

Reviewing the quarter ended December 31, 2024



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- Market Concentration
- International Equities
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#### **ECONOMIC OUTLOOK**



**Gerard Klingman, Founder & President** 

Gerry provides financial planning and investment advisory services to corporate executives, entrepreneurs, professional athletes and other highnet-worth individuals.

Gerry received a bachelor's degree in Economics from Princeton University and attained his Certified Financial ChFC<sup>®</sup> designations from the American College, as well as a CFS® designation from the Institute of Business & Association.

With more than 30 years of experience, Gerry is widely recognized as a leader in the field of financial planning and investment management. Gerry has been consistently ranked on many of the industry's lists of top financial advisers including Barron's Top 100 Independent Advisors, the Financial Times' F400 Top Financial Advisers, and the Forbes ranking of America's Top Wealth Advisors.

Investors faced a lot of uncertainty in 2024 including elections, inflation, and geo-political conflict. All the same, equity markets continued to march higher, supported by strong economic growth. The US economy, as measured by GDP, grew a healthy 2.7% in the third guarter of 2024 versus a year ago (page 8). We believe this is a reasonable expectation for the full year 2024, putting the economy in a much healthier place going into 2025 than many perceive. Two-thirds of GDP is comprised of consumer spending (page 9), and the US consumer remains healthy for a variety of reasons. There have been 20 consecutive months of real wage growth, in which wages have increased faster than inflation on a yearover-year basis (page 10). While the unemployment rate has risen slightly to 4.2%, it remains low by historical standards, and we believe at a more sustainable level than the post-pandemic environment where it seemed that anyone could get a job. Immigration has also been a huge boost to the labor market, with the US Census estimating 2.8m people immigrated to the US from June 2023 to June 2024. The wealth effect has been another big tailwind to the consumer, with US household wealth increasing an estimated 11% in 2024, or by close to \$15 trillion dollars (page 16). Inflation, while significantly lower than two years ago, appears to have stopped decelerating for the time being (page 18). This will remain a Planner<sup>TM</sup> certification from the College of Financial source of market anxiety in 2025, as a benign inflation picture remains the general catalyst for further Planning in 1989. He later earned CLU® and Federal Reserve interest rate cuts. But a strong job market, paired with more workers, higher wages, and higher asset values, is a robust recipe for economic growth. Ultimately, this should result in strong Finance. He is a member of the Financial Planning corporate profits and higher corporate investment spending.

> Against this economic backdrop, global equity market performance was strong in 2024. US Large Cap Equities, as measured by the S&P 500 Index, finished the year at +25% (page 20). From a fundamental perspective, higher corporate earnings and profitability continue to support higher prices. S&P 500 earnings are expected to have grown nearly 10% in 2024 (consensus is \$238 per share), and nearly 15% in 2025 and 2026 (page 22). We believe that 15% earnings growth may be overly optimistic in an economy with 2-3% growth and 2% inflation, but this is nonetheless a testament to the resilience of US businesses. However, equity prices have risen faster than earnings, driving valuations higher (page 21)... continued



#### **ECONOMIC OUTLOOK**

The S&P 500's 12-month forward price-to-earnings ratio is currently above 21x (its long-term average is 16-17x). Valuations are even more extreme in the largest 10 US companies, which now account for a record 39% of the S&P 500 index. These 10 companies trade at 30x forward earnings, while the other 490 remaining stocks trade at 18x (page 36). There is an argument to be made that the quality of these companies, as seen by their consistent secular earnings growth, higher return-on-equity, etc. warrants a higher multiple. But history tells us that eventually, incredibly high valuations and growth expectations likely lead to disappointments and devaluations. We believe this dynamic may not only create risks to traditional market cap indexing going forward but also create opportunities within the rest of the market. US Mid Cap Equities (S&P 400 Index) and US Small Cap Equities (S&P 600 Index) returned 14% and 9% respectively in 2024, failing yet again to keep pace with their larger counterparts. Small businesses are facing uncertainty from both a policy and regulatory standpoint (page 33), which has tempered future earnings expectations. Additionally, these smaller companies are typically more negatively impacted by higher interest rates than their larger counterparts. But at 16x forward earnings, paired with a strong backdrop for economic and corporate earnings growth, we believe these asset classes provide compelling opportunities for long-term investors. We remain Neutral weight to US Large, Mid and Small Cap Equities in our asset allocation models.

International equity markets reversed course in the fourth quarter, declining 8%, but held onto year-to-date gains. Non-US Developed Market Equities, as measured by the MSCI EAFE Index, finished the year +4% while Emerging Market Equities, as measured by the MSCI EM Index, finished the year +8%. President-elect Trump's provocative rhetoric, particularly in relation to the imposition of trade tariffs on imported goods, is the most recent headwind faced by international equity markets. We do think it is likely the new administration will use tariffs to some degree, but we also see them as more of a negotiating tactic that will have a rather small impact on global growth. There is also an element of fatigue at play, as investors have watched US equity markets dominate their global counterparts for several years. All investors want to talk about, even those investors based overseas, is the S&P 500 Index. It is as if investing in Europe and the rest of the world seems irrelevant. We believe that is short-sighted, as these markets offer attractive investment opportunities for patient investors. These markets are trading at 12-14x forward earnings with a ~3% dividend yield. Yes, some of the valuation gap to US markets is deserved given lower earnings growth prospects and more cyclicality, as well as fewer technology-focused companies. But the valuation gap to US markets is the largest it has ever been (page 38). We remain Neutral on Non-US Developed Market Equities and Overweight Non-US Emerging Market Equities.

continued



#### **ECONOMIC OUTLOOK**

The Federal Reserve lowered interest rates at each of its last three meetings in 2024, with short-term interest rates currently at 4.25% to 4.5%. The Fed is now expected to lower rates another two times in 2025 (page 23). But Jerome Powell continues to walk a tightrope as he tries to ensure that the job market doesn't slow too dramatically and inflation doesn't increase. So far, the juggling act has gone pretty well. While all eyes have been on the Federal Reserve and short-term interest rates, long-term interest rates continue to play a leading role. Stronger-than-expected growth and continued concerns about the US government's fiscal outlook have recently pushed long-term interest rates higher, the 10 Year US Treasury ended the year at 4.6%, approaching the 5% level it reached in October 2023 (page 24). With this volatility, we continued to take advantage of the opportunity, purchasing high quality bonds at attractive yields to lock in income in client portfolios. Our investment team has focused on generating consistent cash flow from the fixed income portion of client portfolios, whether through coupon income or consistent maturities. This cash flow is not only useful to manage client liquidity needs but also helps protect against the risk of rising interest rates as the cash can get reinvested at higher market rates. We remain Overweight to high quality Investment Grade credits, including municipals, Treasuries and corporates. While Non-Investment Grade bonds enjoyed another year of positive returns (+8% as measured by the Barclays High Yield index), credit spreads tightened to historically narrow levels (page 29). Even through the income is attractive on an absolute basis, we do not believe investors are being adequately compensated for taking excessive credit risk and remain Neutral to Strategic Bonds.

Long-time clients and readers of our Outlook know that we often provide statistics to support the futility of market timing and attempting, based on valuations or economic events, to be "in" or "out" of the market. The volatility that equity markets have experienced over the last three years certainly reinforced this thesis. Amidst the bear market in 2022, thanks to the Federal Reserve's aggressive tightening, market pundits were all but guaranteeing a recession. Fast forward two years, and the US economy continues to grow, not to mention back-to-back years of 25%+ returns for the S&P 500 equity index. After the last several years of double- digit market returns (both positive and negative), market pundits are forecasting more "average" returns for equity markets in 2025 of 5-10%. Despite the S&P 500 delivering an average return of ~10% since 1926, these average returns are rarely achieved. The market has returned close to the average (between 8% and 12%) in only 6 of the past 100 years (page 39). Most years, the index's return was outside of that range – often above or below by a wide margin – with no distinct pattern and little correlation to market forecasts and/or expected geopolitical impacts. While we remain cognizant of the risks on the horizon, we believe economic growth remains resilient and many asset classes remain attractively valued – a backdrop that should continue to help our clients meet their long-term goals.



