Equity Intelligence Report

November 2023

GAMMA INVESTMENT CONSULTING

Gamma Global Equity Model Highlights

- **The S&P 500 and Nasdaq Models remained neutral (in cash) for November**. Stocks dropped for their third month in a row in October. Equities continue to be buffeted by conflicting economic and political forces which are keeping the Model on the sidelines for the time being.

- **Consumer Staples edged into the top of the sector list as the defensive sectors continued to dominate given the negative outlook for the overall market.** Consumer Staples was followed by the Materials, Energy, and Financials as the only four sectors with positive expected returns for November.

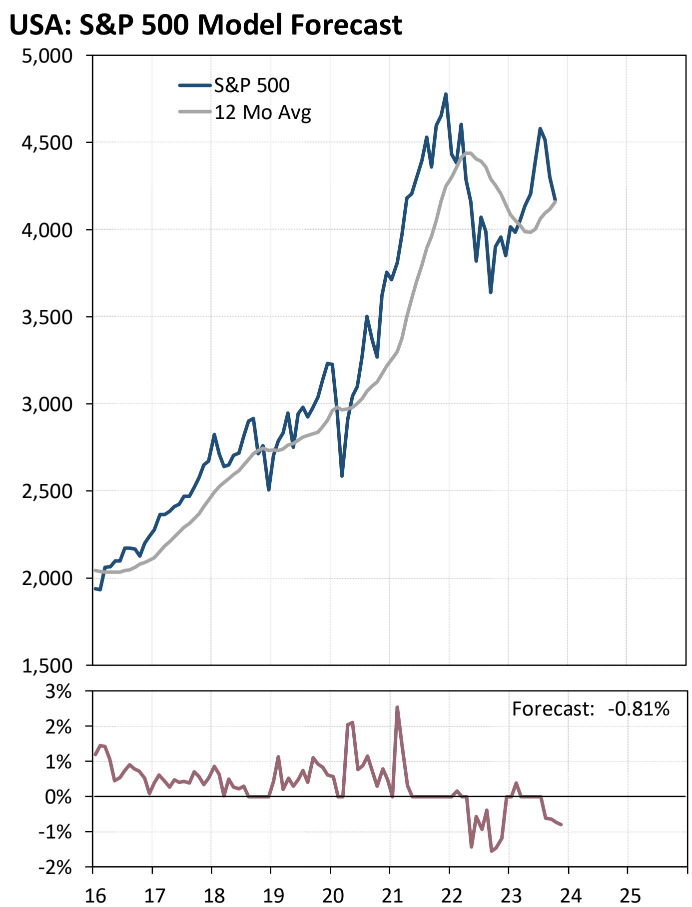
- **The Gold Shares Model remained neutral for November despite last month's rally in gold prices that resulted from concerns over heightened geopolitical risk.**

- **Huntington Ingalls Industries Inc. (HII) and Westrock C0. (WRK) were added to our recommended list of stocks for November.** Celanese Corp (CE), Centene Corp (CNC), DaVita Inc. (DVA), Sempra (SRE), and Skywork Solutions Inc. (SWKS) were dropped from the recommended list due to negative expected returns.

I. Equity Index Outlook

After a strong summer, U.S. equities have now fallen three months in a row. The S&P 500 dropped -2.83% in October leaving it down -9.2% from its July close. The Nasdaq fell a larger -3.28% and was down almost -11% since July. Equities have been forced to deal with overvaluation, geopolitical uncertainty, and rising long-term interest rates due to the federal government's insatiable demand for new cash. In addition, uncertainty remains over Fed policy as the economy continues to surprise to the upside and inflation continues to run well above the Fed's target rate. The net effect is that the overall environment favors caution as evidenced by the Model's preference for remaining in cash (Chart 1).

Chart 1

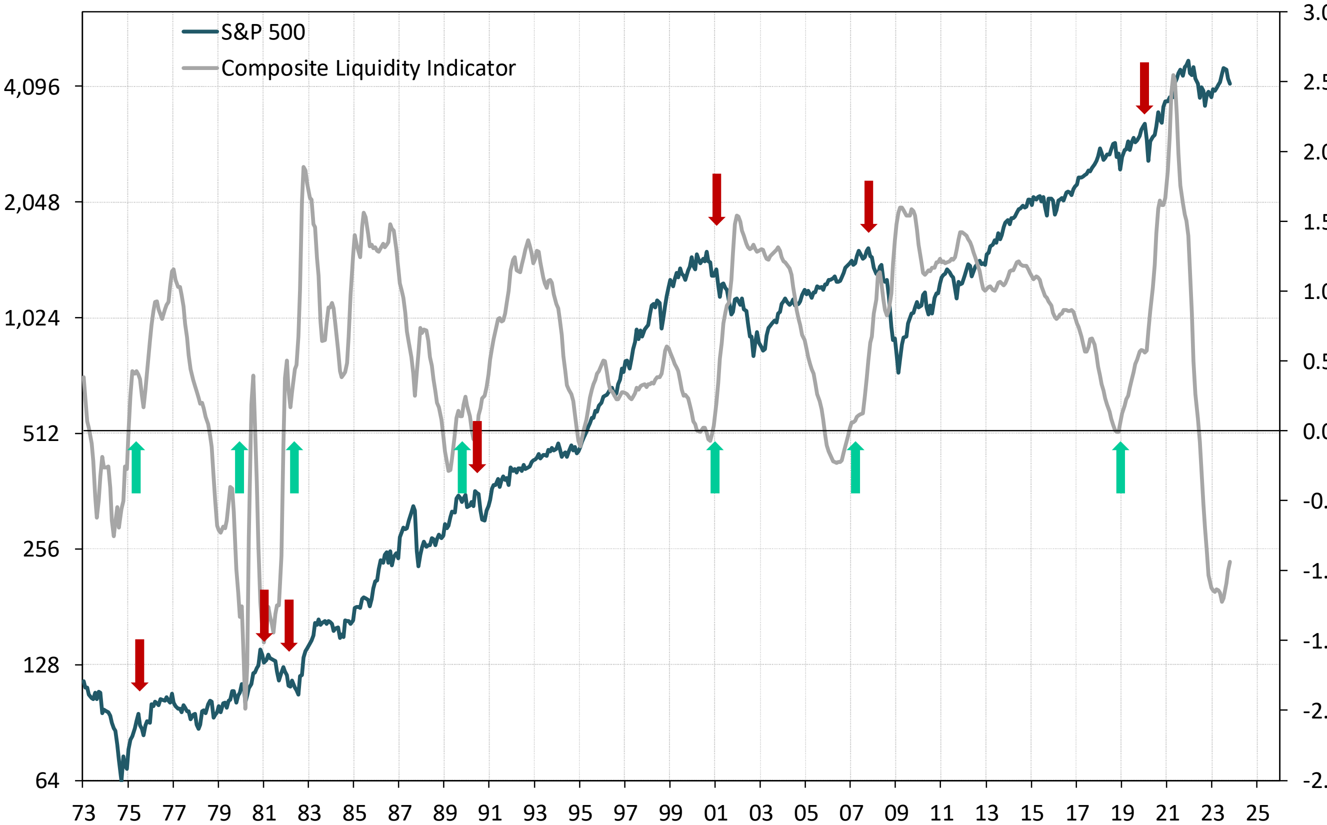


Negative Factors

- **Liquidity remains weak**. The Gamma Composite Liquidity Indicator (CLI) has recently turned up slightly from its most extreme negative reading since 1982 (Chart 2). The improvement is deceptive, however, as it simply indicates that **the rate of deterioration has slowed.** Moreover, Chart 2 clearly illustrates that equity **PEAKS** have invariably occurred

