

An aerial photograph of a dense forest. A curved, light-colored road or path runs horizontally across the middle of the image, separating two different types of trees. The trees above the road are taller and more varied in color, while the trees below are shorter and more uniform in color.

INVESTMENT STRATEGY GROUP

OUTLOOK 2024

JANNEY MONTGOMERY SCOTT LLC

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PHASE TRANSITION

Phase transition describes a change in the state of an object, such as water going from stasis to boiling once the temperature reaches 212 degrees F, or conversely, freezes at 32 degrees F. Outlook 2024 is about an economic phase transition. After a year of posting positive and surprisingly strong growth, the question is whether, metaphorically speaking, inflation's falling temperature and the Federal Reserve's rising temperature will change its state. Could the economy continue to expand, averting a recession, and perhaps even overheat should inflation reignite? Or will the economy slow and even contract as the yoke of high borrowing costs and shrinking savings bears too much weight for the consumer and businesses to carry?

There is even a theory developing that productivity, often quoted but difficult to see and measure, may be the elixir to rescue the economy from a growth-sapping policy of maintaining a tight monetary setting until inflation is ameliorated. That is, even if it comes at the cost of job losses and an accompanying recession. The latest report on that front did hint at such an outcome, giving hope that an upshift in the output/worker will help cure inflation without the need for further heavy-handed monetary intervention. It may be too soon to tell, but the means by which it could happen, via the application and ubiquitous adoption of artificial intelligence, robotics, and various other forms of automation, are among those things that could be the catalyst.

Outlook 2024 establishes a central case with the acknowledgment that new data will be parsed in the coming months that might provide even better clarity as to which phase transition outcome is increasingly likely. In the meantime, also presented are the investment implications to peruse and consider in the context of an investor's bespoke goals and objectives.



OUTLOOK 2024

OVERVIEW

Outlook 2024 offers the Janney Investment Strategy Group's baseline prognostications for the economy, the equity and fixed-income markets, their evolution, and investment implications in the New Year.

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- The economy begins the year carrying a lot of positive momentum built on healthy consumer spending and the dissipation of supply chain distortions. Those benefits will not repeat with the same strength in 2024.
- The pace of economic growth downshifts, and a mild recession ensues. The absence of the pre-conditions for it to be deep or protracted means the transition to recovery should be brief.
- Consumer finances are generally sound with wage gains now accruing above the rate of inflation. Relatively low debt services costs have helped household budgets manage the inflation-boosted cost of living.
- Businesses have maintained profit margins at a high level in spite of labor expense increases due to stout pricing power. That may ebb as nominal economic growth slows forcing companies to cool on employment.
- Corporate earnings estimates may have to be reset if the economy experiences a dip, but not so much as to degrade their prospects for growth. A year-over-year gain is expected.
- The aversion of a recession, or at worst a very shallow and brief one, should support higher stock prices. Investors may find rotating to economically-sensitive areas of the market, cyclical and small caps, fertile ground.
- Oil and base metal commodities should gain, given that tight supplies will underpin prices. The prospects improve exponentially if China takes measured steps to stimulate its economy.
- The fluidity of the geopolitical tensions in the Middle East, Eastern Europe, and China, creates an unusual degree of uncertainty. Any could induce a positive/negative market response.

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- The economic outlook is split between a probable "normal" end-of-cycle economic slowdown and an improbable (but increasingly possible) productivity boom. Contemporaneous data are inconsistent with historical experience, making it hard to rely on the economic outlook for duration decisions.
- Prominence of momentum-based trading strategies coupled with low willingness of dealers to intermediate Treasury markets will continue to produce unusually large monthly swings in interest rates. Given the uncertainty and large swings, we prefer a conservative, reactive approach instead of a proactive one.
- We anticipate the yield curve will steepen in 2024, with the spread between the 2-year and 10-year Treasury returning to positive territory and the term premium increasing alongside of elevated U.S. Treasury issuance.
- While credit fundamentals in investment grade (IG) and high-yield (HY) markets have deteriorated slightly, conditions remain generally constructive. Pricing is moderately expensive with spreads in both sectors below their long-term averages, leaving us neutral on IG credit but slightly more positive on HY.
- Municipal markets are very sensitive to supply, and changes there have created big moves in the muni products relative value. Much like IG, credit fundamentals are solid, but pricing is higher than average, which leaves us neutral on the municipal markets as well.

ECONOMY & EQUITY MARKETS



MARK LUSCHINI, CMT
Chief Investment Strategist

President and Chief Investment Officer, Janney Capital Management

Mark Luschini serves as Janney's Chief Investment Strategist and leads the Investment Strategy Group, which sets the firm's view on macroeconomics, as well as the equity and fixed income markets. In addition, Mark is the President and Chief Investment Officer of Janney Capital Management (JCM), the asset management subsidiary of Janney Montgomery Scott. Under his leadership, JCM has delivered competitive results across its suite of investment strategies and grown its assets under management to more than \$3.5 billion.

