Macro Intelligence Report

July 2024

GAMMA INVESTMENT CONSULTING

Gamma Global Macro Model Highlights

- **The S&P 500 Model covered its SHORT position and went NEUTRAL. The Nasdaq Model remained LONG.** Stocks continue to be highly bifurcated with five names driving virtually all of the indexes' gains since February. The market continues to balance extremely high valuation against improving liquidity and the prospect of lower interest rates.

- **The 10-year Treasury Note and 30-year Treasury Bond Models Model remained SHORT (higher yields) for June. The Investment Grade Corporate Model remained NEUTRAL while the High Yield Corporate Model covered its short position and went NEUTRAL.** The persistent short positioning of most of the fixed income models reflects the market's pushing expectations of a Fed rate hike further into the future. Core inflation and services inflation remain stubbornly high, though growth expectations have moderated recently.

- **The Gold Model remained LONG for June with the Silver and Platinum Models also going LONG after being NEUTRAL last month.** The prospect of "higher for longer" interest rates is creating a headwind for additional price gains. Expectations of weaker GDP growth are also adversely affecting silver and platinum prices because of their role as industrial commodities.

- **The EUR/USD Model remained SHORT euros (long USD) for June.** The exchange rate traded down to the lower end of its 1.0500 – 1.1100 trading range in response to a 25 basis point rate cut by the ECB.

I. Equity Index Outlook

The S&P 500 Model went neutral for July after being short since the end of January (Chart 1). The Nasdaq Model remained long. The transition to a more bullish stance by both indexes has been largely due to improving liquidity, which is more than offsetting deteriorating valuation. The two forces - liquidity and valuation – are balancing each other so that even small changes in either will tip the positioning of the Models. Both the S&P 500 and the Nasdaq are over 1.90 standard deviations overvalued. Historically, overvaluation exceeding two standard deviations has more than offset any combination of bullish factors from earnings, liquidity, or interest rates.

Since bottoming in September 2022, the S&P 500 is up 52% and the Nasdaq is up 67%. The S&P 500, however, is only 15% above its all-time previous high hit in December 2021 while the Nasdaq is up 13%. To keep this in perspective, an investment in risk-free Treasury bills would have generated an 11% return over that same period without the 25% drawdown between December 2021 and September 2022.

The steady rise in stock prices has caused valuation of the S&P 1500 to top two standard deviations, while the

Chart 1

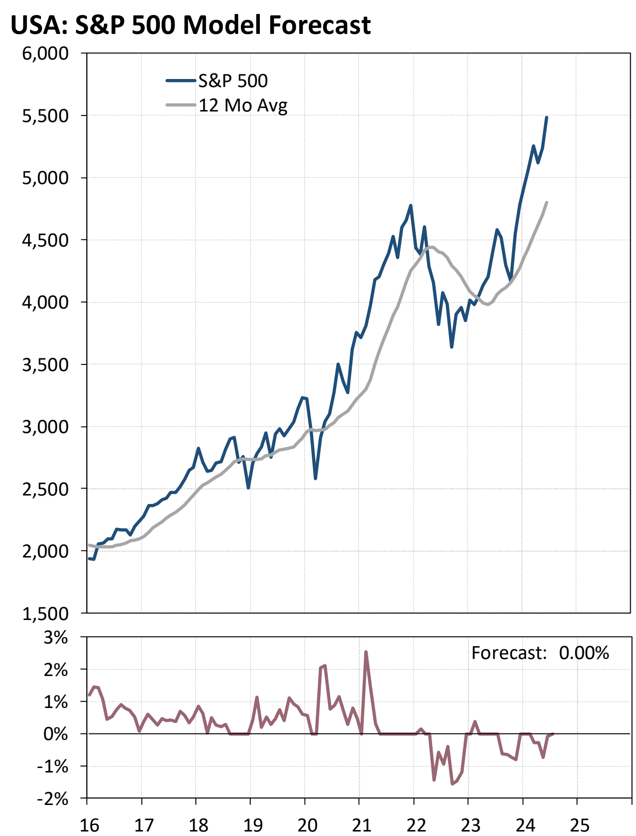


TABLE 1
VALUATION vs FORWARD RETURN ANALYSIS

Country	Valuation (σ)	Valuation (%)	Valuation-Based Return Forecast (Cumulative, %) 1 Mo	3 Mo	6 Mo	1 Yr	2 Yr	3 Yr	5 Yr
S&P 1500	+2.09	+42%	-0.5%	-1.1%	-2.3%	-3.4%	-0.2%	7.2%	16.4%
S&P 500	+1.97	+42%	-0.2%	-0.5%	-1.0%	-0.9%	4.0%	12.5%	23.2%
Nasdaq Composite	+1.91	+54%	-0.5%	-1.6%	-3.1%	-6.3%	-5.3%	2.2%	5.5%
S&P 600 Small Cap	+0.20	+3%	0.7%	2.2%	4.7%	10.0%	22.7%	37.2%	68.6%

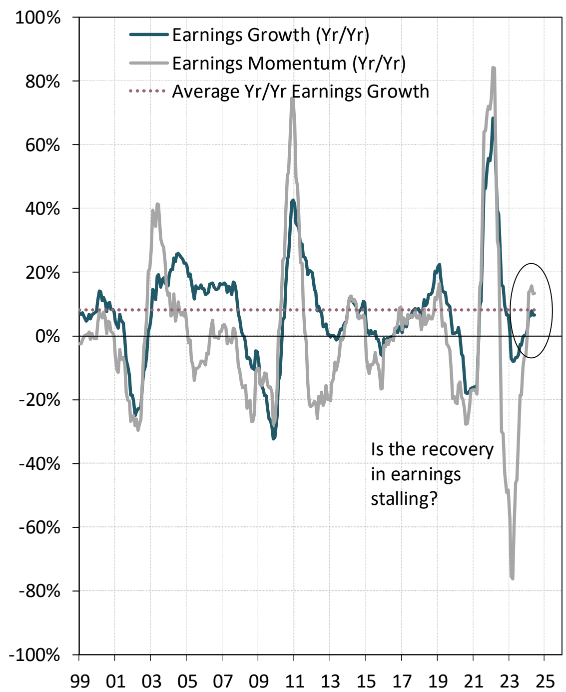
S&P 500 and Nasdaq continue to flirt with that level (Table 1). A strong recovery in earnings since early 2023 and a modest decline in long-term interest rates since October 2023 have been just enough to prevent valuation from tipping solidly into bearish mode for all the major indexes. At this point the recovery in earnings, improving liquidity, and the prospect of a Fed rate cut in September has been enough to keep stock prices heading higher. Given how close valuation is to the bearish tipping point of two standard deviations, however, that could change abruptly if any of these drivers begin to deteriorate.

Positive Factors

- **Corporate earnings continue to improve.** Yr/yr earnings for the S&P 1500, S&P 500, and Nasdaq improved last month. Total market earnings were up 6.5% yr/yr in June as 12-month momentum in growth edged up to 13.3% from 13.2% but remained below the 15.8% peak hit in April (Chart 2). Earnings growth for the S&P 500 was up 8.0% compared to 7.8% the previous month. Earnings momentum also increased from a 16.2% to a 17.2% pace. The Nasdaq continued to lead the other indexes, however, as 12-month earnings accelerated to a 28.3% rate from a 25.8% rate in June. Even at these levels, momentum jumped to 41.9% from 39.6%.

  Earnings growth for the S&P 1500 and S&P 500 is at or even slightly below their long-term averages. The Nasdaq should be viewed more cautiously as the current level of earnings growth is almost 2.5x its average annual growth rate. Weaker than expected releases from the US Census Bureau and the Institute for Supply Management last week chopped the Atlanta Fed's GDPNow forecast of second quarter GDP down from 3.2% in mid-June to only 1.7% this week. The forecasts of second quarter real personal consumption expenditures growth and real gross private domestic growth also decreased from 1.8 percent and 8.7 percent, respectively, to 1.5 percent and 6.9 percent.

Chart 2
S&P 1500 Earnings Growth



  This downward revision is consistent with our Gamma Economic VAR Model forecast that indicates that earnings growth is likely to slow abruptly (but still remain positive) over the next 6-12 months as real GDP growth eases to an average 1.5% yr/yr growth rate over the next year. This forecast is supported by a renewed downturn in the Index of Leading Economic Indicators. The Index had stabilized in April following 23 consecutive down months but has now fallen in both May and June. The 12-month rate of change improved last month from -5.6% to -5.5%, but the three-month change worsened on the renewed weakness over the last two months. **With real GDP growth likely to slow to a 1.5% annual rate, the Nasdaq's 28% rate of earnings growth is unlikely to be sustained.**

Neutral Factors

- **Long-term liquidity continues to improve but has not yet turned positive.** The Gamma Liquidity Indicator for the U.S. improved from -0.82 in May to -0.80 in June – still negative but a steady improvement from -1.97 in May 2023 (Chart 3). The rate of improvement eased slightly, however, suggesting that it will take a combination of Fed rate cuts and an end to Quantitative Tightening (QT) to bolster additional gains.

