



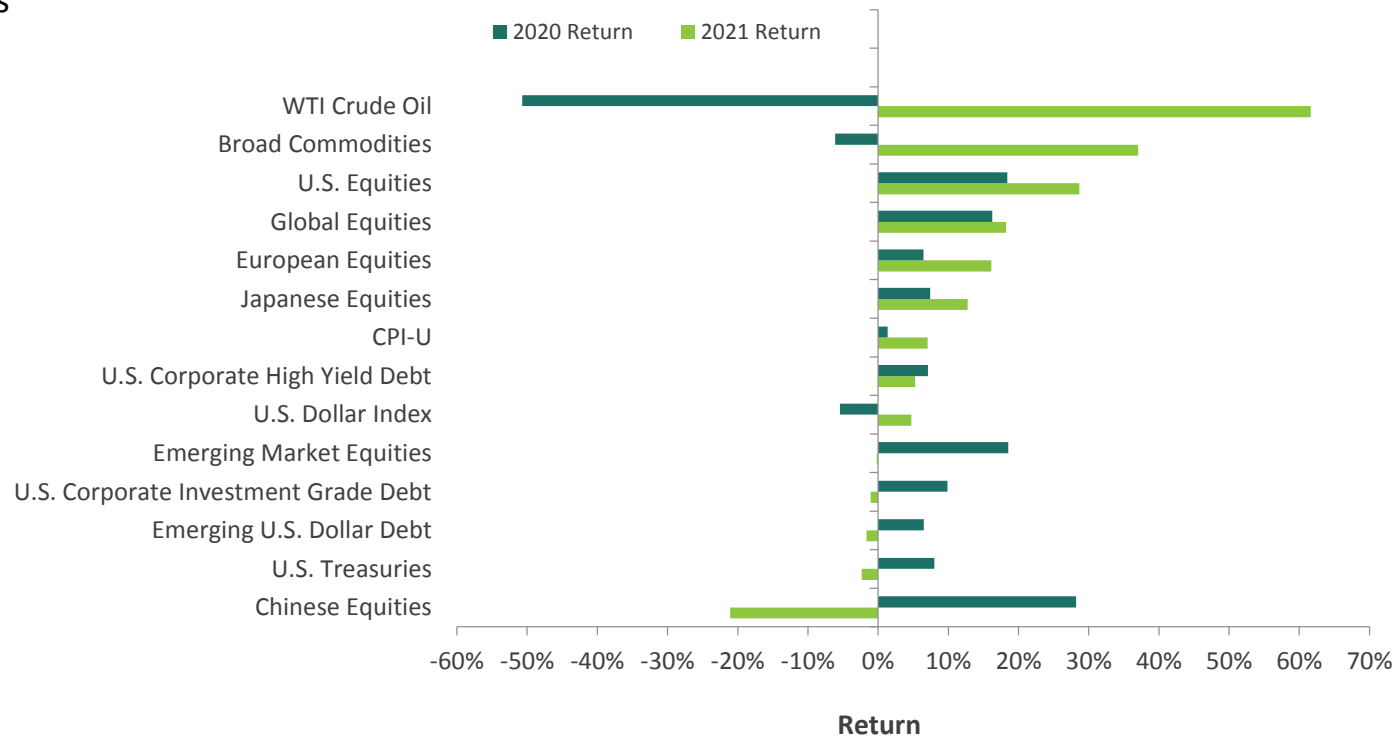
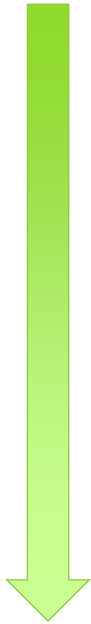
# Market & Portfolio Update

**Amy C. McGarrity**  
Chief Investment Officer  
January 21, 2022

# Market Performance: 2021 and 2020 Calendar Years

“Risk assets” moved higher in 2021 with oil and commodities reversing course from 2020