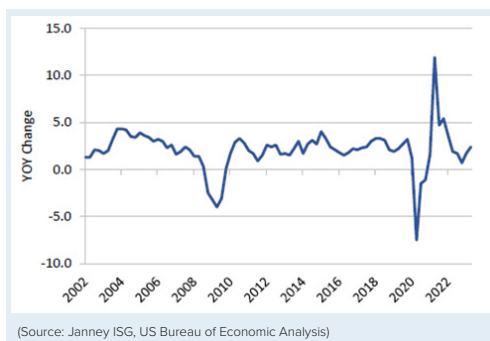
Mark has spent more than thirty years in the investment industry. He draws on that experience to speak on topics related to macroeconomics and the financial markets at seminars, client events and conferences. He is frequently quoted in publications ranging from the Wall Street Journal and Barron's to the New York Times and USA Today. In addition, he regularly appears in various media outlets including CNBC, Fox Business News, and Bloomberg Television and Radio. He has an undergraduate degree in Psychology and an MBA in Finance from Gannon University and holds the Chartered Market Technician (CMT) designation from the Market Technicians Association.

The U.S. economy's resilience to elevated inflation and tightening monetary conditions is a demonstration of the underlying strength in household consumption. The excess savings accumulated during the pandemic and a tight labor market conspired to produce a thrust in consumer spending that remains stout.

Ultimately, the exhaustion of those ample resources will be the test of the sustainability of this expansion. For now, even as job growth and wage gains are slowing, and the abundant level of savings is shrinking, there remains evidence that was once an imminent threat of a recession caused by a weakening demand impulse, has at the very least, been postponed. Still, we acknowledge the very real threat that a contraction in economic activity could occur in 2024, since the Federal Reserve (Fed)'s practice of restricting money flow through rate increases to thwart inflation has, if history is a guide, a slim chance of being successful in the avoidance of one.

The resilience of the U.S. economy is remarkable. Despite inflation still running around 3%, and the Fed raising rates at an almost unprecedented clip, it has remained quite strong. As recently as the third quarter, the reported growth rate was a steamy 5.2% annualized. That may be the high-water mark, so some loss of momentum is to be expected. However, estimates of growth for the fourth quarter are still hovering around 2%, giving reason to believe that the fundamental underpinnings are in place to propel the expansion through year-end and well into the New Year.

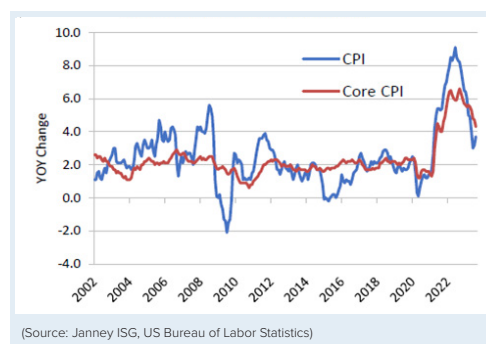
Chart 1: US GDP



After peaking at 9.1% in June of 2022, inflation has declined consistently and is now nearing 3%. Importantly, extrapolating

from the most recent three-month trailing reading produces an annualized rate even closer to the Fed's stated target of 2%. Monetary officials are now optimistic about their victory over inflation and considering rate cuts in 2024 based on their comments at the recent December FOMC meeting. To be sure, they want to retain maximum optionality in the event that inflation flatlines above their target or turns higher, which might invite another rate hike. Since the federal funds interest rate, the primary albeit blunt tool used by the Fed to act as a governor for slowing or speeding up the economy, is already deemed to be sufficiently tight to reduce inflation and the demand associated with priming it, further rate hikes would only increase the likelihood of overtightening and, commensurately with it, a higher risk of a Fed-induced recession.

Chart 2: Consumer Price Index vs Core CPI



The consumer remains key to determining whether concerns raised by some about an imminent recession are justified. Consumption drives almost 70% of the economic activity in the U.S., therefore households' propensity to spend is an important gauge when forecasting the prospects for the economy. The strength in the labor market has clearly been the principal support for consumers' willingness to spend. The job market has begun to cool somewhat. The unemployment rate has

risen from a 50-year low of 3.4%, but not so much as to be worrisome. In addition, the monthly Job Openings and Labor Turnover Survey (JOLTS) has shown in recent months that the number of unfilled job openings has fallen by several million, and yet there are still more jobs open than those who are unemployed.

Chart 3: US Unemployment Rate



(Source: Janney ISG, Bloomberg)

Chart 4: JOLTS



(Source: Janney ISG, US Bureau of Labor Statistics)

Household income statements have benefited from wage gains that, due to falling inflation, are now positive, even after adjusting for prices. The Atlanta Federal Reserve Wage Growth tracker is showing annual gains of more than 5% for all workers, and while decelerating, it is still above pre-pandemic levels. In addition, household balance sheets are quite healthy. Household net worth is \$151 trillion, near its all-time high, boosted by increases in the values of homes and financial assets. That is up more than 5% from a year ago and helping to produce the “wealth effect,” which is the correlation between spending and one’s overall wealth. While not one-for-one, some estimates suggest every dollar increase in net worth translates into 5-10 cents of incremental spending.

