



Q2 2023 Market Synopsis

Economic & Market Update:

The second quarter of 2023 continued the trend of positive returns across almost all asset classes and improving market/economic sentiment that started in late 2022. This has made the first half of the year an excellent period for investors as inflation has come down materially versus the 40-year highs we saw in 2022, while unemployment remains near historic lows. At the same time the overall economy has shown impressive resiliency. With this recent performance the markets are looking past a deeply inverted Treasury rate yield curve (traditionally a sign of a recession), flat or declining overall corporate earnings/margins, and much higher borrowing rates across the economy.

Traphagen views the current environment offering both opportunity; as much higher interest rates are now available through traditional bonds and many alternatives, but also elevated risks, as many historical signs of a near/intermediate term recession or slowdown are entrenched. We feel our portfolio construction of high-quality bonds/bond option selling strategies, significant use of diversified high yielding and risk reducing alternative/private investments, and our unique US stock valuation, dividend, and quality investing approach provides opportunity to participate in line on the upside, but also have outsized protection if we do enter a prolonged slowdown or recession.

The global stock market is up 14.2% through June 30th with US stocks outperforming most international markets once again by a good margin. The performance has been very uneven however with the vast majority of stock gains being recorded by mega cap technology stocks. The remainder of stocks and sectors are generally higher, but much less than these select companies. This has created the most concentrated US stock market in history with the top 10 stocks representing about 31% of the total SP500 index.

Mid and longer-term interest rates are little changed this year with the 10 year starting and ending the 1st half of 2023 within a few ticks of 3.8%. The shorter end of the rate curve continues to increase with the Fed slowing (but continuing) their hiking cycle. In the beginning of January the 1 month T-Bill offered 4.2%, currently this rate is much higher, at just over 5.4%. This has created a fixed income backdrop of very attractive short-term risk-free rates in the mid 5% range, and bond total returns of between 2% and 5% through June.

The stagnation of rates at longer maturities and significant increase in short rates has caused the widest and longest duration ‘inversion’ in at least 40 years. This is one reason we remain cautious on the overall economy and future mid-term growth.

The final pillar of our client portfolios, our private/alternative suite, is once again performing very well, on pace for an above target performance year. Through June in aggregate, our suite has returned around 3.5%, which would annualize to around 7% for the full year. Insurance securities and private credit are the best performers in this category returning near 10% for the former and 5% for the latter. Private real estate is the laggard this year with returns in this asset class between + 1% and - 4.4% depending on the specific fund.

Below: Year to Date 2023 Performance for Select Asset Classes

Select 2022 YTD Asset Class Returns (6/30/2023)	
Digital Assets (Bitcoin)	+ 144.1%
S&P 500 (US Large Cap Stock Market)	+ 15.4%
MSCI EAFE (Foreign Developed Stock Market)	+ 11.1%
Insurance Linked Securities (XILSX/SHRIX)	+ 9.1%
Middle Market Lending (CCLFX)	+ 5.6%
Diversified Private Credit (NICHX/CELFX)	+ 5.0%
MSCI Emerging Market (Emerging Stock Market)	+ 4.4%
Investment Grade Corporate Bonds	+ 3.5%
Private Farmland, Timberland, Infrastructure (VCRRX)	+ 2.8%
US Mid/Long Treasury Bonds	+ 2.0%
Nat Gas/Oil Pipeline Companies (TPYP)	+ 2.0%
Consumer Lending (LENDX)	- 0.1%
Private Equity (PIIVX)	- 3.4%
Private Real Estate Equity (TIPWX)	- 4.4%

** All private assets offered to accredited or qualified investors (\$1M+) in assets will be discussed separately*

All three broad components of client portfolios are performing well this year with domestic large cap tech stocks and digital assets (for our more risk tolerant portfolios) leading the way. Traditional bonds have been generally steady in terms of price and are again acting as a good diversifier while producing reasonable yearly incomes of 4% to 6%. Finally our alternative/private suite continues to earn mid/upper single digit yearly returns with very little volatility and providing a large amount of portfolio downside protection.