### TACTICAL OVERLAY TO STRATEGIC ASSET ALLOCATION MODELS

CASH ALTERNATIVES	UNDERWEIGHT	NEUTRAL	OVERWEIGHT
FIXED INCOME			
US INVESTMENT GRADE BOND	UNDERWEIGHT	NEUTRAL	OVERWEIGHT
TIPS	UNDERWEIGHT	NEUTRAL	OVERWEIGHT
STRATEGIC BOND	UNDERWEIGHT	NEUTRAL	OVERWEIGHT
US STOCKS			
US LARGE CAP EQUITY	UNDERWEIGHT	NEUTRAL	OVERWEIGHT
US MID CAP EQUITY	UNDERWEIGHT	NEUTRAL	OVERWEIGHT
US SMALL CAP EQUITY	UNDERWEIGHT	NEUTRAL	OVERWEIGHT
NON-US STOCKS			
NON-US DEVELOPED MARKETS EQUITY	UNDERWEIGHT	NEUTRAL	OVERWEIGHT
NON-US EMERGING MARKETS EQUITY	UNDERWEIGHT	NEUTRAL	OVERWEIGHT
ALTERNATIVES REAL ESTATE	UNDERWEIGHT	NEUTRAL	OVERWEIGHT

This material is for informational purposes only and should not be used or construed as a recommendation regarding any security outside of a managed account. There is no assurance any of the trends mentioned will continue in the future. Dividends are not guaranteed and must be authorized by a company's board of directors. Diversification does not assure a profit or protect against loss. International investing involves additional risks such as currency fluctuations, differing financial and accounting standards, and possible political and economic instability. Also, investing in emerging markets can be riskier than investing in well-established foreign markets. Investing involves risk and investors may incur a profit or a loss, including the loss of all principal.



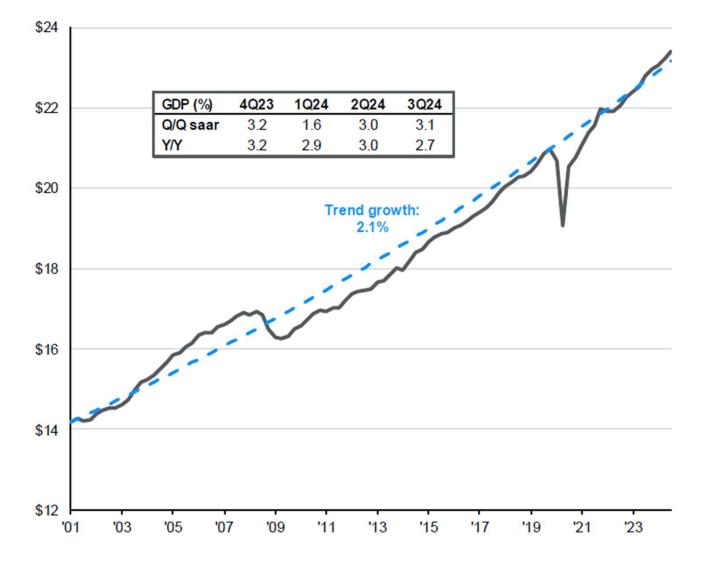
## **ECONOMIC REVIEW**

## **CAPITAL MARKETS**

## **QUARTERLY THEMES**



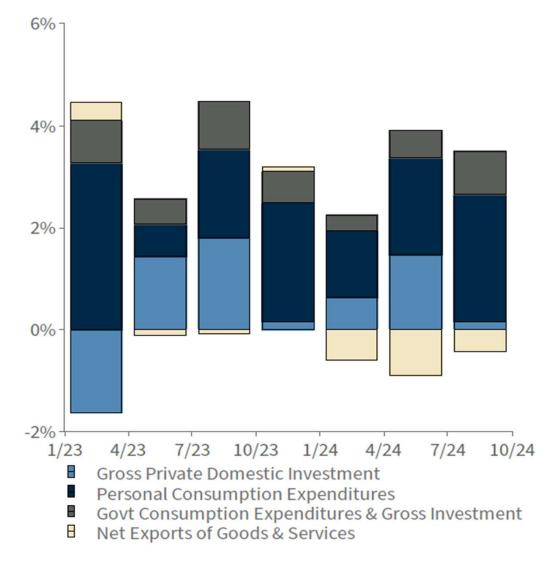
Gross domestic product increased 2.7 percent in the third quarter of 2024 versus a year ago according to the Bureau of Economic Analysis, driven by increases in consumer and government spending, as well as business investment.



Source: Bureau of Economic Analysis, FactSet, JPMorgan Asset Management as of 9/30/2024.



Third quarter real GDP growth reflected increases across personal consumption, government consumption, and gross private domestic investment, while net exports were negative.

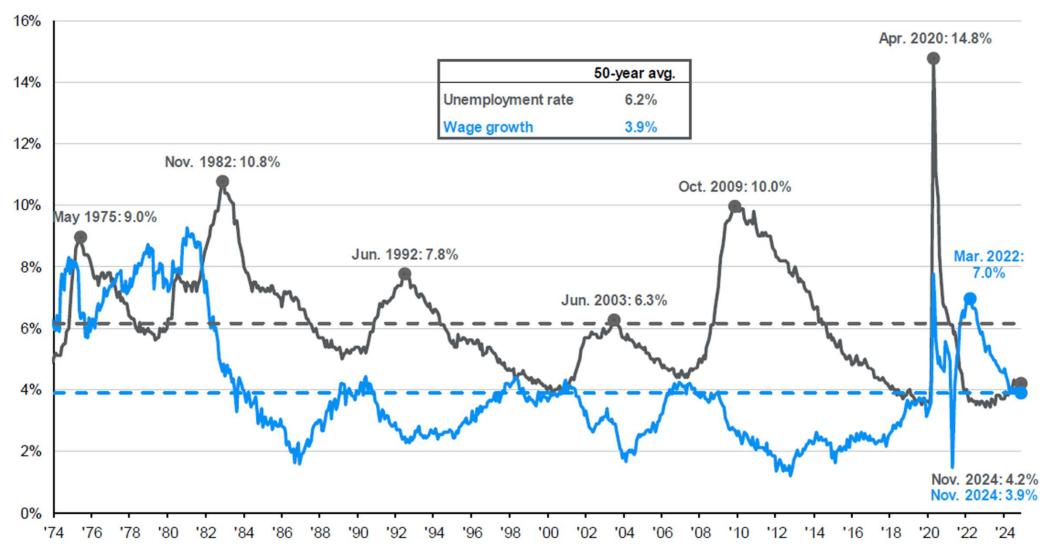


Source: FactSet, as of 9/30/2024.



### EMPLOYMENT

#### **Civilian Unemployment Rate and Year-over-Year Wage Growth**

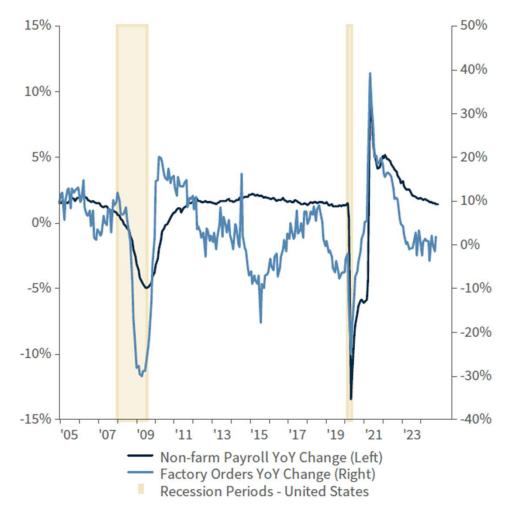


Source: BLS, FactSet, JPMorgan Asset Management. Private production and non-supervisory jobs represent just over 80% of total private nonfarm jobs. Data as of 12/31/2024.



