

Q2 2023

Quarterly Market & Economic Perspective



Keeping a Balanced Approach

SUMMARY

- Harry Markowitz, the creator of Modern Portfolio Theory, recently passed away
- Fed continued to raise interest rates with 25 bps increases in May, but hit the pause button (for now) in June
- Artificial Intelligence, or AI, was a widely discussed topic this quarter; investors look for ways to capitalize

POSITIVE SIGNALS

- Inflation still appears to be fading; CPI eased to 3% in June
- Economic data continues to suggest US economy is not currently in a recession
- Labor market remains strong even as inflation declines, boosting optimism a soft landing might be possible
- Debt ceiling default crisis was averted for now (expected to be discussed again in early 2025)

REASONS FOR CONCERN

- Globally, inflation is still stubbornly high, leaving central bankers with very difficult decisions
- With a yield curve still highly inverted and more potential rate hikes on the horizon, is a recession looming? Are we in a rolling recession?
- The US large cap equity market's return is being driven by only a handful of stocks



SOURCE: MORNINGSTAR; RUSSELL, MSCI, DOW JONES, BLOOMBERG, ICE BOA ML BENCHMARKS SHOWN; PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS

COMMENTARY

In memory of Harry Markowitz

As financial and investment professionals, it is important for us from time to time to pay our respects to individuals that have had enormous impacts on how we invest. Harry Markowitz, the recipient of the 1990 Nobel Prize in Economics and the creator of Modern Portfolio Theory is one of these people. Professor Markowitz passed away on June 22.



Interestingly, Modern Portfolio Theory (MPT) was created in the 1950's, though we are still using many of the same concepts today. MPT is so important because it fundamentally changed how we think about risk and diversification; it truly was a groundbreaking concept. The theory taught us that instead of focusing on the risk and return of individual securities, we should be focusing on how they interact. Expanding upon the concept of diversification (not putting all your eggs in one basket), MPT highlights how we can build more efficient portfolios. In other words, we can achieve a higher level of return based on a given level of risk, or we need to be comfortable with a higher amount of risk given a level of expected return.

Putting the current environment in perspective

Boy, is today's economic environment different from where we were a year ago. Per Exhibit 1, last June inflation was running at 9%, the Fed was still early in their rate hiking cycle and had just executed a 75 bps increase, and bonds were in the midst of earning their worst returns ever for an annual period.

Today, inflation has fallen to 3% (CPI was 4% at June month end), consumers and markets have been incredibly resilient, and the Fed just paused their rate increases. Overall, the economic outlook today appears brighter than a year ago.

EXHIBIT 1

	June 30, 2022	June 30, 2023
S&P 500 Index Trailing 6-Month Return (%)	-19.96	16.89
Bloomberg US Aggregate Bond Index Trailing 6-Month Return (%)	-10.35	2.09
Consumer Price Index Annual Change (%)	9.1	4.0
GDP Growth Trailing Quarter (%)	-0.6	2.2 ¹
Federal Funds Rate Upper Limit (%)	1.75	5.25
Last Fed Rate Decision	+0.75	Pause

Data as of 6/30/2022 and 6/30/2023. Source: Bloomberg, Federal Reserve Board of Governors (FRED), U.S. Bureau of Labor Statistics, Bureau of Economic Analysis, and Federal Reserve Bank of Atlanta GDPNow.
¹ Estimate from Federal Reserve Bank of Atlanta GDPNow.

Debt crisis averted (for now)

Let's not forget that this past quarter saw a US debt ceiling crisis averted at the last minute in early June. Fortunately, cooler heads prevailed on both sides of the political aisle to avoid what would have been the US's first ever default which would have likely caused both economic instability as well as long-term damage to US financial credibility.

Unfortunately, while the debt ceiling was raised for now, we will be discussing this in 2025 when the US is expected to approach it again.

An update on US inflation and the Fed

Inflation continues to be falling as year-over-year headline CPI was 5.0% in April, 4.1% in May, and 3% in June (this is in comparison to last June when CPI hit 8.9%). At the same time, core CPI (which is often a better gauge for inflation as it excludes the volatile food and energy sectors), is still higher, coming in at 5.5% in April, 5.3% in May, and 4.8% in June. Regardless of whether you look at headline or core CPI, or the Fed's preferred inflation gauge called PCE, all three are well above the Fed's 2% inflation expectations.



