



INVESTMENT STRATEGY BRIEF:

Glimpses of Optimism Fade

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STIFEL

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STIFEL

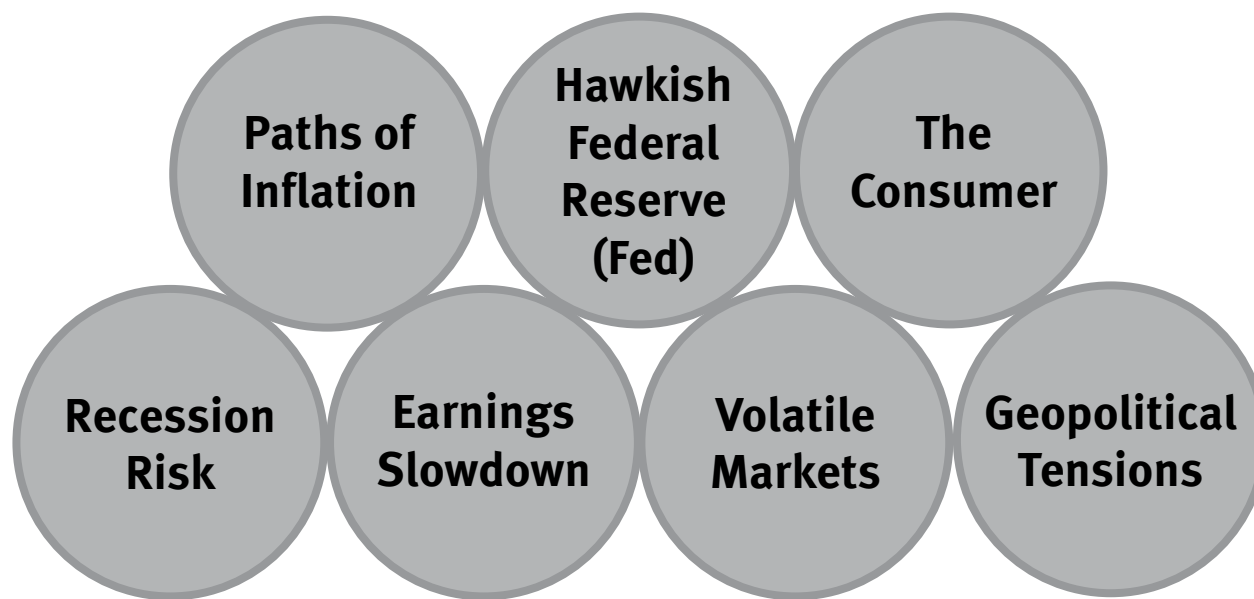
OUTLOOK 2023

FINDING BALANCE

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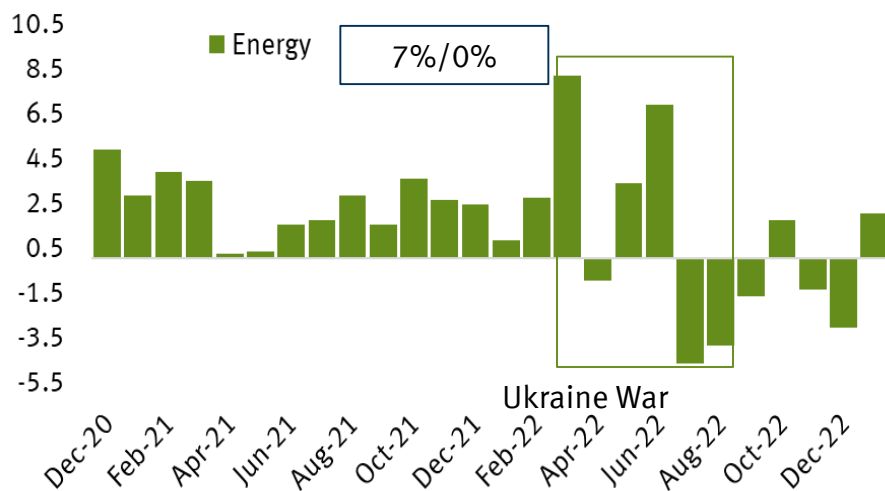
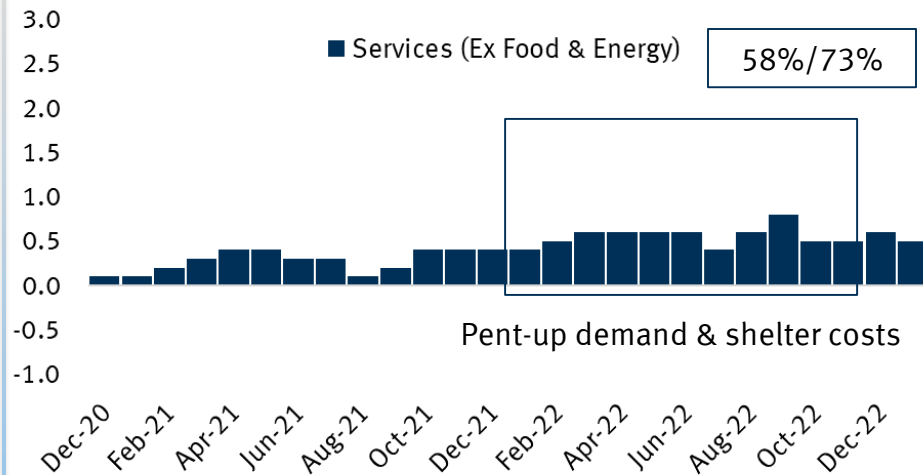
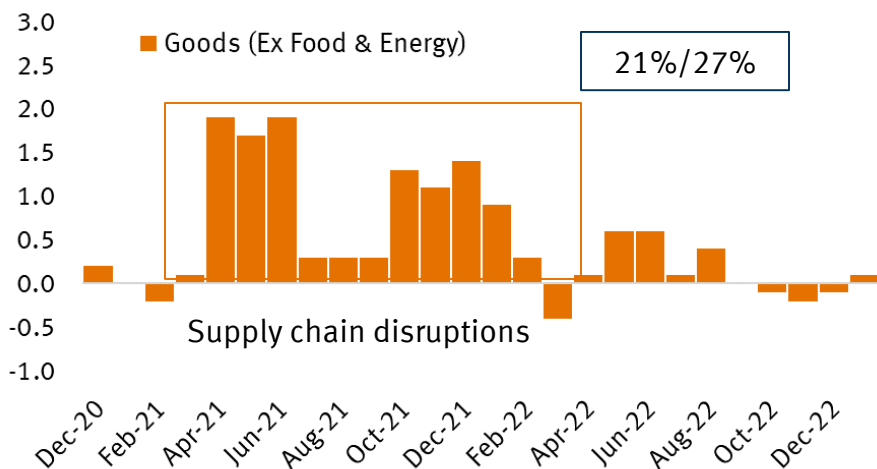


January 31/February 1 Fed Meeting

- The Fed hiked rates 0.25%, as expected.
- The statement acknowledged easing inflationary pressures but noted that inflation remains elevated.
- Markets responded positively
- Powell press conference:
 - ***Ongoing rate hikes will be necessary*** because the “job not fully done.” Core services ex housing still running too high.
 - ***“Premature to declare victory,”*** but we can now say that the ***“disinflationary process is happening.”***
 - Base case: Inflation will go back to 2% without significant downturn. Positive growth at a subdued pace.
 - Powell ***doesn’t see cutting rates this year***, since lots of uncertainty (“wait and see”).

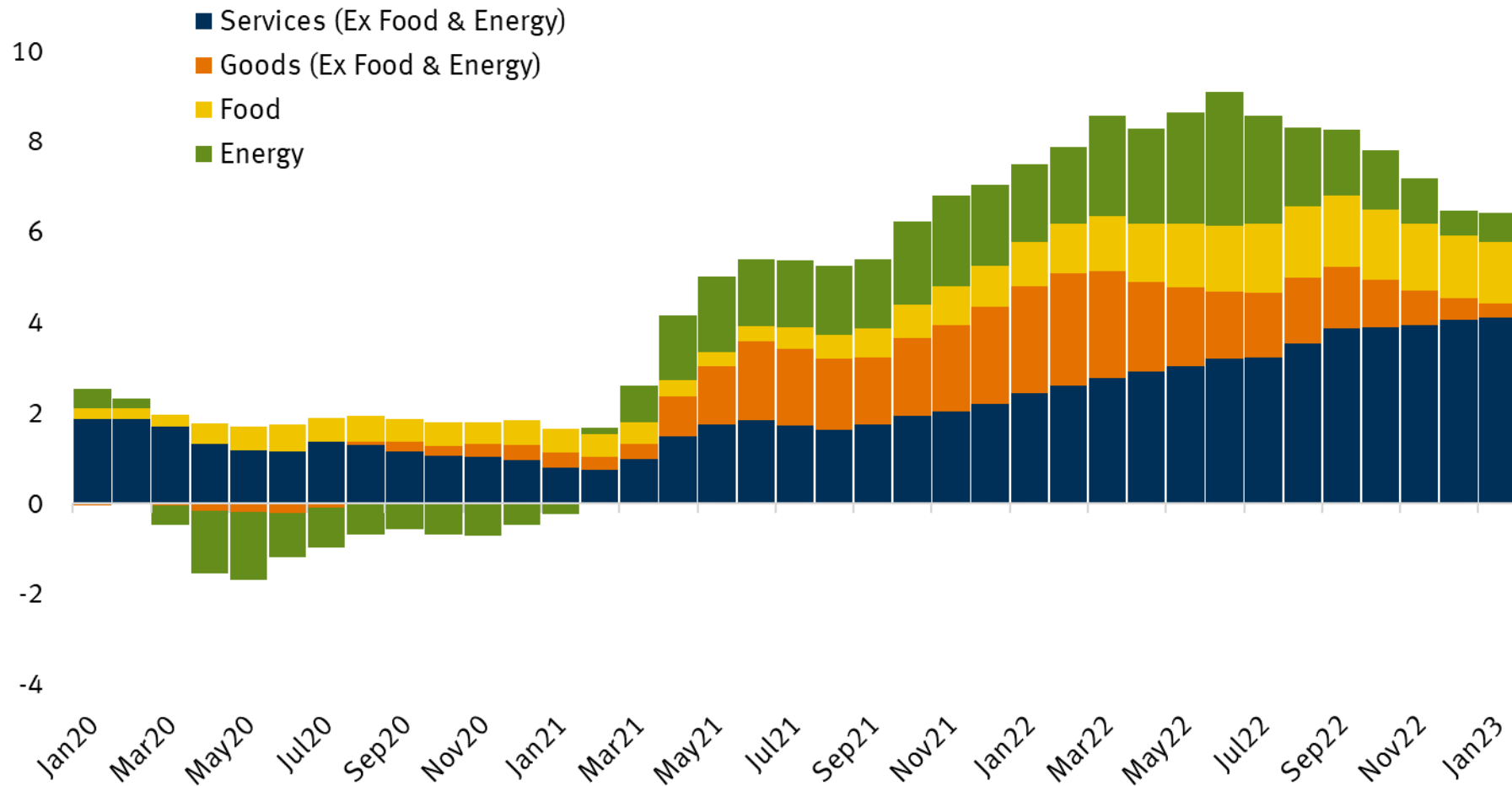
Source: Stifel Investment Strategy

Month over Month % shown below



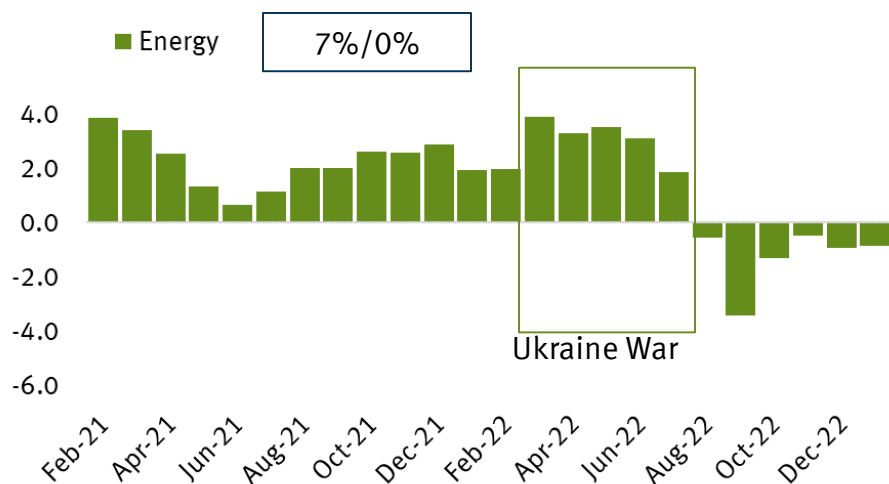
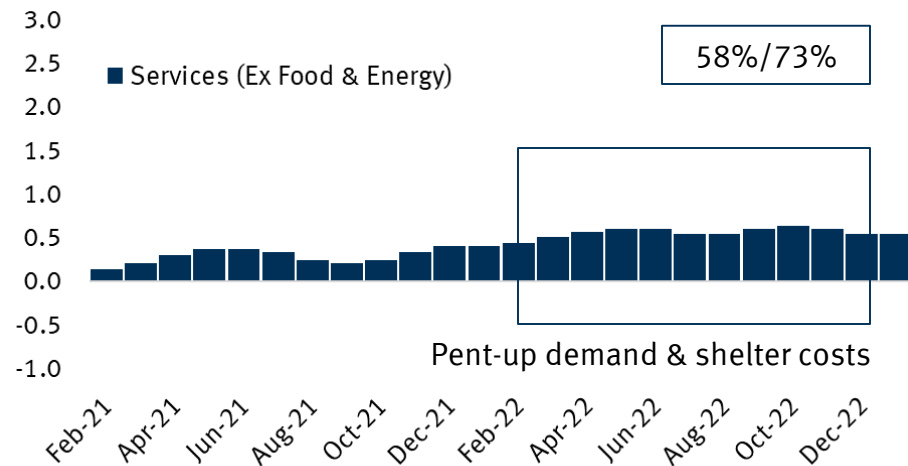
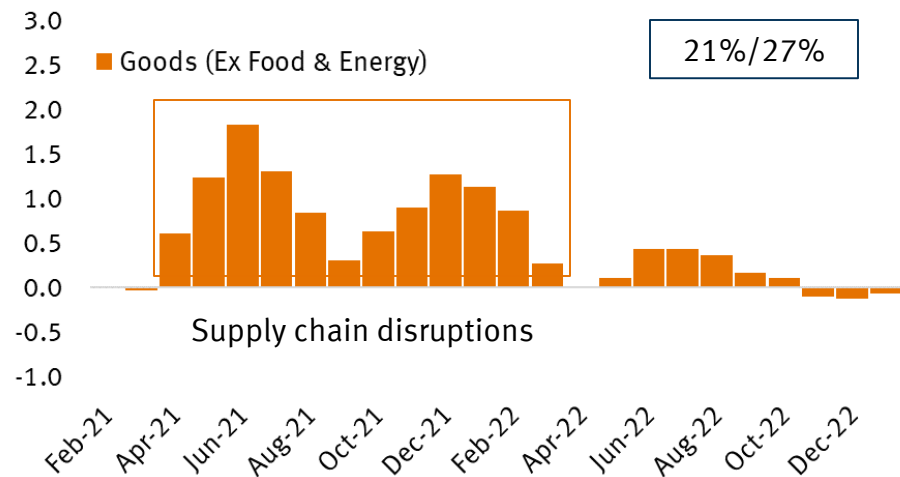
Source: Stifel Investment Strategy data via Bloomberg, as of February 14, 2023.

