EAGLE RIDGE
INVESTMENT MANAGEMENT, LLC

Investment Commentary

December 31, 2022

HIGHLIGHTS

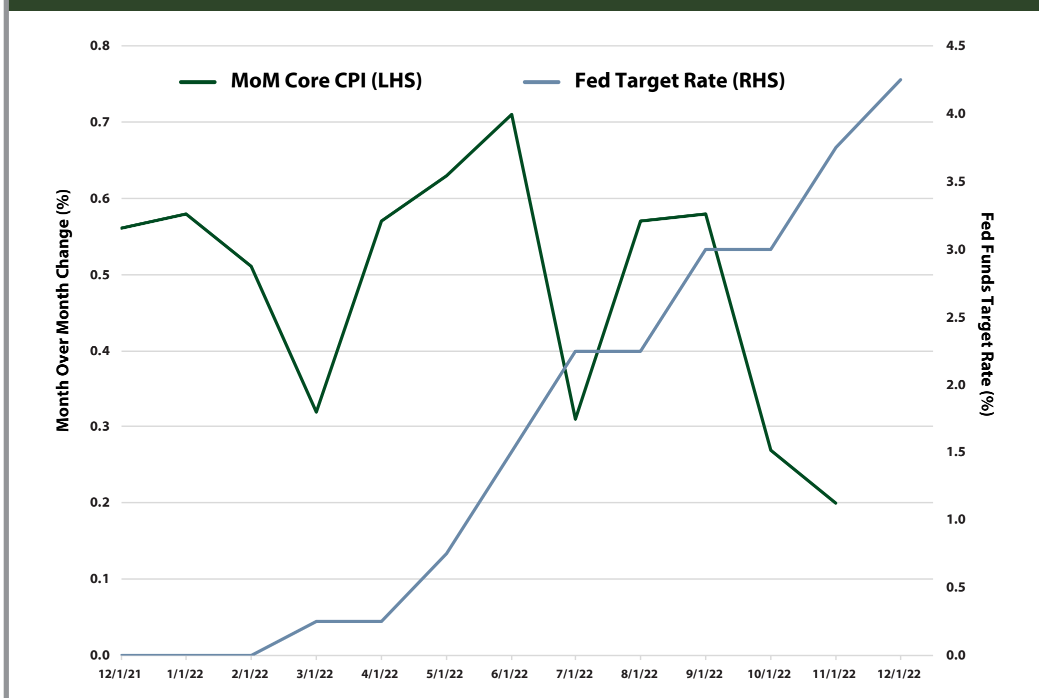
- The markets closed the year down as most asset classes continued to perform poorly. For the year, the S&P 500 declined about 18%. The bond market also closed the year down as the Federal Reserve raised interest rates and reduced its balance sheet.
- There could be near-term volatility, but we're confident in our underlying companies generating cash through this cycle and view the long-term multiple as higher. The multiple will expand on the expectations of inflation and the economy turning a corner.
- Eagle Ridge financial planners work diligently to construct financial plans with accuracy and precision, but future uncertainty makes assumptions necessary. It is our belief that by being conservative with our estimates, our clients gain peace of mind that their long-term objectives will be achieved.

No Santa Claus Rally

The markets closed the year down as most asset classes continued to perform poorly. For the year, the S&P 500 declined about 18%. The bond market also closed the year down (the Bloomberg U.S. Aggregate Bond index fell about 13%) as the Federal Reserve (Fed) raised interest rates and reduced its balance sheet (i.e., not reinvesting the proceeds of maturing securities). 2022 was less kind to those assets trading at elevated multiples (the NASDAQ fell more than 30%) and with speculative appeal (Bitcoin dropped about 64%). As discussed in the next section, the losses have been "orderly" with very few instances of contagion where losses in one sector cause financial panic elsewhere.

The year started with rising inflation and Russia's invasion of Ukraine. The year ended with high inflation and, tragically, a war in Ukraine. However, progress has been made on the economic front. The Fed has aggressively raised rates from a target range of 0% to 0.25% to 4.25% to 4.50%. The core month over month change in the consumer price index (CPI) was 0.2% in November after peaking in June at 0.7%. The November print compares favorably to the average month over month number from 2017 to 2019 (0.17%) when inflation wasn't on anyone's mind.

