RSIC

RETIREMENT SYSTEM INVESTMENT COMMISSION

Commission Meeting Agenda

Thursday, June 4, 2020 9:30 a.m.

MEETING PARTICIPANTS WILL APPEAR VIA TELECONFERENCE

RSIC Presentation Center Open for Public Access to Teleconference

I. Call to Order and Consent Agenda
   A. Adoption of Proposed Agenda
   B. Approval of March 2020 and April 2020 Minutes

II. Chair's Report
   A. Election of Chair and Vice-Chair

III. CEO's Report

IV. CIO's Report
   A. Investment Performance Update
   B. AIP Progress Update

V. Strategic Investment Topics Presentation – Meketa
   A. Long-term Investing in a Recession
   B. China Accounting and Auditing Rules

VI. Delegated Investment Report

VII. Executive Session – To discuss investment matters pursuant to S.C. Code Sections 9-16-80 and 9-16-320; and receive advice from legal counsel pursuant to S.C. Code Section 30-4-70(a)(2).

VIII. Potential Action Resulting from Executive Session

IX. Adjourn

NOTICE OF PUBLIC MEETING

This notice is given to meet the requirements of the S.C. Freedom of Information Act and the Americans with Disabilities Act. Furthermore, this facility is accessible to individuals with disabilities, and special accommodations will be provided if requested in advance.

South Carolina Retirement System Investment Commission
Meeting Minutes

March 5, 2020 9:30 a.m.
Capitol Center
1201 Main Street, 15th Floor
Columbia, South Carolina 29201
Meeting Location: Presentation Center

Commissioners Present:
Dr. Ronald Wilder, Chair
Dr. Rebecca Gunnlaugsson, Vice Chair
Ms. Peggy Boykin, PEBA Executive Director
Mr. Allen Gillespie
Mr. Edward Giobbe
Mr. Reynolds Williams (via telephone)
Mr. William H. Hancock
Mr. William J. Condon, Jr.

I. CALL TO ORDER AND CONSENT AGENDA

Chair Dr. Ronald Wilder called the meeting of the South Carolina Retirement System Investment Commission ("Commission") to order at 9:30 a.m. Mr. William J. Condon, Jr. made a motion to adopt the proposed agenda as presented. Mr. Edward Giobbe seconded the motion, which was approved unanimously.

Mr. William H. Hancock made a motion to approve the minutes from the December 12, 2019 Commission meeting as amended. Dr. Rebecca Gunnlaugsson seconded the motion, which passed unanimously.

II. CAPITAL MARKET EXPECTATIONS REVIEW – MEKETA INVESTMENT GROUP

The Chair turned to Mr. Geoffrey Berg, Chief Investment Officer, to introduce Mr. Frank Benham, Managing Principal, Meketa Investment Group ("Meketa"), to give a presentation on capital market expectations. Mr. Benham started by stating that Meketa updates their capital market expectations each year in January, which informs the long term expected return of the portfolio. For calendar year 2019, the risky assets had particularly good performance, and the bond yields went down. Both of these experiences reduce the forward-looking return. He noted that as a result of the lower expectations for return, the portfolio's long-term performance expectation declined from 8.04 percent to 7.41 percent over a 20year horizon. Mr. Benham provided additional details about how Meketa develops its expectations and how both quantitative and qualitative factors are assessed. There was a long discussion on various topics related to the formulation of Meketa's assumptions and the way that the assumptions are used by the Commission in developing its policies.

Mr. Benham continued explaining how Meketa develops their capital market expectations by identifying asset classes and strategies that are appropriate for long-term allocation of funds, and that are investable. He noted several considerations that influence the process, including unique return behavior, the existence of an observable historical track record for an asset class, whether a robust market exists, and client requests. Meketa then makes forecasts for each asset class. He noted that Meketa has created inputs for 81 'asset classes' in 2020. He explained that Meketa's first step is to develop a ten-year forecast based on fundamental models, and to subsequently develop a 20-year expectation. Mr. Benham then briefly reviewed a peer study to provide the Commissioners comparison data from other consultants. After additional discussion, Mr. Benham, Mr. Berg, and the Commissioners turned to a detailed discussion of the 2020 expectations with comparison to the 2019 expectations. In response to questions from the Commissioners Mr. Benham noted that the 7.41 percent expected return for 2020 was developed using the implementation portfolio rather than the simple five asset policy portfolio. A lengthy discussion ensued regarding the implementation benchmark and the five asset class portfolio. Mr. Benham concluded by stating that as a result of strong market returns in 2019, the Commission is in a better financial condition than it was 12 months prior, but the downside of such returns is that the forward-looking returns for the portfolio declined. Mr. Berg asked Mr. Benham to remind the Commission of the results from Meketa's survey on annual or frequent plan changes to clients' asset allocation. Mr. Benham quickly summarized Meketa's research, which indicated that during a time of volatility, their clients' better course of action is to stick with the long term plan rather than make asset allocation changes.

III. EXPERIENCE STUDY PRESENTATION – GRS ACTUARIAL CONSONSULTANTS

Mr. Michael R. Hitchcock, Chief Executive Officer, introduced representatives from GRS Actuarial Consultants ("GRS"): Mr. Joe Newton and Mr. Danny White. Mr. Newton began by discussing the 2020 Experience Study of the Plan. He outlined GRS' actuarial process, which is based on assumptions that occasionally change to reflect new information, changing characteristics, changing patterns of retirement, terminations, mortality, and various other factors. Mr. Newton noted that the South Carolina Public Employee Benefit Authority ("PEBA") ultimately approves the assumptions used in the evaluation with the exception of the investment return assumption, which is prescribed by law. Mr. Newton outlined the experience study process that begins by comparing the actual experience to the then existing actuarial assumptions. GRS then recommends changes to assumptions, if necessary, to better align with future expectations. Then, the past experience is reviewed over a given timeframe to identify how many members retired, were terminated, became disabled, or died. Mr. Newton noted that GRS' emphasis is on forward-looking expectations for economic assumptions.

Mr. Newton went on to explain that, with respect to the investment return assumption, GRS utilized data provided by Meketa and verified that Meketa's 2019 investment return expectations were consistent with industry standards. He stated that, based on forward looking expectations and input received from the Commission, a 7.25 percent investment return assumption was a reasonable return assumption. However, GRS recommended that the South Carolina General Assembly should adopt a 7.00 percent return assumption for 2021 and into the foreseeable future. He clarified that a 7.00 percent return assumption is the approximate mid-point between the short-term rate of 6.57 percent and the long-term rate of 7.44 percent, which are GRS' current expectations.

The next topic Mr. Newton discussed was payroll growth. He explained that payroll growth correlates to increasing revenue streams for the Plan and is determined by percentage of pay. Mr. Newton also explained how payroll growth is used to project contributions over time. He stated that 3.00 percent is the current total payroll assumption. He noted that, nationally, wage inflation has exceeded price inflation by 0.55 percent per year for the last ten years. Mr. Newton also noted that the South Carolina Retirement System ("SCRS") has experienced membership changes. Over the last ten years, the population has increased by 1.2 percent per year, and consequently, SCRS membership has increased 0.35% per year over the same period.

Mr. Newton then moved on to reviewing cost impacts to the Plan. He overviewed how different return assumptions would impact cost rates. He then explained how different assumed rates of return would affect the Plan's funded status. Thereafter, Mr. Newton reviewed the unfunded liability which led to an extensive discussion amongst the Commissioners.

A break was taken from 11:05 a.m. until 11.19 a.m.

Mr. White began his presentation by explaining the various demographic risks that the Plan may encounter. He first discussed market volatility and membership behavior, which he explained are generally predicable due to the large numbers associated with each. He further stated that the economy can have some influence on turnover behavior but that retiree morality is predictable. Mr. White discussed the employer participation risk. He stated that the risk can result from legislation, contribution rate increases, and employer budget constraints. Ms. Peggy Boykin referenced recent legislation regarding the Plan to be taken up by the South Carolina Senate, which led to a group discussion on proposed legislation and employer behavior.

Dr. Gunnlaugsson made a motion to recede into Executive Session to discuss investment matters, pursuant to S.C. Code Sections 9-16-80 and 9-16-320, that may impact the Annual Investment Plan. Mr. Hancock seconded the motion, which passed unanimously.

IV. CONSOLIDATED ANNUAL INVESTMENT PLAN AND STATEMENT OF INVESTMENT OBJECTIVES AND POLICIES CONSIDERATION

After the Commissioners reconvened in open session, Dr. Wilder noted that the Commissioners discussed one item in executive session. He then requested a motion to approve that discussion. Mr. Condon then made a motion to carry over consideration of the Consolidated Annual Investment Plan and Statement of Investment Objectives and Policies until the next meeting. Mr. Hancock seconded the motion and it was passed unanimously.

V. EXECUTIVE SESSION

Mr. Hancock made a motion to recede back into Executive Session to discuss additional investment matters pursuant to S.C. Code Sections 9-16-80 and 9-16-320, including a comprehensive review of the private equity portfolio performance and a discussion of various underlying holdings, and a review of potential investments in the due diligence process; and receive advice as needed from legal counsel, pursuant to S.C. Code Section 30-4-70(a)(2), related to potential investment matters. Dr. Gunnlaugsson seconded the motion, which passed unanimously.

VI. POTENTIAL ACTION RESULTING FROM EXECUTIVE SESSION

Mr. Hitchcock noted that the Commission did not take any reportable action while in Executive Session and that any action that did occur while in Executive Session pursuant to S.C. Code Ann §9-16-80 and 9-16-320 would be publicized when doing so would not jeopardize the Commission's ability to achieve its investment objectives or implement a portion of the annual investment plan.

VII. MACROECONOMICS PRESENTATION – BOB PRICE, BRIDGEWATER ASSOCIATES

Mr. Berg introduced Mr. Robert Price, Co-Chief Investment Officer of Bridgewater Associates and explained that Mr. Price would be presenting his report via video conference due to travel restrictions related to the coronavirus. Mr. Price joined Bridgewater in 1986, and is responsible for managing the company's investment process alongside the other Co-CIOs, Mr. Ray Dalio and Mr. Greg Jensen.

Mr. Price started off by stating that there is a great deal of uncertainty related to the impact of the coronavirus, and what happens with the virus is going to have a big impact on the economy and the market. He outlined three points of his presentation. First, he stated that it is important to recognize that as conditions unfold, those outcomes are being substantially impacted by the longer-term secular debt deflationary forces. His second point was that the economy has transitioned from an extended but weak expansion to a new cycle that is not going to look like cycles in the past. The third point Mr. Price offered is that monetary policy as a tool for stimulation has reached the end of its useful life. He explained that the combination of fiscal stimulation accompanied by monetary accommodation would be needed to stimulate the economy and bring it out of a downturn. Mr. Price outlined the impact of the deflationary debt, deflationary overhangs, and the response by central banks. He discussed inflation in developed economy reserve currency countries such as the U.S., Europe and Japan. He explained that he expects divergences in secular growth rates that are going to have compounded economic and wealth effects over the next ten years. He also noted that he expects to see trade conflicts increase during the next decade.

Mr. Price went into a deep discussion about how an economy works, based on an outline of the three forces that drive economic growth: productivity, long-range debt cycle and short-term debt cycle. Mr. Price paused to answer questions from the Commission and Mr. Berg throughout the discussion. In response to questions from the Commission, a discussion about the coronavirus ensued followed by Mr. Price providing insight on the effects of the flattening of U.S. rates on the bond market. Following questions, Dr. Wilder thanked Mr. Price for his presentation and discussion with the Commission.

After the Bridgewater presentation, at 3:00 p.m. Dr. Gunnlaugsson moved that the Commission resume Executive Session to discuss investment matters pursuant to S.C. Code Sections 9-16-80 and 9-16-320, including a comprehensive review of the private equity portfolio performance and a discussion of various underlying holdings, and a review of potential investments in the due diligence process; and to receive advice as needed from legal counsel pursuant to S.C. Code Section 30-4-70(a)(2) related to potential investment matters. Mr. Hancock seconded the motion, which passed unanimously.

VIII. QUARTERLY INVESTMENT PERFORMANCE REVIEW

After reconvening in open session, Mr. Berg began by stating that as of December 31, 2019, the Plan had a one-year return of 16.8 percent, which was 24 basis points behind the policy benchmark. He reviewed individual asset class returns, as well as asset class compliance with allowable ranges, and noted that all asset classes were within allowable ranges.

Mr. Berg then turned to the portfolio framework analysis. He highlighted several items noted in the analysis. First, although 2019 was a very good year for the Plan, it was an even better year for a simple stock portfolio, with the Reference Portfolio significantly outperforming in both calendar and FY 2019. Secondly, top down portfolio structure decisions added value in the first half of calendar year 2019, due to large overweight to equities, but were slightly negative for the fiscal year to date. Lastly, the framework revealed poor active returns in Public Equity and Credit during calendar year 2019. He stated that the equity overweight and the underweight to options strategies both assisted Plan performance, as did the underweight to core fixed income. Mr. Berg also noted the consistent performance from portable alpha, as well as the expected short term, adverse impact of the secondary sale conducted during the last quarter.

Mr. Berg also reviewed the Plan’s three-year performance versus the policy benchmark, noting the continuing challenges of active management in areas including GTAA and Global Public Equity. After additional discussion, Mr. Berg concluded his presentation.

IX. REPORTS

A. Commission Chair Report: The Chair reminded the Commissioners of the March 30, 2020 statutory deadline to file their individual Statements of Economic Interest.

B. Committee Chair Reports:

a. Mr. Hancock presented the report of the Audit & Enterprise Risk Management Committee as written and noted that it had been made available to the Commissioners for review prior to the meeting

b. Dr. Rebecca M. Gunnlaugsson reported that the Human Resources & Compensation Committee met on February 24, 2020. The Committee received a staff update from Mr. Hitchcock and received information on the annual CEM review of positions and salaries. The Committee also preformed its annual Charter Review.

C. CEO's Report: Mr. Hitchcock noted that he had nothing to report to the Commission at this time.

D. CIO's Report: Mr. Berg stated he had nothing to report to the Commission at this time.

E. AIP Progress: Mr. Berg highlighted new initiatives, including completing the launch of the co-investment program and working on a plan to integrate the use of secondary sales into the private markets portfolio.

F. Delegated Investments: The following delegated investments were closed by Staff since the December 2019 Commission meeting:

Asset Class Investment	**Investment**	**Amount**	**Closing Date**
Private Equity	Aberdeen U.S. Private Equity VIII	$50 M	December 23, 2019
Infrastructure	Brookfield Infrastructure Partners IV	$100 M	January 31, 2020
Private Equity	Valor Equity V	$75 M	February 6, 2020

X. ADJOURNMENT

There being no further business, Mr. Gillespie moved to adjourn the meeting. Mr. Williams seconded the motion, which passed unanimously, and the meeting adjourned at 4:26 p.m.

[Staff Note: In compliance with S.C. Code Section 30-4-0, public notice of and the agenda for this meeting was delivered to the press and to parties who requested notice and were posted at the entrance, in the lobbies and near the 15th Floor Presentation Center at 1201 Main Street, Columbia, S.C., 4:32 p.m. on March 2, 2020]

South Carolina Retirement System Investment Commission
Meeting Minutes

April 16, 2020 9:30 a.m.
Capitol Center
1201 Main Street, 15th Floor
Columbia, South Carolina 29201
Meeting Location: Video Presentation

Commissioners Present:
Dr. Ronald Wilder, Chair
Dr. Rebecca Gunnlaugsson, Vice Chair
Ms. Peggy Boykin, PEBA Executive Director
Mr. Allen Gillespie
Mr. Edward Giobbe
Mr. Reynolds Williams
Mr. William H. Hancock
Mr. William J. Condon, Jr.

I. CALL TO ORDER AND CONSENT AGENDA

Chair Dr. Ronald Wilder called the meeting of the South Carolina Retirement System Investment Commission ("Commission") to order at 9:35 a.m. Mr. Allen Gillespie made a motion to approve the proposed agenda as presented. Mr. Edward Giobbe seconded the motion, which was approved unanimously.

Mr. Gillespie asked whether they were incorporating the March agenda or whether there was anything linking back to the March meeting documents. Mr. Michael R. Hitchcock, Chief Executive Officer, explained that the consideration of the Consolidated Annual Investment Plan ("AIP") and Statement of Investment Objectives and Policies("SIOP") was carried over from the March meeting, but no other items from the March agenda were being considered at the April meeting.

Mr. Hitchcock recognized two new members from Meketa Investment Group, Inc. ("Meketa"), Ms. Alli Wallace Stone and Mr. LaRoy Brandtly who will be working with the Commission. Mr. Hitchcock noted that Mr. Peter Woolley of Meketa would also continue assisting the Commission.

Mr. Hitchcock then commended the Staff on the successful transition to remote work during the COVID-19 pandemic. He especially thanked the IT team, Ms. Kathleen Shealy and Mr. Eric Baker, for their help. He noted that Mr. Geoffrey Berg, Chief Investment Officer, would provide additional information about how the investment team had been working to position the Portfolio during the current volatile markets.

II. CHAIR'S REPORT

The Chair began his report by noting that his term as Chair would expire on June 30, 2020. He then called for nominations for the Chair and Vice Chair positions for the term to commence on July 1, 2020, noting that a vote would take place during the meeting on June 4, 2020. He also stated that the nominations would remain open until the next Commission meeting. Dr. Rebecca Gunnlaugsson nominated Mr. William H. Hancock as Chair and Dr. Ronald Wilder as Vice Chair. Mr. Gillespie moved to approve the nominations; Mr. Reynolds Williams seconded the motion.

Dr. Wilder asked for further nominations for Chair and Vice Chair. There being no further nominations, he noted that he would adopt the power of the Chair and stated that the nominating process would remain open until the next meeting.

III. CONSIDERATON OF CONSOLIDATED ANNUAL INVESTMENT PLAN AND STATEMENT OF INVESTMENT OBJECTIVES AND POLICIES

The Chair then introduced the consideration of the Consolidated Annual Investment Plan and Statement of Investment Objectives and Policies ("AIP/SIOP"). He stated that the discussions regarding revisions to the AIP/SIOP began in early 2019. A consensus was reached on key details at prior meetings on the Reference Portfolio, Plan weights, and the roles of Commissioners, the CEO and the CIO. The Chair expressed his opinion that the document under consideration was a big improvement over previous versions. The Chair then recognized Mr. Hitchcock for his presentation on the AIP/SIOP.

Mr. Hitchcock gave a brief history of the development of the current draft AIP/SIOP and reiterated to the Commission that the draft AIP/SIOP would require that Staff prove the need to add complexity to the Plan. He noted that by adopting a simple two asset class portfolio as the Reference Portfolio, while adopting a simplified five asset class Policy Portfolio and Implementation Benchmarks, the Commission demonstrated its belief that it sees value in Staff's ability to manage asset weights differently than in the Policy Portfolio. After a brief discussion regarding portable alpha, which is used as an implementation method by which Staff utilizes hedge funds and synthetic exposure, and its role in the Plan, Mr. Hitchcock noted that the draft AIP/SIOP under consideration attempted to incorporate a record for new Commissioners to understand how the Commissioners had reached decisions on asset allocation over time.

Mr. Hitchcock then noted that due to a miscommunication with the Meketa team regarding the inputs for the 2020 capital market expectations, he had included two options in the current draft AIP/SIOP for the Commissioner's consideration. He explained that Meketa's capital market expectations had been developed assuming that the Commission intended portable alpha to remain part of the Policy Portfolio, Therefore, Meketa had incorporated the expected impact of portable alpha into their projected returns. This resulted in a small difference between the return expectations with portable alpha (7.41 percent) and without portable alpha (7.22 percent) and a small difference in expected volatility and the probability of exceeding the assumed rate of return.

Option one proposed to leave the simple five asset plan in place and recognize that, as long-term investors, the Commission should not make long term decisions on short term volatility and return expectations. The second option proposed was to maintain portable alpha as a part of the stated Policy Portfolio.

The Chair suggested that the Commission approach the draft AIP/SIOP in three steps. 1. The Commissioners would have an opportunity to ask Mr. Hitchcock questions about his summary. 2. The Commissioners would discuss and vote on option one or two. 3. After voting on option one or two, the Commissioners would then vote on the AIP/SIOP as presented, subject to any amendment.

The Commissioners then engaged in a lengthy discussion regarding the proposed AIP/SIOP and the two options presented by Mr. Hitchcock, asking various questions of Mr. Hitchcock, Mr. Berg and the Meketa team. After an extensive discussion the Chair called for any additional questions for Mr. Hitchcock and Mr. Berg. He then proceeded to step two and requested questions and comments from the Commissioners regarding Mr. Hitchcock's proposed option one and two for the AIP/SIOP. After hearing from several Commissioners, the Chair requested any concluding comments or questions on the options or a motion to adopt option one. Mr. Giobbe moved to adopt option one into the AIP/SIOP. Mr. Williams seconded the motion, which was adopted unanimously.

