



Institutional Economic and Market Update

First Quarter 2023

Economic and Market Summary

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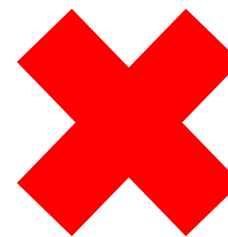
U.S. Economic Outlook

- U.S. recession risks remain elevated with the overall signal continuing to flash red.
- The lagged effects of Fed tightening could continue to weigh on an already slowing growth backdrop in 2023.
- The narrow path for a soft landing relies on a resilient consumer, and/or corporate reluctance to invoke a full scale layoff cycle.

U.S. Market Outlook

- While negative returns in 2022 were primarily driven by multiple contraction, downside to earnings expectations appears to be the primary risk in the coming year.
- We continue to believe that markets will experience heightened volatility until visibility is restored regarding the path forward for the economy and earnings.
- Historically, bear markets are rare and typically provide good opportunities for long term investors.

Recession Dashboard Overall Signal



Recession

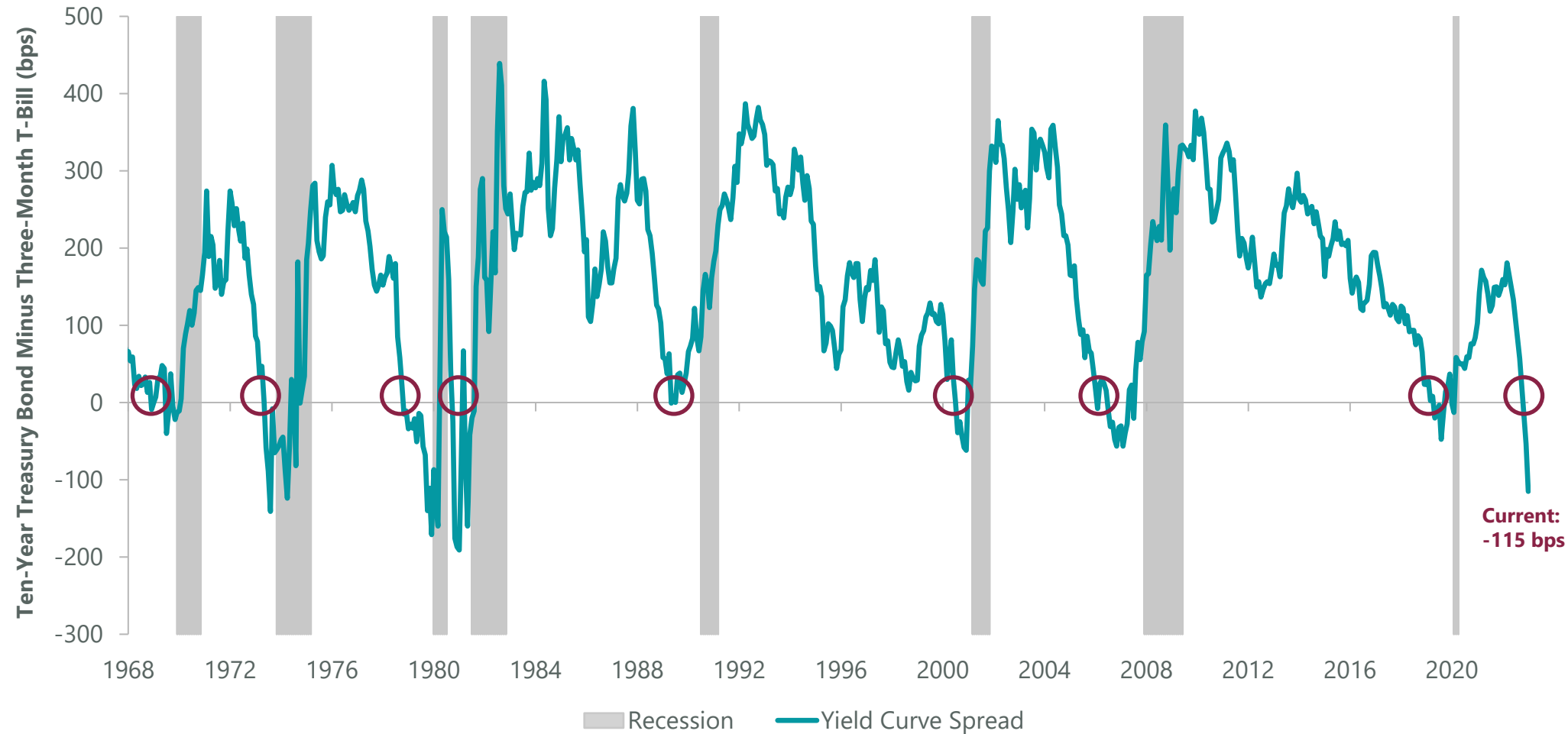
U.S. Recession Risk Indicators

- 12 variables have historically foreshadowed a looming recession
- The overall dashboard is currently signaling recession

		Current	Rapid Summer Deterioration		
		December 31	August 31	July 31	June 30
Consumer	Housing Permits	●	↑	↑	↑
	Job Sentiment	●	↑	↑	↑
	Jobless Claims	↑	↑	↑	↑
	Retail Sales	×	×	×	●
	Wage Growth	×	×	×	×
Business Activity	Commodities	×	×	×	●
	ISM New Orders	×	●	●	●
	Profit Margins	×	↑	↑	↑
	Truck Shipments	↑	↑	↑	↑
Financial	Credit Spreads	×	×	×	×
	Money Supply	×	×	●	●
	Yield Curve	×	●	●	↑
Overall Signal		×	×	●	↑

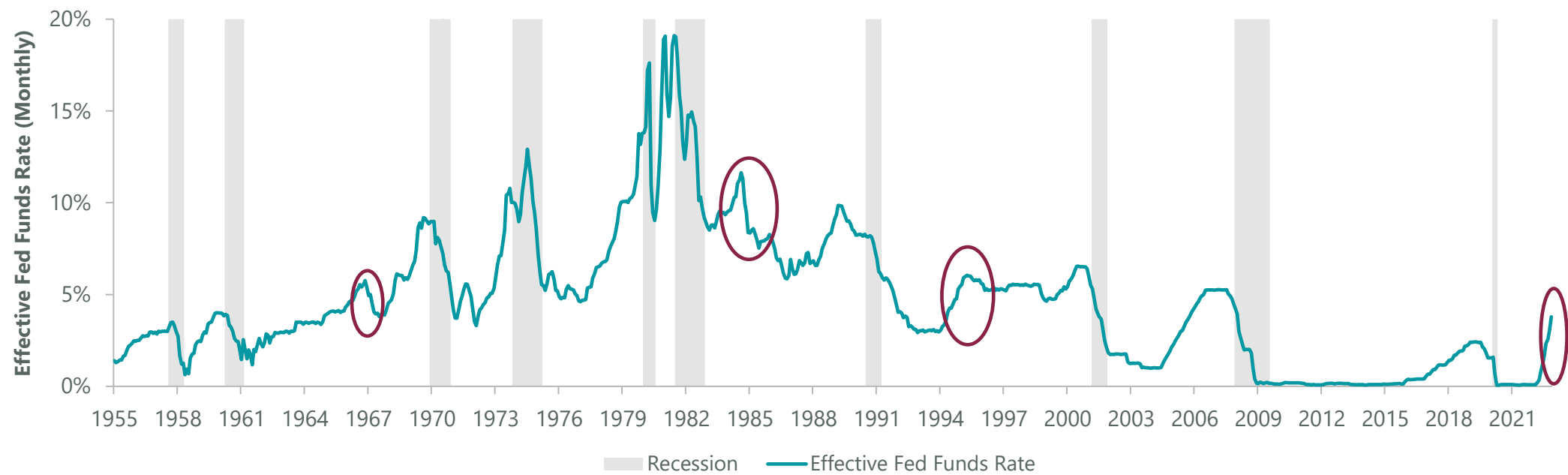
↑ Expansion ● Caution × Recession

Yield Curve Suggests Danger Ahead



- ▶ The 10Y-3M yield curve (our preferred measure) is now deeply inverted, suggesting elevated recessionary risk in 2023.
- ▶ This portion of the yield curve has anticipated eight of the last eight recessions with no false positives.

Don't Make the Same Mistake Twice

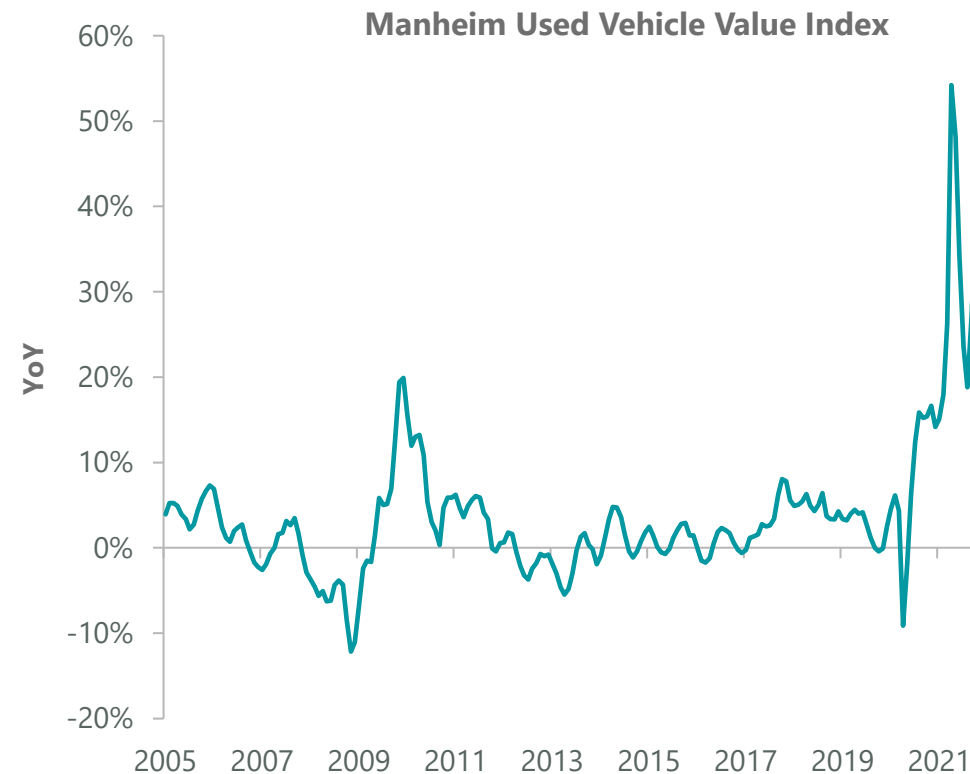


			Core Consumer Price Index YoY Percent Change			Unemployment Rate	
	Overall Recession Signal	Total Fed Rate Cut	Fed Pivot (or Current)	+12 Months	+36 Months	Fed Pivot (or Current)	Labor Market
December 1966	✖	-2.0%	3.3%	3.8%	6.2%	3.8%	Tight
September 1984	⬆	-5.8%	5.1%	4.0%	4.3%	7.3%	Excess
July 1995	●	-0.8%	3.0%	2.7%	2.2%	5.7%	Slack
Current			5.7%			3.5%	

- ▶ There have been 13 primary Fed tightening cycles historically, with 10 ending in a recession and three soft landings.
- ▶ With a tight labor market today similar to 1966, the Fed is likely wary of pivoting too early which could give way to a reacceleration of inflation.

