INVESTMENT INSIGHTS

The Global Investment Strategy View

We explore the outlook for economies and markets and provide year-ahead views across asset classes.

December 2023

The views expressed herein may differ from other JPMorgan Chase & Co. affiliates and employees. This constitutes our judgment based on current market conditions and is subject to change without notice. This has not been prepared with any particular investor in mind, and it may not be suitable for all investors. Investors should speak to their financial representatives before engaging in any investment product or strategy. This material should not be regarded as research or as a J.P. Morgan Research Report. Outlooks and past performance are not reliable indicators of future results. Please read additional regulatory status, disclosures, disclaimers, risks and other important information at the end of this material.

INVESTMENT AND INSURANCE PRODUCTS ARE:
* NOT FDIC INSURED * NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY * NOT A DEPOSIT OR OTHER OBLIGATION OF, OR GUARANTEED BY, JPMORGAN CHASE BANK, N.A. OR ANY OF ITS AFFILIATES * SUBJECT TO INVESTMENT RISKS, INCLUDING POSSIBLE LOSS OF THE PRINCIPAL AMOUNT INVESTED
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The View</td>
<td>1</td>
</tr>
<tr>
<td>Q2 2024 and YE 2024 Outlook Numbers</td>
<td>10</td>
</tr>
<tr>
<td>Macro Views</td>
<td>11</td>
</tr>
<tr>
<td>Equity Views</td>
<td>14</td>
</tr>
<tr>
<td>Rates Views</td>
<td>18</td>
</tr>
<tr>
<td>Credit Views</td>
<td>19</td>
</tr>
<tr>
<td>FX Views</td>
<td>23</td>
</tr>
<tr>
<td>Commodity Views</td>
<td>28</td>
</tr>
<tr>
<td>Our mission</td>
<td>31</td>
</tr>
<tr>
<td>Definitions of Indices and Terms</td>
<td>32</td>
</tr>
<tr>
<td>Key risks</td>
<td>36</td>
</tr>
</tbody>
</table>
KEY TAKEAWAYS

- **The great rate reset.** We’ve seen the end of an interest rate era. Global developed market yields are now above the cycle-neutral yield levels published in J.P. Morgan Asset Management’s 2024 Long-Term Capital Market Assumptions. Investors can increasingly rely on core fixed income to reach their financial goals.

- **We’re expecting a modest U.S. growth slowdown.** Growth will likely slow below trend (but remain positive) in the first half of 2024. With the help of Fed cuts next year, we expect trend-like growth in 2H 2024.

- **The credit cycle is underway, not just in the office sector.** The lagged effects of monetary policy are starting to appear, and a burgeoning credit cycle is ongoing. The duration of “higher for longer” monetary policy will determine the extent and severity of the credit cycle.

- **A unique municipal bond opportunity: equity-like yields.** Tax-equivalent municipal bond yields rival the annual return of the S&P 500 in the 21st century.

- **Despite U.S. tech outperformance in 2023, valuations are rational.** The tech earnings recession is over and artificial intelligence capital investment is likely to translate into earnings quickly.

- **Our high-conviction investment ideas include:** Adding duration in developed market core fixed income, municipal bonds for U.S. taxpayers, preferreds for systemically important financial institutions (SIFI), broad S&P 500 exposure with an overweight to the tech sector, and stressed credit situations.

*Our Global Investment Strategy View integrates the knowledge and analysis of our economists, investment strategists and asset class strategists. The View takes shape at a monthly Forum where the team debates and hones its views and outlooks.*
THE VIEW

The great reset, the end of an interest rate era. Thanks to aggressive monetary policy actions, U.S., EUR and GBP 10-year and investment grade (IG) corporate yields are above the cycle-neutral yield levels published in J.P. Morgan Asset Management’s 2024 Long-Term Capital Market Assumptions (LTCMA).

Why it matters: For most of the post-GFC era, interest rates were below cycle-neutral yields, forcing investors to opt out of core fixed income and take on more risk to reach their financial goals. Over the next year, we expect high-single-digit total returns in developed market core duration (coupon plus price appreciation as rates decline).

Central bank action matters most for longer-dated rates. We think the Fed, ECB and BOE are most likely done hiking and poised to ease in 2024, which will push longer-dated rates lower.

1) Since 1980, 10-year Treasury yields have declined an average of ~100bps following the last Fed rate hike of the cycle.
2) In a simple model, you can explain the majority of the movement in 10-year Treasury yields with the spot fed funds rate, the expected fed funds rate in a year’s time, and the Fed’s share of outstanding Treasuries.

But who will buy all the Treasury debt?! The U.S. deficit is likely to remain near $1.7 trillion in 2024. In 2024, net Treasury issuance will be ~$2.5 trillion, skewed toward longer-duration bonds.

Asset managers and households will likely boost their demand for government debt to absorb the supply. While $2.5 trillion in net issuance seems like a large number, that’s just 2% of aggregate household financial assets ($117 trillion as of Q2 2023). U.S. households and the non-bank financial sector already own ~$10 trillion Treasuries, and higher yields should entice them to buy more.

Go deeper on U.S. fiscal debt sustainability here.

Bottom line: The great interest rate reset offers investors an opportunity to reach their financial goals with less risk. Consider adding long-duration developed market core bonds.

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
We're expecting... a modest U.S. growth slowdown. For most of 2023, interest rates have been above U.S. GDP growth. The Fed and Wall Street economists expect more of the same in 2024. We do, too.

Why it matters: Historically, when rates are higher than GDP growth rates, the economy slows in subsequent quarters. This makes sense when you think about it. Why would anyone borrow money to invest in their business at a rate higher than their expected return on investment? In such a scenario, business owners would be more inclined to save, which would in turn lead the economy to slow.

Today that process is underway. The pace of bank lending growth has slowed meaningfully this year (and abruptly of late), while savers have moved their assets into money market funds at a remarkable clip. Unusually in this cycle, inflation has retreated before the growth slowdown. Over the last six months, core CPI inflation has been running at a 3.2% annualized pace, on the back of five straight months of goods deflation. Service inflation has cooled some, but not yet to a level consistent with the Fed’s 2% inflation target. But only a modest growth slowdown will likely be needed to nudge inflation lower. Historically, when inflation falls below 4%, developed market central banks have inflicted meaningfully less economic pain than when inflation is above 4%. At a little over 3%, current inflation looks to be in the comfort zone.

Bottom line: We expect growth to slow below trend (but remain positive) in 1H 2024. With the help of Fed cuts, we expect trend-like growth in 2H 2024. Macro uncertainty is high, and we assign a 25% probability to an average recession in 2024.

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
The Fed has made its point: U.S. interest rates are restrictive
IG real borrowing rate vs U.S. trend real GDP growth
-5% 0% 5% 10% 15% 20%
'97 '00 '03 '06 '09 '12 '15 '18 '21

Lending growth has slowed meaningfully this year
3 month change in loan growth, annualized, %
0% 5% 10% 15% 20%
'21 '22 '23
*Break adjusted for 3/22 loan divestment

Savers have moved cash into money market funds at a remarkable clip
% change of money market funds, indexed to 12m before the last rate hike, time 0 = last Fed rate hike
45% 35% 25% 15% 5% -5%
-12 -10 -8 -6 -4 -2 0 2 4 6 8 10 12
# Months

Service inflation has not yet reached the Fed's 2% target
U.S. core CPI rolling QoQ %, annualized
0% 5% 10% 15% 20% 25% 30%
'19 '20 '21 '22 '23 '24

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
The credit cycle is underway, and it’s not just the office market. It’s hardly a secret: U.S. central business district vacancies have skyrocketed to over 20%. Remote work explains much of the problem in commercial real estate, but higher rates play an important role as well.

**Why it matters:** Focus on the office market obscures the credit cycle that is underway in other sectors. Monetary policy famously impacts the economy with “long and variable lags.” Well, the lagged impacts have started to appear.

1) In the commercial mortgage-backed securities (CMBS) market—where about 29% of total commercial real estate financing lives—6% of assets are 30-plus days delinquent or in special servicing. That’s the highest level since 2018. Hospitality and retail loan delinquency rates are higher than office.

2) Corporate defaults (high yield credit and leveraged loans) are rising from low levels. Interest coverage ratios are falling quickly, albeit from healthy levels, and already come in below pre-COVID levels for loans. Unless rates decline, deteriorating interest coverage suggests more defaults lie ahead.

3) Newly delinquent consumer credit card balances are at their highest levels since 2011 and rising; borrowers are hit with credit card interest rates at all-time highs. From a historically low base, consumer interest costs as a percentage of disposable income are also rising rapidly.

---

**Bottom line:** We’re beginning to see the lagged effects of monetary policy. A burgeoning credit cycle is underway. The duration of “higher for longer” monetary policy will determine the extent and severity of the credit cycle. Consider investing in stressed/distressed credit opportunities.

---

The credit cycle is underway, and it’s not just the office market. It’s hardly a secret: U.S. central business district vacancies have skyrocketed to over 20%. Remote work explains much of the problem in commercial real estate, but higher rates play an important role as well.

**Why it matters:** Focus on the office market obscures the credit cycle that is underway in other sectors. Monetary policy famously impacts the economy with “long and variable lags.” Well, the lagged impacts have started to appear.

1) In the commercial mortgage-backed securities (CMBS) market—where about 29% of total commercial real estate financing lives—6% of assets are 30-plus days delinquent or in special servicing. That’s the highest level since 2018. Hospitality and retail loan delinquency rates are higher than office.

2) Corporate defaults (high yield credit and leveraged loans) are rising from low levels. Interest coverage ratios are falling quickly, albeit from healthy levels, and already come in below pre-COVID levels for loans. Unless rates decline, deteriorating interest coverage suggests more defaults lie ahead.

3) Newly delinquent consumer credit card balances are at their highest levels since 2011 and rising; borrowers are hit with credit card interest rates at all-time highs. From a historically low base, consumer interest costs as a percentage of disposable income are also rising rapidly.

---

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. ** Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.**
The Global Investment Strategy View

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.

A unique municipal bond opportunity: Equity-like yields. Tax-equivalent municipal bond yields rival the S&P 500’s annual return in the 21st century. Here’s the case for municipal bonds:

1) Compelling yield. On a tax-equivalent yield (TEY) basis, municipal bond yields rival yields on other liquid investments. For high-tax states, such as New York and California, TEYs are in the low double digits.

