



Economic & Market Outlook: It All Depends On Your Time Horizon

Linda A. Duessel, CFA®, CPA, CFP® Senior Equity Strategist Senior Vice President

January 2023

Federated Hermes Forecast

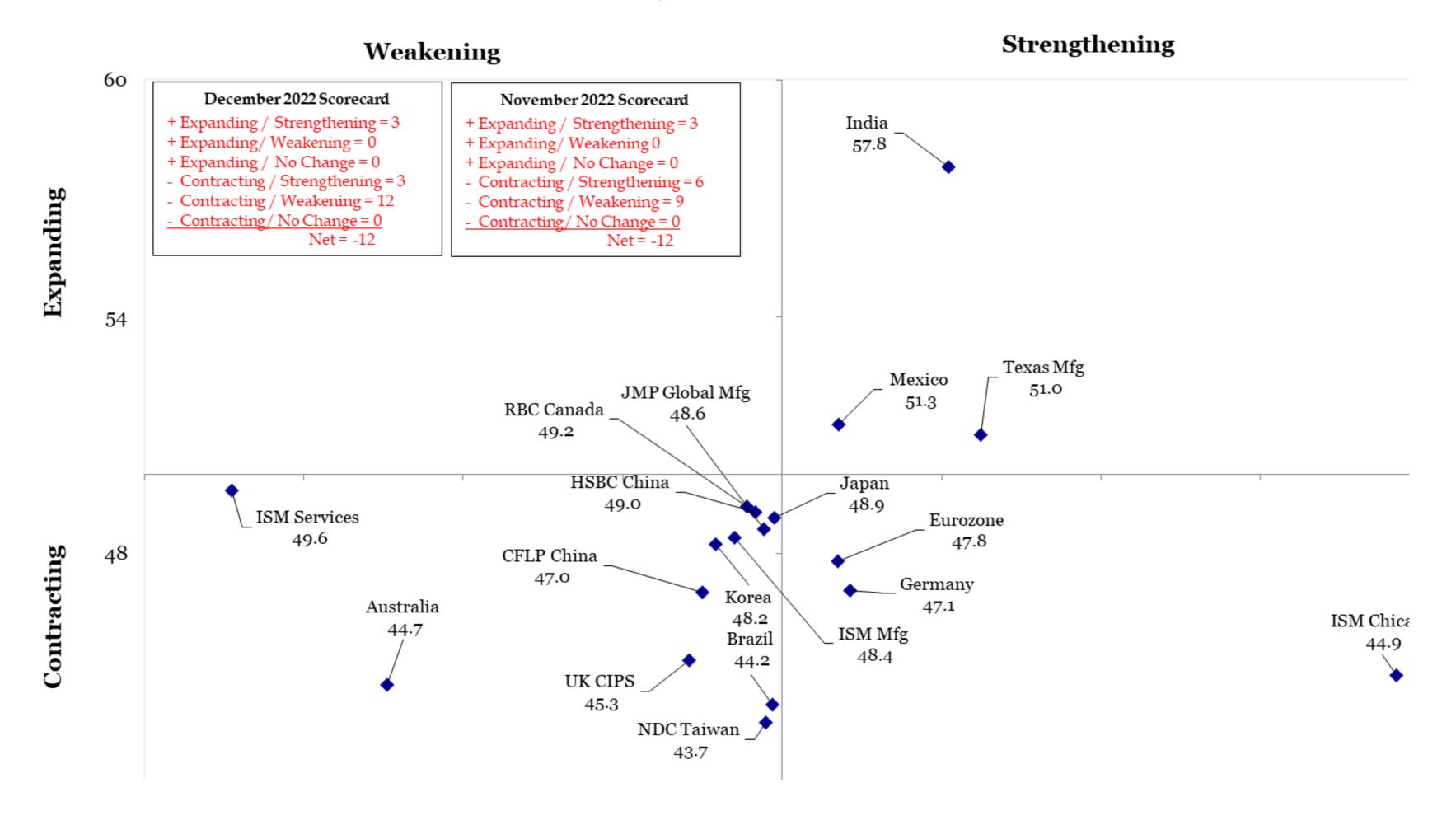
Views are as of January 13, 2023

	2016A	2017A	2018A	2019A	2020A	2021A	2022E	2023E	2024E
Real GDP	1.70%	2.30%	3.00%	2.20%	(3.50)%	5.90%	2.00%	0.60%	N/A
Core CPI	2.20%	1.80%	2.20%	2.30%	1.60%	5.50%	5.70%	3.70%	2.50%
Core PCE	1.80%	1.60%	2.00%	1.60%	1.50%	4.90%	4.70%	3.30%	2.00%
Benchmark 10yr Treasury Yield	2.50%	2.40%	2.68%	1.92%	0.92%	1.51%	3.75%	3.25%	3.00%
Fed Funds Rate (upper band)	0.75%	1.50%	2.50%	1.75%	0.25%	0.25%	4.50%	5.25%	4.00%
S&P 500 EPS	\$119	\$133	\$163	\$167	\$137	\$209	\$220	\$200	\$240
Target Forward P/E	16.8x	16.4x	15.0x	23.6x	18.0x	21.7x	19.5x	17.9x	N/A
S&P 500 Target Price PCE - Personal Consumption Ex	2,239	2,674	2,507	3,231	3,756	4,766	3,900	4,300	N/A

