

Investment Review

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UNM RETIREE WELFARE BENEFIT TRUST
Investment Review
Period Ended 12/31/2022



Market Insights

Key points

1

Wages remain a significant driver of inflation. The Federal Reserve is tightening financial conditions to lower labor demand and regain price stability.

2

The Fed may stop hiking rates in the first half of 2023. However, rates could remain higher for longer to avoid a second spike in inflation.

3

De-globalization, brought on by the war in Ukraine and trade uncertainty with China, is increasing the risk of a recession domestically and globally.

4

As rates fell in the fourth quarter, financial markets rallied. Bonds are beginning to reflect our economic outlook, and we see pockets of opportunity.

5

We continue to be cautious on equities. Though valuations have declined, earnings remain a risk as we enter 2023.

Base case outlook



Economy

Economic growth shows signs of slowing, and a recession is possible.

Risks: Russia-Ukraine war persists, higher rates slowing growth too much.



Policy

The Federal Reserve reaches a point where rate increases can slow then stop. Fiscal policy support is unlikely.

Risk: Persistent inflation may require even tighter financial conditions.



Markets

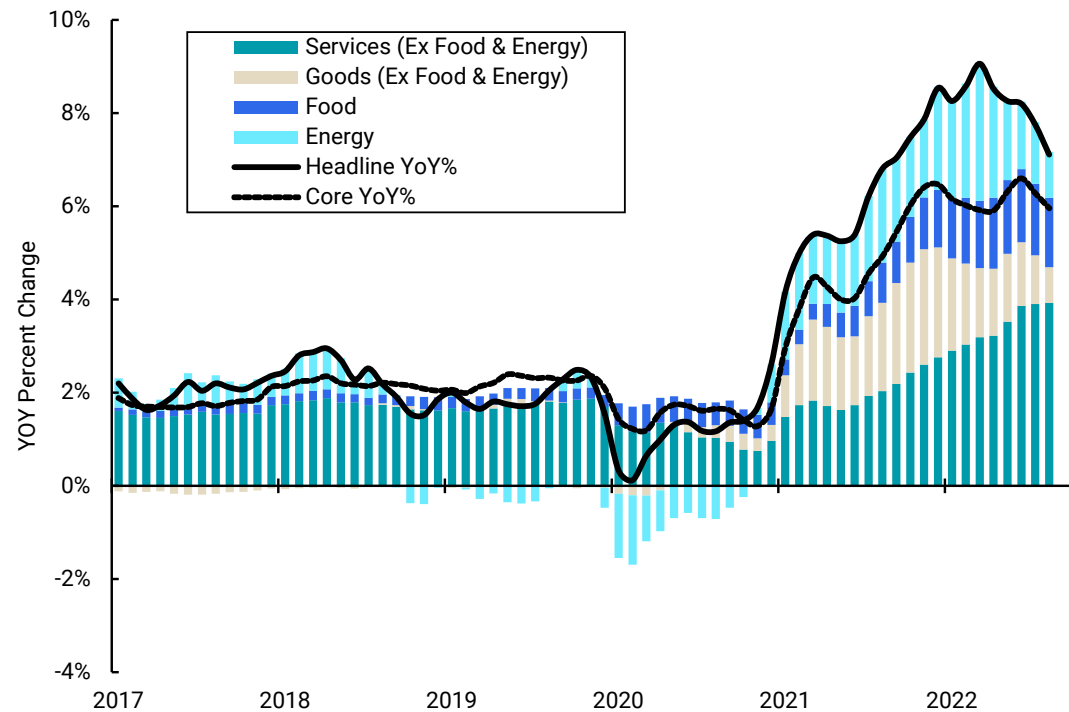
Bond markets are approaching fair value. Equities remain volatile as margins are a risk to earnings.

Risk: Potential for a global recession as well as inflation impacting earnings.

CPI remains elevated

- Headline inflation is moderating as some cyclical prices retreat, including oil products.
- Core inflation remains uncomfortably high as higher rents and wages pressure prices.
- The Federal Reserve is most focused on core inflation.
- The Fed is determined to regain price stability and is willing to accept a recession to do so.

**Consumer Price Index
Headline vs. Core**



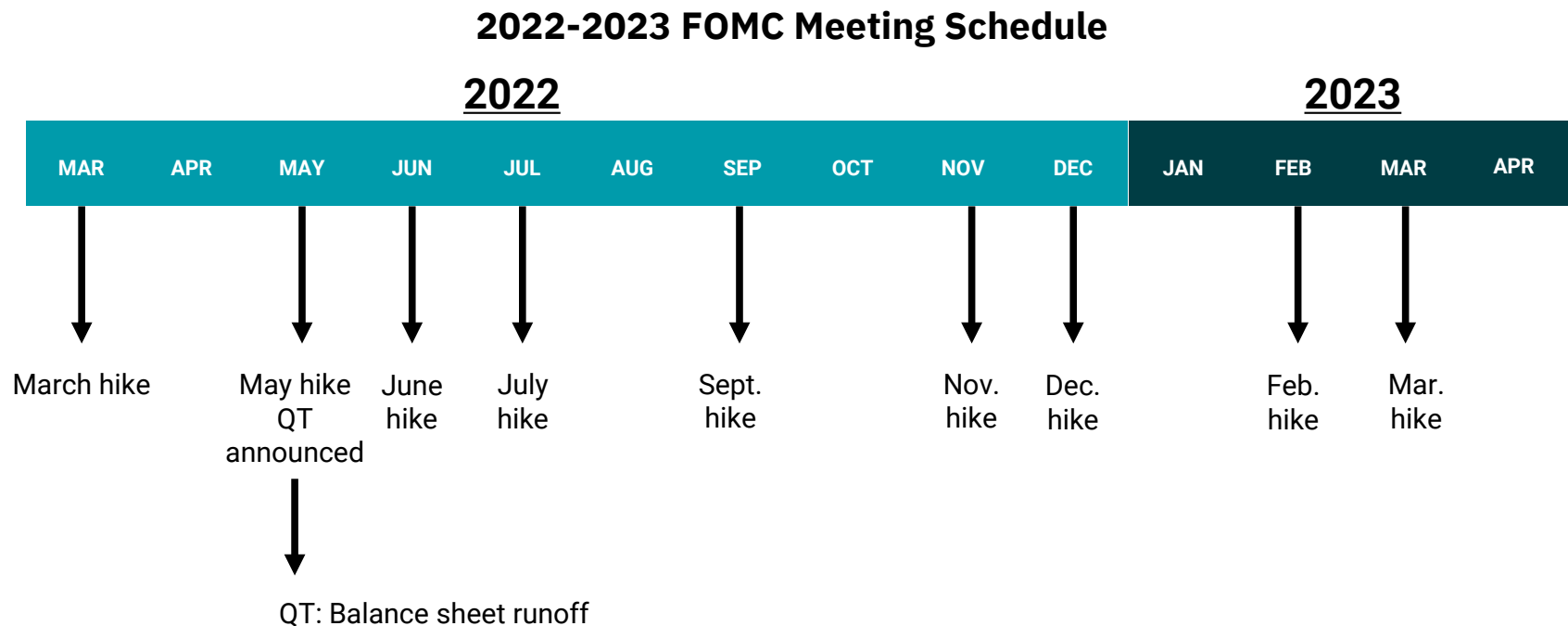
Wages could lead to sticky inflation

- Competition for workers in the job market has led to significant wage increases.
- Higher wages are a key metric for the Federal Reserve as they monitor core inflation.
- Job openings continue to significantly exceed job seekers, and employers are struggling to replace lost headcount from the COVID recession.
- The Fed is aggressively raising rates to stop a wage-price spiral.