Corporate defaults are rising from low levels
High yield and leveraged loan LTM default rate, %

Deteriorating interest coverage suggests more defaults ahead
High yield and leveraged loan interest coverage ratio

Newly delinquent consumer credit card balances are at the highest levels since the wake of the GFC
% of debt balance

Consumer interest costs are rising quickly from historical lows
Household interest costs as % of after-tax household income

Note: Par weighted & includes distressed exchanges

Note: Interest coverage = EBITDA / Net Interest Expense
Source: J.P. Morgan. Data as of 2Q'23.


2) **Extremely low default risk.** Since 2017, municipal bond defaults have averaged 0.14% annually.\textsuperscript{1} In 2017, Puerto Rico defaulted (it was the biggest municipal bond default in history), but even then, the annual default rate for the market was only 0.70%. Also mitigating defaults: States’ median rainy-day fund balances have surged, thanks to COVID-era federal policies.\textsuperscript{2}

3) **Relative value to bonds with similar risks.** Currently, tax-free municipal bonds yield ~75% as much as (federally taxable) Treasury bonds. That’s below the historical norm, but for a good reason. The most likely cure for the ballooning federal deficit is higher taxes, which will only serve to further raise the attractiveness of munis.\textsuperscript{3} Meanwhile, municipal yields offer about 65% of the average investment grade bond’s yield; over the last five years, this metric averaged only 50%.

**Go deeper** on the municipal bond opportunity [here](#).

**Bottom line:** Depending on your goals, consider rotating cash or pre-existing bonds or stocks into municipal bonds where attractive yield meets an extremely low default risk.

---

**Fixed income across sectors offer “equity-like” yields**

<table>
<thead>
<tr>
<th>Yields, %</th>
<th>12/31/2021</th>
<th>11/29/2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>10Y UST</td>
<td>1.5%</td>
<td>2.8%</td>
</tr>
<tr>
<td>US I/G</td>
<td>4.3%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Munis (TEY)</td>
<td>5.4%</td>
<td>8.6%</td>
</tr>
<tr>
<td>US HY</td>
<td>4.7%</td>
<td>3.7%</td>
</tr>
<tr>
<td>US Preferreds</td>
<td>8.7%</td>
<td>6.8%</td>
</tr>
<tr>
<td>S&amp;P 500 historic return*</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

\*Note: Average annual return since 2000

---

**Since 2017, municipal bond defaults have averaged just 0.14% annually**

<table>
<thead>
<tr>
<th>Par value, $bn</th>
<th>Municipal Defaults</th>
<th>Total Market Default Rate (RHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$30</td>
<td>0.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td>$25</td>
<td></td>
<td>0.6%</td>
</tr>
<tr>
<td>$20</td>
<td></td>
<td>0.5%</td>
</tr>
<tr>
<td>$15</td>
<td></td>
<td>0.4%</td>
</tr>
<tr>
<td>$10</td>
<td></td>
<td>0.3%</td>
</tr>
<tr>
<td>$5</td>
<td></td>
<td>0.2%</td>
</tr>
<tr>
<td>$0</td>
<td></td>
<td>0.1%</td>
</tr>
</tbody>
</table>


---

**Unlike federal debt, state and local debt stock has not grown**

% of GDP, 1930 - 2022, end of fiscal year

Sources: Congressional Budget Office, Census Bureau. Data as of December 31, 2022.

---


\textsuperscript{2} All but five states have more in their rainy-day funds today, as a percentage of general fund spending, than they did in 2017. The only exceptions: the rainy-day funds of Alaska, South Dakota, Texas, Washington and Wyoming.

\textsuperscript{3} Also important to note: The Tax Cuts and Jobs Act, which lowered taxes for millions of Americans, is set to sunset in 2025. The Act greatly reduced the number of families that pay the alternative minimum tax (IRS.gov).

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. **Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material.** Please refer to “Definition of Indices and Terms” for important information. **Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.**
Despite U.S. tech sector outperformance in 2023, valuations are rational. Granted, the “magnificent 7” U.S. stocks look expensive relative to their own histories on a price-to-earnings (P/E) basis. But using a price-to-earnings growth (PEG ratio) measure, the stocks look less expensive than their mid- and large-cap peers.

Why it matters: The S&P 500 is exiting its “rolling earnings recession.” We’ve been using this term to describe how various sectors went through an unsynchronized period of negative earnings growth. After three consecutive quarters of negative growth, Q3 2023 earnings for the S&P 500 inflected positively.

In Q3, tech earnings accelerated meaningfully. The commonplace market narrative—“mega-cap tech stocks are expensive”—is wrong. Here’s why:

1) The tech sector has already gone through an earnings recession. It’s over. Information tech sector earnings have been contracting on a year-over-year basis since the middle of 2022. The earnings recession forced tech companies to aggressively cut costs. Indeed, tech companies laid off more employees than at any time since the dot com era.

2) The artificial intelligence (AI) investing era has begun. Demand for AI-related services is intensifying. Half of S&P 500 companies cited “artificial intelligence” in their Q3 2023 quarterly earnings calls, up from 17% a year ago. In advance of the expected surge in computing demand, hyper-scale leaders (Amazon, Microsoft, Google, Oracle) are ramping up capital investment. Microsoft is planning to increase its total company capex by 50% over three years.

3) Higher interest rates will not deter tech sector capital investment. The information technology sector has near zero net debt relative to EBITDA.

4) Investors won’t wait long to see capital investment translate to earnings. Early movers in AI have grown dramatically in 2023. Nvidia’s trajectory has been breathtaking. At the end of 2022, analysts expected Nvidia’s total revenue to reach $29.5 billion in 2023. Those same analysts now expect revenues of about $59 billion with the bulk of the 100% revision coming from AI-related products in software, semiconductors and networking equipment.

Bottom line: U.S. tech valuations are rational, not expensive. The tech earnings recession is over and capital investment is likely to translate into earnings quickly. Consider broad equity exposure and/or adding to U.S. tech.
All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. **Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material.** Please refer to “Definition of Indices and Terms” for important information. **Past performance is no guarantee of future results and investors may get back less than the amount invested.** It is not possible to invest directly in an index.
TL; DR: It’s 2024 outlook season. Here’s a summary of Wall Street views so far. Most expect a 2024 growth slowdown (rather than a recession), with a Fed that is cutting rates in 2024. On average, Wall Street firms expect positive total returns in both bonds and stocks but, an outperformance of bonds on a volatility-adjusted basis.

<table>
<thead>
<tr>
<th>Street Outlook Year-End 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Fed Funds</td>
</tr>
<tr>
<td>Q4 ’24</td>
</tr>
<tr>
<td>JPM PB</td>
</tr>
<tr>
<td>4.50-4.75</td>
</tr>
<tr>
<td>JPM IB</td>
</tr>
<tr>
<td>4.50</td>
</tr>
<tr>
<td>Bank of America</td>
</tr>
<tr>
<td>4.75</td>
</tr>
<tr>
<td>Morgan Stanley</td>
</tr>
<tr>
<td>4.50</td>
</tr>
<tr>
<td>Goldman Sachs</td>
</tr>
<tr>
<td>5.25</td>
</tr>
<tr>
<td>Wells Fargo</td>
</tr>
<tr>
<td>3.75</td>
</tr>
<tr>
<td>UBS</td>
</tr>
<tr>
<td>2.75</td>
</tr>
<tr>
<td>Average (ex-PB)</td>
</tr>
<tr>
<td>4.25</td>
</tr>
<tr>
<td>10Y</td>
</tr>
<tr>
<td>Q4 ’24</td>
</tr>
<tr>
<td>3.90</td>
</tr>
<tr>
<td>3.75</td>
</tr>
<tr>
<td>4.25</td>
</tr>
<tr>
<td>4.30</td>
</tr>
<tr>
<td>3.50</td>
</tr>
<tr>
<td>3.60</td>
</tr>
<tr>
<td>Real GDP</td>
</tr>
<tr>
<td>Q4 ’24</td>
</tr>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>0.70</td>
</tr>
<tr>
<td>1.60</td>
</tr>
<tr>
<td>1.80</td>
</tr>
<tr>
<td>-0.20</td>
</tr>
<tr>
<td>1.10</td>
</tr>
<tr>
<td>Core PCE</td>
</tr>
<tr>
<td>Q4 ’24</td>
</tr>
<tr>
<td>2.20</td>
</tr>
<tr>
<td>2.40</td>
</tr>
<tr>
<td>2.40</td>
</tr>
<tr>
<td>2.30</td>
</tr>
<tr>
<td>2.35</td>
</tr>
<tr>
<td>SPX $</td>
</tr>
<tr>
<td>YE 2024</td>
</tr>
<tr>
<td>4,850</td>
</tr>
<tr>
<td>4,200</td>
</tr>
<tr>
<td>5,000</td>
</tr>
<tr>
<td>4,500</td>
</tr>
<tr>
<td>4,700</td>
</tr>
<tr>
<td>4,625</td>
</tr>
<tr>
<td>4,600</td>
</tr>
</tbody>
</table>

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. **Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material.** Please refer to “Definition of Indices and Terms” for important information. **Past performance is no guarantee of future results and investors may get back less than the amount invested.** It is not possible to invest directly in an index.
Q2 2024 AND YE 2024 OUTLOOK NUMBERS