    - **Money growth is driving improved liquidity**. Most of the improvement in the Gamma Liquidity Index has come from a reversal in money growth, especially in the narrow measures of True Money Supply (TMS) and M1 (Chart 4). Real (inflation adjusted) TMS was up 3.1% yr/yr in June, up from a -6.9% rate as recently as six months ago. The broader real M2 edged up to a -2.8% yr/yr rate from a -2.9% rate in May. Unlike TMS and M1, however, real M2 remained down on an annual basis.

      The recovery in money growth has largely been due to the expansion in bank reserves that began with the Silicon Valley Bank failure last year and the subsequent injection of reserves through the Bank Term Funding Program (BTFP). The gradual winding down of the Fed's O/N Reverse Repo (O/N RRP) facility has also steadily added bank reserves. Whether money growth continues to recover will depend heavily on how quickly the BTFP runs off, whether and how quickly the Fed allows the O/N RRP to drop to zero, and how aggressively the Fed chooses to liquidate its mortgage and Treasury holdings.

    - **Interest rates remain at a 20-year high but are likely to start declining in September.** Inflation, as measured by the Personal Consumption Expenditure Deflator (PCED), fell to a 2.6% yr/yr rate in June, down from a 2.7% rate in May (Chart 5). Excluding food and energy, the inflation rate fell from 2.8% to 2.6%, the lowest annual rate since March 2021. Services inflation edged down to 3.9%, but that was largely unchanged since the end of 2023. **Services inflation has stabilized around a 4% annual rate which may be the major deterrent preventing more aggressive rate cuts.**

      The decline in the inflation rate was greeted with enthusiasm by investors who now believe that the Fed will cut rates 25 basis points at its September meeting.

Chart 3

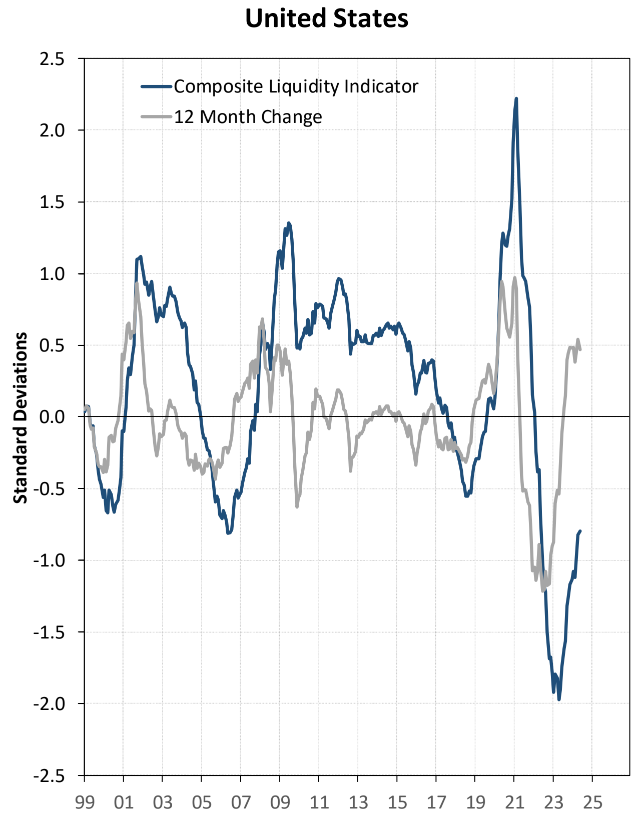
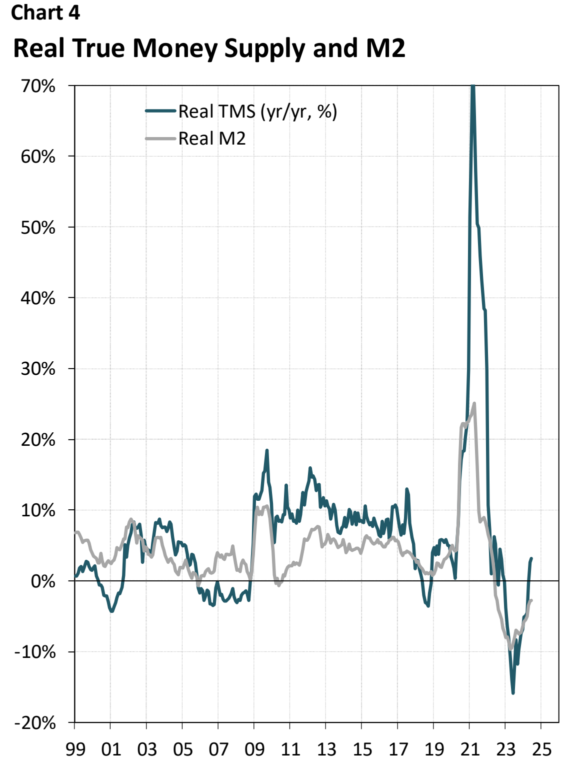


Chart 4



The inflation rate remains above the Fed's 2% target, but the assumption is that the downward bias will continue given the expected weakening in economic activity. According the CME's Fedwatch Tool, investors are pricing in a 25 basis points rate cut at the September FOMC meeting with a 62% confidence. This week's post-July 4th payroll report will also indicate whether a rate cut as early as July could occur if the number comes in unexpectedly weak, though the Fedwatch Tool gives the odds at less than 10%. Beyond September, markets indicate only a 50/50 chance of a second rate cut before the end of the year.

- **<u>Yield curves remain inverted but are much steeper than a year ago.</u>** The 2-10 yield curve has remained inverted for 24 months. The 3-30 curve has been inverted for 20 months (Chart 6). **The longest previously inverted 3-30 curve lasted 17 months and ended in April 1980. Virtually every inverted curve since 1960 has been followed by a substantial decline in stock prices. The average peak-to-trough decline in stock prices following a yield curve inversion lasting at least six months has averaged -34% since 1960.** To appreciate how much damage inverted curves can do to stocks, the bulk of these declines have tended to occur AFTER the curve "uninverted."

As we have noted in the past, the big question is whether the yield curve still has value as a leading indicator. The enormous purchases and sales of Treasuries by the Fed as part of Quantitative Easing and Quantitative Tightening episodes since 2008 have had a substantial impact on long-term rates. This impact may be distorting the historical relationship between the yield curve and stock prices. We still believe that the yield curve is an important leading indicator even if its usefulness has been diminished by the Fed's actions. Also, while investors may applaud the prospect of lower interest rates and a flatter yield curve, the damage done by the prolonged inversion may already have been done but is not yet fully reflected in stock prices.

<u>Negative Factors</u>

- **<u>Quantitative Tightening (QT) remains intact.</u>** Markets are focused most heavily on a potential September rate cut. How this affects liquidity is uncertain given all the moving parts that make up monetary policy today. The O/N RRP, BTFP, Quantitative Tightening (QT), and interest rates are now all components of monetary policy. The tricky/challenging part is to know what the net effect of all of these are on liquidity and the markets.