Federated Hermes

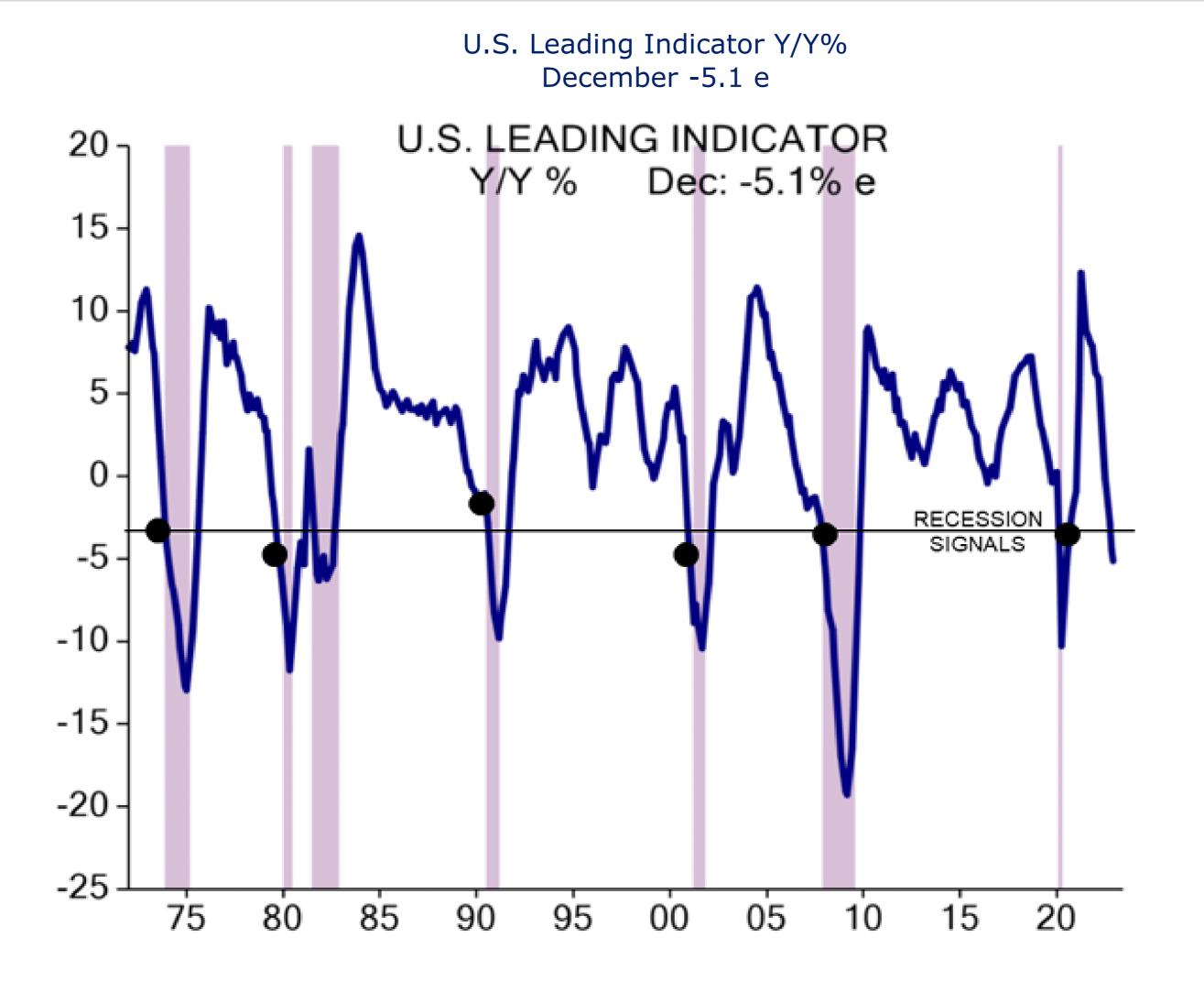
Synchronous Global Recession. Can The U.S. Escape It?

Global Economy Scorecard as of December 2022



Federated Hermes

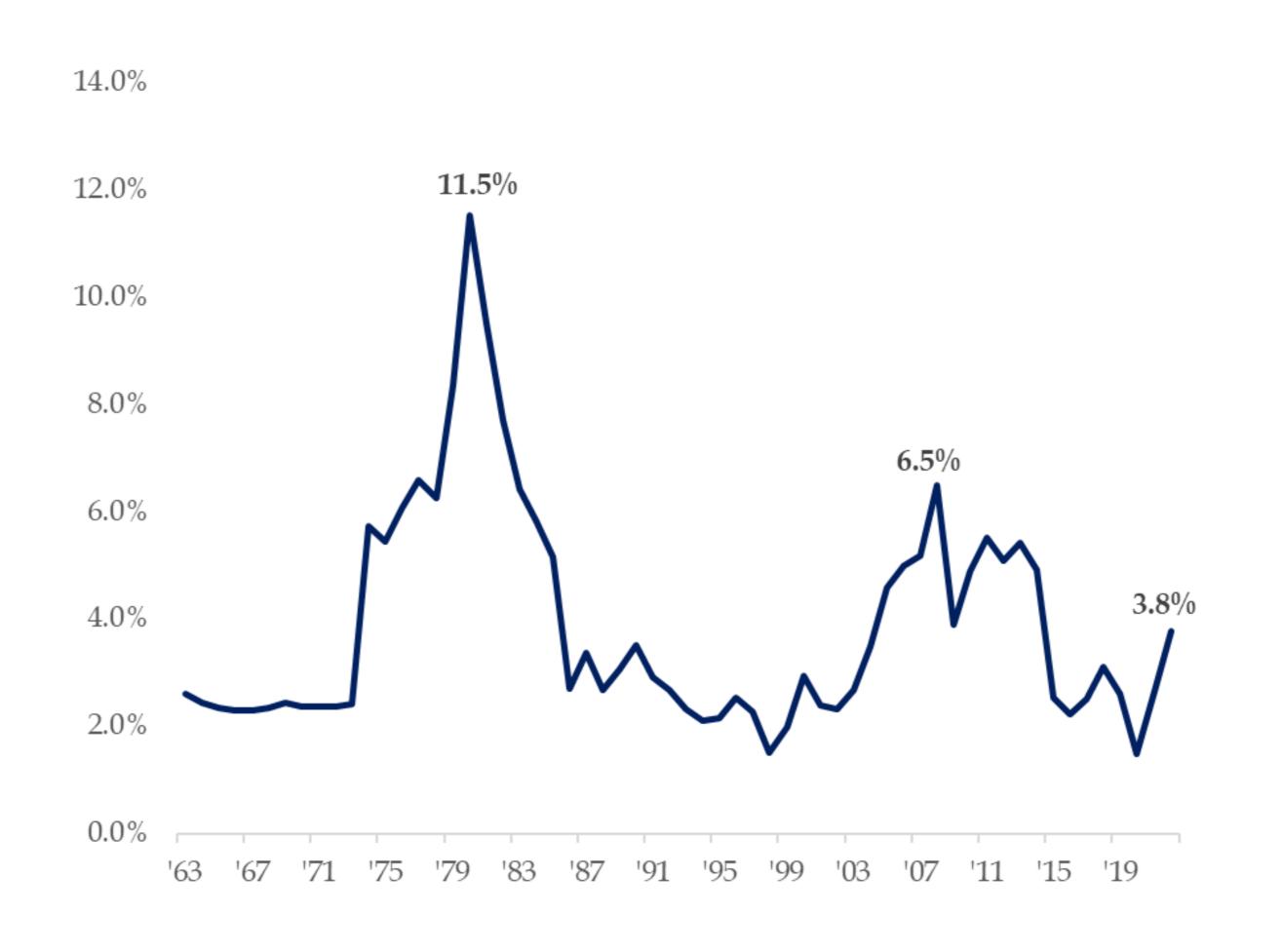
Probably Not.



