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Markets and the Economy

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In April, the S&P 500 recorded the largest monthly percentage decline of the year, and marking the first monthly decline since October of last year. Obvious reasons for the markets decline include stubbornly high inflation suppressing expectations of rate cuts by the Fed, mixed earnings, and extreme tensions in the Middle East. We provide introspection on the not so obvious reasons of what's going on and how we are positioning. Moreover, we discuss some changes with our investments in the small cap strategy, and all other asset classes and styles.

I offer perspectives and dimensions not discussed in the media or that provide more analysis on what we are doing, what we see, or what we are watching closely. Please read all of our legal disclaimers and compliance disclosures as this is for informational and educational purposes only and not investment advice-for institutional investors only. Past performance is not guaranteed. Our positions can and do change anytime based on our assessments of new information.

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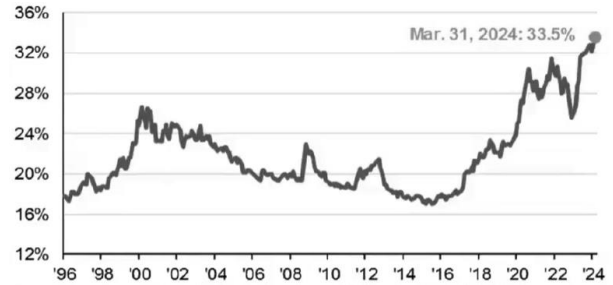


Market Review

High interest rates impact sectors of the economy and income classes disproportionately and eventually constrain growth and valuations. The overall U.S economy and the general consumer is still in great shape from a job and balance sheet perspective. It was 18 months ago that interest rates increased 5% or by 500% in the shortest time span ever. In 2023, we saw 3%+ economic growth that surprised all and the forecasting and leading indicators became meaningless. Why- The economic dislocations from the pandemic not only corrected, but had each demand and supply side benefits that worked in tandem to benefit the consumer and cushion the Fed in its fight. The supply side correction helped the Fed's inflation fight and the demand side correction worked as added economic stimulus, that more than offset the Fed's liquidity drain.

Early 2024, the market and Fed prematurely celebrated a victory at the declining 2.5%-3% inflation level, and aided market expectations for future interest rate declines. However, the change in inflation stopped declining, stayed flat, then moved materially higher the last 2 months. This interest rate repricing spooked markets where we saw a fast increase in the long end of interest rates paired with push out in yields at the short end. This 1-2 combo was a short term negative for bond prices and a double negative for stocks. We saw not only a sell off in the economic sensitive sectors and across equity sizes, but also with the mega 10, 8, or what 6 now (Microsoft, Apple, Nvidia, Amazon, Meta, Google, etc.).

