel strain of coronavirus was reported to have surfaced in Wuhan, China. As of March 2020, the outbreak has been declared to be a pandemic by the World Health Organization, and the Health and Human Services Secretary has declared a public health emergency in the United States in response to the outbreak. Many countries, states, municipalities and other jurisdictions have instituted quarantines, curfews, prohibitions on travel and closure of offices, businesses, schools, retail stores and other public venues, including certain infrastructure facilities. Businesses are also implementing similar precautionary measures. Such measures, as well as the general uncertainty surrounding the dangers and impact of COVID-19, are creating significant disruption in supply chains and economic activity and are having a particularly adverse impact on transportation, hospitality, tourism and entertainment, among other industries. As COVID-19 continues to spread, the potential impacts, including a global, regional or other economic recession, are increasingly uncertain and difficult to assess. Given the ongoing and dynamic nature of the circumstances, it is difficult to predict the impact of the coronavirus outbreak. The extent to which the coronavirus impacts a Clarion Vehicle's results will depend on future developments, which are highly uncertain and cannot be predicted. These include: new information which may emerge concerning the severity of the coronavirus; the duration and spread of the outbreak; the actions to contain the coronavirus or treat its impact; its impact on our tenants, our tenants' customers, employees and vendors; and governmental, regulatory and private sector responses to the coronavirus. A Clarion Vehicle's financial condition and results of operations could be adversely affected, including such Clarion Vehicle's ability to complete in-process real estate transactions and developments, to collect rent from existing tenants, to lease units in its properties to new tenants, to make distributions to investors or to satisfy redemption requests in a timely manner. In addition, the operations of Clarion, any Clarion Vehicle and its investments may be significantly impacted, or even halted, either temporarily or on a long-term basis, as a result of government quarantine and curfew measures, voluntary and precautionary restrictions on work, travel or meetings and other factors related to a public health emergency, including its potential adverse impact on the health of any such entity's personnel.

Force Majeure. The investments of any Clarion Vehicle may be affected by force majeure events (i.e., events beyond the control of the party claiming that the event has occurred, including, without limitation, energy blackouts, acts of God, fire, flood, earthquakes, outbreaks of an infectious disease, pandemic or any other serious public health concern, war, terrorism, labor strikes and telecommunication failures). Some force majeure events may adversely affect the ability of a party (including an investment, a tenant of an investment, a customer of a tenant of an investment, a counterparty of an investment or a counterparty of a Clarion Vehicle) to perform its obligations until it is able to remedy the force majeure event. Such a party may also claim force majeure for nonperformance of its contract obligations. Certain force majeure events (such as an outbreak of an infectious disease) could have a broader negative impact on the world economy and international business activity generally, or in any of the countries in which a Clarion Vehicle may invest specifically. Additionally, a major governmental intervention into industry, including the assertion of control over an investment, could result in a loss to the applicable Clarion Vehicle. Any of the foregoing would therefore adversely affect the performance of such Clarion Vehicle and its investments.

Uncertainty of Net Asset Values. The Net Asset Value of each Clarion Vehicle is based on appraisals that are inherently subjective in certain respects and rely on a variety of assumptions, including assumptions about projected cash flows for the remaining holding periods for such investments. Furthermore, appraisals are based in large part on information as of the end of a given calendar quarter, and market, property and other conditions may change materially thereafter. Furthermore, real estate assets generally cannot be marked to an established market or readily tradable assets. Accordingly, such appraised values may not accurately reflect the actual market values of a Clarion Vehicle's investments, and, thus, prospective investors and Limited Partners may make decisions as to whether to invest in or redeem Interests without complete and accurate valuation information. In particular, the outbreak of COVID-19 and the economic impact arising from both the virus and actions taken to mitigate its spread may impact the value of a Clarion Vehicle's assets and availability of debt, and the current appraisals may not take such factors into account.

Important Legal Information

This is not an offer to sell, or a solicitation of an offer to buy, securities. Investment in real estate and real estate derivatives entails significant risk and is suitable only for certain qualified investors as part of an overall diversified investment strategy and only for investors able to withstand a total loss of investment. This material is for distribution only to prospective investors who are highly sophisticated and are “accredited investors” and “qualified purchasers,” as those terms are defined in the Securities Act of 1933 and the Investment Company Act of 1940, respectively. This presentation is strictly confidential and is not intended for distribution without the written permission of Clarion Partners. Unless otherwise indicated, returns are presented on a gross basis and do not reflect expenses, management fees or incentive allocations. References to indexes are hypothetical illustrations of aggregate returns and do not reflect the performance of any actual investment. Investors cannot invest in an index. Past performance is not indicative of future results and a risk of loss exists. Any investor's actual returns may vary significantly from any aggregate returns set forth in this presentation. Forecasts and projections rely on a number of economic and financial variables and are inherently speculative. Such forecasts and projections are based on complex calculations and formulas that contain substantial subjectivity. There can be no assurance that market conditions will perform according to any forecast or that any fund or account will achieve its objectives. Investors are cautioned not to place undue reliance on any forward-looking statements. Clarion Partners does not assume any obligation to update any forward-looking statements as a result of new information. Such statements are believed to be accurate as of the date provided but are not guaranteed and are subject to change without notice. This material does not constitute investment advice and should not be viewed as a current or past recommendation to buy or sell any securities or to adopt any investment strategy. Clarion Partners does not provide tax or legal advice. Tax-related statements are based on Clarion Partners' understanding of the tax laws. Investors must seek the advice of their independent legal and tax counsel before investing. Certain information contained in this material may have been obtained or derived from independent sources believed to be reliable. Clarion Partners cannot guarantee the accuracy or completeness of such information and has not reviewed the assumptions on which such information is based.

Target Return Disclosure. Target returns may be included herein and, if so, are based on historical performance of the real estate market, current market conditions, the amount of risk to be assumed by the account or fund, as applicable, and certain subjective assumptions relating to the respective investment strategy. Fund-level target returns assume investment through a complete real estate investment cycle. Target returns are presented to establish a benchmark for future evaluation of fund performance, to provide a measure to assist in assessing the anticipated risk and reward characteristics of an investment in the strategy and to facilitate comparisons with other investments. In general, the higher a target return is for an investment, the greater the amount of risk that is associated with that investment. The target is not intended to provide an investor with a prediction of performance and no investment should be made as a result of the target. Any target data or other forecasts contained herein are based upon estimates and assumptions about circumstances and events that may not occur or may change over time. For instance, the target may assume a certain rate of increase in the value of real estate over a particular period of time. If any of the assumptions used do not prove to be true, actual results may be lower than targeted returns. The target investment returns are subject to change at any time and are current as of the date hereof only. In any given year, there may be significant variation from these targets, and Clarion Partners makes no guarantee that an investment will be able to achieve the target investment returns in the short term or the long term (i.e., over a complete real estate investment cycle). Targets are subjective and should not be construed as providing any assurance as to the results that may be realized.

Target Internal Rates of Return. “Target Gross IRRs” are returns calculated gross of fund-level management fees, incentive allocations and expenses, which in the aggregate will be substantial and will have the effect of reducing returns. “Target Net IRRs” are returns calculated net of fund-level management fees, incentive allocations and expenses, unless otherwise disclosed. Target IRRs are based solely on internal cash flow projections and estimates of current market value and do not reflect opinions of value from third party appraisals.

Aggregated Property-Level Data. Aggregated (or “Blended”) property-level return targets, capitalization rates and internal rates of return (IRR), as applicable, are based, in part, on the value of the properties held in the portfolio. Values are assigned to each property using a consistent methodology that is applied in accordance with the written valuation policies. Aggregated asset-level return targets, capitalization rates and IRRs may incorporate property values assigned to properties on different dates within the prior year. Such property values are estimates only. This data is provided for illustrative purposes only and should not be viewed as a guarantee of current property value, capitalization rate or internal rate of return, as applicable. Neither individual nor aggregated cap rates represent a return or distribution from the portfolio itself.

Ownership. On July 31, 2020, Franklin Resources, Inc. (“Franklin Templeton”) acquired Legg Mason, Inc. (“Legg Mason”), including its 82% interest in Clarion. As a specialist investment manager of Franklin Templeton, Clarion continues to operate in a fashion consistent with the prior Legg Mason structure, maintaining its independent brand, investment autonomy, and management ownership of 18% of the business.

Important Legal Information (cont.)

Private Fund Disclosure. The information provided herein with respect to one or more funds (each, a “Fund”), as applicable, has been provided for informational purposes only and does not constitute an offer to sell, or solicitation of offers to buy or convert, securities in any existing or to-be-formed issuer. Investment in a Fund can be made only pursuant to the subscription agreement, offering memorandum and related documents and after careful consideration of the risk factors set forth therein. The information provided with respect to any the Fund is qualified in its entirety by reference to, and will be superseded by, such documents.

An investment in a Fund is speculative and involves a high degree of risk, potentially including risks related to the use of leverage. The performance of the Fund and its assets may be volatile. An investor may lose all or a significant amount of its investment in the Fund. Investment in the Fund is suitable only for sophisticated investors and requires the financial ability and willingness to accept the high risk and lack of liquidity inherent in the investment.

There can be no assurance that unrealized investments will be realized at the current valuations. There can be no guarantee that any Fund will be successful in implementing its investment strategy or that target returns will be realized. Gross returns are calculated prior to deduction of all fund-level fees, including asset management fees and incentive distributions, and investor-level taxes, all of which will reduce returns to investors.

Value Definitions, As Applicable. Gross Asset Value (“GAV”) is the Firm’s consolidated wholly owned total assets and proportionate share of joint venture total assets. Gross Real Estate (“GRE”) is the Firm’s consolidated wholly owned real estate assets and proportionate share of joint venture real estate assets. In contrast to GAV, GRE excludes cash and other assets. For Periods on or after 12/31/2013, Assets under Management (“AuM”) is Gross Asset Value (“GAV”). Prior to that date, AuM is Gross Real Estate Value (“GRE”).

Important Disclosure Relating to Clarion Partners Property Performance and Comparisons to the NCREIF Property Index

Inception date is 10/1/1984. Clarion Partners’ performance is calculated by blending the performance of assets from all client portfolios that meet the criteria for inclusion in the NCREIF Property Index (“NPI”). If the performance shown is for a subset of accounts of Clarion Partners, then all properties that would meet the criteria for inclusion in such subset in the NPI are included. Except with respect to subsets (e.g., industrial properties), qualifying properties include all Clarion Partners client-owned U.S. office, industrial, retail, residential and hospitality operating properties accounted for at market value, pursuant to the current valuation policy applicable to the respective client. New qualifying properties are included in the first full quarter in which they reach a minimum of 60% occupancy or, for newly acquired renovation or development assets, the earlier of 60% occupancy or 1 year after completion of the renovation or development. Once a property is included by Clarion Partners, it remains in the track record until it is disposed or converted to a property type which does not meet NPI inclusion criteria. With the exception of subsets outside of the hospitality sector, Clarion Partners includes the historical performance of 2 hotel investments managed by a Clarion Partners employee between 2002 and 2005 while working at Sarofim Realty Advisors and transferred to Clarion Partners in 2006 and 2007. The performance of Clarion Partners is hypothetical in that it does not track the aggregate performance of all assets held in Clarion Partners client accounts or of any individual account. No client has received the performance shown. Except as otherwise noted, Clarion Partners performance is shown unleveraged and gross of taxes, investment management fees, incentive fees, and, any fund expenses, if applicable. If such fees and expenses were deducted from the assets shown, performance would be substantially lower.

The NPI is a primary benchmark for the commercial real estate industry calculated and maintained by the National Council of Real Estate Investment Fiduciaries. The NPI is a total rate of return measure of the investment performance of a large pool of individual commercial properties that have been acquired in the private market for investment purposes. The NPI includes only U.S. office, industrial, retail, residential and hospitality operating properties owned in whole or in part by non-taxable institutional investors and accounted for at market value. The NPI is gross of investment management fees and is unleveraged. Information regarding NPI’s methodology is available at <http://www.reportingstandards.info/>. Substantial differences exist between the methodology for calculating the NPI and the Clarion Partners performance data. Performance was achieved under certain economic conditions that may not be repeated. Past performance is not a guarantee of future results.

Effect of Fees on Gross Performance

If management and other fees were included, performance would be lower. Advisory fees are disclosed in each fund’s private placement memorandum, in each investment advisory agreement for separate accounts, and in Part 2A of Clarion Partners’ Form ADV, Part 2A.

Important Legal Information (cont.)

Additional Index Definitions

The NCREIF Total Return Property Index (NPI). The NPI quarterly, annual and annualized total returns consist of three components of return – income, capital and total. Total Return is computed by adding the Income Return and the Capital Value Return.

NPI Market Value Index (MVI). The NPI MVI is simply an equal-weighted average of quarterly changes in reported market value for the properties that are not undergoing a major capital expansion. MVI is designed to reflect how property values are changing over time and be an alternative to the NCREIF capital index.

NCREIF Appreciation Index. The NCREIF Appreciation Index is a quarterly, unleveraged composite appreciation return for private commercial real estate properties held for investment purposes only.

NCREIF Industrial Sub-Index. The NCREIF Industrial Sub-Index is a quarterly, unleveraged composite total return for private industrial real estate properties held for investment purposes only.

Bloomberg Barclays US Aggregate Bond Index. The Bloomberg Barclays US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency).

EURO STOXX 600. The STOXX Europe 600 or STOXX 600 is a stock index of European stocks designed by STOXX Ltd. This index has a fixed number of 600 components, among them large companies capitalized among 18 European countries, covering approximately 90% of the free-float market capitalization of the European stock market (not limited to the Eurozone).

FTSE NAREIT All Equity REIT Index. The FTSE NAREIT All Equity REITs Index is a free-float adjusted, market capitalization-weighted index of U.S. Equity REITs. Constituents of the Index include all tax-qualified REITs with more than 50 percent of total assets in qualifying real estate assets other than mortgages secured by real property.

JLL Global RE Transparency Index. The JLL Global Real Estate Transparency Index is based on a combination of quantitative market data and information gathered through a survey of the global business network of JLL and LaSalle Investment Management across 109 markets.

Morgan Stanley EAFE Int'l Stock (MSCI EAFE) Index. The MSCI EAFE Index is designed to represent the performance of large and mid-cap securities across 21 developed markets, including countries in Europe, Australasia and the Far East, excluding the U.S. and Canada.

Morgan Stanley Emerging Markets (MSCI EM) Index. The MSCI Emerging Markets Index captures large and mid-cap representation across 24 Emerging Markets (EM) countries. With 845 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

NAREIT Equity REIT. NAREIT Equity REIT Index is an index designed to provide the most comprehensive assessment of overall industry performance, and includes all tax-qualified real estate investment trusts (REITs) that are listed on the New York Stock Exchange, the NYSE AMEX Equities or the NASDAQ National Market List.

The FTSE NAREIT Equity REITs index contains all Equity REITs not designated as Timber REITs or Infrastructure REITs.

Investment Property Databank (IPD) Index. The IPD Index is a composite of investment returns on both a historical and current basis of its participating members, who must qualify as being open-end, core, diversified funds pursuing a core investment strategy and includes all investments owned by them including real estate, cash and other investments (mezzanine loans receivable, notes receivable, forward commitments, etc.). The IPD Index is capitalization-weighted and is reported gross of fees. Measurement is time-weighted. Unless otherwise noted, IPD Index returns are presented without leverage and before the deduction of portfolio level management fees and do not reflect the results of any actual investment portfolio. The index's history is unfrozen; therefore, any reconstitution would result in a revision to the index's historical data. For comparative purposes, IPD calculates LPF returns using the same methodology as the IPD Index. Further information is available online at <http://www.ipd.com>.

S&P 500 - Standard and Poor's 500 Index. The S&P 500 Index is a capitalization-weighted index of 500 large U.S. stocks. The index is designed to capture the returns of many different sectors of the U.S. economy. The total return calculation includes the price-plus-gross cash dividend return.

Important Legal Information (cont.)

LGAF Disclosure. LGAF was structured as a closed-end fund, the general partner of which (the “LGAF General Partner”) was a joint venture between affiliates of Clarion and Silverpeak as co-members. LGAF was acquired by the Fund on February 18, 2015. Clarion served as the managing member of the LGAF General Partner and was responsible for the day-to-day management of LGAF, but major decisions regarding LGAF and its properties were subject to the approval rights of both Clarion and Silverpeak. The CGMT General Partner is controlled exclusively by Clarion. The term of LGAF was initially seven years from its formation and was scheduled to expire in November 2012, but was extended for two consecutive 18-month periods by the LGAF General Partner (as permitted under LGAF’s governing documents). At the time Gables was acquired by CGMT, LGAF’s term was scheduled to expire in September 2015. The LGAF General Partner had a limited right to call additional capital following LGAF’s initial closing. This call right was exercised during the third calendar quarter of 2009 in an amount equal to \$120,000,000. The entirety of such capital call was ultimately funded by LGAF’s investors. Nothing contained in this presentation should be considered as a prediction of the performance of the Fund. Past performance is not indicative of future results and a risk of loss exists.

Notes:

Notes Regarding Methodology of Calculation for Metrics Presented

Returns are time weighted, calculated at the investment level, and include cash, leverage and interest income from short term investments. Time periods of less than one year are not annualized, unless otherwise indicated. Since Inception returns reflect the Fund inception on February 18, 2015. Unless otherwise indicated, all returns are presented on a gross basis, and do not reflect any expenses, advisory fees, management fees and incentive allocations, which in the aggregate may be substantial. Net returns reflect management fees payable at the Fund level and advisory fees payable at the Operating Partnership level. Past performance is not an indication of future results, and there exists a possibility of future loss.

Unless otherwise noted, real estate values reflect joint venture assets at proportionate share and exclude any value attributed to the Fund's promoted interest therein. The financial statements, however, reflect joint venture assets using the equity method of accounting in accordance with U.S. generally accepted accounting principles and investment in joint ventures includes the value attributed to the Fund's promoted interest therein at inception in accordance with the recordation of the purchase price at Fund inception.

Total Asset Value is the value of the Fund's consolidated wholly-owned assets and proportionate share of joint venture assets. Real estate values are established by independent appraisals each quarter and the values presented herein are based on the March 31, 2021 appraisals.

Fund Net Asset Value as of March 31, 2021 represents Series A units. From February 18, 2015 through November 29, 2019, Net Asset Value included Series A and Series B units. While in place, the Series B units bore a 7.0% preferred annual return from inception through December 31, 2016, and 6.5% thereafter through November 29, 2019 when the Series B units were fully retired. The Series B units did not participate in the Fund's capital appreciation, and, as a result, the returns of all units over the periods during which the Series B units were outstanding were lower than the returns on the Series A units only.

Fund Leverage Ratio is calculated as the sum of the actual principal amounts outstanding, as applicable, of all Fund-level debt, wholly-owned property debt, and the Fund's proportionate share of joint venture debt divided by Total Asset Value.

Unless otherwise noted, unit counts include the Fund's joint venture investments at 100%. Occupancy excludes units that are not available for lease due to value-add renovations or repairs being performed with respect to such units, if and as applicable.

Total projected cost for developments is based on cash-based underwritten budget method vs. GAAP.

There can be no assurance that estimated profit or target returns will be achieved. The estimated profit or target returns established by Clarion Partners are based on assumptions and calculations using available data and in light of current market conditions and available investment opportunities. The estimated profit and target returns are subject to significant limitations. Potential investors should not rely on them when making a decision on whether or not to invest in the Fund. The estimated profit or target returns cannot account for the impact that economic market and/or other factors may have on the implementation of an investment. Estimated profit or target returns do not reflect actual investments, liquidity constraints and actual fees and expenses. There can be no assurance that the Fund will achieve its investment objective, the estimated profit or the target return. The profit or return achieved may be more or less than the estimated profit or target return.

Important Disclosures:

The purchase of shares offered entail certain risks that investors should consider before making a decision to invest in the Fund. There can be no assurance that the Fund will be profitable or, if it is profitable, that any particular yield or rate of return will be obtained or other investment objective will be realized. An investor should only invest in the Fund as part of an overall investment strategy and only if the investor is able to withstand total loss of investment.

Investment Considerations and Risk Factors

Risk Factors that should be considered in making an investment are: Risks of leverage, including possible inability to repay current indebtedness or to source new debt; possible inability to refinance; variable interest rate; impact of borrowing covenants; general economic conditions; past performance of the Fund and Clarion; insufficient cash flow; partial or total loss of the Fund's capital; liability for return of distributions; availability of suitable investments; investment and disposition activities; projections; controlling person liability; limited rights; dependence of the general partner, Clarion and Gables; difficulties in retaining employees; diverse investor group; litigation; diversification of risk; subsequent closings; attracting investors; failure to Fund Equity Commitments; separate agreements with limited partners; leverage and interest rate exposure; availability of leverage; acquisition of Gables; currency and exchange rates, references to indices; short-term investments; privacy and information security.

Risks Related to Real Estate Investing

Investment in real estate generally; illiquidity of the Fund's investments; competition for residents from other housing alternatives; failure to succeed in new markets; inability to pass through increases in operating expenses and other real estate costs; inability to complete development and renovation of advantageous terms; failure of newly acquired apartment communities to achieve anticipated results; inability to lease vacant space, renew leases or re-let space as leases expire; third-party fee management business; partial ownership interests; government support for multifamily housing; environmental matters; possible inability to sell properties; Americans with Disabilities Act; possible inability to complete renovation and development on advantageous terms; possibility of future terrorist activity; insurance may not cover all losses; financial condition of tenants; uninsured losses from seismic activity; partial ownership interests; and investments in securities.

SUBJECT: Real Estate External Manager Presentation ACTION: _____
Realterm

DATE: May 20, 2021 INFORMATION: _____ X

BACKGROUND:

Realterm, external industrial fund manager for the APFC, will present to the Board an update on the industrial real estate market. Realterm will also provide updates on their strategy and fund highlights.

Biographies of Attendees:

Stephen Panos (*Senior Vice President & Fund Manager, Realterm*)

Mr. Panos is responsible for all asset management, leasing, and business plan execution for the Realterm Logistics Income Fund (RLIF). Prior to joining Realterm Logistics, Mr. Panos was a Director of Portfolio Management at Barings, where he was the portfolio manager for a closed-end, value-add commingled fund and single investor separate account, respectively. His primary responsibilities included development and execution of portfolio strategy, fundraising, client relations, portfolio financing and financial reporting. Mr. Panos holds a BA in Economics and Computer Applications from the University of Notre Dame and an MBA from DePaul University.



Realterm Logistics Income Fund

APFC

Board Meeting

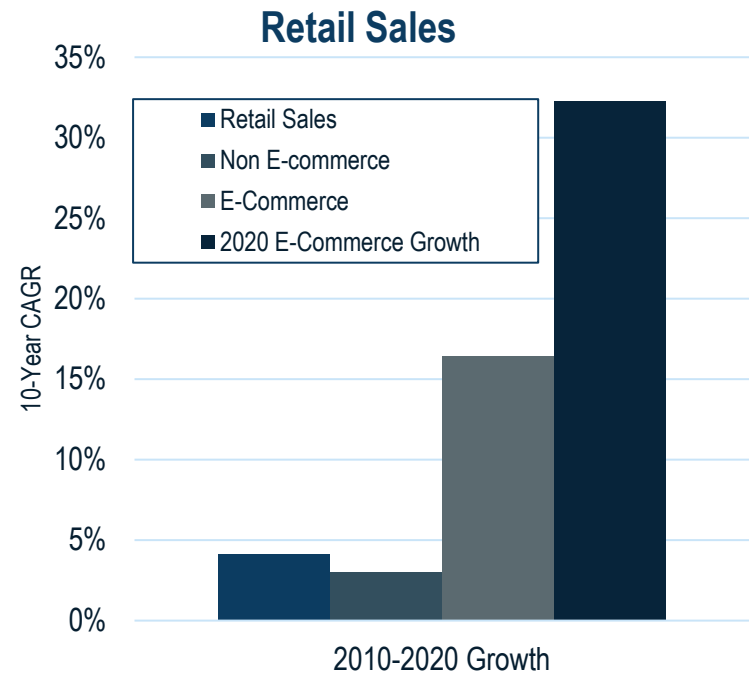
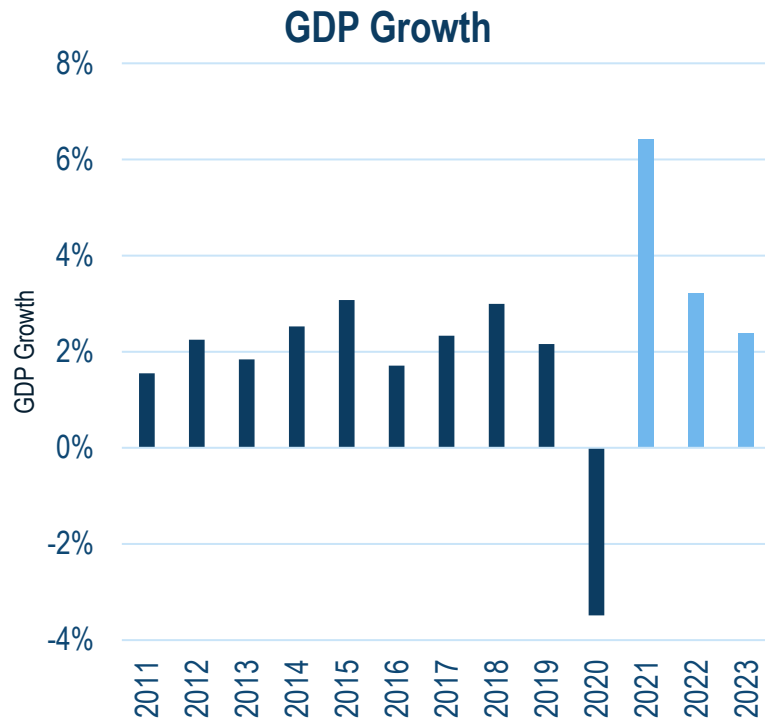
May 20, 2021



Industrial Market Update



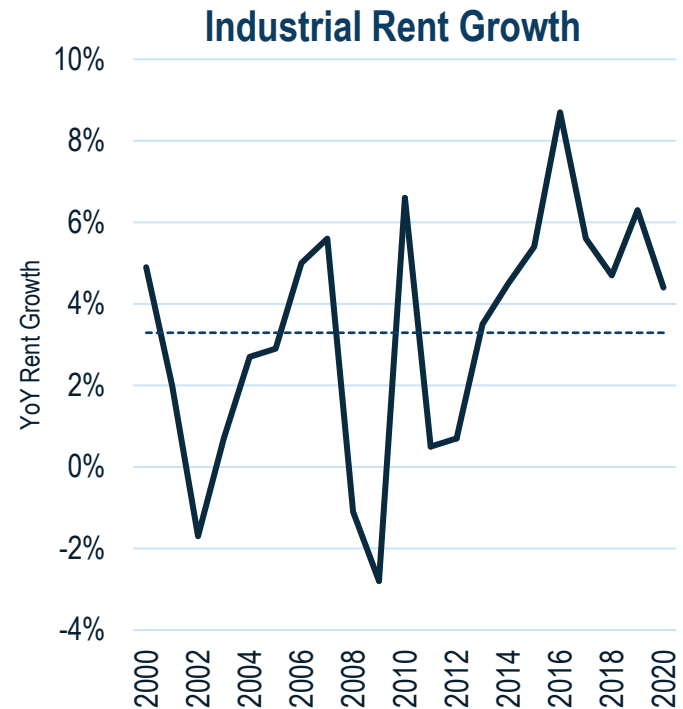
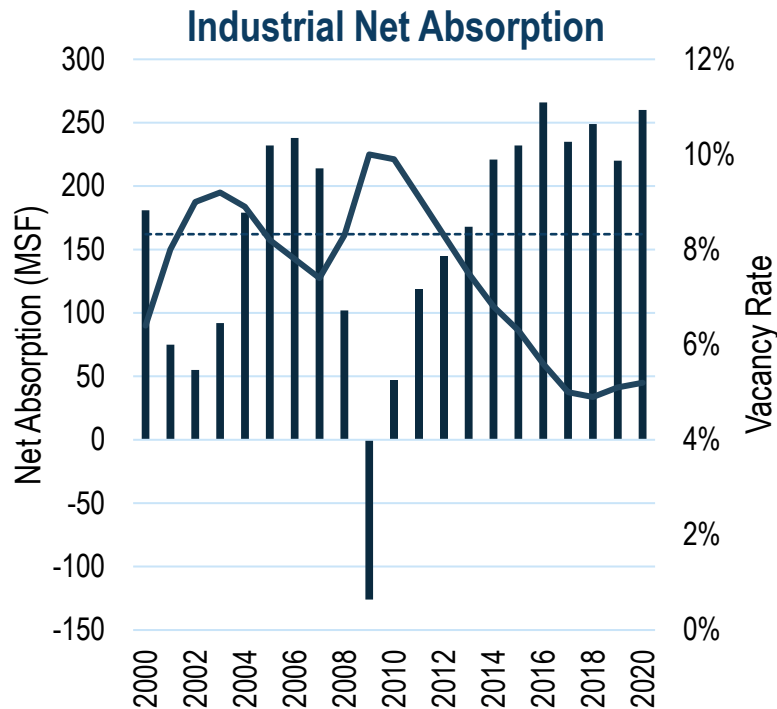
U.S. Economy Poised for Post-Pandemic Take-off



- U.S. economic growth is accelerating. A robust vaccination campaign will lead to more normalized commercial activity. Pent up demand will super-charge recovery in the near term
- The pandemic led to an acceleration in consumption behavior towards online shopping. E-commerce penetration could reach the 20-25% range by 2025

Source: U.S. Bureau of Economic Analysis, U.S. Bureau of the Census

E-Commerce Fueling Unprecedented Industrial Space Demand

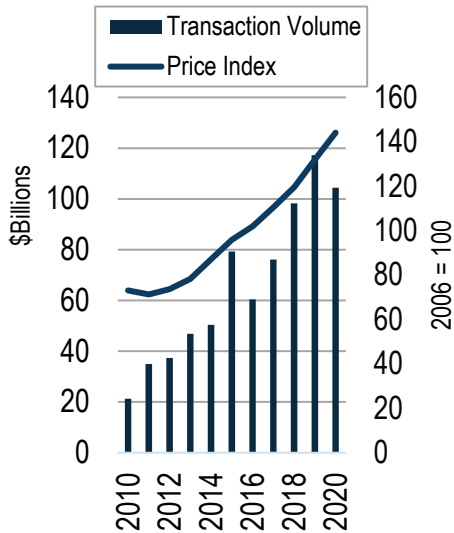


- E-commerce is driving rapid expansion of retailer distribution needs. Near-record industrial net absorption in 2020, despite one of the deepest recessions the nation has experienced
- While rent growth has been exceptionally strong for the past six years, excessive supply growth has historically led to a correction. Industrial rents grew slower than the rate of inflation from 2000-2013

Source: JLL, CBRE, Costar, Realterm

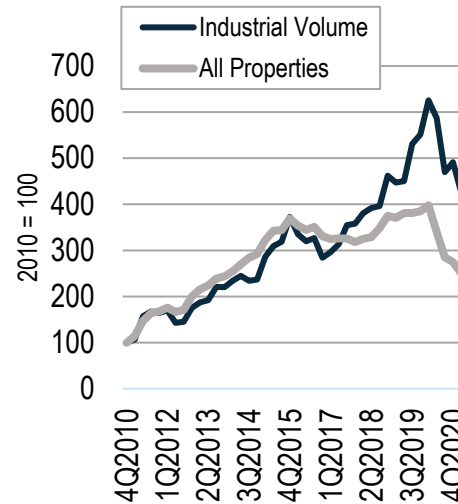
Investors Anticipate Supply Chain Transformation

Industrial Transactions



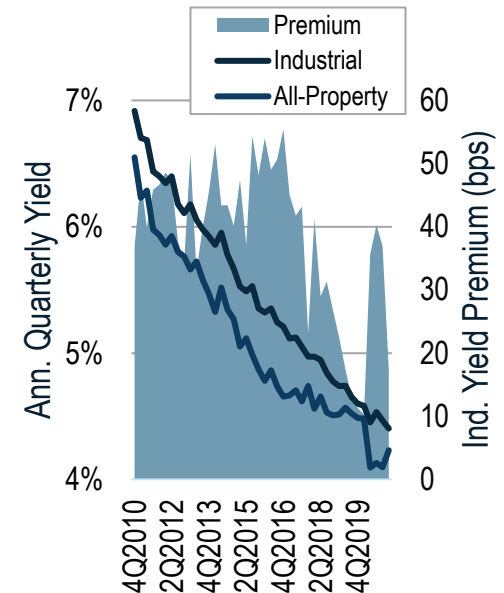
- Industrial prices have increased by nearly 10% in each of the past three years
- Volume has been concentrated in smaller properties (<200,000 sf)

Industrial vs Other Property Types



- Industrial transaction volume in 2019 and 2020 was double its volume five years earlier
- Despite a dip in volume in 2020, industrial transaction volume has increased twice as fast as all other properties since 2010

Industrial Yield Comparison



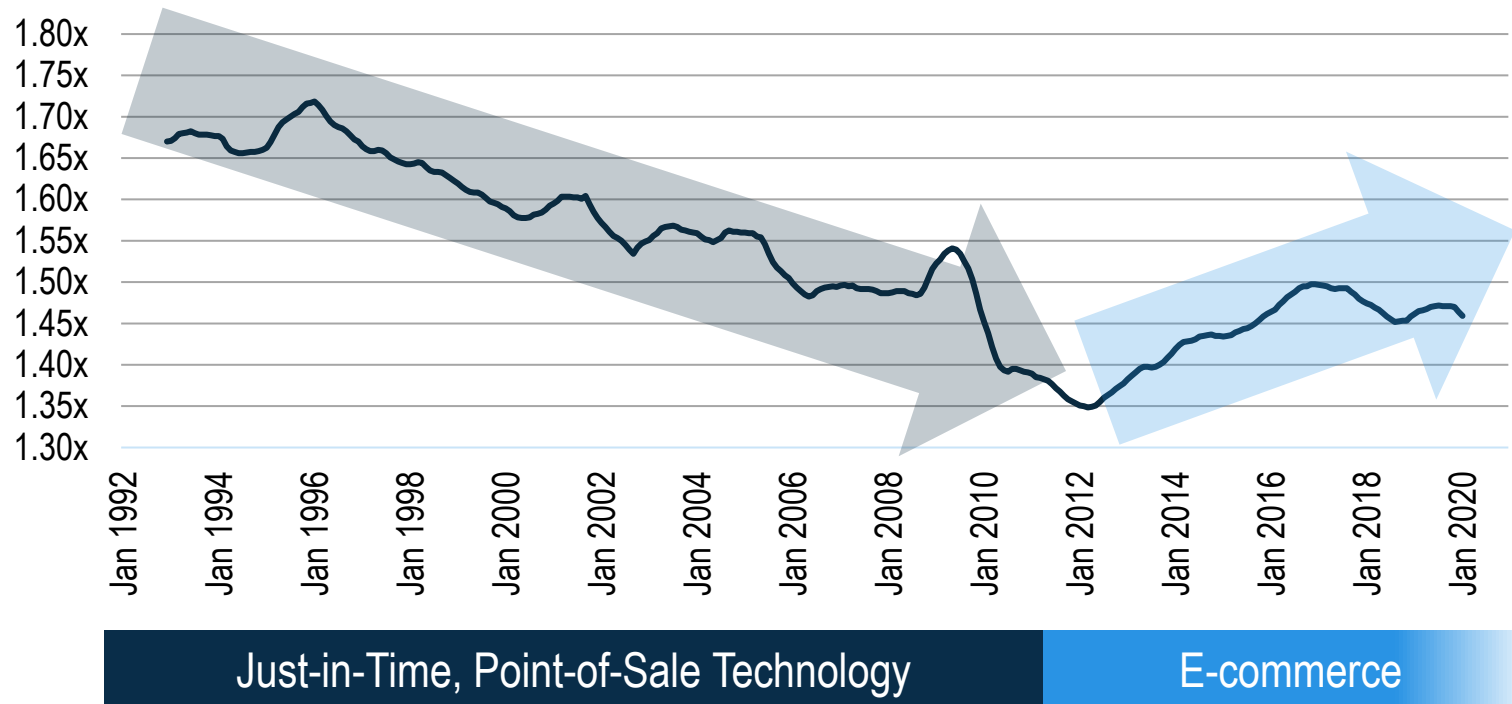
- The industrial yield premium over other properties has eroded from around 50 bps in 2010 to 10 bps in 2020