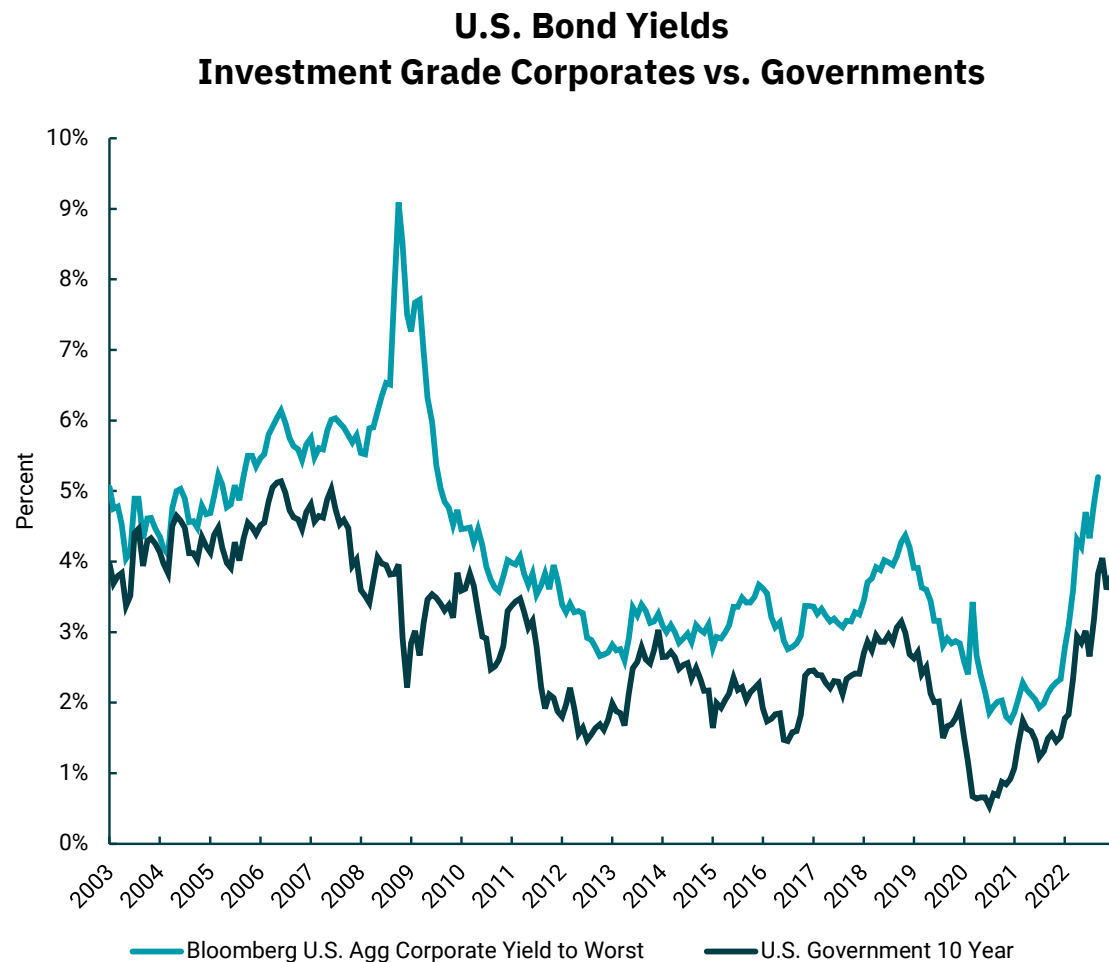
The Fed is tightening financial conditions

- The Federal Reserve hiked rates by 4.25% in 2022, the fastest pace in decades. We expect several more rate hikes in 2023. Quantitative tightening also began in June and will continue in 2023.
- In addition, rates may remain high in 2023.
- Terminal rate expectations are now 5.0-5.25%.



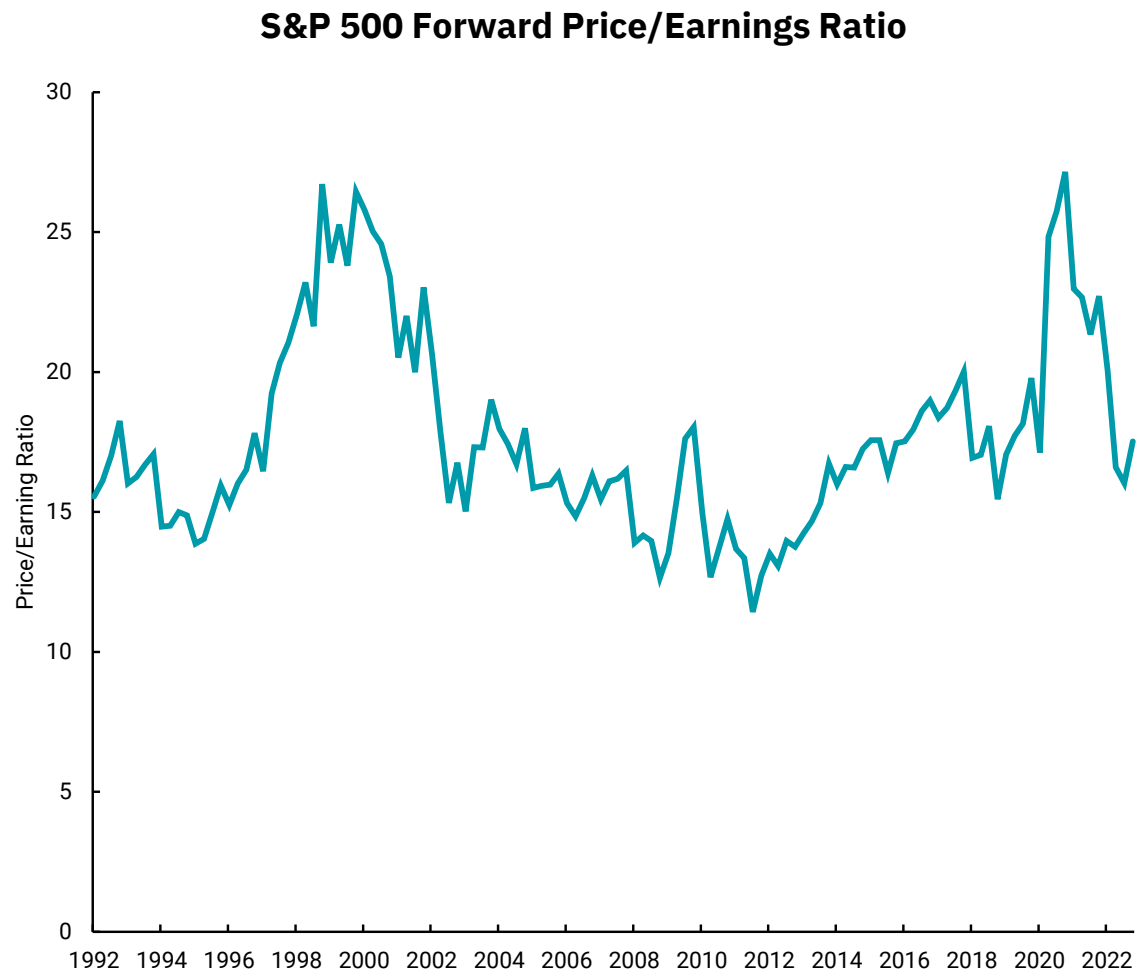
Bond market yields increased

- Government bond yields are trading near the highest yields since the 2008 financial crisis.
- Investment-grade bond yields are beginning to appear attractive as rates are approaching 12-year highs.
- Bonds may represent attractive value at these levels if inflation, as we expect, continues to subside from recent levels.