The major factors which impacted markets in Q2 2023 are highlighted below:

- **Slowing Interest Rate Hikes By the Fed/Inflation:** With the annual inflation rate dropping precipitously over the past year from near 9% on an annualized basis in March of 2022 to around 3% currently, this has allowed the Federal reserve to greatly slow their rate hike pace. It is widely expected that after one or two more hikes the Fed will be done with increasing short term rates. In fact, the market is already building in three or four cuts from current levels over the next year as

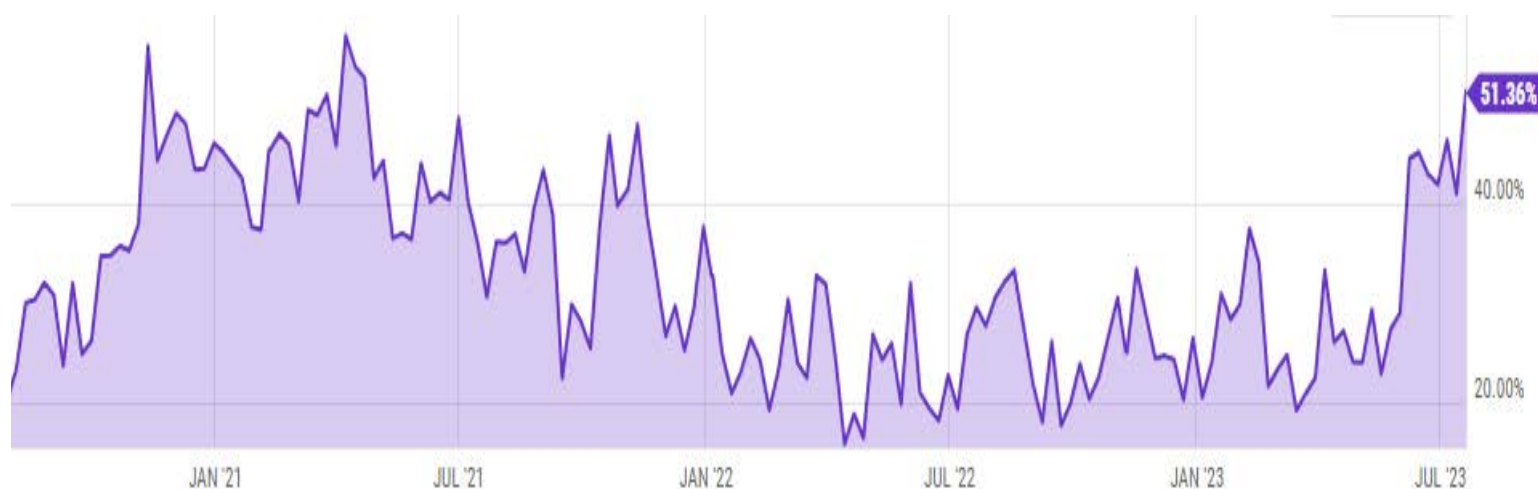
growth and inflation continue to slow or at least stabilize. Although it is a tall order, the optimal outcome would be inflation to settle out around 2% over the next 6-12 months, while economic growth slows, but avoids contraction.



Above: 12-month % change in the US consumer price index (2018 – Current)

- **Regional Banking Stresses Contained:** After a very volatile and uncertain March in the banking sector, the Federal reserve and other government agencies reacted with haste to limit damage from the regional banking stresses and failures. This quick action to implicitly backstop regional banks greatly limited further capital flight and nipped a possible larger crisis in the beginning stages. Although we agree with Warren Buffet that no depositor in a US bank will lose any amount of funds; in an abundance of caution we would recommend clients keeping no more than the insured amounts in any local/regional bank. Further, we do not view this sector (although cheap and still down 25% from recent highs) as attractive for investment as regional banks have a mountain of headwinds including an inverted yield curve, decreasing margins, likely increased regulation, shrinking loan growth, and exposure to commercial real estate.
- **Improved Investor Sentiment & Higher Stock Valuations:** At the beginning of 2023 investor sentiment (or how investors ‘felt’ about the markets) was extremely

bearish/negative with inflation high, stocks down 20% to 30%, and many believing a recession was looming. Since that point, investor sentiment has increased dramatically and is now at the highest level since mid-2021 (prior to the inflation/rate increases.) This investor sentiment has caused a willingness to pay up for stocks as compared to last year and we can see that when looking at today's stock valuations. Late in 2022/early 2023 we saw the stock market trade at about 15X – 16X expected earnings which is historically somewhat below average. Currently, at an SP500 of 4550 or so, we are back just above 20X earnings, which, when looking at the period from 1980 – 2023 is right around average.



