Insights from Stifel's CIO Office

October 2023

INVESTMENT STRATEGY BRIEF:

Fiscal Transition

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U.S. – China Competition

Export Controls

South China Sea

Taiwan

GEOPOLITICAL RISK DASHBOARD

Deglobalization
Increased localization and protectionism

Multipolarity
A more divided world

EVENT	LIKELIHOOD	MARKET IMPACT
U.S. - China Competition	10	7
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Emerging Market (EM) Political Uncertainty	7	5
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Structurally Higher Inflation	4	8
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ISRAEL – HAMAS WAR: LEFT-TAIL RISKS

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
	War Limited to Gaza	**Multi-Front War (Hezbollah)**	**War Expands to Region (Iran)**	**Great Power Conflict (China)**
Likelihood	**Most Likely**	**Somewhat Likely**	**Small Likelihood**	**Remote**
Global Economic Impact	Limited and fades quickly	Limited and fades quickly	• Inflation rises as a result of oil supply disruption • Recession likely • Potential for long-lasting impact to local markets	• Decoupling of U.S. - China relations (deglobalization) • Global recession
Global Market Impact	Limited and fades quickly	Limited and fades quickly	• Risk-off sentiment and volatility increases • Sell-off in global stocks, potentially U.S. stocks • Yields decline	• Risk-off sentiment and volatility increases • Bear market (stocks) • Monetary policy easing and yields falling sharply
Investment Implications	• Prevailing macroeconomic conditions continue to warrant an emphasis on quality for investor portfolios • Diversify across and within asset classes, consider rebalancing to target asset allocation • The ongoing geopolitical uncertainty reinforces this view			

1

ECONOMY

Recession expectations pushed out, economy to slow

3 things we're focused on:

- Consumer spending
- Labor market
- Lag effects

2

INFLATION

Significant progress, final 1% drop may take longer

3 things we're focused on:

- Shelter prices
- Supercore services
- Inflation expectations

3

MARKETS

Returns broadening out, volatility to increase

3 things we're focused on:

- Company earnings
- Profit margins
- Capital expenditures

Economy

STIFEL

POST-GREAT FINANCIAL CRISIS ENVIRONMENT

Household, corporate, and government debt increased significantly post-GFC

In a higher rate regime, the cost of debt will increase going forward

$5.2 trillion

Increase in
U.S. household debt
2023 vs. 2007

$23.4 trillion

Increase in
U.S. federal debt
2023 vs. 2007

~$37
trillion
increase
in debt

$7.0 trillion

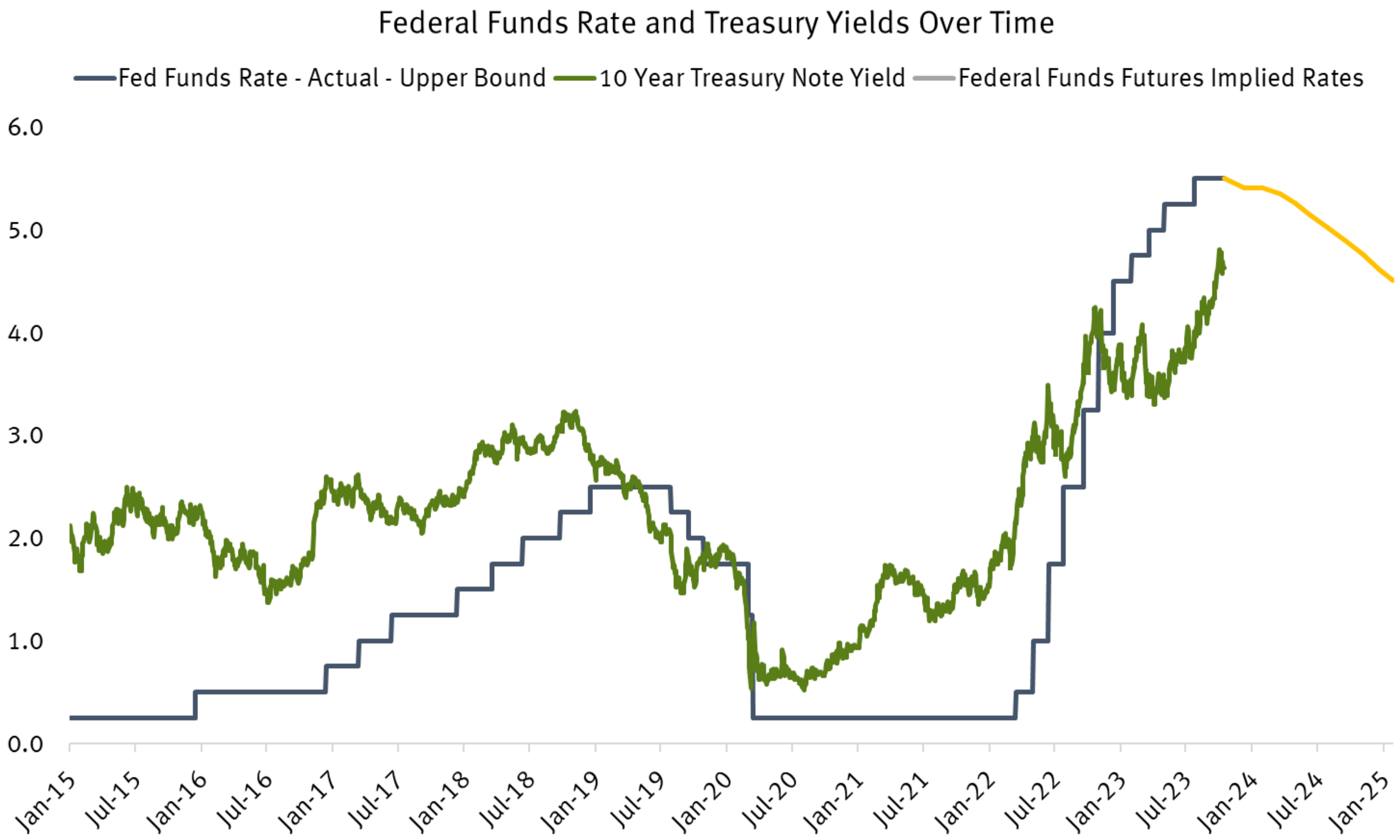
Increase in
U.S. non-financial
corporate debt
2023 vs. 2007

$1.3 trillion

Increase in
U.S. private debt
2023 vs. 2007

Sight|Lines: Troubling Forces Converge: We're Headed to a Fiscal Transition

POST-GREAT FINANCIAL CRISIS ENVIRONMENT



Source: Stifel CIO Office via Bloomberg, as of October 13, 2023

10-YEAR TREASURY YIELD

Decade *prior* to the GFC **5%**

Decade *after* the GFC **2%**

During Pandemic **1.2%**

2020 ← → 2021

Now **4.8%**

10 Years Forward **4.9%**

20 Years Forward **4.9%**

2023 — 2033 — 2043

Sight|Lines: A New Market Rate Regime? Data and Sentiment Say Yes.

GFC: Global Financial Crisis

FISCAL TRANSITION

In a higher rate regime, the cost of debt will increase going forward

Consumers must manage debt more carefully, in a possibly slowing economy, and defaults and bankruptcies could increase

Businesses will adjust how they manage debt, with some companies unable to handle increased debt costs and failing

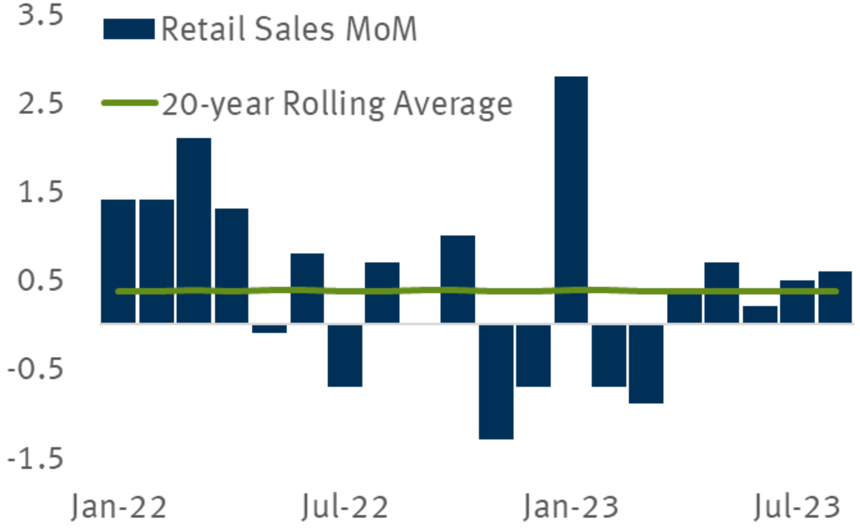
Government spending, deficits, and debt will come more into focus as the cost of our debt rises and attention turns to fiscal discipline

We remain optimistic that, as a country, we'll get through this fiscal transition stronger. But how much pain will we experience through the process, and when?

