



## **FIDUCIARY OVERSIGHT REVIEW** December | 2020

Presentation to: **Regional University System of Oklahoma Supplement Retirement Annuity Plan**

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*For Plan Sponsor Use Only | This report must be preceded or accompanied by a prospectus for all mutual funds referenced.*

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## Section 1: Fiduciary Protocol: Meet - Monitor - Document

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## INVESTMENT ADVISORY SERVICES

Service	Frequency	Date Delivered
Fiduciary Oversight Reviews	Quarterly	11/13/2020
Committee Meetings	Quarterly	9/30/2020
Capital Markets Review	Quarterly	11/13/2020
Asset Quality Review & Due Diligence	Quarterly	9/30/2020
Actuarial Valuation	Annually	9/30/2020
Investment Policy Statement Recommendations	Annually	
Investment Policy Statement Review	Biennial	
Money Market / Stable Value Review	Biennial	11/13/2020

## PLAN ADMINISTRATION

Service	Frequency	Date Delivered
Review of Industry Trends	Quarterly	11/13/2020
Cash-Flows/Transactions	Quarterly	12/17/2020
Review of Priorities and Goals	Annually	11/13/2020
Plan Provisions and Plan Design	Annually	11/13/2020
Expense Review	Annually	11/13/2020

## FIDUCIARY

Service	Frequency	Date Delivered
Fiduciary Training	Annually	
Co-Fiduciary Support	Annually	

## COMPLIANCE

Service	Frequency	Date Delivered
Regulatory / Compliance Updates	Quarterly	9/30/2020

#### NEWSLETTERS / WHITEPAPERS

Plan Sponsor Newsletter - IRS Pre-Approved Plan Document Restatement Requirement

Retirement Plan Spotlight – IRS Cost of Living Adjustments for 2021

Retirement Plan Spotlight - California, Oregon and Illinois State Retirement Programs

Retirement Plan Spotlight – Correcting Delinquent Contributions

Retirement Plan Spotlight – DB | Year End Pension Plan Update

Market & Legal Update - October 2020

Market & Legal Update - November 2020

Market & Legal Update - December 2020

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## Section 2: Retirement Landscape & Industry Trends

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# Leading Brokerage & Consulting Firm **USI at a Glance\***

USI at a Glance		USI
<p><b>2<sup>nd</sup></b></p> <p><b>Largest</b> privately-held broker of U.S. business</p>	<p>The USI ONE Advantage<sup>®</sup> delivers superior client solutions with financial impact</p>	<p><b>500,000<sup>+</sup></b></p> <p>clients served</p>
<p><b>"America's Best Large Employers"</b></p> <p><i>Two Years in a Row!</i></p> <p>Forbes Magazine, 2018 &amp; 2019</p>		<p><b>\$2 BILLION</b> IN Revenue</p> <p>Over</p>
<p><b>8,000<sup>+</sup></b> employees</p>	<p><b>~200 Local offices</b></p> <p>Servicing local, national, and international needs.</p>	<p><b>150<sup>+</sup></b> Years of brokerage experience</p> <p>through our acquired agencies</p>
<p>PROPERTY &amp; CASUALTY ■ EMPLOYEE BENEFITS ■ PERSONAL RISK ■ PROGRAMS ■ RETIREMENT CONSULTING</p>		

\*Information provided is specific to USI, the parent company of USI Consulting Group



# Permanent Private Capital Ownership\*

Evergreen Capital Structure for Long Term Investment, Growth & Success

- **Employee Owned Partnership**

- Over 1,000 USI employees are owners of our firm, investing over a quarter of a billion dollars, from all roles across the organization, including all of our leadership and top producers.

- **Plus KKR Balance Sheet Evergreen Investment**

- Leading alternative investment firm with \$130 billion of assets under management. Global presence with offices in 20 cities in 16 countries across 5 continents. 40-year History with \$71 billion invested and an average 26% IRR. First of its kind balance sheet investment from KKR's \$18 billion balance sheet (evergreen capital).

- **Plus CDPQ Evergreen Pension Fund Investment**

- Leading fund manager for Canadian pension and insurance plans with \$190 billion in net assets. 50-year investment track record. Long term pension fund investment time frame (evergreen capital).



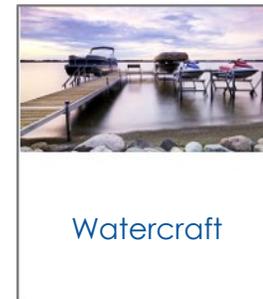
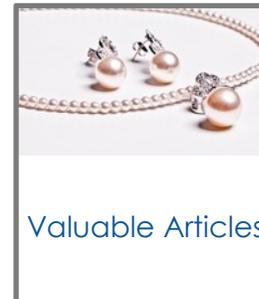
USI is an Employee Owned Partnership with a Unique Evergreen Capital Structure for Long Term Investment and Innovation to Meet our Clients' Needs Today, and in the Future.

\*Information provided is specific to USI, the parent company of USI Consulting Group



# USI ONE® Personal Risk Solutions\*

USI's has made, and continues to make, an unparalleled investment in the personal risk services practice designed to help individuals and family offices design insurance programs that address **risk exposure, enhance coverage** and **manage rate control** with **superior account service**.



\*Information provided is specific to USI, the parent company of USI Consulting Group

# Retirement Plan Landscape & Industry Trends – Defined Contribution

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## Annual Business Planning Checklist

The purpose of this checklist is to highlight key topics and considerations that must be evaluated this quarter and throughout the year.

**Business Planning:** Notify your USICG Representative of the following actions, which will impact your company's retirement plan and IRS compliance tests.

✓ Acquisitions or mergers in the prior year or on the horizon for this year. Please refer to our Mergers & Acquisitions Guide

[https://www.usicg.com/calendar/q1/DC\\_Mergers\\_and\\_Acquisitions\\_Guide.pdf](https://www.usicg.com/calendar/q1/DC_Mergers_and_Acquisitions_Guide.pdf) for additional information

✓ Change in ownership in the prior year or this year and whether the company is part of a controlled group

✓ Significant number of new hires, layoffs, or divestitures in the prior year or plans for this year

✓ Changes to any match or employer contribution formulas

### Compliance Testing

✓ Prepare for the 2020 annual compliance testing, confirm data needed and deadline by the recordkeeper

✓ Identify any late or missed deposits and contact your USICG Representative for correction methods and next steps

### Regulatory Updates

✓ Ensure your payroll/HRIS systems have been updated to reflect the new compensation limit for 2021

✓ CARES Act & SECURE Act: See reminders in Section 3 of this report about re-amortization of loan suspensions and long-term part time employees

### Plan Design Changes

✓ If auto enrollment and/or auto increase were recently implemented, check that deductions were executed accurately

✓ Confirm recent changes to any other plan provisions were executed timely, communicated to plan participants and are being operated accordingly

### Prior Year-End Reminders

✓ ERISA budget/forfeiture account clean up, small balance mandatory cash outs, distribution of annual notices, required minimum distributions (if opted out of CARES Act waiver)

### Education Strategy

✓ Collaborate with your USICG Representative and your plan recordkeeper to devise an employee education plan and communication calendar for this year, including the communication of the Tax Saver's Credit

### Goals & Priorities

✓ Review accomplishments from the prior year, set up goals and priorities for this year

✓ If plan recently transferred from another provider, schedule an after-conversion checkup meeting

✓ Schedule committee meetings for the entire upcoming year, if possible

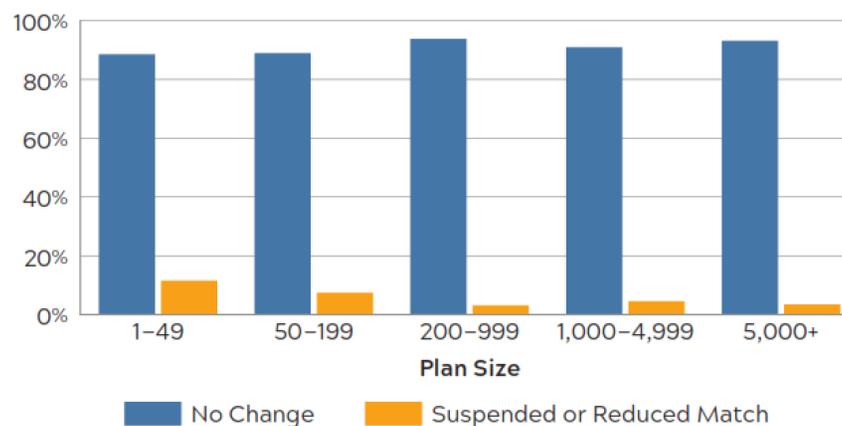
Please contact your USICG Representative for further detail or questions.

## Retirement Plan Landscape & Industry Trends – Defined Contribution

### COVID-19 Impact on 401(k) Plans

#### Changes to Employer Contributions as a Result of the COVID-19 Pandemic

- Based on a survey completed by the Plan Sponsor Council of America (“PSCA”), the below exhibit shows how there were not as many changes to employer contributions as may have been assumed.
  - Further, it is evident that smaller Plans with fewer than 50 participants have made more changes to the matching contribution versus the number of organizations with 5,000 or more participants.
  - Interestingly, based on a survey that was performed by the PSCA in 2009, after the 2008 financial crisis, it was found that four times as many employers moved to suspend matching contributions in comparison to thus far in 2020. Additionally, it was noted that larger employers were more likely to make this change, which has been the opposite trend during the pandemic.

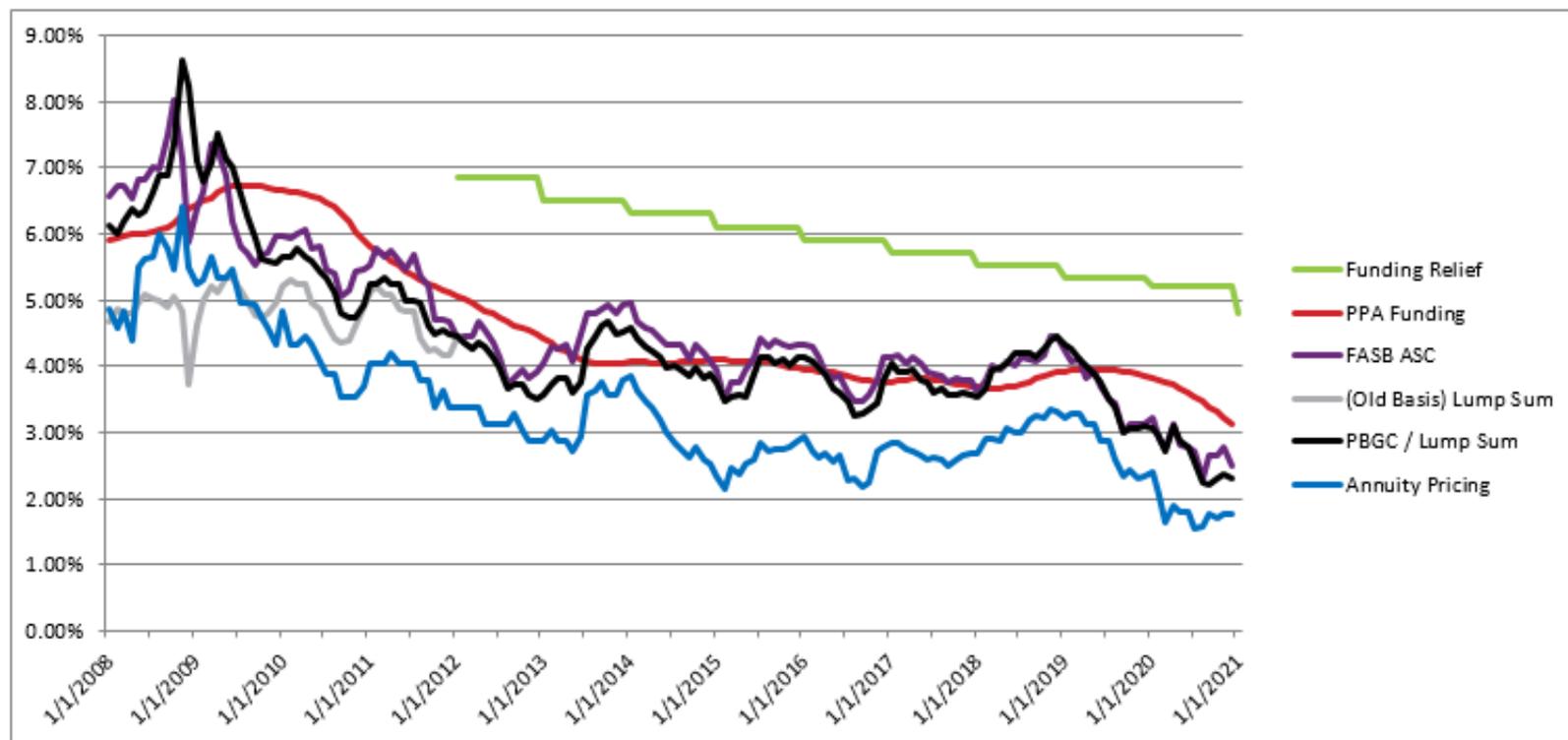


#### Changes to Plan Design as a Result of the COVID-19 Pandemic

- Of the organizations that participated in the PSCA survey, 94.9% **are not** considering any other plan design changes currently.
  - However, more than half are providing participants with education about the impact of plan loans and distributions on retirement savings.
- Of the participating organizations whose plans are offering coronavirus-related distributions (CRDs), 38.7% state that an average of only 1%-5% of participants are utilizing this option; more are doing so now than in June of 2020.

# Retirement Plan Landscape & Industry Trends – Defined Benefit

## Historical Interest Rates



- Interest rate displayed for Funding Relief and PPA Funding represent the second segment rate in each month.
- PPA Funding assumes no funding relief took effect and uses the 24-month average of the second segment rate issued by the IRS.
- FASB ASC Rates are represented by the monthly FTSE Pension Liability Index long-duration discount rate.
- Lump Sum/PBGC rates depict the one-month second segment rate issued by the IRS. These rates are averaged to develop PPA Funding rates. Earlier years of the lump sum rates reflect the phasing-out of the 30-Year Treasury basis.
- Annuity pricing is provided by an insurance carrier and is proprietary information. These rates should not be shared with other carriers and should be used for discussion purposes only. Pricing varies daily based on available rates in the market and on costs to administer benefits.

	Funding Relief	PPA Funding	FASB ASC	Lump Sum/PBGC	Annuity Pricing
<b>Rates as of 1/1/2020:</b>	5.21%	3.83%	3.22%	3.06%	2.40%
<b>Rates as of 12/1/2020:</b>	5.21%	3.12%	2.50%	2.31%	1.77%

Source: IRS.gov; [www.yieldbook.com/m/indices/FTSE-pension-liability.shtml](http://www.yieldbook.com/m/indices/FTSE-pension-liability.shtml)

### Historical Interest Rates (continued)

#### Funding Contribution Calculations

- **Funding Relief interest rates** will drop about 40bps/year for the next four years (assuming current bond rates remain level) as the corridor boundaries of the 25-year corporate bond average gradually expand 5% each year to eventually reach a minimum of 70%, maximum of 130% of the 25-year average.
- Without relief, plan sponsors would base contribution calculations on the **PPA Funding rates**, the 24-month average of corporate bonds. This is the basis for PBGC variable rate premiums under the alternative method and the maximum tax-deductible contribution amount.

**PBGC** (variable-rate premium under the standard method) **and Lump Sum rates** reflect the 1-month corporate bond rates, as issued by the IRS. These rates make up the interest rates for funding interest rates above.

- If a plan sponsor is looking to amend the plan to provide a lump sum window (and currently has no full lump sum optional form), the interest rate month for those calculations should be considered in the plan amendment.

**FASB ASC** calculations are often based on the FTSE Yield Curve (issued monthly), or a dedicated bond model portfolio.

**Plan termination pricing is a blend of the lump sum and annuity pricing rates**, depending on the percentage of the active/terminated vested population electing a lump sum distribution (if the plan permits this option).