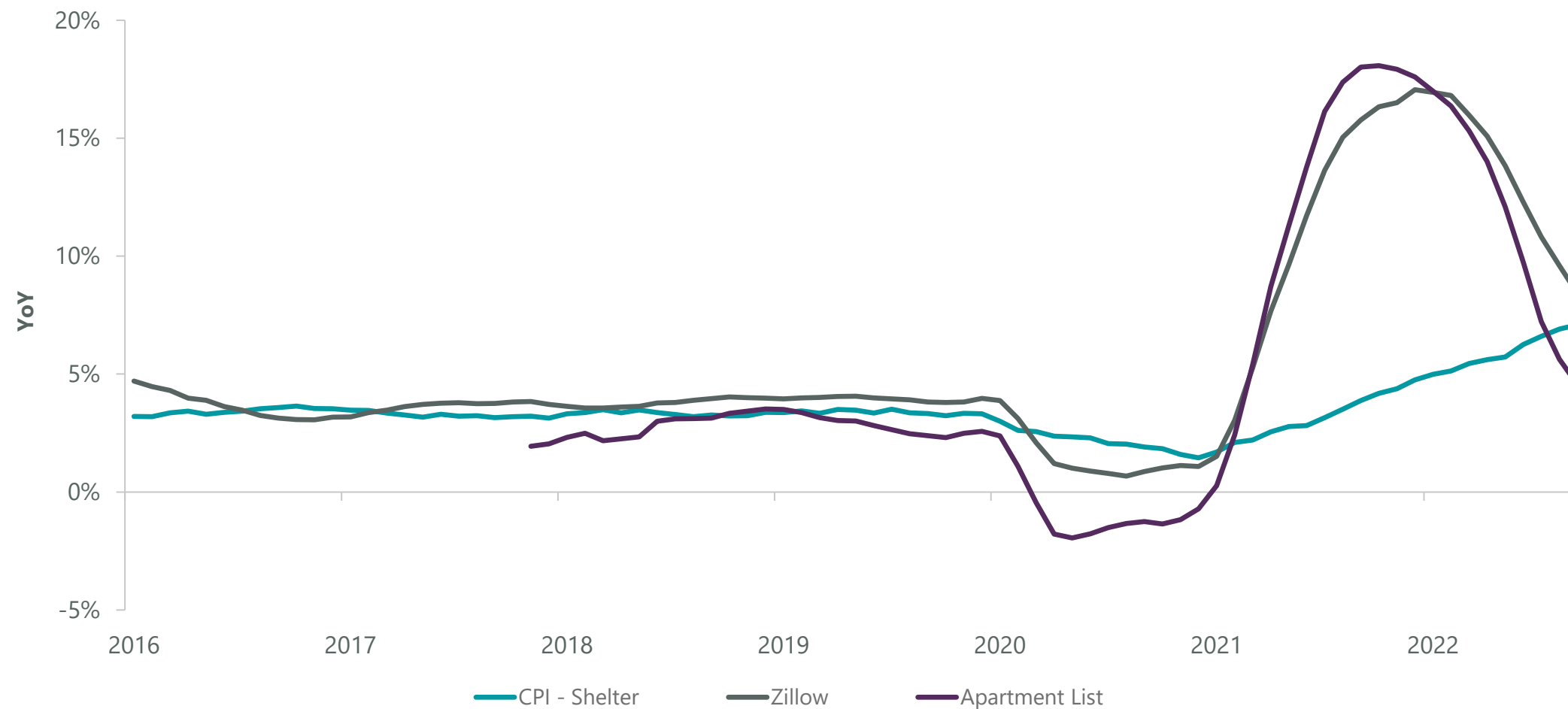
It Actually Was Transitory!

Key Drivers of Goods Inflation Rolled Over in 2H22



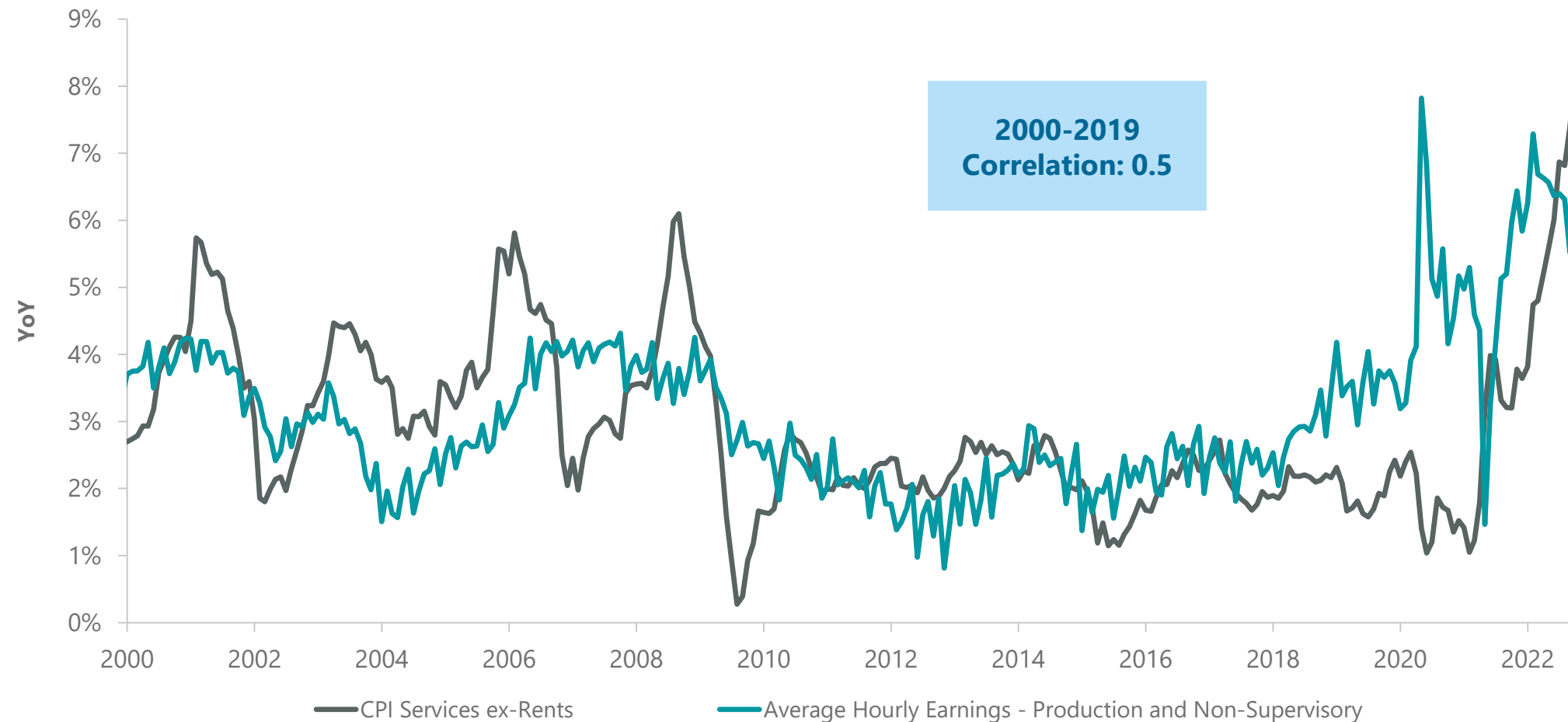
- ▶ **While the roundtrip in goods inflation took longer than anticipated, recently it has arrived in force.**
- ▶ **This has been driven by two primary factors: 1) supply chains healing, and 2) demand waning as consumers shift spending back toward services.**

Peak Shelter Inflation?



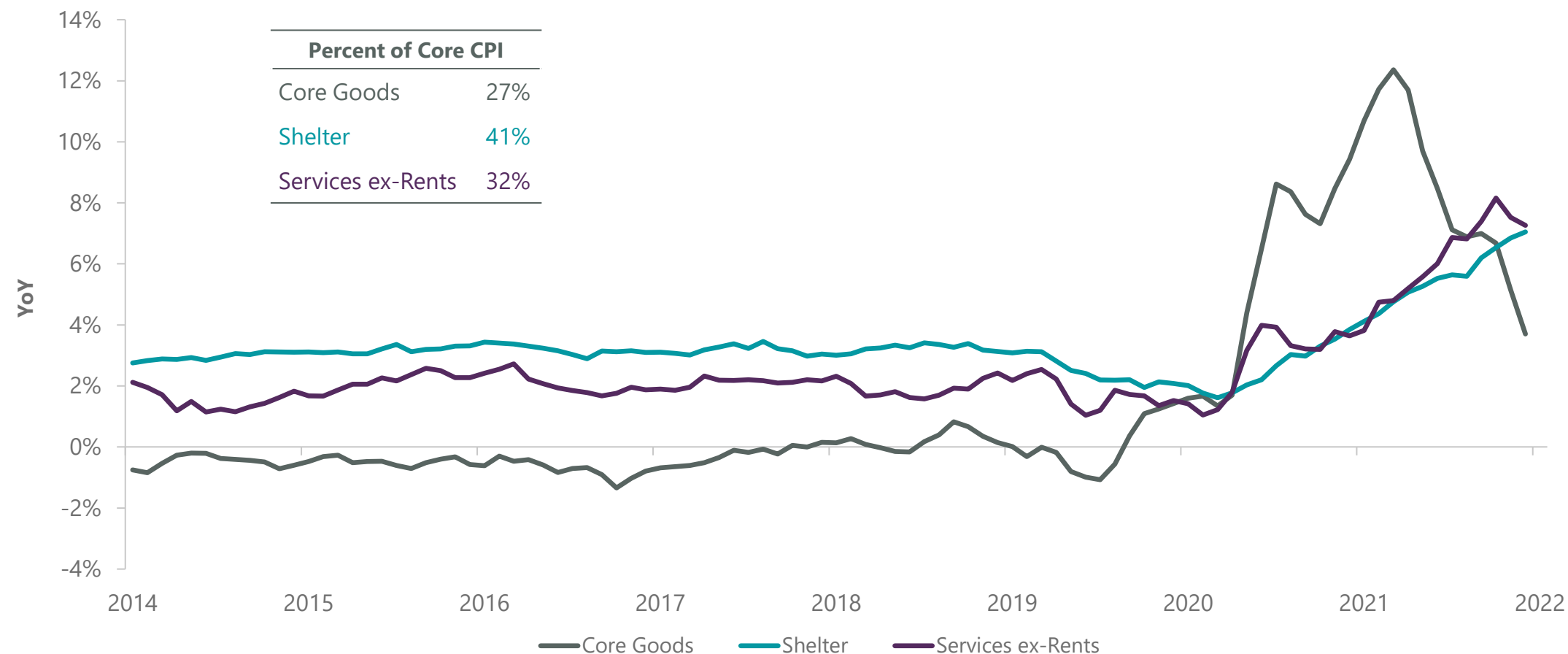
- ▶ **Shelter tends to be a stickier component of inflation since the typical owner stays for 13 years and leases usually last 1-2 years.**
- ▶ **Leading indicators of shelter inflation that focus solely on recent transactions suggest a peak may be near.**