During the quarter, the Fed increased the Fed Funds rate by 25 bps in May but decided to hit the pause button on another increase in June, ending their streak of increasing rates at ten consecutive meetings. The Fed has made it clear that even though inflation has moderated, there is still a long way to go to hit their 2% target, that the full impacts of their previous increases may not be fully felt yet, and that investors should prepare for more hikes in the future.

An update on inflation and other central banks across the globe

Inflation has been moderating across most of the rest of the developed world though is still higher than preferred, with year-over-year inflation in May of 8.7% in the UK, 6.1% in the Euro area, and 3.4% in Canada.

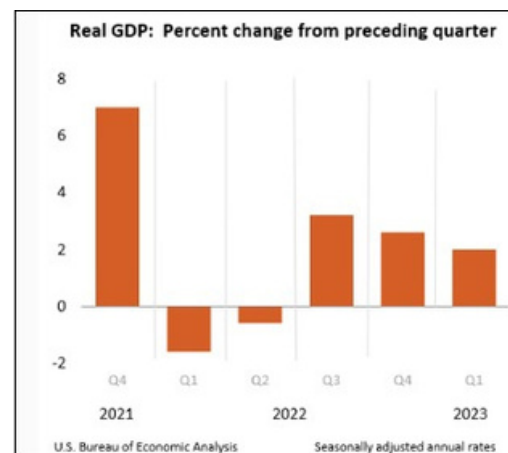
Central banks have acted accordingly, though many are at different stages of their rate hiking cycles. For example, the Bank of England had their 13th straight rate increase, the Canadian Central Bank increased rates in June after having been on hold since January 2023, and the Australian Central Bank hit the pause button in July after having lifted twelve times since May 2022 but warned more increases were likely coming. In addition, even as the European Central Bank had their 8th straight increase in June, ECB President Christine Lagarde said "we are not thinking about pausing."

The challenges for central banks remain. As the Fed and other central bankers have repeatedly stated, their main goal is to reduce inflation to more normal levels; and raising interest rates is their tool of choice. However, when they raise interest rates, they also put more pressure on banks, which we know have already been strained.

Are we currently in a recession?

For almost the entirety of the last year, economists and pundits have been warning of a recession. However, when you look at the variables used to determine a recession, the evidence shows that we are not currently in one. Similarly, as we heard one recent economist suggest, as 68% of GDP comes from consumption, it's hard to have a recession when consumers are still spending.

EXHIBIT 2



Even if you use the back-of-the-envelope calculation for a recession, which is two consecutive quarters of negative GDP, per Exhibit 2, this methodology also shows that we are clearly not in a recession (next GDP data release is July 27, 2023).

While the data suggests the overall US economy is not in a recession, others have suggested we are in a “rolling recession,” where the overall economy is ok, but certain industries rotate through periods of expansion and decline. For example, we have seen challenges in the housing sector as mortgage rates increased, and layoffs in tech companies, but the economy as a whole has been able to weather the storm.

It is also important to remember that economic data is backward looking, while markets are forward looking. Because of this, we would strongly caution against trying to use backward looking data to try and time the markets. As Exhibit 3 shows, there was an official recession from February 2020 to April 2020. However, it was not announced by the National Bureau of Economic Research that we were actually in a recession until June 2020 (2 months after the recession officially ended) and it wasn’t announced that the recession ended until July 2021.



However, it was not announced by the National Bureau of Economic Research that we were actually in a recession until June 2020 (2 months after the recession officially ended) and it wasn’t announced that the recession ended until July 2021. Look at the returns you would have missed out on if you

U.S. Equity

For the first time in many quarters, we are able to report positive US equity returns across the benchmarks we follow over the last quarter, on a YTD basis, and for the last 12 months, with large cap growth stocks leading over those time periods. Partially as a result, the S&P 500 ended June at its highest point through the first six months of the year.

EXHIBIT 3



SOURCE: DIMENSIONAL FUND ADVISORS, PERFORMANCE DATA REPRESENTS PAST PERFORMANCE AND DOES NOT PREDICT FUTURE PERFORMANCE. PERFORMANCE DOES NOT REFLECT THE EXPENSES ASSOCIATED WITH THE MANAGEMENT OF AN ACTUAL PORTFOLIO. S&P DATA © 2022 S&P DOW JONES INDICES LLC, A DIVISION OF S&P GLOBAL. ALL RIGHTS RESERVED. INDICES NOT AVAILABLE FOR DIRECT INVESTMENT THEREFORE, THEIR PERFORMANCE DOES NOT REFLECT THE EXPENSES ASSOCIATED WITH THE MANAGEMENT OF AN ACTUAL PORTFOLIO.