The Commissioners then moved to step three and commenced a discussion of the AIP/SIOP as a whole. After a lengthy discussion amongst the Commissioners regarding the draft AIP/SIOP, Mr. Hitchcock assured the Commissioners that the AIP/SIOP would be very carefully reviewed for any needed technical updates to reflect the decisions made by the Commissioners. After additional discussion and in response to questions raised by Mr. Condon, Mr. Hitchcock offered to develop a compendium of presentations presented to the Commissioners as decisions were made historically and include relevant portions of the meeting minutes. This would enable someone to trace how the Commission made these decisions through time. The Chair, after receiving no further questions or comments, called the question. Mr. Giobbe made a motion to (i) adopt the recommendation of the CEO and CIO to approve the Consolidated Annual Investment Plan and Statement of Investment Objectives and Policies ("AIP/SIOP"), as set forth in the red-numbered document on pages two to 49, and incorporating option one as set forth in Section III (D) of the AIP/SIOP and discussed during the meeting, for Fiscal Year 2020-2021 effective July 1, 2020; and (ii) authorize Staff to finalize the AIP/SIOP by making any technical revisions or formatting edits consistent with the action taken by the Commission. Mr. Hancock seconded the motion, which was approved by a vote of six to one, with Mr. Condon voting against the motion, and Dr. Gunnlaugsson, Mr. Williams, Mr. Hancock, Mr. Gillespie and Dr. Wilder voting in favor of the motion.

The Commissioners then took a break from 11:01 a.m. to 11:11 a.m.

IV. INVESTMENT PERFORMANCE UPDATE

The Chair recognized Mr. Berg for a market update and portfolio review. Mr. Berg began by stating that the current situation is a challenging situation facing investors. He stated that the coronavirus pandemic has created what economists are predicting could be the most severe recession in 90 years and that asset prices have reacted swiftly and severely He noted that the outcome will be based on a host of variables that are currently unknown. He explained that the Federal Government has responded in some very meaningful ways aimed at un-thawing the credit markets, which has been very well received by the market. He noted that there is a great divergence of opinion on what the future holds, but that markets will continue to be very volatile.

Mr. Berg then stressed the importance of liquidity management and noted that Staff is very focused on maintaining a strong liquidity position from which RSIC can both fund benefit obligations and capitalize on opportunities in the market. He then summarized a three-phase action plan for the Commission. Phase one covers liquidity management. He explained that in 2018 he, Mr. Bryan Moore, Director of Public Markets, and other investment staff members conducted a liquidity "fire drill" roundtable, modeling 30 percent market declines to stress test the RSIC's liquidity management. In early March, Mr. Berg re-convened the same team and drew up a liquidity plan in response to the current market situation. The investment team's focus is on maintain appropriate market exposures. The team helped develop a playbook that has served the Plan well. He noted that the Plan has sufficient liquidity to weather an additional 50 percent decline in the equity market. Based on the results of that review, he stated that RSIC has a robust plan in place and would be in a strong liquidity position.

Phase two of the action plan looks at the impact the current situation is having on the markets and the Portfolio and where opportunities may lie. He noted it was important to have a framework through which to contemplate new investment opportunities, and briefly reviewed potential options involving low, medium and high risk. He concluded by explaining that phase three of the action plan involves executing on new opportunities as they arise. Mr. Berg noted that the Staff has executed on a limited number of opportunities to date, including restricting some existing exposure, added equity exposure, and performing certain rebalancing trades.

Mr. Berg concluded by reminding the Commissioners that there have been crises in the past and there will be more in the future. He stated that RSIC has approach all markets with a long-term mind set. The most important thing is to be steady and have discipline in how we approach opportunities.

V. EXECUTIVE SESSION

Mr. Hancock made motion to recede into Executive Session to discuss investment matters and specific investments pursuant to S.C. Code Sections 9-16-80 and 9-16-320; and receive advice as needed from legal counsel pursuant to S.C. Code Section 30-4-70(a)(2), Mr. Gillespie seconded the motion, which passed unanimously.

VI. POTENTIAL ACTION RESULTING FROM EXECUTIVE SESSION

Upon return to open session Mr. Hitchcock noted that the Commission did not take any action while in Executive Session.

VII. ADJOURNMENT

There being no further business, Mr. Gillespie moved to adjourn the meeting. Mr. Williams seconded the motion, which passed unanimously, and the meeting adjourned at 12:27 p.m.

[Staff Note: In compliance with S.C. Code Section 30-4-0, public notice of and the agenda for this meeting was delivered to the press and to parties who requested notice and were posted at the entrance, in the lobbies and near the 15th Floor Presentation Center at 1201 Main Street, Columbia, S.C., 5:15 p.m. on April 13, 2020]

RETIREMENT SYSTEM INVESTMENT COMMISSION

CIO Update

Areas Of Focus

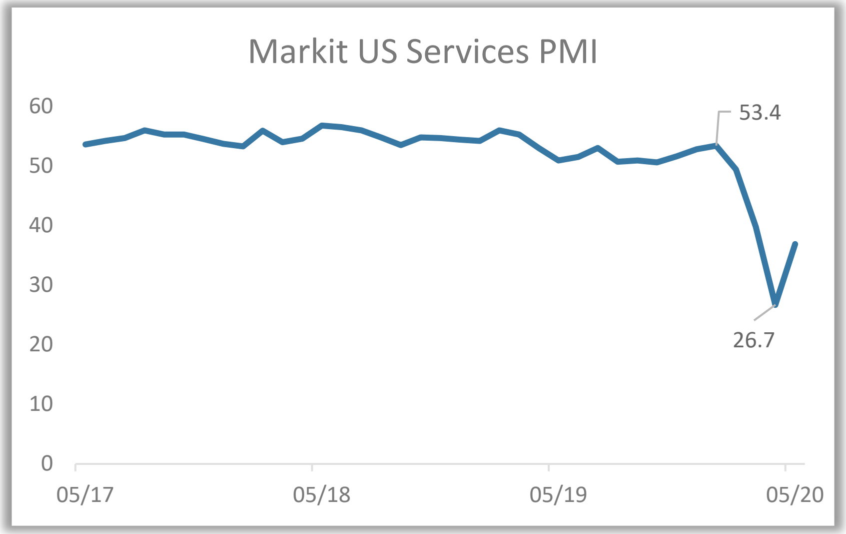
- Economic and market impact of COVID-19
- Portfolio simplification update
  - Active strategies
  - Asset allocation
- March Performance Analysis

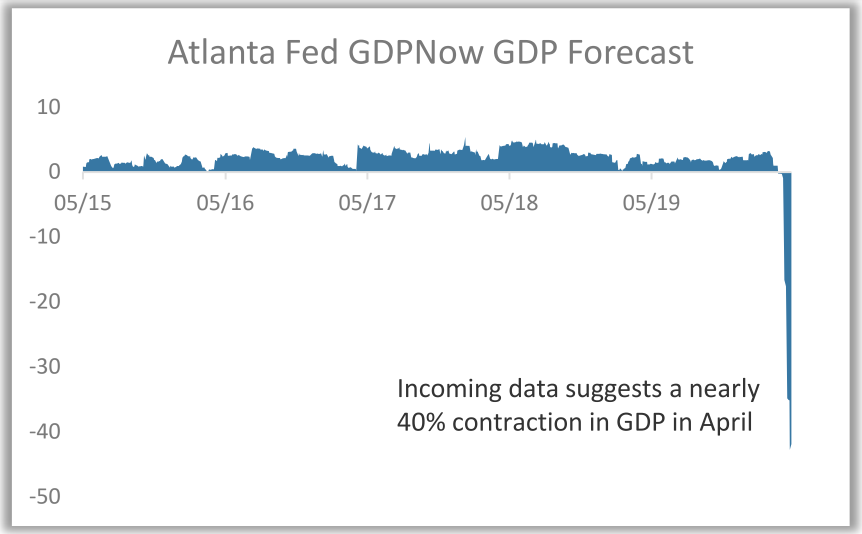
YTD Summary

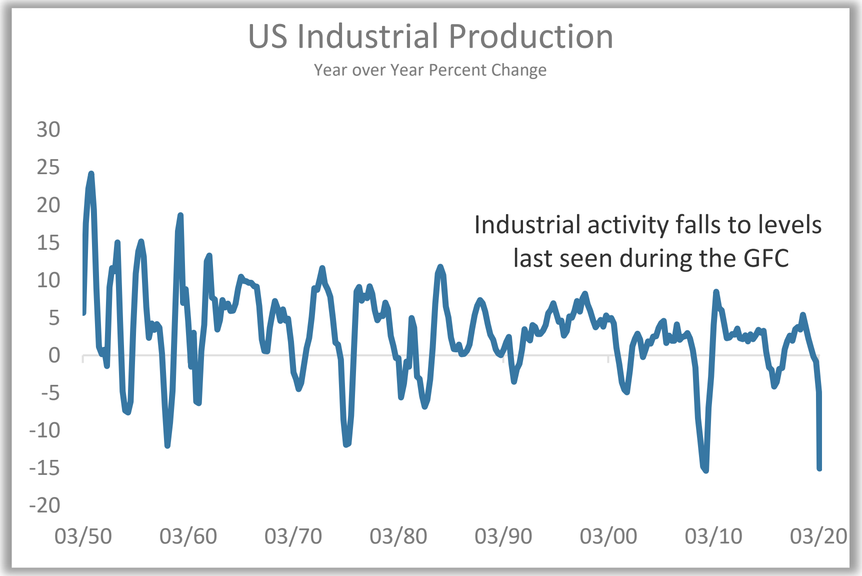
- Q1 was challenging on several fronts
  - Significant economic and market turmoil
  - Major focus on managing liquidity
  - Disappointing performance outcomes in several areas
  - Change to the way we work
- During COVID-19 turmoil, we have maintained our key risk exposures
- We concluded a year-long asset allocation review process by adopting a simpler Policy asset allocation that will take effect in July
  - Currently focused on implementing many of these changes by end of June
  - Likely to delay reduction in credit exposures until spreads reach acceptable levels

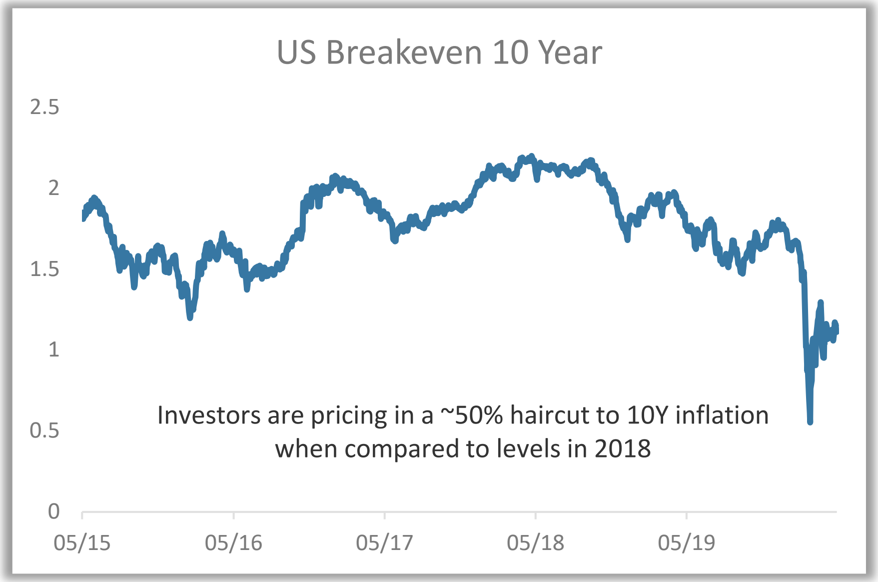
Economic Impacts Of COVID-19

Growth and Inflation Expectations Reveal Significant Damage

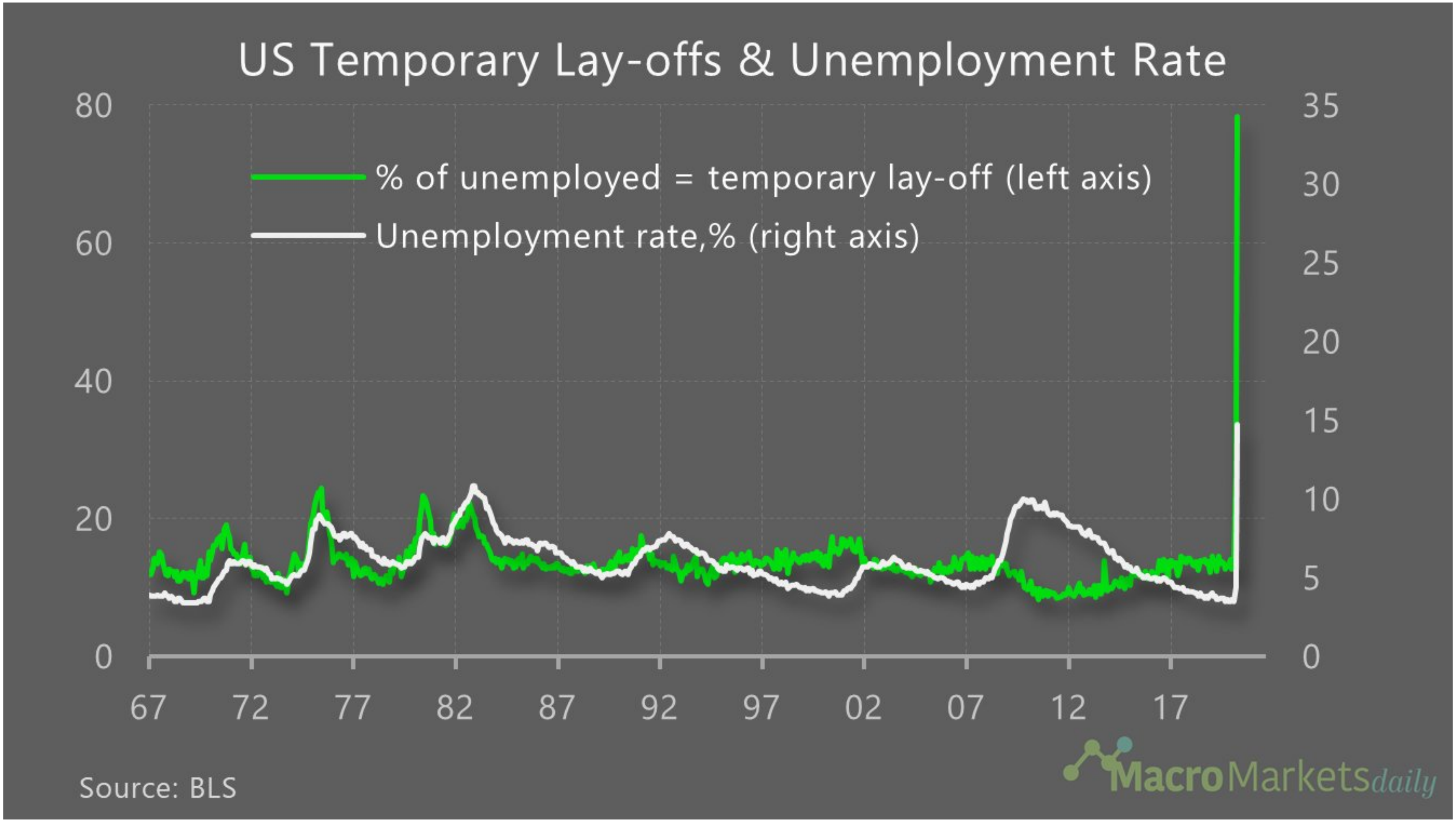






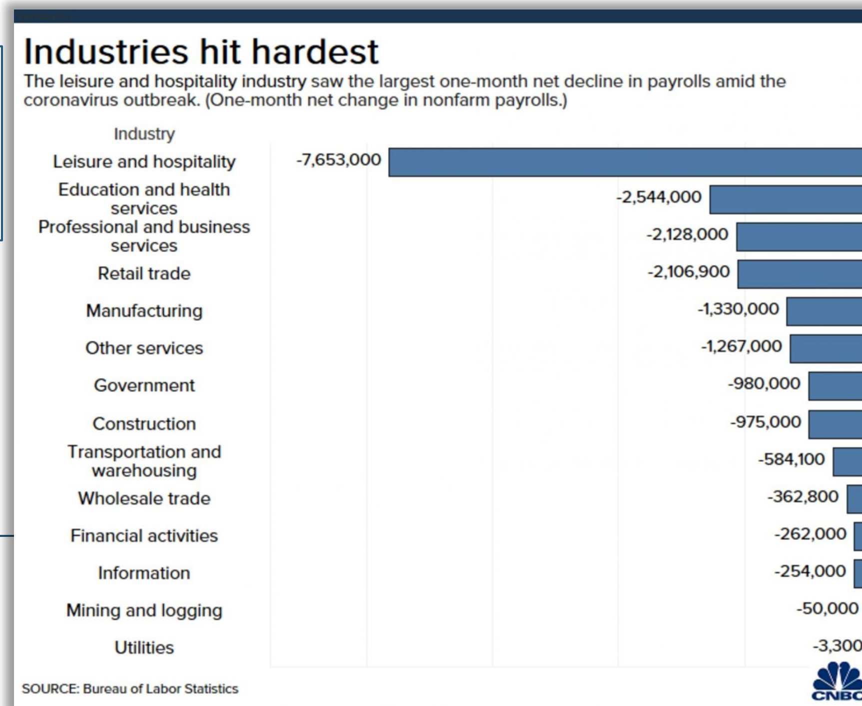


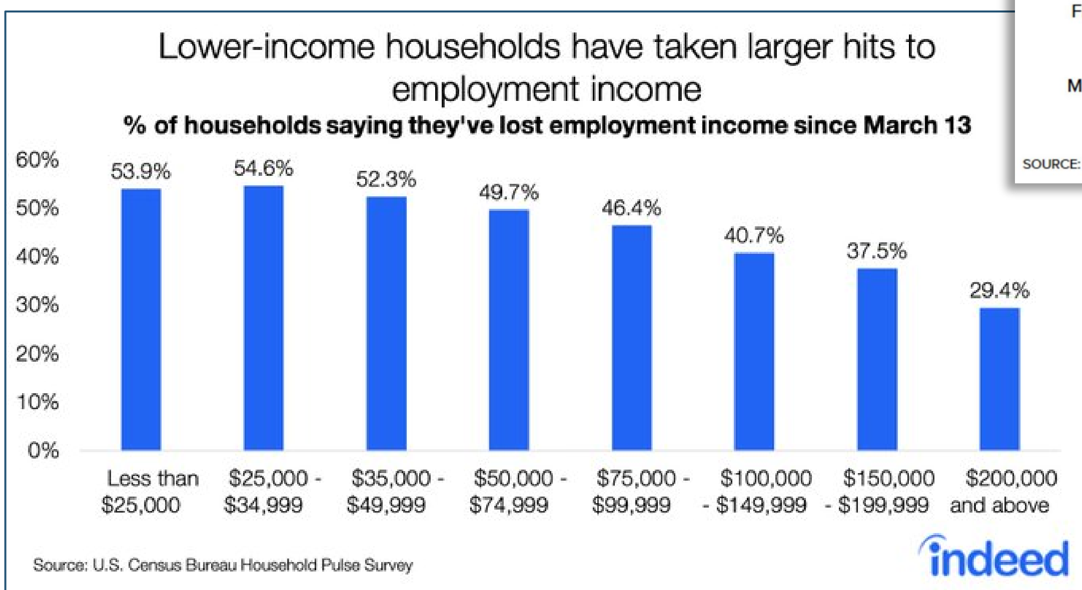
Unemployment: From 50-Year Lows To 70-Year Highs



Sector And Household Income Level

Leisure & Hospitality, Health Care, and Retail sectors seeing most meaningful decline in payrolls…





…which is hitting lower-income households harder.