2021 Highest Performers



All returns are presented in unhedged USD terms

## U.S. Market Barometer

|       | Value | Blend | Growth |
|-------|-------|-------|--------|
| Large | 23.4  | 25.4  | 26.9   |
| Mid   | 28.5  | 24.0  | 17.1   |
| Small | 25.3  | 18.2  | 11.1   |

Source: Market Barometer returns are the respective MSCI USA benchmarks

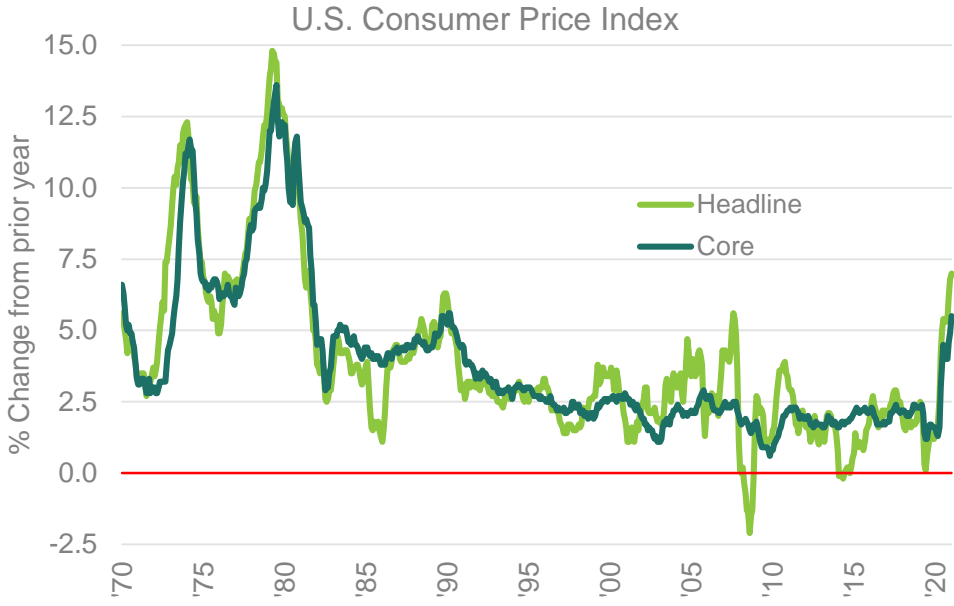
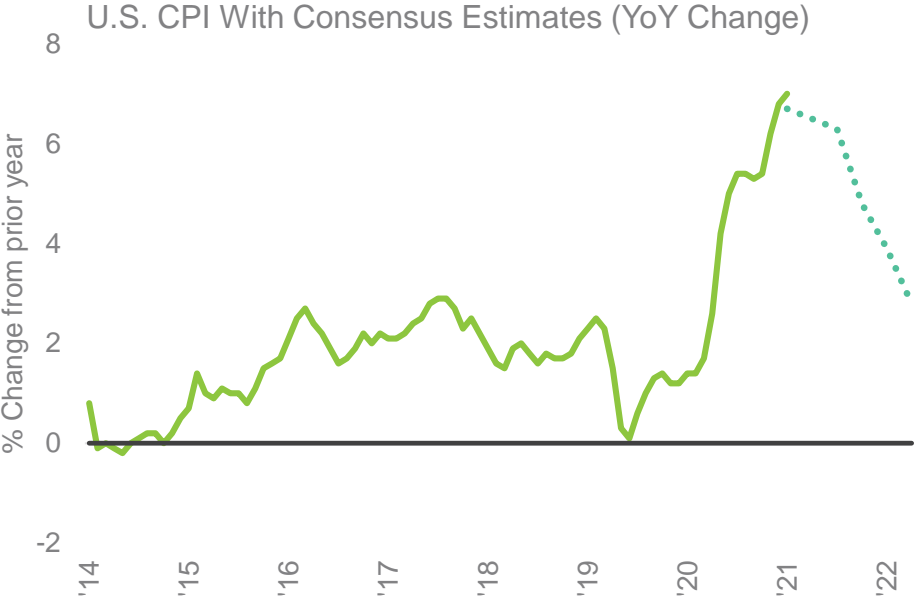
# Market Outlook



Illustration by Charlos Gary. © 2021 Charles Schwab & Co., Inc.