Year over Year % shown below

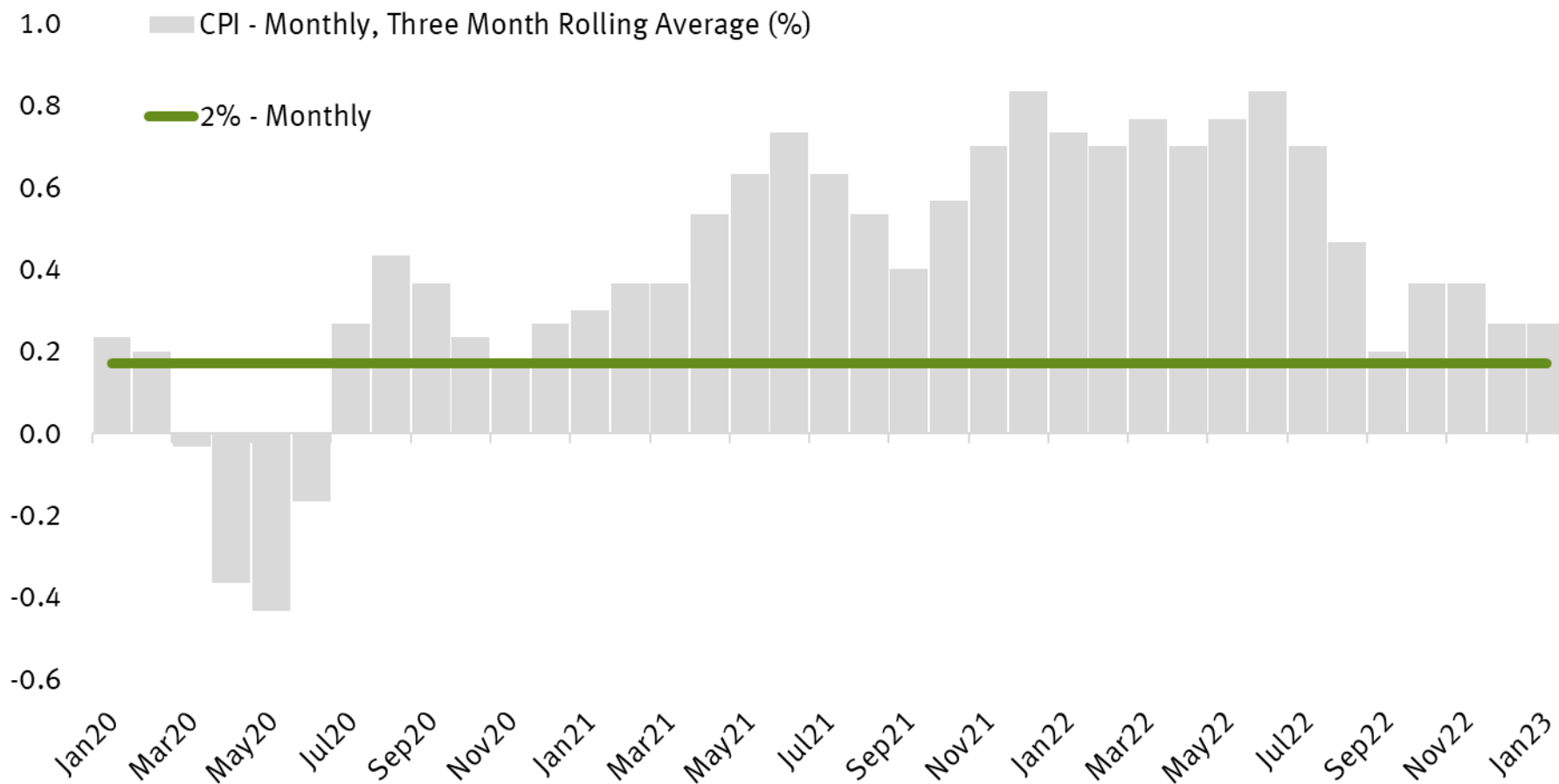


Source: Stifel Investment Strategy data via Bloomberg, as of February 14, 2023.

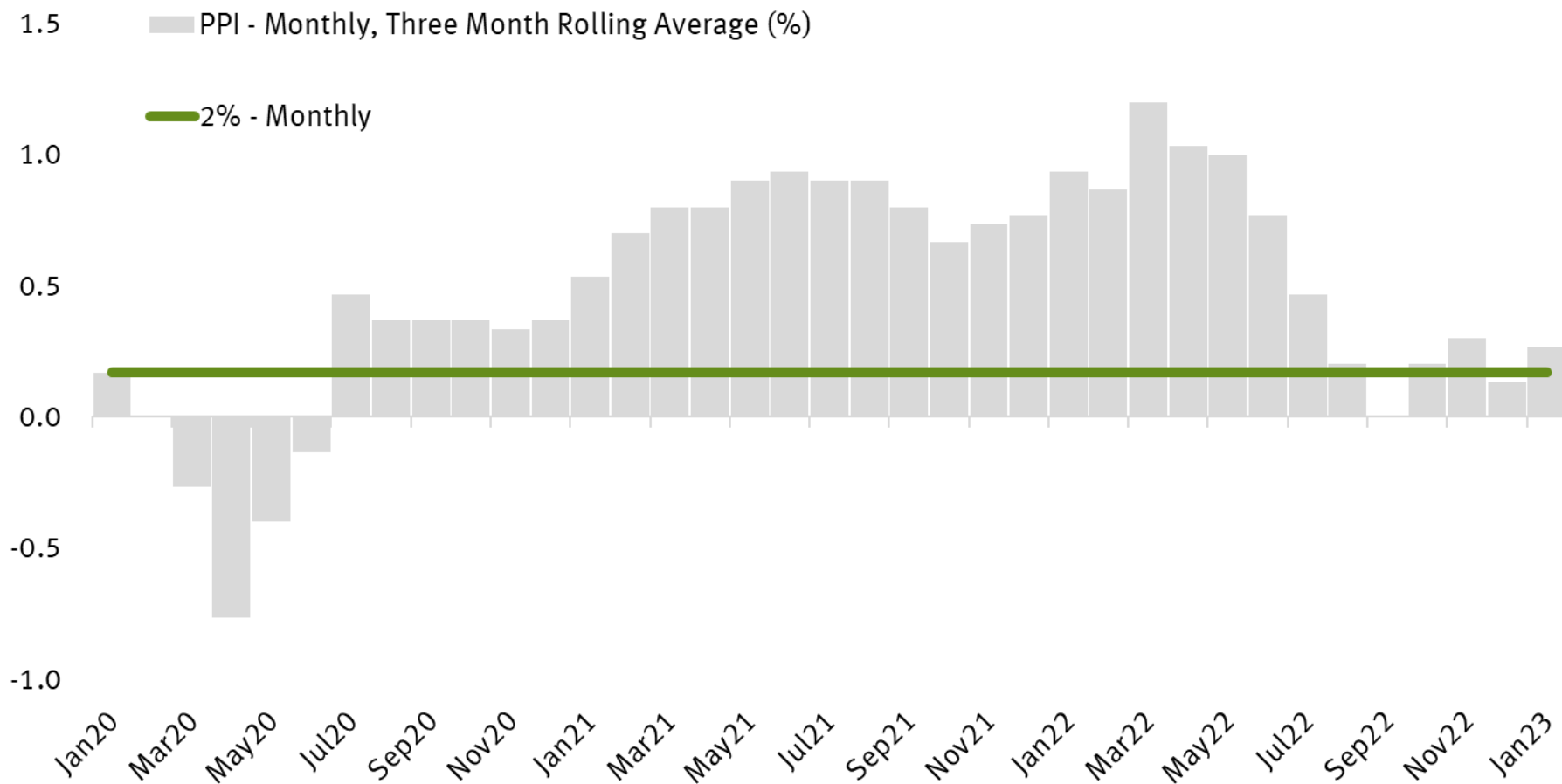
Monthly, three-month rolling average shown below



Source: Stifel Investment Strategy data via Bloomberg, as of February 14, 2023.



Source: Stifel Investment Strategy data via Bloomberg, as of February 14, 2023



Source: Stifel Investment Strategy data via Bloomberg, as of February 16, 2023

GDP Q4 2022 (1st Estimate) (BEA)

Higher than anticipated, Q4 2022 GDP principally rose from higher inventories and consumer spending which were partially offset by a decline in housing.

- **2022 GDP rose 2.1% from 5.9% in 2021.** The rise was led by consumer spending, exports, inventories, and nonresidential, offsetting higher imports and a fall in residential investment and government spending.
- **Q4 2022 GDP rose by a seasonally annual rate (SAAR) of 2.9%,** following a rise of 3.2% in Q3 2022, and declines of 1.6% and 0.6% in Q1 and Q2 2022.
- **The GDP price index** for Q4 2022 was 3.5%, following a 4.4% rise in Q3 2022.
- **Personal Consumer Expenditures (PCE) prices** rose 3.2%, following a rise of 4.3% in Q3. Core PCE rose 3.9%, following a 4.7% rise in Q3.
- **Personal saving rate** rose to 2.9%, from 2.7% in Q3. For 2022, the rate fell to 3.3% from 12.0% in 2021.

Source: Stifel Investment Strategy

**Market Sight|Lines: Employment remains strong.
Will the Fed pause? Is a soft landing possible?**

The January employment report shows that the job market remains strong. The Fed continues to signal higher rates but is debating when to pause. A soft landing is still possible, allowing us to avoid a deep recession.

In summary:

- The January **unemployment rate** declined to 3.4%, the lowest level since 1969.
- **Nonfarm payrolls** rose 517,000 in January, well above market expectations for a rise of 188,000.
- The ratio of the **number of unemployed persons to the number of job openings** rose to 1.9 from 1.8.
- The annual growth of **average hourly earnings** on a yearly basis fell to 4.4%.
- In speeches and other media appearances, Fed officials say they will **hike rates** further, but they are debating when to pause.

Source: Stifel Investment Strategy

1.4%

**Consumers' Contribution
to Q4 GDP**

6.4%

Retail Sales

\$1.1 Trillion

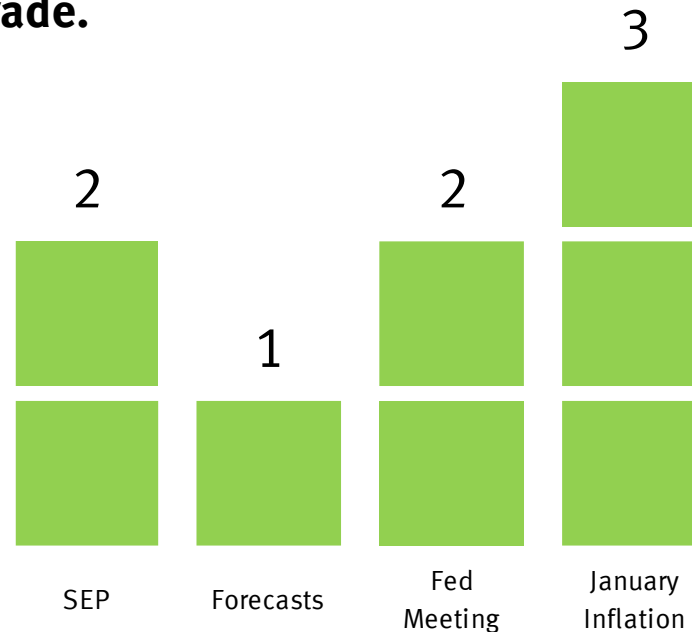
Excess Savings

3.4%

Unemployment Rate

Source: Stifel Investment Strategy data via Bloomberg and Strategas Research Partners, as of February 16, 2022

**A big question: how many more 0.25% Fed rate hikes from here?
Glimpses of optimism fade.**



The Fed's most recent Summary of Economic Projections (SEP) imply there will be two more 0.25% hikes this year.

At the beginning of the year, our forecast, and those implied by Fed funds futures, reflected one more.