Source: Real Capital Analytics, CoStar, NCREIF, Realterm

Trucking Sector Outlook

- FreightWaves predicts the U.S. trucking sector will look similar in the first half of 2021 to what it was in the last half of 2020
 - Pricing and revenue will be volatile in the truckload sector, with steady improvement in LTL and parcel segments
 - Volume is strengthening out of port markets (especially LA, NY/NJ)
- The second half of 2021 will usher in a robust economic recovery, fueled by federal stimulus spending and re-opened commercial activity
 - Expect a temporary mild re-trenching of e-commerce, as store-based sales recover
 - E-commerce and final mile carriers will experience another outstanding year, if somewhat off the 2020 gains
- Congested port activity will create very strong volume growth among truckload carriers over the next six months, but uncertain demand in the rest of the country will pressure local carriers
 - Mergers, and distress from defaults should create real estate investment opportunities for patient buyers

Inventory-Sales Ratio Trend Reversing; Rising Inventory Ahead



- Retailers historically sought to minimize inventory because of storage costs incurred, and the added opportunity cost of growing their business
- E-commerce inventory generates product flexibility and minimizes delivery time to consumer

Source: U.S. Census Bureau

Differentiated Industrial Sponsor & Strategy



Leader in Supply Chain Real Estate

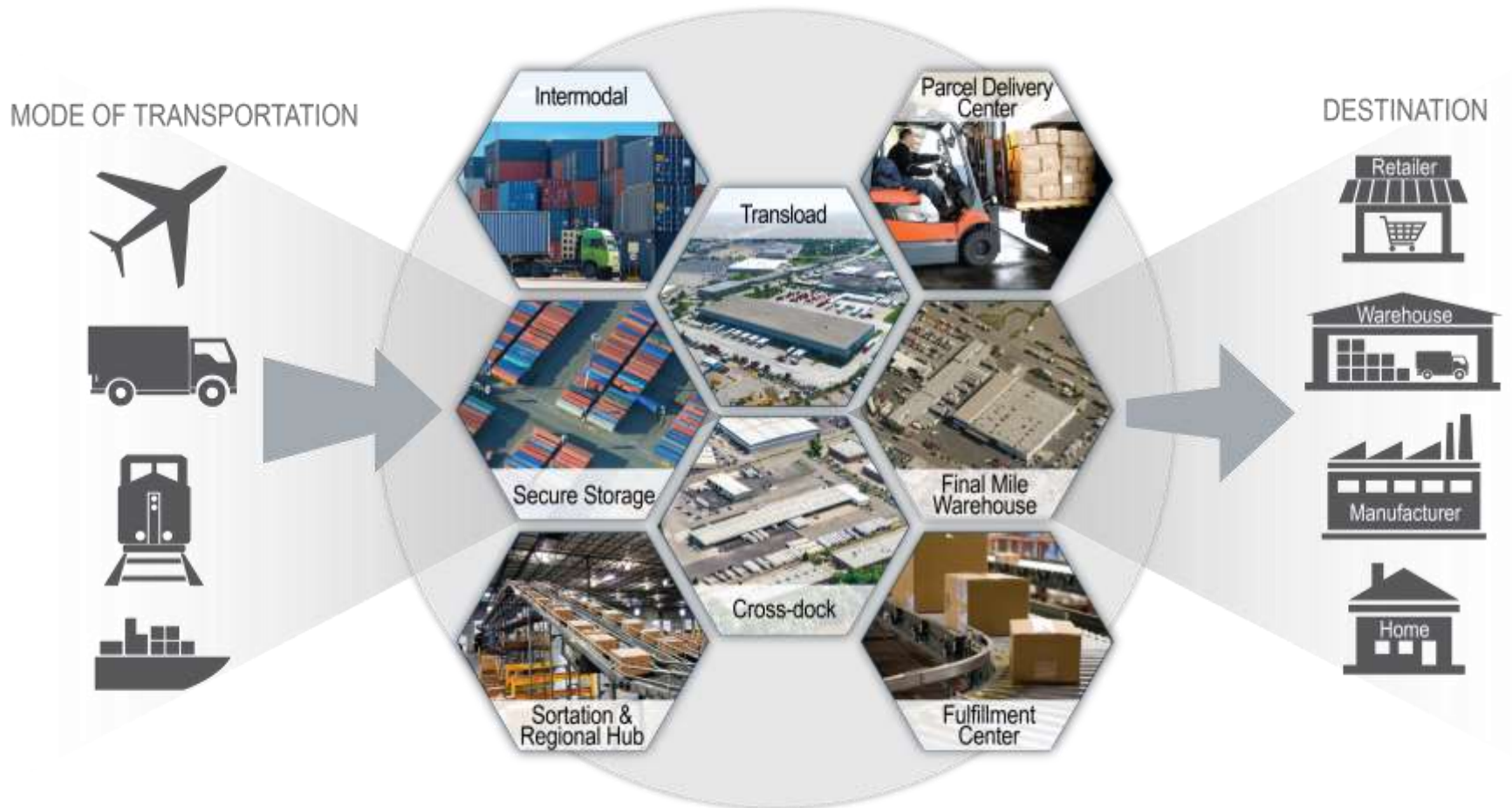


- 30-year track record as real estate operator executing differentiated private equity strategies based on insights into the global supply chain and evolving consumption trends
- Largest pure-play transportation logistics real estate sponsor
- 3 investment platforms with \$7 billion in assets under management across a 350-property, 45+ million square foot global portfolio
- 5 fund series investing over \$3 billion in commingled equity from institutional partners across the U.S., Canada, Europe, the Middle East and Asia

Focus on High Flow Through (HFT®) Supply Chain Real Estate

Mission-Critical Transportation Logistics Nodes Designed to Move, Not Store, Freight

HFT TRANSFER POINTS



HFT Facilities Optimize Supply Chains

Inventory Turnover Increases Delivery Speed and Reduces Cost to the Shipper

- E-commerce-driven demand growth is propelling new warehouse supply
- HFT properties are the pipeline for delivering stored freight to the residential and commercial end user
- Zoning, limited land and competing uses constrain new, infill HFT supply in contrast to general warehouse space, which is more commoditized and cheaper to build
- Well-located, supply-constrained HFT properties perform well through cycles as these properties are relied upon to move an increasing volume of freight through the supply chain
- **HFT properties move 7x more freight per year than warehouses, increasing inventory throughput and reducing per unit merchandise costs for the shipper**

Representative HFT Properties

TRANS-SHIPMENT



FINAL MILE DELIVERY



INTERMODAL / SEAPORT



FLEET OPERATIONS



Differentiated Investment Approach



UNDERWRITING

- Informational advantage drives off-market deal flow
- Mission-critical, transportation- and infrastructure-advantaged
- Mid-bandwidth assets that follow the flow of goods
- Premium to core cap rates
- Asset quality top 25% of market quality
- Discount to replacement cost



PORTFOLIO CONSTRUCTION

- Geographically diversified across primary and key secondary logistics markets
- High current cash income component
- Low ongoing tenant-directed TIs and capex



ACTIVE ASSET MANAGEMENT

- Creative transaction structuring to maximize current income
- Prudent capital investment to improve institutional receptivity for asset
- Active leasing program
- Disciplined and ongoing assessment of an asset's value potential and holding period
- Receptive to highly accretive one-off exits

RESEARCH



- Identify drivers of local, logistics-based real estate demand
- Provide framework to understand property utility and functionality within a transportation network
- Update proprietary market focus model to identify attractive investment markets in evaluating market exposure

Note: It should not be assumed that all investments made by the Fund will be comparable in nature to the investment objectives described above. The information herein is qualified in its entirety by the Memorandum and the Fund's limited partnership agreement.

Proprietary Property Database

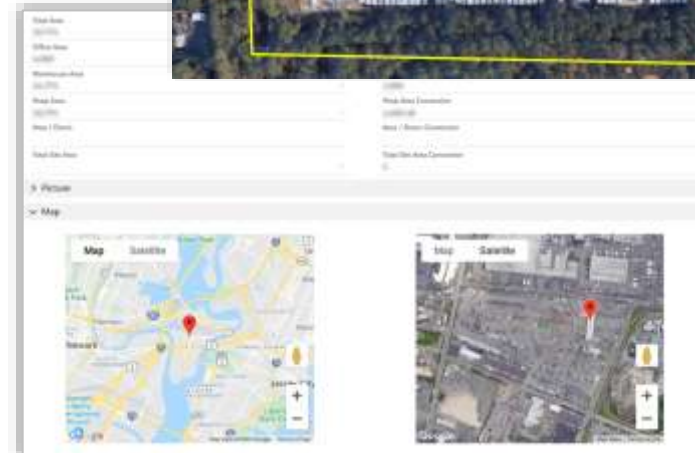
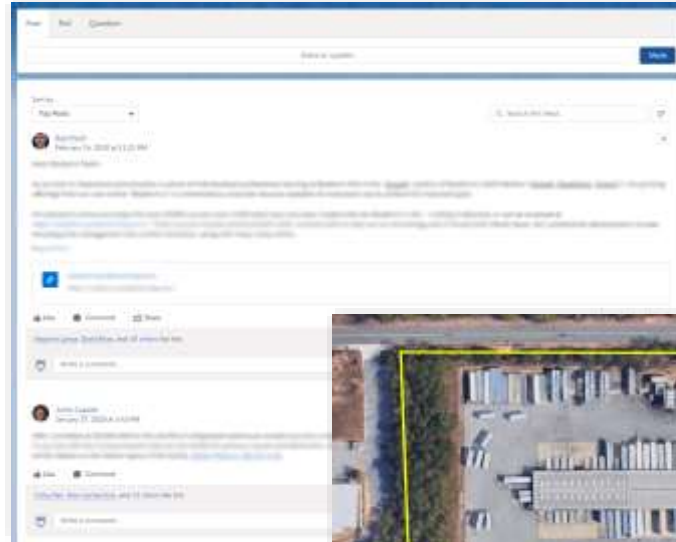
Over 13,000 Properties, Over 80 Micro Markets, And Over 40 Data Fields

Features:

- Property metrics, ownership and physical information
- Lease and sale comps
- Real-time tracking of user needs
- Ability to create custom market reports and filter by any field

Benefits:

- Comparable property data create durable informational advantage in generating off-market deal flow
- Reduced time/resources required when evaluating new market opportunities
- Strategic advantage in ability to share information with partners and users
- Improved collective knowledge across organization





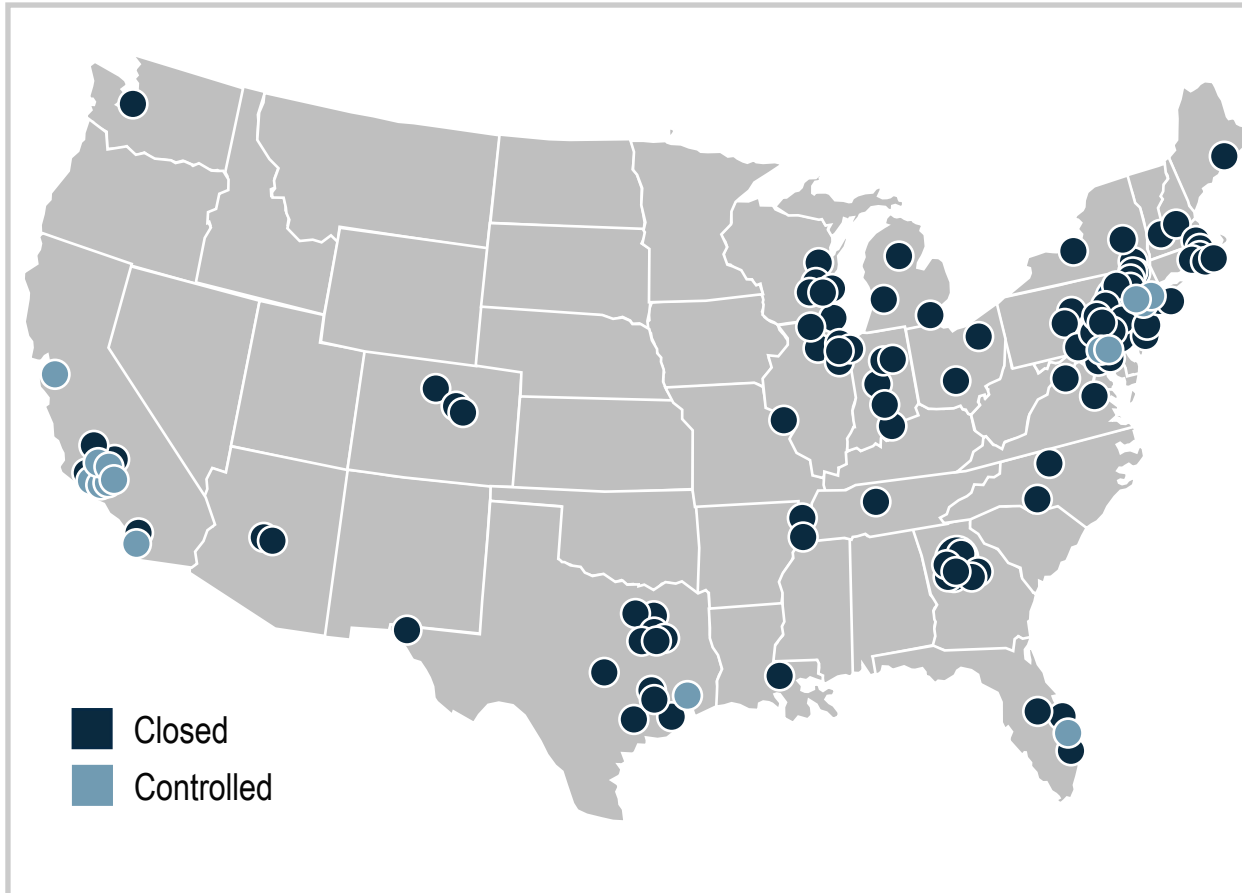
Investment Attributes

- Irreplaceable infill location, well located for final mile delivery into NY Metro
- Efficient site layout for final-mile users, featuring a 58-door circumnavigable cross-dock, 1 distribution warehouse with 32 loading positions, 2 shops, multiple points of entry, and an optimal site coverage
- Significant barriers to entry due to lack of available industrial land
- Strong basis, acquired at a 60% discount to replacement cost, with land value accounting for over 100% of purchase price

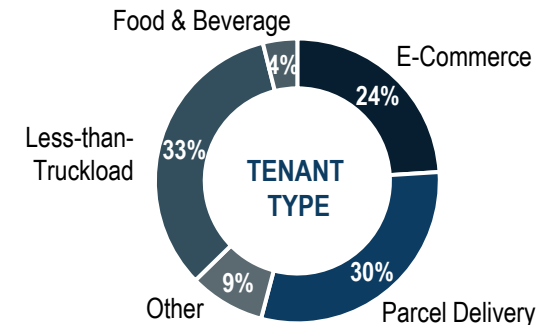
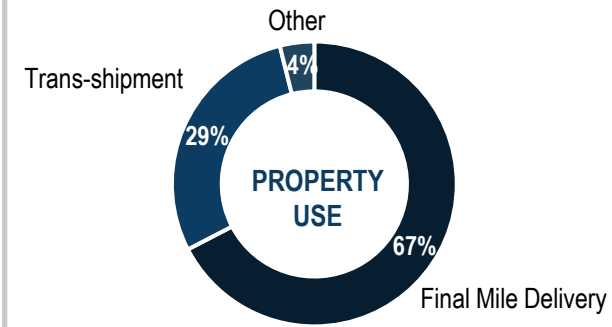
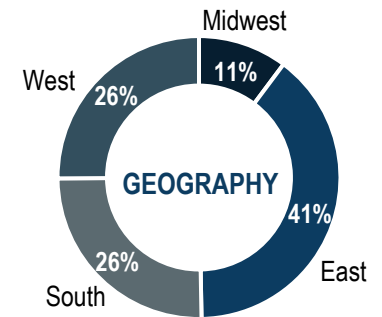
RLIF Update



Portfolio Diversity by Geography, Property Use and Tenant Type



Note: As of March 31, 2021.

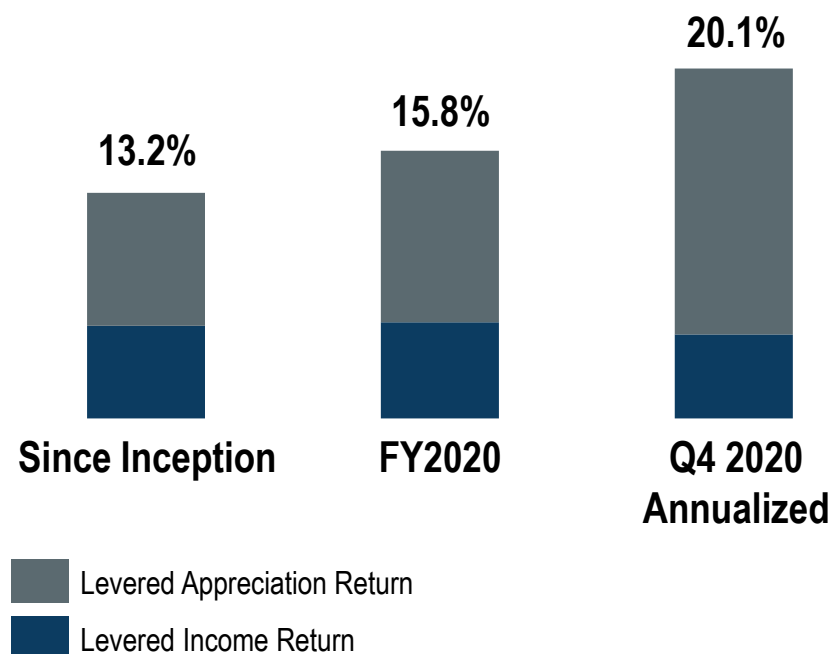


Fund Overview

Investment in Transportation-focused Industrial Real Estate In U.S. Logistics Hubs

Structure	Open-ended
Risk Profile	Core-plus
Target Net Return	8-10% (after fees, expenses and incentive fees)
# of Properties	92
Fund GAV	\$1.1 billion
Leverage (% of Fund GAV)	35.4%

FUND-LEVEL GROSS LEVERAGED TIME-WEIGHTED RETURN PERFORMANCE



Note: As of December 31, 2020

Platform Highlights



Platform Highlights

SPONSOR



- Leading pure-play transportation logistics platform
- Demonstrable, cycle-tested track record

HFT MARKET



- Mission-critical, infill, transportation-advantaged assets optimize movement of goods through the supply chain
- Positive supply/demand imbalance due to limited speculative development and growing demand, including from e-commerce growth

INVESTMENT APPROACH



- Informational advantage through differentiated investment approach and proprietary property database
- Investment touchstones include discount to replacement cost, yield premium to comparable market yields and deep tenant backfill demand

Disclaimer

This presentation (this “Presentation”) is qualified in its entirety by reference to the confidential Private Placement Memorandum of Realterm Logistics Income Fund, L.P. (the “Fund”) (as modified or supplemented from time to time, the “Memorandum”), the agreement of limited partnership of the Fund, as may be amended and/or modified from time to time and the subscription agreement related thereto, copies of which will be made available upon request and should be reviewed before purchasing a limited partner interest in the Fund. Statements in this Presentation are made as of May 20, 2021 unless stated otherwise, and neither the delivery of this Presentation at any time nor any sale of the limited partner interests described herein shall under any circumstances create an implication that the information contained herein is correct as of any time after such date. This Presentation is not intended to be relied upon as the basis for an investment decision, and is not, and should not be assumed to be, complete. The contents herein are not to be construed as legal, business, or tax advice, and each prospective investor should consult its own attorney, business advisor, and tax advisor as to legal, business, and tax advice. In considering any performance information contained herein, prospective investors should bear in mind that past or projected performance is not necessarily indicative of future results, and there can be no assurance that the Fund will achieve comparable results or that target returns, if any, will be met.

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SUBJECT: Special Purpose Acquisition Companies
George Zinn, APFC Investment Advisor

ACTION: _____

DATE: May 20, 2021

INFORMATION: _____ X _____

BACKGROUND:

George Zinn is currently 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.

STATUS:

At this meeting, Mr. Zinn will provide an overview of SPACs (Special Purpose Acquisition Companies). Mr. Zinn will provide a general introduction to the appeal and mechanics of SPACs, the potential impacts of SPACs on capital markets, and implications for the Permanent Fund.

Alaska Permanent Fund
Board Of Trustees Quarterly Meeting
May 19-20, 2021

Trustee Education Topic:

Special Purpose Acquisition Companies (SPACs)

Presenter: Investment Advisor George Zinn

A little history...Blind Pools, P/E, Blank Checks

By the 1970s, **private equity** firms had established themselves as powerful forces in M&A and large takeovers. The general practice is to contribute money to the General Partner who then decides which companies to buy. However, the opportunity for small companies' management to retain control and ownership is limited in this scheme. In the 1980s, the use of “**blind pools**” (ala Henry Villard*) or “**blank check**” companies reemerged, particularly in respect to “penny stocks”. All of these schemes create an opportunity for multiple investors to invest in private or public companies. All of these approaches involve the GP/Sponsor to control or acquire in the hopes of selling later at a profit. The blank check companies became rife with abuse, so much so that the SEC issued the Securities Enforcement Remedies and Penny Stock Reform Act of 1990 in order to protect individual investors.³

*In 1881, Villard was able to raise \$8,000,000 in 24 hours in a blind pool (a pool investors contributed to without knowing what Villard intended to do with their money) in order to not disclose the name of the rival company (the Northern Pacific Railroad) he intended to purchase.

³ See H.R. REP. 101-617 (1990), at 11 (stating “[a] common method or [sic] perpetrating penny stock fraud is through the marketing of ‘shell’ corporations, or ‘blank check companies’ with no operating history, few employees, few or no discernible assets, and no legitimate likelihood of success in the future”); see also id. at 11-16 (detailing examples of “blank check companies” being used as vehicles for fraud against investors).

Special Purpose Acquisition Company (SPAC)

- A special purpose acquisition company is formed to raise money through an initial public offering to buy another company.
- At IPO, investors typically receive 80% of the common equity and the sellers (aka Sponsors”) take 20%.
- At the time of their IPOs, SPACs have no existing business operations or even stated targets for acquisition.
- Sponsors are charged with finding a target, “promoting” and managing the merger process, and if no merger approved then liquidating the company.

So why would you write a “blank check”?

Investor Perspective

- Today's SPAC is a derivative of a blank check company but has these key investor protections as a result of regulation stemming from PSRA*:
 - The initial investment is placed in a trust, typically invested in treasuries.
 - In addition to this escrow, warrants are granted to investors that act as a discount to the purchase price if the venture is successful.
 - If a target is found, investors in the SPAC “have a pre-acquisition choice either to get their money back, or to remain as ‘shareholders of the now-public firm.’”⁴
 - Even if the investor elects to take his/her money back and the merger proceeds, they have the ability to sell or keep and exercise their warrants. They are “detachable”.
 - Provides a limited time frame for the sponsors(creators of the SPAC) prior to having to return funds and pay most of the expenses.⁵
 - Dubbed a “poor man’s private equity fund” because it gives retail investors a method to purchase a hot company before going public which has typically been reserved for institutions and high net worth individuals.⁶

*Securities Enforcement Remedies and Penny Stock Reform Act of 1990, Pub. L. No. 101-429, 104 Stat. 931 (1990)

⁴ SEC Rule 419 and Usha Rodrigues & Mike Stegemoller, Exit, Voice, and Reputation: The Evolution of SPACs, 37 DEL. J. CORP. L. 849, 851 (2013) (citation omitted)

⁵ Efraim Chalamish, SPACs Are Back, GLOBAL FIN. (Dec. 8, 2016), <https://www.gfmag.com/magazine/december-2016/spacs-are-back>.

⁶ Jim Fink, Special Purpose Acquisition Companies (SPACs): Will Investors Live Long and Prosper?, INVESTING DAILY (Apr. 10, 2012), [http:// www.investingdaily.com/10914/special-purpose-acquisition-companies-spacs-will-investors-live-long-and-prosper](http://www.investingdaily.com/10914/special-purpose-acquisition-companies-spacs-will-investors-live-long-and-prosper).

Sponsor Perspective

- Minimum upfront capital outlay

Typically receive a 20% interest in the SPAC's shares as compensation for locating and negotiating a purchase of a profitable target company.⁷

- Ability to market and “promote” a deal based off of reputation and/or celebrity status

Well known PE investors and high profile public company officers, not to mention Shaq, A-Rod, Serena, and Steph Curry are able to capitalize on their reputations

- Readily available financing mitigates risk

At IPO, typically enter into FPA (Forward Purchase Agreement) or PIPE (Private Investment in a Public Entity) thereby reducing risks of redemptions

- A portion of net offering proceeds to pay for expense, in particular D&O insurance.⁸

⁷Derek K. Heyman, From Blank Check To SPAC: The Regulator's Response to The Market, and The Market's Response to The Regulation, 2 ENTREPRENEURIAL BUS. L.J. 531, 533 (2007)

⁸Randi-Jean G. Hedin & Karen G. Narwold, Directors and Officers Liability Insurance Issues for Special Purpose Acquisition Corporations, 14 METROPOLITAN CORP. COUNSEL, Dec. 2006, at 46, available at <http://www.metrocorpcounsel.com/pdf/2006/December/46.pdf>.

Entrepreneur Perspective (vs. traditional IPO)

- **Faster time to market vs. traditional IPO**

3-4 months vs. up to a year, pandemic's volatility closed the IPO "window" at times.

- **Greater execution and pricing certainty**

Only have to negotiate with the Sponsor vs. a roadshow. Price agreed upfront.

- **Ability to market projections**

Can present forward-looking guidance for revenue and profitability five to 10 years out because it is a merger. IPO companies can only share past financials and addressable market.

- **Financing certainty**

Access to Sponsor's incremental PIPE or FPA funds

- **Retain ability to participate in future story upside**

A critical consideration vs. PE where likely would be replaced.

- **Partner with proven operator to grow business**

Similar value proposition of PE/VC firms

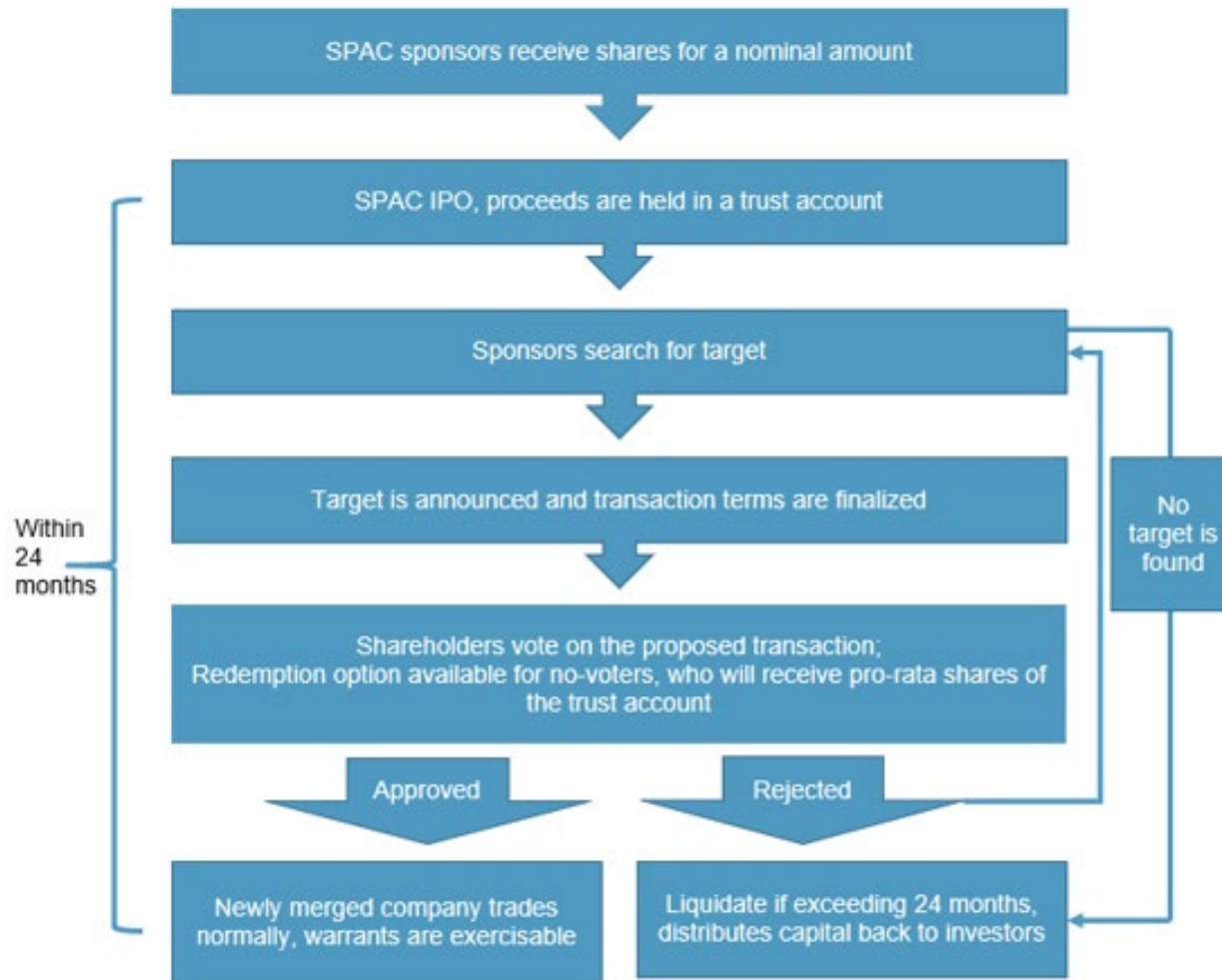
- **Less costly and onerous than traditional IPO**

2% underwriter fee and 3.5% fee at completion compared to 7% for a traditional IPO⁹

⁹[SPACs vs. Traditional IPOs – CFO](https://www.cfo.com/capital-markets/2021/02) ^{314 of 453} <https://www.cfo.com/capital-markets/2021/02>

Lifecycle and De-SPACing

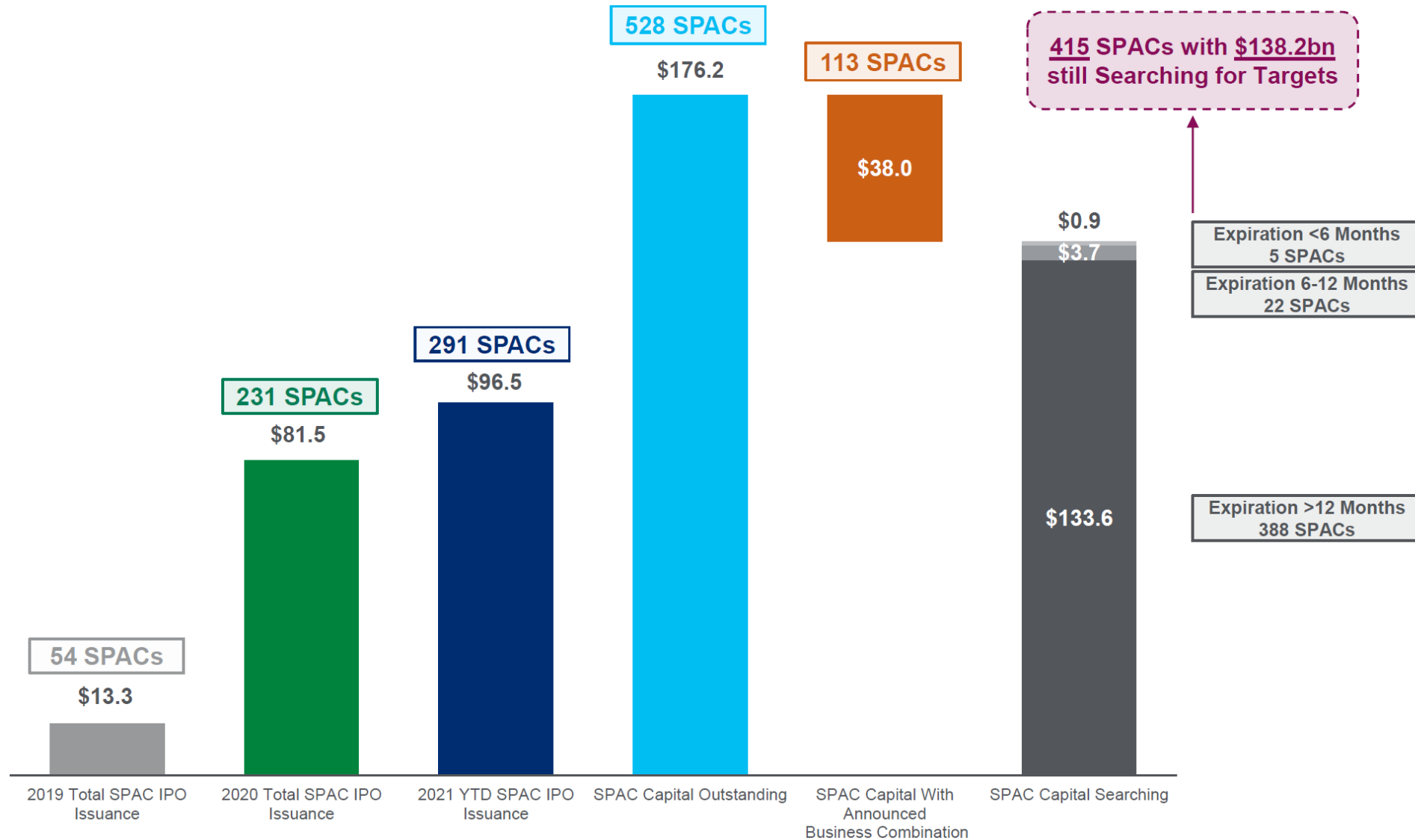
Exhibit 1: SPAC Life Cycle



What does De-SPACing mean?