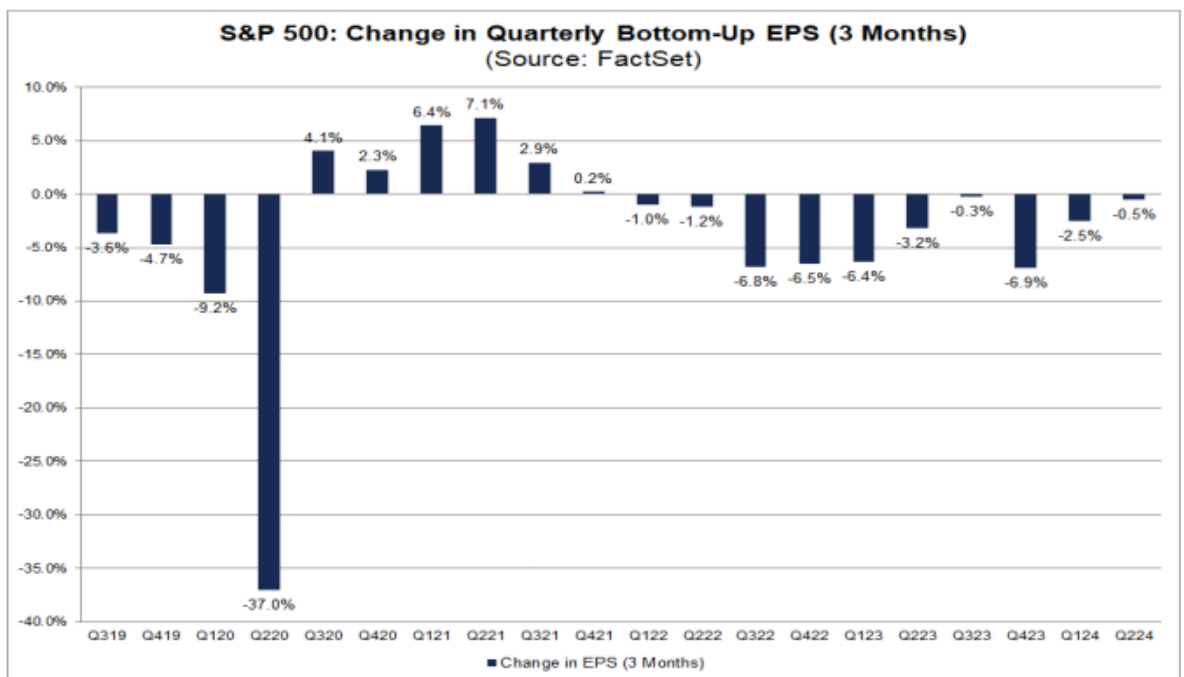
The top 10 stocks of the S&P 500 index hit a new record high with a 34% weight (top right chart) while still maintaining valuations that are 40% higher than the market. The earnings contribution of the top 10 in the S&P 500 (bottom right chart). The forward 12-month P/E ratio for the S&P 500 is 21.2. This P/E ratio is above the 5-year average of 19.3 and above the 10-year average of 17.9. It is also above the forward 12-month P/E ratio of 21.0 recorded at the end of the first quarter (March 31).



Source: JP Morgan



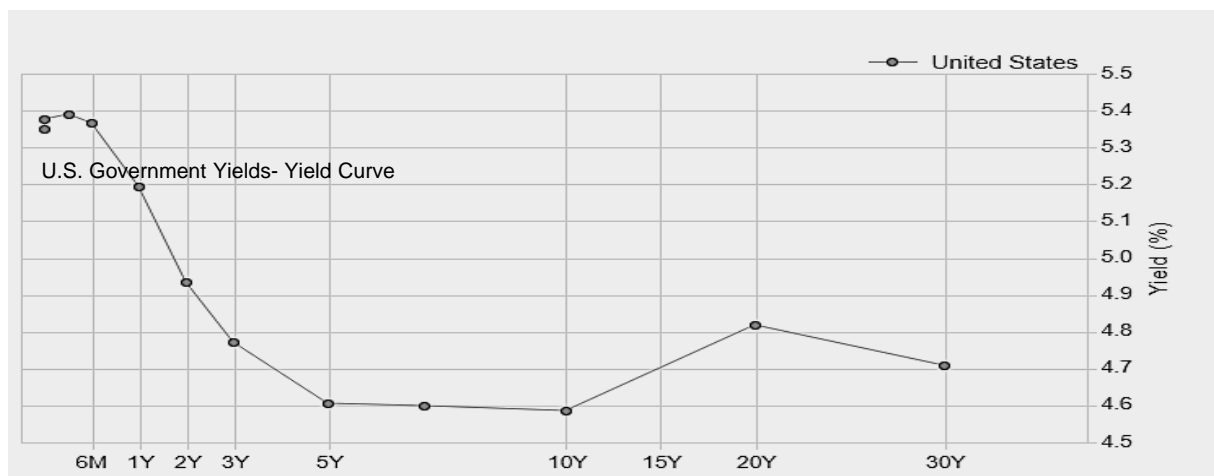
Source: JP Morgan



Changing Interest Rate Behavior

When you fill up your car with gas, do you ever notice the asymmetrical behavior when oil prices go higher, gas prices go up quick, but when oil prices decline, gas prices go down much slower; both scenarios the change in inventory cost has no impact on gasoline prices yet. That same cognitive bias and asymmetrical price ratcheting plays out in real estate cycles and inflationary cycles, such that inflation has to drop below 2% or trend at 2% before interest rates can drop materially in the short end to match market expectations. However, foreign central bank behavior and global interest rates may force the Fed lower with declines in long term interest rates or a deepening and very problematic yield curve inversion. Alternatively, the Fed caves faster under political pressure to lower interest rates, before stable pricing only for long term rates to react like we just seen. In this scenario, financial engineering and motivations for keeping rates low will prevail we believe over market forces. Japan provides a high level of insight from history and scenario analysis.