December 2023

<table>
<thead>
<tr>
<th>Macro^</th>
<th>2024 YE</th>
<th>2025 YE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td>2.2%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Eurozone</td>
<td>2.3%</td>
<td>2.1%</td>
</tr>
<tr>
<td>China</td>
<td>1.1%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Real GDP Growth</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>1.0%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Eurozone</td>
<td>0.6%</td>
<td>1.3%</td>
</tr>
<tr>
<td>China</td>
<td>4.4%</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 500</td>
<td>Mid-2024</td>
<td>2024 YE</td>
</tr>
<tr>
<td>Price</td>
<td>4,650-4,750</td>
<td>4,800-4,900</td>
</tr>
<tr>
<td>P/E Forward Multiple</td>
<td>18.6x</td>
<td>18.7x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stoxx Europe 50</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>4,500-4,600</td>
<td>4,550-4,650</td>
</tr>
<tr>
<td>P/E Forward Multiple</td>
<td>12.75x</td>
<td>12.75x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOPIX</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>2,350-2,400</td>
<td>2,420-2,480</td>
</tr>
<tr>
<td>P/E Forward Multiple</td>
<td>14.0x</td>
<td>14.0x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MSCI Asia ex-Japan</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>635-655</td>
<td>660-690</td>
</tr>
<tr>
<td>P/E Forward Multiple</td>
<td>12.0x</td>
<td>12.3x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MSCI China</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>61-64</td>
<td>65-67</td>
</tr>
<tr>
<td>P/E Forward Multiple</td>
<td>10.8x</td>
<td>10.5x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Currencies</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Dollar Index (DXY)</td>
<td>105 (103-107)</td>
<td>100 (98-102)</td>
</tr>
<tr>
<td>EUR/USD</td>
<td>1.06 (1.04-1.08)</td>
<td>1.12 (1.10-1.14)</td>
</tr>
<tr>
<td>USD/JPY</td>
<td>140 (138-142)</td>
<td>140 (138-142)</td>
</tr>
<tr>
<td>GBP/USD</td>
<td>1.20 (1.18-1.22)</td>
<td>1.25 (1.23-1.27)</td>
</tr>
<tr>
<td>USD/CNY</td>
<td>7.35 (7.25-7.45)</td>
<td>7.30 (7.20-7.40)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rates &amp; Credit Spreads</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>Mid-2024</td>
<td>2024 YE</td>
</tr>
<tr>
<td>Eff. Fed Funds Rate</td>
<td>5.25%-5.50%</td>
<td>4.50%-4.75%</td>
</tr>
<tr>
<td>ON SOFR</td>
<td>5.40%</td>
<td>4.65%</td>
</tr>
<tr>
<td>2-Year UST</td>
<td>4.45%</td>
<td>3.80%</td>
</tr>
<tr>
<td>5-Year UST</td>
<td>4.20%</td>
<td>3.85%</td>
</tr>
<tr>
<td>10-Year UST</td>
<td>4.10%</td>
<td>3.90%</td>
</tr>
<tr>
<td>30-Year UST</td>
<td>4.40%</td>
<td>4.20%</td>
</tr>
<tr>
<td>2s/10s spread</td>
<td>-0.35%</td>
<td>0.10%</td>
</tr>
<tr>
<td>JPM U.S. Investment Grade</td>
<td>150</td>
<td>130</td>
</tr>
<tr>
<td>JPM U.S. High Yield</td>
<td>550</td>
<td>500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Europe</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ECB Deposit Rate</td>
<td>4.00%</td>
<td>3.50%</td>
</tr>
<tr>
<td>5-Year German Yield</td>
<td>2.40%</td>
<td>2.25%</td>
</tr>
<tr>
<td>10-Year German Yield</td>
<td>2.40%</td>
<td>2.25%</td>
</tr>
<tr>
<td>BoE Bank Rate</td>
<td>5.25%</td>
<td>4.75%</td>
</tr>
<tr>
<td>10-Year U.K. Gilt</td>
<td>4.00%</td>
<td>3.85%</td>
</tr>
<tr>
<td>EUR IG</td>
<td>175</td>
<td>140</td>
</tr>
<tr>
<td>EUR HY</td>
<td>580</td>
<td>525</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EM</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EM Sovereign Index (EMBI)</td>
<td>415</td>
<td>375</td>
</tr>
<tr>
<td>EM Corporate Index (CEMBI)</td>
<td>385</td>
<td>325</td>
</tr>
<tr>
<td>JPM Asia IG (JACI IG)</td>
<td>165</td>
<td>155</td>
</tr>
<tr>
<td>JPM Asia HY (JACI HY)</td>
<td>1300</td>
<td>1200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commodities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold ($/oz)</td>
<td>$2,000-$2,100</td>
<td>$2,000-$2,100</td>
</tr>
<tr>
<td>Brent ($/barrel)</td>
<td>$81-$86</td>
<td>$81-$86</td>
</tr>
<tr>
<td>Commodity index (BCOM)</td>
<td>110-115</td>
<td>110-115</td>
</tr>
<tr>
<td>Natural gas ($/MMBtu)</td>
<td>$3.50-$4.50</td>
<td>$3.50-$4.50</td>
</tr>
</tbody>
</table>

^GDP and core inflation estimates represent Q4 year-over-year growth rates. Core inflation in the U.S. is core PCE.

Indices are not investment products and may not be considered for investments.

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
MACRO VIEWS

U.S. Growth

Growth in the United States remains strong, and so far, resilient in the face of Fed rate hikes. There are three key reasons for economic resilience: 1) consumers deployed excess savings, helping to maintain a high level of spending; 2) consumers and businesses proved less interest rate sensitive following a period of refinancing and low levels of debt overall; 3) fiscal spending was more robust and rapid than expected, with the buildout of semiconductor facilities far greater than CBO and others estimated (subsidies offered were uncapped).

But we think an economic slowdown (rather than recession) is still likely in the coming quarters. We are starting to see both household and corporate interest coverage ratios deteriorate, with the restart of student loan payments a drag for households, and smaller companies with floating rate debt most at risk for corporates. Inflation has meaningfully slowed without a significant rise in the unemployment rate, meaning the Fed should be able to cut rates sooner than would otherwise be the case.

What we’re watching: Household income growth, consumer and corporate debt service, and indicators of capex trends.

Our view: 1.0% (Q4 YoY) real GDP growth in 2024
1.8% in 2025

U.S. Inflation

Core inflation is now running lower than previously expected, making the Fed’s job a bit easier. It’s trending around 3%, a percentage point lower than it was a few months ago, which significantly helps to reduce the odds of a meaningful recession. The Fed’s supercore measure of inflation (core services ex shelter) is now running at ~3.5% on a rolling QoQ basis, and shelter is decelerating toward its 2018-2019 pace, which it should reach by early 2024. Inflation is much closer to the 2% mandate than we would have expected when the unemployment rate is below 4%; however, the risk is it begins to pick back up in early 2024 if growth doesn’t slow.

Softening in the labor market is required for the Fed to feel comfortable that inflation will sustainably average 2%. Goods inflation continues to be soft, and services inflation has slowed in sticky labor-intensive industries. Wages are rising at around a 4% pace, not too far from the 3.5% seen as consistent with the Fed’s 2% inflation mandate.

What we’re watching: Wage growth, real-time measures of rent, and services ex-rental inflation.

Our view: 2.2% (Q4 YoY) core PCE in 2024
2.1% in 2025

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.


**Eurozone Growth**

European growth has weakened further, with the latest PMI reading consistent with a stagnating economy at best, or perhaps more likely, one in slight contraction. Weakness has largely been driven by the manufacturing sector this year so far but is now broadening out into services. Our base case is that a true recession will be avoided, given less severe negative spillover from the United States, a potential bottoming in the manufacturing sector in the coming months, and still-rising wages that provide a key support for the consumer. But the probability of such an outcome as opposed to a recession is close to a coin-toss, and risks of further downgrades to our outlook are high.

The U.K. economy has also been on a weakening path, with signs of a loosening labor market now starting to also appear and housing market vulnerabilities still a concern with rates where they are. A recession looks likely in 2024.

**What we’re watching:** Credit and lending standards in the banking sector, Russia-Ukraine conflict and the risk of escalation, manufacturing weakness, and service spending.

**Our view:** 0.6% (Q4 YoY) real GDP growth in 2024
1.3% (Q4 YoY) in 2025

---

**Eurozone Inflation**

Inflation continues to cool, with core CPI now close to 4% YoY. Weaker price pressures are increasingly evident across both goods and services. A weaker near-term demand outlook should support further easing; headline inflation may be close to 2% by the end of this year, though we do not expect core inflation to converge to the ECB’s target until 2024. The key component to watch will be core services, which will likely remain sensitive to wage growth and the tightness of the labor market.

In the U.K., weak supply across the economy is keeping prices elevated relative to other DM economies, even as growth weakens. While headline inflation has come a long way off its peak, core inflation is yet to fall substantially. However, we now expect that wage growth and services inflation are at or near their peaks and should provide disinflation tailwinds over the coming quarters.

**What we’re watching:** Labor market, goods vs. services inflation, energy prices, and ECB and BoE commentary.

**Our view:** 2.3% (Q4 YoY) core HICP in 2024
2.1% (Q4 YoY) in 2025

---

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. **Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material.** Please refer to “Definition of Indices and Terms” for important information. **Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.**
**China Growth**

In October, the economy showed some further signs of stabilization. Sequential momentum in both retail sales and industrial production improved a bit. The investment picture is a little mixed but largely due to the well-flagged drag from property, while manufacturing and infrastructure investment were steady. Even as the PMIs continue to point to an uncertain export outlook, barring a global recession next year, we think economic growth will likely stabilize at the current run rate. Beneath the surface, there is a two-track economy with services and high-end manufacturing leading, and property and related industries lagging.

In recent weeks, policymakers have taken a more proactive approach to restructure local government shadow debt, and modestly expanding the central government balance sheet to support infrastructure investment. There are also reports that more policy tools will be deployed to support other major urbanization policies in the 14th Five Year Plan, which should lend some further modest boost to growth. These should help to further put a floor on growth in 2024.

**What we’re watching:** December Central Economic Work Conference and various other policy meetings.

**Our view:** 4.4% (Q4 YoY) real GDP growth in 2024

4.6% in 2025

---

**China Inflation**

The inflation trajectory softened a little bit in October. Food prices declined unexpectedly, pushing down headline inflation. Commodity prices also eased due to both global and local factors, weighing on producer prices. This is a reminder that there is a lot of work to be done to reflate the economy. That said, we think deflation risk is more sectoral (concentrated in property and related sectors) than broad-based. Despite a soft labor market, wage and income growth are holding up and should support consumption growth in 2024. We continue to expect the economy to exit deflation in 2024.

**What we’re watching:** Oil price, commodity prices, service sector recovery, housing market

**Our view:** 1.1% (Q4 YoY) core HICP in 2024

1.6% in 2025

---

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
EQUITY VIEWS

U.S. Equities

Despite a strong November rally, we remain positive about market prospects over the next year. Key to our view is optimism around earnings growth for 2024 even as the U.S. economy slows. After raising estimates in 1H 2023, we have maintained our estimates of $222 and $240 for S&P 500 earnings in CY2023 and CY2024, respectively. Slow revenue growth and a modest recovery in margins should equate to trend EPS growth as more sectors exit the difficult earnings period of the last 18 months. In our view, valuation is unlikely to move much, recognizing slightly elevated levels but cognizant that rates have downside to our base case view.

We expect an improving earnings and inflation picture to eventually propel U.S. equities to new highs, with the most likely path taking a few quarters. We continue to favor Tech, Healthcare and Consumer Discretionary, and see government policy initiatives as a positive for Industrials. We believe the AI hype will turn into real revenue contribution and could reduce corporate costs over time. We expect innovation to treat obesity and diabetes to drive shifts in consumer habits and spending. By capitalization, we like cap-weighted S&P, but highlight the potential for outperformance from the equal-weighted S&P 500 and the S&P 400 (mid-caps) in our bull case scenario.