Commonly referred to as a reverse merger, where a previously listed public company merges with a private one. This is done typically in lieu of going the IPO route.

Total Current SPAC Capital Outstanding (\$bn)



Potential misalignments ¹⁰

- 24 month timeline

Sponsors have 18 months to identify a target which can be extended by 6 months in order to get the deal done. Unlike investors, Sponsors do not receive any interest back if the SPAC is liquidated.

- Valuation

The cost of the acquisition must exceed 80% of the size of the trust account. Sponsors incentivized to get a deal done could potentially overpay for the target company to satisfy this criterion.

¹⁰ <http://www.littmankrooks.com/pdf/Crunchtime-for-blank%20checkIPO.pdf> and Mendoza, Carmela. "CalPERS' Bienvenue: SPACs Are Fraught with Potential Misalignment." *Private Equity International*, 16 Mar. 2021, www.privateequityinternational.com/calpers-bienvenue-spacs-are-fraught-with-potential-misalignment/

Latest – The SEC Comments

April 8, 2021

“A de-SPAC transaction gives no one a free pass for material misstatements or omissions, ...All involved in promoting, advising, processing, and investing in SPACs should understand the limits on any alleged liability difference between SPACs and conventional IPOs.”

John Coates, the acting director of the agency's corporation finance division

April 20, 2021

“The SEC said last week that SPAC warrants must be classified as liabilities instead of equity instruments. This could result in existing SPACs having to restate their financial statements, according to the law firm Davis Polk & Wardwell.”

[SEC Guidance a Serious Threat to SPACs, Law Firms Say: Report | DealFlow's SPAC Newsletter \(spaconference.com\)](#)

Fund perspective

- Competes with private equity for targets

“SPACs compete with other investment groups such as private equity-is potentially negative. The competition created by SPACs, especially with the limitations on the SPACs' investment options, could make it harder for the private equity industry, and other investors, to find targets selling for a good price. An overall price increase in target companies will lower returns for all takeover investors.”¹¹

- Hedge Funds in the portfolio* trading in SPACs have had success, particularly relative value styles have benefited.

“The returns from our investments in Special Purpose Acquisition Vehicles “SPACs” were the largest contributors to our returns in 2020. The returns from our investments in SPACs were especially large in November and December, and have continued into January and February 2021.”¹²

* Three fund holding have exhibited +4.1%, +27.7%, +12.5%, for 2020. Two others have sold and are exiting positions at 3X and 5X via SPACS.

¹¹ Scott Malone, Crunch Time Coming for Blank-Check Companies, REUTERS NEWS, Mar. 26, 2006.

¹² Confidential Annual Letter from one of the Alaska Permanent Fund’s managers

Questions?

SUBJECT: Investment Policy Review & Adoption

ACTION: X

DATE: May 20, 2021

INFORMATION:

BACKGROUND:

A new Investment Policy Statement was approved by the Board during their May 2020 meeting, along with the 5-year strategic asset allocation plan.

STATUS:

During the past year, with the aim of enhancing the applicability and effectiveness of the Investment Policy, staff proposes some edits. The following slides list out the proposed changes, and seeks Board approval.



ALASKA PERMANENT
FUND CORPORATION

Investment Policy Update: Review & Adoption

May 20, 2021

Portfolio-specific Guidelines: Add to Appendix A

"The objective of the APFC Investment Guidelines is to supplement the Investment Policy by providing operational guidelines for APFC's internally managed investment programs. The ED may update this Appendix from time-to-time; updates will be provided to the Board at its next regularly scheduled meeting."

1. Gold ETF Strategy, Absolute Return

- Maximum size shall be 50% of the overall Absolute Return portfolio
- APFC's position in any given ETF will not exceed 10% of the ETF's Total Assets, without CIO approval
- Eligible securities included U.S. listed ETF products issued by a major sponsor such as iShares, State Street, VanEck, etc.
- The program will only invest on an unlevered basis (no derivative-based ETFs)

2. Tactical Tilt, Public Equities

- Maximum size shall be 15% of overall Public Equity portfolio
- Maximum contribution to overall Public Equity Tracking Error (TE) of 100 bps
- Allowable investments include ETFs (no single name holdings)

APFC Risk Appetite: Include Definition in Investment Policy

The following definition for APFC's risk appetite is added as a new appendix ('C') to the IPS

APFC's Risk appetite is defined in terms of (a) a Risk Tolerance Portfolio (RTP) and (b) Liquidity level, as follows:

- a) The maximum 'risk' of the APFC portfolio should not exceed that of the RTP (specified below)
 - Here risk is measured across the following volatility and drawdown parameters
 - ✓ Value at Risk (VaR), 1 year, 1SD (10 year constant weighted historical monthly data)
 - ✓ Drawdown: Recession GFC – Dec 3, 2007 to Mar 9, 2009
 - The RTP comprises of an **80/20:Equity/Bond** reference portfolio with the following constituents:
 - ✓ 80% MSCI ACWI IMI
 - ✓ 8% BB US AGG
 - ✓ 8% BB US CORP
 - ✓ 4% BB GLBL TRS ex-US
 - The private equity risk estimate computed by Aladdin will be adjusted downward (reduced) by adjusting the private equity exposure to 75% of actual exposure when comparing to RTP.
- b) Liquidity: The combined allocation to Public equities, Fixed income and Cash will not be lower than 40%

Table 3: Edit and Refine Limits

<u>Proposed Edit</u>	<u>Comment / Rationale</u>
• Remove <u>Lower</u> Bound (85% & 75%) for unfunded commitments limit.....	(to formalize approval by BOT on 12/09/2020)
• Increase Absolute Return Single Fund limit to 15%.....	(from 10%)
• Remove Proportion Ownership limits for FIP and PESO	(n/a for FIP; introduce a qualitative control for PESO requiring ED/CIO approval for directly acquiring controlling stake)
• Adjust Proportion Ownership limits for RE and Private Income to 5%	(similar to threshold for public equities)
• Add Note 6 to clarify that the Proportion Ownership limit will only apply to the listed Infra and REIT portfolios	
• Align FX Proportion Unhedged with Total Ex US limits	(align limits)
• Change Daily Liquidity Limit to Weekly.....	(correct error)
• Increase Absolute Return Liquidity limits to 100% Monthly, 40% Quarterly...	(relax liquidity criterion to target specific strategies)
• Edit Note 4 to “Definition: GICS Sub-Industry”	(specify categorization)
• Edit Note 5 to specify “externally” managed funds/strategy.....	(clarify applicability to externally managed assets)

Table 3: Edit and Refine Limits

	Public Equity	Fixed Income	Private Equity	Real Estate	Private Income	Absolute Return	Risk Parity	Cash	Total Fund	Low	High	Low	High
Outstanding Commitments ¹	0.0%	0.0%	10.0%	3.0%	5.0%	2.0%		0.0%	20.0%	85%	115%	75%	125%
Benchmark	M664204USN	LEHCHREB	CAM-PE	ACRPMSC	CAM-PI	HFRIPROXY	HFR1-IP	YODRELL	LEHFTJPM				
Tracking Error	3.5%	2.5%							4.0%	n/a	115%	n/a	125%
Relative VaR ²	100.0%	100.0%							100.0%	0%	125%	0%	140%
Asset Allocation													
Single Name / Issuer ³	4%	4%	2%	10%	2%	n/a	n/a	n/a		0%	115%	0%	125%
Single Industry ⁴	20%	20%	30%	n/a	30%	n/a	n/a	n/a		0%	115%	0%	125%
Single Country - EX US	10%	10%	20%	20%	20%	n/a	n/a	n/a		0%	115%	0%	125%
Total EX US	50%	30%	50%	50%	50%	n/a	n/a	n/a					
Single Fund Investment ⁵	5%	10%	10%	10%	10%	10%	15%	50%	n/a	0%	115%	0%	125%
Proportion of Ownership	5%	5%	10%	100%	5%	10%	5%	n/a	n/a	0%	115%	0%	125%
Rating - Below Inv Grade	n/a	25%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
Rating - Below A- & Unrated	n/a	50%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
Rating - Unrated	n/a	5%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
FX - Proportion Unhedged	30%	50%	5%	30%	20%	50%	20%	50%	n/a	0%	115%	0%	125%
Equity - Proportion w/o Daily Liq	10%	10%	100%	100%	100%	100%	100%	5%		0%	115%	0%	125%
Equity - Proportion w/o Monthly Liq	2%	2%	100%	100%	100%	100%	70%	100%	0%	0%	115%	0%	125%
Equity - Proportion w/o Quarterly Liq	0%	0%	100%	100%	100%	30%	40%	30%	0%	0%	115%	0%	125%
Cash & Equivalents	2%	10%	5%	5%	5%	n/a	n/a	100%		0%	115%	0%	125%
MINIMUM Cash & Equivalents	0%	0%	0%	0%	0%	n/a	n/a	30%		85%	115%	75%	125%

Notes are Maximum Permitted except-Minimum Cash

Notes:

1 % of Total Fund

2 Ratio of Portfolio VaR to Benchmark VaR

3 Single Name / Issuer: represents security level exposure to single entity or operating company.

US Treasury & Govt Agencies are exempt. For Private Assets, the limit applies at the time of investment or cost basis.

4 Definition: GIC's → Sub-Industry

5 Single Fund Investment: represents exposure to a fund or strategy based vehicle.

6 Proportion Ownership: For Real Estate and Private Income, the limit is only applicable to the REIT and listed infrastructure portfolios.

Other Edits

Real Estate

- Increase leverage limit on directly-held Core real estate investments to 65% from 50%.

General Edits

- Update Benchmarks
- Correct Language for U.S. Large Cap Low P/E Portfolio Size Limit:
 - ✓ “The portfolio size shall be limited to a maximum of 1% of total fund NAV.”
- Other formatting and textual edits

APFC Investment Policy

Adopted May 21, 2020, last amended on May 20, 2021

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I. INTRODUCTION

A. Purpose

1. The purpose of this Investment Policy (“Policy”) is to provide a formal plan for investing and managing the assets of the Alaska Permanent Fund and other state assets as prescribed by law (“Fund”) to achieve the defined investment objectives. This Policy also defines the roles and responsibilities of the various parties involved in the investment process and facilitates external communication of the Policy. The appendices are incorporated into and form part of this Policy. Terms not defined within the body of the Policy have meanings assigned to them in the “Glossary,” Appendix D of this document.
2. This document is not intended to be a static document and will be considered for possible amendment on an annual basis or any time the Board of Trustees (“Board”) modifies the Alaska Permanent Fund Corporation’s (“APFC”) investment-related policies or asset allocation. Amendment of this Policy requires Board action as described in AS 37.13.080 and the APFC By-Laws (“By-Laws”). Following any Board approved amendment to this document, changes will be noted in Board meeting minutes and as soon as practicable this document will be amended to reflect the approved changes and posted on the APFC website.

B. Roles of the Board, Staff, Consultants, and Advisors

1. The Board has a responsibility to invest Fund assets in accordance with the Alaska Constitution and the prudent-investor rule provided in AS 37.13.120(a) – (e). The Board has adopted regulations (15 AAC 137.410 – 15 AAC 137.990), which define the eligible investments of Fund assets (“Regulations”). The Board has also adopted By-Laws, which delegate and empower the APFC Staff to invest and manage Fund assets consistent with the parameters of the Regulations and this Policy. Finally, through regularly scheduled and special meetings, the Board oversees the management of APFC Staff and Fund assets, and ensures that APFC has the resources needed to fulfill its objectives as effectively as possible.
2. The APFC Staff’s task is to invest and manage Fund assets to fulfill the Fund’s objectives, as specified by the Board, in this Investment Policy. Additionally, APFC Staff advises the Board about recommended changes to the asset allocation and this Policy to help the Fund achieve its objectives. Finally, APFC Staff, or external investment managers selected by APFC Staff, negotiates and executes all investment plans and strategies, performs risk-management functions, and helps prepare investment performance and other management reports.
3. External consultants provide advice and implementation assistance to the Board and APFC Staff related to investment programs at both the overall Fund level (“General Consultant”) as well as for specific asset classes. The General Consultant also reports on the progress that the Fund is making with regard to specific investment programs and makes comparisons of Fund performance against its target benchmarks, including Fund peers.

4. Consistent with the Board's Charters and Governance Policies, up to three Investment Advisors are selected by the Board to provide education, advice, commentary, and discussion at Board meetings, or as requested by the Board.

II. TOTAL FUND & PORTFOLIO DESIGN PHILOSOPHY

A. Total Fund Objective

Consistent with the Legislature's findings regarding the purpose of the Alaska Permanent Fund (AS 37.13.020), the Board's objective is for the Fund to achieve the highest level of investment performance that is compatible with the Board's risk tolerance and prudent investment practices. Because of the perpetual nature of the Fund and the Legislature's finding that the Fund should benefit all generations of Alaskans, the Board maintains a long-term perspective when formulating this Policy and in evaluating Fund performance. To that end, the Board expects the Fund's design and performance will be evaluated using the following criteria:

1. **Investment Performance:** ability to generate an annualized return of CPI + 5% over a 10-year period ("long-term target")
2. **Investment Risk:** ability of the Fund to achieve the long-term target while conforming to the risk appetite approved by the Board, which can be found in Appendix C.

B. Total Fund Asset Mix

1. APFC's investment programs are organized by asset class and APFC Staff assist the Board in engaging in an asset allocation study for the Fund at least once every five (5) years to review asset classes, risk-return assumptions, and correlations of investment returns with applicable benchmarks and across asset classes. A key objective of the asset allocation study shall be the development, through quantitative and qualitative modeling techniques, of a diversified portfolio that specifies a "long-term target" position for each asset class. The total Fund portfolio mix will represent the portfolio that is expected to meet the Board's long-term target while conforming to the risk appetite approved by the Board.
2. Each asset class allocation percentage shall designate a "long-term target" position within the overall portfolio as well as maximum and minimum ranges around those targets, as outlined in Table 1. Ranges are specified by a "green zone" which reflect normal expected variability around the targets, "yellow zone" which reflect potential remediation by APFC Staff according to prudent portfolio management over a reasonable period of time, and "red zone" which require Board approval of a remediation plan within 30 days. Ranges of these zones are expressed as percentages of the overall Fund. Details of the zones and compliance cure periods are provided in Appendix B.

Table 1: Asset Allocation (AA) Target Levels by Year as % of Fund

	Public Equity	Fixed Income	Private Equity	Real Estate	Private Income	Absolute Return	Risk Parity	Cash	Total Fund
Green Zone	+/- 5%	+/- 5%	+/- 5%	+/- 3%	+/- 5%	+/- 3%	+/- 1%	+/- 2%	
Yellow Zone	0 - 5%	0 - 5%	0 - 5%	0 - 3%	0 - 5%	0 - 3%	0 - 1%	0 - 2%	
FY2021	39%	21%	15%	7%	9%	6%	1%	2%	100%
FY2022	38%	20%	16%	8%	9%	6%	1%	2%	100%
FY2023	36%	20%	17%	9%	9%	6%	1%	2%	100%
FY2024	35%	19%	18%	10%	9%	6%	1%	2%	100%
FY2025	33%	18%	19%	12%	9%	6%	1%	2%	100%

Notes: Green Zone: expressed as +/- to Target Allocation

Yellow Zone: expressed as range beyond green zone

C. Total Fund and Asset Class Benchmarks

Each asset class is associated with a benchmark that describes in general terms the opportunity set and return characteristics associated with the asset class ("Policy Benchmark"). For certain private market asset classes, the Policy Benchmark serves as a proxy for expected returns rather than an approximation of the actual investments that will characterize the components of the portfolio. Note that the investment returns and Policy Benchmarks for Private Equity & Special Opportunities, Real Estate, and Infrastructure & Private Income are lagged by one quarter for performance calculation purposes, as is common practice among large institutional investors. Each asset class is also associated with a long-term return objective, which cumulatively reflects the Fund's long-term objective of CPI + 5% or better. The long-term return objectives and Policy Benchmarks for each asset class are reflected in Table 2.

Table 2: Benchmarks - Constituent Indices and Weights

		Public Equity	Fixed Income	Private Equity	Real Estate	Private Income	Absolute Return	Risk Parity	Fund Cash	Total Fund FY 2021	Total Fund FY 2022	Total Fund FY 2023	Total Fund FY 2024	Total Fund FY 2025
Asset Allocation (AA): Target Levels-FY 2021		39.0%	21.0%	15.0%	7.0%	9.0%	6.0%	1.0%	2.0%	100.0%				
Minimum Long-Term Return Target		CPI + 5.1%	CPI + 0.8%	CPI+10.05%	CPI + 4.0%	CPI + 4.2%	CPI + 2.75%	CPI + 3.95%	CPI	CPI + 5.0%				
Benchmark Index Weights	BB ID	Asset Class / Portfolio Weights								Total Fund Weights				
90 Day T-Bills	GOOI	-	5.00%	-	-	-	-	-	100.00%	3.05%	3.00%	3.00%	2.95%	2.90%
BB US Corporate	LUACTRUU	-	27.50%	-	-	-	-	-	-	5.78%	5.50%	5.50%	5.23%	4.95%
BB Gbl. Treasury ex-US Hedged	LGT1TRUH	-	10.00%	-	-	-	-	-	-	2.10%	2.00%	2.00%	1.90%	1.80%
BB US Agg	LBUSTRUU	-	27.50%	-	-	-	-	-	-	5.78%	5.50%	5.50%	5.23%	4.95%
BB US HY 2% Issuer Cap	LF89TRUU	-	10.00%	-	-	-	-	-	-	2.10%	2.00%	2.00%	1.90%	1.80%
Cambridge Pvt. Credit (Lagged)	n/a	-	-	-	-	40.00%	-	-	-	3.60%	3.60%	3.60%	3.60%	3.60%
Barclays US Securitized Index	LD19TRUU	-	10.00%	-	-	-	-	-	-	2.10%	2.00%	2.00%	1.90%	1.80%
BB US TIPS	LBUTTRUU	-	5.00%	-	-	-	-	-	-	1.05%	1.00%	1.00%	0.95%	0.90%
Cambridge Pvt. Equity (Lagged)	n/a	-	-	100.00%	-	-	-	-	-	15.00%	16.00%	17.00%	18.00%	19.00%
Cambridge Gbl. Pvt. Infra. (Lagged)	n/a	-	-	-	-	60.00%	-	-	-	5.40%	5.40%	5.40%	5.40%	5.40%
HFRI Total HFOF Universe	HFRIFWI	-	-	-	-	100.00%	-	-	-	6.00%	6.00%	6.00%	6.00%	6.00%
JPM EMBI Gbl Diversified	JGENVUUG	-	2.50%	-	-	-	-	-	-	0.53%	0.50%	0.50%	0.48%	0.45%
JPM GBI-EM Gbl Diversified	JPGCCOMP	-	2.50%	-	-	-	-	-	-	0.53%	0.50%	0.50%	0.48%	0.45%
MSCI ACWI IMI	M1WDIM	100.00%	-	-	-	-	-	-	-	39.00%	38.00%	36.00%	35.00%	33.00%
NCREIF Property (Lagged)	NPPITR	-	-	-	85.00%	-	-	-	-	5.95%	6.80%	7.65%	8.50%	10.20%
MSCI US REIT (Lagged)	RMS G	-	-	-	15.00%	-	-	-	-	1.05%	1.20%	1.35%	1.50%	1.80%
HFRI Risk Parity Vol 12	HFRRPV12I	-	-	-	-	-	-	100.00%	-	1.00%	1.00%	1.00%	1.00%	1.00%
Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

D. Total Fund Performance Measurement and Reporting

1. The Board looks to its General Consultant as the primary source of quantitative evaluation of the performance of the Fund and its investment managers. As promptly as possible after the close of each calendar quarter, the General Consultant shall submit a report to the Board, Executive Director (“ED”) and Chief Investment Officer (“CIO”) analyzing the performance of the Fund, its asset classes and investment programs, including both internally and externally managed assets. The report shall include a comparison of total Fund performance with the Board's long-term investment objective, an analysis of the returns of each asset class as measured against established benchmarks; and an analysis of the returns of each manager or relevant groupings of managers as measured against relevant benchmarks. For the purpose of evaluating the value-added by the Fund's investment strategy, the report shall also compare the performance of the total Fund on a one-year basis to a passive benchmark that represents the following: (1) 60% MSCI ACWI IMI; (2) 20% Barclay Global Aggregate (less fees); (3) 10% FTSE EPRA/NAREIT Rental Index; (4) and 10% US TIPs. The General Consultant's report shall also address any special concerns or observations the General Consultant concludes should be brought to the attention of the Board, ED and CIO.
2. At each regular Board meeting, the General Consultant will also report on the investment performance of the Fund and each asset class in comparison with Fund peers (i.e., large US Public Funds and Endowment Funds). The comparative performance of the Fund and each asset class will be assessed and reported across multiple timeframes, including ten-year, five-year, three-year, and one-year. To the extent that peer comparisons may not be directly available for specific asset class comparisons, the General Consultant should use the Fund's Policy Benchmarks (see Table 2) as a proxy.

E. Total Fund Portfolio Implementation and Delegations

APFC Staff directs all investment activities through a delegation of investment authority in the By-Laws from the Board to the ED and then from the ED to specific APFC Staff, as deemed appropriate by the ED. The ED will convene a Public Markets Investment Committee and a Private Markets Investment Committee (together, the “APFC Investment Committee”) on a regular basis in order to discuss and deliberate on investment decisions requiring the ED's authorization. The sole voting member of the APFC Investment Committee shall be the ED. The CIO will also convene an investment department investment committee (“Investment Department Investment Committee”). The Investment Department Investment Committee will meet regularly and will work with APFC Staff to make investment recommendations (“Investment Recommendations”) to be considered for authorization by the ED during the APFC Investment Committee.

Approval of any Investment Recommendation referred by the Investment Department Investment Committee to the APFC Investment Committee requires the affirmative approval of the ED taking into consideration, in a collaborative manner, input from various functions at APFC (e.g. Legal, Finance, Operations, Admin, IT, and Risk). Investment Recommendations from the Investment Department Investment Committee to the APFC Investment Committee shall be in writing and Investment Decisions approved by the APFC Investment Committee shall also be in writing. Variations or the non-approval of an Investment Recommendation of the Investment

Department Investment Committee by the APFC Investment Committee shall be reported to the Board on a monthly basis.

F. Relationship of the Investment Policy with Regulations and Investment Guidelines

As required by AS 37.13.120(a), the Board has adopted Regulations specifically designating the types of investments in which Fund assets can be invested. All investments authorized by this Policy shall be limited to those authorized investments and in the manner prescribed by this Policy and AS 37.13.120.

The Investment Guidelines, attached as Appendix A, supplement the Investment Policy by providing operational guidelines for APFC's internally managed investment programs. The CIO, with the consent of the ED may update the Investment guidelines from time to time; updates will be provided to the Board at its next regularly scheduled meeting.

III. PUBLIC MARKETS

A. Public Equity

1. Objective

The objective of the Public Equity portfolio is to invest in publicly traded securities authorized in 15 AAC 137.440, to exceed the performance of a well-diversified pool of global equities embodied in the **MSCI ACWI IMI Index**, while maintaining risk similar to that of the benchmark. Performance of this portfolio will be evaluated quarterly, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Structure

Consistent with performance objectives, applicable tracking error guidelines, and other investment restrictions described in this Policy and Investment Guidelines, the Public Equity portfolio may include:

- a. Actively and quasi-passively managed equity strategies to enhance the after-fee return of the portfolio relative to its assigned benchmark; and
- b. Passively managed equity strategies to replicate, in a cost-efficient manner, the returns of a benchmark index.

3. Investment Strategy

The Public Equity portfolio will be managed by a mix of external active managers, external passive managers and internal managers. In the case of active external managers, each manager, through an investment manager agreement ("IMA"), will be directed to focus on a subset of the global equity market in which the manager has demonstrated an ability to provide risk-adjusted, after-fee returns in excess of its respective benchmark. Each external manager's IMA will also detail its strategy, performance objectives, permitted investments and restrictions.

The CIO may also approve the internal management of a portion of the Public Equity portfolio by APFC Staff. In place of an IMA, the CIO and ED will require the approval of

and adherence to Investment Guidelines that cover the relevant aspects of the portion of the Public Equity portfolio internally managed by APFC Staff. The Director of Public Equity will have primary responsibility for executing the portfolio's investment strategy.

4. Rebalancing and Mandate Modification

The Director of Public Equity may, with the approval of the CIO, rebalance assets to, from, or between individual Public Equity portfolios.

Initiating or terminating external manager mandates requires the consent of CIO and ED and must conform to Section VIII of this Policy (Public Markets External Manager Selection).

5. Risk Limits and Portfolio Restrictions

The Director of Public Equity is responsible for managing the various risks incurred and adhering to the Investment Policy. In addition to general Policy requirements, the following asset class specific restrictions apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. Short selling is prohibited by an internal or external manager of assets in this portfolio, unless authorized by the CIO and Chief Risk Officer ("CRO").
- c. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- d. All externally managed mandates must comply with Section VIII (External Manager Selection) of this Policy.

B. Fixed Income

1. Objective

The objective of the Fixed Income portfolio is to provide income-oriented investment returns and diversify the risks of the Fund's equity-oriented programs. The Fixed Income portfolio invests in publicly traded and other liquid income-oriented investments authorized in 15 AAC 137.430, to meet or exceed the performance of the **Fixed Income Composite Benchmark**, while staying within predefined risk constraints. Performance of this portfolio will be evaluated quarterly, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Structure

Consistent with performance objectives, applicable tracking error guidelines, and other investment restrictions described in this Policy and Investment Guidelines, the Fixed Income portfolio may include:

- a. Actively and quasi-passively managed income producing strategies that enhance the after-fee return of the Fixed Income portfolio relative to its assigned benchmark; and
- b. Passively managed income producing strategies to replicate, in a cost-efficient manner, the returns of a benchmark index.

3. Investment Strategy

The Fixed Income portfolio will primarily be implemented by the CIO's internal APFC Staff, which may be supplemented by hiring external investment managers to manage portions of the Fixed Income portfolio which are not appropriate for internal management by APFC. Regarding the Fixed Income assets that are externally managed, each external manager, through an IMA, will be directed to focus on a subset of the Fixed Income portfolio in which the manager has demonstrated an ability to manage in relation to its respective benchmark. Each external manager's IMA will also detail its strategy, performance objectives, permitted investments, and restrictions. The Director of Fixed Income will have primary responsibility in executing the portfolio's investment strategy.

4. Rebalancing and Mandate Modification

The Director of Fixed Income may, with the approval of the CIO, rebalance assets to, from, or between individual Fixed Income portfolios.

Initiating or terminating external manager mandates requires the consent of the CIO and ED, and must conform to Section VIII of this Policy (Public Markets External Manager Selection).

5. Risk Limits and Portfolio Restrictions

The Director of Fixed Income is responsible for managing the various risks incurred and adhering to this Policy. In addition to general Policy requirements, the following asset class specific restrictions apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. Short selling is prohibited by an internal or external manager of assets in this portfolio, unless authorized by the CIO and CRO.
- c. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- d. All externally managed mandates must comply with Section VIII (Public Markets External Manager Selection) of this Policy.

C. Risk Parity

1. Objective

The objective of the Risk Parity portfolio is to deliver long-term returns that meet or exceed the performance of a 60% stock/40% bond portfolio through managers which seek to generate returns that are less correlated to global public markets utilizing allocation of risk rather than allocation of capital. Performance of this portfolio will be evaluated quarterly against the Hedge Fund Research **HFR 12% Vol Institutional Index**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

The Risk Parity portfolio will be managed by external managers, selected in accordance with the requirements of this Policy, that provide risk-balanced exposure to multiple

sources of excess expected return. Each manager, through an IMA or limited liability fund, will detail its strategy, performance objectives, permitted investments and restrictions. The Director of Risk Parity will have primary responsibility in executing the portfolio's investment strategy and plans.

3. Risk Limits and Portfolio Restrictions

The Director of Risk Parity is responsible for managing the various risks incurred and adhering to this Policy. In addition to general Policy requirements, the following restrictions will apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. Short selling is prohibited unless authorized by the CIO and CRO.
- c. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- d. All externally managed mandates must comply with Section VIII (Public Markets External Manager Selection) of this Policy.

D. Total Fund Cash

1. Objective

The objective of the Total Fund Cash portfolio is to:

- a. Be a source of funds available to meet the Fund's operational needs, including capital calls and appropriations from the Earnings Reserve Account to the State's general fund; and
- b. Allocate a small portion of the Fund to an asset class that is nearly risk-free and experiences extremely low volatility.

Performance of this portfolio will be evaluated quarterly and will be measured against the risk and after-fee return of the **90 Day Treasury Bills Index**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-years, and ten-year annualized basis.

2. Investment Strategy

The Total Fund Cash portfolio will be internally managed at the direction of the CIO. The size and investment profile of this portfolio may fluctuate month-to-month to accommodate the Fund's liquidity requirements. The CIO will have primary responsibility in executing this portfolio's investment strategy.

3. Authorized Investments

The CIO may invest this portfolio in cash and the following cash equivalents:

- a. US Treasuries with a maximum final maturity of 24 months;
- b. Investment Grade US corporate bonds with a maximum final maturity of 24 months;
- c. Reverse Repurchase Agreements ("Reverse Repo"), as authorized by 15 AAC 137.430(12);
- d. SEC registered money market investment funds;
- e. Other cash equivalents approved by the CRO and ED; and
- f. Gold-backed exchange traded funds as authorized by 15 AAC 137.460.

4. Risk Limits and Portfolio Restrictions

The CIO is responsible for managing the various risks incurred and adhering to this Policy. In addition to general Policy requirements, the following specific restrictions will apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. At any point, 80% of the portfolio should be invested in instruments with a final maturity not exceeding 181 days.
- c. Gold-backed exchange traded funds shall not exceed 50% of the Total Fund Cash portfolio at any time.
- d. Short selling is prohibited in this portfolio.
- e. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.

E. Securities Lending

1. Authorized Investments

The ED is authorized to enter into a securities lending agreement with the Fund's custodian to lend domestic and non-domestic Public Equity and Fixed Income securities from the Fund's portfolio directly to borrowers for a fee in accordance with the following guidelines:

- a. The Fund's custodian shall agree to indemnify the Fund against any direct loss from:
 - i. a borrower default;
 - ii. the reinvestment of cash collateral; and
 - iii. the failure to comply with the terms and conditions of the lending agreements;
- b. Collateral shall be required at a minimum of 102% of the market value of the loaned securities which are denominated in the same currency as the collateral provided by the borrower;

- c. Collateral shall be required at a minimum of 105% of the market value of the loaned securities which are denominated in a currency other than the collateral provided by the borrower;
- d. Collateral and loaned securities shall be marked-to-market daily; and
- e. The investment of cash collateral posted by borrowers shall be restricted to those investment-grade securities permissible under the provisions of AS 37.13.120 and 15 AAC 137; unless the ED elects to have cash collateral released to the Fund to meet the Fund's liquidity needs rather than having it invested by the custodian.

IV. ALTERNATIVE INVESTMENTS

A. Private Equity and Special Opportunities

1. Objective

The objective of the Private Equity & Special Opportunities ("PESO") portfolio is to invest in illiquid growth-oriented assets authorized by 15 AAC 137.460 that are expected to generate risk-adjusted, after-fee returns that are superior to the Public Equity portfolio. Performance of this portfolio will be evaluated quarterly, in aggregate and based upon the vintage year, against the **Cambridge PE (Lagged)**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

PESO investment strategies include: venture capital, growth equity, leveraged buyouts, special opportunities, and distressed debt. PESO portfolio investments will be executed through capital commitments to limited liability funds managed by external investment managers, through co-investments alongside existing external managers, and direct investments into operating companies. Annually, APFC Staff will provide a pacing and investment plan for Board approval that reflects the current PESO exposures, assumptions, and outlook. The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the PESO portfolio's investment strategy.

3. Diversification and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the portfolio risks and adhering to this Policy. In constructing a diversified PESO portfolio, APFC Staff will consider the following characteristics: strategy, geography, industry, manager, investment size, leverage, vintage year, and market position. In addition to general Policy requirements, the following asset class specific restrictions apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- c. The PESO portfolio shall be invested within the following strategy diversification ranges:
 - i. Venture Capital – 5% to 45%;

- ii. Buyouts/Acquisition – 25% to 70%;
- iii. Specialized Funds/Investments – 0% to 50%;
- d. No more than 20% of the PESO Portfolio shall be invested with a single Investment Manager/General Partner.
- e. No more than 20% of the PESO Portfolio shall be invested in publicly traded securities; and
- f. Following the public listing of any shares of a portfolio company held by an APFC controlled investment vehicle, such shares shall be either liquidated consistent with SEC regulations within a reasonable period of time, not to exceed eighteen months, or written approval to continuing holding such public securities must be received from the ED on a quarterly basis.
- g. Without the written approval of the ED and CIO, the PESO Portfolio will not directly acquire a controlling interest in a portfolio company.

B. Real Estate

1. Objective

The objective of the Real Estate portfolio is to generate a risk-adjusted return comprised of an attractive level of current income and capital appreciation, while contributing to diversification of the Fund. Performance of the Real Estate portfolio will be evaluated quarterly against a custom benchmark comprised of **85% NCREIF Property Benchmark (Lagged) and 15% MSCI US REIT Index**, but success in achieving the long-term objective will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

Real Estate investments, as authorized in 15 AAC 137.450, shall primarily target:

- a. Directly-held income producing, core real estate globally;
- b. Directly-held build-to-core or other non-core properties;
- c. Equity and debt funds that invest predominantly in real estate strategies (e.g. core, core-plus, value-added, and opportunistic);
- d. Publicly traded funds (e.g. ETFs or Index), or securities (e.g. REITs, CMBS, or other structured product), where the underlying investments consist of real estate;
- e. Private funds, or securities (e.g., REITs, CMBS, or other structured product), where the underlying investments consist of real estate; and
- f. Co-investments alongside an existing Real Estate manager.

The Director of Real Estate will have primary responsibility in executing the portfolio's investment strategy.

3. Diversification and Portfolio Restrictions

The Director of Real Estate is responsible for managing the various risks incurred and adhering to this Policy. In constructing a diversified Real Estate portfolio, APFC Staff will consider the following characteristics: investment type, property type, geography,

manager, and leverage. In addition to general Policy requirements, the following will apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- c. No more than 60% of the directly-held Real Estate portfolio shall be invested in “non-core” real estate (value-add and opportunistic).
- d. The directly-held portion of the Real Estate portfolio will target the following property types: Multifamily, Industrial, Office, Hotel, and Retail with maximum weightings for each property type measured against NCREIF NPI benchmark weightings. Except for the 10% carve-out for other property described in (f) of this section, maximum risk ceilings of 1.5x the benchmark weighting shall apply for each property type measured against the FY2025 target allocation for the Real Estate portfolio.
- e. In recognition that APFC Staff may pursue some niche property types that are not included in property types of the NCREIF NPI, the directly-held portion of the Real Estate portfolio may, with the consent of the CIO, include up to 10% in property types not included in the NCREIF NPI.
- f. No more than 35% of the Real Estate portfolio shall be invested with a single investment manager/general partner as measured against the FY2025 target allocation for the Real Estate portfolio.
- g. Leverage on investments in the directly-held portion of the Real Estate portfolio shall be limited by investment type as follows:
 - i. Core real estate leverage is limited to 65% of the gross asset value of the investment at the time of debt placement; however, this limit can be increased to 67.5% when including transaction fees and expenses;
 - ii. Non-Core real estate leverage is limited to 65% of the gross asset value of the investment at the time of debt placement or 65% of the project cost on build-to-core investments; however, this limit can be increased to 67.5% when including transaction fees and expenses; and
 - iii. Portfolio-wide leverage is limited to 40% of the gross asset value of the directly-held Real Estate portfolio.