Too Hot to Handle



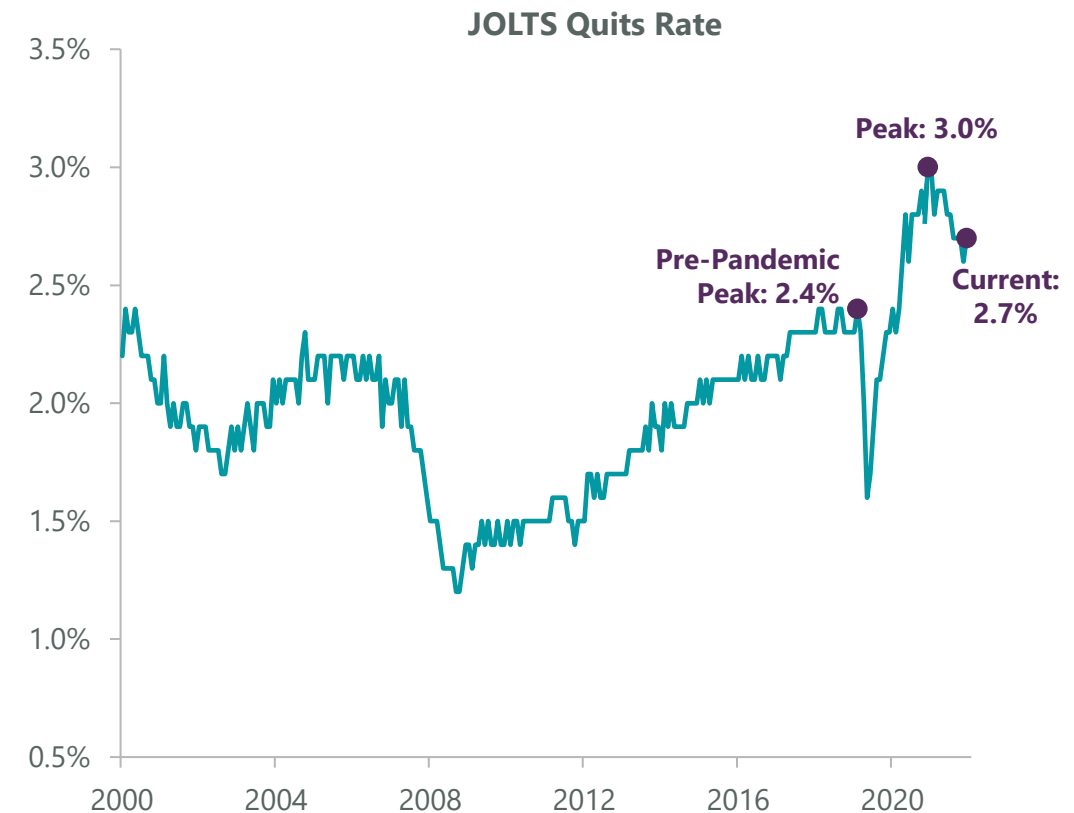
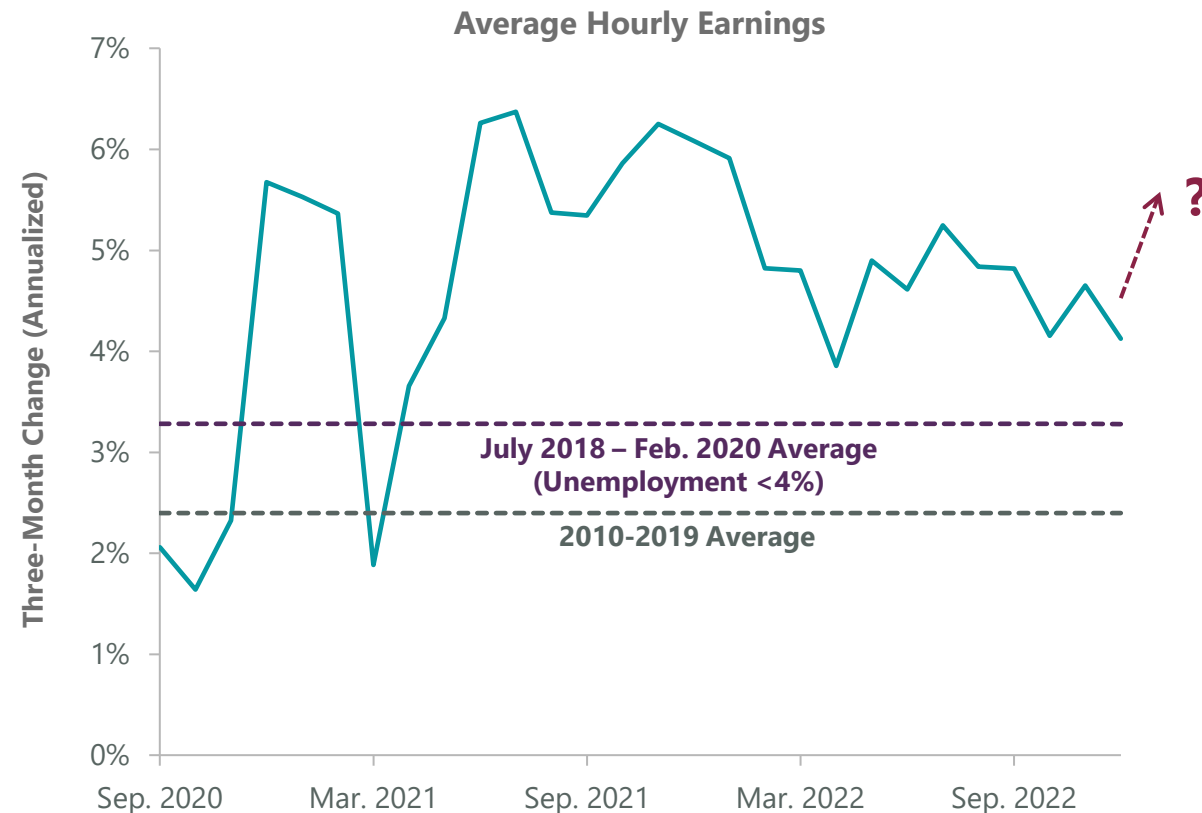
- ▶ **Historically, there has been a robust relationship between wage gains and services inflation excluding rents.**
- ▶ **With wages remaining elevated, this component of inflation is unlikely to return to the Fed's 2% target in the near future.**

Putting It All Together



- ▶ **Although core goods and shelter are likely to moderate in 2023, services ex-rents may prove more resilient given the strength of the labor market.**
- ▶ **The Fed's preferred measure of inflation (Core PCE) has an even larger weighting to services ex-rents - nearly 50% - which could drive tighter for longer monetary policy in 2023.**

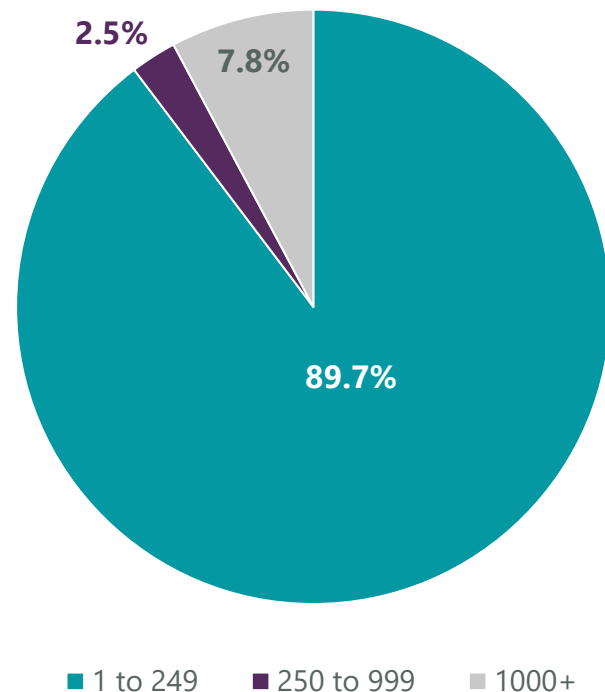
Workers Have The Upper Hand



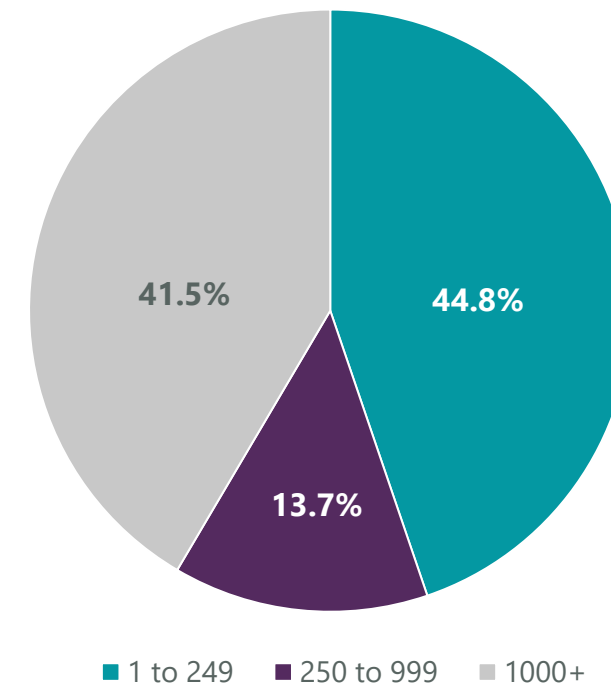
- ▶ **Wage gains could re-accelerate with workers requiring higher cost-of-living adjustments following 2022's elevated inflation.**
- ▶ **The balance of power has shifted towards workers this cycle, with the Quits rate still higher than anything seen pre-pandemic.**