Chart 2

S&P 500



AFTER the CLI has turned positive from periods of contraction. The only major exception was in 1995 during the height of the dot com mania. Also, note that even though the CLI appears to have bottomed, it still has a long way to go before it turns positive. Movement in that direction will be constrained by multiple headwinds:

1) The Federal Reserve has not raised rates at its last two meetings, but rates nevertheless have risen 525 basis points over the last twenty months to their highest level since February 2001 (Chart 3). Given the unexpected strength of the economy and stubbornly high inflation, the central bank may still have additional tightening to do.

   Third quarter preliminary real GDP rose at a whopping 4.9% annual rate, far exceeding the consensus estimate of about 3%. Real consumer spending rose at an even higher 8.2% annual rate fueled by a decline in the personal savings rate to near the record lows hit between 2005-2008 during the height of the housing bubble. Nonfarm payrolls posted a solid +150k gain, though that was slightly less than expected due to strikes by the United Auto Workers union that reduced manufacturing jobs by about 35,000. The previous month's gain of +227k was revised down by 62,000 (note that because of annual benchmark revisions by the Bureau of Labor (BLS), the way the BLS reports revisions, and the relatively small sample sizes of monthly jobs reports, it is difficult to confidently know whether these numbers indicate persistent strength or emerging weakness.) We do know, however, that the persistent economic strength this year (including last month's moderate +150k increase in payrolls) has occurred despite the Index of Leading Indicators (LEI) posting its 18th consecutive monthly decline in a row that left the index down -7.7% yr/yr last month.

   While economic growth remains solid, inflation at both the wage and consumer price level appears to have stabilized at a rate well above the Fed's 2% target. Average hourly earnings of production and nonsupervisory employees in the private sector, the vast majority of private-sector employees, rose by 0.34% in October, the biggest increase in four months. This translates into an annualized increase of 4.2%. Compared to a year ago, average hourly wages rose by 4.4%. The rate of wage growth appears to be stabilizing at over 4%. This is far higher than the rate before the pandemic and presents a problem for the Fed since labor costs tend to be more difficult to bring down without a serious spike in the unemployment rate.

The personal consumption expenditure (PCE) deflator was up at a 3.4% yr/yr rate last month for the third month in a row (Chart 4). And that was up from a low of 3.2% in June. On a three-month basis, inflation has nearly doubled from a 1.9% annual rate in July to a 3.8% annual rate last month. On the plus side, PCE inflation excluding food and energy fell to a 3.7% annual rate last month from a 4.8% rate six months ago and a 5.5% rate a year ago. Like the broad measure, however, the three-month rate has now accelerated for the last two months. Of additional concern is that the University of Michigan's survey of one-year inflation expectations surged from 3.2% to 4.2% - a one percent increase in one month that marked the second biggest monthly increase in almost three years (Chart 5). The survey's five-year inflation expectation also rose from 2.8% to 3.0%. These numbers suggest that the Fed still has its work cut out in reaching its 2% target.

Despite the above-target inflation rate, weakness in leading economic indicators and the improvement in the core inflation rate has encouraged the Fed to take a cautious stance towards additional rate hikes. That suggests that, at best, interest rates will remain at current levels well into 2024 and could rise further if the recent pickup in inflation accelerates. Fed Chairman Powell noted after the last FOMC meeting that "the Committee is not thinking about rate cuts right now at all. We are not talking about rate cuts." Powell added that "we will keep policy restrictive until we are

Chart 3

Interest Rates: United States

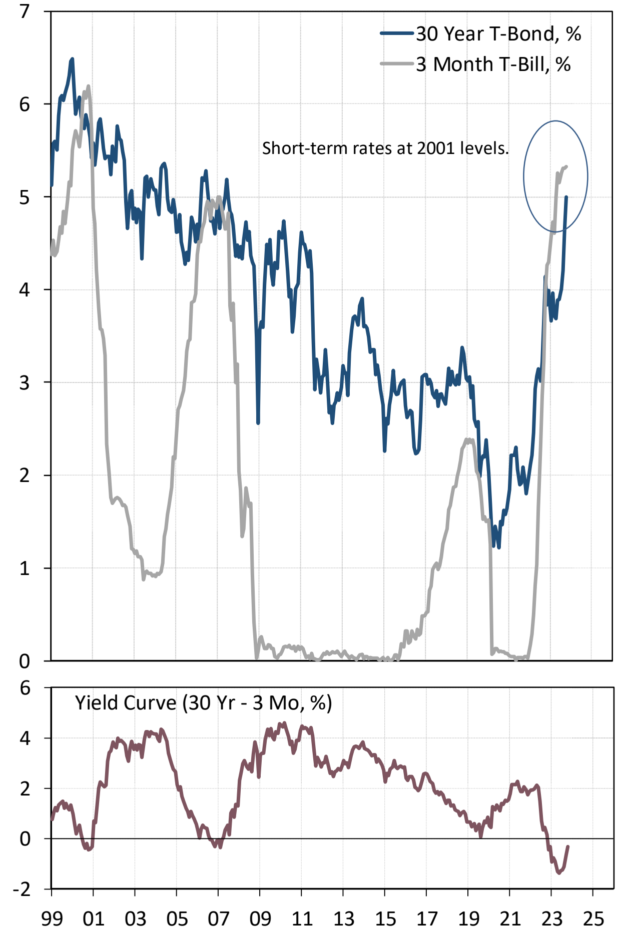
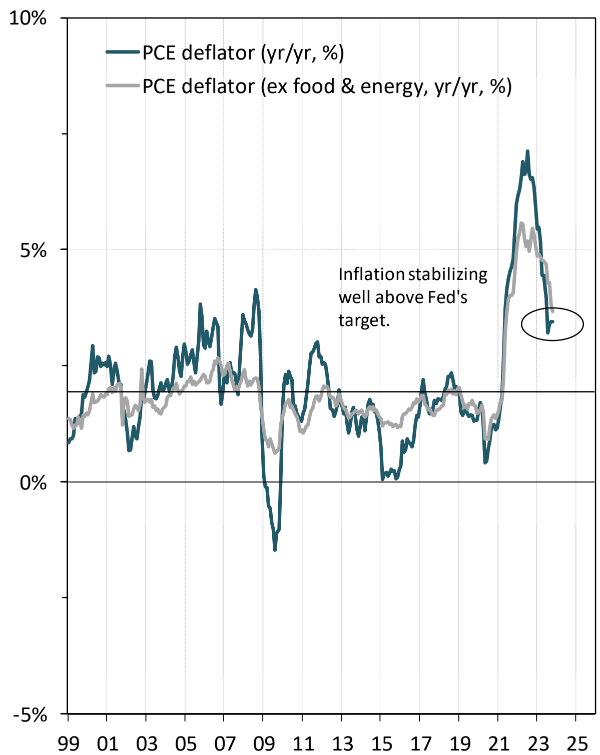