Infrastructure and Private Credit and Income Opportunities Portfolio

The Infrastructure and Private Credit and Income Opportunities portfolio will be comprised of two separate investment strategies in accordance with the Policy requirements below:

C. Infrastructure Portfolio

1. Objective

The objective of the Infrastructure portfolio is to provide attractive risk-adjusted returns that have inflation-protection characteristics and exhibit low correlations with other major asset classes, as authorized by 15 AAC 137.460. Performance of the Infrastructure portfolio will be evaluated quarterly against the **Cambridge Global Private**

Infrastructure Index (Lagged), but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

Infrastructure investments involve the purchase of critical assets with high barriers to entry and, due to the “essential services” nature of the assets, often result in low elasticity of demand. Infrastructure investments may include energy infrastructure, transportation, water infrastructure, telecommunications, social infrastructure (e.g. lotteries, student housing, prisons), other infrastructure (e.g. protected income stream assets, other interests of infrastructure issuers, infrastructure-related assets), other real assets (e.g. timberlands, agricultural farmlands, leasable hard assets), and any other tangible or intangible asset that possesses similar characteristics as those outlined in this section.

Infrastructure investments will be executed through long-term commitments to limited liability funds managed by external investment managers, through co-investments alongside existing Infrastructure managers and direct investments into operating companies. Additionally, investments in publicly-traded stocks of companies whose business profile includes ownership of infrastructure assets (Listed Infrastructure) may be included in the portfolio. Annually, APFC Staff will provide a pacing and investment plan for Board approval that reflects the current exposures, assumptions, and outlook. The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the portfolio’s investment strategy and plans.

3. Risk Limits and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the various risks incurred and adhering to investment policy. In constructing a diversified Infrastructure portfolio, APFC Staff will consider the following characteristics: drivers of underlying assets’ cash flow, industry sector, geography, manager, strategy, investment size, and company concentration. In addition to general Policy requirements, the following will apply to this portfolio:

- Risk Limits as detailed in Table 3, Section VII.
- All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- Investments in multiple limited liability investment vehicles managed by the same manager are permitted, however, combined investments with a single manager shall not exceed 30% of the total Infrastructure portfolio.
- APFC assets invested with each manager shall not represent more than 30% of that manager’s AUM.

D. Private Credit and Income Opportunities

1. Objective

The objective of the Private Credit and Income Opportunities portfolio is to provide attractive risk-adjusted returns that generate a high level of income and potentially provide for capital appreciation, while safeguarding principal, as authorized by 15 AAC 137.460. Performance of the Private Credit and Income Opportunities portfolio will be evaluated quarterly against the **Cambridge Private Credit Index (Lagged)**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

Private Credit and Income Opportunities investments involve the ownership of higher yielding, illiquid investment debt opportunities that cover a range of risk/return profiles. The Private Credit portion of this portfolio shall target externally managed limited liability funds, co-investments, and direct investments into operating companies that target one or more of the following strategies: direct lending, subordinated and mezzanine lending, distressed debt, and opportunistic credit-oriented funds, with flexibility to pursue illiquid and liquid strategies. The Income Opportunities portion of this portfolio shall include investments such as: timberlands, asset-based lending, structured credit, life settlements, leasing and royalty strategies, and special situations that share the common characteristic of being private markets investments with an objective of income generation and downside protection, but which do not fit neatly into other portfolios. Certain portfolios within Private Credit and Income Opportunities may also include some liquid credit exposures to complement the private investments in this portfolio. Annually, APFC Staff will provide a pacing and investment plan for Board approval that reflects the current exposures, assumptions, and outlook. The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the portfolio's investment strategy.

3. Risk Limits and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the various risks incurred and adhering to this Policy. In constructing a diversified Private Credit and Income Opportunities portfolio, APFC Staff will consider the following characteristics: credit profile, geography, manager, strategy, investment size, and company concentration. In addition to general policy aspects, the following will apply to this portfolio:

1. Risk Limits as detailed in Table 3, Section VII.
2. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
3. Investments in multiple vehicles managed by the same manager are permitted, however, combined investments with a single manager shall not exceed 30% of the Private Income portfolio.
4. APFC assets invested with each manager shall not represent more than 30% of that manager's AUM.

E. Absolute Return

1. Objective

The objective for the Absolute Return portfolio is to deliver reasonably consistent and accretive returns that are largely uncorrelated with traditional, market-driven asset classes. Performance of the Absolute Return portfolio will be evaluated quarterly against the **HFRI Total HFOF Universe benchmark**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis. The long-term objective for this portfolio is to generate a return similar to the total Fund with a correlation to the total Fund of less than fifty percent (50%), as measure over rolling 36-month periods.

2. Investment Strategy

The Absolute Return portfolio will invest directly into comingled limited liability funds as authorized by 15 AAC 137.460. The managers of these funds will invest in public or private securities and other financial instruments and may use leverage consistent with other managers of similar strategies. It is not uncommon for the legal terms of these limited liability funds to have restrictions on liquidity, including redemption windows (e.g. monthly, quarterly, annually), notice periods (e.g. 30, 60, or 90 days), lock-ups (e.g. soft, hard), gates (e.g. investor-level, fund-level), and, at times, withdrawal fees. With the written consent of the CIO and ED, and the approval of investment guidelines, a portion of the Absolute Return portfolio may be internally managed and invested in gold-backed exchange traded funds as authorized by 15 AAC 137.460.

The Absolute Return portfolio, whether internally or externally managed, shall pursue one or more of the following investment strategies:

- a. Relative Value, including equity market neutral, fixed income arbitrage, and convertible arbitrage;
- b. Event-Driven, including merger arbitrage, distressed securities/discounted bank debt, and special situations;
- c. Directional/Tactical/Opportunistic, including long-short equity, managed futures, and global macro; and
- d. Commodities, including gold-backed exchange traded funds.

The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the Absolute Return portfolio's investment strategy.

3. Risk Limits and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the various risks incurred and adhering to this Policy. In constructing a diversified Absolute Return portfolio, APFC Staff will consider the following characteristics: manager, strategy, investment size, leverage, correlation with other assets of the Fund, and liquidity. In addition to general Policy Requirements, the following restrictions will apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII;

- b. Relative Value Managers in the range of 0 – 75%;
- c. Event Driven Managers in the range of 0 – 50%;
- d. Directional/Tactical/Opportunistic Managers in the range of 0 – 75%;
- e. Commodities, including gold-backed exchanged traded funds in the range of 0 – 50%;
- f. At least 50% of the portfolio shall be capable of being liquidated within a 12-month period; and
- g. APFC assets invested with each internal or external manager shall not represent more than 30% of that manager’s AUM.

V. ALASKA IN-STATE INVESTMENT POLICY

A. Objective and Considerations

To implement the requirements of AS 37.13.120(c), the Board believes the Fund should have an in-state investment policy that maintains the investment integrity of the Fund and is both proactive and impartial. As such, any internal in-state investment decision made by APFC Staff should include the following considerations:

1. Honor AS 37.13.120(c): Prescribes that if an Alaskan investment has equivalent risk and expected return comparable to or better than a similar non-Alaskan investment, the Alaskan investment should be preferred.
2. Require Compelling Risk-Adjusted Returns: To honor the prudent investor rule provided in AS 37.13.120(a), any Alaskan investment contemplated by APFC must be attractive on a stand-alone basis.
3. Ensure Fund Diversification: In order to provide sufficient risk diversification as required under AS 37.13.120(c), Board approval is required for any in-state investment that would exceed 1% of the Fund, at the time of investment.
4. Seek Participation by Another Institutional Investor: In order to ensure that an Alaskan investment opportunity is attractive on a stand-alone basis and satisfies the institutional quality requirements of 15 AAC 137.420, APFC should generally seek to invest into an Alaskan investment alongside of at least one of its peers (i.e., a large institutional investor, which may include endowments, foundations, sovereign wealth funds, or public or private pension funds).

B. In-State Investment Targets

For the APFC Staff to identify and invest the Fund in additional compelling in-state investments, the following investment targets and guidelines are set to promote compliance with AS 37.13.120(c):

1. By 2021, at least 3% of the Fund should be invested in-state;
2. By 2022, at least 4% of the Fund should be invested in-state;
3. By 2023, at least 5% of the Fund should be invested in-state;

For purposes of this section, a Fund investment will be considered “invested in-state” if,

1. An external investment manager has an office in Alaska and the employee(s) that is primarily responsible for management of the asset(s) is based in Alaska; or
2. An external investment manager has an office in Alaska and the employee(s) that is primarily responsible for management of the asset(s) is based in Alaska; or
3. The Fund’s investments managed internally by APFC Staff will not be included in achieving these targets.

VI. AUTHORIZED USE OF DERIVATIVES

A. Objective

The purpose of this section of the Policy is to establish the permitted uses and the limitations on the use of derivatives and establish procedures for managing risks associated with derivatives. The requirements and limitations of this section of the Policy shall apply to all derivatives transactions executed by APFC Staff and all external managers with authority to buy or sell a derivative as an agent on behalf of the of the Alaska Permanent Fund. This section of the Policy does not apply to investments in a limited liability investment vehicle in which derivatives are in the name of the limited liability investment vehicle and the liability is limited to the amount invested.

B. Derivatives Definition; Scope

1. As defined in 15 AAC 137.990(6), “Derivative” means “an instrument whose value, usefulness, and marketability is dependent upon or derives from an underlying asset; classes of derivatives include futures contracts, options, forward contracts, including currency forward contracts, swaps, and options on futures.”
2. Both exchange traded and over the counter (“OTC”) derivative instruments are under the scope of this Policy. The principal risk of derivatives strategies comes from the potential to lever the portfolio and to express a view on a security or risk factor without committing capital commensurate with the exposure. To mitigate this risk, the successful and prudent use of derivatives depends on:
 - a. Well-defined uses for derivatives, and avoidance of leverage;
 - b. Manager-by-manager limits on economic exposures through derivatives; and
 - c. Investment manager internal control and defined procedures for managing risk.

C. Permitted Uses

1. Permitted uses of derivatives include:
 - a. Hedge and control risks of Fund portfolios so they better align with benchmarks and objectives;
 - b. Efficiently manage portfolio exposures synthetically as opposed to trading underlying securities;

- c. Build portfolios with targeted risk and return characteristics that otherwise could not be efficiently created with securities; and
- d. Facilitate rebalancing.

D. Derivatives Risk Management and Compliance

1. Derivative Pre-Approval Requirement

All derivatives strategies, whether internally or externally managed, are prohibited unless specifically allowed in writing for a permitted use as a part of an investment manager's guidelines.

The use of derivatives by an external manager shall be conditioned upon the finding by the CIO and CRO that the external manager:

- a. Has demonstrated investment expertise in the use of derivatives for the strategy they have been selected to implement;
- b. Has appropriate risk management and valuation policies and procedures in place;
- c. Has legal and investment experience to limit downside effects of the proposed derivatives; and
- d. Has demonstrated the ability to effectively monitor and control the use of derivatives and has agreed to provide monthly derivative exposure reports which detail:
 - i. Total derivative exposures on a gross and net basis,
 - ii. Total collateral/margin postings on gross and net basis, and
 - iii. A list of authorized counterparties and exposure by counterparty.

2. Derivative Recourse Limitations

For externally managed portfolios, all liability created by the use of derivatives in the name of the Fund must be limited to the total value of the portfolio being managed by the external manager. To ensure this requirement is met, approval of the IMA/External Manager guidelines by General Counsel is required.

3. Counterparty and other Requirements

- a. The counterparty to any OTC derivative transaction must have a credit rating of at least A- (Standard and Poor's) or A3 (Moody's), unless an exception is approved in writing by the CIO and CRO;
- b. The net market value, net of all collateral postings, of all OTC derivatives for any individual counterparty may not exceed 30 basis points of the total market value of the Fund.;
- c. Selling (writing) uncovered options is prohibited;
- d. The net of long and short dollar exposures to assets or currencies, whether derived from physical or derivative securities, must be less than or equal to the dollar market value of the portfolio, except for very small, inadvertent, or temporary amounts that occur in the normal course of portfolio management or authorized by the CRO;

- e. The gross dollar exposures of a portfolio in the Fund from physical and derivative securities (futures, options, swaps) cannot exceed 300% of the market value of the aggregate underlying portfolio at all times unless authorized by the CRO; and
- f. If derivatives are used by a manager to actively manage currency exposure, net short exposure to any single currency remains within limits established for that manager's strategy.

VII. RISK MANAGEMENT & OVERSIGHT

Recognizing the relationship between return and risk, APFC consciously and deliberately assumes various risks in pursuit of its return objectives. The goal of risk management is to understand, analyze and manage these risks. The risk management function strives to create risk awareness, establish and formalize a risk management framework, and ensure risks incurred are within the Board's risk appetite. This Policy outlines the Board's approved risk management framework, which includes the salient investment risk parameters and thresholds.

A. Risk Parameters and Measures

APFC Staff will establish a framework for measuring absolute risk of the Fund and each asset class, as well as relative risks in comparison to established benchmarks. This framework should generally include quantifiable estimates of active and relative risk. APFC Staff will monitor and produce reports as appropriate for the Board, ED, CIO, and APFC Staff.

The salient risk parameters are listed below. Related tolerances and associated ranges are provided in Table 3.

Asset Allocation Limits – Target allocation levels are determined for each asset class based on quantitative modeling and qualitative inputs. Disciplined alignment to these targets is essential, albeit ensuring limited flexibility to cater to changing markets and other factors.

Future Commitments - Future commitments are a function of committed capital to private investments and essentially reflect a contingent cash draw liability. Monitoring and limiting future commitments relative to the Fund's overall size is important.

1. **Active Risk** - Tracking error is a measure of how closely a portfolio follows the index to which it is benchmarked. Tracking error is calculated for this purpose on an ex-ante basis using a holdings-based risk analytical system.
2. **Relative Risk Limit** - Relative Value at Risk (RVaR) provides a comparison of portfolio risk relative to benchmark risk and is measured as a ratio of Portfolio VaR to benchmark VaR.

In addition to relative measures, multiple risk parameters including concentration, credit, market, and liquidity risks are monitored and controlled.

1. **Downside Risk** - Downside risk is risk of significant loss of capital. Staff will actively monitor the Fund's downside risk relative to the risk benchmark using scenario analysis and stress testing.
2. **Proxy Securities and Indices** - If necessary and prudent, as determined by the CRO, APFC Staff will employ index proxies to approximate the economic characteristics of specific

investments to the extent that the terms and conditions of those investments or the underlying holdings (in the case of the funds) are not readily available or where the complexity of the underlying investment renders empirical measurement impractical.

3. Private Market Asset Holdings - APFC Staff will actively monitor the portion of the Fund invested in private market asset holdings to ensure that the percent of the total fund invested in private markets adheres to the private investment limits.

B. Credit Ratings for Fixed Income Securities

Credit ratings by the three major ratings agencies, Standard & Poor's, Moody's and Fitch will be the primary source of credit ratings for Fixed Income securities in the Fixed Income and Total Fund Cash portfolios, subject to the following:

1. In case of split ratings, the 'Bloomberg Barclays Middle Rating' methodology shall be applied (i.e. if all three agencies rate a security, the middle rating is adopted; if only two agencies rate a security, the most conservative (lowest) rating is used; if only one rates a security, that single rating is used).
2. If none of the three agencies have assigned a rating, ratings by other agencies and or implied ratings may be used with CRO approval.
3. If no agency ratings are available and a rating cannot be implied, it shall be categorized as 'Unrated'.

C. Legal Risk Management

Legal documentation for all internally managed public and private investments will be reviewed, negotiated and approved by APFC General Counsel prior to execution by the ED. APFC General Counsel shall be responsible for determining when outside legal counsel should be engaged to assist in the review and negotiation of Fund investment matters, subject to applicable statutes and rules adopted by the Office of the Attorney General.

D. Permitted Use of Leverage

APFC Staff and external managers, consistent with the requirements of 15 AAC 137.500 and this Policy (including the risk parameters established by the asset allocation ranges), is authorized to use leverage for an investment of Fund assets, provided that such leverage is non-recourse to APFC or the Fund as described in AS 37.13.120(b) and 15 AAC 137.500.

E. Foreign Exchange Risk

1. External managers and APFC Staff may, with prior approval of the CIO, transact in any foreign exchange instrument (including currency futures and forward contracts, options, and swap agreements), to implement their investment strategies, contingent upon such transactions being consistent with this Policy and the requirements of 15 AAC 137.480.
2. APFC Staff shall analyze foreign exchange risk regularly and present quarterly to the Board. This analysis includes both internal hedging and external foreign exchange overlay manager positioning and performance.

F. Risk Compliance, Monitoring, and Reporting

The APFC Staff assigned to each Asset Class in this Policy will have primary responsibility to ensure adherence to all aspects of this Policy. Additionally, the CRO and risk management team will be responsible for monitoring compliance of Fund investment activity. The Chief Risk Officer will provide the Board and APFC Staff with a comprehensive risk profile of the Fund on a regular basis. At a minimum, this includes the Daily Risk Dashboard and more detailed quarterly updates. The quarterly reports to the Board shall include the levels for most of the salient risk parameters described in this Policy.

G. Risk Parameters and Limits

Table 3: Asset Allocation (AA) Target Levels

	Public Equity	Fixed Income	Private Equity	Real Estate	Private Income	Absolute Return	Risk Parity	Cash	Total Fund	Low	High	Low	High
Future Outstanding Commitments¹	0.0%	0.0%	10.0%	3.0%	5.0%	2.0%	0.0%	0.0%	20.0%	0%	115%	0%	125%
Benchmark	M664204USN	BBGEMBUSD	CAMB_PE	RE_2021	CAM_PI	HFRIPROXY	HFR1_RP	LEH3MO_TB	LHJPMSUSD				
Tracking Error	3.5%	2.5%							4.0%	n/a	115%	n/a	125%
Relative VaR²	100.0%	100.0%							100.0%	0%	125%	0%	140%
% of Asset Allocation													
Single Name / Issuer³	4%	4%	2%	10%	2%	n/a	n/a	n/a		0%	115%	0%	125%
Single Industry⁴	20%	20%	30%	n/a	30%	n/a	n/a	n/a		0%	115%	0%	125%
Single Country - EX US	10%	10%	20%	20%	20%	n/a	n/a	n/a		0%	115%	0%	125%
Total EX US	50%	30%	50%	50%	50%	n/a	n/a	n/a					
Single Fund Investment⁵	5%	10%	10%	10%	10%	15%	50%	n/a		0%	115%	0%	125%
Proportion of Ownership⁶	5%	n/a	n/a	5%	5%	n/a	n/a	n/a		0%	115%	0%	125%
Rating - Below Inv Grade	n/a	25%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
Rating - Below A- & Unrated	n/a	50%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
Rating - Unrated	n/a	5%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
FX - Proportion Unhedged	50%	30%	50%	50%	50%	n/a	n/a	n/a		0%	115%	0%	125%
Liquidity - Proportion w/o Weekly Liq	10%	10%	100%	100%	100%	100%	100%	5%		0%	115%	0%	125%
Liquidity - Proportion w/o Monthly Liq	2%	2%	100%	100%	100%	100%	70%	0%		0%	115%	0%	125%
Liquidity - Proportion w/o Quarterly Liq	0%	0%	100%	100%	100%	40%	30%	0%		0%	115%	0%	125%
Cash & Equivalents	2%	10%	5%	5%	5%	n/a	n/a	100%		0%	115%	0%	125%
MINIMUM Cash & Equivalents	0%	0%	0%	0%	0%	n/a	n/a	30%		85%	115%	75%	125%

All Targets are Maximum Permitted except-Minimum Cash

Notes:

- 1 % of Total Fund
- 2 Ratio of Portfolio VaR to Benchmark VaR
- 3 Single Name / Issuer: represents security level exposure as a percent of the portfolio to single entity or operating company.
US Treasury & Govt Agencies are exempt. For Private Assets, the limit applies at the time of investment or cost basis.
- 4 Definition: GICS Sub-Industry
- 5 Single Fund Investment: represents exposure to an external fund or externally managed strategy based vehicle.
- 6 Proportion Ownership: For Real Estate and Private Income, the limit is only applicable to the REIT and listed infrastructure portfolios.

VIII. PUBLIC MARKETS EXTERNAL MANAGER SELECTION

A. Manager Search and Selection

This section of the Policy applies to discretionary mandates assigned to external investment managers to transact and manage public market assets on behalf of the Fund (i.e. through an IMA). The Board has authorized APFC Staff to hire new investment managers upon conclusion of an appropriate search with the assistance of a qualified consultant, which can include the Board's General Consultant, contingent upon the search and hiring process adhering to the following steps:

1. Setting of relevant search criteria by APFC Staff of applicable manager qualifications;
2. Identification, with the assistance of the consultant, of a list of potential managers that are qualified to provide the investment management services needed, based on the qualifications and other search criteria established by APFC Staff;
3. Evaluation by a review committee established within the consultant's organization of the list of potential, qualified managers identified for recommendation of consideration by APFC Staff;
4. Informing the CIO of managers recommended by the General Consultant's review committee;
5. Selection by APFC Staff of between three and five finalists from those recommended by the consultant's review committee. This process may include, as part of due diligence, on-site visits by APFC Staff. Presentations to APFC Staff by the recommended managers are at the election of the CIO and ED;
6. Analysis by APFC Staff including a detailed recommendation to the CIO and ED, considering manager-specific characteristics as well as portfolio considerations;
7. Approval of the new manager or advisor by the CIO and ED, assignment of benchmarks as appropriate, and determination of the initial amount to be placed under management with the manager;
8. A manager shall also be required to execute a written IMA with the APFC. The IMA shall address matters of performance, compensation, term/termination, investment guidelines, among others, as the APFC and the manager consider necessary and appropriate. The use of derivatives, if any, within externally managed mandates shall conform to the Derivatives section of this Policy and be explicitly detailed in the IMA; and
9. Review and approval by the CRO and General Counsel of the proposed IMA is required prior to execution.

B. Special Situations

In certain special circumstances, the ED and CIO has the authority to modify or waive the criteria in the selection and hiring process outlined above. Even in such instances, the ED and

CIO retains the final manager selection authority. Use of an alternative manager search process may be considered when any one or more of these conditions exist:

1. A manager under consideration for hire has already been vetted in a significant manner either through a search process with a qualified consultant, or the manager is already employed in a manager capacity by APFC;
2. The skill for which the manager is being considered is related in a substantive manner to the role the manager already fulfills for APFC or was the subject of a manager search that first identified this manager;
3. It is in the best interest of the Fund to move more quickly than the typical search procedure permits; or
4. Due to confidentiality or specificity of the investment strategy or structure, use of the typical search procedure is not prudent.

The CIO and ED are required to report use of the alternative manager search and selection process, along with the rationale for the use, at the next regularly-scheduled Board meeting.

C. Monitoring and Evaluation of Managers

1. The Board expects APFC Staff to monitor the performance of the Fund's external managers, using the quarterly quantitative performance reports prepared by the General Consultant and Asset Class-specific Advisors in the case of Private Markets and Alternative Investments. Monitoring manager performance may also include review of other quantitative and qualitative aspects based on on-site visits to the manager's offices, discussions with other clients of the manager, media reports and other feedback.
2. The CIO and ED shall report to the Board any special concerns or observations they may have with respect to the performance of a manager no later than the next regular meeting of the Board.
3. The Board authorizes the CIO and ED to terminate an investment manager. If the CIO and ED terminate or give notice of unsatisfactory performance to a manager, they shall inform the Board of the actions and rationale at the next regularly scheduled Board meeting.

Appendix A: Investment Guidelines

Objective

The objective of the APFC Investment Guidelines is to supplement the Investment Policy by providing operational guidelines for APFC's internally managed investment programs. The ED may update this Appendix from time-to-time; updates will be provided to the Board at its next regularly scheduled meeting.

A. Alaska Direct Alternative Credit Investment Guidelines

In fiscal year 2018, APFC Staff established an in-house hybrid liquid / illiquid alternative credit effort named Alaska Direct Alternative Credit (or "ADAC"). Investments included in ADAC will be (i) non-investment grade high yield ETF's and individual bonds and cash ("Liquid Portfolio") and (ii) co-investments with Private Credit managers and working capital cash ("Private Portfolio"). The following guidelines apply to ADAC:

c. ADAC shall be included in the Special Opportunities / Income Opportunities category.

d. Size and Funding Schedule

- e. \$500 million funded at inception, initially invested in Liquid Portfolio.
- f. Following inception, additional funds will be invested into ADAC through cash transfers to the Liquid Portfolio and capital calls into the Private Portfolio for co-investments, or working capital or organizational expenses for the Private Credit Co-Investment Vehicle.
- g. Funding of additional cash transfers to the Liquid Portfolio will be done at no greater than a 1:1 ratio with cumulative Private Portfolio capital calls.
- h. Invested capital of \$1,000 million targeted to be funded within 24 months of inception.

e. Portfolio Control and Decision Making

- c. Private Income team will have discretion over portfolio-wide decisions including: (i) percentage of portfolio invested in Liquid vs. Private Portfolio, (ii) retaining APFC Fixed Income team as manager of the Liquid Portfolio, and (iii) individual investment decisions in the Private Portfolio.

f. Liquid Portfolio and Benchmark

- e. Liquid Portfolio, initially 100% of ADAC, ultimately scaling down to less than 50%, will be managed by the APFC Fixed Income team at inception.
- f. Targeted maximum allocation will be the greater of \$750 million and 75% of ADAC NAV.
- g. Targeted minimum allocation will be 25% of ADAC NAV.
- h. ETF Account within Liquid Portfolio benchmarked to Barclays US High Yield Index (after July 1, 2018 to allow for an initial ramp-up).
- i. Individual securities portfolio will favor BB-B over CCC-rated securities and will be benchmarked to the Barclays BB High Yield Index (after July 1, 2018 to allow for an initial ramp-up). A relatively high tracking error to this index will be tolerated with the aim of outperformance over a full market cycle.

g. Private Portfolio and Benchmark

- e. Private Portfolio, initially 0% of ADAC, ultimately scaling to greater than 50%, will be managed by the Private Income team.
- f. Targeted maximum allocation will be 75% of ADAC NAV.
- g. Targeted minimum allocation will be 25% of ADAC NAV (after initial, 24-month ramp-up).
- h. Private Portfolio will target having a minimum of \$100 million committed within 12 months of inception and a minimum of \$250 million within 24 months of inception.
- i. Co-investment opportunities will be primarily sourced through existing managers.
- j. Maximum commitment per co-investment of \$75 million without ED written approval.
- k. Private Portfolio will be benchmarked to CPI + 500 bps.

h. Overall ADAC Portfolio Benchmarks

- b. Barclays US High Yield Index (relatively high tracking error to this index will be tolerated with the aim of outperformance over a full market cycle).
- c. A long-term target of CPI + 400 bps.

i. Tenor and Termination

- f. This is an evergreen strategy with realized gains re-invested, which means the size of ADAC will be equal to invested capital, *plus* cumulative realized/unrealized gains, *minus* cumulative realized/unrealized losses.
- g. The CIO, with ED consent, may choose to invest additional capital at any time.
- h. The CIO, with Executive Direct consent, may choose to terminate the strategy at any time. Upon termination, available cash will be distributed from ADAC, the Liquid Portfolio will be sold within 180 days, and the Private Portfolio will cease making new commitments (with the exception of follow-on investments to existing portfolio holdings and investments to which a written commitment to invest has already been executed; both to be pursued only with written consent of the ED) and will distribute proceeds upon any partial or full realization of existing investments.

B. U.S. Large Cap Low P/E

In the fall of 2019, APFC Public Equity Staff established an internally traded deep value strategy. The following guidelines apply to this strategy:

1. Benchmark

The performance benchmark is the Russell 1000 Value Index.

2. Risk Limit

The portfolio will be included within the Total Public Equities' Tracking Error and Relative VaR limits. The allocation limit to the strategy will conform to the limits set in the Public Equities investment guidelines.

3. Concentration Risk

When originally purchasing securities for this strategy, the securities will all be equally weighted and from the lowest valuation quintile of the Russell 1000 index. The portfolio

will be rebalanced every 12 months to ensure that the securities that make up this portfolio remain equally weighted and at least 90% of the securities are in the lowest valuation quintile of the Russell 1000 index. At all times, the portfolio will have a minimum of 100 securities.

4. Allowable Investments

The strategy will invest in U.S. listed equity securities from the Russell 1000 Index.

5. Shorting, Leverage, and Derivatives

Not applicable at this time.

6. Liquidity Risk

The strategy is expected to be fairly liquid. For example, at \$500mm in AUM the portfolio is estimated to trade 95% on day 1 and 99% by day 3, under normal market conditions.

7. Portfolio Size Limit

The portfolio size shall be limited to a maximum of 1% of APFC's total fund NAV.

C. Gold Exchange Traded Fund Strategy

In the fall of 2020, APFC Absolute Return Staff established the APF Real Overlay account for the implementation of the Gold ETF strategy.

1. Allocation Size

The size of the Gold Exchange Traded Fund strategy will range between 0% and 50% of the size of the Absolute Return portfolio.

At the security level, APFC's position in any given ETF will not exceed 10% of the ETF's Total Assets, without separate CIO approval.

2. Eligible Securities

U.S. listed ETF products issued by a major ETF sponsor such as iShares, State Street, VanEck, etc. The program will invest in ETFs backed by physical gold on an unlevered basis, e.g. will not invest in derivatives-based ETFs. Currently identified examples of ETFs that fit these criteria are IAU US, GLDM US, OUNZ US.

3. Benchmark

The performance benchmark is the LBMA Gold Price (BB - GOLDLNPM Index).

D. Internally Managed Tactical Tilt Portfolio Investment Strategy and Guidelines

APF Tactical Tilt was started in 2015 within the Public Equity portfolio with the objective to implement “our own” insights gained from possessing a historical market perspective and with exposure to lots of data and information. It was an attempt to add value in ways the Fund’s external public equity managers are either not set up for or not able to. The Strategy was also thought to be complementary to the bottom up stock selection strategies employed by our external managers.

1. Benchmark

The benchmark is MSCI ACWI IMI net (BB ID: M1WDIM)

2. Primary Objective

Achieve excess returns from top down selection decisions emphasizing sectors/industries, countries/regions, and style factors that represent greater appreciation potential relative to the broad market represented by the benchmark.

3. Secondary Objectives

Control risk in Public Equity portfolio - as market conditions warrant.

Implement same day rebalancing with little cost or friction – with respect to maintaining Fund’s target policy weights and cash flow needs

4. Investment Philosophy & Process

The foundation of this Strategy rests on successful top down allocation decisions across broad segments of public equity markets. The strategy is based on the belief that we can identify segments of the market which are either mispriced or attractively priced, trading at or near the low end with respect to their respective historic cycle, and/or are likely to benefit from a favorable turn in economic and market conditions.

5. **Portfolio Manager:** Director of Public Equity

6. **Portfolio Size:** Maximum 15% of overall Public Equity

7. **Tracking Error:** Maximum contribution to overall Public Equity Tracking Error (TE) of 100 bps (subject to Public Equity being within its TE limits)

8. Allowable Investments

Public equity ETFs, other externally managed public equity funds. Single stock holdings are not permitted.

9. Derivatives

Use of derivatives will require approval of CIO (except when derivatives are part of ETFs or other funds)

Deviation from these guidelines would require CIO and CEO approval. Overall compliance to IPS is required.

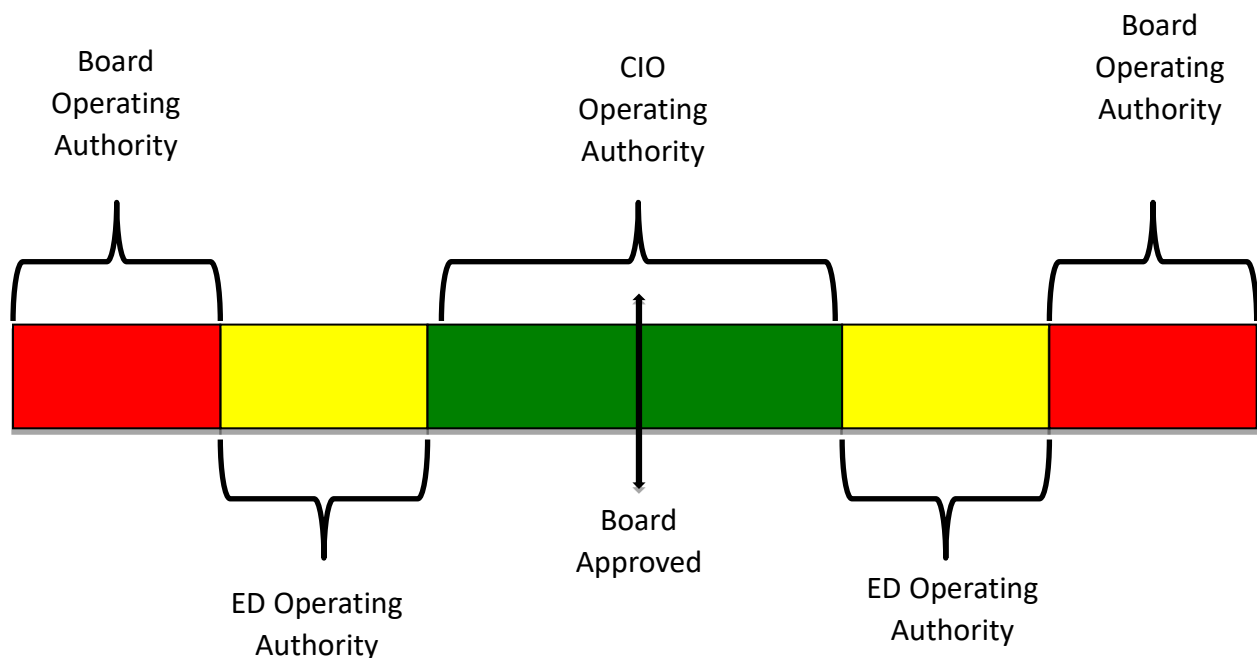
Appendix B: Limit Ranges & Compliance Cure Periods

The Green Zone Operating Range (“Green Zone”) concept is designed to indicate the Board approved operating risk limits.