South Carolina Has Been Hit Hard By COVID-19

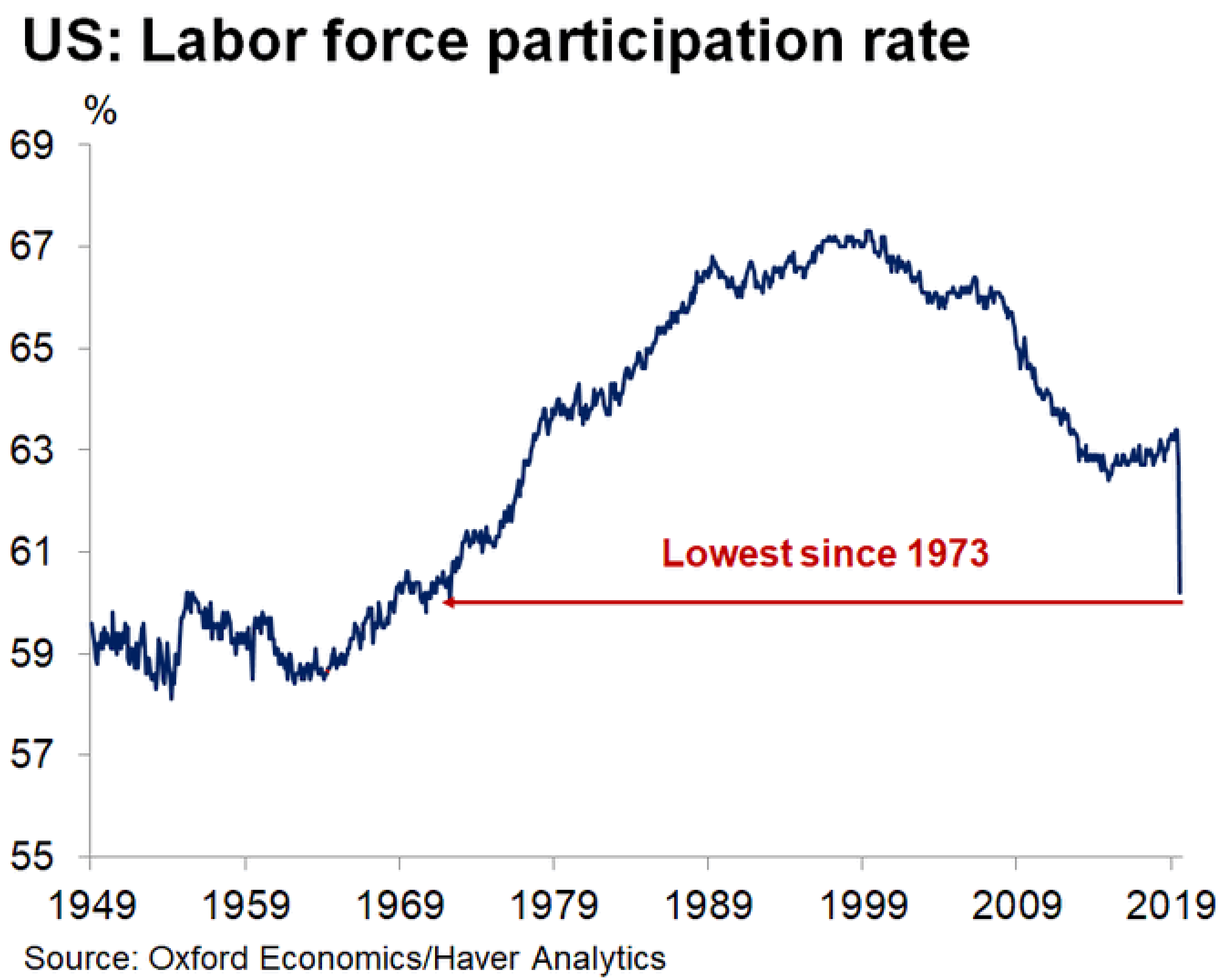
- Approximately 1/3 of SC jobs are in the sectors hardest hit by the pandemic

South Carolina Industry Employment Projections, 2016-2026

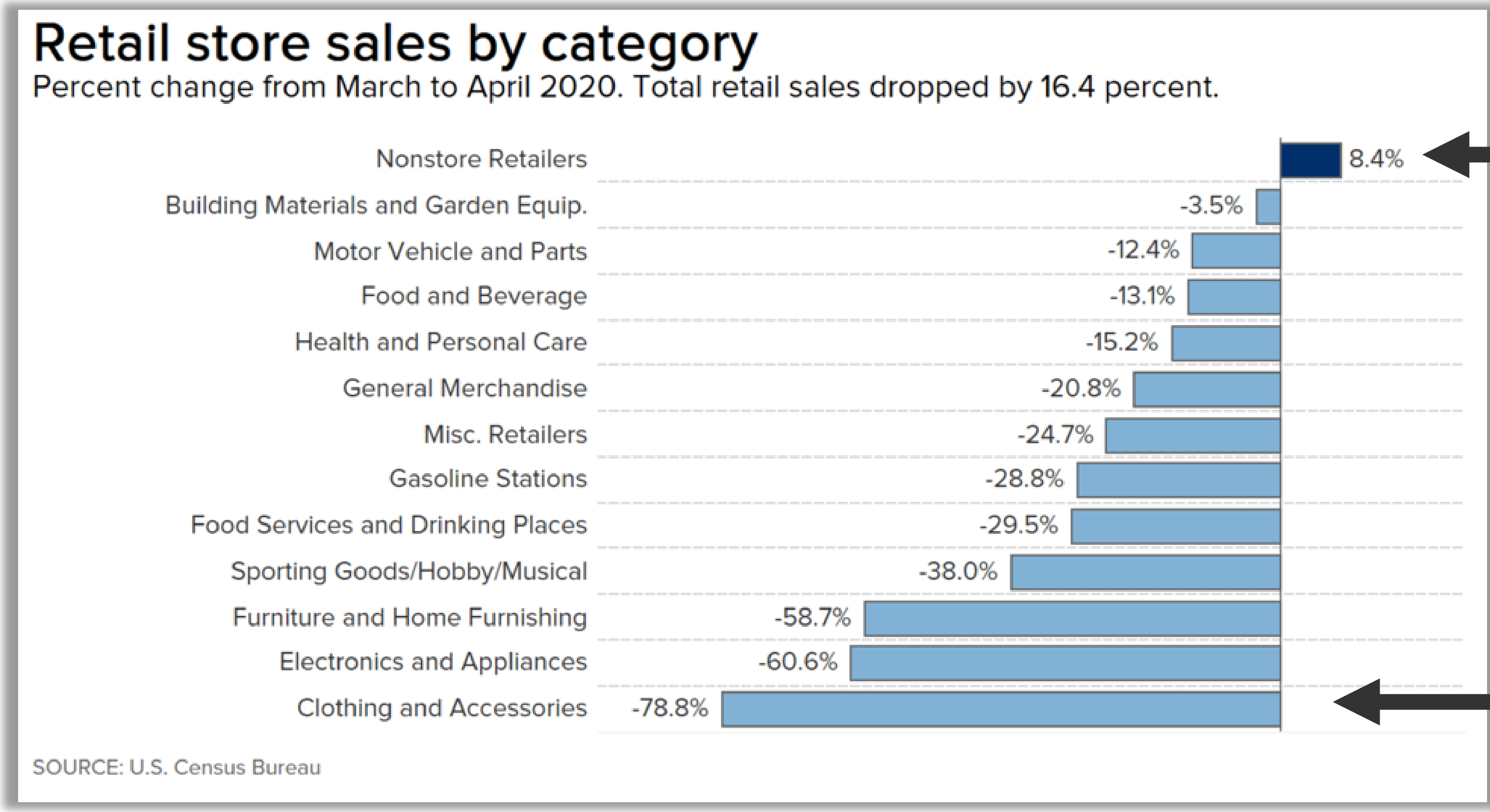
Industry Code	Industry Title	Estimated 2016 Employment	Projected 2026 Employment	Numeric Change	Percent Change
000000	Total All Industries	2,072,388	2,318,285	245,897	11.9%
110000	Agriculture, Forestry, Fishing and Hunting	38,073	33,505	-4,568	-12.0%
210000	Mining	1,461	1,421	-40	-2.7%
220000	Utilities	12,377	12,463	86	0.7%
230000	Construction	94,341	106,713	12,372	13.1%
310000	Manufacturing	238,195	250,200	12,005	5.0%
420000	Wholesale Trade	71,774	81,378	9,604	13.4%
440000	Retail Trade	246,756	266,624	19,868	8.1%
480000	Transportation and Warehousing	62,893	79,589	16,696	26.5%
510000	Information	27,082	28,772	1,690	6.2%
520000	Finance and Insurance	68,155	73,211	5,056	7.4%
530000	Real Estate and Rental and Leasing	29,296	34,237	4,941	16.9%
540000	Professional, Scientific, and Technical Services	93,458	105,874	12,416	13.3%
550000	Management of Companies and Enterprises	17,893	20,503	2,610	14.6%
560000	Administrative and Support and Waste Management	158,037	187,212	29,175	18.5%
610000	Educational Services	168,072	183,258	15,186	9.0%
620000	Health Care and Social Assistance	243,973	295,962	51,989	21.3%
710000	Arts, Entertainment, and Recreation	29,373	32,273	2,900	9.9%
720000	Accommodation and Food Services	217,852	263,148	45,296	20.8%
810000	Other Services	98,596	103,611	5,015	5.1%
900000	Government	154,731	158,331	3,600	2.3%

Source: S.C. Dept. of Employment and Workforce, Industry Employment Projections Program

Many are No Longer Looking for Work



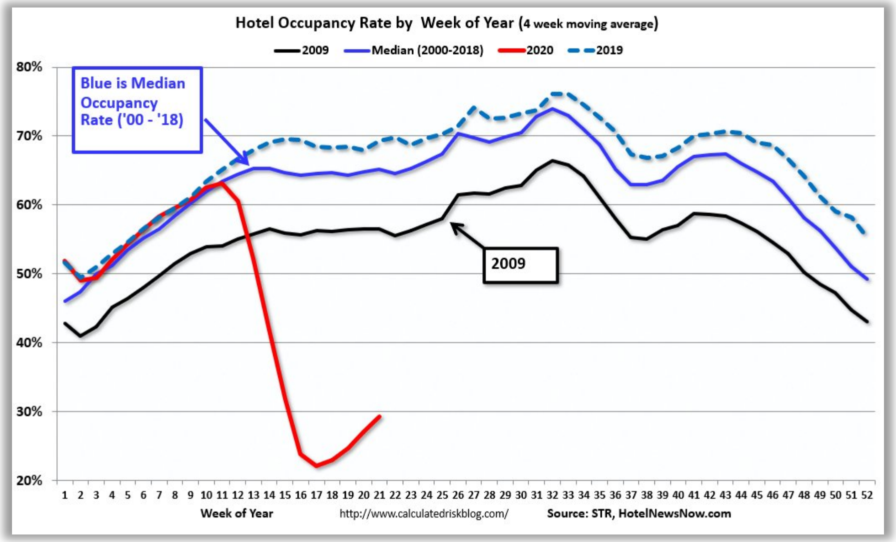
Consumer Spending: An Uneven Contraction

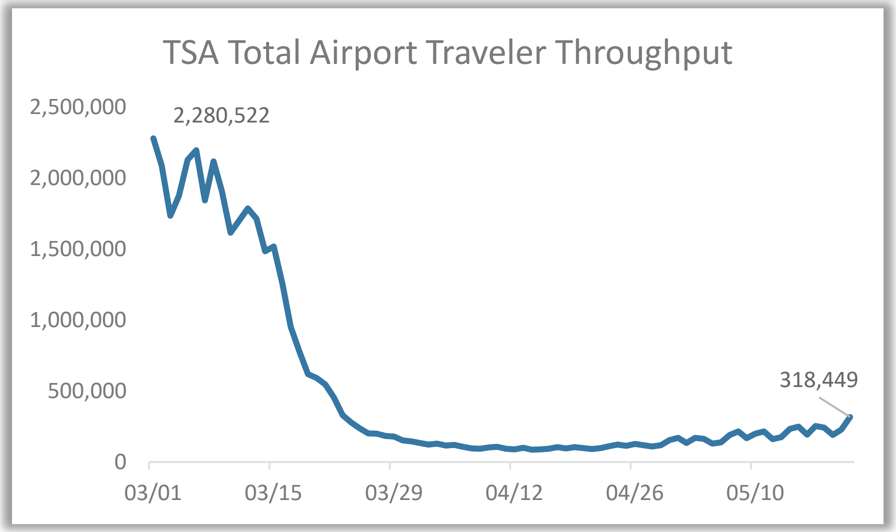


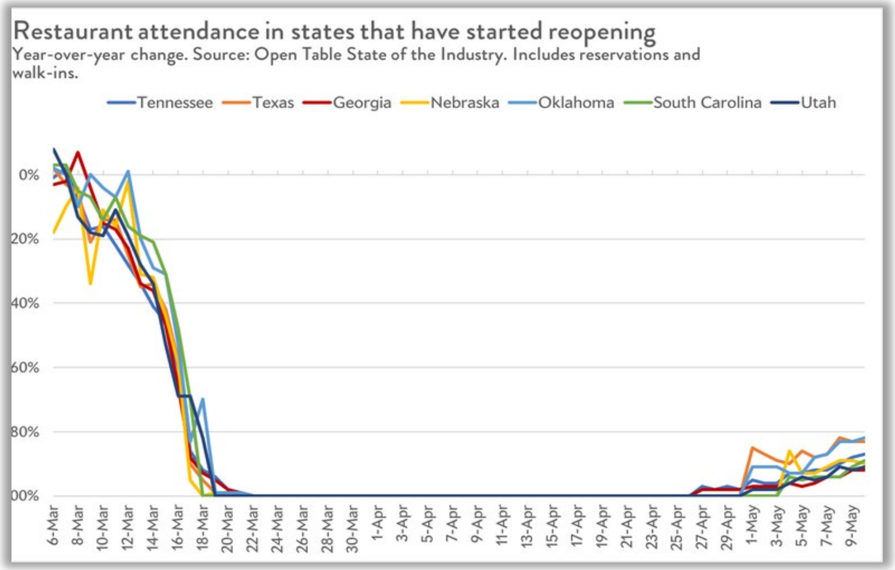
People are shopping Online…

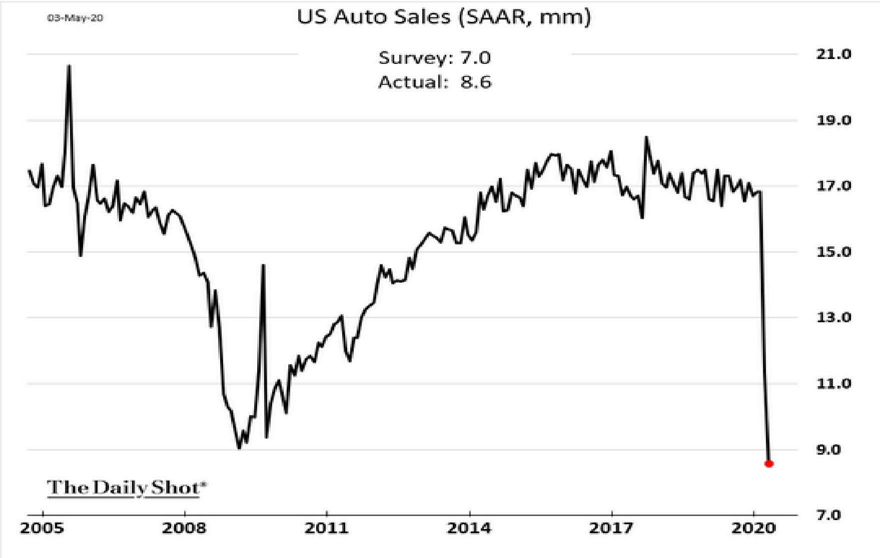
…not in malls

Impacts From Consumers Staying Home

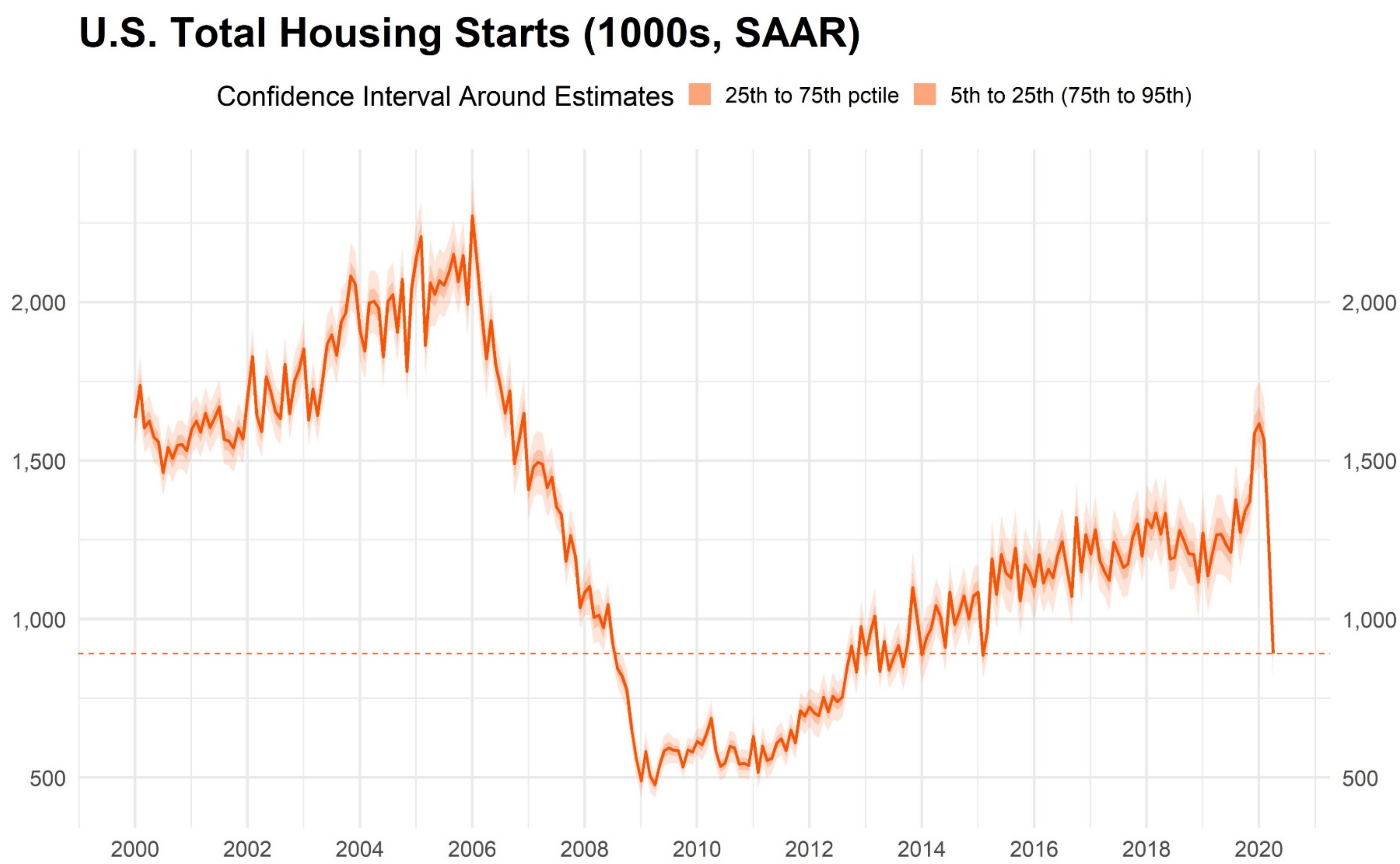








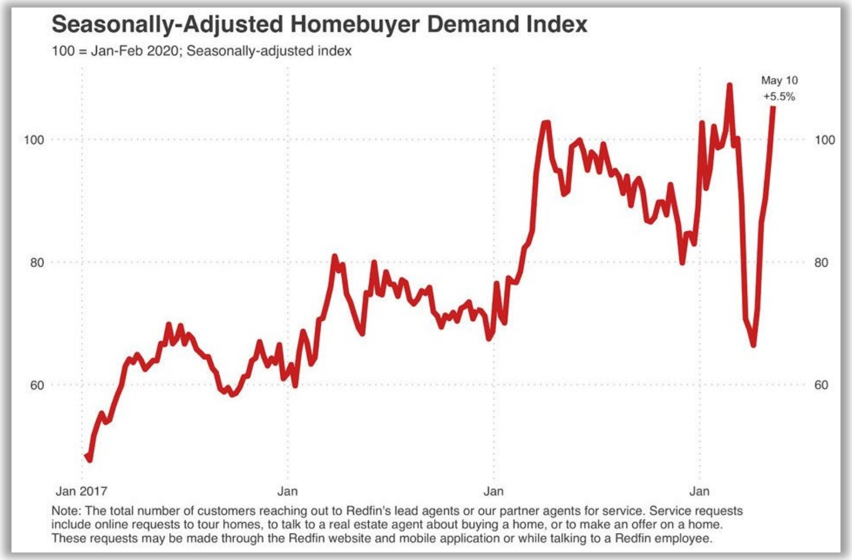
Housing: Reflex Response Is Concerning…

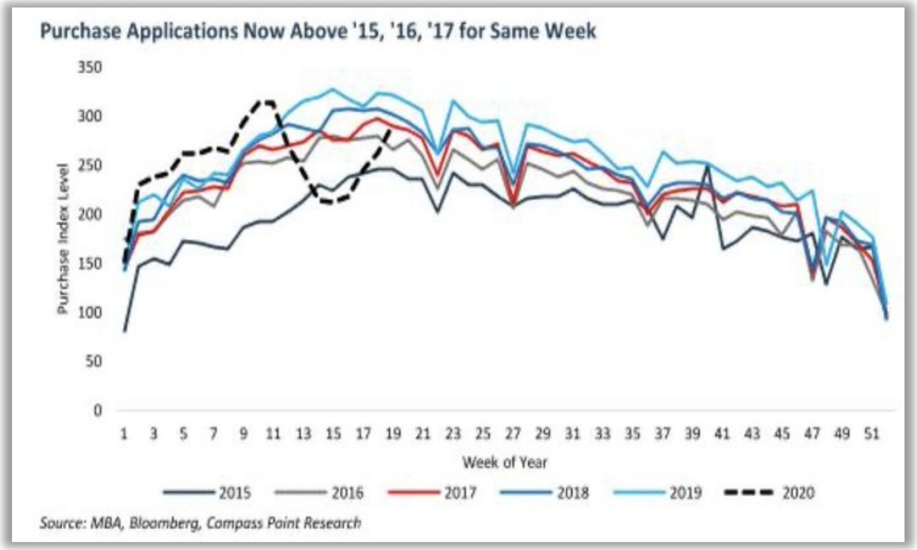


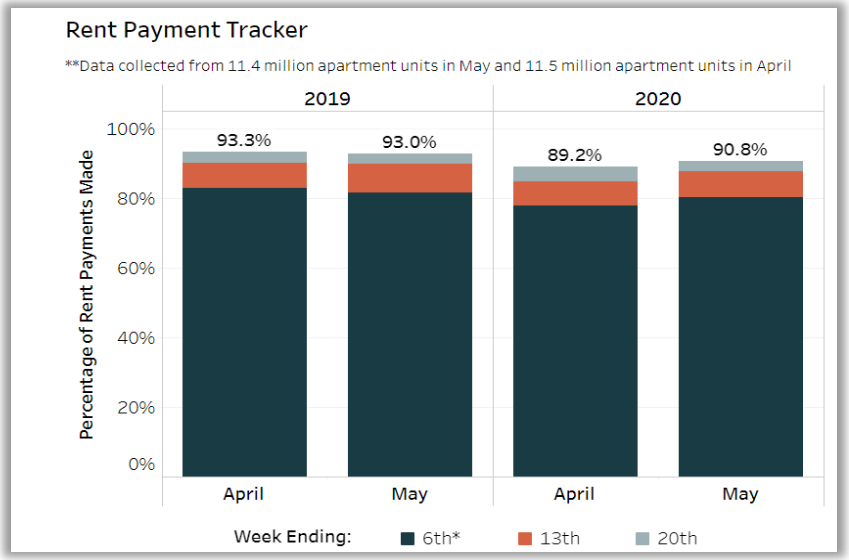
Source: U.S. Census Bureau and Department of Housing and Urban Development
Confidence interval based on normal distribution given relative standard error.
Dotted line at April 2020 estimate