What we’re watching: On the macro side, the soft landing has become the market assumption. While that conclusion makes sense, given earnings, inflation and the labor market, it does make the market sensitive to economic data that comes in too hot or too cold. While equities usually digest growth-driven increases in bond yields, today’s markets search for affirmation that “goldilocks” is a possibility: slowing inflation and growth, but not cratering. On the micro side, we continue to scrub earnings reports and company analyst meetings for shifts in corporate confidence and changes in tone, positive and negative.

Our view: S&P 500 $4,650-$4,750 by mid-2024
$4,800-$4,900 by year-end 2024

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. *Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material.* Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
Europe Equities

We are introducing end of 2024 SX5E targets and see the index trading around EUR 4,550-4,650 range. Third-quarter earnings season is coming to an end. European companies have shown negative earnings growth, but there is a big divergence between the largest European companies, where the growth is holding up better than in the rest of the market. Earnings growth is likely to stay weak for the next few quarters before improving in the second half of 2024. Earnings expectations for 2024 have started to come down, but we think they will come down a bit more. Therefore, we are slightly below consensus for 2024 and 2025 earnings. We think SX5E can show close to a 2% earnings growth in 2024 and improve to 5% in 2025. The market should look through the earnings weakness, and thus we expect a further re-rating of European equities to 12.75x from current 12x NTM PE. Shareholders’ returns are attractive in Europe. The region continues to offer a 3.5% annual dividend yield and European corporates increasingly doing buybacks.

Our sector preference remains unchanged, with European Technology and Industrials our preferences. We also like companies in the Luxury Goods segment, especially off the recent pullback given their unique brand strength cycle in and cycle out. We also like companies in Consumer Staples and Healthcare sectors. Within Europe, we continue to like France from a bottom-up basis over geographies such as the U.K. and Switzerland. Thematically, we focus on European National Champions, multinational companies that have large competitive moats and market-leading positions, based out of Europe.

What we’re watching: We are concerned about developments in China and global macroeconomic data, given European indices’ reliance on the cycle. The dollar’s recent strength has also been a headwind that bears watching.

Our view: SX5E €4,500-€4,600 by mid-2024
€4,550-€4,650 by year-end 2024

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
Asia Equities

We initiate our end of 2024 targets that imply double-digit returns across many geographies. When we incorporate risk associated with these outlooks, we focus on the upside opportunities in India, South Korea and Taiwan, as earnings growth accelerates and valuations are expected to remain consistent with current levels. Risks in China are elevated, reflecting our downgrade of China Offshore equities and preference for China Onshore.

We retain our structural overweight toward India, which is now amongst our most favored market across Asia. With volatility possibly picking up ahead of Indian elections in 1H 2024 and the market up just 5.6% (in USD) over the last 12 months, this could present present attractive buy-on-dip opportunities. We expect earnings to revert back to mid-teens growth in 2024. With increasing signs of a cyclical bottom in semis, and exciting new structural opportunities in AI, we remain positive on the semiconductor sector in Asia, and expect an earnings upgrade cycle as we progress through 2024. These expectations inform our positive view on South Korea and Taiwan.

While there are signs of a “policy put” emerging in China, visibility remains low with regard to timing a turn in sentiment as the macro environment remains subdued. Consequently, we lower our rating toward Offshore China to neutral, but retain our positive view toward Onshore China equities that are typically greater beneficiaries of policy stimulus. The recent Biden/Xi meeting met low expectations, but we do not expect any fundamental shift in the U.S./China relationship. After two strong years, we expect the Japanese equity market to consolidate in 2024, and we remain neutral. With our expectation for the USDJPY to weaken to 138-142, this will be a ~5% drag to TOPIX earnings. A slowing global economy is typically a headwind for export-heavy markets such as Japan. Within the market, we are positive a number of idiosyncratic opportunities, such as Japan inflation beneficiaries, domestic reshoring, and increased shareholder returns and activism.

What we're watching: The Central Economic Work Conference in China is expected to take place in mid-December and set the tone for economic growth in 2024. With the Taiwan election to take place in January, this will also be closely watched from a geopolitical angle and could cause near-term volatility in some Asian equity markets. With the Kishida government in Japan polling at record lows, and cost-of-living pressures rising, any shift in BoJ views on inflation and policy deserve attention.

Our view:

<table>
<thead>
<tr>
<th>Index</th>
<th>1 year</th>
<th>3 year</th>
<th>5 year</th>
<th>10 year</th>
<th>20 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOPIX</td>
<td>2,350-2,400 by mid-2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,420-2,480 by year-end 2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSCI AXL</td>
<td>635-655 by mid-2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>660-690 by year-end 2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSCI China</td>
<td>61-64 by mid-2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>65-67 by year-end 2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSI 300</td>
<td>3,910-3,990 by mid-2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4,100-4,200 by year-end 2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSCI India</td>
<td>2,360-2,470 by mid-2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,500-2,630 by year-end 2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSCI ASEAN</td>
<td>630-640 by mid-2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>650-670 by year-end 2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indian equities have outperformed in the long term

Annualized equity returns by time horizon (USD terms), %

<table>
<thead>
<tr>
<th>Index</th>
<th>1 year</th>
<th>3 year</th>
<th>5 year</th>
<th>10 year</th>
<th>20 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI India</td>
<td>5.6%</td>
<td>12.7%</td>
<td>10.8%</td>
<td>8.9%</td>
<td>10.6%</td>
</tr>
<tr>
<td>MSCI China</td>
<td>20.1%</td>
<td>-16.6%</td>
<td>-2.6%</td>
<td>1.3%</td>
<td>7.5%</td>
</tr>
<tr>
<td>MSCI Asia ex. Japan</td>
<td>13.9%</td>
<td>-5.5%</td>
<td>2.4%</td>
<td>3.0%</td>
<td>8.1%</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>10.1%</td>
<td>10.3%</td>
<td>11.0%</td>
<td>11.1%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Stoxx Euro 600</td>
<td>16.5%</td>
<td>8.2%</td>
<td>5.7%</td>
<td>3.9%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Topix</td>
<td>17.5%</td>
<td>2.0%</td>
<td>2.9%</td>
<td>4.3%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

RATES VIEWS

U.S. Rates

Yields retreated from their mid-October highs after the 10Y briefly topped 5.0%. The sell-off was due to solid economic growth data, which culminated in the 5% QoQ A.R. 3Q real GDP print. That momentum also fed into concerns over future supply and demand imbalances adding additional risk premium to the curve. Markets now firmly price in the Fed on hold and shifting toward cuts around mid-2024. The curve does not expect the federal funds rate to decline below at 3.7%, above the 2.9% the Fed projects for itself to return to over the next couple of years.

We expect the Fed is on hold from here and delivers at least 75bps of cuts in 2024. On average, 10Y yields fall by ~100bps in the year following the last hike of the cycle (over the past seven hiking cycles). We expect that pattern for yields to hold, pushing 10Y yields toward 4% as the Fed begins to cut.

What we’re watching: Whether growth and labor market data continue to signal the Fed is restrictive and Treasury auctions for signs that supply is well digested.

Our view: 10Y: 4.10% (+/-25bps) by mid-2024
3.90% (+/-25 bps) by year-end 2024

Europe Rates

Eurozone economic activity and inflation have continued to slow. The ECB left its policy rate at 4% in October and has communicated that it is now at a sufficiently high level—if maintained long enough—to return inflation to its 2% target. We see the ECB on hold into next year, which, along with softening activity and inflation in the region, makes European duration relatively attractive. We see the first cut from the ECB around mid-year but risks skew earlier rather than later at present.

In the U.K., inflation has decelerated, and growth has started to deteriorate. The BoE will be data dependent, but we think it has reached its terminal rate at 5.25%.

What we’re watching: If central banks have the luxury to pivot toward focusing on the growth outlook relative to inflation.

Our view:
10Y Bund: 2.40% (+/-25bps) by mid-2024
2.25% (+/-25bps) by year-end 2024
10Y Gilt: 4.00% (+/-25bps) by mid-2024
3.85% (+/-25bps) by year-end 2024

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
CREDIT VIEWS

U.S. Credit

As we outline our view on credit markets for 2024, it’s always good practice to look at our calls from last year and what we missed vs. not. We expected a recession in our base case, and surprisingly consumer resiliency, even in light of two bank failures and restrictive interest rates, allowed the economy not only to grow, but to expand. However, that resiliency has come at a cost: additional leverage and less savings for consumers.

The skew of our forecast still tilts to a credit cycle unfolding as high interest rates run through the economy and the lagged effects of monetary policy are felt. We see office commercial real estate as a forebearer of this cycle, as the mix of long-duration assets with low-income yields, financed with short-duration funding that starts resetting at higher funding cost creates restructurings and distressed pricing. As more financing comes due, we expect this to broaden out to other parts of the that have similar profiles. However, the extent of the severity will likely be contained, given the overall better leverage position of the U.S. Consumer and Corporate sector than in 2007-2009. There is a world where the economy surprises with resiliency and inflation comes back, which is our stronger for longer case.

Despite these challenges, after hiking interest rates to 5.50%, the Fed now has ammunition to soften the credit cycle as it unfolds. Which leaves us with a view that is not dissimilar from one year ago. We prefer investment grade/municipal bonds over high yield, given the relative value, better correlation to Treasuries from the former, and asymmetry of returns in a credit cycle. In addition, in the municipal space, we see fundamentals that are stronger than for the central government. In our view, this will manifest in tighter ratios on municipal yields to TSY yields than history would indicate.

What we’re watching: Consider adding core fixed income both investment grade and municipals. We like keeping it simple on the duration front: a healthy mix of short (70%) and long duration (30%) is our preference to get roll-down to maturity carry and ballast of long duration. In extended credit, we continue to see value in GSIB preferreds and subordinated hydrids of IG issuers with yields +7% and distressed opportunities as the cycle unfolds with seasoned managers.

Our view:

U.S. IG (spread): 150bps (+/-25bps) by mid-2024
130bps (+/-25bps) by year-end 2024

US HY (spread): 550bps (+/-25bps) by mid-2024
500bps (+/-25bps) by year-end 2024

Municipal 10yr Yield Ratio: 75% of 10yr TSY by mid-2024
65% of 10yr TSY by year-end 2024

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
E.U. Credit

This year, yields have made a large adjustment due to rapid ECB rate hikes; we think the story of 2024 will likely be less about rate risk and more about fundamental credit risk.

