

Matt's Market Update



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Market Review

In spite of a weak December finish, Q4 was positive for global stock markets and helped to limit the damage in an otherwise very challenging year for investors. The year was characterized by negative returns across all asset classes with very few exceptions. Within U.S. equity markets, Value strategies were the best performers in Q4 with the average manager in each of the Large, Mid and Small Value categories posting double-digit returns. These results far outpaced their respective growth strategy counterparts in both Q4 and YTD. Value outperformance was evident in foreign markets as well. From an index perspective, the Dow Jones Industrial Average posted a gain of +16.01%, followed closely by the MSCI ACWI ex USA index return of +14.28%. Both indexes have more value company exposure than growth. Indexes with larger exposures to growth companies lagged in the quarter with the S&P 500 (+7.56%) and Russell 2000 (+6.23%) posting gains while the NASDAQ (-1.03%) posted a small decline as technology stocks continued to suffer:

In our opinion, the biggest market story of the year was the historically poor year in the bond market. While most investors are conditioned to understand that stocks will face drawdowns and bear markets from time to time, the bear market in bonds this year was new for all but the most seasoned investors. Prior to last year, there were eight calendar years going back to 1977 where the S&P 500 finished with a negative return. Some were small losses like -4.4% in 2018, while others were large negatives like the decline of -37% in 2008. In those prior eight calendar year declines, the Bloomberg Barclays Aggregate Bond index produced a positive return. Not always large, but positive anyway, and this helped to cushion the decline in stocks for investors in a balanced portfolio during those years. This changed in 2022. For only the fourth time since 1937, both stocks and bonds declined in the same calendar year. In fact, 2022 was the first calendar year on record that both the S&P 500 and the key 10-year treasury each declined by over 10%. As a result, the return last year for a classic 60/40 portfolio of S&P 500 and 10-year treasuries was -18%. This was the worst return for the 60/40 portfolio since 1931 during the Great Depression.

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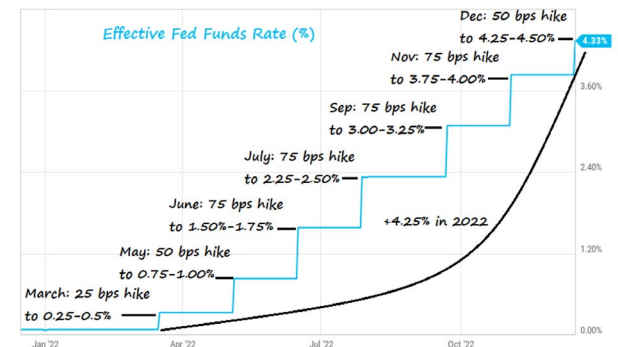
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So why did bonds have such a poor year? In a nutshell, in its efforts to fight inflation, the Federal Reserve raised its official Fed Funds rate target seven times in 2022. This key lending rate between the Fed and banks is used as a reference rate for most other lending rates in the economy such as mortgages for example. When the Fed raises interest rates, it has ripple effects through the economy. What was also unique (and spooked the market last year) were both the magnitude and duration of the rate hikes. Over the last nine months of 2022, the Fed raised its target rate from 0.5% to 4.5%. This led to the historic declines for bonds and extreme volatility for equities.

EFFECTIVE FEDERAL FUNDS RATE (I: EFFRND)



Source: Creative Planning @ CharlieBilello, Dec. 17, 2022. Powered by YCHARTS

Wealth Management Corner



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A hot button topic that has stood out in finance since the early 2000s is ROTH retirement contributions. The name ROTH comes from Senator William Roth of Delaware and was established by the Taxpayer

Relief Act of 1997. It's a relatively new feature to retirement planning and investing. There are so many articles and videos on ROTH retirement accounts that you might think this write-up is redundant. But as a financial planner, I still see and hear people's confusion about this feature, which exists in both the IRA space and the employer-sponsored retirement plan space. ROTH accounts can be powerful financial planning tools but they do have some IRS limitations that are imposed on them like all retirement accounts.

As a retirement planning educator and financial planner, one of the most frequent points of confusion regarding ROTH is its use within retirement plans like 401(k)s or 403(b)s. When I tell people they can contribute ROTH into a plan they are participating in (when the plan allows for it, which most modern plans do) they often think that their plan contains a

ROTH IRA inside of it. This is not true. Their plan is the one account type, and if it's designed by their employer to accept ROTH contributions, then they have the option to contribute money post tax into their retirement plan (account) or also contribute money pre-tax. Both contribution types can happen simultaneously, or they can choose one deferral option over the other. Each contribution type is a different source that would then be broken up on their statement to show how much they have contributed in each. If their plan offers an employer match, that would represent an additional source of funds coming from their employer. Each source would have a record of how much was contributed to it and how much it may have grown to. They all tally to the overall balance and sit within the one account and within the same investments. It's the recordkeeper's job to keep record of the amounts and any growth, so the potential taxation to each source is accurate and accounted for when a distribution is made in the future. If you were to roll over your entire 401(k) out of the plan and didn't have access to a new plan, you would roll over the pre-tax money into a traditional IRA and the ROTH money to a ROTH IRA. If you did have access to a new plan, you may be able to roll the whole amount over including the ROTH money if the new plan

allows for ROTH contributions. Otherwise, you could roll over the pre-tax money into the plan and move the ROTH money to a ROTH IRA.