Small Businesses Driving Labor Demand

Post-Pandemic Growth in Job Openings by Firm Size*

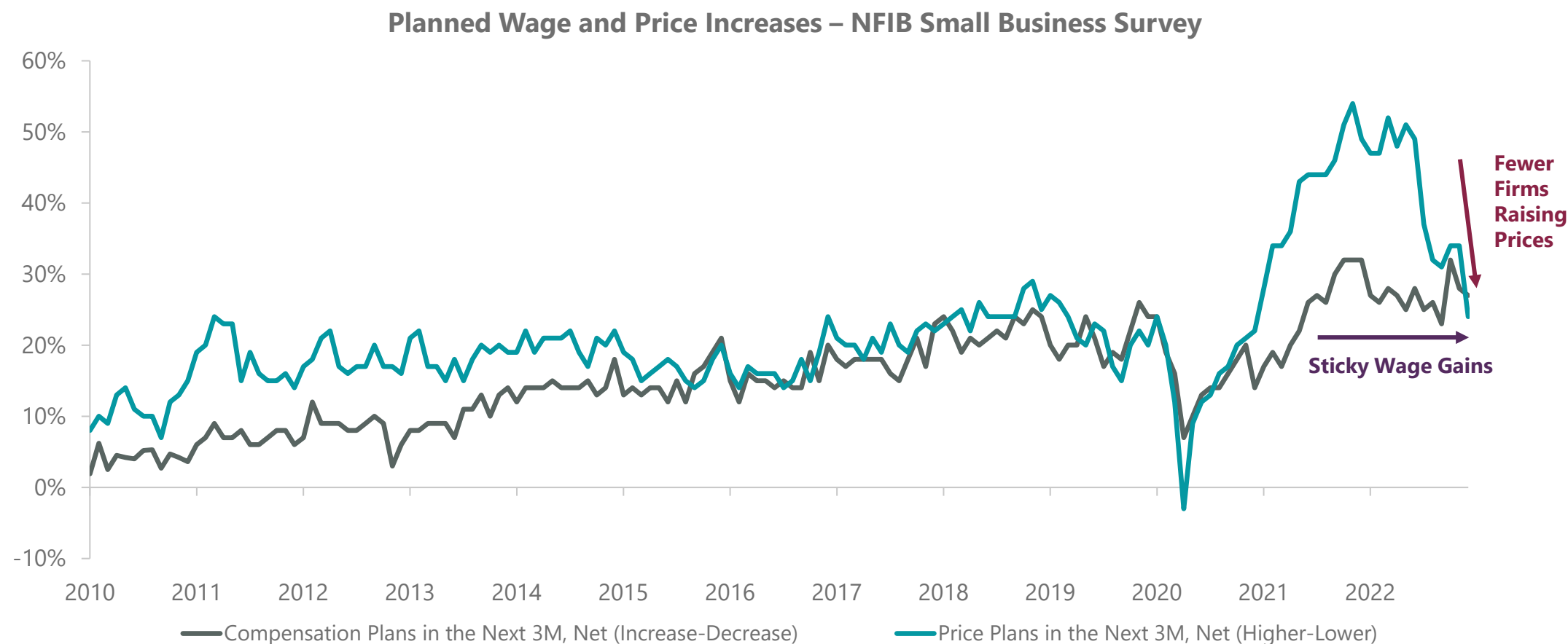


Current Total Employment by Firm Size



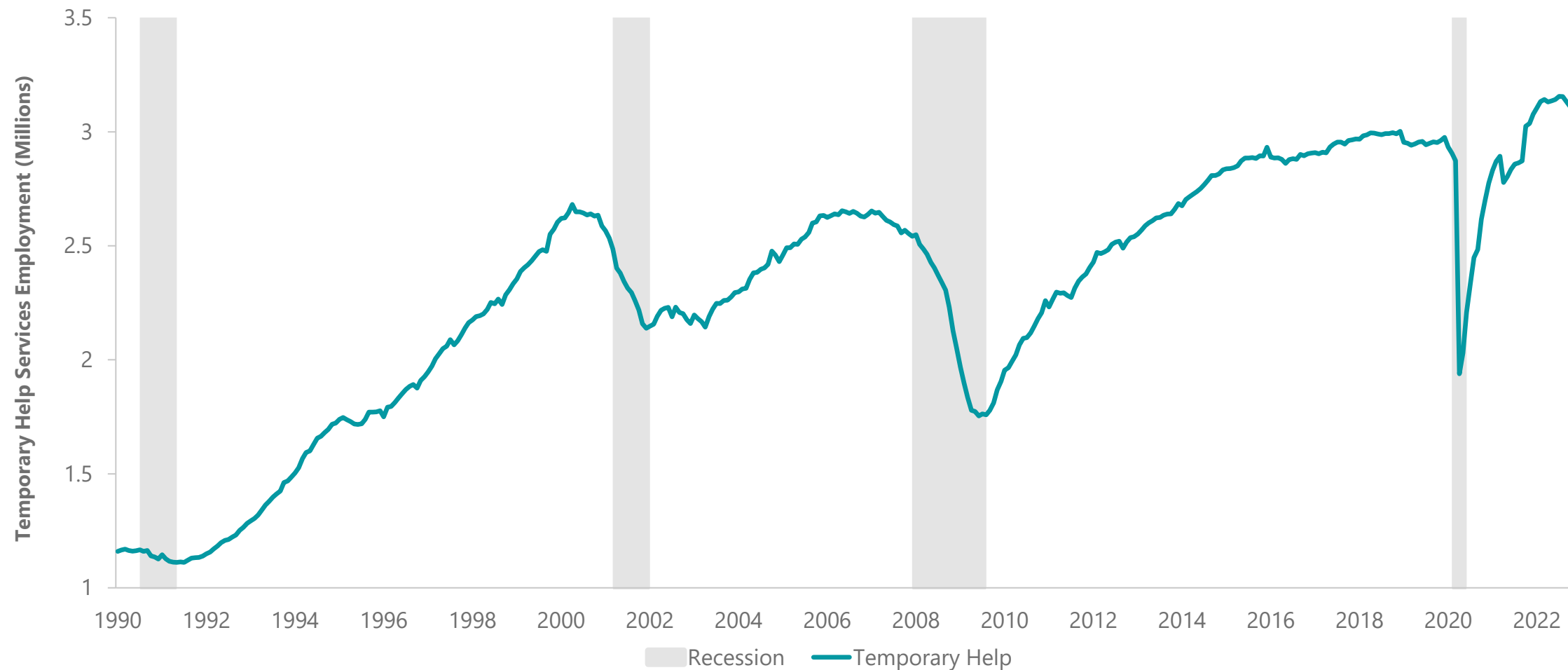
- ▶ **Small businesses are generally seen as the engine of growth powering the U.S. economy.**
- ▶ **In the aftermath of the pandemic, small businesses have made up a disproportionate share of labor demand.**

Small Business Pain Ahead



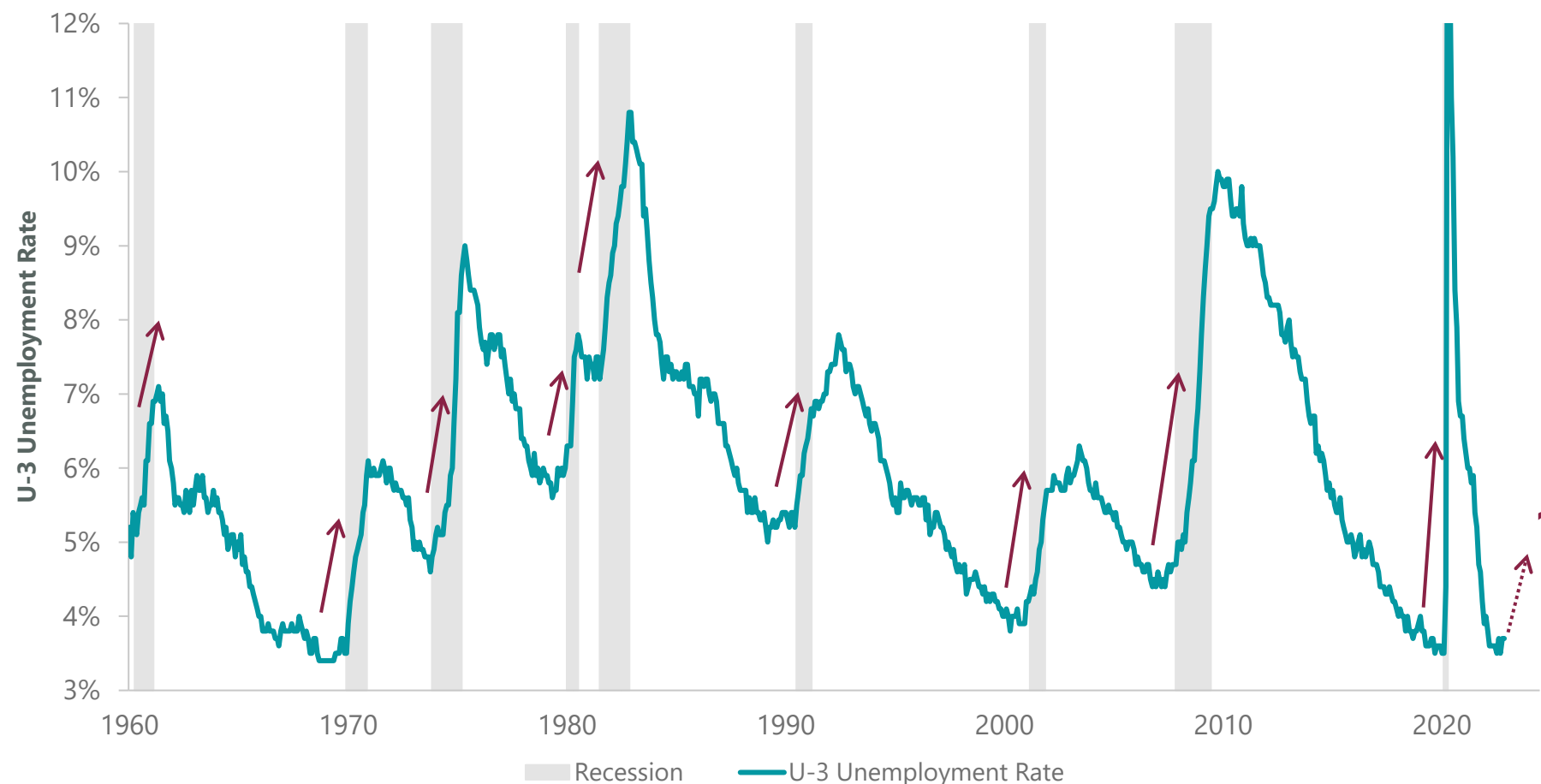
- ▶ **Following a record high in the share of small businesses planning to raise prices last year, slower economic growth and lower inflation are leading many small businesses to calm price hikes into 2023.**
- ▶ **With wage gains holding steady, margins could come under pressure and lead to further cost-cutting measures including layoffs.**

Temp Worker Trends Look Recessionary



- ▶ **Temporary worker employment typically rolls over ahead of the rest of the labor market going into recessions, as temporary workers are easier to hire/fire.**

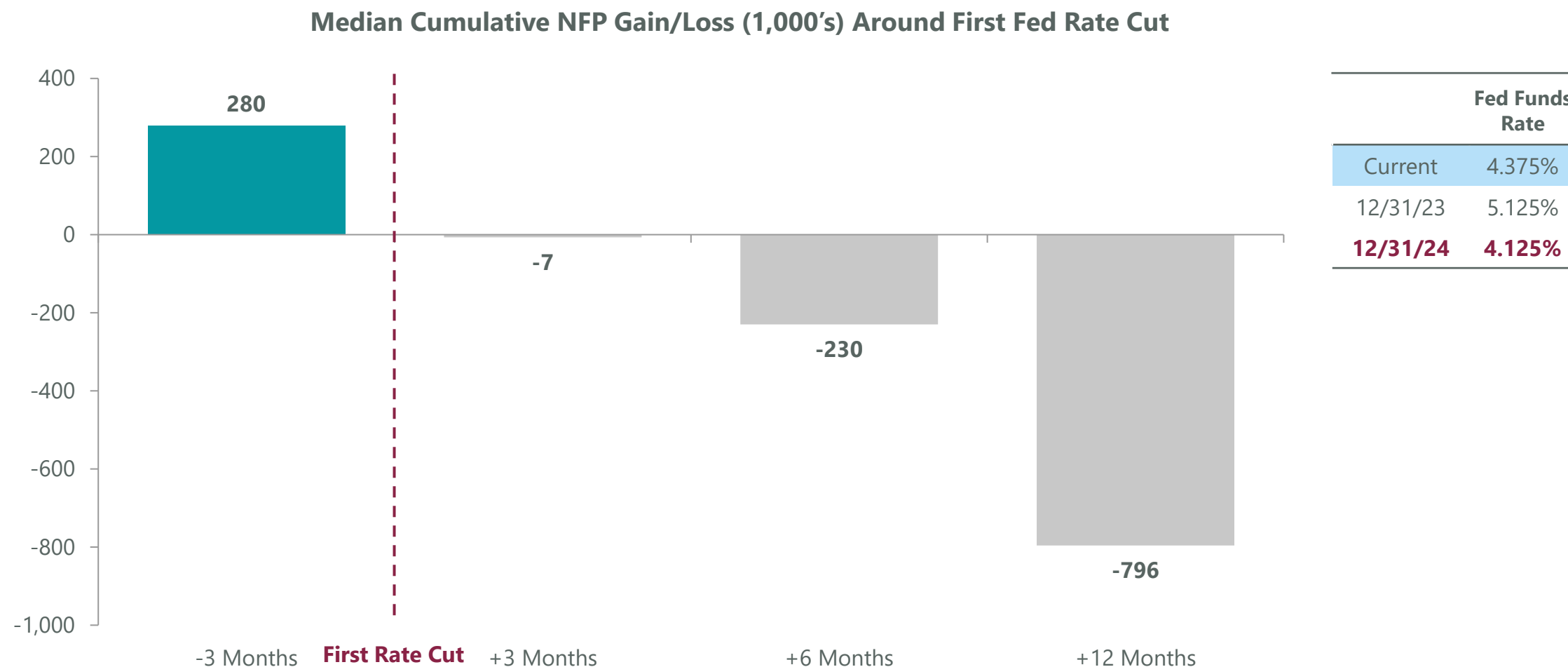
What's The Fed Telling Us?