Chart 5: US Household Net Worth (Nominal USD)



(Source: Janney ISG, Federal Reserve)

The liability side of households’ balance sheets looks reasonably healthy as well. The service cost to support the amount of household indebtedness has risen, but only to pre-pandemic levels, and is still near the lowest in a decade. However, while not yet troubling, the pattern of rising delinquencies on auto loans and credit card debt bears watching. Further deterioration in these readings could imply that consumers are increasingly stretched and are likely to postpone purchases. With tightening credit availability, evidenced by the Fed’s Senior Loan Officer survey reporting a more restrictive lending environment by the preponderance of banking officers, the fuel for household consumption may be getting tapped.

Chart 6: US Household Debt Service Ratio



(Source: Janney ISG, US Census Bureau)

Aggregate Weekly Payrolls, a figure not often talked about, is the combination of employment, hours worked, and earnings. It provides an insightful guide on the overall, or aggregate, spending capability generated strictly from employment. Derived from the monthly release on jobs from the Bureau of Labor Statistics, the recent report shows a 5.0% yearly gain, slightly above the pre-COVID, decade-long trend. This, of course, was

the principal support for the longest economic expansion in U.S. history, almost 11 years in length. Therefore, income generation, rather than pent-up savings and fiscal transfers, will have to be the primary driver for this expansion to continue. On that front, the above-trend pace in place at the moment is good news.

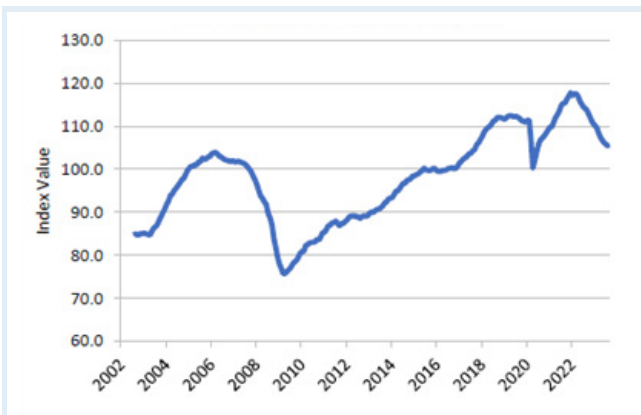
Chart 7: US Personal Consumption



(Source: Janney ISG, BEA)

Of course, a phase transition can occur quite subtly. Moving from expansion to contraction does not happen overnight, but there have been indications for some time that fissures were emerging. A broad measure of economic activity is the Conference Board's Leading Economic Indicator (LEI). It is comprised of 10 components such as employment, manufacturing, housing activity, stock prices, credit conditions, consumer sentiment, and interest rates. It has declined for 19 months in a row and stands at a reading of -7.6%, a figure that in the past, would be deeply into recession territory.

Chart 8: US Leading Economic Index (LEI)



(Source: Janney ISG, Conference Board)

To be sure, "nothing is certain except death and taxes," one might muse, but the LEI has had very high predictive value in the past, so it is noteworthy. There could be extenuating circumstances that have reduced the efficacy of this historically reliable signal. One could

argue manufacturing has been in a mini-recession for quite some time. Obviously, this sector of the economy is very cyclical, and also benefited mightily from the burst in spending in the early days of the pandemic when lockdowns prevented trafficking in service-related businesses geared toward travel, leisure, and entertainment. Therefore, some of the weakness seen by the Institute for Supply Management Purchase Managers' Index (ISM PMI) for manufacturing could just be payback where a period of overspending on goods, i.e. apparel, furnishings, sporting items, computer equipment, etc., is now being directed toward travel, restaurants, concerts (read: Taylor Swift), and other experiences. However, the fact that this gauge just posted its 13th consecutive month below 50, a line that depicts the difference between expanding (>50) and contracting activity (<50), illustrates an unusually sluggish pace. Manufacturing represents less than 12% of domestic output, and yet it hosts the highest-paying jobs, plus the residual impact to other industries is material. Also, consumer confidence is low, but the adage "watch what they do, not what they say" comes to mind since retail sales activity has been quite robust.

Chart 9: ISM Manufacturing Index



(Source: Janney ISG, ISM)

Given the current strength of the labor market, the lack of excess leverage in the private sector, and the well-endowed state of the consumer, barring an unforeseen spark of geopolitical agitation, we expect positive economic conditions to persist into early 2024. However, were a mild recession to develop in the New Year, a prospect that seems likely in our view, it may only be a brief downturn before resuming a new economic expansion.

RISKS

Carrying over from the previous years, unfortunately, is the ongoing conflict in Eastern Europe. Added to that is the outbreak in the Middle East, which could metastasize into a larger confrontation. Of course, there remains the simmering tensions between China and the U.S., especially around the state of Taiwan. Global uncertainty has risen, and any of these risks could devolve into an economic calamity that is more than regionalized.

