

VANTAGEPOINT: HAVE US EQUITIES HIT BOTTOM?

THIRD QUARTER 2022



Have US Equities Hit Bottom?

US equities have entered official bear market territory with a more than 20% price decline. Some markets have seen sharper drops with speculative tech stocks (e.g., the Ark Innovation ETF) falling more than 75% from early 2021 peaks and many crypto assets seeing similar declines. Given the uncertain economic and profit environment, have markets bottomed yet? In this edition of VantagePoint, we address this question by comparing current market conditions to those of historical bear markets, evaluating economic conditions to better understand near-term recession prospects, and considering how much further the market may have to go based on historical precedents.














































We suspect that US equities have probably not hit a bottom yet. Volatile inflation readings, the potential for the Federal Reserve to remain aggressive in hiking rates, and waning economic activity all suggest to us that equities are not out of the woods. Still, timing a market bottom is notoriously difficult. This uncertainty, along with the potential harm from being under-allocated to equities, leads us to recommend investors avoid being under-allocated to equities.

In times of heightened market uncertainty, skilled investors follow pre-established plans for managing through periods of stress. Thoughtful decisions during chaotic environments lay the groundwork for top performance. Key points of preparation include knowing the market history reviewed in this publication, stress testing portfolio liquidity, understanding the diversification capacity of portfolios, guarding against behavioral risks, and positioning to play offense, including rebalancing into assets that become cheap and maintaining adequate diversification (including high-quality sovereign bond duration) to capitalize on opportunities as they develop.*



Celia Dallas,
Chief Investment Strategist

Indicators signal equities have not bottomed unless recession can be avoided






















Indicator	Does indicator signal equities have bottomed?	
	<i>If THERE IS NOT a recession</i>	<i>If THERE IS a recession</i>
Historical Bear Market Price Decline Magnitude	  	  
Historical Bear Market Duration	  	  
Valuation Multiple Contraction	  	  
Valuation Multiple at Bear Market Bottoms	  	  
Earnings Declines Associated with Bear Markets	  	  
Investor Sentiment	  	  
Direction of 10-Year Treasury Yield	  	  
High-Yield Bond Spreads	  	  



If the United States does not enter a recession in the next year or two, the market may have bottomed with the decline in prices and valuation multiples close to non-recessionary bear market averages. However, if a recession comes soon, the equity market is only 50% to 70% of the way to the bottom if history proves to be a useful guide.

US equity earnings are well above their trendline, and profit margins are stretched. With slowing economic growth, rising inflation and interest rates, and changing consumption patterns, meeting earnings growth expectations will be challenging.

Economy is slowing; unclear if recession is on the horizon for 2022–23

Indicator	Does signal show recession is likely within 24 months?
Yield Curve 10-Year/2-Year Spread	  
Yield Curve 10-Year/91-Day Spread	  
US Weekly Economic Index (Leading Indicator)	  
GDP Growth Fundamentals	  
Consumer Financial Position	  
Inflation Expectations	  
Employment Fundamentals	  



The ten-year/two-year Treasury yield spread has inverted, while other prominent yield spread signals have not. Following the surprisingly strong inflation print on July 13, other metrics like the ten-year/three-month yield spread have narrowed considerably. Should these trends persist, a recession is highly likely. However, timing remains uncertain as the lag between yield curve inversion has been varied, ranging from six to 24 months.

Below your average bear

US EQUITY MARKET PERFORMANCE SURROUNDING BEAR MARKETS

1973–2022

Nominal Decline Dates		Price Decline		Real Decline Dates		Length of Decline (months)		At Nominal Market Bottom	
Start	End	Nominal	Real	Start	End	Nominal	Real	CAPCE	CAPCE % Decline
1/11/1973	10/4/1974	-49.9	-58.1	12/8/1972	10/4/1974	21	22	8.7	-53.4
9/21/1976	3/6/1978	-20.2	-27.5	9/21/1976	3/6/1978	17	17	9.0	-22.0
11/20/1980	8/12/1982	-26.8	-35.8	11/20/1980	8/12/1982	21	21	3.7	-35.8
8/25/1987	12/4/1987	-33.5	-34.2	8/25/1987	12/4/1987	3	3	6.7	-34.3
3/23/2000	9/21/2001	-38.5	-41.0	3/23/2000	9/21/2001	18	18	13.9	-44.2
1/4/2002	7/23/2002	-32.5	-35.8	1/4/2002	10/9/2002	7	9	11.0	-34.3
10/9/2007	11/20/2008	-52.1	-53.0	10/9/2007	11/20/2008	13	13	7.2	-54.5
1/6/2009	3/9/2009	-27.1	-27.3	1/6/2009	3/9/2009	2	2	6.6	-27.6
2/19/2020	3/23/2020	-34.3	-34.0	2/19/2020	3/23/2020	1	1	12.6	-34.3
12/27/2021	6/16/2022	-24.7	-27.6	12/27/2021	6/16/2022	6	6	16.9	-29.1
Avg All		-35.0	-38.5			11.5	11.9	8.8	-37.8
Recessionary Avg		-37.3	-40.7			11.8	12.3	9.1	-40.6
Non-recessionary Avg		-26.1	-29.8			8.8	8.8	10.9	-28.5

The current bear market has been relatively short and shallow thus far. At six months and 24.7% down, this bear ranks fourth shortest and the second most shallow among the last ten 20%+ bear markets (without a subsequent 20%+ increase). While the cyclically adjusted price-to-cash earnings (CAPCE) ratio has fallen 29.1% to a multiple of 16.9, the decline falls short of—and the valuation level remains well above—those seen at prior bear market bottoms. The valuation adjustment was only lesser in the 1976–78 and 2009 bear markets, but in those instances, valuations fell to much lower levels.