Chart 4

Inflation Measures



confident that inflation is on a sustainable path down to 2%." Powell noted that "evidence of growth persistently above potential, or that tightness in the labor market is no longer easing, could put further progress on inflation at risk and could warrant further tightening of monetary policy."

We put the odds of another Fed rate hike at 50-50. Even without another increase, however, we believe that interest rates at current levels will continue to reduce liquidity through lower bank lending that leads to additional weakness in the monetary aggregates.

2) Narrow and broad measures of money continue to decline though not as rapidly as six months ago. Yr/yr growth in real True Money Supply (TMS) improved to a -9.4% rate in October from -11.6% in September. While a modest improvement, real TMS growth is still at its weakest since 1981 (Chart 6). Moreover, much of last month's improvement was due to a build-up of cash balances in the Treasury's accounts, something that will likely be reversed in the next few months, which should put renewed downward pressure on money growth. Also, a major driver of money growth – bank lending – continues to slow as higher long-term interest rates have cut demand for mortgages and consumer loans. Annual growth in total bank credit fell to 4.4% last month compared to a 12.2% rate just nine months ago. Growth in the broader measure of money, real M2, slowed to a -7.3% yr/yr rate, its third consecutive drop. Real M2 growth remains just above its lowest level since WW II (Chart 6).

One further concern about money growth that has not generated much attention recently is the possibility of another banking crisis. The crisis earlier this year resulted in the failures of several larger regional banks that triggered billions of dollars in bank runs. Much of that money moved to large "money center" banks for their perceived safety. Since the end of February, however, the level of deposits at all commercial banks has dropped by 2% or $333 billion. This has occurred despite the Federal Reserve launching its Bank Term Funding Program (BTFP) to provide secured one-year loans to banks. The rationale for the BTFP was that