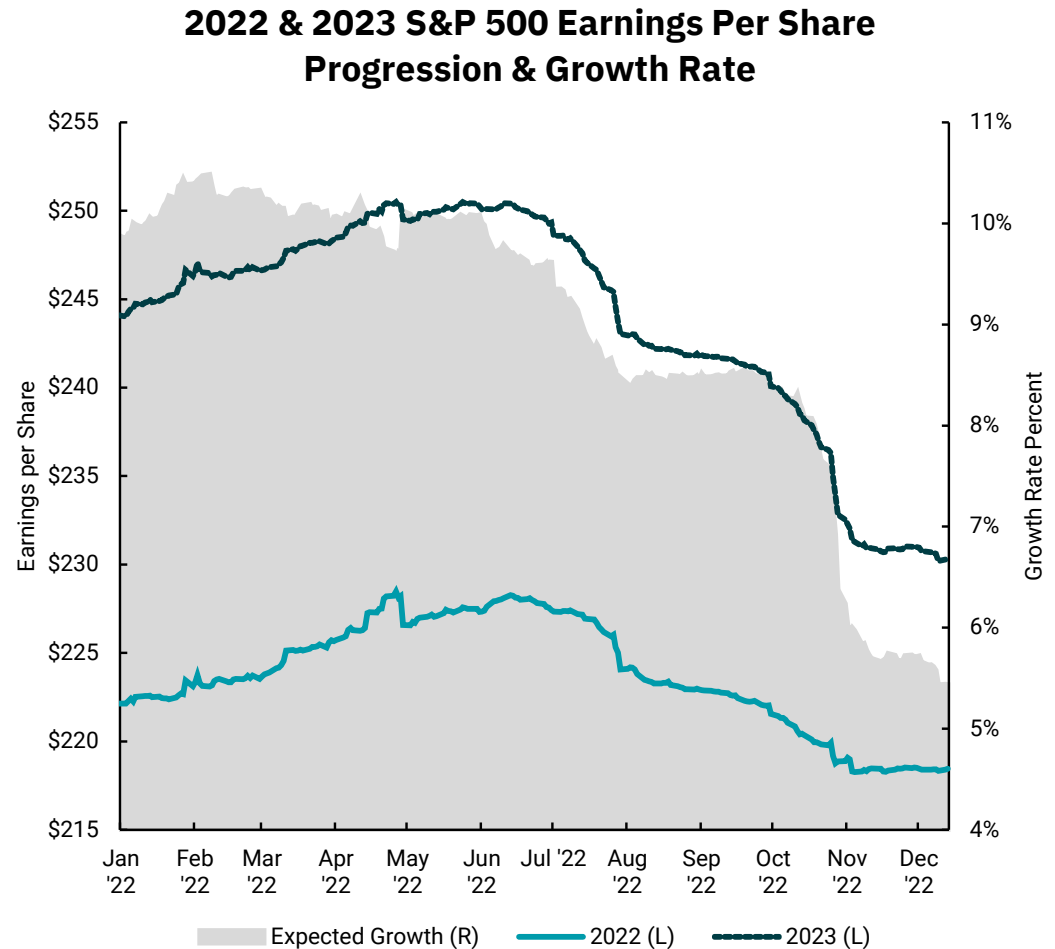
S&P 500 valuation has declined

- Valuations of equities have improved as prices have fallen.
- Consensus expectations are that 2023 earnings will be higher than 2022. However, there are risks to that assumption.
- Earnings are a bigger risk to stocks than multiples.
- Inflation and higher rates are headwinds to both earnings and multiples.



Earnings estimates are beginning to fall

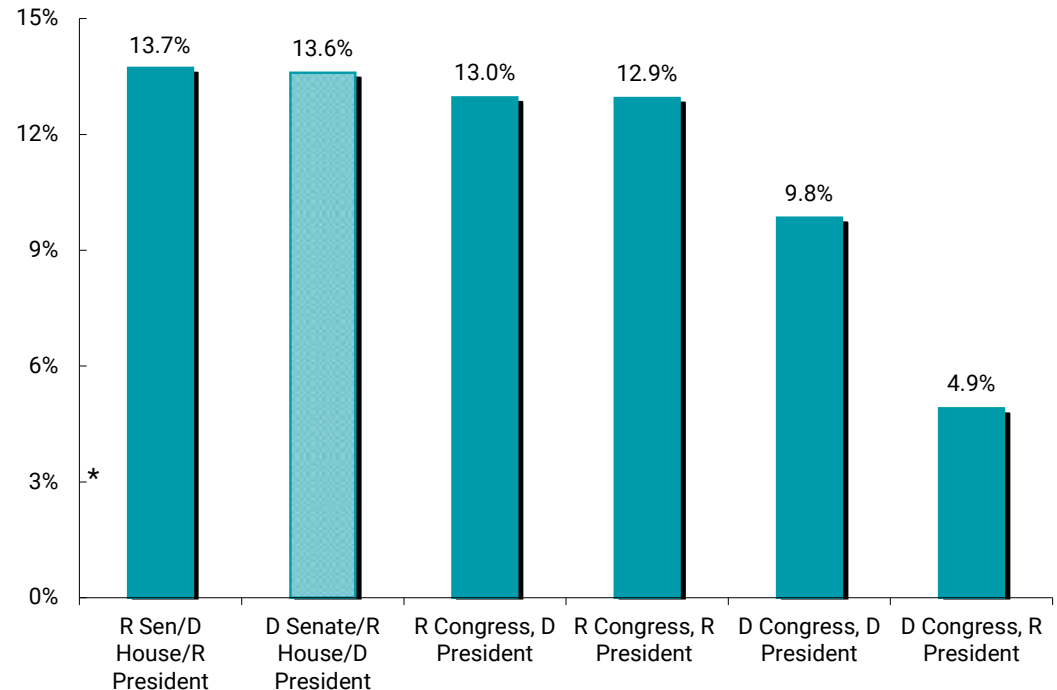
- Earnings estimates for 2022 and 2023 are falling to reflect the slow-growth, high-inflation environment.
- Currently, 2023 earnings are expected to be higher than 2022, as the market is not forecasting a recession.
- Inflation, as well as restrictive monetary policy, is a headwind for the economy and earnings.
- Margins are also a significant risk for earnings and stock prices.



Midterm election results

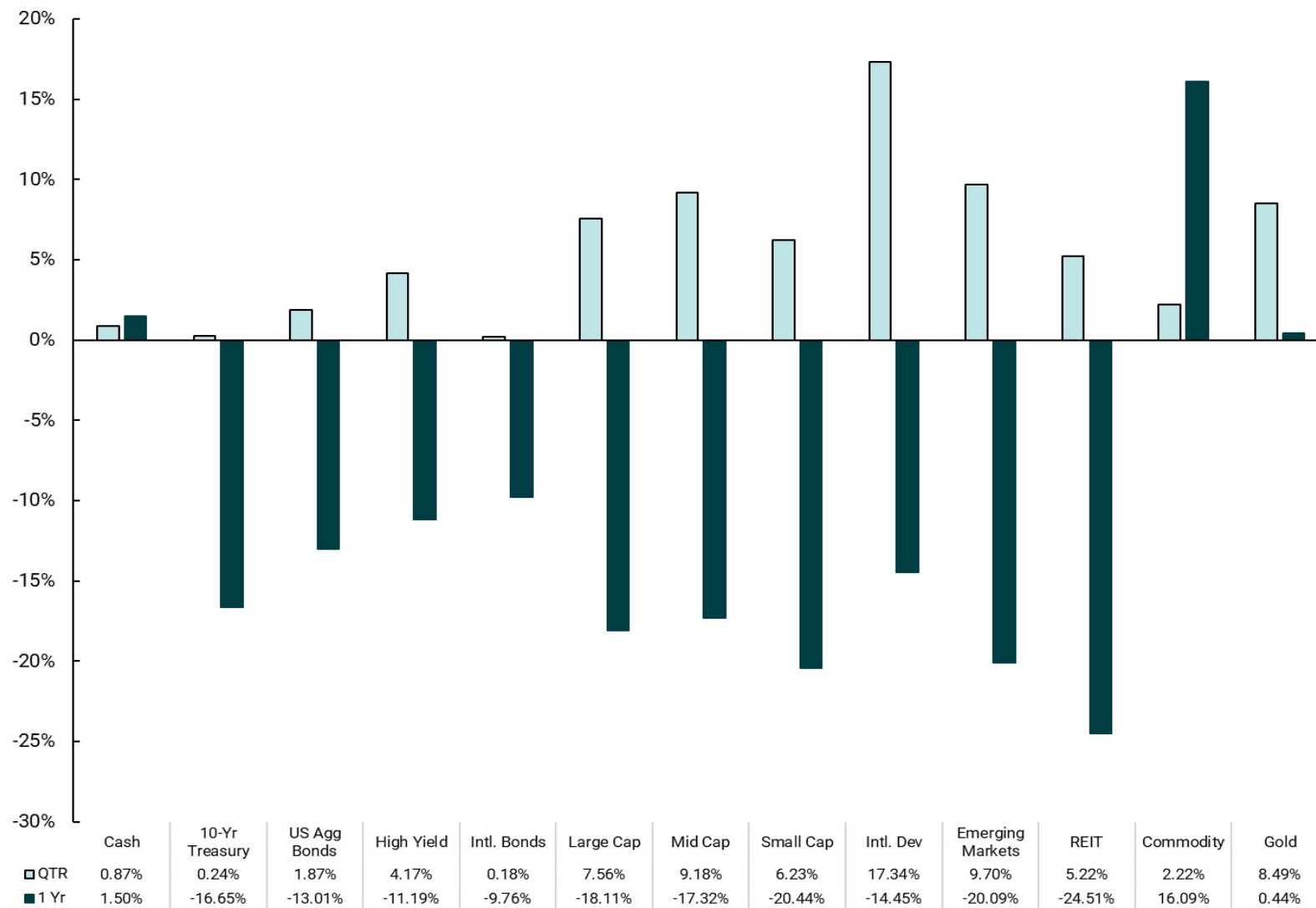
- With the Republicans winning the House, Congress is now split between the two parties, and the market prefers gridlock.
- Past periods of mixed leadership between the White House, Senate and House of Representatives have seen higher equity market performance.
- Year three of a presidential term has also, historically, resulted in positive returns in every administration since WW2.