However, as Exhibit 4 shows, the rally in the S&P 500 has been very narrow. Specifically, on a YTD basis through May, the top 5 stocks in the S&P 500 have combined to deliver a 34.9% return while the other 495 remaining stocks achieved a much lower 3.3%. This is important because broader market rallies have generally been more sustainable and are considered healthier vs. narrow ones.

EXHIBIT 4



SOURCE: T ROWE PRICE, PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. RETURNS REFERENCE S&P 500 INDEX. AS OF MAY 31, 2023.

Within the tech sector, AI has been a hot topic over the quarter with functionality like ChatGPT making its way into our lexicon. With all the buzz about AI, it's not surprising that folks are trying to find ways to invest in AI. Before getting too excited that we have some fantastic ideas on how to do this, remember, AI has been around in one form or another for many years. Also remember that markets are incredibly complex, so we wouldn't bet too much today on AI being able to outsmart the market on a consistent basis.

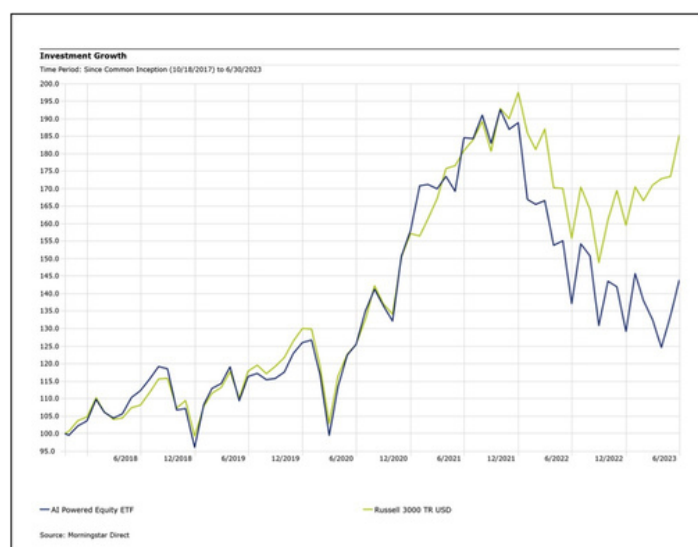
To show you just how difficult it is to consistently outperform the market using AI, we ran a comparison of the Russell 3000 Index, a broad US equity index, vs. AIEQ, the first actively managed ETF to fully utilize artificial intelligence as a method for stock selection. Per its own website, it claims its AI powered ETF using IBM Watson equals a team of 1,000 research analysts, traders, and quants working around the clock. It also analyzes "millions of data points across news, social media, industry and analyst reports, financial statements on over 6,000 companies, technical, macro, market data and more."



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Surely something this complex can easily outperform a simple and broad-based index like the Russell 3000? Not so fast. As Exhibit 5 shows, since the inception of AIEQ in October 2017 through June 2023, the Russell 3000 has outperformed the AI-powered ETF, returning 11.4% vs. 6.7% on an annualized basis. Overall, while AI might be able to digest information, we are not convinced it will be able to predict the future, nor how markets will respond, so we caution against trying to invest with an AI focus

EXHIBIT 5



SOURCE: MORNINGSTAR DIRECT

Non-U.S. Equity

All international indexes we track were positive over the last quarter and on a YTD basis, though they underperformed their US counterparts.

In fact, there were no developed countries that outperformed the US markets over the 2nd quarter. Italy (7.3%), Japan (5.4%), and Spain (5.2%) had the highest developed non-US country returns.

As we have previously noted, China remains roughly 1/3 of emerging markets, so its performance has a meaningful impact on the overall results of EM indexes. For the quarter, China was unfortunately one of the worst returning countries, falling -9.9%, and that overwhelmed the positive outcomes in places like Greece (24.9%), Hungary (24.4%), Poland (23.5%) and Brazil (21.9%).

Source: Dimensional Fund Advisors, Country returns are the country component indices of the MSCI All Country World IMI index

Finally, the rising US Dollar relative to a basket of foreign currencies was another factor in the quarterly underperformance of non-US stocks relative to US stocks.

Global REITs

Global REITs, as represented by the Dow Jones Global Select REIT, gained 1.3% for the quarter, with US REITs moving up by 2.9% while non-US REITs fell by -3.8%.