Fed Projection	
Current	3.5%
12/31/23	4.6%
12/31/24	4.6%
12/13/25	4.5%

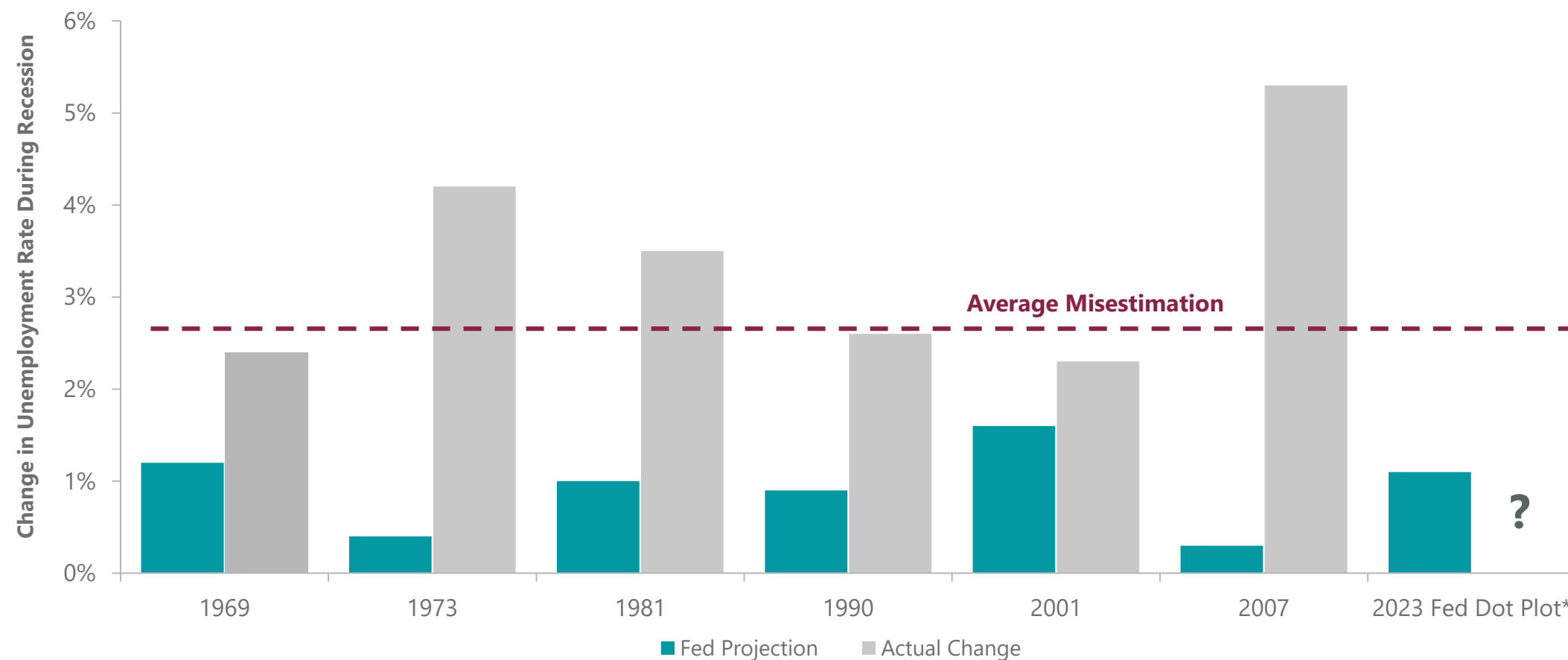
- ▶ **Historically, an increase of 0.5% (or more) in the unemployment rate vs. the lows over the prior year has signaled a recession (the Sahm Rule).**
- ▶ **The Fed Dot Plot signals an expected 1.1% increase in the unemployment rate this year.**

The Fed Has Little Tolerance For Job Losses



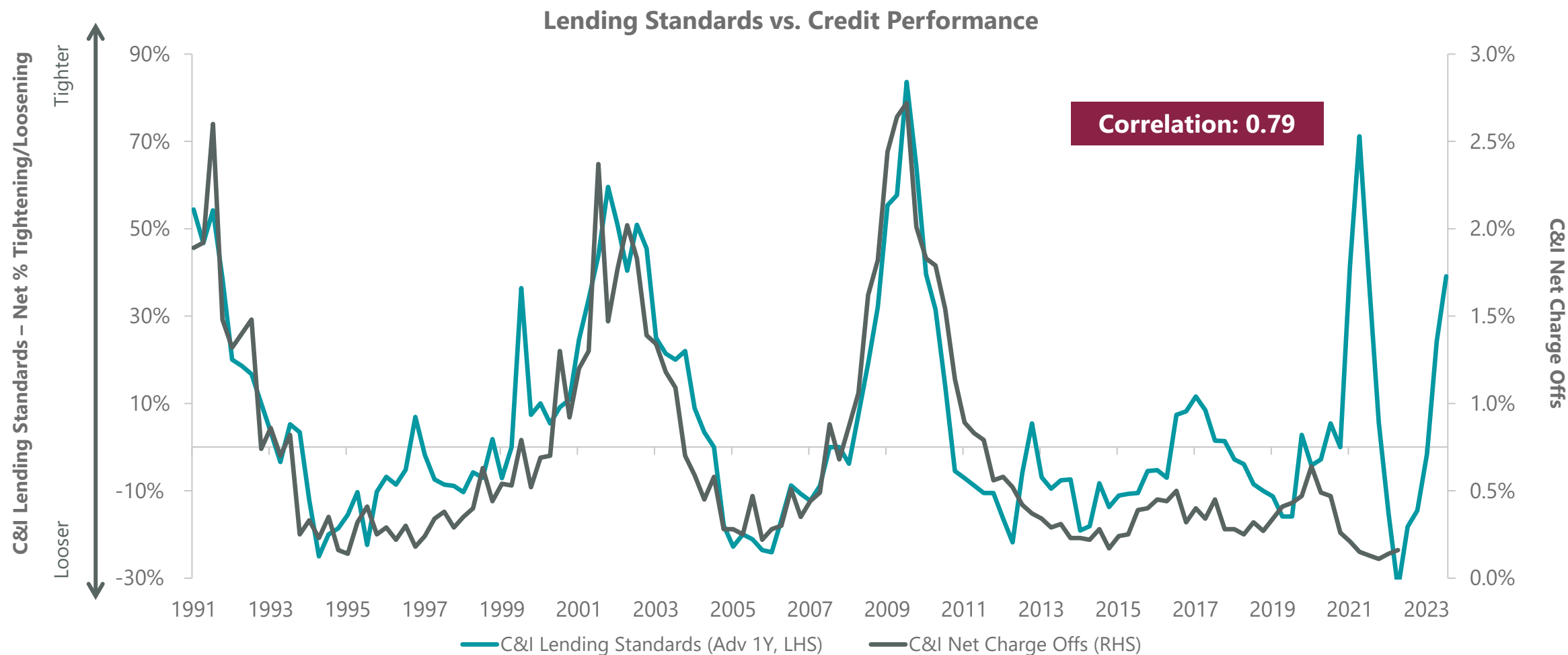
- ▶ Typically, the Fed anticipates layoff cycles (which tend to lag) and is quick to ease monetary policy as the labor market softens.
- ▶ The Fed Dot Plot implies 1.9 million job losses along with further rate hikes in the coming year. No cuts are expected until 2024 which is a departure from previous cycles.

The Fed's Rose-Colored Glasses



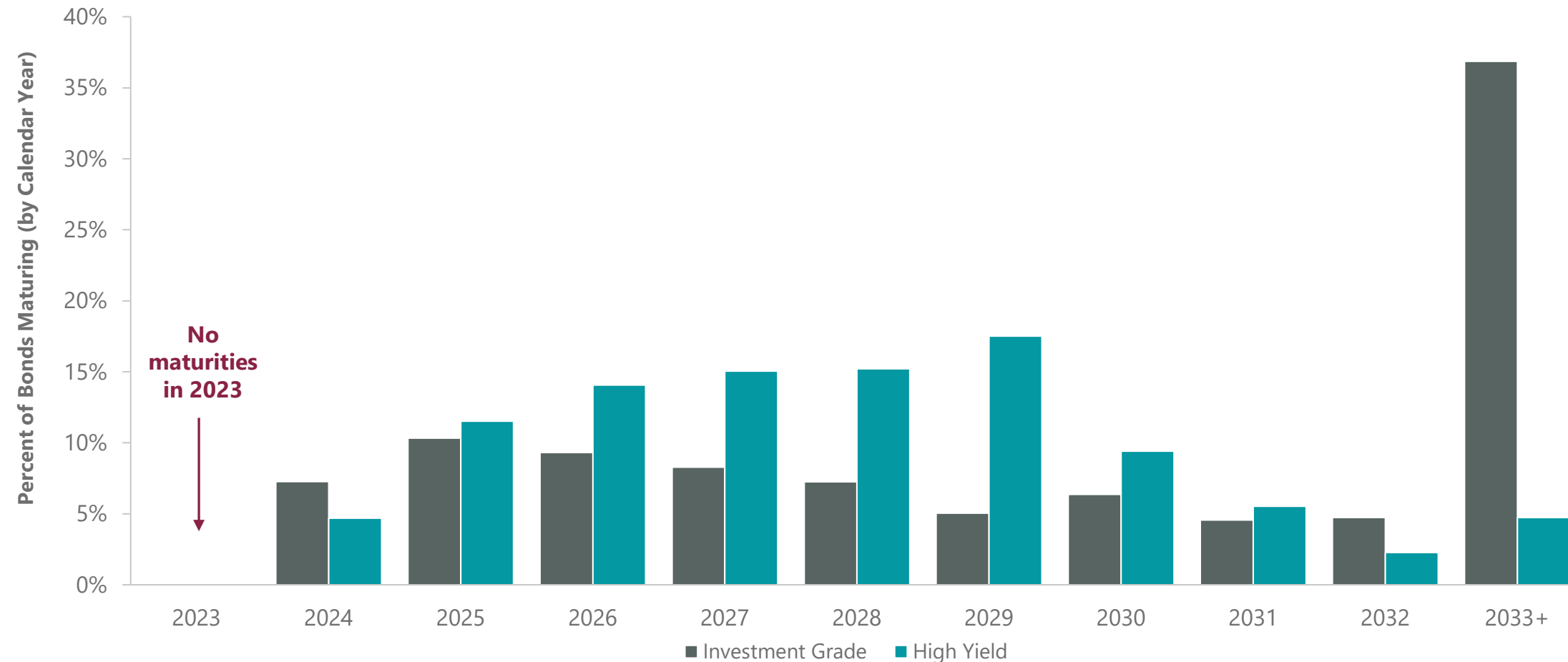
- ▶ The Fed underestimates the pain in labor markets experienced during a recession by 2.5% on average.
- ▶ Although the Fed Dot Plot suggests unemployment rising to the mid-4% range, history suggests something even higher.