Partisan Control, Avg. Annual S&P Performance (1933-2021, Excl. 2001-02)



*Data excludes 2001-2002 due to Sen Jeffords changing party mid-2001

Market summary



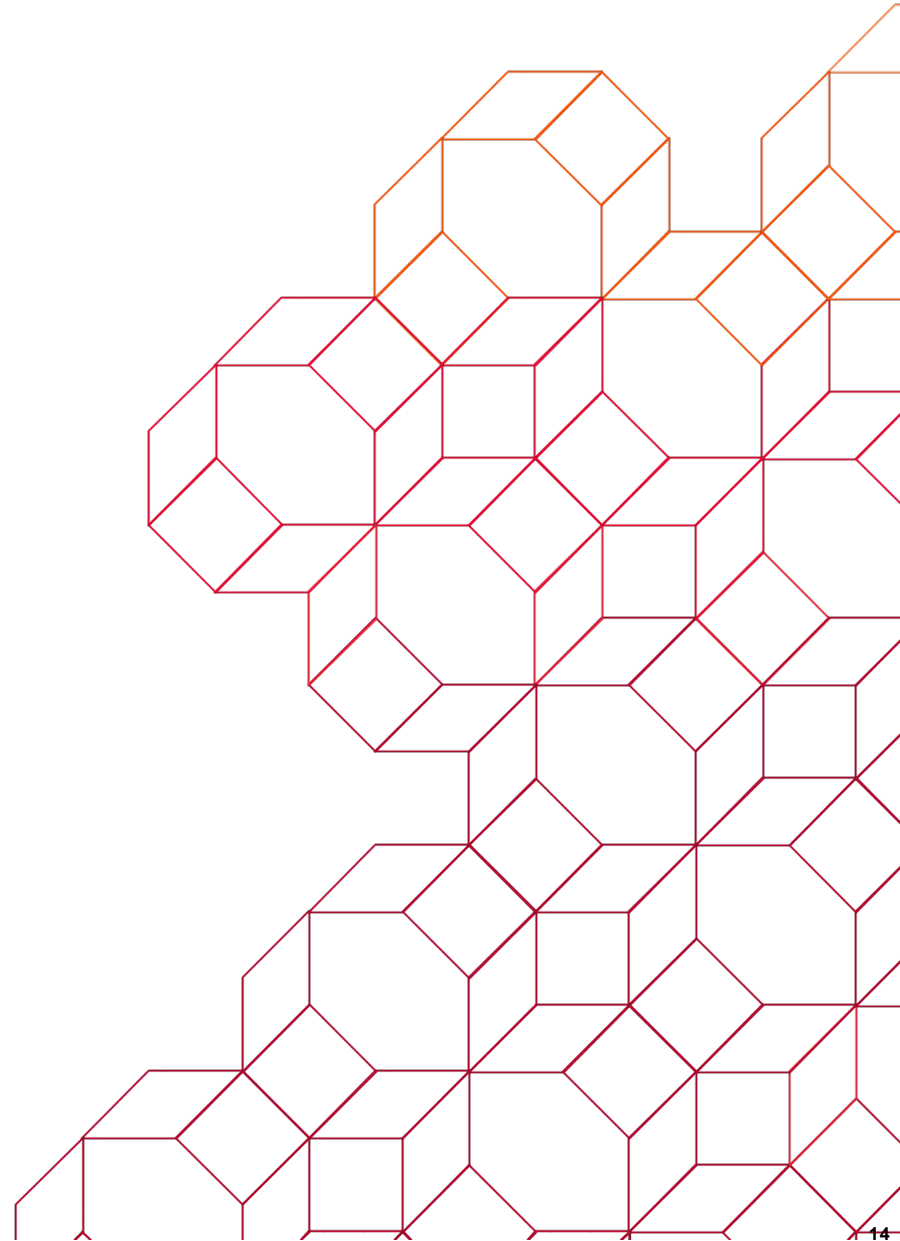
Source: Morningstar. Data shown as of December 31, 2022.

Broad market overview

Returns (%)	3 Mo.	1 Yr.	3 Yrs.	5 Yrs.	10 Yrs.
Capital Markets					
DJ Industrial Average TR USD	16.01	-6.86	7.32	8.38	12.30
NASDAQ 100 TR USD	-0.04	-32.38	8.67	12.36	16.45
Russell 3000 TR USD	7.18	-19.21	7.06	8.79	12.13
S&P 500 TR USD	7.56	-18.11	7.66	9.43	12.56
Domestic Large Cap Equities					
Russell 1000 TR USD	7.24	-19.13	7.35	9.13	12.38
Russell 1000 Value TR USD	12.42	-7.54	5.96	6.67	10.29
Russell 1000 Growth TR USD	2.20	-29.14	7.78	10.96	14.10
Domestic Mid Cap Equities					
Russell Mid Cap TR USD	9.18	-17.32	5.88	7.10	10.96
Russell Mid Cap Value TR USD	10.45	-12.03	5.82	5.72	10.11
Russell Mid Cap Growth TR USD	6.90	-26.72	3.85	7.64	11.41
Domestic Small Cap Equities					
Russell 2000 TR USD	6.23	-20.44	3.10	4.13	9.01
Russell 2000 Value TR USD	8.42	-14.48	4.70	4.13	8.48
Russell 2000 Growth TR USD	4.13	-26.36	0.65	3.51	9.20
International Equities					
MSCI EAFE NR USD	17.34	-14.45	0.87	1.54	4.67
MSCI EAFE Value NR USD	19.64	-5.58	0.65	0.17	3.51
MSCI EAFE Growth NR USD	15.05	-22.95	0.47	2.49	5.59
MSCI ACWI Ex USA NR USD	14.28	-16.00	0.07	0.88	3.80
MSCI EM NR USD	9.70	-20.09	-2.69	-1.40	1.44
Cash & Fixed Income					
FTSE Treasury Bill 3 Mon USD	0.87	1.50	0.71	1.25	0.74
Bloomberg US Agg Bond TR USD	1.87	-13.01	-2.71	0.02	1.06
Bloomberg Gbl Agg Ex USD TR Hdg USD	0.18	-9.76	-2.57	0.52	2.10
Bloomberg US Corporate High Yield TR USD	4.17	-11.19	0.05	2.31	4.03
Alternatives					
MSCI US REIT GR USD	5.22	-24.51	-0.06	3.69	6.48
Bloomberg Commodity TR USD	2.22	16.09	12.65	6.44	-1.29

Source: Morningstar. Data shown as of December 31, 2022

Investment Policy



As of: 12/31/2022

Investment Policy Summary

Investment Objective

The long-term objective of the Trust is to earn a return sufficient to preserve the purchasing power of the Trust to fund retirement benefits for contributing UNM employees.