Above: US Investor Bullish Sentiment over the last 3 years (AAII)

- **Artificial Intelligence Recognition within Markets:** Although artificial intelligence in some form has been around for a decade or more, it was only early in 2023 that it emerged as a strong narrative within the stock market and in the media. With the public introduction of ChatGPT in late 2022, the use cases and applications built around this and other similar products exploded. We have seen an extreme reaction in the companies investors think have a good chance of extracting value over the next decade in this space. Of course, it is so early no one actually knows how this new technology will evolve. For now, the mega cap tech stocks (winners of past 10-15 years) are assumed to be the biggest future winners in AI. Traphagen does think this technology will be increasingly important and possibly cause some paradigm shifts as we get into the back half of the decade. What exact companies accrue significant value or are negatively disrupted from it will not be known for several years.

Traphagen Late 2023/ Early 2024 Portfolio Changes & Performance Update

Much like with our last update, we are pleased that all three pieces of our client portfolios are performing well (high quality bonds, stocks, and alternative/private suite). We were defensively

positioned coming into the year as we did (and still do see an increased risk of a slowdown/recession), however, with our unique portfolio construction even if we are wrong with our recession concerns, we should see most portfolios returning upper single digits to mid double digits this year (assuming stocks remain roughly at current levels). When looking at an environment with elevated stock valuations, heightened economic uncertainty, much higher rates, juxtaposed against several positive signals we are very comfortable with the current portfolio stance. We view our current portfolios with a significant level of defense/capital protection if a recession does emerge over the next year, while able to produce significant positive returns if our concerns do not materialize.

The most consequential investment changes made over the past 4-7 months are highlighted below:

- Increased allocation to high quality bonds and a unique Treasury/Call Selling Strategy (IEL, GIGB, TLTW):** We first purchased 'TLTW' in mid-March and then again shortly thereafter for almost all clients as both a high yield and defensive investment. As a reminder 'TLTW' is a strategy which holds very long-term Treasury bonds (current yield from the bonds themselves is about 4%) and simultaneously sells call options on those bonds. The average cash return (or yield) on the option selling over the long term has been 9%, however this year it has been closer to 15%. Even though rates are higher than when we purchased the security (which causes bond prices to decline); the yield has been so robust that most clients are still up between 2% and 3%. In addition to a double digit, zero default risk yield, this should provide excellent protection during a recession.



Above: TLTW (red) vs. Long Term Bonds (blue) from 3/15 – Current (Traphagen purchase date). TLTW outperformed Long Treasury bonds by close to 6% over the past 4 months.

- Large and increased allocation to insurance linked securities:** After seeing the highest property and casualty insurance premiums (inflation adjusted) since at

least the early 1990s we made the decision to add material exposure to the insurance linked security space for almost all clients. Most clients hold between 9% and 11% of their portfolios in this asset class currently. The average net yield is roughly 15% with no recession/economic credit risk associated with the securities. As we enter the heart of hurricane season the final returns of these securities will be largely impacted by natural disasters in this period, but to this point we could not be more pleased with this allocation. Year to date, our two main holdings in the space (XILSX) is up 8.1% and (SHRIX) is up 11.9%. If we do end the year with an 'average' loss/hurricane season total returns in this space should be in the 14% - 18% range.

- **Addition of High Dividend/High Quality Strategy (SCHD):** We added this security at the beginning of the year and so far in absolute terms most clients are within 1% either side of breakeven on the fund; but it has lagged the SP500 by about 10%. This difference is a function of the SP500 performance in the period being largely driven by the mega cap technology companies, while value orientated/dividend paying stocks lagged. We purchased this security as a core holding for the long term and since it is very different than the index, there will be periods of material underperformance and outperformance. Since January 2022, this strategy and the SP500 have identical performance, but 'SCHD' protected much better on the downside in 2022 being down only 3% last year.
- **Sale of ECOIX and purchase of the utility index (FUTY):** After roughly three years of investment within the Ecofin actively managed renewable energy and infrastructure/utility fund we decided to exit. Although we continue to like this specific theme for significant future growth, cash flow, and portfolio 'defense' the returns we were looking for simply did not materialize in this fund. As we researched other options in the space and new investments became available, we decided to make a change. For now, the funds that were generated from the sale of ECOIX were placed within a simple ultra-low cost utility stock index fund. We like this position for now, but come the fall, we do expect to redeploy these funds into a private infrastructure fund with a ~ 5.5% dividend yield and a target net return of around 10% with low volatility.