# Inflation Estimates

Economist surveys point to a renormalization of inflation trends over the next 18 months

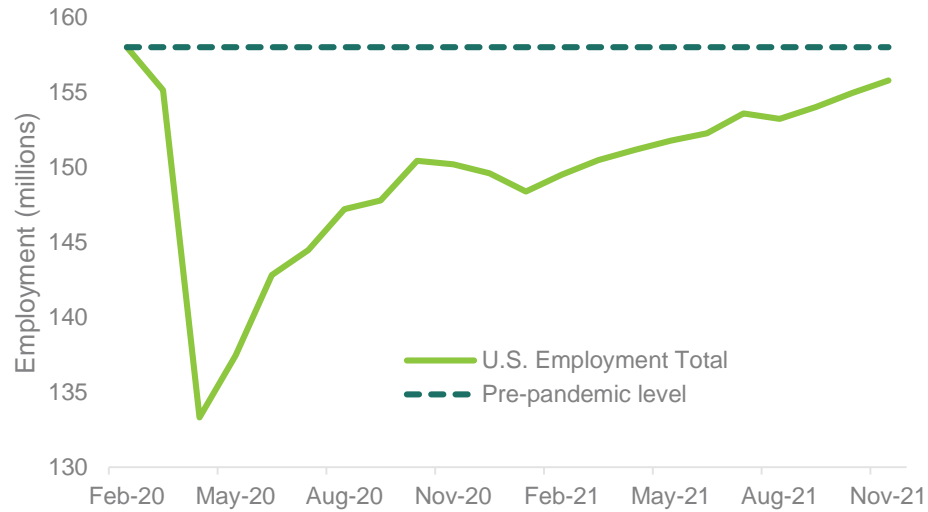


Source: Bureau of Labor Statistics

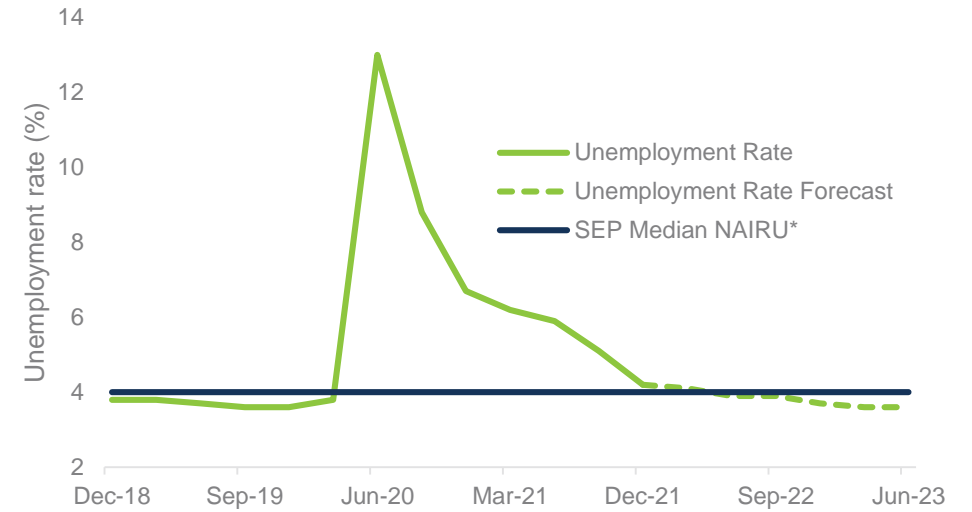


# Labor Market

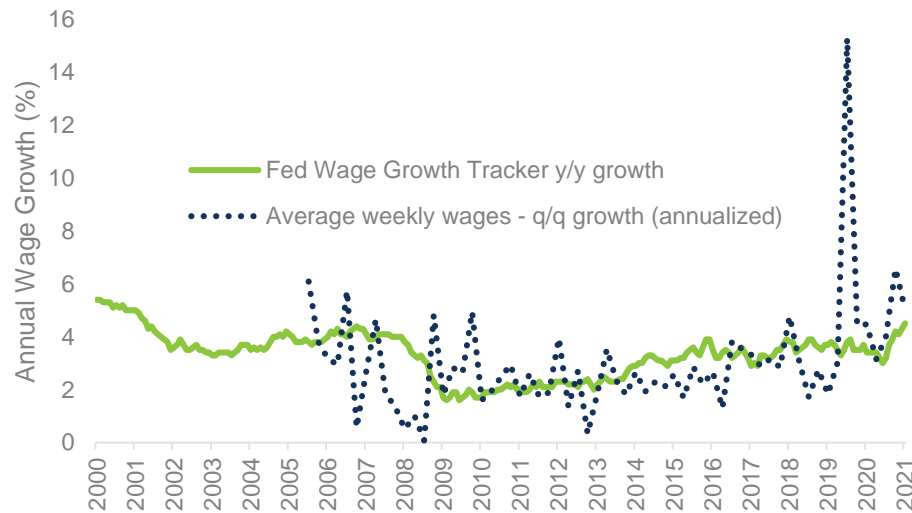
Employment is still ~4m short of pre-pandemic level



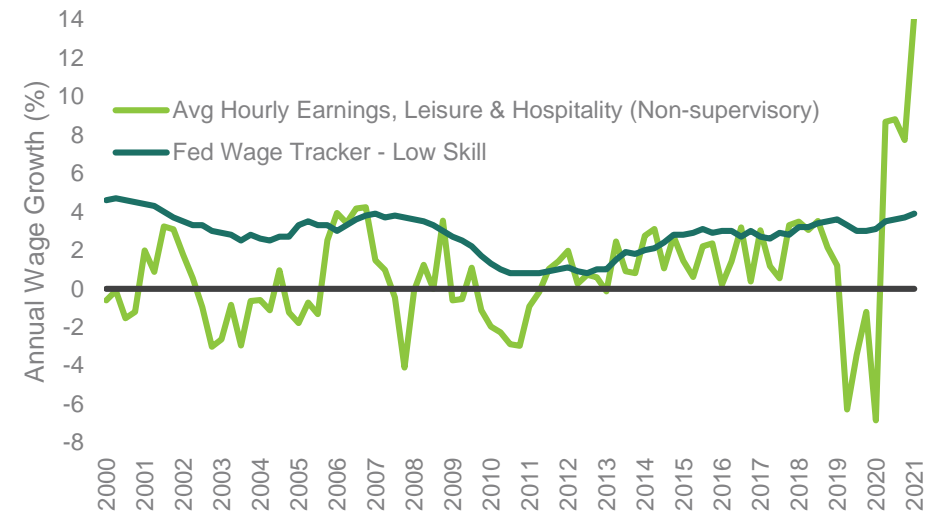
Unemployment may fall below the neutral rate in 2022



Wage growth accelerated in the second half of 2021...



...and is especially elevated for low-wage & low-skill workers



Sources: Bureau of Labor Statistics, U.S. Department of Labor, Federal Reserve

\* Summary of Economic Projections (SEP) Non-accelerating inflation rate of unemployment (NAIRU)