- A. The Green Zone is the Board-approved CIO operating range.
- B. The Yellow Zone is the Board approved ED operating range.
 - 1. The Chief Risk Officer (“CRO”) will notify the CIO and ED promptly upon entry into a Yellow Zone.
 - 2. The CIO will respond by requesting ED approval to operate within the Yellow Zone.
 - 3. With ED approval, the CIO may operate within a Yellow Zone for up to 90 consecutive days or, if longer, until the next Board meeting following entry into a Yellow Zone.
 - 4. The CRO will notify the Board (i) when approaching 90 days of operating within a Yellow Zone and (ii) monthly thereafter.
 - 5. Following Board notification, a Trustee may request in writing a meeting to discuss an extension to continue operating within the Yellow Zone.
 - 6. The Board may grant the CIO and ED an extension to continue operating within a Yellow Zone. Between Board meetings, unless a Trustee requests a meeting, the Board Chair may grant the CIO and ED an extension to continue operating within a Yellow Zone.
- C. The Red Zone is the operating range that requires Board approval.
 - 1. The CRO will notify the Board upon entry into a Red Zone.
 - 2. The CIO and ED will respond to the Board with an action plan.
 - 3. Absent Board approval, operating within a Red Zone is limited to 30 consecutive days (plus the time needed to notice a Board meeting).
 - 4. The Board has the authority to approve operating within a Red Zone, beyond 30 days.

Even though the Fund is expected to operate most of the time within the Green Zone, the Fund may periodically be within a Yellow Zone, and there may be times when the Fund will be within a Red Zone. The zones are designed to increase transparency and awareness; they should not be viewed as explicit violations. Each year a historical report showing periods of operating within the Yellow and Red Zones will be included in Board meeting packets.

Visual Display of Green Zone Concept



Appendix C: Risk Appetite

The risk appetite approved by Board on December 2, 2020 is defined in terms of (a) a Risk Tolerance Portfolio and (b) Liquidity level.

a. Risk Tolerance Portfolio (RTP)

- i. The RTP is comprised of an 80% equity, 20% bond reference portfolio with the following constituents: 80% MSCI ACWI IMI, 8% BB US AGG, 8% BB US CORP, 4% BB GBL TRS ex-US.
- ii. The maximum risk of the APFC portfolio shall not exceed that of the RTP based on two parameters:
 - 1. Value at Risk (VaR): 1-year time horizon, 1 standard deviation, using 10 year constant-weighted historical monthly data.
 - 2. Drawdown: Recession Global Financial Crisis from Dec 2007 to Mar 2009
- iii. The private equity risk estimate computed by Aladdin will be adjusted downward (reduced) by adjusting the private equity exposure to 75% of actual exposure when comparing to RTP.

b. Liquidity level

- i. The combined allocated to public equities, fixed income, and cash will not be lower than 40%.

Appendix D: Glossary

AAC means the Alaska Administrative Code.

ADA means the Americans With Disabilities Act of 1990.

Advisors and **Board Advisors** mean the investment professionals who comprise the Board's Investment Advisory Group.

APFC and **Corporation** mean the Alaska Permanent Fund Corporation, established under AS 37.13.040.

AS means Alaska Statutes.

BB means **Bloomberg**.

Board means the Board of Trustees of the APFC.

CMBS means commercial mortgage-backed securities.

CFO means the APFC's Chief Financial Officer.

CIO means the APFC's CIO.

Consultant means the Board's investment consultant(s), not including Board Advisors.

CPI means the Consumer Price Index.

CRO means Chief Risk Officer

Custodian means the APFC's custodian.

Days means calendar days.

ED means the APFC's Executive Director.

FoF means fund-of-funds.

Fund and **Permanent Fund** mean the Alaska Permanent Fund, established under Article IX, Section 15, of the Alaska Constitution, and described in AS 37.13.010.

IMA means investment management agreement.

Investment Manager and Manager mean investment manager(s) retained by the APFC.

IRR means internal rate-of-return.

Long-Term means over one or more business cycles.

MBS means mortgage-backed securities.

RBM means Strategic Risk Benchmark.

Staff means the APFC Investment Staff and, where the context requires, also means or includes the Executive Director and/or other APFC Staff.

TE means Tracking Error.

Trustees means the members of the APFC's Board of Trustees.

VaR means Value at Risk.

Appendix E: Previous Investment Policy Adoption & Amendments

The previous APFC Investment Policy was adopted or amended effective as follows:

Adopted: May 27, 2010

Amended: September 30, 2010 (§14.9 added)

Amended: December 1, 2010 (§9.1 revised; new §11.1 added and prior §§11.1-11.3 and subsections thereunder renumbered; and §18.2.4 revised)

Amended: May 20, 2011 (§18A added)

Amended: September 30, 2011 (§§ 8, 8.2, 8.3, 8.5, 9.2, 9.3.1, 9.4.1, 11.3.1, 15.3, and 15.4 revised)

Amended: December 8, 2011 (§11.3.2 revised)

Amended: February 22, 2012 (§20 revised)

Amended: April 23, 2012 (§§16.3.1 and 16.3.2 revised; and Specific Policy Modifications for Tysons Corner Phase I Project and Mariner Frontier Fund, L.P. added)

Amended: February 27, 2013 (§§ 15.2, 15.3, and 15.4 revised)

Amended: May 22, 2013 (§§9.5.4, 9.5.5, 12.4, 12.6, 13.2, 13.3.1, 13.3.3, 14.9.4.10, 16.1.2, 16.1.3, 16.1.4, 16.2, 16.3, 16.3.1, 18A, 23.2, and 23.5 revised; Specific Policy Modification for Mariner Frontier Fund, L.P. revised; Specific Policy Modification for Crestline AK Permanent Fund, L.P. added; and Addendum re Internal Investment Managers added)

Amended: May 23, 2013 (§§ 3.1, 3.3, 5.3, 6, 8 (including Table 8a), 8.1 revised; §8.2 deleted; §§ 8.3-8.5 renumbered (as §§ 8.2-8.4) and newly-renumbered §§ 8.2-8.4 revised; and §§ 9.2, 9.3.1, 9.4.1, 10, 11.3.1, and 22.2 revised)

Amended: February 26, 2014 (§§23.3.1, and 23.2 revised; and Addendum re Internal Investment Managers revised)

Amended: May 21, 2014 (§14.9.4.10 (including Table 14.9.4.10.1) revised)

Amended: December 10, 2014 (§§ 8, 9.3.1, 11.3.2, 14.2.2, and Table 14.5.4.1 revised)

Amended: May 19, 2015 (§§ 15 and 16, including conforming changes in other sections revised)

Amended: September 27, 2016

Amended: December, 2016 (§§ 9, 10 and 12, including conforming changes in other sections revised)

Amended: May 23, 2018, complete re-write of the Policy and Guidelines. Changes to be effective on July 1, 2018

Amended: September 27, 2018 (§ 5, Alaska Investment Policy was revised)

Amended: May 21, 2020, complete rewrite of the Investment Policy changes effective July 1, 2020

Amended: September 24, 2020 Amended § III D total fund cash and § IV E absolute return to authorize investment in gold ETFs.

Amended: May 20, 2021 amended: (1) § II A to include reference to Risk Appetite approved by the Board on December 9, 2020; (2) § IV A 3 to include a new subsection (g), which is a control restriction in place of existing 10% ownership restriction; (3) § VII G update table 3 risk parameters to include clarifications and changes to existing limits; (4) Appendix A to include most recent Investment guidelines approved by the ED; and (5) add Appendix C to include Risk Appetite parameters approved by the Board on December 9, 2020.

APFC Investment Policy

Adopted May 21, 2020, last amended on May 20, 2021

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I. INTRODUCTION

A. Purpose

1. The purpose of this Investment Policy ("Policy") is to provide a formal plan for investing and managing the assets of the Alaska Permanent Fund and other state assets as prescribed by law ("Fund") to achieve the defined investment objectives. This Policy also defines the roles and responsibilities of the various parties involved in the investment process and facilitates external communication of the Policy. The appendices are incorporated into and form part of this Policy. Terms not defined within the body of the Policy have meanings assigned to them in the "Glossary," Appendix D of this document.
2. This document is not intended to be a static document and will be considered for possible amendment on an annual basis or any time the Board of Trustees ("Board") modifies the Alaska Permanent Fund Corporation's ("APFC") investment-related policies or asset allocation. Amendment of this Policy requires Board action as described in AS 37.13.080 and the APFC By-Laws ("By-Laws"). Following any Board approved amendment to this document, changes will be noted in Board meeting minutes and as soon as practicable this document will be amended to reflect the approved changes and posted on the APFC website.

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B. Roles of the Board, Staff, Consultants, and Advisors

1. The Board has a responsibility to invest Fund assets in accordance with the Alaska Constitution and the prudent-investor rule provided in AS 37.13.120(a) – (e). The Board has adopted regulations (15 AAC 137.410 – 15 AAC 137.990), which define the eligible investments of Fund assets ("Regulations"). The Board has also adopted By-Laws, which delegate and empower the APFC Staff to invest and manage Fund assets consistent with the parameters of the Regulations and this Policy. Finally, through regularly scheduled and special meetings, the Board oversees the management of APFC Staff and Fund assets, and ensures that APFC has the resources needed to fulfill its objectives as effectively as possible.
2. The APFC Staff's task is to invest and manage Fund assets to fulfill the Fund's objectives, as specified by the Board, in this Investment Policy. Additionally, APFC Staff advises the Board about recommended changes to the asset allocation and this Policy to help the Fund achieve its objectives. Finally, APFC Staff, or external investment managers selected by APFC Staff, negotiates and executes all investment plans and strategies, performs risk-management functions, and helps prepare investment performance and other management reports.
3. External consultants provide advice and implementation assistance to the Board and APFC Staff related to investment programs at both the overall Fund level ("General Consultant") as well as for specific asset classes. The General Consultant also reports on the progress that the Fund is making with regard to specific investment programs and makes comparisons of Fund performance against its target benchmarks, including Fund peers.

4. Consistent with the Board's Charters and Governance Policies, up to three Investment Advisors are selected by the Board to provide education, advice, commentary, and discussion at Board meetings, or as requested by the Board.

II. TOTAL FUND & PORTFOLIO DESIGN PHILOSOPHY

A. Total Fund Objective

Consistent with the Legislature's findings regarding the purpose of the Alaska Permanent Fund (AS 37.13.020), the Board's objective is for the Fund to achieve the highest level of investment performance that is compatible with the Board's risk tolerance and prudent investment practices. Because of the perpetual nature of the Fund and the Legislature's finding that the Fund should benefit all generations of Alaskans, the Board maintains a long-term perspective when formulating this Policy and in evaluating Fund performance. To that end, the Board expects the Fund's design and performance will be evaluated using the following criteria:

1. **Investment Performance:** ability to generate an annualized return of CPI + 5% over a 10-year period ("long-term target")
2. **Investment Risk:** ability of the Fund to achieve the long-term target while conforming to the risk appetite approved by the Board, which can be found in Appendix C.

B. Total Fund Asset Mix

1. APFC's investment programs are organized by asset class and APFC Staff assist the Board in engaging in an asset allocation study for the Fund at least once every five (5) years to review asset classes, risk-return assumptions, and correlations of investment returns with applicable benchmarks and across asset classes. A key objective of the asset allocation study shall be the development, through quantitative and qualitative modeling techniques, of a diversified portfolio that specifies a "long-term target" position for each asset class. The total Fund portfolio mix will represent the portfolio that is expected to meet the Board's long-term target while conforming to the risk appetite approved by the Board.
2. Each asset class allocation percentage shall designate a "long-term target" position within the overall portfolio as well as maximum and minimum ranges around those targets, as outlined in Table 1. Ranges are specified by a "green zone" which reflect normal expected variability around the targets, "yellow zone" which reflect potential remediation by APFC Staff according to prudent portfolio management over a reasonable period of time, and "red zone" which require Board approval of a remediation plan within 30 days. Ranges of these zones are expressed as percentages of the overall Fund. Details of the zones and compliance cure periods are provided in Appendix B.

Table 1: Asset Allocation (AA) Target Levels by Year as % of Fund

	Public Equity	Fixed Income	Private Equity	Real Estate	Private Income	Absolute Return	Risk Parity	Cash	Total Fund
Green Zone	+/- 5%	+/- 5%	+/- 5%	+/- 3%	+/- 5%	+/- 3%	+/- 1%	+/- 2%	
Yellow Zone	0 - 5%	0 - 5%	0 - 5%	0 - 3%	0 - 5%	0 - 3%	0 - 1%	0 - 2%	
FY2021	39%	21%	15%	7%	9%	6%	1%	2%	100%
FY2022	38%	20%	16%	8%	9%	6%	1%	2%	100%
FY2023	36%	20%	17%	9%	9%	6%	1%	2%	100%
FY2024	35%	19%	18%	10%	9%	6%	1%	2%	100%
FY2025	33%	18%	19%	12%	9%	6%	1%	2%	100%

Notes: Green Zone: expressed as +/- to Target Allocation

Yellow Zone: expressed as range beyond green zone

C. Total Fund and Asset Class Benchmarks

Each asset class is associated with a benchmark that describes in general terms the opportunity set and return characteristics associated with the asset class ("Policy Benchmark"). For certain private market asset classes, the Policy Benchmark serves as a proxy for expected returns rather than an approximation of the actual investments that will characterize the components of the portfolio. Note that the investment returns and Policy Benchmarks for Private Equity & Special Opportunities, Real Estate, and Infrastructure & Private Income are lagged by one quarter for performance calculation purposes, as is common practice among large institutional investors. Each asset class is also associated with a long-term return objective, which cumulatively reflects the Fund's long-term objective of CPI + 5% or better. The long-term return objectives and Policy Benchmarks for each asset class are reflected in Table 2.

Table 2: Benchmarks - Constituent Indices and Weights

		Public Equity	Fixed Income	Private Equity	Real Estate	Private Income	Absolute Return	Risk Parity	Fund Cash	Total Fund FY 2021	Total Fund FY 2022	Total Fund FY 2023	Total Fund FY 2024	Total Fund FY 2025
Asset Allocation (AA): Target Levels-FY 2021		39.0%	21.0%	15.0%	7.0%	9.0%	6.0%	1.0%	2.0%	100.0%				
Minimum Long-Term Return Target		CPI + 5.1% CPI + 0.8% CPI + 10.05% CPI + 4.0% CPI + 4.2% CPI + 2.73% CPI + 3.95% CPI												
Benchmark Index Weights		Asset Class / Portfolio Weights									Total Fund Weights			
90 Day T-Bills	GOOI	-	5.00%	-	-	-	-	-	100.00%	3.05%	3.00%	3.00%	2.95%	2.90%
BB US Corporate	LUACTRUU	-	27.50%	-	-	-	-	-	-	5.78%	5.50%	5.50%	5.23%	4.95%
BB Gbl. Treasury ex-US Hedged	LGTITRUH	-	10.00%	-	-	-	-	-	-	2.10%	2.00%	2.00%	1.90%	1.80%
BB US Agg	LBUSTRUU	-	27.50%	-	-	-	-	-	-	5.78%	5.50%	5.50%	5.23%	4.95%
BB US HY 2% Issuer Cap	LF89TRUU	-	10.00%	-	-	-	-	-	-	2.10%	2.00%	2.00%	1.90%	1.80%
Cambridge Pvt. Credit (Lagged)	n/a	-	-	-	-	40.00%	-	-	-	3.60%	3.60%	3.60%	3.60%	3.60%
Barclays US Securitized Index	LD19TRUU	-	10.00%	-	-	-	-	-	-	2.10%	2.00%	2.00%	1.90%	1.80%
BB US TIPS	LBUTTRUU	-	5.00%	-	-	-	-	-	-	1.05%	1.00%	1.00%	0.95%	0.90%
Cambridge Pvt. Equity (Lagged)	n/a	-	-	100.00%	-	-	-	-	-	15.00%	16.00%	17.00%	18.00%	19.00%
Cambridge Gbl. Pvt. Infra. (Lagged)	n/a	-	-	-	-	60.00%	-	-	-	5.40%	5.40%	5.40%	5.40%	5.40%
HFRI Total HFOF Universe	HFRIWU	-	-	-	-	-	100.00%	-	-	6.00%	6.00%	6.00%	6.00%	6.00%
JPM EMBI Gbl Diversified	JGENVUUG	-	2.50%	-	-	-	-	-	-	0.53%	0.50%	0.50%	0.48%	0.45%
JPM GBI-EM Gbl Diversified	JPGCCOMP	-	2.50%	-	-	-	-	-	-	0.53%	0.50%	0.50%	0.48%	0.45%
MSCI ACWI IMI	M1WDIM	100.00%	-	-	-	-	-	-	-	39.00%	38.00%	36.00%	35.00%	33.00%
NCREIF Property (Lagged)	NPIPR	-	-	-	85.00%	-	-	-	-	5.95%	6.80%	7.65%	8.50%	10.20%
MSCI US REIT (Lagged)	RMS G	-	-	-	15.00%	-	-	-	-	1.05%	1.20%	1.35%	1.50%	1.80%
HFRI Risk Parity Vol 1.2	HFRIPV12I	-	-	-	-	-	-	100.00%	-	1.00%	1.00%	1.00%	1.00%	1.00%
Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

D. Total Fund Performance Measurement and Reporting

1. The Board looks to its General Consultant as the primary source of quantitative evaluation of the performance of the Fund and its investment managers. As promptly as possible after the close of each calendar quarter, the General Consultant shall submit a report to the Board, Executive Director ("ED") and Chief Investment Officer ("CIO") analyzing the performance of the Fund, its asset classes and investment programs, including both internally and externally managed assets. The report shall include a comparison of total Fund performance with the Board's long-term investment objective, an analysis of the returns of each asset class as measured against established benchmarks; and an analysis of the returns of each manager or relevant groupings of managers as measured against relevant benchmarks. For the purpose of evaluating the value-added by the Fund's investment strategy, the report shall also compare the performance of the total Fund on a one-year basis to a passive benchmark that represents the following: (1) 60% MSCI ACWI IMI; (2) 20% Barclay Global Aggregate (less fees); (3) 10% FTSE EPRA/NAREIT Rental Index; (4) and 10% US TIPs. The General Consultant's report shall also address any special concerns or observations the General Consultant concludes should be brought to the attention of the Board, ED and CIO.
2. At each regular Board meeting, the General Consultant will also report on the investment performance of the Fund and each asset class in comparison with Fund peers (i.e., large US Public Funds and Endowment Funds). The comparative performance of the Fund and each asset class will be assessed and reported across multiple timeframes, including ten-year, five-year, three-year, and one-year. To the extent that peer comparisons may not be directly available for specific asset class comparisons, the General Consultant should use the Fund's Policy Benchmarks (see Table 2) as a proxy.

E. Total Fund Portfolio Implementation and Delegations

APFC Staff directs all investment activities through a delegation of investment authority in the By-Laws from the Board to the ED and then from the ED to specific APFC Staff, as deemed appropriate by the ED. The ED will convene a Public Markets Investment Committee and a Private Markets Investment Committee (together, the "APFC Investment Committee") on a regular basis in order to discuss and deliberate on investment decisions requiring the ED's authorization. The sole voting member of the APFC Investment Committee shall be the ED. The CIO will also convene an investment department investment committee ("Investment Department Investment Committee"). The Investment Department Investment Committee will meet regularly and will work with APFC Staff to make investment recommendations ("Investment Recommendations") to be considered for authorization by the ED during the APFC Investment Committee.

Approval of any Investment Recommendation referred by the Investment Department Investment Committee to the APFC Investment Committee requires the affirmative approval of the ED taking into consideration, in a collaborative manner, input from various functions at APFC (e.g. Legal, Finance, Operations, Admin, IT, and Risk). Investment Recommendations from the Investment Department Investment Committee to the APFC Investment Committee shall be in writing and Investment Decisions approved by the APFC Investment Committee shall also be in writing. Variations or the non-approval of an Investment Recommendation of the Investment

Department Investment Committee by the APFC Investment Committee shall be reported to the Board on a monthly basis.

F. Relationship of the Investment Policy with Regulations and Investment Guidelines

As required by AS 37.13.120(a), the Board has adopted Regulations specifically designating the types of investments in which Fund assets can be invested. All investments authorized by this Policy shall be limited to those authorized investments and in the manner prescribed by this Policy and AS 37.13.120.

The Investment Guidelines, attached as Appendix A, supplement the Investment Policy by providing operational guidelines for APFC's internally managed investment programs. The CIO, with the consent of the ED may update the Investment guidelines from time to time; updates will be provided to the Board at its next regularly scheduled meeting.

III. PUBLIC MARKETS

A. Public Equity

1. Objective

The objective of the Public Equity portfolio is to invest in publicly traded securities authorized in 15 AAC 137.440, to exceed the performance of a well-diversified pool of global equities embodied in the **MSCI ACWI IMI Index**, while maintaining risk similar to that of the benchmark. Performance of this portfolio will be evaluated quarterly, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Structure

Consistent with performance objectives, applicable tracking error guidelines, and other investment restrictions described in this Policy and Investment Guidelines, the Public Equity portfolio may include:

- a. Actively and quasi-passively managed equity strategies to enhance the after-fee return of the portfolio relative to its assigned benchmark; and
- b. Passively managed equity strategies to replicate, in a cost-efficient manner, the returns of a benchmark index.

3. Investment Strategy

The Public Equity portfolio will be managed by a mix of external active managers, external passive managers and internal managers. In the case of active external managers, each manager, through an investment manager agreement ("IMA"), will be directed to focus on a subset of the global equity market in which the manager has demonstrated an ability to provide risk-adjusted, after-fee returns in excess of its respective benchmark. Each external manager's IMA will also detail its strategy, performance objectives, permitted investments and restrictions.

The CIO may also approve the internal management of a portion of the Public Equity portfolio by APFC Staff. In place of an IMA, the CIO and ED will require the approval of

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and adherence to Investment Guidelines that cover the relevant aspects of the portion of the Public Equity portfolio internally managed by APFC Staff. The Director of Public Equity will have primary responsibility for executing the portfolio's investment strategy.

4. Rebalancing and Mandate Modification

The Director of Public Equity may, with the approval of the CIO, rebalance assets to, from, or between individual Public Equity portfolios.

Initiating or terminating external manager mandates requires the consent of CIO and ED and must conform to Section VIII of this Policy (Public Markets External Manager Selection).

5. Risk Limits and Portfolio Restrictions

The Director of Public Equity is responsible for managing the various risks incurred and adhering to the Investment Policy. In addition to general Policy requirements, the following asset class specific restrictions apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. Short selling is prohibited by an internal or external manager of assets in this portfolio, unless authorized by the CIO and Chief Risk Officer ("CRO").
- c. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- d. All externally managed mandates must comply with Section VIII (External Manager Selection) of this Policy.

B. Fixed Income

1. Objective

The objective of the Fixed Income portfolio is to provide income-oriented investment returns and diversify the risks of the Fund's equity-oriented programs. The Fixed Income portfolio invests in publicly traded and other liquid income-oriented investments authorized in 15 AAC 137.430, to meet or exceed the performance of the **Fixed Income Composite Benchmark**, while staying within predefined risk constraints. Performance of this portfolio will be evaluated quarterly, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Structure

Consistent with performance objectives, applicable tracking error guidelines, and other investment restrictions described in this Policy and Investment Guidelines, the Fixed Income portfolio may include:

- a. Actively and quasi-passively managed income producing strategies that enhance the after-fee return of the Fixed Income portfolio relative to its assigned benchmark; and
- b. Passively managed income producing strategies to replicate, in a cost-efficient manner, the returns of a benchmark index.

3. Investment Strategy

The Fixed Income portfolio will primarily be implemented by the CIO's internal APFC Staff, which may be supplemented by hiring external investment managers to manage portions of the Fixed Income portfolio which are not appropriate for internal management by APFC. Regarding the Fixed Income assets that are externally managed, each external manager, through an IMA, will be directed to focus on a subset of the Fixed Income portfolio in which the manager has demonstrated an ability to manage in relation to its respective benchmark. Each external manager's IMA will also detail its strategy, performance objectives, permitted investments, and restrictions. The Director of Fixed Income will have primary responsibility in executing the portfolio's investment strategy.

4. Rebalancing and Mandate Modification

The Director of Fixed Income may, with the approval of the CIO, rebalance assets to, from, or between individual Fixed Income portfolios.

Initiating or terminating external manager mandates requires the consent of the CIO and ED, and must conform to Section VIII of this Policy (Public Markets External Manager Selection).

5. Risk Limits and Portfolio Restrictions

The Director of Fixed Income is responsible for managing the various risks incurred and adhering to this Policy. In addition to general Policy requirements, the following asset class specific restrictions apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. Short selling is prohibited by an internal or external manager of assets in this portfolio, unless authorized by the CIO and CRO.
- c. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- d. All externally managed mandates must comply with Section VIII (Public Markets External Manager Selection) of this Policy.

C. Risk Parity

1. Objective

The objective of the Risk Parity portfolio is to deliver long-term returns that meet or exceed the performance of a 60% stock/40% bond portfolio through managers which seek to generate returns that are less correlated to global public markets utilizing allocation of risk rather than allocation of capital. Performance of this portfolio will be evaluated quarterly against the Hedge Fund Research **HFR 12% Vol Institutional Index**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

The Risk Parity portfolio will be managed by external managers, selected in accordance with the requirements of this Policy, that provide risk-balanced exposure to multiple

sources of excess expected return. Each manager, through an IMA or limited liability fund, will detail its strategy, performance objectives, permitted investments and restrictions. The Director of Risk Parity will have primary responsibility in executing the portfolio's investment strategy and plans.

3. Risk Limits and Portfolio Restrictions

The Director of Risk Parity is responsible for managing the various risks incurred and adhering to this Policy. In addition to general Policy requirements, the following restrictions will apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. Short selling is prohibited unless authorized by the CIO and CRO.
- c. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- d. All externally managed mandates must comply with Section VIII (Public Markets External Manager Selection) of this Policy.

D. Total Fund Cash

1. Objective

The objective of the Total Fund Cash portfolio is to:

- a. Be a source of funds available to meet the Fund's operational needs, including capital calls and appropriations from the Earnings Reserve Account to the State's general fund; and
- b. Allocate a small portion of the Fund to an asset class that is nearly risk-free and experiences extremely low volatility.

Performance of this portfolio will be evaluated quarterly and will be measured against the risk and after-fee return of the **90 Day Treasury Bills Index**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-years, and ten-year annualized basis.

2. Investment Strategy

The Total Fund Cash portfolio will be internally managed at the direction of the CIO. The size and investment profile of this portfolio may fluctuate month-to-month to accommodate the Fund's liquidity requirements. The CIO will have primary responsibility in executing this portfolio's investment strategy.

3. Authorized Investments

The CIO may invest this portfolio in cash and the following cash equivalents:

- a. US Treasuries with a maximum final maturity of 24 months;
- b. Investment Grade US corporate bonds with a maximum final maturity of 24 months;
- c. Reverse Repurchase Agreements ("Reverse Repo"), as authorized by 15 AAC 137.430(12);
- d. SEC registered money market investment funds;
- e. Other cash equivalents approved by the CRO and ED; and
- f. Gold-backed exchange traded funds as authorized by 15 AAC 137.460.

4. Risk Limits and Portfolio Restrictions

The CIO is responsible for managing the various risks incurred and adhering to this Policy. In addition to general Policy requirements, the following specific restrictions will apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. At any point, 80% of the portfolio should be invested in instruments with a final maturity not exceeding 181 days.
- c. Gold-backed exchange traded funds shall not exceed 50% of the Total Fund Cash portfolio at any time.
- d. Short selling is prohibited in this portfolio.
- e. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.

E. Securities Lending

1. Authorized Investments

The ED is authorized to enter into a securities lending agreement with the Fund's custodian to lend domestic and non-domestic Public Equity and Fixed Income securities from the Fund's portfolio directly to borrowers for a fee in accordance with the following guidelines:

- a. The Fund's custodian shall agree to indemnify the Fund against any direct loss from:
 - i. a borrower default;
 - ii. the reinvestment of cash collateral; and
 - iii. the failure to comply with the terms and conditions of the lending agreements;
- b. Collateral shall be required at a minimum of 102% of the market value of the loaned securities which are denominated in the same currency as the collateral provided by the borrower;

- c. Collateral shall be required at a minimum of 105% of the market value of the loaned securities which are denominated in a currency other than the collateral provided by the borrower;
- d. Collateral and loaned securities shall be marked-to-market daily; and
- e. The investment of cash collateral posted by borrowers shall be restricted to those investment-grade securities permissible under the provisions of AS 37.13.120 and 15 AAC 137; unless the ED elects to have cash collateral released to the Fund to meet the Fund's liquidity needs rather than having it invested by the custodian.

IV. ALTERNATIVE INVESTMENTS

A. Private Equity and Special Opportunities

1. Objective

The objective of the Private Equity & Special Opportunities ("PESO") portfolio is to invest in illiquid growth-oriented assets authorized by 15 AAC 137.460 that are expected to generate risk-adjusted, after-fee returns that are superior to the Public Equity portfolio. Performance of this portfolio will be evaluated quarterly, in aggregate and based upon the vintage year, against the **Cambridge PE (Lagged)**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

PESO investment strategies include: venture capital, growth equity, leveraged buyouts, special opportunities, and distressed debt. PESO portfolio investments will be executed through capital commitments to limited liability funds managed by external investment managers, through co-investments alongside existing external managers, and direct investments into operating companies. Annually, APFC Staff will provide a pacing and investment plan for Board approval that reflects the current PESO exposures, assumptions, and outlook. The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the PESO portfolio's investment strategy.

3. Diversification and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the portfolio risks and adhering to this Policy. In constructing a diversified PESO portfolio, APFC Staff will consider the following characteristics: strategy, geography, industry, manager, investment size, leverage, vintage year, and market position. In addition to general Policy requirements, the following asset class specific restrictions apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- c. The PESO portfolio shall be invested within the following strategy diversification ranges:
 - i. Venture Capital – 5% to 45%;

- ii. Buyouts/Acquisition – 25% to 70%;
- iii. Specialized Funds/Investments – 0% to 50%;
- d. No more than 20% of the PESO Portfolio shall be invested with a single Investment Manager/General Partner.
- e. No more than 20% of the PESO Portfolio shall be invested in publicly traded securities; and
- f. Following the public listing of any shares of a portfolio company held by an APFC controlled investment vehicle, such shares shall be either liquidated consistent with SEC regulations within a reasonable period of time, not to exceed eighteen months, or written approval to continuing holding such public securities must be received from the ED on a quarterly basis.
- g. Without the written approval of the ED and CIO, the PESO Portfolio will not directly acquire a controlling interest in a portfolio company.

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B. Real Estate

1. Objective

The objective of the Real Estate portfolio is to generate a risk-adjusted return comprised of an attractive level of current income and capital appreciation, while contributing to diversification of the Fund. Performance of the Real Estate portfolio will be evaluated quarterly against a custom benchmark comprised of **85% NCREIF Property Benchmark (Lagged) and 15% MSCI US REIT Index**, but success in achieving the long-term objective will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

Real Estate investments, as authorized in 15 AAC 137.450, shall primarily target:

- a. Directly-held income producing, core real estate globally;
- b. Directly-held build-to-core or other non-core properties;
- c. Equity and debt funds that invest predominantly in real estate strategies (e.g. core, core-plus, value-added, and opportunistic);
- d. Publicly traded funds (e.g. ETFs or Index), or securities (e.g. REITs, CMBS, or other structured product), where the underlying investments consist of real estate;
- e. Private funds, or securities (e.g., REITs, CMBS, or other structured product), where the underlying investments consist of real estate; and
- f. Co-investments alongside an existing Real Estate manager.

The Director of Real Estate will have primary responsibility in executing the portfolio's investment strategy.

3. Diversification and Portfolio Restrictions

The Director of Real Estate is responsible for managing the various risks incurred and adhering to this Policy. In constructing a diversified Real Estate portfolio, APFC Staff will consider the following characteristics: investment type, property type, geography,

manager, and leverage. In addition to general Policy requirements, the following will apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII.
- b. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- c. No more than 60% of the directly-held Real Estate portfolio shall be invested in “non-core” real estate (value-add and opportunistic).
- d. The directly-held portion of the Real Estate portfolio will target the following property types: Multifamily, Industrial, Office, Hotel, and Retail with maximum weightings for each property type measured against NCREIF NPI benchmark weightings. Except for the 10% carve-out for other property described in (f) of this section, maximum risk ceilings of 1.5x the benchmark weighting shall apply for each property type measured against the FY2025 target allocation for the Real Estate portfolio.
- e. In recognition that APFC Staff may pursue some niche property types that are not included in property types of the NCREIF NPI, the directly-held portion of the Real Estate portfolio may, with the consent of the CIO, include up to 10% in property types not included in the NCREIF NPI.
- f. No more than 35% of the Real Estate portfolio shall be invested with a single investment manager/general partner as measured against the FY2025 target allocation for the Real Estate portfolio.
- g. Leverage on investments in the directly-held portion of the Real Estate portfolio shall be limited by investment type as follows:
 - i. Core real estate leverage is limited to 65% of the gross asset value of the investment at the time of debt placement; however, this limit can be increased to 67.5% when including transaction fees and expenses;
 - ii. Non-Core real estate leverage is limited to 65% of the gross asset value of the investment at the time of debt placement or 65% of the project cost on build-to-core investments; however, this limit can be increased to 67.5% when including transaction fees and expenses; and
 - iii. Portfolio-wide leverage is limited to 40% of the gross asset value of the directly-held Real Estate portfolio.

Deleted: Core real estate leverage is limited to 50% of the gross asset value of the investment at the time of debt placement; however, this limit can be increased to 52.5% when including transaction fees and expenses;

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Infrastructure and Private Credit and Income Opportunities Portfolio

The Infrastructure and Private Credit and Income Opportunities portfolio will be comprised of two separate investment strategies in accordance with the Policy requirements below:

C. Infrastructure Portfolio

1. Objective

The objective of the Infrastructure portfolio is to provide attractive risk-adjusted returns that have inflation-protection characteristics and exhibit low correlations with other major asset classes, as authorized by 15 AAC 137.460. Performance of the Infrastructure portfolio will be evaluated quarterly against the **Cambridge Global Private**

Infrastructure Index (Lagged), but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

Infrastructure investments involve the purchase of critical assets with high barriers to entry and, due to the “essential services” nature of the assets, often result in low elasticity of demand. Infrastructure investments may include energy infrastructure, transportation, water infrastructure, telecommunications, social infrastructure (e.g. lotteries, student housing, prisons), other infrastructure (e.g. protected income stream assets, other interests of infrastructure issuers, infrastructure-related assets), other real assets (e.g. timberlands, agricultural farmlands, leasable hard assets), and any other tangible or intangible asset that possesses similar characteristics as those outlined in this section.

Infrastructure investments will be executed through long-term commitments to limited liability funds managed by external investment managers, through co-investments alongside existing Infrastructure managers and direct investments into operating companies. Additionally, investments in publicly-traded stocks of companies whose business profile includes ownership of infrastructure assets (Listed Infrastructure) may be included in the portfolio. Annually, APFC Staff will provide a pacing and investment plan for Board approval that reflects the current exposures, assumptions, and outlook. The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the portfolio's investment strategy and plans.