Month over Month CPI and the Fed Target Rate

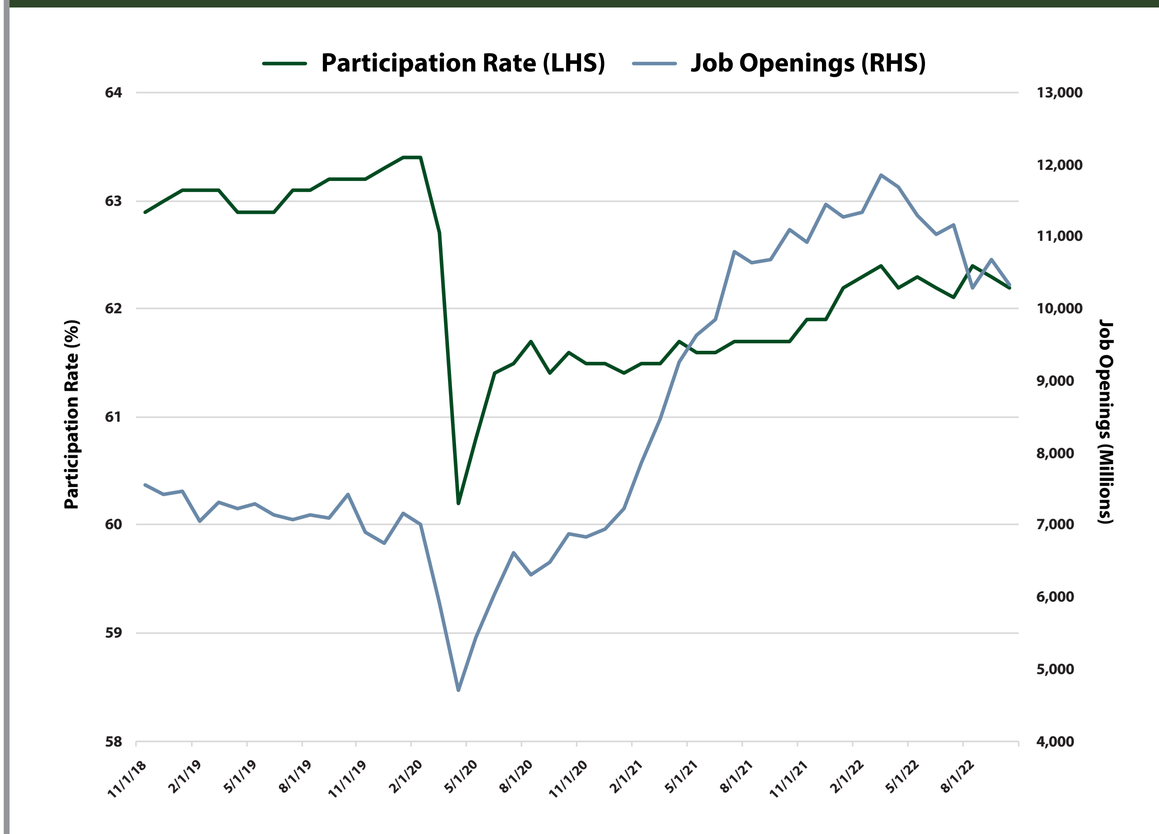


No Santa Claus Rally continued

However, one month at lower levels is not a sustained trend. The Fed is still rightly concerned about inflation in the services segment, and the highly correlated wage inflation. For these components to come down, the job market needs to loosen, i.e., more people need to be looking for a job. One way for this to happen is for more people to enter the workforce, increasing the participation rate, currently at 62.1%, down from 63.4% pre-pandemic. This 1.3% dip may not sound like much, but it represents about 3.4 million people.

Job openings are currently over 10 million. This is off the peak of 11.8 million openings in August, but well above the 7 million openings pre-pandemic and still at an exceptionally high level. The downward trend since August is a positive sign. If the 3.4 million non-participants jumped back into the workforce, the 10 million job openings could fall quickly back to the 7 million range.

