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RETIREMENT SYSTEM INVESTMENT COMMISSION

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VICE-CHAIR <sup>1</sup>

REBECCA M. GUNNLAUGSSON, PH. D  
COMMISSIONER

MELISSA (MISSY) B. SCHUMPERT, CPA  
COMMISSIONER

REYNOLDS WILLIAMS, JD, CFP  
COMMISSIONER

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# Commission Meeting Agenda

Thursday, April 21, 2022 at 9:30 a.m.

RSIC Presentation Center and Streaming Online at [www.rsic.sc.gov](http://www.rsic.sc.gov)

- I. Call to Order and Consent Agenda
  - A. Adoption of Proposed Agenda
  - B. Approval of March 2022 Minutes
- II. Chair's Report
  - A. Open Retiree Representative Nominations
  - B. Open Nominations for Chair / Vice-Chair Election
- III. Committee Reports
- IV. CEO's Report
  - A. Consolidated Annual Investment Plan and Statement of Investment Objectives and Policies – Approval
- V. Ukraine and Russia: Geopolitical Update - KKR
- VI. Macro-Economic Presentation - Torsten Slok, Apollo Chief Economist
- VII. Delegated Investment Report
- VIII. Executive Session to discuss investment matters and specific real asset investments pursuant to S.C. Code Sections 9-16-80 and 9-16-320; and to discuss negotiations incident to proposed contractual arrangements for a general investment consultant and to receive advice from legal counsel pursuant to S.C. Code Section 30-4-70(a)(2).
- IX. Potential Actions Resulting from Executive Session
- X. Adjourn

#### NOTICE OF PUBLIC MEETING

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**South Carolina Retirement System Investment Commission  
Meeting Minutes**

**March 3, 2022  
Capitol Center  
1201 Main Street, 15<sup>th</sup> Floor  
Columbia, South Carolina 29201  
Meeting Location: 1201 Main Street, Ste. 1501 and  
Video Presentation**

**Commissioners Present:**

Mr. William Hancock, Chair  
Dr. Ronald Wilder, Vice Chair  
Ms. Peggy Boykin, PEBA Executive Director  
Mr. William J. Condon, Jr.  
Mr. Edward Giobbe  
Dr. Rebecca Gunnlaugsson  
Ms. Melissa Schumpert  
Mr. Reynolds Williams

**I. Call to Order and Consent Agenda**

Chair Mr. William H. Hancock called the meeting of the South Carolina Retirement System Investment Commission (“Commission”) to order at 9:31 a.m. Dr. Ronald Wilder moved to approve the proposed agenda as presented, Mr. Edward Giobbe seconded the motion, which was approved unanimously.

Dr. Rebecca Gunnlaugsson made a motion to approve the minutes from the December 2, 2021 Commission meeting as presented. Dr. Wilder seconded the motion, which was approved unanimously.

**II. Chair’s Report**

The Chair stated that he had nothing to report

**III. Committee Reports**

The Chair recognized Dr. Gunnlaugsson to provide a report on the activities of the Audit and Enterprise Risk Management Committee (“AERM”). Dr. Gunnlaugsson noted that the AERM Committee Report had been made available to the Commissioners for review prior to the meeting. Hearing no questions, she concluded her report.

**IV. CEO’s Report**

The Chair recognized Mr. Michael Hitchcock, Chief Executive Officer (“CEO”) for his report. Mr. Hitchcock began his report by reminding the Commissioners that state law requires that the Commission review or amend the Statement of Investment Objectives and Policies annually, and that the Commission must adopt an Annual Investment Plan by May 1<sup>st</sup> of each year. He noted that because the Commission had combined both documents into the Consolidated Annual Investment Plan and Statement of Investment Objectives and Policies (“AIP/SIOP”), he would present the proposed edits to the AIP/SIOP at this meeting and then seek approval of the updated AIP/SIOP at the April Commission meeting to meet the May 1<sup>st</sup> deadline.

Mr. Hitchcock then reviewed the suggested edits. The majority of the suggested changes were updates and conforming in nature. The substantive changes included increasing the maximum portable alpha allocation to 15 percent of the Portfolio from 12 percent, in order to conform with the maximum allowable allocation for hedge funds. He also discussed the suggested changes to the alternative investment section regarding the process for the CEO to waive the 25 percent fund commitment maximum for delegated investments. Mr. Hitchcock then discussed the Sudan Policy with the Commission. He noted that the changes to the AIP/SIOP would be presented for approval in April. He also notified the Commission that the Business Plan had been updated, with the Plan focusing on talent management, and IT security and infrastructure. There being no questions, he concluded his report.

## **V. CIO’s Report**

The Chair introduced Mr. Geoffrey Berg, Chief Investment Officer (“CIO”), for the quarterly investment performance report through December 31, 2021. Mr. Berg began his presentation with a brief market overview. He stated that the volatility resulting from inflation fears and the situation in Ukraine would likely continue until markets see a path to clarity, and noted that the Commission had very little direct exposure to Russia.

Mr. Berg then explained that markets are presently anticipating five or six rate hikes over the next 12 months. Last June, the forecast suggested a Federal Funds Rate for January 2023 of around 0.25 percent, whereas the rate now implied by futures prices was approximately 1.70 percent. Mr. Berg noted the contributions of several factors, including actions by the Federal Reserve System (“Fed”). The Fed, which had historically been aggressive when it comes to staying ahead of inflation, was slow to react to the spike in inflation. Mr. Berg noted that the market is now worried about what it will take to regain control over inflation, given that inflationary pressures are showing up in a lot of different areas of the economy.

Mr. Berg turned to a discussion of broader market trends. He noted that the yield curve has flattened, which is mostly the result of short-term rates rising. Mr. Berg also stated that growth has underperformed value, and noted that banks and insurance companies have outperformed the broader markets by about 10 percent this year, which is due in part to the higher rate outlook. Mr. Berg stated that, given the uncertain environment, it is important that the Commission remain disciplined in its investment approach. He also stated that RSIC Staff plans for these types of challenging times so that, when they arise, the Plan will be able to capitalize on attractive opportunities. After several questions from Commissioners, Mr. Berg began to review the performance report for the quarter ending December 31, 2021. For the quarter, he

stated that the Portfolio earned more than 5.3 percent and outperformed the benchmark by more than 1 percent. The net benefit payments were \$193 million during the quarter, and the Plan's value rose to \$41.6 billion. He stated that, when looking at the performance framework, returns outpaced both the Policy and Reference Portfolios during the quarter, and noted that the Portfolio Structure and Manager Selection impacts were both positive for the quarter.

Turning to asset class performance, Mr. Berg explained that public equities rebounded quite strongly from the prior, negative quarter. Private equity continued to build on a strong start and is now up almost 19 percent during the past two quarters. He noted real assets' second consecutive quarter of extremely strong performance. The real assets benchmark registered its largest quarterly return since the 1970s, but our portfolio outperformed due to a surge in REIT performance in the quarter. Portable alpha hedge funds continued to outperform. Mr. Berg stated that three-year returns were ahead of the benchmarks in four out of five asset classes, while on a three-year basis, the Portfolio had outperformed its benchmark by almost 1 percent annually. Mr. Berg then turned to the performance analysis section of his report with a review of the Portfolio framework. He stated that for the fiscal year to date, the Policy Benchmark had earned 5.7 percent, and explained that the Portfolio's 6.99 percent fiscal year to date return was attributable to positive allocation impacts (adding 36 basis points) and manager selection impacts (which improved returns by 93 basis points), while implementation impacts were roughly zero.

Mr. Berg then provided additional detail regarding each of these impacts, beginning with Allocation. He explained that the positive allocation impact resulted from being overweight in private equity and underweight bonds. Next, he explained the Implementation impact had two primary drivers that roughly offset each other: (a) the decision to employ portable alpha, which added value, and (b) the impact of having infrastructure inside our real assets portfolio, which lagged the benchmark. Mr. Berg noted that the Manager Selection impact was strong during the quarter, with the bulk of the outperformance coming from private debt, portable alpha hedge funds, private equity, and bonds. Mr. Berg underscored two things the Commissioners should bear in mind when looking at performance: (1) the rebalancing of public equity back to target at quarter end; and (2) the growth in the private equity portfolio, as a result of (i) returns that have been strong over the course of the past two years and (ii) the growth of the asset base from the co-investment program, through which the Commission had made investments of almost \$800 million, with most of the investments having no management fees or carried interest.

Mr. Berg then noted that all asset classes were within the allowable ranges, with private equity three percent above target and bonds 4.5 percent underweight its target. He noted that the Consolidated Annual Investment Plan and Statement of Investment Objectives and Policies ("AIP/SIOP") requires staff to notify the Commission if the collective exposure to private equity, private debt, and private real assets exceeds 30 percent of the total plan assets and that the combined exposure was 30.7 percent. Mr. Berg noted that that 30 percent threshold sits just 2 percent above the combined long-term asset allocation's target weights to private equity, private debt, and real assets. He noted that taking any one of those three asset classes to its upper limit while



holding the other two at their target weight would trigger the notification requirement. He then held a brief discussion with the Commissioners regarding this topic.

Lastly, Mr. Berg reviewed risk and how the Commission is now using a three-year risk model as compared to a two-year model to estimate risk on a forward-looking basis. He stated that the impacts from this change were not significant, and the risk data was largely unchanged from the prior quarter.

After discussion with the commissioners, Mr. Berg concluded his report

## **VI. Strategic Investment Topic Presentation – Capital Market Expectations Review**

Mr. Hitchcock recognized Ms. Alli Wallace Stone, Managing Principal/Consultant, and Mr. C. LaRoy Brantley, Managing Principal/Consultant, from Meketa Investment Group (“Meketa”) for their presentation on 2022 Capital Markets Expectations. Ms. Stone began the presentation by explaining Meketa’s methodology in setting capital market expectations each year. She noted that they produce expectations each year in January and that yearly changes are driven by many factors, including interest rates, credit spreads, cap rates, and equity prices. Ms. Stone stated that 2021 was a great year for investors with much of the strong performance driven by an increase in prices for most risky assets. Such an increase in prices would normally lead to an expectation of lower capital market expectations. However, the inverse occurred. Ms. Stowe explained that bond yields increased in 2021, which had an upward impact on their capital market expectations. Additionally, higher rates have been priced into future bond yields, which had a meaningfully positive impact on Meketa’s long-term capital market expectations. Thus, Meketa’s capital market expectations resulted in an increase to the Portfolio’s expected return from 6.56 percent to 6.71 percent over the next 20 years. She did note that shorter-term expectations for riskier assets had come down due to the elevated state of current equity market valuations.

Next, Ms. Stowe gave an overview of how Meketa sets capital market expectations using both quantitative and qualitative methodologies. The capital market expectations are then used as inputs to conduct mean variance optimization (“MVO”), which is the traditional starting point for determining asset allocation. She noted the importance of asset allocation and that it is the largest determinant of the Portfolio’s overall success. She then presented a summary of how Meketa identifies asset classes as well as strategies and how they use those to determine the optimal portfolio construction.

She then turned to a discussion of Meketa’s process for developing ten-year forecasts and how Meketa combines the ten-year forecasts with projections for years 11-20 for each asset class to determine the 20-year forecasts. She concluded her portion of the presentation with a discussion of other inputs used in developing the capital market expectations, including standard deviation and correlation.

Mr. Brantley then reviewed year-over-year changes in some of the various asset classes that Meketa monitors, including rate sensitive asset classes, credit, equities, infrastructure and real estate, natural resources and commodities, and alternative strategies. He then presented data from a 2021 peer survey to show how Meketa’s ten and 20-year return expectations compare to their peers’ expectations.

Mr. Brantley then stated that, overall, Meketa anticipates that investors will have to take on greater levels of risk than they have historically to achieve returns similar to what has been achieved in the past. Lastly, he summarized RSIC's current asset allocation policy and expected return. After a brief discussion with the Commissioners, Mr. Brantley concluded his presentation.

## **VII. Actuarial Update – GRS Actuarial Consultants**

The Chair then introduced Mr. Danny White and Mr. Joe Newton from GRS Actuarial Consultants, the actuaries for the South Carolina Retirement System ("SCRS"), to provide an update on actuarial valuations as of July 1, 2021. Mr. White began the presentation by providing a summary of high-level demographic information for the SCRS. Some of the topics discussed included historical changes in workforce by employer type—such as public school, state and other agency employees—historical active and retiree membership levels in SCRS since 2014, and an analysis of fiscal year 2021 mortality experience. He pointed out an increased number of deaths among female educator retirees across all age brackets in 2021 from what was expected due in part to COVID. He then went over historical and projected external cash flows for SCRS, detailed benefit payments made and projected, and noted employer and employee contributions (both actual and projected). He pointed out that although SCRS has a cost-of-living adjustment ("COLA") feature that is fixed, and therefore, is not impacted by high rates of inflation.

Mr. White then presented a summary of the 2021 valuations. He noted that the PEBA Board adopted updated actuarial assumptions in December of 2020 and that the investment return assumption decreased from 7.25 percent to 7 percent. Mr. White also shared that the Portfolio's strong performance in 2021, with a 28.5 percent return, resulted in \$5.9 billion more assets than expected as of July 1, 2021 for SCRS and \$1.1 billion more in assets than expected for the Police Officers Retirement System ("PORS"). He then presented a summary of the funded status on an accounting basis for both SCRS and PORS, which was disclosed in PEBA's annual report. He noted that, for 2021, the funded ratio for SCRS increased from 51 percent to 61 percent. The funded ratio for PORS increased from 59 percent for 2020 to 70 percent for 2021.

Mr. Newton then shared information with the Commissioners on GRS' projection information for both liabilities and assets for SCRS, discussing the impact of the deferred gain from the strong results in 2021 and how that would positively impact SCRS' path to fully funded status. After sharing a brief history of the unfunded accrued actuarial liability ("UAAL"), they shared data that projects that SCRS' UAAL would be reduced to zero by 2036 based on the 2021 valuation versus 2042 based on the 2020 valuation. Mr. White and Mr. Newton then presented similar information for PORS, sharing that the UAAL for PORS was projected to reach zero by 2035 based on the 2021 actuarial valuation rather than 2043 based on the 2020 valuation. After some final remarks, the presentation concluded.

## **VIII. Delegated Investment Report**

The Chair recognized Mr. Berg for the delegated investment report. The following delegated investments were closed by Staff since the December 2, 2021, Commission meeting.

<b>Asset Class</b>	<b>Investment</b>	<b>Investment Amount</b>	<b>Closing Date</b>
Private Credit	Barings CMS Fund	\$250 M	December 10, 2021
Private Equity	Francisco Partners VII	\$100 M	February 15, 2022
Private Equity	Francisco Partners Agility III	Up to \$50 M	February 15, 2022

#### **IX. Executive Session**

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, including a comprehensive review of the bonds portfolio performance and a discussion of various underlying holdings, and a review of potential investments in the due diligence process; to discuss personnel matters, negotiations incident to proposed contractual arrangements and to receive advice from legal counsel pursuant to S.C. Code Section 30-4-70(a)(1)-(2). Ms. Melissa Schumpert seconded the motion, which passed unanimously.

#### **X. Potential Action Resulting from Executive Session**

Upon receding from executive session, Dr. Gunnlaugsson made a motion to adopt the recommendation of the CIO and the Internal Investment Committee as set forth in the Summary Terms Chart on Page 1 of the Due Diligence Report dated February 15, 2022, as discussed in executive session; authorize an investment of up to \$75 million in Asana III; authorize the CEO or his designee to negotiate and execute any necessary documents to implement the Investment as approved by the Commission upon notice from RSIC Legal that all preconditions to closing have been satisfied and to execute the Investment Closing Certification; and authorize the CEO and/or the CIO or their designee(s) to thereafter authorize the custodian of funds to transfer such funds as are necessary to meet the Retirement System trust funds' obligations with respect to the Investment. Dr. Wilder seconded the motion, which was approved unanimously.

Ms. Schumpert then made a motion to adopt the recommendation of the CIO and the Internal Investment Committee as set forth in the Summary Terms Chart on Page 1 of the Due Diligence Report dated February 16, 2022, as discussed in executive session; authorize an investment of up to \$150 million in Greystar XI; authorize the CEO or his designee to negotiate and execute any necessary documents to implement the Investment as approved by the Commission upon notice from RSIC Legal that all

preconditions to closing have been satisfied and to execute the Investment Closing Certification; and authorize the CEO and/or the CIO or their designee(s) to thereafter authorize the custodian of funds to transfer such funds as are necessary to meet the Retirement System trust funds' obligations with respect to the Investment. Dr. Gunnlaugsson seconded the motion, which was approved unanimously.

## **XI. Adjournment**

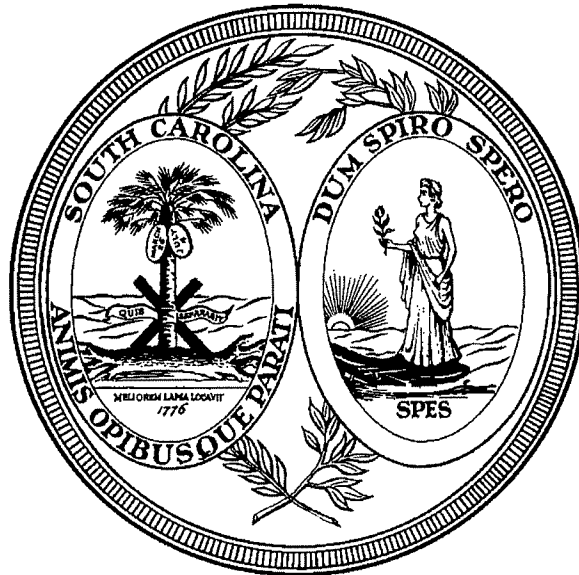
There being no further business, Dr. Wilder moved that the Commission meeting adjourn, Dr. Gunnlaugsson seconded the motion, which was unanimously approved. The meeting adjourned at 2:50 p.m.

[Staff Note: In compliance with S.C. Code Section 30-4-80, 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 15<sup>th</sup> Floor Presentation Center at 1201 Main Street, Columbia, S.C. by 4:45P.M. on February 28, 2022]

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# SOUTH CAROLINA RETIREMENT SYSTEM INVESTMENT COMMISSION



## CONSOLIDATED ANNUAL INVESTMENT PLAN AND STATEMENT OF INVESTMENT OBJECTIVES AND POLICIES

As amended and adopted on April \_\_\_\_, 2022

## ***Role of this Document***

The State of South Carolina administers five defined benefit pension plans: the South Carolina Retirement System (“SCRS”), the Police Officers Retirement System (“PORS”), the Retirement System for Members of the General Assembly (“GARS”), the Retirement System for Judges and Solicitors (“JSRS”), and the South Carolina National Guard Supplemental Plan (“SCNG”) (together, the “Plan”).

The South Carolina General Assembly established the Retirement System Investment Commission (“RSIC”) as a state agency in 2005 and provided it with the exclusive authority to invest and manage the assets of the Plan which it does in one group trust. RSIC is governed by an eight-member board (the “Commission”). The Commission is a co-fiduciary of the assets of the Plan along with the South Carolina Public Employee Benefit Authority Board (“PEBA”).

State law requires the Commission to adopt a Statement of Investment Objectives and Policies (“SIOP”) and to review it annually and to either amend it or reaffirm it. The SIOP establishes investment and performance objectives, policies and guidelines, roles, responsibilities, and delegation of authority for the management of plan assets. State law also requires RSIC’s Chief Investment Officer (“CIO”) to develop an Annual Investment Plan (“AIP”) which must be presented to and adopted by the Commission prior to May 1<sup>st</sup> of each year. Pursuant to state law, relevant portions of the SIOP may constitute parts of the AIP.

In order to ensure consistency and agreement between the SIOP and AIP, the Commission has consolidated the requirements of both into one document which it will review annually prior to May 1<sup>st</sup>. As part of the annual review, the Commission will amend or reaffirm, as it deems appropriate, those portions of this document intended to meet the requirements of the SIOP and the Commission will consider the CIO’s recommendation of any necessary changes to those portions of this document intended to meet the requirements of the AIP. In order to assist the Commission and the CIO in meeting their respective annual requirements, RSIC’s Chief Executive Officer (“CEO”) will provide a guide that designates those portions of this document that are required by the SIOP and those that are required by the AIP.

The consolidated AIP and SIOP takes effect July 1, 20221.



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**I. STRATEGIC PURPOSE, INVESTMENT OBJECTIVE, AND BELIEFS**

**A. Purpose**

The goal of the State’s five defined benefit plans is to provide a lifetime of benefits in retirement to those who have dedicated a career of public service to the State and its political subdivisions. The funding to secure this promise of benefits comes from two sources - contributions made by the employee and employer and the investment return earned on the assets of the Plan. The General Assembly has provided the Retirement System Investment Commission with the sole authority to invest and manage the assets of the Plan. Thus, RSIC’s purpose is to earn an investment return that aids in fulfilling the promise of benefit payments to our current and future retirees and their beneficiaries.

**B. Investment Objective**

RSIC’s primary investment objective is to design an investment program that produces a long-term rate of return that when added to contributions, funds current and future benefit payments. In doing so, RSIC must remain mindful that the Commissioners, CEO, and CIO are named fiduciaries to the Plan’s beneficiaries and must carry out their respective responsibilities to invest and manage the Plan’s assets in keeping with the highest duty of care the law recognizes. As a result, the return the investment program seeks to achieve should involve taking a prudent amount of investment risk.

Further, RSIC cannot design an investment program in isolation, but must instead design a program consistent with the realities of the Plan that is guided by the Plan’s particular design, structure, and risk factors. An important guiding consideration is that the Plan is mature and as a result experiences net negative cash flows, in that the amount of annual contributions into the Plan is less than the annual amount of benefit payments flowing out of the Plan. As a result, the investment program must be designed in a way to provide sufficient liquidity to fund the net benefit payments to current retirees.

The investment program also must be guided by the consideration that the respective systems comprising the Plan are underfunded, in that the discounted liabilities of each system exceed the actuarial value of each system’s assets. The [20210 Actuarial Valuation](#) report from the Plan’s actuaries shows the funded status of each system as:

SCRS	PORS	GARS	JSRS	SCNG
<a href="#">55.2%</a> <del>54.1%</del>	<a href="#">64.3%</a> <del>62.5%</del>	<a href="#">56.1%</a> <del>51.6%</del>	<a href="#">43.6%</a> <a href="#">42.6%</a>	<a href="#">54.1%</a> <del>50.0%</del>

The underfunded nature of the Plan presents the risk that Plan’s assets will be insufficient to support future benefit payments. As a result, the investment program must also be designed in a way to grow the assets of the Plan to support payments to future retirees and their beneficiaries. The General Assembly did take significant action to address the underfunded nature of the Plan in the 2017 Pension Reform Bill. The 2017 Pension Reform Bill requires that the unfunded accrued actuarial liability (“UAAL”) amortization period for SCRS and PORS be reduced by one year each fiscal year until each plan reaches a twenty-year amortization period. In order to support meeting this requirement, the General Assembly significantly increased contributions into the SCRS and PORS. [It should be noted that because of these](#)

efforts, the funding levels for both SCRS and PORS improved over the prior fiscal year and the amortization periods for SCRS and PORS have been reduced to 20 years and 18 years respectively.

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Thus, RSIC is tasked with designing an investment portfolio that balances the need to provide sufficient liquidity to fund current net benefit payments while also growing the portfolio ~~in order to~~ aid in providing benefits to future retirees.

Another guiding factor is that the General Assembly has set ~~7.75~~ percent as the assumed annual rate of investment return on the Plan's assets. ~~The assumed annual rate of return of is expected to decline to 7 percent at the beginning of the 2022 Fiscal Year.~~ The assumed rate of return not only serves as the discount rate to determine the net present value of the Plan's liabilities, but also serves as the primary driver of the Plan's funding policy. Investment performance relative to the assumed rate of return determines whether contribution rates are sufficient to meet the funding goals and requirements of the Plan.

RSIC realizes that investment performance will not meet or exceed the assumed rate of return every year, but rather strives to construct an investment portfolio that will meet or exceed this rate of return over time at a prudent level of market risk, in keeping with its fiduciary duty to the Plan's beneficiaries. Given the historically low interest rate environment, RSIC recognizes that achieving a long-term rate that exceeds the assumed rate of return requires investing the portfolio in a greater percentage of assets with higher expected volatility than would otherwise be required if interest rates were at historic average levels. As a result, the investment portfolio will experience greater market volatility which not only impacts the probability of the investment return exceeding the assumed rate over time, but also correspondingly impacts the probability of reaching the funded status goals of the Plan without requiring additional contribution rate increases.

As a result, RSIC works to design an investment program that maximizes the probability that the Plan will meet the General Assembly's funded status goals, but also given the high level of contribution rates, strives to minimize the probability that the Plan will require additional contributions above those already required. RSIC believes that it can design an investment program with a significant probability of meeting or making significant progress towards both concerns as demonstrated by the stochastic analysis of our funded status expectations for SCRS set out in Table 1 below and a similar analysis of our contribution rate expectations set out in Table 2 below.

TABLE 1

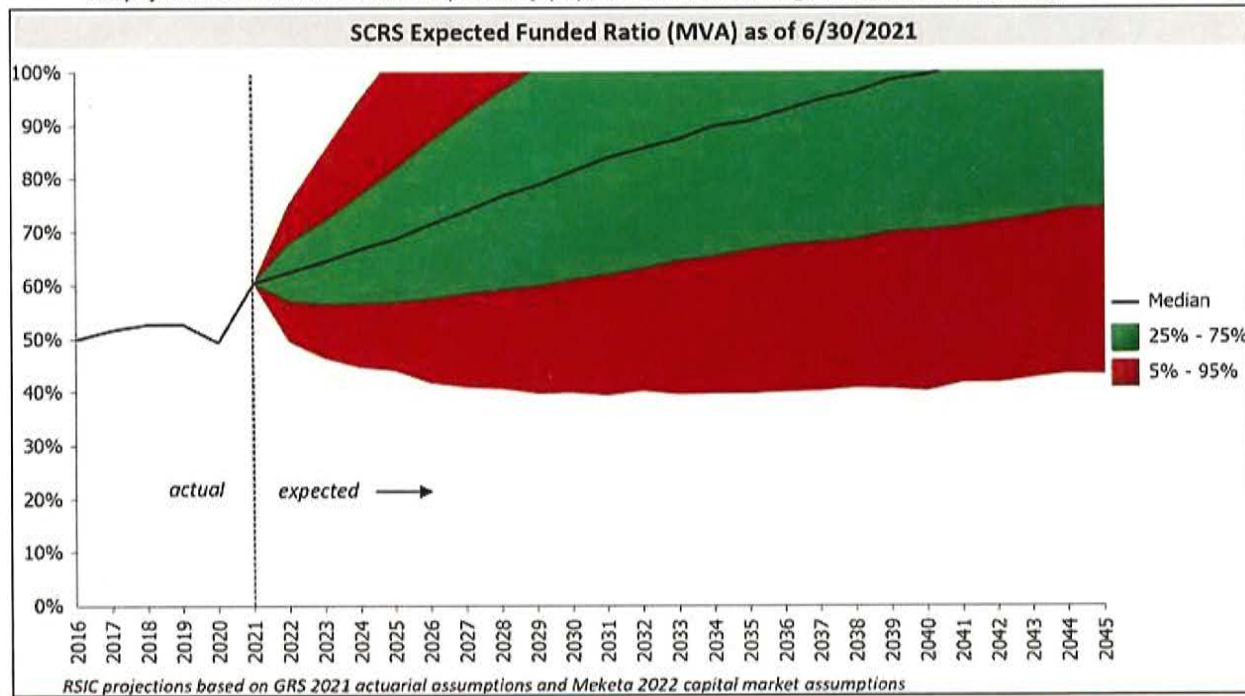
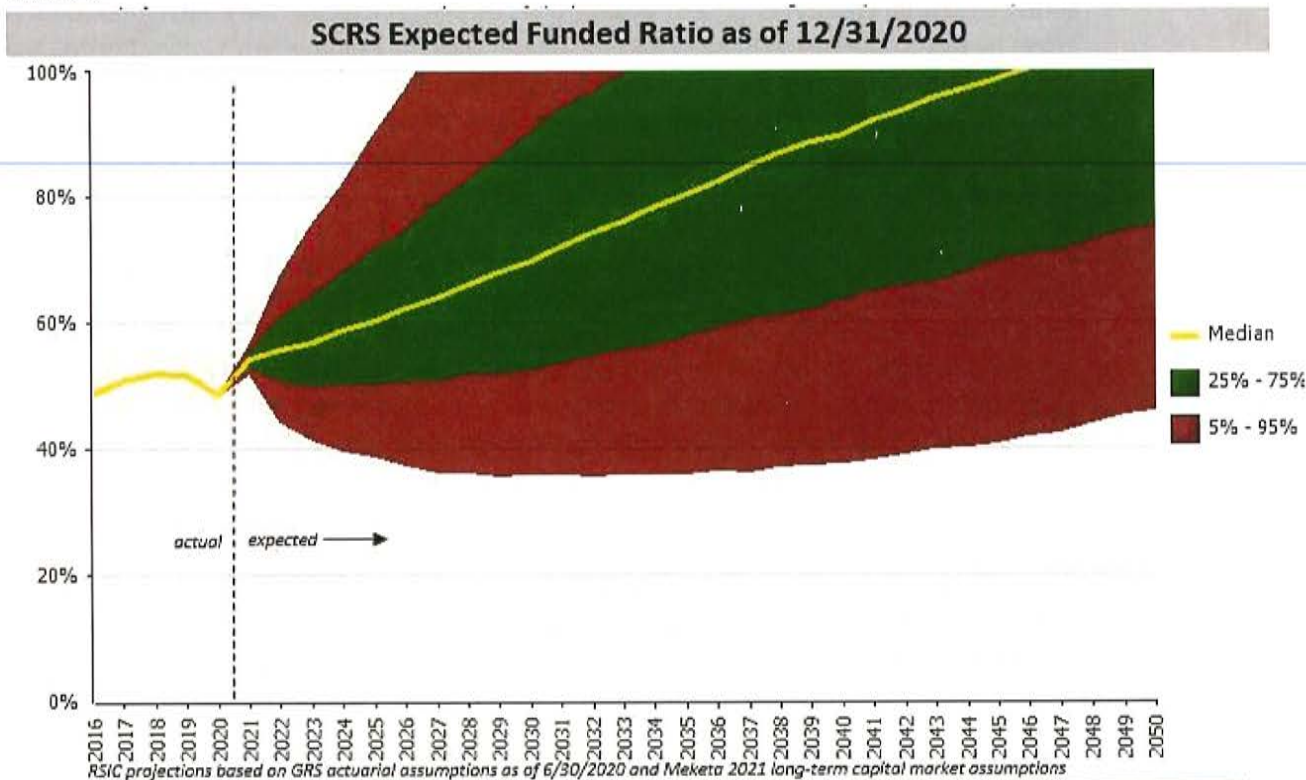


Table 1 tracks the actual, as well as expected, funded status of SCRS since 2016, the year prior to the passage of the 2017 Pension Reform Bill. SCRS is used as the example because its assets comprise the greatest percentage of the total assets of the five systems. The reason for the stochastic approach to the expected funded status is to demonstrate the impact of market volatility on the probable

funded status of SCRS through time. The model upon which the simulation is based incorporates the actual structure, components, and assumptions of SCRS, including the contribution policy put into effect by the 2017 Pension Reform Bill. The model uses the Commission's Policy Portfolio, described below, as the investment portfolio and includes thousands of iterations based on the ~~2021~~ long-term capital market and volatility expectations provided by the Commission's Investment Consultant. The long-term expected return and volatility for the Policy Portfolio is discussed in Section III(D) below.

As can be seen in this table, the base case scenario is that SCRS reaches fully funded status by ~~2046~~2041, which is within the funded status goals set by the 2017 Pension Reform Bill. However, if the Plan were to experience the unfavorable 95<sup>th</sup> percentile scenario, the funded status of the Plan would not improve and would be expected to be in approximately the same funded position in thirty years that is currently. The base case scenario to reach fully funded status has ~~decreased~~ increased by ~~5~~four years over the base case scenario in the corresponding ~~2021~~2020 analysis.

The table also shows the actual improvement of the funded status of SCRS since 2016. The actual improvements shown on the table is attributable to additional contributions flowing into SCRS resulting from the 2017 Pension Reform Bill and better than forecast investment returns since the bill's passage. As of the ~~2021~~2020 Actuarial Valuation, the amortization period for SCRS is ~~20~~22.6 years which is six years ahead of the 2017 Pension Reform ~~m~~.



Bill's requirement of 26-27 years. As for PORS, the amortization period is 18-20.3 years which is ahead of the Pension Reform Bill's requirement of 26-27 years.<sup>1</sup>

TABLE 2

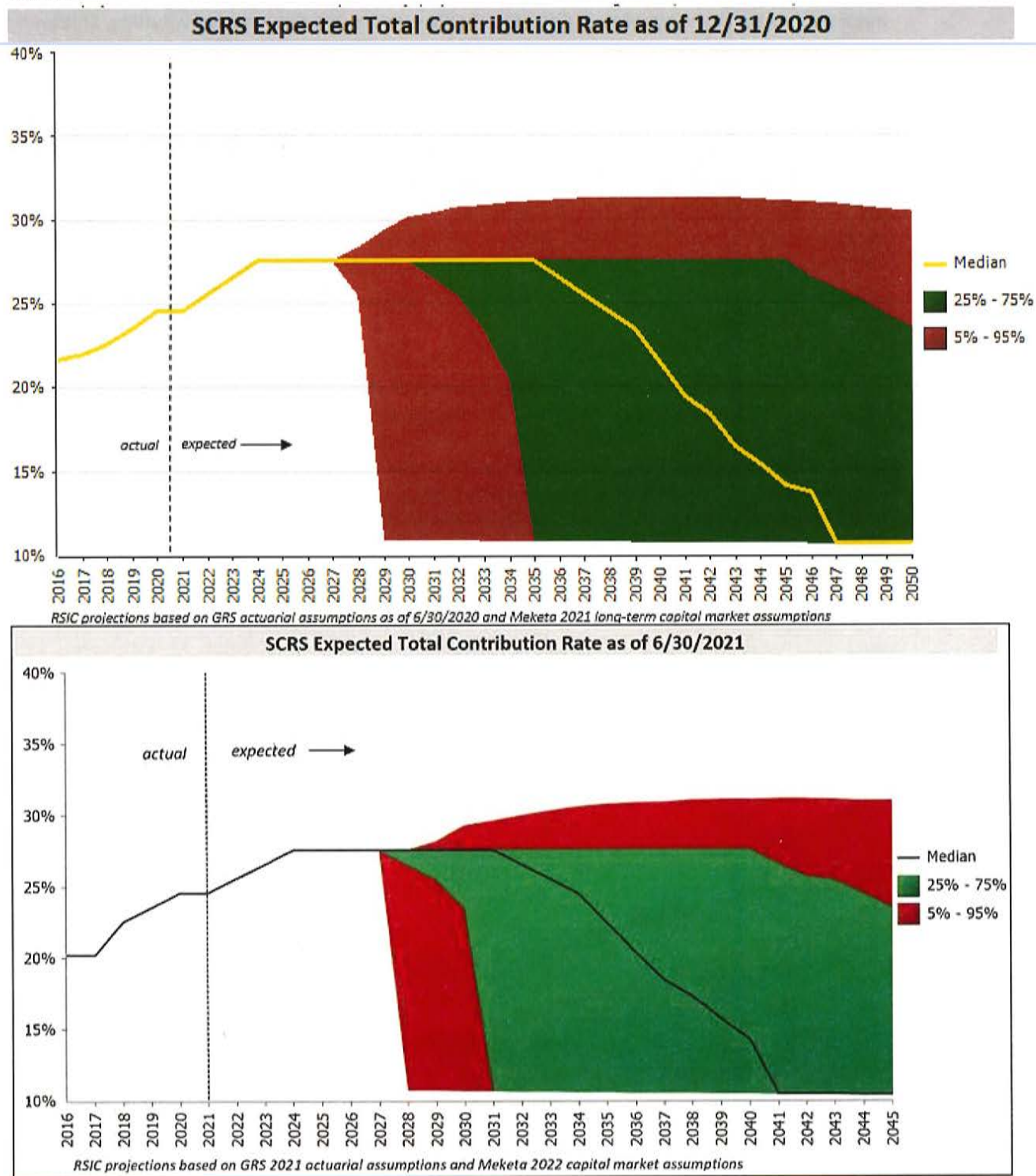


Table 2 tracks the actual, as well as expected, total employer and employee contribution rates for SCRS since 2016. This table also employs a stochastic approach to the expected combined contribution rate to more accurately demonstrate a range of probable outcomes due to market volatility. This analysis is based on the same assumptions used to produce Table 1.

As indicated in this table, the base case scenario shows combined employer and employee contribution rates for SCRS increasing to 27.56 percent pursuant to the schedule required by the 2017 Pension Reform Bill. The contribution rates are then expected to level off and begin to decline in ~~2031~~ ~~2035~~ which is ~~a decrease~~ ~~an increase~~ of ~~four~~ ~~three~~ years as compared to the ~~2021~~ ~~2020~~ analysis. The contribution rates are projected to decline to the 10 percent normal cost contribution rate by ~~2041~~ ~~2047~~, which is ~~a decrease~~ ~~of an increase~~ ~~of five~~ ~~six~~ years compared to the ~~2021~~ ~~2020~~ analysis. The table indicates that there is some probability that

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<sup>3</sup> ~~The 2017 Pension Reform provides for a yearly employer contribution rate increase each year for SCRS and PORS, but the rate increase for Fiscal Year 2021 was suspended to ease some budgetary strain caused by the COVID-19 economic shutdown. As a result, the 2020 Actuarial Valuation provides two different amortization periods each for SCRS and PORS which depend upon whether the General Assembly limits the employer contribution rate increase to the rate provided for 2021 or if it allows the rate to increase to the rate provided for 2022, which would be a two rather than one percent increase. If the 2022 rate goes into effect, then the amortization period for SCRS would be 20.3 years and 18.4 years for PORS.~~



contribution rates may increase above the 27.56 combined contribution rate required by the 2017 Pension Reform Bill.

~~The Commission recognizes that the base case scenarios for reaching fully funded status and for the decline in contribution rates has increased as compared to the 2020 analysis. As discussed below, the Commission attributes the increase to a decline in 2021 long term capital market expectations as compared to 2020 expectations. However, the Commission recognizes that the current base case scenario in both instances falls within the range of expected outcomes in the 2020 analysis and that the decrease in capital market expectations is the result of strong market performance coming out of the market decline associated with the COVID-19 pandemic. RSIC's portfolio benefited from this recovery and remains on the path to improving the Plan's funded status established in the 2017 Pension Reform Bill. (Appendix XI contains historical versions of Tables 1 and 2 for each year since 2020 based on the corresponding year's capital market expectations).~~

### C. Beliefs

As fiduciaries, the Commission and staff of RSIC are charged with exercising their roles and responsibilities to the Plan's participants and beneficiaries with the highest duty of care that the law recognizes. In order to ensure consistency in approach to decision making that is commensurate with this fiduciary duty and focused on achieving the investment objective, the Commission and RSIC staff have adopted a set of core beliefs to ensure that we are collectively guided by a unifying set of principles.

**Belief 1** – We believe that asset allocation is the main driver of an investment portfolio's risk, return, and cost.

**Belief 2** – We believe that investors must be rewarded for incurring additional risk, cost, and complexity.

**Belief 3** – We believe that we are long-term investors which requires us to instill *discipline* and *patience* into our investment decision making and assessment process.

**Belief 4** – We believe that achieving our investment objective requires an organization with strong governance, that maintains core values, and employs talented professionals. In order to do this, we must:

1. establish a governance structure with clear lines of authority and means to assess the quality of decision making and resulting performance;
2. recruit and retain a talented investment and operational staff consistent with our Core Values of:
  - a. Humility,
  - b. Intellectual Curiosity, and
  - c. Team Player
3. achieve a deep understanding of value creation through the investment process;
4. emphasize risk awareness and focus on mitigating investment and enterprise risk; and
5. provide the foundation, infrastructure, and systems necessary to meet the investment objective and mitigate risk.

## II. ROLES AND RESPONSIBILITIES

1. In 2005, RSIC was established by South Carolina law to invest and manage the assets of the State's five defined benefit retirement plans. RSIC invests and manages the assets of all five plans in one group trust. RSIC is governed by an eight-member Commission. The Commission's primary purpose is to set the strategic direction for an investment program that is consistent with its fiduciary duty and strives to earn an investment return that when combined with contributions fulfills the promise of benefit payments to the Plan's current and future retirees and their beneficiaries. This includes setting a long-term asset allocation that meets the Commission's investment objective, oversight of the implementation of the investment portfolio and the business affairs of RSIC, approving certain investments, ensuring legal and ethical integrity, and maintaining accountability. The Commission also adopts a series of governance policies that define the roles and responsibilities of Commissioners and staff and provide general guidance for the operation of RSIC as an agency. (RSIC Governance Policies can be found at: <https://www.rsic.sc.gov/documents/2017.07.14%20Governance%20Policy%20Manual.pdf>).
2. The Commission employs a CEO, who serves as the primary figure of accountability for RSIC. The CEO serves as the chief administrative officer of RSIC as an agency and is charged with the affirmative duty to carry out the mission, policies, and directives of the Commission. The CEO is delegated the Commission's authority necessary, reasonable, and prudent to carry out the operations and management of RSIC as an agency and to implement the Commission's decisions and directives. The CEO also serves as the chief risk officer for the organization. The CEO is charged with employing a CIO and all other agency staff who serve at the will of the CEO. The CEO is also delegated the final authority to close all investments and must certify that investments made pursuant to the Commission's Investment Authority Delegation Policy meet the requirements of the policy (*see* SECTION VI for the Investment Authority Delegation Policy).
3. The CIO manages RSIC's investment functions subject to the oversight of the CEO. RSIC primarily invests Plan assets by allocating capital to external investment managers who implement specific investment strategies ~~in order~~ to provide the exposures necessary to meet the requirements of the Commission's strategic asset allocation. The Commission has implemented an Investment Authority Delegation Policy which provides the CIO with the final authority to invest with external investment managers subject to the limits of the policy. For a proposed investment that exceeds the delegation policy, the CIO determines whether the investment is presented to the Commission for final approval. The CIO is also granted certain authority to manage the implementation and exposure of the portfolio. The CIO through the management of the investment staff also oversees investment risk management, investment manager oversight, and other related activities.
4. The Executive Team is currently comprised of the CEO, CIO, Chief Operating Officer ("COO"), and Chief Legal Officer ("CLO") and serves as RSIC's primary management committee and aids the CEO in making strategic organizational and operational decisions.
5. The Internal Investment Committee ("IIC") is a committee of senior staff appointed by the CEO and is chaired by the CIO. The IIC's responsibilities are provided by the IIC Charter but the IIC is primarily responsible for serving as the committee that vets and recommends new investments to the CIO for approval and execution, or recommendation to the Commission for its approval.



6. The Commission engages a general investment consultant (“Investment Consultant”), who reports to the Commission and assists and advises the Commission on asset allocation, asset/liability study, performance reporting, benchmarking/peer group comparisons, and general investment education and advice. The CEO manages the day-to-day relationship with the Investment Consultant. RSIC Staff may rely on the Consultant for data resources, external analyst inputs, and access to educational materials. The CEO may also retain specialty consultants to serve as an extension of RSIC Staff in Private Equity, Private Debt, Real Estate, Infrastructure, and Hedge Funds.

7. The Internal Audit function is governed by the Commission’s Audit and Enterprise Risk Management Committee and is primarily provided through external service providers. An internal staff member coordinates the relationship with external service providers and assists the committee with performing its duties and functions. The purpose of the Internal Audit function is to provide independent, objective assurance and recommendations designed to add value and improve RSIC operations. It assists the entity in accomplishing its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

8. The Enterprise Risk Management and Compliance (“ERM and Compliance”) function reports to the CEO and serves as the primary staff to aid the CEO in fulfilling the role of chief risk officer. The ERM and Compliance function coordinates with the Executive Team and other staff on the assessment of, and provides oversight related to the identification and evaluation of, major strategic, operational, regulatory, informational, and external risks inherent in the business of RSIC. ERM and Compliance is also responsible for overseeing the process for monitoring compliance with RSIC policies and applicable laws.

9. The Public Employee Benefit Authority (“PEBA”) is a separate agency that administers a comprehensive program of retirement benefits, performing fiduciary duties as stewards of the contributions and disbursements for the Plan. PEBA is responsible for producing GAAP basis financial statements for the Plan and maintains a general ledger to support that process. The financial statements that are produced by PEBA contain information regarding the investments made by the Commission and as such contain the official accounting records for Plan investments. The financial statements are presented in accordance with GAAP and comply with the Governmental Accounting Standards Board standards. The financial statements are audited annually by an independent audit firm hired by the State Auditor’s Office.

10. The Commission and the PEBA Board serve as co-trustees of the Plan’s assets. PEBA is the custodian of the Plan’s assets and RSIC is responsible for the Plan’s custodial banking relationship.

11. Subject to the approval of the State Fiscal Accountability Authority, PEBA designates the Plan’s Actuary. The Commission is a third-party beneficiary to the contract with the Plan’s Actuary, with full rights to all actuarial valuations prepared by the actuary.

12. The South Carolina General Assembly has the authority to control budget and staffing for RSIC and to set the actuarial annual assumed rate of return for the Plan. Starting in early 2021, and every four years thereafter, in consultation with the Commission and the Retirement System’s Actuary, PEBA ~~will propose~~ proposed an assumed annual rate of return to the General Assembly that ~~took will take~~ took effect at the beginning of the 2021-2022 fiscal year ~~because unless~~ the General Assembly ~~took no action acts~~ to amend or reject the recommendation. The General Assembly also conducts periodic legislative

oversight hearings of RSIC.



### III. ASSET ALLOCATION

#### A. Purpose

The Commission's primary responsibility is to establish an investment program that is designed to meet the Commission's investment objective. The most significant action the Commission takes in fulfilling this responsibility is by setting the long-term asset allocation. The Commission designs a portfolio that includes a mix of assets that it believes will likely generate a long-term rate of return that meets its investment objective which is conditioned by its fiduciary duty to only expose the Plan's assets to a prudent level of market risk. The target, or Policy Portfolio, is established with a long-term perspective and the Commission does not expect to change the portfolio to react to short-term market conditions or frequent fluctuations in capital market expectations.

The Commission recognizes employing a long-term perspective has certain risk management benefits. Most notably, this discourages the temptation to react to short-term market trends, which can lead an investor to chase returns in asset classes that have become expensive due to recent appreciation. The Commission believes that adherence to this long-term perspective will produce its greatest benefits during periods of adverse market conditions, during which time the Policy Portfolio will serve as a stabilizing force for the investment program.

State law also requires the Commission to diversify the assets of the investment portfolio and to consider: (i) general economic conditions; (ii) the possible effect of inflation or deflation; (iii) the role that each investment or course of action plays within the overall portfolio; (iv) the needs for liquidity, regularity of income, and preservation or appreciation of capital; and (v) the adequacy of funding for the Plan based on reasonable actuarial factors.

#### B. Background

The Commission undertook a review of the existing Policy Portfolio in early 2019. At the time the Commission began this process, the Policy Portfolio was comprised of eighteen separate asset classes with twenty-one different benchmarks. Many of the asset classes had small target weights – several with less than three percent. Both the CIO and the Investment Consultant expressed concern that the Policy Portfolio was over diversified and required a high level of complexity to exist in the Actual Portfolio without a clear improvement in risk or return. The Commission found this to be inconsistent with its investment belief that investors must be rewarded for incurring additional risk, cost, and complexity. The Commission also believed that the existing Policy Portfolio established the wrong balance between its role as setting the strategic direction of the investment program and investment staff's role in implementing the portfolio. As a result, the Commission determined that a more consolidated Policy Portfolio was in order which valued simplicity and required complexity in the Actual Portfolio to prove its value. The Commission determined that key to this effort was developing a series of benchmarks that would collectively form a Portfolio Framework to clearly determine the value of investment decisions.

#### C. Reference Portfolio

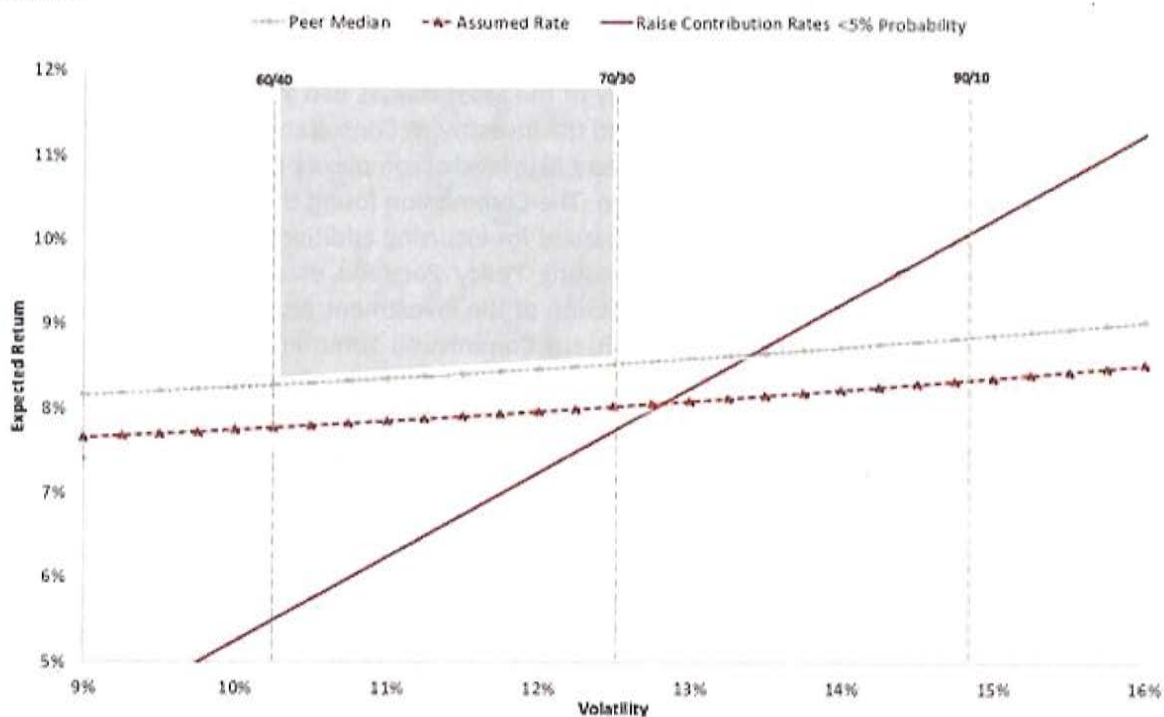
The Commission decided that it would begin the development of this framework by setting a Reference Portfolio. The Reference Portfolio would be a simple two asset class benchmark portfolio comprised of stocks and bonds. The point of the Reference Portfolio was not to limit the portfolio to a simple mix of stocks and bonds, but rather to set a risk reference for establishing the Policy Portfolio. The Reference Portfolio would not serve as a risk limit for the Policy Portfolio, but rather a barometer

to measure the value over time of diversifying into a multi-asset class portfolio.

The Commission attempted to set the allocation of the Reference Portfolio to one consistent with a portfolio that most closely expressed the risk required to earn a return that is expected to exceed the assumed annual rate of return while also avoiding a greater than 5 percent probability of requiring additional contributions increases in the next five years (other plan risks were also contemplated but would also be avoided because these risks would either fall along the same line or to the right of the red risk line represented on Table 3 below). In setting the Reference Portfolio, the Commission was mindful that South Carolina law provides that no more than seventy percent of the portfolio may be invested in equities. The law does not limit the types of assets that could make up the other thirty percent of the portfolio, which could conceivably include assets like high yield bonds which have an imbedded equity risk factor. However, the Commission believed it was prudent to constrain the Reference Portfolio to no more than seventy percent equity risk, as expressed by a seventy percent allocation to equities, and to mitigate the equity risk with a thirty percent allocation to bonds.

The Commission considered the appropriate Reference Portfolio at its April and June 2019 meetings. The Commission determined that a 70 percent Global Public Equities (*MSCI ACWI IMI Net*) and 30 percent Bonds (*Bloomberg Barclays Aggregate*) portfolio best represented the volatility of a diversified portfolio of assets that would be expected to earn a return that exceeds the assumed annual rate of return over time while also avoiding a greater than 5 percent probability of requiring additional contributions increases in the next five years. The Commission reached consensus on this allocation as the Reference Portfolio Benchmark. In reaching this consensus, the Commission accepted that a Reference Portfolio with a risk level associated with a seventy percent allocation to equities was prudently necessary to meet its investment objective.