In Europe, inflation peaked across headline and core, growth slowed sharply, and financial conditions tightened materially. We see growth remaining low but improving gradually as inflation falls closer to target, allowing the central bank to begin easing policy. In this environment, we expect IG credit to benefit the most. Also, we believe the divergence in growth between Europe and the U.S., as well as the probable outcome that the ECB will deliver its cut earlier than the Fed, makes the case stronger for owning duration in EUR IG.

Supporting our view are the expectations for negative correlation between rates and spreads, in line with the traditional relationship, as investors focus on growth risks rather than inflation concerns. The negative correlation reasserting itself allows high-quality fixed income to fulfill its role as ballast in portfolios in both a recession scenario (via lower rates) or a continued expansion (via tighter spreads).

From a valuation perspective, EUR IG yields at 4.3% are unusually high, having surpassed these levels only briefly in periods of stress in 2001/02, 2007/08 and 2011, while spreads are also well above the historical norm, trading at the 65th percentile of the past 20-year range, unlike HY, which trades not too far from the median. Also, dispersion within HY is significantly elevated, with more names clustered in the extremes of the spread distribution, pointing to higher idiosyncratic risks and need for active management.

It’s worth noting that moderating growth weighs unevenly on issuers, and patience is warranted, as cuts are ultimately needed to usher in the next big credit bull market. Central banks are unlikely to rush cutting rates too early after such efforts to rein in inflation (which is still well above mandate), and we see HY as more vulnerable in this higher-for-longer environment given today’s world of interest rate is alien to firms after a decade of zero and sub-zero rates. For context, current secondary market yields are almost double the level of current coupons, while refinancing needs are also higher. The lack of refinancing activity over the past couple of years acted as a positive technical, but it has led to an EU HY market that has 22% scheduled to mature over the next two years, well above the typical 8-12%, with lower-rated Bs and CCCs credits accounting for a considerable amount of these refinancing needs.

Default rates have already started normalizing, running at 2.1% LTM, above the median rate of 1.1% over the past two decades. We expect HY default rates to rise 3.5%. Where does this leave us? We see best value in IG. Fundamentals are robust, valuations are attractive, and a very flat yield curve provides a compelling entry point across the curve: short duration (1-5Y) for attractive carry and roll-down to maturity, and long duration as a hedge to other asset classes in a recessionary environment, that Europe seems more susceptible to.

What we’re watching: IG offers attractive value in both EUR and GBP. Hard to ignore yields in the 4.3% and 6% area, respectively, with very limited credit or rates risk. IG financials because fundamentals are sound for top-tier European banks, which continue to trade wide to corporates, offering interesting value. Corporate hybrids are a fundamentally defensive asset class, where credit risk is low. We would focus on strong IG national champion corporates in defensive sectors such as Telcos, Energy and Utilities. Credit spread dispersion has materially ticked up, hence credit selection is ever so important.

Our view:
EU IG (spread): 175bps (+/-25bps) by mid-2024
140bps (+/-25bps) by year-end 2024
EU HY (spread): 580bps (+/-25bps) by mid-2024
525bps (+/-25bps) by year-end 2024

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
Asia Credit

Asia credits tightened in 2023 but not enough to offset 5-year Treasury rates rise, resulting in subpar returns (+2.19%). Asia HY return was flattish (-0.39%) as more defaults in the property sector ensued.

For 2024, we see potential for mid- to high-single-digit return in Asia credits. The index is yielding 7.15% with a duration of ~ 4 years, 85% of the index is investment grade, and China weight has reduced from 50% to 38%. Carry will be a big driver of returns.

In Asia IG, we expect spreads to widen modestly, given tight valuations, but an absolute yield of 6.08% and duration of 4.49 is likely to lead to higher than carry-like returns given our Treasury rates outlook. Technicals have been the biggest drivers, as issuers have been refinancing maturities in local markets. Given lower local currency rates, we expect only 60% of the maturities next year will be refinanced in the USD market. Our preference in Asia IG is China TMT, given its healthy free cash flow generation; Hong Kong credits, given stable quality; and India credits, given the growth story. We have a neutral view on China Asset Managers, as weak fundamentals are offset by very strong government support. We are avoiding Korean credits and China SOE due to their tight valuations, and we are cautious in Hong Kong real estate due to widening potential, given continued struggles with higher rates.

In Asia HY, the yield-to-worst is very high at 14.81%, but default adjusted return will likely be materially lower. Staying selective is important, as higher rates would impact refinancing ability. For real estate, default is likely to stay high, but the contribution to index is now only 12%, down from 40% few years ago. Our preference in Asia HY is 1) Indian credits due to long-term growth potential and infrastructure; and 2) Macau gaming due to the proven recovery. We remain cautious on China property sector, as we expect default rates to stay high. Credit selection will continue to matter and especially in Asia high yield.

What we’re watching: China TMT—Attractive valuation with solid balance sheets, strong cash flow generation and reduced regulatory uncertainties. India Growth—Long-term growth, infrastructure policy and technical support, search for pocket of values in India high yield. Selective in High Yield-China property defaults to stay high, and we may see more non-China defaults. Credit selection matters.

Our View:

Asia IG (spread): 165bps (+/-25bps) by mid-2024
155bps (+/-25bps) by year-end 2024

Asia HY (spread): 1,300bps (+/-25bps) by mid-2024
1,200bps (+/-25bps) by year-end 2024

*Outlook total return assumptions footnoted below

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
EM Credit

EM had a complex 2023. In the corporate space, performance (+2.82%) was below USD inflation rates despite it being a relatively high spread product. Most of the lack of performance can be attributed to the China real estate distress that is seeming to capitate this year with little to no recoveries for almost every credit in the space. Since the onset of the EM corporate credit space, the experience with the real estate sector is 3x3 in terms of that in a distress cycle, almost all issuers default and end in negligible recoveries: Mexico (2013, Brazil 2015, China 2023). In the sovereign space, the positive performance (+2.96%) was driven by the B/CCC+ complex, similar to U.S. HY, which in a way benefited the most from skirt a downturn in 2023.

Into 2024, we have several elections and a whole host of political risks, given the ongoing wars in both Ukraine and Israel. We expect an eventual interest rate cutting cycle in the back half of 2024 to be supportive of just marginally wider spreads in EM, offset by some of the weaker growth dynamics and political challenges that the different regions will encounter. On the electoral front, there are over 40 elections worldwide, with the most consequential for EM beyond the U.S. (November) being Taiwan (January) and Mexico (June).

What we’re watching: EM has some of the best spread pickup in energy, given the overall aversion to the region in a financial condition tightening cycle. The challenge is sovereign control of energy producers’ limits upside; however, we still see spreads compensating for these risks. As with the developed world, some of the corporate hybrids in EM from investment grade issuers offer HY-like yields with less cyclical fundamental risk and solid balance sheets. We see opportunities in certain Turkey corporates that offer outsized returns for the quality of the business and strength of the balance sheets.

Our view:

EMBI (spread): 415bps (+/-25bps) by mid-2024
375bps (+/-25bps) by year-end 2024

CEMBI (spread): 385bps (+/-25bps) by mid-2024
325bps (+/-25bps) by year-end 2024

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
FX VIEWS

U.S. Dollar

The dollar rally in the second half of the year came to an end in November, as the FOMC communicated it was now “on hold” as inflation and labor market data in the U.S. cooled by more than expected.

Like the LTCMA, our base case remains that the dollar will ultimately unwind the overvaluation that built up in 2022 over the medium term. However, we remain neutral on the dollar against most currencies until we see clearer signs of U.S.-RoW growth and rate differentials converging. We are optimistic that will occur over the next year, but have it penciled in for the second half of 2024.

We would limit short USD positions for now to high-carry, resilient growth FX, primarily in Latam.

What we’re watching: U.S. growth momentum, RoW (Europe and China) economic surprise indices.

Our view: DXY: 105 (103-107) by mid-2024
100 (98-102) by year-end 2024

Euro

Europe remains the primary laggard in the global economy. We see a high chance the ECB atypically leads the Fed in terms of rate cuts this cycle. Last month, we downgraded our outlook for EURUSD to reflect a weaker European growth backdrop and elevated geopolitical tensions that pose an outsized risk to the region. Our base case expects EURUSD to be rangebound at low levels in the near term. Current fair value estimates based on interest rate and growth differentials center around 1.05.

We continue to pencil in some slight upside in 2024. The euro should benefit over time from global investors closing underweights to European fixed income now that negative rates are a thing of the past, and the current degree of U.S. cyclical outperformance should ultimately fade. However, the path to that point will likely be choppy, especially if U.S. growth continues to prove resilient for an extended period of time. Our preferred way to position for a European growth slowdown is via short EURCHF.

What we’re watching: Eurozone vs. U.S. growth momentum, fixed income flows.

Our view: 1.06 (1.04-1.08) by mid-2024
1.12 (1.10-1.124) by year-end 2024

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
British Pound

The economic picture for the United Kingdom continues to weaken. PMI data last month pointed to a contraction in economic activity, and labor market data showed a sharp decline in the number of jobs. While that doesn’t imply that the U.K. economy is teetering on the edge of an imminent recession, a slowdown is clear. From here, we expect the Bank of England to put its rate-hiking cycle on hold, while sticking to the “higher for longer” playbook until inflation has sufficiently cooled and the economy is likely in or close to recession.

This backdrop means there is likely to be little support for GBP via the rates channel (which propped up the currency earlier this year) in the months ahead, while a shift to a “higher for longer” stance from the BoE will likely weigh on forward-looking growth expectations for the U.K. Our GBPUSD model based on rate differentials, global risk sentiment, and the broader USD currently implies fair value around 1.20. We would continue to underweight the currency versus USD and most other G10 FX.

What we’re watching: BOE hiking expectations, U.K. housing market, global risk sentiment, energy prices

Our view: 1.20 (1.18-1.22) by mid-2024
1.25 (1.23-1.25) by year-end 2024

Swiss Franc

Don’t bet against the Swiss franc. After CHF was the best-performing major currency in October, its strength stalled against EUR, though continued against USD. We stay bullish on CHF over the medium-term, on a trade-weighted basis, given its strong fundamentals (e.g., 10% of GDP current account surplus) and safe-haven nature; EURCHF is the most correlated pair to European growth revisions. Swiss inflation has continued to moderate, prompting the SNB to hold rates in September. But the SNB will likely remain vigilant against inflation pressures, and is unlikely to welcome significant currency weakness in our view.

What we’re watching: European growth revisions, SNB intervention.