Chart 5

Univ of Michigan Inflation Survey

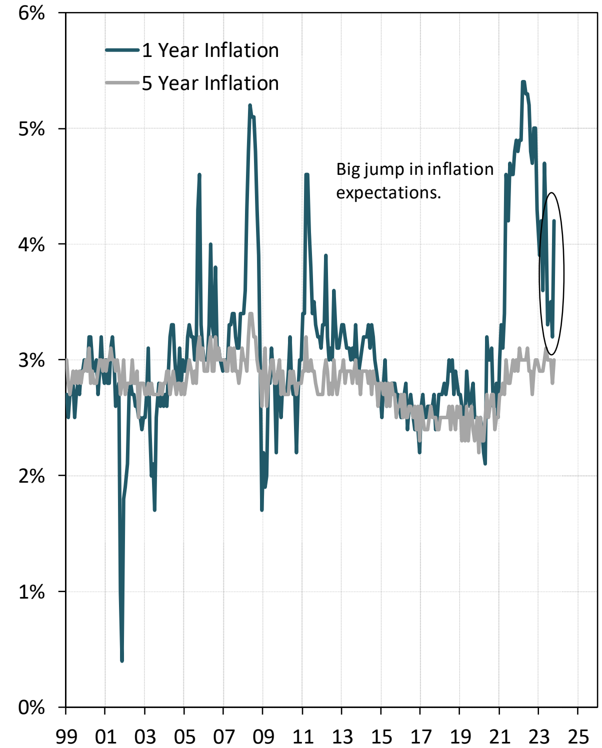


Chart 6

Real True Money Supply and M2

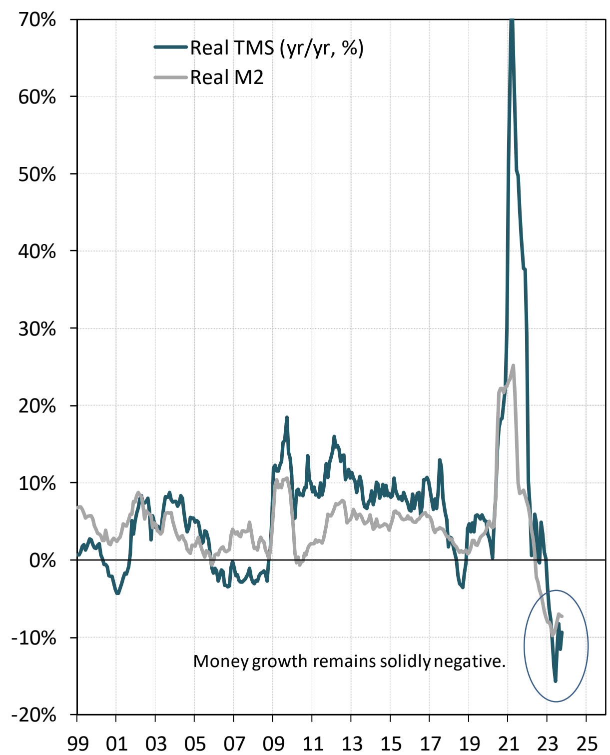
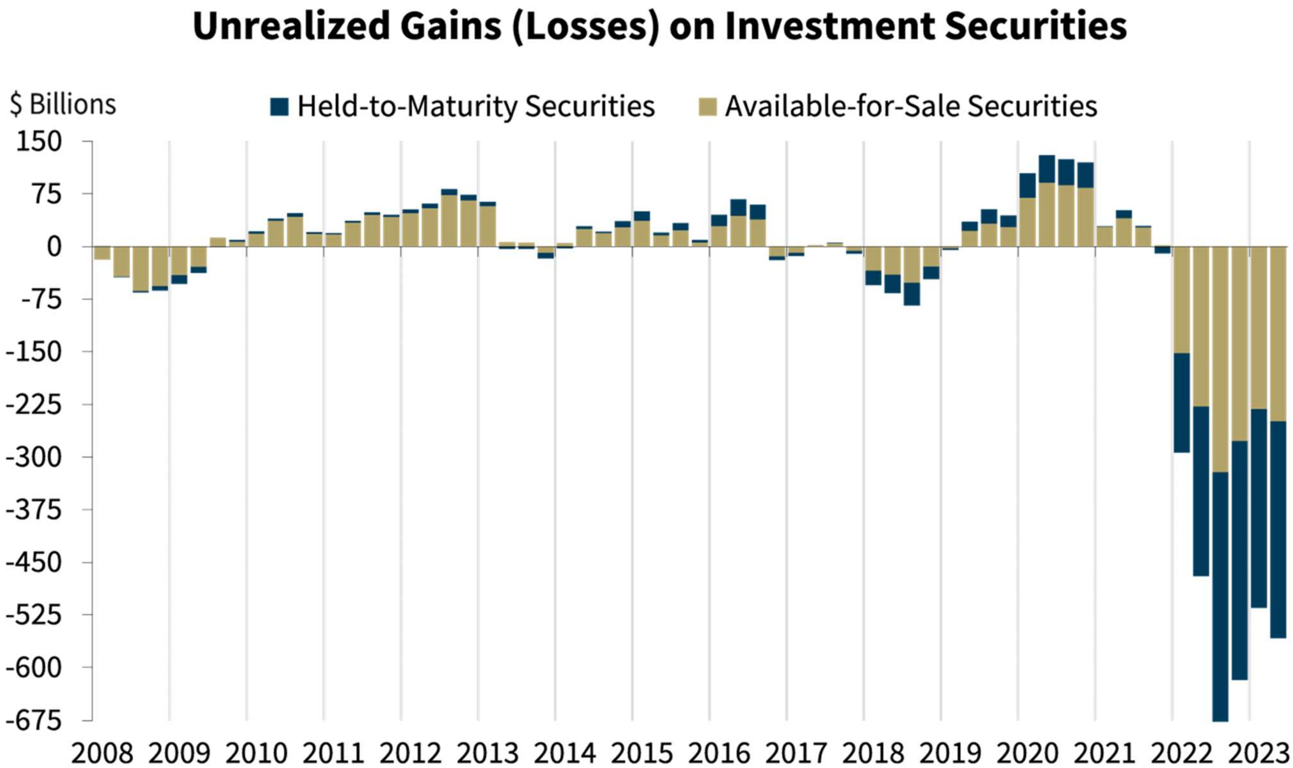


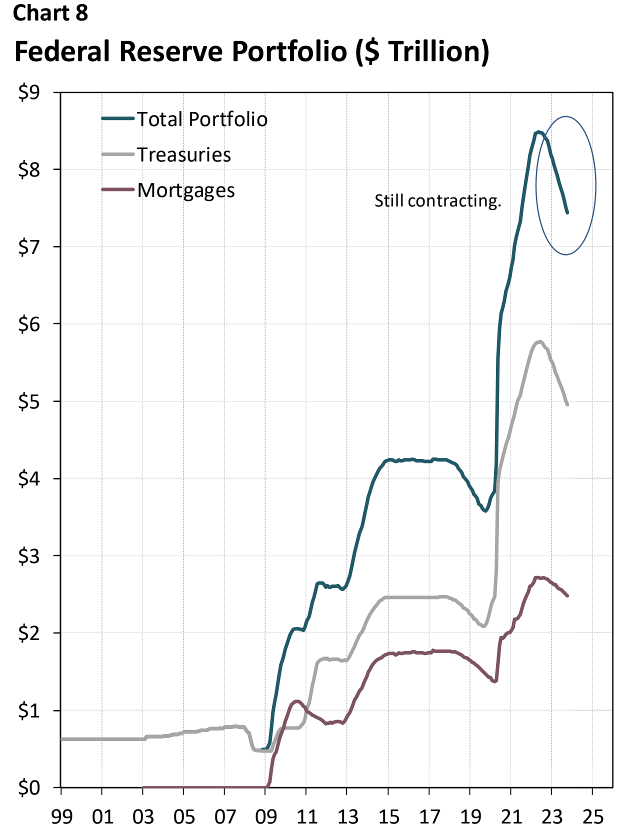
Chart 7



Source: FDIC.
Note: Insured Call Report filers only. Unrealized losses on securities solely reflect the difference between the market value as of quarter end and the book value of non-equity securities.

banks faced a liquidity squeeze. The Treasury securities that they purchased with near-zero yields in 2020-21 were considered extremely safe ***if held to maturity***. If liquidated before then, however, they would be sold at their market price which was a lot lower now that bond yields have soared 4% in reaction to the Fed's tightening. Those capital losses directly impacted bank capital which led to the collapse of several of these banks. The BTFP allowed banks to borrow money from the Fed in loans secured by their high-quality-but-underwater Treasuries rather than selling them at a loss. The fact that the BTFP balances have continued to rise despite moving on from the crisis suggests that there are potentially some landmines still out there. Chart 7 shows that unrealized losses on investment securities remain close to the levels at the time of the first round of bank failures. These figures indicate that banks are undercapitalized (their liabilities outweigh their assets) by about $550 billion overall, and they have enough cash to pay out 84% of uninsured deposits. Should another series of runs occur,

Chart 8



bank lending would likely dry up further which would maintain downward pressure on the monetary aggregates.

3) Stabilizing inflation, stronger-than-expected economic growth, and a massive increase in Treasury borrowing caused long-term rates to hit a cyclical high in October (Chart 3). 10- and 30-year Treasuries hit their highest levels in 16 years. The Treasury's insane borrowing program may, in a sense, be doing the Fed's inflation-fighting work for it. Since Treasuries are the benchmark for pricing other securities such as mortgages, car loans, and corporate bonds, a rise in Treasury yields spills over and affects borrowing costs throughout the economy. Inflation stabilizing at levels well above the Fed's 2% target rate, worsening inflation expectations, and a continued spending binge by the government financed by unprecedented borrowing are expected to keep long-term rates heading higher. The effect is likely to keep downward pressure on liquidity due to reduced borrowing.