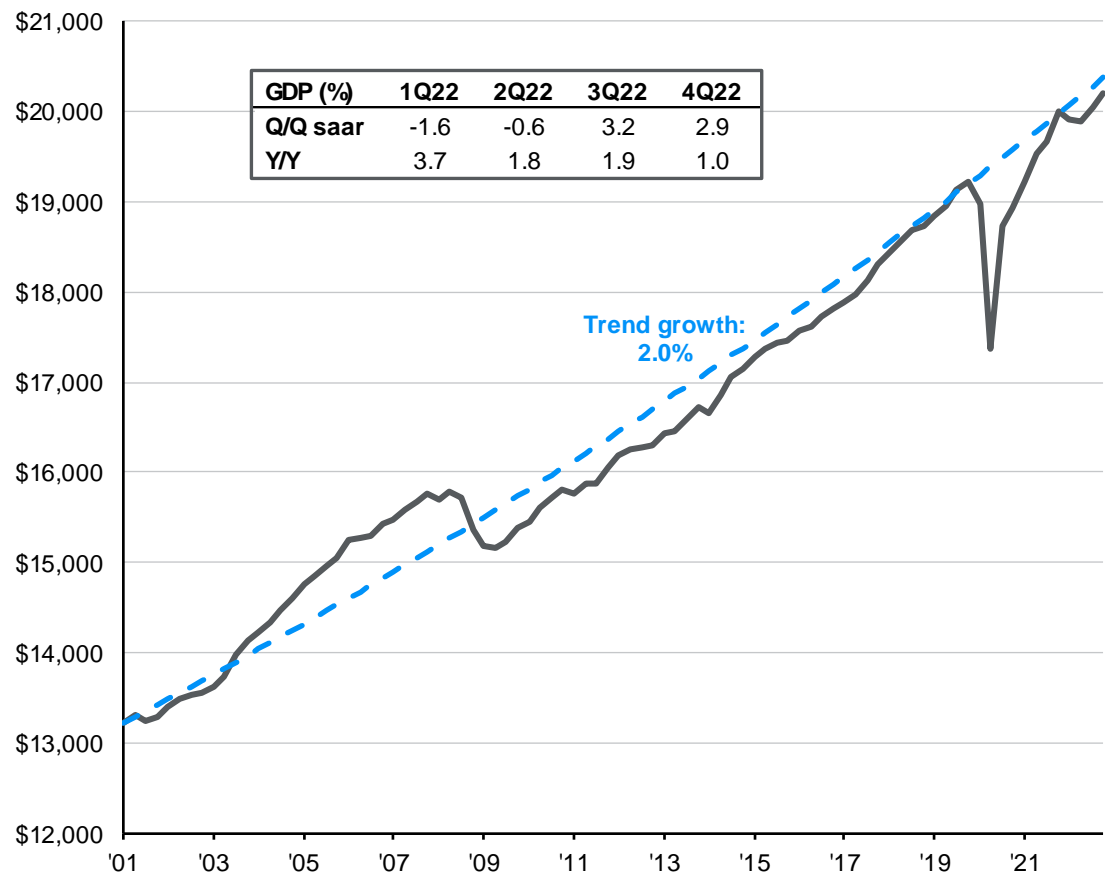
Just after the Fed meeting Fed funds futures moved, anticipating two more 0.25% moves this year.

The firm January inflation reports moved Fed funds futures further, now implying three more 0.25% hikes.

Source: Stifel Investment Strategy data via Bloomberg, as of February 16, 2023

Real GDP

Billions of chained (2012) dollars, seasonally adjusted at annual rates

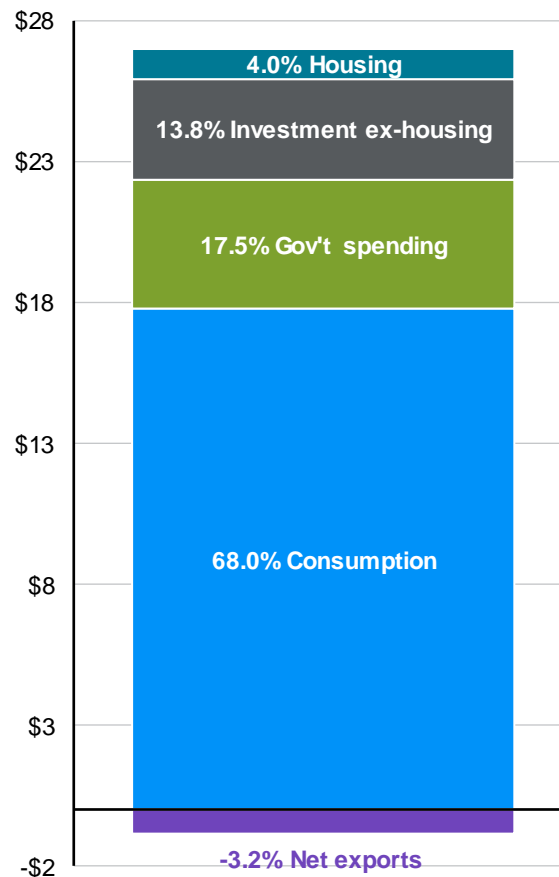


Source: BEA, FactSet, J.P. Morgan Asset Management. Values may not sum to 100% due to rounding. Trend growth is measured as the average annual growth rate from business cycle peak 1Q01 to business cycle peak 4Q19.

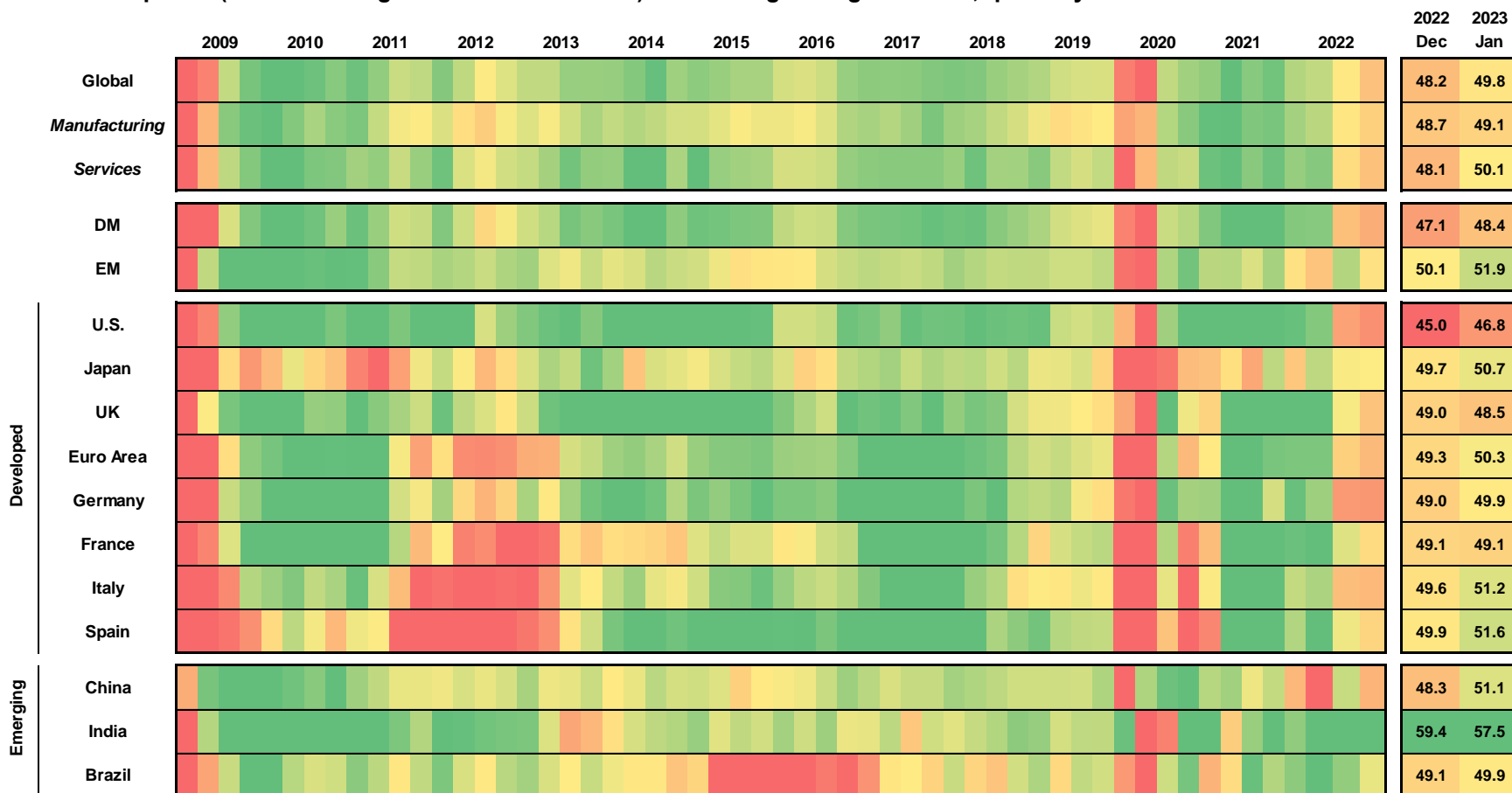
Guide to the Markets – U.S. Data are as of February 10, 2023.

Components of GDP

4Q22 nominal GDP, USD trillions



Global Composite (manufacturing & services combined) Purchasing Managers' Index, quarterly



Source: Standard & Poor's, J.P. Morgan Asset Management.

The Composite PMI includes both manufacturing and services sub-indices. Heatmap colors are based on PMI relative to the 50 level, which indicates acceleration or deceleration of the sector, for the time period shown. Heatmap is based on quarterly averages, with the exception of the two most recent figures, which are single month readings. Data for the U.S. are back-tested and filled in from December 2007 to September 2009 due to lack of existing PMI figures. DM and EM represent developed markets and emerging markets, respectively.

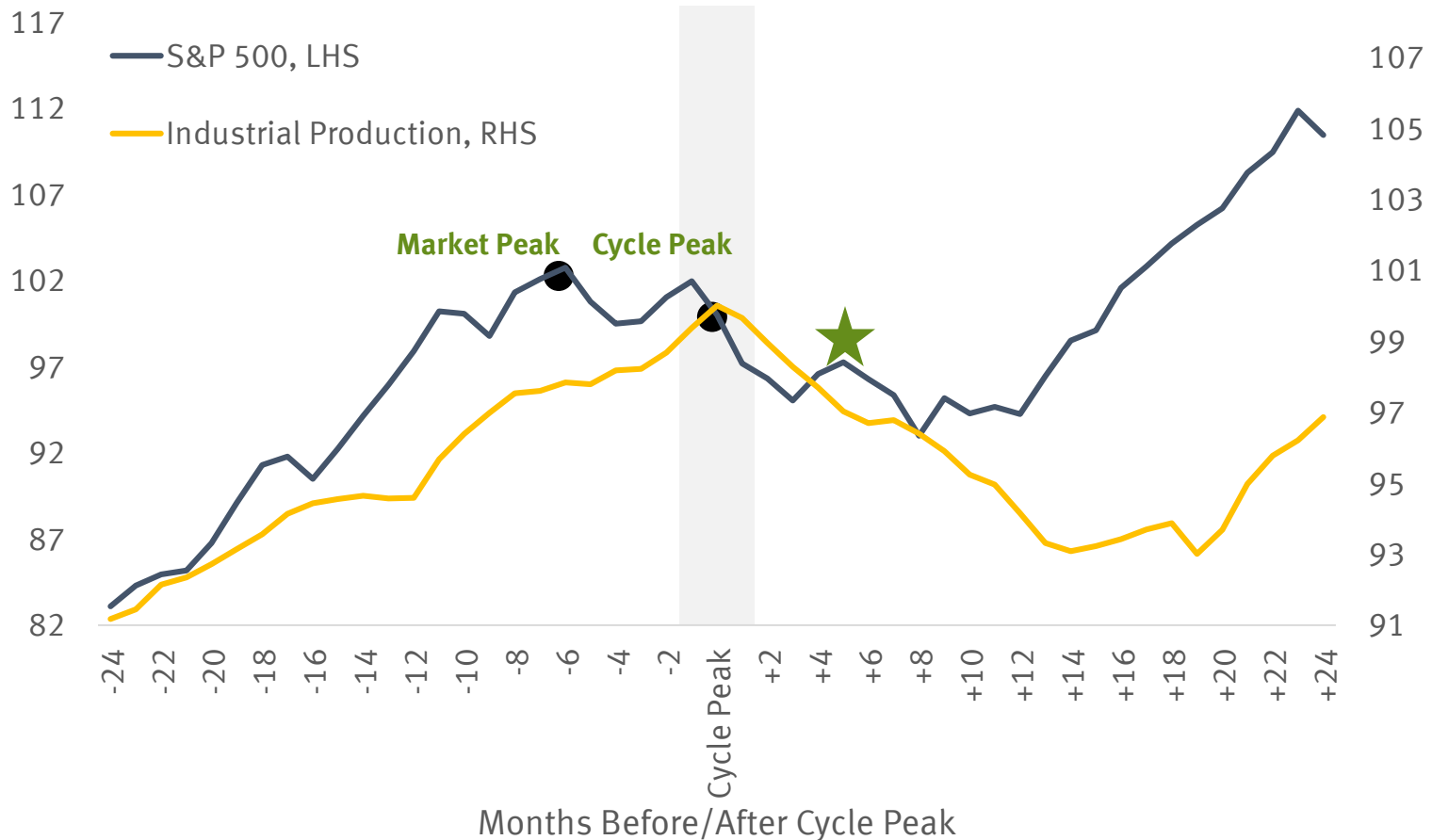
Guide to the Markets – U.S. Data are as of February 10, 2023.