Our view:
USDCHF: 0.88 (0.86-0.90) by mid-2024
0.86 (0.84-0.88) by year-end 2024
EURCHF: 0.93 (0.91-0.95) by mid-2024
0.95 (0.93-0.97) by year-end 2024

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
**Japanese Yen**

The yen continues to fluctuate around the 150 level against the USD—despite large declines in USD yields.

From here, concerns about an intervention-induced short squeeze could limit a further buildup of short positions on the currency. But narratives from the BOJ have changed little, with the central bank still suggesting that the goal of stable inflation is not yet in sight and providing no guidance on a timeframe for a policy shift toward normalization. We expect only a slow and gradual grind higher for JGB yields.

We expect USDJPY to trade lower over the next 12 months as the Fed ends its hiking cycle and U.S. yields ultimately move lower from their peak. However, our conviction on the magnitude and timing of such a move is admittedly low, given the currency pair’s declining sensitivity to rate differentials this month.

**What we’re watching:** Japan inflation, BoJ policy guidance, USD yields.

**Our view:** 140 (138-142) by mid-2024
140 (138-142) by year-end-2024

---

**Chinese Yuan**

The yuan traded slightly stronger on the month on retracement of U.S. yields. PBOC intervention continued with fixes on the stronger side, while offshore short-term liquidity moderately eased. While we think these measures are temporary in nature, they put a cap on how high USDCNH can go over the short term. Recent news flows on the Xi-Biden meeting as well as additional policy easing also lifted sentiment on the margin.

Over the medium term, we still maintain a bearish bias on CNH due to several fundamental headwinds: 1) carry disadvantage against most major currencies could widen as PBOC delivers more rate cuts; 2) balance of payments challenges due to slowing exports and weak capital inflows; 3) concerns over long-term growth outlook and geopolitics.

Thus, we still think it makes sense to hedge long CNH exposure and take advantage of the carry. In addition, a weak CNH also opens the door for using it as a funding currency to leverage attractive borrowing costs and take advantage of opportunities elsewhere.

**What we’re watching:** USD yields, China fiscal policy moves, capital flows.

**Our view:** 7.35 (7.25-7.45) by mid-2024
7.30 (7.25-7.35) by year-end 2024

---

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. **Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material.** Please refer to “Definition of Indices and Terms” for important information. **Past performance is no guarantee of future results and investors may get back less than the amount invested.** It is not possible to invest directly in an index.
G10 Commodity FX

An environment with high levels of macro uncertainties often doesn’t favor commodity FX, given their high-beta nature.

CAD: CAD as a USD proxy looks well positioned to outperform on the crosses. However, it may still trade weaker versus the USD, as we expect the BOC to hold policies on softer growth and inflation, housing market vulnerability, and a softening labor market, as unemployment rate rose to a 21-month high.

AUD: AUD is among the worst-performing G10 currencies, being traded as a CNH proxy. Outlook turns more constructive from here, given resilience in the domestic economy (i.e., limited transmission from China).

NZD: Remain cautious despite attractive valuations. Domestic growth challenges prevail, given prolonged period of high rates and housing weakness, which led to persistent downturn in the NZ economy for the past 1.5 years.

What we’re watching: Commodity prices, global growth outlook, central bank divergence

Our view:

CAD: 1.36 (1.34–1.38) by mid- and year-end 2024
AUD: 0.69 (0.67–0.71) by mid- and year-end 2024
NZD: 0.61 (0.59–0.63) by mid- and year-end 2024

Scandi FX

Scandinavian currencies saw some relief in November, buoyed by their high-beta nature amid improved risk sentiment and broader USD weakness. Still, their sensitivity to European growth leaves them vulnerable versus USD, in our view.

NOK: Positives include improving terms of trade, normalizing Norges Bank FX purchases, relative growth prospects, and a cheap valuation. But we are wary of the potential for near-term selloffs, given its sensitivity to regional growth weakness. We prefer NOK to SEK, but would otherwise be neutral.

SEK: SEK has gained some support from the Riksbank’s FX reserve hedging program and broader risk rally, but we think concerns around the labor market, housing and recessionary growth remain intense and will ultimately win out. We maintain a bearish bias.

What we’re watching: Commodity prices, global growth outlook, housing activity in both countries.

Our view:

EURNOK: 11.10 (10.90–11.30) by mid- and year-end 2024
EURSEK: 11.80 (11.60–12.00) by mid- and year-end 2024

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
Emerging Market FX

A late-cycle environment does not generally favor EMFX, given its growth-sensitive nature, though pockets of the bloc could find resilience with attractive carry.

As we assess the terrain:

Latam: Robust carry makes for a resilient environment for Latin American local assets. We prefer monetizing volatility to directional FX exposure, as politics never stray far from center stage. **BRL**: Still-high real policy rates, given falling inflation and a move into trade surplus territory provides strong support to the Brazilian real. Investors cannot overlook the potential impact of political noise, but we see limited downside from here. **MXN**: The Mexican currency offers the best risk/reward in the region, in our view, given a persistent carry advantage, relatively firm external and fiscal balances, and quieter politics.

EMEA: We are neutral on this part of the complex and would instead focus attention on Latin American markets. **ILS**: The shekel has unwound all of the sell-off seen at the outbreak of the Israel-Hamas war. The move so far has been limited, as market participants respect the willingness and ability of the Bank of Israel to defend the currency, and there has been a lack of broader regional escalation. It takes a lot for the currency to meaningfully weaken from here, but it still makes sense to hedge against tail risks, given reasonable pricing of options.

Asia: Stay negative on the bloc as global trade downturn continues and there are China related risks. Favor countries with boosts from commodity exports/tourism recovery (e.g. THB, IDR over INR, PHP). **TWD**: Bearish bias on sensitivity to China risks and potential pickup in geopolitical premium heading into elections. **SGD**: Neutral against USD and the basket. The Monetary Authority of Singapore (MAS) is expected to remain on hold through 2023, as core CPI peaked, and recent data revealed continued weakness in manufacturing/exports.

What we’re watching: Overall risk sentiment, global trade outlook, central bank divergence.

**Our view:**

<table>
<thead>
<tr>
<th>Currency</th>
<th>Estimate</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRL</td>
<td>5.00</td>
<td>4.80–5.20</td>
</tr>
<tr>
<td></td>
<td>5.20</td>
<td>5.00–5.40</td>
</tr>
<tr>
<td>MXN</td>
<td>17.50</td>
<td>17.30–17.70</td>
</tr>
<tr>
<td></td>
<td>17.80</td>
<td>17.60–18.00</td>
</tr>
<tr>
<td>ILS</td>
<td>3.90</td>
<td>3.80–4.00</td>
</tr>
<tr>
<td></td>
<td>3.95</td>
<td>3.85–4.05</td>
</tr>
<tr>
<td>TWD</td>
<td>32.50</td>
<td>32.00–33.00</td>
</tr>
<tr>
<td></td>
<td>32.00</td>
<td>31.50–32.50</td>
</tr>
<tr>
<td>SGD</td>
<td>1.365</td>
<td>1.345–1.385</td>
</tr>
<tr>
<td></td>
<td>1.360</td>
<td>1.340–1.380</td>
</tr>
</tbody>
</table>

*JPM Investment Bank Outlook

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. **Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material.** Please refer to “Definition of Indices and Terms” for important information. **Past performance is no guarantee of future results and investors may get back less than the amount invested.** It is not possible to invest directly in an index.
COMMODITY VIEWS

BCOM Index
Commodities slid in November, losing -2.75% after some big reversals across the energy complex. The index is now -9.8% YTD and has proved to be a very frustrating as an asset class after the strong gains seen in 2022. There were some bright points in November with some gains in metals and agriculture. The biggest loser was natural gas, which dropped -16%, followed by crude oil down -9.2% and diesel -7.2%. The losses were a reaction to consumer demand dropping in the U.S. and a continued unwind of the geopolitical risk premiums that had accumulated in energy during October. The biggest gains were seen in soybeans +4.95%, silver +4.7% and coffee, which rose +2.3%. Market futures curves have increased negative carry, as markets start to discount near-term demand. The risk of recession in commodity markets has increased, which seems out of line with broader market consensus of a soft landing ahead.

What we’re watching: The overall index has moved sideways for about nine months now, and we watch keenly to see if either side of the range will break. For now, the downside appears the favorite, but our inclination would be to try and fade that move if it happens. The IB has added to commodity exposure this month, but we are hesitant to follow at this point.

Our view: 110-115 by mid-2024
110-115 by year-end 2024

Gold
Gold traded sideways so far in November after seeing strong gains in the previous month. Some of the earlier premium was removed as geopolitical risk eased and risk assets gave up earlier gains, with gold at one point in the month trading as low as 1932. It has since recovered the losses, mainly on the better-than-expected CPI print, largely due to the easing in 10Y interest rates. A lot of the buying has looked to be short covering, and a search for safe-haven status has certainly been another factor. Retail investors had continued to sell gold in October, and that trend continued in November, although at a much lower pace. This continues to give us confidence that the metal is not a crowded trade, and we would advise clients to continue to buy gold on any dips into the mid $1,800s. In terms of the conflict, although the risk of a wider war has eased, a lengthy military struggle will likely keep gold bid. Central bank buying continues to be a feature, with demand hitting a record for the first nine months of 2023.

What we’re watching: As our view on recession moderates, we now look to see if inflation will remerge. We continue to suggest buying gold on dips.

Our view: $2,000-$2,100 by mid-2024
$2,000-$2,100 by year-end 2024

Gold price 1-year history

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
**Crude Oil**

Crude oil had a bad month, dropping -9.2% across the two benchmarks. Although we had been expecting a move lower, the pace of the sell-off in November has surprised us. The J.P. Morgan Energy Conference participants in London were quite bullish, and this is usually a warning sign. The drop in the last 20 days is now the largest in almost a year, and the last drop of this magnitude resulted in a production cut from Saudi Arabia. Our view that new production in North America would temper prices is playing out, but prices below $80 will mean a quick slowdown in the pace of new supply. The slowdown in demand has been real, although early indications show that expectations are for surging demand in the closing weeks of the month as U.S. drivers prepare for Thanksgiving travel. On the SPR rebuild, we have some movement, as the DOE has announced it will buy 1.2 million barrels in January, although it had tendered to buy 3 million. Perhaps we see more movement here as prices fall.

**What we’re watching:** Mobility demand is still strong globally, and with gasoline prices down another -4.25% in November, we think U.S. consumers will respond with increased demand. OPEC holds the key, but crude is beginning to look a little oversold. We would be buyers if Brent trades to $72.