Benchmark(s)

Policy Benchmark	35% BC AGG / 15% MSCI EM, 15% MSCI EAFE, 35% RUS 3000
Primary Benchmark	35% BC AGG / 15% MSCI EM, 15% MSCI EAFE, 35% RUS 3000

Additional Information

Liquidity Needs	No known short or long-term needs
Tax Exempt Status/Tax Information	-
Fiscal Year-End	06/30
Account Inception	09/04/2015
Investment Policy Statement (IPS) Effective Date	07/01/2013
Performance Inception Date	12/31/2015

IPS Strategic Asset Allocation And Targets

Asset Class	Minimum	Maximum	Target
Cash and Cash Equivalents	0.0%	0.0%	0.0%
Fixed Income	0.0%	45.0%	35.0%
Equities	0.0%	65.0%	65.0%
Alternatives	0.0%	15.0%	0.0%

Historical Benchmark Changes

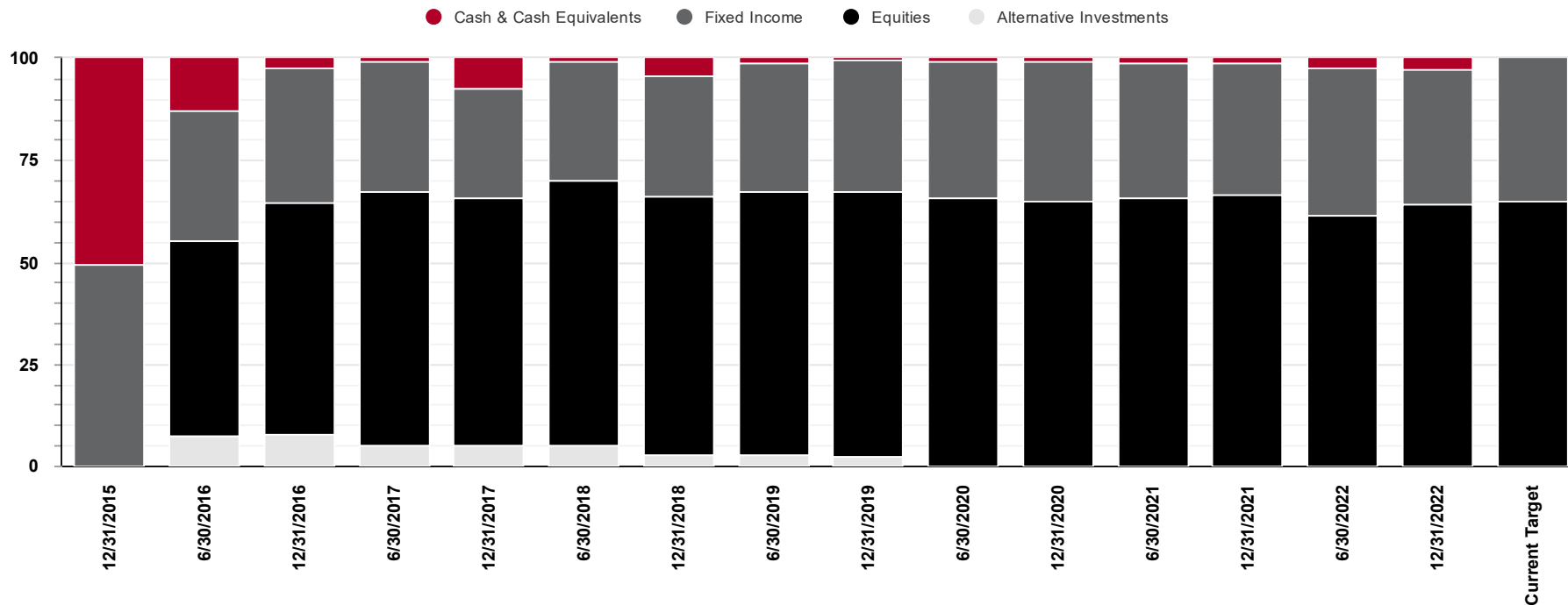
Primary Benchmark

11/28/2018 - 12/09/2021	35% BC AGG / 15% MSCI EM, 15% MSCI EAFE, 35% RUS 3000
01/01/2018 - 11/28/2018	35% BC AGG / 15% MSCI EM, 15% MSCI EAFE, 35% RUS 3000

Policy Benchmark

11/28/2018 - 12/09/2021	35% BC AGG / 15% MSCI EM, 15% MSCI EAFE, 35% RUS 3000
01/01/2018 - 11/28/2018	35% BC AGG / 15% MSCI EM, 15% MSCI EAFE, 35% RUS 3000

Allocation Summary

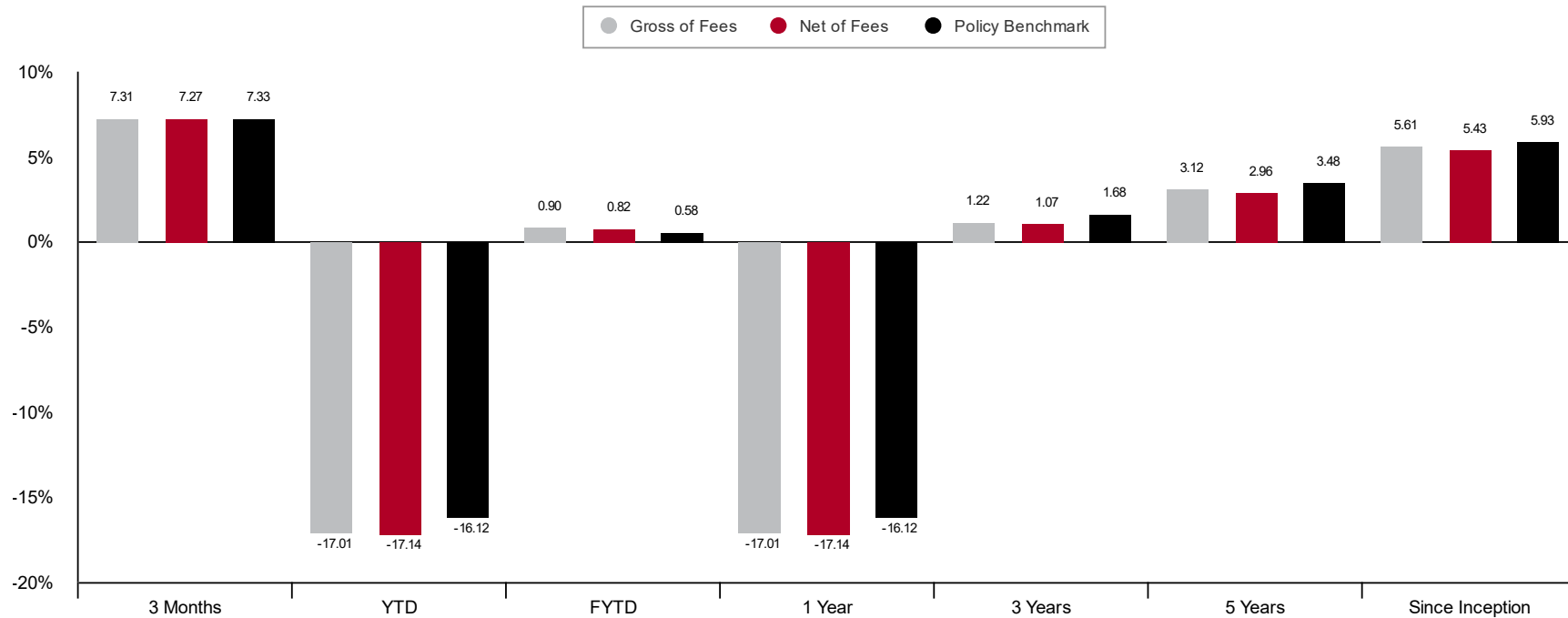


Class	Ending Market Value	Current Portfolio Allocation	Target Allocation	Difference (%)	Difference (\$)
Cash & Cash Equivalents	1,556,821	2.9%	-	2.9%	1,556,821
Fixed Income	17,831,367	32.9%	35.0%	-2.1%	-1,168,304
Equities	34,896,586	64.3%	65.0%	-0.7%	-388,517
TOTAL PORTFOLIO	54,284,774	100%	100%	-	-



Performance Review

Portfolio Performance Summary



Account inception was September 04, 2015. Performance calculation began on December 31, 2015.
Returns for time periods greater than 1 year are annualized.