The impact on financial markets has been more fleeting, but just one or two turns from the current stasis could embroil investor sentiment quickly.

INVESTMENT IMPLICATIONS

The following outline demonstrates how we would express our central thesis that the U.S. economy may experience a mild recession in which demand slips as unemployment rises modestly, but inflation continues to subside. We also assume The Fed's hawkish narrative has already shifted to a more balanced stance and hold rates steady until such time it is confident it has ameliorated inflation, or the economy suffers a sharp setback. Likely, in our view, the Federal Reserve, before year-end, will take steps to lower rates to reinvigorate flagging economic activity. Subsequently, a recovery in economic growth will ensue that may not be vigorous but still sufficient to restart an extended expansion.

Overseas, the growth driver will be hinged on China's effort to stabilize growth at or near its soft target of 5% annualized GDP via additional stimulative measures. So far, the actions taken by the government have been relatively timid and have failed to meaningfully reflate activity. In the meantime, Europe is struggling to avoid a recession and needs a stronger global background to support its industrialized and export-driven economy. While the cycle of more than half the world's central banks tightening has seemingly passed, conditions have not yet warranted a shift to rapidly lowering rates, leaving tight monetary conditions almost ubiquitous on a global basis and especially true for the systemically important institutions such as the U.S. Federal Reserve, the European Central Bank, and the Bank of England. Only the Bank of Japan has remained exceedingly accommodative with its monetary setting in an effort to foster growth and defend the country from falling back into a deflationary spiral. However, that is likely to change early in 2024 since inflation has been consistently operating at a level well above its target of 2%. The second consecutive year of the annual "shunto" wage negotiations should lead to another significant hike in the wage scale. If that comes to pass, we expect the Japanese central bank to begin a process of tightening financial conditions. Since that is likely to occur while others are loosening theirs, the Yen currency could mount a sustained advance.

While U.S. equities have enjoyed more than a decade of outperformance vis a vis their global brethren, that is unlikely to change if the weakness in growth we foresee develops. We will be looking for an opportunity to reposition for a cyclical shift in that view, by allocating capital into overseas markets when global growth appears poised to improve. Valuations are compellingly inexpensive but the catalyst to unlock their potential is a reflationary backdrop in which the U.S. dollar weakens concurrent with a brightening international earnings picture. That prospect may develop in the latter part of next year.

- **Global Equity Markets** — U.S. equities may be largely range-bound until it becomes clear that the aversion of a recession is highly probable, or the economy merely succumbs to a brief interlude of contractionary activity. If past Presidential cycles are an analog, then a rally in the second half of 2024 may occur, which could coincide with market participants anticipating the end of a mid-year economic downturn should there be one.

Foreign markets are generally more industry-heavy, or tech-light put another way, and thus more cyclical in nature. If global activity turns up as central banks begin to adopt an easier, more stimulative monetary stance, then international equities, particularly emerging market bourses, could offer appeal. Markets such as Europe, Japan, India, and LATAM countries, such as Mexico and Brazil, are attractive.

- **Sectors** — The quality companies found in Technology, Communications, and Consumer Discretionary should continue to be well supported. Certain facets of the Industrial and Materials sectors may benefit from the ramp-up of fiscal spending directed at reshoring industries and domestic chip/semiconductor development. Energy, for its idiosyncratic issues of deliberate supply constraints and possible shipping distortions, is a favored cyclical sector. Thematic areas of interest include defense companies, cybersecurity, artificial intelligence, robotics, and genomics.
- **Commodities** — Demand for commodities is likely to wane in an economic slowdown. However, should that occur, lower prices will ultimately breed higher prices as already strained capacity across many areas of the commodity complex tightens further as demand improves. Inventories in copper and other rare earth ingredients are already in deficit and there are a limited number of scalable projects to improve production in the pipeline. Industrial metals should benefit from fiscal expenditures both here and abroad on infrastructure, decarbonization, and electrification. Used as a hedge in a diversified portfolio, precious metals, namely gold but also its counterpart silver to a lesser degree, may be used in part to address the risk of a geopolitical or economic shock.

VARIOUS ECONOMIC SCENARIOS AND PROBABLE OUTCOMES

Our prognostication for the U.S. stock market's path forward includes three potential outcomes that emanate from various economic scenarios that could unfold, with a probability assigned to each. In preview, we see a path for a bullish view to be validated over the course of the year, even as we may encounter some downside in equity prices that could test that assumption within the forecast window. To be sure, our confidence interval between the bull and the bear case is wide, given the kinetic monetary, economic, and geopolitical circumstances we foresee in 2024.

Scenario 1: The Fed Sticks It

Inflation recedes without the need for further intervention by the Federal Reserve. The economy slows, but employment remains reasonably healthy. Monetary officials acknowledge the likelihood that their efforts have successfully thwarted inflation and implicit in their remarks is the prospect for a period of rate reductions. Interest rates glide lower, and households benefit from a boost in real discretionary incomes. Although the U.S. economy does not reaccelerate immediately, the Fed engineers the unlikely, and a recession is averted. Corporate margins hold steady, and profit growth estimates are guided higher. Cash yields decline modestly; bond prices produce only modest gains as the odds of cuts are already priced in. Market participants bid stocks higher, and sector leadership broadens to include cyclicals such as industrials, financials, materials, and small caps. This development occurs while the global backdrop begins to improve, giving commodities a boost. The S&P advances on rising earnings estimates and an expanding multiple to reach 5,200.