Chart 5

Inflation Measures

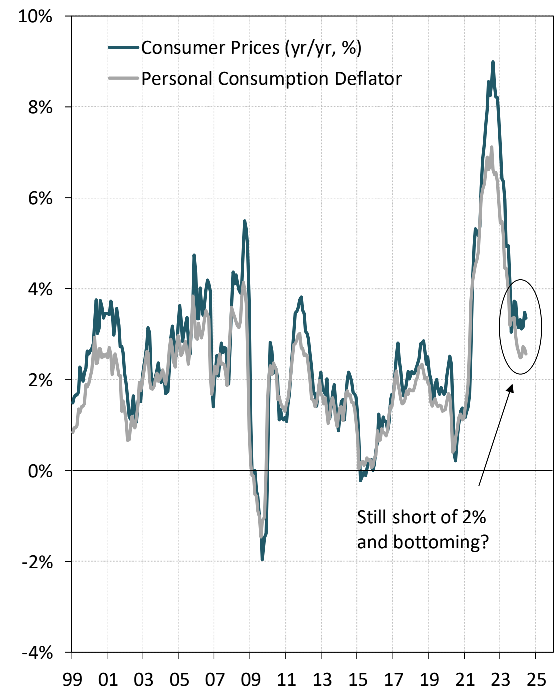
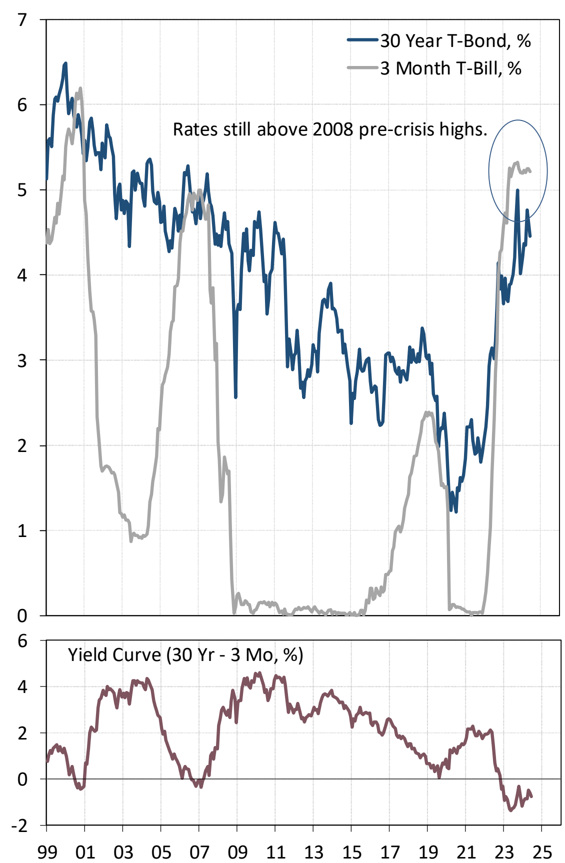


Chart 6

Interest Rates: United States

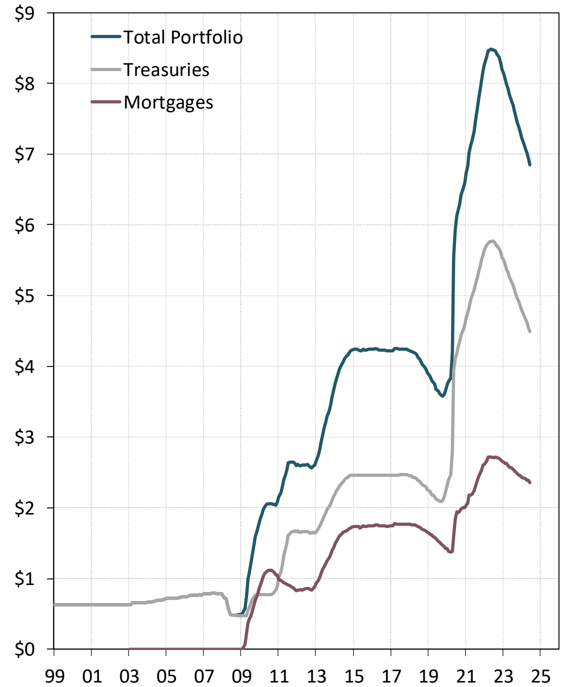


The Federal Reserve contracted its investment portfolio last month by $80.4 billion made up of a $30.1 billion reduction in mortgage-backed securities (MBS) and another $50.3 billion in mostly longer-dated Treasury securities (Chart 7). The BTFP contracted $1.7 billion to $106.6 billion. The Fed's plan is, barring another round of bank failures, to let the BTFP run off to zero over the next ten months as the loans making up the BTFP mature. Lastly, the O/N RRP expanded $212.5 billion in June due to end-of-quarter money market fund flows, but most of that increase was reversed the first week of July.

The NET effect of these changes in the O/N RRP, the BTFP, and QT was to decrease bank reserves by $53.3 billion. June's decline marked the third monthly contraction in a row in bank reserves. We have noted in previous Reports that the $500 billion increase in bank reserves between March 2023 and March 2024 has been the primary driver of the rally in stock prices since October 2023 (Chart 8).

Chart 7

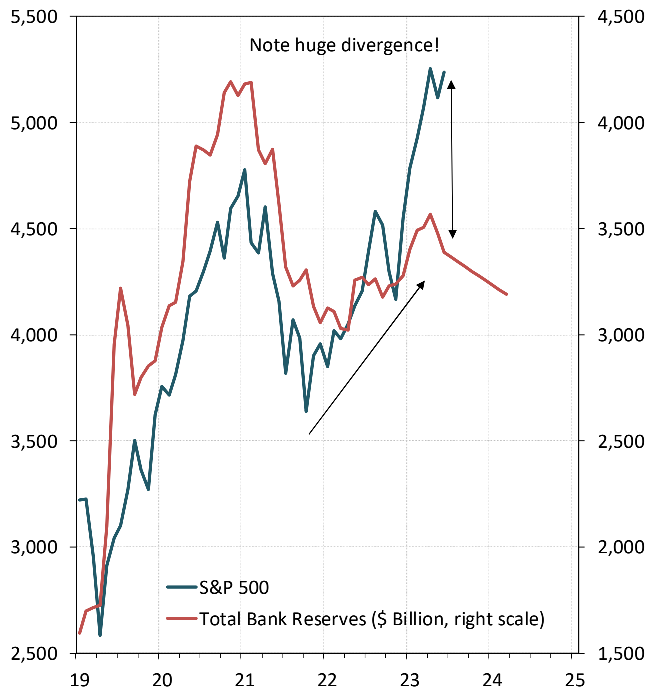
Federal Reserve Balance Sheet (Trillion $)



The Fed has announced that it will continue QT at the rate of $60 billion a month. The winding down of the BTFP will drain another $108 billion. The Fed has not announced whether the O/N RRP will return to zero. Assuming that is the goal, the O/N RRP would ADD an average of $50 billion a month in reserves until it closes. The net effect would be to reduce total reserves by about -$25 billion a month. Since announcing these changes, however, total reserves have continued to fall an average of $80 billion a month. We have already seen the emergence of a huge gap between bank reserves and stock prices (Chart 8). **If bank reserves continue to contract at their current rate, we believe that stock prices could easily correct 25% lower especially given current valuation levels.**

Chart 8

S&P 500 vs Total Bank Reserves



- **<u>Valuation remains at a dangerously high level</u>**. Overvaluation continues to be our major concern not only for the longevity of this bull market but also as a risk factor for a major selloff in stock prices.

  Equity valuations worsened across the board last month as the rise in stock prices continued to outrun improved earnings and lower long-term interest rates. **Valuation for the S&P 1500 hit 2.09 standard deviations in June – a whopping 42% overvalued. That marked the most extreme reading for the broad market index since October 2000 before the index fell 37%.**

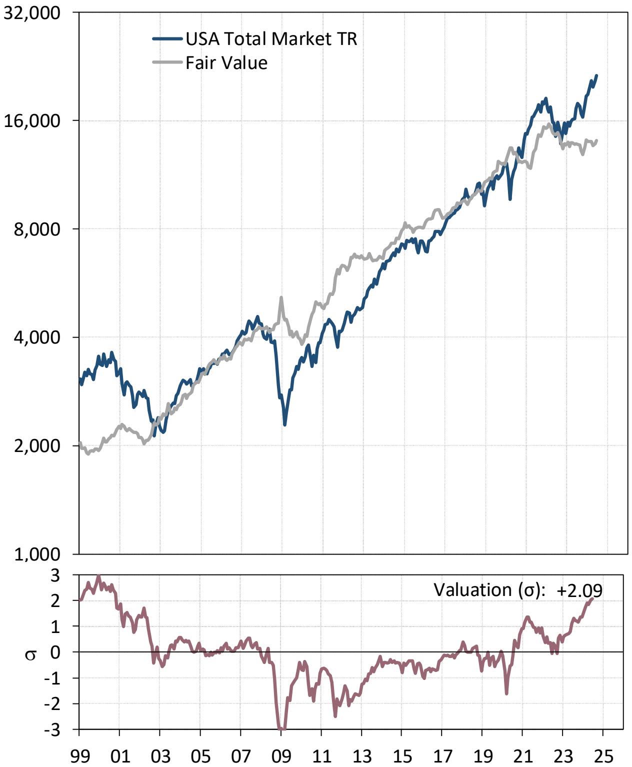
  Overvaluation for the S&P 500 also continued to worsen, topping 1.97 standard deviations (42% overvalued) (Table 1, Chart 9). The Nasdaq also worsened to 1.91 standard deviations (54% overvalued). The Nasdaq had been running more overvalued than the other indexes for months, but the 28% gain in Nasdaq earnings over the past year compared to 8% for the S&P 500 has allowed the tech index to close the gap.