Portfolio Summary	3 Months	YTD	FYTD	1 Year	3 Years	5 Years	Since Inception
Beginning Value (\$)	49,653,879	60,574,558	51,901,053	60,574,558	41,563,940	28,232,608	12,410,699
Net Contributions and Withdrawals (\$)	968,944	4,175,893	1,896,227	4,175,893	11,931,248	20,843,721	31,876,131
Investment Gain/Loss (\$)	3,661,951	-10,465,678	487,494	-10,465,678	789,585	5,208,444	9,997,944
Ending Value (\$)	54,284,774	54,284,774	54,284,774	54,284,774	54,284,774	54,284,774	54,284,774
Total Portfolio (Gross of Fees) (%)	7.31%	-17.01%	0.90%	-17.01%	1.22%	3.12%	5.61%
Total Portfolio (Net of Fees) (%)	7.27%	-17.14%	0.82%	-17.14%	1.07%	2.96%	5.43%
Class Blended (Policy %)	7.33%	-16.12%	0.58%	-16.12%	1.68%	3.48%	5.93%

Performance by Asset Class

Asset Class / Benchmark	Alloc %	Market Value	3 Months	YTD	FYTD	1 Year	3 Years	5 Years	Inception
Cash Equivalent	2.9%	1,556,821	0.85%	1.62%	1.46%	1.62%	0.66%	1.00%	0.90%
<i>N/A</i>	-	-	-	-	-	-	-	-	-
Fixed Income	32.8%	17,831,367	2.31%	-11.85%	-2.18%	-11.85%	-1.39%	0.92%	0.99%
<i>Bloomberg U.S. Aggregate</i>	35.0%	-	1.87%	-13.01%	-2.97%	-13.01%	-2.71%	0.02%	0.89%
Equities	64.3%	34,896,586	10.27%	-19.88%	2.75%	-19.88%	2.24%	4.20%	9.26%
<i>MSCI Emerging Market Net (14.95%) / MSCI EAFE Net (14.95%) / Russell 3000® Index (35.1%)</i>	65.0%	-	10.25%	-18.05%	2.32%	-18.05%	3.56%	4.89%	8.33%
Total Portfolio (Gross of fees)	100.0%	54,284,774	7.31%	-17.01%	0.90%	-17.01%	1.22%	3.12%	5.61%
Total Portfolio (Net of fees)	-	-	7.27%	-17.14%	0.82%	-17.14%	1.07%	2.96%	5.43%
Class Blended	100.0%	-	7.33%	-16.12%	0.58%	-16.12%	1.68%	3.48%	5.93%

Returns for time periods greater than 1 year are annualized.

As of: 12/31/2022

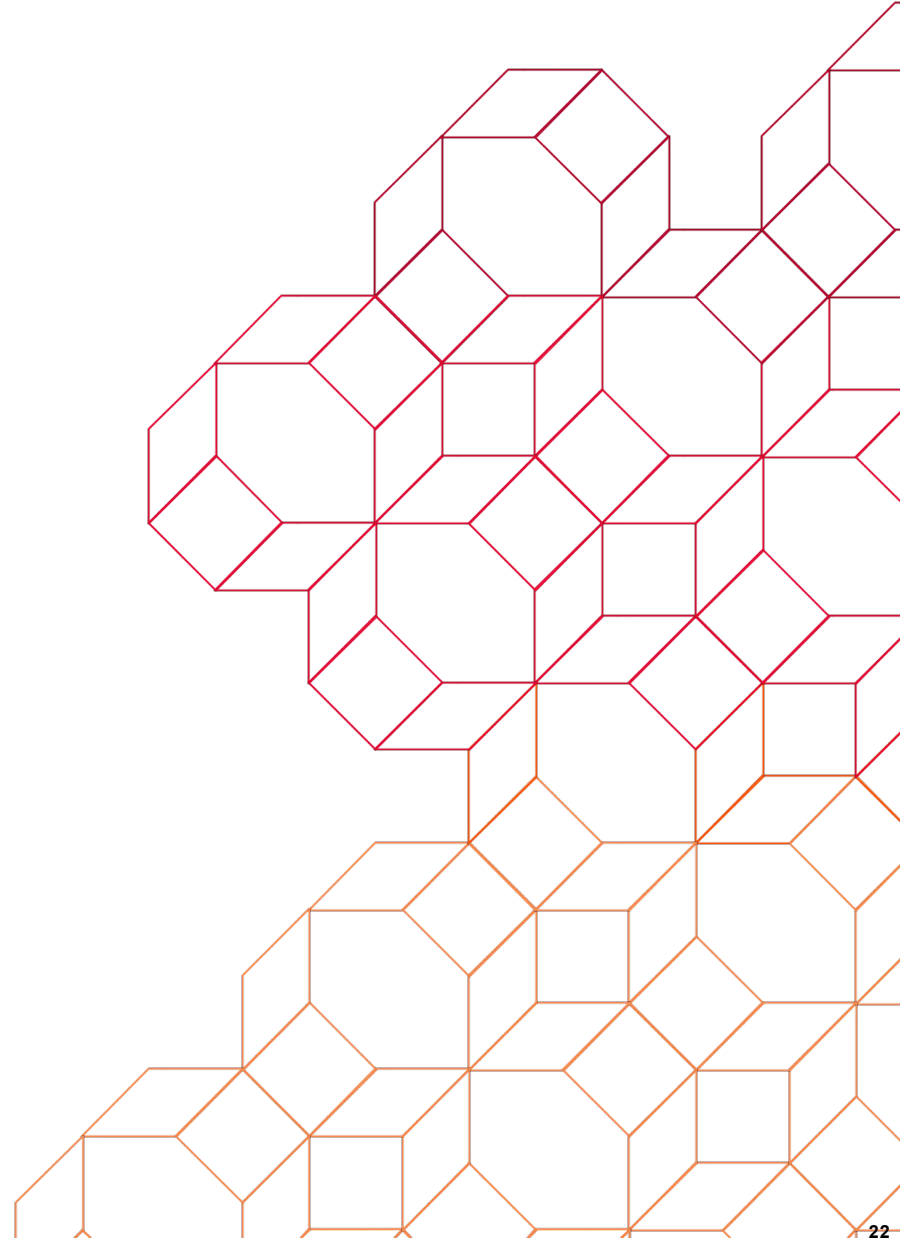
Asset Detail Report

Asset Class	Security ID	Ticker	Security Name	Shares	\$ Market Value	% Current Yield	% Class	% Total
Cash & Cash Equivalents								
			Cash & Cash Equivalents	1,556,821	1,556,821	3.76	100.0	2.87
TOTAL Cash & Cash Equivalents					\$1,556,821	3.76%	100.0%	2.87%
Fixed Income								
Core								
	256210105	DODIX	DODGE & COX INCOME FD INCOME FUND I	1,165,554	14,208,105	2.82	79.7	26.17
	464287440	IEF	ISHARES 7-10 YEAR TREASURY BOND ETF	37,829	3,623,262	1.96	20.3	6.67
TOTAL Core					\$17,831,367	2.65%	100.0%	32.85%
TOTAL Fixed Income					\$17,831,367	2.65%	100.0%	32.85%
Equities								
Large Cap								
	55273H353	MEIKX	MFS SERIES TST I VALUE FD CL R6	82,135	3,897,295	2.09	11.2	7.18
	922040100	VINIX	VANGUARD INSTL IDX SH BEN INT	13,013	4,185,361	1.74	12.0	7.71
	741479406	PRUFX	PRICE T ROWE GRWTH FD CL I	54,076	3,337,550	0.00	9.6	6.15
TOTAL Large Cap					\$11,420,206	1.35%	32.7%	21.04%
Mid Cap								
	922908835	VMCIX	VANGUARD INDEX FDS MD CP STK INST	89,934	5,015,594	1.60	14.4	9.24
TOTAL Mid Cap					\$5,015,594	1.60%	14.4%	9.24%
Small Cap								
	922908876	VSCIX	VANGUARD INDEX FDS S CP STK INST	21,041	1,850,175	1.55	5.3	3.41
TOTAL Small Cap					\$1,850,175	1.55%	5.3%	3.41%
International Developed								
	256206103	DODFX	DODGE & COX FDS INTL STK I	58,004	2,500,541	2.23	7.2	4.61
	464287465	EFA	ISHARES MSCI EAFE ETF	53,555	3,515,350	2.69	10.1	6.48
	298706110	FEUPX	EUROPACIFIC GROWTH FD	27,235	1,336,690	1.47	3.8	2.46
	552981383	MIDLX	MFS SERIES TST V INTL NEWDIS R6	38,676	1,127,407	0.92	3.2	2.08
TOTAL International Developed					\$8,479,988	2.13%	24.3%	15.62%
International Emerging								
	00143W859	ODVIX	INVESCO DEVELOPING MKTS FD	232,836	8,130,623	1.18	23.3	14.98
TOTAL International Emerging					\$8,130,623	1.18%	23.3%	14.98%
TOTAL Equities					\$34,896,586	1.55%	100.0%	64.28%

Asset Detail Report

Asset Class	Security ID	Ticker	Security Name	Shares	\$ Market Value	% Current Yield	% Class	% Total
TOTAL					\$54,284,774	1.97%	100.0%	100.00%
TOTAL ASSETS					\$54,284,774			

Manager Due Diligence



Manager Due Diligence

The Due Diligence process uses a rational and disciplined framework for manager oversight. A manager may be placed on Watch status if/when anything of material nature occurs or is determined to potentially impact the long-term relative performance of the strategy. Such events or changes would generally be characterized as any adverse deviations in the organization, investment process or performance results of the managers. Managers that are used within the portfolio and have a Watch Status are listed within this section.