3. Risk Limits and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the various risks incurred and adhering to investment policy. In constructing a diversified Infrastructure portfolio, APFC Staff will consider the following characteristics: drivers of underlying assets' cash flow, industry sector, geography, manager, strategy, investment size, and company concentration. In addition to general Policy requirements, the following will apply to this portfolio:

- Risk Limits as detailed in Table 3, Section VII.
- All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- Investments in multiple limited liability investment vehicles managed by the same manager are permitted, however, combined investments with a single manager shall not exceed 30% of the total Infrastructure portfolio.
- APFC assets invested with each manager shall not represent more than 30% of that manager's AUM.

D. Private Credit and Income Opportunities

1. Objective

The objective of the Private Credit and Income Opportunities portfolio is to provide attractive risk-adjusted returns that generate a high level of income and potentially provide for capital appreciation, while safeguarding principal, as authorized by 15 AAC 137.460. Performance of the Private Credit and Income Opportunities portfolio will be evaluated quarterly against the **Cambridge Private Credit Index (Lagged)**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

Private Credit and Income Opportunities investments involve the ownership of higher yielding, illiquid investment debt opportunities that cover a range of risk/return profiles. The Private Credit portion of this portfolio shall target externally managed limited liability funds, co-investments, and direct investments into operating companies that target one or more of the following strategies: direct lending, subordinated and mezzanine lending, distressed debt, and opportunistic credit-oriented funds, with flexibility to pursue illiquid and liquid strategies. The Income Opportunities portion of this portfolio shall include investments such as: timberlands, asset-based lending, structured credit, life settlements, leasing and royalty strategies, and special situations that share the common characteristic of being private markets investments with an objective of income generation and downside protection, but which do not fit neatly into other portfolios. Certain portfolios within Private Credit and Income Opportunities may also include some liquid credit exposures to complement the private investments in this portfolio. Annually, APFC Staff will provide a pacing and investment plan for Board approval that reflects the current exposures, assumptions, and outlook. The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the portfolio's investment strategy.

3. Risk Limits and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the various risks incurred and adhering to this Policy. In constructing a diversified Private Credit and Income Opportunities portfolio, APFC Staff will consider the following characteristics: credit profile, geography, manager, strategy, investment size, and company concentration. In addition to general policy aspects, the following will apply to this portfolio:

1. Risk Limits as detailed in Table 3, Section VII.
2. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
3. Investments in multiple vehicles managed by the same manager are permitted, however, combined investments with a single manager shall not exceed 30% of the Private Income portfolio.
4. APFC assets invested with each manager shall not represent more than 30% of that manager's AUM.

E. Absolute Return

1. Objective

The objective for the Absolute Return portfolio is to deliver reasonably consistent and accretive returns that are largely uncorrelated with traditional, market-driven asset classes. Performance of the Absolute Return portfolio will be evaluated quarterly against the **HFRI Total HFOF Universe benchmark**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis. The long-term objective for this portfolio is to generate a return similar to the total Fund with a correlation to the total Fund of less than fifty percent (50%), as measure over rolling 36-month periods.

2. Investment Strategy

The Absolute Return portfolio will invest directly into comingled limited liability funds as authorized by 15 AAC 137.460. The managers of these funds will invest in public or private securities and other financial instruments and may use leverage consistent with other managers of similar strategies. It is not uncommon for the legal terms of these limited liability funds to have restrictions on liquidity, including redemption windows (e.g. monthly, quarterly, annually), notice periods (e.g. 30, 60, or 90 days), lock-ups (e.g. soft, hard), gates (e.g. investor-level, fund-level), and, at times, withdrawal fees. With the written consent of the CIO and ED, and the approval of investment guidelines, a portion of the Absolute Return portfolio may be internally managed and invested in gold-backed exchange traded funds as authorized by 15 AAC 137.460.

The Absolute Return portfolio, whether internally or externally managed, shall pursue one or more of the following investment strategies:

- a. Relative Value, including equity market neutral, fixed income arbitrage, and convertible arbitrage;
- b. Event-Driven, including merger arbitrage, distressed securities/discounted bank debt, and special situations;
- c. Directional/Tactical/Opportunistic, including long-short equity, managed futures, and global macro; and
- d. Commodities, including gold-backed exchange traded funds.

The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the Absolute Return portfolio's investment strategy.

3. Risk Limits and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the various risks incurred and adhering to this Policy. In constructing a diversified Absolute Return portfolio, APFC Staff will consider the following characteristics: manager, strategy, investment size, leverage, correlation with other assets of the Fund, and liquidity. In addition to general Policy Requirements, the following restrictions will apply to this portfolio:

- a. Risk Limits as detailed in Table 3, Section VII;

- b. Relative Value Managers in the range of 0 – 75%;
- c. Event Driven Managers in the range of 0 – 50%;
- d. Directional/Tactical/Opportunistic Managers in the range of 0 – 75%;
- e. Commodities, including gold-backed exchanged traded funds in the range of 0 – 50%;
- f. At least 50% of the portfolio shall be capable of being liquidated within a 12-month period; and
- g. APFC assets invested with each internal or external manager shall not represent more than 30% of that manager's AUM.

V. ALASKA IN-STATE INVESTMENT POLICY

A. Objective and Considerations

To implement the requirements of AS 37.13.120(c), the Board believes the Fund should have an in-state investment policy that maintains the investment integrity of the Fund and is both proactive and impartial. As such, any internal in-state investment decision made by APFC Staff should include the following considerations:

1. Honor AS 37.13.120(c): Prescribes that if an Alaskan investment has equivalent risk and expected return comparable to or better than a similar non-Alaskan investment, the Alaskan investment should be preferred.
2. Require Compelling Risk-Adjusted Returns: To honor the prudent investor rule provided in AS 37.13.120(a), any Alaskan investment contemplated by APFC must be attractive on a stand-alone basis.
3. Ensure Fund Diversification: In order to provide sufficient risk diversification as required under AS 37.13.120(c), Board approval is required for any in-state investment that would exceed 1% of the Fund, at the time of investment.
4. Seek Participation by Another Institutional Investor: In order to ensure that an Alaskan investment opportunity is attractive on a stand-alone basis and satisfies the institutional quality requirements of 15 AAC 137.420, APFC should generally seek to invest into an Alaskan investment alongside of at least one of its peers (i.e., a large institutional investor, which may include endowments, foundations, sovereign wealth funds, or public or private pension funds).

B. In-State Investment Targets

For the APFC Staff to identify and invest the Fund in additional compelling in-state investments, the following investment targets and guidelines are set to promote compliance with AS 37.13.120(c):

1. By 2021, at least 3% of the Fund should be invested in-state;
2. By 2022, at least 4% of the Fund should be invested in-state;
3. By 2023, at least 5% of the Fund should be invested in-state;

For purposes of this section, a Fund investment will be considered “invested in-state” if,

1. An external investment manager has an office in Alaska and the employee(s) that is primarily responsible for management of the asset(s) is based in Alaska; or
2. An external investment manager has an office in Alaska and the employee(s) that is primarily responsible for management of the asset(s) is based in Alaska; or
3. The Fund’s investments managed internally by APFC Staff will not be included in achieving these targets.

VI. AUTHORIZED USE OF DERIVATIVES

A. Objective

The purpose of this section of the Policy is to establish the permitted uses and the limitations on the use of derivatives and establish procedures for managing risks associated with derivatives. The requirements and limitations of this section of the Policy shall apply to all derivatives transactions executed by APFC Staff and all external managers with authority to buy or sell a derivative as an agent on behalf of the of the Alaska Permanent Fund. This section of the Policy does not apply to investments in a limited liability investment vehicle in which derivatives are in the name of the limited liability investment vehicle and the liability is limited to the amount invested.

B. Derivatives Definition; Scope

1. As defined in 15 AAC 137.990(6), “Derivative” means “an instrument whose value, usefulness, and marketability is dependent upon or derives from an underlying asset; classes of derivatives include futures contracts, options, forward contracts, including currency forward contracts, swaps, and options on futures.”
2. Both exchange traded and over the counter (“OTC”) derivative instruments are under the scope of this Policy. The principal risk of derivatives strategies comes from the potential to lever the portfolio and to express a view on a security or risk factor without committing capital commensurate with the exposure. To mitigate this risk, the successful and prudent use of derivatives depends on:
 - a. Well-defined uses for derivatives, and avoidance of leverage;
 - b. Manager-by-manager limits on economic exposures through derivatives; and
 - c. Investment manager internal control and defined procedures for managing risk.

C. Permitted Uses

1. Permitted uses of derivatives include:
 - a. Hedge and control risks of Fund portfolios so they better align with benchmarks and objectives;
 - b. Efficiently manage portfolio exposures synthetically as opposed to trading underlying securities;

- c. Build portfolios with targeted risk and return characteristics that otherwise could not be efficiently created with securities; and
- d. Facilitate rebalancing.

D. Derivatives Risk Management and Compliance

1. Derivative Pre-Approval Requirement

All derivatives strategies, whether internally or externally managed, are prohibited unless specifically allowed in writing for a permitted use as a part of an investment manager's guidelines.

The use of derivatives by an external manager shall be conditioned upon the finding by the CIO and CRO that the external manager:

- a. Has demonstrated investment expertise in the use of derivatives for the strategy they have been selected to implement;
- b. Has appropriate risk management and valuation policies and procedures in place;
- c. Has legal and investment experience to limit downside effects of the proposed derivatives; and
- d. Has demonstrated the ability to effectively monitor and control the use of derivatives and has agreed to provide monthly derivative exposure reports which detail:
 - i. Total derivative exposures on a gross and net basis,
 - ii. Total collateral/margin postings on gross and net basis, and
 - iii. A list of authorized counterparties and exposure by counterparty.

2. Derivative Recourse Limitations

For externally managed portfolios, all liability created by the use of derivatives in the name of the Fund must be limited to the total value of the portfolio being managed by the external manager. To ensure this requirement is met, approval of the IMA/External Manager guidelines by General Counsel is required.

3. Counterparty and other Requirements

- a. The counterparty to any OTC derivative transaction must have a credit rating of at least A- (Standard and Poor's) or A3 (Moody's), unless an exception is approved in writing by the CIO and CRO;
- b. The net market value, net of all collateral postings, of all OTC derivatives for any individual counterparty may not exceed 30 basis points of the total market value of the Fund;
- c. Selling (writing) uncovered options is prohibited;
- d. The net of long and short dollar exposures to assets or currencies, whether derived from physical or derivative securities, must be less than or equal to the dollar market value of the portfolio, except for very small, inadvertent, or temporary amounts that occur in the normal course of portfolio management or authorized by the CRO;

- e. The gross dollar exposures of a portfolio in the Fund from physical and derivative securities (futures, options, swaps) cannot exceed 300% of the market value of the aggregate underlying portfolio at all times unless authorized by the CRO; and
- f. If derivatives are used by a manager to actively manage currency exposure, net short exposure to any single currency remains within limits established for that manager's strategy.

VII. RISK MANAGEMENT & OVERSIGHT

Recognizing the relationship between return and risk, APFC consciously and deliberately assumes various risks in pursuit of its return objectives. The goal of risk management is to understand, analyze and manage these risks. The risk management function strives to create risk awareness, establish and formalize a risk management framework, and ensure risks incurred are within the Board's risk appetite. This Policy outlines the Boards' approved risk management framework, which includes the salient investment risk parameters and thresholds.

A. Risk Parameters and Measures

APFC Staff will establish a framework for measuring absolute risk of the Fund and each asset class, as well as relative risks in comparison to established benchmarks. This framework should generally include quantifiable estimates of active and relative risk. APFC Staff will monitor and produce reports as appropriate for the Board, ED, CIO, and APFC Staff.

The salient risk parameters are listed below. Related tolerances and associated ranges are provided in Table 3.

Asset Allocation Limits – Target allocation levels are determined for each asset class based on quantitative modeling and qualitative inputs. Disciplined alignment to these targets is essential, albeit ensuring limited flexibility to cater to changing markets and other factors.

Future Commitments - Future commitments are a function of committed capital to private investments and essentially reflect a contingent cash draw liability. Monitoring and limiting future commitments relative to the Fund's overall size is important.

1. **Active Risk** - Tracking error is a measure of how closely a portfolio follows the index to which it is benchmarked. Tracking error is calculated for this purpose on an ex-ante basis using a holdings-based risk analytical system.
2. **Relative Risk Limit** - Relative Value at Risk (RVaR) provides a comparison of portfolio risk relative to benchmark risk and is measured as a ratio of Portfolio VaR to benchmark VaR.

In addition to relative measures, multiple risk parameters including concentration, credit, market, and liquidity risks are monitored and controlled.

1. **Downside Risk** - Downside risk is risk of significant loss of capital. Staff will actively monitor the Fund's downside risk relative to the risk benchmark using scenario analysis and stress testing.
2. **Proxy Securities and Indices** - If necessary and prudent, as determined by the CRO, APFC Staff will employ index proxies to approximate the economic characteristics of specific

investments to the extent that the terms and conditions of those investments or the underlying holdings (in the case of the funds) are not readily available or where the complexity of the underlying investment renders empirical measurement impractical.

3. Private Market Asset Holdings - APFC Staff will actively monitor the portion of the Fund invested in private market asset holdings to ensure that the percent of the total fund invested in private markets adheres to the private investment limits.

B. Credit Ratings for Fixed Income Securities

Credit ratings by the three major ratings agencies, Standard & Poor's, Moody's and Fitch will be the primary source of credit ratings for Fixed Income securities in the Fixed Income and Total Fund Cash portfolios, subject to the following:

1. In case of split ratings, the 'Bloomberg Barclays Middle Rating' methodology shall be applied (i.e. if all three agencies rate a security, the middle rating is adopted; if only two agencies rate a security, the most conservative (lowest) rating is used; if only one rates a security, that single rating is used).
2. If none of the three agencies have assigned a rating, ratings by other agencies and or implied ratings may be used with CRO approval.
3. If no agency ratings are available and a rating cannot be implied, it shall be categorized as 'Unrated'.

C. Legal Risk Management

Legal documentation for all internally managed public and private investments will be reviewed, negotiated and approved by APFC General Counsel prior to execution by the ED. APFC General Counsel shall be responsible for determining when outside legal counsel should be engaged to assist in the review and negotiation of Fund investment matters, subject to applicable statutes and rules adopted by the Office of the Attorney General.

D. Permitted Use of Leverage

APFC Staff and external managers, consistent with the requirements of 15 AAC 137.500 and this Policy (including the risk parameters established by the asset allocation ranges), is authorized to use leverage for an investment of Fund assets, provided that such leverage is non-recourse to APFC or the Fund as described in AS 37.13.120(b) and 15 AAC 137.500.

E. Foreign Exchange Risk

1. External managers and APFC Staff may, with prior approval of the CIO, transact in any foreign exchange instrument (including currency futures and forward contracts, options, and swap agreements), to implement their investment strategies, contingent upon such transactions being consistent with this Policy and the requirements of 15 AAC 137.480.
2. APFC Staff shall analyze foreign exchange risk regularly and present quarterly to the Board. This analysis includes both internal hedging and external foreign exchange overlay manager positioning and performance.

F. Risk Compliance, Monitoring, and Reporting

The APFC Staff assigned to each Asset Class in this Policy will have primary responsibility to ensure adherence to all aspects of this Policy. Additionally, the CRO and risk management team will be responsible for monitoring compliance of Fund investment activity. The Chief Risk Officer will provide the Board and APFC Staff with a comprehensive risk profile of the Fund on a regular basis. At a minimum, this includes the Daily Risk Dashboard and more detailed quarterly updates. The quarterly reports to the Board shall include the levels for most of the salient risk parameters described in this Policy.

G. Risk Parameters and Limits

Table 3: Asset Allocation (AA) Target Levels

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	Public Equity	Fixed Income	Private Equity	Real Estate	Private Income	Absolute Return	Risk Parity	Cash	Total Fund	Low	High	Low	High
Future Outstanding Commitments ¹	0.0%	0.0%	10.0%	3.0%	5.0%	2.0%	0.0%	0.0%	20.0%	0%	115%	0%	125%
Benchmark	M664204US\$	BBGEMBUS\$	CAMB_PE	RE_2021	CAM_PI	HFRIIPROXY	HFRI_RP	LEH3MO_TB	LHJPMSUSD				
Tracking Error	3.5%	2.5%							4.0%	n/a	115%	n/a	125%
Relative VaR ²	100.0%	100.0%							100.0%	0%	125%	0%	140%
% of Asset Allocation													
Single Name / Issuer ³	4%	4%	2%	10%	2%	n/a	n/a	n/a		0%	115%	0%	125%
Single Industry ⁴	20%	20%	30%	n/a	30%	n/a	n/a	n/a		0%	115%	0%	125%
Single Country - EX US	10%	10%	20%	20%	20%	n/a	n/a	n/a		0%	115%	0%	125%
Total EX US	50%	30%	50%	50%	50%	n/a	n/a	n/a					
Single Fund Investment ⁵	5%	10%	10%	10%	10%	15%	50%	n/a		0%	115%	0%	125%
Proportion of Ownership ⁶	5%	n/a	n/a	5%	5%	n/a	n/a	n/a		0%	115%	0%	125%
Rating - Below Inv Grade	n/a	25%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
Rating - Below A- & Unrated	n/a	50%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
Rating - Unrated	n/a	5%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
FX - Proportion Unhedged	50%	30%	50%	50%	50%	n/a	n/a	n/a		0%	115%	0%	125%
Liquidity - Proportion w/o Weekly Liq	10%	10%	100%	100%	100%	100%	100%	5%		0%	115%	0%	125%
Liquidity - Proportion w/o Monthly Liq	2%	2%	100%	100%	100%	100%	70%	0%		0%	115%	0%	125%
Liquidity - Proportion w/o Quarterly Liq	0%	0%	100%	100%	100%	40%	30%	0%		0%	115%	0%	125%
Cash & Equivalents	2%	10%	5%	5%	5%	n/a	n/a	100%		0%	115%	0%	125%
MINIMUM Cash & Equivalents	0%	0%	0%	0%	0%	n/a	n/a	30%		85%	115%	75%	125%

All Targets are Maximum Permitted except-Minimum Cash

Notes:

- ¹ % of Total Fund
- ² Ratio of Portfolio VaR to Benchmark VaR
- ³ Single Name / Issuer: represents security level exposure as a percent of the portfolio to single entity or operating company.
US Treasury & Govt Agencies are exempt. For Private Assets, the limit applies at the time of investment or cost basis.
- ⁴ Definition: GICS Sub-Industry
- ⁵ Single Fund Investment: represents exposure to an external fund or externally managed strategy based vehicle.
- ⁶ Proportion Ownership: For Real Estate and Private Income, the limit is only applicable to the REIT and listed infrastructure portfolios.

VIII. PUBLIC MARKETS EXTERNAL MANAGER SELECTION

A. Manager Search and Selection

This section of the Policy applies to discretionary mandates assigned to external investment managers to transact and manage public market assets on behalf of the Fund (i.e. through an IMA). The Board has authorized APFC Staff to hire new investment managers upon conclusion of an appropriate search with the assistance of a qualified consultant, which can include the Board's General Consultant, contingent upon the search and hiring process adhering to the following steps:

1. Setting of relevant search criteria by APFC Staff of applicable manager qualifications;
2. Identification, with the assistance of the consultant, of a list of potential managers that are qualified to provide the investment management services needed, based on the qualifications and other search criteria established by APFC Staff;
3. Evaluation by a review committee established within the consultant's organization of the list of potential, qualified managers identified for recommendation of consideration by APFC Staff;
4. Informing the CIO of managers recommended by the General Consultant's review committee;
5. Selection by APFC Staff of between three and five finalists from those recommended by the consultant's review committee. This process may include, as part of due diligence, on-site visits by APFC Staff. Presentations to APFC Staff by the recommended managers are at the election of the CIO and ED;
6. Analysis by APFC Staff including a detailed recommendation to the CIO and ED, considering manager-specific characteristics as well as portfolio considerations;
7. Approval of the new manager or advisor by the CIO and ED, assignment of benchmarks as appropriate, and determination of the initial amount to be placed under management with the manager;
8. A manager shall also be required to execute a written IMA with the APFC. The IMA shall address matters of performance, compensation, term/termination, investment guidelines, among others, as the APFC and the manager consider necessary and appropriate. The use of derivatives, if any, within externally managed mandates shall conform to the Derivatives section of this Policy and be explicitly detailed in the IMA; and
9. Review and approval by the CRO and General Counsel of the proposed IMA is required prior to execution.

B. Special Situations

In certain special circumstances, the ED and CIO has the authority to modify or waive the criteria in the selection and hiring process outlined above. Even in such instances, the ED and

CIO retains the final manager selection authority. Use of an alternative manager search process may be considered when any one or more of these conditions exist:

1. A manager under consideration for hire has already been vetted in a significant manner either through a search process with a qualified consultant, or the manager is already employed in a manager capacity by APFC;
2. The skill for which the manager is being considered is related in a substantive manner to the role the manager already fulfills for APFC or was the subject of a manager search that first identified this manager;
3. It is in the best interest of the Fund to move more quickly than the typical search procedure permits; or
4. Due to confidentiality or specificity of the investment strategy or structure, use of the typical search procedure is not prudent.

The CIO and ED are required to report use of the alternative manager search and selection process, along with the rationale for the use, at the next regularly-scheduled Board meeting.

C. Monitoring and Evaluation of Managers

1. The Board expects APFC Staff to monitor the performance of the Fund's external managers, using the quarterly quantitative performance reports prepared by the General Consultant and Asset Class-specific Advisors in the case of Private Markets and Alternative Investments. Monitoring manager performance may also include review of other quantitative and qualitative aspects based on on-site visits to the manager's offices, discussions with other clients of the manager, media reports and other feedback.
2. The CIO and ED shall report to the Board any special concerns or observations they may have with respect to the performance of a manager no later than the next regular meeting of the Board.
3. The Board authorizes the CIO and ED to terminate an investment manager. If the CIO and ED terminate or give notice of unsatisfactory performance to a manager, they shall inform the Board of the actions and rationale at the next regularly scheduled Board meeting.

Appendix A: Investment Guidelines

Objective

The objective of the APFC Investment Guidelines is to supplement the Investment Policy by providing operational guidelines for APFC's internally managed investment programs. The ED may update this Appendix from time-to-time; updates will be provided to the Board at its next regularly scheduled meeting.

A. Alaska Direct Alternative Credit Investment Guidelines

In fiscal year 2018, APFC Staff established an in-house hybrid liquid / illiquid alternative credit effort named Alaska Direct Alternative Credit (or "ADAC"). Investments included in ADAC will be (i) non-investment grade high yield ETF's and individual bonds and cash ("Liquid Portfolio") and (ii) co-investments with Private Credit managers and working capital cash ("Private Portfolio"). The following guidelines apply to ADAC:

c. ADAC shall be included in the Special Opportunities / Income Opportunities category.

d. Size and Funding Schedule

- e. \$500 million funded at inception, initially invested in Liquid Portfolio.
- f. Following inception, additional funds will be invested into ADAC through cash transfers to the Liquid Portfolio and capital calls into the Private Portfolio for co-investments, or working capital or organizational expenses for the Private Credit Co-Investment Vehicle.
- g. Funding of additional cash transfers to the Liquid Portfolio will be done at no greater than a 1:1 ratio with cumulative Private Portfolio capital calls.
- h. Invested capital of \$1,000 million targeted to be funded within 24 months of inception.

e. Portfolio Control and Decision Making

- c. Private Income team will have discretion over portfolio-wide decisions including: (i) percentage of portfolio invested in Liquid vs. Private Portfolio, (ii) retaining APFC Fixed Income team as manager of the Liquid Portfolio, and (iii) individual investment decisions in the Private Portfolio.

f. Liquid Portfolio and Benchmark

- e. Liquid Portfolio, initially 100% of ADAC, ultimately scaling down to less than 50%, will be managed by the APFC Fixed Income team at inception.
- f. Targeted maximum allocation will be the greater of \$750 million and 75% of ADAC NAV.
- g. Targeted minimum allocation will be 25% of ADAC NAV.
- h. ETF Account within Liquid Portfolio benchmarked to Barclays US High Yield Index (after July 1, 2018 to allow for an initial ramp-up).
- i. Individual securities portfolio will favor BB-B over CCC-rated securities and will be benchmarked to the Barclays BB High Yield Index (after July 1, 2018 to allow for an initial ramp-up). A relatively high tracking error to this index will be tolerated with the aim of outperformance over a full market cycle.

g. Private Portfolio and Benchmark

- e. Private Portfolio, initially 0% of ADAC, ultimately scaling to greater than 50%, will be managed by the Private Income team.
- f. Targeted maximum allocation will be 75% of ADAC NAV.
- g. Targeted minimum allocation will be 25% of ADAC NAV (after initial, 24-month ramp-up).
- h. Private Portfolio will target having a minimum of \$100 million committed within 12 months of inception and a minimum of \$250 million within 24 months of inception.
- i. Co-investment opportunities will be primarily sourced through existing managers.
- j. Maximum commitment per co-investment of \$75 million without ED written approval.
- k. Private Portfolio will be benchmarked to CPI + 500 bps.

h. Overall ADAC Portfolio Benchmarks

- b. Barclays US High Yield Index (relatively high tracking error to this index will be tolerated with the aim of outperformance over a full market cycle).
- c. A long-term target of CPI + 400 bps.

i. Tenor and Termination

- f. This is an evergreen strategy with realized gains re-invested, which means the size of ADAC will be equal to invested capital, *plus* cumulative realized/unrealized gains, *minus* cumulative realized/unrealized losses.
- g. The CIO, with ED consent, may choose to invest additional capital at any time.
- h. The CIO, with Executive Direct consent, may choose to terminate the strategy at any time. Upon termination, available cash will be distributed from ADAC, the Liquid Portfolio will be sold within 180 days, and the Private Portfolio will cease making new commitments (with the exception of follow-on investments to existing portfolio holdings and investments to which a written commitment to invest has already been executed; both to be pursued only with written consent of the ED) and will distribute proceeds upon any partial or full realization of existing investments.

B. U.S. Large Cap Low P/E

In the fall of 2019, APFC Public Equity Staff established an internally traded deep value strategy. The following guidelines apply to this strategy:

1. Benchmark

The performance benchmark is the Russell 1000 Value Index.

2. Risk Limit

The portfolio will be included within the Total Public Equities' Tracking Error and Relative VaR limits. The allocation limit to the strategy will conform to the limits set in the Public Equities investment guidelines.

3. Concentration Risk

When originally purchasing securities for this strategy, the securities will all be equally weighted and from the lowest valuation quintile of the Russell 1000 index. The portfolio

will be rebalanced every 12 months to ensure that the securities that make up this portfolio remain equally weighted and at least 90% of the securities are in the lowest valuation quintile of the Russell 1000 index. At all times, the portfolio will have a minimum of 100 securities.

4. Allowable Investments

The strategy will invest in U.S. listed equity securities from the Russell 1000 Index.

5. Shorting, Leverage, and Derivatives

Not applicable at this time.

6. Liquidity Risk

The strategy is expected to be fairly liquid. For example, at \$500mm in AUM the portfolio is estimated to trade 95% on day 1 and 99% by day 3, under normal market conditions.

7. Portfolio Size Limit

The portfolio size shall be limited to a maximum of 1% of APFC's total fund NAV.

Deleted: Without strategy is expected to be fairly liquid. For example, at \$500mm in AUM the portfolio is estimated to trade 95% on day 1 and 99% by day 3, under normal market conditions.

C. Gold Exchange Traded Fund Strategy

In the fall of 2020, APFC Absolute Return Staff established the APF Real Overlay account for the implementation of the Gold ETF strategy.

1. Allocation Size

The size of the Gold Exchange Traded Fund strategy will range between 0% and 50% of the size of the Absolute Return portfolio.

At the security level, APFC's position in any given ETF will not exceed 10% of the ETF's Total Assets, without separate CIO approval.

2. Eligible Securities

U.S. listed ETF products issued by a major ETF sponsor such as iShares, State Street, VanEck, etc. The program will invest in ETFs backed by physical gold on an unlevered basis, e.g. will not invest in derivatives-based ETFs. Currently identified examples of ETFs that fit these criteria are IAU US, GLDM US, OUNZ US.

3. Benchmark

The performance benchmark is the LBMA Gold Price (BB - GOLDLNPM Index).

D. Internally Managed Tactical Tilt Portfolio Investment Strategy and Guidelines

APF Tactical Tilt was started in 2015 within the Public Equity portfolio with the objective to implement “our own” insights gained from possessing a historical market perspective and with exposure to lots of data and information. It was an attempt to add value in ways the Fund's external public equity managers are either not set up for or not able to. The Strategy was also thought to be complementary to the bottom up stock selection strategies employed by our external managers.

1. Benchmark

The benchmark is MSCI ACWI IMI net (BB ID: M1WDIM)

2. Primary Objective

Achieve excess returns from top down selection decisions emphasizing sectors/industries, countries/regions, and style factors that represent greater appreciation potential relative to the broad market represented by the benchmark.

3. Secondary Objectives

Control risk in Public Equity portfolio - as market conditions warrant.

Implement same day rebalancing with little cost or friction – with respect to maintaining Fund's target policy weights and cash flow needs

4. Investment Philosophy & Process

The foundation of this Strategy rests on successful top down allocation decisions across broad segments of public equity markets. The strategy is based on the belief that we can identify segments of the market which are either mispriced or attractively priced, trading at or near the low end with respect to their respective historic cycle, and/or are likely to benefit from a favorable turn in economic and market conditions.

5. Portfolio Manager: Director of Public Equity

6. Portfolio Size: Maximum 15% of overall Public Equity

7. Tracking Error: Maximum contribution to overall Public Equity Tracking Error (TE) of 100 bps (subject to Public Equity being within its TE limits)

8. Allowable Investments

Public equity ETFs, other externally managed public equity funds. Single stock holdings are not permitted.

9. Derivatives

Use of derivatives will require approval of CIO (except when derivatives are part of ETFs or other funds)

Deviation from these guidelines would require CIO and CEO approval. Overall compliance to IPS is required.

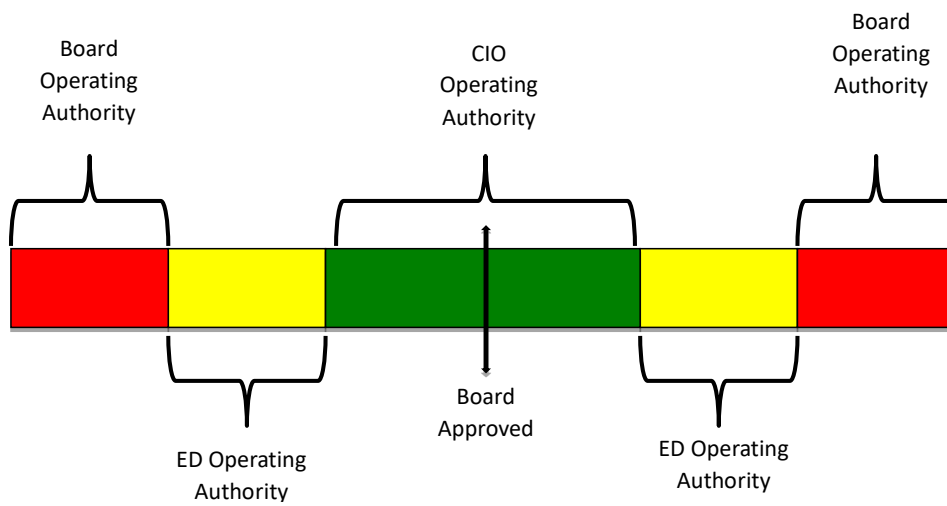
Appendix B: Limit Ranges & Compliance Cure Periods

The Green Zone Operating Range ("Green Zone") concept is designed to indicate the Board approved operating risk limits.

- A. The Green Zone is the Board-approved CIO operating range.
- B. The Yellow Zone is the Board approved ED operating range.
 - 1. The Chief Risk Officer ("CRO") will notify the CIO and ED promptly upon entry into a Yellow Zone.
 - 2. The CIO will respond by requesting ED approval to operate within the Yellow Zone.
 - 3. With ED approval, the CIO may operate within a Yellow Zone for up to 90 consecutive days or, if longer, until the next Board meeting following entry into a Yellow Zone.
 - 4. The CRO will notify the Board (i) when approaching 90 days of operating within a Yellow Zone and (ii) monthly thereafter.
 - 5. Following Board notification, a Trustee may request in writing a meeting to discuss an extension to continue operating within the Yellow Zone.
 - 6. The Board may grant the CIO and ED an extension to continue operating within a Yellow Zone. Between Board meetings, unless a Trustee requests a meeting, the Board Chair may grant the CIO and ED an extension to continue operating within a Yellow Zone.
- C. The Red Zone is the operating range that requires Board approval.
 - 1. The CRO will notify the Board upon entry into a Red Zone.
 - 2. The CIO and ED will respond to the Board with an action plan.
 - 3. Absent Board approval, operating within a Red Zone is limited to 30 consecutive days (plus the time needed to notice a Board meeting).
 - 4. The Board has the authority to approve operating within a Red Zone, beyond 30 days.

Even though the Fund is expected to operate most of the time within the Green Zone, the Fund may periodically be within a Yellow Zone, and there may be times when the Fund will be within a Red Zone. The zones are designed to increase transparency and awareness; they should not be viewed as explicit violations. Each year a historical report showing periods of operating within the Yellow and Red Zones will be included in Board meeting packets.

Visual Display of Green Zone Concept



Appendix C: Risk Appetite

The risk appetite approved by Board on December 2, 2020 is defined in terms of (a) a Risk Tolerance Portfolio and (b) Liquidity level.

a. Risk Tolerance Portfolio (RTP)

- i. The RTP is comprised of an 80% equity, 20% bond reference portfolio with the following constituents: 80% MSCI ACWI IMI, 8% BB US AGG, 8% BB US CORP, 4% BB GBL TRS ex-US.
- ii. The maximum risk of the APFC portfolio shall not exceed that of the RTP based on two parameters:
 - 1. Value at Risk (VaR): 1-year time horizon, 1 standard deviation, using 10 year constant-weighted historical monthly data.
 - 2. Drawdown: Recession Global Financial Crisis from Dec 2007 to Mar 2009

- iii. The private equity risk estimate computed by Aladdin will be adjusted downward (reduced) by adjusting the private equity exposure to 75% of actual exposure when comparing to RTP.

b. Liquidity level

- i. The combined allocated to public equities, fixed income, and cash will not be lower than 40%.

Deleted: the APFC's risk appetite

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Appendix D: Glossary

AAC means the Alaska Administrative Code.

ADA means the Americans With Disabilities Act of 1990.

Advisors and **Board Advisors** mean the investment professionals who comprise the Board's Investment Advisory Group.

APFC and **Corporation** mean the Alaska Permanent Fund Corporation, established under AS 37.13.040.

AS means Alaska Statutes.

BB means **Bloomberg**.

Board means the Board of Trustees of the APFC.

CMBS means commercial mortgage-backed securities.

CFO means the APFC's Chief Financial Officer.

CIO means the APFC's CIO.

Consultant means the Board's investment consultant(s), not including Board Advisors.

CPI means the Consumer Price Index.

CRO means Chief Risk Officer

Custodian means the APFC's custodian.

Days means calendar days.

ED means the APFC's Executive Director.

FoF means fund-of-funds.