# Retirement Plan Landscape & Industry Trends – Defined Benefit

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## Year-End Pension Plan Updates

### Discount Rates

- High quality corporate bond yields have fallen 70bp since 12/31/2019
  - Liabilities may increase 7%-14%, depending on duration
  - Investment performance may offset liability losses

### Mortality

- In 2019, the Society of Actuaries released the Pri-2012 Private Retirement Plans Mortality Table
  - Yields slight decreases in life expectancy from prior tables
- A new mortality projection scale was released, MP-2020
  - Minor decreases in life expectancy
- No published tables reflect the impacts of COVID-19 yet
  - 2020 experience may impact 2020 year-end liabilities

### 2021 Minimum Required Contributions

- Interest rates used for funding contribution calculations dropped 40bp from 2020 to 2021
  - 4%-8% increase in liabilities, offset slightly by IRS mortality updates, will lead to contribution increases
- Positive asset performance may reduce contribution increases, depending if asset smoothing is used

### De-Risking

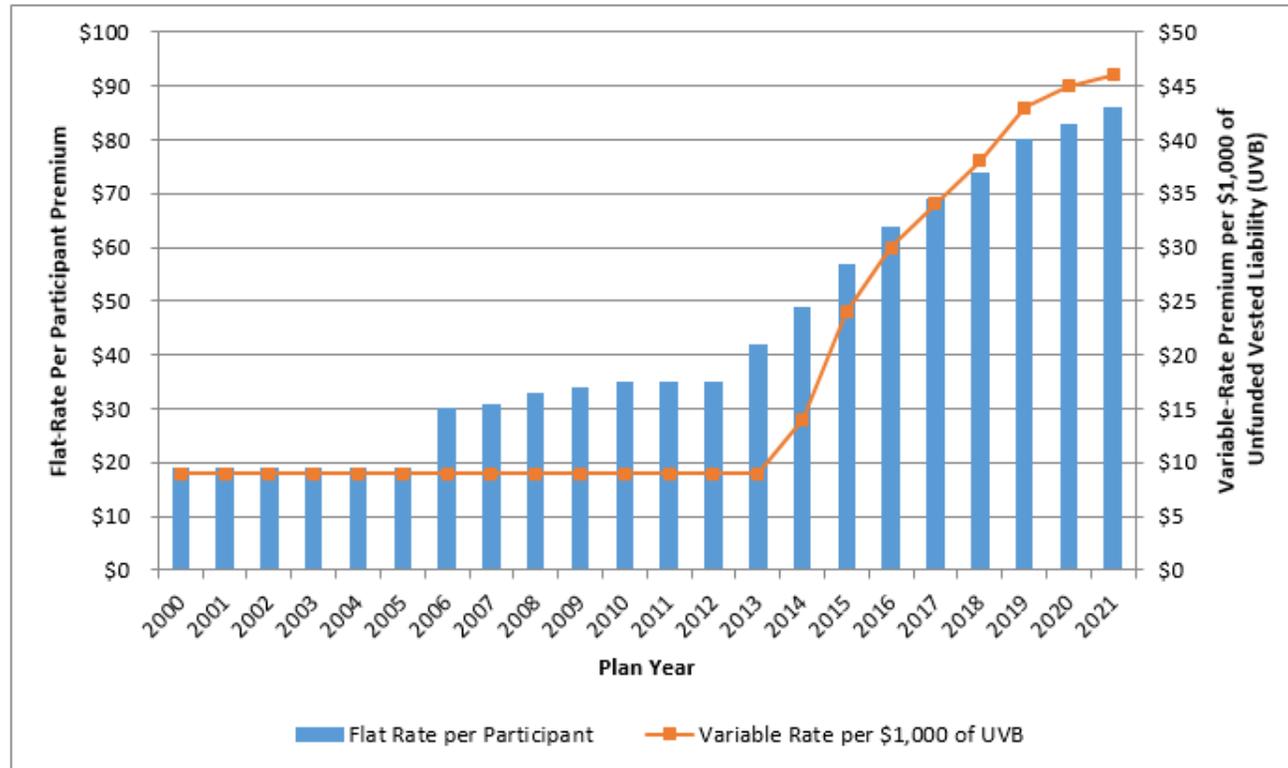
- Positive asset performance may open opportunities to de-risk in 2021
  - Consider locking in returns through liability driven investing, annuity purchases and lump sum windows
- 2020 was another record year for annuity placements, despite the pandemic, and plan sponsors continued to implement lump sum windows
  - These de-risking measures reduce plan size, investment risk, administrative costs and PBGC premiums

# Retirement Plan Landscape & Industry Trends – Defined Benefit

## Year-End Pension Plan Updates: PBGC Premium Updates

### PBGC Premiums

- More increases to Flat Rate and Variable Rate
- Strategies may be available to reduce PBGC premiums; contact your actuary to discuss



Plan Year	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019	2021
<b>Flat Rate per Participant</b>	\$19	\$19	\$19	\$31	\$34	\$35	\$42	\$57	\$69	\$80	\$86
<b>Variable Rate per \$1,000 of UVB</b>	\$9	\$9	\$9	\$9	\$9	\$9	\$9	\$24	\$34	\$43	\$46
<b>Variable Rate per Participant Cap</b>	N/A	N/A	N/A	N/A	N/A	N/A	\$400	\$418	\$517	\$541	\$582

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## Section 3: Legal & Regulatory Developments

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## Legal & Regulatory Developments – Defined Contribution

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### CA & OR State Retirement Programs

- The states of California, Illinois, and Oregon have implemented state-run retirement savings programs for private sector workers whose employers do not offer a retirement plan. Employers that do provide a retirement plan for their employees will be considered exempt from the state's retirement program requirements and will need to register their business as an exempt employer. Please note, even if the employer does not have its headquarters in one of these states, but still has employees that reside in these states, they must register as an exempt employer. Instructions and more information can be found in our [Retirement Plan Spotlight](#).<sup>1</sup>

### IRS Guidance for Terminating 403(b) Plans on Revenue Ruling 2020-23<sup>2</sup>

- Revenue Ruling 2020-23, issued on November 5, 2020, provides guidance about termination of 403(b) plans. Below are the highlights:
  - 403(b) retirement plans funded through 403(b)(7) custodial accounts can be terminated by distributing the Individual Custodial Account (ICA) in-kind to participants or beneficiaries if they do not provide an affirmative election at plan termination.
  - If certain requirements are met, custodial accounts that are distributed to a participant (or beneficiary) will not be includable in the gross income of such participant (or beneficiary) until such amounts are actually paid to the participant (or beneficiary).
  - Once the ICA has been distributed, the plan sponsor has no material retained rights under that ICA.

This guidance provides a further pathway to 403(b) plan termination which previously did not exist. In the past, many plans that had to freeze, may now be able to terminate and distribute those accounts.

### IRS Issues Final Rollover Rules for Qualified Plan Loan Offsets (QPLO)<sup>3</sup>

On December 7, 2020, the Internal Revenue Service released final regulations pertaining to qualified plan loan offset (QPLO), which occur upon participants' severance of employment or at plan termination. Below are the highlights:

- A plan loan offset amount is the amount by which, under the terms governing a plan loan, a participant's accrued benefit is reduced (offset) in order to repay the loan. Participants receiving loan offset distributions typically would have been given 60 days to come up with the loan offset amounts and rollover into either a new qualified plan or IRA to avoid taxation and early distribution penalty.
- The new IRS QPLO rule extends the rollover period from 60 days to the participants' tax filing due date (including extensions) for the tax year in which the offset is treated as distributed from a qualified plan.
- This new rule will apply to plan loan offset amounts—including QPLO amounts—treated as distributed on or after January 1, 2021.

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Source: 1–USI Consulting Group's Retirement Plan Spotlight, December 2020, 2 – USI Advisor's November 2020 Market & Legal Update, 3 –ASPPA's December 2020 Article: IRS Issues Final, Rollover Rules for Qualified Plan Loan Offsets

## Legal & Regulatory Reminders – Defined Contribution

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### Defined Contribution Plan Document Restatements due by July 31, 2022

- For 401(k), Profit Sharing, Money Purchase and ESOP's using an IRS pre-approved plan document

### Plan Document tack-on Amendments required by end of Plan's 2021 plan year

- Bipartisan Budget Act - Hardship Provisions Amendment only for 403(b) Plans

### Plan Document tack-on Amendments required by end of Plan's 2022 plan year

- SECURE Act Amendment
- CARES Act Amendment
- For all Defined Contribution Plans including 403(b) Plans

Your provider will reach out with more details and the exact date about the above-mentioned amendments for your Plan(s)

### SECURE Act Reminders

- Long-term part timers – start tracking hours on January 1, 2021
  - 401(k) plans are required to permit long service part-time employees who are at least age 21 to make elective deferrals if they have worked at least 500 hours per year but less than 1,000 hours per year during three (3) consecutive 12-month periods
- Retroactive Safe Harbor status for Plan's that provide Safe Harbor Nonelective Contributions
  - Notice requirements are eliminated for these contributions but still required for safe harbor matching plans or QACA matching plans
- Plans have as late as 12 months following the end of the plan year to add a safe harbor nonelective contribution, but the allocation must be 4% of participants' compensation. Otherwise, plans have until 30 days before the end of the plan year to add a 3% safe harbor non-elective contribution.

### CARES Act 2020 Reminders

- Covid-19 Related Distributions no longer available after December 30, 2020
- Re- amortization of Covid-19 Loan Repayment Suspensions begin in January 2021

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## Section 4: Economic Review & Capital Markets Analysis

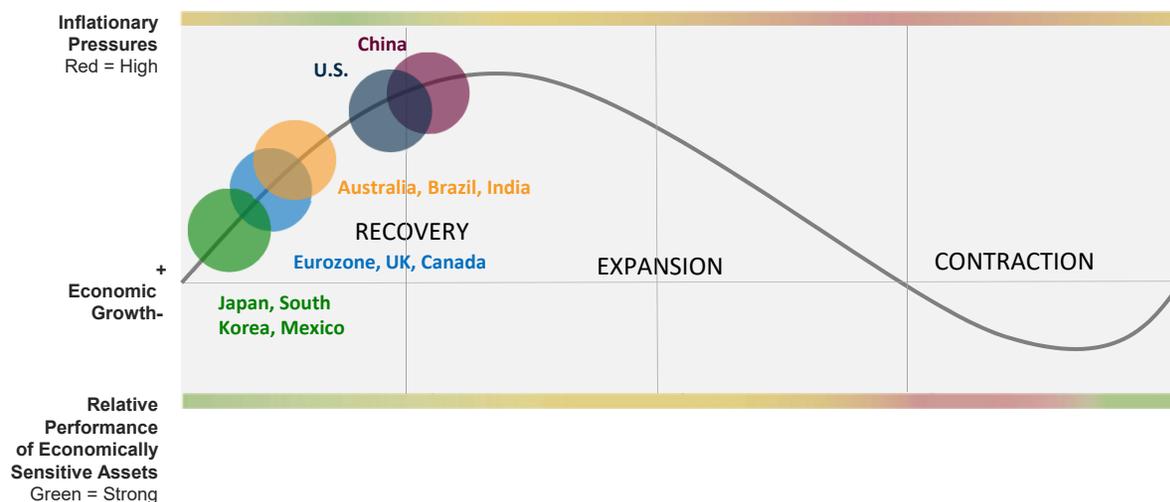
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## Economic Review – Domestic Economic Indicators

Leading Economic Indicators				
		Current	Previous	Frequency
Stock Market	Dec-20	3,732.04	3,340.47	Quarterly
Manufacturing PMI	Dec-20	57.1	53.2	Monthly
Inventory Levels	Oct-20	0.7%	0.8%	Monthly
Retail Sales	Nov-20	-1.1%	-0.1%	Monthly
Building Permits	Nov-20	1635	1544	Monthly
Housing Market	Oct-20	1.5%	1.7%	Monthly
Level of New Business Start-up	Mar-20	804,398	770,609	Annual

Lagging Economic Indicators				
		Current	Previous	Frequency
GDP Growth Rate	Sep-20	33.4%	-31.4%	Quarterly
Income/Wages	Dec-20	\$25.09	\$24.87	Monthly
Unemployment Rate	Dec-20	6.7%	6.7%	Monthly
Core Inflation	Nov-20	1.6%	1.6%	Monthly
Currency	Dec-20	90	94	Quarterly
Interest Rate	Dec-20	0.25%	0.25%	Quarterly
Corporate Profits	Sep-20	\$2018B	\$1589B	Quarterly

World Markets along the Economic Cycle

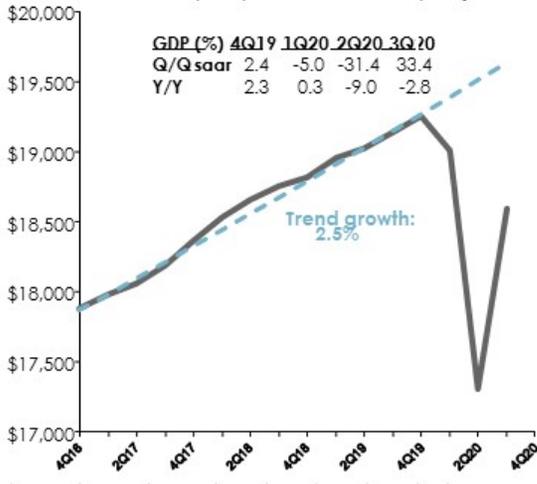


The U.S. as well as many other major economies continued progressing into more mature recoveries as 2020 came to a close. Many still face virus-related headwinds, and activity remains below 2019 levels in most countries. The prospect of a vaccine-assisted full reopening, however, could continue the broadening of the global economic expansion.

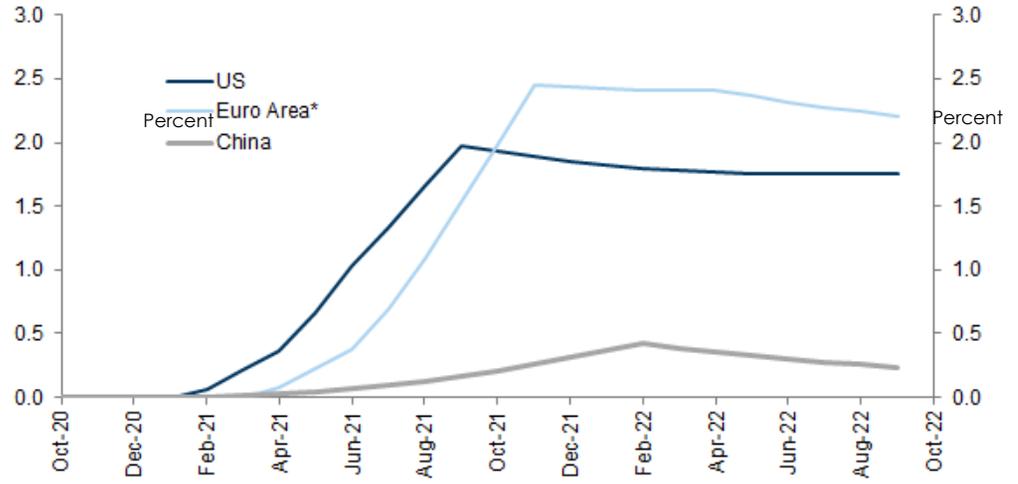
# Economic Review – The Virus, The Vaccine, and The Recovery

## Real GDP

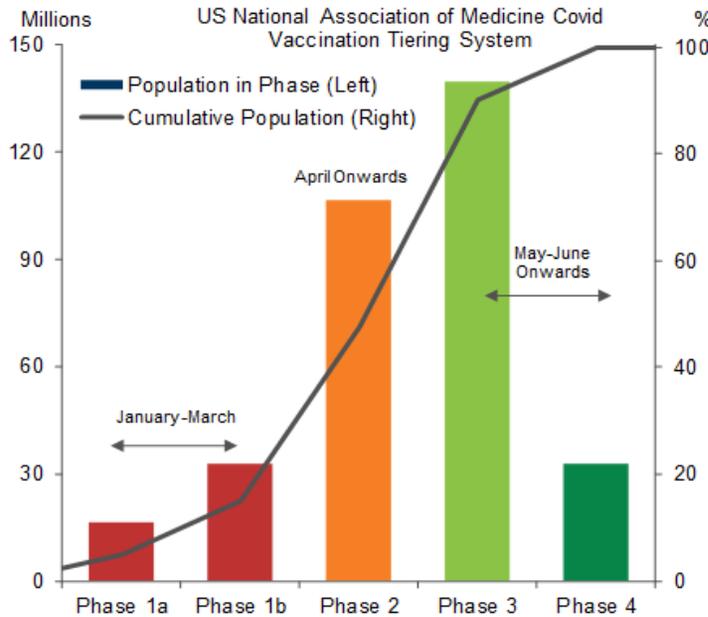
Billions of chained (2012) dollars, seasonally adjusted at annual rates



## Estimated Impact of Vaccine on Real GDP Level



Due to the coronavirus, every major economy suffered a downturn in GDP in 2020, except for China. However, economists anticipate that economies will receive a much-needed boost as a vaccine is rolled out in various phases leading to a rebound in 2021 and even stronger growth in 2022, especially in Europe and the U.S. The chart on the right highlights the U.S. vaccine distribution.

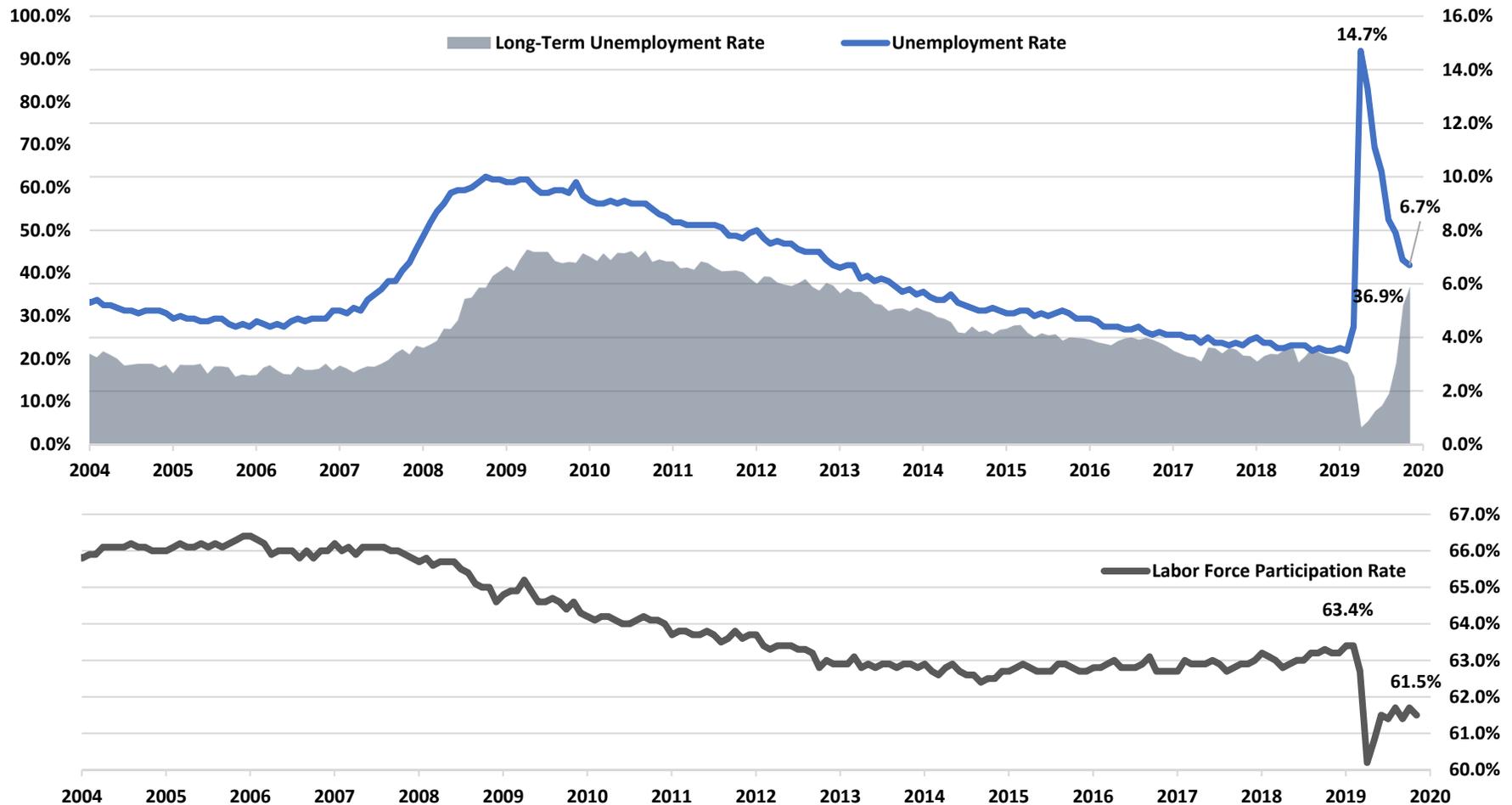


Phase 1 (~45mn)	Phase 2 (~105mn)
<p><i>Phase 1a</i></p> <ul style="list-style-type: none"> <li>- High Risk Health Workers (12.6mn)</li> <li>- First Responders (2.1mn)</li> </ul> <p><i>Phase 1b</i></p> <ul style="list-style-type: none"> <li>- 2+ Comorbid Conditions (20mn)</li> <li>- Over Age 65 in Crowded Settings (6.8mn)</li> </ul>	<ul style="list-style-type: none"> <li>- One Comorbid Condition (80mn)                             <ul style="list-style-type: none"> <li>- Obesity (30mn)</li> <li>- Diabetes (10mn)</li> </ul> </li> <li>- Remaining Over Age 65 (13.2mn)</li> <li>- K-12 Teachers (9.1mn)</li> <li>- Essential Workers (2.7mn) in                             <ul style="list-style-type: none"> <li>- Food Production/Cashiers</li> <li>- Construction/Utilities</li> <li>- Transportation/Delivery</li> </ul> </li> <li>- Incarcerated + Staff (2.7mn)</li> <li>- Homeless + Shelter Staff (1mn)</li> </ul>
Phase 3 (~140mn)	Phase 4 (~33mn)
<ul style="list-style-type: none"> <li>- Children (80mn)</li> <li>- Young Adults Ages 18-30 (46.5mn)</li> <li>- Workers in Important Industries (13mn)                             <ul style="list-style-type: none"> <li>- University Staff</li> <li>- Factory Workers</li> <li>- Restaurant/Hotel Staff</li> <li>- Bank Tellers and Librarians</li> <li>- Barbers and Exercise Instructors</li> </ul> </li> </ul>	<p>Remaining population of the US (33mn)</p>

Source: J.P. Morgan Asset Management *Guide to the Markets – U.S.*, National Association of Medicine, Goldman Sachs Global Investment Research. Data are as of December 31, 2020.