Probability: 25%

Scenario 2: Did You Feel It?

The downshift in economic activity caused by high borrowing costs, exhausted excess savings, a modest rise in unemployment, and frugal consumption, ultimately leads to a mild recession. The absence of significant leverage in businesses or households suggests a lengthy and deep unwinding process need not be undertaken to purge imbalances, therefore, it may be seen in the statistics more than on Main Street. In fact, nominal GDP could remain positive while real GDP (the figure most often quoted publicly) dips below zero for a short time. Inflation approaches the zone for the Federal Reserve to gain comfort, and it begins to reduce interest rates, albeit glacially, so cash yields remain elevated for the better part of the year. Bond prices drift higher as yields fall, but returns are just marginally better than coupon. The somewhat shallow economic dip enables companies to continue to post profits but well short of the current estimates for double-digit year-over-year growth. The S&P 500 encounters some setbacks, plus the 4th year of a Presidential term usually produces mediocre results, yet the market overtakes its January 2022 peak and hits 4,900.

Probability: 65% (our Base Case)

Scenario 3: Should Have Known

Inflation creeps slowly lower, but the Federal Reserve refuses to cut rates believing it must vanquish any risk that consumer inflation expectations become unanchored. In keeping rates elevated, borrowing costs remain high, lending activity slows, demand is cramped, and businesses begin to shed workers to stave off a meaningful decline in profits. Unemployment rises by 2% or more, a typical increase in most recessions, and because consumers see steep job losses occurring, they retrench, removing the spending impulse that is so important to economic vitality. The economy contracts for a protracted period causing monetary officials to ease policy rates. While a recovery eventually ensues, the decline in corporate profits, and de-rating in stock valuations to reflect it, causes stocks to fall near recent cycle lows. Commodity prices weaken, cash yields move lower as the Fed begins to slash short-term rates, but high-quality bonds produce outstanding results. The S&P 500 dips below 3,800.

Probability: 10%

BOTTOM LINE: ENSEMBLE FORECAST

Weighting the probabilities around three different but plausible scenarios, we look for the S&P 500 Index to reach a level of 4,865. While we lean into a more favorable outcome than the point target produced by this ensemble, we remain alert for signs that the non-trivial potential for our bearish case being realized (10% chance) is increasingly likely.

FIXED INCOME & INTEREST RATES



GUY LEBAS, CFA®
Chief Fixed Income Strategist

Director of Custom Fixed Income Solutions, Janney Capital Management

Guy LeBas is responsible for providing direction to the firm's clients on the macroeconomic, interest rate, and bond market investing climate.

Guy authors bond market periodicals which provide relative value recommendations across the fixed income spectrum. Bloomberg named him the most-accurate forecaster of the Treasuries market in 2015 and previously recognized him as a "Bloomberg Best" for his work in bond market forecasting.

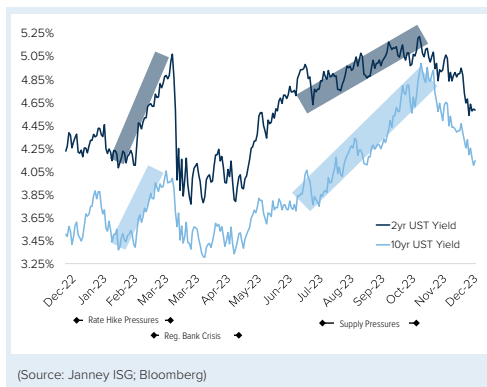
Prior to joining Janney in 2006, Guy served as Interest Rate Risk Manager for U.S. Trust's bank asset and liability portfolios, a role in which he oversaw risk and return on an \$11 billion balance sheet. He received his education from Swarthmore College and is a CFA Charterholder.

In 2023, the U.S. bond markets faced a more complex landscape than at any point in memory.

The year began with focus still on the Federal Reserve tightening cycle, unsurprising given concerns about inflation and economic growth. March brought a rate-related crisis in the regional banking industry, and the Fed shifted to a more cautious approach, aiming for gradual rate increases to balance inflationary pressures without stifling economic recovery. Summer introduced relative calm before Treasury supply concerns dominated fall trading. Finally, November included a "buy everything" rally which reversed much of the supply-driven pressures on interest rates.

Through it all, the markets experienced trending regimes rather than choppy ones, though none lasted for more than about eight weeks. These trading regimes, particularly those later in the year, had little to do with economic fundamentals and more to do with supply and positioning.