**Table 3**



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#### D. Policy Portfolio

The Commission then began establishing a Policy Portfolio that would serve as the Commission's long-term asset allocation. The Policy Portfolio would be a multi-asset class portfolio with similar expected volatility as the Reference Portfolio. The Policy Portfolio would be expected to consolidate the existing eighteen asset class Policy Portfolio into a more simplified allocation without substantially impacting the expected return, but with a similar level of risk as the Reference Portfolio. The purpose of setting the Policy Portfolio's risk target to that of the Reference Portfolio was to reveal the performance impact gained through diversification.

However, unlike the Reference Portfolio, the Policy Portfolio would be a portfolio that could be held and, in any respect, would serve as the gravitational pull to a more simplified Actual Portfolio.

The Commission considered the transition to a more simplified Policy Portfolio at its April and June 2019 meetings and reached consensus on the transition to the simplified target allocation in Table 4 below.

**Table 4**

Legacy Asset Allocation			Current Asset Allocation	
Nominal IG Bonds	6		Bonds	26
Treasuries	5		Private Debt	7
TIPS	2		Global Equity	46
Mixed Credit	4		Private Equity	9
EM Debt	4		Real Assets	12
Private Debt	7			
US Equity	18	}		
Developed Int'l Equity	11			
EM Equity	6			
Equity Options	7			
Private Equity	9			
Real Estate (Public)	1	}		
Real Estate (Private)	8			
Infrastructure (Public)	1			
Infrastructure (Private)	2			
PA Hedge Funds	10			
GTAA	7	}		
Other Opportunistic	1			

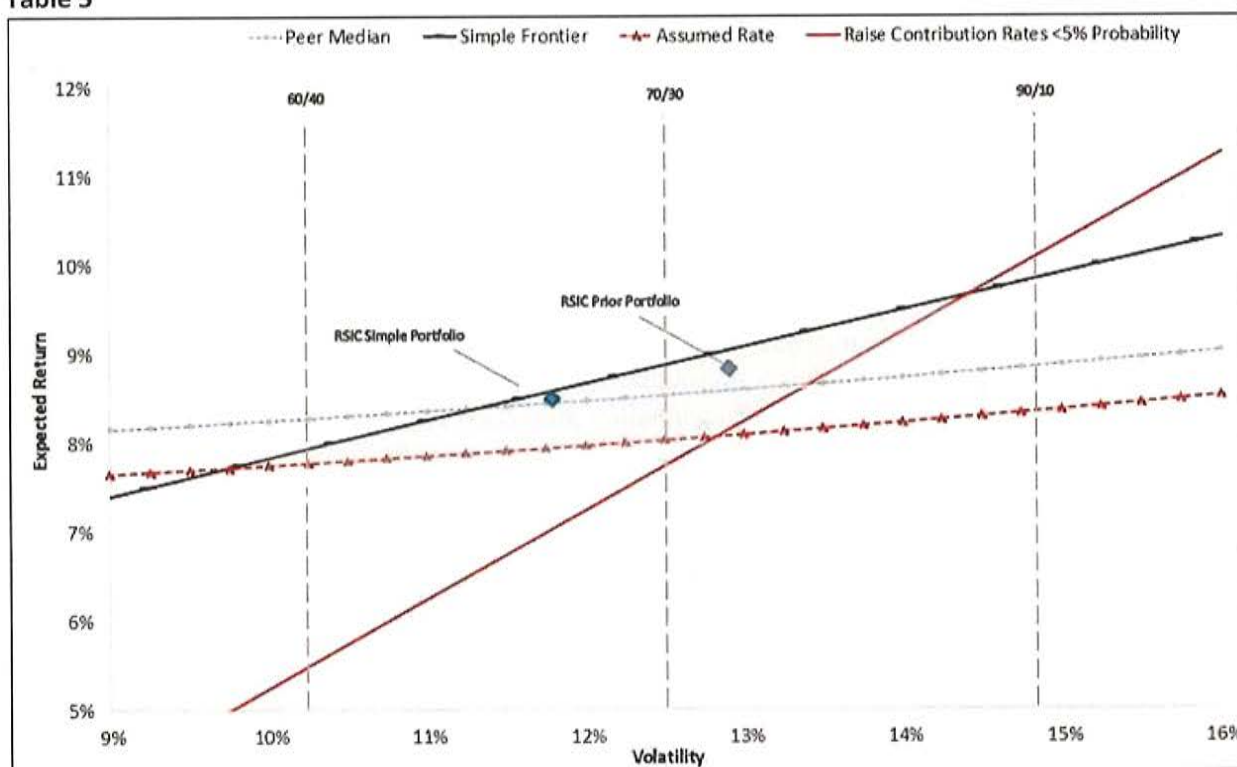
The Commission also analyzed whether the Policy Portfolio would meet the Commission's long-term investment objective in that it would likely exceed the assumed rate of return and avoid risks particular to the plan including not meeting the General Assembly's funded status objectives and avoiding a significant probability of requiring additional contribution increases. This analysis was based on the Investment Consultant's 2019 Capital Market Expectations.



As demonstrated in Table 5<sup>2</sup> the Policy Portfolio would be expected to:

1. exceed the assumed rate of return,
2. compare favorably to the simple frontier<sup>3</sup>,
3. compare favorably to the risk of the Reference Portfolio Benchmark; and
4. experience a less than 5 percent probability of requiring additional contributions increases in the next five years (again other plan risks were also contemplated but would also be avoided because these risks would either fall along the same line or to the right of the risk line represented on the table).

Table 5



In reaching consensus on the asset allocation, the Commission also considered what role each asset class would play in the overall portfolio with each asset class performing the primary role of growth, diversification, or yield:

**Public Equity:** This asset class includes investments in the stock of publicly traded companies. The purpose of public equity in the portfolio is growth. The excess return expectations for this asset class are low. The asset class is highly liquid and can be accessed with minimal implementation cost.

<sup>2</sup> Although the Investment Consultant's long-term capital market expectations are based on projected asset class returns over twenty years, the Reference and Policy Portfolios' risk and return were calculated using these expectations to produce thirty-year results.

<sup>3</sup> The simple or efficient frontier comprises investment portfolios that offer the highest expected return for a specific level of risk. In this case, the investment portfolios along the simple frontier are limited to a mix of the five asset classes from the simplified portfolio shown in Table 4.

**Bonds:** This asset class includes investments in debt securities issued by governments, corporations, or other issuers. The primary purpose of bonds in the portfolio is diversification and the secondary purpose is to provide yield. The excess return expectations for this asset class are low and the asset class is expected to provide a persistent source of return while remaining highly liquid. Bonds are expected to serve a stabilizing purpose in times of market stress.

**Private Equity:** This asset class includes equity investments in privately-held companies. Investors have historically been compensated with incremental return over comparable public equity investments in exchange for lower liquidity and increased business risk as compared to the public markets. The primary role of private equity in the overall portfolio is growth with an expected long-term return that exceeds public equity. The excess returns of this asset class are a source of magnitude of return for the portfolio the value of which is expected to exceed the higher cost of implementation as compared to public equity.

**Private Debt:** This asset class includes investments that provide alternative financing to businesses or assets and are in competition with traditional capital market or bank financing. Investors are compensated with incremental return over what can be achieved through traditional forms of lending in exchange for lower liquidity as compared to liquid credit markets and for serving as a solutions provider to these businesses. The primary role of this asset class in the portfolio is yield. The expectations for the consistency of return above what can be achieved through bonds or the liquid credit markets is high.

**Real Assets:** This asset class includes investments in physical assets like real property and infrastructure, as opposed to financial assets like stocks and bonds. The primary role of this asset class is diversification with the secondary purposes of providing inflation protection and yield. Although the expected liquidity for this asset class is low, the expectations for excess return are high.

**Table 6**

	<b>Public Equity</b>	<b>Private Equity</b>	<b>Bonds</b>	<b>Private Debt</b>	<b>Real Assets</b>
<b>Primary role in portfolio (asset allocation)</b>	Growth	Growth	Diversification	Yield	Diversification
<b>Secondary role in portfolio (asset allocation)</b>			Yield		Yield
<b>Return expectation (20Y benchmark return)</b>	High	> Public Equity	Low	> Bonds	Moderate
<b>Alpha expectation where active: magnitude vs. cost</b>	Low	High	Moderate	Moderate	Moderate
<b>Consistency of excess return</b>	Low	Moderate	Moderate	High	High
<b>Expected liquidity</b>	Very high	Very Low	Very high	Low	Low
<b>RSIC Target Portfolio Expected Cost</b>	Low	High	Low	Moderate	Moderate

The Commission believes that this change in approach to a five asset-class Policy Portfolio shifts the paradigm to one which values simplicity and holds a more complex portfolio accountable for improving risk-adjusted returns. A crucial component to ensure this accountability is having the appropriate benchmarks for the Policy Portfolio. The Commission was guided by the CFA Institute's recommendations that benchmarks are (i) specified in advance, (ii) appropriate, (iii) measurable, (iv) unambiguous, (v) reflective of investment options, (vi) owned, and (vii) investable. At its September 2019 meeting, the Commission reached consensus on the benchmarks in [Table 6](#) [Table 7](#) for the Policy Portfolio.



Table 76

Asset Class	Benchmark <sup>4</sup>
Public Equity	<i>MSCI ACWI IMI Net</i>
Bonds	<i>Bloomberg Barclays Aggregate</i>
Private Equity	<i>Burgiss Private Equity</i>
Private Debt	<i>S&amp;P LSTA +150 bps</i>
Real Assets	<i>NCREIF ODCE Net</i>

<sup>4</sup> The Private Equity and Private Debt portfolios and benchmarks will be reported on a 3-month lag.

MSCI ACWI IMI Net - Morgan Stanley Capital International All Country World Index Investable Market Index; S&P LSTA - Standard & Poor's Loan Syndication and Trading; and NCREIF ODCE - National Council of Real Estate Investment Fiduciaries Open End Diversified Core Equity.

Based on the 2019 Capital Market Expectations provided by the Commission's Investment Consultant that the Commission utilized when reaching consensus on the Policy Portfolio, the Policy Portfolio would ~~have been be~~ expected to achieve a twenty-year annualized rate of return of a 7.83 percent with an expected volatility of

11.69 percent. The portfolio would ~~have been be~~ expected to have a 58.41 percent probability of earning a twenty-year annualized rate of return that ~~met or exceeded~~ ~~meets or exceeds~~ the ~~then~~ assumed rate of return of 7.25 percent.

~~However, strong market performance during 2019 resulted in a meaningful adjustment to long-term capital market expectations which impacted the long-term expected return of the Policy Portfolio. Based on the 2020 Capital Market Expectations provided by the Commission's Investment Consultant in January of 2020, the Policy Portfolio would be expected to achieve a twenty-year annualized rate of return of 7.22 percent with an expected volatility of 11.7 percent. Based on the revised expectations, the portfolio would be expected to have a 49 percent probability of earning a twenty-year annualized rate of return that meets or exceeds the annual assumed rate of return of 7.25 percent in effect in 2020.~~

~~As discussed above, the 2021 Capital Market expectations have declined further, and the Policy Portfolio now would be expected to achieve an annualized rate of return of 6.56 percent with an expected volatility of 12.5 percent. Based on the 2021 expectations, the portfolio would be expected to have a 43.12 percent probability of earning a return that meets or exceeds the assumed rate of return that is set to be reduced to 7 percent at the beginning of the 2022 Fiscal Year.~~

~~In considering the impact of the decline in capital market expectations, the Commission was mindful that inter-year market volatility can result in dramatic shifts in long-term expectations year over year and spur investors to take action to adjust their portfolio's long-term asset allocation. In many instances, this action can lead to an investor to either add or reduce risk at a time that proves to be most disadvantageous to the portfolio. The decline in 2021 Capital Market expectations is directly attributable to the unprecedented rally in financial markets following the sell-off associated with the COVID-19 global shutdown from which RSIC's portfolio also benefited. The positive impact of this rally on achieving the Commission's investment objective would be ignored if the Commission constrained itself to forward-looking expectations only. The Commission believes that adding risk after markets have enjoyed significant appreciation would involve buying assets when they have become expensive which prudent long-term investors seek to avoid.~~

~~In the years since the Commission adopted the Policy Portfolio, the annual capital market expectations have fluctuated primarily in response to significant market movement during the prior year. Based on the 2022 Capital Market Expectations provided by the Commission's Investment Consultant, the Policy Portfolio is expected to achieve a 20-year annualized rate of return of 6.71 percent with an expected volatility of 12.51 percent. The portfolio is expected to have a 45.3 percent chance of achieving a 20-year annualized rate of return that exceeds the 7 percent assumed rate of return. Although these return expectations are lower than the projections at the time the Policy Portfolio was adopted, the expectations are not unreasonable given the significant appreciation in capital markets since the Policy Portfolio was adopted and reasonably reflect the degree of expected return that has been pulled forward during that time period. The return expectations also show a slight improvement over 2021 expectations, when the Policy Portfolio was expected to earn a 20-year annualized rate of return of 6.56 percent with an expected volatility of 12.52 and a 43.1 percent probability of achieving the 7 percent assumed rate of return. Further, it is expected that the continued use of Portable Alpha increases the expected return to 6.91 percent with an expected volatility of 13.06 percent and a 487.13 percent probability of achieving a 20-~~



[year annualized rate of return that exceeds the 7 percent assumed rate of return.](#)

~~Thus, the~~ The Commission believes that long-term investors should resist the temptation to adjust their long-term asset allocation in response to short term volatility in capital market expectations. As a result, the Commission believes that there is no interim asset allocation change to the Policy Portfolio that is absolutely critical to meeting its long-term investment objective and the Commission will not depart from the asset allocation review schedule established in Subsection H.

#### **E. Implementation Portfolio Benchmark**

The Commission recognizes that the CIO and investment staff may add value by structuring the Actual Portfolio in a manner that deviates from the Policy Portfolio target weights or may also pursue a strategy that causes the composition of an asset class to differ from the policy benchmark. As a result, the Commission provides the CIO and the investment staff with the discretion to structure the portfolio within the asset class and sub-asset class ranges in ~~Table 7~~ Table 8. In order to measure the risk and return impact of these portfolio structure decisions, the Commission employs an Implementation Portfolio Benchmark that aggregates the underlying benchmarks of each asset class and sub-asset class strategy according to their actual weights. Providing this discretion while establishing a structure that measures the value of these

decisions also sets the right balance of accountability for Commission decisions and those of the CIO and investment staff.

Table 87

Asset Class	Target	Range	
Public Equity	46%	30%	60%
Domestic	Index	Index +/- 6%	
Developed Non-US	Index	Index +/- 6%	
Emerging Market	Index	Index +/- 4%	
Equity Options	0%	0%	7%
Bonds	26%	15%	35%
Core Bonds (IG)	26%	10%	35%
Inflation-linked (IG)	0%	0%	5%
Mixed Credit (non-IG)	0%	0%	8%
EM Debt	0%	0%	6%
Net Cash/Short Duration	0%	0%	7%
Private Equity	9%	5%	13%
Private Debt	7%	3%	11%
Real Assets	12%	6%	18%
Real Estate	9%	5%	13%
Infrastructure	3%	0%	5%

#### F. Manager Selection

The Commission also recognizes that the CIO and investment staff strive to add additional value through manager selection. In September 2017, the Commission through the adoption of the Investment Delegation Policy delegated investment manager selection decisions to the CIO and investment staff within clearly defined limits and exceptions. The Investment Authority Delegation Policy is set out in Section VI. The value of manager selection is discernable by comparing the Implementation Portfolio Benchmark and the Actual Portfolio.

#### G. Performance Reporting

Essential to the Commission's oversight function is performance reporting that makes clear the value of three major investment decisions: diversification, portfolio structure, and implementation. The Commission charges staff with developing a Portfolio Reporting Framework that easily allows the Commission to judge the value of these three investment decisions by comparing the relative performance between the Reference Portfolio, Policy Portfolio, Implementation Portfolio, and Actual Portfolio:

1. Diversification (Policy Portfolio Benchmark vs. Reference Portfolio Benchmark): The comparison of the Policy and Reference Portfolios Benchmarks reveals the value from



diversification beyond a simple two-asset portfolio. The benefit of designing these portfolios with the same level of expected volatility is that the performance differential is an indication of the impact of diversification, rather than being a function of an expected risk differential. The Commission should expect to see the value of diversification in this comparison over rolling five-year periods. Although these portfolios were established with the same level of expected volatility, the risk of these portfolios is expected to diverge during discrete periods of time but would generally be expected to rise and fall together over time.

2. Portfolio Structure (Implementation Portfolio Benchmark vs. Policy Portfolio Benchmark): This comparison supports an assessment of the quality of the portfolio structure. It reveals the performance impact of the decisions to structure the portfolio differently than the Policy Portfolio Benchmark. These impacts can be broken down into those resulting from the *weights* of asset classes and those resulting from the *composition* of asset classes. The Commission should see the positive performance impact of implementation benchmark decisions over rolling three-year periods. The reporting framework also include risk reports to highlight whether and how changes in portfolio structure alter the risk characteristics of the portfolio.

3. Implementation (Actual Portfolio vs. Implementation Portfolio Benchmark): This comparison aids in the evaluation of the quality of implementation, a key component of which is the impact of manager selection. The Commission should expect to see differential individual manager performance as compared to the implementation benchmark over short periods of time, but the Commission should expect in aggregate to see consistent value added through manager selection. Providing this additional comparison between the Actual Portfolio and the Implementation Benchmarks also disaggregates the performance gained through portfolio structure and that gained through manager selection. As a result, the Commission may evaluate the quality of each of these portfolio decisions when previously the actual portfolio was simply compared to an individual policy benchmark that combined both portfolio structure and manager selection decisions. This additional look through provides the Commission with an enhanced ability to effectively exercise oversight over both portfolio structure and investment manager selection decisions made by the investment staff.

#### H. Asset Allocation Review

The Commission will conduct an Asset-Liability Management Study and asset allocation review every five years. The Commission will continue to receive long-term capital market expectations from the Investment Consultant annually and assess the impact to the expected return and volatility of the Reference and Policy Benchmark Portfolios. However, consistent with its beliefs and long-term approach to asset allocation, the Commission intends to limit interim asset allocation changes to those the Commission determines are absolutely critical to meeting its long-term investment objective and are commensurate with its risk tolerance and fiduciary duties.

#### IV. STRATEGIC INITIATIVES

The Strategic Initiatives described in this Section are major ongoing staff projects contemplated to last up to three years and are likely to have a more significant impact to the portfolio, asset class, or an investment strategy than typical decisions. The CIO will include changes to these initiatives as part of the annual AIP proposal and will provide a quarterly update on progress towards these initiatives at regular Commission meetings.

1. Risk Management – The Quantitative Solutions Group will continue to improve risk monitoring at the Portfolio, asset class, and manager levels. The team will place special emphasis on improving the quality of risk reporting at these levels.<sup>5</sup>

2. End of Fund Life - Establish a discipline to evaluate private investments approaching the end of fund life to optimize asset class performance.

3. Human Capital – Analyze the impact of anticipated baseline changes on asset class staffing needs and align human capital resources with updated portfolio priorities to ensure optimal coverage to source and perform due diligence on potential new investments.

~~1. Portfolio Reporting Framework – The performance reporting team will continue to refine the Portfolio Reporting Framework required by Section III and will work with the Quantitative Solutions Group<sup>6</sup> to incorporate risk reporting into the framework.~~

~~2. Comprehensive Review of Implementation Cost – Staff will continue to examine the mix of structural and variable costs throughout the Portfolio and pursue opportunities (such as the co-investment initiative outlined below) to improve the cost alignment of the investment program.~~

~~3. Secondaries Market – The Commission understands that the thoughtful use of secondaries opportunities can improve returns for a private markets portfolio. The Investment Team will design and execute a plan to incorporate the secondaries market into the investment strategy for private markets asset classes.~~

~~4. Risk Management – The Quantitative Solutions Group will continue to improve risk monitoring at the Portfolio, asset class, and manager levels. The team will place special emphasis on improving the quality of risk reporting at these levels.<sup>5</sup>~~

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<sup>5</sup> The Quantitative Solutions Group is a subset of the Investment Team responsible for ~~conducting deep~~ quantitative ~~analytical support~~ on prospective investment managers as part of the investment due diligence process, and also for monitoring and reporting on investment risk.



## V. INVESTMENT POLICIES

### A. General

1. IIC and Investment Approval Process - State law provides that the AIP is to be implemented by the Commission through the CIO. ~~The~~ RSIC employs a team of investment professionals that support the CIO in carrying out investment management duties and responsibilities. One key component of this infrastructure is the IIC. The IIC assists the CIO by reviewing and providing recommendations to the CIO regarding proposed investments. The IIC also routinely monitors the Portfolio's investment performance and reviews relevant policies and procedures as part of its oversight function. The Commission adopted an Investment Authority Delegation Policy which grants the CIO the ability to approve those investments which fall within the parameters of this policy, subject to the oversight of the CEO. Other investments are presented to the Commission for its approval.

2. Due Diligence – The Investment Team maintains investment due diligence policies to provide consistency and oversight to the investment process. The Initial Due Diligence Policy outlines the key tenets of the RSIC's decision-making process in hiring investment managers. The Ongoing Due Diligence Policy outlines the process and criteria used to evaluate the retention/termination of external investment managers. Both due diligence policies are tested annually by either an Agreed Upon Procedures review by an independent auditor or by the Director of Enterprise Risk Management & Compliance. The results of this review are provided to the Audit and Enterprise Risk Management Committee.

3. Counterparty Risk Management – The Quantitative Solutions Group monitors two sources of potential counterparty risk: (1) the overlay program and (2) the System's master custodial bank. While the risk arising from the overlay program is actively monitored by its external manager, as an added layer of oversight, the Quantitative Solutions Group is responsible for reviewing and reporting on the external manager's prudent management of these counterparty risks.

#### 4. Investment Strategies, Objectives, and Performance Standards:

##### 4.

i. In Section III.D, the Commission described the characteristics and established the role each asset class plays in the Policy Portfolio. Within defined limits and constraints, the Commission provides the CIO and investment staff the ability to structure the portfolio for each asset class in a manner that fulfills the role the asset class plays in the portfolio. The investment staff maintain a "Baseline" document for each asset class that creates a shared understanding of how the portfolio will be structured to achieve the purpose of the asset class established by the Commission. In general, the annual plan for an asset class will involve measures designed to improve its alignment with its Baseline. The following items are detailed in the Baseline document:

##### a. The rationale and purpose of the asset class established by the Commission;

~~i. In accordance with State law, the AIP addresses the Commission's~~



investment strategies, as well as its investment objectives and performance standards. The investment staff maintains a "Baseline" document designed to establish a clear, shared understanding of the rationale, goals, and characteristics for each asset class. In general, the annual plan for an asset class will often involve measures designed to improve its alignment with its Baseline. The following items are detailed in the Baseline document:

- a. Rationale and purpose of the asset class in the broader Portfolio;
- b. Target steady-state asset class exposures (including sub-strategies, geographies, or other relevant factors);

- c. The target return, characteristics (income vs. appreciation), and expected active vs. passive implementation breakdown; and
  - d. An estimate of normal cost to implement the portfolio, and an estimate of the flex cost which may be incurred when market conditions present compelling opportunities.
- ii. Baselines also address the following broader issues:
- a. The role private investments play in the Pportfolio;
  - b. The mix of private vs. public market investments; and
  - c. How the portfolio is likely to change over time.
- iii. The Baseline document is reviewed and updated, as necessary, at least annually, and all RSIC employees are encouraged to present suggested revisions to any Baseline. Proposed changes to the Baseline documents are presented to the IIC for review and to the CIO for approval. In addition to addressing the investment objectives and performance standards for each asset class, the Baseline also serves as a guide to workflow and portfolio management decisions. Investment decisions are reviewed against the Baseline for portfolio fit.
- iv. As part of the individual asset class in-depth examination at each Commission meeting, the investment staff will also provide a review of the particular asset class Baseline, progress towards attaining the Baseline, and any material deviations from the Baseline.
- v. The Commission will be informed promptly of any material change to a Baseline at the next Commission meeting following the change.

5. Allowable Investments and Limitations:

- i. With certain limitations discussed below, State law provides that RSIC may invest “in any kind of property or type of investment consistent with” Title 9, Chapter 16 of the S.C. Code and Section 9-1-1310. These investments include, but are not limited to, futures, forward contracts, swaps, and options, equities, bonds, loans, 144(A)’s, exchange traded funds, American Depository Receipts, real property, and real estate investment trusts. These investments may be listed, exchange traded, or over the counter, negotiated contracts or investments.
- ii. In addition to the instruments outlined above, for every asset class, a variety of investment structures may be utilized depending on the nature of a particular investment. In accordance with the terms of the investment limitations outlined in this policy, these structures may include, but are not limited to, mutual funds, limited partnerships, limited liability companies, strategic partnerships, trusts, commingled vehicles, fund-of-funds, and separately managed accounts in which assets may be held by either the Retirement System’s master custodial bank or an external custodian who is selected and monitored by the external manager or general partner.
- iii. Any investment structure and the underlying instruments must be of a type generally expected to obtain exposure to an asset or sub-asset class contained in Table 7-Table 8, Section III.
- iv. State law imposes certain limited restrictions on the investment of the Portfolio. The managers of the Portfolio’s accounts **other than** index funds, commingled funds, limited



partnerships, derivative instruments, or the like, are required to assist the Commission in meeting its obligations under S.C. Code Ann. §9-16-55, which sets forth limitations on investment in certain types of companies that are engaged in active business operations in Sudan. See Section IX for additional information.

v. The Commission has also established a policy prohibiting an investment in any security or obligation issued by a company or a corporation that is a known sponsor of terrorist organizations or of a company domiciled in a country that is a recognized sponsor of terrorism or terrorist organizations as based on reports from the Office of Terrorism and Financial Intelligence of the Department of Treasury and the Country Reports on Terrorism by the Office of the Coordinator for Counterterrorism of the U.S. Department of State.

6. Internal Management and Overlay Program – Currently, the investment staff actively manages certain Cash and Short Duration accounts, and performs distribution management (management and disposition of in-kind distributions received from external investment managers or third parties). In addition, the CIO has discretion to use synthetic instruments, derivatives, equity baskets, and exchange traded funds in order to implement the asset allocation or otherwise manage the portfolio in accordance with the ranges established by the Commission. The Overlay program functions as a means by which the CIO and Investment Staff manage exposures and manage risk in an efficient manner using synthetic instruments, exchange-traded-funds/notes, equity or fixed income baskets, options, futures, swaps, and forward currency contracts.

7. Portable Alpha – The Commission provides the CIO with the discretion to use Portable Alpha Strategies not to exceed 12-15 percent of total plan assets. The use of Portable Alpha is an implementation decision that is reflected in the Implementation Portfolio Benchmark. The benchmark for Portable Alpha Strategies is *HFRI Conservative Fund of Funds less LIBOR*<sup>6</sup>.

8. Alternative Investments – The Commission has established guidelines applicable to its alternative investments, which include Hedge Funds and Private Markets Assets:

i. The Commission’s initial commitment to a fund will not exceed 25 percent of the committed capital of that fund, unless the Commission, or the CEO for a delegated investment, specifically waives or suspends this restriction (a) in order to take advantage of a new firm or product that has not yet built an asset base, or (b) in the case of a fund that has been created specifically for RSIC (e.g., a single LP fund) or specifically for RSIC and a limited number of other investors (e.g., two member LP fund or LLC). The closing certification for any delegated investment for which the CEO waives this requirement must conspicuously note that this limitation is being waived and identify the basis for the waiver;

ii. Unless otherwise approved by the Commission, no more than 15 percent of an alternative asset investment allocation may be invested with a single manager, general partner, or single fund, with the exception of Funds of One and Strategic Partnerships;

iii. Staff will notify the Commission if the collective exposure to Private Equity, Private Debt, Private Real Assets exceeds 30 percent of total plan assets; and

iv. Hedge funds may not exceed 15 percent of total plan assets.

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<sup>6</sup> HFRI – Hedge Fund Research Performance Index



9. Equity investments not to exceed 70 percent – State law provides that the AIP must also include the minimum and maximum allocations to equity investments on an ongoing basis, not to exceed 70 percent. The allowable ranges for equity investments are set forth in ~~Table 7~~Table 8, Section

III. While State law does not stipulate whether the limitation of 70 percent is based on cost or market value, the Commission manages this limitation by the amount of exposure to equity on a market value basis. Therefore, if the ~~exposure allocation~~ to equity investments exceeds 70 percent of the total market value of the Portfolio, the CIO is required to rebalance the Portfolio.

10. Managing Cost – In accordance with State law, the AIP addresses methods for managing the costs of RSIC’s investment activities. RSIC strives to earn the highest risk-adjusted return on a net of fees basis and recognizes that cost is an important variable to consider. The Investment Team actively engages in an array of strategies to reduce the cost of the Portfolio, including the following:

- i. Increasing the initial investment size;
- ii. Seeking aggregation discounts from firms with which we have multiple investment strategies;
- iii. Utilizing co-investments in private markets;
- iv. Quantifying and monitoring the effectiveness of active implementation across public market asset classes; and
- v. Requesting reductions to, or elimination of, management fees, as appropriate.

11. Risk:

- i. All investments carry some degree of risk. The focus of the RSIC risk function is managing and monitoring these risks to ensure that the Portfolio’s risks are appropriate and that the overall level of risk taken is consistent with meeting the Commission’s investment objective. Key risk initiatives are:
  - a. Incorporating the Plan’s liability structure into the investment decision process; and
  - b. Developing and refining tools to facilitate the incorporation of System liabilities into portfolio management.
- ii. RSIC Staff monitors risk levels both in absolute terms, but also in relation to the Reference Policy benchmark established by the Commission’s asset allocation. This is accomplished using a mix of proprietary and third-party systems and tools.
- iii. At the Portfolio level, Staff will:
  - a. Maintain the Portfolio’s asset allocation within the limits established by this policy;
  - b. Employ an appropriate level of diversification and adhere to the limits within this policy or as contracted with the manager;
  - c. Adhere to policies and procedures established by the Commission; and

- d. Maintain adequate liquidity for benefit payments and capital calls.
- iv. Staff provides the Commission with risk reporting as part of the Portfolio Performance Framework to ensure that risk remains within acceptable levels and to judge the value of portfolio structure and manager selection decisions on a risk adjusted basis.

12. Manager Monitoring Guidelines - RSIC Staff maintains an Ongoing Due Diligence Policy that outlines the manager monitoring requirements in detail. In summary, the Investment Team is required to perform periodic reviews of each active manager. These reviews contribute to the decision to either retain or terminate that manager. These reviews involve both quantitative and qualitative assessments in order to ensure that any decision is made fairly and consistently, and to avoid untimely or undisciplined decisions that may adversely impact returns. Additionally, the Investment Team reviews audited financial statements, compliance certifications, and investment fees on an annual basis. Compliance with the Ongoing Due Diligence Policy is reviewed annually through an Agreed Upon Procedures audit performed by an independent auditor.

13. Proxy Voting - Managers of separate accounts are authorized and directed to vote all proxies, or to direct the Physical Custodian to vote proxies, in keeping with the manager's duties under federal and state law to act in the best interest of the Plan and to maximize shareholder value, and generally to exercise any of the powers of an owner with respect to the assets under the manager's control, subject at all times to the absolute right of the Commission to direct the voting of proxies upon written notification to the manager. Those separate account managers which vote proxies must provide a written annual summary to RSIC summarizing proxy votes cast during the previous year. The report shall also detail any changes to the manager's proxy voting practices and explain any instance in which proxies were not voted in accordance with the best interests of the Plan.

## B. Compliance

1. Placement Agent Policy – State law prohibits RSIC from making an investment where a placement agent receives compensation in connection with RSIC's investment. The Commission's Placement Agent Policy is set out in Section VIII.
2. Investment Manager Sourcing and Conflict Disclosure Policy – In order to enhance transparency and avoid even the appearance of impropriety, before an investment recommendation is made to the Commission or CIO, any Commissioner or RSIC staff member involved in the sourcing or due diligence of a new investment completes a Sourcing and Conflict Disclosure Form. The CEO and CIO must complete a Sourcing and Conflict Disclosure form for each investment.
3. Annual Certification and Ongoing Testing of Guideline Compliance – The Ongoing Due Diligence Policy requires each manager to annually certify its compliance with the contractually

specified guidelines. These certifications are reviewed by RSIC's Compliance function, as well as the Investment Team, and are subject to an annual audit. There is also ongoing testing of guideline compliance for those public markets mandates which are governed by an Investment Management Agreement and custodied with the master custodial bank.

### C. Governance and Oversight

1. Performance Standards and Reporting - As noted above, State law requires that the AIP address the Commission's performance standards. The performance standards and benchmarks are described in Section III. In addition, ~~RSIC the Commission~~ receives monthly performance reports from the custody bank and the Commission receives quarterly performance reports prepared by RSIC's performance reporting staff and the general investment consultant. The performance reporting prepared by RSIC performance reporting staff must incorporate the Portfolio Performance Framework required in Section III.
  
2. Diversification – State law requires that the AIP address the topic of diversification, including sectors, issues and other allocations of assets that provide diversification in accordance with prudent investment standards. The Commission provides the CIO with parameters regarding its diversification objectives through the asset allocation, asset and sub-asset allocation ranges, and performance standards set out in Section III. The Portfolio Reporting Framework required in Section III also provides the Commission the ability to oversee the implementation of the long-term portfolio strategy, as well as the actual implementation of the Commission's diversification directives.
  
3. Procedures regarding consultants, managers, service providers selections and terminations
  - i. Selection - State law requires that the AIP include procedures and policies for selecting, monitoring, compensating, and terminating investment consultants, equity investment managers, and other necessary professional service providers. Investment managers are primarily selected by the CIO, subject to the oversight of the CEO, pursuant to the Investment Authority Delegation Policy through an investment process that also complies with the Investment and Operational Due Diligence Polices. The CIO recommends to the Commission for its approval the selection of any manager of an investment that exceeds the limits of or falls into one of the exceptions to the investment delegation policy. Any investment recommended to the Commission for its approval must also comply with the Investment and Operational Due Diligence Policies. All other service provides are selected pursuant to the Commission's Service Provider Selection Policy which is included in the Commission's Governance Policies (RSIC Governance Policies can be found at: <https://www.rsic.sc.gov/documents/2017.07.14%20Governance%20Policy%20Manual.pdf>)
  
  - ii. Compensation, Fees and Expenses – Service providers, including consultants and investment managers, will be compensated commensurate with the services provided and



industry practices. The Commission will pursue cost savings through structural efficiencies and will strive for fee reductions through negotiations. Investment management fees are evaluated utilizing several metrics or tests. First, fees are examined relative to industry/peer standards. Second, when it reviews potential new mandates or restructurings of existing allocations, the investment staff assesses fees based on the cost relative to other implementation options. For example, in global public equities, the fees charged by active managers (as well as their expected performance and risk) are compared to other methods of obtaining similar market exposure, while in the private markets, fees (as well as expected performance and risk) are compared to public market implementation alternatives. Lastly, to the extent practicable, fees will also be evaluated based on an assessment of the manager's ability to generate excess returns. Investment Staff gathers actual fees and provides annual public disclosure of all fees paid to external managers. The Commission receives an annual report on the cost of its investment program from an independent expert, and may also call upon its investment consultants for assistance in analyzing and addressing issues relating to investment fees. Operating expenses applicable to internal investment operations and the general business of the RSIC are managed by the CEO within the parameters of the annual budget approved by the General Assembly.

iii. Term and Termination -The Commission or the CIO, as applicable, may terminate an investment manager whenever the Commission or CIO determines that its objectives can more efficiently or effectively be met by the selection of another manager or under a different management mandate. The Commission and CIO retain the right to terminate a manager with or without cause and at any time. It should be noted that termination rights may not apply to certain types of investment structures (e.g., typical private markets funds). Circumstances which suggest an immediate review and a possible termination include, but are not limited to, the following:

- a. Manager changes strategy or investment style;
- b. Critical elements of the investment process have deteriorated;
- c. Transaction costs are unreasonable;
- d. Management fees are higher than similarly styled managers for similarly sized portfolios;
- e. Manager is unable to meet the performance expectations within the risk tolerance specified;
- f. Material organizational or personnel changes;
- g. Manager is not complying with the applicable provisions of the Commission's SIOP; and
- h. Manager is not complying with the applicable provisions of the Commission's AIP.

4. Delegation of Authority to CIO - State law requires that the AIP and SIOP contain a detailed description of the delegation of final authority to invest made by the Commission. The

Commission has delegated its final authority to invest to the CIO, subject to the oversight of the CEO, generally in the following amounts:

- i. not to exceed 75 bps of plan value per investment for illiquid structures; and
- ii. not to exceed 200 bps of plan value per investment for liquid structures.

The Commission's full Investment Authority Delegation Policy is set out in Section VI.

5. Policies and Procedures to Adapt Portfolio to Market Contingencies - State law requires that the AIP include policies and procedures providing flexibility in responding to market contingencies. The ranges included with the Commission's asset and sub-asset class allocation ranges established in Section III provide the CIO with extensive flexibility to adapt the portfolio to market conditions. Similarly, the Commission's Investment Authority Delegation Policy provides the CIO the ability to adapt the Portfolio to changes in market conditions. To the extent that the CIO deems the scope of the authority delegated to the CIO insufficient, the CIO with the approval of CEO may take action deemed necessary to protect the Portfolio in an extreme market environment. The CIO will promptly inform the Commission of any such actions.

6. Portfolio Rebalancing - The Commission delegates to the CIO or his designee the authority to execute manager and/or securities transactions to implement rebalancing, manage liquidity, or to otherwise manage exposures within the allowable ranges. As part of this delegation, the Commission expects the CIO to articulate, implement and provide reporting to the Commission regarding the Portfolio's rebalancing and exposure management activities as requested. A high-level summary of the rebalancing and exposure management guidelines include:

- i. The asset allocation is reviewed on an ongoing (typically weekly) basis by Staff and the CIO to ensure that the Portfolio is within its allocation ranges and to identify appropriate actions necessary to maintain compliance and to provide for the Plan's liquidity needs.
- ii. The goal of the rebalancing and exposure management activities is to implement the investment strategy at a reasonable cost within the targets and ranges established by the Commission, recognizing that constant rebalancing to the exact target may not be economically justifiable. The following guidelines are used:
  - a. Rebalancing is currently performed quarterly unless a case has been made **not** to rebalance. Potential rebalancing activity is flagged for consideration based upon exposure reporting that is updated by RSIC's performance reporting staff. Rebalancing the portfolio incurs costs (trading commissions, bid-ask spread, and market impact) which are taken into consideration when rebalancing the Portfolio;
  - b. When an asset class reaches its minimum or maximum allocation, Staff will initiate rebalancing transactions to keep allocations within the approved ranges. Otherwise, Staff must seek Commission approval to remain outside the range; and
  - c. Concentration risk with respect to significant reliance on any single external manager is reviewed regularly by Staff. Mitigation of performance, operational,

headline/reputational, or other fiduciary risks is typically achieved by maintaining a diversified allocation approach both within and across asset classes.

- iii. RSIC Staff must balance the risks noted above with the economic benefits associated with a streamlined approach that uses fewer, larger allocations. Additional analyses of the costs and benefits of passive vs. active market exposure are an important input in these decisions.

#### **D. Investment Manager Guidelines**

1. General - In keeping with the responsibilities assigned to the CIO by State law and the Commission's Governance Policies, the Commission authorizes the CIO and his designees to develop and revise investment management guidelines for each internally and externally managed investment manager. In making this delegation, the Commission acknowledges that discretion in implementing the investment strategy, within the parameters of all applicable guidelines, will typically be granted to the Commission's investment managers. This discretion is usually limited to the selection of securities and the timing of transactions within the portion of the Portfolio allocated to each manager.

2. Funds of One - A Fund of One is an investment structure in which there is typically a majority investor in a specific vehicle or fund. The Commission or CIO as applicable may elect to use a Fund of One structure when the structure will have lower costs, customized exposure advantages, and/or other beneficial considerations. The CIO is responsible for the day-to-day investment responsibilities with respect to Funds of One, including providing affirmative or negative consent for underlying investments, as required.

#### 3. Pooled or Commingled Funds:

i. Commingled investment vehicles can often provide lower costs and better diversification than can be obtained with a separately managed account pursuing the same investment objectives. However, commingled investment funds cannot customize investment policies and guidelines to the specific needs of individual clients. Recognizing these trade-offs, the Commission or the CIO, as applicable, may accept the policies of such funds in order to achieve the lower costs and diversification benefits of commingled vehicles, and exempt commingled investment vehicles from the requirements and guidelines of this policy if:

- a. The investment practices of the commingled vehicle are consistent with the spirit of this policy and are not significantly different in letter; and
- b. The benefits of using a commingled vehicle rather than a separate account are material.

ii. The Commission or CIO, as applicable, may structure a portfolio as a separate account that allows for the advantages of commingled vehicles, but with RSIC as the only investor. With international assets, commingled vehicles save the Commission from having to provide additional resources for currency and foreign custody issues as the manager will assume responsibility for these functions.



iii. If an investment mandate is structured through a commingled vehicle, the investment policies of that vehicle will be the legal governing policies of the investment of assets allocated to that vehicle.

4. Strategic Partnerships - The Commission may elect to establish Strategic Partnerships with certain asset managers who are believed to possess specific expertise, knowledge, and capabilities for a limited or broad range of investment strategies. The performance of each Strategic Partnership will be reviewed by the Commission periodically, with a more comprehensive review occurring approximately every 3 to 5 years. The investment approval and evaluation process within the Strategic Partnership is similar to that followed for other investments, however, in addition to passing RSIC's internal process, the investment must also be approved by the investment committee of the strategic partnership.

5. Trade Execution - For all accounts, the Commission expects the purchase and sale of its securities to be conducted in a manner designed to receive the best combination of price and execution. The Commission may evaluate policies that provide for the most efficient and effective trading process. The compliance with investment guidelines must be monitored by the investment managers on an ongoing basis and be based on then-current market values. Securities that, if purchased, would constitute a compliance violation may not be purchased. In the event of a compliance violation, the manager will be expected to promptly notify investment staff. If for some reason the manager does not believe that it is prudent to immediately bring the account back into compliance, the manager will be expected to present a justification as well as a proposal for bringing the account composition back into compliance.

**E. Compliance with Section 9-16-320 of South Carolina Code:**

1. S.C. Code Section 9-16-320 requires the Commission to meet at least once each fiscal quarter for the purpose of reviewing the performance of investments, assessing compliance with the annual investment plan, and determining whether to amend the plan.

2. The Commission has adopted a strategic calendar that sets a meeting schedule of five meetings per year with a least one meeting every fiscal quarter. The strategic calendar also contains standing agenda items for each meeting to ensure compliance with this Section to include:

i. Quarterly Investment Performance Review – at each meeting the Commission receives a report and presentation on the quarterly, fiscal year to date, one, five, and ten-year plan investment performance. The quarterly performance reports and presentations are based on the Portfolio Performance Reporting Framework described in Section III and are designed to provide the Commission with the ability to judge the absolute value of performance as well as the relative performance between the benchmark portfolios and actual portfolio's performance. The Commission also receives risk reports to judge the absolute and relative risk of the of these portfolios.

- ii. AIP Compliance Review – At each meeting the Commission receives reports detailing compliance with the Annual Investment Plan to include:
  - a. A review of the asset class exposures and sub-asset class components of the portfolio to ensure compliance with the allowable ranges contained in Section III, [Table 7](#) [Table 8](#), and to ensure adequate diversification of the portfolio and that the portfolio is not concentrated in any one industry sector, market sector, or issuer;
  - b. A review of relevant progress towards any of the Strategic Initiatives in Section IV;
  - c. Any significant market contingencies and review of any responsive action that resulted in a decision not to rebalance the portfolio pursuant to Section V.C.6 or any action taken to protect the Portfolio which fell outside the allowable ranges in Section III, [Table 7](#) [Table 8](#);
  - d. Action resulting in significant cost savings to the [P](#)portfolio;
  - e. Any material deviation from the general operational and investment policies, and
  - f. As part of an in-depth review of one of the Policy Portfolio asset classes at each meeting, a review of the asset class baseline and progress towards meeting the baseline.
- iii. The Commission retains the authority to amend any portion of the AIP requirements at any meeting and is required to consider amendments proposed by the CIO at its April meeting. However, if the Commission does not act to amend the AIP at any other meeting, it should be presumed that it determined not to amend the plan.

#### F. General Provisions Related to Alternative Investments

1. South Carolina law, the Employee Retirement Income Security Act of 1974 (“ERISA”), and the Uniform Management of Public Employee Retirement Systems Act of 1997 (“UMPERSA”) each have similar or compatible, but not identical, definitions and responsibilities of fiduciaries with respect to managing and investing assets of retirement systems. For clarity and consistency, it is prudent for the Commission to declare standards for interpretation of certain terms used in these sources.
2. As relating to the use of alternative investment strategies, the “Plan Assets” of the Retirement System include the System’s ownership interest in the following entities (e.g., a share or a unit), but do not include the underlying assets owned by the entity itself:
  - i. a registered investment company;
  - ii. a registered security that is widely held and freely transferable;
  - iii. an entity in which “benefit plan investors” hold less than 25% [percent](#) of the equity interest as defined and determined by ERISA §3(42);
  - iv. an “operating company” engaged in the production or sale of a product or service other than the investment of capital;
  - v. a “real estate operating company” or REOC (which actively manages and develops real estate consistent with U.S. Department of Labor ERISA regulations);
  - vi. a “venture capital operating company” or VCOC (which actively manages “venture capital investments” consistent with U.S. Department of Labor ERISA regulations); or

vii. a private investment partnership or offshore investment corporation the offering memorandum of which allows for the entity to take both long and short positions, use leverage and derivatives, and invest in many markets.

3. Whenever RSIC invests in an entity that does not hold Retirement System's assets, the decision to invest in the entity will be subject, *inter alia*, to the South Carolina fiduciary rules and ethics standards provided by state law, but the transactions engaged in by the entity generally will not be subject to the same rules.

4. RSIC will at times need to interpret statutes while implementing and administering the investment program. Whenever the South Carolina statutes are substantively similar to provisions of ERISA or UMPERSA, and to the extent practicable and consistent with South Carolina law and other principles of general application relating to public pension plans, RSIC intends to use (1) pertinent provisions of ERISA; (2) interpretive rules and regulations of the U.S. Department of Labor relating to ERISA; and (3) the Reporter's official comments to UMPERSA for guidance.



## VI. Investment Authority Delegation Policy

- A. Pursuant to Section 9-16-330(B) of the 1976 Code, the Commission delegates to the CIO the final authority to invest subject to the oversight of the CEO and the requirements and limitations of this policy. The size of any one investment made pursuant to this policy is limited to the percentage of total plan assets that applies to the particular asset class to which the investment pertains as provided in Section C of this policy and subject to any other limitation the Commission may place on this authority at any given time. The value of total plan assets to which the percentage limitations apply must be the estimated total value of plan assets included in the most recent quarterly investment performance report prepared pursuant to Section 9-16-90(A) of the 1976 Code. For purposes of this policy, a co-investment made outside of a co-investment partnership (e.g., the GCM Co-Investment Partnership or a co-investment vehicle attached to a fund investment) is considered a separate and distinct investment from an investment in a commingled fund, fund of one structure, or an amount committed to a separately managed account and is separately subject to the limitations and requirements of this policy. Individual investments made in a separately managed account or a fund of one structure are not considered separate investments for purposes of this policy and are subject in aggregate to the limitations and requirements of this policy regardless of whether some degree of discretion is retained by staff regarding individual investments to be included in the applicable account.
- B. The investment process for any investment made pursuant to this policy must be substantially similar to the investment process employed prior to the adoption of this policy, but for the requirement that the Commission approve the investment prior to closing the investment and must adhere to RSIC's Due Diligence Guidelines and Policies. Notwithstanding the authority granted by this policy, an investment must be presented to the Commission for its approval if it meets any of the following criteria:
1. An investment into an asset class other than (i) an asset class or sub-asset class provided in Table 8, Section III of the Consolidated AIP/SIOP or (ii) Portable Alpha Hedge Funds;
  2. The majority of the types of assets contemplated to underlie the investment have not been previously included in the investment portfolio;
  3. The strategy to be employed by the investment manager is not substantially similar to an investment that has been previously subject to the Commission's investment due diligence process; or
  4. The investment strategy, other than in publicly traded assets, has important direct connections to South Carolina residents, state policymakers, or South Carolina focused businesses, and/or a majority of the assets of the investments would be principally located in South Carolina.
- C. The amount of delegation for new investments approved pursuant to this policy shall not exceed 5% of the total value of Plan assets between regularly scheduled Commission meetings. The size of an individual investment made pursuant this policy is subject to the following limitations provided for the asset class applicable to the investment:
1. Public Markets - 2% of the total value of plan assets, unless it is reasonable to believe that due to the particulars of the investment strategy that liquidating the investment would

ordinarily require longer than ninety days and, in such case, the limit is 1% of the total value of plan assets, for:

- i. Global Public Equity:
    - a. Domestic,
    - b. Developed Non-US,
    - c. Emerging Market,
    - d. Equity Options;
  - ii. Bonds:
    - a. Core Bonds (IG),
    - b. Inflation-linked (IG),
    - c. Mixed Credit (non-IG),
    - d. EM Debt,
    - e. Net Cash and Short Duration; and
  - iii. Portable Alpha Hedge Funds.
2. Publicly-Traded Real Estate - 1% of the total value of plan assets.
3. Private Markets - 75 bps of the total value of plan assets for:
- i. Private Equity,
  - ii. Private Debt,
  - iii. Private Real Assets,
    - a. Real Estate, and
    - b. Infrastructure.
- D. Pursuant to Section 9-16-330(B)(2), the closing documentation of any investment made pursuant to this policy must include the CEO's certification that the investment conforms to the amount and extent of delegation provided by this policy.
- E. The Commission must be informed of an investment made pursuant to this policy no later than three days following the closing of the investment. The notification must include an executive summary of the investment and provide access to any of the following documents relied upon by staff when making the investment:
1. the investment due diligence report,
  2. the operational due diligence report,
  3. any memorandum and/or reports from the general or specialty consultant,
  4. the Internal Investment Committee action summary,
  5. the completeness check certification, and
  6. the final versions of pertinent legal documents, including the Investment contract, limited partnership agreement, the investment management agreement, as applicable, and/or other closing documents.
- F. An investment made pursuant to this policy must be reviewed with the Commission at the next regularly scheduled Commission meeting.
- G. The CIO must provide the Commission with an updated proposed investment pipeline on a monthly basis.

- H. The delegation of the final authority to invest pursuant to this section includes the authority to terminate an investment manager if the investment was made pursuant to this policy or the amount of capital committed to the manager by the Commission would fall within the applicable limits provided in Section C. The CIO must approve any termination of a manager made pursuant to this policy, subject to the oversight of the CEO. The CIO must provide a memorandum to the Commission summarizing his justification for terminating the manager within three days of terminating the manager. The CIO must provide a review of the termination to the Commission at the next Commission meeting.
- I. The Commission will review this policy annually to ensure that it remains relevant and appropriate, or when there has been an amendment to state law relevant to any section of this policy, or a Commission approved change in the responsibilities, duties or operations of the Commission or its Committee generally, or as otherwise deemed appropriate by the Commission.
- J. No provision of this policy shall apply to the extent that it is in conflict with any provision of the Code of Laws of South Carolina, 1976, as amended. In the event of such conflict, the applicable Code provision shall apply in all respects.
- K. This policy was adopted by the Commission on September 28, 2017, subject to final approval by the Chair of the incorporation of certain amendments into the policy. The Chair issued final approval of the policy on October 23, 2017.
- L. This policy was amended on December 2, 2021 and took effect on December 2, 2021.



## VII. SECURITIES LITIGATION POLICY (“POLICY”)

### A. Purpose and General Principles

- a. The purpose of this Policy is to set forth the South Carolina Retirement System Investment Commission’s<sup>1</sup> guidelines with respect to securities litigation. Interests in securities litigation matters will be managed as assets of the South Carolina Retirement Systems Group Trust (the “Trust”) with the goal of enhancing the long-term value of the Trust.
- b. The Commission acknowledges that it has a fiduciary duty to take reasonable actions to pursue and collect on legal claims held as an asset of the Trust. The Commission also recognizes that most, if not all, of the securities litigation claims in which the Trust may have an interest will be pursued by law firms from the class action bar regardless of whether RSIC takes an active role in the litigation.
- c. This Policy outlines the Commission’s procedures for monitoring the Trust’s portfolio for potentially actionable losses, protecting the Trust’s interests in litigation related to portfolio losses, and maximizing recoveries attainable by the Trust from such actionable losses.
- d. This policy consists of four sections: 1) a section relating to asset recovery as passive class members in U.S.-based securities actions; 2) a section for litigation of securities listed on domestic exchanges where RSIC deems active participation is warranted; 3) a section for litigation of securities listed on foreign exchanges; and 4) a section related to the monitoring process for both foreign and domestic claims in which the Trust takes an active role.