Real yields are in the driver's seat

MSCI US FORWARD P/E VS REAL INTEREST RATES

January 31, 2016 – June 30, 2022

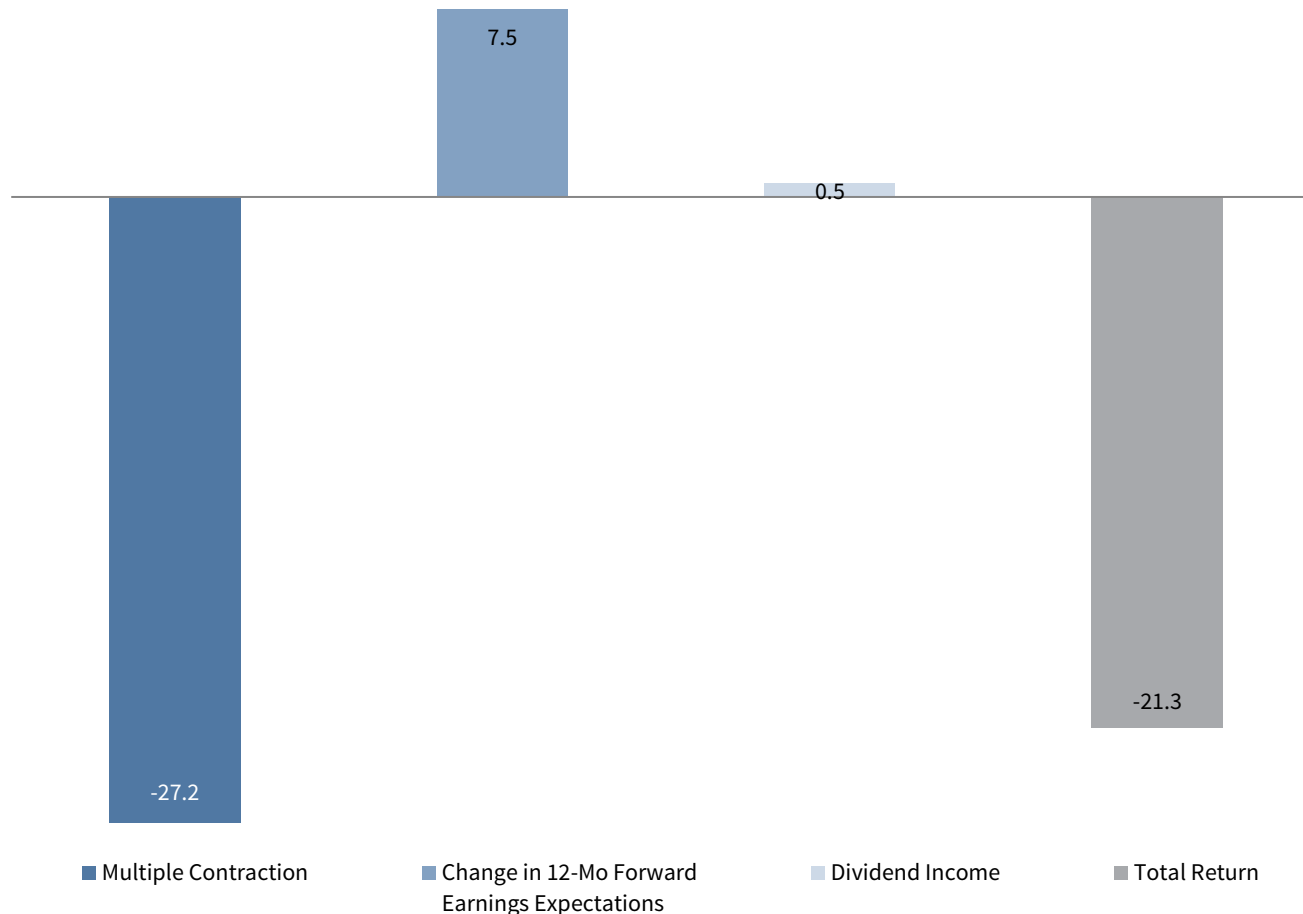


The decline in equity valuations has largely been driven by rising real yields. As interest rates have increased, equities have rerated to lower valuations reflecting the rising cost of capital. The US equity market is top-heavy with large growth stocks that are particularly sensitive to higher rates. For example, Facebook (Meta), Amazon, Apple, Netflix, Google (Alphabet), and Microsoft (FAANGM) account for 22% of the S&P 500's market cap.

Don't forget about the E in P/Es

2022 US EQUITY TOTAL RETURNS BY SOURCE

As of June 30, 2022 • Percent (%) • US Dollars

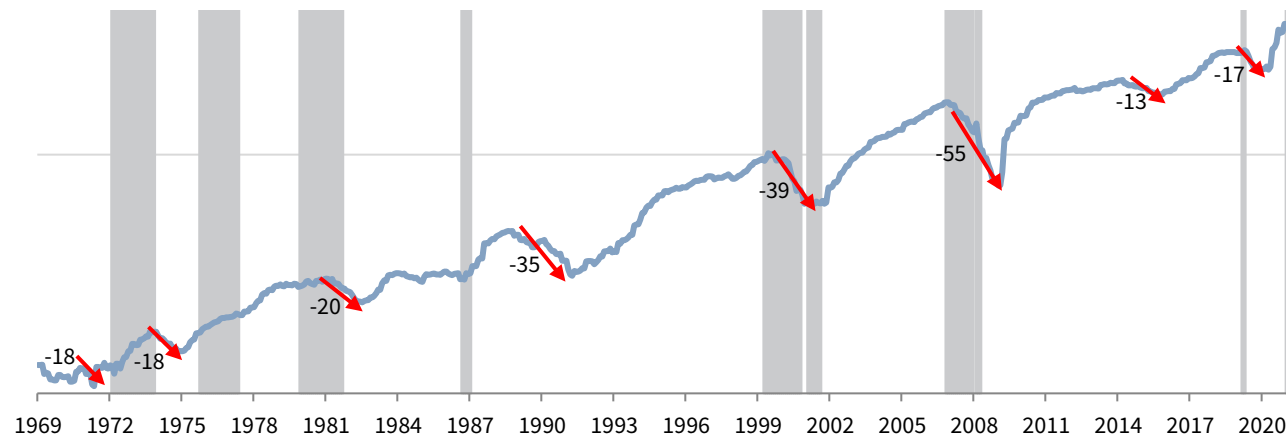


The price-to-forward earnings multiple has contracted a similar amount to the cyclically adjusted price-to-cash earnings (CAPCE) ratio. However, forward earnings expectations have increased over the course of this bear market. Should earnings expectations adjust downward, as we expect will transpire, equities will suffer further losses, particularly if the US economy enters a recession.

Will earnings be the next shoe to drop?