Private Investment Update (*for accredited investors only; \$1M+ with Traphagen*)

Private Equity (I Direct Private Markets Fund (Formally KKR Fund): Since the beginning of 2022 through May 2023, the security has returned - 7.3% which compares to - 10.7% for the public stock market in the same period. Since we invested within the strategy for most clients in 2019, the fund has returned 11.1% per year net of fees. Over the course of the next few months, the fund will look to allocate between KKR, Vista, and Warburg Pincus in terms of private equity managers. This adds further diversification to the fund and adds to the possible universe of investments to choose from

Private Equity (GPB Fund II): We continue to wait for the large cash distribution from prior portfolio company sales. We do not have any specific timeframe for this, although current GPB management, and the SEC monitor have been very aggressive in pushing for the release of these funds to investors. In addition, we did receive an updated fund value (as of 12/31/22) which was – 3.9% vs. – 18% for the public markets in the same period. The remaining operating companies within the fund continue to do well, with double digit revenue growth.

Private Equity (Stepstone PM Fund): This fund continues to perform extremely well and we will be adding this fund to almost all portfolios of \$1M+ for our clients over the next month. Through June the fund has returned + 8.4% and that comes after a 2022 with another + 8.8% return. Since our first clients were invested in the beginning of 2021, the fund has returned + 56.9% vs. + 16.5% for the public stock markets. It is a well-diversified within private equity and also has material amounts invested in private infrastructure/credit to produce a 2% or so cash yield.

Private Real Estate Equity (JPM REIT): This strategy continues to invest in residential and industrial/warehouse real estate opportunistically and is producing very positive results in its first full year of operation. So far in 2023, the fund has returned + 6.8% net of fees, far outpacing almost all other real estate funds.

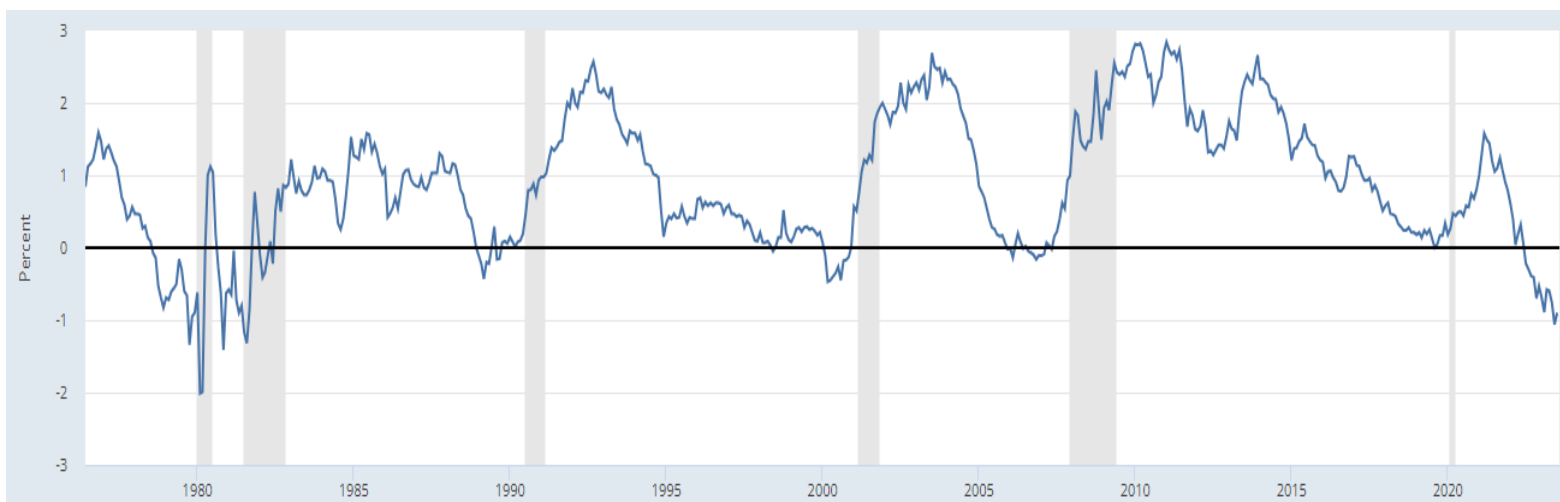
Private Real Estate Equity (Blackstone Fund): The Blackstone fund after a torrid performance pace from 2017 – 2022 has stabilized in terms of returns; but looks again to be picking up some momentum once the initial adjustment from much higher rates was absorbed. From October 2022 through April 2023 the fund was essentially flat, however with most of the interest rate adjustment likely behind us, over the past two months we have seen solid returns again. Between May and June 2023 the fund is up 1.6%, and seems to be on pace to increase average rents by about 6% year over year. It has a current cash yield of 4.6%.