Chart 10: Interest Rate Markets Faced Multiple Selloff Regimes in 2023



(Source: Janney ISG; Bloomberg)

INTEREST RATE MARKETS

Janney ISG's market framework generally begins with an economic outlook, which has been particularly challenging to handicap over the last twelve months. Thanks to post-pandemic economic volatility, we are decidedly out-of-sample versus historical experience. As a result, the economic outlook is very much cloudy, and a good dose of common sense is probably worth more than

probability-based models which rely on history for inputs. Most likely, the U.S. will face a garden-variety slowdown in mid-to-late 2024 and perhaps a mild recession brought about by stagnant consumer spending, a waning fiscal impulse, and deteriorating non-residential construction outlays. That story is not an especially interesting one and has played out regularly across the dozen or so economic cycles in contemporary experience. In that scenario, the Fed is will end up cutting interest rates 200 basis points by year-end 2024, and longer-term yields will end in the mid-3% range. If we get a garden-variety economic slowdown, we expect the curve to steepen as front-end rates decline at a faster pace than longer rates.

The alternative is less likely, though more interesting for both the economy and financial markets. Periodically, the U.S. goes through productivity booms, a rapid and sustained increase in the output of goods and services per unit of input. During such a boom, businesses adopt new technologies, streamline processes, and enhance the skills of their workforce, leading to higher output without a proportional increase in inputs. This phenomenon can fuel economic growth, as higher productivity can result in increased profits, higher wages, and potentially lower prices for consumers. The 2023 data—namely economic growth that is "too fast" for the level of labor market growth—suggest an above-normal chance we are on the verge of such a productivity boom. Realistically, there's no way to be more than 1-in-4 chance confident such a boom is emerging, but if it is, there are strong implications for financial markets.

Typically, in productivity booms, the yield curve's term premium increases. The term premium is a concept which describes the extra yield that investors demand for holding longer-term bonds relative to the expected path of overnight interest rates. While term premia have been out of the spotlight from 2008–2023, they are an increasingly important determinant of long-term interest rates in an environment in which the Fed is

neither hiking nor cutting. Historically, during productivity booms, the term premium has increased, causing the yield curve to steepen even without changes in the expected path of Fed policy.

Chart 11: Interest Rate Outlook Depends on Productivity Boom

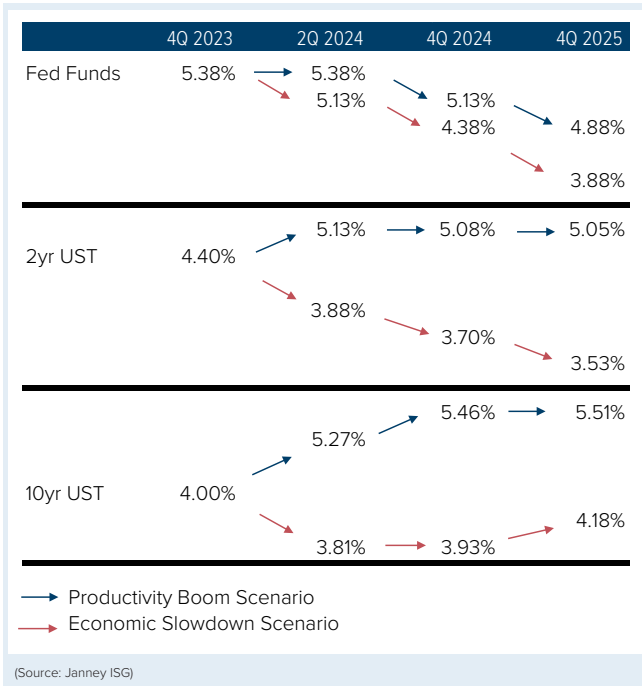


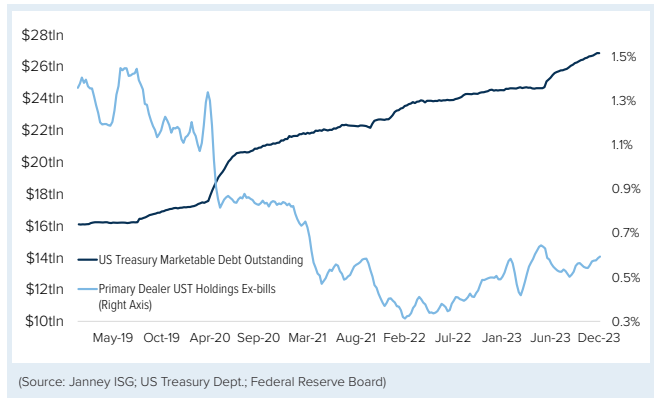
Chart 12: Probability Weighted Midpoint

	4Q 2023	2Q 2024	4Q 2024	4Q 2025
Fed Funds	5.38%	5.21%	4.64%	4.23%
2yr UST	4.40%	4.31%	4.18%	4.06%
5yr UST	4.25%	4.32%	4.32%	4.35%
10yr UST	4.00%	4.32%	4.46%	4.64%
2s/10s Spread	-0.40%	0.01%	0.28%	0.59%

(Source: Janney ISG)