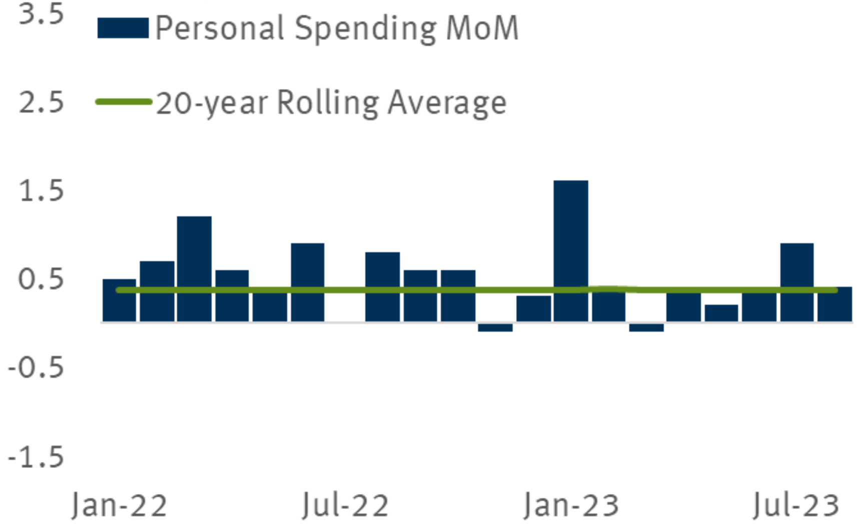
Sight | Lines: Troubling Forces Converge: We're Headed to a Fiscal Transition

CONSUMER ACTIVITY

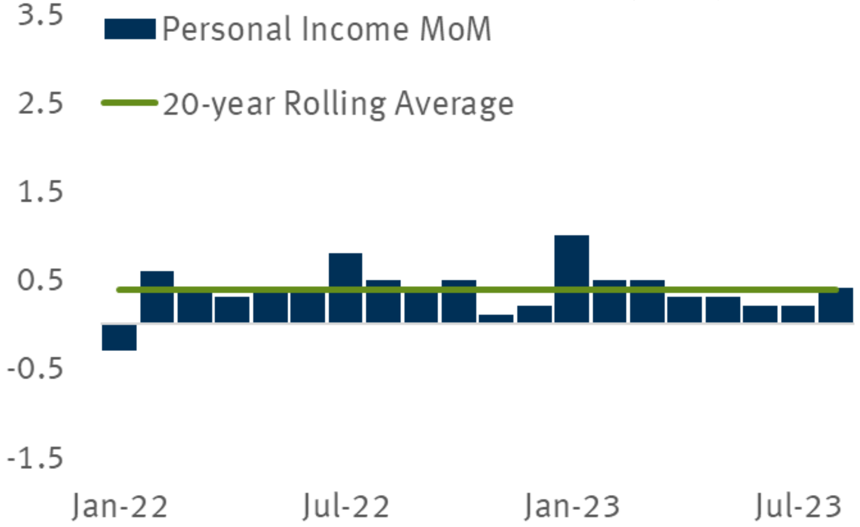
Retail Sales Month Over Month (MoM)



Personal Spending Month Over Month (MoM)



Personal Income Month Over Month (MoM)

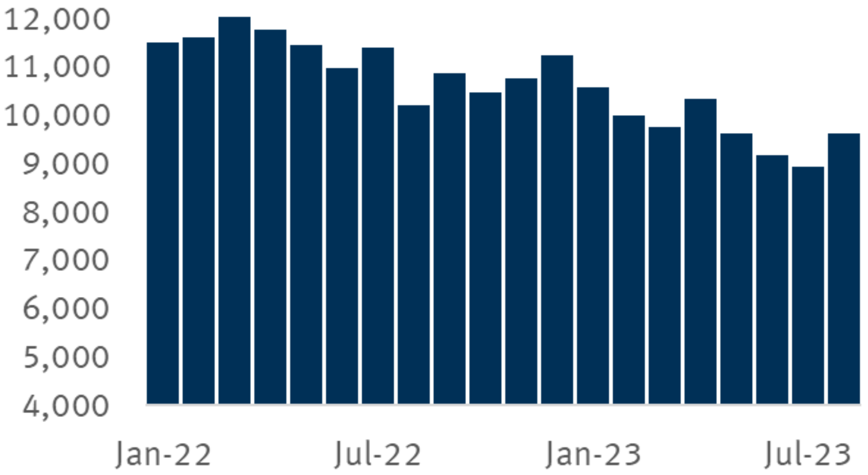


University Of Michigan Consumer Sentiment

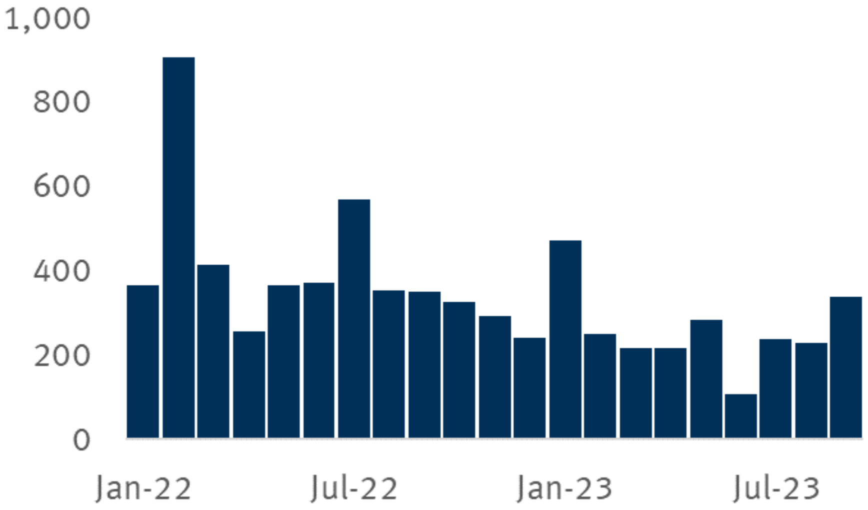
Source: Stifel CIO Office via Bloomberg, as of October 12, 2023

LABOR MARKET

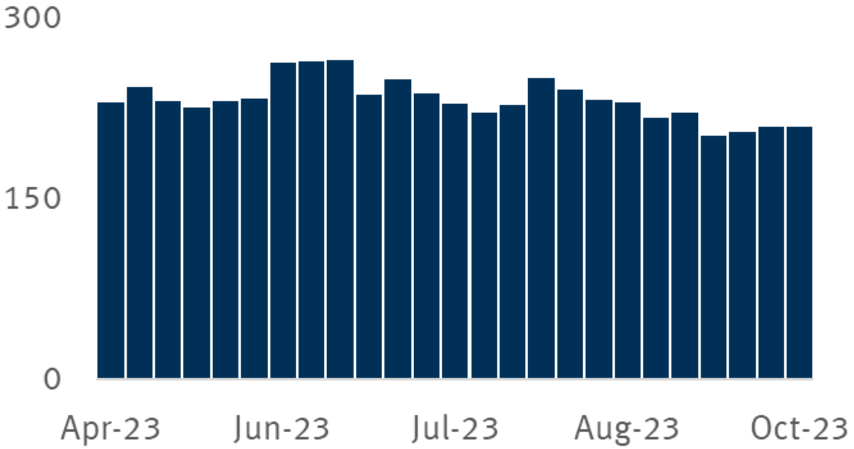
JOLTs - Job Openings (000s)



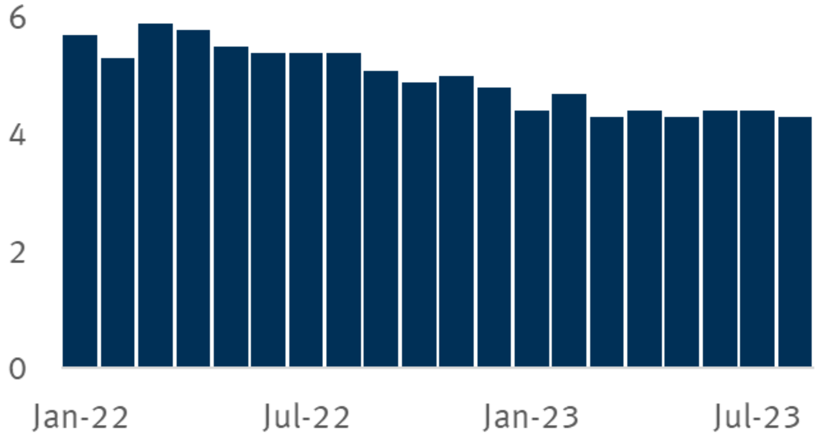
Nonfarm Payrolls (000s)



Jobless Claims (000s)



Wage Growth - Hourly Earnings (%)



Source: Stifel CIO Office via Bloomberg, as of October 12, 2023

ECONOMIC FORECASTS

U.S. GDP	Date of Estimate	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	2022	2023	2024
Consensus Estimates	**10/12/2023**	**2.2**	**2.1**	**3.0**	**0.5**	**0.1**	**0.6**	**1.9**	**2.1**	**1.0**
Consensus Estimates	*1/3/2023*	*0.1*	*-0.6*	*0.0*	*0.9*	*1.5*	*1.8*	*1.9*	*0.3*	*1.3*
Stifel	8/29/2023	1.2	1.8	2.6	1.5	0.9	1.8	0.5	2.1	1.7
Goldman Sachs	10/12/2023	1.5	2.5	3.7	0.7	1.9	1.9	2.0	2.2	1.9
Capital Economics	10/6/2023	1.2	1.4	3.1	-0.8	0.0	0.9	2.0	2.1	0.8
Strategas	10/9/2023	1.0	1.6	3.0	-0.5	-1.5	1.0	2.0	2.1	0.6
UBS	10/6/2023	1.5	1.6	4.7	1.0	1.4	-0.8	2.0	2.4	1.0
Wells Fargo	9/26/2023	0.6	0.9	3.4	0.4	-0.8	-1.1	2.1	2.2	0.5
Bloomberg Economics	9/26/2023	1.2	1.5	3.5	-0.2	-0.5	0.4	2.0	2.2	0.8
Barclays	10/6/2023	1.5	1.5	4.0	1.5	0.5	-0.5	2.0	2.3	0.8
JPMorgan Chase	10/6/2023	1.1	1.7	3.5	1.5	0.5	0.5	2.1	2.3	1.2
Federal Reserve**	9/20/2023							**0.9**	2.1	1.5

Annualized percent change from prior quarter and year-over-year change are shown for quarterly and yearly periods, respectively. Stifel estimates based on Stifel sell-side Economics department estimates.