…But Housing May Be The Most Resilient Sector

- Potential buyer are still showing interest to realtors and online
- Renters, appear to making payments despite high levels of unemployment, suggesting stimulus is working, for now.





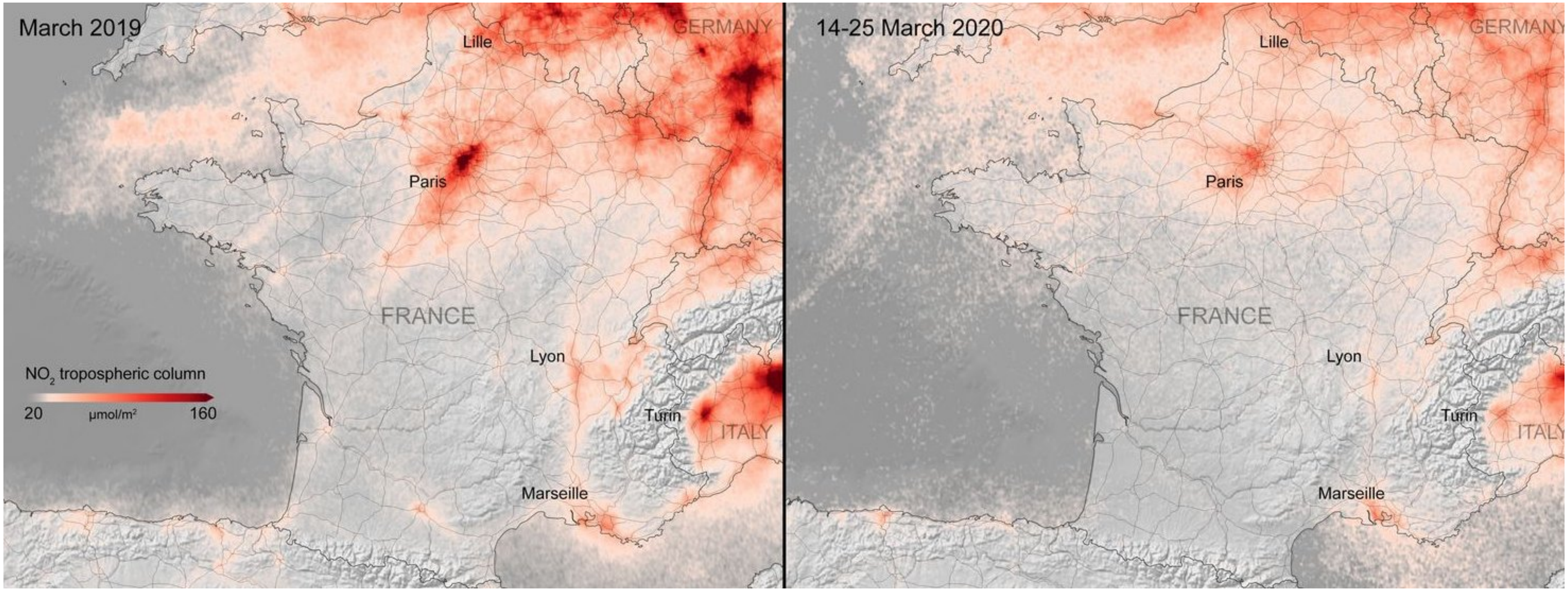


Commercial Real Estate

- Investors struggling to understand short and long-term impacts

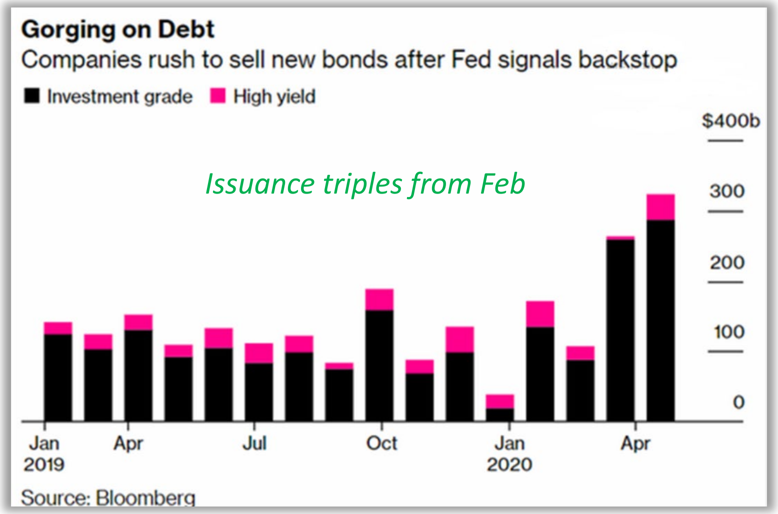
Energy

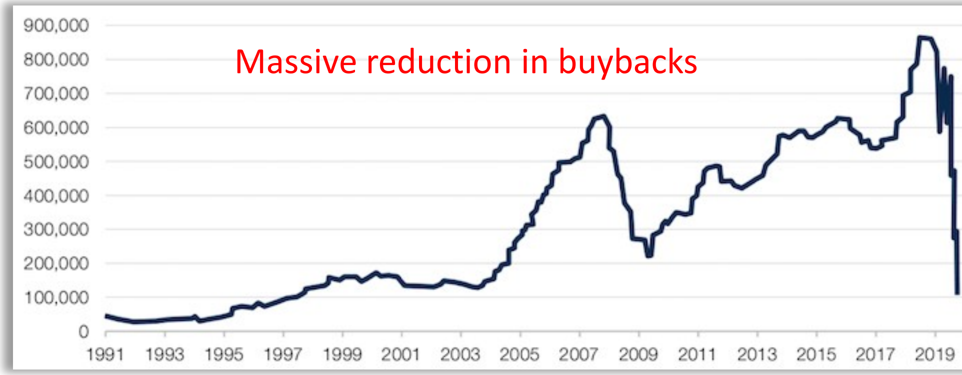
- Oil market experienced simultaneous supply and demand shocks
- 60% reduction in new well drilling in the US



Corporations Hoarding Liquidity

- Focus on managing liquidity has resulted in new borrowing, reduced share buybacks, and even reduced dividends





Sector	DECREASE	INCREASE	INITIAL	SUSPENSION	Grand Total
Communication Services		3		1	4
Consumer Discretionary	2	13		19	34
Consumer Staples		9		2	11
Energy	5	12		2	19
Financials	3	30			33
Health Care		12		2	14
Industrials	2	21	2	5	30
Information Technology	1	14		1	16
Materials	2	6		1	9
Real Estate	1	15		2	18
Utilities	1	16			17
Grand Total	**17**	**151**	**2**	**35**	**205**

….while some cut and even eliminate dividends

How This Has Impacted Markets…

- March 31 was six trading days removed from the bottom of the market
- Since this time, many markets have seen a significant recovery (through 5/27)
  - In general, weakness during Q1 has resulted in strong Q2 returns thus far

	Q1	Since March	Q2 Recovery vs. Q1 Decline
Treasuries	8%	0%	N/A
IG Corporates	-4%	6%	159%
High Yield	-13%	8%	55%
EM Debt	-14%	9%	53%
Infrastructure (listed)	-21%	10%	38%
US Equity	-21%	17%	63%
Global Equity	-21%	15%	53%
Non-US Equity	-23%	10%	33%
Gold	-23%	45%	151%
Commodities	-24%	2%	8%
REITS	-27%	8%	21%
MLPs	-57%	64%	48%
Oil (WTI)	-67%	11%	5%

US Investment Grade, US Equity, and Gold faring the best YTD

REITS and Commodities hit very hard in Q1 *and* lagging in recovery

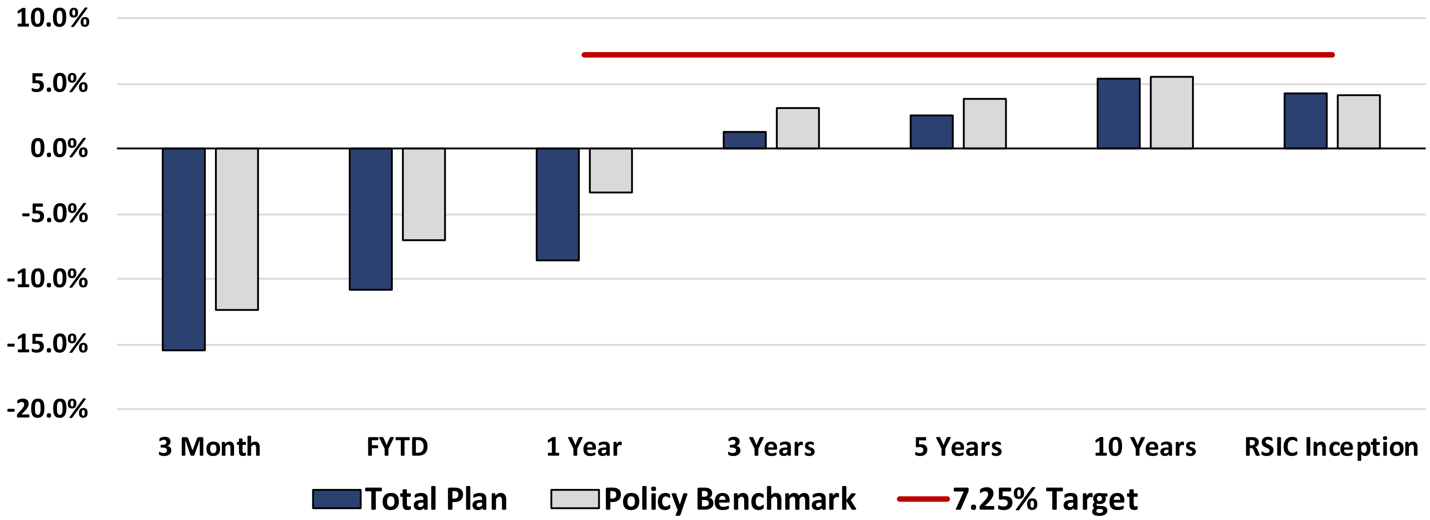
RETIREMENT SYSTEM
INVESTMENT COMMISSION

Performance Update

RSIC 05/25/2020 Investment Commission Meeting
Data as of March 31st, 2020

Performance - Plan & Policy Benchmark[2]

As of March 31, 2020



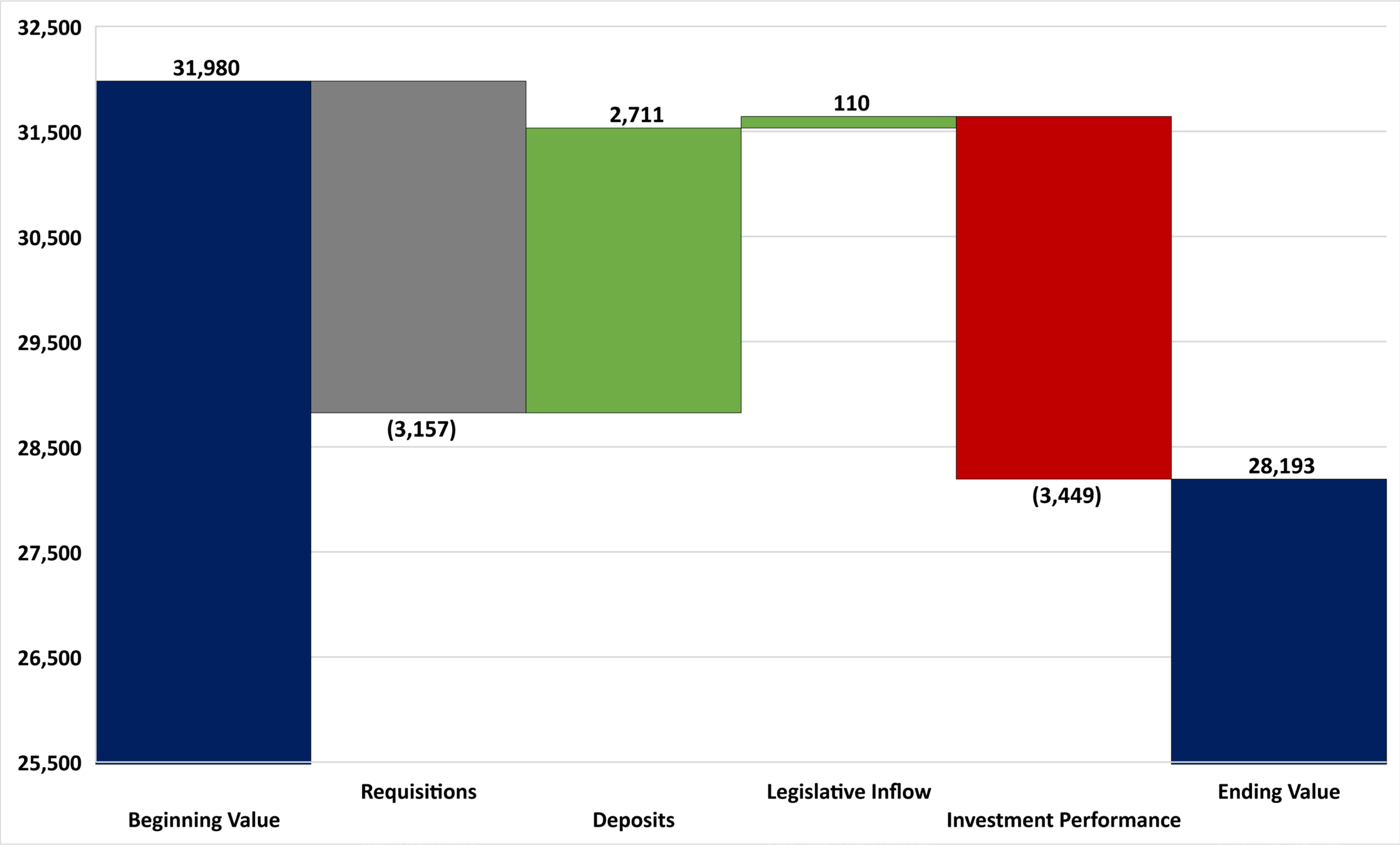
Historic Plan Performance As of 03/31/2020	Market Value (In Millions)	3 Month	FYTD	1 Year	Annualized 3 Years	5 Years	10 Years	RSIC Inception
Total Plan	**$28,193**	**-15.48%**	**-10.88%**	**-8.51%**	**1.34%**	**2.63%**	**5.32%**	**4.22%**
Policy Benchmark		-12.36%	-7.04%	-3.39%	3.10%	3.81%	5.46%	4.14%
Excess Return		-3.12%	-3.84%	-5.12%	-1.76%	-1.18%	-0.14%	0.09%
Net Benefit Payments (In Millions)		($124)	($337)	($507)	($2,892)	($5,033)	($10,031)	($13,803)
Current 3-month Roll off Return:		*4.79%*	*N/A*	*7.92%*	*4.24%*	*1.98%*	*2.82%*	*N/A*
Next 3-month Roll off Return:		*-15.48%*	*N/A*	*2.65%*	*2.34%*	*0.44%*	*-3.07%*	*N/A*

Current Quarter Roll off Return: represents the 3-month period that has fallen off of each time frame's rolling returns. If the current quarter underperforms the roll off return, the performance would decrease for the period.

Next Quarter Roll off Return: represents the 3-month period that will fall off of each time frame's rolling returns in the next quarter. If the next quarter underperforms the roll off return, the performance would decrease for the period.