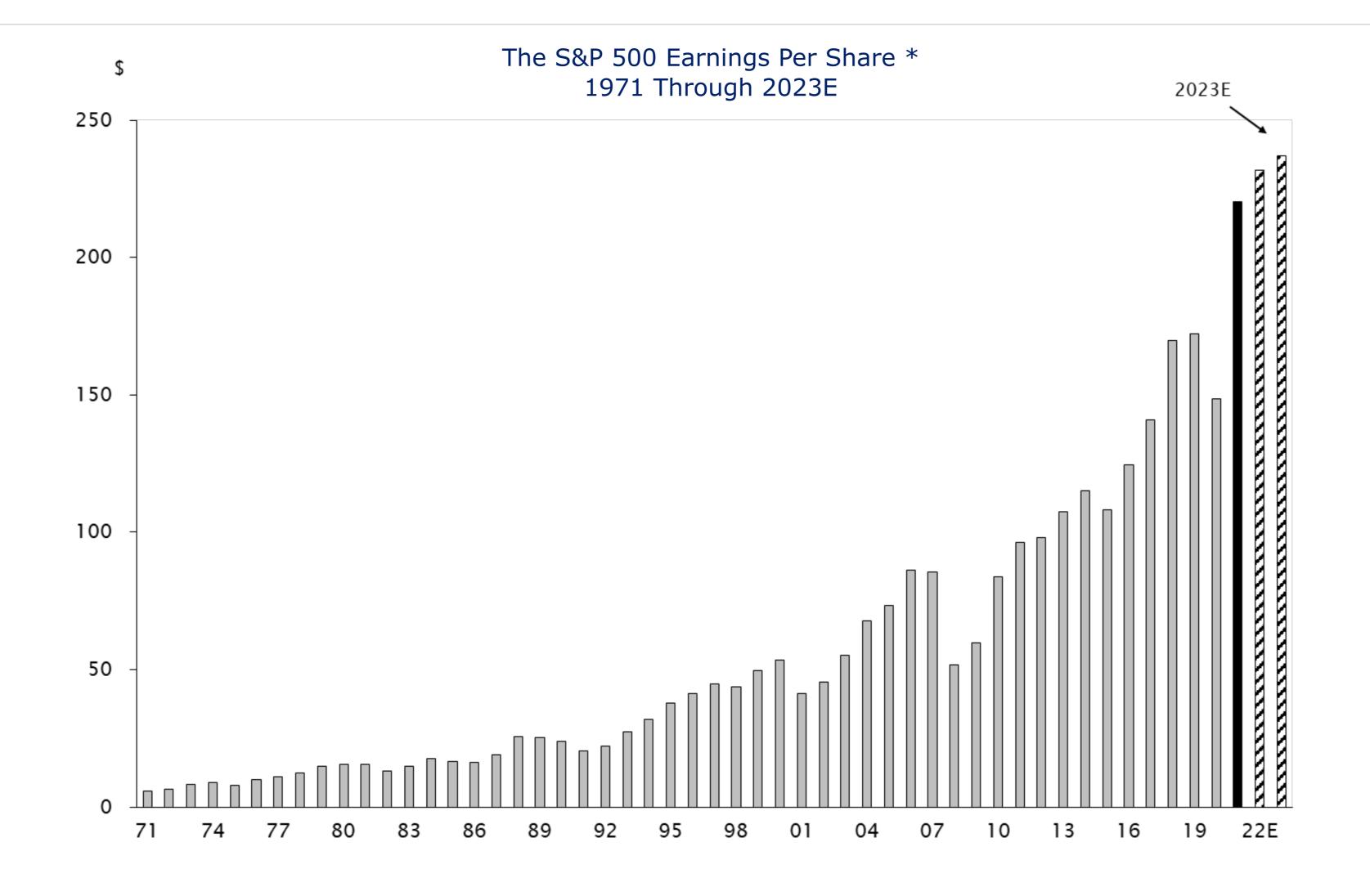
Source: Piper Sandler. Data as of December 23, 2022 Note: Shaded bars indicate recessions