#### EMPLOYMENT

Non-farm payrolls rose by 256,000 in December, well ahead of expectations for 155,000. This increase reflects additions within primarily healthcare, government, and social assistance jobs.

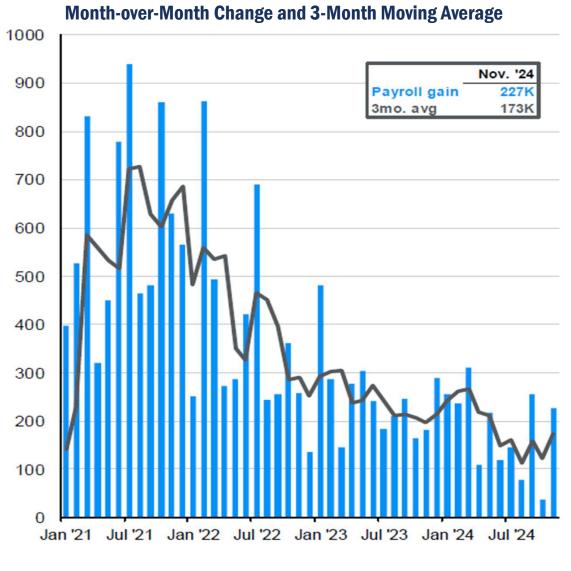


#### **Non-Farm Payroll and Factory Orders**

Source: FactSet, as of 12/31/2024.



### **Non-Farm Payroll Gains**



Source: BLS, FactSet, CBO, JPMorgan Asset Management, as of 12/31/2024.



#### MANUFACTURING

The ISM Manufacturing Index increased in December to 49.3 but remains in contractionary territory (a level below 50). Construction spending increased slightly over the quarter.



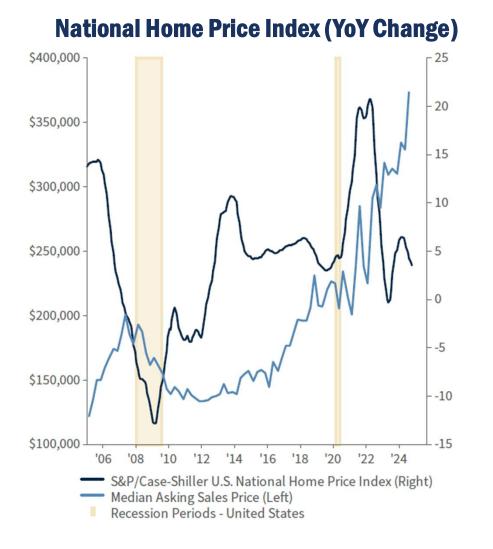
#### **Construction and Manufacturing**

Source: FactSet, as of 12/31/2024.



#### HOUSING MARKET

While home prices have continued to climb, the pace of price increases has moderated. Both new and existing home sales trended slightly higher this fall.



#### **New and Existing Home Sales**



Source: FactSet, as of 12/31/2024.

Source: FactSet, as of 12/31/2024.



#### CONSUMER CONFIDENCE

160

140

120

100

80

60

40

20

'70

'80

'90

Recession Periods - United States

**Consumer Confidence Index** 

US Consumer confidence was 104.7 in December, down from 112.8 in November. Retail sales were relatively stable but slightly higher during the third quarter.

160

140

120

100

80

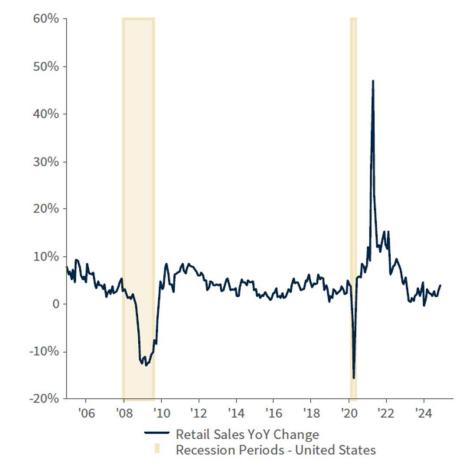
60

40

20

'20





Source: FactSet, as of 12/31/2024.



Source: FactSet, as of 12/31/2024.

'00

Consumer Confidence Index (12-Month Moving Average)

'10



### **Consumer Finances**

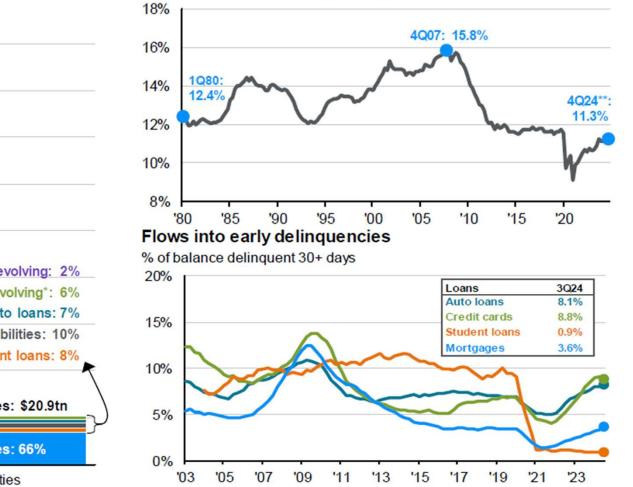
#### **Consumer balance sheet**

3Q24, USD trillions, not seasonally adjusted

\$200			Debt payments as % of di
\$200	Total assets: \$189.7tn		18%
<mark>\$1</mark> 80	_		16%
<mark>\$1</mark> 60	Homes: 28%		14%
\$140			12%
	Other tangible: 5%		10%
\$120	Deposits: 8%		8%
\$100	Pension funds: 17%		'80 '85 '90 Flows into early deline % of balance delinguent 30-
\$80		Other non-revolving: 2%	20%
		Revolving*: 6%	
\$60	-	Auto loans: 7% Other liabilities: 10%	15%
\$40	Other financial assets: 43%	Student loans: 8%	10%
\$20		Total liabilities: \$20.9tn	5%
¢0		Mortgages: 66%	0%
\$0 L	Assets	Liabilities	03 05 07 09

#### Household debt service ratio

Debt payments as % of disposable personal income, SA



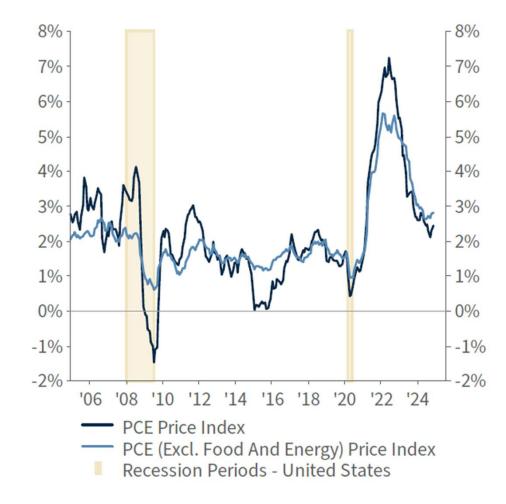
Source: FactSet, FRB, JPMorgan Asset Management, BEA. Data include households and nonprofit organizations (seasonally adjusted). \*Revolving includes credit cards. Values may not sum to 100% due to rounding. \*\*2Q24 and 3Q24 figures for debt service ratio are JPMorgan Asset Management estimates. Data as of 12/31/2024.



INFLATION

### Inflation

After two years of deceleration following post-COVID highs, inflation was sticky at the end of the year. The PCE Price Index (PCE) and Core PCE Index, which excludes the volatile food and energy components, increased 2.4% and 2.8%, respectively, in November versus a year ago.



Source: FactSet, as of 12/31/2024. Personal Consumption Expenditure (PCE) is the preferred measure of inflation by the Bureau of Economic Analysis.