FYTD Benefits and Performance

FYTD March 31, 2020



Performance – Plan & Asset Classes[1,3,4,10]

As of March 31, 2020

Asset Class / Benchmark returns as of 03/31/2020	Plan Weight	3 Month	YTD	FYTD	Annualized 1 Year	Annualized 3 Years	Annualized 5 Years
Total Plan	100.0%	-15.48%	-15.48%	-10.88%	-8.52%	1.34%	2.63%
Policy Benchmark		-12.36%	-12.36%	-7.04%	-3.39%	3.10%	3.81%
Global Public Equity	37.1%	-22.47%	-22.47%	-15.92%	-13.10%	0.34%	1.93%
Global Public Equity Blend		-22.53%	-22.53%	-15.77%	-13.09%	0.64%	2.37%
Equity Options	7.3%	-16.60%	-16.60%	-12.04%	-10.42%	-0.45%	n/a
Blended Equity Options BM		-21.45%	-21.45%	-17.54%	-15.18%	-2.51%	n/a
Private Equity	7.8%	-2.18%	-2.18%	-1.28%	1.78%	7.85%	8.85%
Private Equity Blend		9.05%	9.05%	16.11%	32.20%	16.63%	13.17%
GTAA	6.2%	-22.24%	-22.24%	-16.18%	-14.00%	-2.46%	-0.45%
GTAA Benchmark Blend		-16.48%	-16.48%	-11.19%	-8.33%	0.57%	2.20%
Other Opportunistic	1.3%	-32.48%	-32.48%	-32.84%	-34.09%	n/a	n/a
GTAA Benchmark Blend		-16.48%	-16.48%	-11.19%	-8.33%	n/a	n/a
Core Fixed Income	7.0%	2.67%	2.67%	5.07%	7.99%	4.68%	3.24%
Barclays US Aggregate Bond Index		3.15%	3.15%	5.68%	8.93%	4.82%	3.36%
TIPS	2.3%	1.48%	1.48%	3.58%	6.49%	n/a	n/a
Barclays US Treasury Inflations Notes		1.69%	1.69%	3.87%	6.85%	n/a	n/a
Cash and Short Duration (Net)	1.1%	-0.28%	-0.28%	0.95%	1.78%	1.63%	1.23%
ICE BofA Merrill Lynch 3-Month T-Bill		0.57%	0.57%	1.61%	2.26%	1.83%	1.19%
Mixed Credit	4.7%	-13.11%	-13.11%	-11.13%	-9.41%	-0.73%	0.94%
Mixed Credit Blend		-12.86%	-12.86%	-9.93%	-8.05%	0.00%	2.11%
Private Debt	7.9%	-4.18%	-4.18%	-3.00%	-1.92%	2.39%	3.61%
S&P/LSTA Leveraged Loan + 150 Bps on a 3-month lag		1.91%	1.91%	5.43%	10.14%	5.85%	5.95%
Emerging Markets Debt	3.9%	-17.21%	-17.21%	-14.61%	-10.54%	-2.03%	1.20%
Emerging Markets Debt Blend		-14.28%	-14.28%	-10.94%	-6.62%	-0.13%	1.60%
Private Real Estate	9.2%	1.76%	1.76%	5.57%	6.57%	8.81%	9.82%
Private Real Estate Custom Benchmark		0.97%	0.97%	3.78%	4.93%	7.02%	9.22%
Public Real Estate	1.1%	-23.25%	-23.25%	-17.96%	-16.24%	-0.27%	n/a
FTSE NAREIT Equity REITs Index		-27.30%	-27.30%	-22.23%	-21.26%	-3.14%	n/a
Public Infrastructure	2.1%	-16.84%	-16.84%	-10.91%	-6.73%	2.16%	n/a
Private Infrastructure	1.1%	-0.65%	-0.65%	-2.35%	2.62%	n/a	n/a
Dow Jones Brookfield Global Infrastructure Net Index		-20.94%	-20.94%	-15.73%	-12.09%	0.31%	n/a
PA Hedge Fund Excess Return (Net LIBOR)	10.0%	-6.58%	-6.58%	-4.79%	-4.75%	-0.51%	*0.33%*
Portable Alpha HF Blend		0.62%	0.62%	1.87%	2.50%	1.45%	0.95%
PA Collateral Excess Return (Net LIBOR)	23.5%	-3.61%	-3.61%	-2.34%	-2.17%	-0.09%	n/a
Portable Alpha Benchmark		0.34%	0.34%	1.15%	1.49%	0.86%	n/a

Asset Allocation and SIOP Compliance

FYTD March 31, 2020

Asset Allocation	Market Value as of 03/31/20	Overlay Exposures	Net Position	% of Total Plan	Policy Targets	Difference	Allowable Ranges	SIOP Compliance
Equities	**10,242**		**14,708**	**52.2%**	**51.0%**	**1.2%**	**31% - 59%**	YES
Global Public Equity	6,426	4,026	10,452	37.1%	36.2%	0.9%	22% - 50%	YES
Equity Options	1,608	440	2,048	7.3%	7.0%	0.3%	5% - 9%	YES
Private Equity	2,207	0	2,207	7.8%	7.8%	0.0%	5% - 13%	YES
Real Assets	**3,837**		**3,837**	**13.6%**	**12.0%**	**1.6%**	**7% - 17%**	YES
Private Real Estate	2,604		2,604	9.2%	9.2%	0.0%	0% - 13%	YES
Public Real Estate	317		317	1.1%	-0.2%	1.4%	0% - 13%	YES
Private Infrastructure	316		316	1.1%	1.1%	0.0%	0% - 5%	YES
Public Infrastructure	601		601	2.1%	1.9%	0.2%	0% - 5%	YES
Opportunistic	**1,854**		**2,102**	**7.5%**	**8.0%**	**-0.5%**		
GTAA	1,510	239	1,748	6.2%	7.0%	-0.8%	3% - 11%	YES
Other Opportunistic	344	10	354	1.3%	1.0%	0.3%	0% - 3%	YES
Credit	**4,618**		**4,618**	**16.4%**	**15.0%**	**1.4%**	**10% - 20%**	YES
Mixed Credit	1,312		1,312	4.7%	3.1%	1.5%	0% - 8%	YES
Emerging Markets Debt	1,091		1,091	3.9%	4.0%	-0.1%	2% - 6%	YES
Private Debt	2,215		2,215	7.9%	7.9%	0.0%	3% - 11%	YES
Rate Sensitive	**4,834**		**2,929**	**10.4%**	**14.0%**	**-3.6%**	**4% - 24%**	YES
Core Fixed Income	697	1,910	2,607	9.2%	13.0%	-3.8%	6% - 20%	YES
Cash and Short Duration (Net)	4,137	-3,815	322	1.1%	1.0%	0.1%	0% - 7%	YES
PA HF Excess Return (Net LIBOR)	2,809	-2,809	0	10.0%*	10.0%	0.0%	0% - 12%	YES
Total Plan	**$28,193**	-	**$28,193**	**100.0%**	**110.0%**			
Total Hedge Funds	3,040		**$3,040**	**10.8%**	n/a	n/a	0% - 20%	YES
Total Private Markets	7,341	-	**$7,341**	**26.0%**	n/a	n/a	14% - 25%	NO

Total Hedge Fund exposure: 10.8% and consisted of: 10.0% PA Hedge Fund Excess Return (Net LIBOR), 0.8% to a hedge fund in Mixed Credit *PA Hedge Fund Excess Return (Net LIBOR) are expressed and benchmarked as gross exposure but employed in conjunction with the Overlay Program and are offset when looking at total plan market value.

Footnotes & Disclosures

Footnotes

1. Represents asset class benchmarks as of reporting date. Benchmarks for asset classes may have changed over time.
2. Benefit payments are the net of Plan contributions and disbursements.
3. "Cash" market value is the aggregate cash held at the custodian, Russell Investments, and strategic partnerships.
4. Asset class exposures and returns include blended physical and synthetic returns and current notional values (EM Debt, GTAA, Global Public Equity, Real Estate, Core Fixed Income, Private Equity, TIPS, Equity Options, and Commodities). Synthetic returns are provided by Russell Investments gross of financing costs. To accommodate for financing costs, LIBOR is added to the synthetic returns and removed from the collateral return.
5. Performance contribution methodology: Contribution is calculated by taking the sum of the [beginning weight] X [monthly return].
6. Source: Russell Investments; Net notional exposure.
7. Allocation Effect: [Asset Class Weight – Policy Weight] * [Benchmark Return – Plan Policy Benchmark]
   Selection Effect: [Asset Class Return – Policy Benchmark Return] * Asset Class Weight in Plan
8. The target weights to Private Equity, Private Debt, and Private Real Estate will be equal to their actual weights, reported by the custodial bank, as of the prior month end. When flows have occurred in the asset classes, flow adjusted weights are used to more accurately reflect the impact of the asset class weights. In the case of Private Equity, the use of the flow adjusted weight will affect the target allocation to Public Equity, such that the combined target weight of both asset classes shall equal 44% of the Plan. For Private Debt, the use of the flow adjusted weight will affect the target allocation to Mixed Credit, such that the combined target weight of both asset classes shall equal 11% of the Plan. For Private Real Estate, the use of the flow adjusted weight will affect the target allocation to Public Real Estate, such that the combined target weight of both asset classes shall equal 9% of the Plan. For Private Infrastructure, the use of the flow adjusted weight will affect the target allocation to Public Infrastructure, such that the combined target weight of both asset classes shall equal 3% of the Plan.
9. Policy Ending Value is an estimate of the Plan NAV had it earned the Policy Benchmark return.
10. Collateral held to support the overlay program represents opportunity cost associated with financing the overlay program. The Overlay collateral consists of Ported Cash, Ported Short Duration, and Portable Alpha Hedge Funds. The cost of holding these assets is proxied using 3 Month LIBOR. This benchmark is not a component of the Policy benchmark.
11. RSIC Peer Universe is Bank of New York Public Plans Greater than $5 Billion. The universe includes fund returns that are gross of invoiced fees. The RSIC percentile rank represents the RSIC return gross of invoiced fees.

Disclosures

- Returns are provided by BNY Mellon and are time-weighted, total return calculations. Net of fee performance is calculated and presented after the deduction of fees and expenses. Periods greater than one year are annualized. Past performance is no guarantee of future results. Policy benchmark is the blend of asset class policy benchmarks using policy weights. Asset class benchmarks and policy weights are reviewed annually by the Commission's consultant and adopted by the Commission and have changed over time. The policy benchmark return history represents a blend of these past policies.
- Overlay allocation detail is provided by Russell Investments.
- This report was compiled by the staff of the South Carolina Retirement System Investment Commission and has not been reviewed, approved or verified by the external investment managers. No information contained herein should be used to calculate returns or compare multiple funds, including private equity funds.
- Effective October 1, 2005, the State Retirement System Preservation and Investment Reform Act ("Act 153") established the Commission and devolved fiduciary responsibility for investment and management of the assets of the South Carolina Retirement Systems upon RSIC.
- Allocation / exposure percentages might not add up to totals due to rounding.

Footnotes & Disclosures

Benchmarks

- **Global Public Equity Blend**:
  7/2018 – Present: Weighted average of regional sub-asset class targets in Policy Portfolio. 51.4% MSCI US IMI Index for U.S. Equity, 31.4% MSCI World ex-US IMI Index for Developed Market Equity (non-U.S.), and 17.1% MSCI Emerging Markets IMI Index for Emerging Market Equity
  7/2016 – 6/2018: MSCI All-Country World Investable Markets Index (net of dividends)
  Prior to 7/2016: MSCI All-Country World Index (net of dividends)

- **Equity Options Strategies:**
  7/2018 – Present: 50% CBOE S&P Buy Write Index (BXM) / 50% CBOE S&P 500 Put Write Index (PUT)
  Prior to 6/2018: CBOE S&P 500 Buy Write Index (BXM)

- **Private Equity Blend**: 80% Russell 3000 Index on a 3-month lag / 20% MSCI EAFE (net of dividends) on a 3-month lag Plus 300 basis points

- **Core Fixed Income**: Bloomberg Barclays US Aggregate Bond Index

- **Emerging Market Debt**: 50% JP Morgan EMBI Global Diversified (US Dollar) / 50% JP Morgan GBIEM Global Diversified (Local)

- **Private Debt** : S&P/LSTA Leveraged Loan Index + 150 basis points on a 3-month lag

- **Mixed Credit Blend**:
  7/2016 – Present: 1/2 Bloomberg Barclays US Corporate High Yield 2% Issuer Capped Bond Index
  1/2 S&P/LSTA Leveraged Loan Index
  Prior to 6/2016: 1/3 Bloomberg Barclays US Corporate High Yield 2% Issuer Capped Bond Index
  1/3 S&P/LSTA Leveraged Loan Index
  1/3 Bloomberg Barclays US Mortgage Backed Securities (MBS) Index

- **GTAA Blend**:
  7/2018 – Present: Total System Policy Benchmark ex-Private Markets and Portable Alpha
  7/2016 – 6/2018: 50% MSCI World Index (net of dividends)
  50% Bloomberg Barclays US Aggregate Bond Index
  Prior to 7/2016: 50% MSCI World Index (net of dividends)
  50% FTSE World Government Bond Index (WGBI)

- **Other Opportunistic**:
  7/2018 – Present: Total System Policy Benchmark ex-Private Markets and Portable Alpha
  7/2016 – 6/2018: 50% MSCI World Index (net of dividends)
  50% Bloomberg Barclays US Aggregate Bond Index

- **Private Real Estate Blend:**
  7/2018 – Present: NCREIF Open-End Diversified Core (ODCE) Index *Net of Fees* + 100 basis points
  Prior to 6/2018: NCREIF Open-end Diversified Core (ODCE) Index *Gross of Fees* + 75 basis points

- **Public Real Estate:** FTSE NAREIT Equity REITs Index

- **Infrastructure:** Dow Jones Brookfield Global Infrastructure Index

- **Cash & Short Duration**: ICE BofA Merrill Lynch 3-Month US Treasury Bill Index

- **Portable Alpha Hedge Fund Blend**:
  7/2018 – Present: ICE BofA Merrill Lynch 3-Month T-Bills + 250 basis points
  7/2016-6/2018: *Prior to FY 2019, there was not a benchmark for Portable Alpha Hedge Funds, so effectively* zero
  Prior to 7/2016 HFRI Fund Weighted Composite Index (NOTE: PA HFs were considered Low Beta Hedge Funds at this time).

- **Portable Alpha Benchmark**:
  7/2018 – Present: *Weighted average of monthly weights for PA Hedge Funds* ICE BofA Merrill Lynch 3-Month T-Bills + 250 basis points, and Zero for Ported Cash and Short Duration
  7/2016-6/2018: *Prior to FY 2019, there was not a benchmark for Portable Alpha Hedge Funds, so effectively* zero

RSIC Performance Analysis

Data as of March 31, 2020

Simplified Policy Portfolio

- Simplified Policy portfolio outperformed current Policy by 3.2% during calendar Q1 (outperforming FYTD by 3.1%)

- We are focused on a smooth transition in several areas:
  - Indexing public equity exposure
  - Further reducing liquidity risk by increasing passive Core Bond exposure in the overlay
  - Reducing most off-benchmark exposures where it does not involve crystalizing losses
  - Determining spread levels at which we will reduce credit exposures

- Changes are expected to reduce cost by more than $40 million annually

- We remain focused on liquidity management during this time.

Largest Performance Impacts vs. Policy

- Lagged private benchmarks (-240 bps)
- Underweight Core Bonds (-60 bps)
- Poor Portable Alpha & GAA underperformance (-130 bps)
- Energy exposure (MLPs) in Other Opportunistic (-39 bps)
- Strong Real Assets manager performance (+41 bps)
- Public Equity & Equity Option manager performance (+51 bps)

Portfolio Framework - Current Policy Benchmark

As of 3/31/2020

Reference Portfolio	
3 Month	-15.20%
FYTD	-9.30%
1-Year	-6.23%
2-Years	-1.78%
3-Years	2.24%

Policy Benchmark	
3 Month	-12.36%
FYTD	-7.04%
1-Year	-3.38%
2-Years	-0.11%
3-Years	3.10%

Implementation Benchmark	
3 Month	-14.64%
FYTD	-9.77%
1-Year	-6.90%
2-Years	-1.70%
3-Years	1.62%

RSIC Portfolio Return	
3 Month	-15.48%
FYTD	-10.88%
1-Year	-8.51%
2-Years	-2.77%
3-Years	1.34%

Value From Diversfication	
3 Month	2.8%
FYTD	2.3%
1-Year	2.8%
2-Years	1.7%
3-Years	0.9%

Quality of Portfolio Structure	
3 Month	-2.3%
FYTD	-2.7%
1-Year	-3.5%
2-Years	-1.6%
3-Years	-1.5%

Quality of Manager Selection	
3 Month	-0.8%
FYTD	-1.1%
1-Year	-1.6%
2-Years	-1.1%
3-Years	-0.3%

Actual VS Reference	
3 Month	-0.3%
FYTD	-1.6%
1-Year	-2.3%
2-Years	-1.0%
3-Years	-0.9%

Actual VS Policy	
3 Month	-3.1%
FYTD	-3.8%
1-Year	-5.1%
2-Years	-2.7%
3-Years	-1.8%

3-Month Performance – Total Plan vs Policy

3 Month Performance	Asset Class Return	Policy Return	Excess Return (BPS)
World infrastructure	-12.2%	-20.9%	874
Equity Options	-16.6%	-21.5%	485
Public Real Estate	-23.3%	-27.3%	405
Private Real Estate	1.8%	1.0%	79
Global Public Equity	-22.5%	-22.5%	7
Cash and Short Duration (Net)	0.6%	0.6%	0
TIPS	1.5%	1.7%	-21
Mixed Credit	-13.1%	-12.9%	-24
Core Fixed Income	2.7%	3.1%	-48
Emerging Markets Debt	-17.2%	-14.3%	-294
GTAA	-22.2%	-16.5%	-576
Private Debt	-4.2%	1.9%	-609
PA Hedge Fund Excess Return	-6.6%	0.6%	-720
Private Equity	-2.2%	9.1%	-1123
Other Opportunistic	-32.5%	-16.5%	-1600
Total SC with Overlay	-15.5%	-12.4%	-312

Quarterly Attribution – Portfolio Structure

Quality of Portfolio Structure - Quarter	Impact to Plan (BPS)
Equity Options	24
Cash and Short Duration (Net)	0
World infrastructure	0
TIPS	0
Emerging Markets Debt	0
Private Debt	0
Private Real Estate	-2
GTAA	-2
Public Real Estate	-5
Mixed Credit	-14
Private Equity	-24
Other Opportunistic	-44
Global Public Equity	-49
Core Fixed Income	-60
PA Hedge Fund Excess Return	-88
Total SC with Overlay	-265

- Equity Options underweight (low premiums)
- Underweight Core Fixed Income
- Slight overweight to Public Equity & Value tilt
- Hedge Fund benchmarks performed poorly
- Small allocation to MLPs (energy)

[1]Asset class contributions are displayed as snapshots of RSIC's quarterly attribution (value added relative to policy benchmark) and are not necessarily additive to total Plan Excess Return over long periods of time.

Quarterly Attribution – Manager Selection

Strong performance for Real Assets

Equity Options performed as designed

Equity benefitted from hedged exposure

Disappointing GTAA performance

Poor performance from legacy Private Debt

Quality of Manager Selection - Quarter	Impact to Plan (BPS)
World infrastructure	28
Global Public Equity	27
Equity Options	24
Mixed Credit	11
Private Real Estate	8
PA Hedge Fund Excess Return	7
Other Opportunistic	6
Public Real Estate	5
TIPS	0
Cash and Short Duration (Net)	-1
Core Fixed Income	-3
Emerging Markets Debt	-12
Private Debt	-43
Private Equity	-48
GTAA	-49
Total SC with Overlay	-40

[1]Asset class contributions are displayed as snapshots of RSIC's quarterly attribution (value added relative to policy benchmark) and are not necessarily additive to total Plan Excess Return over long periods of time.

Plan Exposures – Change Since 12/31/2019

- Bonds reduced due to deployment of cash for rebalancing purposes
- Equity remained slightly overweight at quarter end
- Real Assets allocation increase due largely to performance

Asset Class	Policy Target	Weight	Active Weight	Δ Since Last Quarter
Bonds	21.1%	18.1%	-3.0%	-2.9%
Public Equity	43.2%	44.3%	1.2%	-0.8%
Private Credit	7.9%	7.9%	0.0%	1.3%
Private Equity	7.8%	7.8%	0.0%	1.6%
Real Assets	12.0%	13.6%	1.6%	1.8%
Portable Alpha	10.0%	10.0%	0.0%	1.4%
Other Assets	8.0%	7.5%	-0.5%	-1.8%
Total Plan	**110.0%**	**109.2%**	**-0.8%**	**0.6%**

Plan Exposures – Bonds Look through

Asset Class	Policy Target	Weight	Active Weight	Δ Since Last Quarter
Bonds	21.1%	18.1%	-3.0%	-2.9%
Public Equity	43.2%	44.3%	1.2%	-0.8%
Private Credit	7.9%	7.9%	0.0%	1.3%
Private Equity	7.8%	7.8%	0.0%	1.6%
Real Assets	12.0%	13.6%	1.6%	1.8%
Portable Alpha	10.0%	10.0%	0.0%	1.4%
Other Assets	8.0%	7.5%	-0.5%	-1.8%
Total Plan	**110.0%**	**109.2%**	**-0.8%**	**0.6%**

Bonds Breakout	Policy Target	Weight	Active Weight	Δ Since Last Quarter
Emerging Markets Debt	4.0%	3.9%	-0.1%	0.0%
Mixed Credit	3.1%	4.7%	1.5%	0.4%
Core Fixed Income	11.0%	7.0%	-4.0%	0.1%
Cash and SD (Net)	1.0%	0.4%	-0.6%	-3.6%
TIPS	2.0%	2.3%	0.3%	0.4%
Total	**21.1%**	**18.1%**	**-3.0%**	**-2.9%**

Core Fixed Income underweight remains

Added to Mixed Credit during quarter

Plan Exposures – Public Equity Look through

Asset Class	Policy Target	Weight	Active Weight	Δ Since Last Quarter
Bonds	21.1%	18.1%	-3.0%	-2.9%
Public Equity	43.2%	44.3%	1.2%	-0.8%
Private Credit	7.9%	7.9%	0.0%	1.3%
Private Equity	7.8%	7.8%	0.0%	1.6%
Real Assets	12.0%	13.6%	1.6%	1.8%
Portable Alpha	10.0%	10.0%	0.0%	1.4%
Other Assets	8.0%	7.5%	-0.5%	-1.8%
Total Plan	**110.0%**	**109.2%**	**-0.8%**	**0.6%**

Public Equity Breakout	Policy Target	Weight	Active Weight	Δ Since Last Quarter
US Large Cap Equity	14.4%	15.2%	0.8%	0.6%
US Small / Mid Cap Equity	4.2%	4.7%	0.5%	-0.7%
EAFE + Canada	11.4%	11.6%	0.3%	-0.8%
Emerging Market Equity	6.2%	5.6%	-0.6%	-1.3%
Equity Options	7.0%	7.3%	0.3%	1.5%
Total	**43.2%**	**44.3%**	**1.2%**	**-0.8%**

Feb/March rebalancing to maintain exposure

Increased use of passive management during qtr.