## Economic Review – Labor Markets

Since April 2020, we have witnessed a rapid recovery in the unemployment rate, yet we are subsequently experiencing an increase in the long-term unemployment rate (those who have been out of work for more than six months) as many are still unable to find work. Furthermore, the labor force participation rate (the share of working-age people who are employed, on temporary layoff, or actively searching for work) has fallen since February 2020, whereby more than three million people have left the workforce and are no longer actively looking for work. Consequently, they are no longer counted in the unemployment rate which can factor into its recent descent.



Source: FRED. Data are as of December 31, 2020.

## Capital Markets Analysis - Equity

Fund Name	Tot Ret 3 Mo	Tot Ret YTD	Tot Ret 12 Mo	Tot Ret Annlzd 3 Yr	Tot Ret Annlzd 5 Yr	Tot Ret Annlzd 10 Yr
Large Value	16.3	2.8	2.8	6.1	9.7	10.5
Large Blend	12.1	18.4	18.4	14.2	15.2	13.9
Large Growth	11.4	38.5	38.5	23.0	21.0	17.2
Mid Cap Value	20.4	5.0	5.0	5.4	9.7	10.5
Mid Cap Blend	19.9	17.1	17.1	11.6	13.4	12.4
Mid Cap Growth	19.0	35.6	35.6	20.5	18.7	15.0
Small Value	33.4	4.6	4.6	3.7	9.7	8.7
Small Blend	31.4	20.0	20.0	10.2	13.3	11.2
Small Growth	29.6	34.6	34.6	16.2	16.4	13.5
International Equity	16.1	8.3	8.3	4.8	8.0	6.0
World Stock	17.1	11.1	11.1	5.4	9.4	5.4
Emerging Markets Equity	19.8	18.7	18.7	6.6	13.2	4.0

While 2020 was not a pleasant experience for most citizens of the world, global equity markets surprisingly set records which significantly aided pension plan asset growth. The S&P 500 returned 18.4%, NASDAQ rocketed up 43.6%, MSCI EAFE was up 7.8%, and the Barclays Aggregate Bond index rose at 7.5%. The markets fell sharply earlier in the year, with the S&P 500 price index falling at a record pace of 34% in just 23 trading days to a market low on March 23. With the aid of fiscal and federal stimulus and better than expected economic news and corporate profits that exceeded analyst expectations, the S&P 500 roared back, setting a five-month performance record that existed since 1938 and surging nearly 68% from the low to close the year. The December rollout of Pfizer/BioNTech and Moderna's vaccinations in the U.S. as well as AstraZeneca/Oxford vaccine in the U.K. gives reason for optimism that the pandemic could finally be eradicated in 2021.

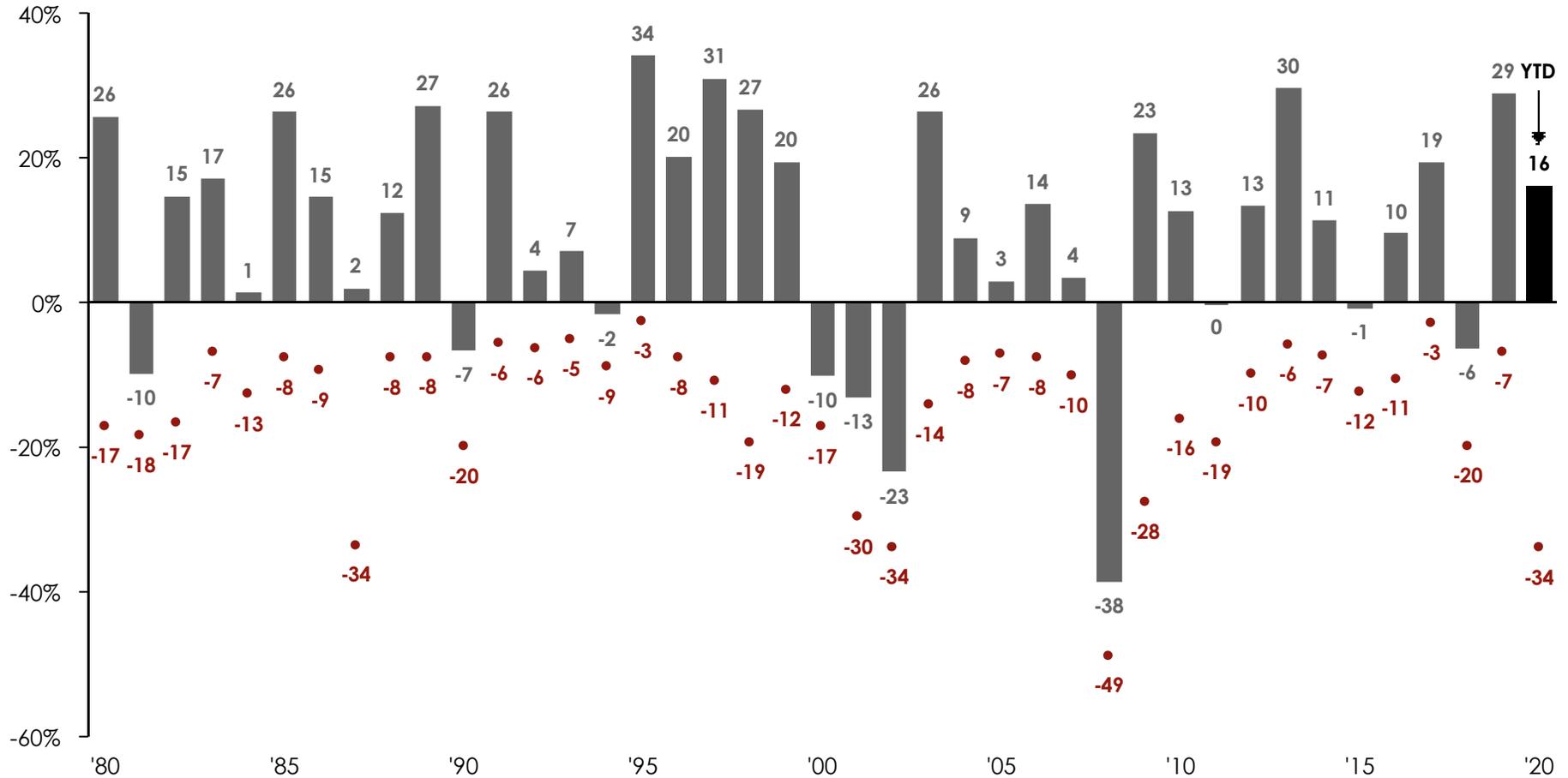
	Energy	Materials	Financials	Industrials	Cons. Disc	Technology	Comm. Services	Real Estate	Health Care	Cons. Staples	Utilities	S&P 500 Index
<b>S&amp;P 500 Weight</b>	<b>2.3%</b>	<b>2.6%</b>	<b>10.4%</b>	<b>8.4%</b>	<b>12.7%</b>	<b>27.6%</b>	<b>10.8%</b>	<b>2.4%</b>	<b>13.5%</b>	<b>6.5%</b>	<b>2.8%</b>	<b>100.0%</b>
Russell Growth weight	0.1%	0.8%	1.9%	4.5%	16.8%	45.1%	11.1%	1.6%	13.6%	4.6%	0.0%	100.0%
Russell Value weight	4.4%	4.8%	19.6%	13.4%	7.7%	9.7%	9.6%	4.4%	13.4%	7.6%	5.5%	100.0%
<b>QTD</b>	27.8	14.5	23.2	15.7	8.0	11.8	13.8	4.9	8.0	6.4	6.5	12.1
<b>YTD</b>	(33.7)	20.7	(1.7)	11.1	33.3	43.9	23.6	(2.2)	13.4	10.7	0.5	18.4
<b>Since Market Peak</b> (February 2020)	(27.2)	22.6	(2.8)	7.6	25.3	28.4	16.1	(8.2)	11.1	8.0	(7.5)	12.7
<b>Since Market Low</b> (March 2020)	65.2	91.8	70.3	84.5	83.5	86.5	62.5	47.3	54.1	42.1	43.8	70.2

Source: Morningstar, as of 12/31/2020. Large Value: Russell 1000 Value, Large Blend: S&P 500, Large Growth: Russell 1000 Growth, Mid Cap Value: Russell Mid Value, Mid Cap Blend: Russell Mid Cap, Mid Cap Growth: Russell Mid Growth, Small Cap Value: Russell 2000 Value, Small Blend: Russell 2000, Small Value: Russell 2000 Value, International Equity: MSCI EAFE, World Stock: MSCI ACWI ex US, Emerging Markets Equity: MSCI EM.

# Annual Returns and Intra-Year Declines

## S&P 500 intra-year declines vs. calendar year returns

Despite average intra-year drops of 14.3%, annual returns positive in 31 of 41 years



Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management. Returns are based on price index only and do not include dividends. Intra-year drops refer to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2020, over which time period the average annual return was 9.0%. Guide to the Markets – U.S. Data are as of December 31, 2020.

# Capital Markets Analysis – Asset Class Returns

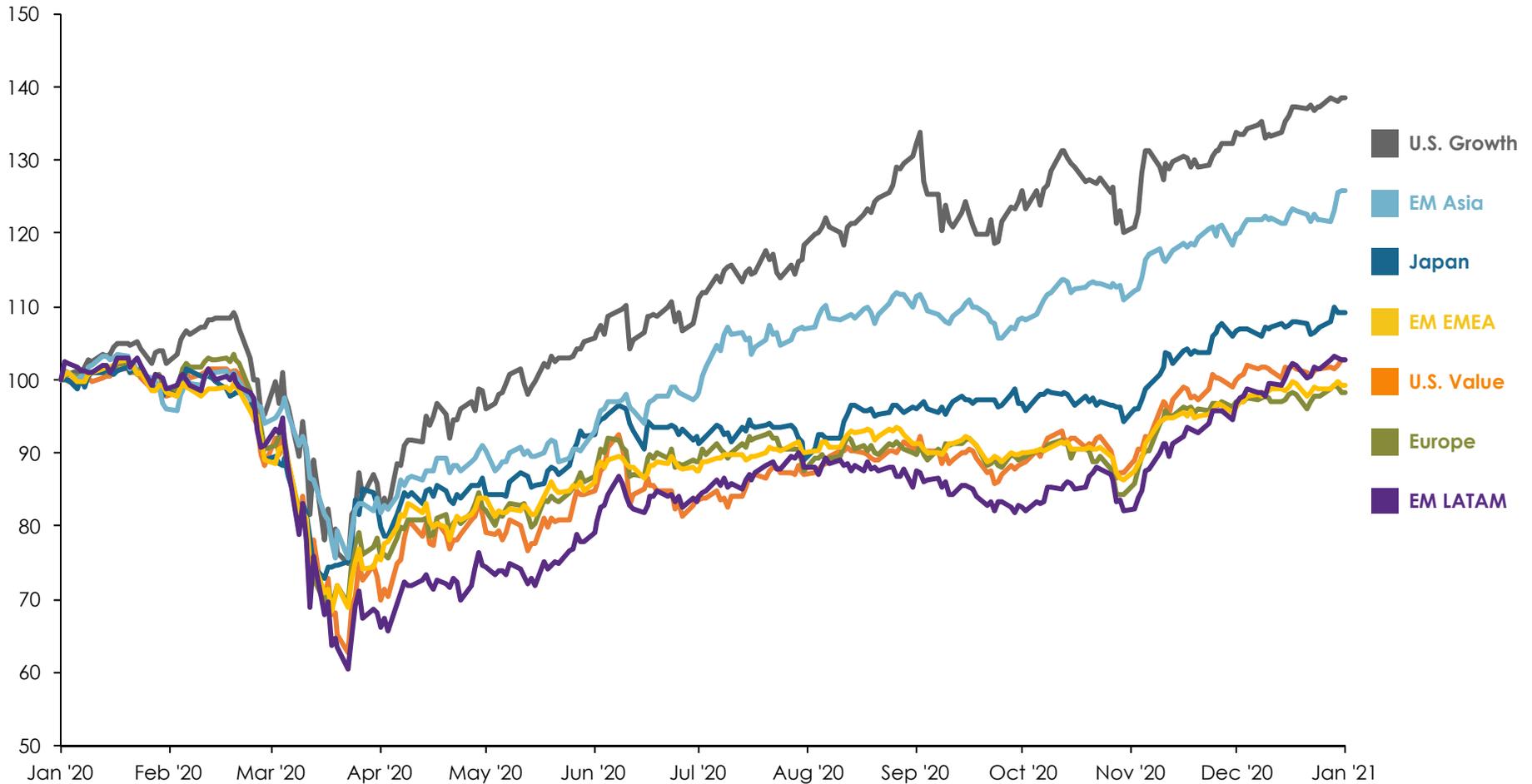
															2006 - 2020	
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ann.	Vol.
REITs 35.1%	EM Equity 39.8%	Fixed Income 5.2%	EM Equity 79.0%	REITs 27.9%	REITs 8.3%	REITs 19.7%	Small Cap 38.8%	REITs 28.0%	REITs 2.8%	Small Cap 21.3%	EM Equity 37.8%	Cash 1.8%	Large Cap 31.5%	Small Cap 20.0%	Large Cap 9.8%	EM Equity 23.3%
EM Equity 32.6%	Comdty. 16.2%	Cash 1.8%	High Yield 59.4%	Small Cap 26.9%	Fixed Income 7.8%	High Yield 19.6%	Large Cap 32.4%	Large Cap 13.7%	Large Cap 1.4%	High Yield 14.3%	DM Equity 25.6%	Fixed Income 0.0%	REITs 28.7%	EM Equity 18.7%	Small Cap 8.9%	REITs 23.1%
DM Equity 26.9%	DM Equity 11.6%	Asset Alloc. 25.4%	DM Equity 32.5%	EM Equity 19.2%	High Yield 3.1%	EM Equity 18.6%	DM Equity 23.3%	Fixed Income 6.0%	Fixed Income 0.5%	Large Cap 12.0%	Large Cap 21.8%	REITs -4.0%	Small Cap 25.5%	Large Cap 18.4%	High Yield 7.5%	Small Cap 22.6%
Small Cap 18.4%	Asset Alloc. 7.1%	High Yield -26.9%	REITs 28.0%	Comdty. 16.8%	Large Cap 2.1%	DM Equity 17.9%	Asset Alloc. 14.9%	Asset Alloc. 5.2%	Cash 0.0%	Comdty. 11.8%	Small Cap 14.6%	High Yield -4.1%	DM Equity 22.7%	Asset Alloc. 10.6%	REITs 7.1%	DM Equity 19.1%
Large Cap 15.8%	Fixed Income 7.0%	Small Cap -33.8%	Small Cap 27.2%	Large Cap 15.1%	Cash 0.1%	Small Cap 16.3%	High Yield 7.3%	Small Cap 4.9%	DM Equity -0.4%	EM Equity 11.6%	Asset Alloc. 14.6%	Large Cap -4.4%	Asset Alloc. 19.5%	DM Equity 8.3%	EM Equity 6.9%	Comdty. 18.8%
Asset Alloc. 15.3%	Large Cap 5.5%	Comdty. -35.6%	Large Cap 26.5%	High Yield 14.8%	Asset Alloc. -0.7%	Large Cap 16.0%	REITs 2.9%	Cash 0.0%	Asset Alloc. -2.0%	REITs 8.6%	High Yield 10.4%	Asset Alloc. -5.8%	EM Equity 18.9%	Fixed Income 7.5%	Asset Alloc. 6.7%	Large Cap 16.7%
High Yield 13.7%	Cash 4.8%	Large Cap -37.0%	Asset Alloc. 25.0%	Asset Alloc. 13.3%	Small Cap -4.2%	Asset Alloc. 12.2%	Cash 0.0%	High Yield 0.0%	High Yield -2.7%	Asset Alloc. 8.3%	REITs 8.7%	Small Cap -11.0%	High Yield 12.6%	High Yield 7.0%	DM Equity 5.0%	High Yield 12.2%
Cash 4.8%	High Yield 3.2%	REITs -37.7%	Comdty. 18.9%	DM Equity 8.2%	DM Equity -11.7%	Fixed Income 4.2%	Fixed Income -2.0%	EM Equity -1.8%	Small Cap -4.4%	Fixed Income 2.6%	Fixed Income 3.5%	Comdty. -11.2%	Fixed Income 8.7%	Cash 0.5%	Fixed Income 4.5%	Asset Alloc. 11.8%
Fixed Income 4.3%	Small Cap -1.6%	DM Equity -43.1%	Fixed Income 5.9%	Fixed Income 6.5%	Comdty. -13.3%	Cash 0.1%	EM Equity -2.3%	DM Equity -4.5%	EM Equity -14.6%	DM Equity 1.5%	Comdty. 1.7%	DM Equity -13.4%	Comdty. 7.7%	Comdty. -3.1%	Cash 1.2%	Fixed Income 3.2%
Comdty. 2.1%	REITs -15.7%	EM Equity -53.2%	Cash 0.1%	Cash 0.1%	EM Equity -18.2%	Comdty. -1.1%	Comdty. -9.5%	Comdty. -17.0%	Comdty. -24.7%	Cash 0.3%	Cash 0.8%	EM Equity -14.2%	Cash 2.2%	REITs -5.1%	Comdty. -4.0%	Cash 0.8%

Source: Barclays, Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor's, J.P. Morgan Asset Management. Large cap: S&P 500, Small cap: Russell 2000, EM Equity: MSCI EME, DM Equity: MSCI EAFE, Comdty: Bloomberg Commodity Index, High Yield: Bloomberg Barclays Global HY Index, Fixed Income: Bloomberg Barclays US Aggregate, REITs: NAREIT Equity REIT Index, Cash: Bloomberg Barclays 1-3m Treasury. The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EME, 25% in the Bloomberg Barclays US Aggregate, 5% in the Bloomberg Barclays 1-3m Treasury, 5% in the Bloomberg Barclays Global High Yield Index, 5% in the Bloomberg Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. Annualized (Ann.) return and volatility (Vol.) represents period from 12/31/05 to 12/31/20. Please see disclosure page at end of index definitions. All data represents total return for stated period. The "Asset Allocation" portfolio is for illustrative purposes only. Past performance is not indicative of future returns. Guide to the Markets – U.S. Data are as of December 31, 2020.