The early expectation of heavy interest rate cuts that the market expected seemed unreasonable to us if you really just thought about it and ask why. We can go further with history and the understanding of the drivers of inflation in the context of past market cycles where the Fed stopped too early or went to hard.



The current U.S. government interest rate yields and the inverted curve depicted above. Despite the financial engineering by central banks domestically and globally, more value and better signals come empirically from short term interest rates. Said another way, there's more noise on a relative basis with longer term interest rates. We believe a further inversion where long rates drop could force the fed to drop will be the base case, unless the Fed waves the flag to greater certainty like it has with markets.

We are seeing behavioral changes in one of two major areas that puts major supply side pressure on interest rates that offset demand. One, the U.S. government and the Fed own less debt in proportion to the public and foreign investors relative to history (3). We see lower long term interest rates, a non-consensus view followed by lower short term rates. Why- it's easy to fall in the camp of what's obvious as the U.S. government has \$35 trillion in debt and 6 months into its fiscal year since October 1, 2023, the federal budget deficit is already \$1.1 trillion. These drivers should in theory, push interest rates higher and the U.S. dollar lower. Have you seen or heard: one third or \$12 trillion of the U.S. public debt must be refinanced by the end of this year. What you haven't heard, last year \$20 trillion or 57% of the debt was refinanced by the U.S. government. Moreover, the U.S. 10Y Treasury yield started 2023 at 3.89% and ended 2023 around 3.89% (Lower right chart). The first quarter of this year, the U.S. government refinanced \$7.2 trillion, a new record in quarterly debt issuance (4). Carol Gilligan at Harvard said it best, theory blinds observation.

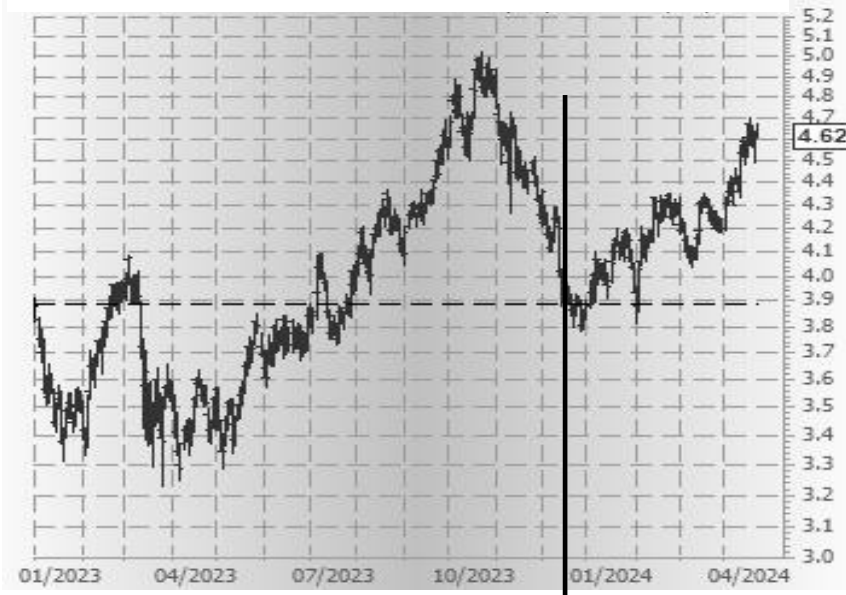
The second major area that puts major supply side pressure on interest rates that most likely offsets demand is the global determinants of the neutral rate of interest (a residual or natural rate). Moreover, combined with the inflationary dynamics, of which have constrained the foreign potency of foreign monetary policy and now can invert domestic monetary policy goals. We come back to this later.

President Trump nominated the current Fed chair Jay Powell, replacing Janet Yellen and political ramifications are factored in covertly (5). We take the position Jay Powell's job is safe in all cases and a positive for markets and the economy despite the political wrangling taking place. Any leadership changes would involve the confirmation of a Senate vote and we think there will be less pressure on the Fed next year as a result of both market forces and financial engineering causing lower interest rates and higher priorities in 2025.