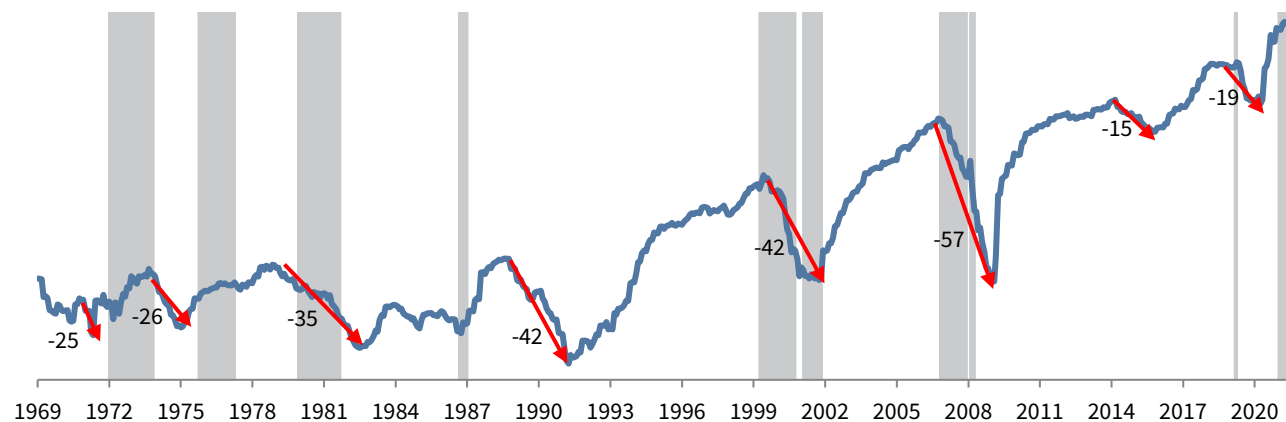
NOMINAL CORPORATE EARNINGS DURING NOMINAL EQUITY MARKET DOWNTURNS

December 31, 1969 – June 30, 2022 • USD EPS in Log Scale



REAL CORPORATE EARNINGS DURING REAL EQUITY MARKET DOWNTURNS

December 31, 1969 – June 30, 2022 • USD EPS in Log Scale

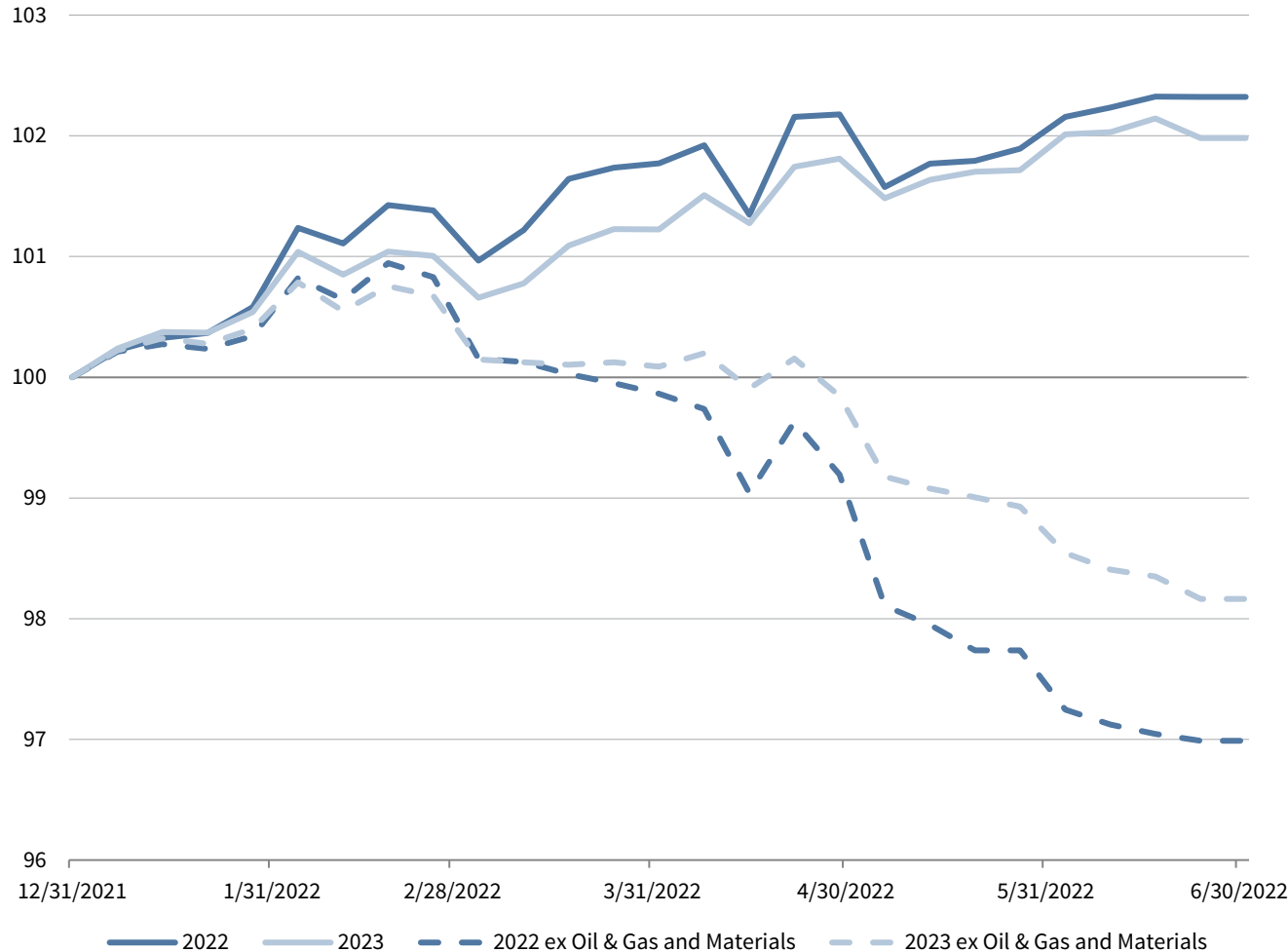


Earnings rarely remain steady or appreciate during bear markets; timing relative to bear markets can vary but the trend generally holds, especially for bear markets associated with recessions. A lesson from the 1970s period is that inflation may support nominal earnings growth, but real earnings remain more challenged. While it is possible earnings will stay flat or appreciate if the United States avoids a recession, we regard this as unlikely. Earnings sit at levels 27% above their ten-year nominal trendline, a precarious position with stretched profit margins, slowing economic growth, rising inflation and interest rates, and changing consumption patterns. *

Drilling down, earnings expectations are starting to fade

US EQUITY EARNINGS GROWTH EXPECTATIONS

December 31, 2021 – July 1, 2022 • December 31, 2021 = 100

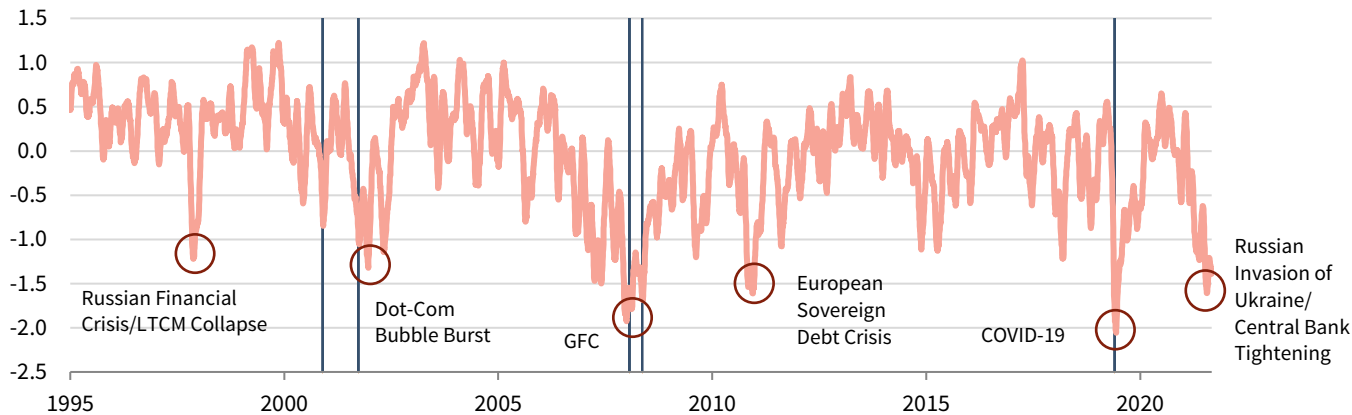


Strong earnings expectations come primarily from the energy sector, with industrials and materials also making positive contributions. Excluding energy, expectations for 2022 and 2023 earnings are starting to fall, but nowhere near the pace of decline experienced in previous bear market recessions.

Investor sentiment stands apart as signaling equities have hit bottom

US INVESTOR SENTIMENT

October 30, 1995 – June 30, 2022 • Composite Z Score



US EQUITY RETURNS AROUND EXTREME OVERSOLD CONDITIONS

1995–2022

DATE	Oversold (Z-Score < -1)				
	CAPCE	VIX	+6m Ret	+1y Ret	+3y Ret (AACR)
9/4/1998	17.1	43.3	29.6	40.6	4.6
10/16/2002	11.7	36.0	2.5	22.4	11.6
2/25/2003	11.2	31.7	18.7	36.3	15.7
10/28/2008	8.9	67.0	-8.2	11.9	11.5
6/14/2010	10.2	28.6	14.3	18.8	14.4
10/10/2011	10.4	33.0	13.9	19.7	16.8
6/13/2012	11.0	24.3	8.1	24.4	17.0
9/18/2015	13.9	22.3	3.7	8.7	13.8
2/5/2016	13.1	23.4	16.5	22.7	13.5
1/4/2019	15.5	21.4	18.5	28.0	24.2
4/6/2020	15.1	45.2	28.6	56.2	*
5/20/2022	18.1	29.4	*	*	*
Median	11.7	31.7	14.3	22.7	14.1

* Data are ongoing.

Our composite US investor sentiment metric includes the CBOE VIX and Put/Call indexes and AAI Investor Sentiment Survey. An index z-score less than -1.0 implies investor sentiment is at low extremes. This measure does not always identify bear market bottoms but has signaled each of the last three and is signaling a bottom today. This signal also tends to mark bottoms after more commonplace 10%+ market corrections. Subsequent six-month, one-year, and three-year equity returns were generally positive after this negative sentiment signal.