# Treasury Yield Curve



| Tenor | Yield 01/17/22 | Yield 12/31/20 | Change |
|-------|----------------|----------------|--------|
| 1M    | 0.04%          | 0.03%          | 0.01%  |
| 2M    | 0.05           | 0.06           | (0.01) |
| 3M    | 0.12           | 0.06           | 0.06   |
| 6M    | 0.29           | 0.08           | 0.21   |
| 1Y    | 0.49           | 0.10           | 0.39   |
| 2Y    | 0.97           | 0.12           | 0.85   |
| 3Y    | 1.27           | 0.17           | 1.10   |
| 5Y    | 1.56           | 0.36           | 1.20   |
| 7Y    | 1.73           | 0.64           | 1.09   |
| 10Y   | 1.79           | 0.91           | 0.87   |
| 20Y   | 2.19           | 1.44           | 0.75   |
| 30Y   | 2.12           | 1.65           | 0.48   |

- The Fed continues to keep short term rates near zero and has generally indicated they will keep them low until growth and employment meet their expectations
- Concerns about potential lasting inflation and the continued impact of the COVID variants are adding confusion to the economic picture

# 2022+ Projects: Investments/Collaborative

## Project

## Status

**Unitization – Fixed Income asset class and entire DB Plan**

Project team is researching feasibility of and process to unitize entire DB plan; the focus has shifted to unitization of the Fixed Income asset class with anticipated completion in Summer 2022

**Refreshed Technology Roadmap**

Project team focusing in on private asset classes, though ongoing upgrades, custodian bank services, and software evaluations are in process throughout department. Team is focused on efficient use and optimization of current technology

# Investment Activities

- Completed work on the BlackRock Aladdin risk module used by Fixed Income
- Commenced the Kyriba (cash management/forecasting software) implementation project
- Assisted in completion of the recordkeeper transition
- Updating CAP-related content on the PERA website
- Creating Stewardship and proxy-voting content for the Trustee Learning Library





# APPENDIX

# Asset Allocation Policy

## Policy

*Asset class weights will be within permissible ranges*

## Status

*All asset class weights within permissible ranges*

| Asset Class       | 2021 Policy Benchmark Weight | Actual Weight* (Nov 30, 2021) | Range         | Risk Weight (Sept 30, 2021) |
|-------------------|------------------------------|-------------------------------|---------------|-----------------------------|
| Global Equity     | 55.5%                        | 58.6%                         | 49.5% - 61.5% | 70.4%                       |
| Fixed Income      | 23.5%                        | 19.0%                         | 18.5% - 28.5% | 0.2%                        |
| Private Equity    | 8.5%                         | 9.2%                          | 4% - 13%      | 16.9%                       |
| Real Estate       | 8.5%                         | 8.1%                          | 4% - 13%      | 9.5%                        |
| Alternatives      | 4.0%                         | 4.7%                          | 0% - 12%      | 2.2%                        |
| Cash/Short Term** | 0.0%                         | 0.3%                          | 0% - 3%       | 0.8%                        |
| <b>Total</b>      | <b>100%</b>                  | <b>100%</b>                   |               | <b>100%</b>                 |