Diving deeper into the YTD sector returns for the FTSE NAREIT US index (a REIT index that provides sector returns publicly), the office space sector continues to be the worst performer having declined -16.2% YTD, though it was relatively flat over the second quarter.



Global Fixed Income

The fixed income indexes we follow were mainly negative for the quarter with the exception of 1–5-year US Corporates (+0.1) and Global Aggregate (hedged USD) bonds (0.1%). All of the fixed income indexes were positive on a YTD basis.

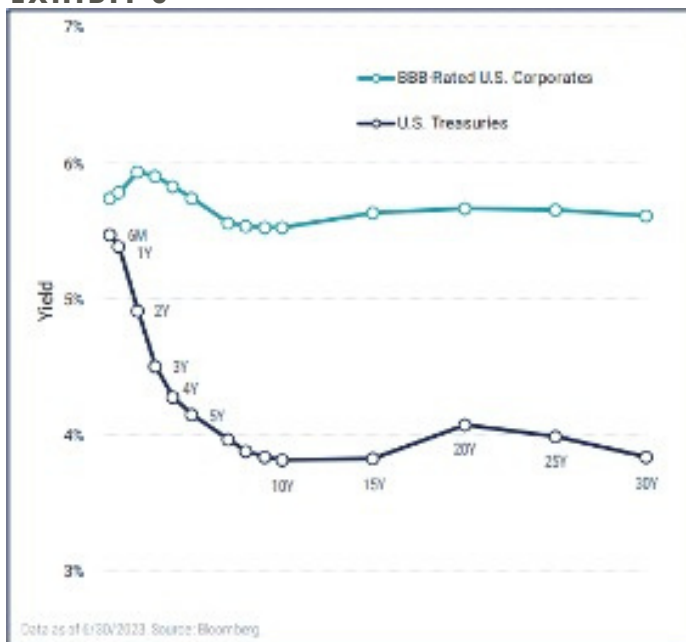
Yields rose across the entirety of the yield curve over the quarter as the stress of the banking sector moved further away in the rear-view mirror, and as signs of continued economic strength and resilience appear. In fact, the yield curve inversion has been exacerbated as Treasury yields increased more on the short end vs. the intermediate and long-term parts of the yield curve.

When you look at the yield curve on a YTD basis, 3-month Treasury yields have increased by 101 bps while 30-year Treasury yields have actually decreased by 12 bps. What is this telling us? The short answer is that with the Fed suggesting there may be two more interest rate hikes this year, we should expect the yield curve to stay inverted with this tighter monetary policy. Investors on the long end of curve are still somewhat expecting the Fed will eventually ease, even though the Fed has not given any indication that will happen anytime soon, so yields at the long end remain largely unchanged from year end.

Although the focus of the last paragraph was Treasury bonds, other bonds have their own yield curves that have different shapes and move for different economic reasons. Exhibit 6 shows the US Treasury yield curve vs. that of BBB-rated US Corporate bonds. A few things stand out. For one, as we should expect because they are riskier, corporate bonds offer a higher yield vs. their Treasury counterparts. Second, unlike the highly inverted Treasury curve, the corporate curve is significantly flatter, meaning intermediate corporate bonds are offering much more yield vs. intermediate Treasuries. At the end of the day, we recommend owning some intermediate term Treasuries as a hedge to equity returns, while corporate bonds can be owned to generate more fixed income return while still maintaining a high average credit quality. To come full circle, Harry Markowitz taught us to not focus on individual security risk, but how securities interact with each other within a total portfolio.

While municipal bond performance was negative for the quarter, munis did outperform Treasuries but underperform corporate bonds.

EXHIBIT 6



SOURCE: BLOOMBERG

We continue to view fixed income as a method of reducing overall portfolio risk (as measured by standard deviation), given that equities are expected to have much higher volatility. Our portfolio's focus will continue to be on high quality bonds with an emphasis on short to intermediate duration government and corporate bonds, where default risk has historically been relatively low.



AUTHORS



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Mario is the Chief Investment Strategist for XY Investment Solutions and the President & Founder of East Bay Financial Services. Mario began his investment career in 1999 with Vanguard mutual funds in Valley Forge, PA, where he consulted institutions and financial advisors on investment policy, portfolio construction, and Exchange-Traded Funds (ETFs). He also held roles as a research analyst, a municipal bond fund specialist, among others, during his tenure. In 2003 he earned the Chartered Financial Analyst designation, and he continues to mentor aspiring Charter candidates and young investment professionals.