### B. Part One: Securities Litigation Policy for Filing Proofs of Claim (“Passive Participation”)

- a. Under U.S. federal law, securities class action lawsuits function as “opt-out” cases. This means that the Trust does not need to participate as a named party in order to recover its *pro rata* share of a class action recovery so long as the certified class claims include the losses incurred by the Trust. This type of participation is called Passive Participation. When notified of a class action settlement in which the Trust has suffered a loss, RSIC need only submit a timely and valid proof of claim in order to be included in any recovery.
- b. The Trust’s custodial bank, The Bank of New York Mellon (“BNY Mellon”), is responsible for completing and filing all proofs of claim, including the necessary supporting documents and information in every securities class action pending in the U.S. in which the Trust has a direct interest (i.e., for Trust assets that are custodied at BNY Mellon (“In-Bank Assets”)). BNY Mellon is not responsible for filing proofs of claim for, or otherwise reporting on the management of, securities class action litigation for assets that are not custodied at BNY Mellon (“Out-of-Bank Assets”).

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<sup>1</sup> “Commission” refers to the commission of seven members responsible for managing the South Carolina Retirement System Investment Commission, as specified in S.C. Code of Laws Ann. Section 9-16-315.

“South Carolina Retirement System Investment Commission” or “RSIC” refers to the agency established by South Carolina law for the purpose of investing and managing all assets held in trust for the participants and beneficiaries of the state’s five separate defined benefit plans.

- c. BNY Mellon’s claims filing responsibilities are set forth in more detail in the Service Level Description, dated July 21, 2019, between the Trust by and through RSIC and BNY Mellon (the “SLD”). The SLD outlines the process for: (i) identifying and reviewing all class action recoveries (whether by settlement or trial); (ii) providing timely notice of each settlement recovery to RSIC and the Commission; (iii) filing complete and accurate proofs of claim forms in a timely fashion on behalf of the Trust; (iv) providing quarterly reports outlining all claims filed on behalf of the Trust during the quarter; and (v) providing quarterly reports identifying all securities litigation proceeds recovered by the Trust directly or on its behalf. In the event of a claim involving securities that are not identified by a specific security identifier (e.g., CUSIP, ISIN, SEDOL, etc.), BNY Mellon will use commercially reasonable efforts to identify impacted securities recorded in BNY Mellon’s records relating to the security named in the documentation received. In the event that BNY Mellon is unable to file a claim on the Trust’s behalf (e.g., involving anti-trust claims), BNY Mellon, or in some cases a third party, will forward the relevant claim information to RSIC, and RSIC will utilize the services of third-party claims filing services that specialize in analyzing and filing such claims.

#### C. Part Two: Securities Litigation Policy for Securities Listed on a Domestic Exchange

- a. While the Commission has a fiduciary obligation to take reasonable action to collect on legal claims held by the Trust, the Trust, acting by RSIC, may need to engage in active participation (“Active Participation”) on occasion. This type of participation involves serving as lead plaintiff in cases in the domestic exchange context. Active Participation in domestic securities class actions must be balanced with the Commission and RSIC’s primary obligation to maximize the investment returns of the Trust. This determination must also be weighed against the additional costs and burden on staff that may result by becoming lead plaintiff in a securities litigation case as well as the recognition that the Trust’s position as a lead plaintiff will not, in and of itself, entitle the Trust to any greater recovery.
- b. **Authority to Seek Lead Plaintiff Designation:** Due to the time-sensitive nature of electing to seek a lead plaintiff designation and the Chief Executive Officer’s (“CEO”) statutory designation as the chief administrative officer of RSIC, the Commission, through this Policy, has delegated to the Executive Leadership Team the authority to elect to seek a lead plaintiff designation where appropriate, reasonable, and prudent to protect the interests of the Trust.
- c. **Decision-Making Guidance for Active Participation:** The Executive Leadership Team will generally consider seeking lead plaintiff status (“Active Participation”) in a domestic class action when: (i) the Trust’s projected losses exceed \$5 million U.S. Dollars (the “Loss Threshold”); or (ii) when the loss is substantial but less than the Loss Threshold and there are significant special factors justifying the Trust’s involvement. The determination of special factors will be made in the discretion of the Executive Leadership Team.
- d. **Monitoring Procedures:** In addition to the reporting provided by BNY Mellon for class action litigation involving In-Bank Assets, the Trust may retain three or more securities litigation monitoring law firms (the “Firms”) to advise RSIC via periodic reporting of recently-filed class actions in which the Trust has sustained losses and which appear to

have merit. The Firms will generally be engaged for up to five years, with the option to terminate earlier or renew for additional periods. Each of the Firms will provide reporting on at least a quarterly basis outlining all recently filed claims in which the Trust has sustained losses. Additionally, the Firms will submit written memos to RSIC on certain cases, including any cases exceeding the Loss Threshold, regarding the alleged facts of the case, the estimated losses, the Firm's view on the merits of the allegations, and a recommendation as to whether RSIC should seek a lead plaintiff position in the matter. RSIC Legal will perform an initial review of all reports and memos received from the Firms. Any reports or memos indicating a loss that exceeds the Loss Threshold will be forwarded to the CLO for further review. The CLO will review the reports and will follow up with the Firms that have provided the memorandum to get additional insight and information about potential claims exceeding the Loss Threshold ("Reviewable Claims") and will make additional inquiries or conduct additional research as needed.

- e. After review by the CLO, the CLO will confer with the Executive Leadership Team regarding the merits of Reviewable Claims, including the projected losses incurred by the Trust, the specifics of the related investment(s), available staff resources, and the recommendations of the Firms regarding whether the Trust should seek a lead plaintiff position. Any decision to seek a lead plaintiff designation for a claim exceeding the Loss Threshold or based on special circumstances must be made by a unanimous vote of the Executive Leadership Team. The Executive Leadership Team will notify the Chair and Vice-Chair of the Commission about any decision to seek a lead plaintiff position and will update the Commission via reporting to the Commission's secure portal.
- f. **Selection of Outside Counsel for Securities Litigation** If the Executive Leadership Team determines that it is prudent to hire one of the Firms or other legal counsel to represent the Trust in a securities litigation action to protect the assets of the Trust, all selection of counsel and retainer agreements shall be negotiated, executed, and monitored by the CEO with assistance from the CLO. The CEO may engage one of the Firms hired to monitor the Trust's portfolio, or the CEO may seek to engage other counsel after consultation with the CLO and notice and consultation with the Office of the South Carolina Attorney General, as required by S.C. Code Ann. Section 9-16-315(l). When RSIC first engages the Firms, RSIC will pre-negotiate a proposed engagement agreement for potential litigation, which must be approved by the CEO.

#### **D. Part Three: Securities Litigation for Securities Listed on a Foreign Exchange**

- a. Due to the 2010 Supreme Court case, *Morrison v. National Australia Bank Ltd.*,<sup>2</sup> investors no longer have the protections of U.S. securities laws for securities that were purchased on a non-U.S. exchange. Unlike the U.S. class action process, foreign securities actions generally require investors to join as a named-plaintiff or "opt-in" at the commencement of the case in order to be entitled to a share of any recovery. This "opt-in" process requires affirmative decisions early in the process to join the lawsuit in order to participate in any recovery. In many cases, investors may be required to make these decisions before a foreign action is even filed.

<sup>2</sup> *Morrison v. National Australia Bank Ltd.*, 561 U.S. 247 (2010).



- b. **Decision-Making Guidance for Active Management:** Because there is rarely an option for passive participation in foreign securities actions, the review for participation in these actions differs from those explained in Part Two of this Policy. The CLO will review notices of potential claims in foreign securities actions and will review recommendation memos received from the Firms or other sources in those cases where the loss threshold exceeds \$1 million (the “Foreign Loss Threshold”). In foreign jurisdictions, various groups, including non-law firm litigation funding organizations, may act as a funding source for the litigation and work with a certain legal team to initiate litigation. In some cases, the group that first files a lawsuit may become a founding group (“Founding Group”). Founding Groups may impose differing terms and conditions in order to participate in a lawsuit. The CLO will review all available factors relating to participating in foreign actions for claims exceeding the Foreign Loss Threshold, including but not limited to: (i) the amount of the loss; (ii) the potential litigation fees; (iii) the litigation funding requirements; (iv) whether more than one litigation funding group is proposing participation; (v) the risk of adverse costs; (vi) the legal merits of the case; (vii) the contractual requirements for joining and/or bringing a claim; and (viii) the potential cost of staff’s time. . After reviewing the above factors and the documentation required to elect to participate in the applicable foreign jurisdiction, the CLO will make a recommendation to the CEO on whether to participate, and if applicable, which Founding Group to elect based on the most suitable contract terms available for the Trust. The CEO, after reviewing the CLO’s recommendation, will elect (A) whether or not to pursue participation in foreign litigation that exceeds the Foreign Loss Threshold; and (B) which funding group to select based on the terms and legal requirements of each. The CLO, working with the Firm(s), as applicable, will negotiate the required documentation and retain the right to change a recommendation to participate if suitable contract terms cannot be negotiated with the Founding Group.

**E. Part Four: Litigation Monitoring for Active Participation in Domestic and Foreign Litigation**

- a. The CEO, acting via the CLO, will monitor any pending domestic or foreign cases in which RSIC is actively participating. The CLO will request quarterly written status updates from any Firms representing RSIC in Active Participation cases. The CLO will actively participate in discussions with the Firms regarding any participation by RSIC Staff or document production needs. The CEO and CLO will be actively involved in settlement discussions for any domestic litigation action. The CLO will submit periodic updates to the CEO and the Commission regarding such cases. In accordance with the CEO’s statutory authority as chief administrative officer of the Commission, the CEO retains the ultimate authority related to the direction of any class action litigation and/or settlement pursuant to this Policy. The CEO may consult the Commission on any matter related to the initiation of or conduct of any lawsuit pursuant to this Policy. The CEO shall have full authority to approve a proposed settlement of any litigation. In addition, the CEO shall have full authority to execute all contracts, legal documents, settlements, certifications, and authorizations required to pursue litigation authorized by the Executive Leadership Team.

a.

- F. The Commission shall review this policy at least once every three (3) years to ensure that it remains relevant and appropriate.
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### VIII. Placement Agent Policy

- A. Purpose.** It is the intent of this Policy to comply with S.C. Code Ann. §9-16-100, which prohibits compensation being paid to a Placement Agent (as defined below) as a result of an investment by the Retirement System (as defined below).
- B. Definitions.** For purposes of this Policy, the following capitalized terms will have the defined meaning set forth below:
- a. Pursuant to §9-16-100(B), a “Placement Agent” means any individual directly or indirectly hired, engaged, or retained by, or serving for the benefit of or on behalf of an external manager or an investment fund managed by an external manager and who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker, or other intermediary in connection with making an investment with or investing in a fund managed by the external investment manager.
  - b. “Placement Agent Policy Compliance Letter” means that letter which will be requested from prospective external investment management firms in accordance with the terms of this Policy.
  - c. “Policy” means this Placement Agent Policy.
  - d. “Retirement System” means the South Carolina Retirement Systems Group Trust.
  - e. “RSIC” means the South Carolina Retirement System Investment Commission.
- C. Procedure**
- a. RSIC staff will inform prospective external investment management firms (“Investment Managers”) as to the RSIC’s Placement Agency Policy and statutory requirements as soon as practicable after RSIC staff begins the due diligence review of any potential investment. The RSIC staff member leading the due diligence review for the investment is responsible for sending written notice (paper, fax or email) to the Investment Manager requesting a Placement Agent Policy Compliance Letter. If a copy of this Policy has not already been provided to the Investment Manager, then this Policy will be made available to the Investment Manager prior to or at the time notice is given to the Investment Manager.
  - b. The Placement Agent Policy Compliance Letter must be included in the RSIC investment Due Diligence Report packet.
  - c. Investments will not be voted on by the Commission, Internal Investment Committee, or otherwise approved pursuant to RSIC policies, prior to receipt of the completed Placement Agent Policy Compliance Letter and confirmation from RSIC compliance staff that the letter is sufficient per Section G below.
  - d. The following entities must complete the Placement Agent Policy Compliance Letter as outlined below:
    - i. Investment Managers that have a direct contractual investment management relationship with the RSIC or with an investment vehicle in which the RSIC is invested.
    - ii. Investment Managers that have an indirect contractual investment management relationship with the RSIC through an investment vehicle that invests in funds or other pooled investment vehicles or other assets.



- D. Placement Agent Policy Compliance Letter.** The Investment Manager will provide disclosure in the form of a letter addressing all requirements specified below:
- a. Certification that, in compliance with §9-16-100, no Placement Agent (as defined by State law) received, or will receive, compensation in connection with the RSIC making an investment with or investing in a fund managed by the Investment Manager.
  - b. Representation that the Investment Manager has reviewed the applicable law and has not relied on the counsel or advice of RSIC or any employee, representative, agent or officer of RSIC regarding the interpretation and application of the applicable law.
  - c. Representation that all information contained in the Placement Agent Policy Compliance Letter is true, correct, and complete in all material respects.
- E. Open Records Law.** RSIC may be required to disclose information in the Placement Agent Policy Compliance Letter under the South Carolina Freedom of Information Act.
- F. Investments with Separate Account Investment Management Agreements (“IMAs”).** If, after closing, the RSIC determines that the Placement Agent Policy Compliance Letter contains a material inaccuracy or omission, the RSIC will, to the fullest extent possible, seek the option, in its sole discretion and without liability to the Investment Manager or any third party, to terminate the IMA and to pursue all remedies that may otherwise be available to the RSIC without incurring any penalty under any agreement to which it is a party.
- G. Investments in commingled investment structures (LPAs, LLCs, Trusts, etc.).** The RSIC will endeavor to have provisions incorporated into the transaction documents for commingled investment structures which would permit the RSIC to take those actions described in the next sentence. If, after closing, the RSIC determines that the Placement Agent Policy Compliance Letter contains a material inaccuracy or omission, the RSIC will seek to obtain the option, in its sole discretion and without liability to the commingled investment structure, the General Partner or equivalent management entity, any other investor in the structure or third party, to cease making further capital contributions and/or direct payments to the investment and to pursue all remedies that may otherwise be available to the RSIC without being deemed to be a defaulting Limited Partner under the transaction documents and without incurring any other penalty under any agreement to which it is a party.
- H. Review.** RSIC’s compliance staff will review Placement Agent Policy Compliance Letters and will determine whether each letter is sufficient. Any questions regarding the sufficiency of the letter will be referred to the RSIC legal department and will be reported to the CIO and applicable RSIC Staff.
- I. Staff Contact.** RSIC staff will provide notice about the prohibition in the state law to any party that contacts RSIC staff regarding a potential investment and appears to be acting in the role of a Placement Agent.

**J. Obligation to Update.** It is the Investment Manager's obligation to promptly inform RSIC staff of any material changes to a prior-filed Placement Agent Policy Compliance Letter, and to submit an updated Placement Agent Policy Compliance Letter where warranted prior to the RSIC's closing on an investment.

**K. Review and History**

- a. The Commission will review this policy at least every three years to ensure that it remains relevant and appropriate, or when there has been an amendment to state law relevant to any section of this policy, or a Commission approved change in the responsibilities, duties, or operations of the Commission or its committees generally, or as otherwise deemed appropriate by the Commission.
- b. No provision of this policy shall apply to the extent that it is in conflict with any provision of the Code of Laws of South Carolina, 1976, as amended. In the event of such conflict, the applicable Code provision shall apply in all respects.
- c. This policy was initially adopted on September 20, 2012.
- d. This policy was amended on June 22, 2017 and will take effect on July 1, 2017.

## IX. SUDAN DIVESTMENT POLICY

- A. Background.** The State of South Carolina has enacted a Sudan divestment law, codified at S.C. Code Ann. §9-16-55 (“Act”). The uncodified preamble to the Act notes that “[d]ivestment is a course of last resort that should be used sparingly and under extraordinary circumstances,” but states that “the genocide occurring in the Sudan is reprehensible and abhorrent,” warranting this type of legislative response. The Act, which applies solely to the South Carolina Retirement Systems Group Trust (“Group Trust”) managed by the South Carolina Retirement System Investment Commission (“Commission” as the governing body, “RSIC” as the agency), sets forth various criteria that are to be considered by the Commission in making the determinations required by the Act.
- B. Purpose.** The purpose of this Sudan Divestment Policy (“Policy”) is to document the manner in which the Act is administered. The Commission has the exclusive authority to invest and manage the assets of the Group Trust pursuant to S.C. Code Ann. §9-16-20. The Commission also has the fiduciary duty to manage the assets of the Group Trust solely in the interests of the retirement systems, participants, and beneficiaries. The Commission must discharge these responsibilities in a manner consistent with all applicable statutes, regulations, and policies, including the Act.
- C. Definitions.** The Act utilizes the following defined terms:
- a. “Active Business Operations” means a Company engaged in Business Operations that provide revenue to the Government of Sudan or a Company engaged in Oil-Related Activities.
  - b. “Business Operations” means maintaining, selling, or leasing equipment, facilities, personnel, or any other apparatus of business or commerce in Sudan, including the ownership or possession of real or personal property located in Sudan.
  - c. “Company” means a sole proprietorship, organization, association, corporation, partnership, venture, or other entity, its subsidiary or affiliate that exists for profit-making purposes or to otherwise secure economic advantage. “Company” also means a Company owned or controlled, either directly or indirectly, by the Government of Sudan, that is established or organized under the laws of or has its principal place of business in the Sudan.
  - d. “Government of Sudan” means the Government of Sudan or its instrumentalities as further defined in the Darfur Peace and Accountability Act of 2006.
  - e. “Investment” means the purchase, ownership, or control of stock of a Company, association, or corporation, the capital stock of a mutual water Company or corporation, bonds issued by the government or a political subdivision of Sudan, corporate bonds, or other debt instruments issued by a Company.
  - f. “Military Equipment” means weapons, arms, or military defense supplies.
  - g. “Oil-Related Activities” means, but is not limited to, the export of oil, extracting or producing oil, exploration for oil, or the construction or maintenance of a pipeline, refinery, or other oil field infrastructure.
  - h. “Public Employee Retirement Funds” means those assets as defined in §9-16-10(1).
  - i. “Scrutinized Companies” means any of the following:

- i. The Company is engaged in Active Business Operations in Sudan; and
- ii. The Company is engaged in Oil-Related Activities or energy or power-related operations, or contracts with another Company with Business Operations in the oil, energy, and power sectors of Sudan, and the Company has failed to take Substantial Action related to the Government of Sudan because of the Darfur genocide; or
- iii. The Company has demonstrated complicity in the Darfur genocide.
- iv. The Company is not engaged in Oil-Related Activities and lacks significant Business Operations in the eastern, southern, and western regions of Sudan; and
- v. The Company is engaged in Oil-Related Activities or energy or power-related operations, or contracts with another Company with Business Operations in the oil, energy, and power sectors of Sudan, and the Company has failed to take Substantial Action related to the Government of Sudan because of the Darfur genocide; or
- vi. The Company has demonstrated complicity in the Darfur genocide.
- vii. The Company supplies Military Equipment within the borders of Sudan.<sup>3</sup>
- j. “State” means the State of South Carolina.
- k. “Substantial Action” means a boycott of the Government of Sudan, curtailing business in Sudan until that time described in Section I of this Policy, selling Company assets, equipment, or real and personal property located in Sudan, or undertaking significant humanitarian efforts in the eastern, southern, or western regions of Sudan.
- l. “Sudan” means the Republic of the Sudan, a territory under the administration or control of the Government of Sudan, including, but not limited to, the Darfur region, or an individual, Company, or public agency located in Khartoum, northern Sudan, or the Nile River Valley that supports the Republic of the Sudan.

#### D. Identification of Companies

- a. Identifying Scrutinized Companies. RSIC Staff (“Staff”) has engaged the services of a specialized research firm (“Advisor”) to (i) identify companies doing business in Sudan, as defined in the Act, and (ii) provide Staff with a list of such Scrutinized Companies (“Scrutinized Companies List”).
- b. Updates to Scrutinized Companies List. Staff shall ensure that the Scrutinized Companies List is updated on or about January 1 and July 1 of each year.

#### E. Engagement

- a. Determining Scrutinized Status. For each Company identified by the Advisor pursuant to Section D of this Policy, RSIC (either via Staff or the Advisor) shall send a written notice informing the Company that it may become subject to divestment by RSIC. The notice

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<sup>3</sup> If a Company provides equipment within the borders of Sudan that may be readily used for military purposes, including but not limited to, radar systems and military-grade transport vehicles, there is a strong presumption against investing in the Company unless that Company implements safeguards to prevent the use of that equipment for military purposes.



shall offer the Company the opportunity to clarify its Sudan-related activities within 90 days in order to avoid qualifying for potential divestment.

- b. **Compliance.** If, following RSIC's notification (either via Staff or the Advisor) to a Company pursuant to Section E. a. of this Policy, that Company ceases the activities that caused the Company to be added to the Scrutinized Companies List, as determined by the Advisor, the Company shall be removed from the Scrutinized Companies List, and the provisions of this Section E shall cease to apply to the Company unless it resumes the activities that caused the Company to be added to the Scrutinized Companies List.

**F. Determinations to be made by the Chief Investment Officer**

- a. **Delegation to the Chief Investment Officer.** The Commission has delegated authority to the Chief Investment Officer ("CIO") to, in consultation with RSIC's Chief Executive Officer, make the determinations required under the Act and to take actions necessary to implement this Policy.
- b. **General.** If, following RSIC's engagement with a Company pursuant to Section E. a. of this Policy, the Company continues to be a Scrutinized Company, Staff will present the CIO with detailed information gathered from the Advisor, affected investment managers, and others regarding the Company, its Business Operations, the Group Trust's holdings, and any other information required by the Act and this Policy. The CIO will make determinations as to (i) whether Staff should sell, redeem, divest, or withdraw the Group Trust's interests in the Company, and (ii) the timing of any such sale, redemption, divestment, or withdrawal. The CIO will also make the determinations described in Section I of this Policy.

- G. Prohibition.** RSIC shall not use Public Employee Retirement Funds to acquire new Investments in Companies on the Scrutinized Companies List, except as provided in this Policy.

**H. Permissible Investments under the Act**

- a. The Act does not apply to the following types of Investments:
  - i. Investments in a Company that is primarily engaged in supplying goods or services intended to relieve human suffering in Sudan;
  - ii. Investments in a Company that promotes health, education, journalistic, or religious activities in or welfare in the western, eastern, or southern regions of Sudan;
  - iii. Investments in a United States Company that is authorized by the federal government to have Business Operations in Sudan; and
  - iv. Investments that constitute indirect beneficial ownership through index funds, commingled funds, limited partnerships, derivative instruments, or the like.
- b. In developing the Scrutinized Companies List, the Advisor shall determine, in good faith and with due professional care, whether any of the foregoing exemptions and exclusions set forth in the Act apply.

- I. Determinations required to be made by the CIO pursuant to §9-16-55(D)(1).** The Act states that nothing in the Act "requires the [C]ommission to take action as described in [the Act] unless the

[C]ommission determines, in good faith, that the action described in [the Act] is consistent with the fiduciary responsibilities of the [C]ommission as described in [Title 9, Chapter 16 of the Code] and there are appropriated funds of the State to absorb the expenses of the [C]ommission to implement this [Act].” §9-16-55(D)(1). Accordingly, whenever the CIO is asked to consider taking action under the terms of the Act or this Policy, Staff will assist the CIO in making the determinations required to be made as described in this Section.

- J. Reporting.** Staff shall, following the close of RSIC’s fiscal year, prepare a formal report to the Commission regarding actions taken pursuant to the Act. RSIC shall also publish the report. The report shall include all of the following information with respect to the previous fiscal year:
- a. The Scrutinized Companies List;
  - b. A list of all Companies added to or removed from the Scrutinized Companies List;
  - c. A summary of correspondence with Companies engaged by RSIC under the Act;
  - d. A list of all Companies that RSIC will continue to engage concerning their Business Operations in Sudan;
  - e. A summary of all Investments sold, redeemed, divested, or withdrawn under the Act; and
  - f. A list of all Investments that were retained by RSIC pursuant to a determination by the CIO as set forth in Section I.
- K. Expiration.** The restrictions in the Act shall apply only until:
- a. The Government of Sudan halts the genocide in Darfur for twelve months as determined by both the Department of State and the Congress of the United States; or
  - b. The United States revokes its current sanctions against Sudan.
- L. Indemnification.** The Act provides that present and former board members, officers, and employees of the State Fiscal Accountability Authority, present, future, and former directors, officers, and employees of the South Carolina Public Employee Benefit Authority, the Commission, and contract investment managers retained by the Commission must be indemnified from the general fund of the State and held harmless by the State from all claims, demands, suits, actions, damages, judgments, costs, charges, and expenses, including court costs and attorney’s fees, and against all liability, losses, and damages of any nature whatsoever that these present, future, or former board members, officers, employees, or contract investment managers shall or may at any time sustain by reason of any decision to restrict, reduce, or eliminate Investments pursuant to the Act.

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**LONG-TERM ANNUALIZED RETURN AND VOLATILITY EXPECTATIONS –**  
**Meketa Investment Group 2022 Annual Asset Study**  
**Twenty-Year Annualized Return and Volatility Expectations for Major Asset Classes**

Asset Class	Annualized Compounded Return (%)	Annualized Standard Deviation (%)
<b>Rate Sensitive</b>		
Cash Equivalents	1.7	1.0
Short-term Investment Grade Bonds	1.9	1.0
Investment Grade Bonds	2.4	4.0
Investment Grade Corporate Bonds	3.0	7.0
Long-term Government Bonds	2.8	12.0
Long-term STRIPS	3.0	23.0
TIPS	2.4	7.0
<b>Credit</b>		
High Yield Bonds	4.4	11.0
Bank Loans	4.0	10.0
Foreign Bonds	2.3	8.0
Emerging Market Bonds (major; unhedged)	4.2	12.0
Emerging Market Bonds (local; unhedged)	4.6	13.0
Direct Lending	7.1	14.0
Mezzanine Debt	7.2	16.0
Distressed Debt	7.7	21.0
<b>Equities</b>		
Public US Equity	6.8	18.0
Public Developed Market Equity	7.5	19.0
Public Emerging Market Equity	8.4	24.0
Public Frontier Market Equity	8.7	21.0
Public Global Equity	7.2	18.0
Private Equity Composite	10.0	28.0
<b>Real Assets</b>		
REITs	7.1	26.0
Core Private Real Estate	6.1	12.0
Value Added Real Estate	8.1	20.0
Opportunistic Real Estate	9.6	26.0
High Yield Real Estate Debt	6.8	18.0
Natural Resources (Private)	8.5	24.0
Commodities	4.6	17.0
Infrastructure (Core)	7.3	14.0
Infrastructure (Non-Core)	9.3	22.0
<b>Other</b>		
Hedge Funds	4.4	7.0
Long-Short	4.1	10.0
Event Driven	5.2	9.0
Global Macro	5.0	5.0
Risk Parity (10% vol)	5.2	11.0
Tactical Asset Allocation	4.5	11.0

**Meketa Investment Group 2021 Annual Asset Study**  
**Twenty-Year Annualized Return and Volatility Expectations for Major Asset Classes**

Asset Class	Annualized Compounded Return (%)	Annualized Standard Deviation (%)
<b>Rate Sensitive</b>		
Cash Equivalents	1.1	1.0
Short-term Investment Grade Bonds	1.3	1.0
Investment Grade Bonds	1.8	4.0
Investment Grade Corporate Bonds	2.3	7.0
Long-term Government Bonds	2.5	12.0
Long-term STRIPS	3.3	21.0
TIPS	1.8	7.0
<b>Credit</b>		
High Yield Bonds	4.2	11.0
Bank Loans	4.0	9.0
Foreign Bonds	1.7	8.0
Emerging Market Bonds (major; unhedged)	3.7	11.0
Emerging Market Bonds (local; unhedged)	3.9	14.0
Direct Lending	6.7	14.0
Mezzanine Debt	6.9	16.0
Distressed Debt	7.0	21.0
<b>Equities</b>		
Public US Equity	6.8	18.0
Public Developed Market Equity	7.1	19.0
Public Emerging Market Equity	8.1	24.0
Public Frontier Market Equity	8.9	21.0
Public Global Equity	7.1	18.0
Private Equity Composite	9.1	28.0
Buyouts	9.0	25.0
Venture Capital	9.6	36.0
<b>Real Assets</b>		
REITs	7.2	26.0
Core Private Real Estate	5.5	12.0
Value Added Real Estate	7.2	20.0
Opportunistic Real Estate	9.2	26.0
High Yield Real Estate Debt	6.0	18.0
Natural Resources (Public)	7.3	23.0
Natural Resources (Private)	8.3	23.0
Commodities	3.7	17.0
Infrastructure (Public)	7.4	18.0
Infrastructure (Core)	7.0	14.0
Infrastructure (Non-Core)	9.0	22.0
<b>Other</b>		
Hedge Funds	4.3	7.0
Long-Short	3.8	10.0
Event-Driven	4.9	9.0
Global Macro	4.3	5.0
Risk Parity (10% vol)	4.0	11.0
Tactical Asset Allocation	4.1	11.0



XI.

LONG-TERM ANNUALIZED RETURN AND VOLATILITY EXPECTATIONS-  
 CONSOLIDATED SIOP / AIP TABLES 1 AND 2 (2021 and 2020 VERSIONS)

TABLE 1 (2021)

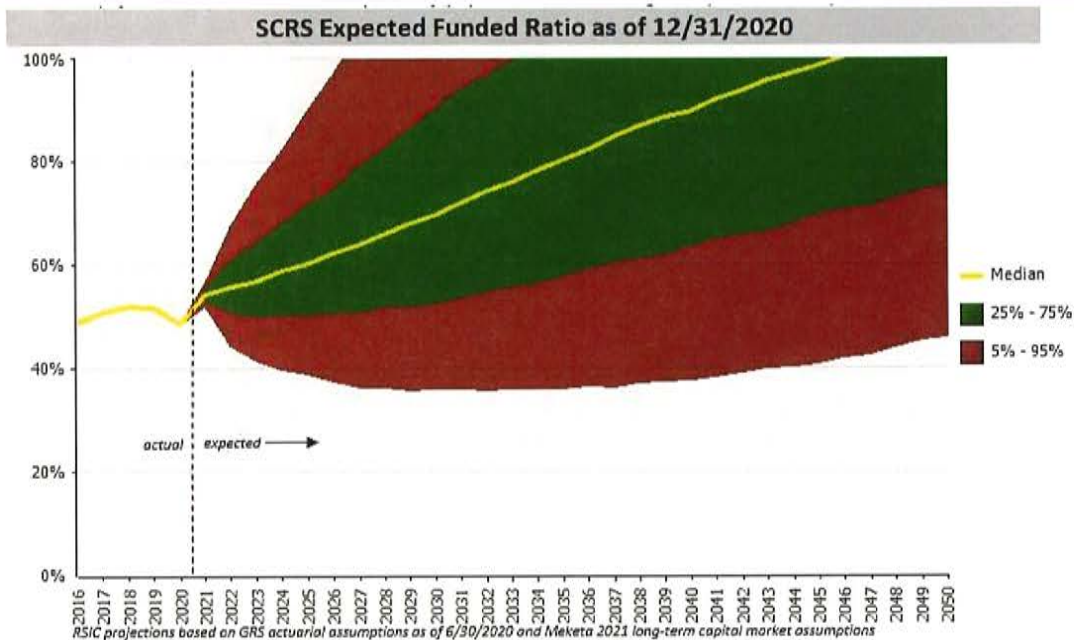
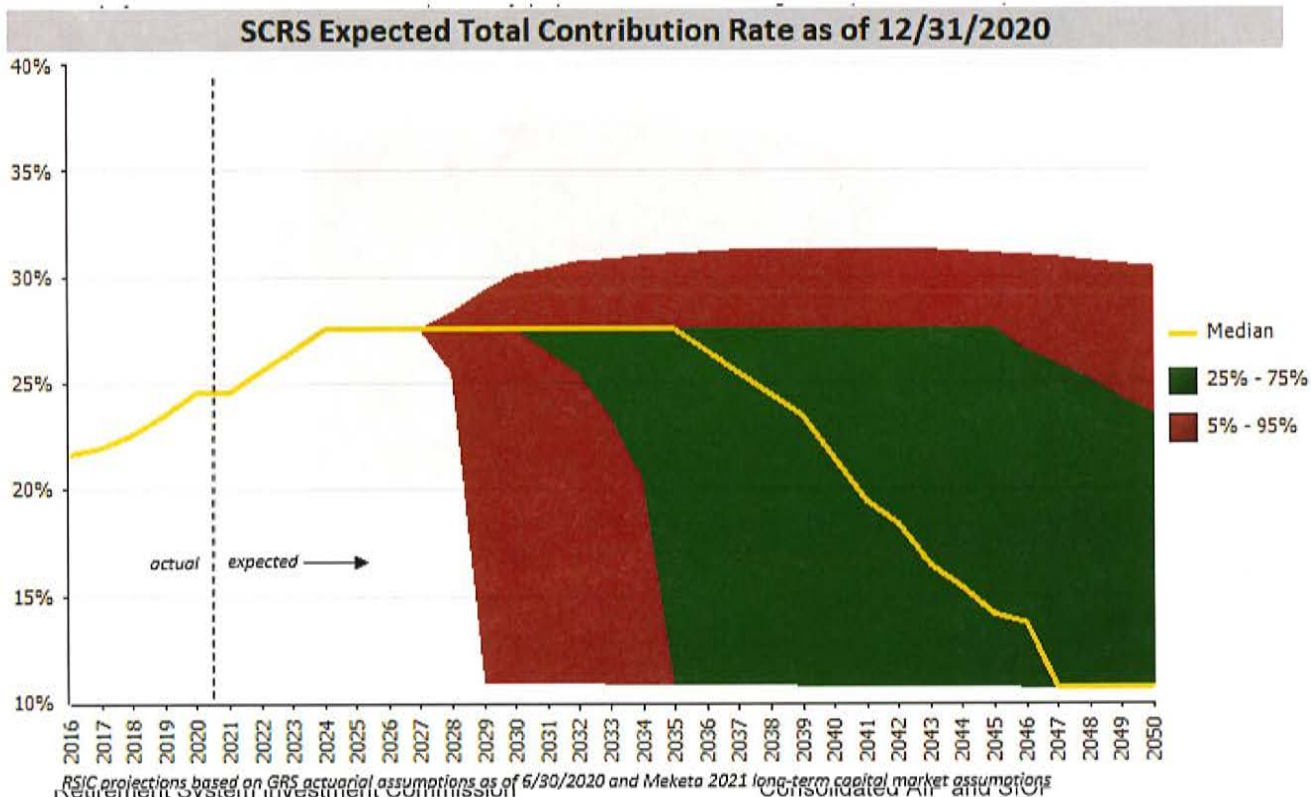


TABLE 1 (2020)



Retirement System Investment Commission Consolidated AIP and SIOP

As amended and adopted on April \_\_, 2022

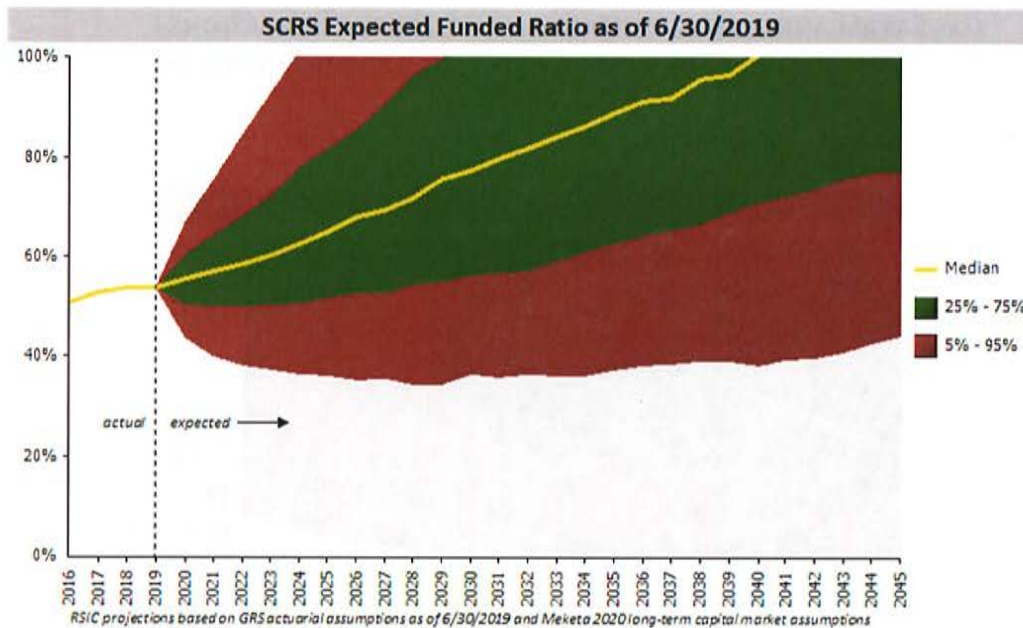


TABLE 2 (2021)

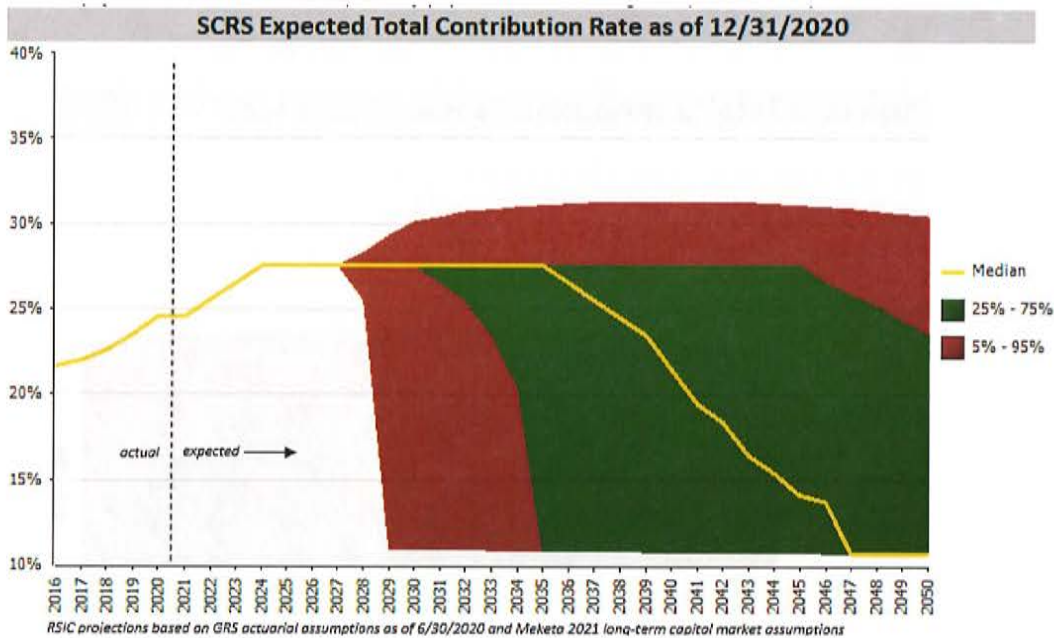
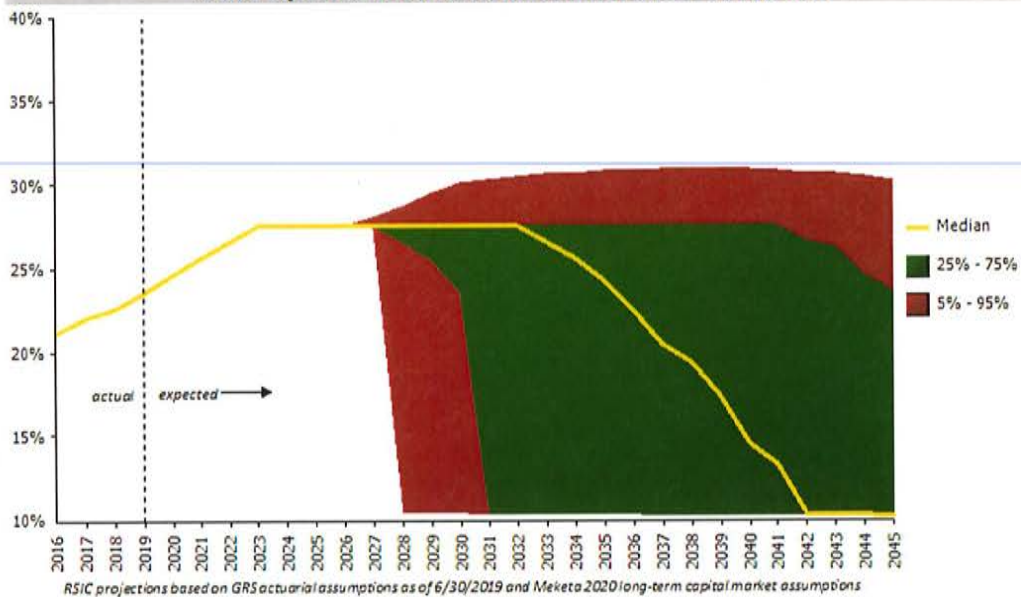


TABLE 2 (2020)

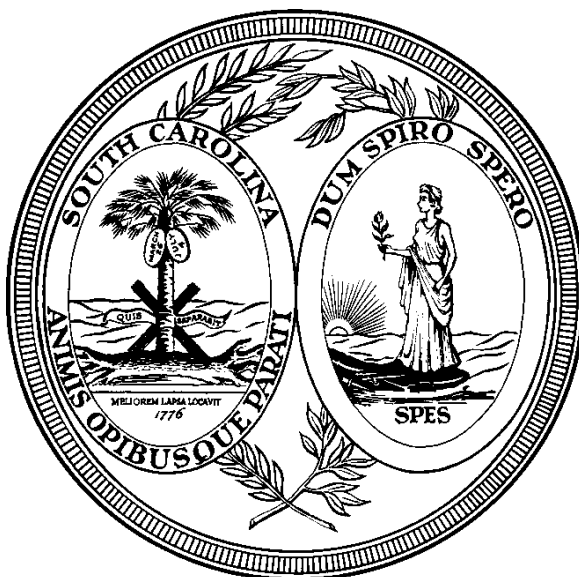
**SCRS Expected Total Contribution Rate as of 6/30/2019**







# SOUTH CAROLINA RETIREMENT SYSTEM INVESTMENT COMMISSION



## CONSOLIDATED ANNUAL INVESTMENT PLAN AND STATEMENT OF INVESTMENT OBJECTIVES AND POLICIES

As amended and adopted on April \_\_\_\_, 2022

## ***Role of this Document***

The State of South Carolina administers five defined benefit pension plans: the South Carolina Retirement System (“SCRS”), the Police Officers Retirement System (“PORS”), the Retirement System for Members of the General Assembly (“GARS”), the Retirement System for Judges and Solicitors (“JSRS”), and the South Carolina National Guard Supplemental Plan (“SCNG”) (together, the “Plan”).

The South Carolina General Assembly established the Retirement System Investment Commission (“RSIC”) as a state agency in 2005 and provided it with the exclusive authority to invest and manage the assets of the Plan which it does in one group trust. RSIC is governed by an eight-member board (the “Commission”). The Commission is a co-fiduciary of the assets of the Plan along with the South Carolina Public Employee Benefit Authority Board (“PEBA”).

State law requires the Commission to adopt a Statement of Investment Objectives and Policies (“SIOP”) and to review it annually and to either amend it or reaffirm it. The SIOP establishes investment and performance objectives, policies and guidelines, roles, responsibilities, and delegation of authority for the management of plan assets. State law also requires RSIC’s Chief Investment Officer (“CIO”) to develop an Annual Investment Plan (“AIP”) which must be presented to and adopted by the Commission prior to May 1<sup>st</sup> of each year. Pursuant to state law, relevant portions of the SIOP may constitute parts of the AIP.

In order to ensure consistency and agreement between the SIOP and AIP, the Commission has consolidated the requirements of both into one document which it will review annually prior to May 1<sup>st</sup>. As part of the annual review, the Commission will amend or reaffirm, as it deems appropriate, those portions of this document intended to meet the requirements of the SIOP and the Commission will consider the CIO’s recommendation of any necessary changes to those portions of this document intended to meet the requirements of the AIP. In order to assist the Commission and the CIO in meeting their respective annual requirements, RSIC’s Chief Executive Officer (“CEO”) will provide a guide that designates those portions of this document that are required by the SIOP and those that are required by the AIP.

The consolidated AIP and SIOP takes effect July 1, 2022.

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## I. STRATEGIC PURPOSE, INVESTMENT OBJECTIVE, AND BELIEFS

### A. Purpose

The goal of the State's five defined benefit plans is to provide a lifetime of benefits in retirement to those who have dedicated a career of public service to the State and its political subdivisions. The funding to secure this promise of benefits comes from two sources - contributions made by the employee and employer and the investment return earned on the assets of the Plan. The General Assembly has provided the Retirement System Investment Commission with the sole authority to invest and manage the assets of the Plan. Thus, RSIC's purpose is to earn an investment return that aids in fulfilling the promise of benefit payments to our current and future retirees and their beneficiaries.

### B. Investment Objective

RSIC's primary investment objective is to design an investment program that produces a long-term rate of return that when added to contributions, funds current and future benefit payments. In doing so, RSIC must remain mindful that the Commissioners, CEO, and CIO are named fiduciaries to the Plan's beneficiaries and must carry out their respective responsibilities to invest and manage the Plan's assets in keeping with the highest duty of care the law recognizes. As a result, the return the investment program seeks to achieve should involve taking a prudent amount of investment risk.

Further, RSIC cannot design an investment program in isolation, but must instead design a program consistent with the realities of the Plan that is guided by the Plan's particular design, structure, and risk factors. An important guiding consideration is that the Plan is mature and as a result experiences net negative cash flows, in that the amount of annual contributions into the Plan is less than the annual amount of benefit payments flowing out of the Plan. As a result, the investment program must be designed in a way to provide sufficient liquidity to fund the net benefit payments to current retirees.

The investment program also must be guided by the consideration that the respective systems comprising the Plan are underfunded, in that the discounted liabilities of each system exceed the actuarial value of each system's assets. The 2021 Actuarial Valuation report from the Plan's actuaries shows the funded status of each system as:

<u>SCRS</u>	<u>PORS</u>	<u>GARS</u>	<u>JSRS</u>	<u>SCNG</u>
55.2%	64.3%	56.1%	43.6%	54.1%

The underfunded nature of the Plan presents the risk that Plan's assets will be insufficient to support future benefit payments. As a result, the investment program must also be designed in a way to grow the assets of the Plan to support payments to future retirees and their beneficiaries. The General Assembly did take significant action to address the underfunded nature of the Plan in the 2017 Pension Reform Bill. The 2017 Pension Reform Bill requires that the unfunded accrued actuarial liability ("UAAL") amortization period for SCRS and PORS be reduced by one year each fiscal year until each plan reaches a twenty-year amortization period. In order to support meeting this requirement, the General Assembly significantly increased contributions into the SCRS and PORS. It should be noted that because of these efforts, the funding levels for both SCRS and PORS improved over the prior fiscal year and the amortization periods for SCRS and PORS have been reduced to 20 years and 18 years respectively. Thus, RSIC



is tasked with designing an investment portfolio that balances the need to provide sufficient liquidity to fund current net benefit payments while also growing the portfolio it aid in providing benefits to future retirees.

Another guiding factor is that the General Assembly has set 7 percent as the assumed annual rate of investment return on the Plan's assets. The assumed rate of return not only serves as the discount rate to determine the net present value of the Plan's liabilities, but also serves as the primary driver of the Plan's funding policy. Investment performance relative to the assumed rate of return determines whether contribution rates are sufficient to meet the funding goals and requirements of the Plan.

RSIC realizes that investment performance will not meet or exceed the assumed rate of return every year, but rather strives to construct an investment portfolio that will meet or exceed this rate of return over time at a prudent level of market risk, in keeping with its fiduciary duty to the Plan's beneficiaries. Given the historically low interest rate environment, RSIC recognizes that achieving a long-term rate that exceeds the assumed rate of return requires investing the portfolio in a greater percentage of assets with higher expected volatility than would otherwise be required if interest rates were at historic average levels. As a result, the investment portfolio will experience greater market volatility which not only impacts the probability of the investment return exceeding the assumed rate over time, but also correspondingly impacts the probability of reaching the funded status goals of the Plan without requiring additional contribution rate increases.

As a result, RSIC works to design an investment program that maximizes the probability that the Plan will meet the General Assembly's funded status goals, but also given the high level of contribution rates, strives to minimize the probability that the Plan will require additional contributions above those already required. RSIC believes that it can design an investment program with a significant probability of meeting or making significant progress towards both concerns as demonstrated by the stochastic analysis of our funded status expectations for SCRS set out in Table 1 below and a similar analysis of our contribution rate expectations set out in Table 2 below.

TABLE 1

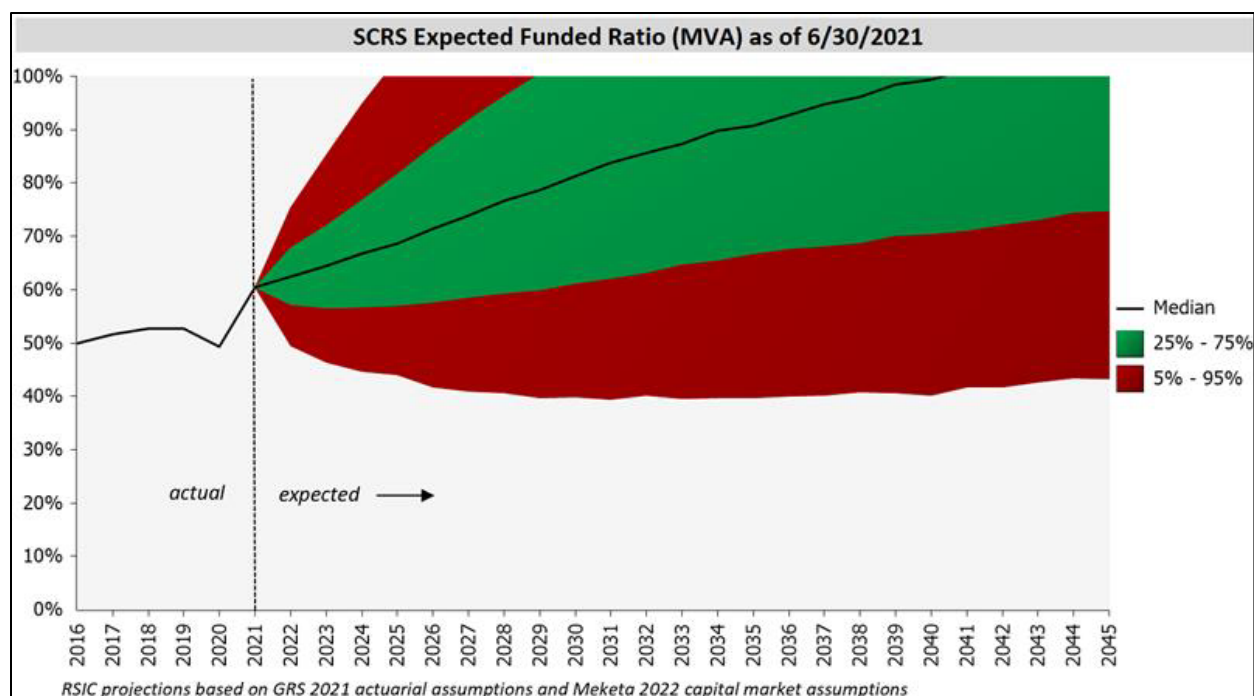


Table 1 tracks the actual, as well as expected, funded status of SCRS since 2016, the year prior to the passage of the 2017 Pension Reform Bill. SCRS is used as the example because its assets comprise the greatest percentage of the total assets of the five systems. The reason for the stochastic approach to the expected funded status is to demonstrate the impact of market volatility on the probable funded status of SCRS through time. The model upon which the simulation is based incorporates the actual structure, components, and assumptions of SCRS, including the contribution policy put into effect by the 2017 Pension Reform Bill. The model uses the Commission's Policy Portfolio, described below, as the investment portfolio and includes thousands of iterations based on the 2022 long-term capital market and volatility expectations provided by the Commission's Investment Consultant. The long-term expected return and volatility for the Policy Portfolio is discussed in Section III(D) below.

As can be seen in this table, the base case scenario is that SCRS reaches fully funded status by 2041, which is within the funded status goals set by the 2017 Pension Reform Bill. However, if the Plan were to experience the unfavorable 95<sup>th</sup> percentile scenario, the funded status of the Plan would not improve and would be expected to be in approximately the same funded position in thirty years that is currently. The base case scenario to reach fully funded status has decreased by 5 years over the base case scenario in the corresponding 2021 analysis.