Ten-year Treasury yields may be starting to trend down

10-YR US TREASURY YIELDS AROUND EQUITY MARKET BOTTOMS

January 2, 1962 – June 30, 2022 • Yield

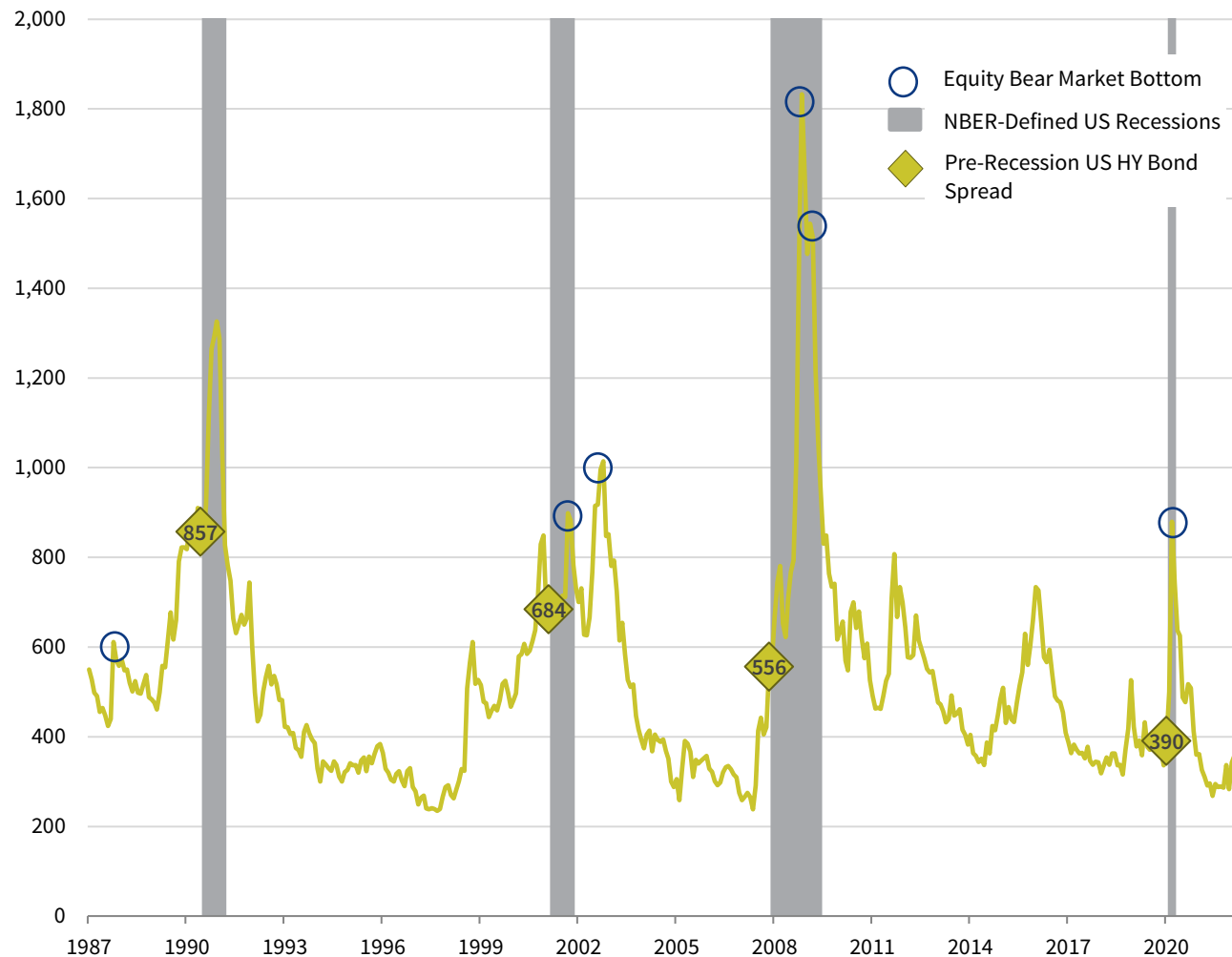


Historically, bear markets have not bottomed until ten-year yields peak. Timing of rate declines has varied. Prior to 1982, when yields were in a secular uptrend, peaks tended to be coincident indicators. For bear markets since 1982, a period of secular rate declines, the ten-year Treasury tended to peak earlier, providing some advance warning. Rates may be in a nascent down trend, as the ten-year yield has fallen 70 basis points (bps) peak-to-trough from its mid-June peak of 3.5% amid rising recession concerns that have brought down inflation and Fed tightening expectations.

High-yield bond spreads are widening, but below typical bear market bottom levels

US HIGH-YIELD BOND SPREADS DURING RECESSIONS

December 31, 1987 – June 30, 2022 • OAS in Basis Points

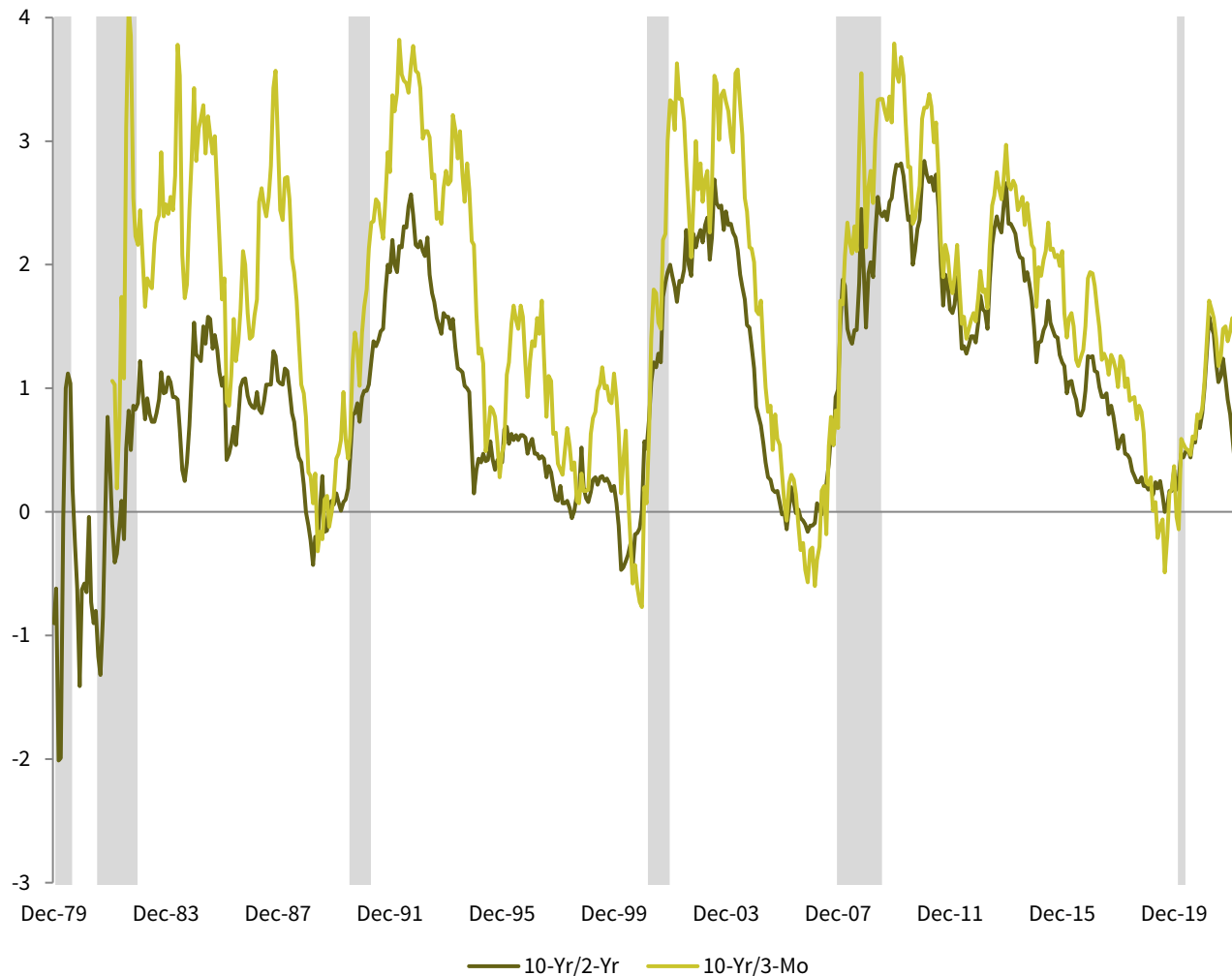


At 569 bps, high-yield bond option-adjusted spreads (OAS) are well off their cycle lows and are at the low end of spread levels seen at the start of recessions. Current spreads also remain well below averages marking historical bear market bottoms. However, if a recession is avoided, high-yield spreads are right about where we would expect to see them at the market bottom based on historical precedent. In contrast, during recessionary bear markets, spreads widened to an average of 12.6 percentage points.