T. Rowe Price Growth Stock I (PRUFX)

The investment seeks long term capital growth through investments in stocks. The fund will normally invest at least 80% of its net assets (including any borrowings for investment purposes) in the common stocks of a diversified group of growth companies. While most assets will typically be invested in U.S. common stocks, the fund may invest in foreign stocks in keeping with the fund's objective. The fund is non-diversified.

Asset Class: Equities, Large-Cap Growth

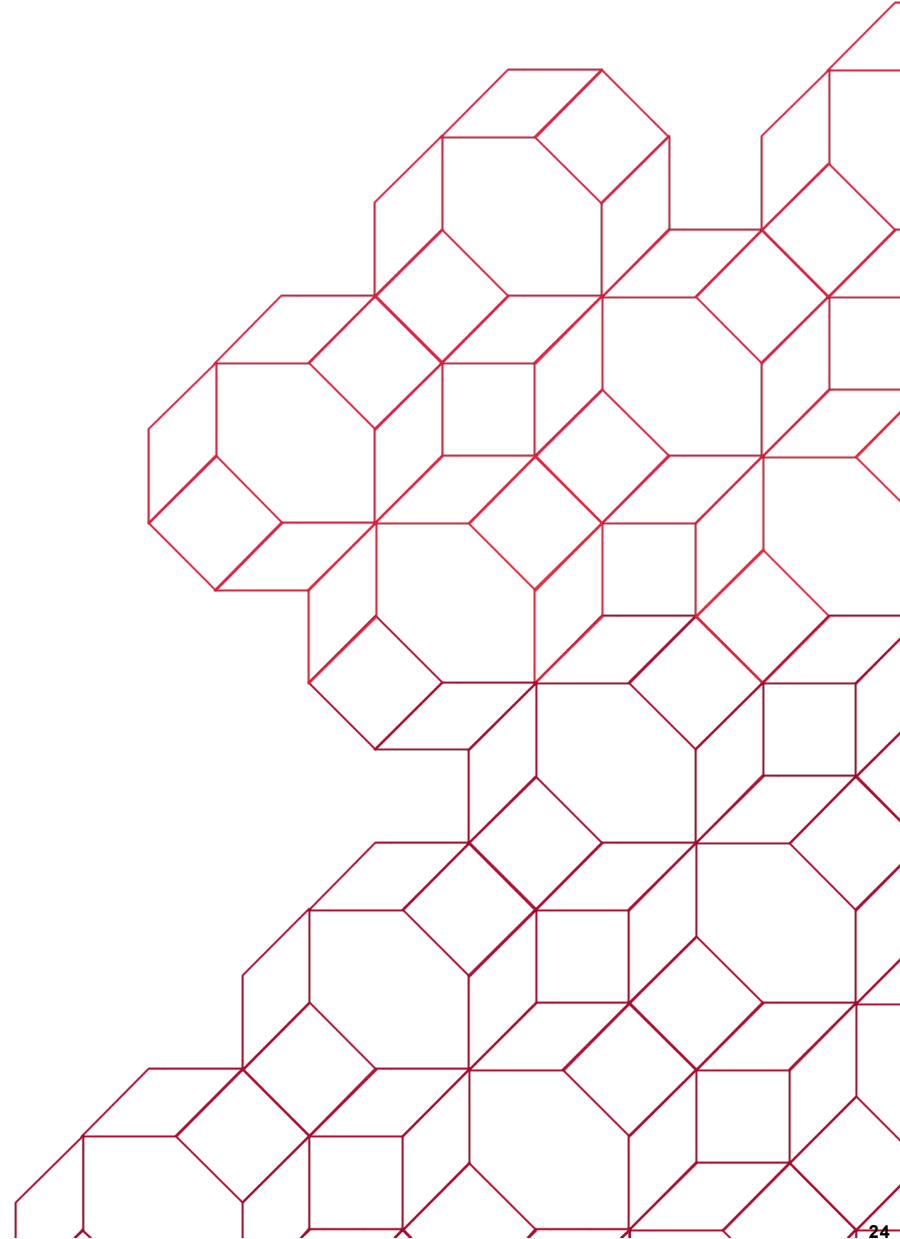
Date Placed on Watch: October 01, 2022

Reason for Status Change: Performance

Watch Status

- The T. Rowe Price Growth Stock Fund is a fundamental strategy that looks to identify companies that exhibit above average earnings growth and significant free cash flow generation.
- We are placing the fund on watch due to underperformance. Although it has been a difficult environment for many high growth strategies, the majority of underperformance is due to stock selection.
- In the third quarter of 2022, the fund returned 3.29%, outperforming the Russell 1000 Growth Index by .31%, and ranking in the 26th percentile of the Large Growth peer group. Year-to-date as of 9/30/2022, the fund returned 38.69%, underperforming the Index by 8.03%, and ranking in the 88th percentile of the peer group.

Transaction Summary



Activity Summary

UNM RETIREE WELFARE BENEFIT TRUST

Reconciliation	Last 3 Months	Fiscal Year To Date
Beginning Market Value	\$49,653,879	\$51,901,053
Contributions	989,000	1,937,000
Withdrawals	-	-500
Expenses	-20,056	-40,273
Non-Cash Activity	69,415	69,415
Investment Gain / Loss	3,592,536	418,079
Ending Market Value	\$54,284,774	\$54,284,774

Reconciliation

Year	Time Period	Beginning Market Value ¹	Net Contributions & Withdrawals	Earnings	Ending Market Value ¹
TOTALS			44,270,046	10,014,727	
2022		60,574,558	4,175,893	-10,465,678	54,284,774
	December	55,634,672	327,000	-1,676,899	54,284,774
	November	51,354,975	332,000	3,947,697	55,634,672
	October	49,653,879	309,944	1,391,152	51,354,975
	September	53,358,314	347,000	-4,051,436	49,653,879
	August	54,764,015	301,000	-1,706,700	53,358,314
	July	51,901,053	279,283	2,583,679	54,764,015
	June	54,722,336	341,000	-3,162,283	51,901,053
	May	53,876,351	313,948	532,037	54,722,336
	April	57,298,413	314,297	-3,736,359	53,876,351
	March	57,578,677	340,060	-620,324	57,298,413
	February	58,019,247	992,221	-1,432,791	57,578,677
	January	60,574,558	-21,860	-2,533,451	58,019,247
2021		51,199,259	5,316,161	4,059,138	60,574,558
	Quarter 4	58,583,831	647,809	1,342,917	60,574,558
	Quarter 3	59,291,997	329,052	-1,037,218	58,583,831
	Quarter 2	52,166,647	4,358,063	2,767,287	59,291,997
	Quarter 1	51,199,259	-18,764	986,152	52,166,647
2020		41,563,940	2,439,194	7,196,124	51,199,259
	Quarter 4	45,989,572	-17,961	5,227,647	51,199,259
	Quarter 3	43,194,069	295,605	2,499,898	45,989,572
	Quarter 2	35,649,433	2,177,893	5,366,744	43,194,069
	Quarter 1	41,563,940	-16,342	-5,898,165	35,649,433
2019		30,298,085	4,669,792	6,596,063	41,563,940
	Quarter 4	37,786,651	1,435,763	2,341,526	41,563,940
	Quarter 3	36,630,412	1,049,096	107,142	37,786,651
	Quarter 2	34,704,443	701,279	1,224,690	36,630,412
	Quarter 1	30,298,085	1,483,654	2,922,704	34,704,443
2018		28,232,608	4,242,681	-2,177,204	30,298,085
	Quarter 4	32,138,866	763,170	-2,603,950	30,298,085
	Quarter 3	30,023,327	1,491,540	623,999	32,138,866
	Quarter 2	29,386,795	770,872	-134,340	30,023,327
	Quarter 1	28,232,608	1,217,099	-62,912	29,386,795

¹Market values include accrued income.