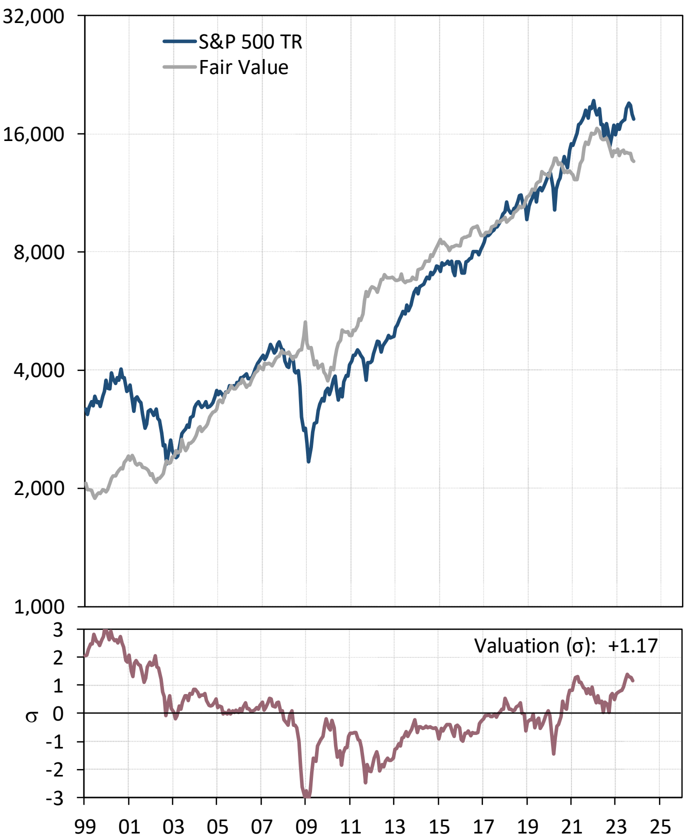
4) The yield steepened last month but remains inverted. The 3-30 yield spread narrowed to 32 basis points as the 30-year T-Bond yield surged to 5%. The curve has steepened from an extreme inversion of -36 basis points in May. A steeper yield curve has historically been associated with improved liquidity. As we noted last month, a steeper curve can occur due to either short-term interest rates falling faster than long-term rates or long-term rates rising faster than short-term rates. In this case, the steepening has occurred due to rising long-term rates. This is potentially a bearish sign for equities and the economy because higher long-term interest rates reflect an expectation of higher and/or higher for longer short-term interest rates. In other words, the rise in long-term rates (and the accompanying steepening of the curve) are likely due to market expectations that the Fed may raise rates further and keep them higher for longer to ensure that inflation returns to its 2% target rate (Chart 5).

- **<u>The Federal Reserve's Balance Sheet continues to shrink</u>.** Since the introduction of so-called Quantitative Easing (QE) following the 2007-2008 financial crisis, changes in the Fed's balance sheet have had a disproportionately large impact on asset prices. The current process of Quantitative Tightening (QT) has resulted in the liquidation of an average of $90 billion a month in assets from the Fed's investment portfolio. The Fed's portfolio has shrunk by $1.04 trillion since the central bank started raising interest rates in May 2022 (Chart 8). Fed Chairman Powell noted following the last FOMC meeting that "the Committee is not considering changing the pace of the Balance Sheet runoff. That is not something we are considering. I know there are many candidate explanations for why rates have been going up, and QT is certainly on that list, although it could be playing a small effect."

- **<u>Equities remain highly overvalued by historical standards</u>**. Valuation improved modestly last month on a combination of lower equity prices and improved earnings. The Gamma Valuation Model indicates that the

Chart 9

USA: S&P 500 Valuation

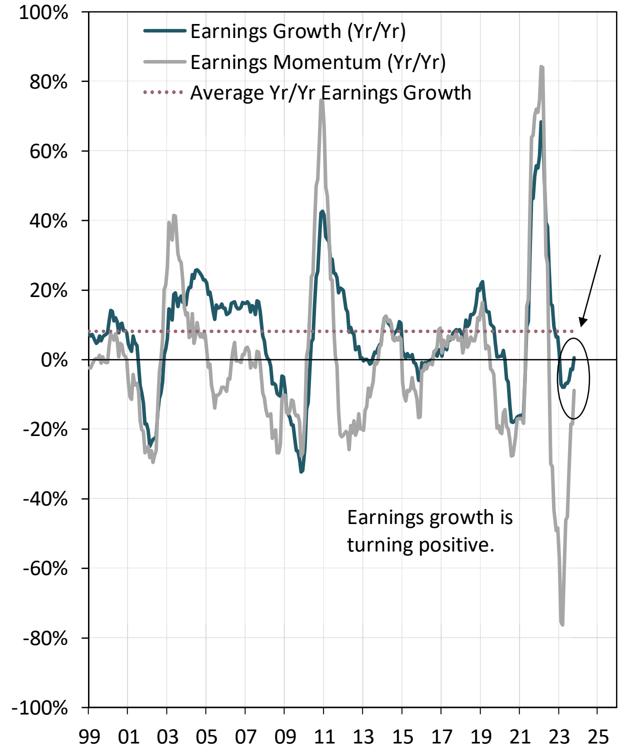


S&P 500 and Nasdaq remain 1.2 (25%) and 1.5 (41%) standard deviations above fair value – still near their highest levels since the collapse of the dot com bubble (Chart 9). **According to the Gamma Valuation Model, the S&P 500 has been trading above fair value for 39 months in a row – the longest such stretch since the dot com bubble.**

Earnings have been recovering, which has helped prevent a further worsening of valuation despite the jump in long-term interest rates. 12-month trailing earnings for the total U.S. market improved to +0.4% yr/yr (Chart 10). The S&P 500 improved to +2.0% last month after being down as much as -9.2% in June. Nasdaq earnings turned positive at +0.4% after bottoming at -15.5% in February. Despite this improvement, however, **according to the Gamma Valuation Model, it would require either 1) a 22% drop in stock prices, 2) a 55% increase in corporate earnings, or 3) a drop in interest rates to 2.2% (or a combination of the above) to bring equity valuation back to neutral.** For valuation to drop instantaneously to -1 standard deviations (a typical level for the beginning of a new bull market) would require either 1) a 37% drop in stock prices, 2) a doubling of earnings, 3) interest rates falling to 2.20%, or 4) some combination of the three. The problem is that sharply lower interest rates would likely require a recession which would cause earnings to contract. Conversely, if earnings growth surges due to a strong economy, the Fed will likely have to raise interest rates even more to keep inflation headed to its 2% target rate. Our experience has been that small to moderate overvaluation can be remedied by changes in earnings and/or interest rates. **Substantial overvaluations, however, have invariably required major market corrections to get prices back to fair value.**

Chart 10

US Total Market Earnings Growth



Positive Factors

- **Seasonals.** Following the last three down months, equities have now entered their historically strong stretch through next spring. November has historically been the second strongest month for the S&P 500, averaging a 1.78% monthly gain since 1973. Assuming the Fed makes no move to hike rates and earnings continue to recover, we could see a year-end rally despite the persistent weakness in liquidity.

- **Market breadth is nearing short-term reversal levels.** Market breadth based on the number of outperforming stocks has dropped to a -1.2 standard deviation level. While not at the -1.5 standard deviation level historically associated with sustained rallies, a reading at this level suggests that sentiment is bearish enough to trigger a short-covering rally into year-end.