### Inflation

#### 10% 9.1% Food at home Energy 8.6% 9% 8.5% Core goods Shelter Dining, recreation and other svcs. 8% Auto insurance 7.09 6.8% 7% 6.2% 6% 5.4 5.4% 5% 4.2% 4% 3% 2.6% 2% 1% 0% -1% -2% Jan '22 May '22 Jan '23 Jan '21 May 21 Sep '21 Sep '22 May '23 Sep '23 Jan '24 May '24

#### **Contributors to Headline CPI Inflation**

Source: BLS, FactSet, JPMorgan Asset Management. Contributions mirror the BLS methodology on Table 7 of the CPI report. Values may not sum to headline CPI figures due to rounding and underlying calculations. "Shelter" includes owners' equivalent rent and rent of primary residence. "Food at home" includes alcoholic beverages. Data as of 12/31/2024.

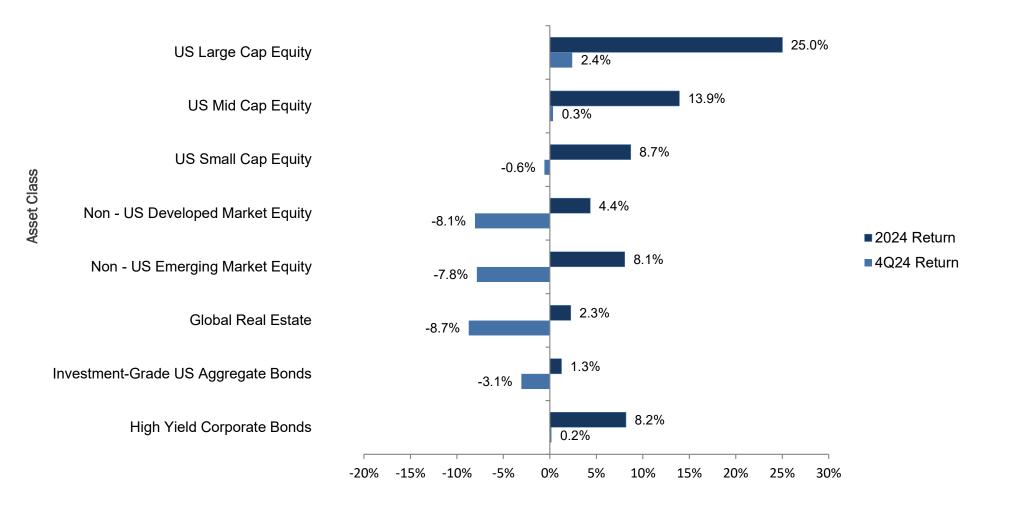


## **ECONOMIC REVIEW**

## **CAPITAL MARKETS**

# **QUARTERLY THEMES**





Source: FactSet, as of 12/31/2024. Past performance is not indicative of future results. Please see slides 42-44 for asset class definitions.



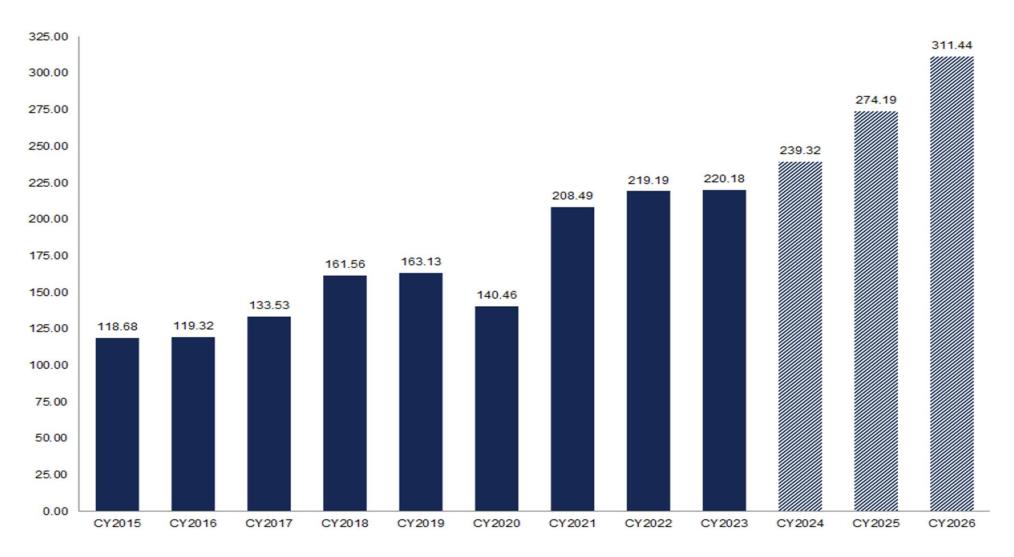
	Current Forward P/E	20-Year Average	Current P/E as a % of 20-year Average
S&P 500	21.4	15.7	136.5%
S&P 400	15.8	15.7	100.8%
S&P 600	15.4	16.3	94.3%

Source: Standard & Poor's, Raymond James Institutional Equity Strategy Weekly. P/E calculated as the most recent index price, divided by consensus earnings in the next twelve months. Please see slides 42-44 for index definitions. 20-year averages as of June 2024. Current P/E data as of 12/31/2024.



#### **CORPORATE EARNINGS**

#### S&P 500 Calendar Year Bottom-Up EPS Estimates: Current & Historical

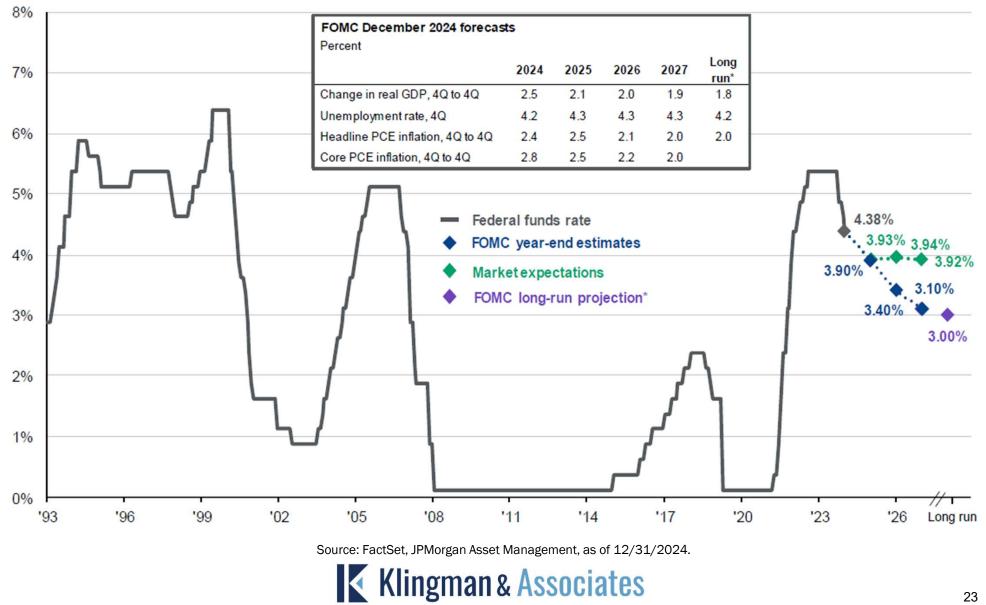


Source: Standard & Poor's, FactSet, Earnings Insight Report. Please see slides 42-44 for index definitions. Data as of 12/31/24.