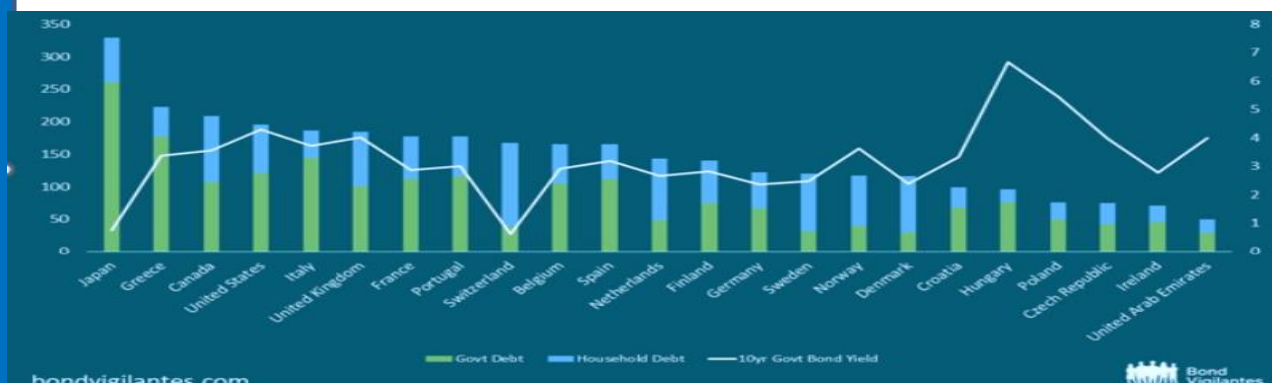
Whether the Fed should or will do one or two rate cuts this year and the timing is dependent on the global currency and interest rate dynamics playing out combined with a slower than 2023 U.S. economy. I'm guessing this is enough to keep equity valuations trading at the current levels- average to slightly above average, since this has already proved true, then we contrast the behavior of foreign equity markets the last year with U.S. markets that will now wait on earnings and revenue growth to reaccelerate. The expectation of lower interest rates and the economic stimulus programs to come from both presidential candidates is the backdrop of 2024. This backdrop combined with margin expansion from declining inflation or deflation, seems to be the floor in U.S. stocks. Of course, former President Trump's tax cuts set to expire next year, however, at the minimum, tax cuts are extended for middle America but the wealthy get hit like always.... as slowing government spending and huge debt levels take greater importance in 2025. Corporate loopholes and the wealthy will ultimately pay a disproportionate price the next few years for the widespread irresponsibility and lack of accountability that just grows but now has a spotlight from the small consequences reaped so far.

Now back to the second major area that puts major supply side pressure on interest rates that most likely offsets demand. That is the global determinants of the neutral rate of interest (a residual or natural rate). A prime example of these constraints in action was the policy rate normalization phase undertaken by the Fed during the 2016-18 period, which was characterized by global disinflationary pressures, underwhelming economic performance in Europe and Japan, slowing economic growth in China, and escalating trade tensions. In fact, the Fed started to quietly study the break from history and changing correlations during this first of a kind phenomenon in 2016-2018.

Treasury yields back above 4.6%
US 10 Year Treasury Note



These forces were counteracting the Fed's 'normalization' policy efforts and exerting downward pressure on the global neutral rate of interest. The U.S. rates declined despite the backdrop of stable growth and inflation outlook in the United States as global economic deteriorated and trade conditions. Global central banks have already started to lower interest rates and thus lead the U.S. since non U.S. economic growth and non U.S. inflation fell quicker. The lower right chart shows the 10 yield for both developed and emerging counties along debt levels and composition. The higher relative U.S. interest rates have buoyed the U.S. dollar relative to the world, despite relatively much higher debt levels and a U.S. debt to GDP (income) ratio. The dollar is on one side of almost 90% of foreign exchange transactions. The U.S. is forcing global central banks to protect their currencies as they support their economies with lower rates, that could spark the next systemic risk and global backlash. Japan's Yen hit 34 year lows, and Korea's Won is the weakest since 2022 where their central bank called moves excessive.