Change in Participation Rate and Job Openings



No Santa Claus Rally continued

Taking a step back, the participation rate could increase simply because more people need jobs. The savings rate as a percent of disposable income ended 2021 at 7.5% and has fallen to 2.4% in November 2022. This is well off the 8% pre-pandemic levels and the 34% reached at the height of the pandemic. In fact, it's the lowest since the Great Financial Crisis. As people tap into their savings, they are more likely to join the workforce and start to take some of the 10 million available jobs. This would reduce wage pressure and help slow inflation.

The less rosy scenario is as consumers slow spending, the 10 million job openings fall as businesses stop hiring, and the economy ends up in a recession. While this slows inflation, it is not the "soft landing" the Fed is attempting to execute. The bond market is wrestling with this scenario now, and the result is an inverted yield curve, i.e., when short-term rates are higher than long-term rates. Long-term rates should be higher because an investor generally demands a greater return in exchange for the longer payback period. Currently, high short-term inflation expectations are keeping short rates elevated while more tame long-term inflation expectations keep long rates down.

The stock market is also accounting for a downside scenario - the S&P 500 trades at 17 times earnings vs. the 21 times earnings valuation at the end of 2019 and 15-year median of about 18.5 times earnings. Eagle Ridge has debated whether 17x is too high given the possibility of a recession in addition to interest rates being the highest in more than a decade.

The conclusion is that there could be near-term volatility, but we're confident in our underlying companies generating cash through this cycle and view the long-term multiple as higher. In addition, the market will not wait for the Fed to declare its inflation fight over. The multiple will expand on the expectations of inflation and the economy turning a corner.

Eagle Ridge believes that waiting for a normal yield curve or a finality to the inflation fight, results in waiting too long and missing the turning point in the market.

What's Broken So Far?

We would not be surprised to see greater turmoil in the financial markets, since the degree of losses experienced in 2022 has historically caused more widespread disruptions. Interest rates have not risen this quickly in the past forty years. Additionally, two generations of investors have only operated in a falling interest rate paradigm where rates decline, and assets appreciate. So far, the instances of contagion have been very mild relative to the amount of change in the investing environment.

At the beginning of economic and market booms, financing usually flows into sectors of the economy that are growing rapidly (ideally) or areas where there are tax and/or regulatory benefits. For instance, during the Internet boom that started in the mid-1990s, the capital markets directed funds to the technology sector which spurred incredible gains in networking and helped the Internet flourish. On the other hand, legislative and regulatory changes in the early 2000s blurred the lines between commercial banks and investment banks. These banks then took on greater risk by expanding their use of derivatives to amplify returns, which attracted greater investment into the sector.

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What's Broken So Far? continued

As market cycles mature, investment keeps flowing into sectors that have done well as momentum drives further investment. However, the follow-on investments are not as attractive since the opportunity set for the original investments dries up and the market becomes overcrowded.

In 2008, the housing market collapsed and many of our largest financial institutions teetered on the brink of insolvency. Marginally healthy institutions such as Wells Fargo and Bank of America were forced to buy failing banks such as Washington Mutual and Merrill Lynch. The banks and their financing mechanisms survived as central governments recapitalized the financial institutions.

During this same period in Europe, global investors poured money into the bonds of fundamentally weak credits such as Greece, Italy, Spain, Portugal, and Ireland. Investors were chasing higher yields than available from stronger nations such as Germany. Once credit conditions tightened as a response to the Great Financial Crisis's focus on quality, money exited Europe's peripheral bonds and these countries' finances wobbled.

These two disruptions from the Great Financial Crisis dwarf the contagion that we have experienced during the current market downturn. Over the last nine months, federal funds and other short-term interest rates have increased from essentially 0% to over 4%. This change in rates is seismic and has had (and will have) incredible impacts. Interest is the price of money and money has gone from free to expensive in less than a year's time.

So far, the Western world has only experienced two instances of contagion. The first was the funding issues that arose in the United Kingdom's pension system last year. English pension managers bought derivatives to leverage returns since they could not get sufficient returns from traditional bonds to meet their actuarial obligations. Therefore, when interest rates rose and bond prices fell, the pension plans faced funding issues. In response, the Bank of England had to intervene in the UK's bond market to stabilize prices and keep the pension plans afloat.