The table also shows the actual improvement of the funded status of SCRS since 2016. The actual improvement shown on the table is attributable to additional contributions flowing into SCRS resulting from the 2017 Pension Reform Bill and better than forecast investment returns since the bill's passage. As of the 2021 Actuarial Valuation, the amortization period for SCRS is 20 years which is six years ahead of the 2017 Pension Reform Bill's requirement of 26 years. As for PORS, the amortization period is 18 years which is ahead of the Pension Reform Bill's requirement of 26 years.

TABLE 2

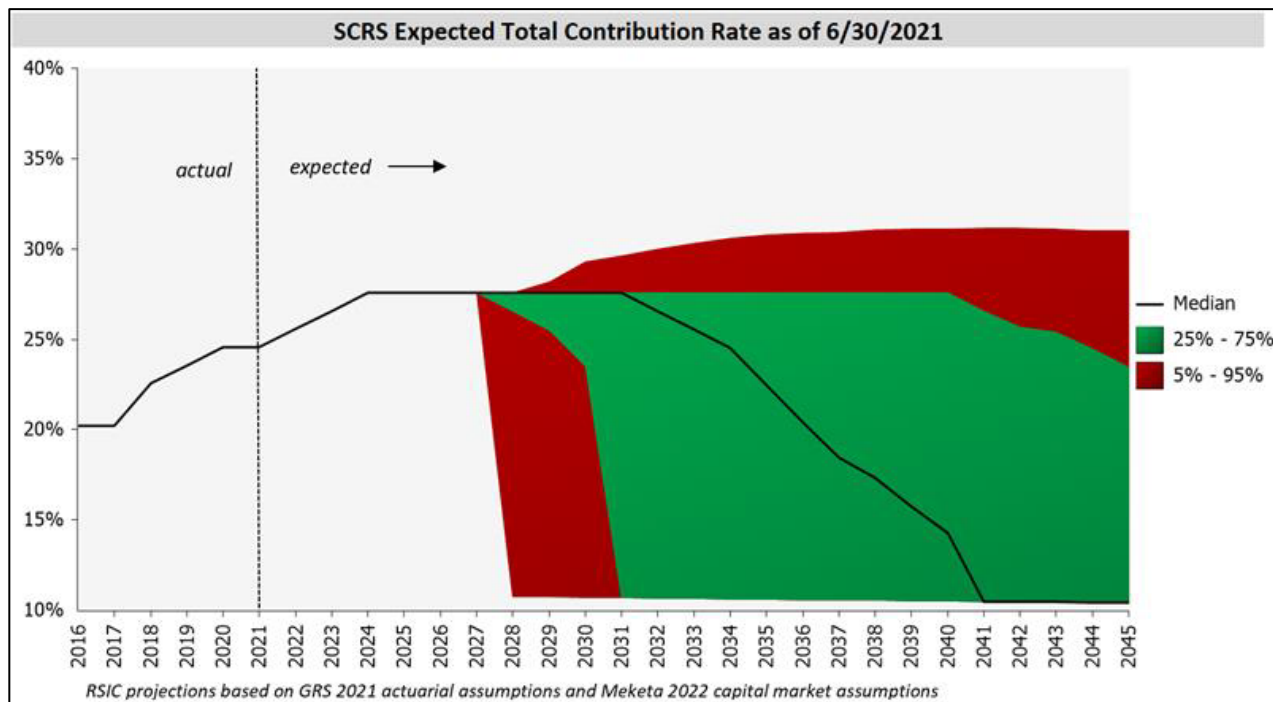


Table 2 tracks the actual, as well as expected, total employer and employee contribution rates for SCRS since 2016. This table also employs a stochastic approach to the expected combined contribution rate to more accurately demonstrate a range of probable outcomes due to market volatility. This analysis is based on the same assumptions used to produce Table 1.

As indicated in this table, the base case scenario shows combined employer and employee contribution rates for SCRS increasing to 27.56 percent pursuant to the schedule required by the 2017 Pension Reform Bill. The contribution rates are then expected to level off and begin to decline in 2031 which is a decrease of four years as compared to the 2021 analysis. The contribution rates are projected to decline to the 10 percent normal cost contribution rate by 2041, which is a decrease of six years compared to the 2021 analysis. The table indicates that there is some probability that contribution rates may increase above the 27.56 combined contribution rate required by the 2017 Pension Reform Bill. (Appendix XI contains historical versions of Tables 1 and 2 for each year since 2020 based on the corresponding year's capital market expectations).

### C. Beliefs

As fiduciaries, the Commission and staff of RSIC are charged with exercising their roles and responsibilities to the Plan's participants and beneficiaries with the highest duty of care that the law recognizes. In order to ensure consistency in approach to decision making that is commensurate with this fiduciary duty and focused on achieving the investment objective, the Commission and RSIC staff have adopted a set of core beliefs to ensure that we are collectively guided by a unifying set of principles.

**Belief 1** – We believe that asset allocation is the main driver of an investment portfolio's risk, return, and cost.

**Belief 2** – We believe that investors must be rewarded for incurring additional risk, cost, and

complexity.

**Belief 3** – We believe that we are long-term investors which requires us to instill *discipline* and *patience* into our investment decision making and assessment process.

**Belief 4** – We believe that achieving our investment objective requires an organization with strong governance, that maintains core values, and employs talented professionals. In order to do this, we must:

1. establish a governance structure with clear lines of authority and means to assess the quality of decision making and resulting performance;
2. recruit and retain a talented investment and operational staff consistent with our Core Values of:
  - a. Humility,
  - b. Intellectual Curiosity, and
  - c. Team Player
3. achieve a deep understanding of value creation through the investment process;
4. emphasize risk awareness and focus on mitigating investment and enterprise risk; and
5. provide the foundation, infrastructure, and systems necessary to meet the investment objective and mitigate risk.



## II. ROLES AND RESPONSIBILITIES

1. In 2005, RSIC was established by South Carolina law to invest and manage the assets of the State's five defined benefit retirement plans. RSIC invests and manages the assets of all five plans in one group trust. RSIC is governed by an eight-member Commission. The Commission's primary purpose is to set the strategic direction for an investment program that is consistent with its fiduciary duty and strives to earn an investment return that when combined with contributions fulfills the promise of benefit payments to the Plan's current and future retirees and their beneficiaries. This includes setting a long-term asset allocation that meets the Commission's investment objective, oversight of the implementation of the investment portfolio and the business affairs of RSIC, approving certain investments, ensuring legal and ethical integrity, and maintaining accountability. The Commission also adopts a series of governance policies that define the roles and responsibilities of Commissioners and staff and provide general guidance for the operation of RSIC as an agency. (RSIC Governance Policies can be found at: <https://www.rsic.sc.gov/documents/2017.07.14%20Governance%20Policy%20Manual.pdf>).

2. The Commission employs a CEO, who serves as the primary figure of accountability for RSIC. The CEO serves as the chief administrative officer of RSIC as an agency and is charged with the affirmative duty to carry out the mission, policies, and directives of the Commission. The CEO is delegated the Commission's authority necessary, reasonable, and prudent to carry out the operations and management of RSIC as an agency and to implement the Commission's decisions and directives. The CEO also serves as the chief risk officer for the organization. The CEO is charged with employing a CIO and all other agency staff who serve at the will of the CEO. The CEO is also delegated the final authority to close all investments and must certify that investments made pursuant to the Commission's Investment Authority Delegation Policy meet the requirements of the policy (see SECTION VI for the Investment Authority Delegation Policy).

3. The CIO manages RSIC's investment functions subject to the oversight of the CEO. RSIC primarily invests Plan assets by allocating capital to external investment managers who implement specific investment strategies to provide the exposures necessary to meet the requirements of the Commission's strategic asset allocation. The Commission has implemented an Investment Authority Delegation Policy which provides the CIO with the final authority to invest with external investment managers subject to the limits of the policy. For a proposed investment that exceeds the delegation policy, the CIO determines whether the investment is presented to the Commission for final approval. The CIO is also granted certain authority to manage the implementation and exposure of the portfolio. The CIO through the management of the investment staff also oversees investment risk management, investment manager oversight, and other related activities.

4. The Executive Team is currently comprised of the CEO, CIO, Chief Operating Officer ("COO"), and Chief Legal Officer ("CLO") and serves as RSIC's primary management committee and aids the CEO in making strategic organizational and operational decisions.

5. The Internal Investment Committee ("IIC") is a committee of senior staff appointed by the CEO and is chaired by the CIO. The IIC's responsibilities are provided by the IIC Charter but the IIC is primarily responsible for serving as the committee that vets and recommends new investments to the CIO for approval and execution, or recommendation to the Commission for its approval.

6. The Commission engages a general investment consultant (“Investment Consultant”), who reports to the Commission and assists and advises the Commission on asset allocation, asset/liability study, performance reporting, benchmarking/peer group comparisons, and general investment education and advice. The CEO manages the day-to-day relationship with the Investment Consultant. RSIC Staff may rely on the Consultant for data resources, external analyst inputs, and access to educational materials. The CEO may also retain specialty consultants to serve as an extension of RSIC Staff in Private Equity, Private Debt, Real Estate, Infrastructure, and Hedge Funds.

7. The Internal Audit function is governed by the Commission’s Audit and Enterprise Risk Management Committee and is primarily provided through external service providers. An internal staff member coordinates the relationship with external service providers and assists the committee with performing its duties and functions. The purpose of the Internal Audit function is to provide independent, objective assurance and recommendations designed to add value and improve RSIC operations. It assists the entity in accomplishing its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

8. The Enterprise Risk Management and Compliance (“ERM and Compliance”) function reports to the CEO and serves as the primary staff to aid the CEO in fulfilling the role of chief risk officer. The ERM and Compliance function coordinates with the Executive Team and other staff on the assessment of, and provides oversight related to the identification and evaluation of, major strategic, operational, regulatory, informational, and external risks inherent in the business of RSIC. ERM and Compliance is also responsible for overseeing the process for monitoring compliance with RSIC policies and applicable laws.

9. The Public Employee Benefit Authority (“PEBA”) is a separate agency that administers a comprehensive program of retirement benefits, performing fiduciary duties as stewards of the contributions and disbursements for the Plan. PEBA is responsible for producing GAAP basis financial statements for the Plan and maintains a general ledger to support that process. The financial statements that are produced by PEBA contain information regarding the investments made by the Commission and as such contain the official accounting records for Plan investments. The financial statements are presented in accordance with GAAP and comply with the Governmental Accounting Standards Board standards. The financial statements are audited annually by an independent audit firm hired by the State Auditor’s Office.

10. The Commission and the PEBA Board serve as co-trustees of the Plan’s assets. PEBA is the custodian of the Plan’s assets and RSIC is responsible for the Plan’s custodial banking relationship.

11. Subject to the approval of the State Fiscal Accountability Authority, PEBA designates the Plan’s Actuary. The Commission is a third-party beneficiary to the contract with the Plan’s Actuary, with full rights to all actuarial valuations prepared by the actuary.

12. The South Carolina General Assembly has the authority to control budget and staffing for RSIC and to set the actuarial annual assumed rate of return for the Plan. Starting in early 2021, and every four years thereafter, in consultation with the Commission and the Retirement System’s Actuary, PEBA proposed an assumed annual rate of return to the General Assembly that took effect at the beginning of the 2021-2022 fiscal year because the General Assembly took no action to amend or reject the recommendation. The General Assembly also conducts periodic legislative oversight hearings of RSIC.

### III. ASSET ALLOCATION

#### A. Purpose

The Commission's primary responsibility is to establish an investment program that is designed to meet the Commission's investment objective. The most significant action the Commission takes in fulfilling this responsibility is by setting the long-term asset allocation. The Commission designs a portfolio that includes a mix of assets that it believes will likely generate a long-term rate of return that meets its investment objective which is conditioned by its fiduciary duty to only expose the Plan's assets to a prudent level of market risk. The target, or Policy Portfolio, is established with a long-term perspective and the Commission does not expect to change the portfolio to react to short-term market conditions or frequent fluctuations in capital market expectations.

The Commission recognizes employing a long-term perspective has certain risk management benefits. Most notably, this discourages the temptation to react to short-term market trends, which can lead an investor to chase returns in asset classes that have become expensive due to recent appreciation. The Commission believes that adherence to this long-term perspective will produce its greatest benefits during periods of adverse market conditions, during which time the Policy Portfolio will serve as a stabilizing force for the investment program.

State law also requires the Commission to diversify the assets of the investment portfolio and to consider: (i) general economic conditions; (ii) the possible effect of inflation or deflation; (iii) the role that each investment or course of action plays within the overall portfolio; (iv) the needs for liquidity, regularity of income, and preservation or appreciation of capital; and (v) the adequacy of funding for the Plan based on reasonable actuarial factors.

#### B. Background

The Commission undertook a review of the existing Policy Portfolio in early 2019. At the time the Commission began this process, the Policy Portfolio was comprised of eighteen separate asset classes with twenty-one different benchmarks. Many of the asset classes had small target weights – several with less than three percent. Both the CIO and the Investment Consultant expressed concern that the Policy Portfolio was over diversified and required a high level of complexity to exist in the Actual Portfolio without a clear improvement in risk or return. The Commission found this to be inconsistent with its investment belief that investors must be rewarded for incurring additional risk, cost, and complexity. The Commission also believed that the existing Policy Portfolio established the wrong balance between its role as setting the strategic direction of the investment program and investment staff's role in implementing the portfolio. As a result, the Commission determined that a more consolidated Policy Portfolio was in order which valued simplicity and required complexity in the Actual Portfolio to prove its value. The Commission determined that key to this effort was developing a series of benchmarks that would collectively form a Portfolio Framework to clearly determine the value of investment decisions.

#### C. Reference Portfolio

The Commission decided that it would begin the development of this framework by setting a Reference Portfolio. The Reference Portfolio would be a simple two asset class benchmark portfolio comprised of stocks and bonds. The point of the Reference Portfolio was not to limit the portfolio to a simple mix of stocks and bonds, but rather to set a risk reference for establishing the Policy Portfolio.

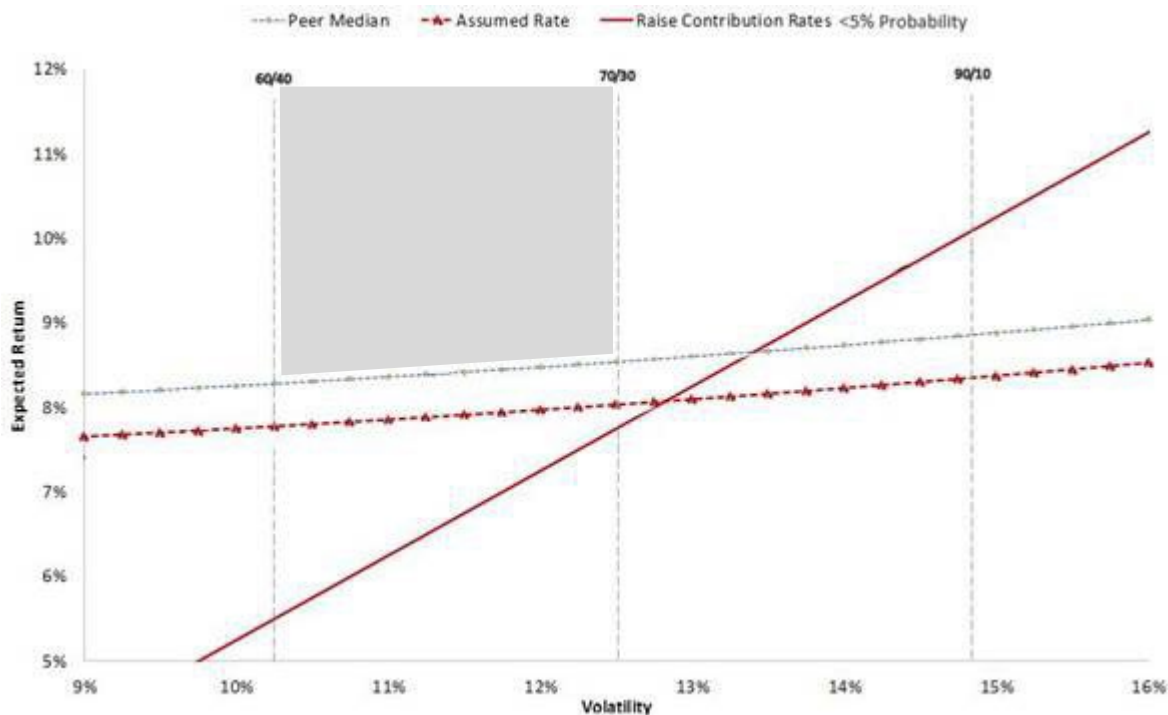
The Reference Portfolio would not serve as a risk limit for the Policy Portfolio, but rather a barometer

to measure the value over time of diversifying into a multi-asset class portfolio.

The Commission attempted to set the allocation of the Reference Portfolio to one consistent with a portfolio that most closely expressed the risk required to earn a return that is expected to exceed the assumed annual rate of return while also avoiding a greater than 5 percent probability of requiring additional contributions increases in the next five years (other plan risks were also contemplated but would also be avoided because these risks would either fall along the same line or to the right of the red risk line represented on Table 3 below). In setting the Reference Portfolio, the Commission was mindful that South Carolina law provides that no more than seventy percent of the portfolio may be invested in equities. The law does not limit the types of assets that could make up the other thirty percent of the portfolio, which could conceivably include assets like high yield bonds which have an imbedded equity risk factor. However, the Commission believed it was prudent to constrain the Reference Portfolio to no more than seventy percent equity risk, as expressed by a seventy percent allocation to equities, and to mitigate the equity risk with a thirty percent allocation to bonds.

The Commission considered the appropriate Reference Portfolio at its April and June 2019 meetings. The Commission determined that a 70 percent Global Public Equities (*MSCI ACWI IMI Net*) and 30 percent Bonds (*Bloomberg Barclays Aggregate*) portfolio best represented the volatility of a diversified portfolio of assets that would be expected to earn a return that exceeds the assumed annual rate of return over time while also avoiding a greater than 5 percent probability of requiring additional contributions increases in the next five years. The Commission reached consensus on this allocation as the Reference Portfolio Benchmark. In reaching this consensus, the Commission accepted that a Reference Portfolio with a risk level associated with a seventy percent allocation to equities was prudently necessary to meet its investment objective.

**Table 3**





#### D. Policy Portfolio

The Commission then began establishing a Policy Portfolio that would serve as the Commission's long-term asset allocation. The Policy Portfolio would be a multi-asset class portfolio with similar expected volatility as the Reference Portfolio. The Policy Portfolio would be expected to consolidate the existing eighteen asset class Policy Portfolio into a more simplified allocation without substantially impacting the expected return, but with a similar level of risk as the Reference Portfolio. The purpose of setting the Policy Portfolio's risk target to that of the Reference Portfolio was to reveal the performance impact gained through diversification.

However, unlike the Reference Portfolio, the Policy Portfolio would be a portfolio that could be held and, in any respect, would serve as the gravitational pull to a more simplified Actual Portfolio.

The Commission considered the transition to a more simplified Policy Portfolio at its April and June 2019 meetings and reached consensus on the transition to the simplified target allocation in Table 4 below.

**Table 4**

Legacy Asset Allocation	
Nominal IG Bonds	6
Treasuries	5
TIPS	2
Mixed Credit	4
EM Debt	4
Private Debt	7
US Equity	18
Developed Int'l Equity	11
EM Equity	6
Equity Options	7
Private Equity	9
Real Estate (Public)	1
Real Estate (Private)	8
Infrastructure (Public)	1
Infrastructure (Private)	2
PA Hedge Funds	10
GTAA	7
Other Opportunistic	1

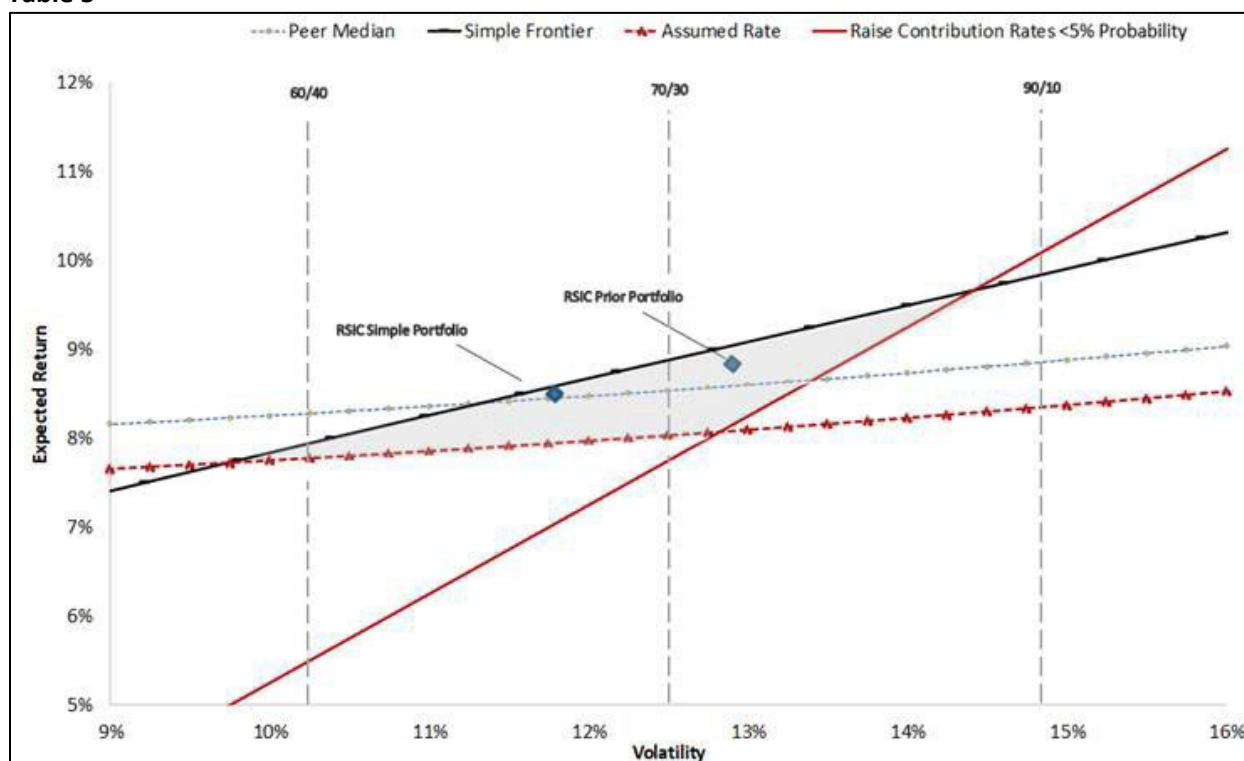
Current Asset Allocation	
Bonds	26
Private Debt	7
Global Equity	46
Private Equity	9
Real Assets	12

The Commission also analyzed whether the Policy Portfolio would meet the Commission's long-term investment objective in that it would likely exceed the assumed rate of return and avoid risks particular to the plan including not meeting the General Assembly's funded status objectives and avoiding a significant probability of requiring additional contribution increases. This analysis was based on the Investment Consultant's 2019 Capital Market Expectations.

As demonstrated in Table 5<sup>2</sup> the Policy Portfolio would be expected to:

1. exceed the assumed rate of return,
2. compare favorably to the simple frontier<sup>3</sup>,
3. compare favorably to the risk of the Reference Portfolio Benchmark; and
4. experience a less than 5 percent probability of requiring additional contributions increases in the next five years (again other plan risks were also contemplated but would also be avoided because these risks would either fall along the same line or to the right of the risk line represented on the table).

**Table 5**



In reaching consensus on the asset allocation, the Commission also considered what role each asset class would play in the overall portfolio with each asset class performing the primary role of growth, diversification, or yield:

**Public Equity:** This asset class includes investments in the stock of publicly traded companies. The purpose of public equity in the portfolio is growth. The excess return expectations for this asset class are low. The asset class is highly liquid and can be accessed with minimal implementation cost.

<sup>2</sup> Although the Investment Consultant's long-term capital market expectations are based on projected asset class returns over twenty years, the Reference and Policy Portfolios' risk and return were calculated using these expectations to produce thirty-year results.

<sup>3</sup> The simple or efficient frontier comprises investment portfolios that offer the highest expected return for a specific level of risk. In this case, the investment portfolios along the simple frontier are limited to a mix of the five asset classes from the simplified portfolio shown in Table 4.

**Bonds:** This asset class includes investments in debt securities issued by governments, corporations, or other issuers. The primary purpose of bonds in the portfolio is diversification and the secondary purpose is to provide yield. The excess return expectations for this asset class are low and the asset class is expected to provide a persistent source of return while remaining highly liquid. Bonds are expected to serve a stabilizing purpose in times of market stress.

**Private Equity:** This asset class includes equity investments in privately held companies. Investors have historically been compensated with incremental return over comparable public equity investments in exchange for lower liquidity and increased business risk as compared to the public markets. The primary role of private equity in the overall portfolio is growth with an expected long-term return that exceeds public equity. The excess returns of this asset class are a source of magnitude of return for the portfolio the value of which is expected to exceed the higher cost of implementation as compared to public equity.

**Private Debt:** This asset class includes investments that provide alternative financing to businesses or assets and are in competition with traditional capital market or bank financing. Investors are compensated with incremental return over what can be achieved through traditional forms of lending in exchange for lower liquidity as compared to liquid credit markets and for serving as a solutions provider to these businesses. The primary role of this asset class in the portfolio is yield. The expectations for the consistency of return above what can be achieved through bonds or the liquid credit markets is high.

**Real Assets:** This asset class includes investments in physical assets like real property and infrastructure, as opposed to financial assets like stocks and bonds. The primary role of this asset class is diversification with the secondary purposes of providing inflation protection and yield. Although the expected liquidity for this asset class is low, the expectations for excess return are high.

**Table 6**

	<b>Public Equity</b>	<b>Private Equity</b>	<b>Bonds</b>	<b>Private Debt</b>	<b>Real Assets</b>
<b>Primary role in portfolio (asset allocation)</b>	Growth	Growth	Diversification	Yield	Diversification
<b>Secondary role in portfolio (asset allocation)</b>			Yield		Yield
<b>Return expectation (20Y benchmark return)</b>	High	> Public Equity	Low	> Bonds	Moderate
<b>Alpha expectation where active: magnitude vs. cost</b>	Low	High	Moderate	Moderate	Moderate
<b>Consistency of excess return</b>	Low	Moderate	Moderate	High	High
<b>Expected liquidity</b>	Very high	Very Low	Very high	Low	Low
<b>RSIC Target Portfolio Expected Cost</b>	Low	High	Low	Moderate	Moderate

The Commission believes that this change in approach to a five asset-class Policy Portfolio shifts the paradigm to one which values simplicity and holds a more complex portfolio accountable for improving risk-adjusted returns. A crucial component to ensure this accountability is having the appropriate benchmarks for the Policy Portfolio. The Commission was guided by the CFA Institute's recommendations that benchmarks are (i) specified in advance, (ii) appropriate, (iii) measurable, (iv) unambiguous, (v) reflective of investment options, (vi) owned, and (vii) investable. At its September 2019 meeting, the Commission reached consensus on the benchmarks in Table 7 for the Policy Portfolio.

Table 7

<b>Asset Class</b>	<b>Benchmark<sup>4</sup></b>
Public Equity	<i>MSCI ACWI IMI Net</i>
Bonds	<i>Bloomberg Barclays Aggregate</i>
Private Equity	<i>Burgiss Private Equity</i>
Private Debt	<i>S&amp;P LSTA +150 bps</i>
Real Assets	<i>NCREIF ODCE Net</i>

<sup>4</sup> The Private Equity and Private Debt portfolios and benchmarks will be reported on a 3-month lag.

MSCI ACWI IMI Net - Morgan Stanley Capital International All Country World Index Investable Market Index; S&P LSTA - Standard & Poor's Loan Syndication and Trading; and NCREIF ODCE – National Council of Real Estate Investment Fiduciaries Open End Diversified Core Equity.



Based on the 2019 Capital Market Expectations provided by the Commission's Investment Consultant that the Commission utilized when reaching consensus on the Policy Portfolio, the Policy Portfolio would have been expected to achieve a twenty-year annualized rate of return of a 7.83 percent with an expected volatility of 11.69 percent. The portfolio would have been expected to have a 58.41 percent probability of earning a twenty-year annualized rate of return that met or exceeded the then assumed rate of return of 7.25 percent.

In the years since the Commission adopted the Policy Portfolio, the annual capital market expectations have fluctuated primarily in response to significant market movement during the prior year. Based on the 2022 Capital Market Expectations provided by the Commission's Investment Consultant, the Policy Portfolio is expected to achieve a 20-year annualized rate of return of 6.71 percent with an expected volatility of 12.51 percent. The portfolio is expected to have a 45.3 percent chance of achieving a 20-year annualized rate of return that exceeds the 7 percent assumed rate of return. Although these return expectations are lower than the projections at the time the Policy Portfolio was adopted, the expectations are not unreasonable given the significant appreciation in capital markets since the Policy Portfolio was adopted and reasonably reflect the degree of expected return that has been pulled forward during that time period. The return expectations also show a slight improvement over 2021 expectations, when the Policy Portfolio was expected to earn a 20-year annualized rate of return of 6.56 percent with an expected volatility of 12.52 and a 43.1 percent probability of achieving the 7 percent assumed rate of return. Further, it is expected that the continued use of Portable Alpha increases the expected return to 6.91 percent with an expected volatility of 13.06 percent and a 48.3 percent probability of achieving a 20-year annualized rate of return that exceeds the 7 percent assumed rate of return.

The Commission believes that long-term investors should resist the temptation to adjust their long-term asset allocation in response to short term volatility in capital market expectations. As a result, the Commission believes that there is no interim asset allocation change to the Policy Portfolio that is absolutely critical to meeting its long-term investment objective and the Commission will not depart from the asset allocation review schedule established in Subsection H.

#### **E. Implementation Portfolio Benchmark**

The Commission recognizes that the CIO and investment staff may add value by structuring the Actual Portfolio in a manner that deviates from the Policy Portfolio target weights or may also pursue a strategy that causes the composition of an asset class to differ from the policy benchmark. As a result, the Commission provides the CIO and the investment staff with the discretion to structure the portfolio within the asset class and sub-asset class ranges in Table 8. In order to measure the risk and return impact of these portfolio structure decisions, the Commission employs an Implementation Portfolio Benchmark that aggregates the underlying benchmarks of each asset class and sub-asset class strategy according to their actual weights. Providing this discretion while establishing a structure that measures the value of these

decisions also sets the right balance of accountability for Commission decisions and those of the CIO and investment staff.

**Table 8**

<b>Asset Class</b>	<b>Target</b>	<b>Range</b>	
Public Equity	46%	30%	60%
Domestic	Index	Index +/- 6%	
Developed Non-US	Index	Index +/- 6%	
Emerging Market	Index	Index +/- 4%	
Equity Options	0%	0%	7%
Bonds	26%	15%	35%
Core Bonds (IG)	26%	10%	35%
Inflation-linked (IG)	0%	0%	5%
Mixed Credit (non-IG)	0%	0%	8%
EM Debt	0%	0%	6%
Net Cash/Short Duration	0%	0%	7%
Private Equity	9%	5%	13%
Private Debt	7%	3%	11%
Real Assets	12%	6%	18%
Real Estate	9%	5%	13%
Infrastructure	3%	0%	5%

#### **F. Manager Selection**

The Commission also recognizes that the CIO and investment staff strive to add additional value through manager selection. In September 2017, the Commission through the adoption of the Investment Delegation Policy delegated investment manager selection decisions to the CIO and investment staff within clearly defined limits and exceptions. The Investment Authority Delegation Policy is set out in Section VI. The value of manager selection is discernable by comparing the Implementation Portfolio Benchmark and the Actual Portfolio.

#### **G. Performance Reporting**

Essential to the Commission's oversight function is performance reporting that makes clear the value of three major investment decisions: diversification, portfolio structure, and implementation. The Commission charges staff with developing a Portfolio Reporting Framework that easily allows the Commission to judge the value of these three investment decisions by comparing the relative performance between the Reference Portfolio, Policy Portfolio, Implementation Portfolio, and Actual Portfolio:

1. Diversification (Policy Portfolio Benchmark vs. Reference Portfolio Benchmark): The comparison of the Policy and Reference Portfolios Benchmarks reveals the value from

diversification beyond a simple two-asset portfolio. The benefit of designing these portfolios with the same level of expected volatility is that the performance differential is an indication of the impact of diversification, rather than being a function of an expected risk differential. The Commission should expect to see the value of diversification in this comparison over rolling five-year periods. Although these portfolios were established with the same level of expected volatility, the risk of these portfolios is expected to diverge during discrete periods of time but would generally be expected to rise and fall together over time.

2. Portfolio Structure (Implementation Portfolio Benchmark vs. Policy Portfolio Benchmark): This comparison supports an assessment of the quality of the portfolio structure. It reveals the performance impact of the decisions to structure the portfolio differently than the Policy Portfolio Benchmark. These impacts can be broken down into those resulting from the *weights* of asset classes and those resulting from the *composition* of asset classes. The Commission should see the positive performance impact of implementation benchmark decisions over rolling three-year periods. The reporting framework also include risk reports to highlight whether and how changes in portfolio structure alter the risk characteristics of the portfolio.

3. Implementation (Actual Portfolio vs. Implementation Portfolio Benchmark): This comparison aids in the evaluation of the quality of implementation, a key component of which is the impact of manager selection. The Commission should expect to see differential individual manager performance as compared to the implementation benchmark over short periods of time, but the Commission should expect in aggregate to see consistent value added through manager selection. Providing this additional comparison between the Actual Portfolio and the Implementation Benchmarks also disaggregates the performance gained through portfolio structure and that gained through manager selection. As a result, the Commission may evaluate the quality of each of these portfolio decisions when previously the actual portfolio was simply compared to an individual policy benchmark that combined both portfolio structure and manager selection decisions. This additional look through provides the Commission with an enhanced ability to effectively exercise oversight over both portfolio structure and investment manager selection decisions made by the investment staff.

## H. Asset Allocation Review

The Commission will conduct an Asset-Liability Management Study and asset allocation review every five years. The Commission will continue to receive long-term capital market expectations from the Investment Consultant annually and assess the impact to the expected return and volatility of the Reference and Policy Benchmark Portfolios. However, consistent with its beliefs and long-term approach to asset allocation, the Commission intends to limit interim asset allocation changes to those the Commission determines are absolutely critical to meeting its long-term investment objective and are commensurate with its risk tolerance and fiduciary duties.

#### IV. STRATEGIC INITIATIVES

The Strategic Initiatives described in this Section are major ongoing staff projects contemplated to last up to three years and are likely to have a more significant impact to the portfolio, asset class, or an investment strategy than typical decisions. The CIO will include changes to these initiatives as part of the annual AIP proposal and will provide a quarterly update on progress towards these initiatives at regular Commission meetings.

1. Risk Management – The Quantitative Solutions Group will continue to improve risk monitoring at the Portfolio, asset class, and manager levels. The team will place special emphasis on improving the quality of risk reporting at these levels.<sup>5</sup>
2. End of Fund Life - Establish a discipline to evaluate private investments approaching the end of fund life to optimize asset class performance.
3. Human Capital – Analyze the impact of anticipated baseline changes on asset class staffing needs and align human capital resources with updated portfolio priorities to ensure optimal coverage to source and perform due diligence on potential new investments.

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<sup>5</sup> The Quantitative Solutions Group is a subset of the Investment Team responsible for quantitative analytical support on prospective investment managers as part of the investment due diligence process, and also for monitoring and reporting on investment risk.



## V. INVESTMENT POLICIES

### A. General

1. IIC and Investment Approval Process - State law provides that the AIP is to be implemented by the Commission through the CIO. RSIC employs a team of investment professionals that support the CIO in carrying out investment management duties and responsibilities. One key component of this infrastructure is the IIC. The IIC assists the CIO by reviewing and providing recommendations to the CIO regarding proposed investments. The IIC also routinely monitors the Portfolio's investment performance and reviews relevant policies and procedures as part of its oversight function. The Commission adopted an Investment Authority Delegation Policy which grants the CIO the ability to approve those investments which fall within the parameters of this policy, subject to the oversight of the CEO. Other investments are presented to the Commission for its approval.

2. Due Diligence – The Investment Team maintains investment due diligence policies to provide consistency and oversight to the investment process. The Initial Due Diligence Policy outlines the key tenets of the RSIC's decision-making process in hiring investment managers. The Ongoing Due Diligence Policy outlines the process and criteria used to evaluate the retention/termination of external investment managers. Both due diligence policies are tested annually by either an Agreed Upon Procedures review by an independent auditor or by the Director of Enterprise Risk Management & Compliance. The results of this review are provided to the Audit and Enterprise Risk Management Committee.

3. Counterparty Risk Management – The Quantitative Solutions Group monitors two sources of potential counterparty risk: (1) the overlay program and (2) the System's master custodial bank. While the risk arising from the overlay program is actively monitored by its external manager, as an added layer of oversight, the Quantitative Solutions Group is responsible for reviewing and reporting on the external manager's prudent management of these counterparty risks.

4. Investment Strategies, Objectives, and Performance Standards:

- i. In Section III.D, the Commission described the characteristics and established the role each asset class plays in the Policy Portfolio. Within defined limits and constraints, the Commission provides the CIO and investment staff the ability to structure the portfolio for each asset class in a manner that fulfills the role the asset class plays in the portfolio. The investment staff maintain a "Baseline" document for each asset class that creates a shared understanding of how the portfolio will be structured to achieve the purpose of the asset class established by the Commission. In general, the annual plan for an asset class will involve measures designed to improve its alignment with its Baseline. The following items are detailed in the Baseline document:
  - a. The rationale and purpose of the asset class established by the Commission;
  - b. Target steady-state asset class exposures (including sub-strategies, geographies, or other relevant factors);

- c. The target return, characteristics (income vs. appreciation), and expected active vs. passive implementation breakdown; and
      - d. An estimate of normal cost to implement the portfolio, and an estimate of the flex cost which may be incurred when market conditions present compelling opportunities.
    - ii. Baselines also address the following broader issues:
      - a. The role private investments play in the Portfolio;
      - b. The mix of private vs. public market investments; and
      - c. How the portfolio is likely to change over time.
    - iii. The Baseline document is reviewed and updated, as necessary, at least annually, and all RSIC employees are encouraged to present suggested revisions to any Baseline. Proposed changes to the Baseline documents are presented to the IIC for review and to the CIO for approval. In addition to addressing the investment objectives and performance standards for each asset class, the Baseline also serves as a guide to workflow and portfolio management decisions. Investment decisions are reviewed against the Baseline for portfolio fit.
    - iv. As part of the individual asset class in-depth examination at each Commission meeting, the investment staff will also provide a review of the particular asset class Baseline, progress towards attaining the Baseline, and any material deviations from the Baseline.
    - v. The Commission will be informed promptly of any material change to a Baseline at the next Commission meeting following the change.
5. Allowable Investments and Limitations:
- i. With certain limitations discussed below, State law provides that RSIC may invest “in any kind of property or type of investment consistent with” Title 9, Chapter 16 of the S.C. Code and Section 9-1-1310. These investments include, but are not limited to, futures, forward contracts, swaps, and options, equities, bonds, loans, 144(A)’s, exchange traded funds, American Depository Receipts, real property, and real estate investment trusts. These investments may be listed, exchange traded, or over the counter, negotiated contracts or investments.
  - ii. In addition to the instruments outlined above, for every asset class, a variety of investment structures may be utilized depending on the nature of a particular investment. In accordance with the terms of the investment limitations outlined in this policy, these structures may include, but are not limited to, mutual funds, limited partnerships, limited liability companies, strategic partnerships, trusts, commingled vehicles, fund-of-funds, and separately managed accounts in which assets may be held by either the Retirement System’s master custodial bank or an external custodian who is selected and monitored by the external manager or general partner.
  - iii. Any investment structure and the underlying instruments must be of a type generally expected to obtain exposure to an asset or sub-asset class contained in Table 8, Section III.
  - iv. State law imposes certain limited restrictions on the investment of the Portfolio. The managers of the Portfolio’s accounts **other than** index funds, commingled funds, limited

partnerships, derivative instruments, or the like, are required to assist the Commission in meeting its obligations under S.C. Code Ann. §9-16-55, which sets forth limitations on investment in certain types of companies that are engaged in active business operations in Sudan. See Section IX for additional information.

v. The Commission has also established a policy prohibiting an investment in any security or obligation issued by a company or a corporation that is a known sponsor of terrorist organizations or of a company domiciled in a country that is a recognized sponsor of terrorism or terrorist organizations as based on reports from the Office of Terrorism and Financial Intelligence of the Department of Treasury and the Country Reports on Terrorism by the Office of the Coordinator for Counterterrorism of the U.S. Department of State.

6. Internal Management and Overlay Program – Currently, the investment staff actively manages certain Cash and Short Duration accounts, and performs distribution management (management and disposition of in-kind distributions received from external investment managers or third parties). In addition, the CIO has discretion to use synthetic instruments, derivatives, equity baskets, and exchange traded funds in order to implement the asset allocation or otherwise manage the portfolio in accordance with the ranges established by the Commission. The Overlay program functions as a means by which the CIO and Investment Staff manage exposures and manage risk in an efficient manner using synthetic instruments, exchange-traded-funds/notes, equity or fixed income baskets, options, futures, swaps, and forward currency contracts.

7. Portable Alpha – The Commission provides the CIO with the discretion to use Portable Alpha Strategies not to exceed 15 percent of total plan assets. The use of Portable Alpha is an implementation decision that is reflected in the Implementation Portfolio Benchmark. The benchmark for Portable Alpha Strategies is *HFRI Conservative Fund of Funds less LIBOR*<sup>6</sup>.

8. Alternative Investments – The Commission has established guidelines applicable to its alternative investments, which include Hedge Funds and Private Markets Assets:

i. The Commission’s initial commitment to a fund will not exceed 25 percent of the committed capital of that fund, unless the Commission, or the CEO for a delegated investment, specifically waives or suspends this restriction (a) in order to take advantage of a new firm or product that has not yet built an asset base, or (b) in the case of a fund that has been created specifically for RSIC (e.g., a singleLP fund) or specifically for RSIC and a limited number of other investors (e.g., two member LP fund or LLC). The closing certification for any delegated investment for which the CEO waives this requirement must conspicuously note that this limitation is being waived and identify the basis for the waiver;

ii. Unless otherwise approved by the Commission, no more than 15 percent of an alternative asset investment allocation may be invested with a single manager, general partner, or single fund, with the exception of Funds of One and Strategic Partnerships;

iii. Staff will notify the Commission if the collective exposure to Private Equity, Private Debt, Private Real Assets exceeds 30 percent of total plan assets; and

iv. Hedge funds may not exceed 15 percent of total plan assets.

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<sup>6</sup> HFRI – Hedge Fund Research Performance Index  
Retirement System Investment Commission

9. Equity investments not to exceed 70 percent – State law provides that the AIP must also include the minimum and maximum allocations to equity investments on an ongoing basis, not to exceed 70 percent. The allowable ranges for equity investments are set forth in Table 8, Section III. While State law does not stipulate whether the limitation of 70 percent is based on cost or market value, the Commission manages this limitation by the amount of exposure to equity on a market value basis. Therefore, if the exposure to equity investments exceeds 70 percent of the total market value of the Portfolio, the CIO is required to rebalance the Portfolio.

10. Managing Cost – In accordance with State law, the AIP addresses methods for managing the costs of RSIC's investment activities. RSIC strives to earn the highest risk-adjusted return on a net of fees basis and recognizes that cost is an important variable to consider. The Investment Team actively engages in an array of strategies to reduce the cost of the Portfolio, including the following:

- i. Increasing the initial investment size;
- ii. Seeking aggregation discounts from firms with which we have multiple investment strategies;
- iii. Utilizing co-investments in private markets;
- iv. Quantifying and monitoring the effectiveness of active implementation across public market asset classes; and
- v. Requesting reductions to, or elimination of, management fees, as appropriate.

11. Risk:

- i. All investments carry some degree of risk. The focus of the RSIC risk function is managing and monitoring these risks to ensure that the Portfolio's risks are appropriate and that the overall level of risk taken is consistent with meeting the Commission's investment objective. Key risk initiatives are:
  - a. Incorporating the Plan's liability structure into the investment decision process; and
  - b. Developing and refining tools to facilitate the incorporation of System liabilities into portfolio management.
- ii. RSIC Staff monitors risk levels both in absolute terms, but also in relation to the Reference Policy benchmark established by the Commission's asset allocation. This is accomplished using a mix of proprietary and third-party systems and tools.
- iii. At the Portfolio level, Staff will:
  - a. Maintain the Portfolio's asset allocation within the limits established by this policy;
  - b. Employ an appropriate level of diversification and adhere to the limits within this policy or as contracted with the manager;
  - c. Adhere to policies and procedures established by the Commission; and



- d. Maintain adequate liquidity for benefit payments and capital calls.
- iv. Staff provides the Commission with risk reporting as part of the Portfolio Performance Framework to ensure that risk remains within acceptable levels and to judge the value of portfolio structure and manager selection decisions on a risk adjusted basis.

12. Manager Monitoring Guidelines - RSIC Staff maintains an Ongoing Due Diligence Policy that outlines the manager monitoring requirements in detail. In summary, the Investment Team is required to perform periodic reviews of each active manager. These reviews contribute to the decision to either retain or terminate that manager. These reviews involve both quantitative and qualitative assessments in order to ensure that any decision is made fairly and consistently, and to avoid untimely or undisciplined decisions that may adversely impact returns. Additionally, the Investment Team reviews audited financial statements, compliance certifications, and investment fees on an annual basis. Compliance with the Ongoing Due Diligence Policy is reviewed annually through an Agreed Upon Procedures audit performed by an independent auditor.

13. Proxy Voting - Managers of separate accounts are authorized and directed to vote all proxies, or to direct the Physical Custodian to vote proxies, in keeping with the manager's duties under federal and state law to act in the best interest of the Plan and to maximize shareholder value, and generally to exercise any of the powers of an owner with respect to the assets under the manager's control, subject at all times to the absolute right of the Commission to direct the voting of proxies upon written notification to the manager. Those separate account managers which vote proxies must provide a written annual summary to RSIC summarizing proxy votes cast during the previous year. The report shall also detail any changes to the manager's proxy voting practices and explain any instance in which proxies were not voted in accordance with the best interests of the Plan.

## **B. Compliance**

1. Placement Agent Policy – State law prohibits RSIC from making an investment where a placement agent receives compensation in connection with RSIC's investment. The Commission's Placement Agent Policy is set out in Section VIII.
2. Investment Manager Sourcing and Conflict Disclosure Policy – In order to enhance transparency and avoid even the appearance of impropriety, before an investment recommendation is made to the Commission or CIO, any Commissioner or RSIC staff member involved in the sourcing or due diligence of a new investment completes a Sourcing and Conflict Disclosure Form. The CEO and CIO must complete a Sourcing and Conflict Disclosure form for each investment.
3. Annual Certification and Ongoing Testing of Guideline Compliance – The Ongoing Due Diligence Policy requires each manager to annually certify its compliance with the contractually

specified guidelines. These certifications are reviewed by RSIC's Compliance function, as well as the Investment Team, and are subject to an annual audit. There is also ongoing testing of guideline compliance for those public markets mandates which are governed by an Investment Management Agreement and custodied with the master custodial bank.

### C. Governance and Oversight

1. Performance Standards and Reporting - As noted above, State law requires that the AIP address the Commission's performance standards. The performance standards and benchmarks are described in Section III. In addition, RSIC receives monthly performance reports from the custody bank and the Commission receives quarterly performance reports prepared by RSIC's performance reporting staff and the general investment consultant. The performance reporting prepared by RSIC performance reporting staff must incorporate the Portfolio Performance Framework required in Section III.

2. Diversification – State law requires that the AIP address the topic of diversification, including sectors, issues and other allocations of assets that provide diversification in accordance with prudent investment standards. The Commission provides the CIO with parameters regarding its diversification objectives through the asset allocation, asset and sub-asset allocation ranges, and performance standards set out in Section III. The Portfolio Reporting Framework required in Section III also provides the Commission the ability to oversee the implementation of the long-term portfolio strategy, as well as the actual implementation of the Commission's diversification directives.

### 3. Procedures regarding consultants, managers, service providers selections and terminations

i. Selection - State law requires that the AIP include procedures and policies for selecting, monitoring, compensating, and terminating investment consultants, equity investment managers, and other necessary professional service providers. Investment managers are primarily selected by the CIO, subject to the oversight of the CEO, pursuant to the Investment Authority Delegation Policy through an investment process that also complies with the Investment and Operational Due Diligence Polices. The CIO recommends to the Commission for its approval the selection of any manager of an investment that exceeds the limits of or falls into one of the exceptions to the investment delegation policy. Any investment recommended to the Commission for its approval must also comply with the Investment and Operational Due Diligence Policies. All other service provides are selected pursuant to the Commission's Service Provider Selection Policy which is included in the Commission's Governance Policies (RSIC Governance Policies can be found at: <https://www.rsic.sc.gov/documents/2017.07.14%20Governance%20Policy%20Manual.pdf>)

ii. Compensation, Fees and Expenses – Service providers, including consultants and investment managers, will be compensated commensurate with the services provided and

industry practices. The Commission will pursue cost savings through structural efficiencies and will strive for fee reductions through negotiations. Investment management fees are evaluated utilizing several metrics or tests. First, fees are examined relative to industry/peer standards. Second, when it reviews potential new mandates or restructurings of existing allocations, the investment staff assesses fees based on the cost relative to other implementation options. For example, in global public equities, the fees charged by active managers (as well as their expected performance and risk) are compared to other methods of obtaining similar market exposure, while in the private markets, fees (as well as expected performance and risk) are compared to public market implementation alternatives. Lastly, to the extent practicable, fees will also be evaluated based on an assessment of the manager's ability to generate excess returns. Investment Staff gathers actual fees and provides annual public disclosure of all fees paid to external managers. The Commission receives an annual report on the cost of its investment program from an independent expert, and may also call upon its investment consultants for assistance in analyzing and addressing issues relating to investment fees. Operating expenses applicable to internal investment operations and the general business of the RSIC are managed by the CEO within the parameters of the annual budget approved by the General Assembly.

iii. Term and Termination -The Commission or the CIO, as applicable, may terminate an investment manager whenever the Commission or CIO determines that its objectives can more efficiently or effectively be met by the selection of another manager or under a different management mandate. The Commission and CIO retain the right to terminate a manager with or without cause and at any time. It should be noted that termination rights may not apply to certain types of investment structures (e.g., typical private markets funds). Circumstances which suggest an immediate review and a possible termination include, but are not limited to, the following:

- a. Manager changes strategy or investment style;
- b. Critical elements of the investment process have deteriorated;
- c. Transaction costs are unreasonable;
- d. Management fees are higher than similarly styled managers for similarly sized portfolios;
- e. Manager is unable to meet the performance expectations within the risk tolerance specified;
- f. Material organizational or personnel changes;
- g. Manager is not complying with the applicable provisions of the Commission's SIOP; and
- h. Manager is not complying with the applicable provisions of the Commission's AIP.

4. Delegation of Authority to CIO - State law requires that the AIP and SIOP contain a detailed description of the delegation of final authority to invest made by the Commission. The

Commission has delegated its final authority to invest to the CIO, subject to the oversight of the CEO, generally in the following amounts:

- i. not to exceed 75 bps of plan value per investment for illiquid structures; and
- ii. not to exceed 200 bps of plan value per investment for liquid structures.

The Commission's full Investment Authority Delegation Policy is set out in Section VI.

5. Policies and Procedures to Adapt Portfolio to Market Contingencies - State law requires that the AIP include policies and procedures providing flexibility in responding to market contingencies. The ranges included with the Commission's asset and sub-asset class allocation ranges established in Section III provide the CIO with extensive flexibility to adapt the portfolio to market conditions. Similarly, the Commission's Investment Authority Delegation Policy provides the CIO the ability to adapt the Portfolio to changes in market conditions. To the extent that the CIO deems the scope of the authority delegated to the CIO insufficient, the CIO with the approval of CEO may take action deemed necessary to protect the Portfolio in an extreme market environment. The CIO will promptly inform the Commission of any such actions.