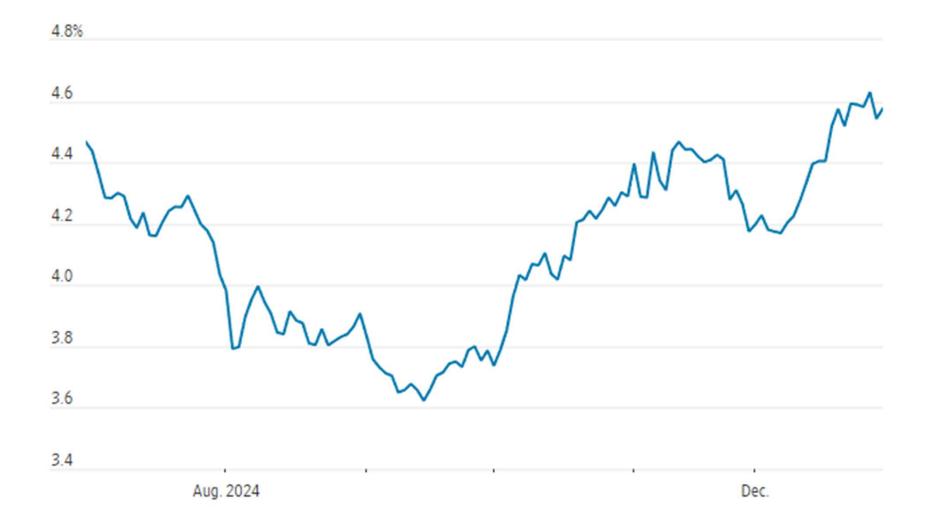
#### **Federal Funds Rate Expectations**

#### FOMC and Market Expectations for the Federal Funds Rate





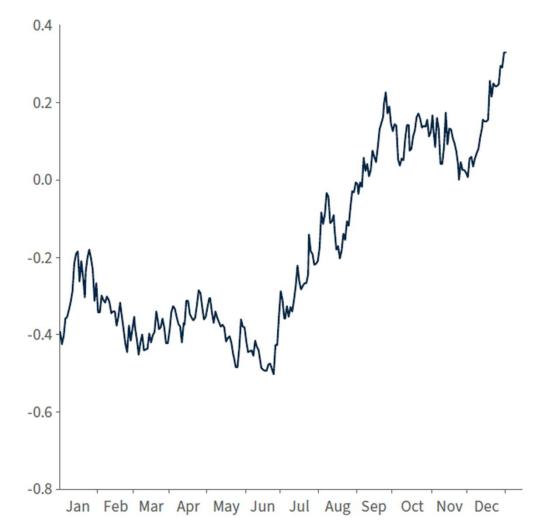
## **US 10-Year Treasury Yield**



Source: Tullet Prebon, Wall Street Journal, as of 12/31/2024.







Source: FactSet, as of 12/31/2024.

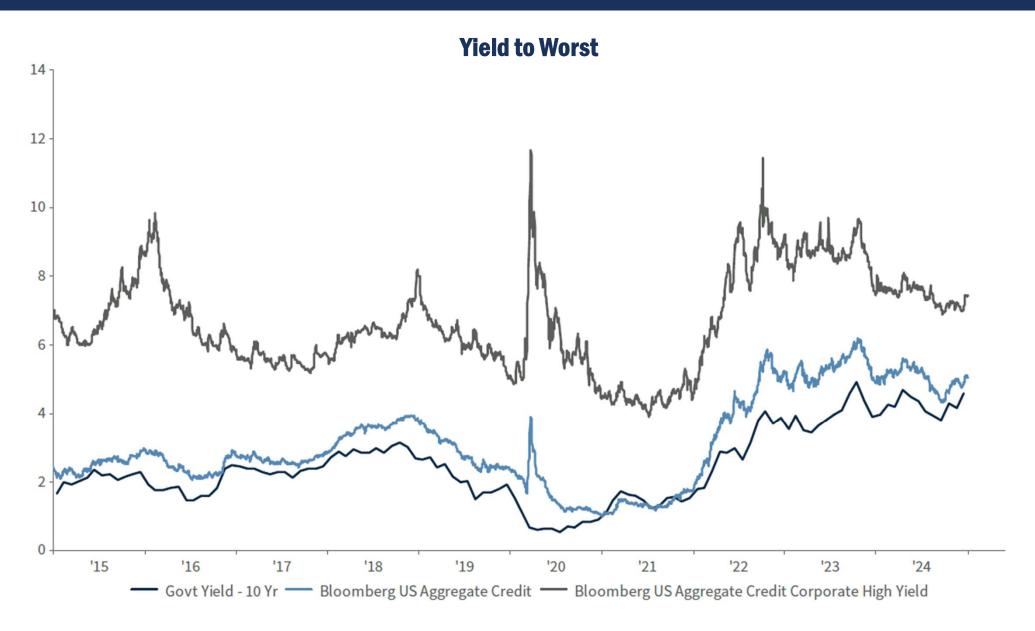


### **US Treasury 10 Year Yield vs. Term Premium**



Source: Carlyle Analysis, Federal Reserve Bank of New York. Data as of January 2025.

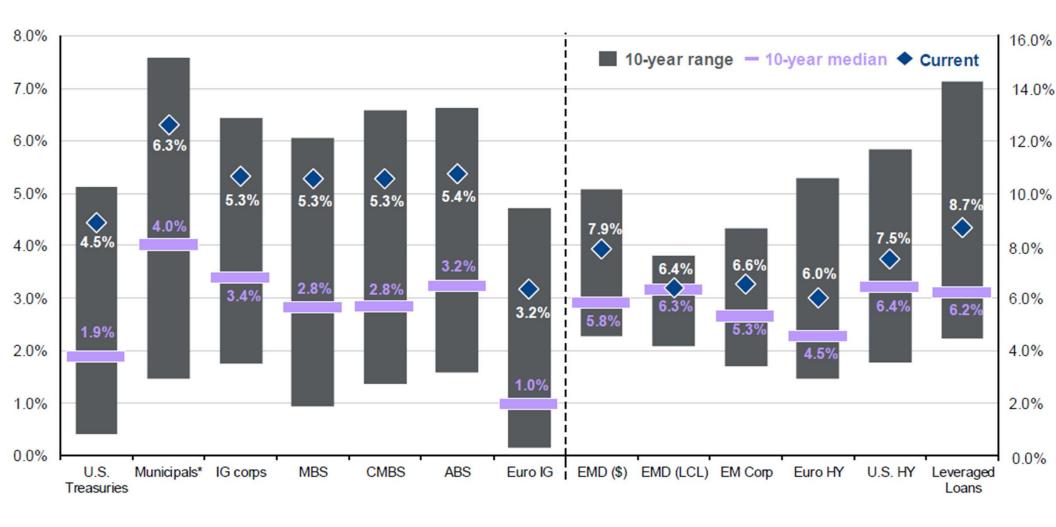




Source: FactSet, as of 12/31/2024. All yields are Yield to Worst. Past performance is not indicative of future results. Please see slides 42-44 for index definitions.



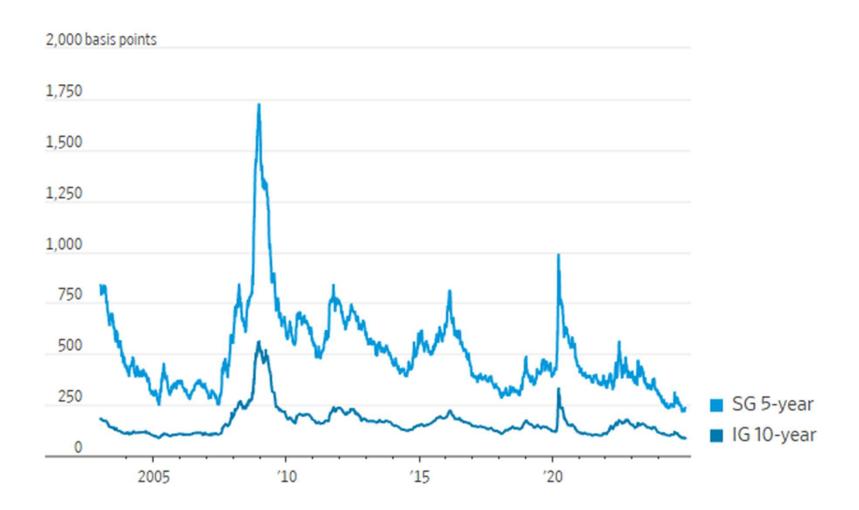
### **Yield to Worst Across Fixed Income Sectors**



Source: Bloomberg, FactSet, JPMorgan, as of 12/31/24. All sectors shown are yield-to-worst except for Municipals, which is based on the tax-equivalent yield-toworst assuming a top-income tax bracket rate of 37% plus a Medicare tax rate of 3.8% for a total of 40.8%. Please see slides 42-44 for index definitions.