**Our view:** Brent: $81-$86 by mid-2024
$81-$86 by year-end 2024

WTI: $77-$82 by mid-2024
$77-$82 by year-end 2024

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
**Natural Gas**

Natural gas remains very volatile, unwinding all the gains seen in October and now losing -17% on the month. The longer-term outlook for natural gas is not inspiring. Discussions in London at the beginning of the month have us very concerned that beyond 2024, too much capacity is going to be coming online. The reality for the commodity is that the U.S., has plenty of dry gas supply and can produce a lot more at very cheap prices. As LNG capacity comes online, the reality is that we see supplies increasing by 60% over the next six years into 2030. It's not clear who the buyers will be for all this new supply, and so far, the exporters seem to be working on the premise that “if we build it, they will come.” Asian demand for LNG is good this year, but can it absorb so much new capacity? We are doubtful. Certainly, the opening of the new LNG facilities will increase dry gas demand, but producers can and will meet this challenge easily. This is a problem for the future. For today and the next 12 months, we need to watch the weather. Winter will determine direction from here.

**What we’re watching:** Weather and weather. Hard to be bullish, but a little price appreciation from here seems reasonable.

**Our view:** $3.50-$4.50 by mid-2024

$3.50-$4.50 by year-end 2024

---

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material. Please refer to “Definition of Indices and Terms” for important information. Past performance is no guarantee of future results and investors may get back less than the amount invested. It is not possible to invest directly in an index.
OUR MISSION

The Global Investment Strategy Group provides industry-leading insights and investment advice to help our clients achieve their long-term goals. They draw on the extensive knowledge and experience of the Group’s economists, investment strategists and asset-class strategists to provide a unique perspective across the global financial markets.

THE TEAM

Executive Sponsor
Clay Erwin
Global Head of Investments
Sales & Trading

Global Investment Strategy Group
Tom Kennedy
Chief Investment Strategist
Elyse Ausenbaugh
Global Investment Strategist
Christopher Baggini
Global Head of Equity Strategy
Nur Cristiani
Head of LatAm Investment Strategy
Kristin Kallergis Rowland
Global Head of Alternative Investments
Jacob Manoukian
Head of U.S. Investment Strategy
Grace Peters
Global Head of Investment Strategy
Xavier Vegas
Global Head of Credit Strategy
Alex Wolf
Head of Asia Investment Strategy

There can be no assurance that any or all of the members will remain with the firm or that past performance or success of any such professional serves as an indicator of future success.
DEFINITIONS OF INDICES AND TERMS

Currencies and Central Banks

- USD – US dollar
- DXY – U.S. Dollar Index indicates the general initial value of the USD. The index measures this by averaging the exchange rates between the USD and major world currencies.
- EUR – Euro
- JPY – Japanese yen
- GBP – British pound
- CHF – Swiss franc
- CAD – Canadian dollar
- AUD – Australian dollar
- NOK – Norwegian krone
- MXN – Mexican peso
- BRL – Brazilian real
- CNH – Offshore deliverable renminbi
- CNY – Onshore non-deliverable renminbi
- RMB – Chinese renminbi
- KRW – Korean won
- INR – Indian rupee
- SGD – Singapore dollar
- SEK – Swedish krona
- XAU – Gold
- RUB – Russian ruble
- TRY – Turkish lira
- BCB – Central Bank of Brazil
- BoC – Bank of Canada
- BoE – Bank of England
- BOJ – Bank of Japan
- CBR – Central Bank of Russia
- CBRT – Central Bank of the Republic of Turkey
- CBRA – Central Bank of the Republic of Argentina
- ECB – European Central Bank
- Fed – Federal Reserve
- SNB – Swiss National Bank

Additional abbreviations

- Bbl – Barrel
- Bps – Basis points
- Bcf – Billion cubic feet
- BoP – Balance of Payments
- BTP – Italian government bonds
- Bund – German government bonds
- CFTC – Commodity Futures Trading Commission
- COVID-19 – Coronavirus disease 2019
- DM – Developed Markets
- EM – Emerging Markets
- EMEA – Europe, Middle East and Africa
- FDI – Foreign Direct Investment
- FX – Foreign Exchange
- G10 – The Group of Ten is made up of 11 industrial countries that consult and cooperate on economic, monetary and financial matters
- GDP – Gross Domestic Product
- HY – High yield
- IG – Investment grade
- JGB – Japan government bond
- LATAM – Latin America
- OPEC – Organisation of the Petroleum Exporting Countries
- Oz. – Ounce
- REER – Real Effective Exchange Rate
- UK – United Kingdom
- UST – U.S. Treasury note
- WTI – Western Texas Intermediate
- YTD – Year-to-date

TR rate assumptions include: US Treasury Stronger for Longer 10Y = 5.1%, 5Y = 5.15%, Base Case 10Y = 3.9%, 5Y = 4%, Recession 10Y = 2.9%, 5Y = 2.7%. German Bund – Stronger for Longer 5Y Bund = 2.6%, Base Case 5Y Bund = 2.25%, Recession 5Y Bund = 1.7%. *TR default rate assumptions include: US High Yield Stronger for Longer Default rate = 3%, Base Case Default rate = 3.5%, Recession Default rate = 8%. CEMBI Stronger for Longer Default rate = 2%, Base Case Default rate = 2%, Recession Default rate = 3%, EMBI stronger for Longer Default rate = 3%, Base Case Default rate = 3%, Recession Default rate = 5%, EURO IG Recession Default rate = 1%, EURO High Yield Stronger for Longer Default rate = 5%, Base Case Default rate = 3.5%, Recession Default rate = 8%. JACI IG TR include Stronger for Longer Default rate = 2%. JACI High Yield Stronger for Longer Default rate = 12%, Default rate = 12%, Recession Default rate = 16%.
Note: Indices are for illustrative purposes only, are not investment products, and may not be considered for direct investment. Indices are an inherently weak predictive or comparative tool. All indices denominated in U.S. dollars unless noted otherwise.

The Bloomberg Commodity Index (BCOM) is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification. Roll period typically occurs from 6th-10th business day based on the roll schedule.

The Bloomberg US Agg Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate pass-throughs), ABS and CMBS (agency and non-agency).

The JPM Corporate Emerging Market Bond Index (CEMBI) series was launched in 2007 and was the first comprehensive USD corporate emerging markets bond index. There are two root versions of the CEMBI with a Diversified overlay for each version: the CEMBI and the CEMBI Broad. The CEMBI Broad Diversified version is the most popular among the four versions largely due to its issuer coverage and diversification weighting scheme.

The CSI 300 Index is a free-float weighted index that consists of 300 A-share stocks listed on the Shanghai or Shenzhen Stock Exchanges. Index has a base level of 1000 on 12/31/2004. * Due to our agreement with CSI, shares in the index is restricted, please visit SSIS<go> for more information and access. This ticker holds prices fed from Shenzhen Stock Exchange.

The Citi Economic Surprise Indices measure data surprises relative to market expectations. A positive reading means that data releases have been stronger than expected and a negative reading means that data releases have been worse than expected.

The Emerging Market Bond Index Global (EMBI Global) was the first comprehensive EM sovereign index in the market, after the EMBI+. It provides full coverage of the EM asset class with representative countries, investable instruments (sovereign and quasi-sovereign), and transparent rules. The EMBI Global includes only USD-denominated emerging markets sovereign bonds and uses a traditional, market capitalization weighted method for country allocation.

The J.P. Morgan Asia Credit Index (JACI) aids in evaluating investment opportunities in fixed rate USD denominated bonds issued in Asia ex Japan region. It follows a traditional market capitalization technique similar to the EMBI and the CEMBI Index series.

The MSCI AC Asia ex Japan Index captures large and mid-cap representation across two of three Developed Markets countries (excluding Japan) and eight Emerging Markets countries in Asia. With 609 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. Developed Markets countries in the index include: Hong Kong and Singapore. Emerging Markets countries include: China, India, Indonesia, Korea, Malaysia, the Philippines, Taiwan and Thailand.

The MSCI China Index is a free-float weighted equity index. It was developed with a base value of 100 as of December 31, 1992. This index is priced in HKD. Please refer to M3CN Index for USD.

The MSCI AC ASEAN Index (former: MSCI South East Asia Index) captures large and mid cap representation across 4 Emerging Markets countries and 1 Developed Market country.

The MSCI India Index is a free-float weighted equity index. It was developed with a base value of 100 as of December 31 1992.

The MSCI World Index is a free float-adjusted spx market capitalization weighted index that is designed to measure the equity market performance of developed markets. The index consists of 23 developed market country indexes.

The Russell 2000 Index is comprised of the smallest 2000 companies in the Russell 3000 Index, representing approximately 8% of the Russell 3000 total market capitalization. The real-time value is calculated with a base value of 135.00 as of December 31, 1986. The end-of-day value is calculated with a base value of 100.00 as of December 29, 1978.

The Standard and Poor’s Midcap 400 Index is a capitalization-weighted index which measures the performance of the mid-range sector of the U.S. stock market. The index was developed with a base level of 100 as of December 31, 1990. See MDY US Equity <GO> for the tradeable equivalent.
The **Standard and Poor’s 500 Index** is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries. The index was developed with a base level of 10 for the 1941–43 base period.

The **EURO STOXX 50 Index**, Europe's leading blue-chip index for the Eurozone, provides a blue-chip representation of supersector leaders in the region. The index covers 50 stocks from 11 Eurozone countries. The index is licensed to financial institutions to serve as an underlying for a wide range of investment products such as exchange-traded funds (ETFs), futures, options and structured products.

The **STOXX Europe 600 Index (SXXP Index)**: An index tracking 600 publicly traded companies based in one of 18 EU countries. The index includes small cap, medium cap, and large cap companies. The countries represented in the index are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Holland, Iceland, Ireland, Italy, Luxembourg, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**TOPIX**, also known as the Tokyo Stock Price Index, is a capitalization-weighted index of all companies listed on the First Section of the Tokyo Stock Exchange.
JPMAM Long-Term Capital Market Assumptions

Given the complex risk-reward trade-offs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations. Please note that all information shown is based on qualitative analysis. Exclusive reliance on the above is not advised. This information is not intended as a recommendation to invest in any particular asset class or strategy or as a promise of future performance. Note that these asset class and strategy assumptions are passive only – they do not consider the impact of active management. References to future returns are not promises or even estimates of actual returns a client portfolio may achieve. Assumptions, opinions and estimates are provided for illustrative purposes only. They should not be relied upon as recommendations to buy or sell securities. Forecasts of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. This material has been prepared for information purposes only and is not intended to provide, and should not be relied on for, accounting, legal or tax advice. The outputs of the assumptions are provided for illustration/discussion purposes only and are subject to significant limitations.