Many people think the income limits imposed on ROTH IRAs apply to 401(k) plans, but they do not. Regardless of how much income you make, you can contribute up to the maximum allowable IRS dollar amount for the year into ROTH inside your 401(k) if you wanted to. I often see folks trying to contribute to ROTH through back-door ROTH IRA contributions because they were unaware that they could simply contribute to ROTH inside of their 401(k). A back-door ROTH IRA is an allowable way of putting money into ROTH accounts when you are over the income limits to be able to contribute directly to a ROTH IRA. I'm not going to get into that here because that's a topic that could be a whole other article unto itself. Just know that there are important rules to be aware of regarding the taxation of a back door ROTH IRA. It's not for everyone and if you have money in a traditional IRA at the time the tax consequence might outweigh the benefit of doing one. Not everyone is in a position to reap the benefits of a back-door ROTH IRA. Consult your Sentinel Financial Planner if this is something you are interested in learning more about.

The limits that the IRS imposes on retirement plan contributions annually is a cumulative limit between pre-tax and ROTH contributions. In 2023, that limit is \$22,500 or \$30,000 for anyone age 50 or older at any time during the plan year. You cannot do \$22,500 into ROTH and another \$22,500 into pre-tax. The overall maximum is \$22,500 for both or \$30,000 if you are of age to do so. And lastly, if you are worried about getting your employer match because you want to make ROTH contributions, don't fret – you will still get the match. The match is based on how much you contribute, not how that money is taxed. But currently, employer contributions are always pre-tax money and not matched in ROTH dollars.

Just know that ROTH IRAs and ROTH 401(k) contributions share many similar rules but they are not all the same. It's a good idea to consult your Sentinel Financial Planner who understands these rules intimately, so you can learn more about the pros and cons of utilizing this powerful financial planning tool for yourself.

Recession Evidence is Building

One of the more contentious debates in 2022 (and still ongoing to start the year) is whether the U.S. economy is in a recession? The real GDP (Gross Domestic Product) results from Q1 & Q2 last year showed negative growth. Per recent history, the last ten times that real GDP declined in consecutive quarters, the NBER (National Bureau of Economic Research) declared an official recession. As of this writing, no official pronouncement has been made.

US REAL GDP: CONSECUTIVE QUARTERS OF NEGATIVE GROWTH (1947 - 2022)

Real GDP: # Consecutive Negative Quarters	Start Quarter	End Quarter	Recession
2	Q1 2022	Q2 2022	?
2	Q1 2020	Q2 2020	Yes
4	Q3 2008	Q2 2009	Yes
2	Q4 1990	Q1 1991	Yes
2	Q4 1981	Q1 1982	Yes
2	Q2 1980	Q3 1980	Yes
3	Q3 1974	Q1 1975	Yes
2	Q4 1969	Q1 1970	Yes
2	Q3 1957	Q1 1958	Yes
3	Q3 1953	Q1 1954	Yes
2	Q3 1949	Q2 1949	Yes
2	Q2 1947	Q3 1947	No

Source: @CharlieBilello

Adding support for the recession case is the fact that the Leading Economic Indicator index (LEI), a widely followed measure that combines multiple forward looking economic measures, continues to signal recession. According to the Conference Board, which publishes this monthly indicator, (LEI) for the U.S. decreased by 1.0 percent in December 2022 to 110.5, following a decline of 1.1 percent in November. The LEI is now down 4.2 percent over the six-month period between June and December 2022—a much steeper rate of decline than its 1.9 percent contraction over the previous six-month period. Finally, as we mentioned last year in our post Q2 update, the yield curve remains dramatically inverted with short-term rates higher than long-term. A sign that almost always forewarns of recession. In fact, the last eight recessions in the U.S. were predicted in advance by an inverted yield curve.