Is a recession imminent? Yield curve signals should not be ignored

10-YR/2-YR AND 10-YR/3-M TREASURY YIELD SPREADS

December 31, 1979 – June 30, 2022



One of the most reliable advance indicators of recessions is the yield curve, with inversion signaling a recession ahead. While many economists favor the ten-year/three-month spread over the ten-year/two-year spread, the two tend to be highly correlated. The recent gap in these signals has been significant, with the ten-year/two-year inverting slightly intra-month three times this year, with the most sustained period starting on July 6. While the ten-year/three-month spread remained unremarkable this year, following the June CPI release of 9.1%, this indicator significantly narrowed as investors have priced in accelerated expectations for Fed tightening.

Yield spreads are not a useful timing tool

EQUITY RETURNS AND RECESSIONS AROUND 10-YR/2-YR SPREAD INVERSIONS

January 31, 1966 – June 30, 2022

Date of First Inversion:	Returns Around Yield Curve Inversions (%)				# of Months Between:	
	Trailing 12-M Return	Fwd 12-M Return	Fwd 3-Yr Return (AACR)	Return from Inversion to Market Peak	YC Inversion and S&P Peak	YC Inversion and Recession
December 29, 1967	20.1	7.7	-1.5	12.3	11	24
February 28, 1973	4.8	-13.8	-3.7	Mkt Peaked Before	-2	9
August 18, 1978	7.2	3.9	7.5	8.5	18	17
September 12, 1980	16.4	-3.1	9.6	11.9	2	10
December 13, 1988	17.4	27.7	11.6	20.0	19	19
May 26, 1998	29.2	19.3	5.3	20.5	19	No Recession
February 2, 2000	11.7	-4.2	-15.2	8.4	1	13
October 27, 2005	4.3	13.6	-11.6	12.7	22	24
August 27, 2019	-1.0	21.4	*	18.0	6	6
April 1, 2022	13.1	*	*	Mkt Peaked Before	-3	*
Mean:	12.2	8.0	0.3	14.1	11	15
Median:	11.7	7.7	1.9	12.5	11	15

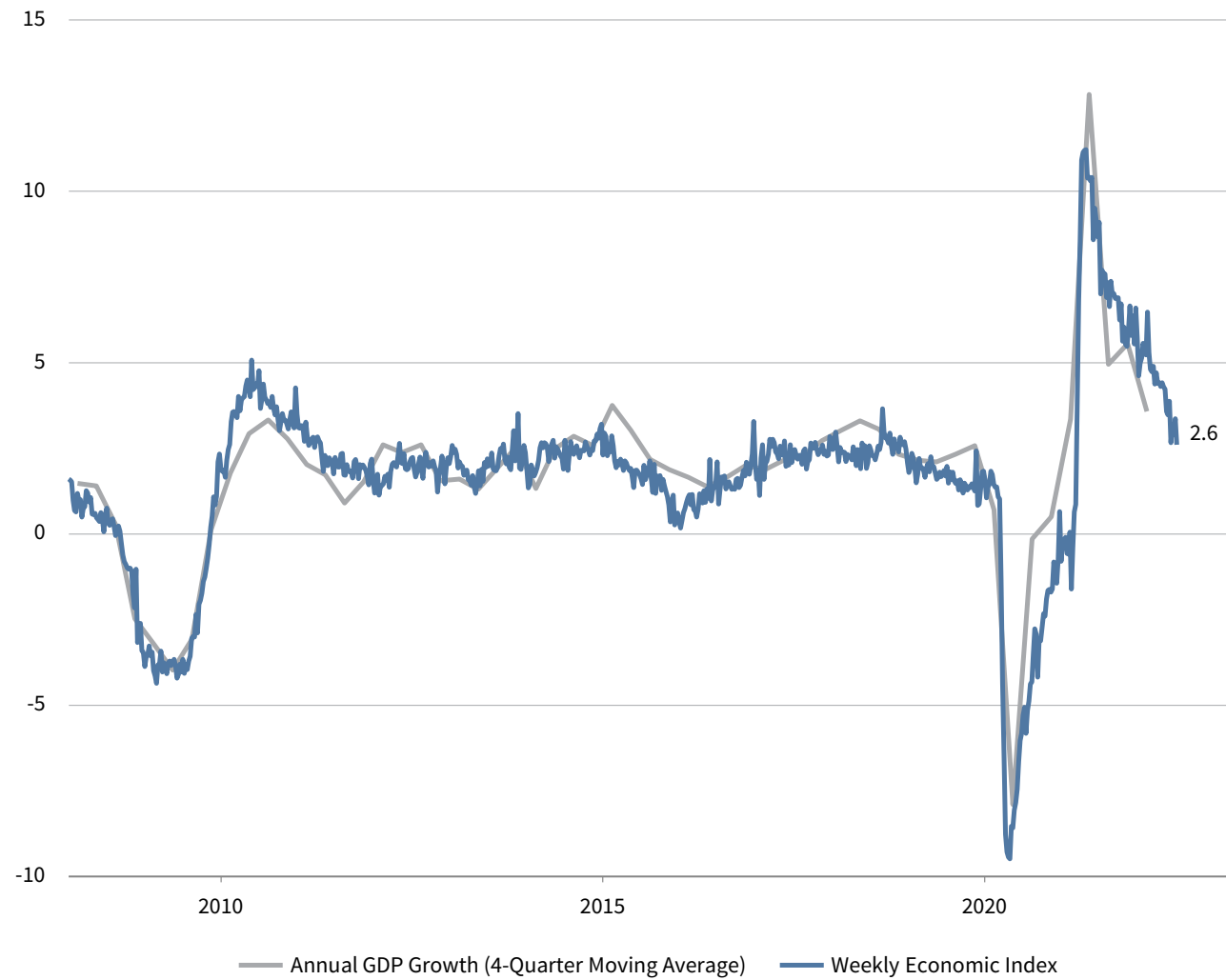
* Data are ongoing.

Over the last 56 years, the ten-year/two-year segment of the yield curve has inverted nine other times, each of which signaled a recession within six to 24 months—too wide a range to provide a useful timing signal. The market has tended to peak following yield curve inversions, but also with a long lead time. The current period and the 1973 inversion were the only two instances where the market peaked in advance of the inversion.

US Weekly Economic Index reflects normalizing growth, not recession

US WEEKLY ECONOMIC INDEX

January 4, 2008 – July 08, 2022 • Percent (%)



The Weekly Economic Index has served as a useful leading indicator for GDP growth. A pessimist looking at this chart will focus on its sharp decline and conclude the economy is headed straight for recession. An optimist would focus on the growth deceleration to more sustainable levels that should alleviate some inflationary pressures. The preponderance of data supports the optimists, for now; however, economic drags such as monetary and fiscal tightening, a strong US dollar, and high prices work with a lag. Should the data continue to trend in the same direction, a recession will eventually materialize.