6. Portfolio Rebalancing - The Commission delegates to the CIO or his designee the authority to execute manager and/or securities transactions to implement rebalancing, manage liquidity, or to otherwise manage exposures within the allowable ranges. As part of this delegation, the Commission expects the CIO to articulate, implement and provide reporting to the Commission regarding the Portfolio's rebalancing and exposure management activities as requested. A high-level summary of the rebalancing and exposure management guidelines include:

- i. The asset allocation is reviewed on an ongoing (typically weekly) basis by Staff and the CIO to ensure that the Portfolio is within its allocation ranges and to identify appropriate actions necessary to maintain compliance and to provide for the Plan's liquidity needs.
- ii. The goal of the rebalancing and exposure management activities is to implement the investment strategy at a reasonable cost within the targets and ranges established by the Commission, recognizing that constant rebalancing to the exact target may not be economically justifiable. The following guidelines are used:
  - a. Rebalancing is currently performed quarterly unless a case has been made **not** to rebalance. Potential rebalancing activity is flagged for consideration based upon exposure reporting that is updated by RSIC's performance reporting staff. Rebalancing the portfolio incurs costs (trading commissions, bid-ask spread, and market impact) which are taken into consideration when rebalancing the Portfolio;
  - b. When an asset class reaches its minimum or maximum allocation, Staff will initiate rebalancing transactions to keep allocations within the approved ranges. Otherwise, Staff must seek Commission approval to remain outside the range; and
  - c. Concentration risk with respect to significant reliance on any single external manager is reviewed regularly by Staff. Mitigation of performance, operational, headline/reputational, or other fiduciary risks is typically achieved by maintaining a diversified allocation approach both within and across asset classes.



iii. RSIC Staff must balance the risks noted above with the economic benefits associated with a streamlined approach that uses fewer, larger allocations. Additional analyses of the costs and benefits of passive vs. active market exposure are an important input in these decisions.

#### D. Investment Manager Guidelines

1. General - In keeping with the responsibilities assigned to the CIO by State law and the Commission's Governance Policies, the Commission authorizes the CIO and his designees to develop and revise investment management guidelines for each internally and externally managed investment manager. In making this delegation, the Commission acknowledges that discretion in implementing the investment strategy, within the parameters of all applicable guidelines, will typically be granted to the Commission's investment managers. This discretion is usually limited to the selection of securities and the timing of transactions within the portion of the Portfolio allocated to each manager.

2. Funds of One - A Fund of One is an investment structure in which there is typically a majority investor in a specific vehicle or fund. The Commission or CIO as applicable may elect to use a Fund of One structure when the structure will have lower costs, customized exposure advantages, and/or other beneficial considerations. The CIO is responsible for the day-to-day investment responsibilities with respect to Funds of One, including providing affirmative or negative consent for underlying investments, as required.

#### 3. Pooled or Commingled Funds:

i. Commingled investment vehicles can often provide lower costs and better diversification than can be obtained with a separately managed account pursuing the same investment objectives. However, commingled investment funds cannot customize investment policies and guidelines to the specific needs of individual clients. Recognizing these trade-offs, the Commission or the CIO, as applicable, may accept the policies of such funds in order to achieve the lower costs and diversification benefits of commingled vehicles, and exempt commingled investment vehicles from the requirements and guidelines of this policy if:

- a. The investment practices of the commingled vehicle are consistent with the spirit of this policy and are not significantly different in letter; and
- b. The benefits of using a commingled vehicle rather than a separate account are material.

ii. The Commission or CIO, as applicable, may structure a portfolio as a separate account that allows for the advantages of commingled vehicles, but with RSIC as the only investor. With international assets, commingled vehicles save the Commission from having to provide additional resources for currency and foreign custody issues as the manager will assume responsibility for these functions.

iii. If an investment mandate is structured through a commingled vehicle, the investment policies of that vehicle will be the legal governing policies of the investment of assets allocated to that vehicle.

4. Strategic Partnerships - The Commission may elect to establish Strategic Partnerships with certain asset managers who are believed to possess specific expertise, knowledge, and capabilities for a limited or broad range of investment strategies. The performance of each Strategic Partnership will be reviewed by the Commission periodically, with a more comprehensive review occurring approximately every 3 to 5 years. The investment approval and evaluation process within the Strategic Partnership is similar to that followed for other investments, however, in addition to passing RSIC's internal process, the investment must also be approved by the investment committee of the strategic partnership.

5. Trade Execution - For all accounts, the Commission expects the purchase and sale of its securities to be conducted in a manner designed to receive the best combination of price and execution. The Commission may evaluate policies that provide for the most efficient and effective trading process. The compliance with investment guidelines must be monitored by the investment managers on an ongoing basis and be based on then-current market values. Securities that, if purchased, would constitute a compliance violation may not be purchased. In the event of a compliance violation, the manager will be expected to promptly notify investment staff. If for some reason the manager does not believe that it is prudent to immediately bring the account back into compliance, the manager will be expected to present a justification as well as a proposal for bringing the account composition back into compliance.

**E. Compliance with Section 9-16-320 of South Carolina Code:**

1. S.C. Code Section 9-16-320 requires the Commission to meet at least once each fiscal quarter for the purpose of reviewing the performance of investments, assessing compliance with the annual investment plan, and determining whether to amend the plan.

2. The Commission has adopted a strategic calendar that sets a meeting schedule of five meetings per year with a least one meeting every fiscal quarter. The strategic calendar also contains standing agenda items for each meeting to ensure compliance with this Section to include:

i. Quarterly Investment Performance Review – at each meeting the Commission receives a report and presentation on the quarterly, fiscal year to date, one, five, and ten-year plan investment performance. The quarterly performance reports and presentations are based on the Portfolio Performance Reporting Framework described in Section III and are designed to provide the Commission with the ability to judge the absolute value of performance as well as the relative performance between the benchmark portfolios and actual portfolio's performance. The Commission also receives risk reports to judge the absolute and relative risk of the of these portfolios.

ii. AIP Compliance Review – At each meeting the Commission receives reports detailing compliance with the Annual Investment Plan to include:

a. A review of the asset class exposures and sub-asset class components of the portfolio to ensure compliance with the allowable ranges contained in Section III, Table 8, and to ensure adequate diversification of the portfolio and that the portfolio is not concentrated in any one industry sector, market sector, or issuer;

- b. A review of relevant progress towards any of the Strategic Initiatives in Section IV;
  - c. Any significant market contingencies and review of any responsive action that resulted in a decision not to rebalance the portfolio pursuant to Section V.C.6 or any action taken to protect the Portfolio which fell outside the allowable ranges in Section III, Table 8;
  - d. Action resulting in significant cost savings to the Portfolio;
  - e. Any material deviation from the general operational and investment policies, and
  - f. As part of an in-depth review of one of the Policy Portfolio asset classes at each meeting, a review of the asset class baseline and progress towards meeting the baseline.
- iii. The Commission retains the authority to amend any portion of the AIP requirements at any meeting and is required to consider amendments proposed by the CIO at its April meeting. However, if the Commission does not act to amend the AIP at any other meeting, it should be presumed that it determined not to amend the plan.

#### **F. General Provisions Related to Alternative Investments**

1. South Carolina law, the Employee Retirement Income Security Act of 1974 (“ERISA”), and the Uniform Management of Public Employee Retirement Systems Act of 1997 (“UMPERSA”) each have similar or compatible, but not identical, definitions and responsibilities of fiduciaries with respect to managing and investing assets of retirement systems. For clarity and consistency, it is prudent for the Commission to declare standards for interpretation of certain terms used in these sources.
2. As relating to the use of alternative investment strategies, the “Plan Assets” of the Retirement System include the System’s ownership interest in the following entities (e.g., a share or a unit), but do not include the underlying assets owned by the entity itself:
  - i. a registered investment company;
  - ii. a registered security that is widely held and freely transferable;
  - iii. an entity in which “benefit plan investors” hold less than 25 percent of the equity interest as defined and determined by ERISA §3(42);
  - iv. an “operating company” engaged in the production or sale of a product or service other than the investment of capital;
  - v. a “real estate operating company” or REOC (which actively manages and develops real estate consistent with U.S. Department of Labor ERISA regulations);
  - vi. a “venture capital operating company” or VCOC (which actively manages “venture capital investments” consistent with U.S. Department of Labor ERISA regulations); or
  - vii. a private investment partnership or offshore investment corporation the offering memorandum of which allows for the entity to take both long and short positions, use leverage and derivatives, and invest in many markets.
3. Whenever RSIC invests in an entity that does not hold Retirement System’s assets, the decision to invest in the entity will be subject, *inter alia*, to the South Carolina fiduciary rules and ethics standards provided by state law, but the transactions engaged in by the entity generally will not be subject to the same rules.
4. RSIC will at times need to interpret statutes while implementing and administering the investment program. Whenever the South Carolina statutes are substantively similar to provisions

of ERISA or UMPERSA, and to the extent practicable and consistent with South Carolina law and other principles of general application relating to public pension plans, RSIC intends to use (1) pertinent provisions of ERISA; (2) interpretive rules and regulations of the U.S. Department of Labor relating to ERISA; and (3) the Reporter's official comments to UMPERSA for guidance.

## VI. Investment Authority Delegation Policy

- A. Pursuant to Section 9-16-330(B) of the 1976 Code, the Commission delegates to the CIO the final authority to invest subject to the oversight of the CEO and the requirements and limitations of this policy. The size of any one investment made pursuant to this policy is limited to the percentage of total plan assets that applies to the particular asset class to which the investment pertains as provided in Section C of this policy and subject to any other limitation the Commission may place on this authority at any given time. The value of total plan assets to which the percentage limitations apply must be the estimated total value of plan assets included in the most recent quarterly investment performance report prepared pursuant to Section 9-16-90(A) of the 1976 Code. For purposes of this policy, a co-investment made outside of a co-investment partnership (e.g., the GCM Co-Investment Partnership or a co-investment vehicle attached to a fund investment) is considered a separate and distinct investment from an investment in a commingled fund, fund of one structure, or an amount committed to a separately managed account and is separately subject to the limitations and requirements of this policy. Individual investments made in a separately managed account or a fund of one structure are not considered separate investments for purposes of this policy and are subject in aggregate to the limitations and requirements of this policy regardless of whether some degree of discretion is retained by staff regarding individual investments to be included in the applicable account.
- B. The investment process for any investment made pursuant to this policy must be substantially similar to the investment process employed prior to the adoption of this policy, but for the requirement that the Commission approve the investment prior to closing the investment and must adhere to RSIC's Due Diligence Guidelines and Policies. Notwithstanding the authority granted by this policy, an investment must be presented to the Commission for its approval if it meets any of the following criteria:
1. An investment into an asset class other than (i) an asset class or sub-asset class provided in Table 8, Section III of the Consolidated AIP/SIOP or (ii) Portable Alpha Hedge Funds;
  2. The majority of the types of assets contemplated to underlie the investment have not been previously included in the investment portfolio;
  3. The strategy to be employed by the investment manager is not substantially similar to an investment that has been previously subject to the Commission's investment due diligence process; or
  4. The investment strategy, other than in publicly traded assets, has important direct connections to South Carolina residents, state policymakers, or South Carolina focused businesses, and/or a majority of the assets of the investments would be principally located in South Carolina.
- C. The amount of delegation for new investments approved pursuant to this policy shall not exceed 5% of the total value of Plan assets between regularly scheduled Commission meetings. The size of an individual investment made pursuant this policy is subject to the following limitations provided for the asset class applicable to the investment:
1. Public Markets - 2% of the total value of plan assets, unless it is reasonable to believe that due to the particulars of the investment strategy that liquidating the investment would



ordinarily require longer than ninety days and, in such case, the limit is 1% of the total value of plan assets, for:

- i. Global Public Equity:
    - a. Domestic,
    - b. Developed Non-US,
    - c. Emerging Market,
    - d. Equity Options;
  - ii. Bonds:
    - a. Core Bonds (IG),
    - b. Inflation-linked (IG),
    - c. Mixed Credit (non-IG),
    - d. EM Debt,
    - e. Net Cash and Short Duration; and
  - iii. Portable Alpha Hedge Funds.
2. Publicly-Traded Real Estate - 1% of the total value of plan assets.
3. Private Markets - 75 bps of the total value of plan assets for:
- i. Private Equity,
  - ii. Private Debt,
  - iii. Private Real Assets,
    - a. Real Estate, and
    - b. Infrastructure.
- D. Pursuant to Section 9-16-330(B)(2), the closing documentation of any investment made pursuant to this policy must include the CEO's certification that the investment conforms to the amount and extent of delegation provided by this policy.
- E. The Commission must be informed of an investment made pursuant to this policy no later than three days following the closing of the investment. The notification must include an executive summary of the investment and provide access to any of the following documents relied upon by staff when making the investment:
- 1. the investment due diligence report,
  - 2. the operational due diligence report,
  - 3. any memorandum and/or reports from the general or specialty consultant,
  - 4. the Internal Investment Committee action summary,
  - 5. the completeness check certification, and
  - 6. the final versions of pertinent legal documents, including the Investment contract, limited partnership agreement, the investment management agreement, as applicable, and/or other closing documents.
- F. An investment made pursuant to this policy must be reviewed with the Commission at the next regularly scheduled Commission meeting.
- G. The CIO must provide the Commission with an updated proposed investment pipeline on a monthly basis.

- H. The delegation of the final authority to invest pursuant to this section includes the authority to terminate an investment manager if the investment was made pursuant to this policy or the amount of capital committed to the manager by the Commission would fall within the applicable limits provided in Section C. The CIO must approve any termination of a manager made pursuant to this policy, subject to the oversight of the CEO. The CIO must provide a memorandum to the Commission summarizing his justification for terminating the manager within three days of terminating the manager. The CIO must provide a review of the termination to the Commission at the next Commission meeting.
- I. The Commission will review this policy annually to ensure that it remains relevant and appropriate, or when there has been an amendment to state law relevant to any section of this policy, or a Commission approved change in the responsibilities, duties or operations of the Commission or its Committee generally, or as otherwise deemed appropriate by the Commission.
- J. No provision of this policy shall apply to the extent that it is in conflict with any provision of the Code of Laws of South Carolina, 1976, as amended. In the event of such conflict, the applicable Code provision shall apply in all respects.
- K. This policy was adopted by the Commission on September 28, 2017, subject to final approval by the Chair of the incorporation of certain amendments into the policy. The Chair issued final approval of the policy on October 23, 2017.
- L. This policy was amended on December 2, 2021 and took effect on December 2, 2021.

## VII. SECURITIES LITIGATION POLICY (“POLICY”)

### A. Purpose and General Principles

- a. The purpose of this Policy is to set forth the South Carolina Retirement System Investment Commission’s<sup>1</sup> guidelines with respect to securities litigation. Interests in securities litigation matters will be managed as assets of the South Carolina Retirement Systems Group Trust (the “Trust”) with the goal of enhancing the long-term value of the Trust.
- b. The Commission acknowledges that it has a fiduciary duty to take reasonable actions to pursue and collect on legal claims held as an asset of the Trust. The Commission also recognizes that most, if not all, of the securities litigation claims in which the Trust may have an interest will be pursued by law firms from the class action bar regardless of whether RSIC takes an active role in the litigation.
- c. This Policy outlines the Commission’s procedures for monitoring the Trust’s portfolio for potentially actionable losses, protecting the Trust’s interests in litigation related to portfolio losses, and maximizing recoveries attainable by the Trust from such actionable losses.
- d. This policy consists of four sections: 1) a section relating to asset recovery as passive class members in U.S.-based securities actions; 2) a section for litigation of securities listed on domestic exchanges where RSIC deems active participation is warranted; 3) a section for litigation of securities listed on foreign exchanges; and 4) a section related to the monitoring process for both foreign and domestic claims in which the Trust takes an active role.

### B. Part One: Securities Litigation Policy for Filing Proofs of Claim (“Passive Participation”)

- a. Under U.S. federal law, securities class action lawsuits function as “opt-out” cases. This means that the Trust does not need to participate as a named party in order to recover its *pro rata* share of a class action recovery so long as the certified class claims include the losses incurred by the Trust. This type of participation is called Passive Participation. When notified of a class action settlement in which the Trust has suffered a loss, RSIC need only submit a timely and valid proof of claim in order to be included in any recovery.
- b. The Trust’s custodial bank, The Bank of New York Mellon (“BNY Mellon”), is responsible for completing and filing all proofs of claim, including the necessary supporting documents and information in every securities class action pending in the U.S. in which the Trust has a direct interest (i.e., for Trust assets that are custodied at BNY Mellon (“In-Bank Assets”)). BNY Mellon is not responsible for filing proofs of claim for, or otherwise reporting on the management of, securities class action litigation for assets that are not custodied at BNY Mellon (“Out-of-Bank Assets”).

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<sup>1</sup> “Commission” refers to the commission of seven members responsible for managing the South Carolina Retirement System Investment Commission, as specified in S.C. Code of Laws Ann. Section 9-16-315.

“South Carolina Retirement System Investment Commission” or “RSIC” refers to the agency established by South Carolina law for the purpose of investing and managing all assets held in trust for the participants and beneficiaries of the state’s five separate defined benefit plans.

- c. BNY Mellon’s claims filing responsibilities are set forth in more detail in the Service Level Description, dated July 21, 2019, between the Trust by and through RSIC and BNY Mellon (the “SLD”). The SLD outlines the process for: (i) identifying and reviewing all class action recoveries (whether by settlement or trial); (ii) providing timely notice of each settlement recovery to RSIC and the Commission; (iii) filing complete and accurate proofs of claim forms in a timely fashion on behalf of the Trust; (iv) providing quarterly reports outlining all claims filed on behalf of the Trust during the quarter; and (v) providing quarterly reports identifying all securities litigation proceeds recovered by the Trust directly or on its behalf. In the event of a claim involving securities that are not identified by a specific security identifier (e.g., CUSIP, ISIN, SEDOL, etc.), BNY Mellon will use commercially reasonable efforts to identify impacted securities recorded in BNY Mellon’s records relating to the security named in the documentation received. In the event that BNY Mellon is unable to file a claim on the Trust’s behalf (e.g., involving anti-trust claims), BNY Mellon, or in some cases a third party, will forward the relevant claim information to RSIC, and RSIC will utilize the services of third-party claims filing services that specialize in analyzing and filing such claims.

**C. Part Two: Securities Litigation Policy for Securities Listed on a Domestic Exchange**

- a. While the Commission has a fiduciary obligation to take reasonable action to collect on legal claims held by the Trust, the Trust, acting by RSIC, may need to engage in active participation (“Active Participation”) on occasion. This type of participation involves serving as lead plaintiff in cases in the domestic exchange context. Active Participation in domestic securities class actions must be balanced with the Commission and RSIC’s primary obligation to maximize the investment returns of the Trust. This determination must also be weighed against the additional costs and burden on staff that may result by becoming lead plaintiff in a securities litigation case as well as the recognition that the Trust’s position as a lead plaintiff will not, in and of itself, entitle the Trust to any greater recovery.
- b. **Authority to Seek Lead Plaintiff Designation:** Due to the time-sensitive nature of electing to seek a lead plaintiff designation and the Chief Executive Officer’s (“CEO”) statutory designation as the chief administrative officer of RSIC, the Commission, through this Policy, has delegated to the Executive Leadership Team the authority to elect to seek a lead plaintiff designation where appropriate, reasonable, and prudent to protect the interests of the Trust.
- c. **Decision-Making Guidance for Active Participation:** The Executive Leadership Team will generally consider seeking lead plaintiff status (“Active Participation”) in a domestic class action when: (i) the Trust’s projected losses exceed \$5 million U.S. Dollars (the “Loss Threshold”); or (ii) when the loss is substantial but less than the Loss Threshold and there are significant special factors justifying the Trust’s involvement. The determination of special factors will be made in the discretion of the Executive Leadership Team.
- d. **Monitoring Procedures:** In addition to the reporting provided by BNY Mellon for class action litigation involving In-Bank Assets, the Trust may retain three or more securities litigation monitoring law firms (the “Firms”) to advise RSIC via periodic reporting of recently-filed class actions in which the Trust has sustained losses and which appear to

have merit. The Firms will generally be engaged for up to five years, with the option to terminate earlier or renew for additional periods. Each of the Firms will provide reporting on at least a quarterly basis outlining all recently filed claims in which the Trust has sustained losses. Additionally, the Firms will submit written memos to RSIC on certain cases, including any cases exceeding the Loss Threshold, regarding the alleged facts of the case, the estimated losses, the Firm's view on the merits of the allegations, and a recommendation as to whether RSIC should seek a lead plaintiff position in the matter. RSIC Legal will perform an initial review of all reports and memos received from the Firms. Any reports or memos indicating a loss that exceeds the Loss Threshold will be forwarded to the CLO for further review. The CLO will review the reports and will follow up with the Firms that have provided the memorandum to get additional insight and information about potential claims exceeding the Loss Threshold ("Reviewable Claims") and will make additional inquiries or conduct additional research as needed.

- e. After review by the CLO, the CLO will confer with the Executive Leadership Team regarding the merits of Reviewable Claims, including the projected losses incurred by the Trust, the specifics of the related investment(s), available staff resources, and the recommendations of the Firms regarding whether the Trust should seek a lead plaintiff position. Any decision to seek a lead plaintiff designation for a claim exceeding the Loss Threshold or based on special circumstances must be made by a unanimous vote of the Executive Leadership Team. The Executive Leadership Team will notify the Chair and Vice-Chair of the Commission about any decision to seek a lead plaintiff position and will update the Commission via reporting to the Commission's secure portal.
- f. **Selection of Outside Counsel for Securities Litigation** If the Executive Leadership Team determines that it is prudent to hire one of the Firms or other legal counsel to represent the Trust in a securities litigation action to protect the assets of the Trust, all selection of counsel and retainer agreements shall be negotiated, executed, and monitored by the CEO with assistance from the CLO. The CEO may engage one of the Firms hired to monitor the Trust's portfolio, or the CEO may seek to engage other counsel after consultation with the CLO and notice and consultation with the Office of the South Carolina Attorney General, as required by S.C. Code Ann. Section 9-16-315(I). When RSIC first engages the Firms, RSIC will pre-negotiate a proposed engagement agreement for potential litigation, which must be approved by the CEO.

#### **D. Part Three: Securities Litigation for Securities Listed on a Foreign Exchange**

- a. Due to the 2010 Supreme Court case, *Morrison v. National Australia Bank Ltd.*,<sup>2</sup> investors no longer have the protections of U.S. securities laws for securities that were purchased on a non-U.S. exchange. Unlike the U.S. class action process, foreign securities actions generally require investors to join as a named-plaintiff or "opt-in" at the commencement of the case in order to be entitled to a share of any recovery. This "opt-in" process requires affirmative decisions early in the process to join the lawsuit in order to participate in any recovery. In many cases, investors may be required to make these decisions before a foreign action is even filed.

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<sup>2</sup> *Morrison v. National Australia Bank Ltd.*, 561 U.S. 247 (2010).



- b. **Decision-Making Guidance for Active Management:** Because there is rarely an option for passive participation in foreign securities actions, the review for participation in these actions differs from those explained in Part Two of this Policy. The CLO will review notices of potential claims in foreign securities actions and will review recommendation memos received from the Firms or other sources in those cases where the loss threshold exceeds \$1 million (the “Foreign Loss Threshold”). In foreign jurisdictions, various groups, including non-law firm litigation funding organizations, may act as a funding source for the litigation and work with a certain legal team to initiate litigation. In some cases, the group that first files a lawsuit may become a founding group (“Founding Group”). Founding Groups may impose differing terms and conditions in order to participate in a lawsuit. The CLO will review all available factors relating to participating in foreign actions for claims exceeding the Foreign Loss Threshold, including but not limited to: (i) the amount of the loss; (ii) the potential litigation fees; (iii) the litigation funding requirements; (iv) whether more than one litigation funding group is proposing participation; (v) the risk of adverse costs; (vi) the legal merits of the case; (vii) the contractual requirements for joining and/or bringing a claim; and (viii) the potential cost of staff’s time. . After reviewing the above factors and the documentation required to elect to participate in the applicable foreign jurisdiction, the CLO will make a recommendation to the CEO on whether to participate, and if applicable, which Founding Group to elect based on the most suitable contract terms available for the Trust. The CEO, after reviewing the CLO’s recommendation, will elect (A) whether or not to pursue participation in foreign litigation that exceeds the Foreign Loss Threshold; and (B) which funding group to select based on the terms and legal requirements of each. The CLO, working with the Firm(s), as applicable, will negotiate the required documentation and retain the right to change a recommendation to participate if suitable contract terms cannot be negotiated with the Founding Group.

**E. Part Four: Litigation Monitoring for Active Participation in Domestic and Foreign Litigation**

- a. The CEO, acting via the CLO, will monitor any pending domestic or foreign cases in which RSIC is actively participating. The CLO will request quarterly written status updates from any Firms representing RSIC in Active Participation cases. The CLO will actively participate in discussions with the Firms regarding any participation by RSIC Staff or document production needs. The CEO and CLO will be actively involved in settlement discussions for any domestic litigation action. The CLO will submit periodic updates to the CEO and the Commission regarding such cases. In accordance with the CEO’s statutory authority as chief administrative officer of the Commission, the CEO retains the ultimate authority related to the direction of any class action litigation and/or settlement pursuant to this Policy. The CEO may consult the Commission on any matter related to the initiation of or conduct of any lawsuit pursuant to this Policy. The CEO shall have full authority to approve a proposed settlement of any litigation. In addition, the CEO shall have full authority to execute all contracts, legal documents, settlements, certifications, and authorizations required to pursue litigation authorized by the Executive Leadership Team.

- F. The Commission shall review this policy at least once every three (3) years to ensure that it remains relevant and appropriate.

## VIII. Placement Agent Policy

- A. Purpose.** It is the intent of this Policy to comply with S.C. Code Ann. §9-16-100, which prohibits compensation being paid to a Placement Agent (as defined below) as a result of an investment by the Retirement System (as defined below).
- B. Definitions.** For purposes of this Policy, the following capitalized terms will have the defined meaning set forth below:
- a. Pursuant to §9-16-100(B), a “Placement Agent” means any individual directly or indirectly hired, engaged, or retained by, or serving for the benefit of or on behalf of an external manager or an investment fund managed by an external manager and who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker, or other intermediary in connection with making an investment with or investing in a fund managed by the external investment manager.
  - b. “Placement Agent Policy Compliance Letter” means that letter which will be requested from prospective external investment management firms in accordance with the terms of this Policy.
  - c. “Policy” means this Placement Agent Policy.
  - d. “Retirement System” means the South Carolina Retirement Systems Group Trust.
  - e. “RSIC” means the South Carolina Retirement System Investment Commission.
- C. Procedure**
- a. RSIC staff will inform prospective external investment management firms (“Investment Managers”) as to the RSIC’s Placement Agency Policy and statutory requirements as soon as practicable after RSIC staff begins the due diligence review of any potential investment. The RSIC staff member leading the due diligence review for the investment is responsible for sending written notice (paper, fax or email) to the Investment Manager requesting a Placement Agent Policy Compliance Letter. If a copy of this Policy has not already been provided to the Investment Manager, then this Policy will be made available to the Investment Manager prior to or at the time notice is given to the Investment Manager.
  - b. The Placement Agent Policy Compliance Letter must be included in the RSIC investment Due Diligence Report packet.
  - c. Investments will not be voted on by the Commission, Internal Investment Committee, or otherwise approved pursuant to RSIC policies, prior to receipt of the completed Placement Agent Policy Compliance Letter and confirmation from RSIC compliance staff that the letter is sufficient per Section G below.
  - d. The following entities must complete the Placement Agent Policy Compliance Letter as outlined below:
    - i. Investment Managers that have a direct contractual investment management relationship with the RSIC or with an investment vehicle in which the RSIC is invested.
    - ii. Investment Managers that have an indirect contractual investment management relationship with the RSIC through an investment vehicle that invests in funds or other pooled investment vehicles or other assets.

- D. Placement Agent Policy Compliance Letter.** The Investment Manager will provide disclosure in the form of a letter addressing all requirements specified below:
- a. Certification that, in compliance with §9-16-100, no Placement Agent (as defined by State law) received, or will receive, compensation in connection with the RSIC making an investment with or investing in a fund managed by the Investment Manager.
  - b. Representation that the Investment Manager has reviewed the applicable law and has not relied on the counsel or advice of RSIC or any employee, representative, agent or officer of RSIC regarding the interpretation and application of the applicable law.
  - c. Representation that all information contained in the Placement Agent Policy Compliance Letter is true, correct, and complete in all material respects.
- E. Open Records Law.** RSIC may be required to disclose information in the Placement Agent Policy Compliance Letter under the South Carolina Freedom of Information Act.
- F. Investments with Separate Account Investment Management Agreements (“IMAs”).** If, after closing, the RSIC determines that the Placement Agent Policy Compliance Letter contains a material inaccuracy or omission, the RSIC will, to the fullest extent possible, seek the option, in its sole discretion and without liability to the Investment Manager or any third party, to terminate the IMA and to pursue all remedies that may otherwise be available to the RSIC without incurring any penalty under any agreement to which it is a party.
- G. Investments in commingled investment structures (LPAs, LLCs, Trusts, etc.).** The RSIC will endeavor to have provisions incorporated into the transaction documents for commingled investment structures which would permit the RSIC to take those actions described in the next sentence. If, after closing, the RSIC determines that the Placement Agent Policy Compliance Letter contains a material inaccuracy or omission, the RSIC will seek to obtain the option, in its sole discretion and without liability to the commingled investment structure, the General Partner or equivalent management entity, any other investor in the structure or third party, to cease making further capital contributions and/or direct payments to the investment and to pursue all remedies that may otherwise be available to the RSIC without being deemed to be a defaulting Limited Partner under the transaction documents and without incurring any other penalty under any agreement to which it is a party.
- H. Review.** RSIC’s compliance staff will review Placement Agent Policy Compliance Letters and will determine whether each letter is sufficient. Any questions regarding the sufficiency of the letter will be referred to the RSIC legal department and will be reported to the CIO and applicable RSIC Staff.
- I. Staff Contact.** RSIC staff will provide notice about the prohibition in the state law to any party that contacts RSIC staff regarding a potential investment and appears to be acting in the role of a Placement Agent.

**J. Obligation to Update.** It is the Investment Manager's obligation to promptly inform RSIC staff of any material changes to a prior-filed Placement Agent Policy Compliance Letter, and to submit an updated Placement Agent Policy Compliance Letter where warranted prior to the RSIC's closing on an investment.

**K. Review and History**

- a. The Commission will review this policy at least every three years to ensure that it remains relevant and appropriate, or when there has been an amendment to state law relevant to any section of this policy, or a Commission approved change in the responsibilities, duties, or operations of the Commission or its committees generally, or as otherwise deemed appropriate by the Commission.
- b. No provision of this policy shall apply to the extent that it is in conflict with any provision of the Code of Laws of South Carolina, 1976, as amended. In the event of such conflict, the applicable Code provision shall apply in all respects.
- c. This policy was initially adopted on September 20, 2012.
- d. This policy was amended on June 22, 2017 and will take effect on July 1, 2017.

## IX. SUDAN DIVESTMENT POLICY

- A. Background.** The State of South Carolina has enacted a Sudan divestment law, codified at S.C. Code Ann. §9-16-55 (“Act”). The uncodified preamble to the Act notes that “[d]ivestment is a course of last resort that should be used sparingly and under extraordinary circumstances,” but states that “the genocide occurring in the Sudan is reprehensible and abhorrent,” warranting this type of legislative response. The Act, which applies solely to the South Carolina Retirement Systems Group Trust (“Group Trust”) managed by the South Carolina Retirement System Investment Commission (“Commission” as the governing body, “RSIC” as the agency), sets forth various criteria that are to be considered by the Commission in making the determinations required by the Act.
- B. Purpose.** The purpose of this Sudan Divestment Policy (“Policy”) is to document the manner in which the Act is administered. The Commission has the exclusive authority to invest and manage the assets of the Group Trust pursuant to S.C. Code Ann. §9-16-20. The Commission also has the fiduciary duty to manage the assets of the Group Trust solely in the interests of the retirement systems, participants, and beneficiaries. The Commission must discharge these responsibilities in a manner consistent with all applicable statutes, regulations, and policies, including the Act.
- C. Definitions.** The Act utilizes the following defined terms:
- a. “Active Business Operations” means a Company engaged in Business Operations that provide revenue to the Government of Sudan or a Company engaged in Oil-Related Activities.
  - b. “Business Operations” means maintaining, selling, or leasing equipment, facilities, personnel, or any other apparatus of business or commerce in Sudan, including the ownership or possession of real or personal property located in Sudan.
  - c. “Company” means a sole proprietorship, organization, association, corporation, partnership, venture, or other entity, its subsidiary or affiliate that exists for profit-making purposes or to otherwise secure economic advantage. “Company” also means a Company owned or controlled, either directly or indirectly, by the Government of Sudan, that is established or organized under the laws of or has its principal place of business in the Sudan.
  - d. “Government of Sudan” means the Government of Sudan or its instrumentalities as further defined in the Darfur Peace and Accountability Act of 2006.
  - e. “Investment” means the purchase, ownership, or control of stock of a Company, association, or corporation, the capital stock of a mutual water Company or corporation, bonds issued by the government or a political subdivision of Sudan, corporate bonds, or other debt instruments issued by a Company.
  - f. “Military Equipment” means weapons, arms, or military defense supplies.
  - g. “Oil-Related Activities” means, but is not limited to, the export of oil, extracting or producing oil, exploration for oil, or the construction or maintenance of a pipeline, refinery, or other oil field infrastructure.
  - h. “Public Employee Retirement Funds” means those assets as defined in §9-16-10(1).
  - i. “Scrutinized Companies” means any of the following:



- i. The Company is engaged in Active Business Operations in Sudan; and
- ii. The Company is engaged in Oil-Related Activities or energy or power-related operations, or contracts with another Company with Business Operations in the oil, energy, and power sectors of Sudan, and the Company has failed to take Substantial Action related to the Government of Sudan because of the Darfur genocide; or
- iii. The Company has demonstrated complicity in the Darfur genocide.
- iv. The Company is not engaged in Oil-Related Activities and lacks significant Business Operations in the eastern, southern, and western regions of Sudan; and
- v. The Company is engaged in Oil-Related Activities or energy or power-related operations, or contracts with another Company with Business Operations in the oil, energy, and power sectors of Sudan, and the Company has failed to take Substantial Action related to the Government of Sudan because of the Darfur genocide; or
- vi. The Company has demonstrated complicity in the Darfur genocide.
- vii. The Company supplies Military Equipment within the borders of Sudan.<sup>3</sup>
- j. “State” means the State of South Carolina.
- k. “Substantial Action” means a boycott of the Government of Sudan, curtailing business in Sudan until that time described in Section I of this Policy, selling Company assets, equipment, or real and personal property located in Sudan, or undertaking significant humanitarian efforts in the eastern, southern, or western regions of Sudan.
- l. “Sudan” means the Republic of the Sudan, a territory under the administration or control of the Government of Sudan, including, but not limited to, the Darfur region, or an individual, Company, or public agency located in Khartoum, northern Sudan, or the Nile River Valley that supports the Republic of the Sudan.

#### D. Identification of Companies

- a. Identifying Scrutinized Companies. RSIC Staff (“Staff”) has engaged the services of a specialized research firm (“Advisor”) to (i) identify companies doing business in Sudan, as defined in the Act, and (ii) provide Staff with a list of such Scrutinized Companies (“Scrutinized Companies List”).
- b. Updates to Scrutinized Companies List. Staff shall ensure that the Scrutinized Companies List is updated on or about January 1 and July 1 of each year.

#### E. Engagement

- a. Determining Scrutinized Status. For each Company identified by the Advisor pursuant to Section D of this Policy, RSIC (either via Staff or the Advisor) shall send a written notice informing the Company that it may become subject to divestment by RSIC. The notice

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<sup>3</sup> If a Company provides equipment within the borders of Sudan that may be readily used for military purposes, including but not limited to, radar systems and military-grade transport vehicles, there is a strong presumption against investing in the Company unless that Company implements safeguards to prevent the use of that equipment for military purposes.

shall offer the Company the opportunity to clarify its Sudan-related activities within 90 days in order to avoid qualifying for potential divestment.

- b.** Compliance. If, following RSIC’s notification (either via Staff or the Advisor) to a Company pursuant to Section E. a. of this Policy, that Company ceases the activities that caused the Company to be added to the Scrutinized Companies List, as determined by the Advisor, the Company shall be removed from the Scrutinized Companies List, and the provisions of this Section E shall cease to apply to the Company unless it resumes the activities that caused the Company to be added to the Scrutinized Companies List.
- F. Determinations to be made by the Chief Investment Officer**
- a.** Delegation to the Chief Investment Officer. The Commission has delegated authority to the Chief Investment Officer (“CIO”) to, in consultation with RSIC’s Chief Executive Officer, make the determinations required under the Act and to take actions necessary to implement this Policy.
  - b.** General. If, following RSIC’s engagement with a Company pursuant to Section E. a. of this Policy, the Company continues to be a Scrutinized Company, Staff will present the CIO with detailed information gathered from the Advisor, affected investment managers, and others regarding the Company, its Business Operations, the Group Trust’s holdings, and any other information required by the Act and this Policy. The CIO will make determinations as to (i) whether Staff should sell, redeem, divest, or withdraw the Group Trust’s interests in the Company, and (ii) the timing of any such sale, redemption, divestment, or withdrawal. The CIO will also make the determinations described in Section I of this Policy.
- G. Prohibition.** RSIC shall not use Public Employee Retirement Funds to acquire new Investments in Companies on the Scrutinized Companies List, except as provided in this Policy.
- H. Permissible Investments under the Act**
- a.** The Act does not apply to the following types of Investments:
    - i.** Investments in a Company that is primarily engaged in supplying goods or services intended to relieve human suffering in Sudan;
    - ii.** Investments in a Company that promotes health, education, journalistic, or religious activities in or welfare in the western, eastern, or southern regions of Sudan;
    - iii.** Investments in a United States Company that is authorized by the federal government to have Business Operations in Sudan; and
    - iv.** Investments that constitute indirect beneficial ownership through index funds, commingled funds, limited partnerships, derivative instruments, or the like.
  - b.** In developing the Scrutinized Companies List, the Advisor shall determine, in good faith and with due professional care, whether any of the foregoing exemptions and exclusions set forth in the Act apply.
- I. Determinations required to be made by the CIO pursuant to §9-16-55(D)(1).** The Act states that nothing in the Act “requires the [C]ommission to take action as described in [the Act] unless the

[C]ommission determines, in good faith, that the action described in [the Act] is consistent with the fiduciary responsibilities of the [C]ommission as described in [Title 9, Chapter 16 of the Code] and there are appropriated funds of the State to absorb the expenses of the [C]ommission to implement this [Act].” §9-16-55(D)(1). Accordingly, whenever the CIO is asked to consider taking action under the terms of the Act or this Policy, Staff will assist the CIO in making the determinations required to be made as described in this Section.

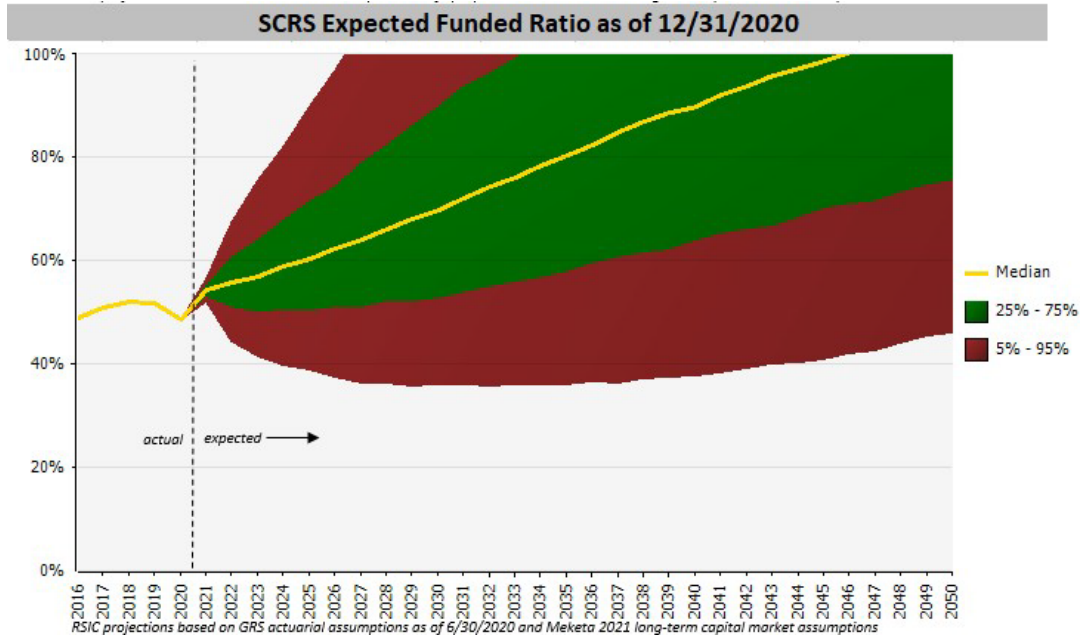
- J. Reporting.** Staff shall, following the close of RSIC’s fiscal year, prepare a formal report to the Commission regarding actions taken pursuant to the Act. RSIC shall also publish the report. The report shall include all of the following information with respect to the previous fiscal year:
- a.** The Scrutinized Companies List;
  - b.** A list of all Companies added to or removed from the Scrutinized Companies List;
  - c.** A summary of correspondence with Companies engaged by RSIC under the Act;
  - d.** A list of all Companies that RSIC will continue to engage concerning their Business Operations in Sudan;
  - e.** A summary of all Investments sold, redeemed, divested, or withdrawn under the Act; and
  - f.** A list of all Investments that were retained by RSIC pursuant to a determination by the CIO as set forth in Section I.
- K. Expiration.** The restrictions in the Act shall apply only until:
- a.** The Government of Sudan halts the genocide in Darfur for twelve months as determined by both the Department of State and the Congress of the United States; or
  - b.** The United States revokes its current sanctions against Sudan.
- L. Indemnification.** The Act provides that present and former board members, officers, and employees of the State Fiscal Accountability Authority, present, future, and former directors, officers, and employees of the South Carolina Public Employee Benefit Authority, the Commission, and contract investment managers retained by the Commission must be indemnified from the general fund of the State and held harmless by the State from all claims, demands, suits, actions, damages, judgments, costs, charges, and expenses, including court costs and attorney’s fees, and against all liability, losses, and damages of any nature whatsoever that these present, future, or former board members, officers, employees, or contract investment managers shall or may at any time sustain by reason of any decision to restrict, reduce, or eliminate Investments pursuant to the Act.

**X.**  
**LONG-TERM ANNUALIZED RETURN AND VOLATILITY EXPECTATIONS –**  
**Meketa Investment Group 2022 Annual Asset Study**  
**Twenty-Year Annualized Return and Volatility Expectations for Major Asset Classes**

Asset Class	Annualized Compounded Return (%)	Annualized Standard Deviation (%)
<b>Rate Sensitive</b>		
Cash Equivalents	1.7	1.0
Short-term Investment Grade Bonds	1.9	1.0
Investment Grade Bonds	2.4	4.0
Investment Grade Corporate Bonds	3.0	7.0
Long-term Government Bonds	2.8	12.0
Long-term STRIPS	3.0	23.0
TIPS	2.4	7.0
<b>Credit</b>		
High Yield Bonds	4.4	11.0
Bank Loans	4.0	10.0
Foreign Bonds	2.3	8.0
Emerging Market Bonds (major; unhedged)	4.2	12.0
Emerging Market Bonds (local; unhedged)	4.6	13.0
Direct Lending	7.1	14.0
Mezzanine Debt	7.2	16.0
Distressed Debt	7.7	21.0
<b>Equities</b>		
Public US Equity	6.8	18.0
Public Developed Market Equity	7.5	19.0
Public Emerging Market Equity	8.4	24.0
Public Frontier Market Equity	8.7	21.0
Public Global Equity	7.2	18.0
Private Equity Composite	10.0	28.0
<b>Real Assets</b>		
REITs	7.1	26.0
Core Private Real Estate	6.1	12.0
Value Added Real Estate	8.1	20.0
Opportunistic Real Estate	9.6	26.0
High Yield Real Estate Debt	6.8	18.0
Natural Resources (Private)	8.5	24.0
Commodities	4.6	17.0
Infrastructure (Core)	7.3	14.0
Infrastructure (Non-Core)	9.3	22.0
<b>Other</b>		
Hedge Funds	4.4	7.0
Long-Short	4.1	10.0
Event Driven	5.2	9.0
Global Macro	5.0	5.0
Risk Parity (10% vol)	5.2	11.0
Tactical Asset Allocation	4.5	11.0

**XI.**  
**TABLES 1 AND 2 (2021 and 2020 VERSIONS)**

**TABLE 1 (2021)**



**TABLE 1 (2020)**

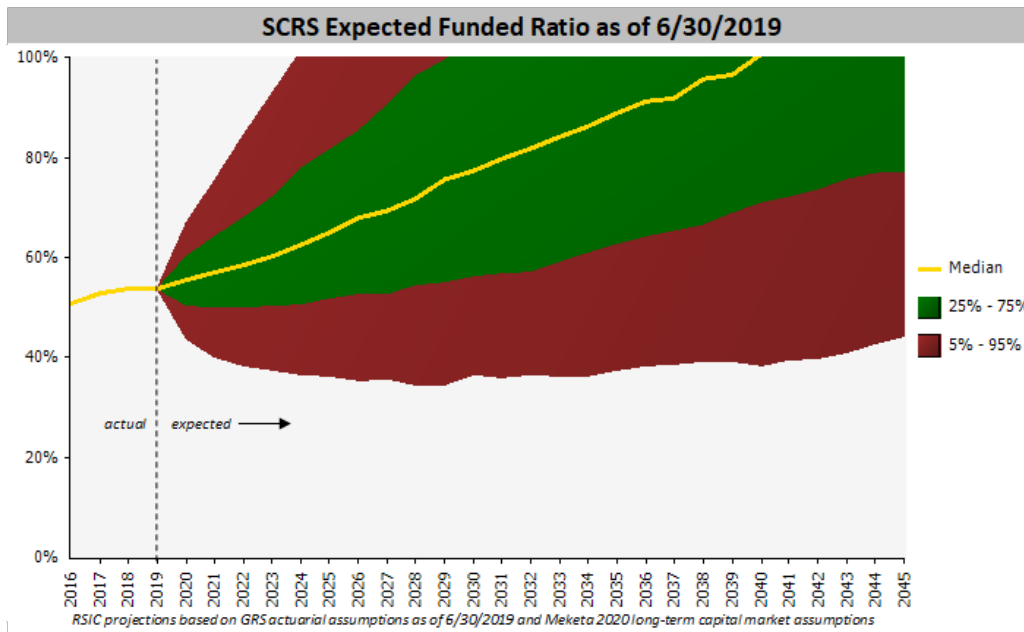




TABLE 2 (2021)

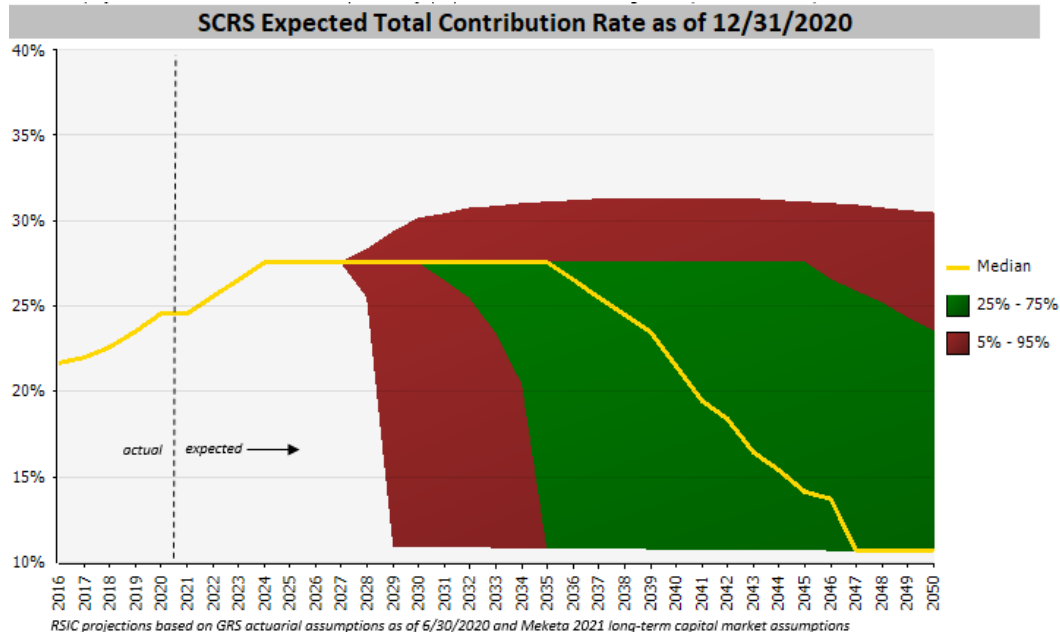
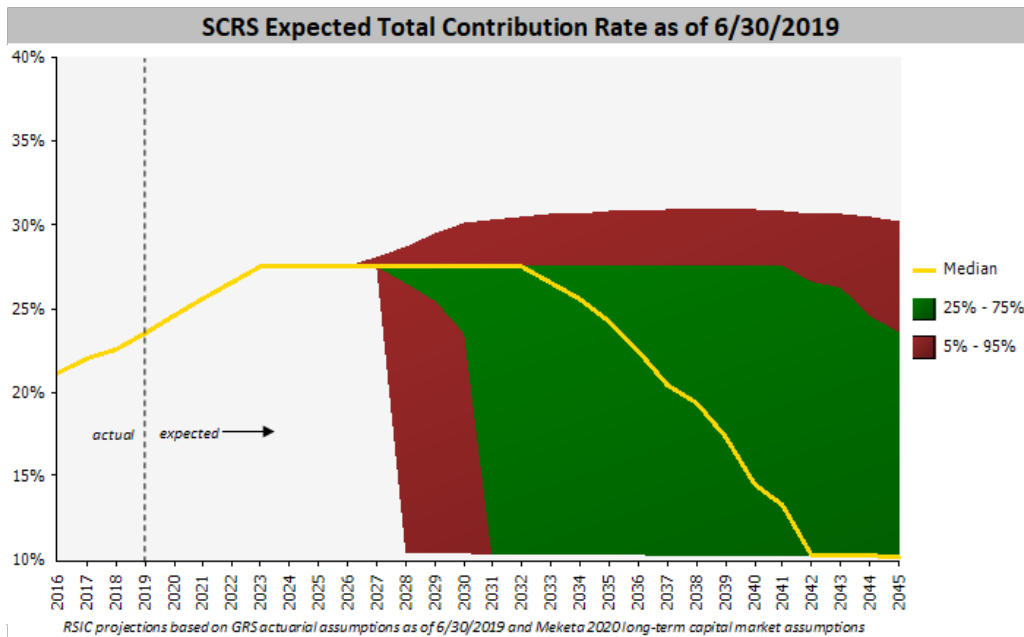


TABLE 2 (2020)





# KKR

## KKR GLOBAL MACRO: STATE OF PLAY

**APRIL 2022**

CONFIDENTIAL AND PROPRIETARY:  
For Investment Professionals Only

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# What Does All of This Mean for Investing?

There are several important structural forces at work that warrant investor attention at this time of heightened uncertainty

**We are in an era of sustained, heightened geopolitical risks.** We have shifted from a period of benign globalization to one of great power competition

---

**The importance of all things security-related will grow meaningfully.** This reality will fuel a massive capex cycle, with supply chains becoming more regional, with energy production and delivery that is inherently more localized and decentralized

---

**We think we are shifting from disinflation towards inflation, or even stagflation in certain instances.** Complicating factors include starting a crisis with interest rates near their lower bound. This means the Fed's arsenal for tackling the crisis is lacking

---

**A rethinking of asset allocation relative to the prior decade.** Diversification will matter more. Pacing will too. We advocate shortening duration, leaning into collateral-based cash flows, and overweighting opportunistic vehicles across liquid/private markets

## Lowering Our U.S. GDP Forecasts in the West; No Real Change in the East

We remain steadfastly ahead of consensus on inflation, but less so on growth

	2022e Real GDP Growth			2022e Inflation			2023e Real GDP Growth			2023e Inflation		
	GMAA New	GMAA Prior	Bloomberg Consensus	GMAA New	GMAA Prior	Bloomberg Consensus	GMAA New	GMAA Prior	Bloomberg Consensus	GMAA New	GMAA Prior	Bloomberg Consensus
U.S.	<b>3.2%</b>	3.8%	3.6%	<b>7.0%</b>	6.5%	6.1%	<b>1.8%</b>	2.25%	2.4%	<b>3.0%</b>	3.0%	2.6%
Euro Area	<b>2.6%</b>	3.5%	3.5%	<b>6.0%</b>	4.7%	5.0%	<b>2.1%</b>	2.1%	2.5%	<b>2.1%</b>	1.5%	2.0%
China	<b>4.8%</b>	4.8%	5.1%	<b>2.6%</b>	2.6%	2.2%	<b>5.4%</b>	5.4%	5.2%	<b>2.3%</b>	2.3%	2.2%

We continue to forecast seven Fed hikes in 2022, with fed funds ending the year at 1.875%. We do think the Fed could decide to hike by 50 basis at one or more meetings this year. We also raise our 2023 forecast to reflect four additional hikes.

Note: U.S. GDP and inflation are under review. Data as at March 17, 2022. Source: Bloomberg., KKR GMAA analysis.