II. Equity Sector Outlook

Defensive sectors dominated November's list of top sectors. Consumer Staples topped the list followed by Materials, Energy, and Financials. No other sectors had a positive expected return given the bearish Gamma Model forecasts for the S&P 500 and Nasdaq indexes.

Table 1

1 Mo Stock Sector Index Forecasts (%)

Sector	Ticker	1 Mo Forecast	Previous Forecast	Change
Consumer Staples	XLP	0.27%	0.09%	0.18%
Materials	XLB	0.22%	0.07%	0.14%
Energy	XLE	0.20%	0.34%	-0.14%
Financials	XLF	0.17%	0.03%	0.13%
Utilities	XLU	-0.03%	-0.07%	0.03%
Health Care	XLV	-0.06%	-0.10%	0.04%
Industrials	XLI	-0.25%	-0.40%	0.15%
Communications Services	XLC	-0.36%	-0.66%	0.31%
Technology	XLK	-0.71%	-1.05%	0.33%
Real Estate	XLRE	-0.78%	-1.36%	0.59%
Consumer Discretionary	XLY	-0.91%	-1.36%	0.45%
Gold Miners	---	-1.11%	-1.72%	0.60%

Consumer Staples topped the list for November with an expected return of 0.27%. Consumer Staples is the only sector that has historically been profitable when the broad Gamma equity Models have been negative. Table 2 shows the average annual return of each major sector during those months when the Gamma S&P 500 Model has been negative or neutral. Consumer Staples stocks have averaged an annualized return of 0.8% during those periods. In addition to its historical outperformance during "down" markets, the Consumer Staples sector is also fairly-valued, with current valuation -0.1 standard deviations below fair value (Table 3).

Table 2

Average Annual Return When Gamma S&P 500 Model is Negative (1975- 2023)

Sector	Ticker	Average Return
Consumer Staples	XLP	0.80%
Health Care	XLV	-0.01%
Real Estate	XLRE	-0.78%
Utilities	XLU	-2.35%
Gold Miners	---	-3.23%
Energy	XLE	-3.83%
Communications Services	XLC	-5.84%
Technology	XLK	-5.93%
Consumer Discretionary	XLY	-6.47%
Industrials	XLI	-6.58%
Financials	XLF	-7.25%
Materials	XLB	-9.60%

Second on the list is Materials. The Materials sector has an expected return of 0.22% for November. The sector's position on the list is a bit surprising since Materials companies as a whole have historically been the worst sector when the broad market Model is bearish, losing an annualized average of -9.6%. Also, the sector, while not overvalued at the level of the Technology, Telecom and Consumer Discretionary sectors, is still 0.94 standard deviations overvalued (14%). In addition, earnings on a 12-month trailing basis are down -31%, and earnings momentum is still negative at -53%. As we noted last month, historically the Materials sector has tended to rally even as the economy sinks into recession. With the Index of Leading Indicators down for the last 18 months in a row, the positive expected return for the sector may simply be due to its historical performance when economic activity slows.

Table 3

SECTOR VALUATION ANALYSIS

Sector	Valuation (σ)	Valuation (%)
Consumer Discretionary	+2.35	+59%
Communication Services	+2.03	+57%
Technology	+1.77	+59%
Utilities	+1.51	+22%
Health Care	+1.51	+34%
Materials	+0.94	+14%
Industrials	+0.54	+12%
Consumer Staples	-0.10	-2%
Real Estate	-0.48	-14%
Financials	-0.91	-21%
Gold Mining Shares	-1.03	-31%
Energy	-2.15	-44%

Following Materials is the Energy sector. Energy has consistently been at or near the top of the list for the last 18 months. Energy has a 0.20% expected return for November, though the sector has not necessarily been a huge performer when the overall market goes down. The sector has historically been down at a -3.8% annual rate during periods when the Gamma S&P 500 Model is negative. Where the sector excels is in valuation where it is -2.15 standard deviations undervalued, more than double the next closest sector. In addition, the sector's 12-moth trailing earnings are up 12%, one of only four sectors with positive 12-month earnings.

At the other extreme are Consumer Discretionary, Real Estate, and Technology with expected losses of -0.91%, -0.78%, and -

0.71%. Consumer Discretionary is the most expensive sector with 2.35 standard deviation (59%) overvaluation. Technology comes in third of all sectors at 1.77 standard deviation overvaluation (59%). Only the Real Estate sector at -0.48 standard deviations is undervalued. All three sectors have negative 12-month trailing earnings growth and negative earnings momentum. The Consumer Discretionary sector, in particular, has averaged a -6.47% annualized loss when the Gamma S&P 500 Model has been bearish. Technology has also struggled with an average loss of 5.93%. Real estate, however, has been close to a break-even at -0.78%

III. Stock Recommendations and Review

The Gamma Company Model starts November with eleven names on our "hold long" list of companies (Table 4). Huntington Ingalls Industries Inc. (HII), with an expected return of 0.80%, strong positive factor momentum, and below average valuation, was added to the list. Westrock Co. (WRK), with an expected return of 2.14% was also added to the list. Celanese Corp. (CE), Centene Corp. (CNC), DaVita Inc. (DVA), Sempra (SE), and Skywork Solutions Inc. (SWKS) were removed from the list due to negative expected return forecasts for November. No other companies were removed from last month's list as all the other names continue to have expected return forecasts well above the average for the S&P 500 stocks.

Table 4

GAMMA COMPANY MODEL - Recommended List Performance — **As of: Oct 31, 2023**

Sector	Ticker	Entry Price	Closing Price 10.31.23	% Change	Trade Date	S&P 500 % Change	Excess Return
Altria Group, Inc.	MO	$47.63	$40.17	-15.7%	12.2.22	3.0%	-18.7%
Huntington Ingalls Ind. Inc.	HII	$219.82	$219.82	0.0%	10.31.23	0.0%	0.0%
EQT	EQT	$41.13	$42.38	3.0%	6.30.23	-5.4%	8.4%
Henry Schein Inc.	HSIC	$78.31	$63.98	-18.3%	3.1.23	6.1%	-24.4%
Kroger Co.	KR	$47.57	$45.37	-4.6%	12.2.22	3.0%	-7.6%
McKesson Corp.	MCK	$313.34	$455.36	45.3%	6.10.22	7.5%	37.8%
ONEOKE Inc.	OKE	$68.20	$65.20	-4.4%	2.6.23	2.0%	-6.4%
Pioneer Natural Resources	PXD	$237.93	$239.00	0.5%	8.31.23	-7.0%	7.4%
Pulte Group	PHM	$57.48	$73.59	28.0%	2.6.23	2.0%	26.0%
WEC Energy	WEC	$87.35	$81.39	-6.8%	5.31.23	0.3%	-7.2%
Westrock Co.	WRK	$35.93	$35.93	0.0%	10.31.23	0.0%	0.0%
						AVERAGE	1.4%

The recommended portfolio of "long only" names overall outperformed the S&P 500 return by 1.4% through the end of October. Virtually all of the outperformance was due to McKesson Corp. (MCK) and Pulte Group (PHM). MCK was up 37.8% from its recommended purchase price in June 2022. PHM was up 26.0% since February 2023. The top underperformer was Henry Schein Inc. (HSIC) which, despite having a strong expected return of 3.2% for November, has continued to struggle. The position was down -24.4% from its entry price in March 2023.