First quarter 2022 negative GDP reflects still-strong domestic growth

GDP DECOMPOSITION

Contribution to Real GDP SAAR % Change from Previous Quarter



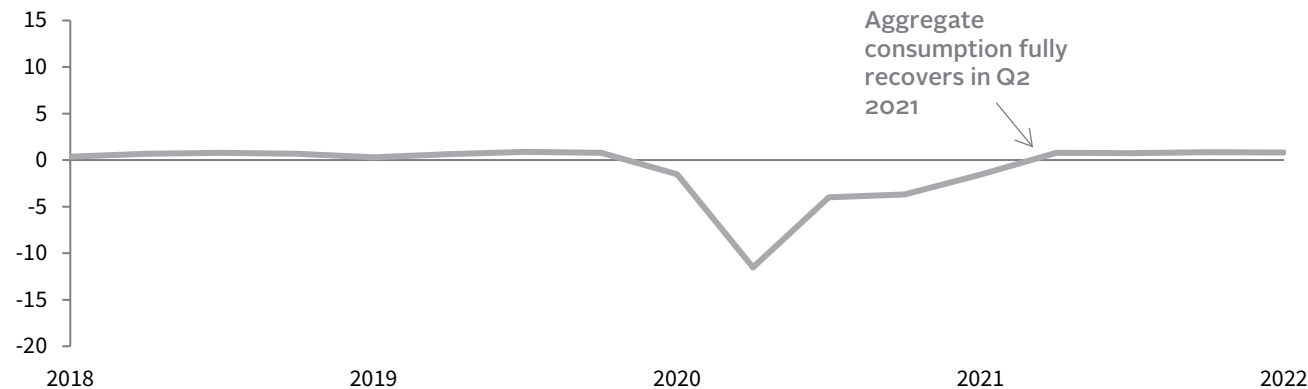
GDP turned negative in first quarter 2022, yet its composition reveals still-strong domestic demand. Weak net exports, which would be expected in a strong US dollar environment, were the key culprit. Inventories were an additional drag as retailers have reported they are overstocked with delayed shipments that don't meet evolving investor preferences. Even if GDP is negative in second quarter, as the Atlanta Fed GDPNow metric now predicts, two consecutive quarters of contraction may not mark an official recession and/or a shallow recession, provided domestic demand remains strong.

COVID-19 consumption trends are reversing

US REAL CONSUMER DEMAND: PERCENT (%) FROM PRE-PANDEMIC TREND

First Quarter 2018 – First Quarter 2022

All Consumption



Goods vs Services

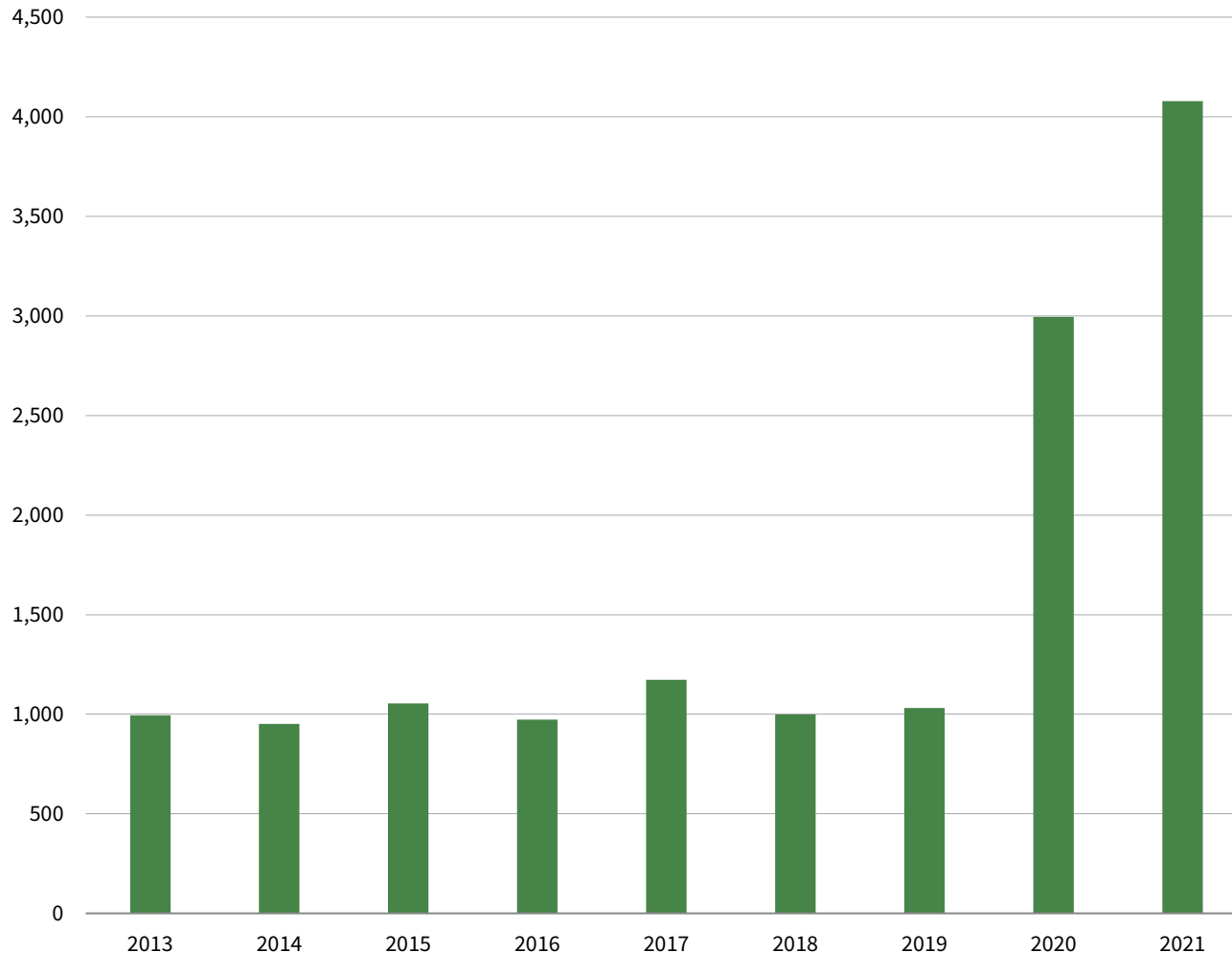


Consumer demand is undergoing a shift from goods to services—a reversal of COVID-19 trends. The reversal has been resulting in a decline in manufacturing metrics, making it imperative to look at demand for goods and services combined. As demand for goods declines to more normal levels, goods price inflation should moderate. Since services prices did not drop as demand fell, it is not clear how far it will rise as demand normalizes, although labor market tightness could push up costs that businesses may seek to pass along.