**Percent change from fourth quarter to fourth quarter one year ago.

Source: Stifel CIO Office via Bloomberg, as of October 12, 2023. Federal Reserve estimates are as of September 20, 2023. Figures in grey areas under "Consensus Estimates" represent reported results

Inflation

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INFLATION EXPECTATIONS

Investors: Breakeven Inflation Rates

1.74%
1-Year Treasury

2.33%
5-Year Treasury

2.40%
10-Year Treasury

2.46%
5-year, 5-year forward Treasury

Consumers: Surveys

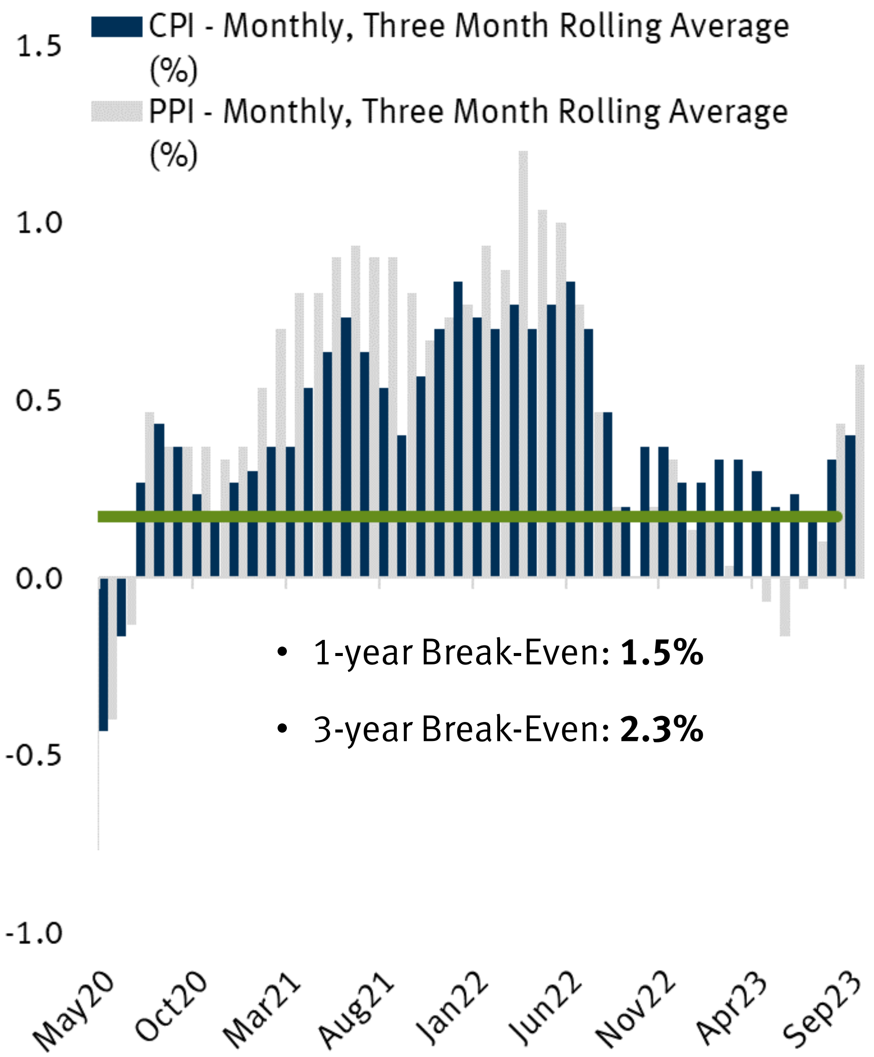
3.8%
University of Michigan 1-year

3.0%
University of Michigan 5-10 year

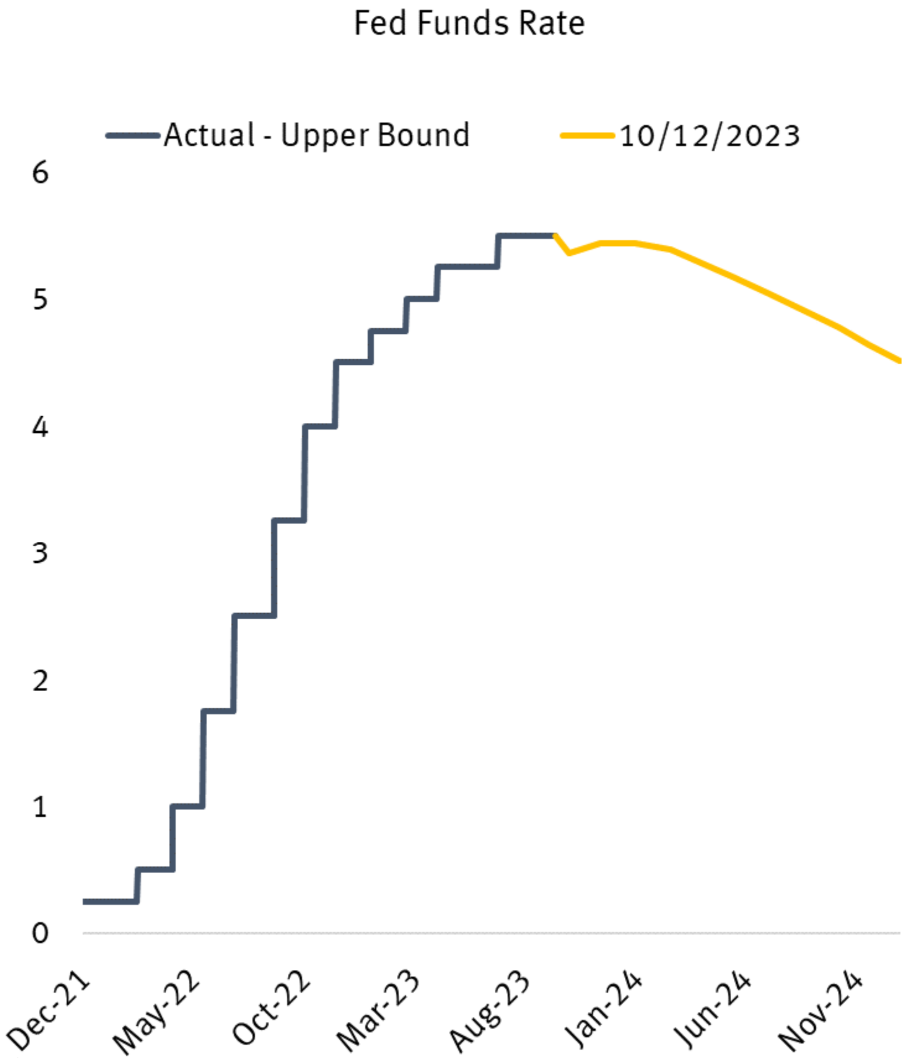
5.7%
Conference Board 1-year

Source: Stifel CIO Office via Bloomberg, as of October 17, 2023

INFLATION AND FED POLICY



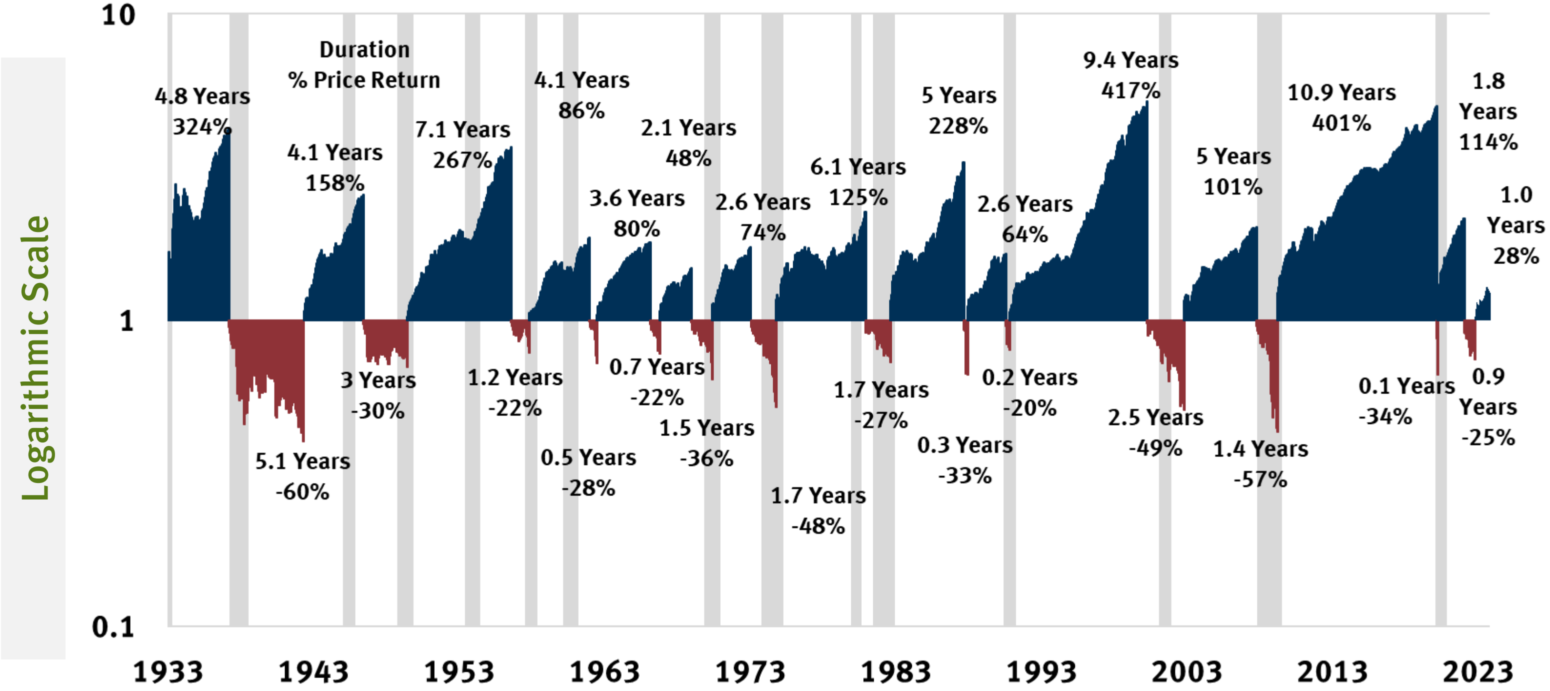
- 1-year Break-Even: **1.5%**
- 3-year Break-Even: **2.3%**

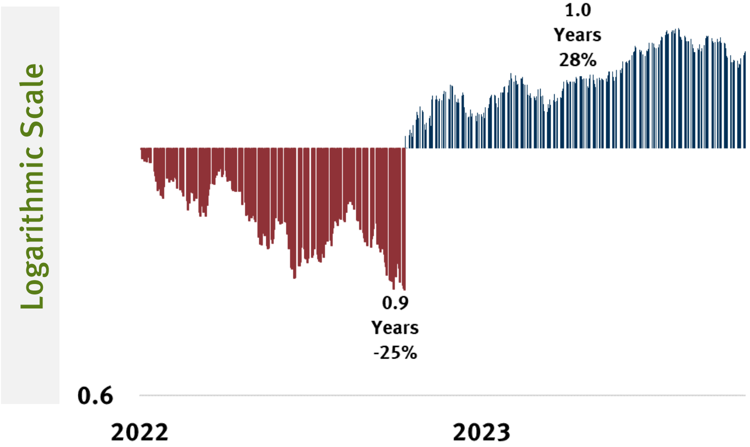

Fed Funds Rate

Source: Stifel CIO Office via Bloomberg, as of October 12, 2023 PPI = Producer Price Index

Markets

POST-PANDEMIC ENVIRONMENT





S&P 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. Indices are unmanaged, do not reflect fees and expenses, and are not available for direct investment. Past performance does not guarantee future results. Investing involves risk, including the possible loss of principal. Asset allocation and diversification do not ensure a profit or protection against loss.