## **Credit Spreads on Investment Grade and High Yield Bonds**

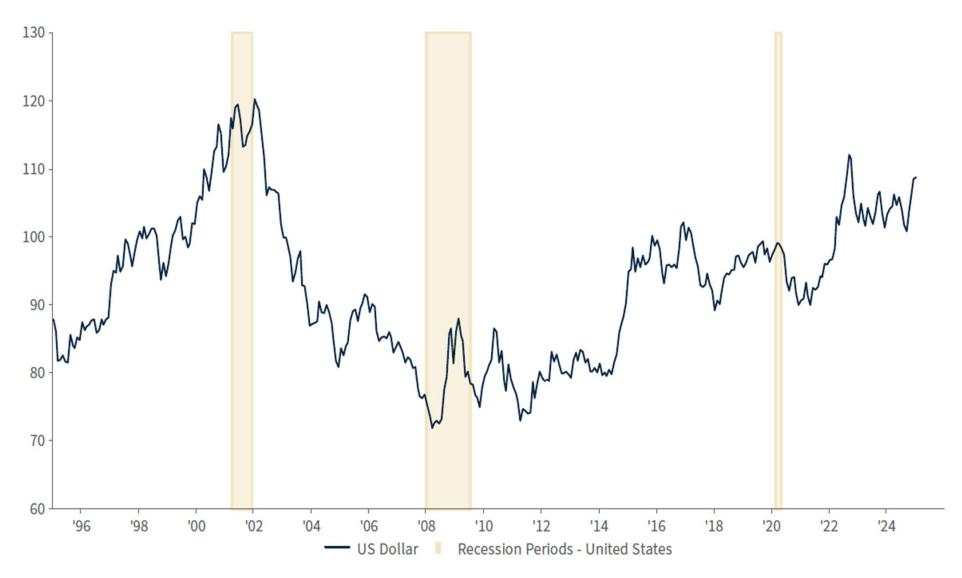


Source: Standard & Poor's, Wall Street Journal. Please see slides 42-44 for index definitions. Data as of 12/31/2024.



### FOREIGN EXCHANGE RATES

The US Dollar strengthened in the fourth quarter as investors dialed back expectations for additional rate cuts.



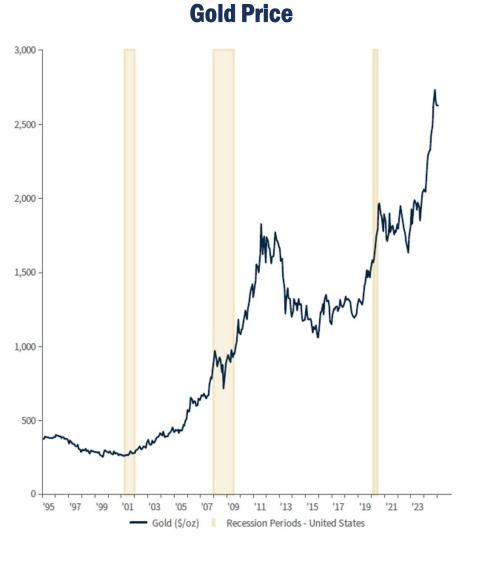
Source: FactSet, as of 12/31/2024.



#### **COMMODITY PRICES**

**WTI Price** 





Source: FactSet, as of 12/31/2024.

Source: FactSet, as of 12/31/2024.



## **ECONOMIC REVIEW**

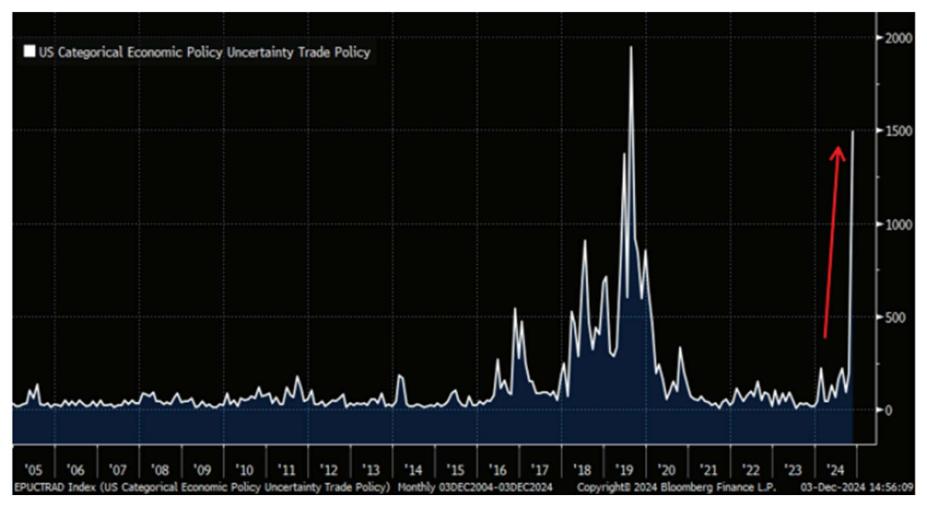
## **CAPITAL MARKETS**

## **QUARTERLY THEMES**



## **Trade Policy Fears**

#### **US Categorical Economic Policy Uncertainty Trade Policy**



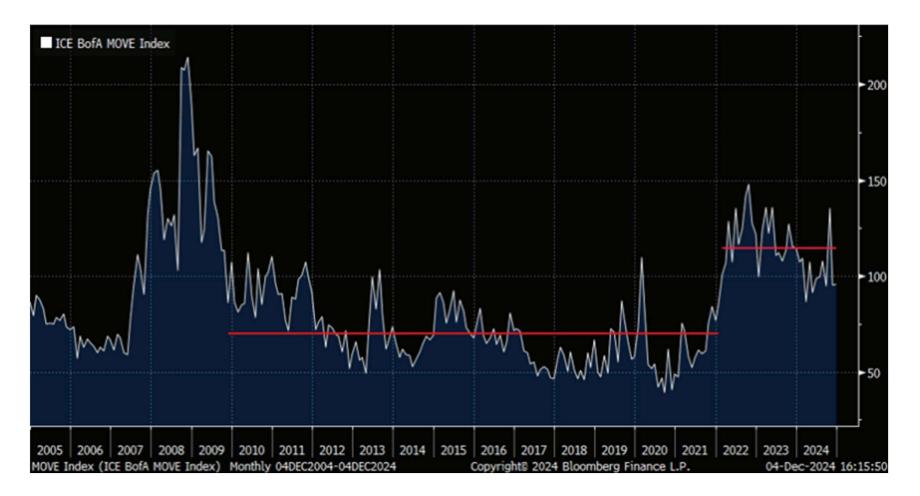
Source: Bloomberg, Richard Bernstein Advisors LLC. Data shown is from December 2004 through November 2024.



#### **Q4 THEMES: INTEREST RATES**

## **Interest Rate Volatility**

**ICE BofA MOVE Index** 



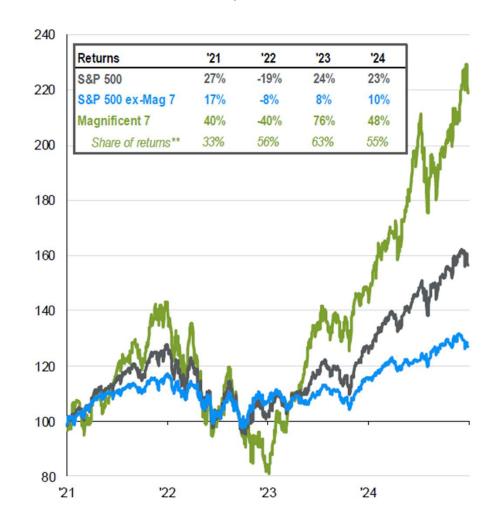
Source: BofAML US Strategy, Richard Bernstein Advisors LLC. The BofA MOVE Index measures volatility in the US Treasury Bond market. Please see slides 42-44 for index definitions. Data shown is from December 2004 through November 2024.