Excess savings built up during pandemic support consumption

US HOUSEHOLD CHECKABLE DEPOSITS AND CURRENCY

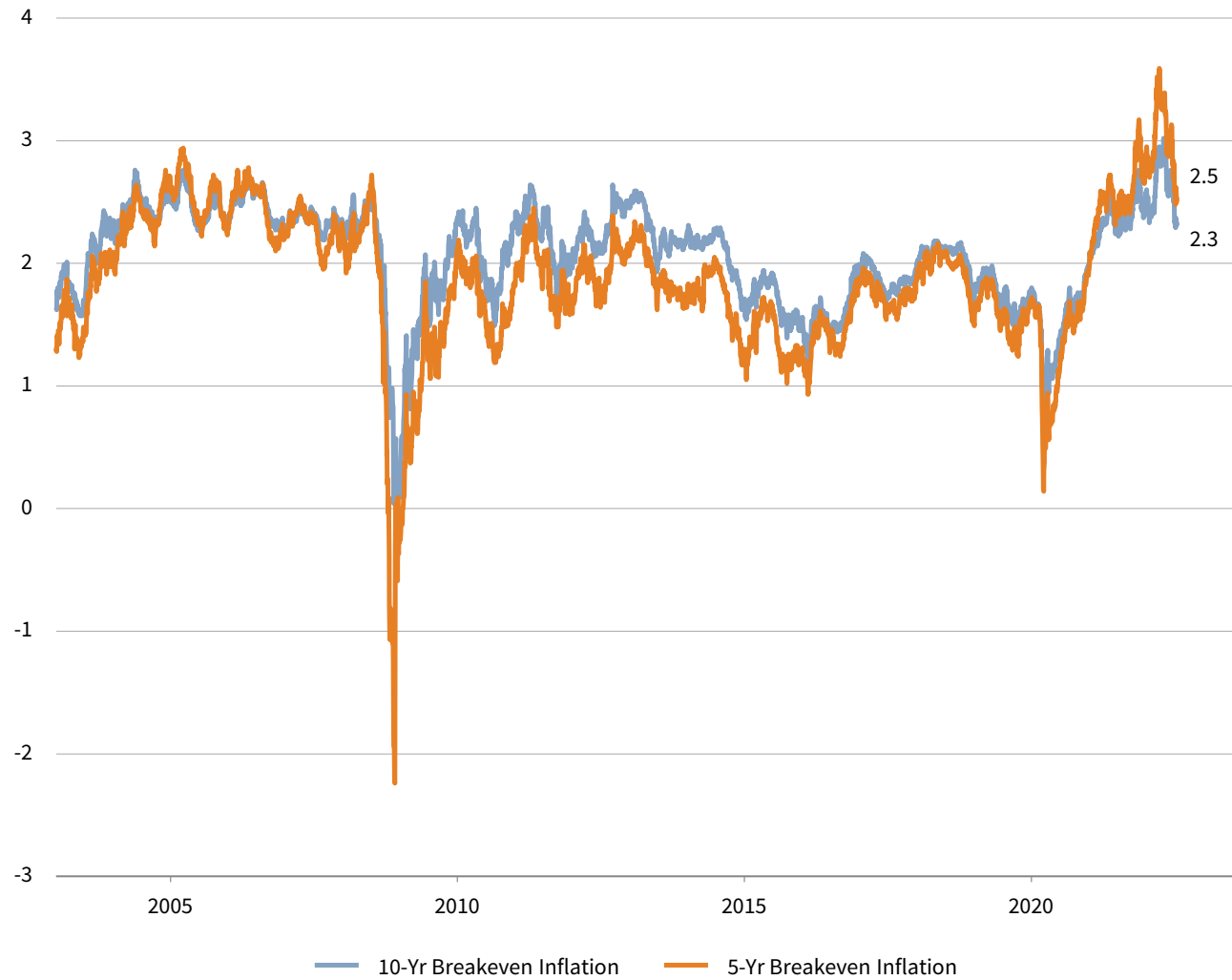
As of December 31, 2021 • USD (Billions)



Consumer demand is supported by \$2.2 trillion in excess savings—much of which is liquid—that households accumulated during the pandemic; median wages growth of 6.8% annualized on a rolling three-month basis; and depreciating goods prices. However, if consumer confidence remains low in the face of still-elevated inflation, reduced government spending, and tightening financial conditions, households could hold on to their surplus savings and a recession could be closer than we anticipate.

Inflation expectations are falling along with economic growth expectations

US BREAKEVEN INFLATION RATES
January 3, 2003 – July 14, 2022 • Percent (%)

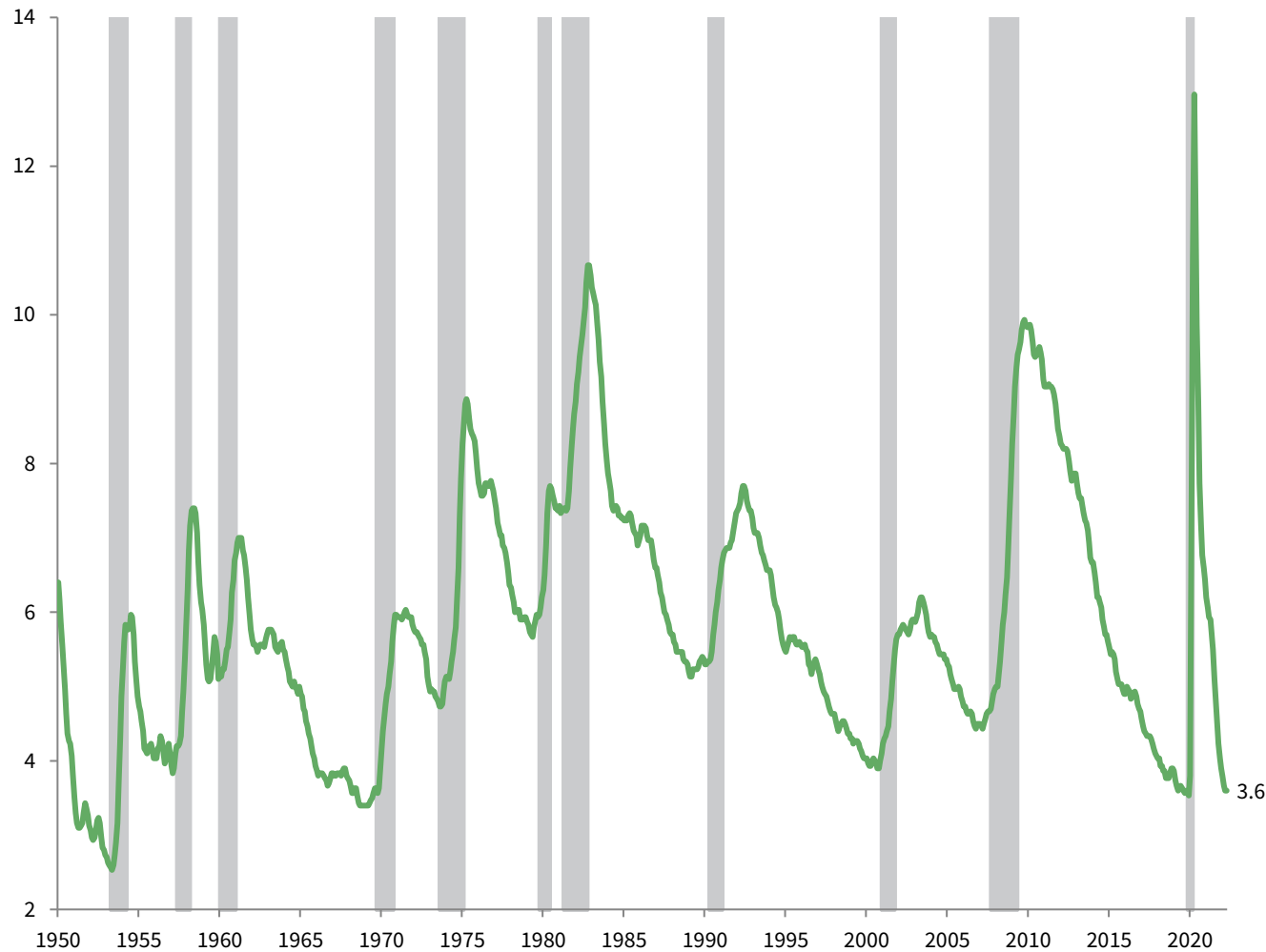


As economic growth has been decelerating and the Fed has taken a more aggressive stance against inflation, expressing a willingness to tighten into economic weakness, markets have started to price in softening demand by reducing expectations for Fed tightening and inflation. Inflation expectations priced into five-year bonds peaked in late March at nearly 3.6% before coming back down 90 bps, while ten-year bond inflation expectations have remained more muted, but followed a similar pattern. Surprisingly high June headline inflation of 9.1% has the potential to push up inflation expectations, but the initial reaction has been to front load Fed tightening expectations.