Recession-Recovery Dashboard

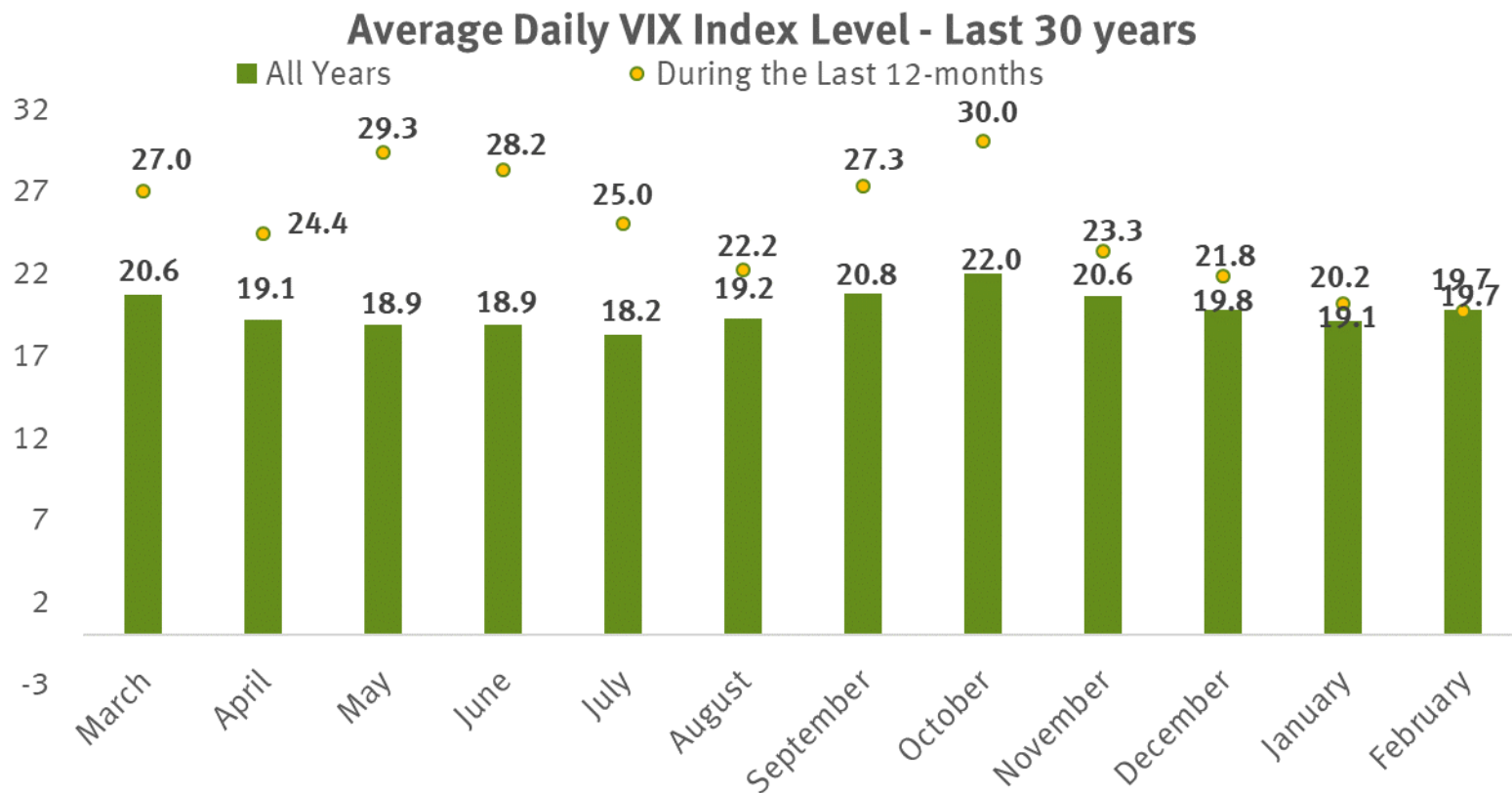
Financial	Yield Curve
	Credit Spreads
	Money Supply
Inflation	Wage Growth
	Commodities
	Inflation (PCE)
Consumer	Housing Starts
	Jobless Claims
	Retail Sales
	Job Sentiment
Business Activity	ISM New Orders
	Profit Margins
	Truck Shipments

Expansion
Caution
Recession

- Various **yield curve** indicators suggest +50% probability of recession.
- **Credit spreads** are holding based on less worry looking forward.
- **Money supply** growth has declined on less accommodative policy and banks cautiousness about lending money.
- **Wage growth** is contributing to inflationary pressures.
- **Commodities** may have eased on global growth fears but with Russia cutting energy supply to Europe and China opening up, this represents an upside risk to energy prices.
- The Fed remains laser focused on **inflation** by aggressively tightening; the probability of recession presents a meaningful risk.
- **Housing starts** have stalled on higher costs and weak builder confidence.
- **Jobless claims** show no signs of labor market weakness.
- Overall **retail sales** remains supported by consumer spending.
- **Job sentiment** remains range-bound but shows some deceleration.
- **ISM New Orders** show volatility with services sector presenting a meaningful upside risk and manufacturing a downside risk.
- **Profit margins** remain historically high but risks are meaningful due to price pressures.
- **Truck shipments** are range-bound easing supply chain issues are offset by slowing demand.

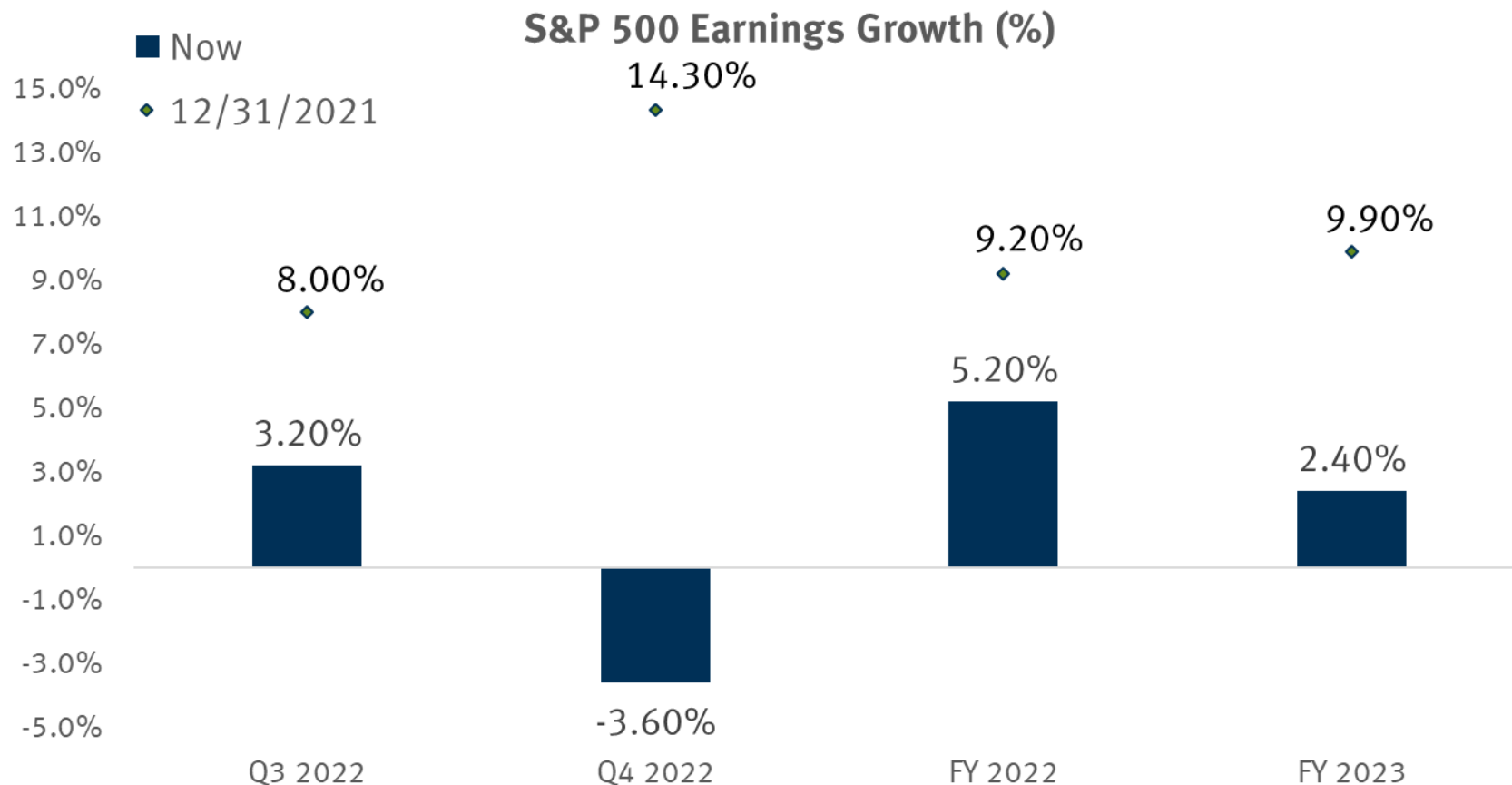


Source: Stifel Investment Strategy data via Strategas Research Partners, as of February 15, 2023; Data since 1950.

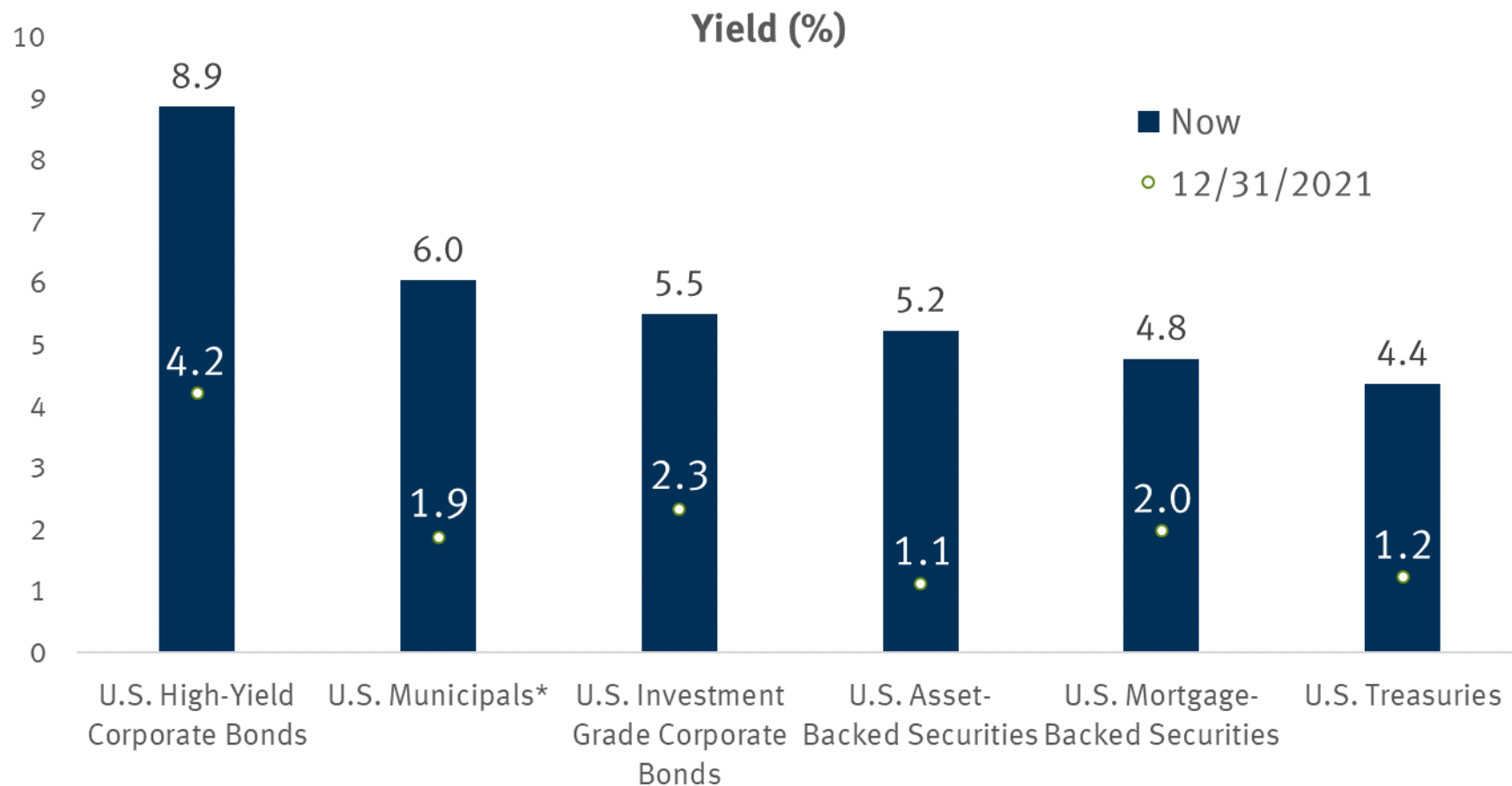


Source: Stifel Investment Strategy data via Bloomberg, as of February 21, 2023 (intra-day)