# Capital Markets Analysis – Global Equity Returns

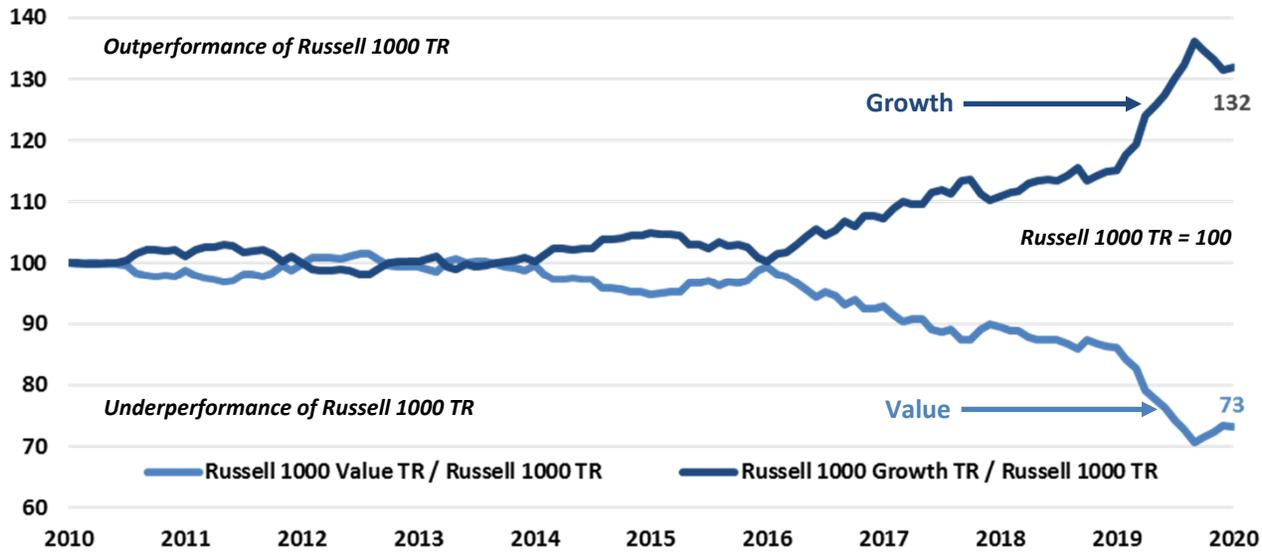
## Global equity returns

Total returns, local currency, Dec. 31, 2019=100

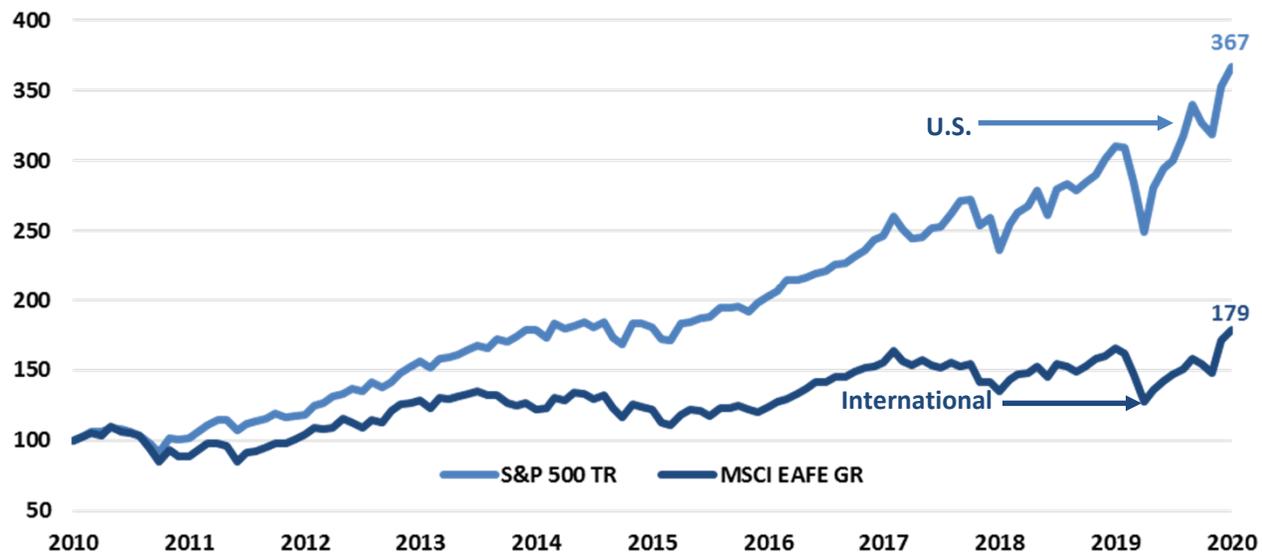


Source: J.P. Morgan Asset Management *Guide to the Markets*, December 2020. U.S. Growth = Russell 1000 Growth, U.S. Value = Russell 1000 Value, EM Asia = MSCI EM Asia, Japan = MSCI Japan, EM EMEA = MSCI EM EMEA, Europe = MSCI Europe, EM LATAM = MSCI EM LATAM

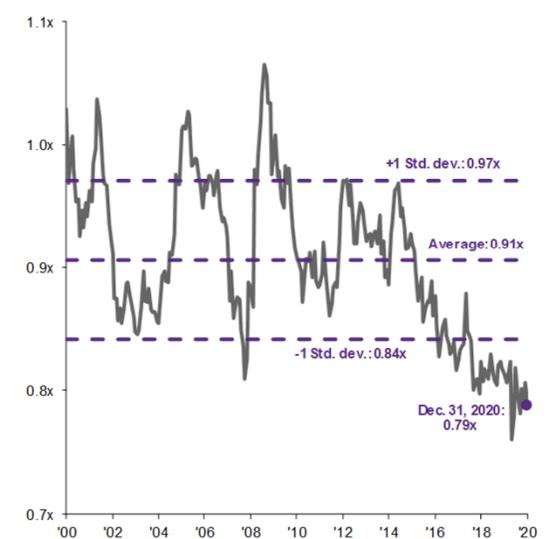
# Capital Markets Analysis – Investment Trends



**Value vs. Growth relative valuations**  
 Relative fwd. P/E ratio of Value vs. Growth, z-score, Dec. 1997 - present

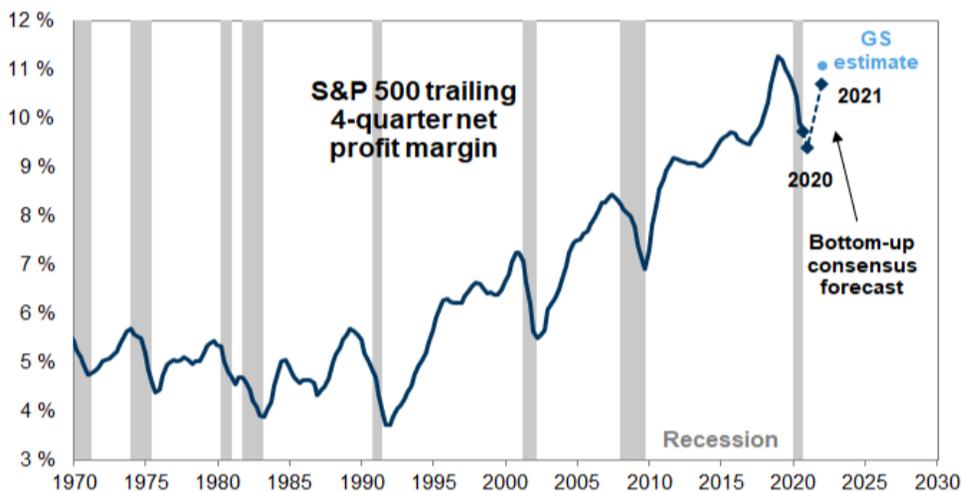


**Developed markets: Relative price-to-earnings ratio**  
 MSCI EAFE vs. S&P 500, next 12 months



Source: Morningstar, J.P. Morgan Asset Management *Guide to the Markets* – U.S. Data are as of December 31, 2020.

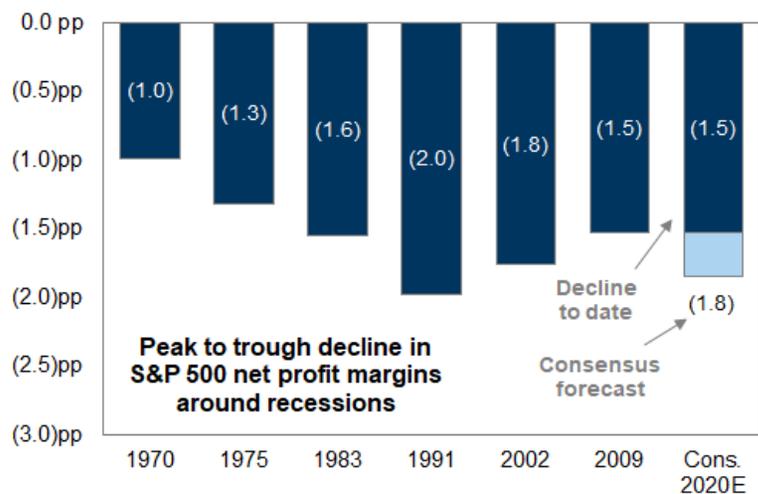
# Capital Markets Analysis – Corporate Earnings



S&P 500 profit margins have rebounded sharply in each of the three recessions over the last 30 years. The 2020 decline may be one of the most severe, exceeding the decline that occurred during the 2009 recession. However, consensus estimates are for margins to end 2021 at 10.7% and then surpass the previous high of 4Q 2018 by mid-2022, representing the second fastest post-recession margin rebound in the last 50 years. This would continue a trend that started in 1990 of profit margins reaching new highs after their rebound.

## The ongoing margin decline rivals the largest in decades

Trailing 4-quarter net profit margins excluding Financials and Utilities



## Margins have rebounded increasingly quickly in recent cycles

Trailing 4-quarter net profit margins excluding Financials and Utilities

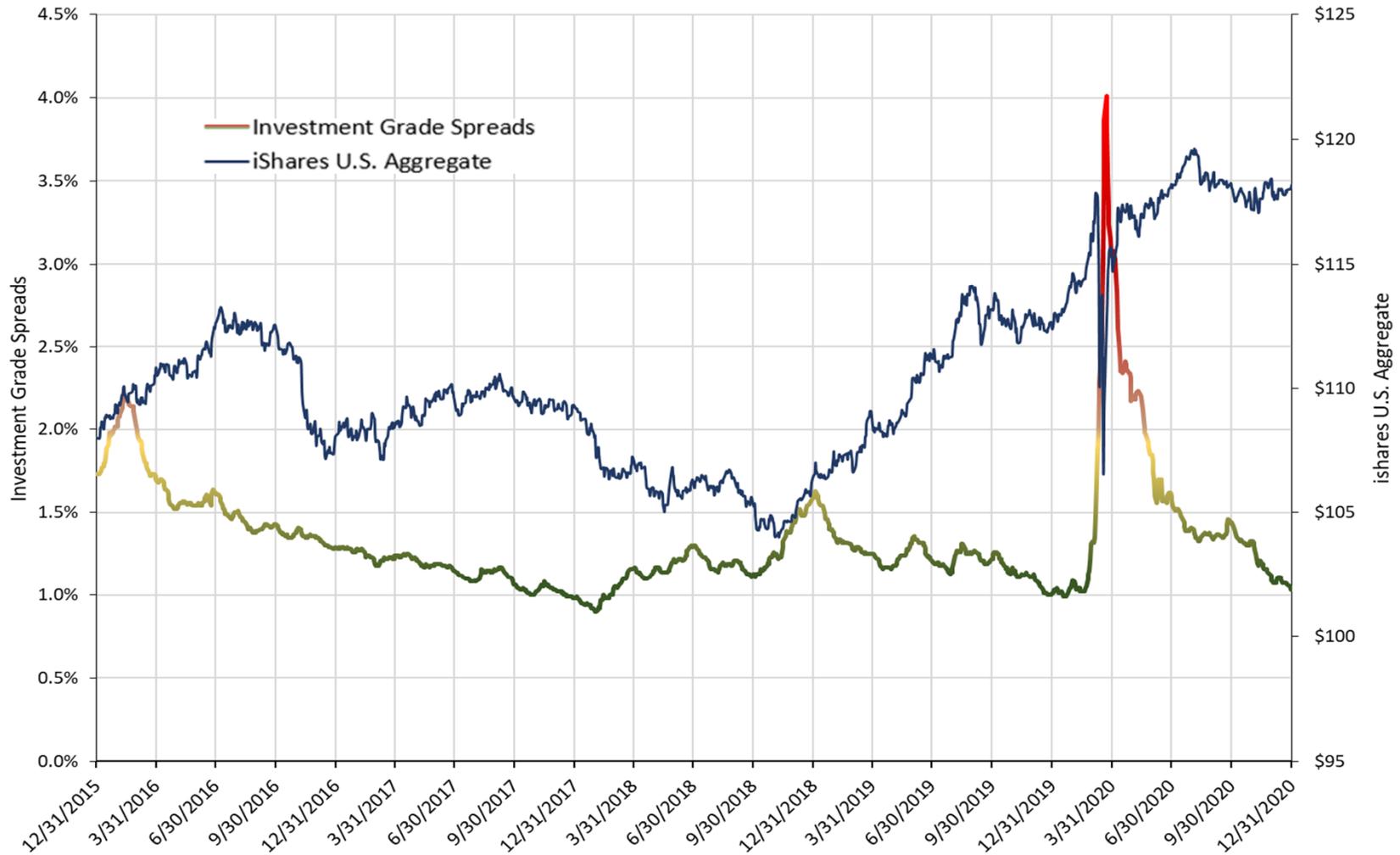
**Speed of S&P 500 margin contraction and rebound around economic recessions (quarters)**

Margin trough	Peak to trough	Trough to recoup 50% of decline	From trough to prior peak
1970	8	9	97
1975	7	5	78
1983	14	4	22
1991	10	8	14
2002	6	6	10
2009	9	2	4
Cons. 2020E	8	3	7

Source: Compustat, FactSet, Goldman Sachs Global Investment Research. Data are as of December 31, 2020.

# Capital Markets Analysis – Corporate Credit Spreads

In late March of 2020, corporate bonds were trading at their widest credit spreads since 2008. The severe change in spreads was caused by the fear surrounding COVID-19 and the perceived effect it was going to have on financial markets. Fortunately, the Federal Reserve implemented a mandate to purchase corporate bonds for the first time in history. This mandate, coupled with natural financial market rationale, has helped return corporate credit spreads to normal levels once again.

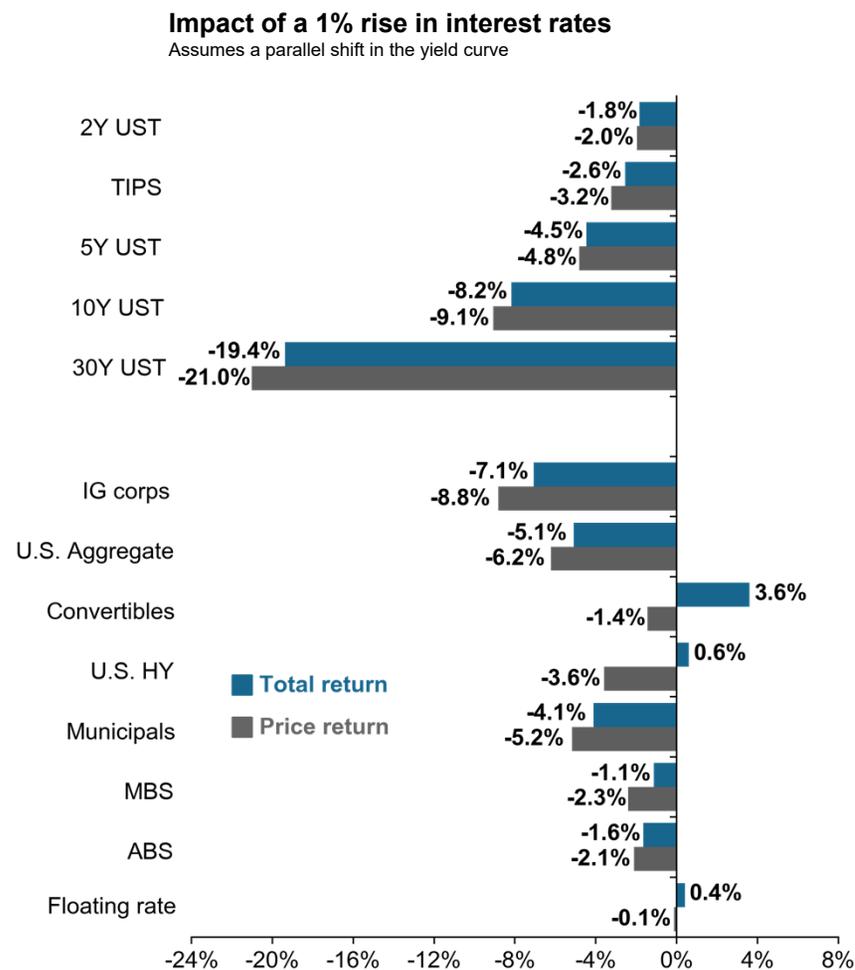


Source: FRED, Yahoo Finance. Data are as of December 31, 2020.

## Capital Markets Analysis – Yields and Duration

Interest rates have dropped dramatically from where they stood on December 31, 2019 and increased the duration risk for bonds. The chart on the lower right illustrates the effect of a 1% rise in interest rates for various fixed income categories.