Lending Standards Suggest Credit To Deteriorate



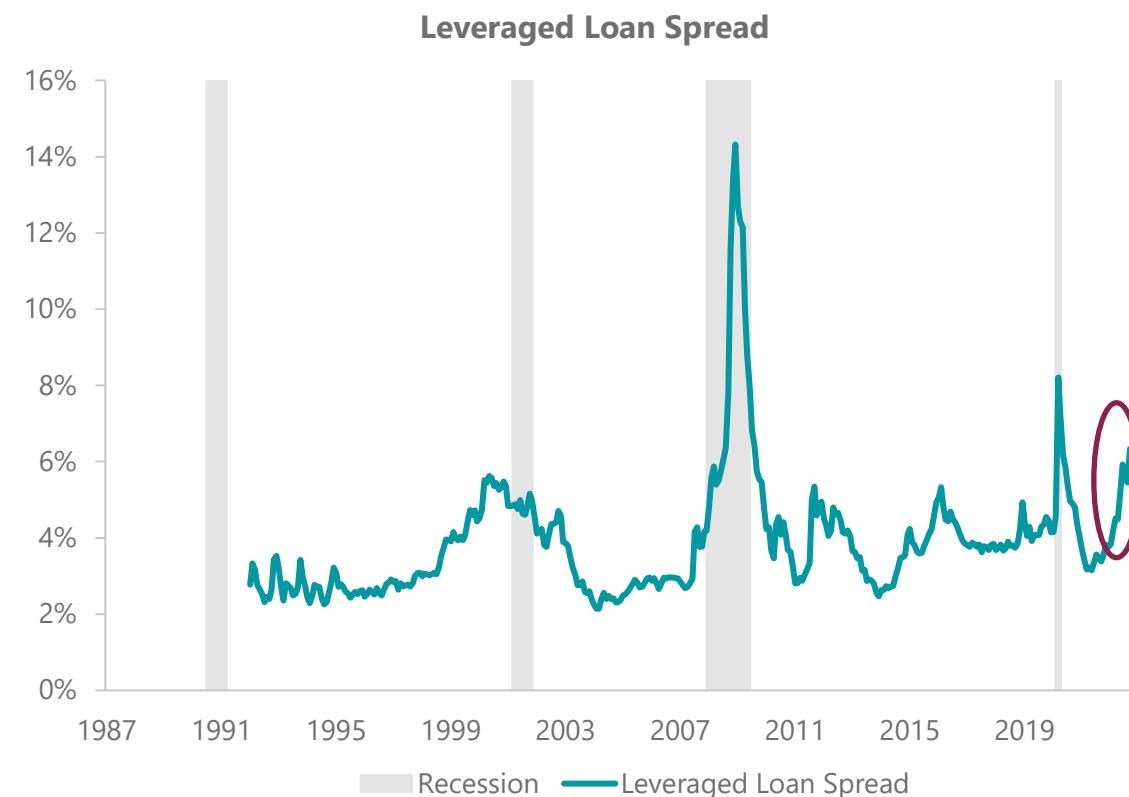
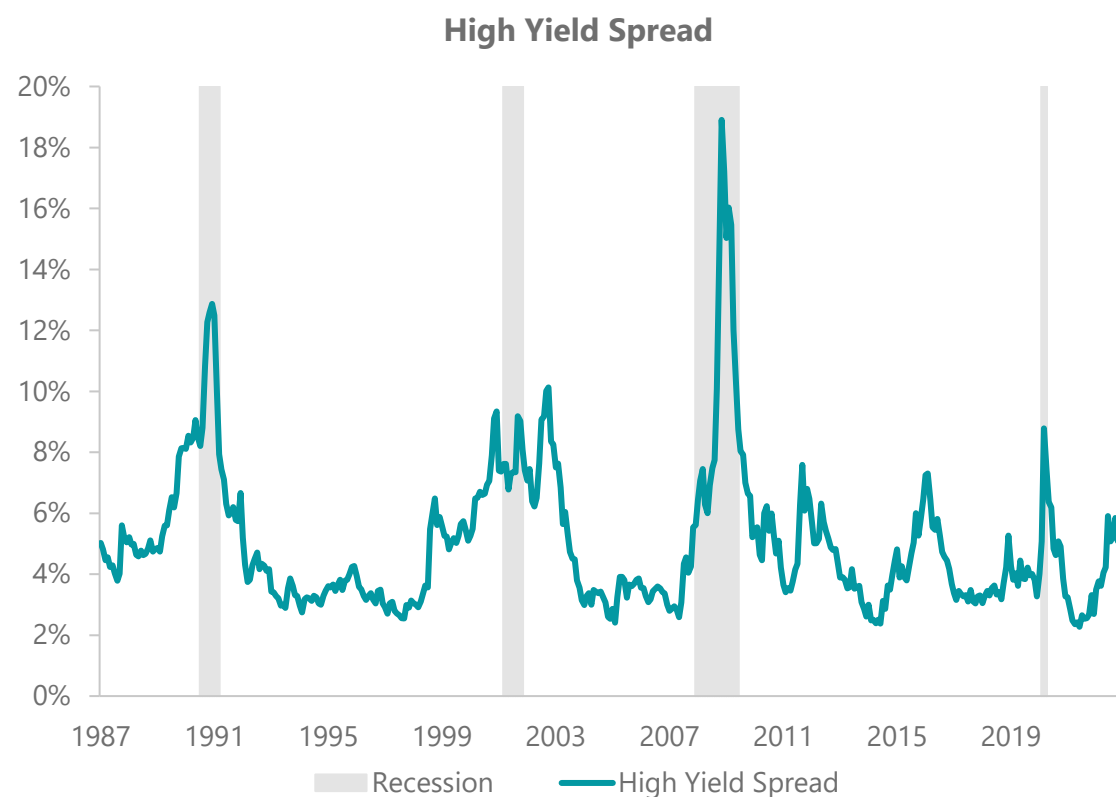
- ▶ **Traditionally, lending standards lead net charge offs by one year.**
- ▶ **With standards tightening substantially, credit performance could come under pressure in 2023.**

Corporate Maturity Wall



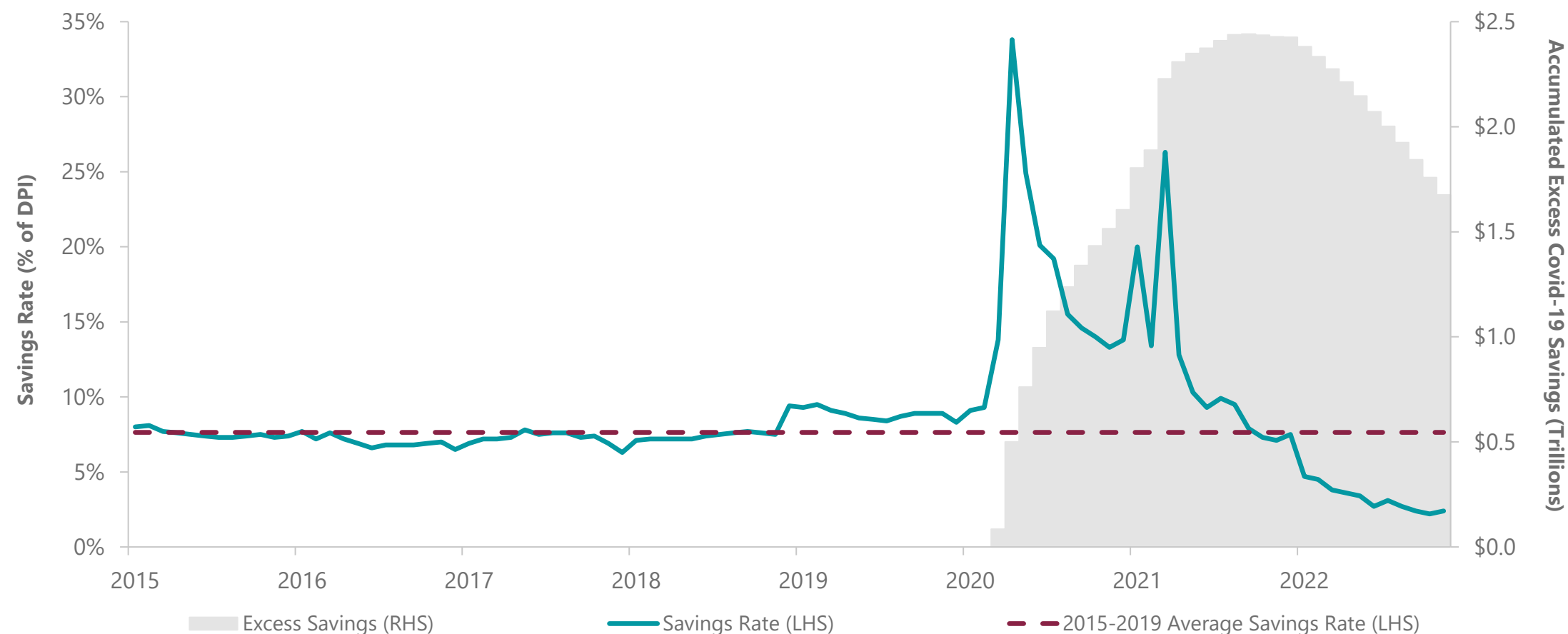
- ▶ One of the biggest risks during recessions is the inability for companies to roll over debt.
- ▶ There are no maturities over the coming year for the Bloomberg High Yield and Corporate benchmarks (covering \$7.3 trillion in bonds), which dampens one source of risk and could keep spreads from widening as much as during past recessions.

Credit Spreads Widening



► **Credit spreads have widened substantially off the lows with leveraged loans gapping out despite strong demand for floating rate products.**

Elevated, But Dwindling



- ▶ **Consumers continue to buttress spending by tapping into the ~\$1.7 trillion of excess savings accumulated during the pandemic.**
- ▶ **At the current pace, it would take until mid-2024 for excess savings to be fully depleted.**
- ▶ **Personal savings rates are at new all-time lows; should they normalize, it could meaningfully slow consumption.**

Cart Before the Horse?

Recession Start	Recession End	Length (Months)	Market Low During Recession?	Distance from Recession Start (Months)	Distance from Recession End (Months)
Nov. 1948	Oct. 1949	11	Yes	6	-5
July 1953	May 1954	10	Yes	1	-9
Aug. 1957	April 1958	8	Yes	2	-6
April 1960	Feb. 1961	10	Yes	6	-4
Dec. 1969	Nov. 1970	11	Yes	5	-6
Nov. 1973	March 1975	16	Yes	10	-6
Jan. 1980	July 1980	6	Yes	2	-4
July 1981	Nov. 1982	16	Yes	12	-4
July 1990	March 1991	8	Yes	2	-6
March 2001	Nov. 2001	8	No	18	10
Dec. 2007	June 2009	18	Yes	14	-4
Feb. 2020	April 2020	2	Yes	1	-1
Average:		10.3		6.6	-3.8

- ▶ **Historically, market lows have come around the two-thirds mark during recessions.**
- ▶ **The strength of the labor market would suggest this point is not yet on the immediate horizon.**

What's the Path for Earnings?