Late 2023/Early 2024 Market and Economic Outlook Update:

We remain in one of the most uncertain rate/economic environments we have seen in about 15 years. There are both very positive and several challenging cross currents throughout the current landscape. It is possible we are entering a new higher ‘rate/inflation’ regime versus where we were since 2009, or we could be gradually reentering a lower rate/growth environment. Even the bond market itself seems uncertain, where it’s implied forecast of short-term rates one year from now, is oscillating 1% up and down frequently.

Several important economic data metrics pointing in opposite directions are highlighted below. Yield curve inversions (meaning short rates are higher than long rates) have essentially an unblemished record of predicting recessions. Historically, every time this has happened a recession has occurred in the near/intermediate future, however there are reasons why this time could take longer than usual (consumers and companies able to lock in very low-cost debt for many years).

Below: Chart of the 10 Year Treasury Yield – 2 Year Treasury Yield (below the 0 line indicates an inversion) and each time that has occurred over the past 50 years a recession has occurred shortly thereafter. Blue highlighted periods indicate recessions.



We are currently at the most persistent and deep inversion we have seen since 1980 and this is certainly a headwind for economic growth.

On the flip side, we see several positive factors for further market resiliency including a persistent tight labor market (although this could be inflationary), strong trend of lower inflation vs. last year, new technologies (such as AI) helping to boost productivity, and housing/real estate price stability.

Another very unique aspect of this new ‘higher rate’ regime that almost no one is talking about (at least not yet) is the large stimulative impact to consumers/corporations/investors getting much more interest income on their cash, savings, and risk-free Treasury bonds. This interest income going from near nothing from 2009 – 2021 to 5% or more in 2023 is important.



Above: Federal interest payments from 2010-2023 (Over the past 2 years interest payments to government bond holders has almost doubled from \$500M to \$1 Trillion) and is poised to increase further

The above government payments to bond holders in addition to increased rates on savings, cash, money markets, and CDs, is providing roughly an additional \$1 Trillion dollars per year in cash payments to corporations, investors, and savers vs. the zero-rate environment we were in for the last 15 years. Even if only 25% of these payments are used for capital or consumer spending, that is a very large amount of stimulus for consumer spending and investments. This could also prove somewhat inflationary over time as well, as these payments are being funded via debt or 'money printing'.

In our last newsletter released 3 months ago, we concluded with highlighting four major positive catalysts that we thought could provide a good market environment. The specific points we covered were much lower inflation, lower/less volatile interest rates, progress on supply chains, logistics, and lower valuations. Every one of these positive catalysts (in addition to the AI narrative) have manifested over the past 3-6 months and explains why the financial markets and our client portfolios are on pace for a very good year.