Markets and Outlook

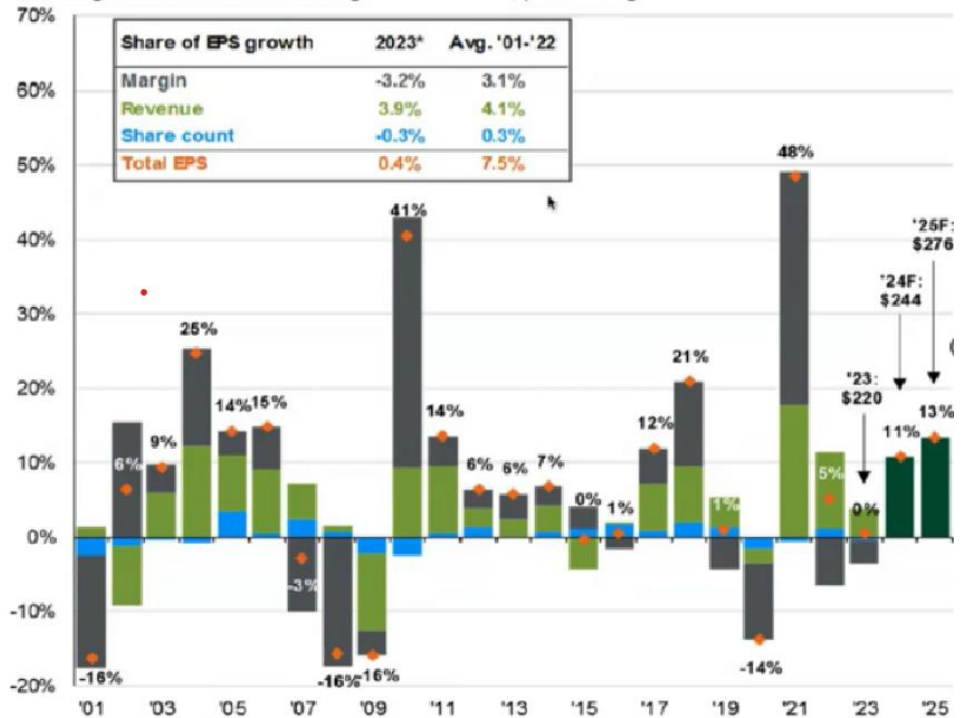
Market Outlook for Equities

The percentage of companies beating EPS estimates (77%) is below the 5-year average, the earnings surprise percentage (+8.4%) is below the 5-year average, the percentage of companies beating revenue estimates (60%) is below the 5-year average, the revenue surprise percentage (+1.3%) is below the 5-year average. Long term all this negative sentiment is positive for long term stock returns. In the short term, the higher mixed and conflicting signals from market technicals, sentiment, slowing economic growth, interest rates, combined with higher uncertainty from domestic and foreign policy, ultimately leads to market volatility and a correction. How much more patient will the equity market be with 2 consecutive years of earnings growth 100% from margin expansion or cost cuts (bottom chart). The alternative to still lackluster revenue growth is wider cost cuts and a earnings-economic recession (unlikely in election years). Why we think rates drop preemptively or defensively or strategically i.e. financial engineering in the long end and short end of the yield curve. At the very least, we see rates at a ceiling unless a major central bank moves too quickly on the short end thus igniting renewed inflationary pressures.

Where we are unsure is the global liquidity and further supporting risk assets, so we ask ourselves will the market respond/ keep looking forward with additional stimulus albeit less effective from lower rates. We use foreign equities last year and this year as support for this behavior. The current setup lends itself to a world with slower growth while debt levels slowly unwind. Lower interest rates support this and hedging deflation, as we pay attention to what's playing out in China