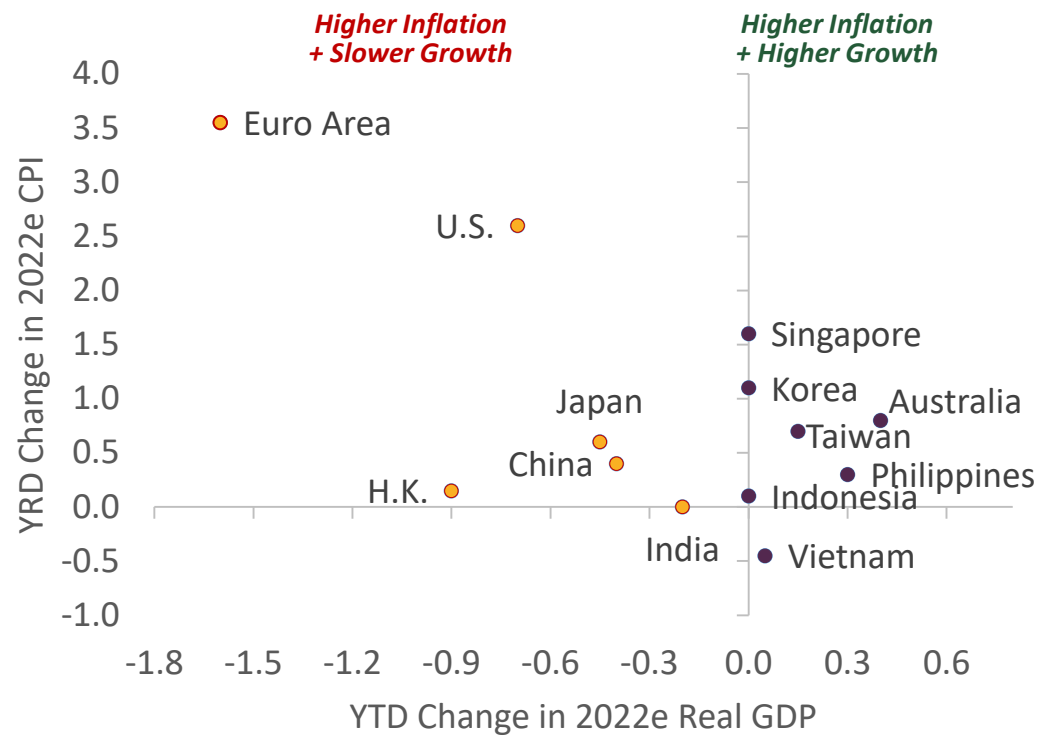
# Europe and the USA Have Seen the Biggest Decline in Growth and Increase in Inflation

We are NOT Experiencing a Global Synchronous Recovery This Cycle

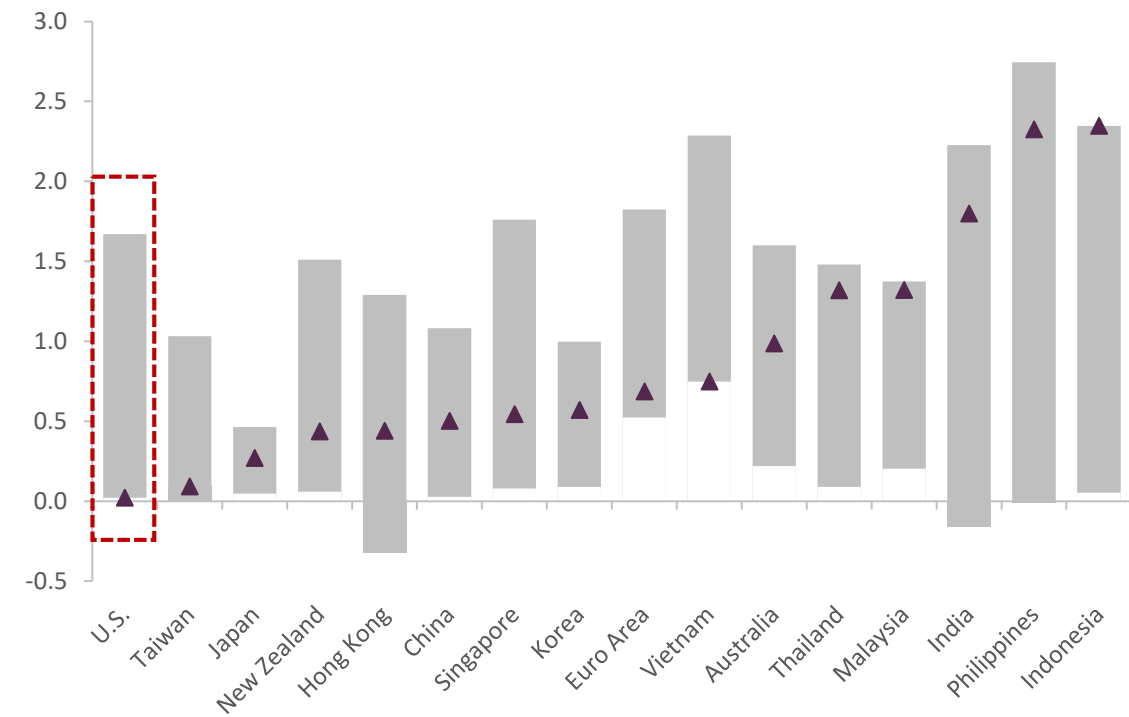
**The West is Experiencing More Inflation and Slower Growth Southeast Asia Has Been More Immune**

**Worth Noting That Yield Curve Inversion Is Mainly a U.S. Story. Almost All Other Countries Still Have a Positive Yield Curve**

YTD Change in Growth and Inflation



Yield Curve: 10-2 Yr: Current vs Range Since 2015 (ppt)



As at Mar 21, 2022. Source: Bloomberg, KKR GMAA.

Data as at March 29, 2022. Source: Bloomberg, Haver Analytics.

KKR

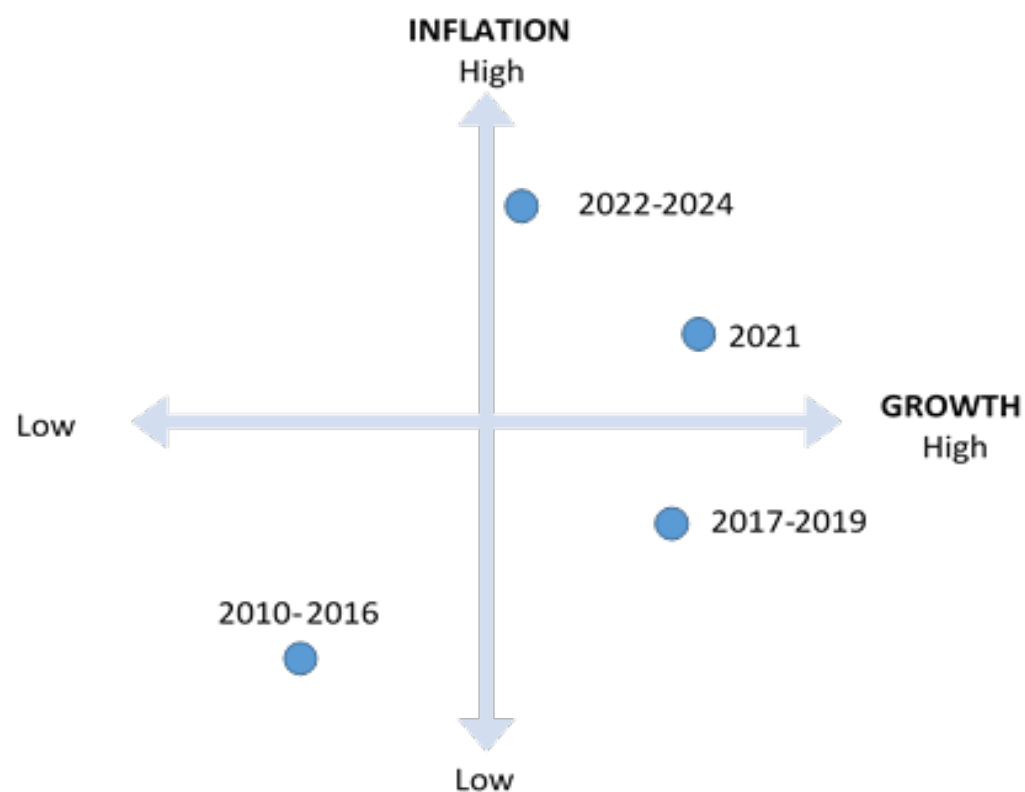
I

Key Themes

# Point #1: We Believe We Have Entered a New Regime

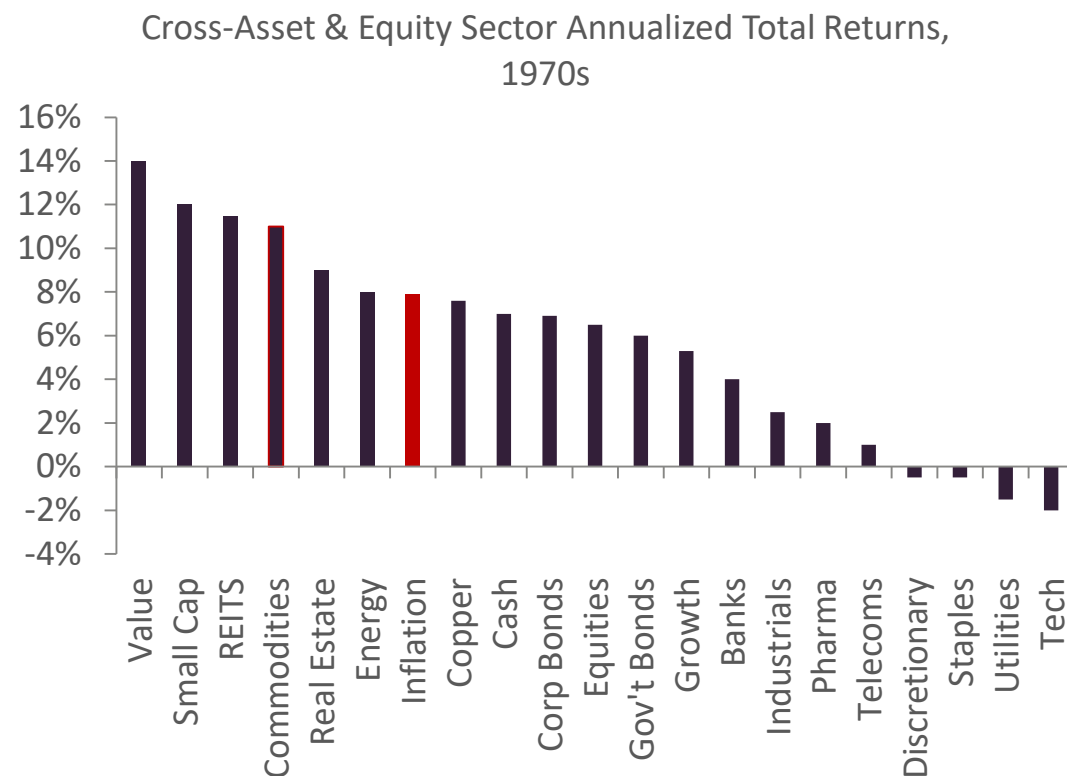
We still see higher headline nominal GDP growth this cycle, but the underlying mix is increasingly shifting towards inflation relative to real growth

## A Regime Change Is Occurring



Data as at March 9, 2022. Source: KKR Global Macro & Asset Allocation analysis.

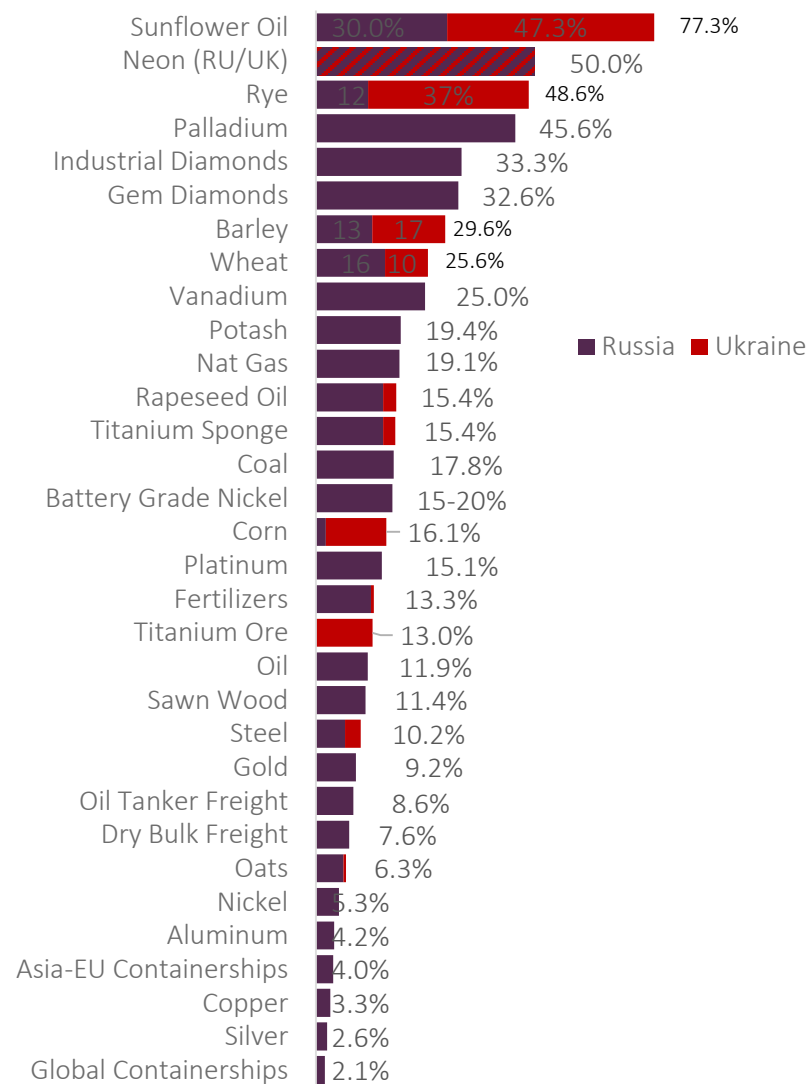
## Price Makers Tend to Outperform in a Stagflation Environment



Data as at March 2022. Source: BofA Global Investment Strategy.

# Geopolitical Tensions Are Likely to Exacerbate the Transition Towards an Emphasis On ‘Security’ of Inputs

Share of Global Exports (% World)



Comments

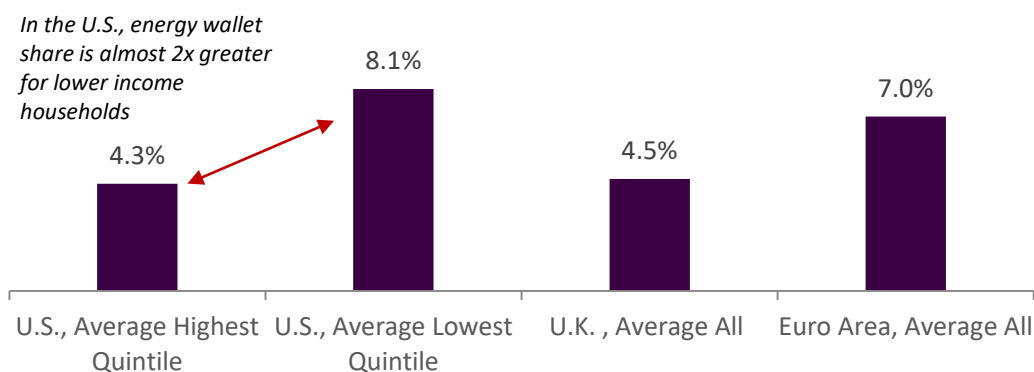
Ukraine (47%) and Russia (30%) are the largest exporters of sunflower oil  
 75% of the world's supply of neon is likely used to make semiconductors  
 Ukraine (37%) and Russia (12%) made up 49% of rye exports in 2021  
 84% of palladium used in catalytic converters for cars  
 Russia (33%), Congo (24%), Australia (18%) top 3 industrial diamond exporters  
 Alrosa, which produces 90% of Russian diamonds, has been sanctioned  
 Russia (13%) and Ukraine (17%) and 3rd and 4th largest barley exporters  
 Russia (16%) and Ukraine (10%) and 1st and 5th largest wheat exporters  
 2nd largest vanadium producer after China. Used in steel alloys  
 3rd largest potash exporter after Canada (39%), and Belarus (21%)  
 Largest exporter of natural gas (21% share in pipelines, 4.3% share LNG)  
 Russia (15%) and Ukraine (3%) make up 18% of rapeseed oil exports  
 Russia (2%), Ukraine (14%) are the 3rd & 5th largest titanium sponge producers  
 Russia 3rd largest coal exporter: 23% to China, 20% EU, 13% Japan, 12% Korea  
 Russia-based Norilsk produces ~15-20% of global battery grade nickel supply  
 Ukraine (14%) and Russia (2%) are the 11th & 4th largest corn exporters  
 32% of platinum used in catalytic converters for cars  
 Russia is largest fertilizer exporter, followed by China  
 Ukraine (13%) is the 4th largest titanium ore & concentrates exporters  
 Russia 2nd largest oil exporter after Saudi Arabia (12.0%)  
 Russia is 2nd largest exporter of sawn wood after Canada (21%)  
 RU (6.7%) 4th & UK (3.5%) 9th largest steel exporters after China, Japan & Korea  
 Soaring as a safe haven and inflation hedge  
 Russia exports oil to 47% EU, 28% China, 7% US, 5% Korea, 3% India, 2% Japan  
 Russia and Ukraine represent 7.6% of global dry bulk exports  
 Russia (6%) and Ukraine (1%) make up 7% of oat oil exports  
 Nickel market is already very tight due to EV demand  
 40% used in transportation, 21% packaging, 8% electrical  
 Russia is 3-5% of Asia-Europe container volumes  
 Market already very tight on EVs, electronics, solar, wind, housing  
 14th largest silver exporter. First is United Kingdom (14.4%)  
 Reduced airspace and rail freight resulting in increased sea freight demand

# In This Environment, Low-end Income Consumer Spending Will Lag

Savings rates are still high and house prices are appreciating, helping to offset some of the commodity shock

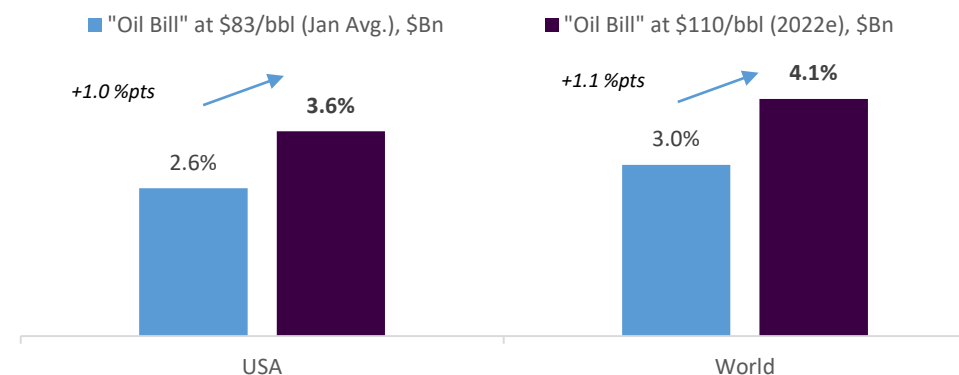
## Even Before the Pandemic, Energy Could Be a Significant Headwind For Certain Consumers

Annual Energy Spend as a % of Total Spending by Household, %



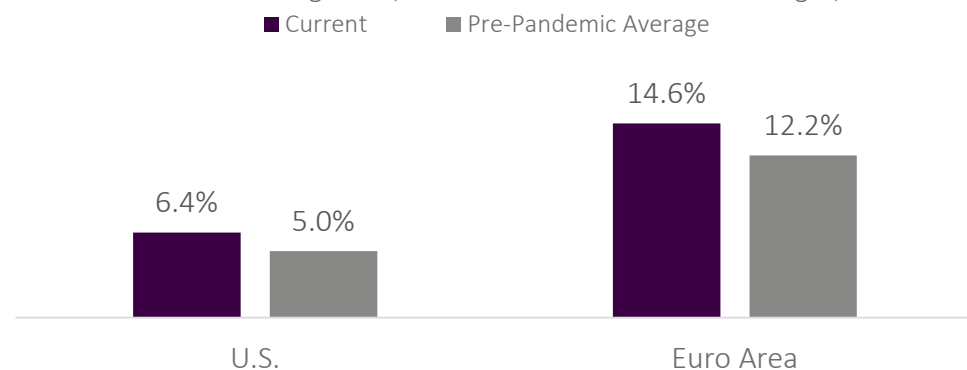
## \$110 Oil Will Impact Both Consumer Spending and GDP Growth

Changes in Economic "Oil Bill" as a % of GDP



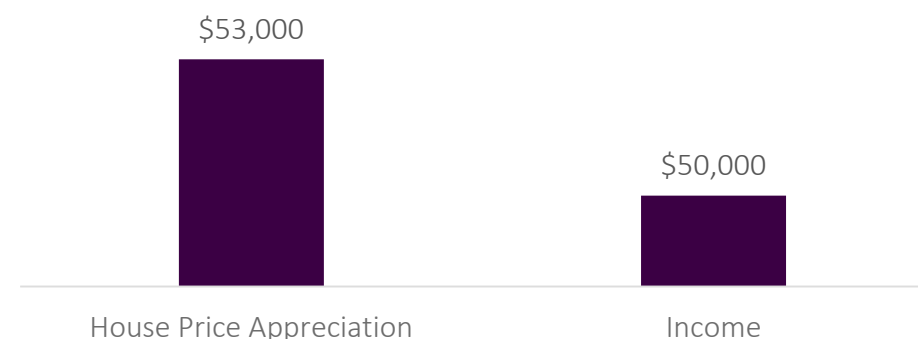
## However, Consumer Savings Are Offsetting the Rise in Input Costs

Consumer Savings Rate, Current and Pre-Pandemic Averages, %



## Wealth Is Not Always Created Through Income

Average U.S. Homeowner, 2021, US\$

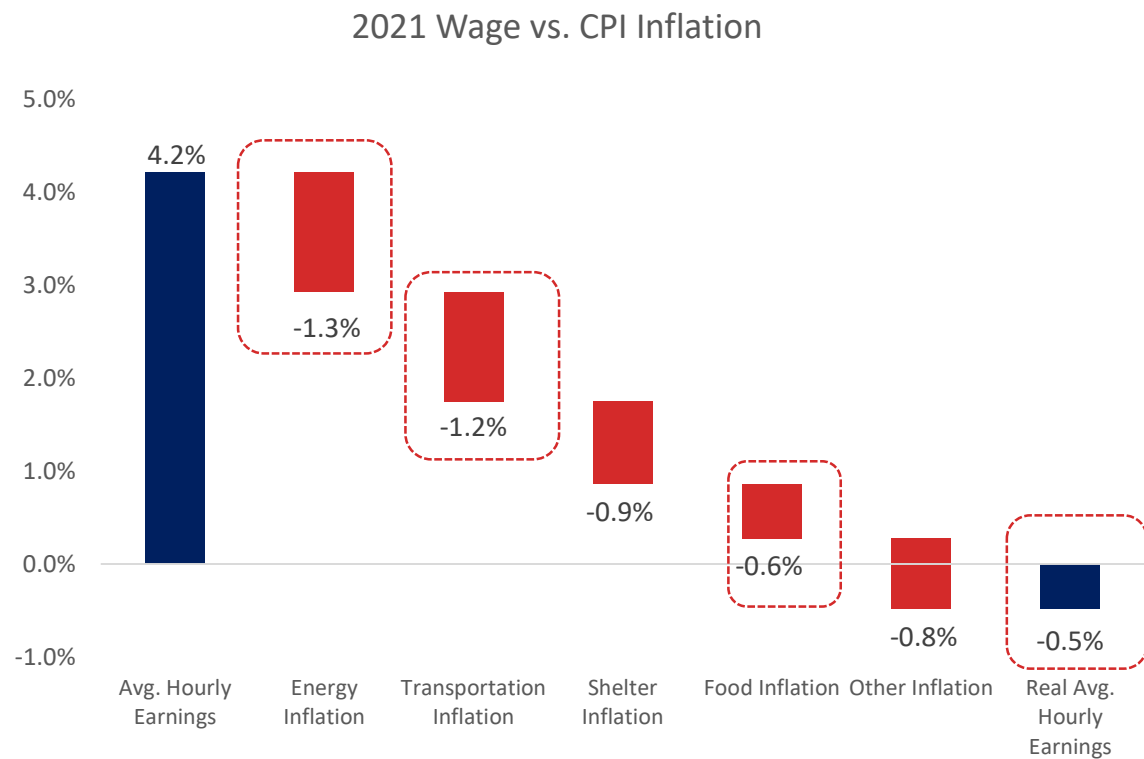




## Point #2: Inflation is Unlikely to Abate in the Near-Term

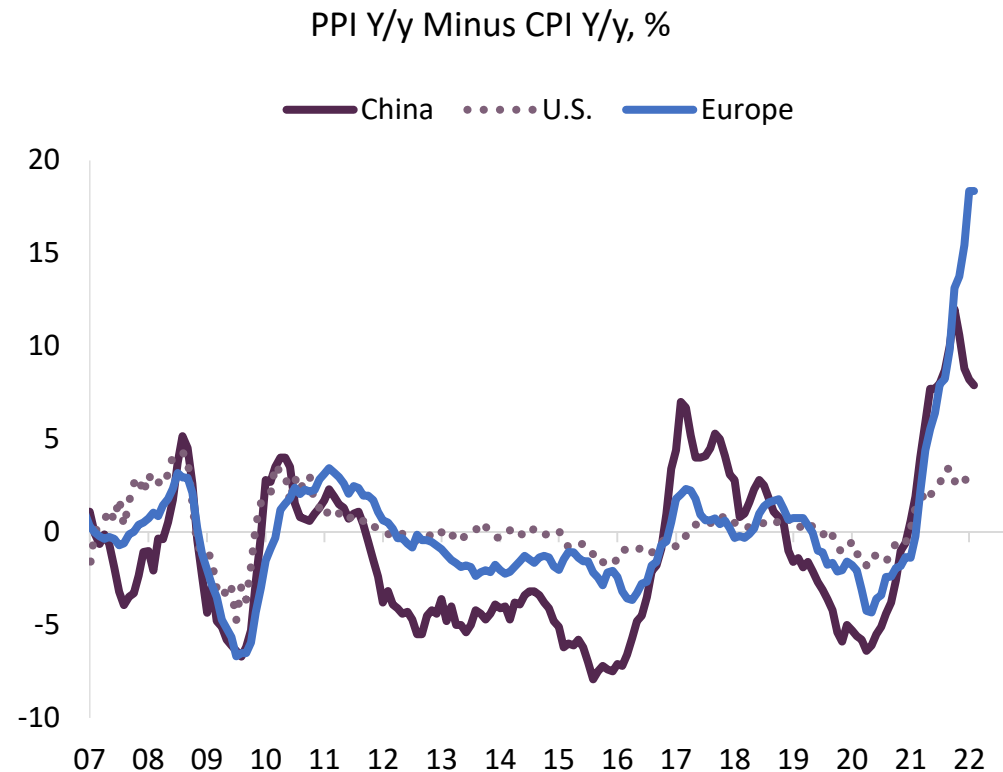
Inflation trends are most pronounced in the U.S., but adverse PPI/CPI spread is quite widespread

**Even With the Substantial Wage Gains in 2021, Surging Inflation Means Real Hourly Earnings Have Declined**



Data as at December 31, 2021. Source: BLS, BEA, Haver Analytics.

**We Continue to Focus on Pricing Power As One of the Calls to Arms This Cycle**

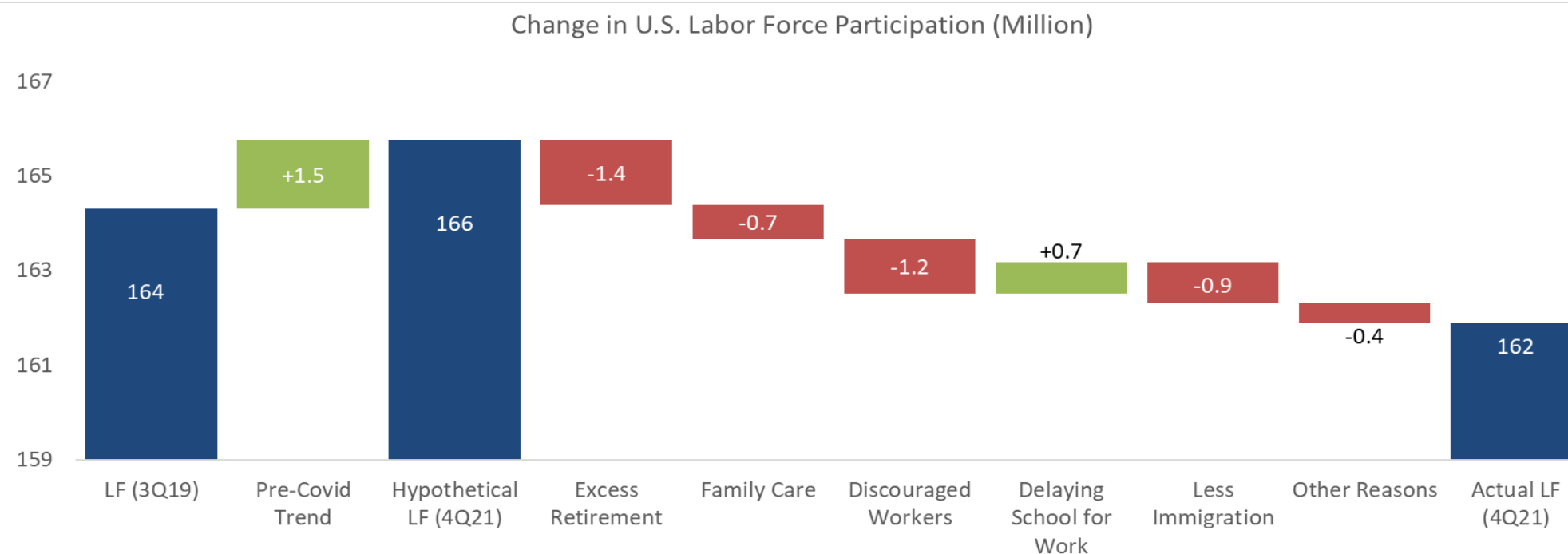


Data as at February 28, 2022. Source: Bloomberg.

# Labor: We Estimate That 2.1 Million of the Total 3.9 Million Erosion in the Labor Force Since 2019 May Be Permanent

Our research suggests that the U.S. labor market is nearly the tightest it has been in 50 years

**Excess Retirement, Discouraged Workers, Less Immigration, and Family Responsibilities Have Been the Main Drivers of the Labor Force Participation Shortfall Relative to the Pre-Pandemic Trend**



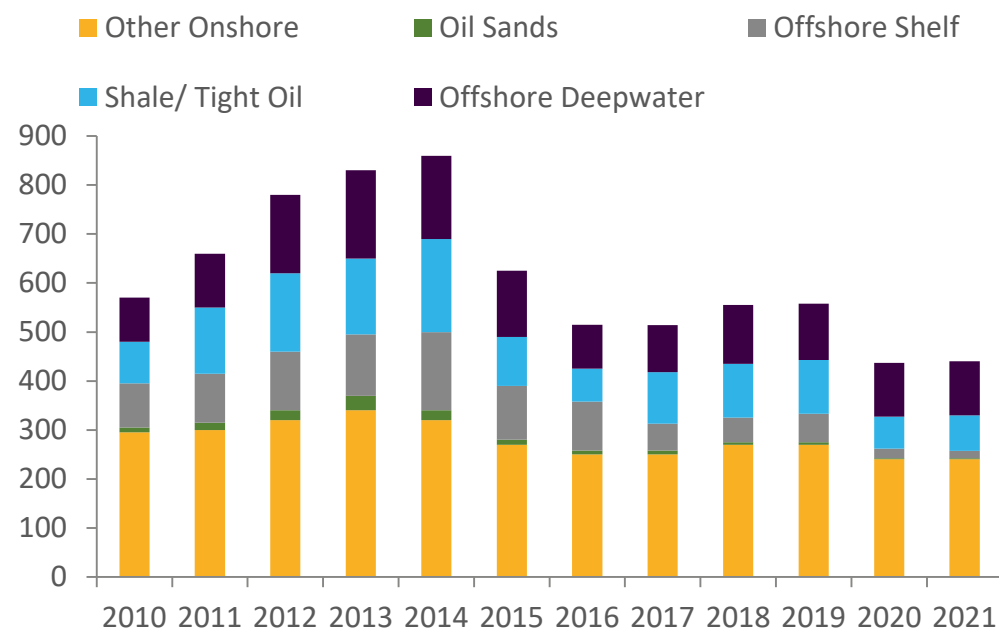
Data as at December 31, 2021. Source: Census Bureau, Haver Analytics, KKR Global Macro & Asset Allocation analysis.

# High Commodity Prices: We Also Think the Global Energy Transition/Security Will Be a Defining Feature of This Recovery

The trend towards 'Green' is – unfortunately – inflationary in nature

**Global Capex for Energy Has Crashed, Which Is Leading to a Tightening of Supply**

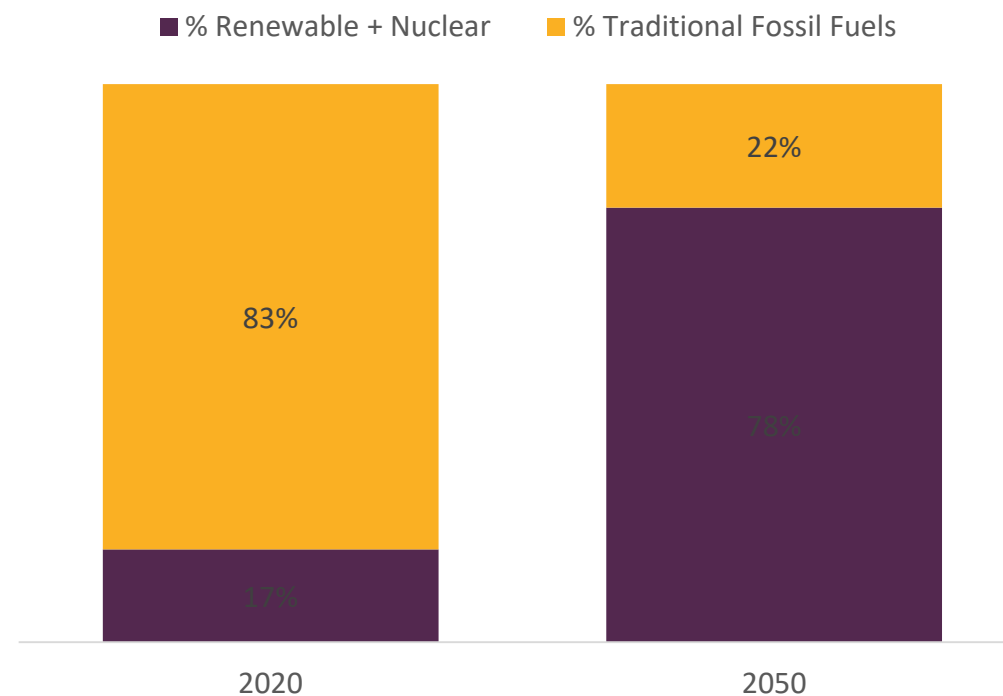
Global E&P Investments by Supply Segment, US\$ Billions



Data as at May 2021. Source: Rystad Energy, UCube, Citi.

**Net Zero Is Not That Easily Achieved As Transitions Do Not Happen Overnight**

% Energy Supply in Net Zero 2050



As at May 2021. Source: International Energy Agency (2021), Net Zero by 2050, IEA, Paris: Net Zero by 2050 Scenario - Data product - IEA. License: Creative Commons Attribution CC BY-NC-SA 3.0 IGO, KKR GMAA analysis.

# Higher Housing Costs: Rental Income Is a Very Sticky Inflationary Cost

We raised our already above-consensus 2022 U.S. CPI forecast to 7.0% from 6.5%, as well as our longer-term inflation forecast to 3.0% from 2.5%

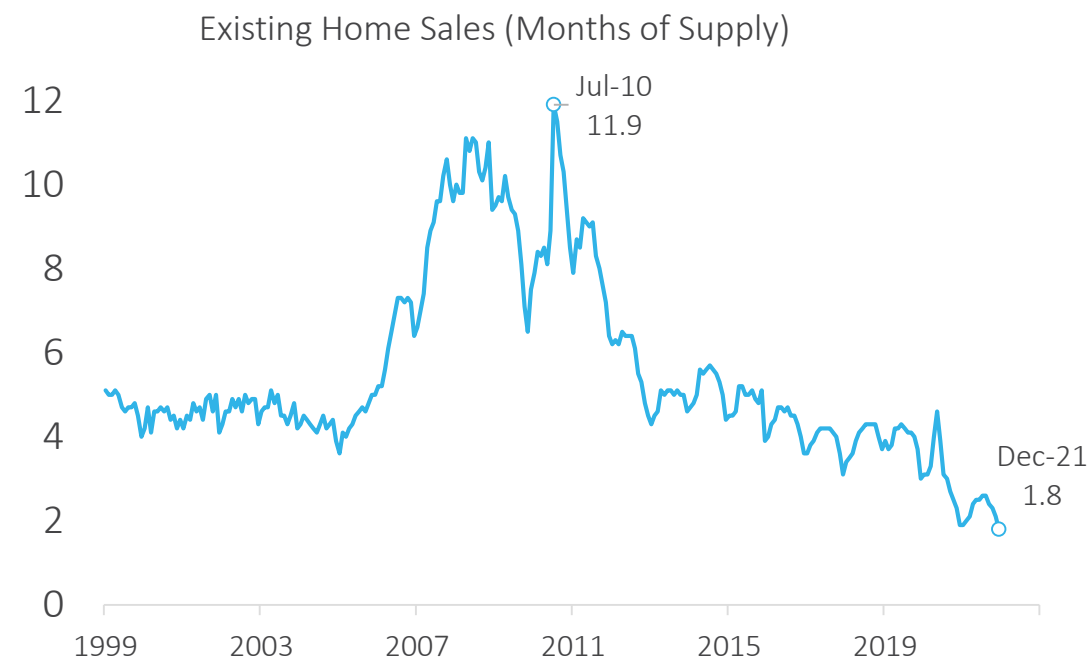
**Overall, Our Forecasts Continue to Embed a Structural Shift Higher Relative to the 1.5% Resting Rate Recorded During the Mid-2010s**

	Year/Year % Changes				Full-Year 2022e	Full-Year 2023e
	1Q22e	2Q22e	3Q22e	4Q22e		
<b>Headline CPI</b>	<b>7.9%</b>	<b>8.1%</b>	<b>7.1%</b>	<b>4.9%</b>	<b>7.0%</b>	<b>3.0%</b>
Energy (7%)	25.9%	33.2%	26.6%	13.1%	24.7%	2.5%
Food (14%)	7.8%	9.4%	8.2%	5.8%	7.8%	5.0%
<b>Core CPI (79%)</b>	<b>6.3%</b>	<b>5.7%</b>	<b>5.1%</b>	<b>4.0%</b>	<b>5.3%</b>	<b>2.6%</b>
<b>Core Goods (21%)</b>	<b>12.3%</b>	<b>9.5%</b>	<b>6.4%</b>	<b>2.6%</b>	<b>7.7%</b>	<b>-0.4%</b>
Vehicles (7%)	23.5%	14.1%	7.3%	0.3%	11.3%	-5.0%
Other Core Gds (13%)	5.4%	6.5%	5.9%	4.4%	5.5%	2.5%
<b>Core Services (58%)</b>	<b>4.3%</b>	<b>4.4%</b>	<b>4.7%</b>	<b>4.6%</b>	<b>4.5%</b>	<b>3.7%</b>
Shelter, Hlth, & Ed. (43%)	3.8%	4.5%	5.0%	4.9%	4.5%	4.3%
Other Core Services (13%)	5.7%	4.0%	3.8%	3.8%	4.4%	2.0%

*Huge Areas of Focus*

Data as at March 17, 2022. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

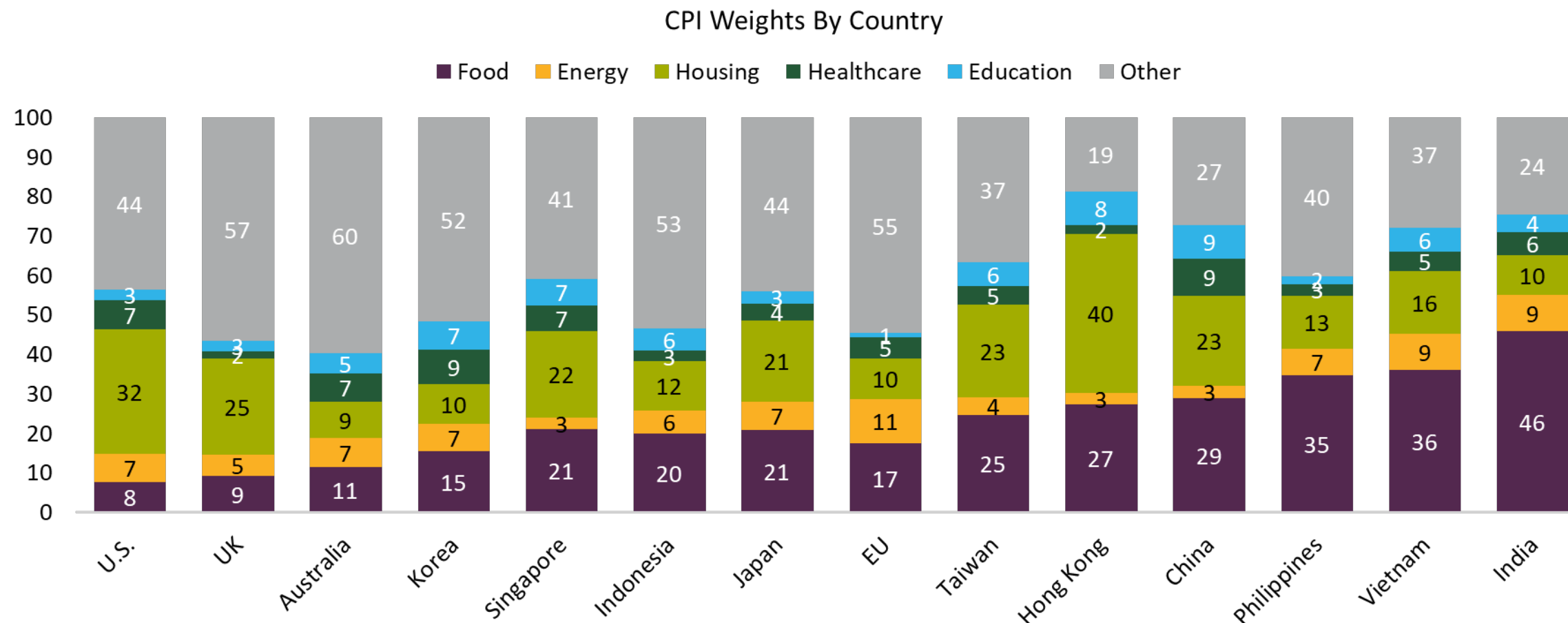
**Housing Availability Remains an Issue; It Will Also Skew Inflation Reports to the Upside**



Left – Data as at December 31, 2021. Source: National Association of Realtors. Right – Data as at December 31, 2021. Source: Census Bureau.

## Inflation Headwinds Vary Widely Across the Globe

In Asia, we are particularly focused on food prices, which are a much larger overall component of inflation



Data as at March 7, 2022. Source: KKR GMAA analysis.

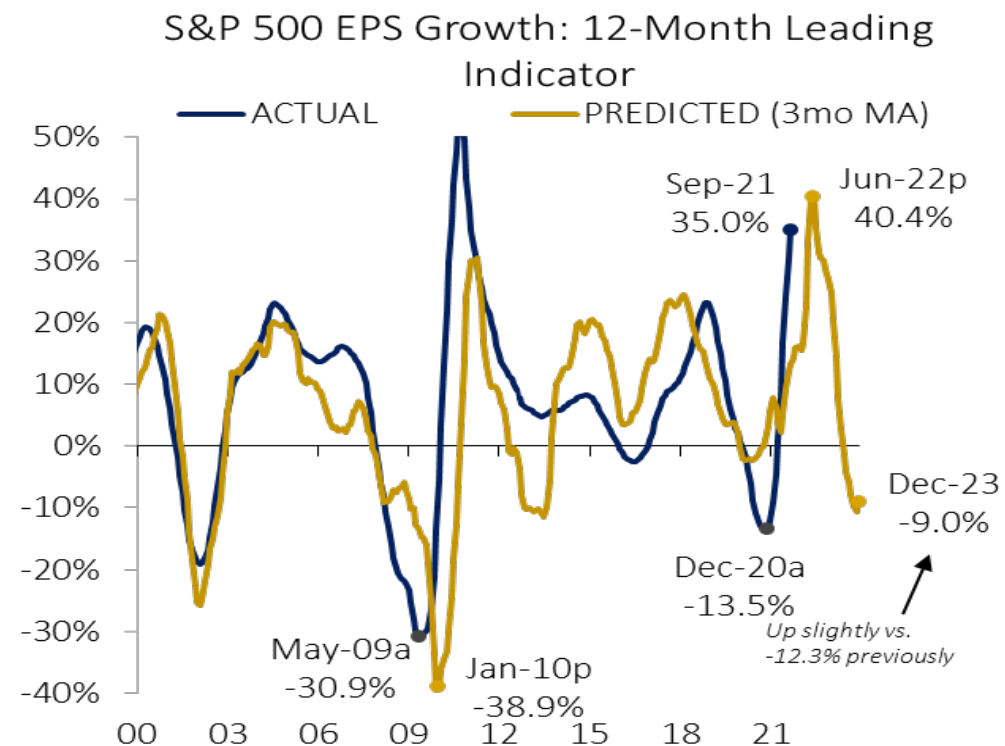
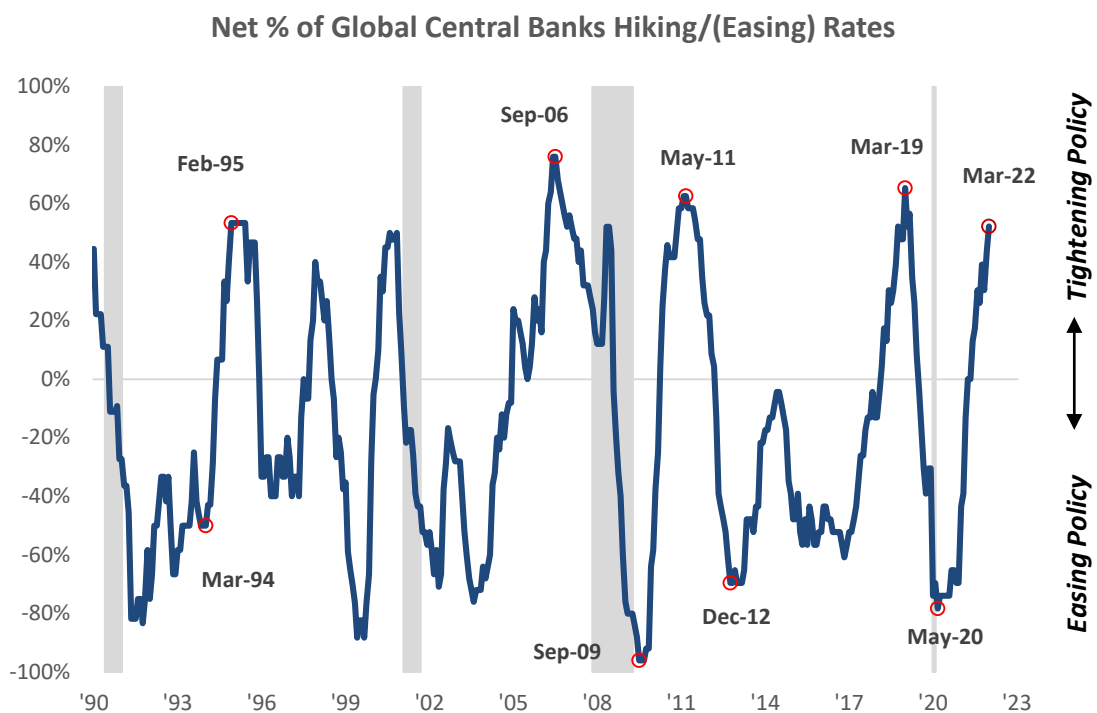


# Point #3: Rate of Change Is Now Poised to Slow

This backdrop will likely create more volatility, as margins come under pressure and rate of change on economic growth slows and financial conditions tighten

**We Are Already in a Global Central Bank Hiking Cycle**

**EPS Growth Will Start to Slow**



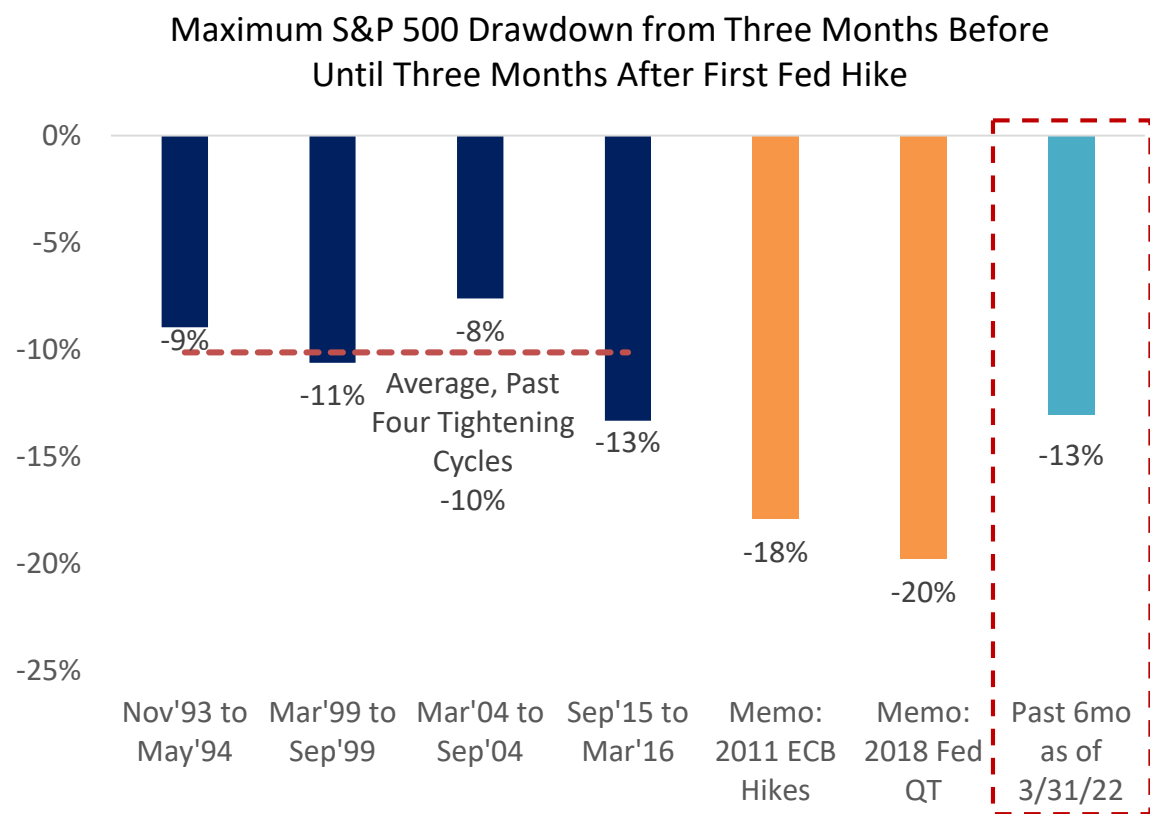
Data as at March 31, 2022. Bloomberg, Deutsche Bank.