INVERTED YIELD CURVE (10-YEAR MINUS 3-MONTH) AND RECESSIONS (1962 - 2022)

Recession Start	Recession End	Inverted Yield Curve Before Recession?	First Yield Curve Inversion	Lead vs. Recession Start (Months)
Jan-70	Nov-70	Yes	Nov-65	50
Dec-73	Mar-75	Yes	Jun-71	30
Feb-80	Jul-80	Yes	Aug-78	18
Aug-81	Nov-82	Yes	Sep-80	11
Aug-90	Mar-91	Yes	Mar-89	17
Apr-01	Nov-01	Yes	Sep-98	31
Jan-08	Jun-09	Yes	Jan-06	24
Mar-20	Apr-20	Yes	Mar-19	12
?	?	?	Oct-22	?
Average Lead Time				24

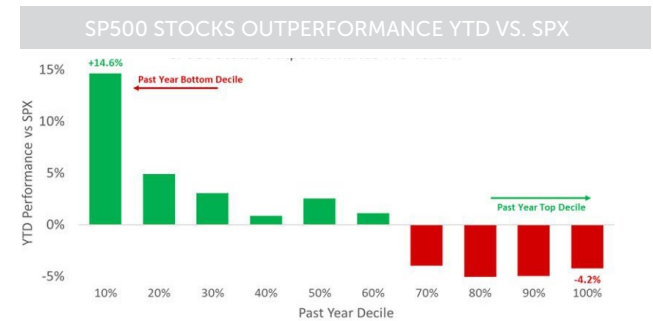
Source: @ CharlieBilello

Our Portfolio Strategy & Allocation Outlook

We made no significant changes to managed private client accounts in Q4. For the most conservative investors, we continue to like the strategy of laddered bond ETFs. Each ETF holds a basket of investment quality bonds maturing in the same year. By constructing a simple ladder of ETFs that mature in future years (2024, 2025, etc.), we can generate income while reducing interest rate risk. The ladder is maintained by simply taking the proceeds from an ETF that matures and rolling them into a new ETF in the year at the end of the ladder:

We mentioned in our last update how investor sentiment had become extremely bearish at the end of Q3, potentially meaning a reversal was imminent. Sure enough, Q4 was positive for equities and the momentum has only increased to start the year. While early, it's interesting to point out that the best performers so far in January are those stocks that did the worst last year. The chart on this page is showing performance so far in January (left axis) versus the decile finish in 2022 (bottom axis). For example, the stocks that finished in the bottom 10% of performance last year are the leading performers to start 2023. Perhaps it's a market rotation away from last year's winners, but we certainly can't make a case that the leading stocks this year represent great value based on historical valuations. In a world where

the Fed is still moving rates higher (albeit expectedly slower this year), earnings estimates are still coming down, recession evidence is building and there's no evidence of progress in the Ukraine war; we remain skeptical. Staying fully diversified, but conservatively positioned, is our preferred investment stance heading into what will be another very interesting year for financial markets.



Source: ZeroHedge

Please let us know if you'd like to discuss your personal investing and financial planning needs.

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Market Scoreboard

Index Returns (%)	Q4 2022	YTD	1 Year	3 Year	5 Year	10 Year
S&P 500	7.56	-18.11	-18.11	7.66	9.43	12.56
DJIA	16.01	-6.86	-6.86	7.32	8.38	12.30
NASDAQ	-1.03	-33.10	-33.10	5.27	8.68	13.24
Russell 2000	6.23	-20.44	-20.44	3.10	4.13	9.01
MSCI ACWI Ex USA	-14.28	-16.00	-16.00	0.07	0.88	3.80
Barclays Aggregate Bond	1.81	-13.01	-13.01	-2.71	0.02	1.06

Source: Morningstar

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S&P 500 TR: A market capitalization-weighted index of 500 widely held stocks often used as a proxy for the large-cap segment of stock market.

Russell 2000 TR: Consists of the smallest 2000 companies in the Russell 3000 Index, representing approximately 7% of the Russell 3000 total market capitalization often used as a proxy for the small-cap segment of the stock market.

Barcap Aggregate Bond TR: The Barclays Capital Aggregate Bond Index is a market capitalization-weighted index, meaning the securities in the index are weighted according to the market size of each bond type. Most U.S. traded investment grade bonds are represented. The index includes Treasury securities, Government agency bonds, Mortgage-backed bonds, Corporate bonds, and a small amount of foreign bonds traded in U.S.

MSCI EAFE NR USD: Widely accepted as a benchmark for international stock performance, the EAFE Index is an aggregate of 21 individual country indexes that collectively represent many of the major markets of the world.

DJ US Industrials TR USD: Computed by summing the prices of the stocks of 30 U.S. companies and then dividing that total by an adjusted value--one which has been adjusted over the years to account for the effects of stock splits on the prices of the 30 companies.

NASDAQ: Measures the performance of all issues listed in the Nasdaq Stock Market and is often used as a proxy for the large-cap technology segment of the U.S. stock market.

DJ/UBS Commodity: The DJ-UBSCI is composed of futures contracts on physical commodities and is often used as a proxy for broad-based exposure to the commodity markets.

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