Many companies citing supply chain, inflation, and recession



Source: Stifel Investment Strategy via FactSet, as of February 15, 2023

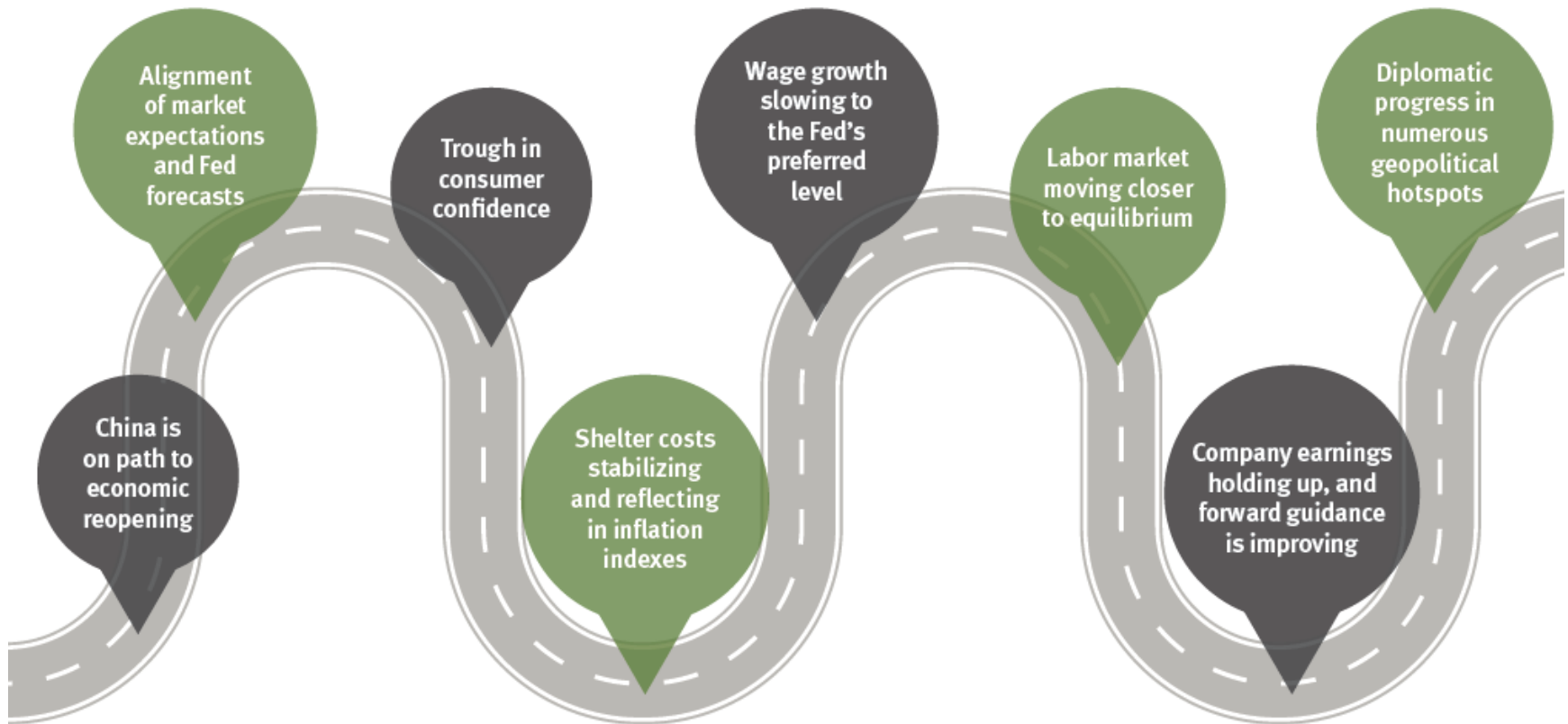


*Based on taxable equivalent yield.

Source: Stifel Investment Strategy data via Bloomberg, as of February 21, 2023

Index	2020	2021	2022	Jan 2023	Feb 2023
S&P 500 Index	18.4%	28.7%	-18.1%	6.3%	-1.8%
Russell 1000 Value	2.8%	25.1%	-7.6%	5.2%	-2.6%
Russell 1000 Growth	38.5%	27.6%	-29.1%	8.3%	-0.9%
NYSE FANG+ Index	103.1%	17.7%	-40.0%	18.7%	2.1%
Russell 2000 Index	19.9%	14.8%	-20.5%	9.7%	-2.2%
MSCI EAFE Index	7.8%	11.3%	-14.5%	8.1%	-0.6%
MSCI EM Index	18.3%	-2.5%	-20.1%	7.9%	-3.5%
Bloomberg U.S. Aggregate	7.5%	-1.5%	-13.0%	3.1%	-2.8%

SIGNPOSTS

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JANUARY

4	Federal Open Market Committee (FOMC) Minutes
6	Employment
12/18	Inflation
13	Consumer Sentiment
18	Retail Sales
19	Housing

FEBRUARY

1	Fed Policy Decision
3	Employment
10	Consumer Sentiment
14/16	Inflation
15	Retail Sales
16/21	Housing
22	Federal Open Market Committee (FOMC) Minutes
23	Fourth Quarter GDP (Adv Est.)

OTHER IMPORTANT TOPICS

- Russia-Ukraine War
- China-Taiwan Tensions
- Progression of Earnings Forecasts
- Fourth Quarter Earnings Season
- Progression of PMI measures
- Business and consumer sentiment
- Global Inflation
- Global Central Bank Policy

MARCH

10	Employment
14/15	Inflation
15	Retail Sales
16/23	Housing
17	Consumer Sentiment
22	FOMC Economic Projections

APRIL

7	Employment
12	Federal Open Market Committee (FOMC) Minutes
12/13	Inflation
14	Consumer Sentiment
14	Retail Sales
18/25	Housing

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



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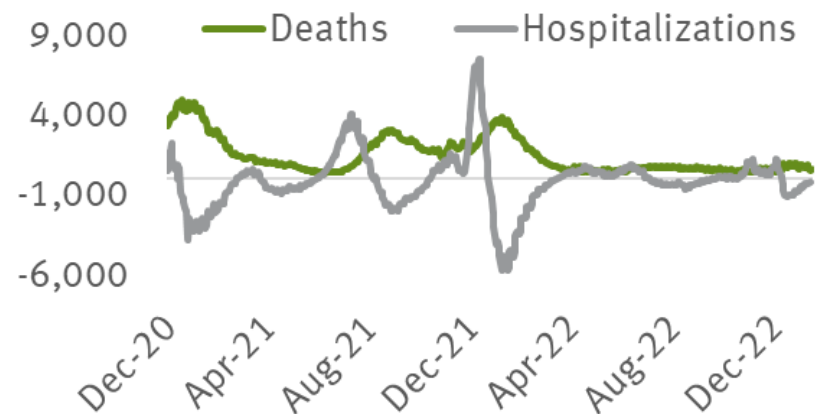
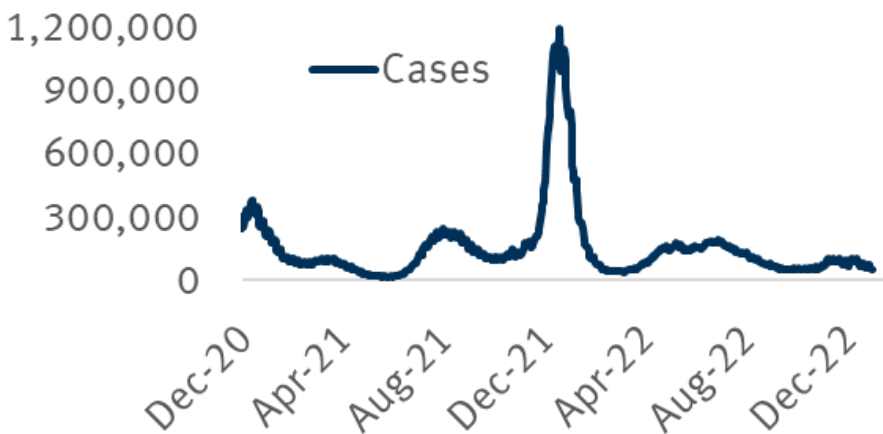


VIDEO | PODCAST | NEWSLETTER



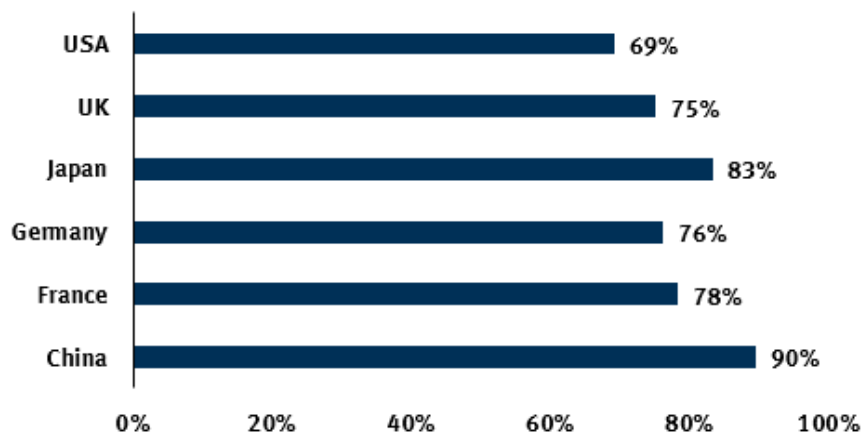


Macro Environment



Source: Stifel Investment Strategy via Bloomberg, Our World in Data, as of February 15, 2023; based on 7-day moving average data. Change in cases, deaths, and hospitalizations shown above.

Share of Population Fully Vaccinated



Source: Stifel Investment Strategy via ourworldindata.org as of February 16, 2023

EFFECTIVENESS AT PREVENTING

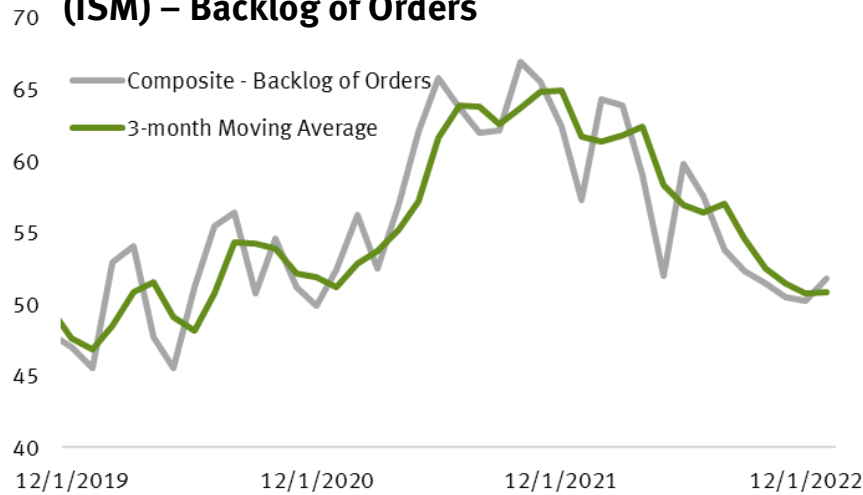
		<u>Original Strain</u>		<u>Omicron Variant</u>		
		<u>Vaccine</u>	<u>Severe Disease</u>	<u>Infection</u>	<u>Severe Disease</u>	<u>Infection</u>
U.S.	Johnson & Johnson	86%	72%	57%	33%	
	Moderna	97%	92%	73%	48%	
	Pfizer/BioNTech	95%	86%	72%	44%	
China	CanSino	66%	62%	48%	32%	
	CoronaVac	50%	47%	37%	24%	
	Sinopharm	73%	68%	53%	35%	

Source: Stifel Investment Strategy via IHME healthdata.org as of February 18, 2022

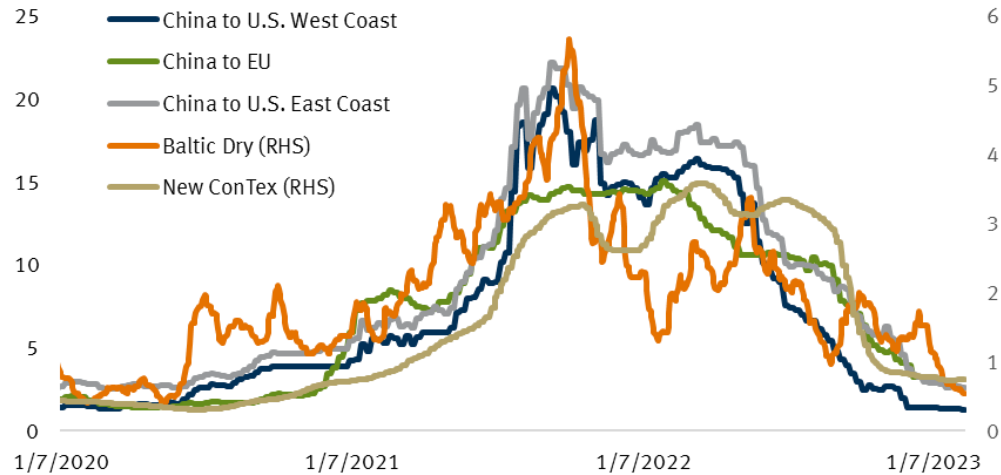
STIFEL WHEN WILL SUPPLY CHAIN PRESSURES EASE?