1970s Redux? Not As Vulnerable To Energy Costs Now

Estimated Energy Expenditure As A Percent of Disposable Income

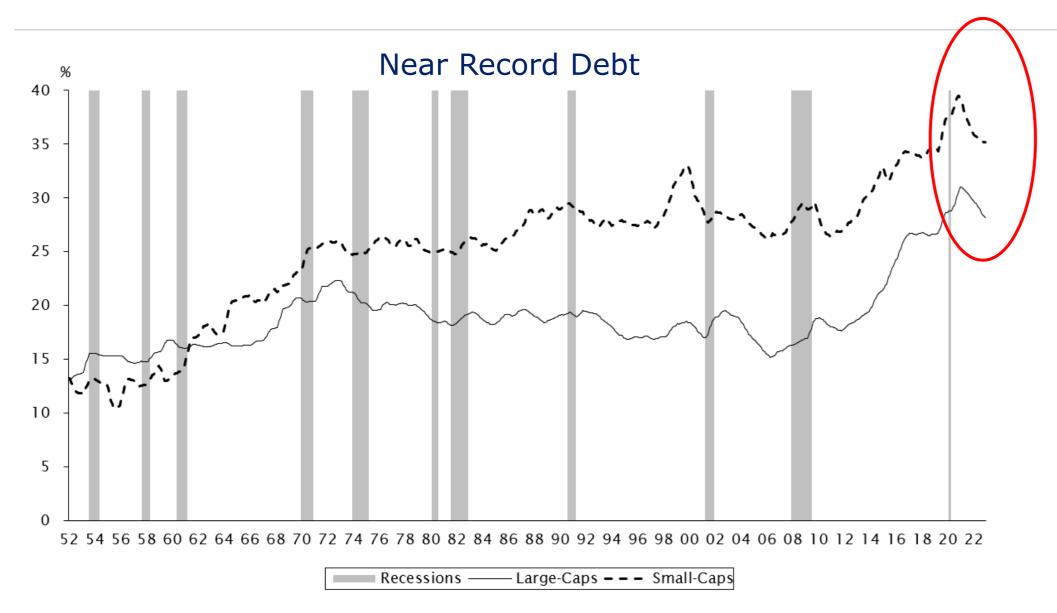


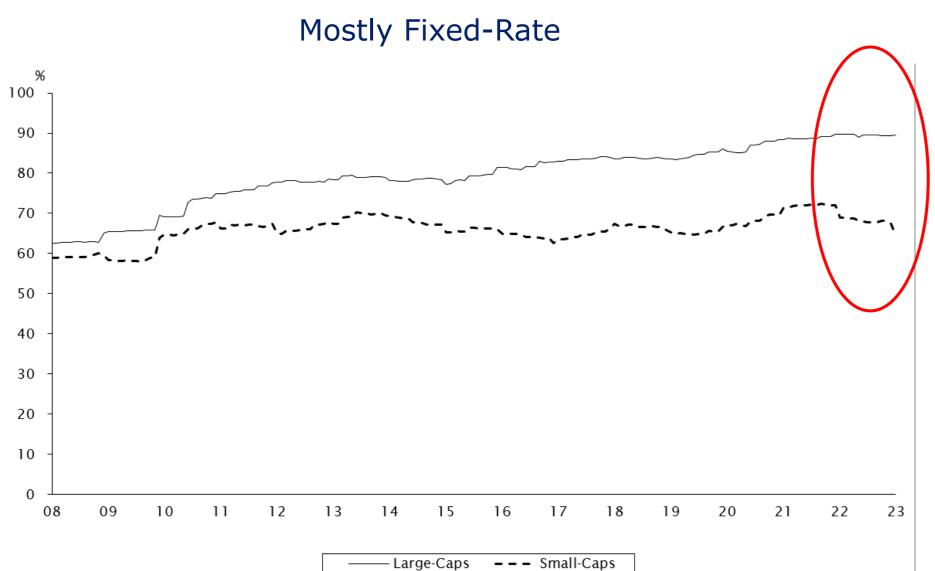
The Earnings Have Been Extraordinary



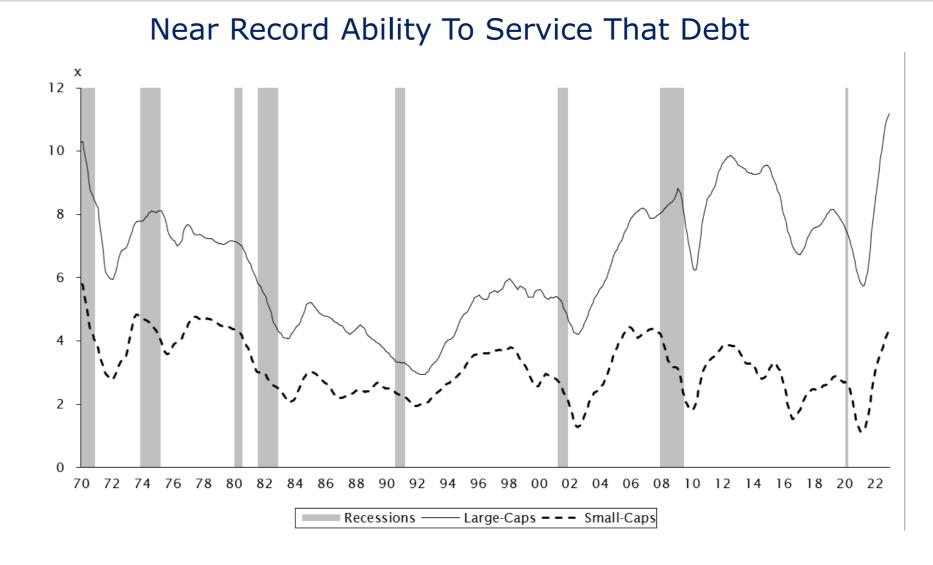
Federated Hermes

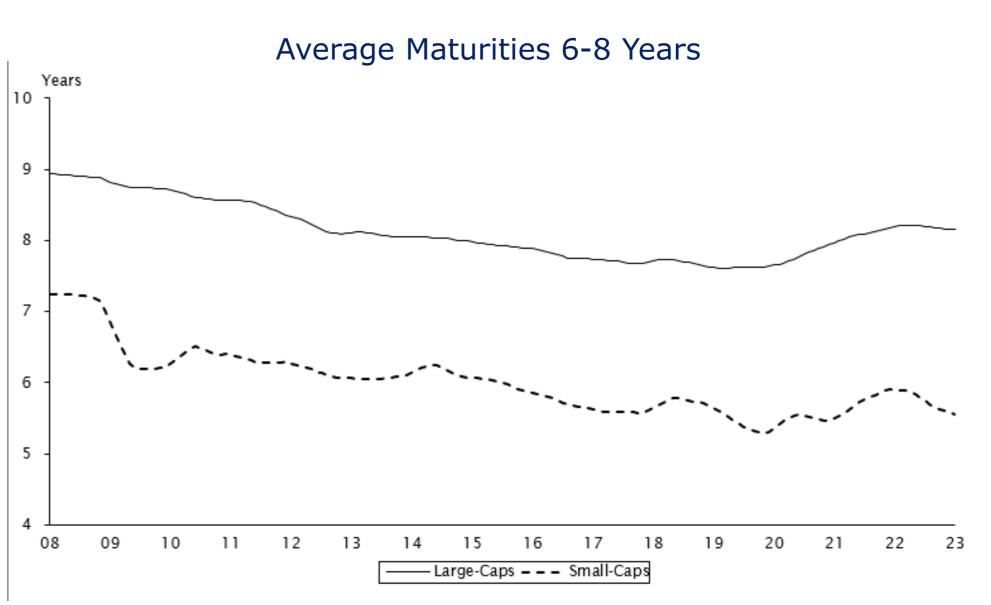
Corporate Debt Is Manageable





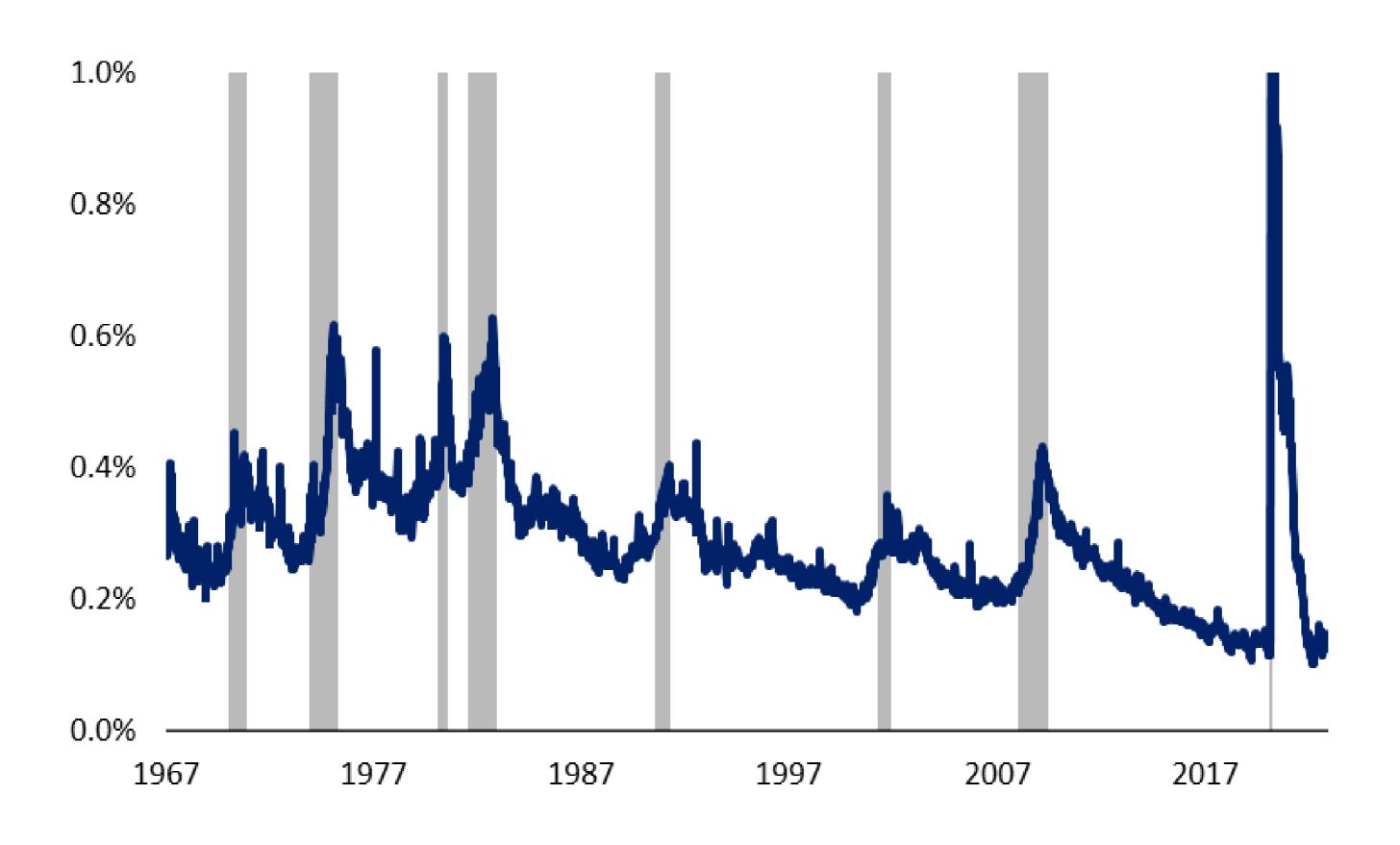
Source: Empirical Research Partners. January 12,2023. Note: Shaded bars indicate recessions