Raised Equity Options exposure during quarter

Portfolio Risk Framework

Risk Estimates [1]

Mar. 2020 Exposures; Mar. 2020 Risk

	Reference	Policy [3]	Implementation [3]	Actual [4]
Expected Volatility [2]	***12.08%***	***14.04%***	***14.78%***	***N/A***

	Asset Allocation	Portfolio Structure	Manager Selection [4]
Tracking Error	***2.71%***	***0.79%***	***N/A***

Footnotes:

1 *Estimates based on an equal weighted (no-decay) model of daily data from the previous two years.*

2 *Risk figures provided are ex-ante, our best estimate of future risk based on current positioning.*

3 *Private benchmarks proxied with daily public alternatives.*

4 *Actual position level risk sourced from BNYM, and will be subject to a 6-8 week lag due to data requirements. These are preliminary figures and subject to change.*

APPENDIX

Attribution – Last 4 Quarters

Portfolio Structure	Jun-19	Sep-19	Dec-19	Mar-20	FYTD	12M
Public Equity	-3	0	4	-25	-22	-25
Private Equity	-58	-3	0	-24	-28	-86
Other Assets	-5	-6	-6	-46	-57	-62
Real Assets	-3	-3	-1	-7	-10	-13
Private Credit	0	0	0	0	0	0
Bonds	-4	-17	6	-75	-86	-89
PA HFs	2	-11	9	-88	-90	-88
Total	**-70**	**-40**	**12**	**-265**	**-294**	**-364**

Overweight public equity (with small & value tilts) hurt performance during the quarter.

Underweight to Core/Overweight cash entering COVID-19 crisis hurt returns.

Portable Alpha structure weighted on returns as hedge funds experienced negative returns.

Selection	Jun-19	Sep-19	Dec-19	Mar-20	FYTD	12M
Public Equity	-1	-1	-3	51	47	46
Private Equity	-14	-23	-17	-48	-88	-102
Other Assets	-9	1	11	-43	-32	-41
Real Assets	2	8	0	42	49	51
Private Credit	-20	-7	-8	-43	-58	-77
Bonds	-4	-4	-5	-6	-15	-18
PA HFs	-7	11	2	7	21	13
Total	**-53**	**-15**	**-20**	**-40**	**-75**	**-128**

Equity Options managers outperformed during the quarter.

Public Equity returns benefitted from hedged overlay exposures.

Private Equity and Credit performed poorly versus benchmarks.

GTAA strategies had extremely disappointing quarter

Total Value Added	Jun-19	Sep-19	Dec-19	Mar-20	FYTD	12M
Public Equity	-4	-1	0	26	26	21
Private Equity	-72	-25	-17	-72	-115	-188
Other Assets	-13	-5	5	-89	-89	-103
Real Assets	-1	5	-1	35	39	38
Private Credit	-20	-7	-8	-44	-58	-78
Bonds	-8	-21	2	-81	-100	-108
PA HFs	-5	0	11	-80	-70	-75
Total	**-124**	**-54**	**-8**	**-306**	**-368**	**-492**

Simplified Policy allocation meaningfully outperformed existing Policy Portfolio during quarter/year.

Impact of 2019 PE secondary sale not yet observable in returns.

[1]Asset class contributions are displayed as snapshots of RSIC's quarterly attribution (value added relative to policy benchmark) and are not necessarily additive to total Plan Excess Return over long periods of time.

Quarter Performance – Attribution Building Blocks as of 12/31/19

	A	B	B-A	C	B*C	D	E	C-D	C-E	E-D			
	Weights			Returns				Excess Returns			Attribution		
Attribution Building Blocks as of 3/31/2020	Avg Policy Target	Avg Wt in Plan	Active Weight (BPS)	Asset Class Return	cR to Plan Return	Policy Return	Implementation BM Return	Excess Return - Policy (BPS)	Excess Return - Impl. (BPS)	Impl - Policy (BPS)	Quality of Portfolio Structure (BPS)	Manager Selection (BPS)	Total Value Added (BPS)
Global Public Equity	37.6%	39.4%	188	-22.5%	-8.9%	-22.5%	-23.1%	7	60	-54	-49	27	-23
Equity Options	7.0%	4.6%	-243	-16.6%	-0.8%	-21.5%	-21.1%	485	446	40	24	24	49
Private Equity	6.4%	6.4%	0	-2.2%	-0.1%	9.1%	4.8%	-1123	-696	-427	-24	-48	-72
GTAA	7.0%	7.5%	51	-22.2%	-1.7%	-16.5%	-16.5%	-576	-574	-2	-2	-49	-51
Other Opportunistic	1.0%	1.9%	93	-32.5%	-0.6%	-16.5%	-34.2%	-1600	176	-1776	-44	6	-39
Private Real Estate	7.8%	7.8%	0	1.8%	0.1%	1.0%	0.8%	79	101	-22	-2	8	6
Public Real Estate	1.2%	1.2%	8	-23.3%	-0.3%	-27.3%	-27.3%	405	405	0	-5	5	0
World infrastructure	3.0%	3.0%	5	-12.2%	-0.4%	-20.9%	-20.8%	874	859	15	0	28	28
Emerging Markets Debt	4.0%	4.0%	-3	-17.2%	-0.7%	-14.3%	-14.3%	-294	-290	-3	0	-12	-13
Mixed Credit	4.1%	5.8%	170	-13.1%	-0.8%	-12.9%	-14.7%	-24	157	-181	-14	11	-3
Private Debt	6.9%	6.9%	0	-4.2%	-0.3%	1.9%	1.8%	-609	-603	-6	0	-43	-44
Core Fixed Income	11.0%	7.2%	-385	2.7%	0.2%	3.1%	3.1%	-48	-41	-7	-60	-3	-63
Cash and Short Duration (Net)	1.0%	2.2%	121	0.6%	0.0%	0.6%	0.9%	0	-30	30	0	-1	-1
TIPS	2.0%	2.0%	-5	1.5%	0.0%	1.7%	1.7%	-21	-21	0	0	0	-1
PA Hedge Fund Excess Return	10.0%	8.5%	-146	-6.6%	-0.6%	0.6%	-7.3%	-720	76	-796	-88	7	-80
Total SC with Overlay	110.0%	108.5%	-146	-15.5%	-15.5%	-12.4%	-14.6%	-312	-84	-228	-265	-40	-306

Description: This report is used to explain RSIC's performance by asset class as well as attributing each asset classes' excess return to three different effects.
Allocation Effect: The decisions made to over or underweight an asset class relative to RSICs policy targets. Because Global Public Equity is Overweight its target, and the benchmark outperformed the Plan Policy benchmark, it is adding 5BPS to the Plan's excess return over the policy benchmark.
Implementation Style Bias: The performance coming from a manager (or collection of managers) that tracks a different benchmark(s) than that which is used to measure the asset class as a whole. For example, Private Equity is benchmarked to an 80/20 + 300 BPS public benchmark in the Policy BM, but RSIC tracks these assets versus a private markets benchmark.
Manager Selection: The value added by manager's ability to outperform (or underperform) the benchmarks that we hired them to beat. This is a measure of manager "alpha".

Footnotes and Disclosures

- Quality of Portfolio Structure: The combination of the Allocation Effect and Implementation Style Bias.

- Allocation Effect: The decisions made to over or underweight an asset class relative to RSICs policy targets. Because Global Public Equity is Overweight its target, and the benchmark outperformed the Plan Policy benchmark, it is adding 5BPS to the Plan's excess return over the policy benchmark. Allocation effect is calculated as: [Asset Class Weight – Policy Weight] * [Asset Class Policy Benchmark – Total Plan Policy Benchmark]

- Implementation Style Bias**:** The performance coming from a manager (or collection of managers) that tracks a different benchmark(s) than that which is used to measure the asset class as a whole. For example, Private Equity is benchmarked to an 80/20 + 300 BPS public benchmark in the Policy BM, but RSIC tracks these assets versus a private markets benchmark. Implementation Style Bias is calculated as: [Asset Class Implementation Benchmark Return – Asset Class Policy Benchmark Return] * [Asset Class Weight in Plan]

- Manager Selection**:** The value added by manager's ability to outperform (or underperform) the benchmarks that we hired them to beat. This is a measure of manager "alpha". Manager Selection is calculated as: [Asset Class Return – Asset Class Implementation Benchmark Return] * [Asset Class Weight in Plan]

- Asset class exposures and returns include blended physical and synthetic returns and current notional values (EM Debt, GTAA, Global Public Equity, Real Estate, Core Fixed Income, Private Equity, TIPS, Equity Options, and Commodities). Synthetic returns are provided by Russell Investments gross of financing costs. To accommodate for financing costs, LIBOR is added to the synthetic returns and removed from the collateral return.

- Returns are provided by BNY Mellon and are time-weighted, total return calculations. Net of fee performance is calculated and presented after the deduction of fees and expenses. Periods greater than one year are annualized. Past performance is no guarantee of future results. Policy benchmark is the blend of asset class policy benchmarks using policy weights. Asset class benchmarks and policy weights are reviewed annually by the Commission's consultant and adopted by the Commission and have changed over time. The policy benchmark return history represents a blend of these past policies.

- Overlay allocation detail is provided by Russell Investments.

- Implementation benchmark history was recalculated and restated during Q1 2020 due to the changing nature of the PE Universe and a correction to an equity benchmark, data may not match previously reported information.

- This report was compiled by the staff of the South Carolina Retirement System Investment Commission and has not been reviewed, approved or verified by the external investment managers. No information contained herein should be used to calculate returns or compare multiple funds, including private equity funds.

RETIREMENT SYSTEM
INVESTMENT COMMISSION

Annual Investment Plan Progress Report

Geoff Berg, CIO
Robert Feinstein, Managing Director
Steve Marino, Managing Director
Bryan Moore, Managing Director
James Wingo, Director

Summary Update

- New RSIC priorities

NEW RSIC PRIORITIES	STATUS
Implement portfolio reporting framework	NEARING COMPLETION
Continue to drive improvements to Private Markets returns:	
• Co-investment Platform	COMPLETED/BROADENING
• Plan for ongoing utilization of secondaries	ONGOING
• Improve sourcing	ONGOING
• Adapt process to leverage specialty consultant	NEARING COMPLETION
Risk reporting	ONGOING

- Current AIP initiatives
  - Update attached

APPENDIX
Current AIP Progress Report
(As of 3/31/2020)

Summary Update

- AIP included 34 different goals/initiatives
  - 28 from the investment team
    - 16 of these are “single-year” initiatives
    - 12 are multi-year, or “ongoing” initiatives
  - Non-investment team initiatives relate to Reporting, IT, and Legal initiatives

- Progress from prior meeting noted in yellow

Current-Year Initiatives - Investments

- Over 90% of current-year initiatives completed

INITIATIVE	Single or Multi-Yr	STATUS
A. INVESTMENT TEAM - CURRENT YEAR INITIATIVES		
Implement Policy Asset Allocation	Single	COMPLETED
TIPS: create implementation plan for exposure	Single	COMPLETED
EM small cap manager search	Single	COMPLETED
Passive Index Menu	Single	COMPLETED
Evaluate insurance-linked strategies	Single	COMPLETED
Evaluate impact of rising rates on Securities Lending	Single	COMPLETED
Work with Securities Lending agent to improve reporting	Single	COMPLETED
Co-investment platform - design & implementation	Single	COMPLETED
Develop strategy to exploit credit market turbulence	Single	COMPLETED
Active/Enhanced/Passive Framework	Single	COMPLETED
Evaluate additional alt beta strategies	Single	COMPLETED
Use of Equity Options in international markets	Single	COMPLETED
Currency hedging - evaluate options (w/Meketa)	Single	COMPLETED
PD and Credit: Develop way to track key differentials	Single	COMPLETED
Re-underwrite existing active equity strategies	Single	COMPLETED
Rebalancing options (cost/benefit analysis)	Single	VERY EARLY

Multi-Year and Ongoing Initiatives - Investments

- We completed three ongoing initiatives and have made progress on the remaining nine

INITIATIVE	Single or Multi-Yr	STATUS
B. INVESTMENT TEAM - MULTI-YEAR INITIATIVES		
Challenging beliefs (continue)	Multi	ONGOING
Mixed Credit: monitor secured vs. unsecured mix	Multi	COMPLETED
Build-out of Investment Risk function	Multi	ONGOING
Fee and expense review - structural vs. variable	Multi	ONGOING
Manager debates (GAA)	Multi	COMPLETED
Enhance Private Markets quantitative underwriting	Multi	ONGOING
Infrastructure: build out private portfolio	Multi	ONGOING
Personnel - Opportunities for cross-asset class work	Multi	ONGOING
Non-PA HFs: complete wind-down	Multi	COMPLETED
Asset consolidation w/high conviction mgrs; improve cost	Multi	ONGOING
TAA and Rebalancing - strengthen capabilities	Multi	ONGOING
Review of investment process	Multi	NEARING COMPLETION

Non-Investment Initiatives

- Progress has been made on non-investment initiatives, most of which are multi-year

INITIATIVE	Single or Multi-Yr	STATUS
C. NON-INVESTMENT TEAM AIP INITIATIVES		
Ops - Explore improvements to FI portfolio accounting	Single	COMPLETED
Ops - Assess performance reporting ecosystem needs	Multi	NEARING COMPLETION
Ops - Enhance IT infrastructure to support RSIC business needs	Multi	ONGOING
Ops - Research, implement CMS solution	Multi	ONGOING
Legal - Evaluate contracting/closing process	Multi	ONGOING
Legal - Assess different ownership structures	Multi	ONGOING

MEKETA
INVESTMENT GROUP

South Carolina Retirement System Investment Commission

March 31, 2020

Performance Report

MEKETA

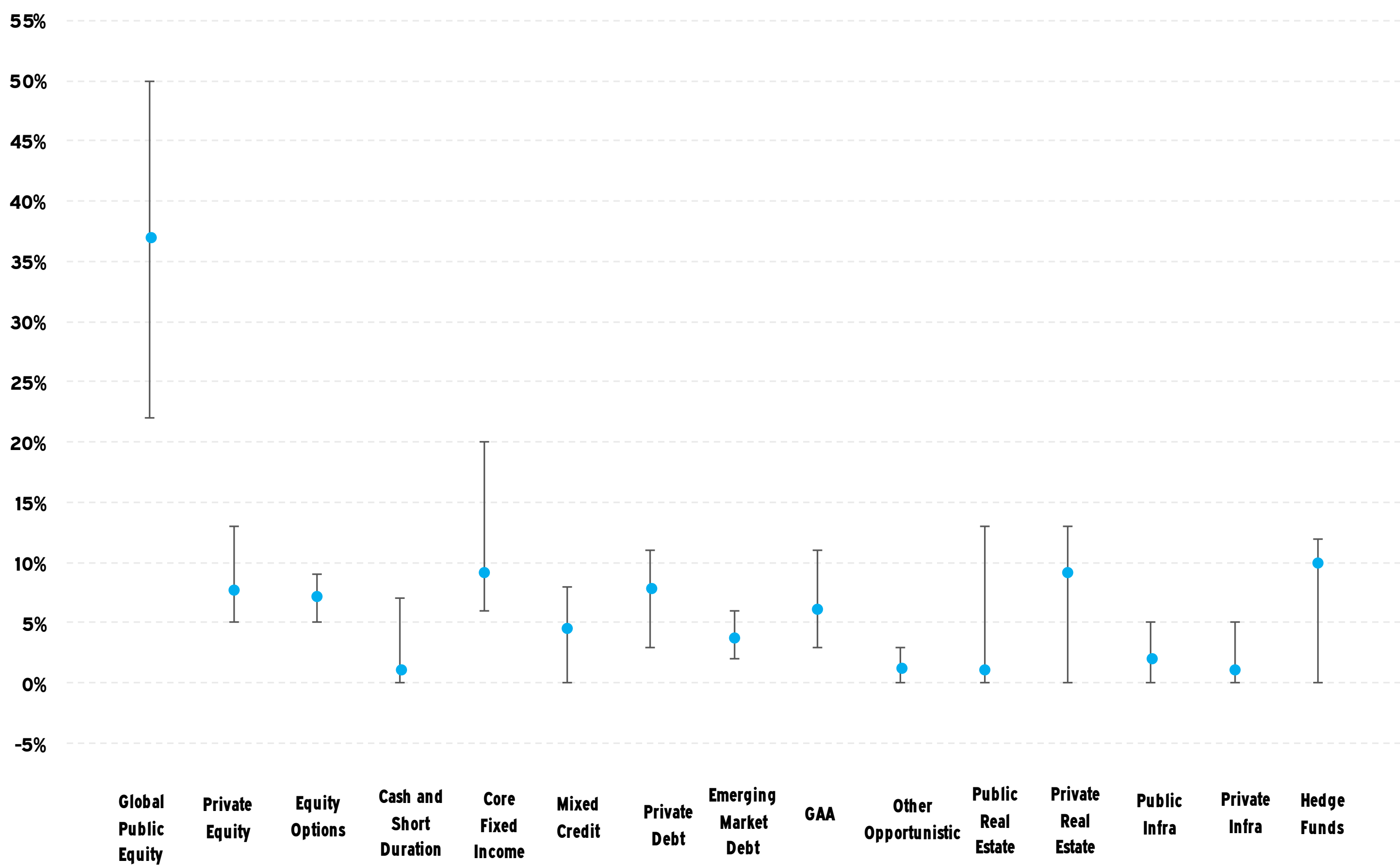
South Carolina Retirement System Investment Commission

Total Retirement System | As of March 31, 2020

Allocation vs. Targets and Policy								
	MV at 3/31/2020	Overlay Exposures	Net Position	% of Total System	% of Total System (Net)	FY 20 Policy Targets	Allowable Ranges	SIOP Compliance?
Total System	**28,193,486,295**	**-**	**28,193,486,295**	**100%**	**100%**	**110%**	**-**	**-**
Equity	**10,241,551,116**	**4,465,959,202**	**14,707,510,318**	**36%**	**52%**	**51%**	**31-59%**	**Yes**
Global Public Equity	6,425,879,564	4,026,061,984	10,451,941,549	23%	37%	36%	22-50%	Yes
Private Equity	2,207,299,550	-	2,207,299,550	8%	8%	8%	5-13%	Yes
Equity Options	1,608,372,002	439,897,218	2,048,269,220	6%	7%	7%	5-9%	Yes
Conservative Fixed Income	**4,834,200,484**	**(1,904,855,817)**	**2,929,344,667**	**17%**	**10%**	**14%**	**4-24%**	**Yes**
Cash and Short Duration	4,137,467,709	(3,815,093,856)	322,373,853	15%	1%	1%	0-7%	Yes
Core Fixed Income	696,732,775	1,910,238,039	2,606,970,814	2%	9%	13%	6-20%	Yes
Diversified Credit	**4,617,505,639**	**-**	**4,617,505,639**	**16%**	**16%**	**15%**	**10-20%**	**Yes**
Mixed Credit	1,312,360,592	-	1,312,360,592	5%	5%	3%	0-8%	Yes
Private Debt	2,214,540,402	-	2,214,540,402	8%	8%	8%	3-11%	Yes
Emerging Market Debt	1,090,604,644	-	1,090,604,644	4%	4%	4%	2-6%	Yes
Opportunistic	**1,854,267,692**	**248,128,129**	**2,102,395,821**	**7%**	**7%**	**8%**		
GAA	1,509,855,850	238,622,519	1,748,478,369	5%	6%	7%	3-11%	Yes
Other Opportunistic	344,411,842	9,505,610	353,917,451	1%	1%	1%	0-3%	Yes
Real Assets	**3,836,729,850**	**-**	**3,836,729,850**	**14%**	**14%**	**12%**	**7-17%**	**Yes**
Public Real Estate	316,521,838	-	316,521,838	1%	1%	0%	0-13%	Yes
Private Real Estate	2,603,950,260	-	2,603,950,260	9%	9%	9%	0-13%	Yes
Public Infrastructure	600,660,860	-	600,660,860	2%	2%	2%	0-5%	Yes
Private Infrastructure	315,596,893	-	315,596,893	1%	1%	1%	0-5%	Yes
Hedge Funds PA	**2,809,231,514**	**(2,809,231,514)**	**-**	**10%**	**0%**	**10%**	**0-12%**	**Yes**

Includes cash in the Russell Overlay separate account.
Percentages may not sum to 100% due to rounding.