#### **Q4 THEMES: MARKET CONCENTRATION**

#### **Performance of Magnificent 7**

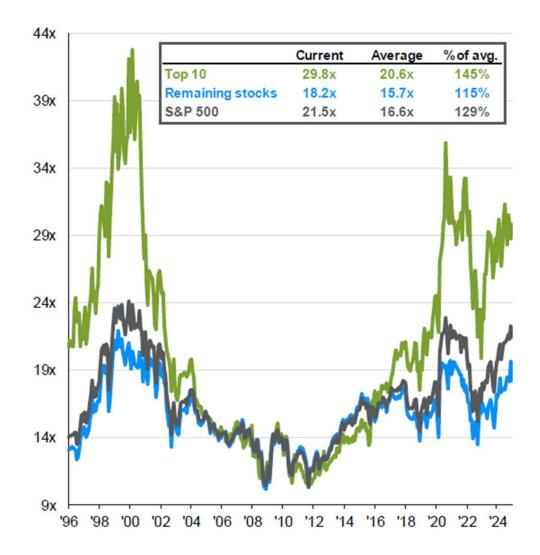
#### Price Return, Indexed to 100



Source: FactSet, Standard & Poor's, JPMorgan Asset Management. Magnificent 7 includes AAPL, AMZN, GOOG, GOOGL, META, MSFT, NVDA and TSLA. Share of returns represent how much each group contributed to the overall return. Please see slides 42-44 for index definitions. Data as of 12/31/2024.



### P/E Ratio of Top 10 and Remaining Stocks in S&P 500

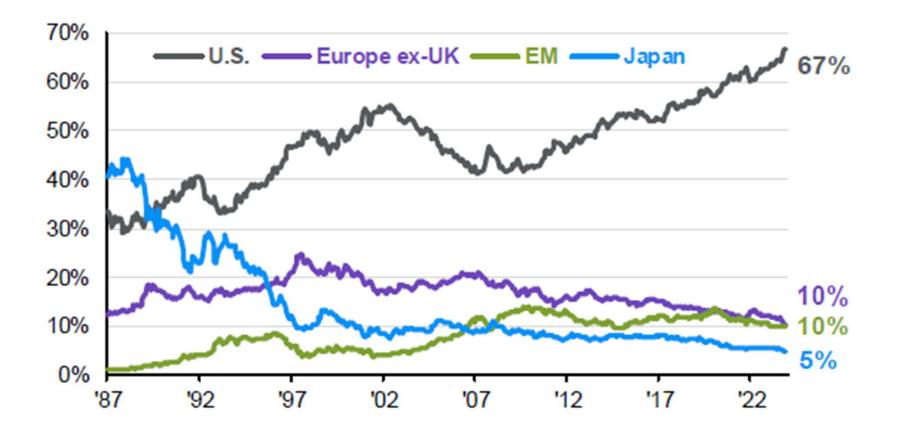


Source: FactSet, Standard & Poor's, JPMorgan Asset Management. The top 10 S&P 500 companies as of year-end were AAPL, AMZN, GOOG, GOOGL, META, MSFT, NVDA, TSLA, AVGO, BRK.B and JPM. Please see slides 42-44 for index definitions. Data as of 12/31/2024.



### **Share of Global Market Capitalization**

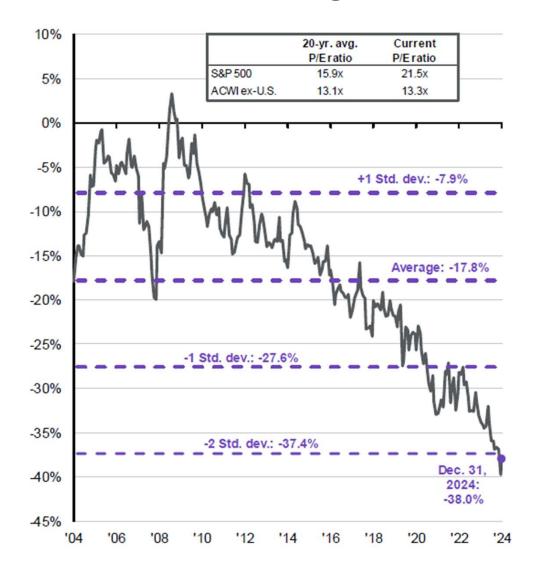
Weight in the MSCI All Country World Index, USD



Source: FactSet, MSCI. Please see slides 42-44 for index definitions. Data as of 12/31/2024.



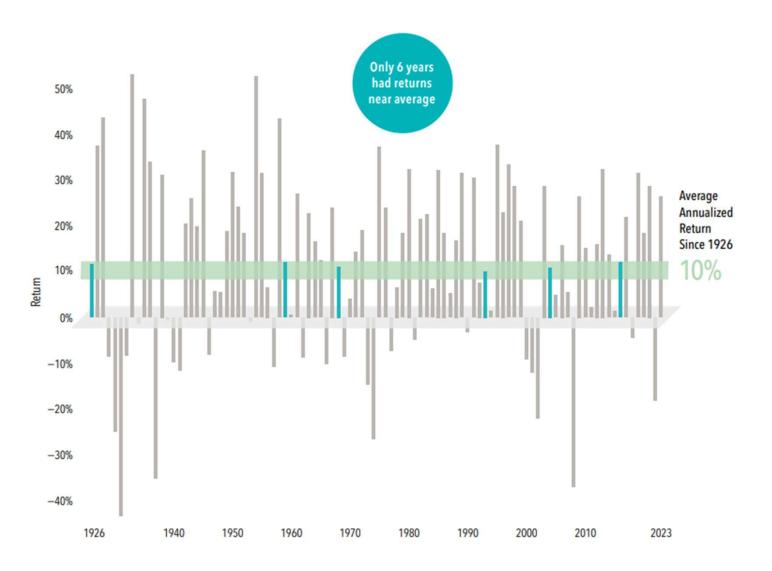
#### **International Price-to-Earnings Discount vs. US**



Source: FactSet, MSCI, Standard & Poor's, JPMorgan Asset Management. Please see slides 42-44 for index definitions. Data as of 12/31/2024.



### Annual Returns for the S&P 500 Index, 1926-2023



Source: Standard & Poor's, Dimensional Fund Advisors. Please see slides 42-44 for index definitions. Data as of 12/31/2023.



#### DISCLOSURE

All of the accolades received by Klingman & Associates along with the full disclosure of the criteria used for awarding them can be found at: <a href="https://www.klingmanria.com/accolades\_and\_recognition.htm">https://www.klingmanria.com/accolades\_and\_recognition.htm</a>

Data provided by Morningstar, Bloomberg.

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#### **DISCLOSURE** (continued)

Fixed Income: subject to credit risk and interest rate risk. An issuer's credit rating may impact their ability to pay the promised income and return of principal upon maturity. Generally, when interest rates rise, bond prices fall, and vice versa. Specific-sector investing can be subject to different and greater risks than more diversified investments.

**Consumer Price Index (CPI)**: a common measure of inflation which examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care. Changes in CPI are used to assess price changes associated with the cost of living.

Gross Domestic Product (GDP): a broad measurement of a nation's overall economic activity. It is the monetary value of all the finished goods and services produced within a country's borders in a specific time period, including all private and public consumption, government outlays, investments and net exports that occur within a defined territory.

Price-to-Earnings Ratio (P/E): a ratio for valuing a company that measures its current share price relative to its per-share earnings.

Price-to-Book Ratio (P/B): A ratio used to compare a stock's market value to its book value. It is calculated by dividing the closing stock price by the latest quarter's book value per share.