No sign of recession in strong US employment stats

US UNEMPLOYMENT RATE: 3-MONTH MOVING AVERAGE

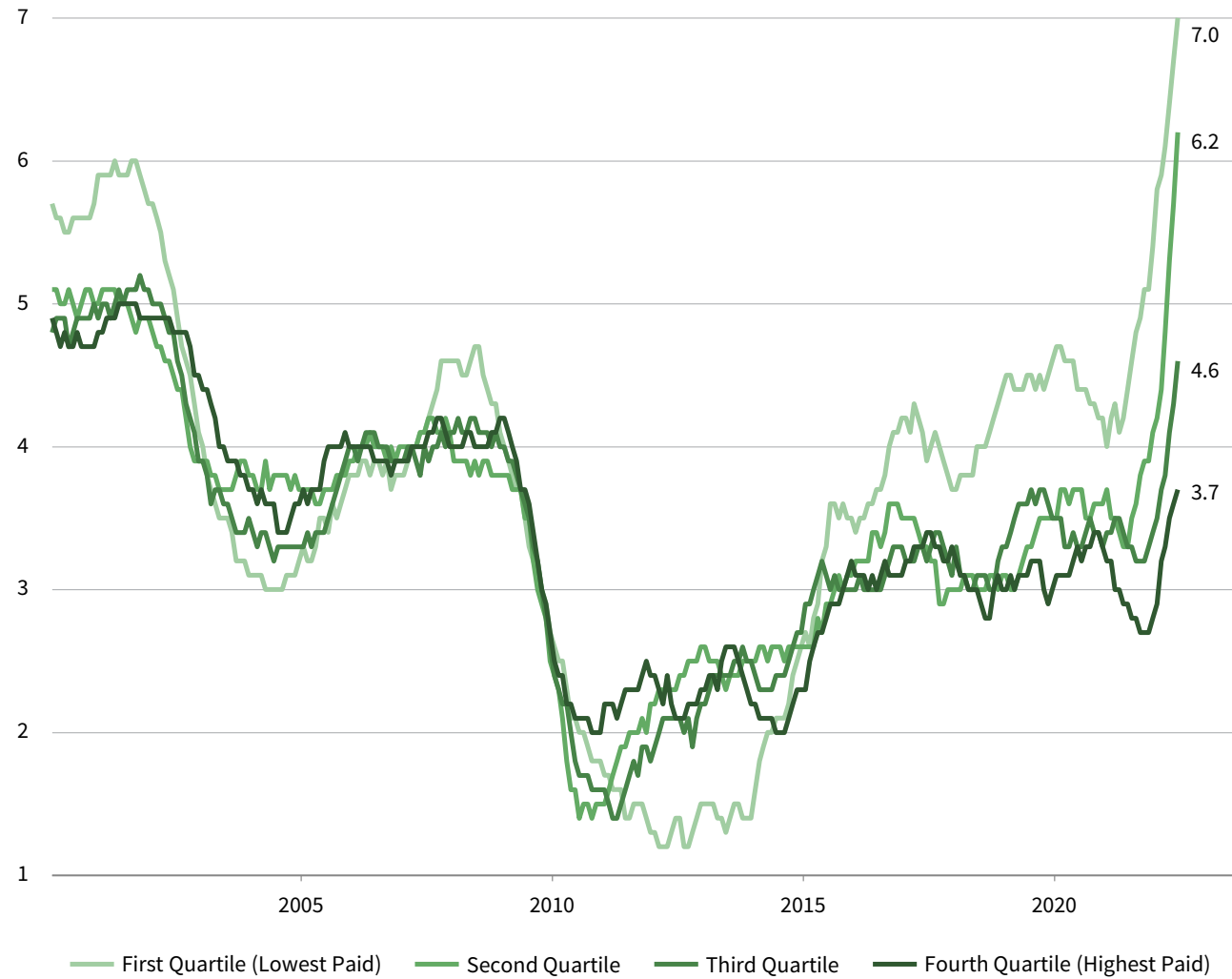
March 31, 1950 – June 30, 2022 • Percent (%)



The United States has always entered a recession when the trailing three-month unemployment rate has increased by more than 33 bps, suggesting it is highly unlikely we are in an NBER-type recession. However, unemployment is a coincident indicator. Initial unemployment claims have been modestly increasing, but are being reabsorbed as continuing claims are falling. The Fed's projections indicate expectations that the unemployment rate will increase 50 bps without triggering a recession. While it is possible unemployment increases come primarily from decreases in job openings and/or increases in labor force participation, this would be unprecedented.

The lowest paid workers are seeing the highest boost to earnings

US WAGE GROWTH BY INCOME QUANTILES
January 2000 – June 2022 • Percent (%)



Increasing wages can lead to increased prices, putting further pressure on employers to increase wages in a classic wage-price spiral. However, real private wages have been stagnant—the index of aggregate weekly payrolls (product of jobs, income, and hours worked) has increased 9% year-over-year in June, close to the rate of inflation. Low-income workers account for the majority of workers who left the workforce during the pandemic. Increased wages and diminishing pent-up savings among these workers could entice them back into the workforce, adding some slack to the labor market.

Perfect timing not required

INVESTING STATISTICS DURING THE SEVEN MAJOR US EQUITY DRAWDOWNS SINCE 1974

		Subsequent 1-Yr Performance							
		US Equities	DM Equities	EM Equities	US SC Equities	US Treasuries	US IG Credit	US High Yield	US Cash
Perfect Timing	Min	-21.8	-18.9	8.2	-1.0	-4.4	7.6	-2.3	0.1
	Avg	33.2	32.0	51.3	49.8	6.3	15.0	24.5	3.6
	Median	37.2	29.9	52.5	53.6	7.5	11.1	23.7	1.8
	Max	59.3	55.2	92.1	96.0	17.9	29.2	56.3	8.7
Early Timing	Min	-16.9	-14.1	15.0	-16.9	-4.4	0.5	0.7	0.1
	Avg	15.9	14.8	29.1	30.0	7.1	13.9	18.2	4.1
	Median	10.6	9.3	21.2	22.9	6.3	11.3	22.3	2.7
	Max	59.3	54.8	58.9	96.0	22.9	36.2	27.0	9.4
Late Timing	Min	-22.7	-19.5	-6.0	-13.2	-3.2	3.3	-1.4	0.1
	Avg	20.6	21.6	30.0	32.1	5.0	10.2	15.9	3.6
	Median	27.0	30.6	35.4	34.3	4.5	10.1	15.4	1.6
	Max	42.5	39.7	56.3	68.0	11.8	16.7	29.0	9.0
Momentum Timing	Min	12.6	7.2	23.4	20.1	-3.8	3.6	12.5	0.1
	Avg	23.9	24.2	34.8	37.2	5.8	10.7	15.0	3.8
	Median	16.4	21.0	32.2	25.4	7.1	10.4	14.0	3.4
	Max	42.7	41.3	51.5	73.7	13.1	19.6	19.4	8.9

Perfect Timing: Invest After MSCI US Hits Bottom

Early Timing: Invest After MSCI US Falls 20%

Late Timing: Invest 3 Months After MSCI US Hits Bottom

Momentum Timing: Use Signal to Invest After MSCI US Falls 20%

On average, investing in equities and other risk assets after a 20% US equity decline has produced strong returns the subsequent year. Of course, the best results are earned by investing with perfect timing but, realistically, being early or late has been profitable, on average, following an initial 20% drawdown. Using momentum as an additional tool has produced positive benefits. Momentum has not yet turned positive over a 12-month horizon, so investors may choose to be patient in rebalancing, but we would begin doing so.

Sources: Bloomberg Index Services Limited, Federal Reserve, MSCI Inc., Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Data are monthly and reflect MSCI US Index (US Equities), MSCI World Index (DM Equities), MSCI Emerging Markets Index (EM Equities), S&P SmallCap 600® Index (US SC Equities), Bloomberg US Treasury Index (US Treasuries), Bloomberg US Investment Grade Corporate Bond Index (US IG Credit), Bloomberg US High Yield Index (US High Yield), and Federal Reserve Treasury bill secondary market total returns (US Cash). Scenarios reflect the average performance across the seven major downturns where the MSCI US price level dropped 20% before a 20% increase based on monthly data. The US Equity Momentum scenario highlights returns after US equity momentum—which is defined as the annual MSCI US price change—has turned positive following each downturn.



Celia Dallas, Chief Investment Strategist

David Kautter also contributed to this publication

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