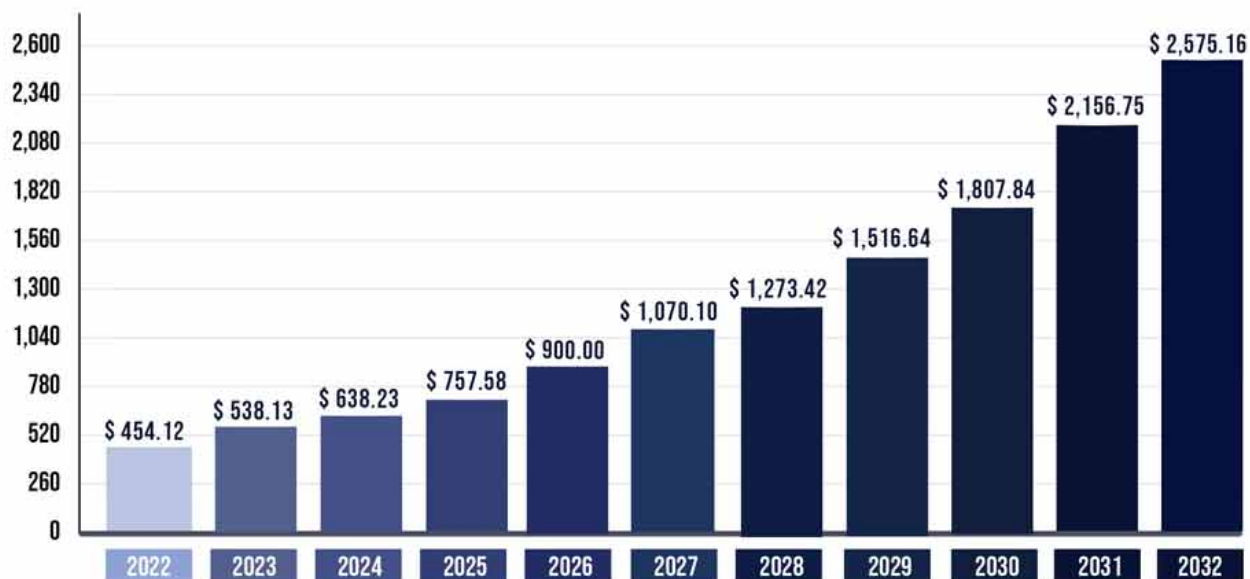
As we look forward, Traphagen sees most of the positive catalysts still present, but we view them as largely priced into the market. Thusly as we are investing from this point forward, we are going to lean away from the most expensive parts of the market, look to the private markets where valuations are cheaper and within private credit/insurance securities where 9% to 15% net high quality yields are available. Traphagen also remains invested in value tilted/high quality companies while also holding a large amount of portfolio defense/protection.

Lastly, we do think artificial intelligence could be a paradigm shifting innovation over the next several decades and we do want to be in a position to extract value/profit from a diversified allocation in the space. We have exposure to this area through both 'traditional' mega cap AI leaders such as Alphabet (Google) and smaller/mid-size publicly traded companies that have different value propositions within the space through 'GINN'.

We think we have the most growth and performance potential in an allocation across several private AI companies where most investors do not have access currently. These companies include Nanotronics, Databricks, Dataminr, Verbit, Brain Corp, Inrix, among others. These companies are growing quickly in the private sector and we believe several of these are likely to go public over the next 2-4 years. These investments are all held within the 'PIIVX' (Private Shares Fund), and just under 10% of the fund is now allocated to this specific sector.

Below: Future estimates of artificial intelligence market size (in Billions) over the next decade. Per Precedence Research the market for AI in 2023 should be roughly 5X the size it is currently.

ARTIFICIAL INTELLIGENCE (AI) MARKET SIZE, 2022 TO 2032 (USD BILLION)

Source: www.precedenceresearch.com

News recently crossed that Fitch downgraded US government sovereign debt from AAA to AA+. This was likely a major factor in the stock and especially bond market volatility of the last couple days. Although we share some of the long-term concerns that Fitch noted, such as quality of governance on the national level, historically large national deficits and increased interest payments; the chance of an actual default on US debt remains essentially zero. The US Dollar remains the reserve currency of the world and the downgrade itself should (like the prior downgrade of US debt in 2011) have little to no longer-term impact on the US Stock market or economy.

As always, we thank you for the continued trust you place in us, and all here at Traphagen wish you the best as we progress through the dog days of summer and we hope all enjoy any trips or vacations you might have planned.

Best regards,

Your Traphagen Investment Team