The other crisis has been the collapse of the crypto currency market. Bitcoin lost almost 2/3 of its value during 2022. Crypto exchange FTX recently filed for bankruptcy, losing over $30 billion in notional value in a few days. FTX, led by disgraced financier, Sam Bankman Fried, stole customer money to cover losses in its trading arm, Alameda Research. This scandal echoes Bernie Madoff's brazen fraud and Enron's impenetrable financial records.

Relative to the failures that arose after the Great Financial Crisis, these implosions are quite minor. While we have no crystal ball, we would not be surprised if there were greater disruptions to come. Future issues may arise in sectors that have been dependent on extremely low-cost financing. Cheap money has been cut off, so businesses and governments are now forced to pay more competitive rates to obtain capital. An article in the *Wall Street Journal* on December 27th indicated that public pension plans have cash balances of only 1.9% compared to a 15-year average of 2.45%. These pension plans communicated that the lower cash balances were a result of capital calls from private equity investments. Since these plans also hold far fewer liquid investments than in the past, their managers are having to get creative to keep enough liquidity to pay their retirees. We hope that the markets adjust to higher rates without cracking; however, financing conditions have changed so quickly that it is difficult to imagine a soft landing throughout the economy.

Contagion	Tech Bubble Burst 2000-2002	Great Financial Crisis 2007-2010	Post-Pandemic Inflation 2021- present
Financial Institutions	Long Term Capital Management (1998), Arthur Andersen	Bear Sterns, Lehman Bros., Wachovia, AIG etc.	
Corporate Distress	Enron, WorldCom	GE, GM, Ford	
Sovereign Crises	Argentina, Turkey	Greece, Portugal etc.	UK Pensions, Sri Lanka
Scandals/Frauds		Madoff	FTX

In Planning, Sober Assumptions Lead to Better Decisions

During our financial planning process, we work with our clients to create a snapshot of their current financial circumstances. We use software to illustrate a client's net worth, balance sheet, investment allocation, and financial statement (personal income and expenses). Then, we model a projection of the client's annual cash flow into the future, based on their life expectancy. The objective of these projections is to outline the possibilities of a client's financial future, so they can prioritize their goals and make decisions accordingly. Therefore, it is of the utmost importance that these projections are as accurate as possible.

Long-term financial plan projections are built on the back of assumptions. For example, in retirement planning there are several key factors, including portfolio composition (and assumed growth rates), inflation rates, savings rates, withdrawal rates, time horizon until retirement, and the duration of retirement. All these variables will impact the outcome of the projection, but some will bear a heavier influence depending on the client's situation. For this reason, we model multiple scenarios designed to stress test a client's financial plan and examine the sensitivity of various assumptions. We also run a Monte Carlo analysis to help clients understand the probability of achieving certain outcomes.

When we build our cash flow projections, we always prefer to be conservative in our estimates, especially when an assumption has higher variability. For example, let's assume a client's compensation is comprised of a base salary and a bonus payment derived from the company's fiscal year performance. We may assume a client's base salary grows with inflation, as it typically has in the past. However, the client notes their most recent bonus payment was twice as high as usual because their company had an exceptional year. In this case it may be beneficial to average a client's last 5 years of bonus payments for the future annual bonus assumption. The planner may even advise to omit the outlier year entirely, when calculating the mean, to assume a more conservative annual bonus payment. Income assumptions carry great significance for retirement planning, as they directly impact projected savings rates.

Financial plan projections require a forecast of future investment returns, commonly referred to as capital market assumptions. We use software that utilizes Morningstar classifications to break down the client's investment holdings into asset classes. Each asset class gets assigned an expected return and standard deviation (risk statistic). The expected return and standard deviation are based on the historical data of over 40 different market indices, which are updated every quarter to account for current market trends.