	Yield		Return	Avg. Maturity	Correlation to 10-year	Correlation to S&P 500
	12/31/2020	12/31/2019	2020			
<b>U.S. Treasuries</b>						
<b>2-Year</b>	0.13%	1.58%	3.07%	2 years	0.67	-0.39
<b>5-Year</b>	0.36%	1.69%	7.26%	5	0.92	-0.35
<b>TIPS</b>	-1.06%	0.15%	10.99%	10	0.58	0.19
<b>10-Year</b>	0.93%	1.92%	10.61%	10	1.00	-0.33
<b>30-Year</b>	1.65%	2.39%	18.72%	30	0.93	-0.33
<b>Sector</b>						
<b>IG corps</b>	1.74%	2.84%	9.89%	12.3	0.41	0.39
<b>U.S. Aggregate</b>	1.12%	2.31%	7.51%	8.3	0.85	0.03
<b>Convertibles</b>	5.04%	5.36%	50.12%	-	-0.29	0.89
<b>U.S. HY</b>	4.18%	5.19%	7.11%	6.5	-0.26	0.74
<b>Municipals</b>	1.07%	1.78%	5.21%	13.0	0.38	0.10
<b>MBS</b>	1.25%	2.54%	3.87%	4.0	0.81	-0.14
<b>ABS</b>	2.23%	2.87%	3.37%	2.2	-0.01	0.27
<b>Floating rate</b>	0.54%	2.30%	1.38%	1.6	-0.23	0.45

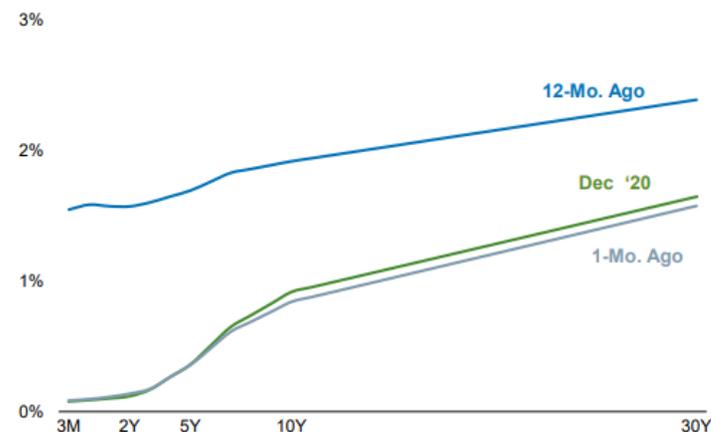


Source: Barclays, Bloomberg, FactSet, SIFMA, Standard & Poor's, U.S. Treasury, J.P. Morgan Asset Management. Sectors shown above are provided by Bloomberg unless otherwise noted and are represented by – U.S. Aggregate; MBS: U.S. Aggregate Securitized - MBS; ABS: J.P. Morgan ABS Index; Corporates: U.S. Corporates; Municipals: Muni Bond; High Yield: Corporate High Yield; TIPS: Treasury Inflation-Protected Securities (TIPS); U.S. Floating rate index; Convertibles: U.S. Convertibles Composite. Convertibles yield is as of November 2020 due to data availability. Yield and return information based on bellwethers for Treasury securities. Sector yields reflect yield-to-worst. Convertibles yield is based on U.S. portion of Bloomberg Barclays Global Convertibles. Correlations are based on 15-years of monthly returns for all sectors. Issuance is based on monthly data provided by SIFMA. Past performance is not indicative of future results. J.P. Morgan Asset Management *Guide to the Markets – U.S.* Data are as of December 31, 2020.

# Capital Markets Analysis – Fixed Income

Fund Name	Tot Ret 3 Mo	Tot Ret YTD	Tot Ret 12 Mo	Tot Ret Annlzd 3 Yr	Tot Ret Annlzd 5 Yr	Tot Ret Annlzd 10 Yr
Short-Term Bond	0.21	3.33	3.33	2.98	2.21	1.60
Intermediate-Term Bond	0.67	7.51	7.51	5.34	4.44	3.84
Long-Term Bond	1.68	16.12	16.12	9.80	9.35	8.16
Bank Loan	3.64	2.78	2.78	3.99	5.19	4.47
High Yield	6.15	5.48	5.48	5.49	8.24	6.47
TIPS	1.62	10.99	10.99	5.92	5.08	3.81
World Bond	2.77	10.11	10.11	4.96	4.78	2.32
Emerging Markets Bond	5.49	5.88	5.88	4.94	6.84	5.97
Multisector Bond	1.29	7.58	7.58	5.45	4.87	4.16

## U.S. Treasury Yield Curve

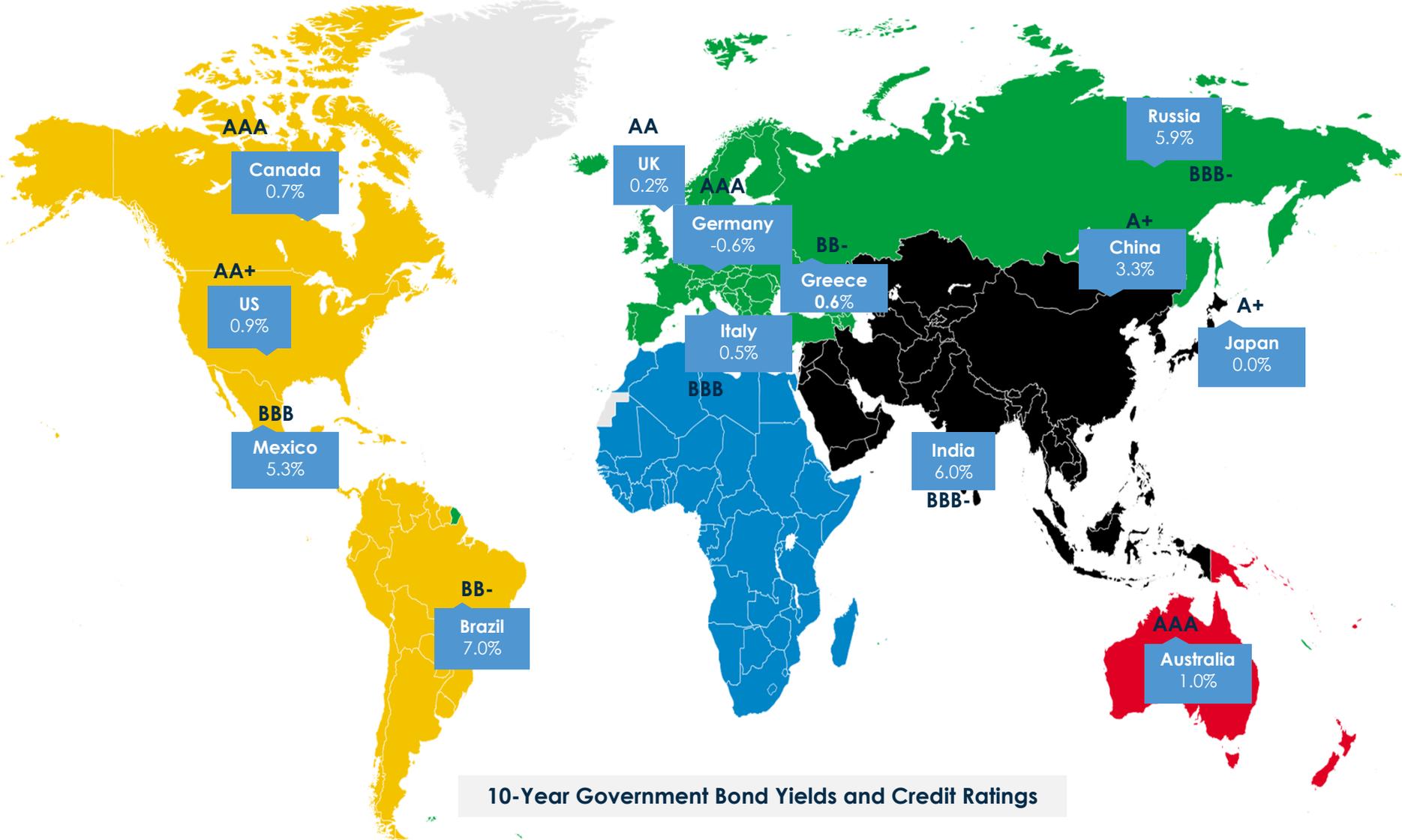


## Corporate Bond Returns by Credit Quality

	Coupon (%)	Duration (yrs.)	Tot Ret 3 Mo	Tot Ret YTD	Tot Ret 12 Mo	Tot Ret Annlzd 3 Yr	Tot Ret Annlzd 5 Yr	Tot Ret Annlzd 10 Yr
<b>BbgBarc U.S. Corporate Investment Grade Index</b>	<b>3.76</b>	<b>8.8</b>	<b>3.05</b>	<b>9.89</b>	<b>9.89</b>	<b>7.06</b>	<b>6.74</b>	<b>5.63</b>
AAA Index	3.15	13.0	1.47	12.30	12.30	8.06	7.10	5.61
AA Index	3.11	9.7	1.74	9.00	9.00	6.22	5.37	4.47
A Index	3.48	8.7	2.22	10.06	10.06	6.70	6.13	5.34
BBB Index	4.11	8.7	3.99	9.88	9.88	7.46	7.51	6.16
<b>ICE BofAML U.S. High Yield Index</b>	<b>5.99</b>	<b>3.7</b>	<b>6.48</b>	<b>6.17</b>	<b>6.17</b>	<b>5.89</b>	<b>8.43</b>	<b>6.62</b>
BB Index	5.31	4.5	5.74	8.62	8.62	7.03	8.27	7.07
B Index	6.32	2.8	5.72	3.66	3.66	5.29	7.82	6.14
CCC- Index	7.98	2.4	12.19	2.86	2.86	2.46	10.17	6.06
<b>S&amp;P/LSTA Leveraged Loan Index</b>	<b>L+3.75</b>	<b>-</b>	<b>3.81</b>	<b>3.12</b>	<b>3.12</b>	<b>4.01</b>	<b>5.24</b>	<b>4.32</b>
BBB Index	L+2.10	-	1.98	1.37	1.37	3.44	3.74	3.42
BB Index	L+2.81	-	2.75	0.75	0.75	3.12	4.01	3.74
B Index	L+4.07	-	3.78	3.80	3.80	4.49	5.68	4.70
CCC Index	L+5.06	-	9.21	4.35	4.35	3.36	9.54	6.49
D Index	-	-	0.45	(31.71)	(31.71)	(21.19)	(9.07)	(7.37)

Source: Morningstar, Eaton Vance, Board of Governors of the Federal Reserve System (US). Data as of 12/31/2020.

# Capital Markets Analysis – Global Fixed Income



Source: Trading Economics. Ratings by Standard and Poor's and are subject to change. Data as of 12/31/20.

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## Section 5: Plan Asset Overview

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## Breakdown of Assets - Universities

			12/31/20	Plan	Sub-Plan	Target
			Market Value	Allocation	Allocation	Plan %
Board of Regents of Oklahoma Colleges (new plan)	U-J351A	TIAA Traditional	\$ 77,028	91%	91%	50%
Board of Regents of Oklahoma Colleges (new plan)	X-J351A	CREF Equity Index	\$ 7,653	9%	9%	50%
			\$ 84,681	0%	100%	100%
Central Oklahoma, University of (new plan)	X-J297A	CREF Equity Index Account R2	\$ 4,138,518	33%	38%	38%
Central Oklahoma, University of (new plan)	X-J297A	CREF Growth Account R2	\$ 1,380,721	11%	13%	13%
Central Oklahoma, University of (new plan)	X-J297A	CREF Bond Market Account R2	\$ 1,832,581	15%	17%	17%
Central Oklahoma, University of (new plan)	U-J297A	TIAA Traditional	\$ 3,641,864	29%	33%	33%
			\$ 10,993,684	87%	100%	100%
Central Oklahoma, University of (old plan)	X-J2970	CREF Equity Index Account R2	\$ 607,479	5%	38%	38%
Central Oklahoma, University of (old plan)	X-J2970	CREF Growth Account R2	\$ 202,671	2%	13%	13%
Central Oklahoma, University of (old plan)	U-J2970	TIAA Traditional	\$ 82,127	1%	5%	5%
Central Oklahoma, University of (old plan)	X-J2970	CREF Bond Market Account R2	\$ 723,088	6%	45%	45%
			\$ 1,615,366	13%	100%	100%
East Central University (new plan)	U-J312A	TIAA Traditional	\$ 2,900,638	88%	90%	50%
East Central University (new plan)	X-J312A	CREF Growth Account R1	\$ 80,221	2%	2%	15%
East Central University (new plan)	X-J312A	CREF Equity Index Account R1	\$ 240,451	7%	7%	35%
			\$ 3,221,309	98%	100%	100%
East Central University (old plan)	U-J3120	TIAA Traditional	\$ 64,489	2%	88%	50%
East Central University (old plan)	X-J3120	CREF Equity Index Account R1	\$ 9,044	0%	12%	50%
			\$ 73,533	2%	100%	100%
Northeastern State University (new plan)	X-J352A	CREF Stock Account R1	\$ -	0%	0%	0%
Northeastern State University (new plan)	X-J352A	CREF Growth Account R1	\$ 437,530	7%	9%	15%
Northeastern State University (new plan)	X-J352A	CREF Equity Index Account R1	\$ 1,311,430	20%	28%	35%
Northeastern State University (new plan)	U-J352A	TIAA Real Estate Account R1	\$ -	0%	0%	0%
Northeastern State University (new plan)	U-J352A	TIAA Traditional	\$ 2,979,944	46%	63%	50%
			\$ 4,728,904	73%	100%	100%
Northeastern State University (old plan)	U-J3520	TIAA Traditional	\$ 1,605,936	25%	90%	50%
Northeastern State University (old plan)	X-J3520	CREF Growth Account R1	\$ 44,326	1%	2%	15%
Northeastern State University (old plan)	X-J3520	CREF Equity Index Account R1	\$ 132,861	2%	7%	35%
			\$ 1,783,124	27%	100%	100%

## Breakdown of Assets - Universities

Northwestern Okla. State Univ. (new plan)	U-J349A	TIAA Traditional	\$ 973,861	89%	90%	50%
Northwestern Okla. State Univ. (new plan)	X-J349A	CREF Growth Account R1	\$ 26,739	2%	2%	15%
Northwestern Okla. State Univ. (new plan)	X-J349A	CREF Equity Index Account R1	\$ 80,145	7%	7%	35%
			\$ 1,080,746	99%	100%	100%
Northwestern Okla. State Univ. (old plan)	U-J3490	TIAA Traditional	\$ 7,770	1%	88%	50%
Northwestern Okla. State Univ. (old plan)	X-J3490	CREF Equity Index Account R1	\$ 1,097	0%	12%	50%
			\$ 8,867	1%	100%	100%
Southeastern Okla. State Univ. (new plan)	X-J353A	CREF Stock Account R1	\$ -	0%	0%	0%
Southeastern Okla. State Univ. (new plan)	X-J353A	CREF Equity Index Account R1	\$ 867,457	47%	57%	35%
Southeastern Okla. State Univ. (new plan)	X-J353A	CREF Growth Account R1	\$ 289,408	16%	19%	15%
Southeastern Okla. State Univ. (new plan)	U-J353A	TIAA Real Estate Account R1	\$ -	0%	0%	0%
Southeastern Okla. State Univ. (new plan)	U-J353A	TIAA Traditional	\$ 360,414	20%	24%	24%
Southeastern Okla. State Univ. (new plan)	U-J353A	TIAA Bond Account R1	\$ -	0%	0%	26%
			\$ 1,517,279	82%	100%	100%
Southeastern Okla. State Univ. (old plan)	U-J3530	TIAA Traditional	\$ 285,171	15%	88%	50%
Southeastern Okla. State Univ. (old plan)	X-J3530	CREF Growth Account R1	\$ 9,590	1%	3%	15%
Southeastern Okla. State Univ. (old plan)	X-J3530	CREF Equity Index Account R1	\$ 28,746	2%	9%	35%
			\$ 323,508	18%	100%	100%
Southwestern Okla. State Univ. (new plan)	U-J350A	TIAA Traditional	\$ 3,618,537	88%	90%	50%
Southwestern Okla. State Univ. (new plan)	x-J350A	CREF Growth Account R1	\$ 103,054	3%	3%	15%
Southwestern Okla. State Univ. (new plan)	x-J350A	CREF Equity Index Account R1	\$ 308,890	8%	8%	35%
			\$ 4,030,481	98%	100%	100%
Southwestern Okla. State Univ. (old plan)	X-J3500	CREF Equity Index Account R1	\$ 8,273	0%	11%	50%
Southwestern Okla. State Univ. (old plan)	U-J3500	TIAA Traditional	\$ 64,823	2%	89%	50%
			\$ 73,096	2%	100%	100%
	<b>Total</b>		<b>\$ 29,534,577</b>			

## Asset Allocation

As of December 31, 2020

	Q4-2020		Q3-2020		Change	
	\$	%	\$	%	\$	%
<b>RUSO SRA</b>	<b>29,534,577.39</b>	<b>100.00</b>	<b>28,832,970.06</b>	<b>100.00</b>	<b>701,607.33</b>	<b>2.43</b>
CREF Bond Market Account R2	2,555,668.78	8.65	-	0.00	2,555,668.78	100.00
CREF Equity Index (TEIHX)	7,653.19	0.03	-	0.00	7,653.19	100.00
CREF Equity Index Account R1 (QCEQRX)	2,988,395.15	10.12	-	0.00	2,988,395.15	100.00
CREF Equity Index R2 (QCEQPX)	4,745,997.41	16.07	4,499,648.88	15.61	246,348.53	5.47
CREF Growth Account R1 (QCGRRX)	990,868.83	3.35	-	0.00	990,868.83	100.00
CREF Growth R2 (QCGRPX)	1,583,392.65	5.36	2,852,328.93	9.89	-1,268,936.28	-44.49
CREF Stock R1 (QCSTRX)	-	0.00	1,325,459.12	4.60	-1,325,459.12	-100.00
TIAA Real Estate Account (QREARX)	-	0.00	970,333.76	3.37	-970,333.76	-100.00
TIAA Traditional Annuity GRA	16,662,601.38	56.42	19,185,199.37	66.54	-2,522,597.99	-13.15