“Expected” or “alpha” return estimates are subject to uncertainty and error. For example, changes in the historical data from which it is estimated will result in different implications for asset class returns. Expected returns for each asset class are conditional on an economic scenario; actual returns in the event the scenario comes to pass could be higher or lower, as they have been in the past, so an investor should not expect to achieve returns similar to the outputs shown herein. References to future returns for either asset allocation strategies or asset classes are not promises of actual returns a client portfolio may achieve. Because of the inherent limitations of all models, potential investors should not rely exclusively on the model when making a decision. The model cannot account for the impact that economic, market, and other factors may have on the implementation and ongoing management of an actual investment portfolio. Unlike actual portfolio outcomes, the model outcomes do not reflect actual trading, liquidity constraints, fees, expenses, taxes and other factors that could impact the future returns. The model assumptions are passive only – they do not consider the impact of active management. A manager’s ability to achieve similar outcomes is subject to risk factors over which the manager may have no or limited control.

The views contained herein are not to be taken as advice or a recommendation to buy or sell any investment in any jurisdiction, nor is it a commitment from J.P. Morgan Asset Management or any of its subsidiaries to participate in any of the transactions mentioned herein. Any forecasts, figures, opinions or investment techniques and strategies set out are for information purposes only, based on certain assumptions and current market conditions and are subject to change without prior notice. All information presented herein is considered to be accurate at the time of production. This material does not contain sufficient information to support an investment decision and it should not be relied upon by you in evaluating the merits of investing in any securities or products. In addition, users should make an independent assessment of the legal, regulatory, tax, credit and accounting implications and determine, together with their own financial professional, if any investment mentioned herein is believed to be appropriate to their personal goals. Investors should ensure that they obtain all available relevant information before making any investment. It should be noted that investment involves risks, the value of investments and the income from them may fluctuate in accordance with market conditions and taxation agreements and investors may not get back the full amount invested. Both past performance and yield are not a reliable indicator of current and future results.
KEY RISKS

- Investments in commodities may have greater volatility than investments in traditional securities. The value of commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates, or factors affecting a particular industry or commodity, such as drought, floods, weather, livestock disease, embargoes, tariffs and international economic, political and regulatory developments. Investing in commodities creates an opportunity for increased return but, at the same time, creates the possibility for greater loss.

- Investing in alternative assets involves higher risks than traditional investments and is suitable only for sophisticated investors. Alternative investments involve greater risks than traditional investments and should not be deemed a complete investment program. They are not tax efficient and an investor should consult with his/her tax advisor prior to investing. Alternative investments have higher fees than traditional investments and they may also be highly leveraged and engage in speculative investment techniques, which can magnify the potential for investment loss or gain. The value of the investment may fall as well as rise and investors may get back less than they invested.

- The price of equity securities may rise or fall due to the changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. Equity securities are subject to "stock market risk" meaning that stock prices in general may decline over short or extended periods of time.

- Investing in fixed income products is subject to certain risks, including interest rate, credit, inflation, call, prepayment and reinvestment risk. Any fixed income security sold or redeemed prior to maturity may be subject to substantial gain or loss.

- Preferred securities are typically long dated securities with call protection that fall in between debt and equity in the capital structure. Preferred securities carry various risks and considerations which include: concentration risk; interest rate risk; lower credit ratings than individual bonds; a lower claim to assets than a firm's individual bonds; higher yields due to these risk characteristics; and "callable" implications meaning the issuing company may redeem the stock at a certain price after a certain date.

- Investors should understand the potential tax liabilities surrounding a municipal bond purchase. Certain municipal bonds are federally taxed if the holder is subject to alternative minimum tax. Capital gains, if any, are federally taxable. The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax (AMT).

- Holders of foreign securities can be subject to foreign exchange risk, exchange-rate risk and currency risk, as exchange rates fluctuate between an investment's foreign currency and the investment holder's domestic currency. Conversely, it is possible to benefit from favorable foreign exchange fluctuations.

- International investments may not be suitable for all investors. International investing involves a greater degree of risk and increased volatility. Changes in currency exchange rates and differences in accounting and taxation policies outside the U.S. can raise or lower returns. Some overseas markets may not be as politically and economically stable as the United States and other nations. International investing can be more volatile.

- Investments in emerging markets may not be suitable for all investors. Emerging markets involve a greater degree of risk and increased volatility. Changes in currency exchange rates and differences in accounting and taxation policies outside the U.S. can raise or lower returns. Some overseas markets may not be as politically and economically stable as the United States and other nations. Investments in emerging markets can be more volatile.

- Not all option strategies are suitable for all investors. Certain strategies may expose investors to significant potential risks and losses. For additional risk information, please request a copy of "Characteristics and Risks of Standardized Options." We advise investors to consult their tax advisors and legal counsel about the tax implications of these strategies. Investors are urged to carefully consider whether options or option-related products or strategies are suitable for their needs. In discussion of options and other strategies, results and risks are based solely on hypothetical examples cited; actual results and risks will vary depending on specific circumstances. Investors are urged to consider carefully whether option or option-related products in general, as well as the products or strategies discussed herein are suitable to their needs. In actual transactions, the client's counterparty for OTC derivatives applications is JPMorgan Chase Bank, N.A. and its affiliates. For a copy of the "Characteristics and Risks of Standardized Options" booklet, please contact your J.P. Morgan Advisor.

- Structured products involve derivatives and risks that may not be suitable for all investors. The most common risks include, but are not limited to, risk of adverse or unanticipated market developments, issuer credit quality risk, risk of lack of uniform standard pricing, risk of adverse events involving any underlying reference obligations, risk of high volatility, risk of illiquidity/little to no secondary market, and conflicts of interest. Before investing in a structured product, investors should review the accompanying offering document, prospectus or prospectus supplement to understand the actual terms and key risks associated with the each individual structured product. Any payments on a structured product are subject to the credit risk of the issuer and/or guarantor. Investors may lose their entire investment, i.e., incur an unlimited loss. The risks listed above are not complete. For a more comprehensive list of the risks involved with this particular product, please speak to your J.P. Morgan team. If you are in any doubt about the risks involved in the product, you may clarify with the intermediary or seek independent professional advice.

- The risks listed above are not complete. For a more comprehensive list of the risks involved with this particular product, please speak to your J.P. Morgan team.
KEY RISKS

This material is for information purposes only, and may inform you of certain products and services offered by J.P. Morgan’s wealth management businesses, part of JPMorgan Chase & Co. ("JPM"). The views and strategies described in the material may not be suitable for all investors and are subject to investment risks. Please read all Important Information.

GENERAL RISKS & CONSIDERATIONS.

Any views, strategies or products discussed in this material may not be appropriate for all individuals and are subject to risks. Investors may get back less than they invested, and past performance is not a reliable indicator of future results. Asset allocation/diversification does not guarantee a profit or protect against loss. Nothing in this material should be relied upon in isolation for the purpose of making an investment decision. You are urged to consider carefully whether the services, products, asset classes (e.g., equities, fixed income, alternative investments, commodities, etc.) or strategies discussed are suitable to your needs. You must also consider the objectives, risks, charges, and expenses associated with an investment service, product or strategy prior to making an investment decision. For this and more complete information, including discussion of your goals/situation, contact your J.P. Morgan representative.

NON-RELIANCE.

Certain information contained in this material is believed to be reliable; however, JPM does not represent or warrant its accuracy, reliability or completeness, or accept any liability for any loss or damage (whether direct or indirect) arising out of the use of all or any part of this material. No representation or warranty should be made with regard to any computations, graphs, tables, diagrams or commentary in this material, which are provided for illustration/reference purposes only. The views, opinions, estimates and strategies expressed in this material constitute our judgment based on current market conditions and are subject to change without notice. JPM assumes no duty to update any information in this material in the event that such information changes. Views, opinions, estimates and strategies expressed herein may differ from those expressed by other areas of JPM, views expressed for other purposes or in other contexts, and this material should not be regarded as a research report. Any projected results and risks are based solely on hypothetical examples cited, and actual results and risks will vary depending on specific circumstances. Forward-looking statements should not be considered as guarantees or predictions of future events.

Nothing in this document shall be construed as giving rise to any duty of care owed to, or advisory relationship with, you or any third party. Nothing in this document shall be regarded as an offer, solicitation, recommendation or advice (whether financial, accounting, legal, tax or other) given by J.P. Morgan and/or its officers or employees, irrespective of whether or not such communication was given at your request. J.P. Morgan and its affiliates and employees do not provide tax, legal or accounting advice. You should consult your own tax, legal and accounting advisors before engaging in any financial transactions.

LEGAL ENTITY AND REGULATORY INFORMATION.

J.P. Morgan Wealth Management is a business of JPMorgan Chase & Co., which offers investment products and services through J.P. Morgan Securities LLC (JPMS), a registered broker-dealer and investment adviser, member FINRA and SIPC. Insurance products are made available through Chase Insurance Agency, Inc. (CIA), a licensed insurance agency, doing business as Chase Insurance Agency Services, Inc. in Florida. Certain custody and other services are provided by JPMorgan Chase Bank, N.A. (JPMC). JPM, CIA and JPMC are affiliated companies under the common control of JPMorgan Chase & Co. Products not available in all states.

Bank deposit accounts and related services, such as checking, savings and bank lending, are offered by JPMorgan Chase Bank, N.A. Member FDIC.

This document may provide information about the brokerage and investment advisory services provided by J.P. Morgan Securities LLC ("JPMS"). The agreements entered into with JPMS, and corresponding disclosures provided with respect to the different products and services provided by JPMS (including our Form ADV disclosure brochure, if and when applicable), contain important information about the capacity in which we will be acting. You should read them all carefully. We encourage clients to speak to their JPMS representative regarding the nature of the products and services and to ask any questions they may have about the difference between brokerage and investment advisory services, including the obligation to disclose conflicts of interests and to act in the best interests of our clients.

J.P. Morgan may hold a position for itself or our other clients which may not be consistent with the information, opinions, estimates, investment strategies or views expressed in this document. JPMorgan Chase & Co. or its affiliates may hold a position or act as market maker in the financial instruments of any issuer discussed herein or act as an underwriter, placement agent, advisor or lender to such issuer.

© 2023 JPMorgan Chase & Co. All rights reserved.