Mario is Past President of CFA Society South Carolina and Former Chairman of the College of Charleston Finance Department Advisory Board. His approach to investments and the industry has been featured in Investment News, NAPFA Advisor Magazine, South Carolina Public Radio, and other publications and media outlets.

Eric Stein, CFA

Prior to joining East Bay, Eric worked for a variety of firms, both large and small. This includes 7+ years with Goldman Sachs Asset Management where he held roles in areas such as performance measurement, client service, risk analysis, and portfolio construction. During his tenure there, Eric had the opportunity to cover many different types of asset classes, vehicles, and client types. Eric also worked at RSM U.S. Wealth Management for 10+ years, serving as the Chief Investment Officer while providing strategic leadership and solutions for their national investment platform.

As a Partner at East Bay, Eric serves a select group of financial advisory firms as their outsourced Chief Investment Strategist. Responsibilities of this role include continuous oversight of advisor clients' investments, bespoke strategies for unique situations, client communications, and more.



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Benchmark descriptions: MSCI ACWI Index, MSCI’s flagship global equity index, is designed to represent performance of the full opportunity set of large- and mid-cap stocks across 23 developed and 24 emerging markets, covering approximately 85% of the free float- adjusted market capitalization in each market. Russell 3000 Index is a market-capitalization-weighted equity index that tracks the performance of the 3,000 largest U.S.-traded stocks which represent about 98% of all U.S incorporated equity securities. Standard & Poors 500 is an index based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ. The S&P 500 index components and their weightings are determined by S&P Dow Jones Indices. Russell 1000 Index is an index of approximately 1,000 of the largest companies and is a subset of the Russell 3000, comprising approximately 90% of total market capitalization of all listed US stocks. Russell 1000® Growth Index is a market capitalization weighted index that measures the performance of those Russell 1000® companies with higher price-to-book ratios and higher forecasted growth values. Russell 1000® Value Index is a large-cap value index measuring the performance of the largest 1,000 U.S. incorporated companies with lower price-to-book ratios and lower forecasted growth values. Russell 2000® Growth Index measures the performance of the Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values. Russell 2000® Value Index is an unmanaged, market-value weighted, value-oriented index comprised of small stocks that have relatively low price-to-book ratios and lower forecasted growth values. MSCI EAFE (Europe, Australasia, Far East) Index is designed to measure the equity market performance of developed markets outside of the U.S. & Canada. MSCI EAFE Small Cap Index captures small cap representation across Developed Markets countries around the world, excluding the US and Canada. MSCI Emerging Markets Index captures large and mid cap representation across 24 Emerging Markets (EM) countries and covers approximately 85% of the free float-adjusted market capitalization in each country. MSCI Frontier Markets Index captures large and mid cap representation across 29 Frontier Markets countries and covers about 85% of the free float-adjusted market capitalization in each country. Dow Jones Global Select REIT Index is designed to measure the performance of publicly traded REITs and REIT-like securities and is a sub-index of the Dow Jones Global Select Real Estate Securities Index (RESI), which seeks to measure equity real estate investment trusts (REITs) and real estate operating companies (REOCs) traded globally. The index is designed to serve as a proxy for direct real estate investment. 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ICE BofAML 5-10 Year US Treasury, Corporate and Municipal Indexes are subsets respectively of ICE BofAML US Treasury, Corporate and Municipal Indexes including all securities with a remaining term to final maturity greater than or equal to 5 years and less than 10 years. ICE BofAML 10+ Year Treasury, Corporate and Municipal Securities Index are subsets respectively of ICE BofAML US Treasury, Corporate and Municipal Securities Indexes including all securities with a remaining term to final maturity greater than or equal to 10 years. Bloomberg Barclays Global Aggregate Bond Index provides a broad-based measure of the global investment-grade fixed income markets (one version shown with its currency hedged back to the USD and is noted as such). Bloomberg Barclays US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed- rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and nonagency). J.P. Morgan Global (ex-US) Government Bond Index: Is the standard unmanaged foreign securities index representing major government bond markets outside the US markets (one version shown with its currency hedged back to the USD and is noted as such). ICE BofAML US Inflation-Linked Treasury Index tracks the performance of U.S. dollar denominated inflation linked sovereign debt publicly issued by the U.S. government in its domestic market. Qualifying securities must have at least one year remaining term to final maturity and no more than 5 years to maturity. Bloomberg Barclays U.S. Corporate High Yield Bond Index is a total return performance benchmark for fixed income securities having a maximum quality rating of Ba1.