# Asset Allocation & Performance

As of December 31, 2020

	Allocation		Performance (%)							Expense Ratio Gross	Expense Ratio Net	
	Market Value \$	%	1 Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date			
<b>RUSO SRA</b>	<b>29,534,577.39</b>	<b>100.00</b>									-	-
All Public Plans-Total Fund Median			10.10	12.89	8.91	9.71	8.12	8.25			-	-
CREF Bond Market Account R2	2,555,668.78	8.65	1.53 (22)	7.85 (47)	5.45 (36)	4.75 (30)	3.96 (36)	5.84 (51)	04/01/1990	0.32	0.32	
Blmbg. Barc. U.S. Aggregate			0.67	7.51	5.34	4.44	3.84	6.04		-	-	
Intermediate Core Bond Median			1.03	7.73	5.29	4.42	3.79	5.86		0.61	0.51	
CREF Equity Index (TEIHX)	7,653.19	0.03	14.64 (21)	20.73 (18)	14.30 (20)	15.29 (16)	13.70 (21)	7.38 (26)	08/01/1999	0.19	0.19	
S&P 500 Index			12.15	18.40	14.18	15.22	13.88	7.01		-	-	
Large Blend Median			12.14	17.53	12.90	14.02	12.78	6.80		0.79	0.72	
CREF Equity Index Account R1 (QCEQRX)	2,988,395.15	10.12	14.54 (23)	20.35 (21)	14.01 (30)	14.87 (32)	13.29 (37)	10.01 (45)	04/01/1994	0.48	0.48	
S&P 500 Index			12.15	18.40	14.18	15.22	13.88	10.43		-	-	
Large Blend Median			12.14	17.53	12.90	14.02	12.78	9.86		0.79	0.72	
CREF Equity Index R2 (QCEQPX)	4,745,997.41	16.07	14.60 (22)	20.56 (19)	14.21 (21)	15.12 (23)	13.43 (32)	10.10 (37)	05/01/1994	0.29	0.29	
S&P 500 Index			12.15	18.40	14.18	15.22	13.88	10.41		-	-	
Large Blend Median			12.14	17.53	12.90	14.02	12.78	9.83		0.79	0.72	
CREF Growth Account R1 (QCGRRX)	990,868.83	3.35	11.39 (59)	40.44 (29)	21.53 (46)	19.31 (41)	16.53 (30)	10.13 (64)	04/01/1994	0.50	0.50	
Russell 1000 Growth Index			11.39	38.49	22.99	21.00	17.21	11.08		-	-	
Large Growth Median			11.93	34.78	21.05	18.70	15.48	10.57		0.97	0.89	
CREF Growth R2 (QCGRPX)	1,583,392.65	5.36	11.44 (58)	40.68 (29)	21.75 (45)	19.57 (37)	16.68 (28)	10.22 (62)	05/01/1994	0.32	0.32	
Russell 1000 Growth Index			11.39	38.49	22.99	21.00	17.21	11.10		-	-	
Large Growth Median			11.93	34.78	21.05	18.70	15.48	10.57		0.97	0.89	
CREF Stock R1 (QCSTRX)	-	0.00	15.29 (52)	17.64 (31)	10.47 (32)	12.52 (21)	10.46 (19)	9.93 (75)	08/01/1952	0.57	0.57	
Allocation--85%+ Equity			15.58	13.25	8.56	10.58	9.15	-		-	-	
Allocation--85%+ Equity Median			15.34	15.22	9.46	11.40	9.49	9.95		1.15	1.08	
TIAA Real Estate Account (QREARX)	-	0.00	0.59 (100)	-0.84 (92)	3.11 (70)	3.78 (89)	7.14 (82)	5.96 (-)	10/01/1995	0.83	0.83	
Dow Jones U.S. Moderate Index			10.91	13.03	9.47	10.15	9.34	8.22		-	-	
Miscellaneous Sector Median			32.31	31.60	14.99	20.61	11.02	-		0.75	0.70	
TIAA Traditional Annuity GRA	16,662,601.38	56.42	-	-	-	-	-	-	01/01/1901	-	-	
Blmbg. Barc. 1-3 Govt			0.05	3.14	2.77	1.92	1.32	-		-	-	
Money Market-Taxable Median			0.00	0.28	1.19	0.80	0.40	-		0.47	0.42	

# Asset Allocation & Performance - Calendar Years

As of December 31, 2020

	Performance (%)									
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>RUSO SRA</b>										
All Public Plans-Total Fund Median	19.57	-4.45	15.25	6.67	0.00	6.32	16.46	12.00	-0.27	12.33
CREF Bond Market Account R2	8.97 (32)	-0.23 (44)	4.04 (22)	3.36 (21)	0.44 (37)	5.52 (57)	-2.01 (46)	5.29 (52)	6.96 (52)	6.73 (51)
Blmbg. Barc. U.S. Aggregate	8.72	0.01	3.54	2.65	0.55	5.97	-2.02	4.21	7.84	6.54
Intermediate Core Bond Median	8.58	-0.32	3.46	2.63	0.25	5.62	-2.08	5.39	6.98	6.76
CREF Equity Index (TEIHX)	30.71 (45)	-5.36 (49)	20.99 (57)	12.75 (18)	0.46 (48)	12.52 (47)	33.47 (30)	16.33 (31)	0.99 (48)	16.88 (16)
S&P 500 Index	31.49	-4.38	21.83	11.96	1.38	13.69	32.39	16.00	2.11	15.06
Large Blend Median	30.23	-5.50	21.20	11.15	0.35	12.34	32.21	15.72	0.89	14.59
CREF Equity Index Account R1 (QCEQRX)	30.40 (49)	-5.59 (52)	20.43 (66)	12.07 (25)	-0.02 (56)	12.17 (53)	32.99 (37)	15.98 (40)	0.66 (53)	16.45 (18)
S&P 500 Index	31.49	-4.38	21.83	11.96	1.38	13.69	32.39	16.00	2.11	15.06
Large Blend Median	30.23	-5.50	21.20	11.15	0.35	12.34	32.21	15.72	0.89	14.59
CREF Equity Index R2 (QCEQPX)	30.66 (46)	-5.41 (50)	20.74 (61)	12.38 (23)	0.17 (53)	12.17 (53)	32.99 (37)	15.98 (40)	0.66 (53)	16.45 (18)
S&P 500 Index	31.49	-4.38	21.83	11.96	1.38	13.69	32.39	16.00	2.11	15.06
Large Blend Median	30.23	-5.50	21.20	11.15	0.35	12.34	32.21	15.72	0.89	14.59
CREF Growth Account R1 (QCGRRX)	31.33 (62)	-2.69 (59)	31.38 (30)	2.53 (54)	6.19 (36)	13.66 (16)	35.00 (45)	15.87 (45)	1.19 (26)	14.98 (59)
Russell 1000 Growth Index	36.39	-1.51	30.21	7.08	5.67	13.05	33.48	15.26	2.64	16.71
Large Growth Median	32.49	-1.71	28.67	2.97	4.58	10.52	34.48	15.52	-1.44	16.08
CREF Growth R2 (QCGRPX)	31.59 (60)	-2.51 (57)	31.73 (28)	2.81 (52)	6.39 (33)	13.66 (16)	35.00 (45)	15.87 (45)	1.19 (26)	14.98 (59)
Russell 1000 Growth Index	36.39	-1.51	30.21	7.08	5.67	13.05	33.48	15.26	2.64	16.71
Large Growth Median	32.49	-1.71	28.67	2.97	4.58	10.52	34.48	15.52	-1.44	16.08
CREF Stock R1 (QCSTRX)	27.13 (22)	-9.86 (61)	23.01 (15)	8.76 (33)	-1.10 (37)	6.41 (29)	27.83 (37)	17.26 (15)	-4.94 (52)	15.72 (38)
Allocation--85%+ Equity	24.45	-9.24	19.73	7.94	-1.80	5.48	26.72	15.43	-4.17	14.84
Allocation--85%+ Equity Median	25.33	-9.39	20.24	7.59	-1.83	5.12	27.10	15.17	-4.85	15.17
TIAA Real Estate Account (QREARX)	5.51 (90)	4.79 (7)	4.37 (100)	5.20 (69)	8.16 (5)	12.22 (1)	9.65 (95)	10.06 (32)	12.99 (1)	13.29 (38)
Dow Jones U.S. Moderate Index	20.80	-3.92	13.12	9.26	-0.13	9.08	19.56	11.92	3.32	15.23
Miscellaneous Sector Median	28.04	-10.91	21.77	9.22	-0.23	-3.04	41.73	-0.54	-30.12	2.05
TIAA Traditional Annuity GRA	-	-	-	-	-	-	-	-	-	-
Blmbg. Barc. 1-3 Govt	3.59	1.58	0.45	0.87	0.57	0.64	0.37	0.51	1.56	2.40
Money Market-Taxable Median	1.83	1.47	0.46	0.03	0.01	0.01	0.01	0.01	0.01	0.01

## Risk Statistics

As of December 31, 2020

	5 Years								
	Standard Deviation	Beta	Alpha	Information Ratio	Tracking Error	R-Squared	Up Capture	Down Capture	Sharpe Ratio
CREF Bond Market Account R2	3.45	1.01	0.25	0.23	1.36	0.84	107.02	106.99	1.02
Blmbg. Barc. U.S. Aggregate	3.13	1.00	0.00	-	0.00	1.00	100.00	100.00	1.04
Intermediate Core Bond Median	3.26	1.00	0.01	-0.02	1.09	0.90	101.22	103.93	0.99
CREF Equity Index (TEIHX)	15.85	1.04	-0.51	0.14	1.32	0.99	102.42	103.90	0.90
S&P 500 Index	15.13	1.00	0.00	-	0.00	1.00	100.00	100.00	0.94
Large Blend Median	15.16	1.00	-0.80	-0.56	2.44	0.98	98.10	101.02	0.87
CREF Equity Index Account R1 (QCEQRX)	15.84	1.04	-0.87	-0.15	1.31	0.99	101.33	104.44	0.88
S&P 500 Index	15.13	1.00	0.00	-	0.00	1.00	100.00	100.00	0.94
Large Blend Median	15.16	1.00	-0.80	-0.56	2.44	0.98	98.10	101.02	0.87
CREF Equity Index R2 (QCEQPX)	15.84	1.04	-0.66	0.02	1.31	0.99	101.95	104.10	0.89
S&P 500 Index	15.13	1.00	0.00	-	0.00	1.00	100.00	100.00	0.94
Large Blend Median	15.16	1.00	-0.80	-0.56	2.44	0.98	98.10	101.02	0.87
CREF Growth Account R1 (QCGRRX)	16.68	1.03	-1.87	-0.78	1.72	0.99	99.10	108.03	1.07
Russell 1000 Growth Index	16.16	1.00	0.00	-	0.00	1.00	100.00	100.00	1.19
Large Growth Median	16.36	0.99	-1.52	-0.55	4.06	0.94	94.82	102.17	1.06
CREF Growth R2 (QCGRPX)	16.68	1.03	-1.66	-0.65	1.72	0.99	99.59	107.58	1.09
Russell 1000 Growth Index	16.16	1.00	0.00	-	0.00	1.00	100.00	100.00	1.19
Large Growth Median	16.36	0.99	-1.52	-0.55	4.06	0.94	94.82	102.17	1.06
CREF Stock R1 (QCSTRX)	15.68	1.05	1.35	1.36	1.37	0.99	109.56	103.66	0.76
Allocation--85%+ Equity	14.94	1.00	0.00	-	0.00	1.00	100.00	100.00	0.67
Allocation--85%+ Equity Median	15.12	1.01	0.76	0.44	1.91	0.99	101.96	99.50	0.72
TIAA Real Estate Account (QREARX)	1.06	0.01	3.70	-0.62	10.46	0.01	16.25	-8.60	2.51
Dow Jones U.S. Moderate Index	10.49	1.00	0.00	-	0.00	1.00	100.00	100.00	0.86
Miscellaneous Sector Median	21.71	1.84	4.03	0.93	12.99	0.68	175.47	154.97	0.99
TIAA Traditional Annuity GRA	-	-	-	-	-	-	-	-	-
Blmbg. Barc. 1-3 Govt	1.08	1.00	0.00	-	0.00	1.00	100.00	100.00	0.75
Money Market-Taxable Median	0.22	0.07	0.67	-1.08	1.03	0.11	24.13	-49.95	-3.33

# Actual Correlation Matrix

5 Years Ending December 31, 2020

	A	B	C	D	E	F	G	H	I
A	1.00								
B	0.25	1.00							
C	0.25	1.00	1.00						
D	0.25	1.00	1.00	1.00					
E	0.28	0.95	0.95	0.95	1.00				
F	0.28	0.95	0.95	0.95	1.00	1.00			
G	0.28	0.99	0.99	0.99	0.95	0.95	1.00		
H	-0.04	0.04	0.04	0.04	-0.09	-0.09	0.04	1.00	
I	-	-	-	-	-	-	-	-	-

- A = CREF Bond Market Account R2
- B = CREF Equity Index (TEIHX)
- C = CREF Equity Index Account R1 (QCEQRX)
- D = CREF Equity Index R2 (QCEQPX)
- E = CREF Growth Account R1 (QCGRRX)
- F = CREF Growth R2 (QCGRPX)
- G = CREF Stock R1 (QCSTRX)
- H = TIAA Real Estate Account (QREARX)
- I = TIAA Traditional Annuity GRA

Low correlation, most diversified  
 Moderate correlation, some diversification  
 High correlation, few diversification benefits

Extended Performance - In situations where performance is quoted for a period that extends beyond the inception date of the share class for a fund, please note that the share results prior to the date of first sale are hypothetical based on adjustments made to the historical monthly returns of the oldest share class to reflect the increase in fees of the indicated share class. Adjustments are not made to the historical returns if the new share class has lower fees.

The performance data contained herein represents past performance, which does not guarantee future results. Investment returns and principal value will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data quoted. Please contact USI Advisors at (860) 633-5283 or toll free at (866) 305-8847 to obtain data current to the most recent month end (if it is not provided in this report). The fund performance information shown does not reflect the deduction of any initial sales charges, as these charges are not applicable to eligible retirement plans. Had these sales charges been deducted, results would have been lower than shown.

### **Government MM Funds:**

You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time. The fund's sponsor will not impose a fee upon the sale of your shares, nor will it temporarily suspend your ability to sell shares if the fund's weekly liquid assets fall below 30% of its total assets because of market conditions or other factors.

### **Retail MM Funds:**

You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

### **Institutional MM Funds:**

You could lose money by investing in a money market fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

**You should consider the investment objectives, risks, and charges and expenses of the investment options carefully before investing. The prospectuses and other comparable documents contain this and other information about the investment options. They may be obtained by calling USI Advisors at (860) 633-5283 or toll free at (866) 305-8847. You should read the prospectuses and/or other comparable documents carefully before investing.**

All investment-related charts and data provided through eVestment Alliance and/or Morningstar.

Fixed Income Credit Ratings (listed on the investment fact sheets): The credit quality ratings for underlying fixed-income holdings within the portfolio are assigned by either Standard & Poor's or Moody's and then reported by the investment company, along with the allocation as a percentage of overall fixed-income holdings, to Morningstar.

For Morningstar Category Classification Definitions and Investment Definitions, please visit [www.usiadvisorsinc.com](http://www.usiadvisorsinc.com).

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Investment Advice for institutional accounts provided by USI Advisors, Inc.  
95 Glastonbury Blvd., Glastonbury, CT 06033

## IMPORTANT DISCLOSURES:

For additional information made publicly available by the fund's sponsor, including performance data to the most recent month-end, please visit the fund's Website. All total returns for the funds listed assume the reinvestment of all dividends and capital gains distributions at net asset value when paid. Furthermore, the total returns do not reflect the deduction of any initial sales charges as these charges are not applicable to eligible retirement plans. Had these sales charges been deducted, results would have been lower than shown. In certain circumstances, a back-end sales charge may be assessed upon redemption of shares within a particular timeframe. Please refer to the prospectus and/or statement of additional information for specific details. Please note that there are other charges and expenses that apply to the investment options, such as management fees, which are reflected in their net investment return. For certain investment options, the returns reflect subsidies and waivers, without which the results would have been lower than noted. These subsidies and waivers may not continue to remain in effect. Please note that certain funds will charge a redemption fee for short-term trading. The returns shown do not reflect short-term trading fees; if included, results would have been less than shown.

The stable value funds identified are structured either as collective trust funds or insurance company separate accounts, but are not mutual funds; consequently, they are not registered with or regulated by the U.S. Securities and Exchange Commission. Those established as collective trusts are typically operated and offered by banks and/or trust companies or their affiliates and are regulated by banking regulators. Those established as insurance company separate accounts are typically operated by insurance companies and are regulated by state insurance departments. For a copy of the stable value fund's "Summary Information Booklet" and/or information flyer, please call USI Advisors at (860) 633-5283.

The Model Portfolios identified are not mutual funds or securities in and of themselves, rather they are asset allocation models comprised of several complementary investments. The component investments that make up the Model Portfolios are identified in the accompanying performance summary sheets, along with their percentage allocation in respect to the Model and their individual performance. The Plan Sponsor makes the Model Portfolio(s) available for the convenience of Plan Participants; however, the Plan Sponsor generally does not permit Plan Participants to invest retirement plan contributions directly into the individual investments that constitute the Models. Plan Participants may only gain access to the underlying investments by allocating their contributions to the Model Portfolio(s).

Investments identified as Separately Managed Accounts ("SMA"), if any, are not registered mutual funds and are not offered to the Plan through USI Securities, Inc. SMAs are privately managed investment accounts that have various investment objectives, differing degrees of risk, and utilize varying investment strategies. Detailed information on each SMA available to your Plan is available directly from the Registered Investment Advisor with whom the Plan Sponsor has contracted to manage the SMA. USI Advisors receives performance data from the Plan Sponsor or the SMA firm and consolidates this information into this report for the convenience, and at the request, of the Plan Sponsor.

An index is a measure of value changes in a representative grouping of stocks, bonds, or other securities. Indexes are used primarily for comparative performance measurement and as a gauge of movements in financial markets. You can not invest directly in an index and, for comparative purposes; they do not reflect the effect of the various fees inherent in actual investment vehicles.

## RISKS:

Investing in mutual funds, which are intended as long-term investments, involves risk, including the possible loss of principal. It is important to understand that certain types of securities and/or investment strategies employed by mutual funds may expose an investor to additional inherent risks. Investments in **foreign securities** are subject to special additional risks, including currency risk, political risk, and risk associated with varying accounting standards. Funds invested in **emerging markets** may accentuate these risks. **Sector funds** (those funds that invest exclusively in one sector or industry), such as technology or real estate stocks, are subject to substantial volatility due to adverse political, economic, or other developments and may carry additional risk resulting from lack of industry diversification. **Non-diversified** funds, which invest more of their assets in a single issuer, may experience substantial volatility due to the increased concentration of investments. Funds that invest in **small or mid-capitalization companies** may experience a greater degree of market volatility, and potential for business failure, than those of large-capitalization stocks and are riskier investments. **Bond funds** have the same interest rate, inflation, and credit risks as associated with the underlying bonds owned by the fund. Generally, the value of bond funds rises when prevailing interest rates fall and falls when interest rates rise. Funds that invest in lower-rated debt securities, commonly referred to as **high yield or junk bonds**, have additional risks and may be subject to greater market fluctuations and risk of loss of income and principal (relative to higher-rated securities), due to the lower credit quality of the securities and increased risk of default. Bear in mind that higher return potential is accompanied by higher risk.