Market Sight/Lines - Exploring the Data: Supply Chain Pressures May Be Easing

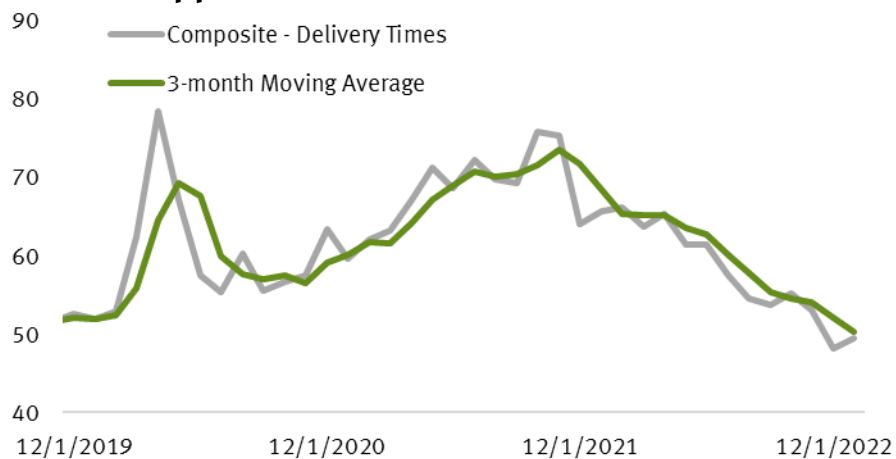
Institute of Supply Management (ISM) – Backlog of Orders



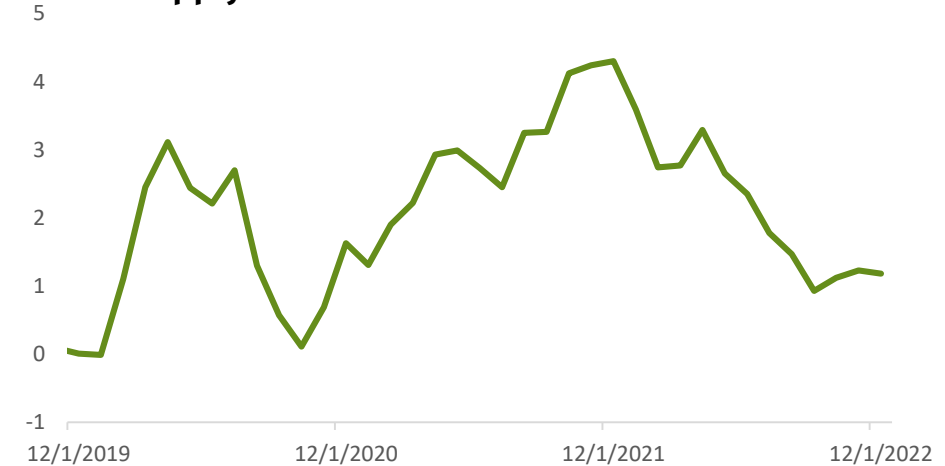
Shipping Costs (\$000)



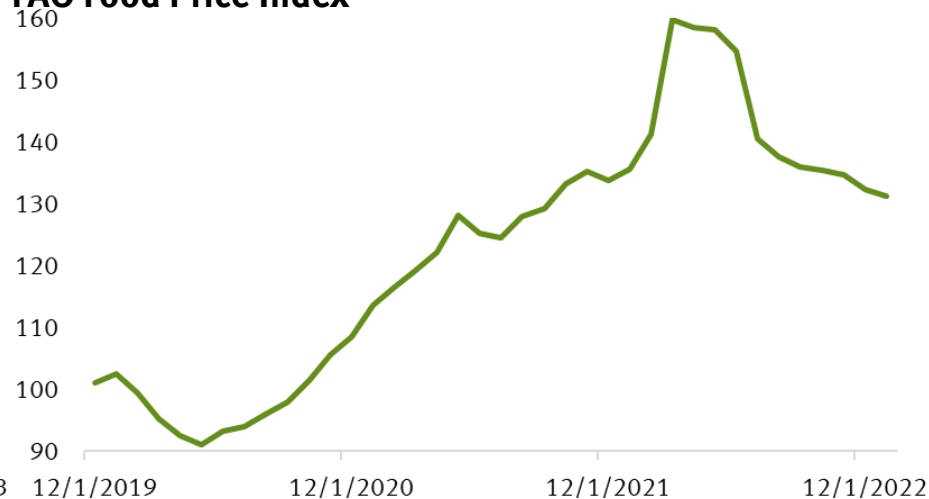
ISM Supplier Deliveries



Global Supply Chain Pressure Index



Source: Stifel Investment Strategy data via Bloomberg, as of February 16, 2023

Market Sight/Lines - Exploring the Data: Inflation May Be Cooling**Brent Crude Oil (\$/barrel)****FAO Food Price Index****Average Gas Price (\$/gallon)**

Source: Stifel Investment Strategy data via Bloomberg, as of February 16, 2023

	CPI		Core CPI	
	Monthly	Annualized	Monthly	Annualized
2020	0.11%	1.29%	0.13%	1.60%
2021	0.57%	7.10%	0.45%	5.48%
1H'22	0.89%	11.16%	0.55%	6.85%
Jul '22	0.00%	0.00%	0.30%	3.66%
Aug '22	0.20%	1.21%	0.60%	7.44%
Sep '22	0.40%	4.91%	0.60%	7.44%
Oct '22	0.50%	6.17%	0.30%	3.66%
Nov '22	0.20%	2.43%	0.30%	3.66%
Dec '22	0.10%	1.21%	0.40%	4.91%
Jan '23	0.50%	6.17%	0.40%	4.91%

2.82%
1-Year

2.51%
5-Year

Investors:
Breakeven
Inflation
Rates

2.31%
10-Year

2.10%
*5-year, 5-year
forward*

Consumers:
Surveys

4.2%

*University of Michigan
1-year*

2.9%

*University of
Michigan 5-10
year*

6.8%

Conference Board 1-year

Source: Stifel Investment Strategy data via Bloomberg, as of February 14, 2023 (intra-day)

Fed's Dual Mandate

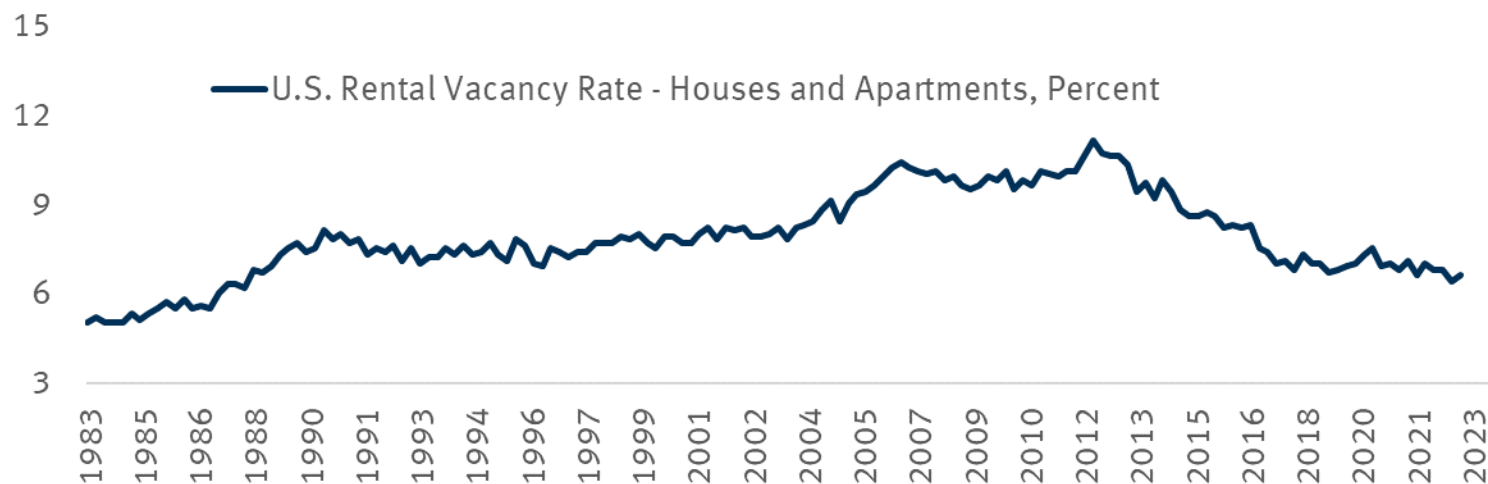
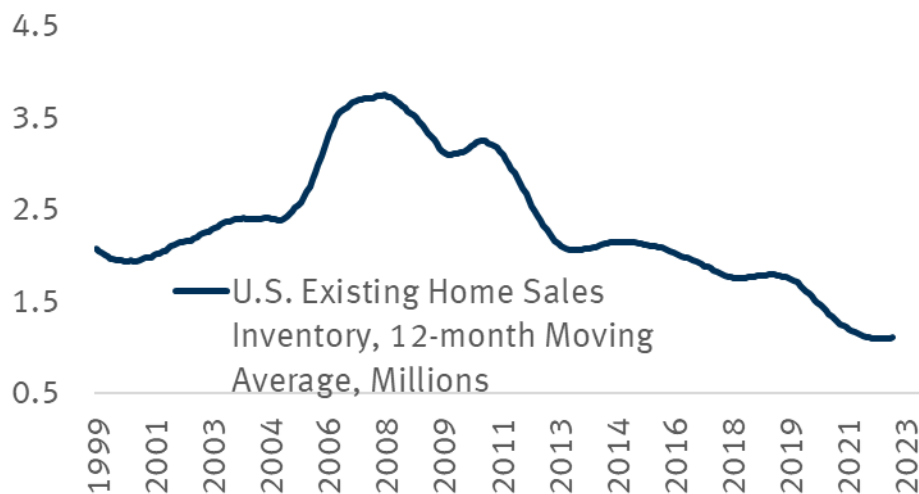


Price Stability: 2%

- Wage pressures subside
- Food/shelter/core goods prices ease
- Supply chain pressures ease
- Inflation expectations fall towards 2%
- Monthly Consumer Price Index (CPI) trends lower
- Monthly PCE trends lower

Maximum Employment

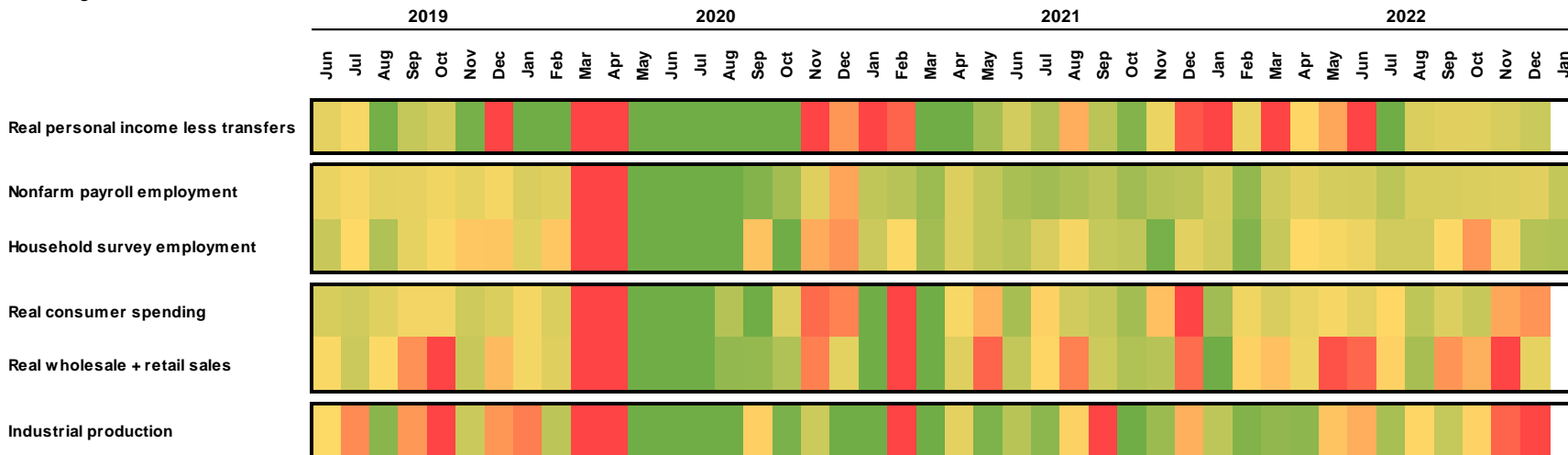
- Job quits slow
- Initial jobless claims rise
- Unemployment to job openings ratio declines
- Unemployment above 4.4%
- Deep recession
- Severe financial conditions



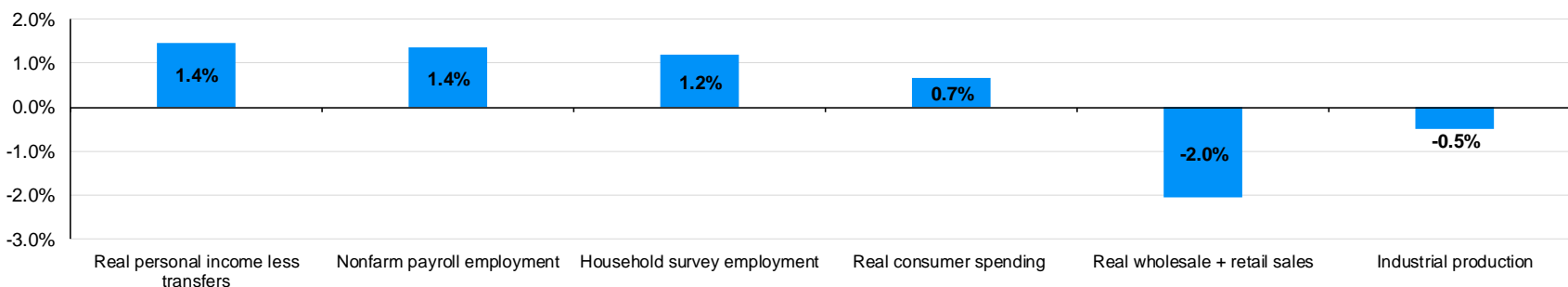
Source: Stifel Investment Strategy data via Bloomberg, as of February 16, 2022

Variables used by the NBER in making recession determination*

% change month-over-month



% change, last six months



Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Census Bureau, Federal Reserve of St. Louis, NBER, J.P. Morgan Asset Management. Heatmap shading reflects 10 years of data, with green and red reflecting a range of +/- 0.5 standard deviations from a baseline of 0% monthly growth. *The NBER's definition of a recession involves a significant decline in economic activity that is spread across the economy and lasts more than a few months. Because a recession must influence the economy broadly and not be confined to one sector, the committee emphasizes economy-wide measures of economic activity. Specifically, they consider real personal income less transfers, nonfarm payroll employment, employment as measured by the household survey, real personal consumption expenditures, wholesale-retail sales adjusted for price changes and industrial production. There is no fixed rule about which measures contribute to the process or how they are weighted, but the committee notes that "in recent decades, the two measures we have put the most weight on are real personal income less transfers and nonfarm payroll employment."

Guide to the Markets – U.S. Data are as of February 10, 2023.