Such extremes of valuation are rare. **Two standard deviation levels of overvaluation have only happened three times since 1960.** The previous two instances occurred in 1973 (+53% overvalued) before the severe 1974 recession and in 1999 (+67% overvalued) during the dot com mania. The 1974 bear market saw stock prices drop a crushing -46% which up until that point was the largest selloff since the Great Depression. Not to be outdone, stocks dropped -52% from their peak in 2000 to their bottom in early mid-2002. It took 91 months following the 1974 recession for stock prices to return to their previous peak. Following their peak in September 2000, stocks took 85 months to put in a new high.

Our Models indicate that once overvaluation reaches two standard deviations and higher, valuation starts to overwhelm all other factors including earnings growth, interest rates, and liquidity. Investors need to be acutely aware that at current valuation levels, the broad indexes would need to fall 40-50% just to get back to fair value.

Chart 9

USA: S&P 1500 Valuation



Periods of extreme overvaluation can take years of sub-par performance to unwind themselves. For example, at current valuation the Gamma Valuation Model predicts that the one-year return for the S&P 500 is -0.9%. That doesn't seem that terrible after the recent rally. The problem is that the Valuation Model predicts an average annual return of only 4.3% over the next five years. That means five years in which the S&P 500 dramatically underperforms its average 12.9% average annual return since 1973. In contrast, the 5-year T-Note also currently yields 4.3% with effectively no risk if held to maturity compared to the prospect of a 50% drop in stock prices!

- **Seasonals are turning negative.** Stocks have now exited their historically bullish October - May stretch and are now heading into the summer doldrum period from July - September. While July has historically been an average "up" month, the entire stretch from July to September has averaged a monthly return of only 0.4%, well below the long-term average monthly return of 1.1% since 1973.

II. Fixed Income Outlook

The 10-year Treasury Note and 30-year Treasury Bond Models remained SHORT (higher yields) for July (Chart 10, 11). The Investment Grade and High Yield Corporate Models remained NEUTRAL. The Gamma Bond Models remain short Treasuries and neutral corporate bonds despite weak manufacturing and services PMI data and a dip in the headline PCED inflation rate.

Chart 10

USA: 10 Yr T-Note Model Forecast

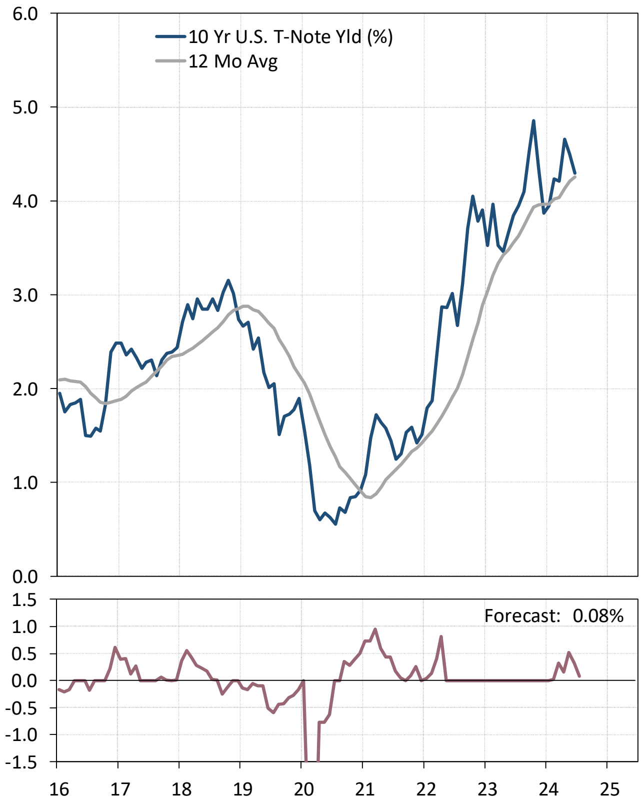
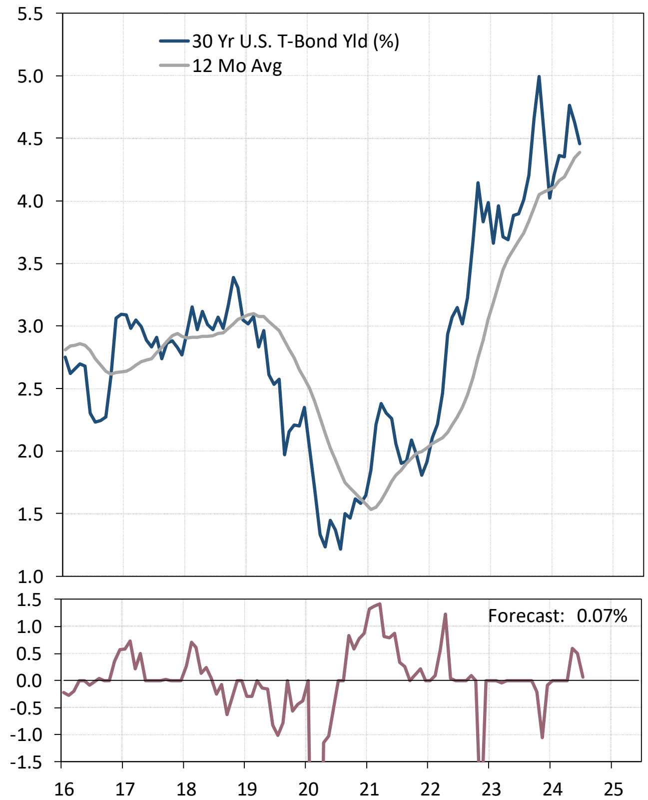


Chart 11

USA: 30 Yr T-Bond Model Forecast



Negative Factors (Higher Yields)

- **Federal borrowing continues unabated**. The bond market is facing an increasingly dire fiscal outlook. Total federal debt outstanding last month topped $34.7 trillion as it surged $3.2 trillion from a year earlier (Chart 12). Federal debt has now grown over $1 trillion yr/yr every month since September 2019 despite eight consecutive quarters of positive GDP growth and record tax revenues, Growth in the debt is being exacerbated by the current high level of interest rates. As new debt is issued and old debt is rolled over, it is being financed at much higher interest rates than what the economy has seen since the 2008-09 financial crisis. Interest on the national debt, depending on the exact level of interest rates, could hit $1.6 trillion on a twelve-month basis within a year.

- **BTFP , O/N RRP, and QT**. The net effect of winding down the Fed's BTFP and the O/N RRP plus QT has been a steady rise in bank reserves since the failure of Silicon Valley Bank. As we discussed above, going forward we expect the net effect of these three variables to be a monthly drain of about -$25 billion in reserves from the banking system. While not as contractionary as the Fed's earlier plan to liquidate $90 billion of its portfolio monthly, the end result is still likely to be additional upward pressure on long-term rates as the Fed remains a net seller of Treasuries. Moreover, despite expecting "only" a $25 billion monthly reduction in reserves, the Fed over the last two months has been closer to the original $90 billion reduction.

Positive Factors (lower yields)

- **After many head-fakes, the economy may really be slowing**. Inflation fell to a 2.6% yr/yr rate in June, a sign to bond bulls that inflation continues to trend towards the Fed's 2% target. That view was bolstered by last month's Institute of Supply Management Index weakness (Chart 13). The manufacturing index fell to 48.5 (anything below "50" signifies contraction). The manufacturing index crept into expansion territory in March at 50.3 but has since posted three declines in a row below 50. The index has contracted in 19 of the last 20 months and is now turning lower again. The services index, which had consistently been positive over the last three years despite repeated calls of an imminent recession, is finally showing signs of a sustained downturn. The services index dropped five points in June to 48.8 and was below 50 for the second time in three months. The index has only been negative in two out of three months in the March - April 2020 period during the COVID pandemic and in November – December 2009 following the 2008 financial crisis.

  The sudden drop in the ISM measures suggests slower economic growth. We remain somewhat skeptical that a recession is imminent, however. Economists have been calling for a sharp slowdown in the economy for two years, and growth has instead remained surprisingly robust. That said, the Conference Board's Index of Leading Indicators (LEI) fell a sharp -0.6% last month after showing signs of stabilizing back in April. The index remains down -5.5% yr/yr, and the three-month change has worsened from -2.7% in April to -3.5% in June.

- **Valuation favors lower yields**. All the U.S. fixed income markets: Treasuries, Investment Grade, and High Yield are slightly undervalued (in price) ranging from -0.21 standard deviations for 10-year T-Notes to -0.56 standard deviations for Investment Grade and High Yield Corporates. While not especially large, this across-the-board undervaluation is likely to support slightly lower bond yields.

- **Seasonals point to lower yields**. Bonds are just the opposite of stock indexes at this point in the year. The negative seasonals for stocks indexes for the July-September stretch indicate lower bond yields over that period.