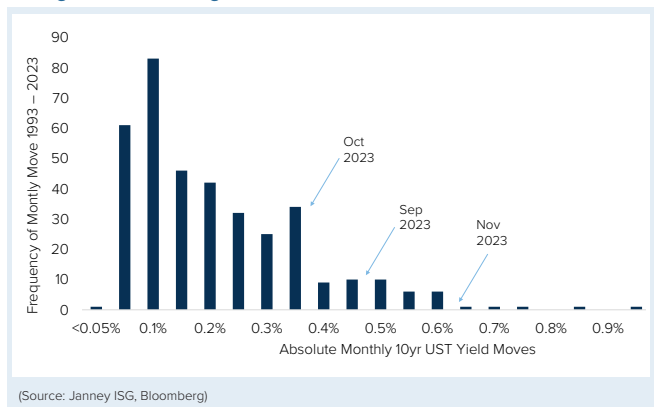
One of the great challenges with interest rates in 2023 is a structural (or at least secular) one. The size of the U.S. Treasury markets has grown relative to the economy and broader financial system and outgrown dealers' ability and willingness to position inventory. One outgrowth is that liquidity events, for example non-economic sales from the U.S. Treasury Department, are having an outsized effect on the level of interest rates. Compounding this effect is that positioning of marginal buyers/sellers has become increasingly correlated. The Fed is a net seller of Treasuries, as are domestic regional banks. Global bank holdings are roughly flat and foreign official holders have increased ownership only slightly. That leaves "real money" (pensions and retail) as well as "leveraged money" (hedge funds) as the buyers absorbing the Treasury's issuance.

Chart 13: As Treasury Markets Have Grown, Dealers' Inventory Has Generally Shrunk, Leading to More Volatile Price Swings



Leveraged investment strategies take many forms, but rules-based Commodities Trading Advisors, or CTAs, are having an unusually powerful effect on the interest rate markets. CTAs rely largely on momentum-based rules to position long or short in a range of markets, including Treasury futures. As the marginal buyer/seller of duration at present, they are also creating self-reinforcing cycles of long and short positions in the markets. The cycles look something like this: an exogenous catalyst causes rates to move, and then CTA rules require them to "push" that move with increasing longs or shorts. Normally there are counter-trend real money buyers or sellers that serve as a check on these CTA-led price swings, but counter-trend positioning appears diminished, leaving the CTAs with outsized power to influence interest rates month-to-month.

Chart 14: Interest Rates Have Experienced Series of Unusually Large Swings in 2020 through 2023



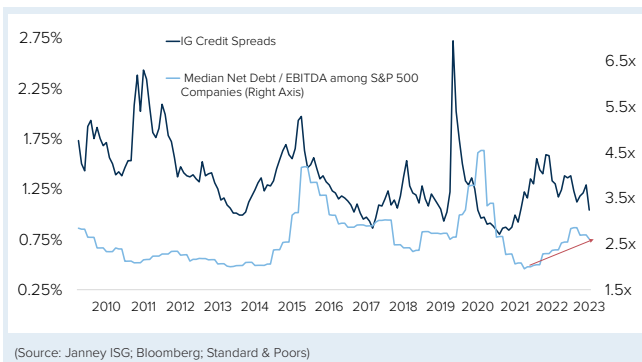
Normally we would argue that economics leads to Fed decisions which in turn is a primary driver of interest rates. But unprecedented economic trends and a bifurcated outlook mean relying on economics to build a market thesis is inherently risky. Moreover, the CTA positioning phenomenon is leading to unusually large month-to-month swings in interest rates. Instead of positioning based on the economic outlook, therefore, we prefer a conservative

approach and reacting to rather than predicting big swings in interest rates. In late 2023, markets have grown rather optimistic on near-term Fed rate cuts that Fed officials are only now beginning to consider. As a result, we favor reducing interest rate risk today with an eye for opportunities to extend duration if and when the yield curve steepens in 2024. While our preferred approach leaves returns on the table if indeed the economy faces a sudden recession, it provides a lot of protection if the less-likely productivity boom does indeed emerge. Most importantly, however, a nimble reactive approach minimizes risk at a time of unusual economic uncertainty.

CREDIT MARKETS

One area in which we are more confident, however, is the fundamental credit outlook. S&P 500 companies' earnings troughed in 2Q 2023 and will likely show YoY growth in 4Q 2023. Net debt to EBITDA, a measure of debt relative to earnings power, is about 1.4x, which, while above the recent lows, is in line with its 10-year average and well lower than pre-Global Financial Crisis levels. As corporate incomes likely improve and new bond issuance remains low, we can expect leverage to remain low by historical standards as well. The S&P 500 is an easy proxy for investment grade-rated companies in the U.S.

Chart 15: Corporate Leverage Above 2022 Lows, But Still Strong in Historical Context



Fundamentals are far from the only thing that matters for credit, and although these fundamentals are generally constructive, pricing is not especially favorable. The spread of the U.S. Investment Grade Credit Index, a measure of the incremental yield for IG corporate bonds of U.S. Treasuries, is below its historical average. Excluding “crisis” periods from that long-run average, spreads are about in line with normal. We view current spreads as adequate compensation given sound fundamentals and a mixed economic outlook, but they are not particularly compelling.