Source: Stifel Investment Strategy via Strategas Securities, LLC and Bloomberg, as of October 12, 2023 (Intra-Day)

MARKET PERFORMANCE

Index	2020	2021	2022	YTD – June 1 2023	June 1 – October 13 2023	YTD – October 13 2023
S&P 500 Index	18.4%	28.7%	-18.1%	10.7%	3.1%	14.2%
S&P 500 Eq. Weight.	12.8%	29.6%	-11.5%	0.1%	0.7%	0.8%
S&P 500 Financials	-1.8%	34.9%	-10.6%	-5.7%	4.4%	-1.6%
KBW Reg. Banking	-8.7%	36.7%	-6.9%	-25.9%	3.8%	-23.1%
Russell 1000 Value	2.8%	25.1%	-7.6%	-0.7%	1.4%	0.7%
Russell 1000 Growth	38.5%	27.6%	-29.1%	22.2%	4.6%	27.9%
NYSE FANG+ Index	103.1%	17.7%	-40.0%	64.5%	3.8%	70.8%
Russell 2000 Index	19.9%	14.8%	-20.5%	1.0%	-2.2%	-1.2%
MSCI EAFE Index	7.8%	11.3%	-14.5%	8.3%	-2.0%	6.1%
MSCI EM Index	18.3%	-2.5%	-20.1%	1.4%	0.3%	1.7%
Bloomberg U.S. Agg	7.5%	-1.5%	-13.0%	2.7%	-4.0%	-1.4%

Source: Stifel CIO Office via Bloomberg, as of October 13, 2023

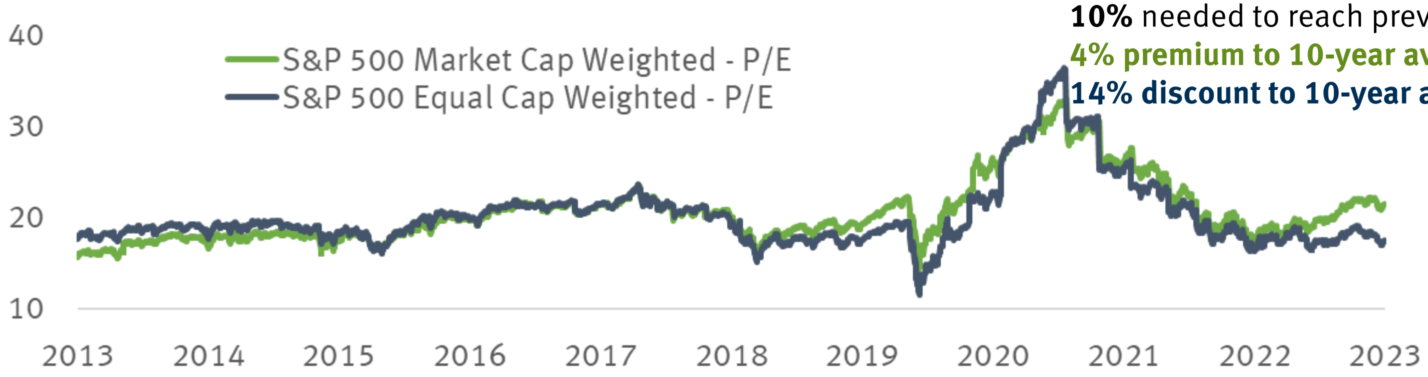
NEAR-TERM RISKS AND OPPORTUNITIES

Current S&P 500 Index Level

Consensus 2024 EPS

Consensus 2023 EPS

EPS	EPS Forward P/E					
	16x	**17x**	**18x**	**19x**	**20x**	**21x**
$255	4,080	4,335	4,582	4,837	5,102	5,355
$250	4,000	4,250	4,492	4,742	5,002	5,250
$245	3,920	4,165	4,378	4,647	4,902	5,145
$240	3,840	4,080	4,312	4,552	4,802	5,040
$230	3,680	3,910	4,132	4,362	4,602	4,830
$220	3,520	3,740	3,953	4,173	4,378	4,620
$210	3,360	3,570	3,773	3,983	4,202	4,410