S&P 500 year-over-year pro-forma EPS growth

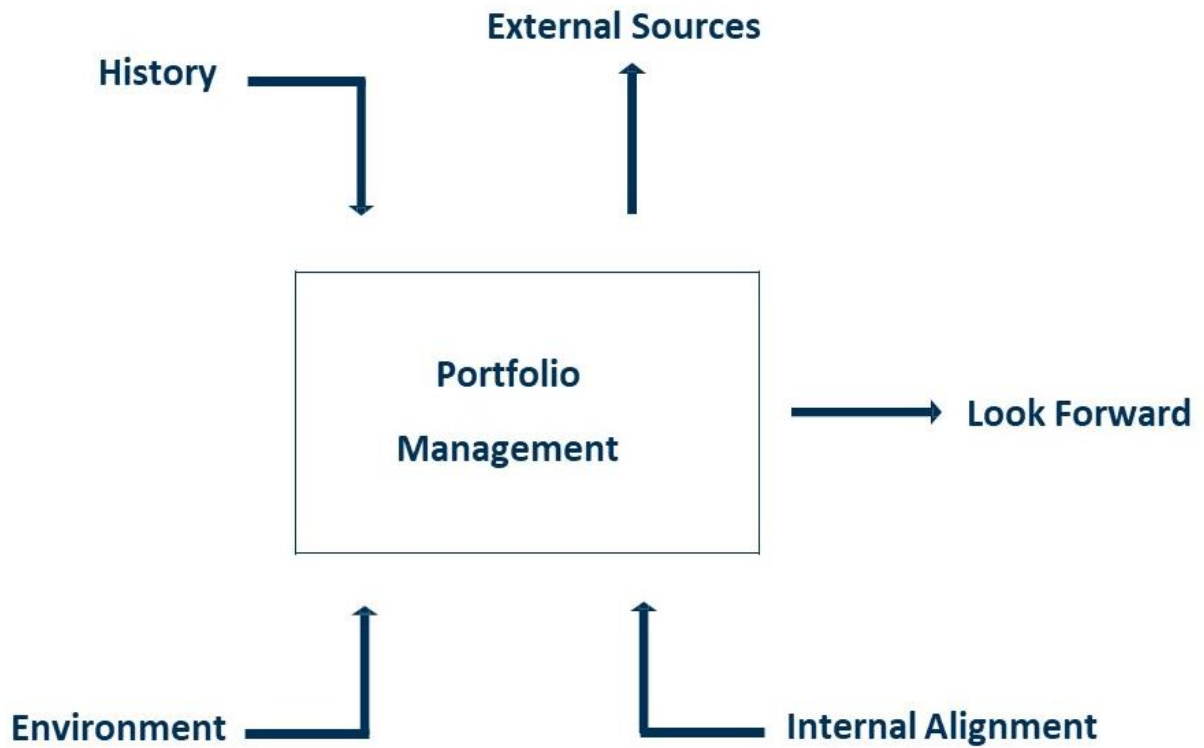
Annual growth broken into changes in revenue, profit margin and share count



Fixed Income

The easy and obvious choice has been to stay invested in the front end of the yield curve between 3m and 2yr bond maturities. The yield curve has been inverted for almost 2 years. Before that, the yield curve was flat and yield relative to duration made no sense the farther you go out in maturity. Today, it makes sense to stay front end heavy 1-4 as the curve rolls further out. Like we seen in foreign bond markets and historically, long end rates fall with slower growth (when inflation is addressed), before responding to central bank short term moves. While the 5-10 year part of the curve makes provides low reward for the risk, beyond that we think it's prudent to start a position in higher duration bonds 10-20y, with 6%-9% capital gain move in the event long rates collapse. Also, a hedge to stocks in this scenario plays out vs. another rate move up sending both stocks and bonds lower.





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Portfolio holdings are as of the date indicated, and are subject to change. This material should not be construed as recommendation to buy or sell any security.

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US Small Cap Composite, benchmarked to the Russell 2000® Index

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2024: Year to Date

Ticker AMAM- Ambrx Biopharma up YTD 94.17% as we held 1.4% of the small cap strategy in the name. We took a new position 10/12/23 at \$13.67 and Johnson and Johnson struck a deal to buy the company at \$28 a share. We cued in on posters at the 2023 European Society for Medical Oncology (ESMO) Congress meeting. The prostate cancer results were very encouraging especially in this heavily pre-treated patient population where patents would have exhausted all treatment options. Plus after our own research, we came away with the uniqueness of their genetic code technology platform. Ambrx is developing engineered precision biologics with site-specific, homogenous, and stable conjugation to overcome limitations of traditional antibody drug conjugate (ADC) technologies.... the market size and skewness to our upside estimates relative to the downside was in our favor for a 1% starter position.