We work with our clients to analyze all their investment assets in their plan. This includes accounts Eagle Ridge does not directly manage, like brokerage accounts with other managers, mutual funds, employer sponsored retirement plans, and alternative investments. All a client's accounts are aggregated by software, which uses the capital market assumptions to calculate the expected return and risk of the entire portfolio. These calculations help us illustrate various savings rates for pre-retirees or model multiple safe withdrawal rates for retirees. We can also use this data to recommend prudent allocation adjustments within our client's investment accounts.

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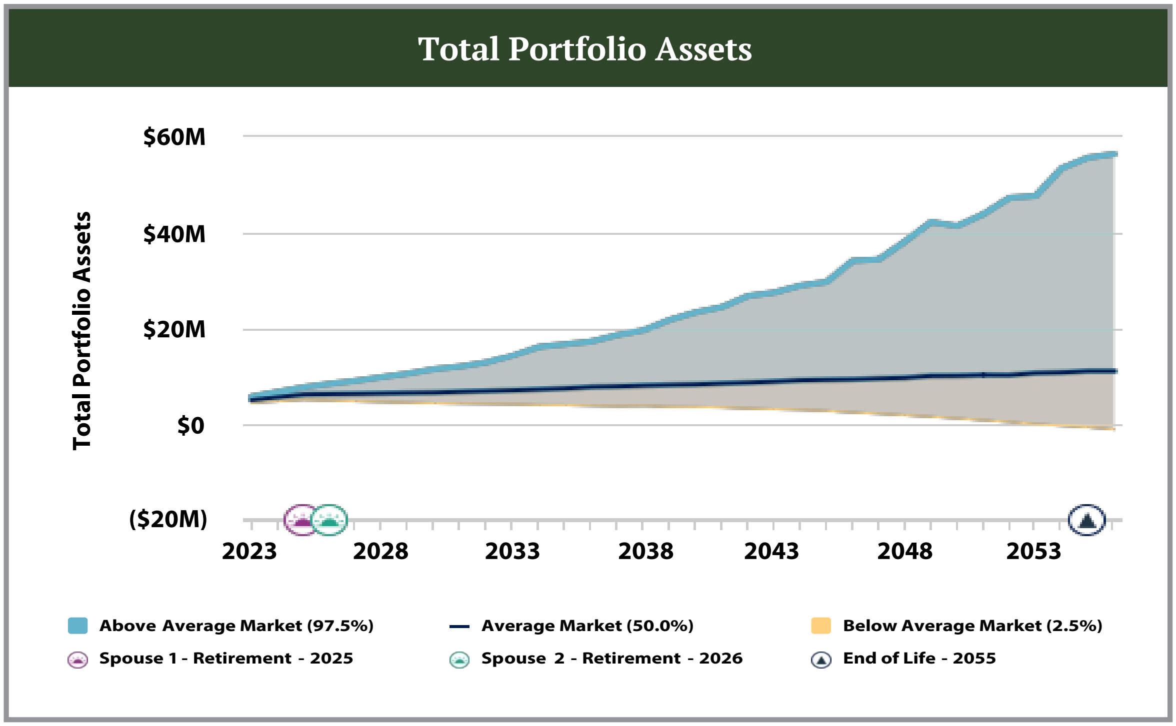
In Planning, Sober Assumptions Lead to Better Decisions continued

While these projections can be very useful, especially in the near term, a linear illustration with compound interest sometimes make long term projections unrealistic. The market does not earn a static return each year. So, in addition to this static return assumption, we will run a Monte Carlo simulation that tests trials of different returns each year. These simulations introduce random investment volatility to the analysis, and display results by expressing the probability of outcomes.



Additionally, Eagle Ridge financial planners will stress test cash flow projections by running scenarios with poor market conditions or an increase in expenses due to a long-term healthcare event. Planners can also test the sensitivity of any individual variable on a projection. For example, does the impact of a client's retirement date or investment return have a greater impact on the overall results? How does the social security claim date affect the cash flow projections, and does that impact change if the client lives longer? How do things change if there is a real estate purchase or the sale of a business? We commonly use these types of tests to help advise clients on decisions they are considering.

Eagle Ridge financial planners work diligently to construct financial plans with accuracy and precision, but future uncertainty makes assumptions necessary. It is our belief that by being conservative with our estimates, our clients gain peace of mind that their long-term objectives will be achieved. By strategically stress testing the cash flow projection, our clients can plan for their future with additional confidence and insight.