1970s Redux? Employees Quitting Their Jobs At Highest Rate Since The Late 1970s

Initial Jobless Claims As A Share of The Labor Force

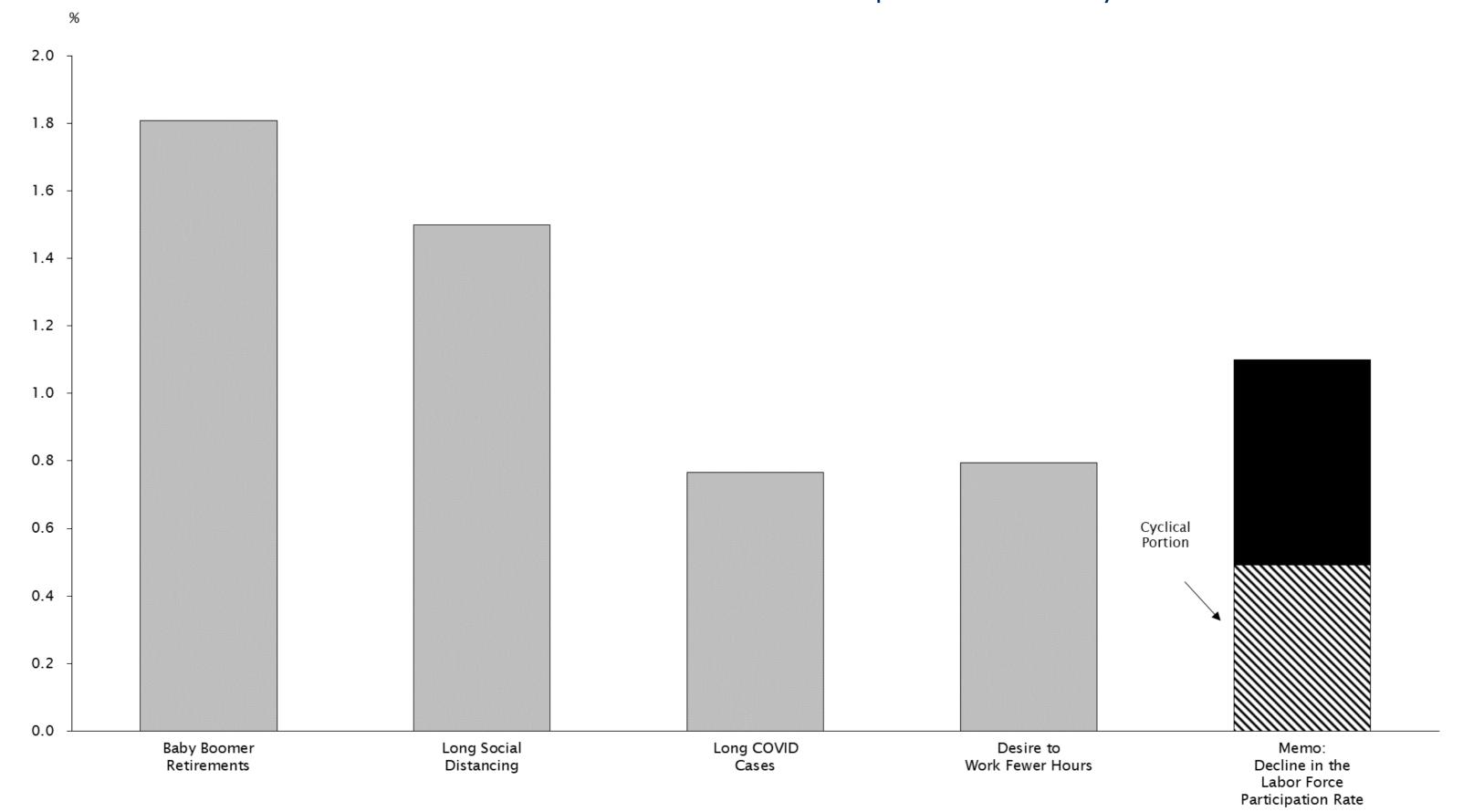


Source: Department of Labor, Bureau of Labor Statistics, Haver Analytics, BofA Global Research. January 6, 2023

Note: Shaded bars indicate recessions

Where Are All The Workers?

Baby Boomer Retirements, Long Social Distancing, Long COVID and Working Hours Desired As a Share of The Labor Force Late-2022 Compared to February 2020



Source: Bureau of Labor Statistics, Brookings Institute, Federal Reserve Bank of Minneapolis, Federal Reserve Bank of Kansas City, Barrero, J. M., Bloom, N. and Steven J. Davis, 2022. "Long Social Distancing," Working Paper; Faberman R.J., Mueller, A.I. and Aysegul Sahin, 2022. Has the Willingness to Work Fallen During the COVID Pandemic?" Working Paper, Survey of Consumer Expectations, Empirical Research Partners Analysis.

Note: The number comes from taking the change in the labor force participation rate and applying it to the population. Data as of December 31, 2022

Federated Hermes

Job Market Tight As A Drum...

Top and Bottom Half of the Income Distribution Median Wage Growth Rates 1997 Through Mid-December 2022