\* Transitional cash remains within respective asset classes

\*\* Includes Cash Overlay

# Active Risk Policy

## Policy

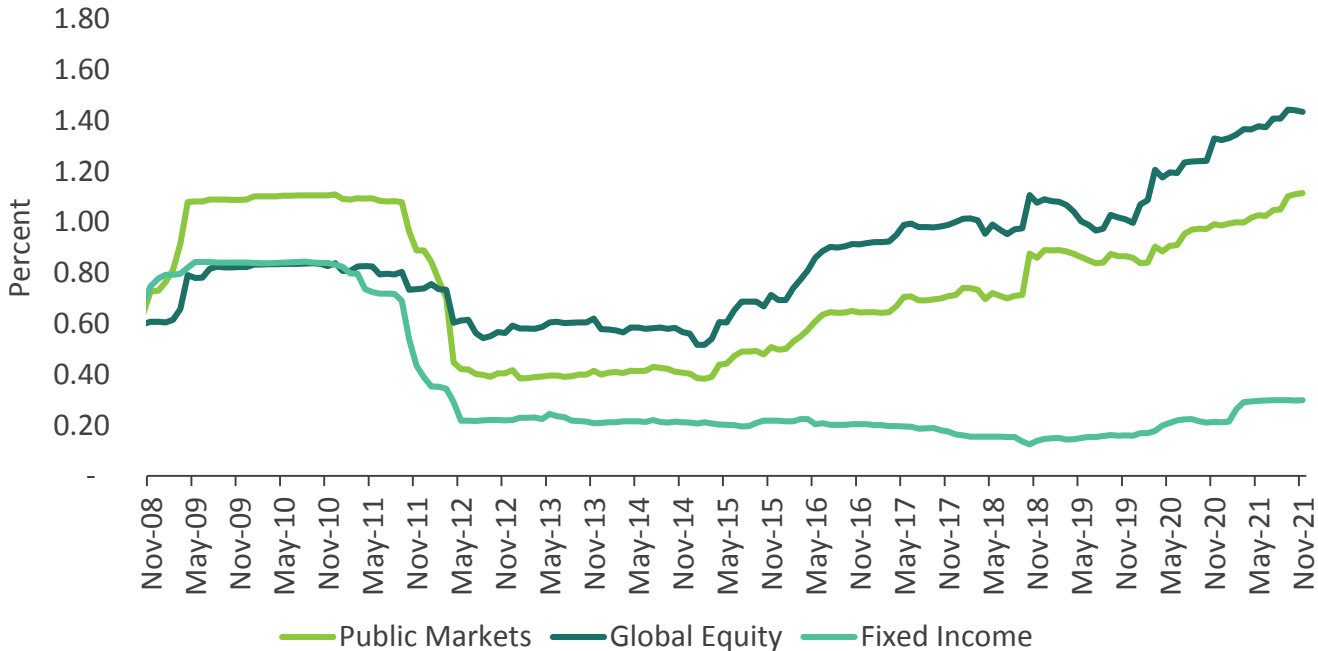
Active risk within marketable securities asset classes (i.e., Global Equity and Fixed Income) and total marketable securities portfolios will not exceed maximums

## Status

Active risk levels are within policy limits

| Active Risk                        |  |  |
|------------------------------------|--|--|
|                                    | Five-Year Tracking Error in Basis Points 30-Nov-21 | Active Risk Policy Maximum in Basis Points |
| Global Equity                      | 143  | 225  |
| Fixed Income                       | 30   | 100  |
| <b>Total Marketable Securities</b> | <b>111</b>   | <b>150</b>                                 |

Historical Active Risk - Public Markets



\*Active risk measurement was changed from trailing three years to trailing five years as of January 2020



# Portfolio Monitor

## ASSET CLASS

## STRATEGY

### Global Equity

Portfolio retains higher quality bias. No material sector or geographic overweights or underweights relative to the benchmark.

### Fixed Income

The current environment is challenging. Valuation (spreads) are at historic tights, driven by an accommodative Federal Reserve and substantial liquidity in the system. The Fed is in initial stages of removing stimulus as the economy recovers from the pandemic. The portfolio is positioned conservatively with a modest overweight to sectors which outperform in volatile environments.

### Private Equity

Initiating work on budget and plan for 2022 vintage. PE market and fundraising continues to be robust with no shortage of investment opportunities. Reup opportunities expected to drive commitment activity in 2022.

### Real Estate

The current investment environment continues to improve, but is in the early stages of recovery and investors remain cautious. Transaction activity remains subdued compared to peak levels and only the most desirable property types are trading, while capitalization rates remain largely unchanged. The most negatively impacted sectors are service retail, lodging, and open plan office spaces. Focus remains on selective investment in industrial and multifamily properties in major tech, medical and education driven markets.

### Alternatives

At this stage of the market cycle, real assets including infrastructure, specialty crops and asset-backed credit strategies appear to off the best risk-adjusted returns. Also, special situations in Europe and Emerging Markets look interesting due to less capital availability and less favorable monetary conditions.