Chart 12
Federal Government Debt (Trillion $)

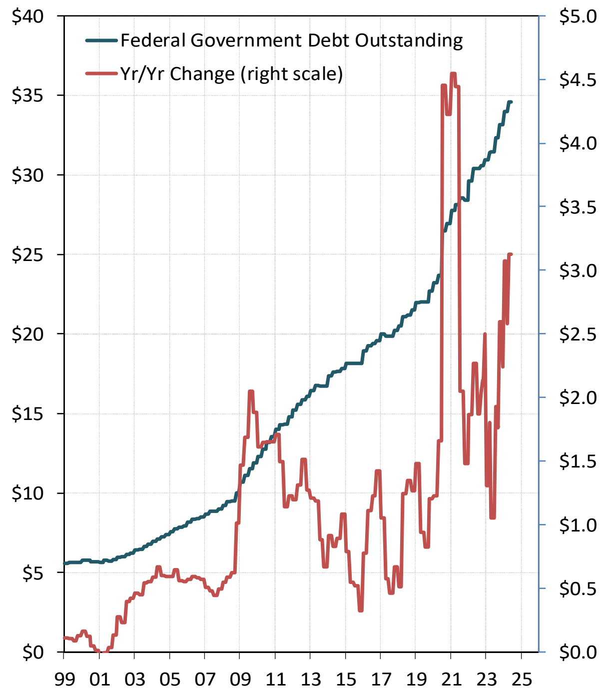
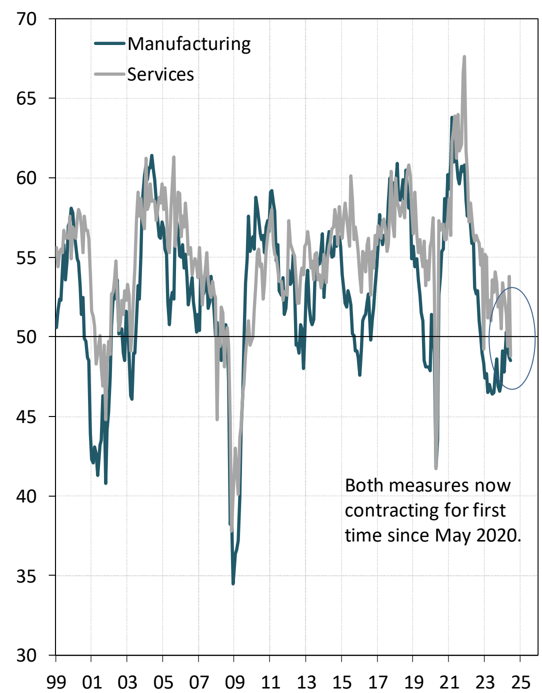


Chart 13
ISM Indexes



III. Gold and Precious Metals Outlook

The Gamma Gold Model remained LONG for July. The Silver and Platinum Models also went LONG after being briefly NEUTRAL last month for the first time in six months (Chart 14, 15). The Gold Mining Shares Model also went LONG after being neutral since February (Table 2). Precious metals had a volatile month in June due to the rapidly changing expectations over the timing of the Fed's next rate cut. While the Models remain long, we expect only a modest upward bias in price with high volatility until the future direction of interest rates becomes clearer.

Chart 14
Gold Model Forecast

Chart 15
Silver Model Forecast

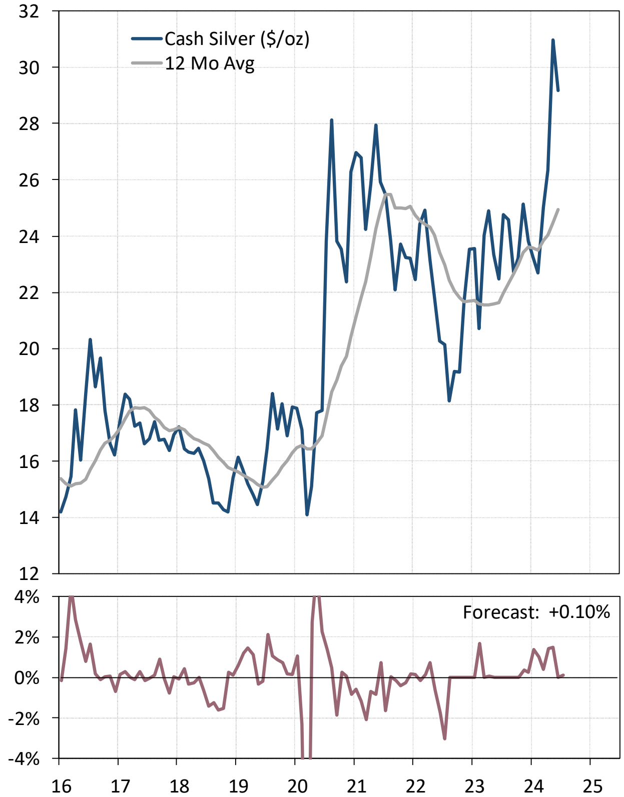


TABLE 2
1 MONTH STOCK SECTOR MODEL FORECASTS (%)

Country	Stock Index	Index	1 Mo Forecast	Previous Forecast	Position	Trade	Updated
Gold Mining	---	1,409.17	+1.24%	0.00%	Long	Buy	6/28/24
Financials	XLF	4,027.51	+1.20%	+0.36%	Long	Hold	6/28/24
Energy	XLE	2,313.51	+1.19%	0.00%	Long	Buy	6/28/24
Industrials	XLI	6,614.52	+1.06%	0.00%	Long	Buy	6/28/24
Technology	XLK	14,449.61	0.00%	0.00%	Neutral	Hold	6/28/24
Health Care	XLV	10,048.27	0.00%	0.00%	Neutral	Hold	6/28/24
Consumer Discretionary	XLY	5,127.59	0.00%	-0.63%	Neutral	Cover Short	6/28/24
Communications Services	XLC	7,190.82	0.00%	0.00%	Neutral	Hold	6/28/24
Consumer Staples	XLP	6,040.59	0.00%	0.00%	Neutral	Hold	6/28/24
Utilities	XLU	667.24	0.00%	0.00%	Neutral	Hold	6/28/24
Materials	XLB	2,804.76	0.00%	0.00%	Neutral	Hold	6/28/24
Real Estate	XLRE	2,370.16	0.00%	0.00%	Neutral	Hold	6/28/24
Telecommunications	---	736.43	0.00%	-0.15%	Neutral	Cover Short	6/28/24

Positive Factors

- **Liquidity is slowly improving.** As noted above, Gamma's Liquidity Index improved slightly from -0.82 in May to -0.80 last month. 12-month momentum in the Index remained positive but dipped slightly from 0.54 to 0.47. Most of the improvement has occurred not due to faster money growth or falling interest rates but rather due to slower deterioration in these measures. The result is that on a yr/yr basis, the measures are no longer showing the extreme deterioration that occurred when the Fed started to tighten. Moreover, the 2-10 and 3-30 yield curves continue to indicate a restrictive monetary policy. With inflation having edged lower last month based on the PCED, a Fed rate cut in September has become much more likely. It's our belief, however, that only a sustained series of rate cuts will be enough to push liquidity solidly into positive enough territory to sustain higher precious metals prices.

- **Fiscal policy**. Total federal debt rose a modest (by current standards) $50 billion last month as the yr/yr increase surged by over $3.2 trillion. The pace of deficit spending shows no signs of moderating as the Congressional Budget Office projects the annual budget deficit to be between $1.9 trillion and $2.8 trillion every year through 2034. The current 20-year high in interest rates is causing the interest rate burden on the debt to grow rapidly as new debt is issued and existing debt is rolled over at these high rates. Our concern is that the Federal Reserve will be pressured to end its QT and begin purchasing additional Treasury debt that would be paid for with newly minted dollars. The result would likely be much higher gold prices and long-term bond yields as investors seek protection against the resulting higher inflation risk. Our experience shows that the market often ignores major problems for a long time only to have them become the sole focus very quickly. The market may ignore the deteriorating fiscal situation until a crisis occurs, but when it does materialize the result could be much higher precious metals prices.

Neutral Factors

- **Valuation.** Gold ended June +0.36 standard deviations overvalued (9%). Such a modest level of overvaluation is unlikely to have much impact on price. Previous periods of similar overvaluation have been consistent with a one-year return of 8.3%, only slightly below the long-term 8.7%. The big reality is that the severe undervaluation seen in late 2022 is no longer providing gold with a substantial tailwind. Gold hit -1.80 standard deviation undervaluation in October 2022. Gold has since rallied 42%. Now that valuation is beginning to overshoot to the upside, we will be paying attention to whether valuation starts to reach levels historically associated with corrections and reversals.