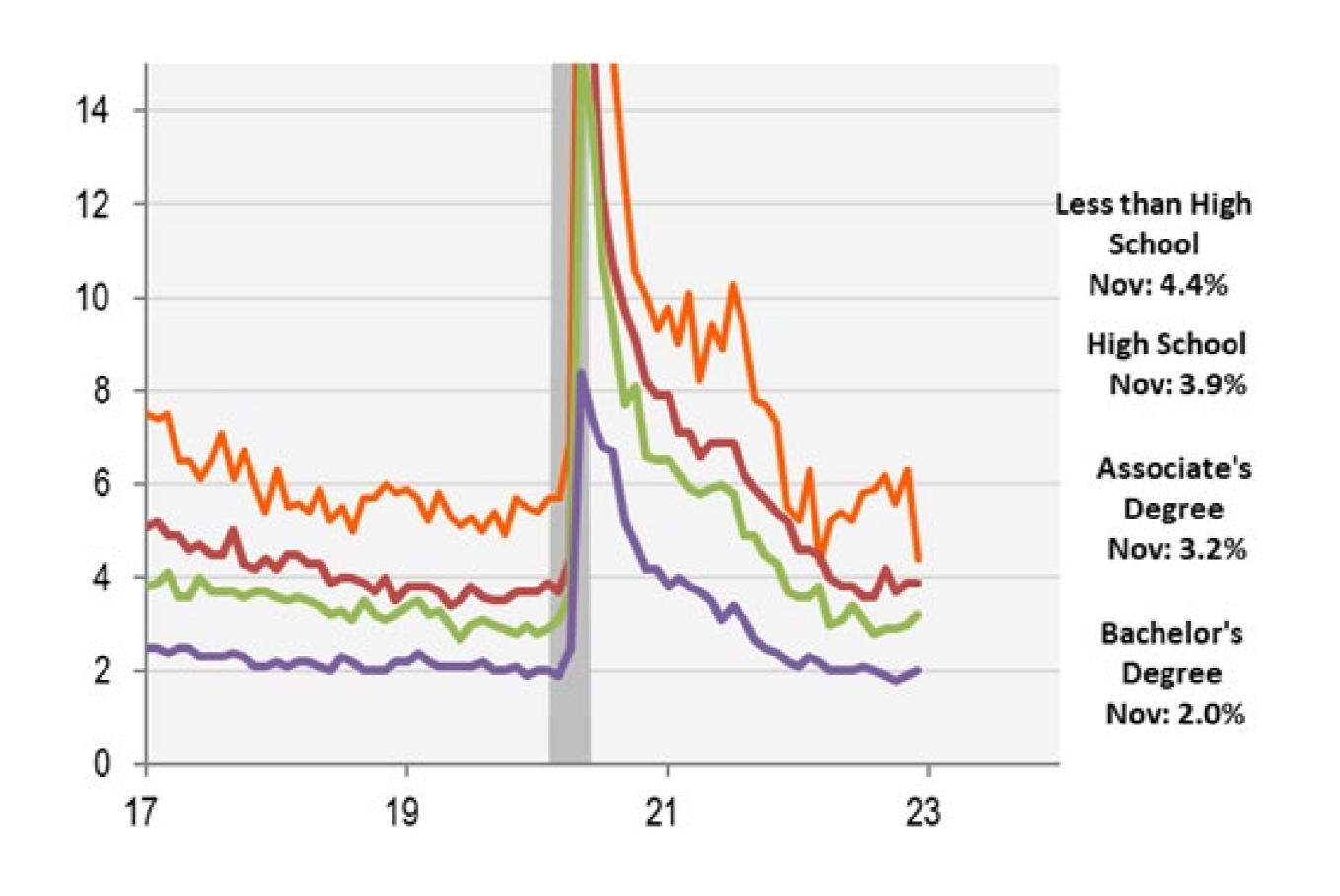


Source: Federal Reserve Bank of Atlanta, National Bureau of Economic Research. Empirical Research Partners. Data as of December 16, 2022 Note: Shaded bars indicate recessions