Reconciliation

Year	Time Period	Beginning Market Value ¹	Net Contributions & Withdrawals	Earnings	Ending Market Value ¹
2017		19,097,989	5,492,375	3,642,245	28,232,608
	Quarter 4	25,227,621	2,021,703	983,285	28,232,608
	Quarter 3	23,912,205	416,012	899,404	25,227,621
	Quarter 2	21,846,878	1,298,815	766,512	23,912,205
	Quarter 1	19,097,989	1,755,844	993,045	21,846,878
2016		12,410,699	5,540,035	1,147,255	19,097,989
	Quarter 4	18,285,337	844,838	-32,186	19,097,989
	Quarter 3	16,500,060	1,292,346	492,930	18,285,337
	Quarter 2	14,858,058	1,436,838	205,165	16,500,060
	Quarter 1	12,410,699	1,966,013	481,346	14,858,058
2015		-	12,393,916	16,783	12,410,699
	Quarter 4	10,447,273	1,962,571	855	12,410,699
	Quarter 3	-	10,431,345	15,928	10,447,273

¹Market values include accrued income.

Definitions & Disclosures

Definitions

The following terminology may appear in this presentation.

Allocation Effect: Allocation Effect measures the influence that an over- or underweight allocation to a particular sector or asset class has on a portfolio's performance.

Alpha: Alpha is a measure of performance on a risk-adjusted basis, taking the volatility of a portfolio into consideration and comparing the risk-adjusted performance to a benchmark index. The excess return of the strategy relative to the return of the benchmark index is alpha. A positive alpha of 1.0 means the strategy has outperformed its benchmark by 1%, while a similar negative alpha would indicate an underperformance of 1%.

Beta: Beta measures the relationship between a portfolio and the market as a whole. Beta values can be positive or negative. An index has a beta of 1.0.

Batting Average: Batting average is a statistical metric used to measure a manager's ability to meet or beat an index. It is calculated by dividing the number of months in which the manager beats or matches the index return by the total number of months in the comparison period and multiplying that factor by 100. A higher batting average reflects greater skill of the manager.

Capture Ratio: The capture ratio is a statistical measure that compares the strategy's overall performance in up-markets versus its overall performance in down-markets, and is used to evaluate how much a manager participates on the upside compared to how well it protects on the downside.

Days of Non-Compliance: When monitoring compliance to investment guidelines over a period of time, the days of non-compliance are the total number of days during the time period when the portfolio was not in compliance with those guidelines.

Downside Beta: Measures an asset's or portfolio's association with the benchmark only in periods when the benchmark's return is negative.

Downside Deviation: Measures risk and price volatility of investments by focusing on returns that fall below the average period return. (Sortino Ratio denominator)

Due Diligence Process: The Due Diligence process uses a disciplined framework for manager oversight, consisting of quarterly quantitative performance reviews and ongoing qualitative monitoring as described in the Important Information section. A manager may be placed on Watch status if/when anything of material nature occurs or is determined to potentially impact the long-term relative performance of the strategy. Such events or changes would generally be characterized as any adverse deviations in the organization, investment process, or performance results of the managers.

Investment Gain/Loss: Investment Gain/Loss is defined as interest and dividend income, accrued income, foreign tax withholding refunds, realized gain/loss, and market appreciation and depreciation.

Information Ratio: Information Ratio is a risk-adjusted ratio of portfolio returns exceeding the returns of a benchmark index to the volatility of those excess returns. The information Ratio measures a portfolio manager's ability to generate excess returns relative to a benchmark, but also attempts to identify the consistency of the manager. The higher the ratio, the more consistent the manager's historical returns.

Interaction Effect: Interaction Effect is the portion of a portfolio's return that can be attributed to the interaction between the manager's selection decisions and allocation decisions.

Issuer Concentration: Issuer Concentration is monitored based on counterparties and industries by consolidating securities by issuer using the first six digits of the security's CUSIP. This information is then sorted by percentage of total market value.

Market Value: The market values shown in this report and used in calculating the returns in this report are calculated independently from our trust accounting system. Valuations are based on trade date full accrual methodologies which may differ from your chosen statement reporting method. Please refer to your BOKF Financial statement for your official account record. Discrepancies should be discussed with your advisor.

Net of Fee Returns: Net of fee returns reflect investment management fees that have either been calculated by BOKF or deducted from the market value of the portfolio.

Parallel Shift Effect: The Parallel Shift Effect is the portion of a portfolio's return that is attributable to a movement of the yield curve over the time period being evaluated.

Performance Inception Date: Performance inception date is the date that the all funds designated are fully invested in the chosen investment strategy.

Policy Benchmark: A Policy Benchmark is assigned to a portfolio if the client's Investment Policy Statement indicates the market index used to evaluate achievement of the investment objective. The blended benchmark represents the weighted average of the asset allocation targets defined in the investment policy statement. If no targets are defined, the midpoints of each asset class's minimum and maximum ranges will be used, with the total of the weights equaling 100%. Changes to benchmarks are made prospectively.

Primary Benchmark: The primary benchmark is made up of the target weightings assigned to asset class benchmarks of the investment policy statement, reflecting the investment strategy for the total portfolio. The primary benchmark reflects indices deemed by the investment manager to be most appropriate for the management strategy.

R-Squared: R-squared is a statistical measure that represents the percentage of a security's movements that can be explained by movements in a benchmark index. R-squared values range from 0 to 100, and a value of 100 means that all movements of a portfolio are completely explained by movements in the index.

Definitions

Reshaping Effect: The Reshaping Effect is the portion of a portfolio's return that is attributable to the change in the shape of the yield curve over the time period being evaluated.

Rolldown Effect: The Rolldown Effect is the portion of a portfolio's return that is attributable to the bonds' movement along the yield curve as the term-to-maturity decreases over time.

Secondary Benchmark: In some instances, a secondary benchmark may be assigned as an additional measurement using different indices.

Security Level Returns: Beginning date of security level historical performance is as-of the implementation of enhanced performance reporting.

Selection Effect: The Selection Effect is the portion of a portfolio's return that can be attributed to the manager's security, sector or asset class selection decisions within a particular sector.

Standard Deviation: Standard deviation is a measure of dispersion of returns. It is calculated by using the positive square root of the variance. The higher the standard deviation, the more risky the data set being measured.

Sortino Ratio: Sortino Ratio is a risk-adjusted ratio. It is a modification of the Sharpe ratio that differentiates harmful downside volatility from general volatility by taking into account the standard deviation of negative asset returns. The Sortino Ratio subtracts the risk-free rate of return from the portfolio's return and then divides that by the downside deviation. A large Sortino Ratio indicates the portfolio has historically had lower probability of large loss.

Tracking Error: Tracking error is a divergence between the price behavior of a portfolio and the price behavior of a benchmark. Tracking errors are reported as a positive number representing the standard deviation percentage difference. Tracking error for passive strategies should be minimal.

Turnover Ratio: Turnover Ratio is the percentage of an investment or mutual fund's holdings that have been replaced in a given year to measure the level of the fund's trading activity. The Turnover Ratio can vary depending on the type of investment style, objective, or strategy.

Yield Effect: The Yield Effect is the portion of a portfolio's return that is attributable to interest income and to price changes resulting from a decrease in term-to-maturity over the time period being evaluated.

As of: 12/31/2022

Disclosures

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Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.

References to indices, benchmarks or other measures of relative performance are provided for your information only. References to such indices do not imply that managed portfolios will achieve returns, or exhibit other characteristics comparable to the indices. Index composition may not reflect the manner in which a portfolio is structured in relation to expected or achieved returns, portfolio guidelines, sector exposure, correlations or volatility, all of which are subject to change over time.

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