Negative Factors

- **Dollar strength**. The Federal Reserve is likely to maintain interest rates at a higher level for longer than most other major central banks. The European Central Bank (ECB) and Bank of Canada both cut interest rates by 25 basis points in June. The Bank of Japan remains woefully behind in the tightening cycle which has caused the yen to collapse to its lowest level since 1986. The positive interest rate differential should keep the dollar bid and keep downward pressure on precious metals prices.

- **Quantitative Tightening**. Much of the recovery in dollar liquidity has occurred as a result of the winding down of the Fed's O/N RRP facility and the launch of the BTFP in March 2023. Those programs swelled bank reserves from a low of $3.06 trillion in November 2022 to $3.57 trillion two months ago. With both programs now draining reserves, we may see the recovery in liquidity start to stall over the coming months even if the Fed cuts interest rates.

IV. Foreign Exchange Outlook

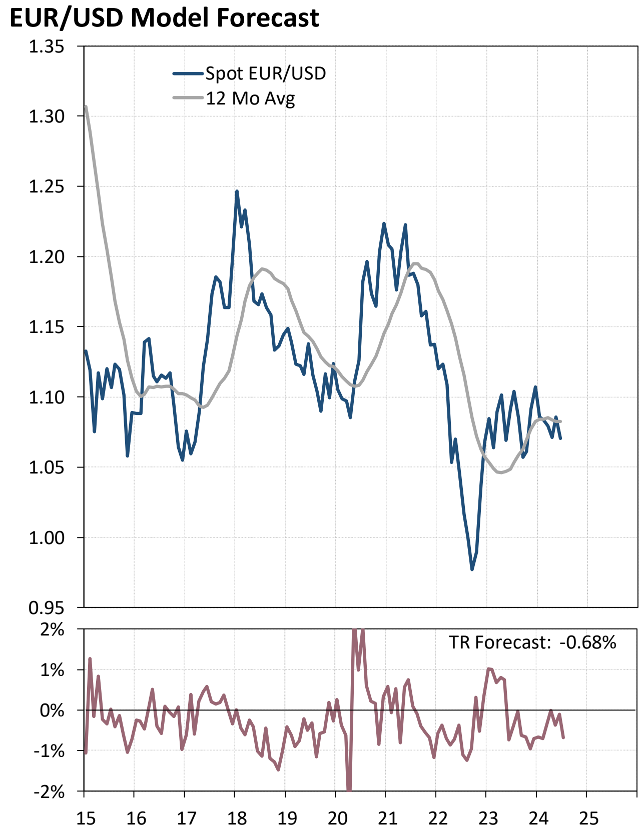
The Gamma EUR/USD Model remained SHORT the euro (long USD) for July (Chart 16). The Model has now been short the euro for 12 consecutive months as the dollar continues to hold a commanding advantage in interest rates, monetary policy, and economic growth. The EUR/USD exchange rate ended the month down -1.42% near the bottom end of the narrow 1.0500 to 1.1200 range that the exchange rate has traded in since the end of 2022.

Positive Dollar Factors

- **The U.S. dollar is likely to maintain its interest rate edge.** The European Central Bank (ECB) lowered interest rates by 25 basis points to 3.75% in June for the first time in nearly five years. ECB officials apparently remained confident that inflation would continue to converge to its 2% target. ECB President Christine Lagarde said there was a "strong likelihood" the decision marked the beginning of "dialing back" of rates from their all-time highs. "There was widespread agreement that we are on track to bring inflation down to our target, and confidence is growing in our forecasts that should allow us to keep bringing rates down," said another council member. The ECB predicted that inflation would average 2.5% in 2024, 2.2% in 2025, and 1.9% in 2026. The improving trend has allowed the ECB to focus on flagging growth. Real GDP has not grown above a 2.8% annual rate since IIQ 2021. Markets are now pricing in two additional 25 basis points rate cuts this year.

  In contrast, the Federal Reserve continues to be cautious on the timing of its next rate cut. According to the CME's FedWatch Tool, markets now expect the Fed to cut the Fed Funds rate by 25 basis points in September with a 70% probability. The result is that the dollar will retain an interest rate edge for the foreseeable future in both short-term and long-term rates (Chart 17)

Chart 16



- **Economic growth will continue to favor the dollar**. U.S. GDP growth dipped to a 1.6% annual rate in IQ2024, and the Atlanta Fed's GDPNow forecast calls for U.S. real GDP to grow at a solid 1.5% annual rate in the second quarter. This compares favorably to the Eurozone where early expectations of second quarter growth are 1.2%. U.S. growth has now exceeded Eurozone growth for seven consecutive quarters for a whopping cumulative 15%. Moreover, the OECD's leading indicator for the U.S. turned positive three months ago while the indicator for the major Eurozone economies are all still negative.

Neutral Dollar Factors

- **Relative inflation**. Eurozone inflation peaked at a 10.6% yr/yr rate in October 2022 and has since improved to a 2.3% rate. U.S. inflation as measured by the PCED peaked at a 7.1% yr/yr rate in June 2022 before declining to a 2.7% rate last month. The result is that Eurozone inflation has improved more rapidly than U.S. inflation, falling from 4.3% higher in October 2022 to -0.3% lower in June. Over the long term, the lower European inflation rate will help support the euro. In the short term, however, the relatively higher U.S inflation rate will cause the Fed to move more cautiously in cutting interest rates which will help support the dollar.

TABLE 3

VALUATION vs FORWARD RETURN ANALYSIS - ANNUALIZED RETURNS **Updated: 06/28/24**

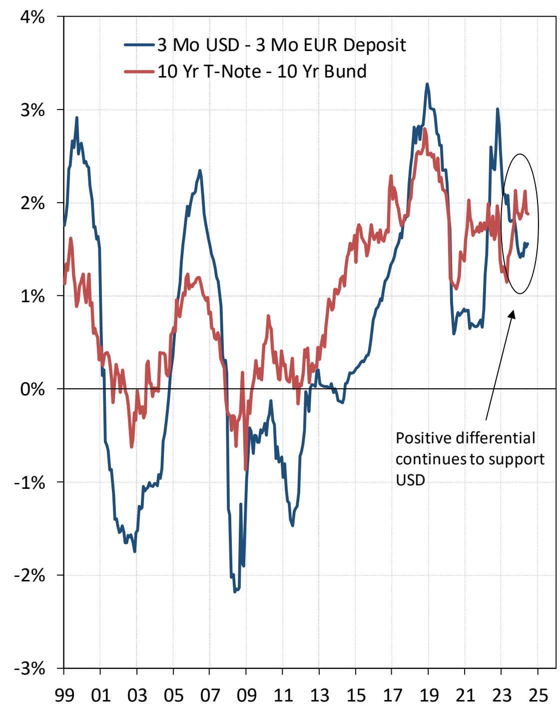
Country / Index	Valuation (σ)	Valuation (%)	Valuation-Based Forecast (Annualized, %) 1 Mo	3 Mo	6 Mo	1 Yr	2 Yr	3 Yr	5 Yr
S&P 1500	+2.09	+42%	-5.9%	-4.5%	-4.6%	-3.4%	-0.1%	2.4%	3.1%
S&P 500	+1.97	+42%	-1.9%	-1.9%	-2.0%	-0.9%	2.0%	4.0%	4.3%
Nasdaq	+1.91	+54%	-6.3%	-6.3%	-6.1%	-6.3%	-2.7%	0.7%	1.1%
S&P 600 Small Cap	+0.20	+3%	9.3%	9.2%	9.6%	10.0%	10.8%	11.1%	11.0%
Europe	-0.58	-13%	15.0%	14.8%	15.7%	15.6%	15.1%	14.5%	14.3%
Germany	-0.49	-11%	12.2%	12.1%	12.6%	12.6%	12.5%	12.3%	11.8%
France	+0.63	+13%	9.5%	9.4%	8.7%	9.3%	10.9%	11.9%	12.6%
Italy	-1.01	-25%	14.7%	14.5%	16.2%	17.5%	16.7%	15.2%	15.6%
Switzerland	-1.56	-31%	10.2%	10.1%	12.0%	11.5%	11.0%	10.7%	12.4%
UK	+0.43	+10%	10.0%	9.9%	9.7%	10.2%	11.8%	12.1%	12.6%

Negative Dollar Factors

- **European equities are still cheap relative to U.S. stocks.** U.S. stocks have hit valuation levels not seen since the dot com mania of the late 1990's. The S&P 1500 is 2.09 standard deviations overvalued while the S&P 500 and Nasdaq are over 1.90 standard deviations above fair value. **In contrast, the Stoxx 600 last month was -0.5 standard deviations below fair value (Table 3)**. Based on these valuation levels, the twelve-month outlook for U.S. stock calls for a -3.4% LOSS while the outlook for the Stoxx 600 calls for a 15.6% GAIN. The major factor preventing European stocks from providing additional support to the euro is the weak earnings of European stocks. While valuation is attractive relative to the U.S., U.S earnings have dramatically outperformed those of their European counterparts. Yr/yr earnings for the S&P 1500 were up 6.4% in June while earnings for the Stoxx 600 were still down -1.7%. It will likely take a combination of better relative value AND an improvement in relative earnings for European stocks to help support a sustained recovery in the euro.