SECURE 2.0

After substantial debate in Washington, DC lasting more than one year, the 117th Congress ended its legislative session with a 2022 year-end holiday present for America! The passage of the Setting Every Community Up for Retirement Enhancement Act (SECURE) brings many enhancements to retirement planning. The provisions with broadest applicability are presented below in order of effective chronological date. We plan to cover these provisions in further detail in a future piece.

• Changes to Qualified Retirement Arrangements

- **Required Minimum Distributions (RMDs) Age**
  - Effective January 1, 2023: Increases to age 73 for those born after December 31, 1950 and prior to January 1, 1960
  - Effective January 1, 2033: Increases to age 75 for those born after December 31, 1959
- **Penalties for Failing to Take an RMD**
  - The penalty excise tax on any amount remaining in the retirement account that should have been withdrawn has been reduced to 25% as of January 1, 2023
  - The penalty excise tax is reduced to 10% if the delayed withdrawal amount is corrected and withdrawn not later than December 31st of the second year following its required withdrawal date

• Employee Student Loan Payments Treated as Deferred Retirement Contributions

- **Beginning January 1, 2024, employees who make payments against student loan indebtedness will be eligible for matching employer contributions to qualified employer retirement plans**

• De Minimis "Emergency" Withdrawals from Qualified Retirement Plans

- **Beginning January 1, 2024, a one-time penalty free withdrawal per year by employees of up to $1,000 may be made for "emergencies." An emergency is defined as "an unforeseen or immediate financial need relating to necessary personal or family emergency expenses." Income tax would still be due on the amount withdrawn in the year of withdrawal, but the amount of the income tax paid could be refunded to the employee in the future *if repayment of the withdrawn funds is made within three years of withdrawal*.**

• Qualified Charitable Distributions (QCD)

- **Effective January 1, 2024, the $100,000 QCD amount will be adjusted annually for inflation**

SECURE 2.0 continued

• Automatic Enrollment in Employer Plans upon Hire; Part-time Employee Participation Service and Age Reduced

- Beginning January 1, 2025, employer qualified plan enrollment will shift to an "opt out" regime where new plans will be required to automatically enroll employees in the plan, as well as set a default contribution rate of between 3% and 10% for the employee, with an automatic savings escalation of 1% per year leading to a maximum contribution rate of up to at least 10%, but not to exceed 15%
- Additionally, part-time employees who are at least eighteen (18) years of age and accrue a two consecutive year service requirement of at least 500 hours per year *after December 31, 2022*, will now be eligible to participate in an employer's qualified retirement plan and shall have a non-forfeitable right to any employer contributions made to their account

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• "Catch-up" Contributions Increased for Participants Who Are 50 Years of Age or Older; "Rothification" of "Catch-up" Contributions Required for Certain Highly-Compensated Employees

- Beginning January 1, 2025, employees who are 60, 61, 62 and 63 years of age will be allowed to contribute a higher "catch-up" contribution equal to the greater of: (i) $10,000, or (ii) 150% of the regular catch-up amount for calendar year 2025
- Beginning January 1, 2024, any "catch-up" contribution made by an employee plan participant who earns *compensation in excess of $145,000* will be required to make such contributions *on an after-tax basis* to a Designated Roth Account within the qualified employer plan

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• Other Plan Enhancements

- There are numerous other provisions contained in SECURE Act 2.0 pertaining to small business employer plans, multiple employer plans, SIMPLE plans, starter plans, the Savers Credit and Employee Stock Ownership Plans (ESOPs).

We strongly encourage you to consult your legal and tax advisors prior to the effective dates of these and other provisions of SECURE Act 2.0.

About Eagle Ridge

Eagle Ridge Investment Management is an independently owned, SEC-registered investment advisory firm. Our goal is to provide superior investment performance and a high level of service to a select group of clients, unencumbered by the need to sell products or meet corporate goals. We strive to help our clients meet their needs and compound their wealth through a disciplined investment process.

For more information, please contact Alie Hamilton at **a.hamilton@eagleridgeinvestment.com** or **203-227-4515**.