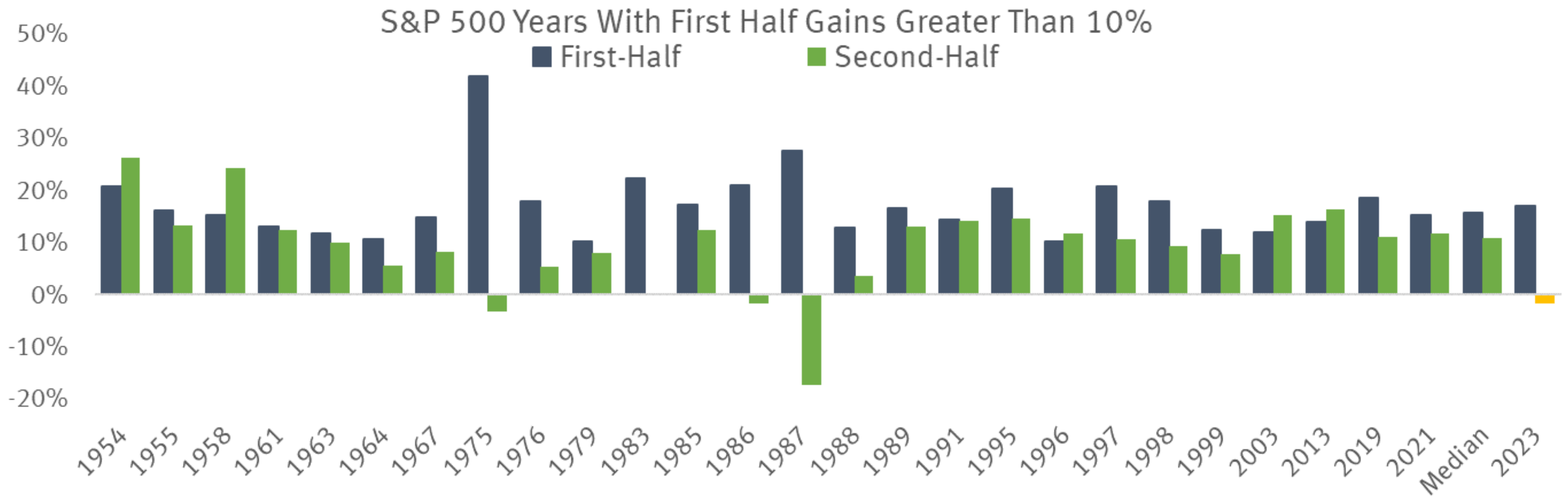


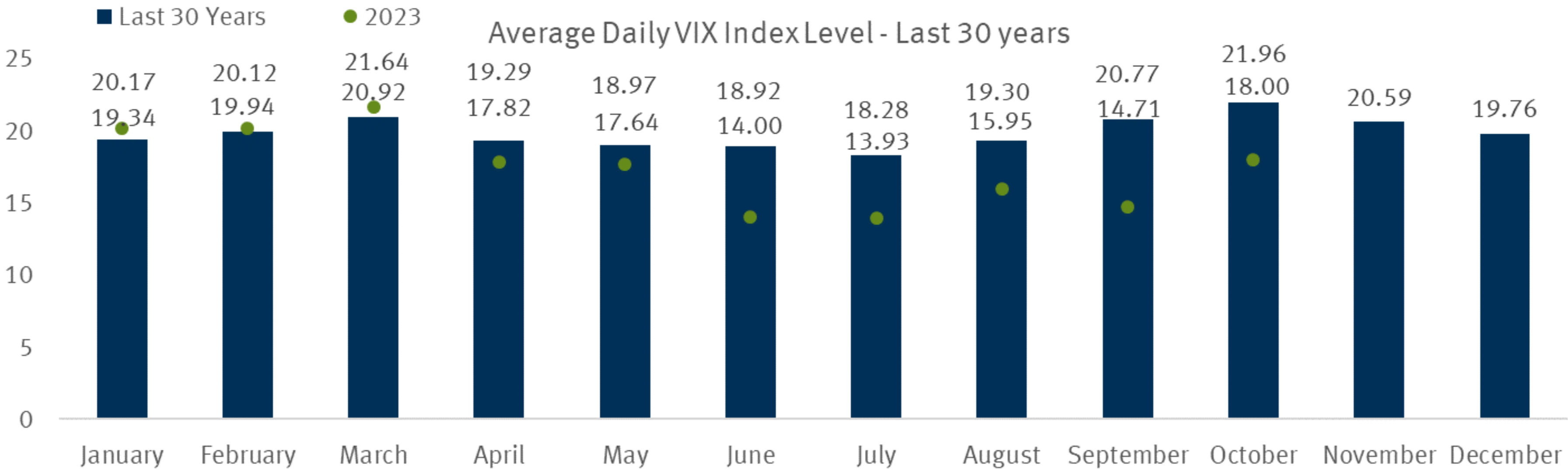
10% needed to reach previous S&P 500 high

4% premium to 10-year average

14% discount to 10-year average

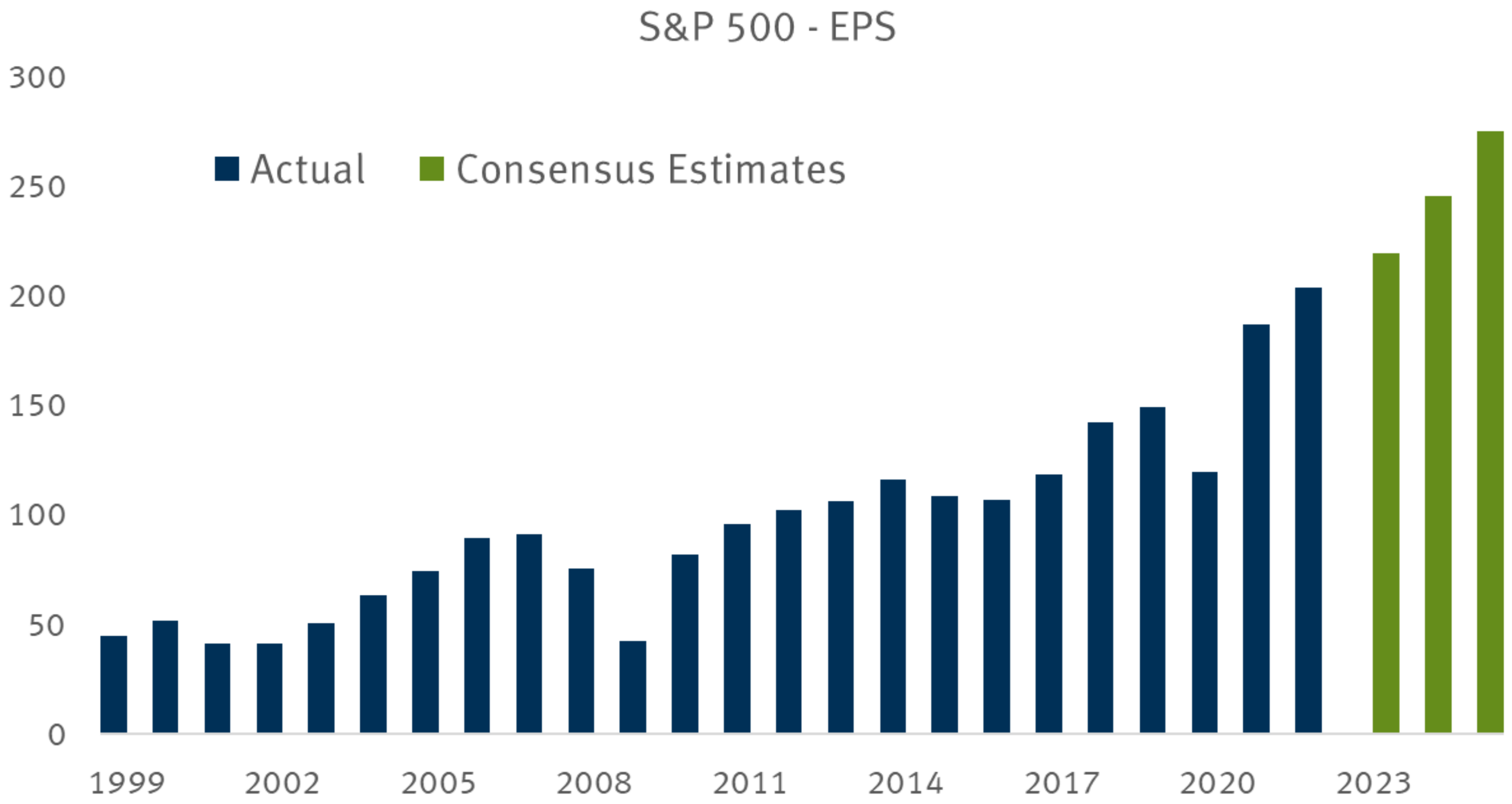
Source: Stifel CIO Office via Bloomberg, as of October 12, 2023
EPS = Earnings Per Share