Although diversification is not a guarantee against loss, it is an effective strategy to help you manage risk. There is no guarantee that a diversified portfolio will outperform a non-diversified portfolio. There are no assurances that your investment objectives will be achieved.

## EXPLANATION OF ABBREVIATED TERMS:

Cat = Category, Idx = Benchmark Index, Mstar Rating = Morningstar Rating, Tot Ret = Total Return, Annlzd = Annualized, Std Dev = Standard Deviation, Ticker = Ticker Symbol, Prosp = Prospectus

When viewing performance of an index, keep in mind that indices are unmanaged and are not subject to charges and expenses that may otherwise be applicable to investment options available in your plan. These indices are unavailable for direct investment.

Standard Deviation is a measure of the degree to which a fund's return varies from its previous returns or from the average of all similar funds. The larger the standard deviation, the greater the likelihood (and risk) that a security's performance will fluctuate from the average return.

## RATINGS METHODOLOGY:

### Data Source: Morningstar, Inc.

For each fund with at least a three-year history, Morningstar calculates in each fund category overall 3, 5, and 10-year Morningstar Ratings (commonly called the star ratings) based on a Morningstar Risk-Adjusted measure that accounts for variations in a fund's monthly performance (including the effects of sales charges, loads, and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. A fund is rated by Morningstar against all other funds in its category: 5 stars are assigned to the top 10%; 4 stars to the next 22.5%; 3 stars to the next 35%; 2 stars to the next 22.5%; and 1 star to the bottom 10%. Ratings are © Morningstar, Inc. All rights reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from the use of this information. Funds are rated for up to three periods, the trailing 3, 5, and 10 years, and ratings are recalculated each month. For funds that remain in the same Morningstar Category for the entire evaluation period, the following weights are used to calculate an overall rating:

### Age of fund Overall rating -

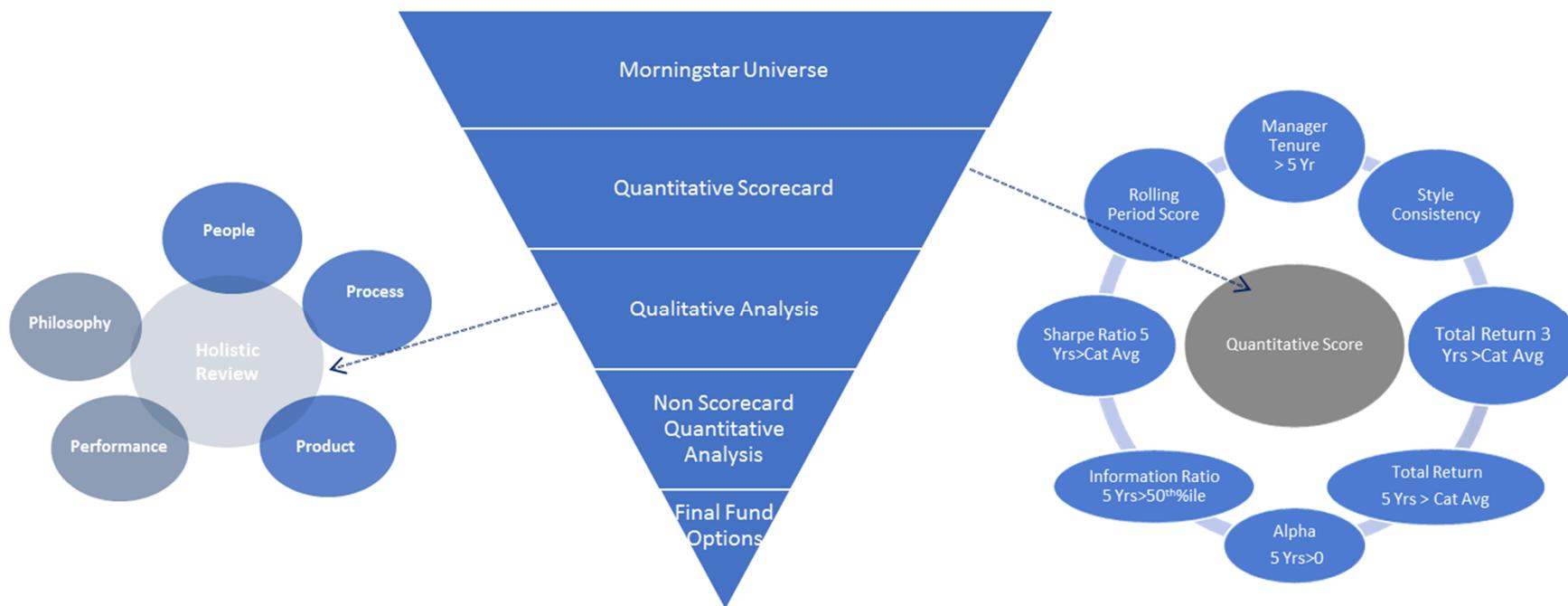
- At least three years, but less than five 100% three-year rating
- At least five years, but less than ten 60% five-year rating  
40% three-year rating
- At least ten years 50% ten-year rating  
30% five-year rating  
20% three-year rating

If a fund changes Morningstar Categories, its long-term historical performance is given less weight, based on the magnitude of the change. (For example, a change from a mid-cap category to large-cap category is considered less significant than a change from small-cap to large-cap.) Doing so ensures the fairest comparisons and minimizes any incentive for fund companies to change a fund's style in an attempt to receive a better rating by shifting to another Morningstar Category.

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# USIA Due Diligence Process



# Investments - Due Diligence Updates

As of December 31, 2020

Fund Name	Mgr.Tenure	Style Consistency	Tot.Ref.3Yrs>Cat.Avg.	Tot.Ref.5Yrs>Cat.Avg.	Alpha 5Yrs>0	IR.5Yrs>50Pct	SR.5Yrs>Cat.Avg.	Rolling Period Score	Overall Score
CREF Bond Market Account R2	-	-	-	-	-	-	-	-	-
CREF Equity Index (TEIHX)	-	-	-	-	-	-	-	-	-
CREF Equity Index Account R1 (QCEQRX)	■	■	■	■	■	■	■	■	■
CREF Equity Index R2 (QCEQPX)	■	■	■	■	■	■	■	■	■
CREF Growth Account R1 (QCGRRX)	■	■	■	■	■	■	■	■	■
CREF Growth R2 (QCGRPX)	■	■	■	■	■	■	■	■	■
CREF Stock R1 (QCSTRX)	■	■	■	■	■	■	■	■	■
TIAA Real Estate Account (QREARX)	■	■	-	-	■	■	■	■	■

Data source: Morningstar Direct. USIA proprietary scorecard provides quantitative analysis considerations for short-, intermediate- and long-term time periods of absolute and relative risk/performance considerations as well as manager experience. USIA Research applies additional qualitative factor considerations based on their holistic due diligence process which focuses on: people (firm/investment level); philosophy, process and product. Examples of these considerations are: enterprise and operational considerations; ownership structure; investment personnel stability and experience; risk management, compensation structure; relationship management; investment process adoption by the team and consistent with team culture; investment process transparency and consistency throughout portfolio construction process from selection to sale; and product economic, compliance, and operational considerations (i.e. size, availability, investment strategy type, etc). Funds may be added or removed from the asset class screen based on additional non-scorecard quantitative and qualitative analysis (i.e. attribution, style drift, qualifying separate account investment strategy, etc).

## Investments - Due Diligence Updates

As of December 31, 2020

Fund Name	Comments	Action
CREF Equity Index Account R1 (QCEQRX)	CREF Equity Index is assigned an action of Hold. The fund seeks to track the Russell 3000 Index by buying most, but not necessarily all, of the securities in the index. Jim Campagna has managed the fund since 2005. He was joined by Lei Liao in 2014. Over all time frames ended Q4'20, the fund's tracking error is in line with the index. Notably, 2020 calendar year performance was generated amid atypical volatility in the markets broadly due to fears of the COVID-19 pandemic and its impact on the economy. This resulted in significant flight to quality in Q1, followed by the return of risk appetite in Q2, Q3, and Q4 as most markets recouped losses from Q1. We will continue to monitor.	Hold
CREF Equity Index R2 (QCEQPX)	CREF Equity Index is assigned an action of Hold. The fund seeks to track the Russell 3000 Index by buying most, but not necessarily all, of the securities in the index. Jim Campagna has managed the fund since 2005. He was joined by Lei Liao in 2014. Over all time frames ended Q4'20, the fund's tracking error is in line with the index. Notably, 2020 calendar year performance was generated amid atypical volatility in the markets broadly due to fears of the COVID-19 pandemic and its impact on the economy. This resulted in significant flight to quality in Q1, followed by the return of risk appetite in Q2, Q3, and Q4 as most markets recouped losses from Q1. We will continue to monitor.	Hold
CREF Growth Account R1 (QCGRRX)	CREF Growth is assigned an action of Hold. Terrence Kontos has managed the fund since 2014. He was joined by Saira Malik effective October 1, 2020. The duo invest primarily in large-cap equity securities believed to present the opportunity for growth. The fund also seeks to invest in companies expected to benefit from prospective acquisitions, reorganizations, corporate restructurings or other special situations. The resulting portfolio consists of about 490 positions but the top 10 holdings still make up about 45% of assets. Over the period ended Q4'20, intermediate-term trailing returns keep pace with category peers, and short-term returns lead the category average and the index. In the past year ended Q4'20, strong consumer discretionary and information technology security selection added value. On balance, selection within industrials detracted. Notably, 2020 calendar year performance was generated amid atypical volatility in the markets broadly due to fears of the COVID-19 pandemic and its impact on the economy. This resulted in significant flight to quality in Q1, followed by the return of risk appetite in Q2, Q3, and Q4 as most markets recouped losses from Q1. During the recovery in Q2 and Q3, value and blend both lagged growth which continued to perform strongly, perpetuating a trend since the global financial crisis in which growth outpaces value. In Q4, value outperformed growth but returns over the full course of 2020 still favored growth. We will continue to monitor.	Hold

## Investments - Due Diligence Updates

As of December 31, 2020

Fund Name	Comments	Action
CREF Growth R2 (QCGRPX)	<p>CREF Growth is assigned an action of Hold. Terrence Kontos has managed the fund since 2014. He was joined by Saira Malik effective October 1, 2020. The duo invest primarily in large-cap equity securities believed to present the opportunity for growth. The fund also seeks to invest in companies expected to benefit from prospective acquisitions, reorganizations, corporate restructurings or other special situations. The resulting portfolio consists of about 490 positions but the top 10 holdings still make up about 45% of assets. Over the period ended Q4'20, intermediate-term trailing returns keep pace with category peers, and short-term returns lead the category average and the index. In the past year ended Q4'20, strong consumer discretionary and information technology security selection added value. On balance, selection within industrials detracted. Notably, 2020 calendar year performance was generated amid atypical volatility in the markets broadly due to fears of the COVID-19 pandemic and its impact on the economy. This resulted in significant flight to quality in Q1, followed by the return of risk appetite in Q2, Q3, and Q4 as most markets recouped losses from Q1. During the recovery in Q2 and Q3, value and blend both lagged growth which continued to perform strongly, perpetuating a trend since the global financial crisis in which growth outpaces value. In Q4, value outperformed growth but returns over the full course of 2020 still favored growth. We will continue to monitor.</p>	Hold

Data source: Morningstar Direct. USIA proprietary scorecard provides quantitative analysis considerations for short-, intermediate- and long-term time periods of absolute and relative risk/performance considerations as well as manager experience. USIA Research applies additional qualitative factor considerations based on their holistic due diligence process which focuses on: people (firm/investment level); philosophy, process and product. Examples of these considerations are: enterprise and operational considerations; ownership structure; investment personnel stability and experience; risk management, compensation structure; relationship management; investment process adoption by the team and consistent with team culture; investment process transparency and consistency throughout portfolio construction process from selection to sale; and product economic, compliance, and operational considerations (i.e. size, availability, investment strategy type, etc). Funds may be added or removed from the asset class screen based on additional non-scorecard quantitative and qualitative analysis (i.e. attribution, style drift, qualifying separate account investment strategy, etc).

# CREF Bond Market Account R2

Benchmark: Blmbg. Barc. U.S. Aggregate

Category: Intermediate Core Bond

Report Date: 12/31/2020

## Fund Information

Ticker	QCBMPX
Fund Inception	04/24/2015
Fund Assets	14,855 Million
Portfolio Assets	5,125 Million
Total # of Holdings	2131
% in Top 10	10.79 %
PM	Cerra,J/Higgins,J/O'Brien,J
PM Tenure	9 Years 4 Months
Turnover	85.00 %
Net Expense (%)	0.32 %
SEC Yield	1.47 %

## Asset Allocation (%)

Equity	0.00
Fixed Income	99.06
Cash	7.15

## Portfolio Characteristics

No data found.

## Trailing Performance

	1 Quarter	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	2016
Manager	1.53 (22)	7.85 (47)	5.45 (36)	4.75 (30)	3.96 (36)	8.97 (32)	-0.23 (44)	4.04 (22)	3.36 (21)
Benchmark	0.67	7.51	5.34	4.44	3.84	8.72	0.01	3.54	2.65
Category	1.03	7.73	5.29	4.42	3.79	8.58	-0.32	3.46	2.63

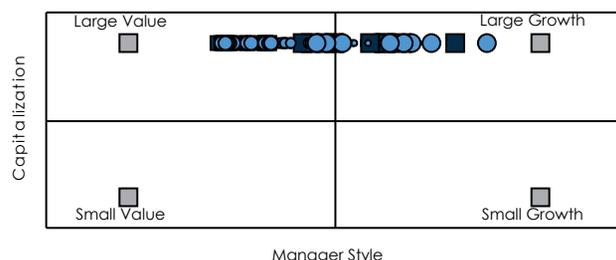
## Sector Weights (%)

No data found.

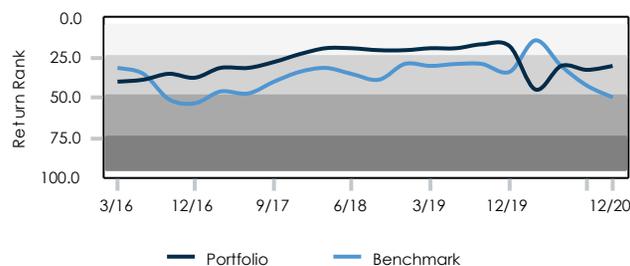
## Top Ten Holdings

No data found.

## 5 Year Style Map



## 5 Year Rolling Percentile Ranking



## Fund Statistics

	5 Years
Standard Deviation	3.45

### vs. Blmbg. Barc. U.S. Aggregate

Alpha	0.25
Beta	1.01
Information Ratio	0.23
Tracking Error	1.36
R-Squared	0.84
Consistency	68.33
Up Capture	107.02
Down Capture	106.99

### vs. 90 Day U.S. Treasury Bill

Sharpe Ratio	1.02
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# CREF Equity Index (TEIHX)

Benchmark: S&P 500 Index

Category: Large Blend

Report Date: 12/31/2020

## Fund Information

Ticker	TEIHX
Fund Inception	12/04/2015
Fund Assets	30,506 Million
Portfolio Assets	12 Million
Total # of Holdings	2974
% in Top 10	22.56 %
PM	Campagna,P/Liao,L/Tran,D
PM Tenure	15 Years
Turnover	12.00 %
Net Expense (%)	0.19 %
SEC Yield	-

## Asset Allocation (%)

Equity	99.48
Fixed Income	0.02
Cash	0.50

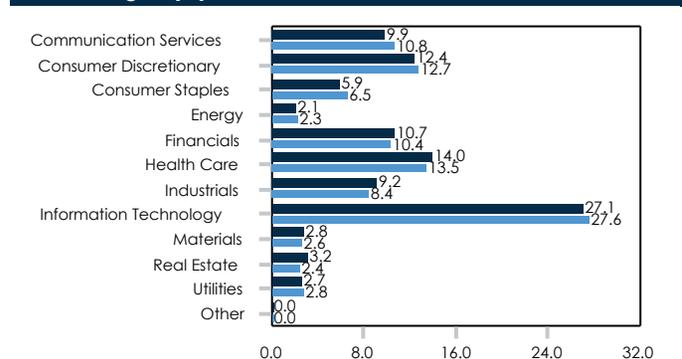
## Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap \$M	404,556	483,324
Median Mkt. Cap \$M	2,156	26,815
Price/Earnings ratio	29.09	29.35
Price/Book ratio	4.43	4.57
5 Yr. EPS Growth Rate (%)	17.56	18.17
Current Yield (%)	1.42	1.53
Beta (5 Years, Monthly)	1.04	1.00
Number of Stocks	2,950	505
Debt to Equity (%)	92.51	155.75
Forecast P/E	22.76	22.83
Forecast EPS Growth	14.89	14.75
Return on Equity (%)	9.25	10.77
% in Int'l Securities	3.34	2.98

## Trailing Performance

	1 Quarter	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	2016
Manager	14.64 (21)	20.73 (18)	14.30 (20)	15.29 (16)	13.70 (21)	30.71 (45)	-5.36 (49)	20.99 (57)	12.75 (18)
Benchmark	12.15	18.40	14.18	15.22	13.88	31.49	-4.38	21.83	11.96
Category	12.14	17.53	12.90	14.02	12.78	30.23	-5.50	21.20	11.15

## Sector Weights (%)

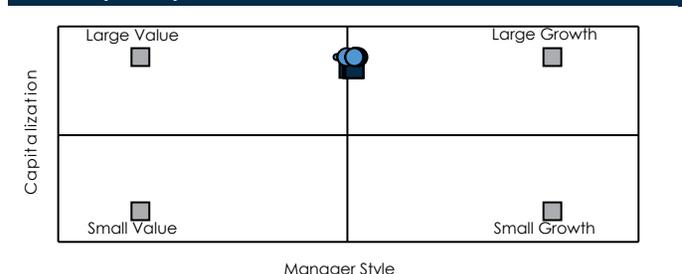


## Top Ten Holdings

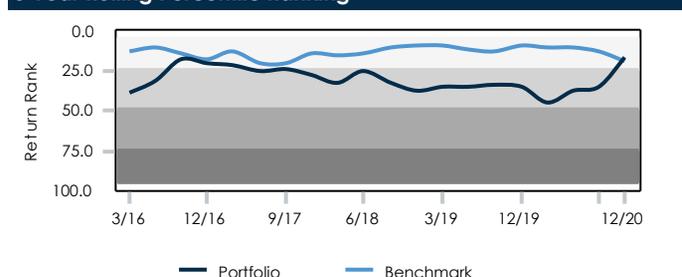
	Portfolio Weight (%)	Benchmark Weight (%)
Apple Inc	5.64	6.70
Microsoft Corp	4.39	5.31
Amazon.com Inc	3.64	4.39
Facebook Inc	1.73	2.07
Tesla Inc	1.41	1.69
Alphabet Inc	1.38	1.66
Alphabet Inc	1.34	1.61
Berkshire Hathaway Inc	1.14	1.43
Johnson & Johnson	1.09	1.31
JPMorgan Chase & Co	1.01	1.22