Chart 17

USD-EUR Interest Rate Differentials



V. U.S. Stock Recommendations

Our recommended portfolio for June posted a 0.8% gain for the month, but this trailed the S&P 500 by 3.6%. June was the first month since February when the recommended portfolio lagged behind the S&P 500. First Solar (FSLR) continued to outperform by posting a 31.2% gain since it entered the portfolio at the end of March. Most of this return, however, was offset by a disastrous month for Albemarle Corp. (ALB) which was down a whopping -27.5% from its March purchase price (Table 4).

TABLE 3

GAMMA COMPANY MODEL - Recommended List — **As of: Jun 28, 2024**

Sector	Ticker	Entry Price	Closing Price 6.28.24	% Change	Trade Date	S&P 500 % Change	Excess Return
PALO ALTO NETWORKS	PANW	$310.55	$337.20	8.6%	2.29.24	7.2%	1.4%
ALBEMARLE CORP.	ALB	$131.74	$95.52	-27.5%	3.28.24	3.9%	-31.4%
FIRST SOLAR INC.	FSLR	$171.87	$225.46	31.2%	3.28.24	3.9%	27.3%
APA	APA	$30.53	$29.44	-3.6%	5.31.24	3.5%	-7.0%
ALLSTATE ORD SHS	ALL	$167.52	$159.66	-4.7%	5.31.24	3.5%	-8.2%
JM SMUCKER CO.	SJM	$109.04	$109.04	0.0%	6.28.24	0.0%	0.0%

The Gamma Company Model continues to recommend Albemarle Corp. despite last month's poor performance as the stock is now extremely undervalued relative to its fundamentals. The Gamma Company Model is also adding JM Smucker (SJM) to this month's recommended list.

JM Smucker Co. (SJM: $109.04) is engaged in the manufacturing and marketing of branded food and beverage products on a worldwide basis. The Company operates through four segments: U.S. Retail Coffee, U.S. Retail Frozen Handheld & Spreads, U.S. Retail Pet Foods, and Sweet Baked Snacks. Their product portfolio includes Folgers, Dunkin, and Café Bustelo branded coffee, Smucker's and Jiff, Meow Mix, Milk-Bone, Pup-Peroni, Hostess and Voortman.

- The company is the third-rated stock for July from our Gamma Company Model Forecast for the S&P 500 stocks, with a forecasted one-month price gain of +4.82% and a previous month (June) forecast price loss of -0.21%.
- Trades at a Forward P/E (NTM) of 11.2 and pays a dividend with a 3.89% yield.
- Analyst coverage: 17 analysts cover SJM, and the recommendations are 3 strong buys, 2 buys, 11 holds, and 1 underperform. The price target ranges from $114.00 - $140.00.
- Ariel Investments, an investment management company, in its "Ariel Focus Fund" Q1 2024 investment letter highlighted SJM. The letter stated: "We also repurchased former holding and leading manufacturer of consumer food products, The J. M. Smucker Company after the market reacted negatively to the company's recent acquisition of snack-maker Hostess. In our view, iconic brands produce consistent returns on stable consumer demand. After several years of inflationary pressures, SJM's disciplined management team has successfully been able to pass through higher pricing to cover increased costs. Meanwhile, SJM generates relatively high levels of free cash flow, which allows it to deploy cash between business growth initiatives (brand investment, business expansion, and M&A) and shareholder return programs (dividend increases and share repurchases)."
- Recent Q4 fiscal 2024 EPS beat expectations by 3.6% on higher volume/mix and net price realizations. These results reflect solid demand for its leading brands.
- Revenue is forecast to grow 4.3% on average during the next 3 years, compared to a 3.0% growth forecast for the Food industry in the US.

Source: CNBC

Albemarle Corp. (ALB: $95.52). We previously recommended this stock on 4.1.24 at a price of $131.74 due to perceived attractive valuation following the company's announced $2 billion equity offering and sluggish lithium prices. The company's stock price has since sold off 25.5% due to a further worsening in the price of lithium carbonate (having fallen to a four-month low) as well as company executives stating that at this price level, current prices do not justify new plant investments. The Gamma Company Model continues to recommend the stock due to even better valuation after the recent selloff.

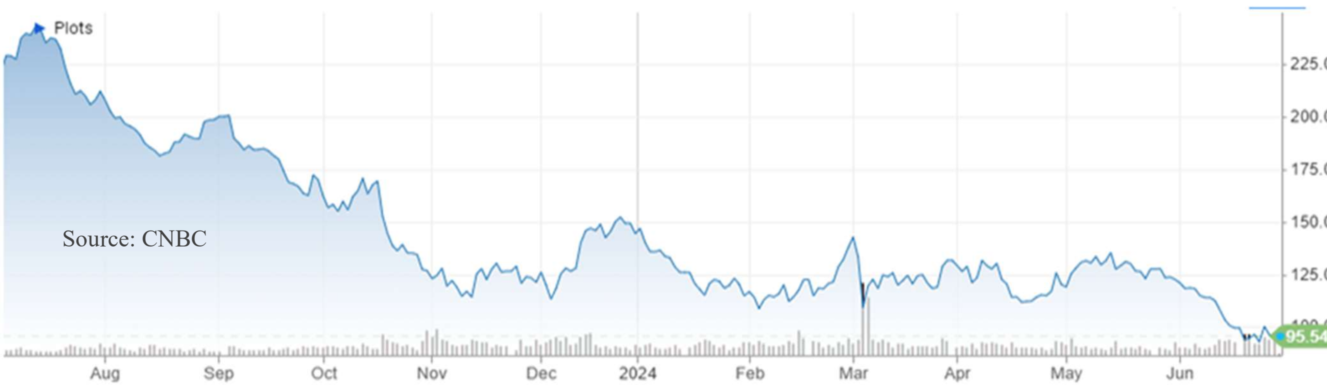
- ALB is the second-rated stock for July from our Gamma Company Model Forecast for the S&P 500 stocks with a forecasted one-month price gain of +6.00% and following a previous month (June) forecast loss of -0.51%.
- Trades at a Forward P/E (NTM) of 18.1 with a dividend yield of 1.69%.
- Analyst coverage: 28 analysts cover ALB and the recommendations are 6 strong buys, 10 buys, 10 holds and 2 underperforms. The price target ranges from $81.00 - $216.00.
- While we believe that this has been largely priced into the company's stock price, the major risk continues to be the pricing downdraft in lithium prices arising from China's now rationalized overbuild of downstream automotive OEM and/or battery and/or cell capacity.

From our previous Report on ALB released on April 1, 2024:

Albemarle Corp. is the world's largest lithium producer. It is engaged in the development, manufacturing, and marketing of essential resources into critical ingredients for consumer electronics, petroleum refinancing, utilities, packaging, construction, transportation, pharmaceuticals, crop production, food-safety and custom chemistry services. The Company is a global developer, manufacturer, and marketer of specialty chemicals including lithium carbonate, lithium hydroxide, and lithium chloride. Its Specialties business optimizes its portfolio of bromine and highly specialized lithium solutions serving a variety of industries, including energy, mobility, connectivity, and health. Specialty products are essential in both internal combustion and electric vehicles, high-voltage cables, powertrains, airbags, and tires.

- According to Benchmark Minerals, Albemarle's auction of 10k MT of spodumene concentrate had a winning bid of approximately $1,300/metric ton, which compared favorably to "spot prices" as low as $950/ton.
- Over the last 5 years, ALB managed to increase EPS by 16% a year.
- The company has strategic partnerships with Ford, Tesla and BMW and produces lithium for flame-retardant products, petroleum refining and lubricants.
- It owns two segments, production and energy storage, permitting it to leverage vertical integration.

- Albemarle has plans to expand its existing asset base including commissioning a lithium conversion facility in Meishan, China (capacity of 50k tons of lithium hydroxide per.) This provides ALB additional capacity and access to China's high-growth electric vehicle (EV) market.
- Albemarle trades at just 1.4 times sales as lithium stocks have seen mines close with reduced production.



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 fund. 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 Busi-ness. He graduated magna cum laude from Manhattan College, with a BS BA in Economics and is Series 7 and 63 registered.