U.S. GDP	Q1 22	Q2 22	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23	Q4 23	2021	2022	2023	2024
Consensus Estimates	-1.6	-0.6	3.2	2.9	0.0	-0.5	-0.2	0.6	5.9	2.1	0.6	1.2
Stifel**	1.2	0.5	-1.1	1.2	-0.6	-1.8	0.3	-0.9	5.3	0.5	-0.7	1.6
Goldman Sachs	1.5	0.7	2.5	2.2	0.8	1.1	1.2	1.2	5.7	2.0	1.5	1.6
Capital Economics	1.2	1.2	3.3	1.4	-0.5	-1.1	-0.3	0.7	5.7	2.0	0.4	1.6
Strategas	1.0	-0.5	1.0	2.0	0.5	0.7	1.0	0.0	5.6	2.0	1.3	0.5
UBS	1.5	-0.8	1.5	1.7	0.8	-0.9	-1.9	-1.5	5.6	2.0	0.6	0.3
Wells Fargo	0.6	0.2	2.9	3.1	-0.6	0.8	-1.9	-1.6	5.6	2.1	0.6	0.5
Bloomberg Economics	1.2	1.0	2.0	3.0	1.3	0.6	-0.8	-0.8	5.6	2.0	0.5	1.2
Barclays	1.5	-0.4	2.0	2.0	0.5	1.0	-0.5	-1.0	5.6	2.0	1.1	0.2
JPMorgan Chase	1.1	0.7	3.0	2.8	1.0	0.8	0.5	-0.5	5.7	2.1	1.3	0.4
Bank of America ML	1.0	-1.5	1.0	2.5	1.5	-0.5	-2.0	-1.5	5.6	2.1	0.7	0.3
Federal Reserve**									5.5	0.5	0.5	1.6

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 Investment Strategy data via Bloomberg, as of February 15, 2023. Federal Reserve estimates are as of December 14, 2022. Figures in grey areas under "Consensus Estimates" represent reported results

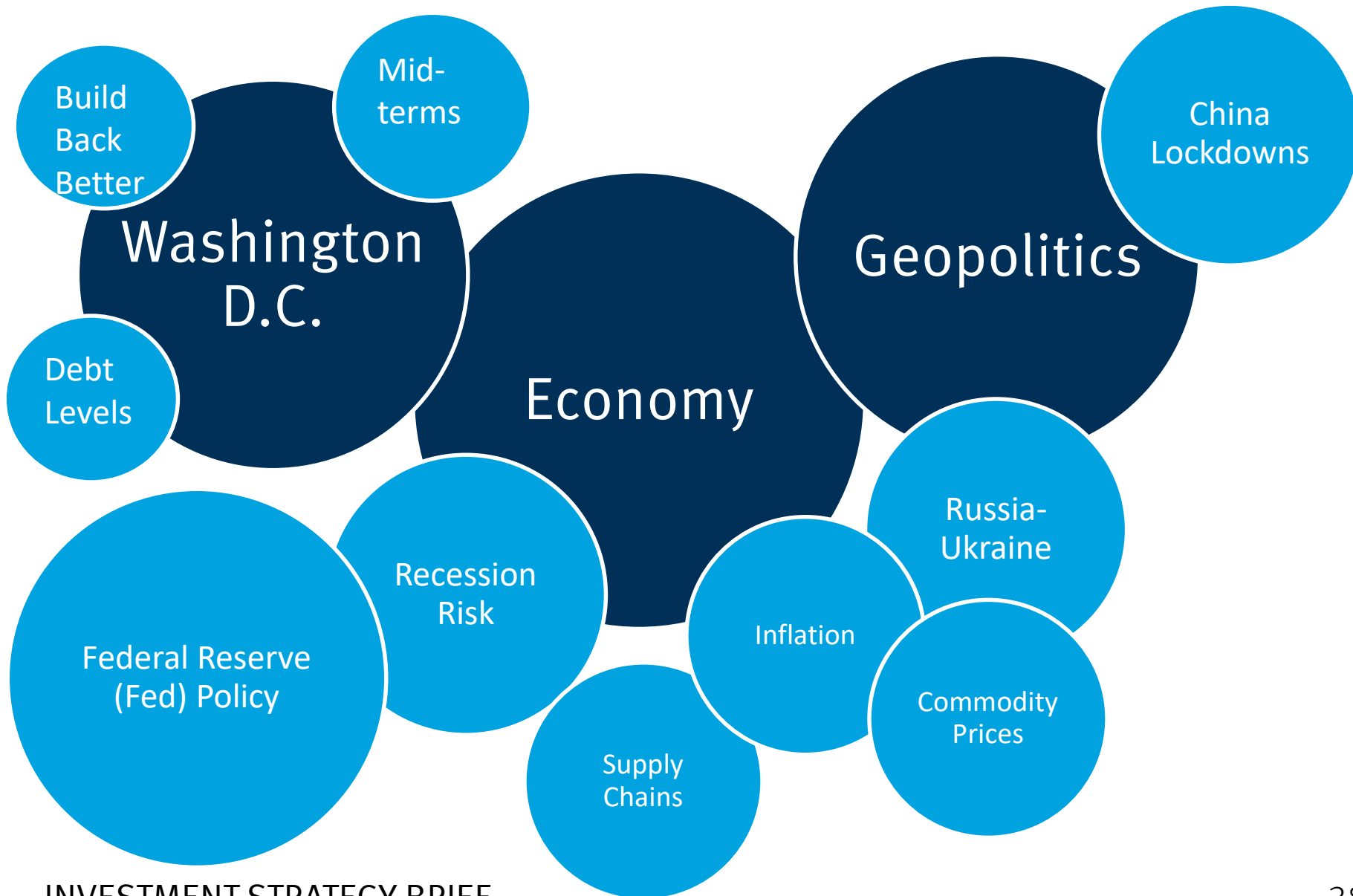
EARLY Acceleration in economic growth	MID Positive, but moderating growth	LATE Growth rate slows to trend or below-trend	RECESSION Growth contracts
Lower consumer spending	Recovering consumer spending	Strong consumer spending	Falling consumer spending
Credit creation low	Credit creation rising	Credit creation rising faster	Credit creation declining
Company profits recovering	Company profits peaking	Company profits under pressure	Company profits contracting
Fiscal/monetary policy accommodative	Fiscal/monetary policy shifting to neutral	Fiscal/monetary policy contractionary	Fiscal/monetary policy easing



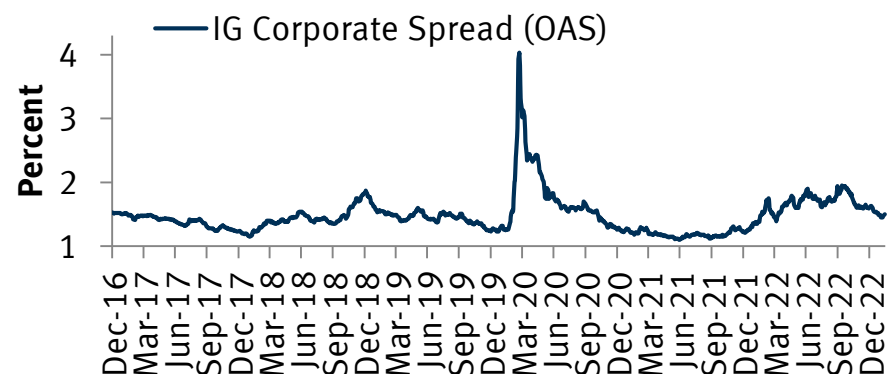
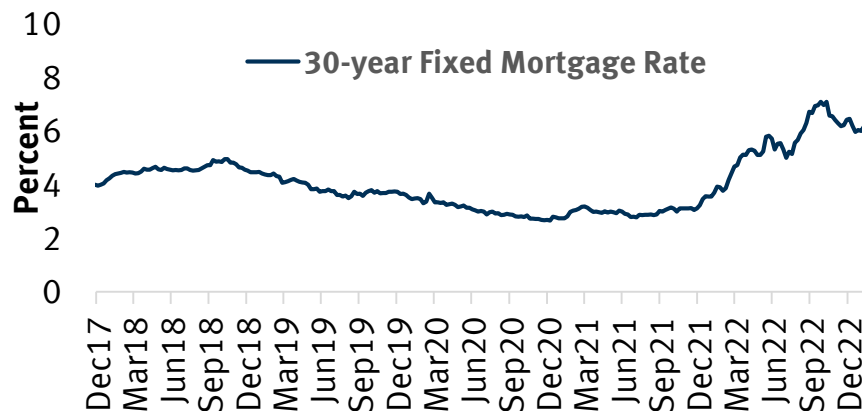
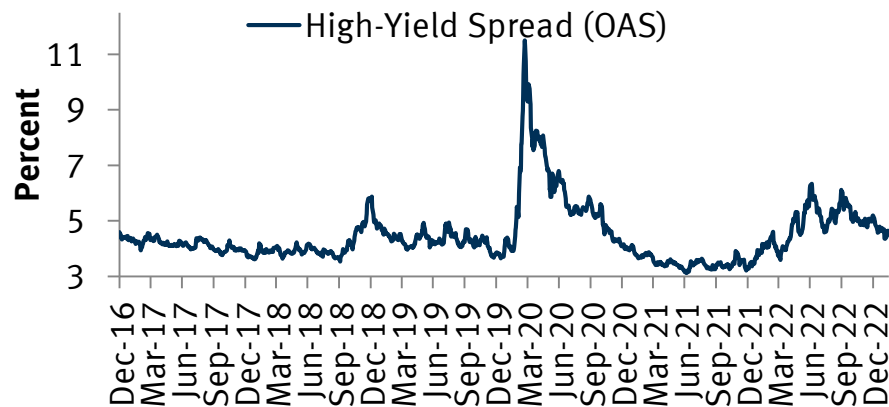
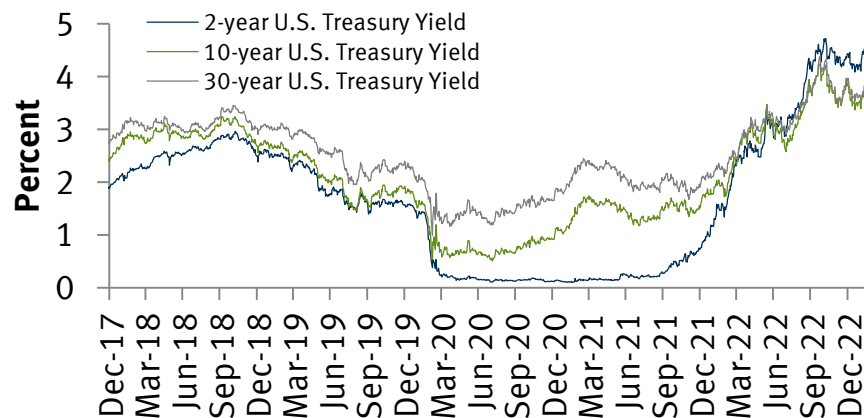




Markets

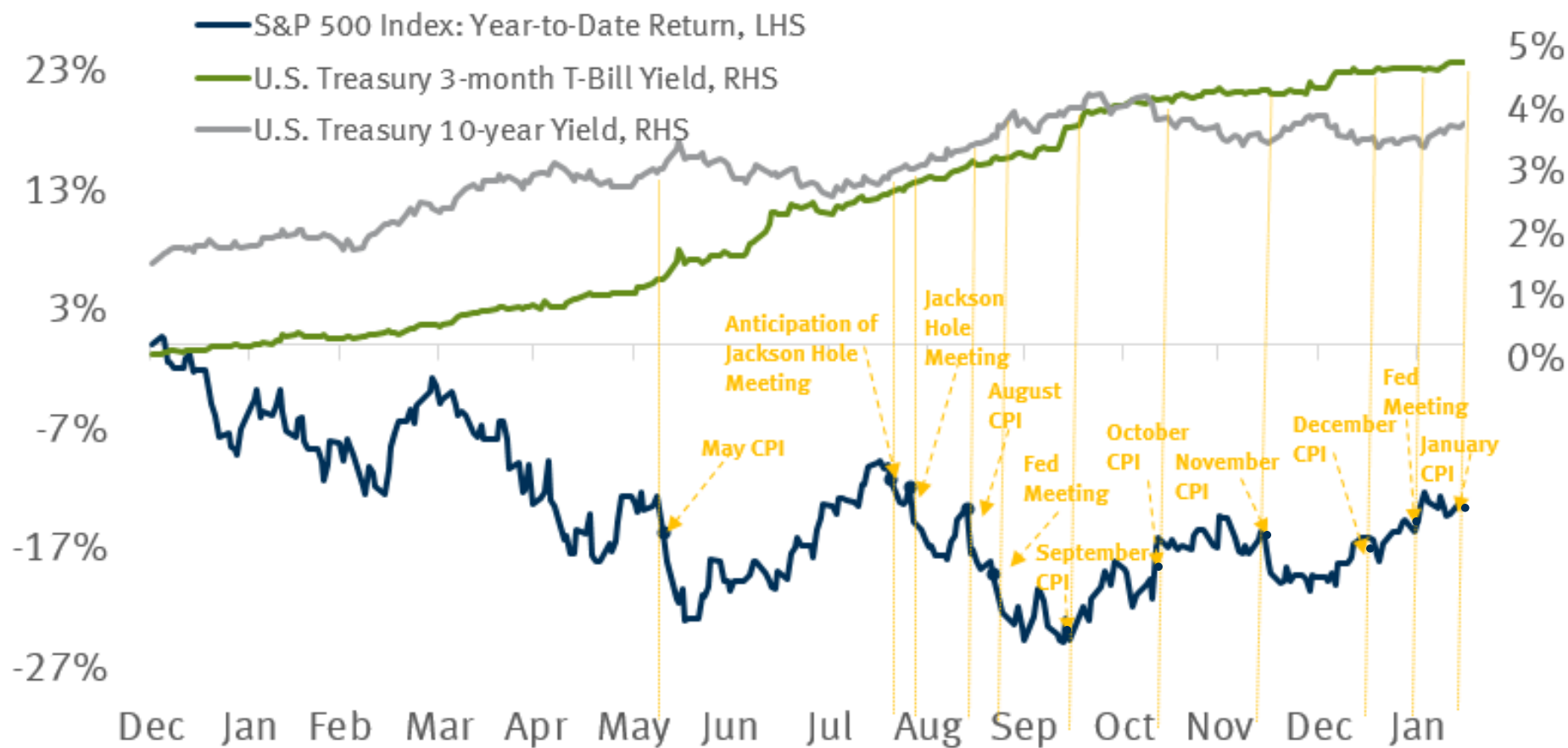


Rates and Spreads



OAS Spread is the measurement of the spread of a fixed-income security rate and the risk-free rate of return, which is adjusted to take into account an embedded option