The first new name being added, Huntington Ingalls Industries Inc. (HII, $219.82), has an expected return of 0.8% for November.

Huntington Ingalls Industries Inc. manufactures and delivers naval ships and technologies through three segments: Ingalls, Newport News and Mission Technologies.

- The company is the fourth-highest rated stock for November from our Gamma Company Model Forecast for the S&P 500, with a forecasted one-month price gain of +0.80% and a previous month (October) forecast gain of +0.19%.
- Analyst coverage: 14 analysts cover HII, and the recommendations are 1 strong buy, 6 buys, 5 holds and 2 underperform. The price target range is from $195.00 - $300.00.

- Trades at a Forward P/E (NTM) of 15.2 and pays a dividend with a 2.22% yield.
- Huntington Ingalls' guidance necessitates a Q4 shipbuilding margin increase.
- The company overall execution and labor outlook is improving.
- Its Newport News Shipbuilding division continues to make progress in the area of workforce development acceleration and is meeting hiring demand for skilled trades positions through community outreach efforts and on-site hiring events.
- On Nov. 2, the company reported a revenue increase of 7.2% for the quarter ended September 2023 vs. prior year and EPS of $3.70 for the same period compared to $3.44 a year ago. HII's EPS was +9.1% higher than the consensus EPS of $3.39.
- Leading into this most recent quarterly report, HII has an established record of topping earnings estimates as the company boasts an average surprise for the past two quarters of 5.90%.
- Over the next year, analysts forecast EPS to increase by 58.9%.

The second addition to the portfolio is Westrock Co. (WRK, $35.93), has an expected return of 2.1% for November, up from 1.15% in October and is in the second-highest rated Materials sector.

- WestRock Co. is a multinational, basic materials provider of fiber-based paper and packaging solutions for consumer and corrugated packaging markets. It operates through four segments: Corrugated Packaging, Consumer Packaging, Global Paper and Distribution.
- The company is the top-rated stock for November from our Gamma Company Model Forecast for the S&P 500, with a forecasted one-month price gain of +2.14% and a previous month (October) forecast gain of +1.15%. Materials is the highest rated sector for November.
- Analyst coverage: 8 analysts cover WRK, and the recommendations are 1 strong buy, 3 buys and 4 holds. The price target range is from $38.00 - $45.00.
- Trades at a Forward P/E (NTM) of 14.7 and pays a dividend with a 3.20% yield.
- Overall, Westrock has seen stable demand for corrugated packaging and containerboard for the packaging of essential items such as food, beverage and medicines.
- The company estimated an annual cost-savings run-rate of $450mm in addition to price actions and productivity initiatives.
- Over the past few quarters, WRK has seen a decline in corrugated packaging volume as inflation has caused reduced consumer spending.
- Some headwinds include higher recycle fiber costs, labor shortages and supply-chain issues.
- WRK beat the Zacks Consensus Estimate in three of the last four quarters with an average earnings surprise of 30.7%.

- WestRock exceeded its 2023 Q3 EPS estimates by 78% in August. This earnings growth momentum should continue with analysts' 2023 Q4 EPS at $0.81, 21% above the Zacks consensus of $0.67 a share.
- The company trades at a reasonable price-to-sales valuation of 0.45 times its sales.
- Over the next year, analysts forecast EPS to increase by 58.9%

Source: CNBC

-Karl Chalupa and N. Claude Colabella

Mr. Chalupa is the CIO and Co-Founder of Gamma Investment Consulting and Editor of the Gamma Intelligence Reports. He is also President of Gamma Capital LLC, a quantitative global macro investment firm. Mr. Chalupa developed the Gamma Investment Program used for previously trading the firm's $400 million global macro program. He was previously Director of Risk Management at Titan Advisors LLC, a $4.5 billion alternative investments firm. Mr. Chalupa was also Managing Director of the Currency and Alternative Investment Strategies Groups at State Street Global Advisors (SSGA) where he developed a $9 billion currency overlay program and launched SSGA's first hedge fund based on his Gamma Model. Mr. Chalupa spent 13 years at ABN Amro Bank where he traded interest rate and currency derivatives and was Manager of the Proprietary Trading and Economic Research Desk. He began his career as an economist for the Federal Reserve Bank of Chicago. Mr. Chalupa holds an MA in Economics from Brown University, graduated magna cum laude from Northern Illinois University with BAs in Economics and Political Science and is Series 3 registered.

Mr. Colabella is the Chief Operating Officer, Co-Founder of Gamma Investment Consulting and Co-Editor of the Gamma Equity Intelligence Report. He was previously Director of Communications and Investor Relations at Titan Advisors, LLC, a $4.5 billion alternative assets solutions firm. Mr. Colabella has equity research experience with working at Petroleum Research Group, Inc. (Rye, NY), an independent energy equity research boutique and at John S. Herold, Inc., a leading petroleum research and consulting firm. He was a Managing Partner at Alpha Beta Alternative Investments, Inc., an alternative investment boutique that managed Alpha Beta Partners, LP, a multi-strategy "fund of funds." Mr. Colabella holds an MBA in Finance from Duke University, Fuqua School of Business. He graduated magna cum laude from Manhattan College, with a BS BA in Economics and is Series 7 and 63 registered.