**Small-cap and Mid-Cap Equity:** generally involve greater risks, and may not be appropriate for every investor. International investing also involves special risks, including currency fluctuations, different financial accounting standards, and possible political and economic volatility.

**High-Yield Fixed Income:** not suitable for all investors. Risk of default may increase due to changes in the issuer's credit quality. Price changes may occur due to changes in interest rates and the liquidity of the bond. When appropriate, these bonds should only comprise a modest portion of your portfolio.

**Commodities**: trading is generally considered speculative because of the significant potential for investment loss.

U.S. Government Fixed Income: guaranteed timely payment of principal and interest by the federal government.

U.S. Treasury Bills: A short-term debt obligation backed by the U.S. government with a maturity of less than one year.

**Fixed Income Sectors:** Returns based on the four sectors of Barclays Global Sector Classification Scheme: Securitized (consisting of U.S. MBS Index, the ERISA-Eligible CMBS Index and the fixed-rate ABS Index), Government Related (consisting of U.S. Agencies and non-corporate debts with four sub sectors: Agencies, Local Authorities, Sovereign and Supranational), Corporate (dollar-denominated debt from U.S. and non-U.S. industrial, utility, and financial institutions issuers), and Treasuries (includes public obligations of the U.S. Treasury that have remaining maturities of one year or more).



Asset class and reference benchmarks:

ASSET CLASS	BENCHMARK	
U.S. Equity	Russell 3000 TR	
Non-U.S. Equity	MSCI ACWI ex US NR	
U.S. Fixed Income	Barclays U.S. Aggregate Bond TR	
Global Real Estate (prior to 2008)	NASDAQ Global Real Estate NR	
Global Real Estate (2008-present)	FTSE EPRA/NAREIT Global Real Estate NR	
Commodities	Bloomberg Commodity TR USD	
Cash & Cash Alternatives	Citi Treasury Bill 3 Mon USD	

Bloomberg Commodity Total Return Index: Formerly the Dow Jones-UBS Commodity Index TR (DJUBSTR), is composed of futures contracts and reflects the returns on a fully collateralized investment in the BCOM. This combines the returns of the BCOM with the returns on cash collateral invested in 3 Month U.S. Treasury Bills.

Barclays 10-Year Municipal: A rules-based, market-value weighted index engineered for the long-term tax-exempt bond market. This index is the 10 year (8-12) component of the Municipal Bond Index.

Barclays 10-Year U.S. Treasuries: Measures the performance of U.S. Treasury securities that have a remaining maturity of 10 years.

Barclays U.S. Aggregate Index: Represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment-grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.

Barclays Global Aggregate ex-U.S. Dollar Bond Index: Tracks an international basket of bonds that currently contains 65% government, 14% corporate, 13% agency and 8% mortgage-related bonds.

Barclays High Yield: Covers the universe of fixed-rate, non-investment grade debt. Pay-in-kind (PIK) bonds, Eurobonds, and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC-registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures and 144-As are also included.

Barclays U.S. Corporate High Yield: Composed of fixed-rate, publicly issued, non-investment grade debt.

Citi 3-Month Treasury-Bill Index: This is an unmanaged index of three-month Treasury bills.

FTSE EPRA/NAREIT Global Real Estate Index : Designed to represent general trends in eligible listed real estate stocks worldwide. Relevant real estate activities are defined as the ownership, trading and development of income producing real estate.



#### **INDEX DESCRIPTIONS (continued)**

**Global Financial Data:** Index data has calculated for world ex US indices back to 1919. Since the Morgan Stanley World index was not calculated before 1970, an index has been put together to simulate how a World Index would have performed had it been calculated back to 1919. From 1970 on, the indices are capitalization weighted and include the same countries as are now included in the MSCI World Index.

MSCI All Country World Index Ex-U.S Index.: A market-capitalization-weighted index maintained by Morgan Stanley Capital International (MSCI) and designed to provide a broad measure of stock performance throughout the world, with the exception of U.S.-based companies. It includes both developed and emerging markets.

MSCI EAFE Index (Europe, Australasia, Far East): A free-float adjusted market capitalization index that is designed to measure developed market equity performance, excluding the United States and Canada. The EAFE consists of the country indices of 21 developed nations.

MSCI EAFE Growth Index: Represents approximately 50% of the free-float adjusted market capitalization of the MSCI EAFE index, and consists of those securities classified by MSCI as most representing the growth style.

MSCI EAFE Small-Cap Index: An unmanaged, market-weighted index of small companies in developed markets, excluding the U.S. and Canada.

MSCI EAFE Value: Represents approximately 50% of the free-float adjusted market capitalization of the MSCI EAFE index, and consists of those securities classified by MSCI as most representing the value style.

MSCI Emerging Markets Index: Designed to measure equity market performance in 25 emerging market indexes. The three largest industries are materials, energy and banks.

MSCI Local Currency Index: A special currency perspective that approximates the return of an index as if there were no currency valuation changes from one day to the next.

NASDAQ Global Real Estate Index: The index measures the performance of real estate stocks which listed on an Index Eligible Global Stock Exchange. The index is marketcapitalization weighted.

Russell 1000 Index: Measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately 90% of the investible U.S. equity market.

Russell 1000 Value Index: Measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell 1000 Growth Index: Measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell Mid-Cap Index: Measures the performance of the 800 smallest companies of the Russell 1000 Index, which represent approximately 30% of the total market capitalization of the Russell 1000 Index.

Russell Mid-cap Value Index: Measures the performance of those Russell Mid-cap companies with lower price-to-book ratios and lower forecasted growth values.

Russell Mid-Cap Growth Index: Measures the performance of those Russell Mid-cap companies with higher price-to-book ratios and higher forecasted growth values.

Russell 2000 Index: Measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represent approximately 8% of the total market capitalization of the Russell 3000 Index.

Russell 2000 Value Index: Measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell 2000 Growth Index: Measures the performance of those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 3000 Index: measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents 98% of the investable U.S. equity market.



#### **INDEX DESCRIPTIONS (continued)**

Standard & Poor's 500 (S&P 500): Measures changes in stock market conditions based on the average performance of 500 widely held common stocks. Represents approximately 68% of the investable U.S. equity market.

S&P 500 Consumer Discretionary: Comprises those companies included in the S&P 500 that are classified as members of the GICS® consumer discretionary sector.

S&P 500 Consumer Staples: Comprises those companies included in the S&P 500 that are classified as members of the GICS® consumer staples sector.

S&P 500 Energy: Comprises those companies included in the S&P 500 that are classified as members of the GICS® energy sector.

S&P 500 Financials: Comprises those companies included in the S&P 500 that are classified as members of the GICS® financials sector

S&P 500 Health Care: Comprises those companies included in the S&P 500 that are classified as members of the GICS® health care sector.

S&P 500 Industrials: Comprises those companies included in the S&P 500 that are classified as members of the GICS® industrials sector.

S&P 500 Information Technology: Comprises those companies included in the S&P 500 that are classified as members of the GICS® information technology sector.

S&P 500 Materials: Comprises those companies included in the S&P 500 that are classified as members of the GICS® materials sector.

S&P 500 Telecom Services: Comprises those companies included in the S&P 500 that are classified as members of the GICS® telecommunication services sector.

S&P 500 Utilities: Comprises those companies included in the S&P 500 that are classified as members of the GICS® utilities sector.

S&P Mid Cap 400 (S&P 400): Provides investors with a benchmark for mid – cap companies. The index, which is distinct from the large-cap S&P 500, measures the performance of mid-cap companies, reflecting distinctive risk and return characteristics of this market segment.

S&P Small Cap 600 (S&P 600): Provides investors with a benchmark for small – cap companies. The index, which is distinct from the large-cap S&P 500, measures the performance of small-cap companies, reflecting distinctive risk and return characteristics of this market segment.

VIX is the Chicago Board Options Exchange (CBOE) Volatility Index, which shows the market's expectation of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 index options. It is a widely used measure of market risk.