Rederated Hermes

...Across All Skill-Set Levels

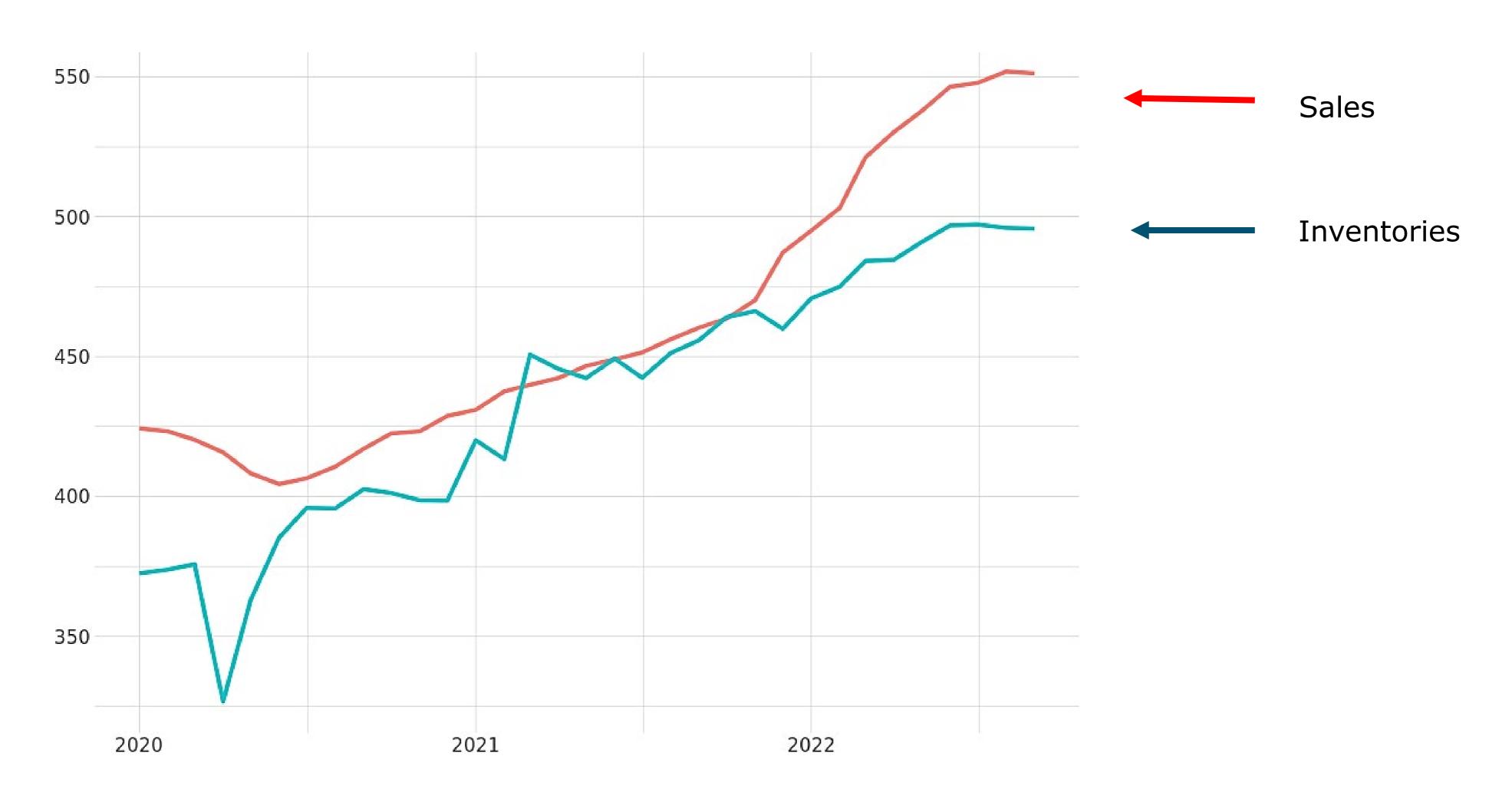
U.S. Unemployment Rate By Education



Source: Piper Sandler. Data as of December 3, 2022

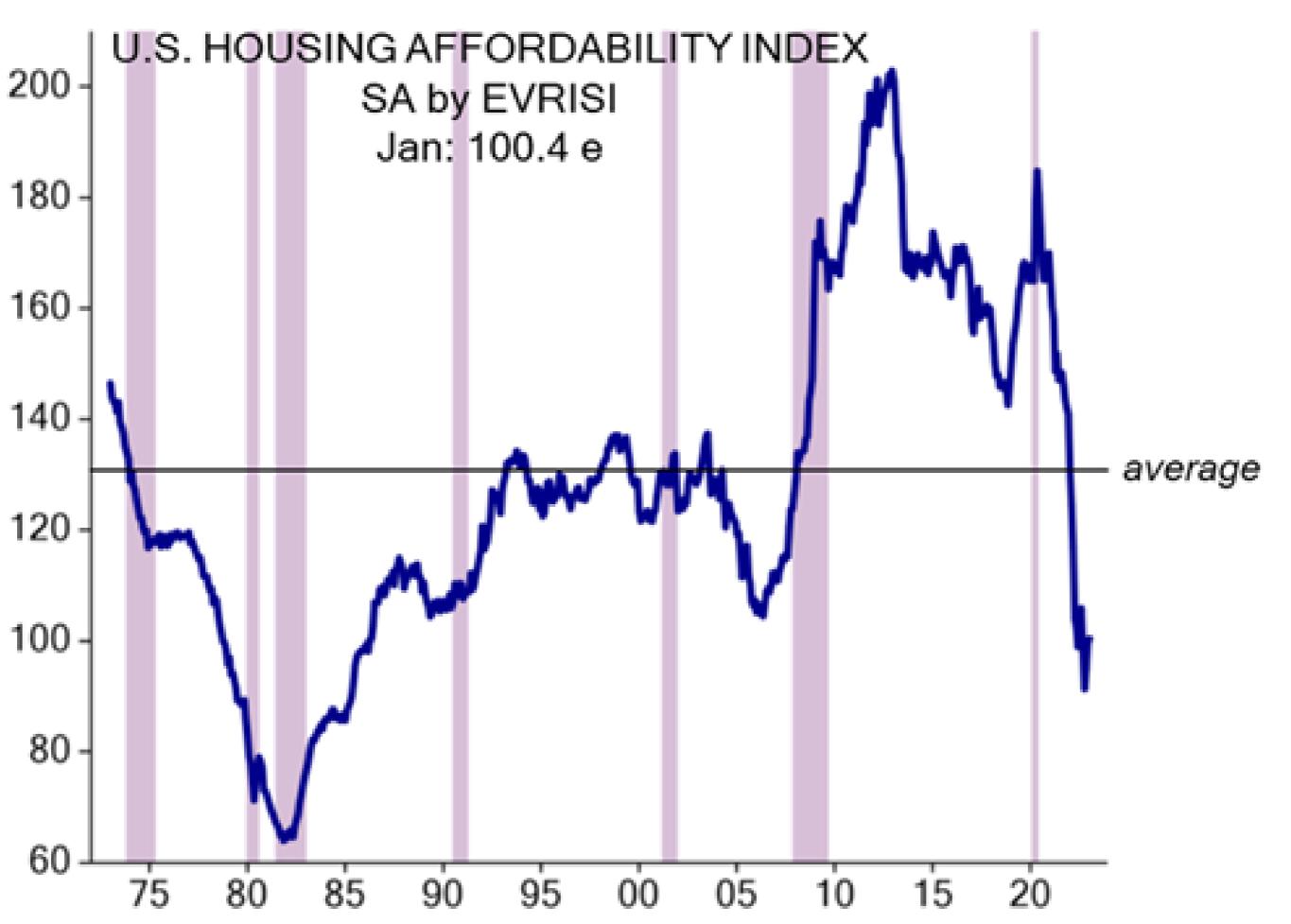
The Spending Spree Is Over Just As Inventories Are Surging