Actual vs. Policy Ranges:
(Including Overlay)



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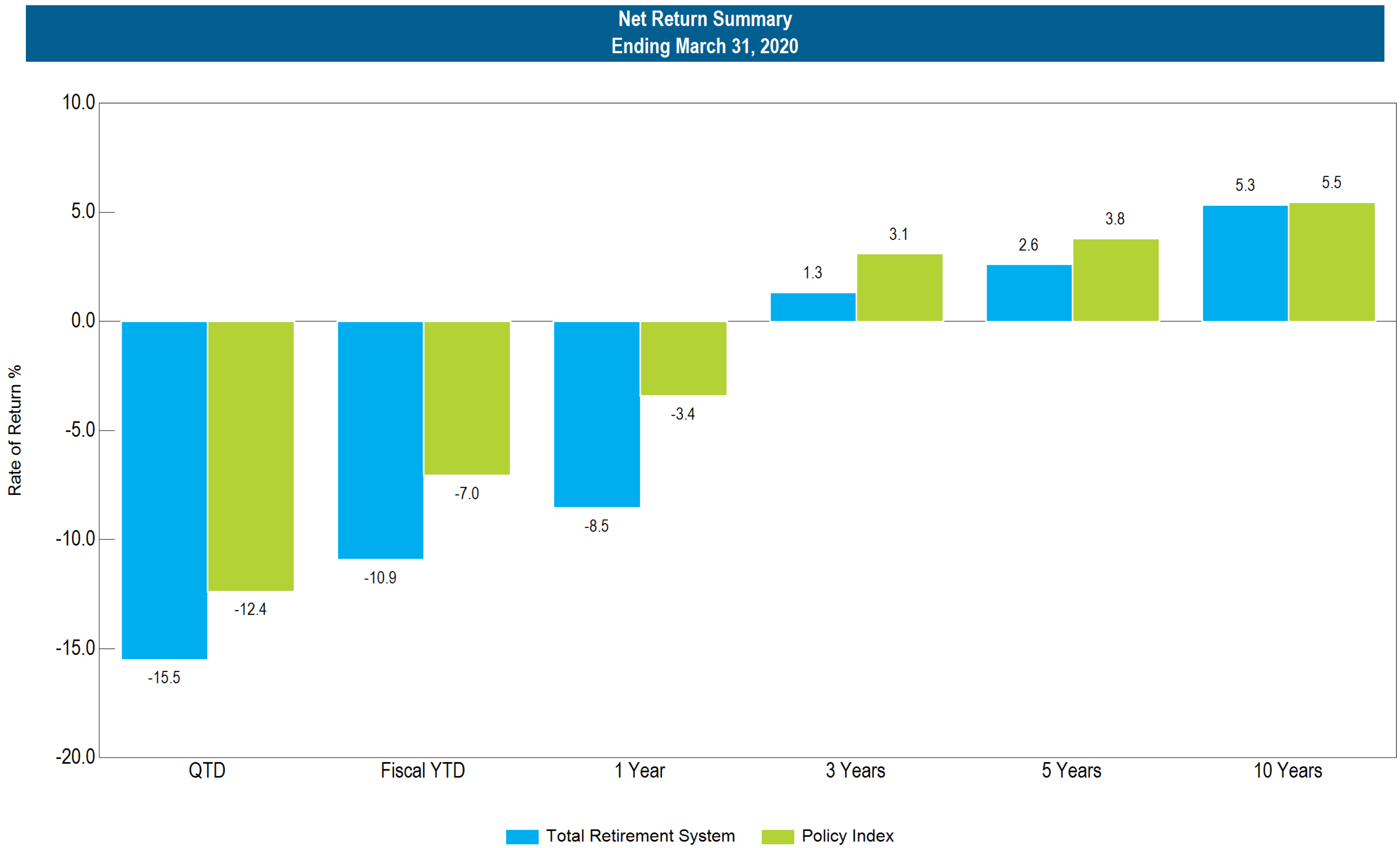
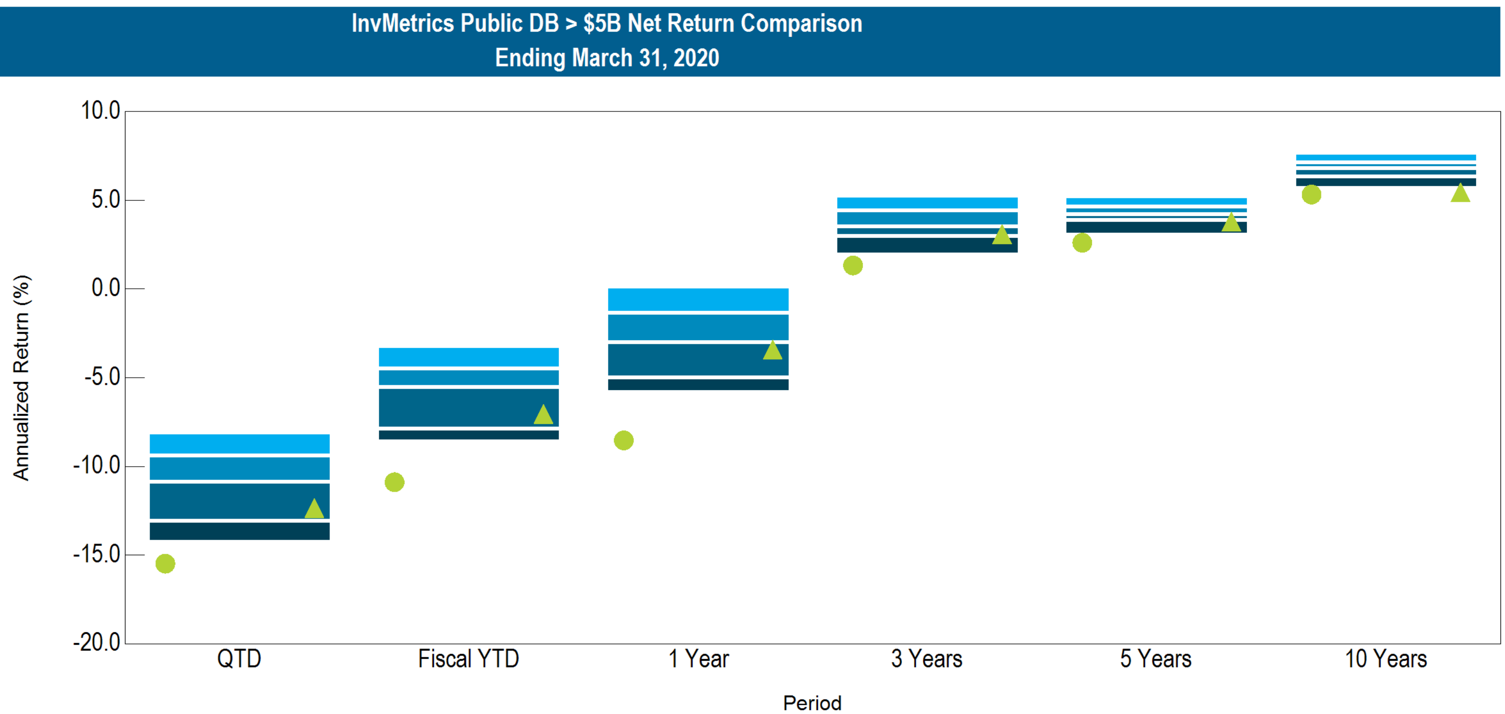
South Carolina Retirement System Investment Commission

Total Retirement System | As of March 31, 2020



Returns for periods greater than one year are annualized.



	Return (Rank)											
5th Percentile	-8.1		-3.2		0.1		5.3		5.2		7.7	
25th Percentile	-9.4		-4.5		-1.3		4.5		4.7		7.2	
Median	-10.8		-5.5		-3.0		3.5		4.2		6.8	
75th Percentile	-13.1		-7.9		-5.0		3.0		3.9		6.4	
95th Percentile	-14.2		-8.6		-5.8		2.0		3.1		5.7	
# of Portfolios	23		23		23		23		21		21	
Total Retirement System	-15.5	(99)	-10.9	(99)	-8.5	(99)	1.3	(99)	2.6	(97)	5.3	(96)
Policy Index	-12.4	(70)	-7.0	(65)	-3.4	(59)	3.1	(74)	3.8	(85)	5.5	(96)

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South Carolina Retirement System Investment Commission

Total Retirement System | As of March 31, 2020

Quarterly Excess Performance vs. Policy Benchmark

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South Carolina Retirement System Investment Commission

Total Retirement System | As of March 31, 2020

Net Asset Class Performance Summary

	Market Value ($)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Retirement System	**28,193,486,295**	**100.0**	**-15.5**	**-10.9**	**-8.5**	**1.3**	**2.6**	**5.3**	**5.7**	**Jul-94**
Policy Index			*-12.4*	*-7.0*	*-3.4*	*3.1*	*3.8*	*5.5*	*5.3*	*Jul-94*
Global Public Equity	**6,425,879,564**	**22.8**	**-25.1**	**-19.1**	**-16.6**	**-1.3**	**1.1**	**5.1**	**3.3**	**Jun-99**
FY '20 Global Public Equities Custom Benchmark			*-22.6*	*-15.8*	*-13.1*	*0.6*	*2.4*	*5.6*	*4.0*	*Jun-99*
Private Equity	**2,207,299,550**	**7.8**	**-2.2**	**-1.3**	**1.8**	**7.8**	**8.8**	**11.5**	**7.2**	**Apr-07**
80% Russell 3000/20% MSCI EAFE + 300 bps on a 3-month lag			*9.0*	*16.1*	*32.2*	*16.6*	*13.2*	*14.9*	*14.8*	*Apr-07*
Equity Options	**1,608,372,002**	**5.7**	**-16.6**	**-11.9**	**-10.4**	**-0.2**	**--**	**--**	**2.1**	**Jul-16**
FY '20 CBOE 50/50 Put/Buy			*-21.5*	*-17.5*	*-15.2*	*-2.5*	*1.3*	*4.2*	*0.2*	*Jul-16*
Short Duration	**403,366,119**	**1.4**	**-1.8**	**-0.3**	**0.8**	**1.7**	**1.6**	**1.8**	**1.7**	**Mar-10**
BBgBarc US Govt/Credit 1-3 Yr. TR			*1.7*	*3.0*	*4.5*	*2.6*	*1.9*	*1.6*	*1.6*	*Mar-10*
Cash and Overlay	**3,734,101,590**	**13.2**	**0.2**	**1.3**	**1.8**	**1.3**	**0.6**	**0.3**	**1.1**	**Oct-05**
ICE BofAML 91 Days T-Bills TR			*0.6*	*1.6*	*2.3*	*1.8*	*1.2*	*0.6*	*1.3*	*Oct-05*
Core Fixed Income	**696,732,775**	**2.5**	**2.1**	**4.5**	**7.6**	**4.6**	**3.5**	**4.1**	**6.0**	**Jul-94**
BBgBarc US Aggregate TR			*3.1*	*5.7*	*8.9*	*4.8*	*3.4*	*3.9*	*5.6*	*Jul-94*
Mixed Credit	**1,312,360,592**	**4.7**	**-13.2**	**-11.2**	**-9.5**	**-0.8**	**0.9**	**3.7**	**4.7**	**May-08**
50% S&P LSTA Leveraged Loan Index/50% Barclays High Yield Index			*-12.9*	*-9.9*	*-8.0*	*0.0*	*2.1*	*3.9*	*4.7*	*May-08*
Private Debt	**2,214,540,402**	**7.9**	**-4.2**	**-3.0**	**-1.9**	**2.4**	**3.6**	**6.5**	**6.2**	**Jun-08**
S&P LSTA Leveraged Loan Index + 150 bps on a 3-month lag			*1.9*	*5.4*	*10.1*	*5.8*	*5.9*	*6.5*	*5.3*	*Jun-08*
Emerging Market Debt	**1,090,604,644**	**3.9**	**-17.2**	**-14.6**	**-10.6**	**-2.0**	**1.2**	**2.1**	**3.5**	**Jul-09**
50% JP Morgan EMBI Global Diversified (USD)/50% JP Morgan EMBI Global Diversified			*-14.3*	*-10.9*	*-6.6*	*-0.1*	*1.6*	*2.8*	*4.1*	*Jul-09*
GAA	**1,509,855,850**	**5.4**	**-23.1**	**-17.1**	**-14.9**	**-3.1**	**-1.1**	**3.6**	**3.1**	**Aug-07**
Total System Policy Benchmark ex-Private Markets			*-16.5*	*-11.2*	*-8.3*	*0.6*	*2.2*	*4.0*	*3.2*	*Aug-07*

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Total Retirement System | As of March 31, 2020

	Market Value ($)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Other Opportunistic	**344,411,842**	**1.2**	**-30.8**	**-31.3**	**-32.5**	**--**	**--**	**--**	**-7.7**	**Jul-17**
Total System Policy Benchmark ex-Private Markets			*-16.5*	*-11.2*	*-8.3*	*0.6*	*2.2*	*4.0*	*-0.4*	*Jul-17*
Hedge Funds Portable Alpha	**2,809,231,514**	**10.0**	**-6.2**	**-3.4**	**-2.7**	**1.5**	**1.8**	**6.8**	**7.2**	**Jul-07**
ICE BAML 3 Month T-Bill + 250 BPS SC Custom			*1.2*	*3.5*	*4.8*	*3.5*	*2.3*	*1.3*	*1.6*	*Jul-07*
Public Real Estate	**316,521,838**	**1.1**	**-23.3**	**-18.0**	**-16.2**	**-0.3**	**--**	**--**	**-1.2**	**Jul-16**
FTSE NAREIT Equity REIT			*-27.3*	*-22.2*	*-21.3*	*-3.1*	*-0.3*	*7.4*	*-3.4*	*Jul-16*
Private Real Estate	**2,603,950,260**	**9.2**	**1.8**	**5.6**	**6.6**	**8.8**	**9.9**	**11.0**	**7.2**	**Jul-08**
NCREIF ODCE Net + 100 BPS SC Custom			*1.0*	*3.8*	*5.0*	*7.0*	*9.2*	*11.9*	*5.9*	*Jul-08*
Public Infrastructure	**600,660,860**	**2.1**	**-16.8**	**-10.9**	**-6.7**	**2.2**	**--**	**--**	**2.4**	**Jun-16**
DJ Brookfield Global Infrastructure			*-20.9*	*-15.7*	*-12.1*	*0.3*	*1.1*	*7.6*	*2.6*	*Jun-16*
Private Infrastructure	**315,596,893**	**1.1**	**-0.6**	**-2.3**	**2.6**	**--**	**--**	**--**	**5.1**	**Jul-18**
DJ Brookfield Global Infrastructure			*-20.9*	*-15.7*	*-12.1*	*0.3*	*1.1*	*7.6*	*-2.9*	*Jul-18*

Statistics Summary

5 Years Ending March 31, 2020

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Retirement System	2.6%	8.1%	-0.8	1.1	0.2	1.6%
Policy Index	3.8%	7.2%	--	1.0	0.4	0.0%
Global Public Equity	1.1%	14.4%	-0.8	1.0	0.0	1.6%
FY '20 Global Public Equities Custom Benchmark	2.4%	14.0%	--	1.0	0.1	0.0%
Private Equity	8.8%	4.4%	-0.4	0.0	1.7	12.0%
80% Russell 3000/20% MSCI EAFE + 300 bps on a 3-month lag	13.2%	11.6%	--	1.0	1.0	0.0%
Short Duration	1.6%	1.3%	-0.2	0.4	0.4	1.3%
BBgBarc US Govt/Credit 1-3 Yr. TR	1.9%	0.9%	--	1.0	0.8	0.0%
Cash and Overlay	0.6%	0.3%	-2.9	1.0	-1.6	0.2%
ICE BofAML 91 Days T-Bills TR	1.2%	0.3%	--	1.0	0.2	0.0%
Core Fixed Income	3.5%	3.1%	0.2	1.0	0.8	0.8%
BBgBarc US Aggregate TR	3.4%	3.1%	--	1.0	0.7	0.0%
Mixed Credit	0.9%	6.7%	-0.7	1.0	0.0	1.6%
50% S&P LSTA Leveraged Loan Index/50% Barclays High Yield Index	2.1%	6.5%	--	1.0	0.2	0.0%
Private Debt	3.6%	3.6%	-0.5	0.1	0.7	4.5%
S&P LSTA Leveraged Loan Index + 150 bps on a 3-month lag	5.9%	3.0%	--	1.0	1.6	0.0%
Emerging Market Debt	1.2%	10.8%	-0.2	1.1	0.0	1.9%
50% JP Morgan EMBI Global Diversified (USD)/50% JP Morgan EMBI Global Diversified	1.6%	9.6%	--	1.0	0.0	0.0%
GAA	-1.1%	11.3%	-1.0	1.2	-0.2	3.4%
Total System Policy Benchmark ex-Private Markets	2.2%	9.0%	--	1.0	0.1	0.0%
Hedge Funds Portable Alpha	1.8%	4.4%	-0.1	-1.2	0.1	4.5%
ICE BAML 3 Month T-Bill + 250 BPS SC Custom	2.3%	0.5%	--	1.0	2.2	0.0%
Private Real Estate	9.9%	2.1%	0.2	0.0	4.1	4.2%
NCREIF ODCE Net + 100 BPS SC Custom	9.2%	3.7%	--	1.0	2.2	0.0%

Return calculations are rounded to the nearest tenth of percent and may differ slightly from BNYM reported returns.

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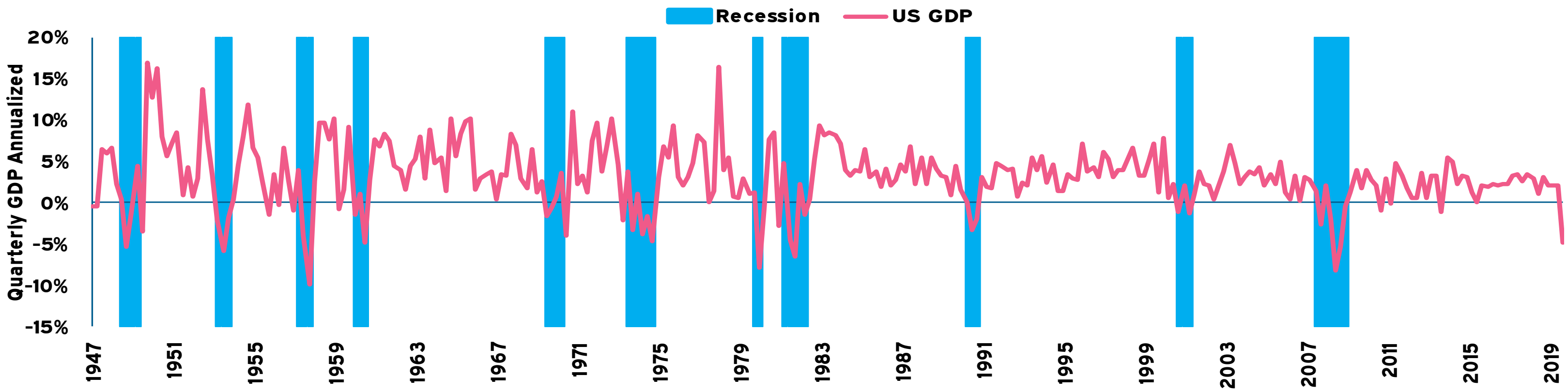
Long-Term Investing in a Recession

Executive Summary

- The following materials describe how markets typically react to a recession, the impact this could have on the Retirement System, and best practices on how to navigate a bear market.
- Ultimately, it is crucial to recognize that as long-term investors these types of markets are inevitable. When evaluating your projected return and the probability of meeting your assumed rate of return, we factor in such events.
- It is vitally important that investors remain calm and disciplined in their investment approach. Investors who are too reactionary and make decisions out of fear of short-term loss typically lose in the long run.
- Recently the markets have been severely impacted by the effects COVID-19 is having on the global economy. As a result, it is likely that the US will enter a recession in 2020.

What is a Recession?



A recession refers to that part of the business cycle when economic activity declines.

- More specifically, a recession is defined as a "significant decline in economic activity, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales."[1]
- Recessions are typically marked by several key, adverse outcomes:
  - Unemployment increases significantly as companies cut costs or go out of business.
  - Consumer spending decreases and saving increases as consumer confidence decreases.
  - Equity and corporate bond prices fall as earnings expectations decline and bankruptcy risk rises.

[1] The National Bureau of Economic Research is responsible for defining recessions in the US.