Gamma Macro Model Forecasts for July 2024

1 MONTH STOCK INDEX MODEL FORECASTS (%)

Country	Stock Index	Price	1 Mo Forecast	Previous Forecast	Position	Trade	Updated
USA	S&P 500	5,482.87	0.00%	-0.07%	Neutral	Cover Short	6/28/24
USA	Nasdaq	17,994.92	+0.36%	+0.35%	Long	Hold	6/28/24
USA	Russell 2000	2,054.27	0.00%	0.00%	Neutral	Hold	6/28/24
Canada	S&P/TSX 60	1,312.14	0.00%	0.00%	Neutral	Hold	6/28/24
Mexico	IPC	52,403.67	+0.01%	0.00%	Long	Buy	6/28/24
Brazil	Bovespa	123,807.59	0.00%	0.00%	Neutral	Hold	6/28/24
Japan	TOPIX	2,809.63	+1.20%	+0.83%	Long	Hold	6/28/24
China	Hang Seng CEI	6,331.86	+0.88%	+1.08%	Long	Hold	6/28/24
Hong Kong	Hang Seng	18,292.63	0.00%	0.00%	Neutral	Hold	6/28/24
S. Korea	KOSPI	2,797.82	+0.07%	0.00%	Long	Buy	6/28/24
India	Nifty 500	22,559.70	+0.64%	+0.24%	Long	Hold	6/28/24
Australia	S&P/ASX 200	7,767.50	0.00%	0.00%	Neutral	Hold	6/28/24
Europe	STOXX 600	512.98	0.00%	0.00%	Neutral	Hold	6/28/24
UK	FTSE 100	8,196.50	+0.75%	+0.68%	Long	Hold	6/28/24
Germany	DAX	18,292.63	0.00%	0.00%	Neutral	Hold	6/28/24
France	CAC 40	7,493.03	0.00%	0.00%	Neutral	Hold	6/28/24
Italy	FTSE/MIB 30	33,184.04	0.00%	0.00%	Neutral	Hold	6/28/24
Switzerland	Swiss Market	12,022.74	+0.32%	+0.91%	Long	Hold	6/28/24
Russia	RTS 50	1,137.45	0.00%	0.00%	Neutral	Hold	6/28/24
S. Africa	FTSE/JSE 40	73,077.47	+0.64%	+1.00%	Long	Hold	6/28/24

1 MONTH FIXED INCOME MODEL PRICE CHANGE FORECASTS (%)

Country	Debt Instrument	Current Yield (%)	Price Change Forecasts (%) 1 Month	Previous	Bond Position	Trade	Updated
USA	2 Yr T-Note	4.69	-0.06%	-0.18%	Short	Hold	6/28/24
USA	5 Yr T-Note	4.29	-0.09%	-0.25%	Short	Hold	6/28/24
USA	10 Yr T-Note	4.30	-0.08%	-0.33%	Short	Hold	6/28/24
USA	30 Yr T-Note	4.46	-0.07%	-0.50%	Short	Hold	6/28/24
USA	IG Corporate	5.50	0.00%	0.00%	Neutral	Hold	6/28/24
USA	HY Corporate	8.02	0.00%	0.00%	Neutral	Hold	6/28/24
Canada	10 Yr Govt	3.46	-0.03%	-0.16%	Short	Hold	6/28/24
Mexico	10 Yr Cetes	9.90	0.00%	0.00%	Neutral	Hold	6/28/24
Brazil	10 Yr Govt	12.25	-0.41%	0.00%	Short	Sell	6/28/24
Japan	10 Yr JGB	1.05	0.00%	0.00%	Neutral	Hold	6/28/24
Australia	10 Yr Govt	4.34	-0.05%	-0.15%	Short	Hold	6/28/24
S. Korea	10 Yr Govt	3.28	-0.08%	-0.09%	Short	Hold	6/28/24
China	10 Yr Govt	2.21	0.00%	-0.05%	Neutral	Cover Short	6/28/24
India	10 Yr Govt	7.01	0.00%	0.00%	Neutral	Hold	6/28/24
Germany	10 Yr Bund	2.47	-0.00%	-0.46%	Short	Hold	6/28/24
France	10 Yr OAT	3.30	-0.20%	-0.22%	Short	Hold	6/28/24
Italy	10 Yr BTP	4.07	-0.25%	-0.28%	Short	Hold	6/28/24
Switzerland	10 Yr Conf	0.54	0.00%	-0.10%	Neutral	Cover Short	6/28/24
UK	15 Yr Gilt	4.41	-0.08%	-0.19%	Short	Hold	6/28/24
Russia	10 Yr Govt	15.13	0.00%	0.00%	Neutral	Hold	6/28/24
S. Africa	10 Yr Govt	10.00	0.00%	-0.14%	Neutral	Cover Short	6/28/24

Gamma Macro Model Forecasts for July 2024

1 MONTH FX MODEL FORECASTS (%)

Currency	Spot FX Rate	1 Mo Forecast	Previous Forecast	Position	Trade	Updated
EUR/USD	1.0705	-0.68%	-0.11%	Short	Hold	6/28/24
GBP/USD	1.2633	-0.14%	+0.22%	Short	Cover Long & Sell	6/28/24
USD/CHF	0.9003	+0.74%	+0.22%	Long	Hold	6/28/24
USD/NOK	10.6616	+0.63%	+0.20%	Long	Hold	6/28/24
USD/SEK	10.6047	+0.66%	-0.05%	Long	Cover Short & Buy	6/28/24
USD/JPY	160.59	0.00%	0.00%	Neutral	Hold	6/28/24
AUD/USD	0.6671	-0.31%	+0.01%	Short	Cover Long & Sell	6/28/24
NZD/USD	0.6094	-0.44%	+0.14%	Short	Cover Long & Sell	6/28/24
USD/KRW	1,378.04	+0.23%	+0.24%	Long	Hold	6/28/24
USD/CNY	7.2657	+0.35%	+0.34%	Long	Hold	6/28/24
USD/INR	83.35	-0.31%	+0.07%	Short	Cover Long & Sell	6/28/24
USD/SGD	1.3556	+0.16%	+0.09%	Long	Hold	6/28/24
USD/CAD	1.3703	+0.22%	+0.06%	Long	Hold	6/28/24
USD/BRL	5.5594	0.00%	0.00%	Neutral	Hold	6/28/24
USD/MXN	18.26	0.00%	0.00%	Neutral	Hold	6/28/24
USD/RUB	86.25	-0.99%	-1.88%	Short	Hold	6/28/24
USD/ZAR	18.22	+0.34%	-0.23%	Long	Cover Short & Buy	6/28/24
BTC/USD	60,804	-4.53%	+2.69%	Short	Cover Long & Sell	6/28/24

1 MONTH COMMODITY PRICE FORECASTS (%)

Commodity	Cash / Futures Price ($)	1 Month Forecast	Previous Forecast	Position	Trade	Updated
Gold	$2,324.35	+0.32%	+0.64%	Long	Hold	6/28/24
Silver	$29.17	+0.10%	0.00%	Long	Buy	6/28/24
Platinum	$1,002.88	+0.22%	0.00%	Long	Buy	6/28/24
Palladium	$967.04	+0.17%	0.00%	Long	Buy	6/28/24
Aluminum	$2,447.97	0.00%	+0.85%	Neutral	Cover Long	6/28/24
Copper	$9,372.07	0.00%	+0.13%	Neutral	Cover Long	6/28/24
Lead	$2,129.82	0.00%	+1.06%	Neutral	Cover Long	6/28/24
Nickel	$16,843.60	0.00%	+1.28%	Neutral	Cover Long	6/28/24
Tin	$31,955.00	+0.69%	+1.13%	Long	Hold	6/28/24
Zinc	$2,872.16	+0.48%	+1.27%	Long	Hold	6/28/24
LME COMPOSITE	---	0.00%	+0.73%	Neutral	Cover Long	6/28/24
WTI Crude Oil	$79.41	0.00%	+1.33%	Neutral	Cover Long	6/14/24
HH Natural Gas	$2.730	0.00%	0.00%	Neutral	Hold	6/20/24

GAMMA COMPANY MODEL - Recommended List

As of: Jun 28, 2024

Sector	Ticker	Entry Price	Closing Price 6.28.24	% Change	Trade Date
PALO ALTO NETWORKS	PANW	$310.55	$337.20	8.6%	2.29.24
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FIRST SOLAR INC.	FSLR	$171.87	$225.46	31.2%	3.28.24
APA	APA	$30.53	$29.44	-3.6%	5.31.24
ALLSTATE ORD SHS	ALL	$167.52	$159.66	-4.7%	5.31.24
JM SMUCKER CO.	SJM	$109.04	$109.04	0.0%	6.28.24

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