Source: Stifel CIO Office via Bloomberg, as of October 12, 2023

EARNINGS



Source: Stifel CIO Office via FactSet, as of October 12, 2023

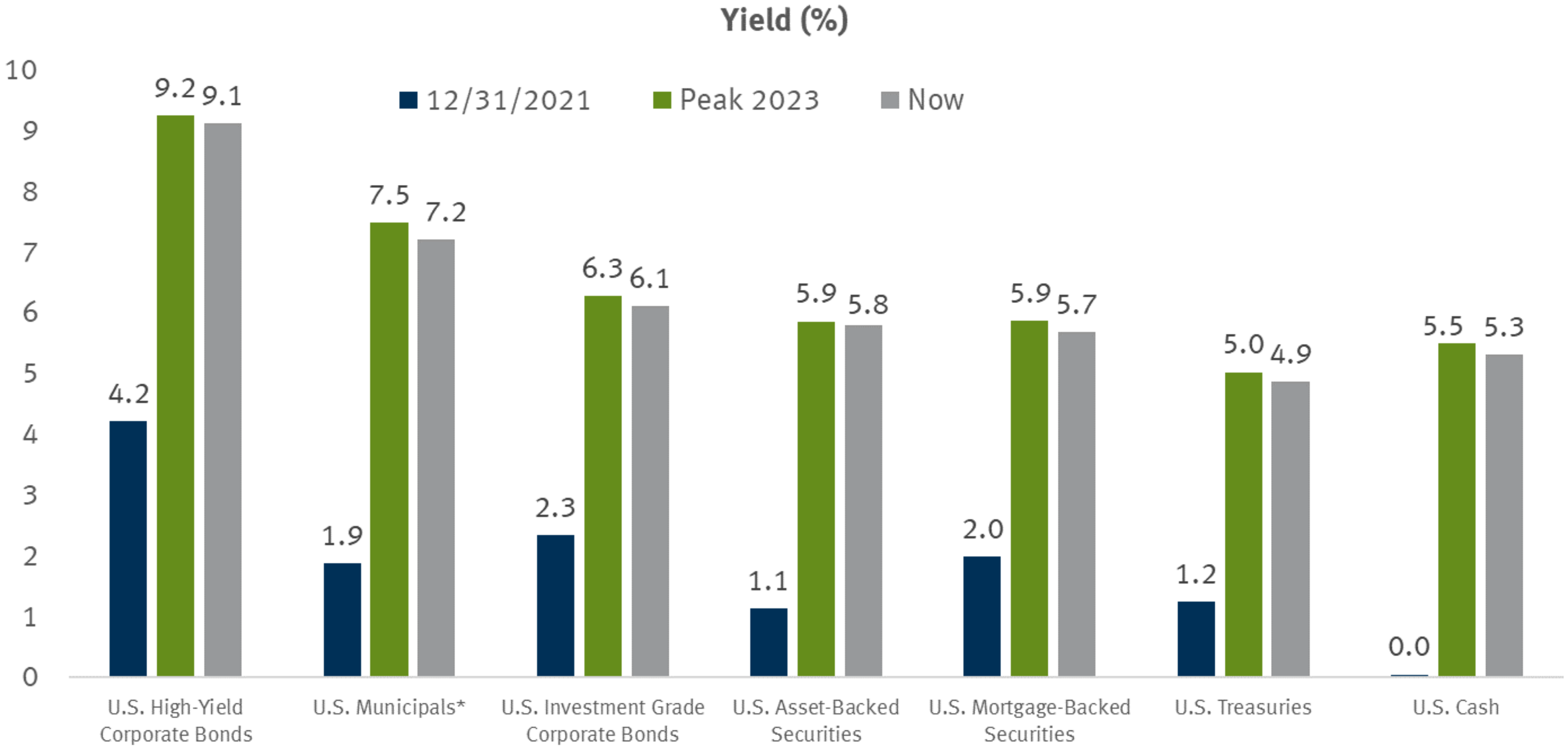
CREDIT SPREADS

	Current	5-Year Average
Corporate IG	1.24	1.23
Corporate HY	4.12	4.14
Securitized	0.75	0.46
CMBS	1.37	0.93
ABS	0.71	0.55
MBS	0.71	0.43

Corporate IG = Corporate Investment Grade
Corporate HY = Corporate High Yield
Securitized = Securitized Credit Markets
CMBS = Commercial Mortgage-Backed Securities
ABS = Asset-Backed Securities
MBS = Mortgage-Backed Securities

Source: Stifel CIO Office via Bloomberg, as of October 16, 2023

BOND YIELDS

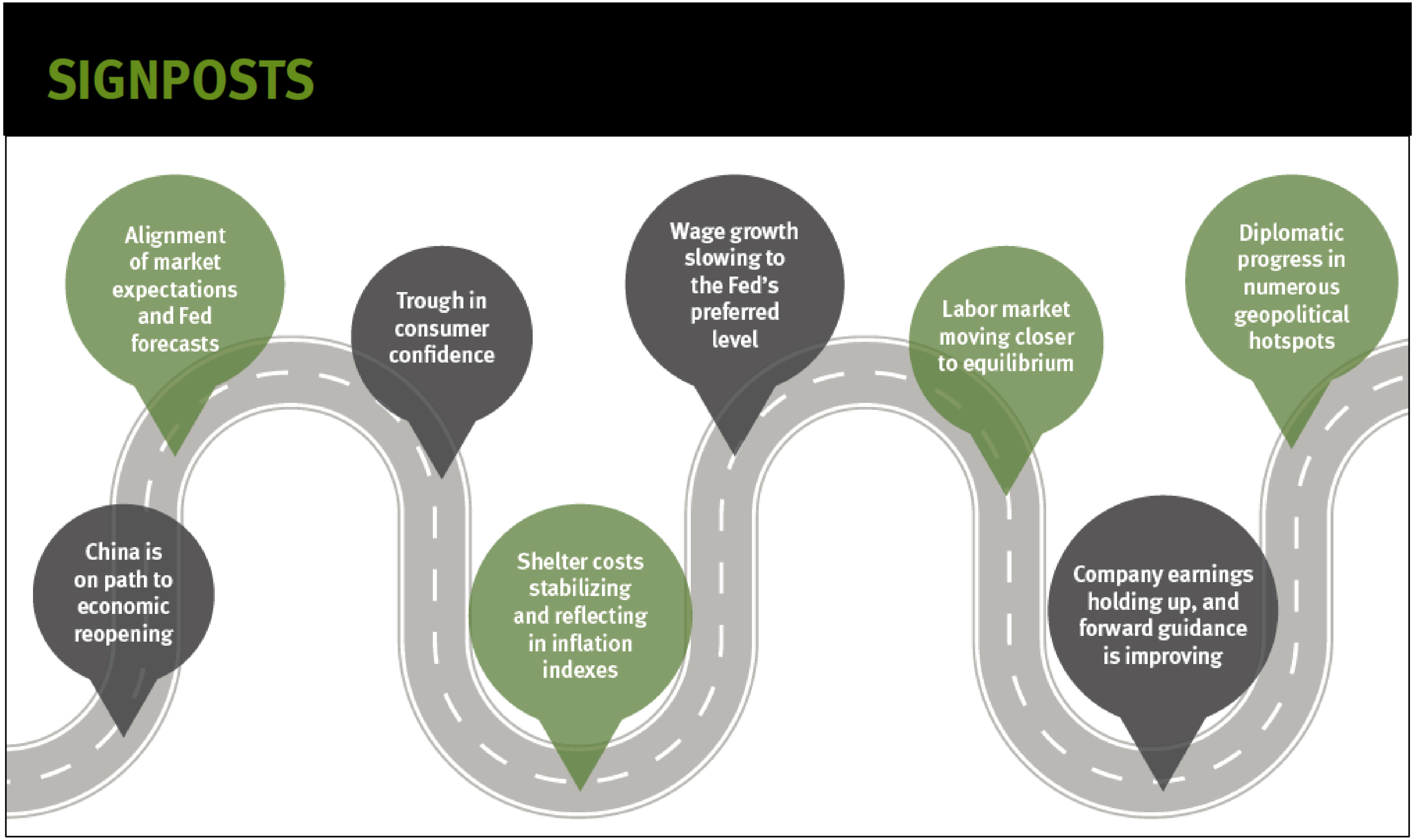


**Based on taxable equivalent yield. Taxable equivalent yield assumes a 37% federal tax and 3.8% net investment income tax.*

Source: Stifel CIO Office via Bloomberg, as of October 13, 2023

Looking Forward

SIGNPOSTS TO FINDING BALANCE



SIGNPOSTS

- China is on path to economic reopening
- Alignment of market expectations and Fed forecasts
- Trough in consumer confidence
- Shelter costs stabilizing and reflecting in inflation indexes
- Wage growth slowing to the Fed's preferred level
- Labor market moving closer to equilibrium
- Company earnings holding up, and forward guidance is improving
- Diplomatic progress in numerous geopolitical hotspots

NAVIGATING KEY DATES

OCTOBER	
6	Employment
11	Federal Open Market Committee (FOMC) Minutes
12/27	Inflation
17	Retail Sales
19	Housing

NOVEMBER	
3	Employment
14/29	Inflation
10	Consumer Sentiment
15	Retail Sales
17	Housing
22	Federal Open Market Committee (FOMC) Minutes

DECEMBER	
8	Employment
8	Consumer Sentiment
12/21	Inflation
13	Fed Policy Decision
14	Retail Sales
19	Housing