% of Portfolio	22.77	27.39
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## 5 Year Style Map



## 5 Year Rolling Percentile Ranking



## Fund Statistics

	5 Years
Standard Deviation	15.85
<b>vs. S&amp;P 500 Index</b>	
Alpha	-0.51
Beta	1.04
Information Ratio	0.14
Tracking Error	1.32
R-Squared	0.99
Consistency	48.33
Up Capture	102.42
Down Capture	103.90

<b>vs. 90 Day U.S. Treasury Bill</b>	
Sharpe Ratio	0.90

# CREF Equity Index R1

Benchmark: S&P 500 Index

Category: Large Blend

Report Date: 12/31/2020

Fund Information	
Ticker	QCEQRX
Fund Inception	04/29/1994
Fund Assets	21,836 Million
Portfolio Assets	4,230 Million
Total # of Holdings	2734
% in Top 10	23.19 %
PM	Campagna,P/Liao,L/Tran,D
PM Tenure	15 Years
Turnover	2.00 %
Net Expense (%)	0.48 %
SEC Yield	-

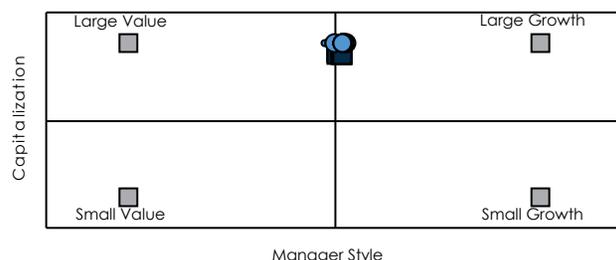
Asset Allocation (%)	
Equity	99.80
Fixed Income	0.00
Cash	0.20

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap \$M	-	483,324
Median Mkt. Cap \$M	-	26,815
Price/Earnings ratio	0.00	29.35
Price/Book ratio	0.00	4.57
5 Yr. EPS Growth Rate (%)	0.00	18.17
Current Yield (%)	0.00	1.53
Beta (5 Years, Monthly)	1.04	1.00
Number of Stocks	0	505
Debt to Equity (%)	0.00	155.75
Forecast P/E	0.00	22.83
Forecast EPS Growth	0.00	14.75
Return on Equity (%)	0.00	10.77
% in Int'l Securities	0.00	2.98

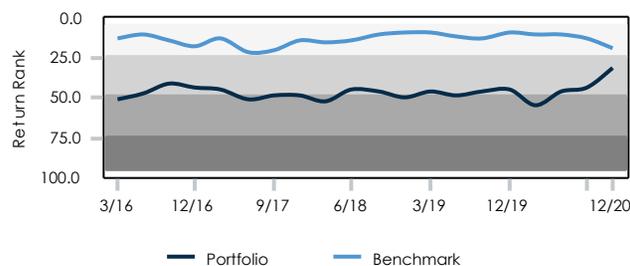
Trailing Performance		1 Quarter	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	2016
Manager		14.54 (22)	20.35 (21)	14.01 (30)	14.87 (32)	13.29 (37)	30.40 (49)	-5.59 (52)	20.43 (66)	12.07 (25)
Benchmark		12.15	18.40	14.18	15.22	13.88	31.49	-4.38	21.83	11.96
Category		12.14	17.53	12.92	14.01	12.77	30.22	-5.50	21.18	11.15

Sector Weights (%)	Top Ten Holdings
No data found.	No data found.

## 5 Year Style Map



## 5 Year Rolling Percentile Ranking



## Fund Statistics

	5 Years
Standard Deviation	15.84

vs. S&P 500 Index	
Alpha	-0.87
Beta	1.04
Information Ratio	-0.15
Tracking Error	1.31
R-Squared	0.99
Consistency	43.33
Up Capture	101.33
Down Capture	104.44

vs. 90 Day U.S. Treasury Bill	
Sharpe Ratio	0.88

# CREF Equity Index R2

Benchmark: S&P 500 Index

Category: Large Blend

Report Date: 12/31/2020

Fund Information	
Ticker	QCEQPX
Fund Inception	04/24/2015
Fund Assets	21,836 Million
Portfolio Assets	7,484 Million
Total # of Holdings	2734
% in Top 10	23.19 %
PM	Campagna,P/Liao,L/Tran,D
PM Tenure	15 Years
Turnover	2.00 %
Net Expense (%)	0.29 %
SEC Yield	-

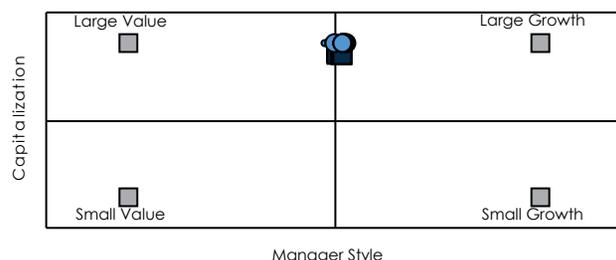
Asset Allocation (%)	
Equity	99.80
Fixed Income	0.00
Cash	0.20

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap \$M	-	483,324
Median Mkt. Cap \$M	-	26,815
Price/Earnings ratio	0.00	29.35
Price/Book ratio	0.00	4.57
5 Yr. EPS Growth Rate (%)	0.00	18.17
Current Yield (%)	0.00	1.53
Beta (5 Years, Monthly)	1.04	1.00
Number of Stocks	0	505
Debt to Equity (%)	0.00	155.75
Forecast P/E	0.00	22.83
Forecast EPS Growth	0.00	14.75
Return on Equity (%)	0.00	10.77
% in Int'l Securities	0.00	2.98

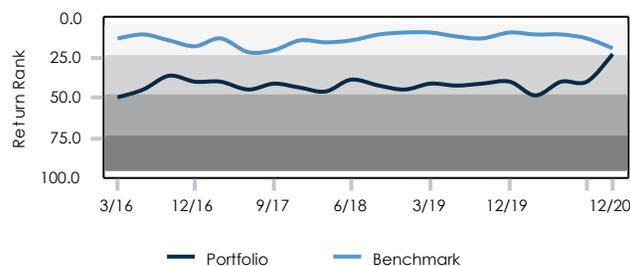
Trailing Performance		1 Quarter	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	2016
Manager		14.60 (22)	20.56 (19)	14.21 (21)	15.12 (23)	13.43 (32)	30.66 (46)	-5.41 (49)	20.74 (61)	12.38 (23)
Benchmark		12.15	18.40	14.18	15.22	13.88	31.49	-4.38	21.83	11.96
Category		12.14	17.51	12.91	14.01	12.77	30.23	-5.50	21.18	11.15

Sector Weights (%)	Top Ten Holdings
No data found.	No data found.

## 5 Year Style Map



## 5 Year Rolling Percentile Ranking



## Fund Statistics

	5 Years
Standard Deviation	15.84

vs. S&P 500 Index	
Alpha	-0.66
Beta	1.04
Information Ratio	0.02
Tracking Error	1.31
R-Squared	0.99
Consistency	46.67
Up Capture	101.95
Down Capture	104.10

vs. 90 Day U.S. Treasury Bill	
Sharpe Ratio	0.89

# CREF Growth R1

Benchmark: Russell 1000 Growth Index

Category: Large Growth

Report Date: 12/31/2020

## Fund Information

Ticker	QCGRRX
Fund Inception	04/29/1994
Fund Assets	35,718 Million
Portfolio Assets	6,548 Million
Total # of Holdings	487
% in Top 10	43.55 %
PM	Kontos,T/Malik,S
PM Tenure	6 Years 7 Months
Turnover	85.00 %
Net Expense (%)	0.50 %
SEC Yield	-

## Asset Allocation (%)

Equity	99.98
Fixed Income	0.00
Cash	0.02

## Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap \$M	-	712,934
Median Mkt. Cap \$M	-	16,342
Price/Earnings ratio	0.00	40.00
Price/Book ratio	0.00	12.01
5 Yr. EPS Growth Rate (%)	0.00	28.84
Current Yield (%)	0.00	0.78
Beta (5 Years, Monthly)	1.03	1.00
Number of Stocks	0	453
Debt to Equity (%)	0.00	51.40
Forecast P/E	0.00	31.30
Forecast EPS Growth	0.00	20.65
Return on Equity (%)	0.00	13.59
% in Int'l Securities	0.00	2.31

## Trailing Performance

	1 Quarter	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	2016
Manager	11.39 (59)	40.44 (29)	21.53 (46)	19.31 (41)	16.53 (30)	31.33 (62)	-2.69 (59)	31.38 (30)	2.53 (54)
Benchmark	11.39	38.49	22.99	21.00	17.21	36.39	-1.51	30.21	7.08
Category	11.91	34.78	21.06	18.69	15.48	32.49	-1.72	28.67	2.97

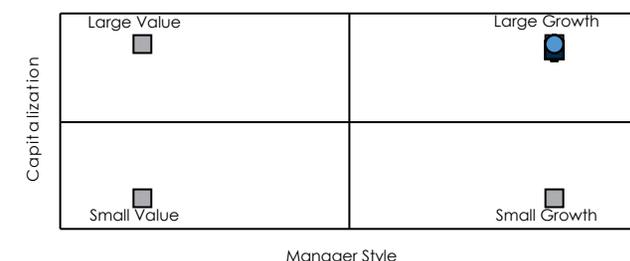
## Sector Weights (%)

No data found.

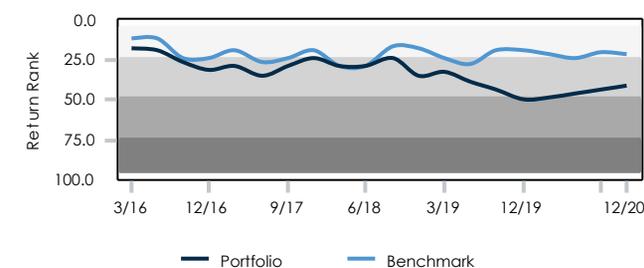
## Top Ten Holdings

No data found.

## 5 Year Style Map



## 5 Year Rolling Percentile Ranking



## Fund Statistics

	5 Years
Standard Deviation	16.68

## vs. Russell 1000 Growth Index

Alpha	-1.87
Beta	1.03
Information Ratio	-0.78
Tracking Error	1.72
R-Squared	0.99
Consistency	45.00
Up Capture	99.10
Down Capture	108.03

## vs. 90 Day U.S. Treasury Bill

Sharpe Ratio	1.07
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# CREF Growth R2

Benchmark: Russell 1000 Growth Index

Category: Large Growth

Report Date: 12/31/2020

Fund Information	
Ticker	QCGRPX
Fund Inception	04/24/2015
Fund Assets	35,718 Million
Portfolio Assets	12,020 Million
Total # of Holdings	487
% in Top 10	43.55 %
PM	Kontos,T/Malik,S
PM Tenure	6 Years 7 Months
Turnover	85.00 %
Net Expense (%)	0.32 %
SEC Yield	-

Asset Allocation (%)	
Equity	99.98
Fixed Income	0.00
Cash	0.02

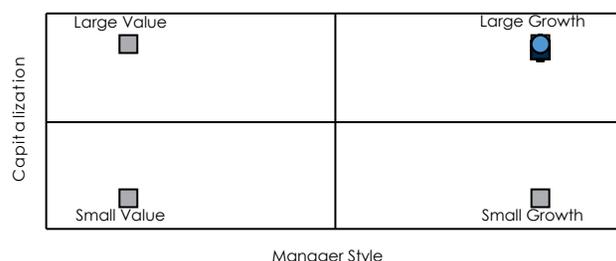
Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap \$M	-	712,934
Median Mkt. Cap \$M	-	16,342
Price/Earnings ratio	0.00	40.00
Price/Book ratio	0.00	12.01
5 Yr. EPS Growth Rate (%)	0.00	28.84
Current Yield (%)	0.00	0.78
Beta (5 Years, Monthly)	1.03	1.00
Number of Stocks	0	453
Debt to Equity (%)	0.00	51.40
Forecast P/E	0.00	31.30
Forecast EPS Growth	0.00	20.65
Return on Equity (%)	0.00	13.59
% in Int'l Securities	0.00	2.31

Trailing Performance												
	1 Quarter	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	2016			
Manager	11.44 (58)	40.68 (29)	21.75 (45)	19.57 (37)	16.68 (28)	31.59 (60)	-2.51 (57)	31.73 (28)	2.81 (52)			
Benchmark	11.39	38.49	22.99	21.00	17.21	36.39	-1.51	30.21	7.08			
Category	11.91	34.78	21.06	18.69	15.48	32.49	-1.72	28.67	2.97			

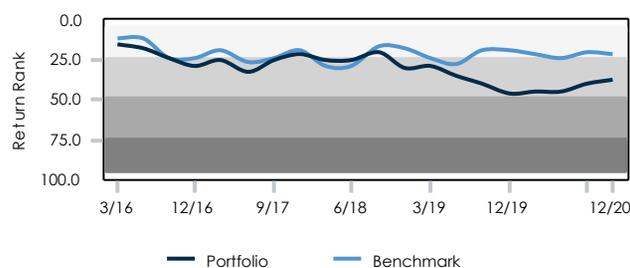
**Sector Weights (%)**  
No data found.

**Top Ten Holdings**  
No data found.

## 5 Year Style Map



## 5 Year Rolling Percentile Ranking



## Fund Statistics

	5 Years
Standard Deviation	16.68

vs. Russell 1000 Growth Index	
Alpha	-1.66
Beta	1.03
Information Ratio	-0.65
Tracking Error	1.72
R-Squared	0.99
Consistency	46.67
Up Capture	99.59
Down Capture	107.58

vs. 90 Day U.S. Treasury Bill	
Sharpe Ratio	1.09

# CREF Stock R1 (QCSTRX)

Benchmark: Allocation--85%+ Equity

Category: Allocation--85%+ Equity

Report Date: 12/31/2020

## Fund Information

Ticker	QCSTRX
Fund Inception	07/31/1952
Fund Assets	125,488 Million
Portfolio Assets	15,073 Million
Total # of Holdings	9714
% in Top 10	16.15 %
PM	Chalupnik,D/Erickson,H/Malik,S
PM Tenure	24 Years 9 Months
Turnover	60.00 %
Net Expense (%)	0.57 %
SEC Yield	-

## Asset Allocation (%)

Equity	98.29
Fixed Income	0.17
Cash	1.50

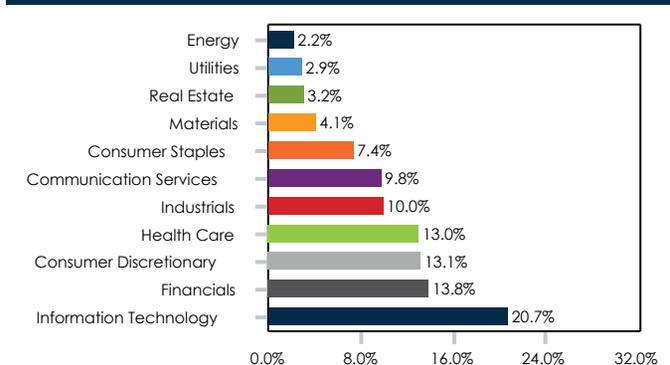
## Fund Characteristics

Total Securities	9,714
Avg. Market Cap	\$62,676 Million
P/E	18.1
P/B	2.3
Div. Yield	2.0%
Avg. Coupon	-
Avg. Effective Maturity	-
Avg. Effective Duration	-
Avg. Credit Quality	-
Yield To Maturity	-
SEC Yield	-

## Trailing Performance

	1 Quarter	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	2016
Manager	15.29 (52)	17.64 (31)	10.47 (32)	12.52 (21)	10.46 (19)	27.13 (22)	-9.86 (61)	23.01 (15)	8.76 (33)
Benchmark	15.58	13.25	8.56	10.58	9.15	24.45	-9.24	19.73	7.94
Category	15.34	15.22	9.46	11.40	9.49	25.33	-9.39	20.24	7.59

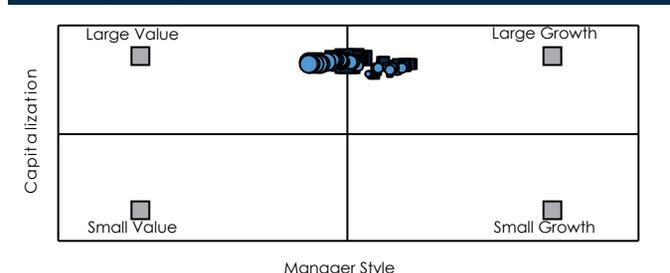
## Equity Sector Allocation



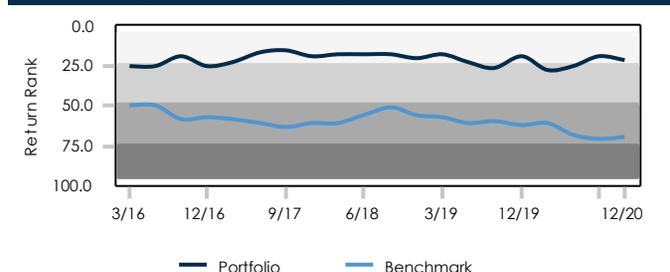
## Top Ten Securities

Apple Inc	3.5 %
Microsoft Corp	3.3 %
Amazon.com Inc	2.9 %
Facebook Inc A	1.4 %
Alphabet Inc Class C	1.2 %
S+p500 Emini Fut Dec20 Xcme 20	1.0 %
Alphabet Inc A	0.8 %
Alibaba Group Holding Ltd ADR	0.7 %
JPMorgan Chase & Co	0.7 %
Berkshire Hathaway Inc Class B	0.7 %
<b>Total</b>	<b>16.2 %</b>

## 5 Year Style Map



## 5 Year Rolling Percentile Ranking



## Fund Statistics

	<b>5 Years</b>
Standard Deviation	15.68

## vs. Allocation--85%+ Equity

Alpha	1.35
Beta	1.05
Information Ratio	1.36
Tracking Error	1.37
R-Squared	0.99
Consistency	63.33
Up Capture	109.56
Down Capture	103.66

## vs. 90 Day U.S. Treasury Bill

Sharpe Ratio	0.76
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