Our Earnings Growth Leading Indicator is a combination of seven macro inputs that in combination we think have significant explanatory power regarding the S&P 500 EPS growth outlook. Data as at January 31, 2022. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

# We Still Expect Volatility to Increase, Particularly in Speculative Parts of the Market

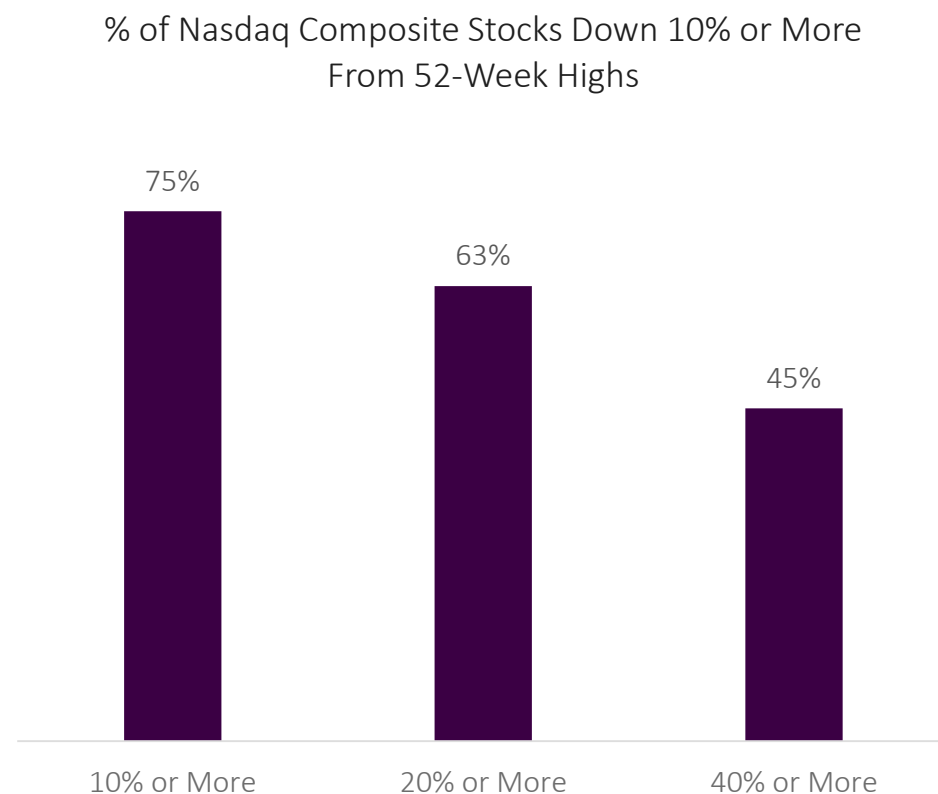
The market downturn is more of an indictment on the speculative part of the market than Russia/Ukraine concerns

## Rate Hikes Usually Lead to a Bit of Damage



Data as at March 31, 2022. Source: KKR GMAA analysis, Bloomberg.

## Market Indices Are Not Reflective of Performance at the Single Stock Level

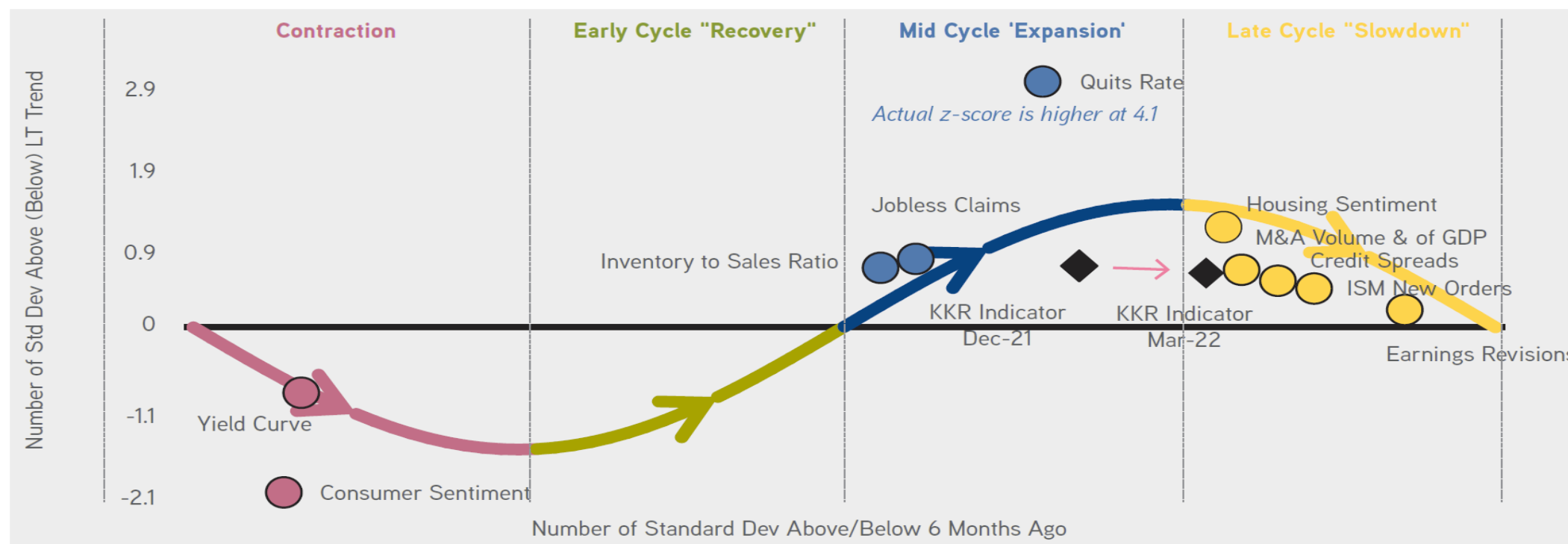


Data as at March 31, 2022, 2022. Source: Bloomberg.

## Point #4: We Are Now Later Cycle

The U.S. economy has moved into the late cycle 'slowdown' phase, after spending the last 18 months in mid-cycle 'expansion'

### The Four Phases of the Stylized Business Cycle



#### Contraction

- Indicator is below trend and breadth of components is deteriorating
- The macro environment is weak as the yield curve flattens (inverts) and credit spreads widen. Corporate activity is depressed given an uncertain outlook

#### Early Cycle "Recovery"

- Indicator is below trend, but the breadth of components is improving
- On the back of easy monetary policy, growth shows signs of recovering with both consumer confidence, inventory-sales and earnings revisions all improving from trough levels

#### Mid Cycle "Expansion"

- Indicator is above trend and the breadth of components is improving
- Growth and optimism are back, driving a tighter labor market and a resurgence of M&A activity

#### Late Cycle "Slowdown"

- Indicator is above trend, but the breadth of components is deteriorating
- The macro environment rolls-over, as inflationary pressure leads to higher rates. Housing activity decelerates and manufacturing activity plateaus

## Point #5: Get More Thematic

Given the sheer amount of liquidity in the system, we will need to be more thematic in nature

**Get Long Pricing Power**

---

**Own More Collateral-Based Cash Flows**

---

**Digitalization/Automation/Logistics**

---

**Normalization: Revenge of Services**

---

**Security, Including Energy, Data, Communication, Payments, Defense**

---

**We Have Entered Into a Savings Bull Market**

KKR

# II KEY CONCLUSIONS



# Key Conclusions/Action Items

This is *A Different Kind of Recovery*. So, we are using a different playbook for asset allocation

- 01 We remain in a 'Different Kind of Recovery': an asynchronous recovery defined by higher inflation, lower real rates, and tightening financial conditions in the West

---
- 02 Our model now suggests we are late cycle, which is usually defined by slowing earnings and multiple compression

---
- 03 Expect more volatility, but appreciate some of the risk is now 'in the price'

---
- 04 The opportunity set:
  - Overweight collateral-based cash flows, including Infrastructure, Asset-Based Finance, and Real Estate
  - Overweight Opportunistic capital in both liquid and illiquid markets
  - Maintain shorter duration in both Equities and Credit
  - Within Equities, focus on pricing power and high cash flow conversion

---
- 05 The biggest way to mitigate uncertainty is get the long-term investment themes right: energy transition, security, cyber, digitalization, automation/logistics, and rise of the global millennial

APOLLO GLOBAL MANAGEMENT

# Outlook for markets

Torsten Slok, Ph.D. | Chief Economist

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April 2022

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Unless otherwise noted, information as of April 2022

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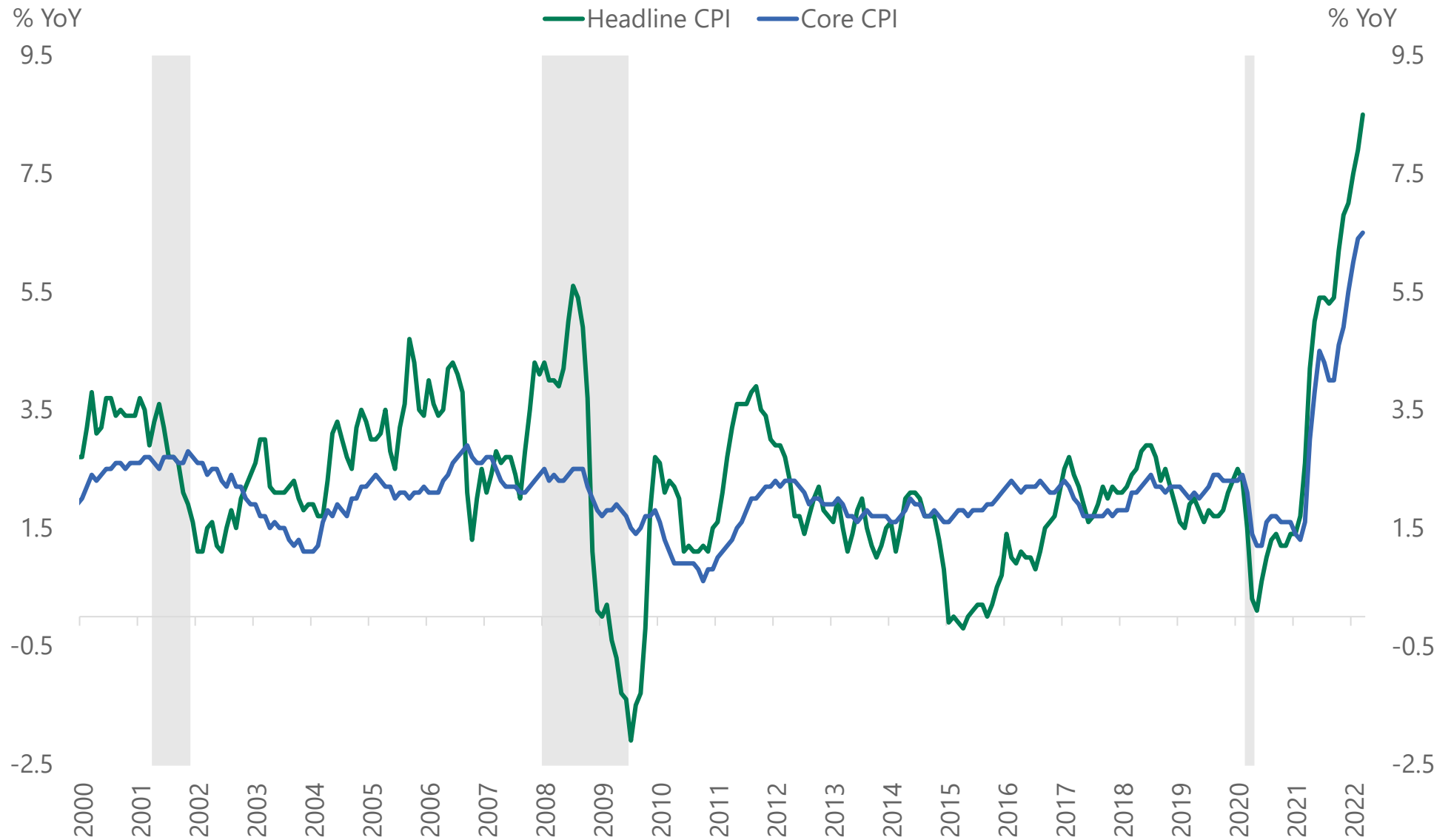
S&P 500 Index Comparison - The S&P 500 Index is based on the market capitalizations of 500 leading companies publicly traded in the U.S. stock market, as determined by Standard & Poor's. The S&P 500 Index performance is reflective of price return. As used herein, the S&P 500 Index is solely intended as an illustrative proxy for market performance generally. Because the S&P 500 Index represents an unmanaged, broad-based basket of stocks, this index should be considered materially different from a fund's portfolio and the other indices used herein.

- 1) Inflation is a more permanent problem.** Forces pushing inflation up are supply chain problems, energy prices, higher wages, and rising home prices and rents. Situation in Ukraine has delayed the peak in inflation.
- 2) More Fed rate hikes are coming.** And the Fed's goal with increasing the risk-free rate is to limit risk-taking in the economy and financial markets.
- 3) Fed QE has ended.** Fed asset purchases have played a key role supporting rates, credit, and equity markets. The opposite will happen once global QE stops.

## **Bottom line for markets:**

Inflation uncertainty is significant, Fed hikes are coming, and QE is ending. As a result, **we are likely in 2022 to see higher rates, wider credit spreads, and less support for equities.**

# Inflation is meaningfully above the Fed's 2% target



Source: BLS, Haver Analytics, Apollo Chief Economist

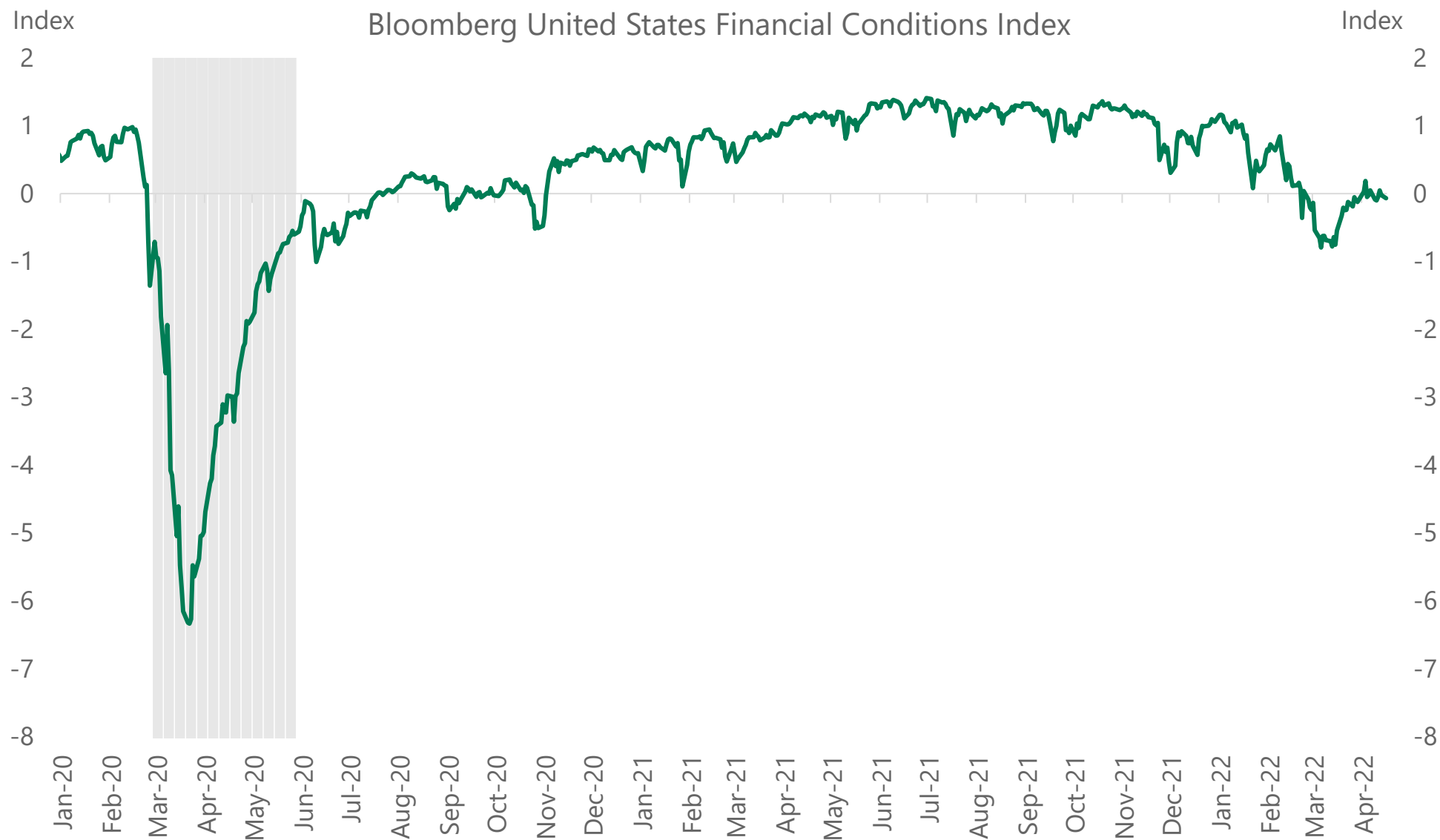


# Record-high household inflation expectations



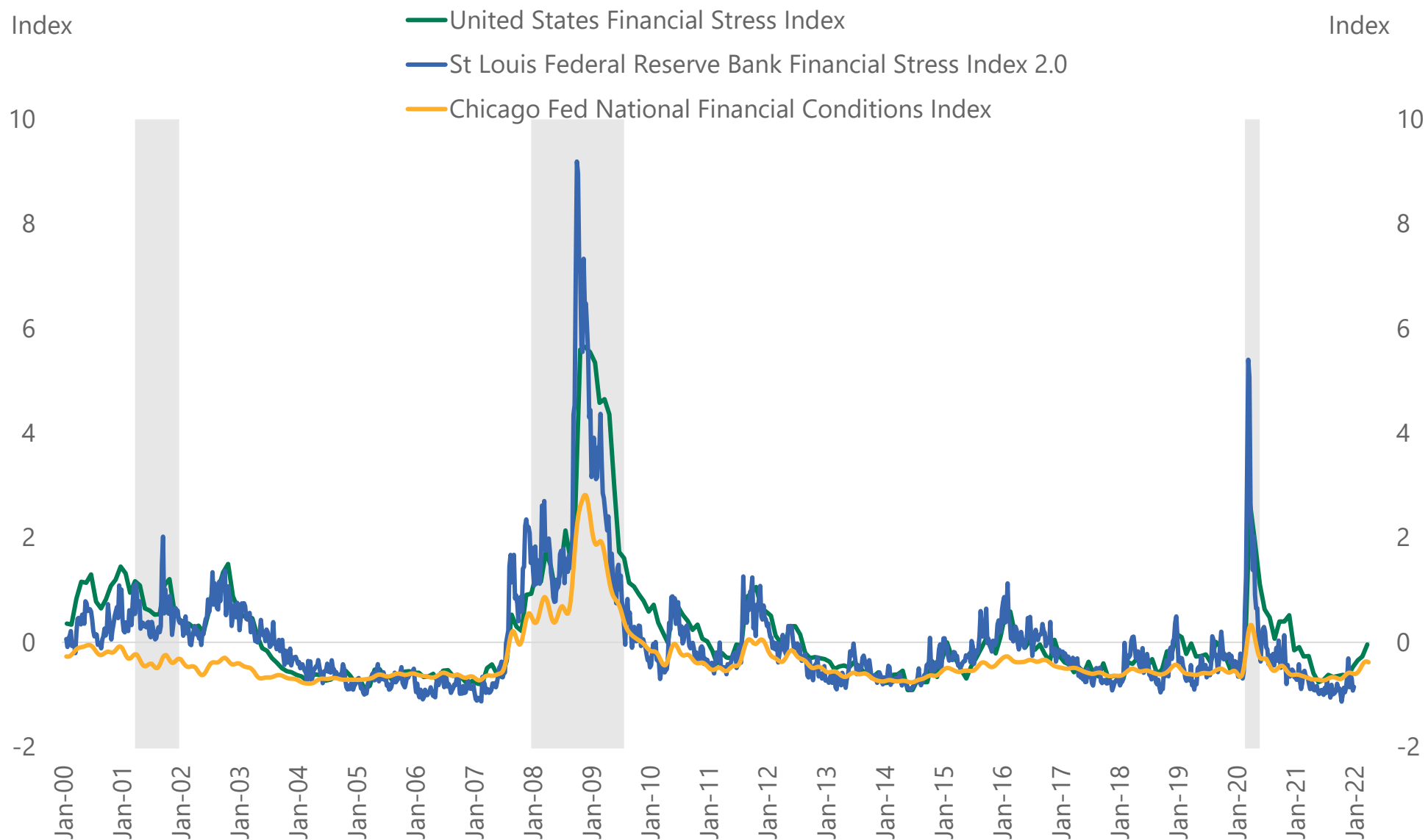
Source: Conference Board, Haver Analytics, Apollo Chief Economist

# Financial conditions back to neutral



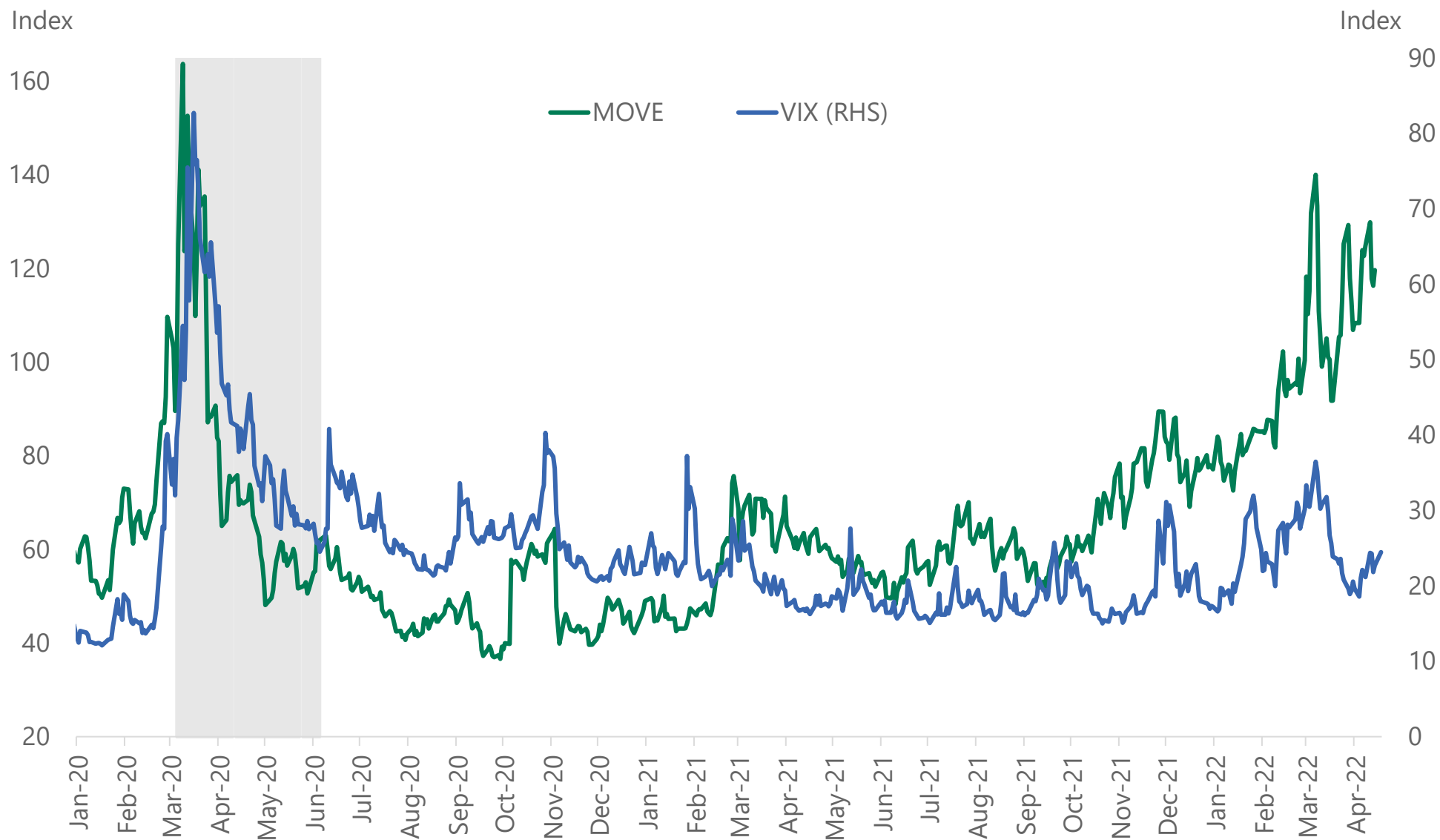
Source: Bloomberg, Apollo Chief Economist

# Financial conditions back to neutral



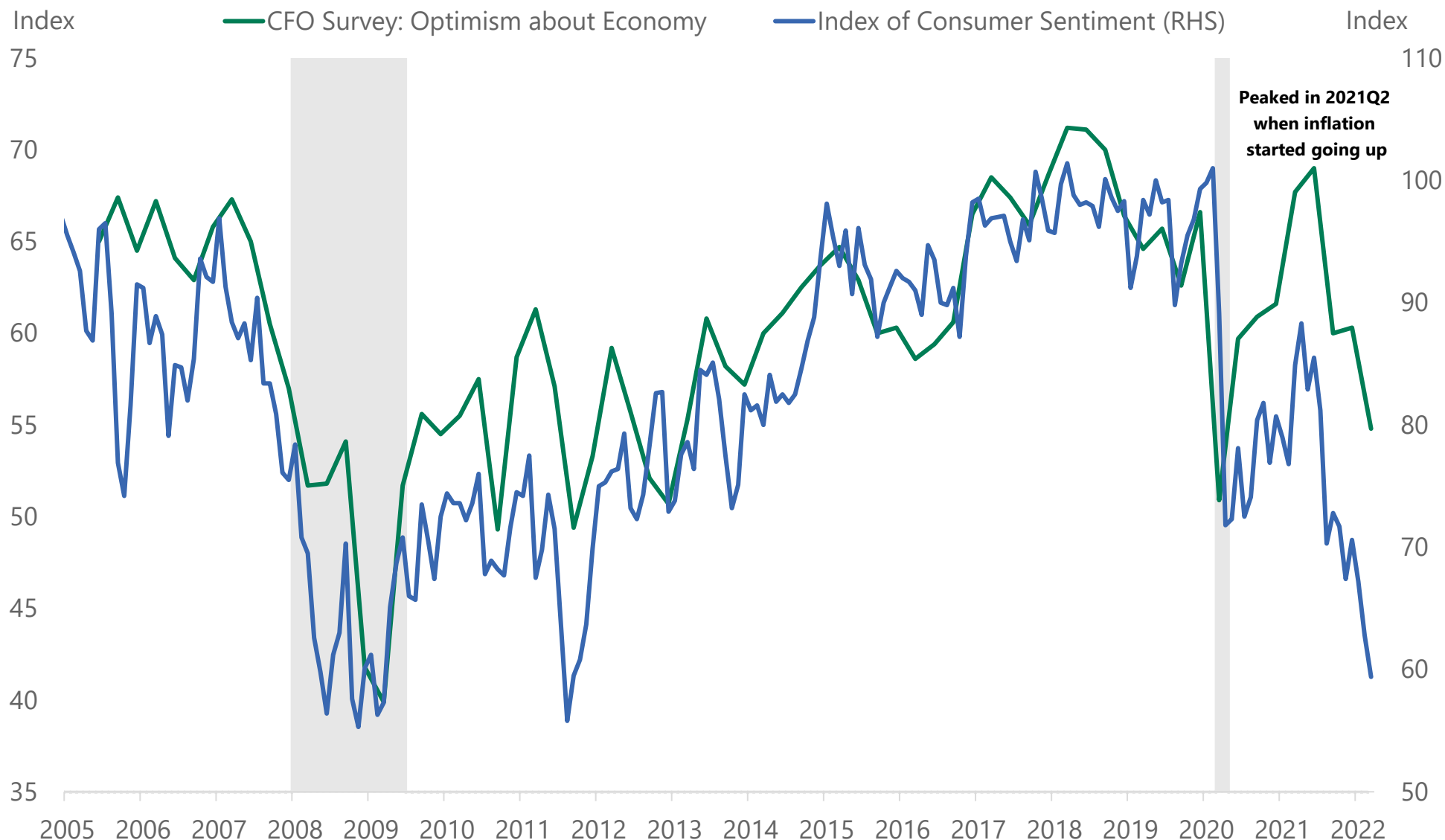
Source: Bloomberg, Apollo Chief Economist

# Strong disconnect between rates markets and equity markets



Source: Bloomberg, Apollo Chief Economist

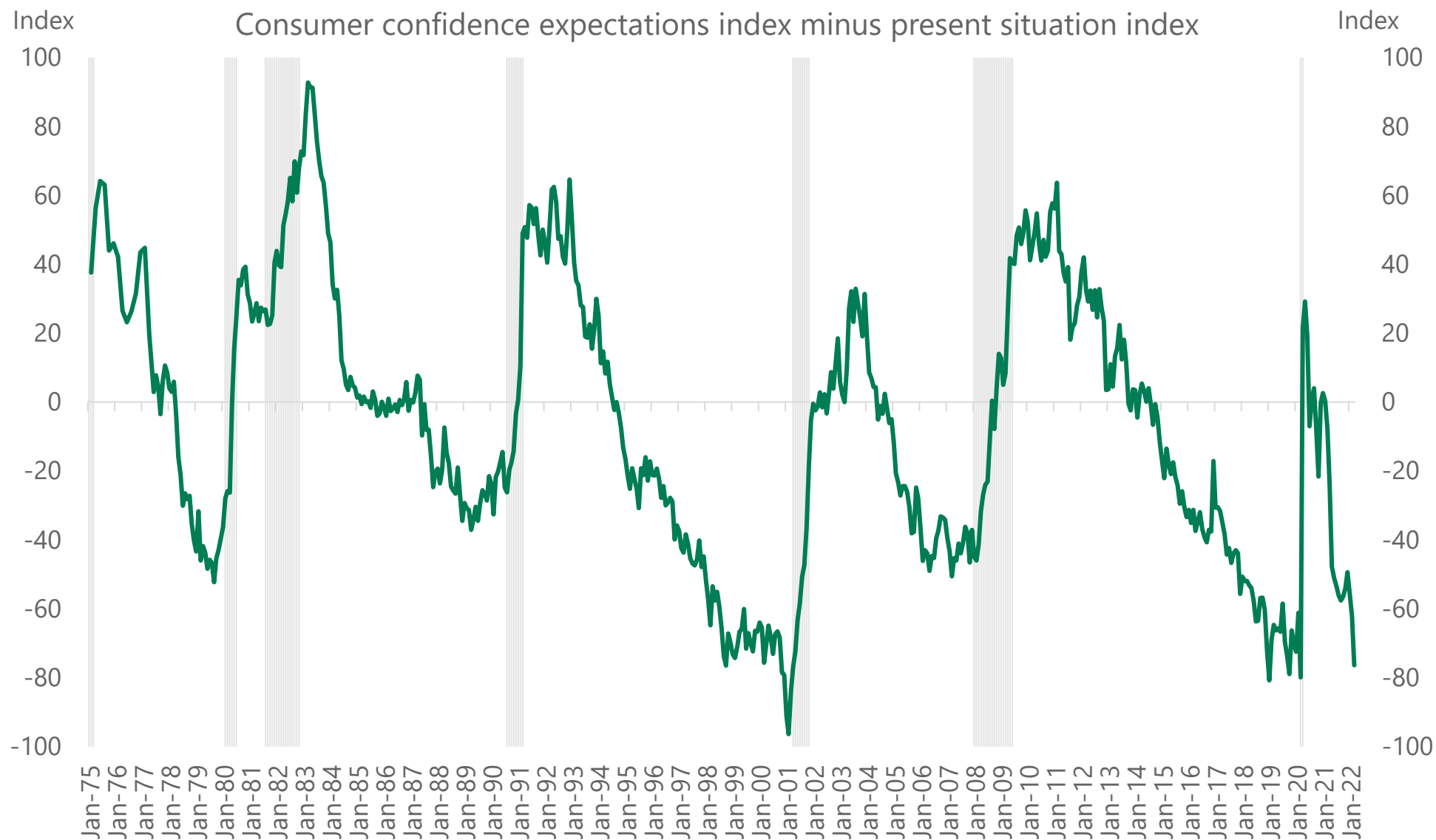
# Strong downtrend in consumer confidence and business confidence: Where will these lines be after eight Fed hikes?



Source: University of Michigan, Duke, FRB Richmond and Atlanta, Apollo Chief Economist

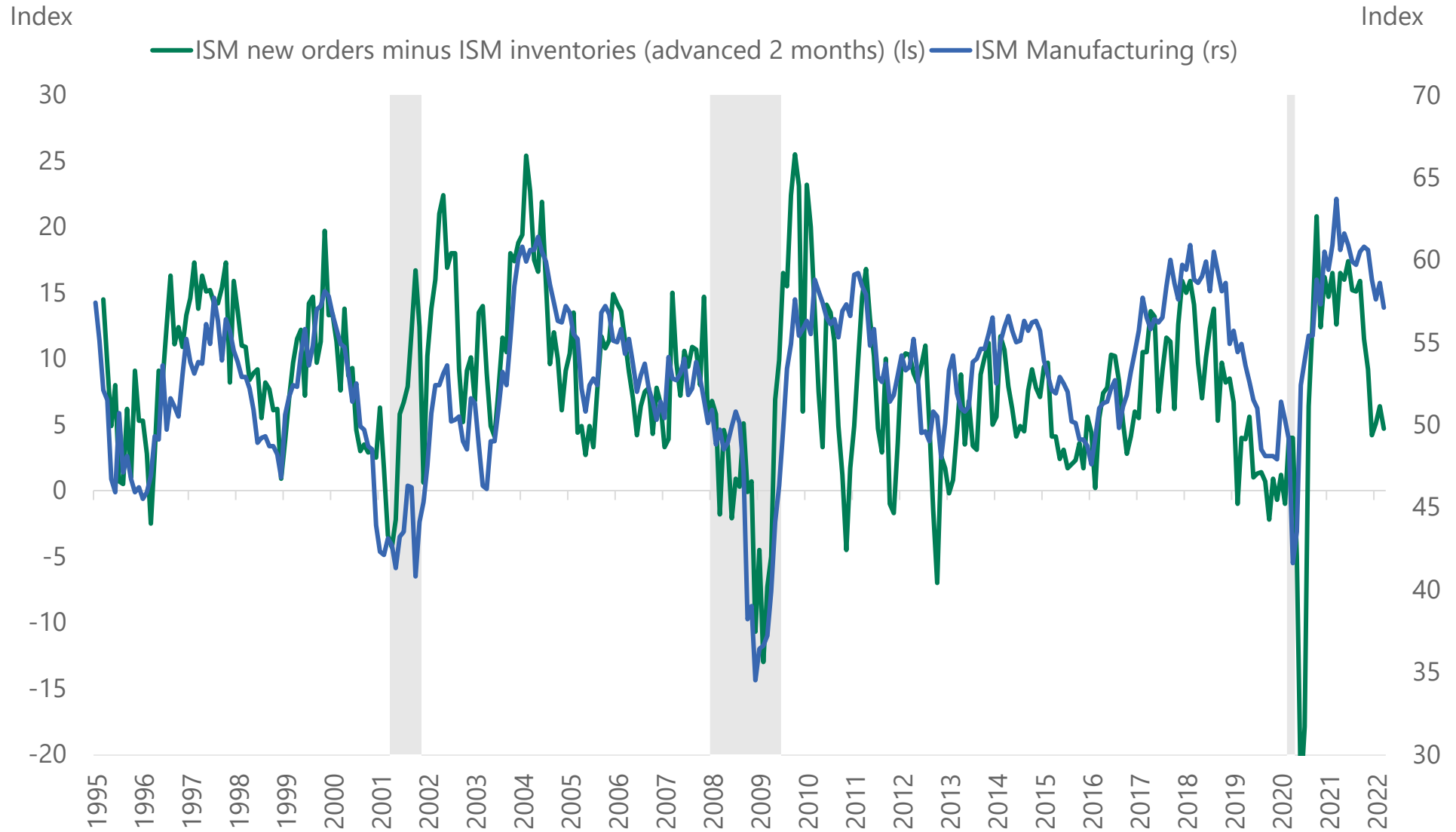


# Consumer expectations minus consumer present situation: Consumers more and more worried about the future



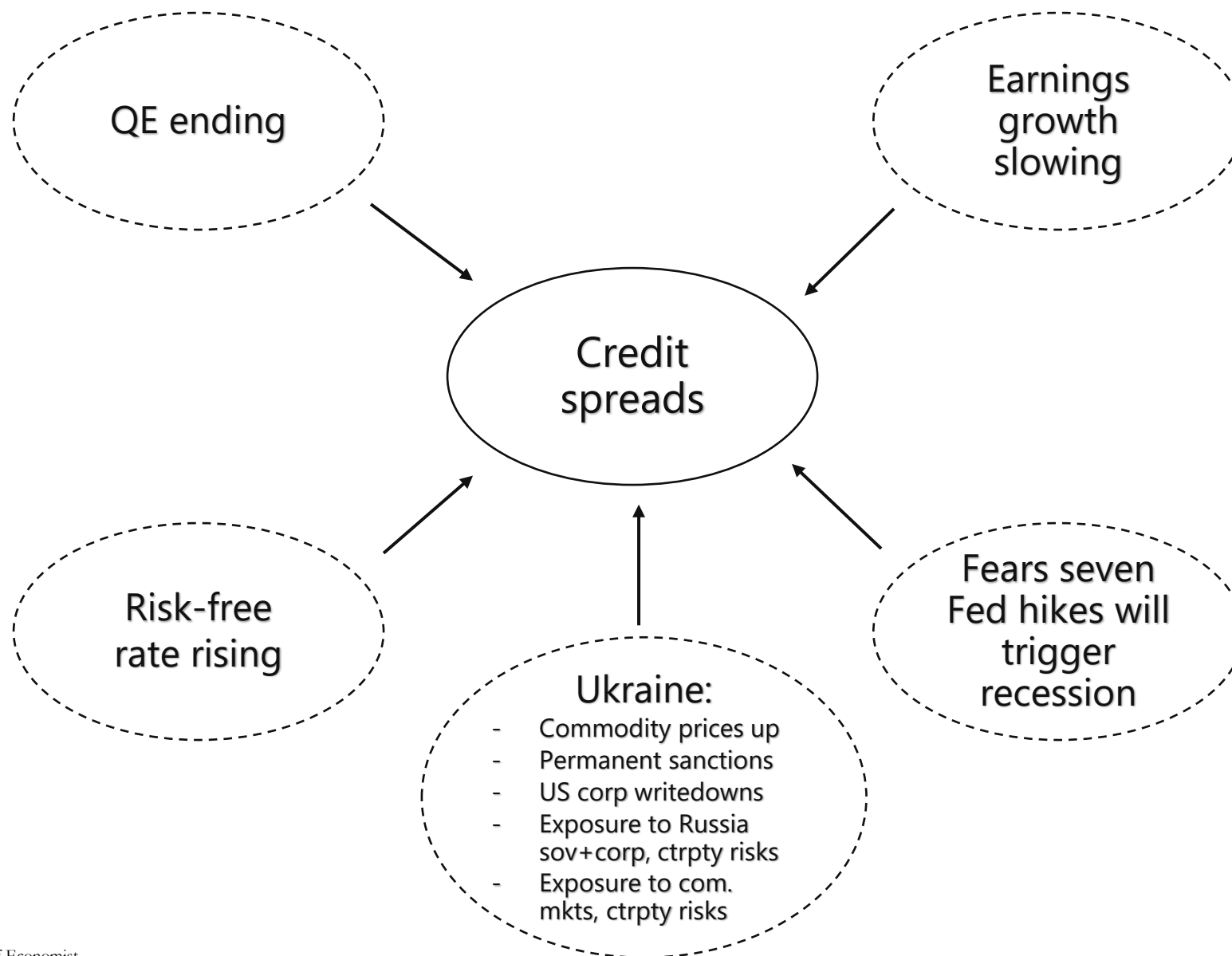
Source: Conference Board, Haver Analytics, Apollo Chief Economist

# The economy is slowing down



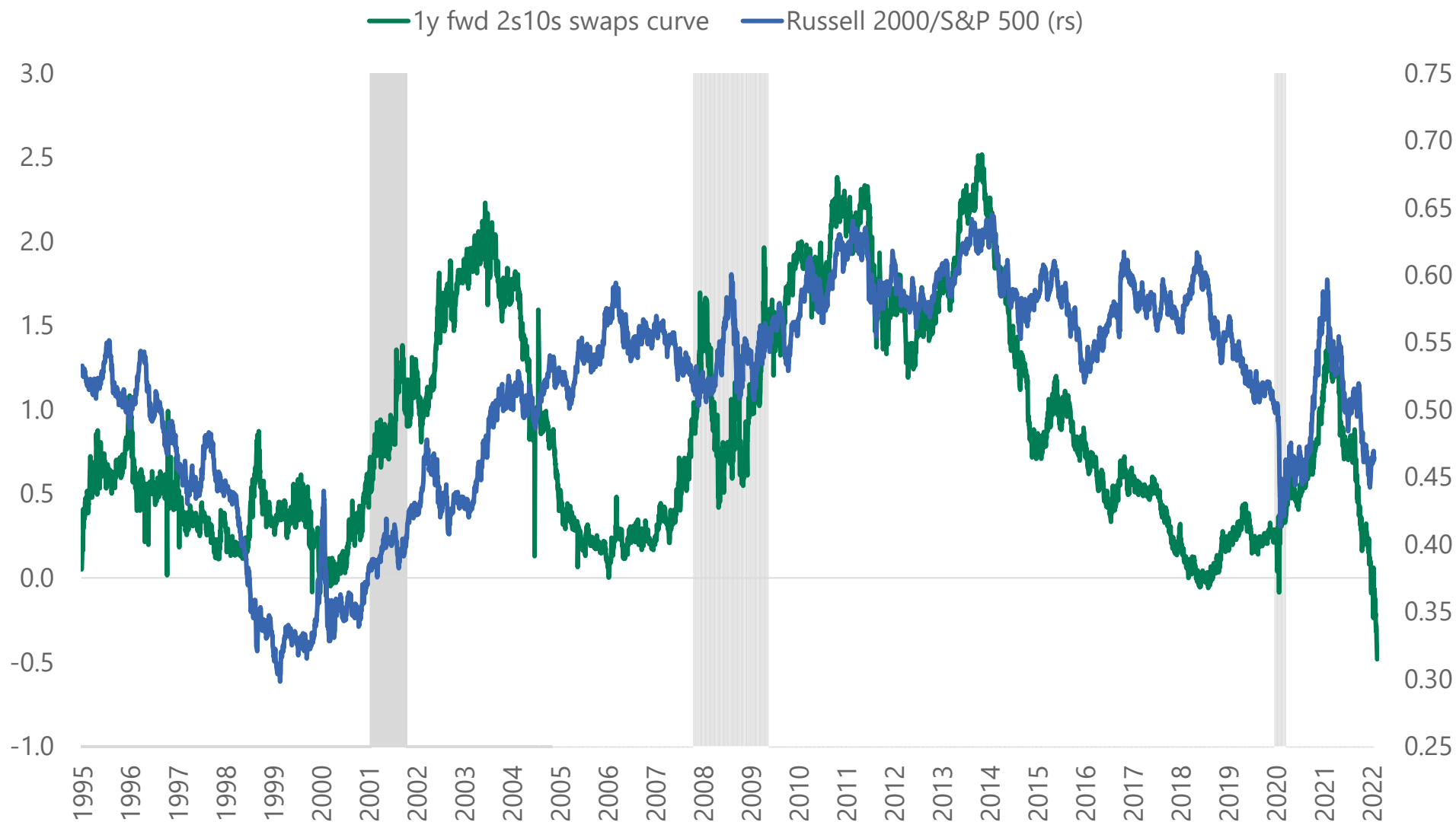
Source: ISM, Haver, Apollo Chief Economist

# Turbulence in credit markets intensifying



Source: Apollo Chief Economist

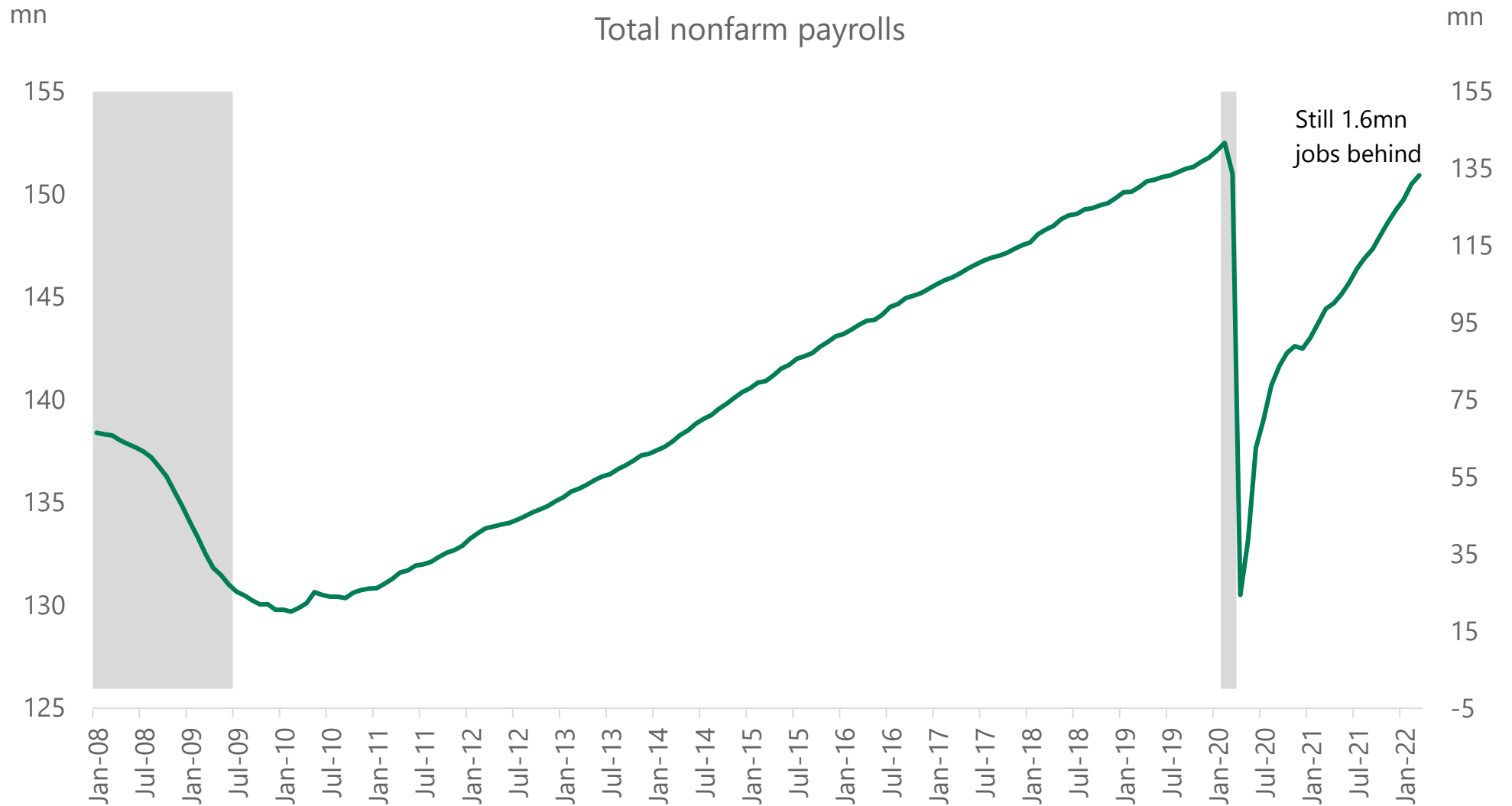
# Markets are pricing end-of-cycle. Short rates are pricing early cycle.