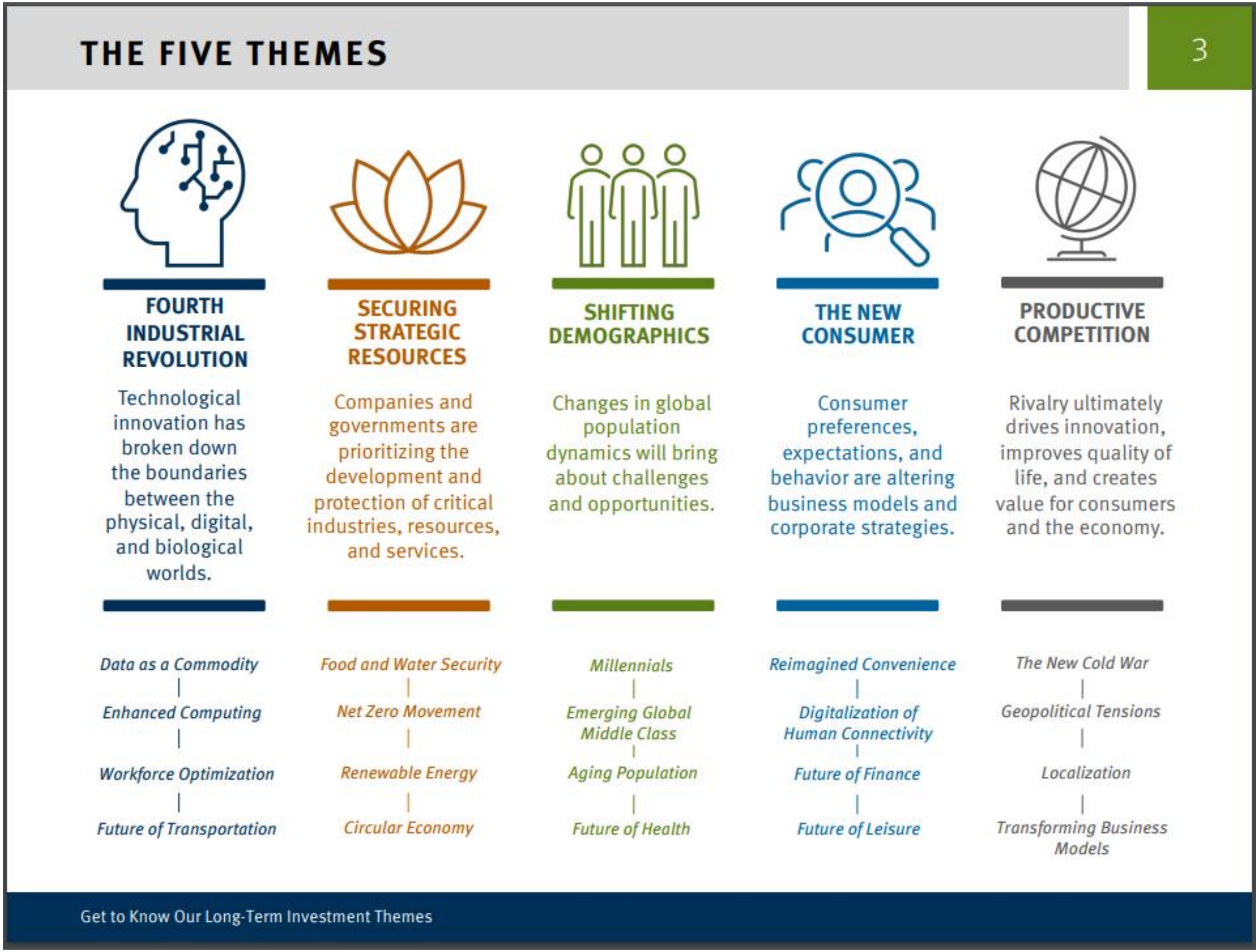
JANUARY	
3	Federal Open Market Committee (FOMC) Minutes
5	Employment
10*	Consumer Sentiment
11/26	Inflation
17*	Retail Sales
25*	Housing
31	Fed Policy Decision

* Estimated date pending announcement of actual date

OTHER IMPORTANT TOPICS

- Israel-Hamas War
- Russia-Ukraine War
- China-Taiwan Tensions
- Progression of Earnings Forecasts
- Third Quarter Earnings Season
- Progression of Purchasing Managers' Index measures
- Business and consumer sentiment
- Global Inflation
- Global Central Bank Policy

LONG-TERM INVESTMENT THEMES



THE FIVE THEMES

3

FOURTH INDUSTRIAL REVOLUTION	SECURING STRATEGIC RESOURCES	SHIFTING DEMOGRAPHICS	THE NEW CONSUMER	PRODUCTIVE COMPETITION
Technological innovation has broken down the boundaries between the physical, digital, and biological worlds.	Companies and governments are prioritizing the development and protection of critical industries, resources, and services.	Changes in global population dynamics will bring about challenges and opportunities.	Consumer preferences, expectations, and behavior are altering business models and corporate strategies.	Rivalry ultimately drives innovation, improves quality of life, and creates value for consumers and the economy.
Data as a Commodity *Enhanced Computing* *Workforce Optimization* *Future of Transportation*	*Food and Water Security* *Net Zero Movement* *Renewable Energy* *Circular Economy*	*Millennials* *Emerging Global Middle Class* *Aging Population* *Future of Health*	*Reimagined Convenience* *Digitalization of Human Connectivity* *Future of Finance* *Future of Leisure*	*The New Cold War* *Geopolitical Tensions* *Localization* *Transforming Business Models*

Get to Know Our Long-Term Investment Themes

Source: Stifel CIO Office via *From Vision to Value: Our Long-Term Investment Themes*

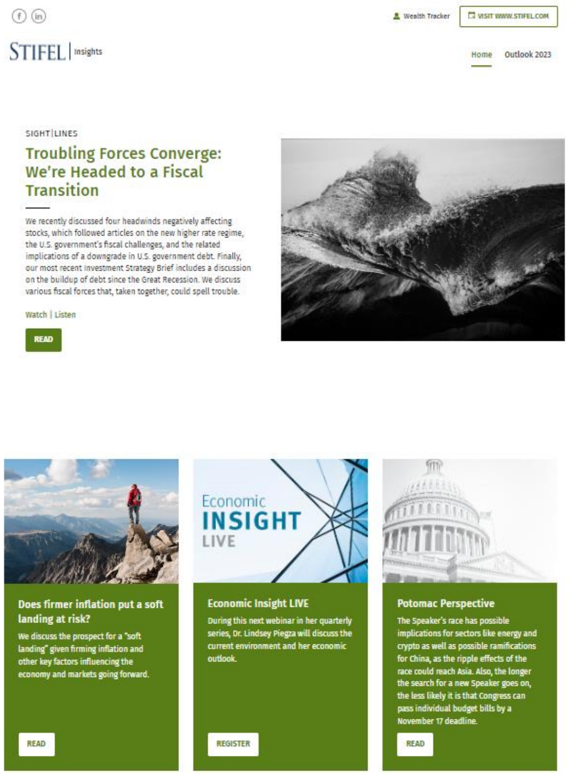
VIEW REPORT

STIFEL GUIDANCE

WHERE TO FIND STIFEL GUIDANCE

The Stifel CIO Office develops economic and market analysis, and corresponding investment guidance, for the benefit of Stifel clients. You can find all of our Stifel Guidance at:

stifelinsights.com



SIGHT|LINES

Troubling Forces Converge: We're Headed to a Fiscal Transition

We recently discussed four headwinds negatively affecting stocks, which followed articles on the new higher rate regime, the U.S. government's fiscal challenges, and the related implications of a downgrade in U.S. government debt. Finally, our most recent Investment Strategy Brief includes a discussion on the buildup of debt since the Great Recession. We discuss various fiscal forces that, taken together, could spell trouble.

Watch | Listen

READ

Does firmer inflation put a soft landing at risk?

We discuss the prospect for a "soft landing" given firming inflation and other key factors influencing the economy and markets going forward.

READ

Economic Insight LIVE

During this next webinar in her quarterly series, Dr. Lindsey Piegza will discuss the current environment and her economic outlook.

REGISTER

Potomac Perspective

The Speaker's race has possible implications for sectors like energy and crypto as well as possible ramifications for China, as the ripple effects of the race could reach Asia. Also, the longer the search for a new Speaker goes on, the less likely it is that Congress can pass individual budget bills by a November 17 deadline.

READ

Popular insights from Stifel's CIO Office include:

Dynamic leanings

ASSET ALLOCATION

144 ASSET ALLOCATION MODELS FOR YOUR SELECTION

6
Risk Profiles

Conservative

Moderately Conservative

Moderate

Moderate Growth

Moderately Aggressive

Aggressive

2
Time Frames

- Strategic (Long Term)
- Dynamic (Near Term)

3
Levels of Liquidity

- Tier 1
- Tier 2
- Tier 3

2
Equity Choices

- U.S. Focused
- Global

2
Fixed Income Choices

- Tax Sensitive
- Taxable

DYNAMIC LEANINGS

⬛ Underweight ▨ Neutral 🟩 Overweight

	ASSET CLASS	CURRENT			COMMENTS
		⬛	▨	🟩	
EQUITY	**U.S. Equity vs. Non-U.S. Equity**		▨		While non-U.S. equity relative valuations remain attractive for longer-term investors, we remain neutral given the global economic and geopolitical headwinds. The strength of the U.S. consumer and corporate balance sheets put the U.S. on a stronger footing, but richer valuations mean near-term weakness is possible.
	U.S. Large Cap vs. U.S. Small Cap	⬛			Small cap company valuations are providing an attractive entry point for skilled investors. Falling prices reflect, to a good degree, the concerns about higher interest rates and an economic slowdown. But lower valuations create opportunities. We guide investors to implement an overweight with active management.
	U.S. Large Value vs. U.S. Large Growth		▨		In this environment we believe investors should diversify across both value and growth styles. Within U.S. large cap, we have a modest overweight to dividend growth and quality companies, regardless of style.
	Non-U.S. Developed Markets vs. Emerging Markets		▨		Risks stemming from China and the war in Ukraine are each binary, meaning one or both could quickly dissipate, or get worse. Our team is closely following the developments in China and Europe, and we are prepared to act swiftly as we receive further clarity on the macroeconomic outlook.
	Europe vs. Japan		▨		We see investment opportunities across regions of the world. Japan's corporate governance reform is a positive and likely to enhance shareholder value in the medium-to-long term. Risks from the war in Ukraine are largely reflected in European stock valuations, and there is meaningful upside potential if and when we see a diplomatic resolution there.