Ticker PRPL- Purple Innovation up 32.04%. One of last year's laggards on our strategies 2023's performance. We not only maintained the position but bought at levels that were absolutely nonsensical to us 3 different trading days during Q4 of 2023. The industry went from being oversaturated to sales at recessionary levels, then the competitor comps put Purple as a positive anomaly, and lastly, the caliber of the management team was highly rare for this small cap that traded down in the micro-cap space.

Ticker PLCE- Children's Place. A name we know well and have owned it several times the last decade. On 2/9 after earnings, the stock was down 51% on 12 million shares trading. We didn't agree with the street and further confirmed the mispricing when the company materially paid down debt during the quarter. We took a 3% new position at an average price of \$9.55 on 2/9, based on the market's new valuations and what was non logical with the fundamentals and outlook of the company. On 2/12 the market revalued PLCE 73% higher, and our risk-reward upside to downside fair values caused us to close the position with an average price on exit at \$16.56. In addition, it was an industry driven decision too, where we had more exposure in the apparel space than is prudent with our position in Tilly's 1%, Buckle 1%, Kohl's 1%, and Purple Innovation 3.4%.

Ticker: PCT – PureCycle up 39% on our 2.5% position A name we have followed and know well, we just didn't think the market price was logical with the risk reward of the stock relative to the business cycle phase of pre-revenue. We were beyond excited when the market presented us with an opportunity to take a position at \$3.53. Our position was larger than starter positions since the company was in the 9th inning of refining this plastic recycle technology and working out the kinks in its first factory in Ironton, Ohio. Polypropylene otherwise known as Plastic #5 or PP5 is used in food and health/beauty product packaging. It was impossible to recycle PP5 to virgin state and eliminate smell and color. So, it was mostly dumped in landfills. While working at P&G John Layman invented polypropylene recycling process. P&G licensed the process exclusively to PureCycle Technologies. Why? Some PG employees had a personal relationship with some of the guys that rolled forward into PCT. Our multi-dimensional research is somewhat intense with verifying factory outputs, developments, validating short reports, etc., but gratifying when someone really understands what this company has done thus far, we technology licensed from P&G.

Ticker: AXSM- Axsome up 67% on our 2.8% position. This is a name where we spent upward of 300 hours on in 2022 (see our write up that we uploaded in July 2022 to our website) when we took a position in the name and then bought multiple more rounds. We bought at levels as low as \$24 and have owned it since, we have made a bunch of trims since it's trading at \$93.

Asymmetrical Investments- Quick Summaries on Some Changes- Subjective

Ticker GOGO- Back in after 2 years out, and the setup is right.- 5G Business Jets Internet #1 market share. The Sky patent dispute went in its favor and appeal held up. The FCC puts them 2 years ahead of Starlink in 5G, and it turns out GOGO built a moat to transition users from ATG to 5G satellite where both clients and Gogo win. Margin expansion set to roll higher with the transition to 5G, and further scale. Bylaws changed recently where now equity owners can own more than 5%, and we think the CEO Oak will sell when the times right. In the mean time, both debt and free cash flow reaccelerate in positive directions and our entry point is where historical valuations troughed.

Ticker PLCE- Children's Place. A name we know well and have owned it several times the last decade. Back in post a 65% stock decline from sale in previous page. The risk profile dropped by 50% after a Saudi family bought up 51% of equity, refinanced it's debt with better terms with a larger line from their family office Mithaq Capital. The business strategy of moving toward omnichannel and closing underperforming stores is obvious but takes time to play out, while leveraging it's own brands. The stock remains derisked at current levels until valuations normalize with its peers.

Ticker: BRCC – Black Rifle Coffee, back in after wholesale showed surprising strength and social media indicators appeared to align with it's target market. The overlay of direct to consumer sales provides a nice tailwind to offset any wholesale margin pressure.

Ticker: NVRO- A new name with multiple levers to enhance shareholder value. Nevro is the only chronic sacroiliac joint (SI Joint) pain company that manufactures and supports a complete portfolio of FDA-cleared, innovative SI Joint fusion devices. Plus they recently acquired Vyrsa Technologies that will show up accretive in 2024. A strategic shift against an investment community that wrote them off as never making money, we think shows up strong after 9th inning operational fine tuning that was presignaled. We packaged up the shift in production, restructuring, and seasonal nature where the fundamentals provided downside protection compared to a revaluation of a profitable medical device company.