Fund and **Permanent Fund** mean the Alaska Permanent Fund, established under Article IX, Section 15, of the Alaska Constitution, and described in AS 37.13.010.

IMA means investment management agreement.

Investment Manager and **Manager** mean investment manager(s) retained by the APFC.

IRR means internal rate-of-return.

Long-Term means over one or more business cycles.

MBS means mortgage-backed securities.

RBM means Strategic Risk Benchmark.

Staff means the APFC Investment Staff and, where the context requires, also means or includes the Executive Director and/or other APFC Staff.

TE means Tracking Error.

Trustees means the members of the APFC's Board of Trustees.

VaR means Value at Risk.

Appendix E: Previous Investment Policy Adoption & Amendments

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The previous APFC Investment Policy was adopted or amended effective as follows:

Adopted: May 27, 2010

Amended: September 30, 2010 (§14.9 added)

Amended: December 1, 2010 (§9.1 revised; new §11.1 added and prior §§11.1-11.3 and subsections thereunder renumbered; and §18.2.4 revised)

Amended: May 20, 2011 (§18A added)

Amended: September 30, 2011 (§§ 8, 8.2, 8.3, 8.5, 9.2, 9.3.1, 9.4.1, 11.3.1, 15.3, and 15.4 revised)

Amended: December 8, 2011 (§11.3.2 revised)

Amended: February 22, 2012 (§20 revised)

Amended: April 23, 2012 (§§16.3.1 and 16.3.2 revised; and Specific Policy Modifications for Tysons Corner Phase I Project and Mariner Frontier Fund, L.P. added)

Amended: February 27, 2013 (§§ 15.2, 15.3, and 15.4 revised)

Amended: May 22, 2013 (§§9.5.4, 9.5.5, 12.4, 12.6, 13.2, 13.3.1, 13.3.3, 14.9.4.10, 16.1.2, 16.1.3, 16.1.4, 16.2, 16.3, 16.3.1, 18A, 23.2, and 23.5 revised; Specific Policy Modification for Mariner Frontier Fund, L.P. revised; Specific Policy Modification for Crestline AK Permanent Fund, L.P. added; and Addendum re Internal Investment Managers added)

Amended: May 23, 2013 (§§ 3.1, 3.3, 5.3, 6, 8 (including Table 8a), 8.1 revised; §8.2 deleted; §§ 8.3-8.5 renumbered (as §§ 8.2-8.4) and newly-renumbered §§ 8.2-8.4 revised; and §§ 9.2, 9.3.1, 9.4.1, 10, 11.3.1, and 22.2 revised)

Amended: February 26, 2014 (§§23.3.1, and 23.2 revised; and Addendum re Internal Investment Managers revised)

Amended: May 21, 2014 (§14.9.4.10 (including Table 14.9.4.10.1) revised)

Amended: December 10, 2014 (§§ 8, 9.3.1, 11.3.2, 14.2.2, and Table 14.5.4.1 revised)

Amended: May 19, 2015 (§§ 15 and 16, including conforming changes in other sections revised)

Amended: September 27, 2016

Amended: December, 2016 (§§ 9, 10 and 12, including conforming changes in other sections revised)

Amended: May 23, 2018, complete re-write of the Policy and Guidelines. Changes to be effective on July 1, 2018

Amended: September 27, 2018 (§ 5, Alaska Investment Policy was revised)

Amended: May 21, 2020, complete rewrite of the Investment Policy changes effective July 1, 2020

Amended: September 24, 2020 Amended § III D total fund cash and § IV E absolute return to authorize investment in gold ETFs.

Amended: May 20, 2021 amended: (1) § II A to include reference to Risk Appetite approved by the Board on December 9, 2020; (2) § IV A 3 to include a new subsection (g), which is a control restriction in place of existing 10% ownership restriction; (3) § VII G update table 3 risk parameters to include clarifications and changes to existing limits; (4) Appendix A to include most recent Investment guidelines approved by the ED; and (5) add Appendix C to include Risk Appetite parameters approved by the Board on December 9, 2020.

SUBJECT: FY 2022 Real Estate Investment Pacing

ACTION: _____

DATE: May 20, 2021

INFORMATION: _____ X _____

BACKGROUND:

At this meeting and each May going forward, APFC Real Estate staff will provide an informational update to the Board of Trustees on current portfolio exposure, targets, and projections for the next fiscal year's activity in the Real Estate portfolio.

STATUS:

At this meeting Staff will provide an update to the Board of Trustees that includes:

- Projection model with recommended pacing for FY 2022 and beyond necessary to achieve targeted exposures; and
- A sensitivity analysis showing the probabilistic range of outcomes in various hypothetical scenarios.

As an informational matter, staff will summarize a plan to deploy \$800 million annually in the Real Estate Portfolio assumed to be comprised of \$400 million to multi-family, \$150 million to industrial, \$250 million to office, and \$0 to the retail sector on average. Staff seeks to maintain flexibility to increase or decrease deployment based on opportunistic deal flow and transaction timing.



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Real Estate

FY 2022 Proposed Pacing Plan | May 19-20, 2021

Commitment Pacing for Real Estate

- Real Estate is a long-term, illiquid asset class that requires long-term planning
- After several years of minimal capital deployment to the Real Estate asset class and a portfolio materially underweighted to Industrial and Multi-family, in the past year, the team has re-invigorated Real Estate new investment activities
- In past, we have not presented on Real Estate pacing annually, however, starting now and going forward this will be done in May along with Private Equity and Private Income
- Staff proposes targeted FY 2022 deployment for Real Estate of \$800 million
- Given the significant headroom between current allocation (~7%) and ultimate target allocation (12%), Staff believes that it has flexibility to adjust pacing amounts depending on opportunity set; therefore +/- \$500 million tolerance band around the \$800 million target is proposed

Pacing Methodology

- Simpler modeling exercise than for Private Equity and Private Income, which rely more extensively on draw-down private equity-style funds (capital called over ~3 years, exited over subsequent ~5 years)
- While the Real Estate portfolio has several commitments to private equity-style funds, the bulk of assets are in separate accounts and open-ended funds, which require less estimation on exit timing
- Key variables include: NAV growth assumptions, annual deployment by sector, and APFC total fund growth

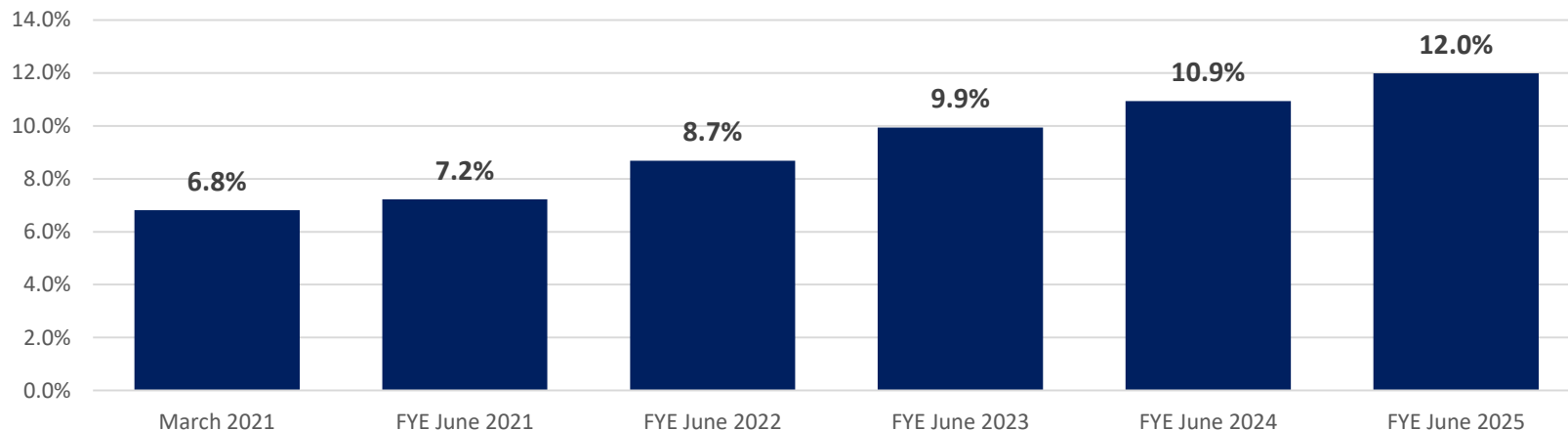
Metric	Real Estate Pacing Model
APFC Net Fund Growth	2.25%
Investment Pace (FY '22 – '25)	\$800 million per year
NAV Growth	0% - 5% depending on asset type
% of Portfolio in REITs	15% constant over forecast

Projected Sector Mix

- Model assumes that existing REIT exposure maintained at 70% multi-family / 30% industrial exposure over entire forecast horizon with new capital added to REIT portfolio (to maintain 15% of total) is done so at the same weights as the MSCI US REIT Index
- Mix of \$800 million of annual deployment going forward assumed to be comprised of \$400 million to multi-family, \$150 million to industrial, \$250 million to office, and \$0 to retail annually on average
- Ultimate FY '25 material overweight to multi-family is intentional

	Mar-21	Jun-21	Jun-22	Jun-23	Jun-24	Jun-25	NCREIF
Multi-family	28.6%	29.4%	31.1%	32.7%	33.9%	35.0%	26.0%
Industrial	15.0%	15.1%	16.5%	16.9%	17.2%	17.5%	18.0%
Office	26.1%	26.9%	28.1%	29.1%	29.8%	30.4%	35.0%
Retail	28.6%	26.8%	22.7%	19.8%	17.6%	15.8%	20.0%
Hotel	1.7%	1.7%	1.6%	1.5%	1.4%	1.3%	1.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Projected Path to 12% Real Estate Allocation



**Projected
NAV (\$ mm):**

\$5.2

\$5.7

\$7.0

\$8.2

\$9.2

\$10.4

Target

Allocation:

7.0%

7.0%

8.0%

9.0%

10.0%

12.0%

Sensitivity Analysis

- FY '25 Target Allocation = 12.0%
- FY '25 Green Zone = 9-15%
- FY '25 Yellow Zone = 6-9% and 15-18%

		Annual Net Fund Growth and Total Fund Value - FY '25							
		\$57,869	\$64,383	\$72,168	\$79,046	\$86,404	\$96,081	\$105,563	\$115,731
		(7.50%)	(5.00%)	(2.25%)	0.00%	2.25%	5.00%	7.50%	10.00%
Annual Deployment (\$ millions)	\$1,000	19.6%	17.6%	15.7%	14.4%	13.1%	11.8%	10.8%	9.8%
	\$900	18.7%	16.9%	15.0%	13.7%	12.6%	11.3%	10.3%	9.4%
	\$800	17.9%	16.1%	14.3%	13.1%	12.0%	10.8%	9.8%	8.9%
	\$700	17.0%	15.3%	13.6%	12.5%	11.4%	10.3%	9.3%	8.5%
	\$600	16.2%	14.5%	13.0%	11.8%	10.8%	9.7%	8.9%	8.1%
	\$500	15.3%	13.7%	12.3%	11.2%	10.2%	9.2%	8.4%	7.6%

SUBJECT: FY 2022 Alternatives Investment Pacing

ACTION: _____

DATE: May 20, 2021

INFORMATION: _____ X _____

BACKGROUND:

Each May, APFC Alternative Investments staff provides an informational update to the Board of Trustees on current portfolio exposure, targets, and projections for the next fiscal year's activity in the Alternatives portfolios.

STATUS:

At this meeting Staff will provide an update to the Board of Trustees that includes:

- Current NAV relative to target with a snapshot of FY 2021 commitment activity;
- Projection model with recommended pacing for FY 2022 and beyond necessary to achieve targeted exposures; and
- A sensitivity analysis showing the probabilistic range of outcomes in various hypothetical scenarios.

The update will cover the Private Equity and Special Opportunities Portfolio and the Private Income Portfolio.

As an informational matter, staff will summarize a plan to invest or commit approximately \$1.6 billion under the Private Equity and Special Opportunities Portfolio to a combination of funds, co-investments, and direct investments in FY 2022. As in prior years, staff seeks to maintain flexibility to increase or decrease deployment by up to \$550 million based on market conditions, opportunistic deal flow, and transaction timing. The FY 2022 target represents a steady pace (in absolute dollar terms though not as a percentage of the overall fund) in line with FY 2021.

Additionally, staff will summarize a plan to invest or commit approximately \$1.1 billion under the Private Income Portfolio to a combination of funds, co-investments, and direct investments in FY 2022. Staff will recommend maintaining flexibility to increase or decrease deployment by up to \$400 million for FY 2022. The FY 2022 proposed deployment pace is slightly above the FY 2021 proposed pace in order to meet long-term target asset allocation targets.



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Alternative Investments

FY 2022 Proposed Pacing Plan | May 20, 2021

Commitment Pacing for Alternative Assets

- Private Equity and Private Income are long-term, illiquid asset classes that require long-term planning
- APFC has been navigating towards **long-term allocation targets**
 - **9%** for Infrastructure, Private Credit, and Income Opportunities (together, "Private Income")
 - **19%** for Private Equity, Venture Capital, and Special Opportunities (together, "PESO")
- APFC revisits and refreshes commitment pacing plan annually in May
 - Small course corrections are sometimes appropriate
- Staff proposes FY 2022 pacing for **Private Income** that is slightly above FY 2021
 - **\$1.1 billion** proposed target deployment, +/- \$400 million depending on opportunity set
- Staff proposes FY 2022 pacing for **PESO** that is in line with FY 2021
 - **\$1.6 billion** proposed target deployment, +/- \$550 million depending on opportunity set

Pacing Methodology

- Top-down and bottom-up approach to project capital calls, distributions, NAV, unfunded, and total exposure
- Call and distribution curves are strategy-specific, based on historical cash flow data and negotiated legal terms
- Sub-asset class allocation targets based on historical averages and staff targets
- No exits assumed via secondary sales
- Partnership life reflects term of investment period, fund life, and contractual extensions

Key Elements of Model

	PE + SpecOpps	Private Income
APFC Net Fund Growth ¹	2.25%	2.25%
Target FY2022 Investment Pace ²	\$1.6 billion	\$1.1 billion
Long-term Expected Annual Net Return	12.3%	7.25%

¹Nominal growth net of all income, gains, and distributions.

²Target deployment for FY 2022 subject to market conditions and other factors.

The background of the slide is a solid teal color. Overlaid on this background is a close-up, slightly out-of-focus image of a pine branch with long, thin needles and a cluster of small, light-colored pine cones or buds. The image is positioned in the lower half of the slide, behind the title text.

Private Equity + Special Opportunities

Private Equity Portfolio Snapshot

- Distributions have been robust but current NAV still exceeds target

PESO Performance & Liquidity

	3 Month	1 Year	3 Year	5 Year	10 Year
Investment Gains	\$2,278	\$3,980	\$6,537	\$8,628	\$11,253
Distributions to APFC	\$658	\$1,710	\$5,592	\$8,588	\$11,186
Net IRR	19.4%	40.4%	24.4%	21.0%	20.5%
<i>Performance Benchmark</i>	<i>10.4%</i>	<i>8.6%</i>	<i>10.9%</i>	<i>12.8%</i>	<i>13.8%</i>

- Direct investments have enhanced returns, improved liquidity, and reduced operating costs

PESO Net Annualized Return by Tactic

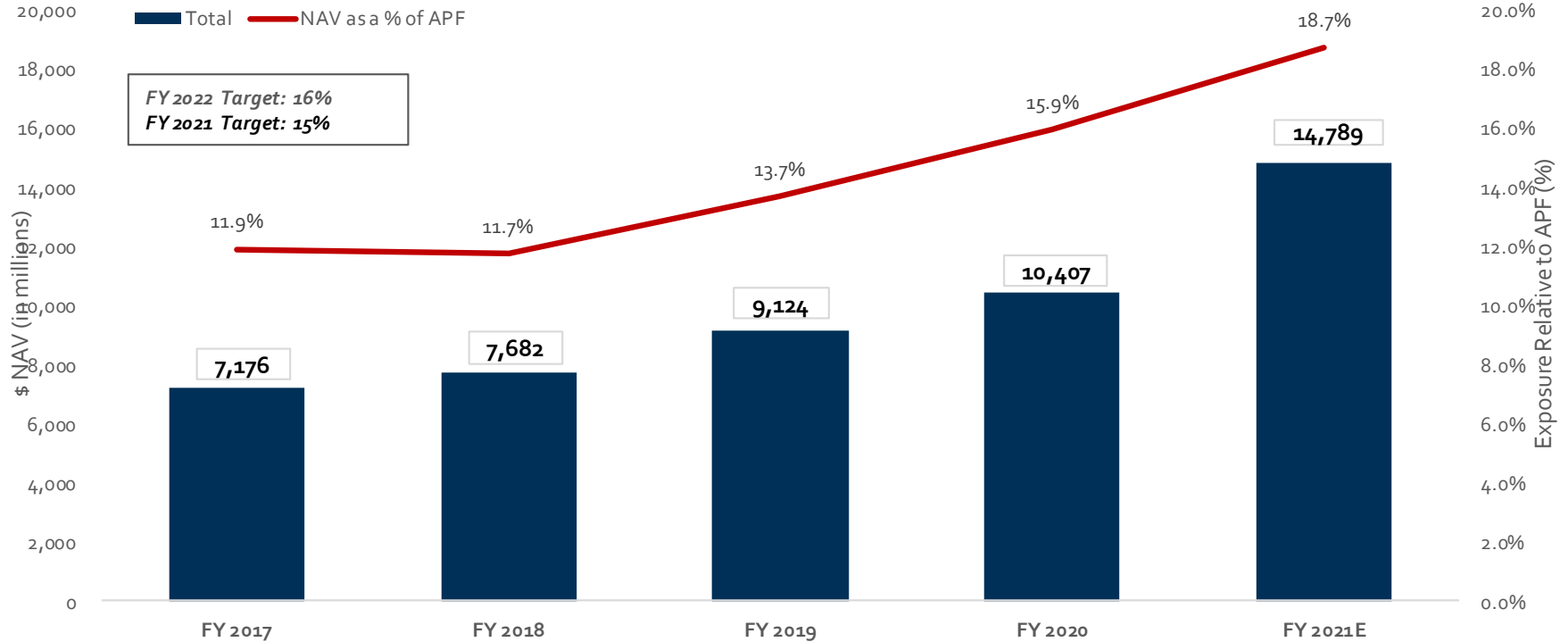
	IRR 3 Month	IRR 1 Year	IRR SI
Funds	17.3%	37.2%	15.2%
Directs/Co-invest	<u>29.4%</u>	<u>55.2%</u>	<u>52.7%</u>
Total	19.4%	40.4%	17.7%

PESO Net Annualized Return by Program

	Commitments Since Inc	IRR Since Inc
Pathway + HarbourVest	\$7,383	15.0%
APFC Staff PE	\$5,576	23.0%
APFC Staff SpecOpps	<u>\$5,909</u>	<u>26.6%</u>
Total	\$18,868	17.7%

Notes: \$ = millions of US Dollars, as of 12/31/20. Since inception commence in 2004 for funds and 2013 for directs/co-invest.
Sources: Pathway Capital Management, Cambridge Associates

Private Equity Exposure

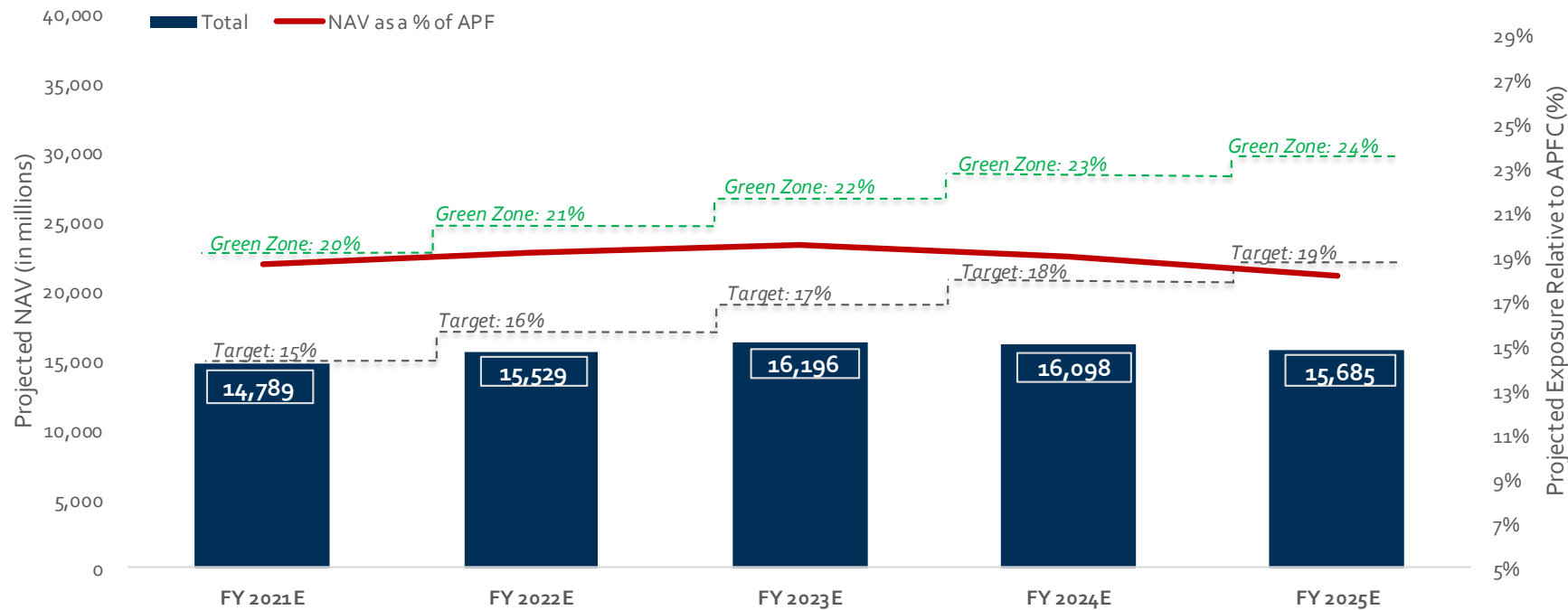


Source: Pathway & APFC. APFC Fiscal Year ends on June 30.

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Proposed Pacing and Projected Exposures

APFC Staff recommends a **\$1.6 billion** commitment target for FY 2022



Source: Pathway & APFC

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Note: APFC Fiscal Year ends on June 30. Assumes an annual \$1.6 billion pace. Target increases by 1% each fiscal year.

Investment Pacing – Sensitivity Analysis

- Largest impact to overall exposure is the denominator effect of the total fund
- Base case scenario of 2.25% net growth in APFC, annual pacing of \$1.6bn, and 12.3% PE+SO annualized returns
- Acceptable range of potential outcomes that would not result in a breach of green zone limits
- Annual pacing study allows APFC to course correct any potential deviations early

Projected Exposure as a % of Total Fund at FYE 2023

		APFC Net Fund Growth							
		-7.5%	-5.0%	-2.5%	0.0%	2.3%	5.0%	7.5%	10.0%
Annual Investment Pace (in millions)	\$400	23.5%	22.2%	20.9%	19.8%	18.8%	17.7%	16.8%	16.0%
	\$800	23.8%	22.5%	21.2%	20.0%	19.1%	18.0%	17.1%	16.2%
	\$1,200	24.2%	22.8%	21.5%	20.3%	19.3%	18.2%	17.3%	16.4%
	\$1,600	24.5%	23.1%	21.8%	20.6%	19.6%	18.5%	17.5%	16.6%
	\$2,000	24.8%	23.4%	22.1%	20.8%	19.8%	18.7%	17.7%	16.8%
	\$2,400	25.1%	23.7%	22.3%	21.1%	20.1%	18.9%	18.0%	17.1%
	\$2,800	25.4%	24.0%	22.6%	21.4%	20.3%	19.2%	18.2%	17.3%

Assumes: 12.3% PE+SO annualized return

		APFC Net Fund Growth							
		-7.5%	-5.0%	-2.5%	0.0%	2.3%	5.0%	7.5%	10.0%
PE+SO Expected Annual Return	19.6%								
	-8.7%	17.5%	17.0%	16.6%	16.2%	15.8%	15.4%	15.1%	14.7%
	-1.7%	18.9%	18.4%	17.9%	17.5%	17.1%	16.6%	16.3%	15.9%
	5.3%	20.3%	19.7%	19.2%	18.7%	18.3%	17.9%	17.4%	17.0%
	12.3%	21.7%	21.1%	20.5%	20.0%	19.6%	19.1%	18.6%	18.2%
	19.3%	23.0%	22.4%	21.9%	21.3%	20.8%	20.3%	19.8%	19.4%
	26.3%	24.4%	23.8%	23.2%	22.6%	22.1%	21.5%	21.0%	20.5%
	33.3%	25.8%	25.1%	24.5%	23.9%	23.3%	22.7%	22.2%	21.7%

Assumes: \$1.6bn annual commitment pace

Source: Pathway & APFC

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Note: Green zone (+/- 5% of 17% target); Yellow Zone (0-5% beyond Green Zone); Red Zone (>5% beyond Green Zone)

Investment Pacing – Sensitivity Analysis

- Largest impact to overall exposure is the denominator effect of the total fund
- Base case scenario of 2.25% net growth in APFC, annual pacing of \$1.6bn, and 12.3% PE+SO annualized returns
- Acceptable range of potential outcomes that would not result in a breach of green zone limits
- Annual pacing study allows APFC to course correct any potential deviations early

Projected Exposure as a % of Total Fund at FYE 2025

		APFC Net Fund Growth							
		-7.5%	-5.0%	-2.5%	0.0%	2.3%	5.0%	7.5%	10.0%
Annual Investment Pace (in millions)	\$400	19.3%	18.7%	18.3%	17.8%	17.4%	17.0%	16.6%	16.2%
	\$800	19.5%	19.0%	18.5%	18.1%	17.7%	17.2%	16.8%	16.4%
	\$1,200	19.8%	19.3%	18.8%	18.3%	17.9%	17.4%	17.0%	16.6%
	\$1,600	20.1%	19.5%	19.0%	18.6%	18.1%	17.7%	17.3%	16.9%
	\$2,000	20.3%	19.8%	19.3%	18.8%	18.4%	17.9%	17.5%	17.1%
	\$2,400	20.6%	20.0%	19.5%	19.0%	18.6%	18.1%	17.7%	17.3%
	\$2,800	20.9%	20.3%	19.8%	19.3%	18.9%	18.4%	17.9%	17.5%

Assumes: 12.3% PE+SO annualized return

		APFC Net Fund Growth							
		-7.5%	-5.0%	-2.5%	0.0%	2.3%	5.0%	7.5%	10.0%
PE+SO Expected Annual Return	18.1%	16.4%	15.9%	15.5%	15.1%	14.8%	14.4%	14.1%	13.8%
	-8.7%	17.6%	17.1%	16.7%	16.3%	15.9%	15.5%	15.1%	14.8%
	-1.7%	18.8%	18.3%	17.9%	17.4%	17.0%	16.6%	16.2%	15.8%
	5.3%	20.1%	19.5%	19.0%	18.6%	18.1%	17.7%	17.3%	16.9%
	12.3%	21.3%	20.7%	20.2%	19.7%	19.3%	18.8%	18.3%	17.9%
	19.3%	22.5%	21.9%	21.4%	20.8%	20.4%	19.8%	19.4%	18.9%
	26.3%	23.7%	23.1%	22.5%	22.0%	21.5%	20.9%	20.4%	20.0%
	33.3%								

Assumes: \$1.6bn annual commitment pace

Source: Pathway & APFC

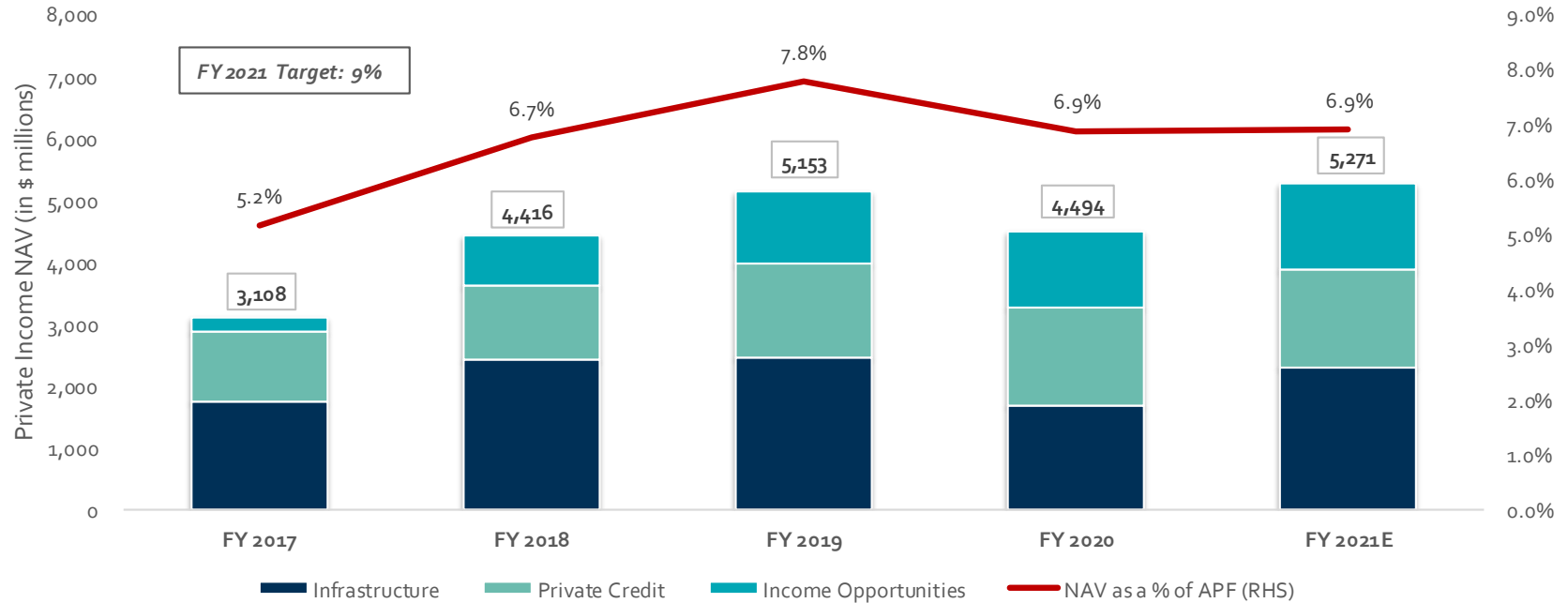
Note: Green zone (+/- 5% of 19% target); Yellow Zone (0-5% beyond Green Zone); Red Zone (>5% beyond Green Zone)

A teal-colored background featuring a close-up, slightly out-of-focus image of a pine branch with needles and a small, textured cone or bud in the center.

Private Income

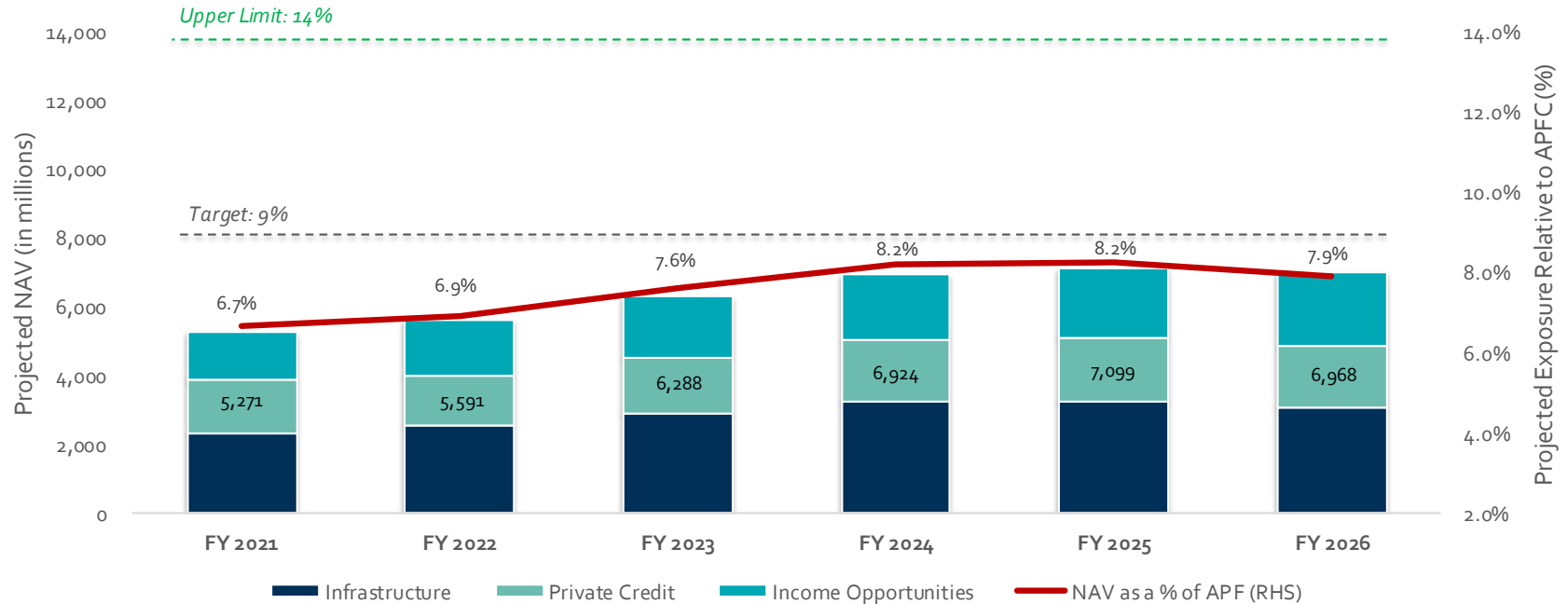
Infrastructure, Private Credit, Income Opportunities

Private Income Historical Exposure



Private Income Projected Exposure

APFC Staff recommends a **\$1.1 billion** commitment target for FY 2022



Note: APFC Fiscal Year ends on June 30. Assumes a steady \$1.1 billion pace.