NTM EPS Behavior								
Market Peak	EPS Peak	# of Days	Market Trough	EPS Trough	# of Days	EPS Peak – Trough	EPS at Market Trough	Market Peak – Trough
Recessions								
3/24/2000	8/7/2000	136	10/9/2002	12/17/2001	-296	-17.5%	-13.4%	-49.1%
10/9/2007	11/1/2007	23	3/9/2009	5/8/2009	60	-39.3%	-36.8%	-56.8%
2/19/2020	1/30/2020	-20	3/23/2020	5/15/2020	53	-20.6%	-4.5%	-33.9%
Average GDP Recession:		46	-61			-25.8%	-18.2%	-46.6%
Non-Recessionary EPS Declines								
7/17/1998	9/29/1998	74	8/31/1998	1/4/1999	126	-2.6%	-10.%	-19.3%
5/21/2014	10/7/2014	139	8/25/2015	2/6/2015	-200	-5.5%	-2.3%	-7.2%
11/3/2015	9/8/2015	-56	2/1/2016	3/1/2016	29	-3.2%	-2.8%	-13.3%
9/20/2018	12/6/2018	77	12/24/2018	2/1/2019	39	-2.3%	-10.%	-19.8%
Average GDP Recession:		59	-2			-3.4%	-1.8%	-14.9%
Current*								
1/3/2022	7/8/2022	186	10/12/2022	12/21/2022	70	-4.1%	-1.6%	-25.4%

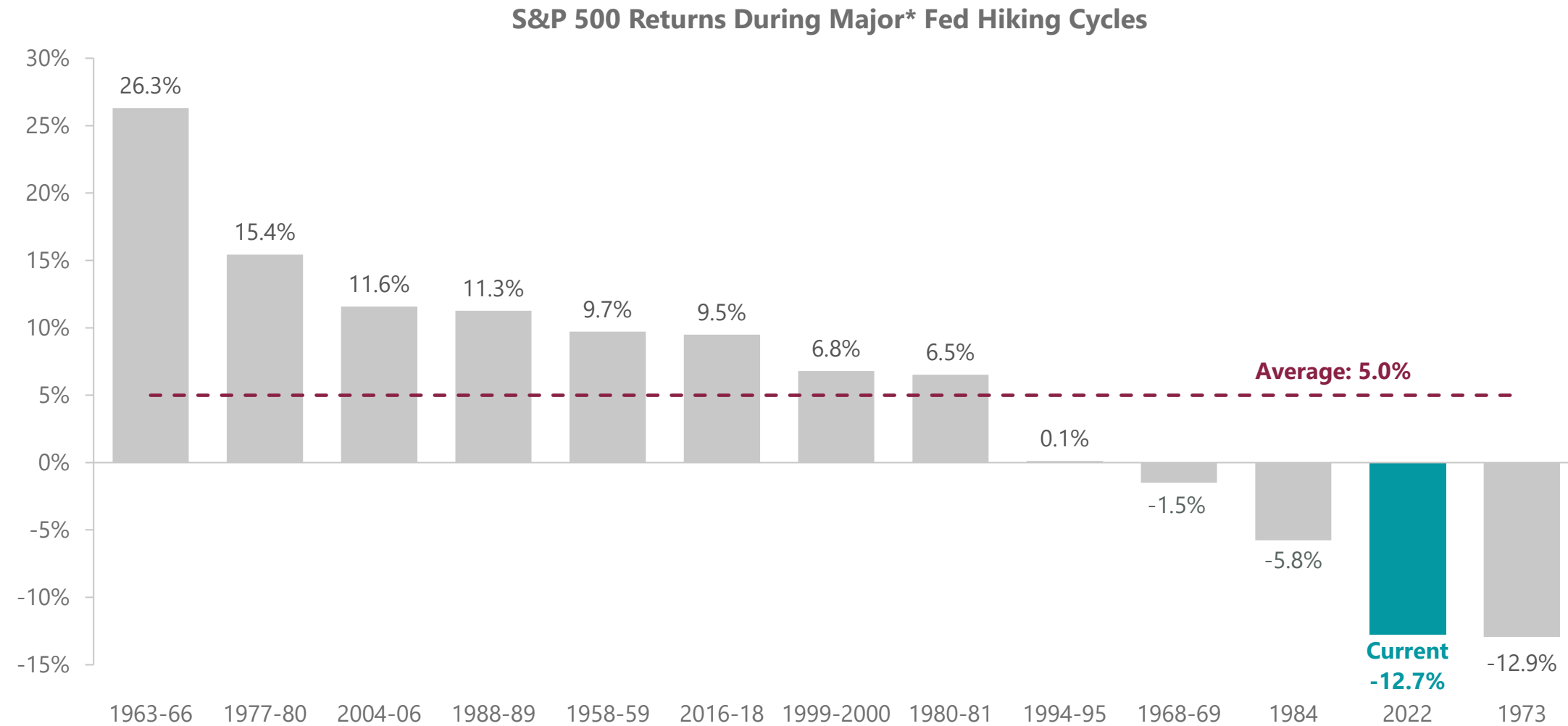
- ▶ Earnings revisions have declined by -26% on average across the last three recessions.
- ▶ It is not uncommon for earnings estimates to bottom after the market lows have occurred, although historically, approximately two-thirds of the EPS decline has occurred by the recessionary market lows.

Be Careful What You Wish For

Recession Years	Fed 1 st Cut	S&P Bottom	Fed 1 st Cut to Bottom (Months)	Market Decline from 1 st Cut to Bottom	Market Peak to 1 st Cut
1969 – 1970	March 1970	June 1970	3	-18.0%	-16.5%
1973 – 1975	Sept. 1973	Oct. 1974	13	-40.2%	-13.3%
1980 – 1982*	June 1981	Aug. 1982	13	-23.3%	-4.9%
1990 – 1991	June 1989	Oct. 1990	16	-8.2%	14.6%
2001	Jan. 2001	Oct. 2002	21	-42.4%	-11.8%
2007 – 2009	Sept. 2007	March 2009	17	-55.5%	3.0%
Average:			14	-31.3%	-4.8%
Current:**					-20.0%

- ▶ **Although the market is hoping for a Fed pivot, historically that moment has given way to a selloff as recession fears and weaker earnings overwhelm easier monetary policy benefits.**
- ▶ **The current market selloff is substantially worse than historical moves that have come between market peaks and Fed cuts. This may help soften the blow to markets when the pivot eventually comes.**

A Particularly Tough Cycle



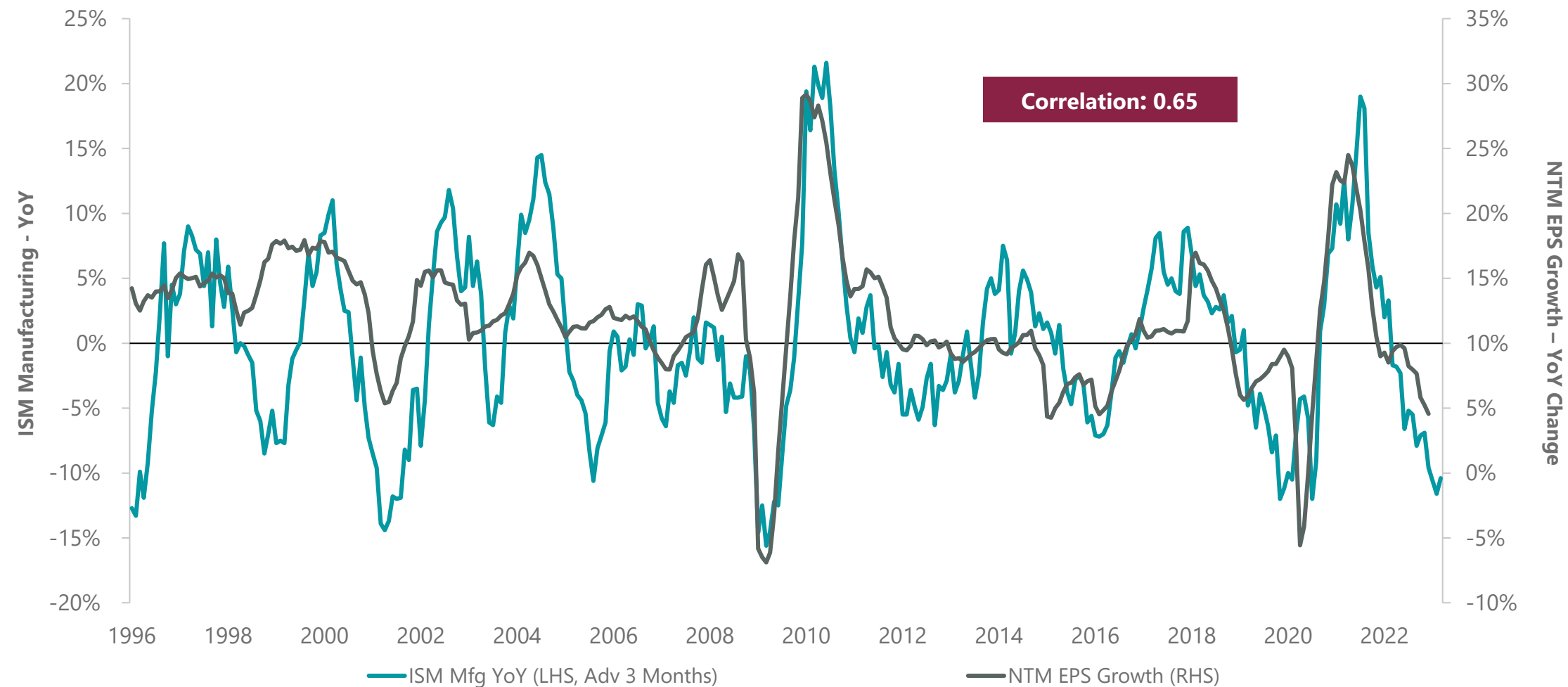
► **The S&P 500 has experienced unusually poor returns so far during this hiking cycle compared to history.**

Further Pain Ahead?

Recession Start (Peak)	Recession End (Trough)	Unemployment Cycle Low	Change in Unemployment at Market Trough*	Change in Unemployment Full Cycle
Nov. 1948	Oct. 1949	3.4%	2.8%	4.5%
July 1953	May 1954	2.5%	0.6%	3.6%
Aug. 1957	April 1958	3.7%	1.5%	3.8%
April 1960	Feb. 1961	4.8%	1.3%	2.3%
Dec. 1969	Nov. 1970	3.4%	1.5%	2.7%
Nov. 1973	March 1975	4.6%	1.4%	4.4%
Jan. 1980	July 1980	5.6%	0.7%	2.2%
July 1980	Nov. 1982	7.2%	2.6%	3.6%
July 1990	March 1991	5.0%	0.9%	2.8%
March 2001	Nov. 2001	3.8%	1.9%	2.5%
Dec. 2007	June 2009	4.4%	4.3%	5.6%
Feb. 2020	April 2020	3.5%	0.9%	11.2%
Average			1.7%	4.1%
Current		3.5%	0.0%	???

- ▶ **The unemployment rate has historically risen by 4.1% from trough to peak in periods associated with recessionary cycles.**
- ▶ **Of this move, only 1.7% (~40%) had occurred when the market bottomed on average.**

ISM Manufacturing and Earnings



- The ISM Manufacturing PMI typically leads S&P 500 earnings growth by three months, which explains the close linkage between this survey and market momentum.

ISM Manufacturing and Recessions

ISM Trough		ISM Manufacturing Troughs and Recessions				S&P 500	
Date	Level	Recession				Trough	# of Months
Start	# of Months	End	# of Months				
Feb. 1949	31.3	Nov. 1948	3	Oct. 1949	-8	June 1949	-4
Dec. 1953	35.6	July 1953	5	May 1954	-5	Sep. 1953	4
Jan. 1958	33.4	Aug. 1957	5	Apr. 1958	-3	Oct. 1957	3
May 1960	42.6	Apr. 1960	1	Feb. 1961	-9	Oct. 1960	-5
Nov. 1970	39.7	Dec. 1969	11	Nov 1970	0	May 1970	6
Jan. 1975	30.7	Nov. 1973	14	Mar. 1975	-2	Oct. 1974	4
May 1980	29.4	Jan. 1980	4	July 1980	-2	Mar. 1980	2
May. 1982	35.5	July 1981	10	Nov. 1982	-6	Aug. 1982	-2
Jan. 1991	39.2	July 1990	6	Mar. 1991	-2	Oct. 1990	4
Oct. 2001	40.8	Mar. 2001	7	Nov. 2001	-1	Oct 2002	-11
Dec. 2008	34.5	Dec. 2007	12	June 2009	-6	Mar. 2009	-2
Apr. 2020	41.6	Feb. 2020	2	Apr. 2020	0	Mar. 2020	1
Average	36.2	7				-4	
Last 4 Average	39.0	7				-2	
Min	29.4	1				-9	
Max	42.6	14				0	
Current	48.4	???				???	

- ▶ The ISM Manufacturing PMI has only recently entered contractionary territory and remains well above levels associated with past recessionary troughs.
- ▶ The ISM Manufacturing PMI typically bottoms in tandem with equity markets, which suggests further downside in 2023.