Ticker: DOMO- We sold with a modest loss (small for small caps (-22%)) as the industry continues to migrate to rolled up enterprise packaged software that benefits the big boys. Moreover, a few short signals provided signs to exit as did the crowding out effect from AI spending. The enterprise value comps still look like a headwind for a buyout.

Ticker: PRPL- We closed the position post the deal with Sealy as it put the risk to reward in a neutral position. The 1 year deal with Sealy was just stupid, and just showcases they had zero options with the merger Mattress Firm- Sealy. The management team is excellent so with exception of higher volatility, we wouldn't be surprised at another 25-50% upside. The macro environment and other discretionary plays is what ultimately drove us to close it.

Ticker: LL- We don't ever feel good about owning perceived junk- revisit our Blue Apron 3 page summary May 2023-online. We use alternative trading strategies where low float and small caps that turn into microcaps with ultrathin trading volume is worth it to us, even when we have to wait... as the various modeled upsides in decision trees and scenario analysis provide us uncomfortable long term upside. We understood the story with Floor and Décor going private-public, Tile Shop vs. Floor and Décor vs. LL Flooring competitive advantages and client segments. Don't get us wrong, this is a pig with consistent -20% comps, but the environment and industry has forced the board in the corner. Moreover, two competing and questionable buyout candidates- Live and the former founder, provided further downside protection post 2 consecutive quarters with better working capital and a buffer to worse case ride it out. We don't think that's likely given the former owner is trying to steal his company back after pulling a \$6 and \$3 noncontingent cash offer. We think this is different from the previous two times as Tom Sullivan, the former owner is working with Campaign Management- a firm that maximizes shareholder support in corporate elections. There is history of bad blood, and we think the 3 director nomination is a head fake as Tom- F5- Cabinets to Go, and Southwind are direct competitors. Tom rolled out Southwind last year since carpet-flooring manufacturing has to be scaled with its partners and competitors. We see this play as a way to control supply chain costs with LL's national footprint and distribution scale with cross selling.. a mirror of Floor and Décor and how the industry is evolving. Tom's new Floor and Décor would serve the lower end- improved pricing with less sku's and 50% less square footage per store than FND. Atlas Firm is another private equity firm circling LL as they specialize in building services. We think Tom's firm provides the most leverage for him relative to the industry with CTG, but the games and past call him into action. The stretched strategic review, lock up with Live, and delayed board meeting with a new record date for proxy voting in 2 weeks makes us utterly confused. However, if we try to think (it hurts), this looks like the board shifted postures and might be waving a white flag. Why- all the past offers and rescinds went against LL company and board where the board might be operating according to the Revlon Rule. This rule addresses the conflicts of the board with their fiduciary duty. Once a takeout seems probable, the fiduciary duty switches to one of auctioning or obtaining the highest value to protect board. This would fit with the Live terms, and scenarios that was just bizarre. The question then comes back to what Tom would offer to close the deal as he won't run a public company nor take part in it ever again, thus private equity is very logical. Like Blue Apron, our scenario analysis and upside shifted with the macros and 10 year, to where our upside collapsed but still highly attractive in the short term (this time we maintain confidentiality so we don't curse us). Long term, ex no take out and if a macro tailwind the trough multiples would suggest a 2x-5x return comped with TTSH, FND, and LL mean reversion. Bear case- macro environment and competitive environment would send this to the dump slow but private equity is the

Important information

Investment Securities

The market price of equity securities may be adversely affected by financial market, industry, or issuer-specific events. Focus on a particular style or on small or medium-sized companies may enhance that risk.

Limited Number of Investments

Because the portfolio has a limited number of securities, it may be more susceptible to factors adversely affecting its securities than a portfolio with a greater number of securities.

Market Volatility

Local, regional, or global events such as war, acts of terrorism, the spread of infectious illness or other public health issues, recessions, or other events could have a significant impact on the portfolio and its investments, including hampering the ability of the portfolio manager(s) to invest the portfolio's assets as intended.

Form ADV

For additional information on risks, please see the firm's Form ADV

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