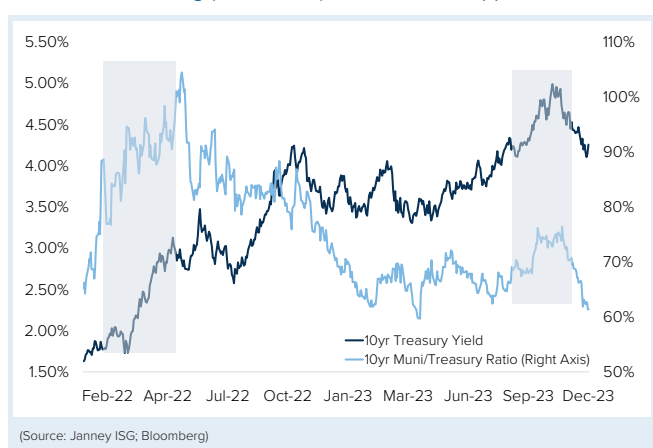
When it comes to the high-yield credit markets, the picture is more nuanced. In late 2020–early 2022, a huge number of high-yield issuers refinanced their short-term debt and borrowed longer term to lock in then-low interest rates. That issuance caused the average duration of HY bonds

in the major indices to extend considerably. After 18 months of very low issuance, however, the average maturity of the HY sector has come down from more than 6.5 years to less than 4.9 years today. Some choose to see this decline as evidence of refinancing needs, but we view it as an indication of lower interest rate risk that has somewhat de-risked the sector in 2023. As far as refinancing needs go, the massive influx of funds into the private credit space should help provide healthy liquidity in the public HY sector as well. Much like pricing in IG, spreads in the HY arena are wider than long-term averages but in line with the non-crisis average. But given the shorter sector duration and healthy liquidity characteristics, we think high yield will likely deliver reasonably attractive returns in 2024.

MUNICIPALS

Tax-exempt markets spent much of 2023 below their long-run average of relative value versus taxable counterparts. Supply was low, with issuance (11 month extrapolated) down -3.5% from the prior year and -27% from 2020’s record. Demand was relatively strong throughout most of the year, as retail investors continued reallocating a decade of equity gains into the interest rate markets. It was only in the fall run-up in long-term rates that muni/Treasury ratios spiked, creating the first obvious relative opportunity. Some of this ratio spike stems from longer maturity 4% and even 5% coupon munis falling below or approaching par, and their duration extending from call date to maturity date. Long maturity callable munis have been a way that many investors added yield in the 2020–2022 low-yield environment, and with the big backup in interest rates, the risks of that approach presented themselves rather violently.

Chart 16: In Periods of Rapidly Rising Treasury Yields, Muni Ratios Widened, Presenting (Short-Lived) Relative Value Opportunities



For 2024, we anticipate supply will remain moderate as state and local governments are still broadly flush with cash and refinancing needs are moderate. Demand from the retail sector should remain relatively strong as the potential of 5%+ taxable equivalent yields in the muni

markets is still novel. We foresee generally positive credit trends as well. One of the underappreciated trends in muni credit has been the vast improvement in pension funding thanks to stronger equity markets. Milliman, an actuarial consulting firm, estimated corporate pension funding at an all-time high of 115% at November month end, up +9% vs. the prior year. While muni pension data is lagged—and starts from a much lower average funded ratio—we can expect similar directional trends thanks to strong asset returns and higher interest rates.

Moderate supply, strong demand, and broadly stable to positive credit trends speak for healthy muni markets conditions (again) in 2024. But as the late-2023 experience underscores, it is better to limit highly callable structures in this still-volatile interest rate environment. Our favorite combination in municipal bond markets right now is short (<5 yr) non-callable 5% coupons combined with 7- to 10-year lightly callable 4% coupons to boost incremental income. In the event that we do see another round of interest rate-inspired selling in munis, those short 5% coupons can provide ready liquidity to re-deploy into longer 5% paper. Once again, our preferred theme for 2024 is to be reactive rather than proactive in the face of large swings in the interest rate markets.

CONCLUSIONS

The four most dangerous words in the financial universe are “this time is different.” And yet, the experience of 2023 suggests that the economic environment and the relationship between the interest rate markets and the economic environment are indeed different. Against this backdrop, we urge a cautious and reactive approach to fixed income investing. Fade the extremes in the interest rate markets, rely on income generation in fundamentally healthy credit and municipals, and look to equities for a better place to capture the upside rather than swinging for the fences in duration.

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Asset Classes: Janney ISG ratings for domestic fixed income asset classes including Treasuries, Agencies, Mortgages, Investment Grade Credit, High Yield Credit, and Municipals employ the "Barclays U.S. Aggregate Bond Market Index" as a benchmark.

Treasuries: Janney ISG ratings employ the "Barclays U.S. Treasury Index" as a benchmark.

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