Extreme Markets

Period	Peak-to-Trough Decline of the S&P 500	Approximate Time to Recovery
Sept 1929 to June 1932	-85%	266 months
February 1937 to April 1942	-57%	48 months
May 1946 to February 1948	-25%	27 months
August 1956 to October 1957	-22%	11 months
December 1961 to June 1962	-28%	14 months
February 1966 to October 1966	-22%	7 months
November 1968 to May 1970	-36%	21 months
January 1973 to October 1974	-48%	69 months
September 1976 to March 1978	-19%	17 months
November 1980 to August 1982	-27%	3 months
August 1987 to December 1987	-32%	19 months
July 1990 to October 1990	-20%	4 months
July 1998 to August 1998	-19%	3 months
March 2000 to October 2002	-49%	56 months
October 2007 to March 2009	-57%	49 months
February 2020 to May 2020	-34%	TBD
Average	**-36%**	**41 months**
Average ex. Great Depression	**-33%**	**25 months**

- Since the Great Depression, the US has experienced sixteen distinct bear markets including the most recent bear market brought on by the impacts of COVID-19.
  - Bear markets are defined as a decline in the market of at least 20%
- These bear markets generally coincided with – and often slightly preceded – recessions.
- With the exception of the Great Depression, bear markets lasted an average of approximately 2 years, and were always followed by a bull market.
- The subsequent bull market rebounds have far exceeded the declines experienced during recessions, allowing long-term investors to benefit from continuous equity exposure.

Asset Class Performance in Periods of Market Distress

	Global Financial Crisis (Oct 2007 - Mar 2009)	Popping of the TMT Bubble (Apr 2000 - Sep 2002)	LTCM (Jul - Aug 1998)	Crash of 1987 (Sep - Nov 1987)	Strong dollar (Jan 1981 - Sep 1982)	Stagflation (Jan 1973 - Sep 1974)
Cash Equivalents	3.1	9.9	0.8	1.4	24.4	13.5
Investment Grade Bonds	9.3	28.6	1.8	2.2	29.9	7.9
Long-term Government Bonds	24.5	35.5	4.1	2.6	28.4	-1.8
TIPS	9.6	37.4	0.7	2.8	15.6	4.3
High Yield Bonds	-20.7	-6.3	-5.0	-3.6	6.9	-15.5
Emerging Market Bonds (local)	-2.3	7.2	-34.1	-11.0	-2.0	-23.9
US Equity	-43.8	-43.8	-15.4	-29.5	-2.3	-42.6
Developed Market Equity (non-US)	-49.6	-46.7	-11.5	-14.5	-18.0	-36.3
Emerging Market Equity	-45.8	-43.9	-26.7	-25.3	-12.1	-44.2
Private Equity	-25.8	-26.0	-3.3	0.6	-3.9	-20.1
Core Private Real Estate	-7.3	23.6	2.3	0.7	23.9	-4.4
Core Infrastructure	0.2	24.8	-0.3	0.0	-0.2	-0.5
Hedge Funds	-15.6	-2.1	-9.4	-7.8	-3.8	-15.7

- One key component of portfolio construction and asset class design is choosing asset classes with a low to negative correlation with one another. This minimizes the effect volatile asset classes can have on the total System in times of market distress.

Worst Case Return Expectations[1]

Time Period	Current Policy (%)	5-Asset Mix (%)	70/30 Reference Portfolio (%)	US Equities (%)
One Year	-18.5	-16.7	-17.7	-25.1
Three Years (annualized)	-8.5	-7.3	-8.1	-12.7
Five Years (annualized)	-5.1	-4.2	-5.0	-8.5
Ten Years (annualized)	-1.6	-1.0	-1.7	-4.1
Twenty Years (annualized)	0.9	1.3	0.7	-0.8

- As part of our periodic review of the Retirement System's asset allocation, we evaluate the "worst case" returns that we expect the Fund to experience in a given period.
  - However, this model tends to understate the magnitude of left-tail events.
  - For example, the System declined 29.0% in 2008, during the GFC.
- In addition, given that we had just experienced one of the largest and longest running bull markets in US history, our capital markets assumptions reflected that valuations were high and anticipated the next 10 years' investment performance would be weaker than the prior 10 years.
- Therefore, periodic market declines are expected, and while painful in the short term, they are built into our long-term modeling of the Retirement System's return assumptions

[1] The "Worst Case" Return Projections included in this document assume a negative three standard deviation event (i.e., it encompasses >99% of possible outcomes). However, throughout history investors have experienced significantly worse returns.

Recent Performance

- COVID-19 has had an extreme impact on performance thus far in 2020. Global stock markets experienced a period of extreme volatility from late February into April, with swings of 3%+ up and down almost daily.
- Given the economic uncertainty surrounding the pandemic, US stocks declined from their recent peak into bear market (-20%) territory at the fastest pace in history. This was also the first time we have experienced both a bull and a bear market rally in one month.
- Meketa Investment Group anticipates that the effects of COVID-19 will push the US economy into a recession in the second and third quarter of 2020.

Retirement System Performance & Recent Estimates[1]

	April	March	Q1	YTD	FYTD
South Carolina Retirement System	7.2%	-11.0%	-15.5%	-8.3%	-3.7%
5 Asset Portfolio Benchmark	6.7%	-6.1%	-9.3%	-3.2%	2.5%
Reference Portfolio Benchmark	8.2%	-10.3%	-15.2%	-8.2%	1.8%
Russell 3000	13.2%	-13.8%	-20.9%	-10.4%	-1.1%
MSCI ACWI ex. US IMI	8.1%	-15.1%	-24.1%	-17.9%	-11.9%
Barclays Aggregate	1.8%	-0.6%	3.1%	5.0%	7.6%

[1] Performance subsequent to March 31, 2020 represents estimated results that have not been formally finalized yet. The Reference Portfolio benchmark is 70% MSCI ACWI IMI/30% Barclays Aggregate.

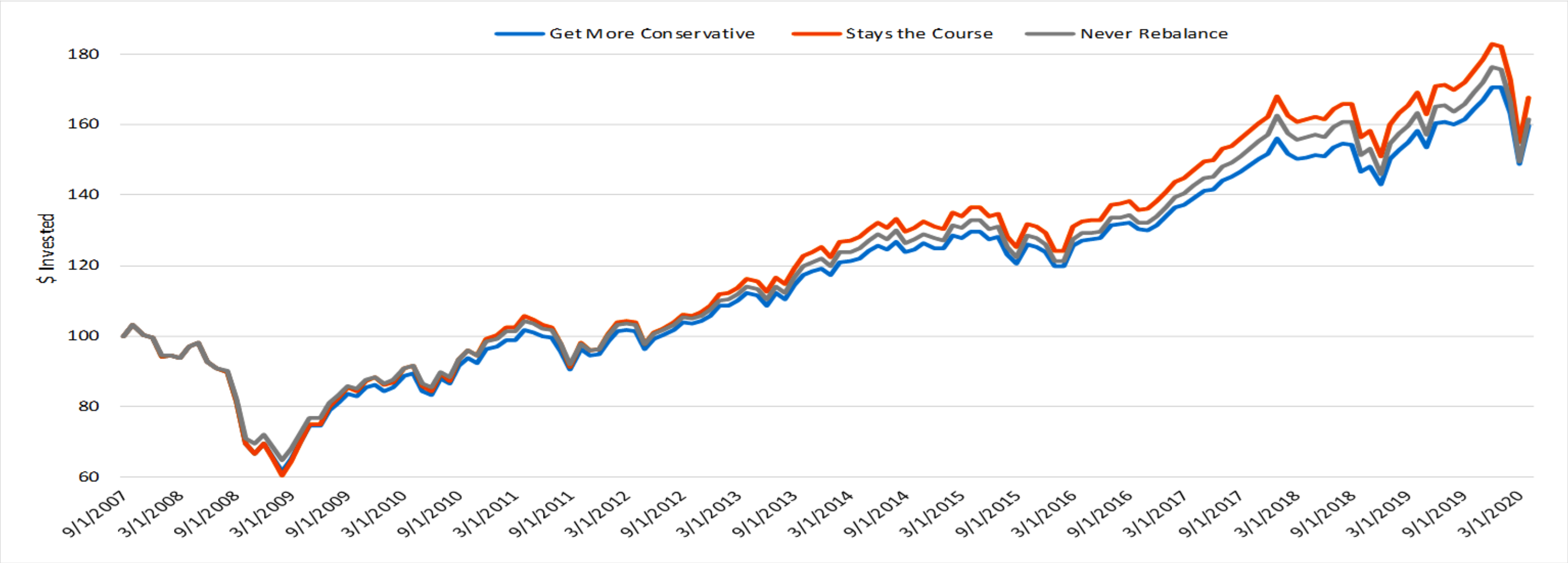
Lessons Learned From History and Peers?

Mistakes Made by Peers in the Industry

- Becoming risk-averse in times of market distress (e.g., changing to a more conservative strategic asset allocation).
- Deviating from the plan by refraining from making private markets commitments and losing the opportunity for adequate vintage year diversification.
- Having over-allocated to illiquid assets and being forced sellers in down markets.
- Seeking to market time and identify the bottom of a market downturn.

What Should Investors Do[1]?

#1. Rebalance: Periodically rebalance back to equity targets to benefit when the market eventually rebounds.

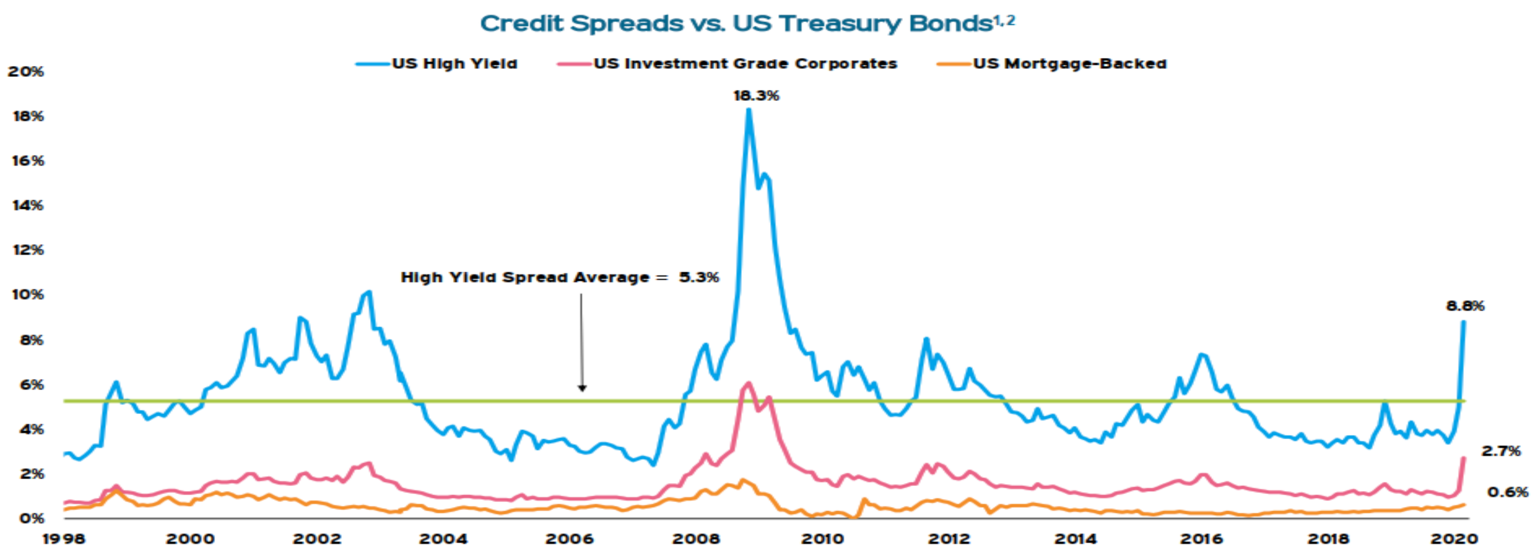


- The chart above demonstrates the value of $100 invested by three different people. The first investor gets more conservative two-thirds of the way through the GFC, the second investor rebalances regularly to maintain a 70% equities/30% bonds allocation, and the third investor never rebalances.
- The investor, who rebalances, ends up with the highest balance and outperforms the one who gets more conservative by 5%, which on an initial investment of $100 is the difference between $167.75 and $159.62. However on a $30 billion Fund this differential is significant and equates to over $2.4 billion.

[1] The chart above uses the MSCI ACWI and Barclays Aggregate indexes and assumes monthly rebalancing for the example that is labeled “Stays the Course”.

#2. Opportunistic Investments:

- Evaluate high quality investment opportunities in assets that are distressed due to the current market environment, which can be purchased at discounted prices.
- An example of this was in 2008, when credit spreads widened significantly. As a result, Meketa advised its clients to increase their allocations to high yield bonds. Following our recommendation, from April 2009 through December 2009, high yield bonds gained 49.3%.



[1] Source: Barclays Live. Data represents the OAS.
[2] The median high yield spread was 4.8% from 1997-2020.

#3. Stay the Course:

- Many investors suffer from the behavioral bias that causes them to get fearful when the market declines and hence get more conservative at an inopportune time.
  - They also chase performance by investing in risky assets after a period of strong investment performance.
- It is crucial to long-term success that Funds are disciplined at maintaining their strategic asset allocations and not fall victim to these behavioral biases.
- Investors' performance lags actual fund performance due to performance chasing, a practice that effectively translates into buying high and selling low.

The Gap by Asset Class (10-Year Returns)[1]

Broad Category Group	Investor Return	Total Return	Gap
U.S. Equity	6.88	7.89	-1.01
International Equity	6.84	9.95	-3.11
Municipal Bonds	2.71	4.06	-1.35
All Funds	6.10	7.05	-0.95

1 Source: Morningstar. Kinnel, Russel. "Mind the Gap 2012". https://www.morningstar.com/articles/710248/mind-the-gap-2015.

Forward Looking

- Going forward, Meketa and Staff will be evaluating the longer-term implications COVID-19, the US economic stimulus, and the resulting distress on the global economy, will have on the capital markets.
- As part of this analysis, some of the topics Meketa is in the process of exploring are as follows:
  - The impact of secularly lower interest rates and perhaps inflation.
  - Lower energy prices
  - A possible retreat from globalization
  - Long-term changes to the real estate market
- We will report back to the Commission and Staff with our findings over the next 12 months as needed.

Summary

- Recessions occur, and when they do, the short-term impact on the Retirement System's performance can be severe and long-lasting.
- It is likely that the US will enter a recession due to the economic impacts that COVID-19 is having on the global economy.
- The best way to position the Retirement System for long-term success is to remain disciplined in your investment approach and not become reactionary to short-term market fluctuations.
- Long-term investors rebalance periodically to maintain their policy equity allocation, even during times of market distress, in order to benefit when the market rebounds.
- Market timing is typically unsuccessful, so the key to meeting your investment return over long-term periods is to avoid deviating greatly from your strategic asset class targets.

Appendix

What Commonalities Are Prevalent In Groups That Make Investment Mistakes?

Everyday Group Dynamics:

- **Dominant Member:** Strong personality, greater technical knowledge or political power – this person's views often win.
- **Passivity:** Willingness to go along with any idea.
- **Be Heard:** Desire to be vocal, add value and participate – even when lacking expertise.
- **Fear:** Doesn't want to assert ideas that could be criticized.
- **Decision Obsessing:** Constantly revisiting decisions that didn't go "their' way.

Discipline & Confidence:

- **Preference for the Comfortable Decision:** Terminate the "bad" manager or asset class. Taking NO ACTION on the "good" manager or asset class (e.g. not to re-balance to policy targets in bear or bull market).
- **Overconfidence:** In ability to time markets, managers, or risks. "We should stay the course now, but get out before it goes down."
- **Peer Pressure:** Preoccupation with the decisions of other boards. Reacting to headlines. Chasing returns of other managers in peer group.
- **Productivity Focused:** Desire to make a decision to have a "productive" meeting.

What Commonalities Are Prevalent In Groups That Make Investment Mistakes? (Continued)

Conflicts:

- **Conflicts:** Managers placed/retained on the roster for their "relationship" value.
- **Personal Bonds:** Personal affinity for managers/consultant/vendors clouds judgment.

Board Operations:

- **Large Board:** Diffusion of responsibility; share blame for bad outcome. Too many opinions; lack of consensus.
- **Lack of Time Discipline:** Board members not disciplined with use of time; inadvertent time wasted on inconsequential issues. Chair not able to effectively preside over meetings.
- **Volunteer Problem:** Responsibility to Board is not deep; members not adequately prepared.
- **Meeting Fatigue:** Too many meetings; participants lose focus.
- **Implementation Costs:** Slow to get consensus or vote, infrequent meetings, wait for market movement to confirm idea.

Manager Roster:

- **Return Focus:** Ends justify means; risks taken not easily quantified (versus expected return). Manager decisions (hire, retain, fire) with focus on past absolute returns.
- **Time Horizon:** Evaluating managers on a short-term horizon, often after a period of bad performance.
- **Clean Slate Effect:** Appeal to terminate a manager to expunge its record from the quarterly report; start fresh with a new manager – can lead to "whipsaw" pattern, favoring the "hot" investment style.
- **Overactive Management of Managers:** Manager churn tends to be reactive and expensive.

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Holding Foreign Companies Accountable Act and Potential Impact

Background

- On May 20, 2020, the U.S. Senate passed the **Holding Foreign Companies Accountable Act** (S.945) by unanimous consent. A similar bill was introduced in the House of Representatives on the same day.
- If enacted, the bill would prohibit a foreign-owned company from listing and trading securities on U.S. stock exchanges, if the company was unable to meet the certain following criteria:
  1. The company is unable to establish that it is not controlled by a foreign government.
  2. If the Public Company Accounting Oversight Board ("PCAOB")[1] is prevented from inspecting the company's audits for three consecutive years to determine that it is not under the control of a foreign government.
- The bill covers all listed companies, but it will primarily have an effect on U.S.-listed Chinese companies.
  - The PCAOB is currently unable to inspect the work of the auditing firms used in China with full transparency.
  - These firms routinely cite local laws related to confidentiality, privacy, or national security as reasons for being unable to provide the PCAOB with the information needed to complete inspections.

[1] The Public Company Accounting Oversight Board is a nonprofit corporation created by the Sarbanes-Oxley Act of 2002 to oversee accounting professionals who provide independent audit reports for publicly traded companies.

Potential Impacts on Emerging Markets

- As of April 30, 2020, emerging market equities and specifically China, make up approximately 11% and 4%, respectively, of the global equity market, as defined by the MSCI ACWI IMI benchmark.
- If enacted, the actual impact on emerging market investors is still unclear at this point.
- The bill has the potential to hurt Chinese companies registered on the US stock exchanges. Currently, there are over 200 firms listed on U.S. exchanges with a market cap of approximately $1 trillion USD.
- If enacted, there would be a three-year period for companies to come into compliance.
- This gives U.S. and Chinese regulators time on how to agree to best regulate Chinese companies listed in the U.S. that could alleviate many of the PCAOB's concerns.
- Another potential outcome is that Chinese companies listed in the U.S. may seek alternative listings, most likely in Hong Kong or London. Alibaba successfully listed in Hong Kong in 2019, and other companies are planning to in 2020.
- Most often, when a company listed in multiple countries delists from a particular exchange, the standard practice is to transfer the shares to another exchange.
  - This means institutional investors are unlikely to lose total access to invest in these companies, as institutions are not beholden to the U.S. stock exchanges and can/do trade shares on non-US exchanges.

Potential Impacts on Emerging Markets (continued)

- However, there is a possibility U.S. investors may lose billions of dollars in retaliation from China and the domestic stock exchanges may suffer from the delistings.
  - China has warned the U.S. of "significant repercussions" and the country could refuse to transfer the shares to another exchange, meaning investors would be vulnerable to losing the entirety of the capital they invested in a worst case retaliation scenario.

Potential Impacts on RSIC Portfolio

- Direct overall impacts on the RSIC Portfolio should be minimal.
- Within the MSCI ACWI IMI index, only about 1.5% of constituents are foreign companies listed on U.S. exchanges.
  - Within this subset, approximately 80% of these companies are Chinese, with Alibaba (BABA) being the overwhelmingly largest position.
- Using the MSCI ACWI IMI index as a proxy for the RSIC Portfolio and a target weight of 46% to global public equity:
  - The estimated current exposure to foreign companies listed on U.S. exchanges is approximately \$193 million (0.7% of total Portfolio).[1]
  - The estimated current exposure specifically to Chinese companies listed on U.S. exchanges is approximately \$152 million (0.5% of total Portfolio).[1]

[1] RSIC Portfolio total market value as of 3/31/2020. MSCI ACWI IMI Index weights as of 4/30/2020.

Delegated Investments (April 16, 2020 to June 3, 2020)

Asset Class	Investment	Investment Amount	Closing Date
Private Equity	Francisco Partners GP VI	Up to $100 M	April 16, 2020
Private Equity	Francisco Partners Agility II	Up to $50 M	April 16, 2020
Private Equity	CVC Capital Partners VIII	€100 M	May 1, 2020
Private Credit	Eagle Point Credit Partners	Up to $100 M	May 6, 2020
Private Equity	CD&R XI	$75 M	May 22, 2020
Private Equity	Bridgepoint Development Capital IV	Up to £75 M	May 28, 2020