Gamma Equity Model Forecasts for November 2023

1 MONTH STOCK INDEX MODEL FORECASTS (%)

Country	Stock Index	Price	1 Mo Forecast	Previous Forecast	Position	Trade	Updated
USA	S&P 500	4,166.82	-0.81%	-0.74%	Short	Hold	10/31/23
USA	Nasdaq	12,720.25	-1.68%	-1.92%	Short	Hold	10/31/23
Canada	S&P/TSX 60	1,131.88	0.00%	0.00%	Neutral	Hold	10/31/23
Mexico	IPC	48,945.55	0.00%	0.00%	Neutral	Hold	10/31/23

1 MONTH STOCK SECTOR MODEL FORECASTS (%)

Sector	Ticker	1 Mo Forecast	Previous Forecast	Updated
Consumer Staples	XLP	+0.27%	+0.09%	10/31/23
Materials	XLB	+0.22%	+0.07%	10/31/23
Energy	XLE	+0.20%	+0.34%	10/31/23
Financials	XLF	+0.17%	+0.03%	10/31/23
Utilities	XLU	-0.03%	-0.07%	10/31/23
Health Care	XLV	-0.06%	-0.10%	10/31/23
Industrials	XLI	-0.25%	-0.40%	10/31/23
Communications Services	XLC	-0.36%	-0.66%	10/31/23
Technology	XLK	-0.71%	-1.05%	10/31/23
Real Estate	XLRE	-0.78%	-1.36%	10/31/23
Consumer Discretionary	XLY	-0.91%	-1.36%	10/31/23
Gold Miners	---	-1.11%	-1.72%	10/31/23

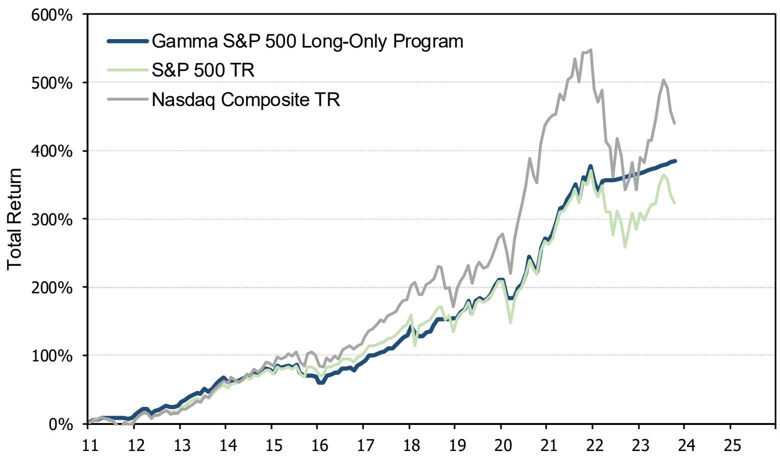
GAMMA COMPANY MODEL - Recommended List Performance

As of: Oct 31, 2023

Sector	Ticker	Entry Price	Closing Price 10.31.23	% Change	Trade Date	S&P 500 % Change	Excess Return
Altria Group, Inc.	MO	$47.63	$40.17	-15.7%	12.2.22	3.0%	-18.7%
Huntington Ingalls Ind. Inc.	HII	$219.82	$219.82	0.0%	10.31.23	0.0%	0.0%
EQT	EQT	$41.13	$42.38	3.0%	6.30.23	-5.4%	8.4%
Henry Schein Inc.	HSIC	$78.31	$63.98	-18.3%	3.1.23	6.1%	-24.4%
Kroger Co.	KR	$47.57	$45.37	-4.6%	12.2.22	3.0%	-7.6%
McKesson Corp.	MCK	$313.34	$455.36	45.3%	6.10.22	7.5%	37.8%
ONEOKE Inc.	OKE	$68.20	$65.20	-4.4%	2.6.23	2.0%	-6.4%
Pioneer Natural Resources	PXD	$237.93	$239.00	0.5%	8.31.23	-7.0%	7.4%
Pulte Group	PHM	$57.48	$73.59	28.0%	2.6.23	2.0%	26.0%
WEC Energy	WEC	$87.35	$81.39	-6.8%	5.31.23	0.3%	-7.2%
Westrock Co.	WRK	$35.93	$35.93	0.0%	10.31.23	0.0%	0.0%
						AVERAGE	1.4%

Gamma Model Performance Summary – October 2023

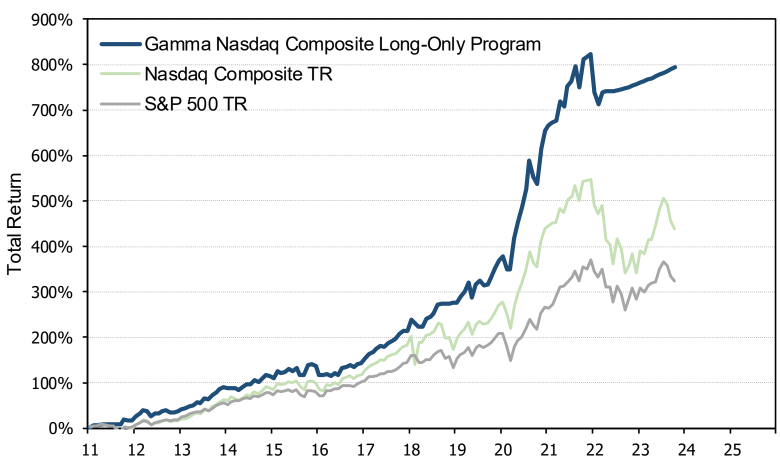
Gamma S&P 500 Long-Only Program Jan 2011 - Oct 2023



Historical Performance	Program	BM1	BM2
Compound ROR	13.1%	11.9%	14.0%
Cumulative Return	485.4%	323.8%	439.5%
Cumulative VAMI	$4,854	$4,238	$5,395
Best Month	10.9%	13.9%	20.7%
Worst Month	-8.2%	-17.7%	-20.9%
% Positive Months	79.2%	69.5%	64.9%
Historical Risk	**Program**	**BM1**	**BM2**
Standard Deviation	9.8%	15.7%	18.7%
Sharpe Ratio (1.0% RFR)	1.24	0.70	0.70
Sortino Ratio (1.0% RFR)	1.68	1.08	1.17
Downside Deviation	7.2%	10.1%	11.1%
Maximum Drawdown	-14.1%	-23.8%	-31.8%
Months In Maximum Drawdown	18	22	22

BM1: S&P 500 Total return
BM2: Nasdaq Composite Total Return

Gamma Nasdaq Composite Long-Only Program Jan 2011 - Oct 2023



Historical Performance	Program	BM1	BM2
Compound ROR	18.6%	14.0%	11.9%
Cumulative Return	893.6%	439.5%	323.8%
Cumulative VAMI	$8,936	$5,395	$4,238
Best Month	15.5%	20.7%	13.9%
Worst Month	-9.0%	-20.9%	-17.7%
% Positive Months	77.9%	64.9%	69.5%
Historical Risk	**Program**	**BM1**	**BM2**
Standard Deviation	12.8%	18.7%	15.7%
Sharpe Ratio (1.0% RFR)	1.38	0.70	0.70
Sortino Ratio (1.0% RFR)	2.10	1.17	1.08
Downside Deviation	8.4%	11.1%	10.1%
Maximum Drawdown	-12.0%	-31.8%	-23.8%
Months In Maximum Drawdown	22	22	22

BM1: Nasdaq Composite Total Return
BM2: S&P 500 Total Return

Past performance is not indicative of future results