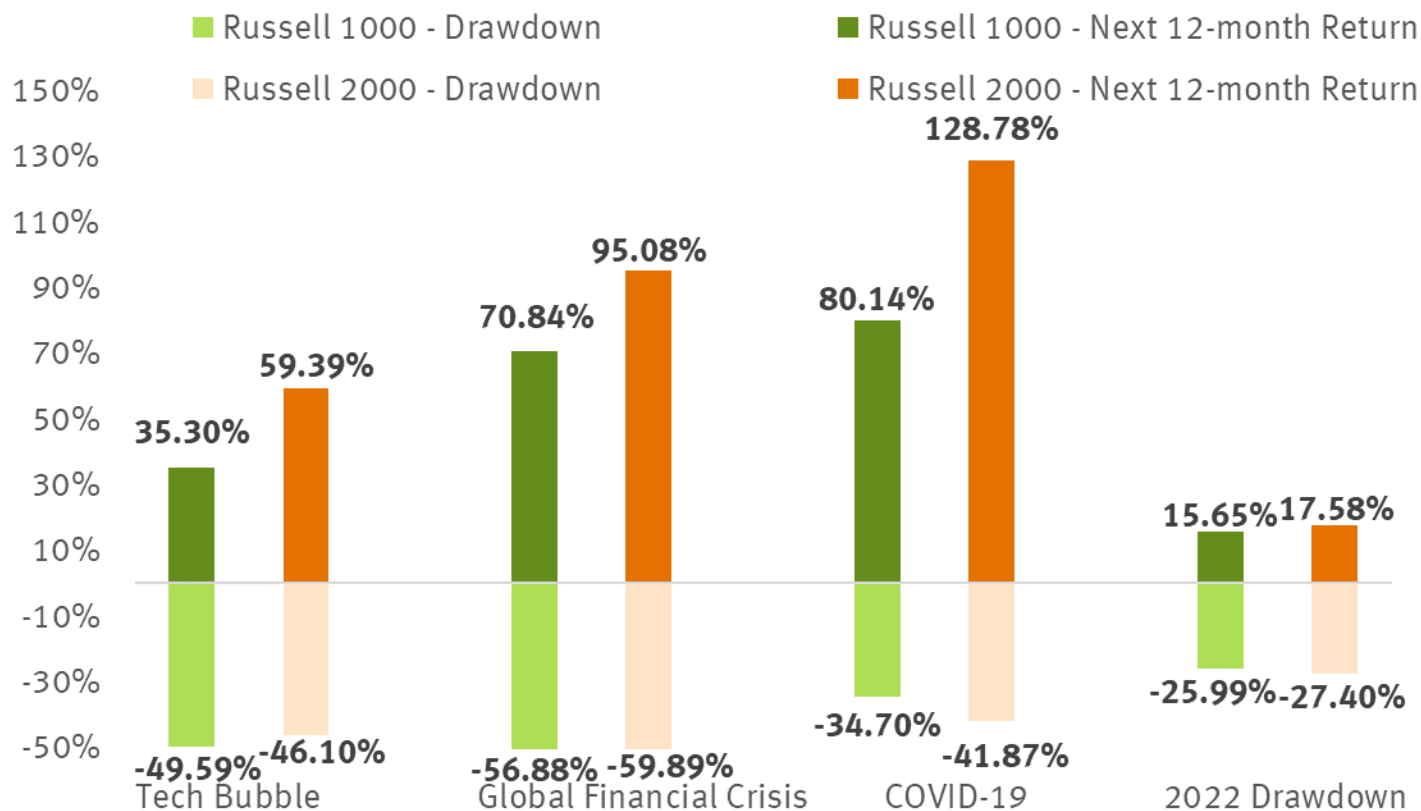
Source: Stifel Investment Strategy data via Bloomberg, as of February 14, 2023 (intra-day)



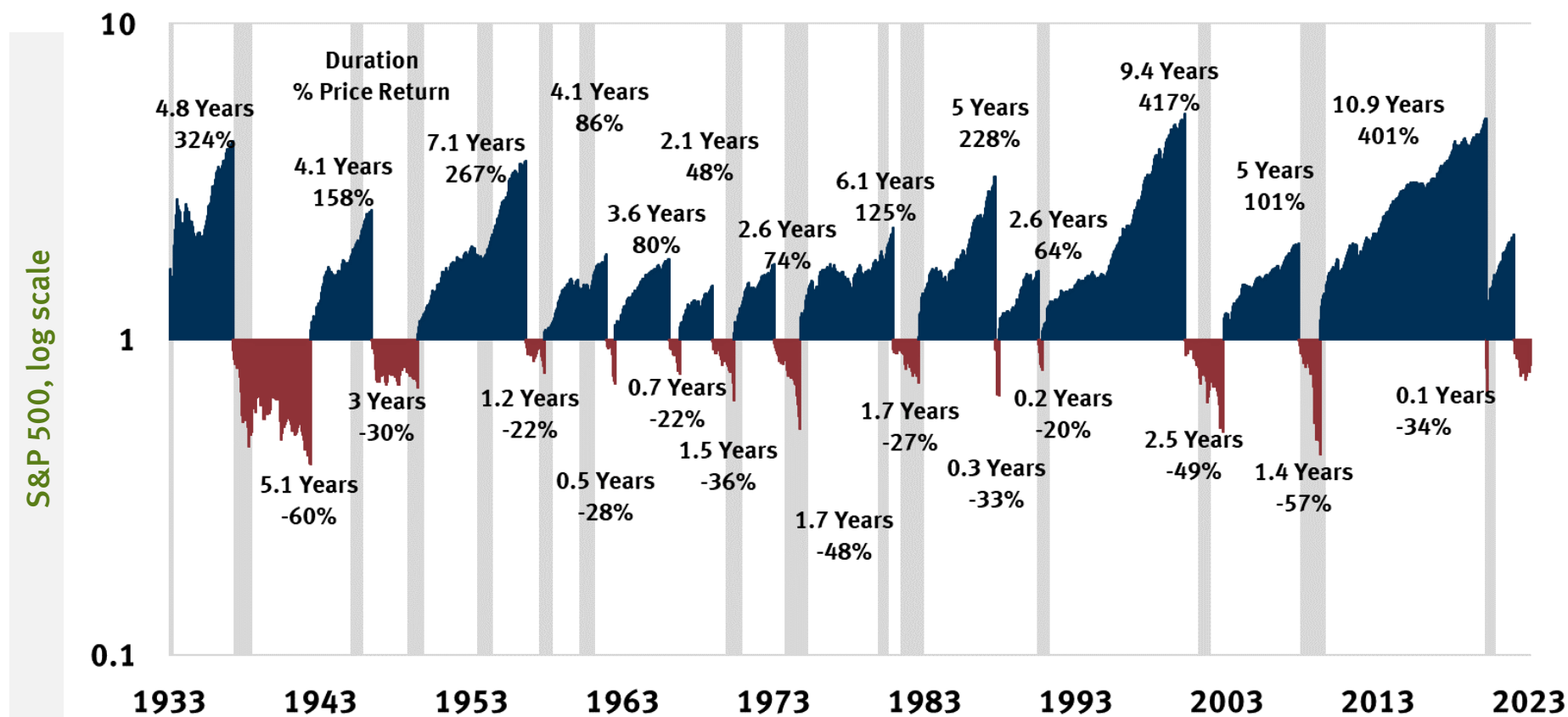
Source: Stifel Investment Strategy data via Bloomberg, as of February 14, 2023 (intra-day)

First Fed Rate Hike	Last Fed Rate Hike	S&P 500 Return	Months to Recession
Feb-72	May-74	-7.4%	20
Nov-76	Mar-80	30.3%	37
Aug-80	Dec-80	12.1%	11
Apr-83	Aug-84	8.0%	86
Dec-86	Sep-87	30.5%	43
Mar-88	Feb-89	15.1%	27
Feb-94	Feb-95	0.7%	85
Jun-99	May-00	9.7%	21
Jun-04	Jun-06	16.2%	42
Dec-15	Dec-18	30.5%	50
Median		13.6%	40
Average		14.6%	42
Mar-22	?	-3.7%	?

Source: Stifel Investment Strategy data via Bloomberg, as of February 14, 2023 (intra-day)



Source: Stifel Investment Strategy data via Bloomberg, as of February 14, 2023. Based on price return.

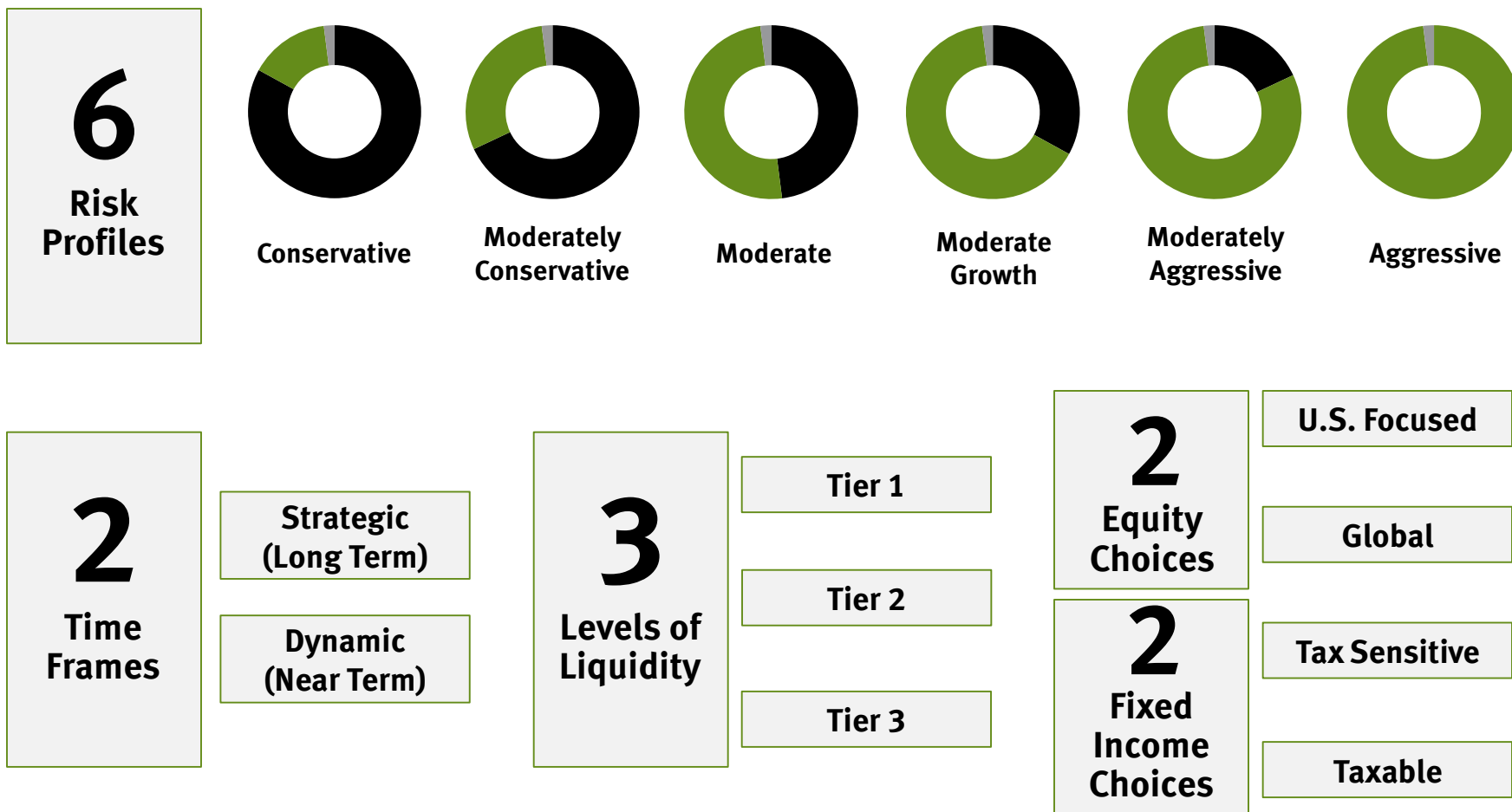


Source: Stifel Investment Strategy data via Bloomberg, Strategas Research Partners, as of February 16, 2023 (Intra-day)














Dynamic leanings

144 ASSET ALLOCATION MODELS FOR YOUR SELECTION













DYNAMIC LEANINGS

 Underweight
  Neutral
  Overweight

ASSET CLASS	CURRENT			COMMENTS
				
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.

EQUITY

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.

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.

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.

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 Restoration Index is composed of 13 high-frequency economic indicators. These indicators include those with longer histories (initial jobless claims, MBA mortgage applications, and steel production) along with newly developed gauges tracking mobility, dining reservations, and airport traffic, among others. KBW set each of the 13 indicators to 100 as of the end of February 2020, the official end of the longest economic cycle in U.S. history, and update the Index each week.

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.