ISM Tied to Equity Leadership

S&P 500 NTM%Δ by ISM Manufacturing Regime

		ISM Manufacturing - Level			
		High	Medium	Low	
		> 56.6	56.6 - 49.4	< 49.4	
ISM Manufacturing - NTMΔ	Rising	11.8	17.3	18.2	17.5
	Stable	6.3	9.6	8.4	8.6
	Falling	2.7	0.8	-11.1	1.1
		4.4	8.9	14.5	

Sector Performance During Low ISM Regimes

		Rising	Stable	Falling	All
Cyclical ↑ Defensive ↓	Information Technology	11.6	-0.5	-5.3	9.7
	Consumer Discretionary	4.4	-0.1	8.7	4.4
	Materials	3.6	-0.7	8.0	3.7
	Financials	3.5	2.5	-9.1	2.5
	Industrials	1.7	5.2	-3.7	1.5
	Consumer Staples	-3.3	4.4	16.0	-1.4
	Health Care	-4.4	4.7	13.4	-2.6
	Real Estate	-2.4	-1.9	-19.6	-3.7
	Energy	-5.6	-1.5	1.8	-4.9
	Communication Services	-11.2	-5.7	1.3	-10.0
	Utilities	-16.7	-11.2	-0.2	-15.2
	S&P 500	18.2	8.4	-11.1	14.5

- ▶ During periods of declining ISM manufacturing PMI, equities tend to deliver lackluster returns.
- ▶ Within low ISM regimes, cyclicals lead on balance as the ISM tends not to stay at low levels forever, and a recovery is eventually priced in. However, defensives have historically led when the ISM falls further.

Recessionary Drawdowns by Sector/Industry

Max Drawdowns Around Recessionary Market Declines

	1990	2001	2007-9	2020	Avg	Current
Consumer Staples	-16.0	-22.0	-34.8	-24.7	-24.4	-17.7
Food, Bev, & Tob	-14.9	-22.7	-35.5	-31.1	-26.1	-14.0
Food Retail	-21.4	-38.6	-34.5	-16.0	-27.6	-25.6
H-Hold & Pers Prod	-19.6	-37.6	-40.4	-22.5	-30.0	-26.3
Pharma & Biotech	-15.4	-46.7	-36.7	-23.2	-30.5	-13.6
HC Equip & Svcs	-14.9	-24.5	-50.1	-35.2	-31.2	-20.7
Health Care	-15.3	-42.3	-40.7	-28.6	-31.7	-16.3
Transport	-28.3	-36.8	-55.9	-38.4	-39.9	-28.3
Retail	-35.5	-36.8	-59.6	-27.6	-39.9	-40.1
S&P 500	-19.9	-49.1	-56.8	-33.9	-39.9	-25.4
Utilities	-11.0	-64.5	-49.2	-36.6	-40.3	-20.9
Materials	-24.8	-38.6	-62.1	-37.4	-40.7	-25.6
Energy	-15.1	-35.7	-54.4	-61.1	-41.6	-26.3
Comm & Prof Svcs	-31.0	-38.4	-60.6	-37.0	-41.7	-22.2
Cons Svcs	-38.6	-36.2	-44.6	-49.0	-42.1	-28.8
Consumer Discretionary	-31.6	-44.5	-60.3	-32.5	-42.2	-41.2
Telecom	-21.2	-76.2	-51.1	-24.8	-43.3	-27.3
Communication Services	-21.2	-76.2	-51.1	-28.6	-44.3	-46.3
Durables & Apparel	-29.6	-31.6	-68.7	-47.3	-44.3	-46.7
Industrials	-28.1	-45.7	-65.2	-42.6	-45.4	-22.6
Media	-28.4	-63.9	-65.2	-30.4	-47.0	-50.2
Real Estate	-	-26.4	-75.7	-38.9	-47.0	-34.9
Capital Goods	-27.7	-49.5	-68.6	-44.9	-47.7	-22.4
Insurance	-31.9	-41.4	-81.2	-43.8	-49.6	-16.5
Software	-47.0	-70.8	-53.9	-27.9	-49.9	-39.6
Information Technology	-31.3	-82.5	-55.0	-31.2	-50.0	-34.3
Hardware	-30.7	-85.8	-54.3	-32.3	-50.8	-29.8
Financials	-39.4	-38.3	-83.4	-43.1	-51.1	-27.0
Diversified Fin	-40.0	-49.9	-83.6	-38.5	-53.0	-26.5
Banks	-46.8	-28.0	-87.5	-49.8	-53.0	-36.7
Semiconductors	-41.6	-84.4	-61.8	-35.1	-55.7	-48.6
Auto	-38.1	-57.4	-85.6	-56.2	-59.3	-68.2

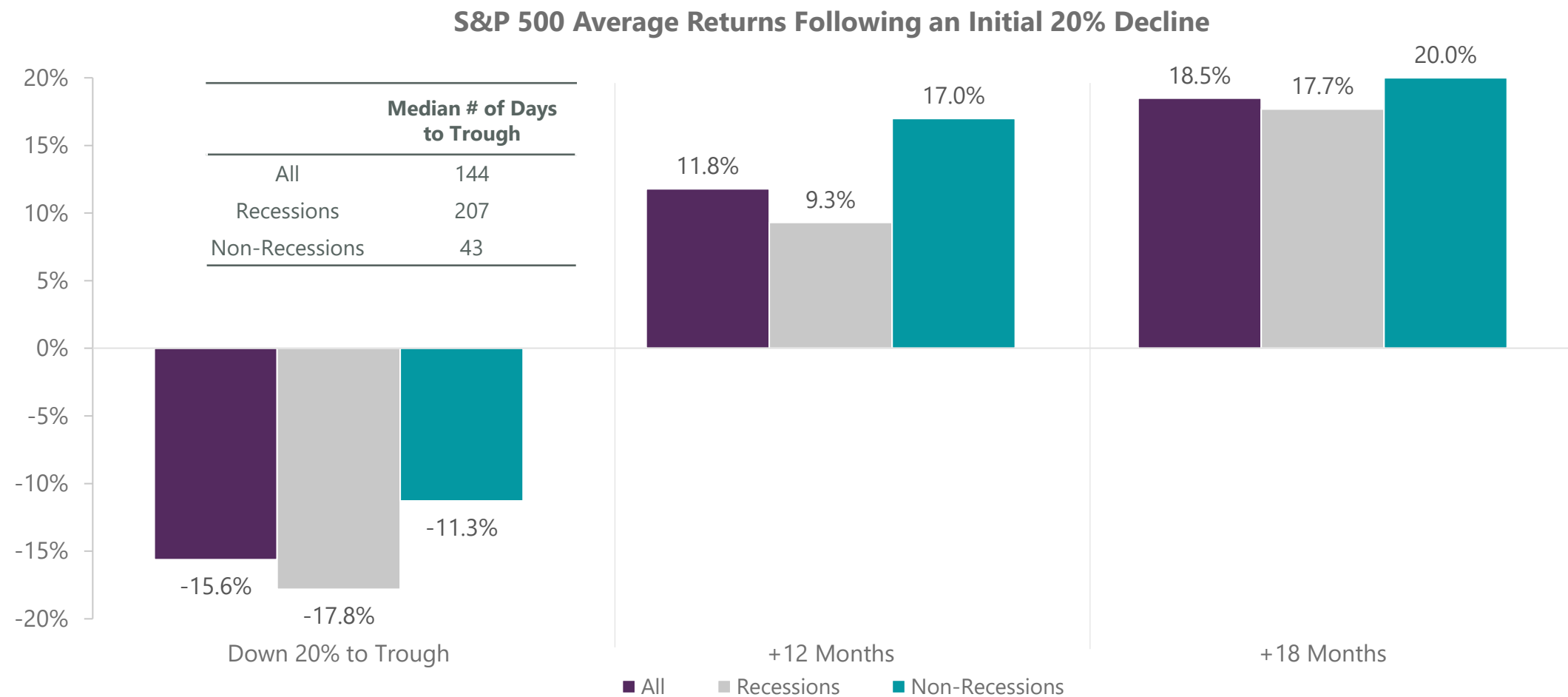
► Traditional defensive sectors such as Staples, Health Care, and Utilities have historically held up better during past recessionary market declines.

Stages of Recessionary Drawdowns

Performance by Quarter of Recessionary Market Decline				
	1st	2nd	3rd	4th
S&P 500	-11.5	-4.7	-14.2	-21.2
Energy	4.3	4.2	-15.9	-15.8
Materials	-9.9	7.5	-15.5	-21.5
Industrials	-7.1	-2.7	-17.1	-26.2
Capital Goods	-8.2	-4.3	-19.3	-26.5
Comm & Prof Svcs	-5.7	2.8	-12.3	-24.0
Transport	-0.3	2.0	-6.7	-23.8
Consumer Discretionary	-17.3	0.9	-13.9	-21.7
Auto	-17.0	-4.8	-25.7	-30.6
Durables & Apparel	-10.4	2.6	-8.2	-23.1
Cons Svcs	-9.4	-2.5	-8.4	-15.5
Retail	-21.6	4.0	-6.9	-19.2
Consumer Staples	7.4	-2.4	-2.0	-10.1
Food Retail	8.8	-2.4	-7.0	-16.6
Food, Bev, & Tob	9.5	-1.7	-2.4	-8.8
H-Hold & Pers Prod	1.6	-5.4	2.9	-10.1
Health Care	3.4	-5.5	-5.1	-13.4
HC Equip & Svcs	5.5	-5.6	-5.9	-10.1
Pharma & Biotech	2.4	-5.0	-4.1	-14.1
Financials	-8.9	-7.1	-17.5	-31.8
Banks	-13.4	-7.9	-9.3	-31.7
Diversified Fin	-11.8	-8.5	-19.7	-33.5
Insurance	2.2	-6.7	-22.2	-28.4
Information Technology	-25.1	-9.5	-18.5	-25.9
Software	-23.3	-2.6	-19.6	-23.4
Hardware	-25.9	-10.7	-18.3	-27.4
Semiconductors	-30.7	-6.2	-16.9	-31.2
Communication Services	-17.1	-9.8	-16.0	-18.8
Telecom	-17.1	-9.8	-16.0	-18.8
Media	-15.9	-1.1	-22.1	-24.3
Utilities	9.8	-2.4	-19.0	-20.9

- ▶ **Market leadership has been relatively consistent through past recessionary market declines.**
- ▶ **Health Care and Consumer Staples stand out as areas of defensive leadership that tend to hold up best through the second half of the downturn.**
- ▶ **Parts of Consumer Discretionary (retail and consumer services) typically start to anticipate the eventual bottom.**
- ▶ **Surprisingly, Utilities have historically held up well early in past recessionary market declines but fade down the stretch.**

Bear Market Achieved, Good Entry Point?



- ▶ **Once a bear market (-20%) has occurred, markets typically continue to sell off with recessions experiencing larger drawdowns than non-recessions.**
- ▶ **However, patient investors have historically been rewarded for staying the course over the following year.**

Biographies

Name and Position		Industry Experience	ClearBridge Tenure	Education, Experience and Professional Designations
	Josh Jamner CFA Vice President, Investment Strategy Analyst	13 years	Joined ClearBridge in 2017	- Member of the CFA Institute - RBC Capital Markets - Assistant Vice President, Associate Strategist – U.S. Equity - Bessemer Trust - Assistant Vice President, Client Portfolio Analyst - BA in Government from Colby College
	Jeffrey Schulze CFA Director, Investment Strategist	17 years	Joined ClearBridge in 2014	- Member of the CFA Institute - Lord Abbett & Co., LLC – Portfolio Specialist - BS in Finance from Rutgers University

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