DYNAMIC LEANINGS

⬛ Underweight
▨ Neutral
🟩 Overweight

	ASSET CLASS	CURRENT			COMMENTS
		⬛	▨	🟩	
FIXED INCOME	U.S. Investment Grade vs. U.S. High Yield			🟩	Bond yields are the most attractive they have been in the last 10–15 years, despite coming off of recent highs. Near-term volatility and an economic slowdown may exacerbate near-term price losses in high yield.
	Corporates/ Government/Agency MBS		▨		While our base case is for Treasury yields and corporate spreads to remain range bound, we remain neutral and diversified across fixed income supersectors given the fat tail risks of our bear and bull scenarios.
	Duration		▨		We view duration as a diversifier in a multi-asset class portfolio given the near-term uncertainty and remain neutral to the overall market.
ALTERNATIVES	Private Assets		▨		For investors interested in alternative investments and able to handle illiquidity, exposure to some combination of private equity, private debt, and/or private real estate can be considered as part of a diversified portfolio.
	Hedge Funds		▨		For investors interested in alternative investments and able to handle less liquidity who have conviction about manager skill, exposure to hedge funds can be a helpful part of a diversified portfolio. This is especially true in volatile, low-return environments.

Past performance is no guarantee of future results.

Index returns include the reinvestment of dividends but do not include adjustments for brokerage, custodian, and advisory fees.

Indices are unmanaged, do not reflect fees and expenses, and are not available for direct investment.

Past performance does not guarantee future results. Investing involves risk, including the possible loss of principal. Asset allocation and diversification do not ensure a profit or protection against loss.

Alternative Investments or Non-Traditional Assets – Alternative investments may include, but are not limited to: Real Estate Investment Trusts (REITs), Commodities, Futures, Hedge Funds, Venture Capital, Limited Partnerships, etc.

Real Estate – When investing in real estate companies, property values can fall due to environmental, economic, or other reasons, and changes in interest rates can negatively impact the performance.

Commodities and Futures – The risk of loss in trading commodities and futures can be substantial. You should therefore carefully consider whether such trading is suitable for you in light of your financial condition. The high degree of leverage that is often obtainable in commodity trading can work against you as well as for you. The use of leverage can lead to large losses as well as gains.

Hedge Funds – *Investors should be aware that hedge funds often engage in leverage, short-selling, arbitrage, hedging, derivatives, and other speculative investment practices that may increase investment loss. Hedge funds can be highly illiquid, are not required to provide periodic pricing or valuation information to investors, and often charge high fees that can erode performance. Additionally, they may involve complex tax structures and delays in distributing tax information. While hedge funds may appear similar to mutual funds, they are not necessarily subject to the same regulatory requirements as mutual funds.*

Venture Capital – Venture capital investments involve substantial risks. The risks associated with investing in companies in the start-up or expansion stages of development are greater than those of companies in later stages, because the companies' business concepts generally are unproven and the companies have little or no track record.

Limited Partnerships – Generally, limited partnership investments are suitable only for a narrow class of relatively sophisticated investors. Limited partnership investments may be speculative in nature and be subject to resale restrictions or illiquidity. An investment is appropriate only for investors who have the capacity to absorb a loss of some or all of their investment.

Bonds – When investing in bonds, it is important to note that as interest rates rise, bond prices will fall. High-yield bonds have greater credit risk than higher quality bonds.

Duration – Duration is a measure of the sensitivity of the price -- the value of principal -- of a fixed-income investment to a change in interest rates. Duration is expressed as a number of years.

Standard Deviation – Standard deviation is a measure of the dispersion of a set of data from its mean. It is calculated as the square root of variance by determining the variation between each data point relative to the mean. If the data points are further from the mean, there is higher deviation within the data set.

International and Emerging Markets – There are special considerations associated with international investing, including the risk of currency fluctuations and political and economic events. Investing in emerging markets may involve greater risk and volatility than investing in more developed countries.

Private Equity – *Private equity funds are not appropriate for all investors. Investors should be aware that private equity funds may contain speculative investment practices that can lead to a loss of the entire investment. Private equity funds may invest in entities in which no secondary market exists and, as such, may be highly illiquid. The funds are not required to provide periodic pricing or valuation information to investors and often charge high fees that can erode performance. Additionally, they may involve complex tax structures and delays in distributing tax information.*

Short Positions – The investor should note that when a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker will demand more collateral and the manager might have to close out that short position at an inopportune time to limit any further losses.

Small Company Securities – Small company securities are typically more volatile and carry additional risks, since smaller companies generally are not as well established as larger companies.

APPENDIX: INDEX DESCRIPTIONS

Bloomberg U.S. Treasury Bills 1-3 Months Index includes all publicly issued zero-coupon U.S. Treasury Bills that have a remaining maturity of less than three months and more than one month, are rated investment grade, and have $250 million or more of outstanding face value.

Bloomberg U.S. Corporate IG Index is an unmanaged index considered representative of fixed-rate investment-grade taxable bond debt.

Bloomberg U.S. Aggregate Corporate Index is an unmanaged index considered representative of fixed-rate investment-grade taxable bond debt.

Bloomberg U.S. Corporate High Yield is an unmanaged index considered representative of fixed-rate, noninvestment-grade debt.

Bloomberg U.S. Government Bond Index is an unmanaged index considered representative of fixed-rate, investment-grade US Government debt.

Bloomberg Global Aggregate This index provides a broad-based measure of the global investment-grade, fixed-rate debt market.

DXY Index is a measure of the value of the U.S. dollar relative to the value of a basket of currencies of the majority of the U.S.'s most significant trading partners.

S&P 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.

S&P 500 Equal Weight Index is the equal-weight version of the widely regarded Standard & Poor’s 500 Index, which is generally considered representative of the U.S. large capitalization market. The index has the same constituents as the capitalization-weighted S&P 500, but each company in the index is allocated a fixed weight of 0.20% at each quarterly rebalancing.

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

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

Russell 1000 Growth Index measures the performance of those Russell 1000 index companies with lower price-to-book ratios and lower forecasted growth values.

Russell 1000 Index represents approximately 1,000 of the largest companies in the U.S. equity markets, the Russell 1000 is a subset of the Russell 3000 Index. The Russell 1000 (maintained by the Russell Investment Group) comprises over 90% of the total market capitalization of all listed U.S. stocks and is considered a bellwether index for large cap investing.

Russell 2000 Index measures the performance of the 2,000 smallest companies in the Russell 3000 index.

MSCI EAFE Index captures large and mid cap representation across Developed Markets countries around the world, excluding the U.S. and Canada. With 914 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Emerging Markets (EM) Index captures large and mid cap representation across 23 Emerging Markets (EM) countries. With 837 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

Morgan Stanley Market implied pace of hikes index (MSPOKE) is the number of Fed rate hikes in the 12 months following the first rate hike implied by the Eurodollar interest rate futures market.

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

APPENDIX: **INDEX DESCRIPTIONS**

Wilshire 5000 Index is a market-capitalization-weighted index of the market value of all stocks actively traded in the United States.

VIX Index 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.

EURO STOXX 50 is a stock index of Eurozone stocks designed by STOXX, an index provider owned by Deutsche Börse Group. According to STOXX, its goal is "to provide a blue-chip representation of Supersector leaders in the Eurozone

Cash & Cash Equivalent is represented by the Bloomberg U.S. Treasury 3-6 months Bill Index, comprised of treasury bills issued by the U.S. government with less than one year to maturity.

U.S. Government Bonds is represented by the Bloomberg U.S. Government Bond Index, comprised of the U.S. Treasury and U.S. Agency indexes.

U.S. Corp IG Bonds is represented by the Bloomberg U.S. Corporate Bond Index, comprised of the investment grade, fixed-rate, taxable corporate bond market.

High-Yield Bonds is represented by the Bloomberg U.S. Corporate High Yield Bond Index, comprised of U.S. Dollar denominated, high-yield, fixed-rate corporate bond market securities.

U.S. LC (Large Cap) equities is represented by Russell 1000 Index, comprised of 1,000 of the largest U.S. securities based on a combination of their market cap and current index membership.

U.S. SC (Small Cap) equities is represented by the Russell 2000 Index, comprised of 2,000 of the smallest U.S. securities based on a combination of their market cap and current index membership.

Developed International Equities is represented by the MSCI EAFE Index, comprised of equity securities that belong to markets outside of the U.S. and Canada.

Emerging Markets Equities is represented by the MSCI EM Index, comprised of equity securities that belong to emerging markets.

Moderate Bench stands for moderate benchmark portfolio return which is a blended portfolio of stocks (60% weight, represented by MSCI AC World Index) and bonds (40% weight, represented by Bloomberg U.S. Agg Gov/Credit).

MSCI AC World Index is comprised of equity securities belonging to 23 developed markets and 24 emerging markets countries.

Bloomberg U.S. Government/Credit Bond Index is comprised investment grade, dollar-denominated, fixed-rate Treasuries, government-related and corporate securities.

KBW Nasdaq Regional Banking Index seeks to reflect the performance of U.S. companies that do business as regional banks of thrifts.

NYSE FANG+ Index is an equal-dollar weighted index designed to track the performance of highly-traded growth stocks of technology and tech-enabled companies in the technology, media & communications and consumer discretionary sectors such as Facebook, Apple, Amazon, Netflix, and Alphabet's Google.