Source: Bloomberg, Apollo Chief Economist

# Total employment 1.6mn jobs lower than in February 2020

153



Source: BLS, Apollo Chief Economist

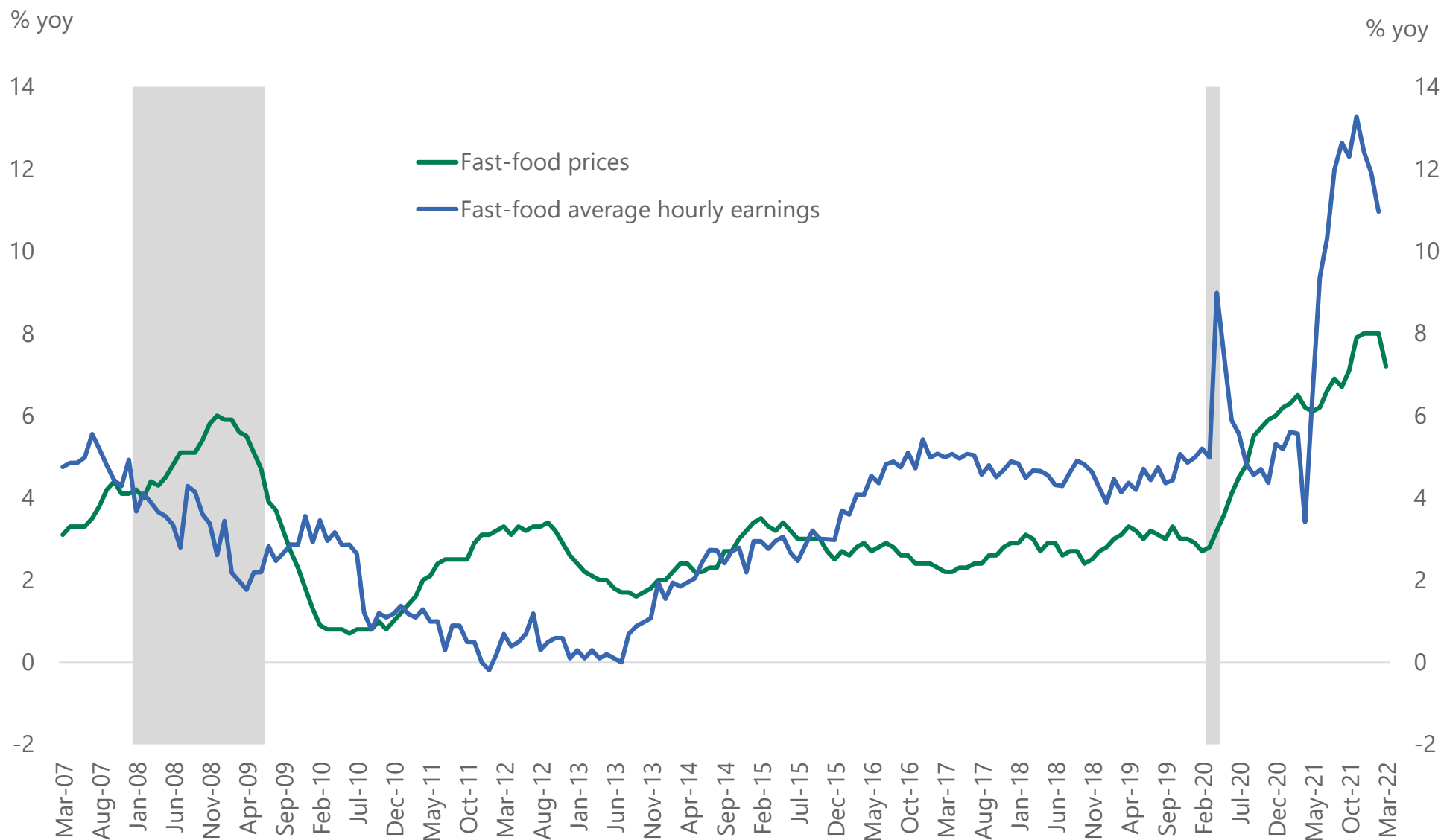
# Hotel and restaurant wages substantially above pre-covid trend



Source: BLS, Haver Analytics, Apollo Chief Economist

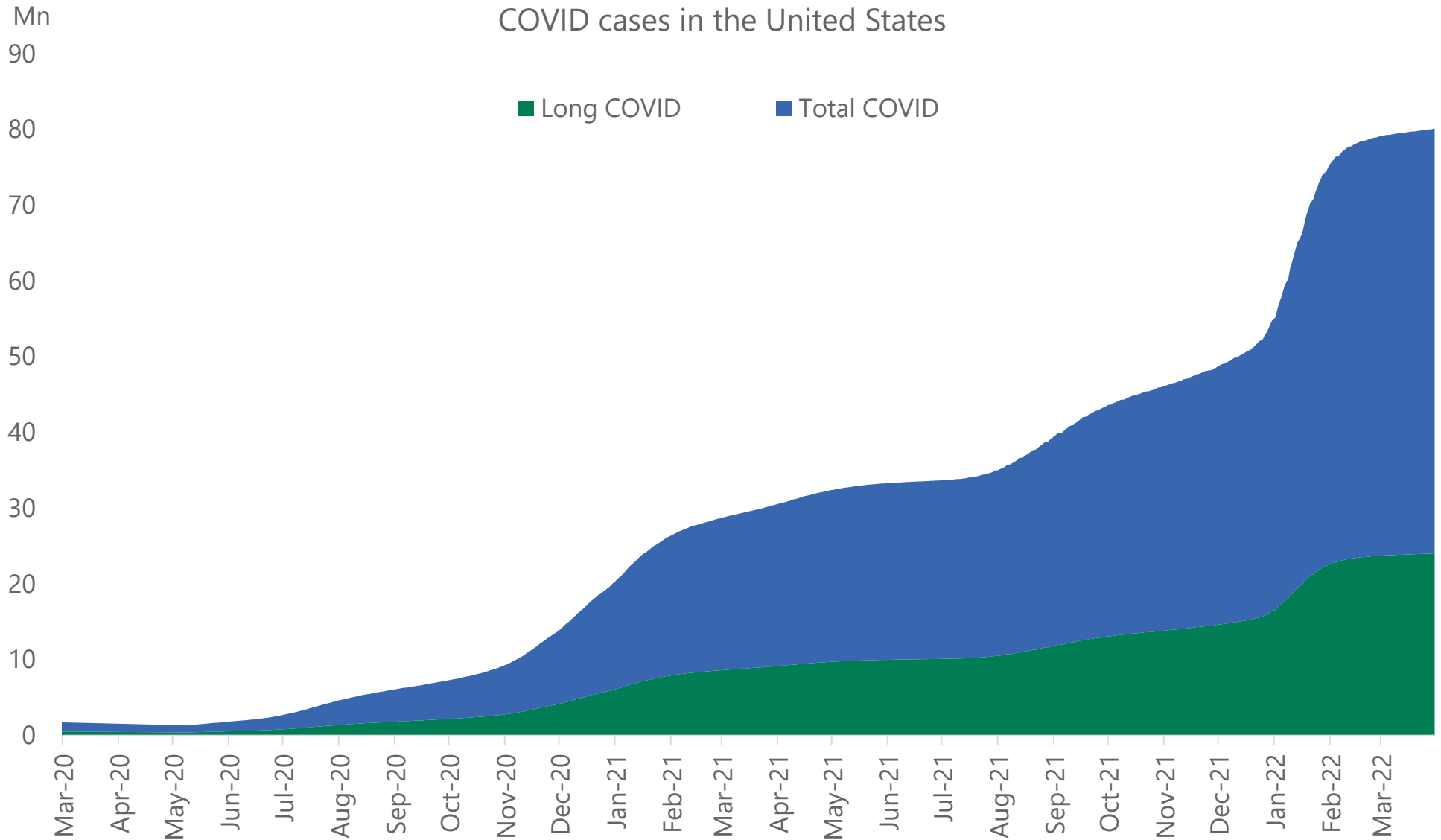


# Labor costs rising faster than selling prices in the fast-food industry



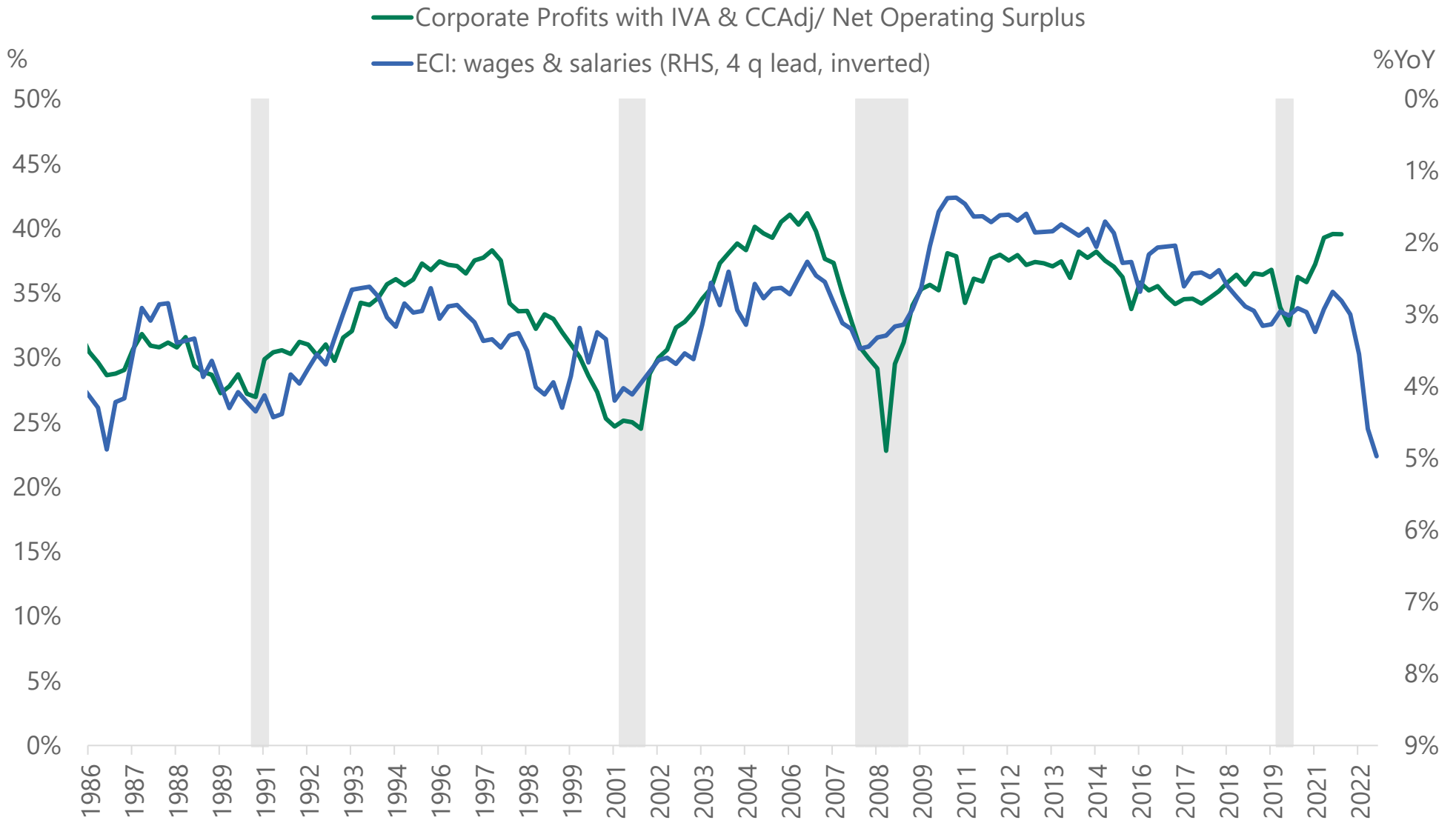
Source: BLS, Haver, Apollo Chief Economist

**80 million people have had covid. 25mn are suffering from long covid, and this is likely holding back labor supply.**



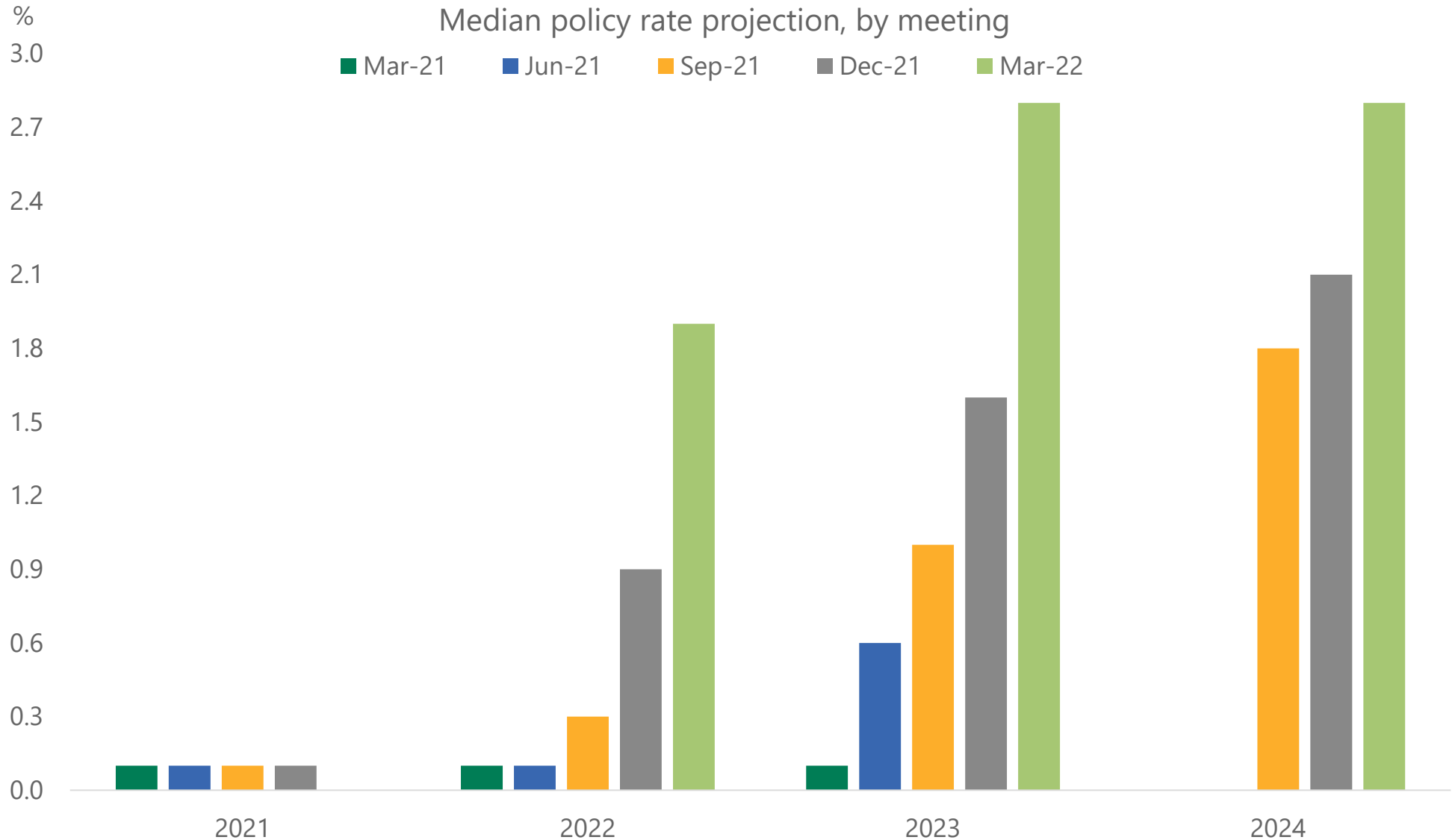
Source: Bloomberg, Apollo Chief Economist, <https://pascdashboard.aapmr.org/>

# Rising labor costs will weigh on profit margins over the coming quarters



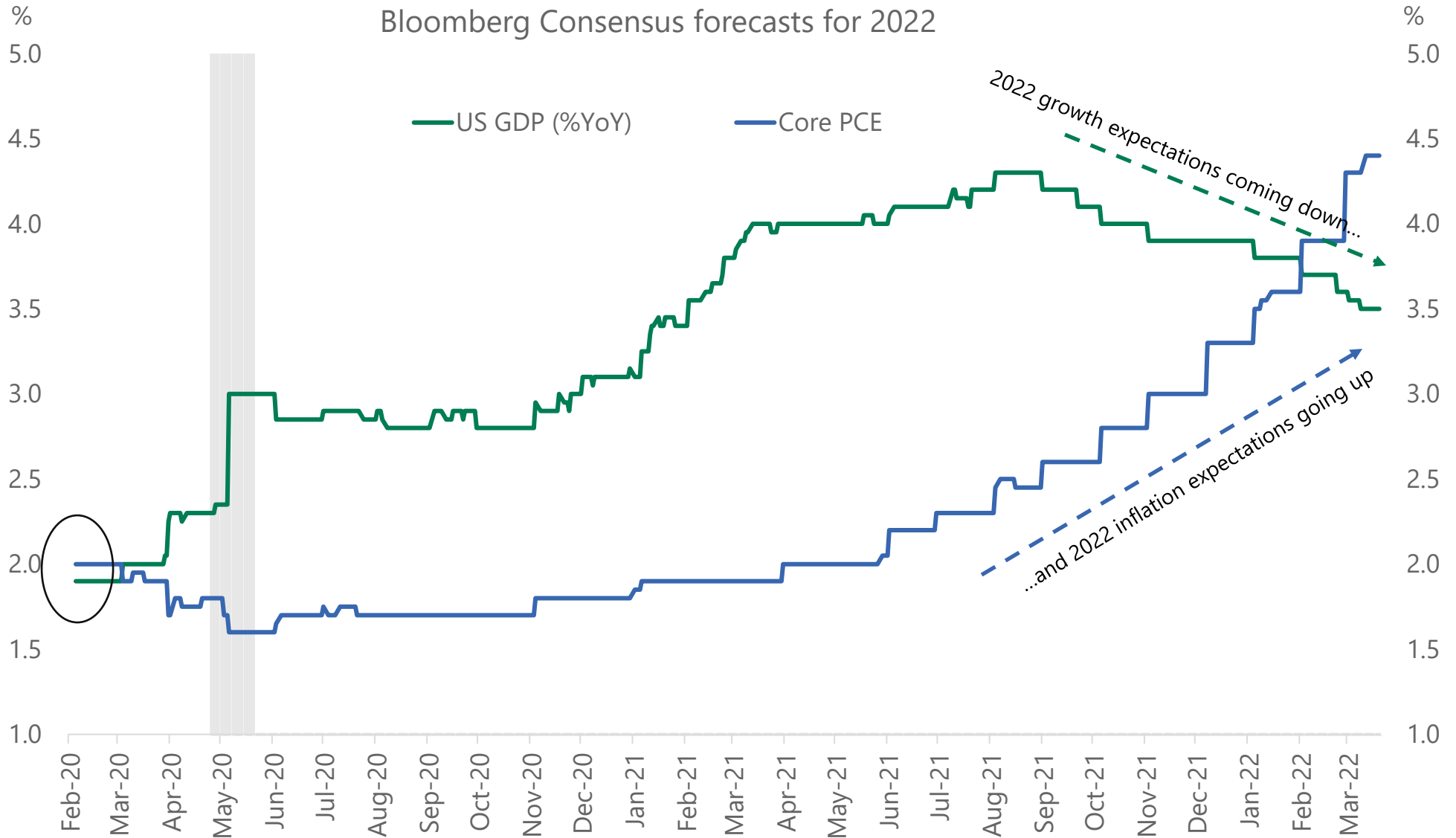
Source: BEA, Haver Analytics, Apollo Chief Economist

# Since March 2021, the Fed has become increasingly hawkish



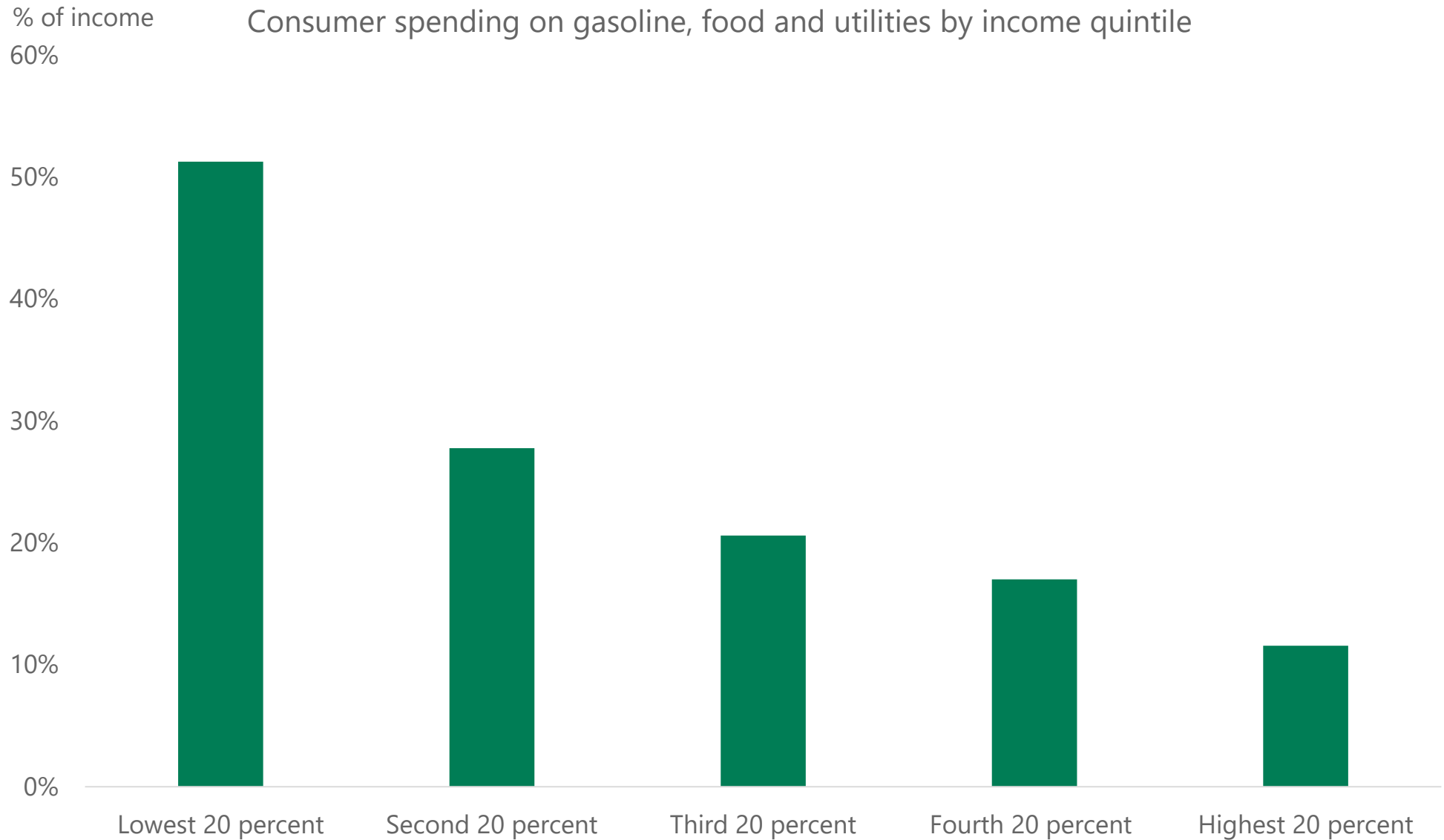
Source: FOMC Summary of Economic Projections, Apollo Chief Economist

# Consensus: Nominal growth: From 4% to 8%



Source: Bloomberg, Apollo Chief Economist

# Share of after-tax income spent on gasoline, food and utilities by income <sup>160</sup>



Source: BLS, Apollo Chief Economist



# Consumer credit quality deteriorating across lower FICO scores

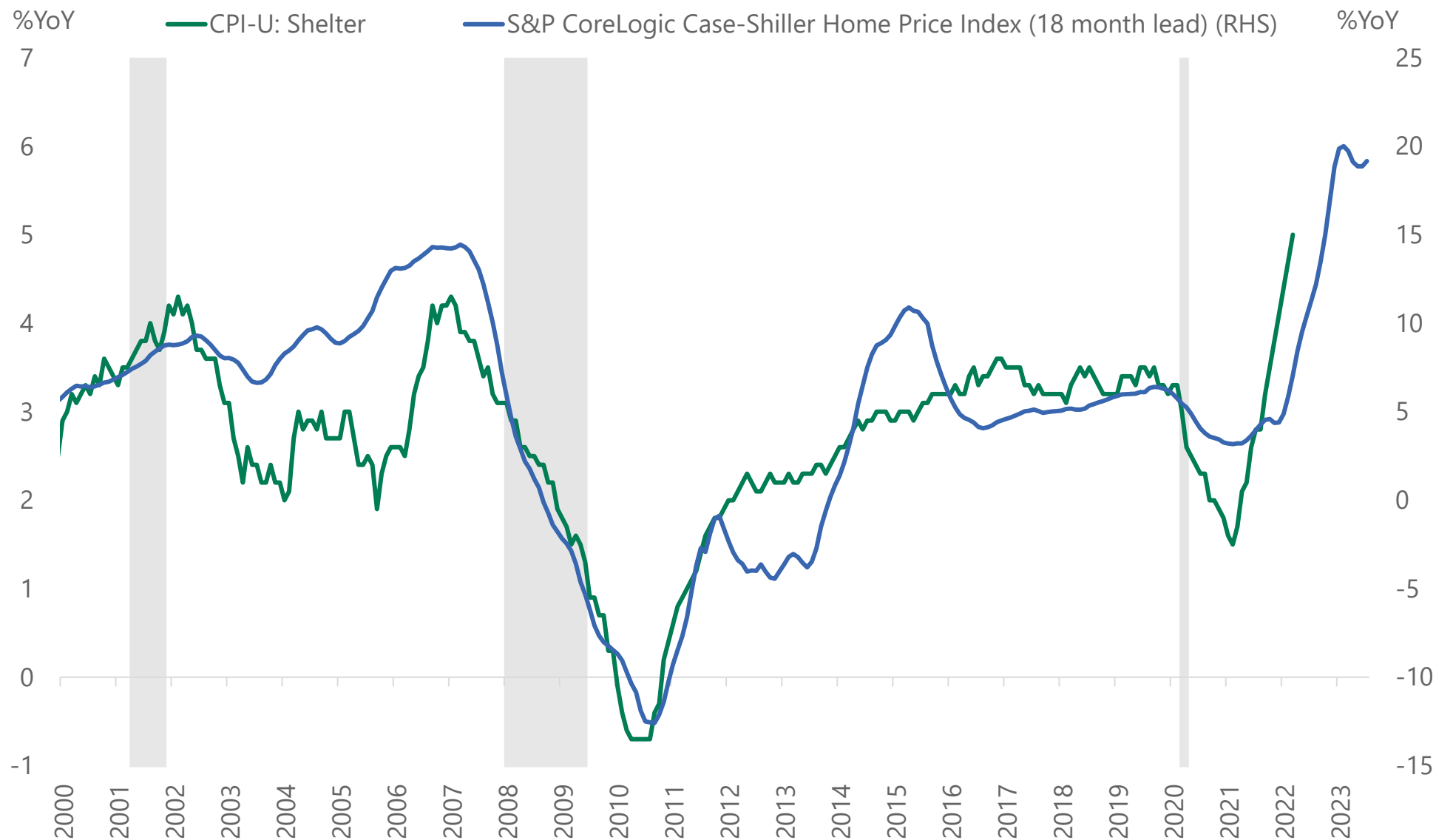
Auto Loans				
+60 day delinquency rate				
	Feb. 2022	Jan. 2022	Feb. 2021	April 2019
Super Prime	0.0%	0.0%	0.0%	0.0%
Prime plus	0.0%	0.0%	0.0%	0.0%
Prime	0.1%	0.1%	0.2%	0.1%
Near prime	0.5%	0.5%	0.6%	0.4%
Subprime	12.0%	11.2%	10.9%	6.8%
Total	1.7%	1.6%	1.6%	1.1%

Credit Cards				
+90 day delinquency rate				
	Feb. 2022	Jan. 2022	Feb. 2021	April 2019
Super Prime	0.00%	0.00%	0.00%	0.00%
Prime plus	0.10%	0.00%	0.00%	0.01%
Prime	0.20%	0.20%	0.20%	0.15%
Near prime	0.99%	0.96%	1.04%	1.11%
Subprime	16.53%	15.67%	15.51%	18.8%
Total	1.59%	1.53%	1.33%	1.78%

Mortgages				
Distribution of Delinquency				
	Feb. 2022	Jan. 2022	Feb. 2021	April 2019
Current	95.8%	95.8%	95.9%	94.0%
30-59 DPD	2.2%	2.3%	2.1%	3.2%
60-89 DPD	1.2%	1.2%	1.2%	1.6%
90+	0.7%	0.7%	0.7%	0.9%
Foreclosure	0.1%	0.1%	0.1%	0.2%

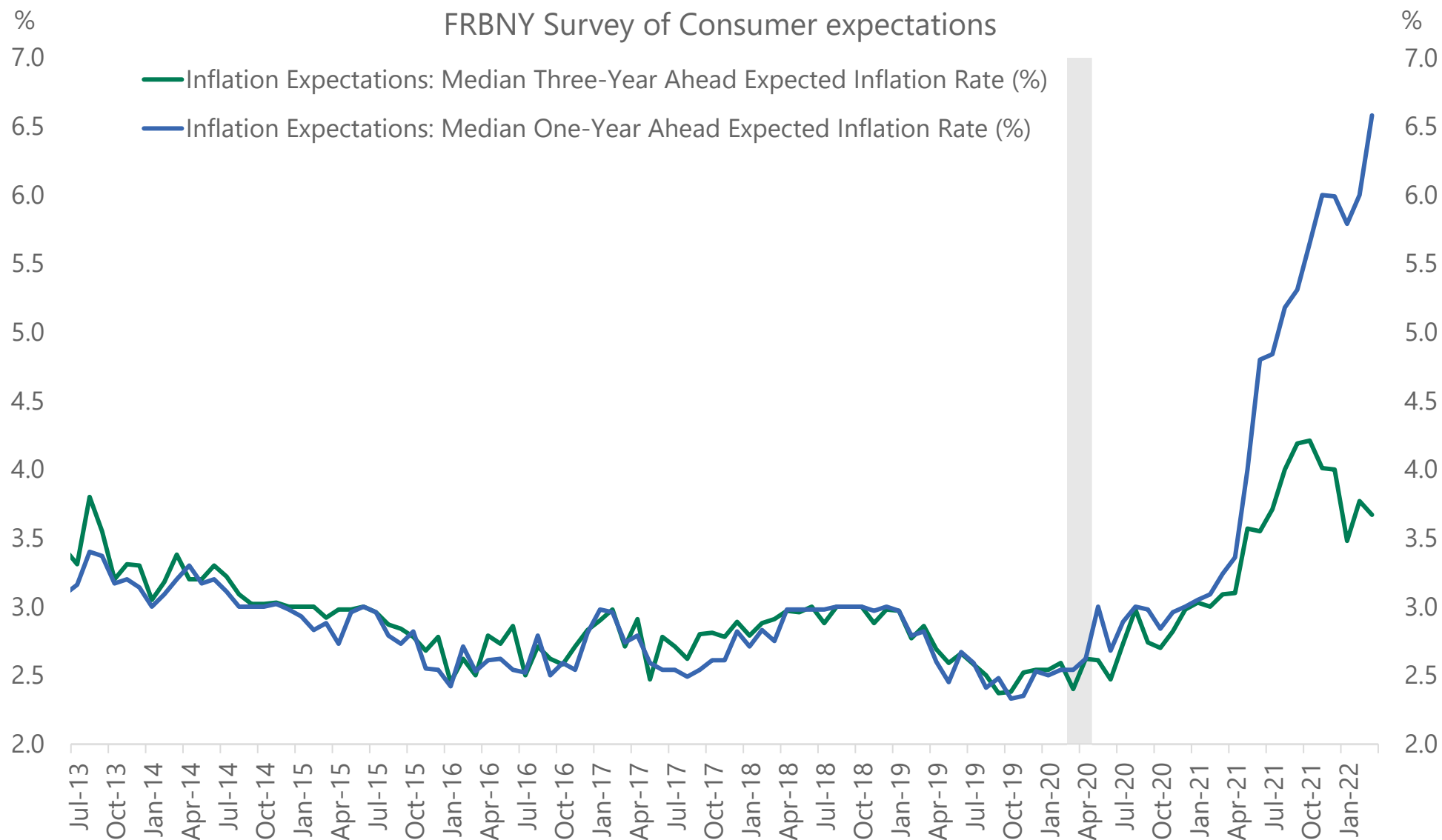
Source: Transunion Monthly Industry Snapshot

# Home prices are a leading indicator of inflation



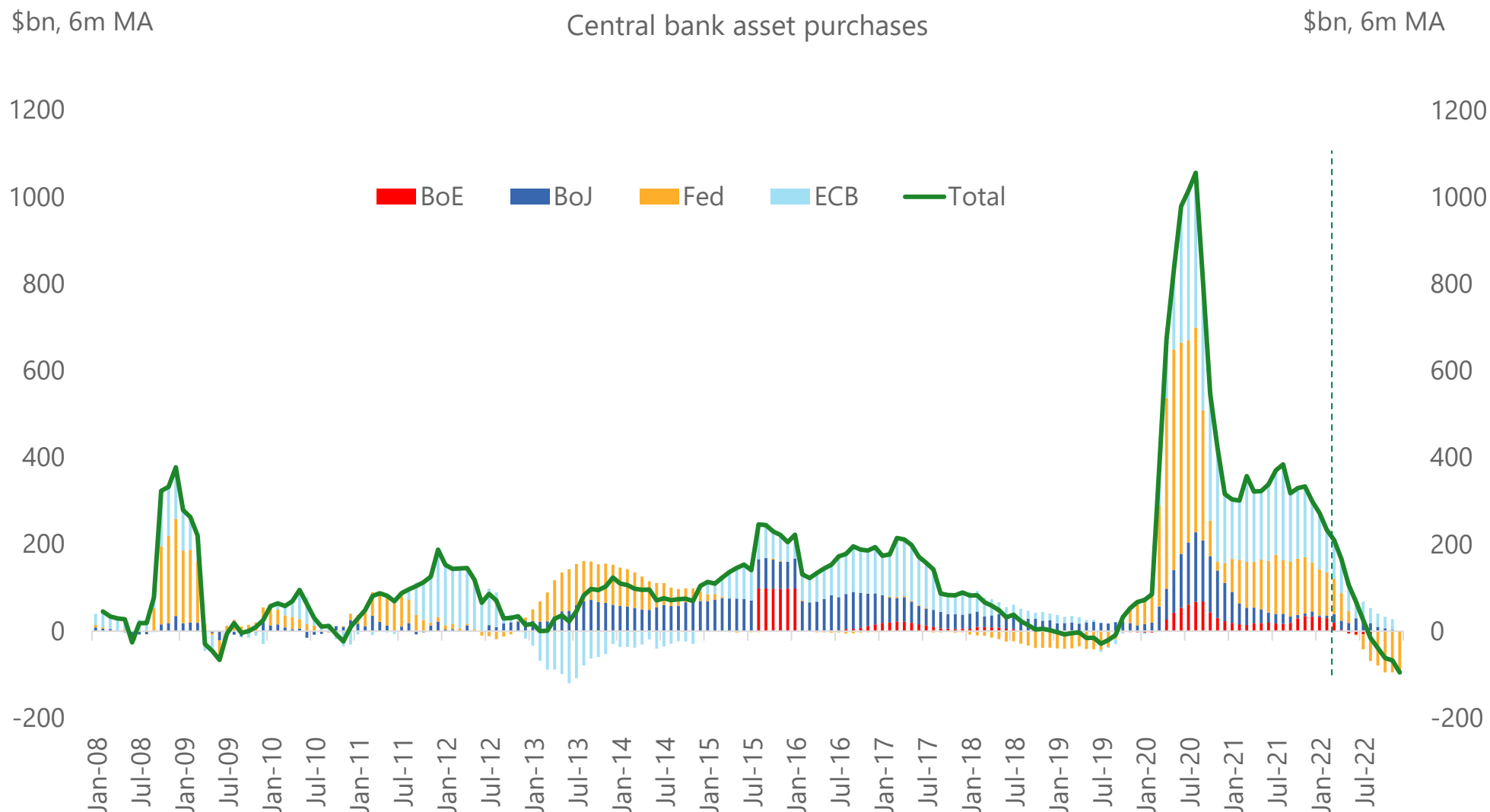
Source: S&P case-shiller, BLS, Bloomberg, Apollo Chief Economist

# Inflation expectations becoming unanchored



Source: FRBNY, Haver Analytics, Apollo Chief Economist

# Global QE is coming to an end



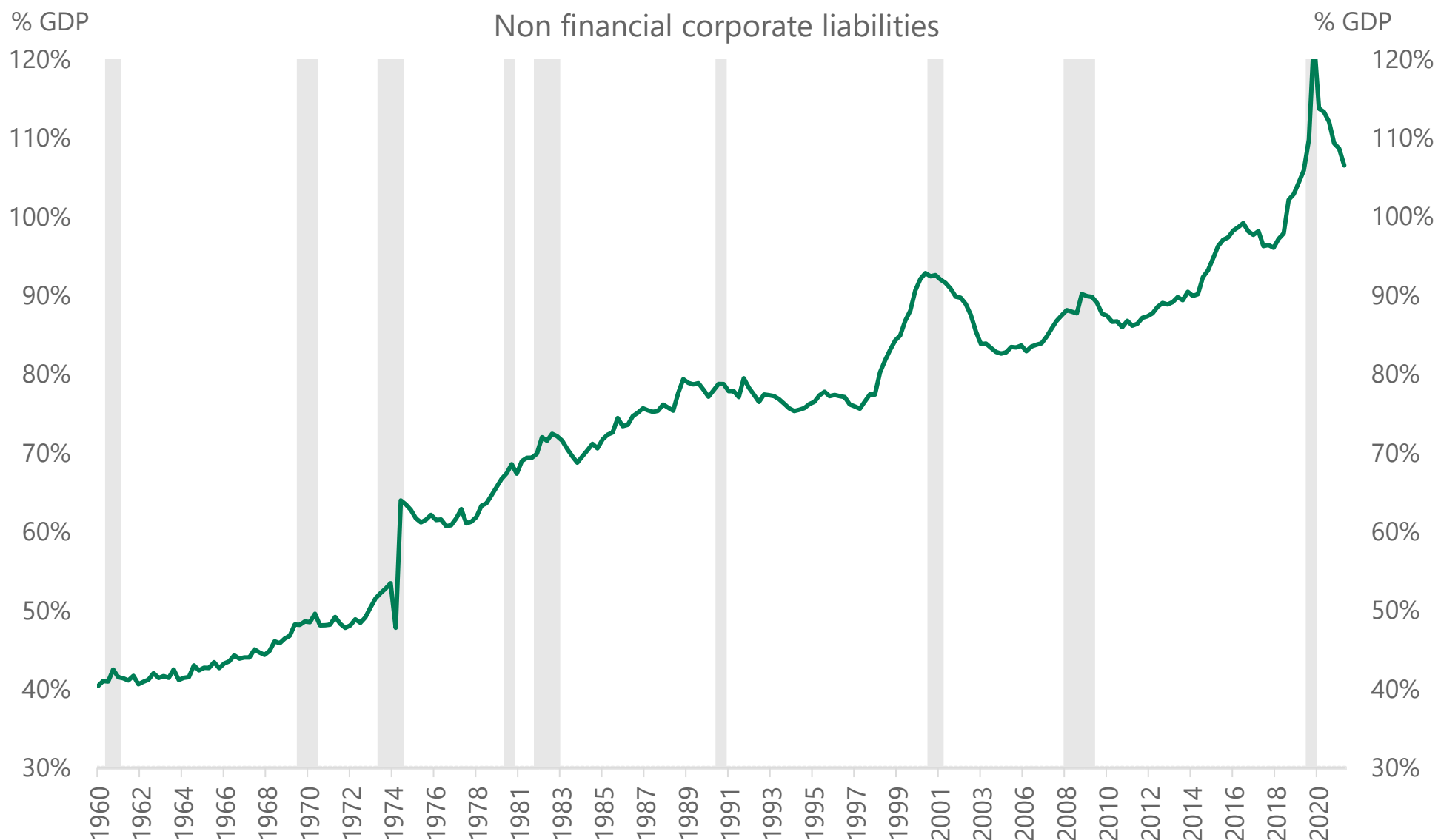
Source: Bloomberg, Apollo Chief Economist. Pace of purchases for 2021: BOE: £3.4bn per week till mid December 2021, FED: USD120bn per month with wind down from December with purchases ending in March 2022, ECB: Euro 90bn per month (20 bn APP + 60 bn PEPP), PEPP till March 2022, Euro 40bn in April, Euro 30bn in May and Euro 20bn in June, and euro 20bn per month onwards. BOJ: USD 70bn per month. For 2022: All programs are expected to wind down linearly from January 2022 to December 2022. Fed QT \$ 95 per month from May 2022.

Credit markets have never been more vulnerable to rising rates.

Three reasons:

- 1) Very high leverage in the corporate sector
- 2) Lower-rated firms make up big share of all debt outstanding
- 3) Record-high duration for the IG index

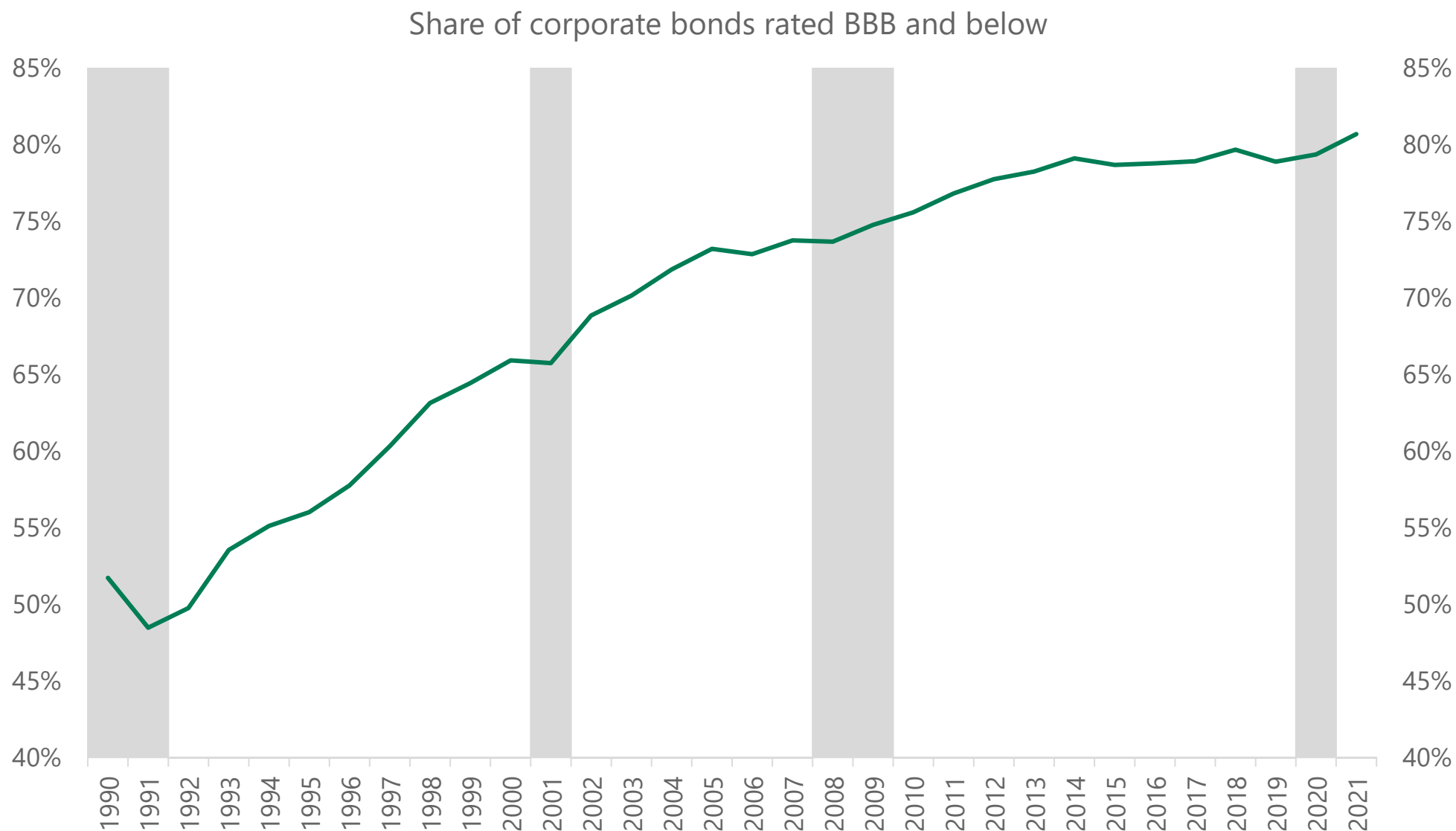
# High debt level in the corporate sector means more vulnerability to rising rates



Source: FRB, Haver Analytics, Apollo Chief Economist

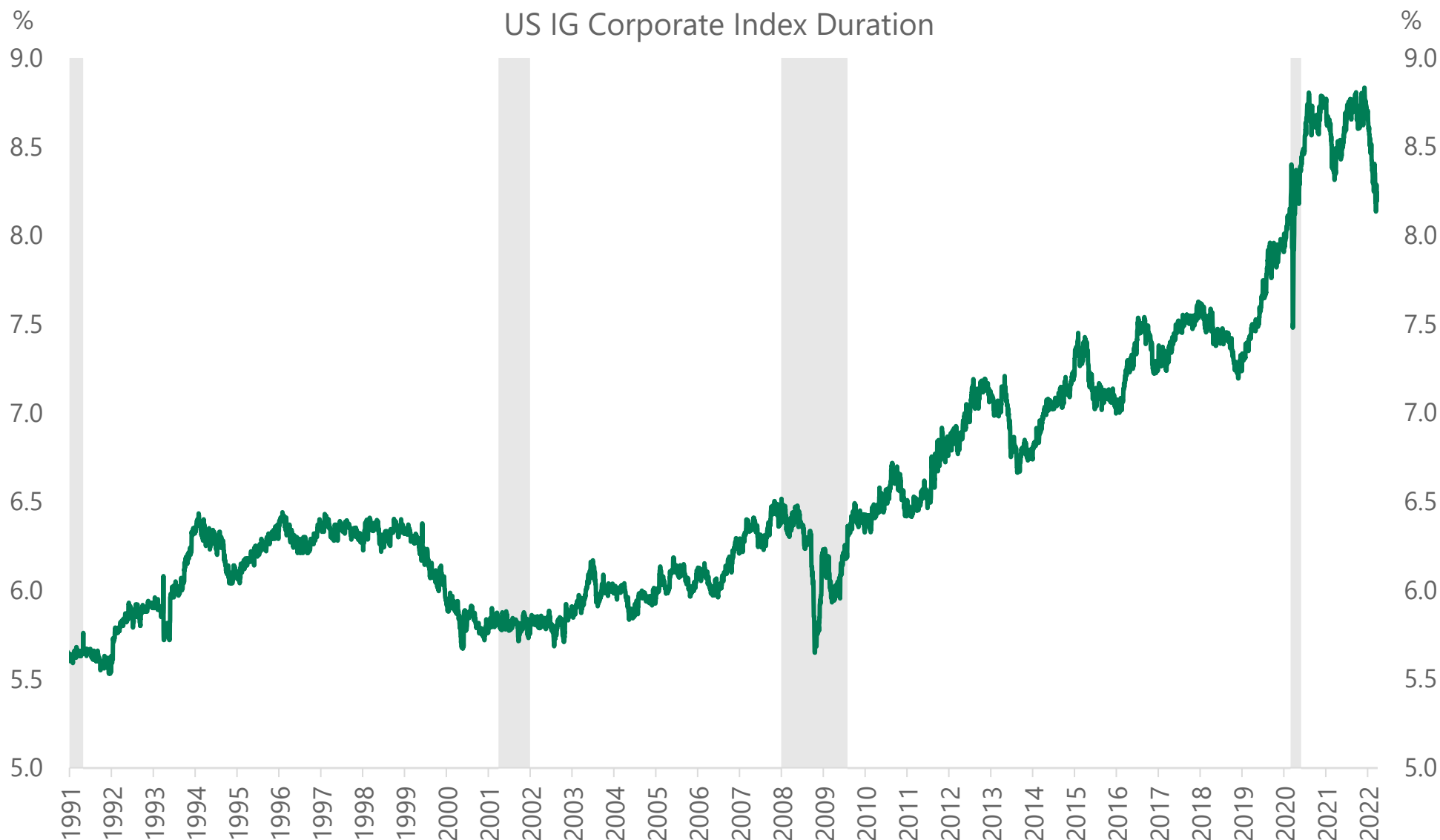


# Lower-rated firms are by definition more vulnerable to rising interest rates



Source: S&P, Apollo Chief Economist (Note: Data as of July 01, 2021)

# Credit has never been more vulnerable to rising rates: IG duration near all-time high



Source: Bloomberg, Apollo Chief Economist. Note: The measure used is modified duration, which measures the expected change in a bond's price to a 1% change in interest rates.

## Asset allocation views

<p><b>Fed outlook</b> Growth slowdown is temporary</p>	<p>Omicron variant has peaked. Ukraine having limited impact on US growth. Consumer spending and capex spending will accelerate in 2022. High inflation is a key risk.</p>
<p><b>Rates outlook</b> More Fed hikes coming</p>	<p>Inflation at 8.5% is meaningfully above the Fed's 2% target. Forces pushing inflation up are supply chain problems, energy prices, higher wages, and higher housing costs. 10s to end 2022 at 2.5%. Curve to flatten.</p>
<p><b>Credit outlook</b> Fed QE is over</p>	<p>IG duration is record-high and corporate leverage is high. Economic outlook is solid, but Fed is hiking and QE is ending in Q1. Could see repeat of 18Q4.</p>
<p><b>Equity outlook</b> Valuations high</p>	<p>P/E ratio remains very high. Stock market is vulnerable to higher wages, Fed hiking, and QE ending.</p>
<p><b>FX outlook</b> Dollar higher</p>	<p>2-year rates expected to go up more in the US than in EU and JP, and the Fed will raise rates before the ECB and BoJ. That should be dollar positive.</p>
<p><b>Commodity outlook</b> Global recovery supports commodities</p>	<p>Accelerating global growth will support commodity markets, including energy. Could have disruptive energy crisis, in particular in Europe.</p>
<p><b>Alternative assets outlook</b> Credit selection/stock picking is key</p>	<p>Themes: Inflation high, rates rising, volatility continues.</p>

## - Inflation is high

High inflation is driven by supply chain problems and by growing demand coming out of covid. **Investors can buy real estate and infrastructure to protect themselves against inflation.**

## - Rates rising

Because of high inflation the Fed is hiking rates. The Fed is expected to increase interest rates nine more times this year. **With this backdrop, investors should be buying floating rate high quality credit.**

## - High volatility in markets

Because of high inflation and rising rates there is a lot of uncertainty in markets. Credit selection and stock picking are key in turbulent markets. **Entry price matters and many things in recent months just got a lot cheaper, in particular in equity markets.**

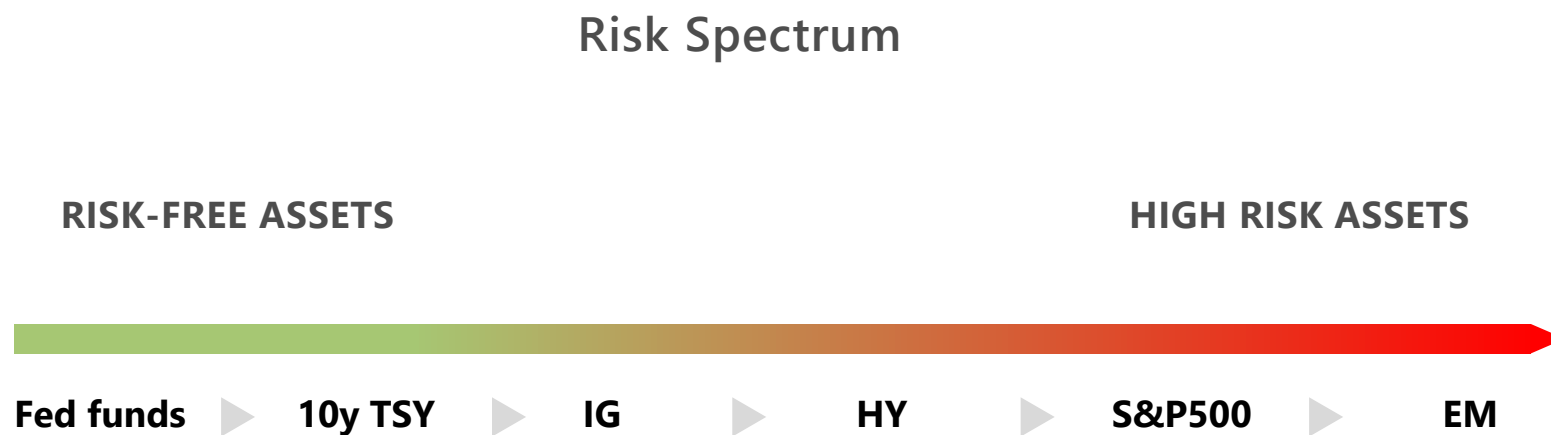
## - Ukraine/Russia

Very little direct impact on US credit and equity markets. But has big impact on energy prices and on supply chains. **This is a stagflation shock: Higher inflation and lower growth, in particular in Europe.**

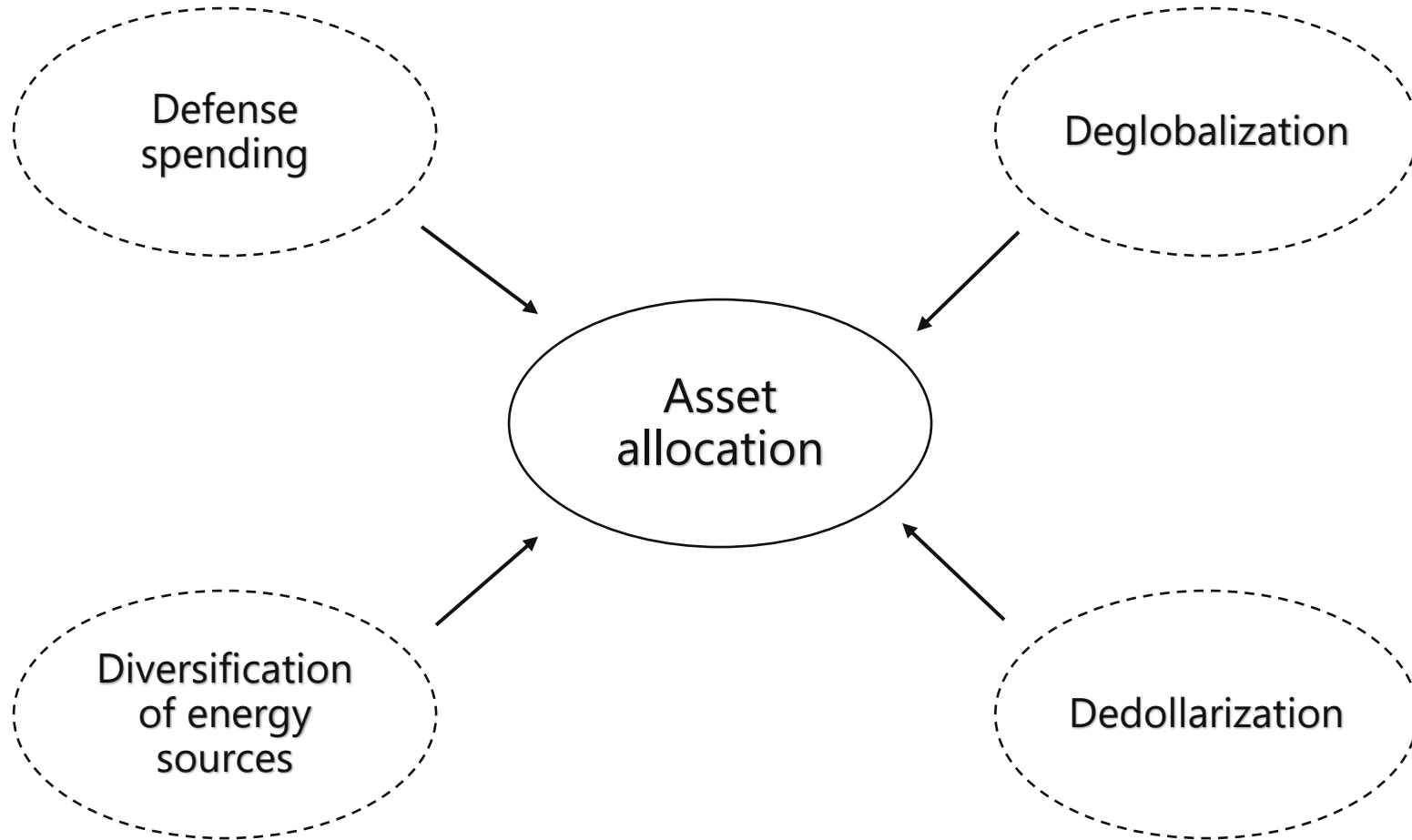
## - High energy prices

**Will accelerate the energy transition and investment in green energy and renewables.** Europe and US looking for other sources of energy than fossil fuels.

Hunt for yield is reversing. Driven by inflation uncertainty.



# Four Megatrends Impacting Asset Allocation After February 24, 2022







## **Torsten Slok, Ph.D.**

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Apollo Global Management

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Torsten Slok joined Apollo in 2020 as Chief Economist and he leads Apollo's macroeconomic and market analysis across the platform.

Prior to joining, Mr. Slok worked for 15 years as Chief Economist at Deutsche Bank where his team was top ranked in the annual Institutional Investor survey for a decade, including #1 in 2019. Prior to joining Deutsche Bank Mr. Slok worked at the IMF in Washington, DC and at the OECD in Paris.

Mr. Slok has a Ph.D in Economics and has studied at the University of Copenhagen and Princeton University.

Asset Class	Investment	Investment Amount	Closing Date
Real Estate	Asana Partners III	\$50 M	March 7, 2022
Private Credit	KKR Lending Partners IV	\$150 M	March 15, 2022
Portable Alpha	Polymer Asia Fund LP	Up to 0.75% of Plan assets	March 30, 2022
Private Equity	Hg Saturn 3	\$50 M	March 31, 2022
Private Equity	Hg Genesis 10	Up to €44 M	April 11, 2022