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Private Income Investment Pacing

- Sensitivity Analysis by FYE 2023

- Largest impact to overall exposure is the denominator effect of the total fund
- Base case scenario of 2.25% net growth in APFC, annual pacing of \$1.1 billion, and 7.25% annualized returns
- Large range of possible outcomes that would still keep the PI portfolio within green zone limits
- Annual pacing study allows APFC Staff to course correct any potential deviations early

Projected Exposure as a % of Total Fund at FYE 2023

		APFC Net Fund Growth							
		-7.5%	-5.0%	-2.5%	0.0%	2.3%	5.0%	7.5%	10.0%
Annual Investment Pace (in millions)	\$200	8.6%	8.1%	7.6%	7.2%	6.9%	6.5%	6.2%	5.9%
	\$500	8.9%	8.4%	7.9%	7.5%	7.1%	6.7%	6.4%	6.1%
	\$800	9.2%	8.7%	8.2%	7.7%	7.4%	6.9%	6.6%	6.3%
	\$1,100	9.5%	8.9%	8.4%	8.0%	7.6%	7.2%	6.8%	6.5%
	\$1,400	9.8%	9.2%	8.7%	8.2%	7.8%	7.4%	7.0%	6.7%
	\$1,700	10.1%	9.5%	9.0%	8.5%	8.1%	7.6%	7.2%	6.9%
	\$2,000	10.4%	9.8%	9.2%	8.7%	8.3%	7.9%	7.5%	7.1%

Assumes: 7.25% Private Income annualized return

		APFC Net Fund Growth							
		-7.5%	-5.0%	-2.5%	0.0%	2.3%	5.0%	7.5%	10.0%
Private Income Expected Annual Return	-13.8%	6.8%	6.4%	6.1%	5.8%	5.5%	5.2%	4.9%	4.7%
	-6.8%	7.6%	7.2%	6.8%	6.4%	6.1%	5.8%	5.5%	5.2%
	0.2%	8.5%	8.0%	7.6%	7.2%	6.8%	6.5%	6.1%	5.8%
	7.25%	9.5%	8.9%	8.4%	8.0%	7.6%	7.2%	6.8%	6.5%
	14.3%	10.5%	9.9%	9.3%	8.8%	8.4%	7.9%	7.5%	7.2%
	21.3%	11.6%	10.9%	10.3%	9.8%	9.3%	8.8%	8.3%	7.9%
	28.3%	12.7%	12.0%	11.3%	10.7%	10.2%	9.6%	9.1%	8.7%

Assumes: \$1.1 billion annual commitment pace

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Note: Green zone (+/- 5% of 9% target); Yellow Zone (0-5% beyond Green Zone); Red Zone (>5% beyond Green Zone)

Private Income Investment Pacing

- Sensitivity Analysis by FYE 2025

- Largest impact to overall exposure is the denominator effect of the total fund
- Base case scenario of 2.25% net growth in APFC, annual pacing of \$1.1 billion, and 7.25% annualized returns
- Large range of possible outcomes that would still keep the PI portfolio within green zone limits
- Annual pacing study allows APFC Staff to course correct any potential deviations early

Projected Exposure as a % of Total Fund at FYE 2025

		APFC Net Fund Growth							
		-7.5%	-5.0%	-2.5%	0.0%	2.3%	5.0%	7.5%	10.0%
Annual Investment Pace (in millions)	\$200	8.8%	7.9%	7.0%	6.3%	5.8%	5.2%	4.7%	4.3%
	\$500	10.0%	9.0%	8.0%	7.2%	6.6%	5.9%	5.3%	4.9%
	\$800	11.3%	10.1%	9.0%	8.1%	7.4%	6.6%	6.0%	5.4%
	\$1,100	12.5%	11.2%	10.0%	9.0%	8.2%	7.3%	6.7%	6.0%
	\$1,400	13.7%	12.3%	11.0%	9.9%	9.0%	8.1%	7.3%	6.6%
	\$1,700	15.0%	13.4%	12.0%	10.8%	9.8%	8.8%	8.0%	7.2%
	\$2,000	16.2%	14.5%	13.0%	11.7%	10.6%	9.5%	8.6%	7.8%

Assumes: 7.25% Private Income annualized return

		APFC Net Fund Growth							
		-7.5%	-5.0%	-2.5%	0.0%	2.3%	5.0%	7.5%	10.0%
Private	-13.8%	8.1%	7.2%	6.5%	5.8%	5.3%	4.8%	4.3%	3.9%
Income	-6.8%	9.3%	8.3%	7.5%	6.7%	6.1%	5.5%	5.0%	4.5%
Expected	0.2%	10.7%	9.6%	8.6%	7.8%	7.1%	6.3%	5.7%	5.2%
Annual	7.25%	12.5%	11.2%	10.0%	9.0%	8.2%	7.3%	6.7%	6.0%
Return	14.3%	14.6%	13.0%	11.7%	10.5%	9.6%	8.6%	7.8%	7.0%
	21.3%	17.0%	15.2%	13.7%	12.3%	11.2%	10.0%	9.1%	8.2%
	28.3%	19.9%	17.8%	16.0%	14.4%	13.1%	11.7%	10.6%	9.6%

Assumes: \$1.1 billion annual commitment pace

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Note: Green zone (+/- 5% of 9% target); Yellow Zone (0-5% beyond Green Zone); Red Zone (>5% beyond Green Zone)

Summary – FY2022 Pacing Proposal

Private Equity and Special Opportunities

- **APFC staff recommends targeting a \$1.6 billion annual deployment pace for FY 2022**
 - Investments to be allocated across strategies (e.g., venture, buyouts, distressed) and tactics (funds, co-investments, directs) subject to market opportunities and investment policy.
 - Consistent with prior years, flexibility to increase or decrease pacing by \$550 million from target
 - Exposure and pacing to be reviewed quarterly

Private Income

- **APFC recommends targeting a \$1.1 billion annual deployment schedule for FY 2022**
 - Investments to be allocated across strategies (e.g., infrastructure, private credit, income opportunities) and tactics (funds, co-investments, directs) subject to market opportunities and investment policy.
 - Flexibility to increase or decrease pacing by \$400 million from target

SUBJECT: FY21 Budget Projections

ACTION:

DATE: May 20, 2021

INFORMATION: X

BACKGROUND:

Per Board Resolution 98-4 – Pertaining to The Operating Budget of The Corporation:

APFC staff shall, prior to the last meeting of the Board of Trustees of each fiscal year, prepare an analysis of expenditures to date and status of programs, identify projected shortfalls and surpluses by the objects of expenditures set out herein, and recommend transfers to the Board of Trustees.

The Board of Trustees may, following discussion and due consideration of staff recommendations, authorize the transfer of budgeted funds between the objects of expenditure set out herein pursuant to such recommendations as may be amended by the Board of Trustees.

STATUS:

The attached report shows the projected fiscal year-end status of the Corporation's two Fiscal Year 2021 budget components. The estimates are based on actual expenditures through April 15, 2021, and expenditure projections for the remainder of April, May, and June 2021.

OPERATIONS COMPONENT

Total Corporate Operations	FY21 Budget	FY21 Actuals & Projected	Projected Surplus
	\$17,680,700	\$14,545,705	\$3,134,995

The total expenditure for corporate operations is well within this year's budget. An analysis of the projected FY2021 expenditure activity for each of the objects of expenditure is provided below, along with budget detail highlights and factors contributing to the operational surplus. The surplus is contingent on the passing of APFC's

FY2021 supplemental request of \$50,000,000. Otherwise, all remaining funds will be used to paid investment fee contractual obligations

In December, the Board approved the submission of a supplemental budget request for the FY2021 Investment Management Fee allocation to fund external manager fees. The initial request was for \$25,000,000, with authority to adjust the request as needed as the fiscal year progressed and projections modified. Near the end of the calendar year, updated projections determined the need to increase the request to \$50,000,000. It is important to highlight that an overall increase in fees is positive as it is directly related to managers outperforming their relative benchmarks. As a reminder, any funds requested and not expended will lapse at the close of the fiscal year and the remaining Earning Reserve Account.

In early April, APFC reached out to Senate Finance, House Finance, and Revenue Budget Subcommittee members to request an expedited 'fast track' of our supplemental request. Without an enacted appropriation, funds will be insufficient to fulfill our FY21 contractual obligations in the coming months for our external managers.

Personal Services	FY21 Budget	FY21 Actuals & Projected	Projected Surplus
	\$12,839,400	\$10,891,199	\$ 1,948,201

The Personal Services line is projected to have a surplus at year-end primarily due to the inconceivable uncertainty that has accompanied COVID-19 this past year which caused longer than anticipated vacancies. We are proud of the foresight that allowed us a seamless transition to work remotely and the staff's commitment to making it successful. While we have been diligently navigating employee safety, changing mandates, and testing new recruiting techniques, we have managed to continue to encourage people to join our team.

As was stated in the CEO's HR report, in the midst of a global pandemic, our team was able to bring on 16 new full-time staff members, two corporate interns, and three interns placed through our Partner Internship Program. Eight new members of the team relocated to Juneau from the lower 48 and internationally. Along with a record AUM, the staffing necessary to support and grow the Fund is at its highest level in the Corporation's history.

We continue to have offers declined due to lack of compensation and uncertainty surrounding an incentive compensation program in the near future, which is a standard within the industry. Additionally, we regrettably had to reject dozens of candidates interested in working for the Fund because we could not meet their salary requirements.

As we move into the next fiscal year, we will continue to look for creative ways to find quality talent to fulfill our vision of providing outstanding returns for the benefit of current and future generations of Alaskans.

Organizationally we understand the importance of filling positions quickly. However, our philosophy is rooted in ensuring we hire the right people, even if that means leaving positions open for a longer period. Therefore, while some recruitments have taken longer to fill, it is critical to the success of APFC and the State to make quality hires that will add value to the Fund in whatever their capacity.

Travel	FY21 Budget	FY21 Actuals & Projected	Projected Surplus
	\$700,000	\$131,211	\$568,789

Travel expenditures are significantly less than budgeted due to the ban placed on business travel as a result of the COVID-19. The majority of travel this fiscal year has been related to Board meetings and the recruitment process.

Although this unprecedented situation has halted our in-person connection, it has assisted the industry and business communities to advance in our usage of technology to conduct business nationally and internationally. This virtual connection with our business partners will remain intact, but it will not fully replace in-person interaction. As the vaccine continues to be broadly distributed, we anticipate travel restrictions and requirements to lift, allowing business travel to resume.

	FY19 Actual	FY20 Actual	FY21 Projected
Total Expenditure	\$536,326	\$401,705	\$99,211
Total Trips	207	166*	54**
Staff Travel	184	140	41
Trustee Travel	23	26	13

*FY20 booked trips totaled 205. However, 39 trips were canceled due to COVID-19.

**FY21 booked trips totaled 61. However, 7 trips were canceled due to COVID-19. The total expenditure in the chart does not include \$32,000 related shipment of personal property related to the recruitment process, which is included in the total shown above.

Contractual Services	FY21 Budget	FY21 Actual & Projected	Projected Surplus
	\$3,404,400	\$2,894,512	\$509,888

The Contractual Services item of expenditure encompasses all services provided to the Corporation by non-employees such as contractors, consultants, auditors, and attorneys.

Contractual Services	FY21 Budget	FY21 Actuals & Projected	Surplus
Audit, Legal, Consulting	\$445,945	\$415,470	\$30,475
Public Communications	146,500	146,460	40
Board Support/Meetings	76,000	45,410	30,590
Information Technology	1,725,500	1,545,236	180,264
HR and Recruitment	77,436	41,010	36,426
Training/Education	185,925	38,321	147,604
Office Support	747,094	662,605	84,489
Total	\$3,404,400	\$2,894,512	\$509,888

**Contractual Services for Investment Management Fees are included in the Investment Management section.*

Audit, Legal, Consulting – Entering the fiscal year, we projected a shortfall in this line of expenditure because of the unanticipated costs associated with awarding a new contract to KPMG to perform the annual audit and Department of Law (DOL) committing an Assistant Attorney General (AAG) to assist with APFC matters.

The additional assistance from DOL on procurement, securities litigation, public records, and compliance has been beneficial to the Corporation and has allowed our General Counsel to focus on investments. This being the first full year with our Reimbursable Service Agreement (RSA) in place, we have found our billable hours to be lower than estimated. It is expected that we will have a better idea of what our average annual expenses will be in time. However, our needs will be contingent on the volume of instances that require support in these areas of law.

Lower than anticipated legal fees and the minimal need for consultant services resulted in a \$30,475 surplus for this line of expenditure.

Public Communications – The year-end expenditure on this line will be expended. It has been a busy year for communications. Together with our new communications contractor, we have produced an annual report, an education series of mini-digitized videos, developed a mid-year at-a-glance, and supported our social media presence. There is always much more to do, and as this fiscal year ends, we will be working on the strategic plan for the next five years. One staff member will also be joining the team to support our efforts in educating and telling the story of APFC and the Permanent Fund.

Board Support and Meetings – This line of expenditure includes meeting room expenses, catering, and transcription services. Overall this line is projected to have a surplus of \$30,590.

Social distancing and safety protocols influenced how Board meetings were hosted this year. We have been able to accommodate completely virtual meetings and socially distanced in-person meetings. While we have had to close our recent meetings to in-person public attendance, it has been great to have the public join and provide comments from the comfort of their own homes. As a result, expenses related to hosting in-person meetings are less than expected.

Information Technology (IT) – This line of expenditure includes system and consulting services, software licensing and maintenance, and IT equipment repair.

Between APFC's IT staff and our dedicated consultants, a tremendous amount of progress has been made on the following projects: engineering and installing our disaster recovery site infrastructure, preparing to transition APFC to Office 365, enhancing our internet security and our users' ability to work remotely and collaborate. We have also made great progress on implementing a much stronger and capable information security management system for the organization.

These projects are the final components to completing the technology refresh that began in 2017. APFC will continue to evolve toward a more modern workplace. With a move to Office 365 and continued investment in the collaboration technologies that the Microsoft 365 Cloud Suite brings, our workforce will be able to seamlessly transition between office and remote work.

For services relating to information technology, we are anticipating to lapse \$180,264. The surplus is generated from software licensing and system services. Projecting technology expenses prior to acquiring the technology is based on estimates and anticipated needs.

HR and Recruitment – This line of expenditure includes recruitment notices and Department of Revenue inter-agency expenses. Utilizing free online platforms, deepening relationships with partner organizations, and building on our already strong social media presence to promote active recruitments reduced our need to post on other more costly platforms, ultimately resulting in savings. The expected lapse for this line is \$36,426.

Training and Education – This line is projected to have a \$147,604 surplus. In addition to most conferences being canceled due to COVID-19, the training and education emphasis for this year has been primarily virtual at lower cost and with no travel. We are excited to continue our executive development with Applied Leadership, who will be partnering with APFC leadership to enhance the tools they have learned over the past year.

Office Support – This expenditure line is expected to have a surplus of \$84,489. This category includes inter-agency agreements, office and equipment leases, delivery services, and all communications necessary for day-to-day operations such as videoconferencing, telecommunications, mobile devices, etc. The surplus is primarily due to the RSA structure with the Department of Revenue changing to no longer include an

allocation for APFC to support the Commissioner's Office. The remaining surplus is spread across the services that support office functionality.

Commodities	FY21 Budget	FY21 Actuals & Projected	Projected Surplus
	\$336,900	\$251,400	\$85,500

The Commodities line includes subscriptions, reference materials, office supplies, furniture, and IT equipment that cost less than \$5,000 per item. The expenditure in this line is under budget by \$85,500, most of that coming from workstation equipment.

With the transition to working remotely, the importance of regularly replacing IT workstation equipment has become more apparent than ever. Because our IT Department made it a priority to ensure a regular replacement schedule was not only budgeted for but implemented timely, they were prepared to outfit the Corporation with the equipment necessary to conduct business remotely with little to no disruption. The projected expenses for the remainder of the fiscal year include purchasing 15 laptops and the equipment needed to outfit all of our new staff members.

Equipment	FY21 Budget	FY21 Actuals & Projected	Projected Surplus
	\$400,000	\$377,383	\$22,617

The Equipment line includes furniture and IT equipment that cost more than \$5,000 per item. This line is expected to have a surplus of \$22,617. The main initiatives reflected in this line include purchasing equipment necessary to complete the final stages of modernizing our production data center, increasing the capabilities of our Disaster Recovery Plan, and investing in artificial intelligence machines to expand security measures.

Two years ago, APFC's Business Continuity Disaster Recovery (BCDR) committee started developing a comprehensive BCDR plan. This plan is heavily dependent upon technology infrastructure. The complete plan was made up of three phases. Phase One, engineering a plan to begin duplicating data and compute capability in Fairbanks, our DR location, was completed in FY2019. Phase Two outfitted the DR site with the equipment necessary to support a fully functional operation. The completion of Phase Two was delayed due to COVID-19 but was recently completed. The final step in this phase will be the installation of a dedicated Blackrock line at the DR site. As soon as the Blackrock line is installed, we will conduct extensive system and user testing and finalize the BCDR documentation.

INVESTMENT MANAGEMENT COMPONENT

Investment Management	FY21 Budget	FY21 Actuals & Projected	Shortfall
Investment Manager Fees	\$114,297,200	\$145,099,270	(\$30,802,070)
Public Equities	77,861,110	111,446,247	(33,585,137)
Fixed Income	12,986,190	7,823,640	5,162,550
Alternative Assets*	23,449,900	25,829,383	(2,379,483)
Investment Systems	\$6,716,400	\$5,088,403	\$1,627,997
Investment Due Diligence	6,587,000	2,856,452	3,730,548
Custody Fees	1,800,000	1,198,999	601,001
Total	\$129,400,600	\$154,243,124	(\$24,842,524)

*includes Real Estate Fees

Note: This analysis includes a projection for investment management fees that are paid directly with corporate receipts. APFC has agreements in place in which management fees are netted directly from assets under management. This analysis and projection does not address these net fee arrangements. A report of fees paid to managers with net fee arrangements is included in each quarterly Board meeting packet.

Management fees are largely dependent upon investment performance, which is difficult to predict, particularly as far in advance as the budget process requires. The budget is built based upon projected growth for each asset class combined with anticipated actual fee structures for external management. Because of the unpredictability of these inputs and the nature of the budget approval process, a conservative buffer is built in to ensure that the Corporation can honor the terms of the contracts with its investment partners.

Even taking the added precaution of including a buffer, exceptional performance in a fiscal year like 2021 cannot be predicted. The higher overall Fund value and outperformance increased expenses associated with management fees that were not anticipated when the budget was created. Staff's close monitoring through December lead to the development of a supplemental request of \$50 million. Without the passing of the request, the total expenditures for the Investment Management budget are expected to have a shortfall of \$24.8 million. If the supplement request is approved, any surplus authorization will not lapse and will remain invested as part of the Earnings Reserve account of the Fund.

Public Equity – The shortfall of \$33.6 million for fees paid for the management of the public equity portfolio is due to the Fund outperforming the assumed returns. As of February 28, Public Equities' fiscal year-to-date performance was 33.82 percent. In comparison, the fee projections used to develop the budget back in September of 2019 assumed Callan's growth rate of 7.3 percent.

The contractual fees for Public Equities include two fee structures, base and incentive. Although positive performance impacted the base fees, incentive fees for a handful of managers doubled what was initially projected. Incentive fees are contracted and paid based on managers outperforming their relative benchmark on a calendar year basis. They are not directly related to market performance, making them nearly impossible to forecast.

Fixed Income – Fees paid for the external management of these portfolios are projected to result in a surplus of \$5.2 million. Fixed Income management fees are directly related to the value of assets managed. Roughly half of the surplus is correlated to Board action that moved REITs back to Real Estate and Listed Infrastructure to Alternatives on July 1, 2020. Due to the timing of the decision, fees for the program were still budgeted within Fixed Income Plus.

Real Estate – At the beginning of July, AEW Domestic was the only account with fees paid directly from the investment fee budget that made the transition. Since then, CSCM AH4RII, which previously resided in Alternatives, has also been reclassified as well. Additionally, fees associated with a new real estate asset will begin to hit this line in the fourth quarter of the fiscal year. Real Estate fees for the fiscal year are expected to be approximately \$2.9 million.

Alternatives – Exclusively looking at fees specific to Alternatives, we anticipated a surplus of \$531,869. Including the Real Estate fees rolling up into Alternatives, this line is expected to end the fiscal year with a shortfall of \$2.4 million. Pathway Capital continues to account for the majority of fees paid for Alternative Investments, roughly 94 percent.

Future projections will not include the Blackrock Risk Parity plan that was redeemed in September 2020. As of February, all associated fees were fully paid.

Investment Systems – There is a projected surplus of \$1.6 on this line for the year. Expenditures on this line include consulting related to systems that support investment activity such as Bloomberg and BlackRock, data feeds for investment systems that facilitate analytics and trading, and internet access fees.

We made significant progress researching cost-effective solutions to fulfill identified data gaps. We worked with the BlackRock team to rework the existing Aladdin system to consume ETF data from external sources. This rework, along with additional data feed from Bank of New York Mellon, will now provide enhanced portfolio analytics capabilities to our Public Equities team. This creative and successful solution came at a significantly less than anticipated cost.

The majority of the surplus is attributed to APFC's continued research for portfolio and risk analytics solutions for Private Assets. The current version of the BlackRock system that APFC uses has limited capabilities for Private Assets, a gap we are striving to close given the expanding Private Assets portfolio. We have identified a solution that may meet our needs through a preliminary procurement process. As we continue to do our diligence, we will have a better idea of the appropriate procurement path forward and related costs.

Investment Due Diligence – The projection indicates that expenditures in this category will be about \$2.9 million, which is substantially less than the budget authorization of \$6.6 million. A significant portion of this surplus authorization, approximately \$3.4 million, resides in the budget to secure third-party fiduciary advice, subject matter experts, and legal services when considering and acquiring investment opportunities. Budgetary depth will continue to be requested for this discretionary work to avoid restricting the required due diligence of investment opportunities. The remainder of the surplus authorization relates to manager searches and memberships that were not utilized this fiscal year.

Custody Fees – Bank of New York Mellon is the custodian of the Fund's assets. The annual service fee is a flat \$1 million. Additional expenditures on the contract include collateral management and tax advisory services.

CAPITAL PROJECTS

Project Name	Year Authorized	Authorization	Projected to be expended through June 30	Balance
APFC Headquarters Renovation	FY2018	\$4,050,000	\$3,779,720	\$270,280

The Department of Transportation (DOT), Dawson Construction, and Capital Office Furniture completed the office reconfiguration at the beginning of March 2019. On March 19, 2019, the Corporation received its certificate of permanent occupancy.

In April of 2020, APFC received our final closeout invoice from DOT. Since then, a solicitation was conducted to commission four Alaskan artists to expend our authorized art allowance, AS 35.27.020. Each of the art pieces will be installed before June 30, at which point APFC will request to have the capital project closed.

SUBJECT: FY22 Budget Approval

ACTION: X

DATE: May 20, 2021

INFORMATION:

BACKGROUND:

Per Board Resolution, 98-6 Authorization to Expend Approved Funds:

Before the end of the current fiscal year, APFC staff shall present to the Board of Trustees the final operating and capital budgets authorized by the Legislature for the succeeding fiscal year, and identify budget reductions by the Legislature, if any, along with an analysis of resulting corporate or program effect.

The Board of Trustees authorizes the Executive Director, following proper notification to the Trustees in accordance with the requirements of Resolution 98-6, to expend from appropriations as authorized by Trustee policy and the Legislature beginning July 1 of the fiscal year.

In October 2020, the Board approved a detailed budget for presentation to the Legislature through the Office of Management and Budget (OMB).

STATUS:

The Board of Trustee's proposed FY2022 Budget was presented in the Governor's Budget, HB 69, in its entirety. On April 23, 2021, the House Finance Committee presented Committee Substitute (CS) of HB 69. It included the FY2022 Operating Budget and the Corporation's FY2021 Supplemental request of \$50 million for Investment Management Fees. APFC's FY2022 Governor Amendment for an additional \$60 million in Investment Management Fees has been submitted to OMB and will be routed to the Legislature for consideration. Several stages in the Legislative approval and Governor enactment process must occur before the outcome of our FY2022 Budget will be known.

BOARD PROPOSED BUDGET:

Annually, the Budget is developed utilizing a zero-based budgeting approach. In the summer of 2020, all department heads thoroughly reviewed prior-year expenditures to compile and project FY2022 expenses. This process resulted in reductions to four lines of expenditure: Contractual Services, Commodities, Investment Due Diligence, and Custody Fees; and increases to Personal Services, Travel, Equipment, Investment Management Fees, and Investment Systems.

The overall variance compared to the FY2021 authorized Budget resulted in an increase of \$1.1 million in the Operating Allocation and a \$3.6 million increase in the Investment Management Allocation, totaling an increase of \$4.7 million.

Within the Operating Allocation, reductions were primarily attributed to IT contractual services and IT-related commodities. This is the second consecutive year that these lines of expenditure have been reduced. Our IT Team's successful efforts to modernize our IT infrastructure and equipment have contributed to the continued reductions as we are now entering into a maintenance phase. Although continual declines in these areas of expenditure are not guaranteed, future IT budget-related expenditures

will be dependent on the equipment replacement cycle, emerging technologies, and security upgrades versus a complete renovation.

The increase in the Operating Allocation is mainly due to Personal Services. The request included an adjusted incentive compensation plan to fund a portion, \$890,000, of the estimated maximum distribution of \$2.5 million, a new Global Rates Analyst for Fixed Income \$195,803, and merit adjustments \$181,406. At the request of the Board, funding for the incentive compensation plan was brought forth at this reduced level. The intention in requesting a reduced amount was to be more aligned with what would have been actually distributed had the plan been funded in the FY2021 Budget.

In the Investment Management Allocation, reductions were taken in Investment Due Diligence and Custody Fees. These reductions were based on reviewing FY2020 actuals and contractual terms for Bank of New York Mellon reducing to a yearly flat fee.

Increases to the allocation included funds for Investment Management Fees \$117.2 million and Investment Systems \$8 million. Fees were forecasted using similar assumptions to what was used to generate the FY2021 Budget request. The additional funds requested for Investment Systems were to cover the natural growth in subscription costs, the potential need to acquire new data feeds, and the anticipated procurement of the systems necessary to fulfill our need for portfolio and risk analytics for Private Assets.

In early April, a Governor Amendment was submitted to include an additional \$60 million for Investment Management Fees. As staff reviewed FY2021 Investment Management Fees, it was determined that if performance continued to be strong through the calendar year 2021, the FY2022 budget obligations would likely look similar. To mitigate the need for a potential supplemental in the coming fiscal year, an amendment has been requested to bring the total request for the Investment Management Fee Allocation to \$193,039,100 for FY2022.

In summary, the Board Proposed FY2022 Operating Budget contained an increase of \$4.7 million across both the Operating and Investment Management allocations. As the Legislative appropriation process continues, the outcome of APFC's Operating Budget, supplemental, and the amendment will be determined.

	BOT Proposed Increments/Decrements
Personal Services	\$1,197,600
Merit and Retention Adjustments	\$181,406
Adjusted Staff Compensation Plan*	\$890,000
New Global Analyst- Fixed Income	\$195,803
Board Honorarium	(\$6,540)
Vacancy	(\$63,069)
Operational Reductions	(\$76,600)
Investment Management Fees	\$3,638,500
Total Increment from FY21 Authorized Budget to FY22	\$4,759,500

* In accordance with the policy passed by the Board, the maximum distribution of the Staff Incentive Compensation plan was estimated to be \$2,530,400.

A comparison of the Board's Authorized FY2021, Proposed FY2022 request, and the Gov Proposed Operating Budget is outlined below:

	Authorized	BOT Proposed	GOV Proposed
	FY2021	FY2022	FY2022
Operating Allocation	\$17,680,700	\$18,801,700	\$18,801,700
Personal Services	\$12,839,400	\$14,037,000	\$14,037,000
Travel	\$700,000	\$800,000	\$800,000
Contractual Services	\$3,404,400	\$3,213,600	\$3,213,600
Commodities	\$336,900	\$201,100	\$201,100
Equipment	\$400,000	\$550,000	\$550,000
Investment Management Allocation	\$129,400,600	\$133,039,100	\$133,039,100
Investment Manager Fees	\$114,297,200	\$117,221,500	\$117,221,500
Investment Due Diligence	\$6,587,000	\$6,136,700	\$6,136,700
Investment Systems	\$6,716,400	\$8,080,900	\$8,080,900
Custody Fees	\$1,800,000	1,600,000.00	1,600,000.00
Total Appropriation	\$147,081,300	\$151,840,800	\$151,840,800

RECOMMENDATION:

	Supplemental Request Authorization	Requested Authorization	Governor Amendment Authorization
	FY2021	FY2022	FY2022
Operating Allocation		\$18,801,700	
Personal Services		\$14,037,000	
Travel		\$800,000	
Contractual Services		\$3,213,600	
Commodities		\$201,100	
Equipment		\$550,000	
Investment Management Allocation	\$50,000,000	\$133,039,100	\$60,000,000
Investment Manager Fees		\$117,221,500	
Investment Due Diligence		\$6,136,700	
Investment Systems		\$8,080,900	
Custody Fees		1,600,000.00	
FY22 Total Appropriation Authorization		\$151,840,800	\$211,840,800

Proposed Board Motion:

“The Board moves to authorize the Chief Executive Officer to expend the APFC budget authorization, and supplemental, as authorized by the Legislature and enacted into law.” If final budget negotiations produce a different outcome than what was presented, the Board authorizes the CEO to expend the legislative authorizations contained in the bill signed by the Governor.”



FY21 Budget Projections

Two Allocations -

- Corporate Operations
- Investment Management Fees

Capital Budget



Corporate Operations

- Personal Services
- Travel
- Contractual Services
- Commodities
- Equipment

Total Corporate Operations

Total Corporate Operations	FY21 Budget	FY21 Actuals & Projected	Projected Surplus
	\$ 17,680,700	\$ 14,454,705	\$ 3,134,995

Personal Services

Total Personal Services	FY21 Budget	FY21 Actuals & Projected	Projected Surplus
	\$ 12,839,400	\$ 10,891,199	\$ 1,948,201

- Salaries
- Benefits
- Trustee Honoraria

Personal Services Surplus

Position Title	# of PCNs	Status
Accountant	3	2-Filled, 1 Actively recruiting
Investment Associate	2	1-Filled, 1-Actively recruiting
Investment Officer	5	4-Filled, 1-Actively recruiting
Investment Analyst	1	Filled
Risk Officer	1	Filled
IT Systems Engineer	1	Filled
Communications Specialist	1	Filled
Corporate Interns	2	2-Filled
Admin. Specialist	6	4-Filled, 2-pending (part-time)
Analyst	2	1-Filled, 1-pending
Chief/Director of Operations	1	Pending

Travel

Total Travel	FY21 Budget	FY21 Actuals & Projected	Projected Surplus
	\$ 700,000	\$ 131,211	\$ 568,789

- Staff
- Trustee
- Moving/Non-employee

Contractual Services

	FY21 Budget	FY21 Actuals & Projected	Projected Surplus
Audit, Legal, Consulting	445,945	415,470	30,475
Public Communications	146,500	146,460	40
Board Support and Meetings	76,000	45,410	30,590
Information Technology	1,725,500	1,545,236	180,264
HR and Recruitment	77,436	41,010	36,426
Training/Education	185,925	38,321	147,604
Office Support	747,094	662,605	84,489
TOTAL	\$ 3,404,400	\$ 2,894,512	\$ 509,888

*Contractual Services for Investment Management Fees are outlined on slide 11

Commodities

Total Commodities	FY21 Budget	FY21 Actuals & Projected	Projected Surplus
	\$ 336,900	\$ 251,400	\$ 85,500

- Office/IT Supplies
- Subscriptions
- Equipment < \$5,000

Equipment

Total Equipment	FY21 Budget	FY21 Actuals & Projected	Projected Surplus
	\$ 400,000	\$ 377,383	\$ 22,617

- Equipment > \$5,000

Investment Management Fees

	FY21 Budget	FY21 Actuals & Projected	Projected Surplus/ Shortfall
Investment Manager Fees	\$ 114,297,200	\$ 145,099,270	\$ (30,802,070)
Public Equity	77,861,110	111,446,247	(33,585,137)
Fixed Income Plus	12,986,190	7,823,640	5,162,550
Alternative Investments	23,449,900	25,829,383	(2,379,483)
Investment Systems	6,716,400	5,088,403	1,627,997
Investment Due Diligence	6,587,000	2,856,452	3,730,548
Custody Fees	1,800,000	1,198,999	601,001
TOTAL	\$ 129,400,600	\$ 154,243,124	\$ (24,842,524)

FY 21 Supplemental Request

- Board approved \$25 million with authority to adjust the request as needed.
- A \$50 million request was submitted to meet projected investment management fee contractual obligations , increasing the total request for the Investment Management Fee Allocation to \$179,400,600.

Fee Projections

Investment Manager Fees - 12/19/2019		114,297,218.15
	Public Equities	77,861,113.98
	Fixed Income	12,986,190.19
	Real Estate	-
	Alternatives	23,449,913.99

Investment Manager Fees -11/20/2020		129,898,568.39
	Public Equities	92,598,959.25
	Fixed Income	7,636,282.36
	Real Estate	2,227,688.21
	Alternatives	27,435,638.57

Investment Manager Fees - 4/23/2021		145,099,270.32
	Public Equities	111,446,247.12
	Fixed Income	7,823,639.96
	Real Estate	2,911,352.25
	Alternatives	22,918,030.99

Capital Project

	Year Authorized	Authorization	Expended to Date	Balance
APFC Headquarters Renovation	FY2018	\$ 4,050,000	\$ 3,779,720	\$ 270,280

A teal-colored background featuring a close-up, slightly out-of-focus image of a pine branch with needles and a small, textured, light-colored growth or seed pod. The word "Questions?" is centered in white text.

Questions?



FY22 Budget Authorization



FY22 BOT Budget Request

- \$151,840,800
- Adjusted Staff Compensation Plan
- New Global Rates Analyst-Fixed Income
- Merit and Retention Adjustment

Change from FY21

	BOT Proposed Increments/ Decrements
Personal Services	\$ 1,197,600
Merit and Retention Adjustments	181,406
Adjusted Staff Compensation Plan*	890,000
New Global Analyst- Fixed Income	195,803
Board Honorarium	(6,540)
Vacancy	(63,069)
Operational Reductions	(76,600)
Investment Management Fees	3,638,500
Total Increment from FY21 Authorized Budget	\$ 4,759,500

*In accordance with the policy passed by the Board, the maximum distribution of the Incentive Compensation plan was estimated to be \$2,530,400.

FY22 Proposed Budget

	FY21 Authorized	BOT/GOV Proposed	Supplemental and Amendments	House Finance CS HB 69 (FIN)
Operating Allocation	\$ 17,680,700	\$ 18,801,700		\$ 18,801,700
Personal Services	\$ 12,839,400	14,037,000		
Travel	\$ 700	800,000		
Contractual Services	\$ 3,404,400	3,213,600		
Commodities	\$ 336,900	201,100		
Equipment	\$ 400,000	550,000		
Investment Mgmt. Allocation	\$ 129,400,600	\$ 133,039,100		\$ 133,039,100
Investment Manager Fees	\$ 114,297,200	117,221,500		
Investment Due Diligence	\$ 6,587,000	6,136,700		
Investment Systems	\$ 6,716,400	8,080,900		
Custody Fees	\$ 1,800,000	1,600,000		
Total Appropriation	\$ 147,081,300	\$151,840,800		\$ 151,840,800
Investment Management Fee FY2021 Supplemental			\$ 50,000,000	\$ 50,000,000
Investment Management Fee FY2022 Amendment			\$ 60,000,000	

FY22 Governor Amendment

- To mitigate the need for a potential FY22 supplemental, a \$60 million amendment was submitted, increasing the total request for the Investment Management Fee Allocation to \$193,039,100.

Fee Projection

Investment Manager Fees - 8/12/2020		117,221,489.11
	Public Equities	75,895,661.04
	Fixed Income	7,755,846.82
	Real Estate	1,114,386.93
	Alternatives	32,455,594.31



Motion to Authorize Expenditure