Retail Inventories Less Autos vs. Retail Sales Less Autos & Gas

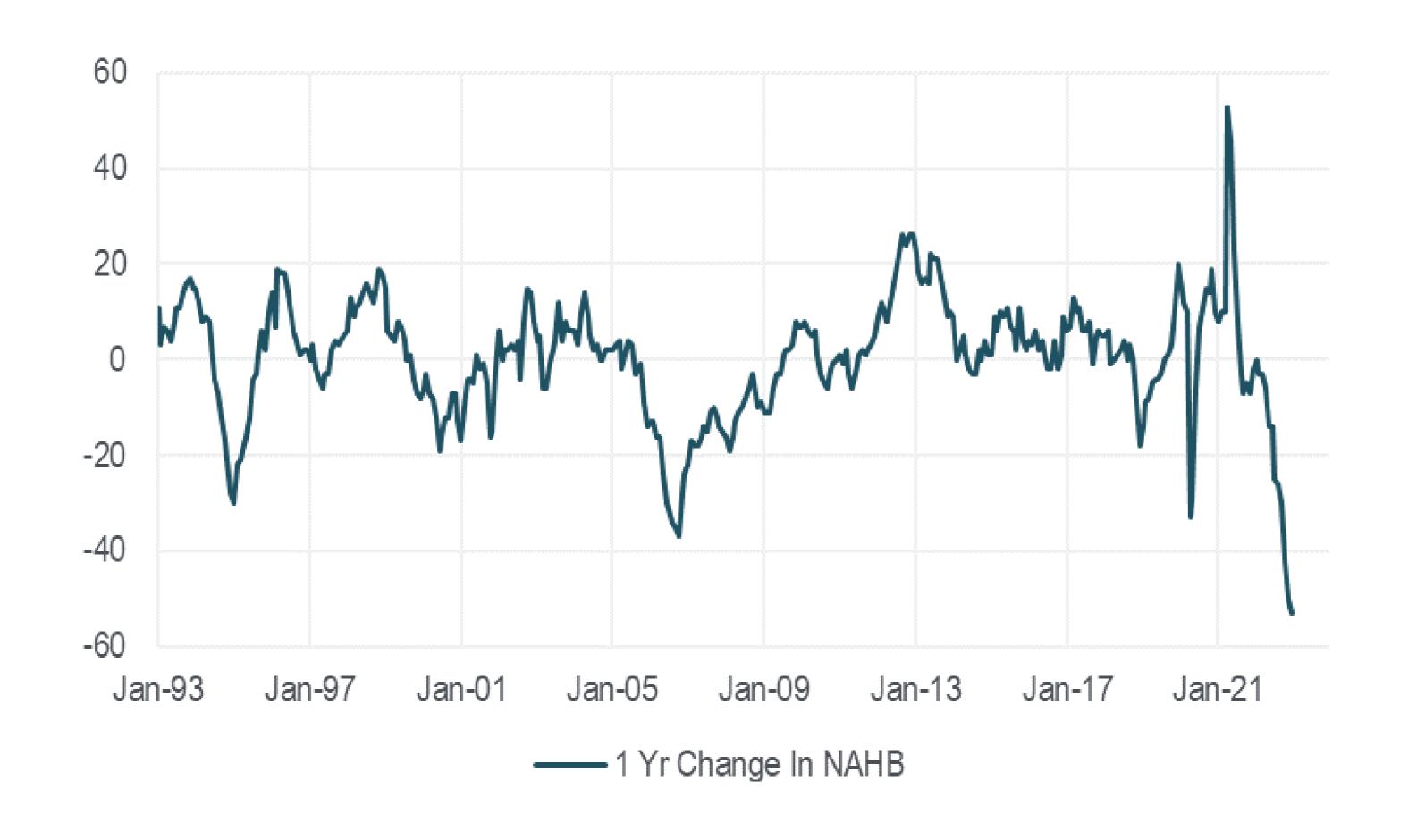


First-Time Home Buyers Priced Out



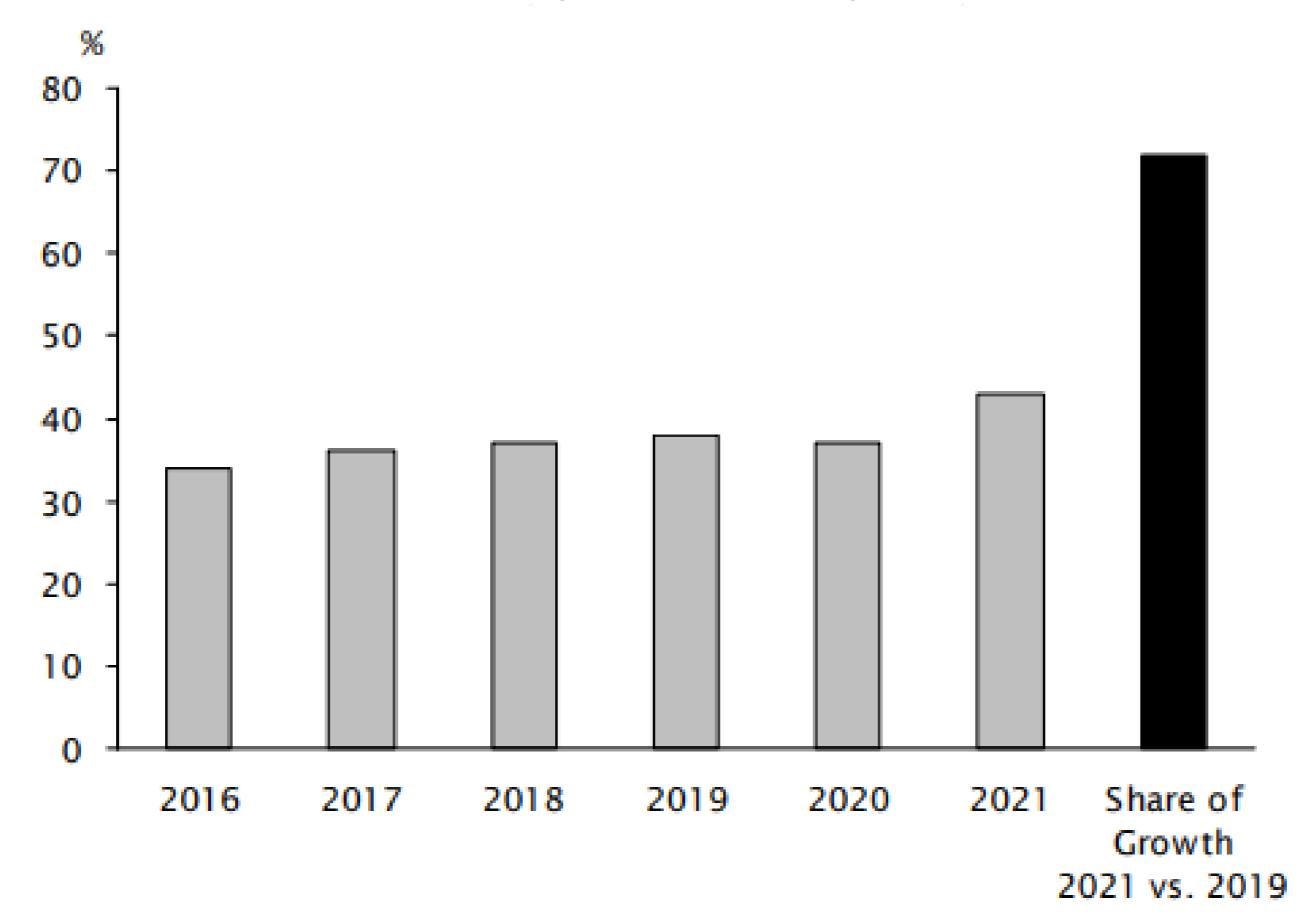


Biggest Year Over Year Drop In The NAHB* In History



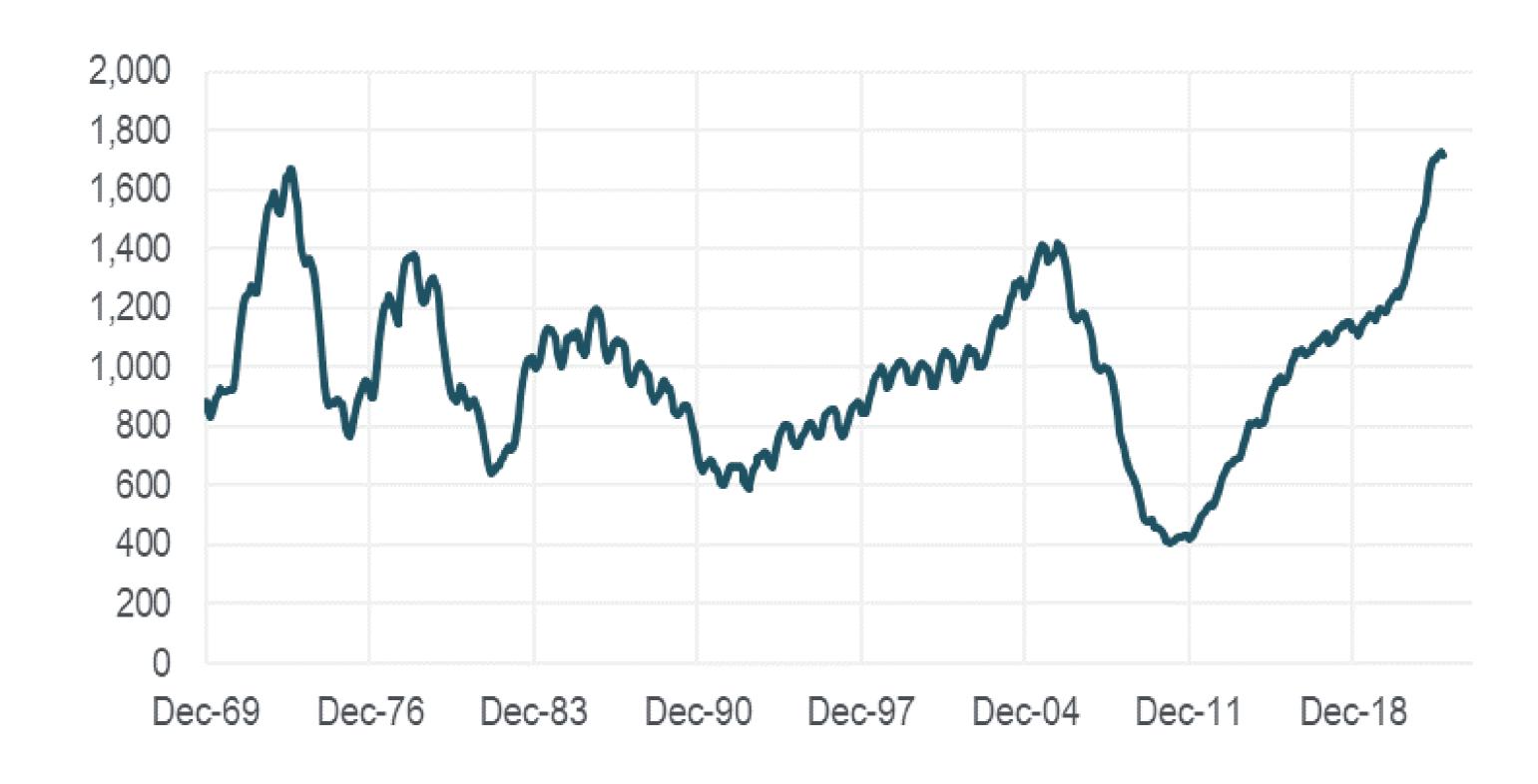
Plenty Of Demand For Homes Down The Road

Millennials* Share of Home Purchases Years Ending June: 2016 Through 2021



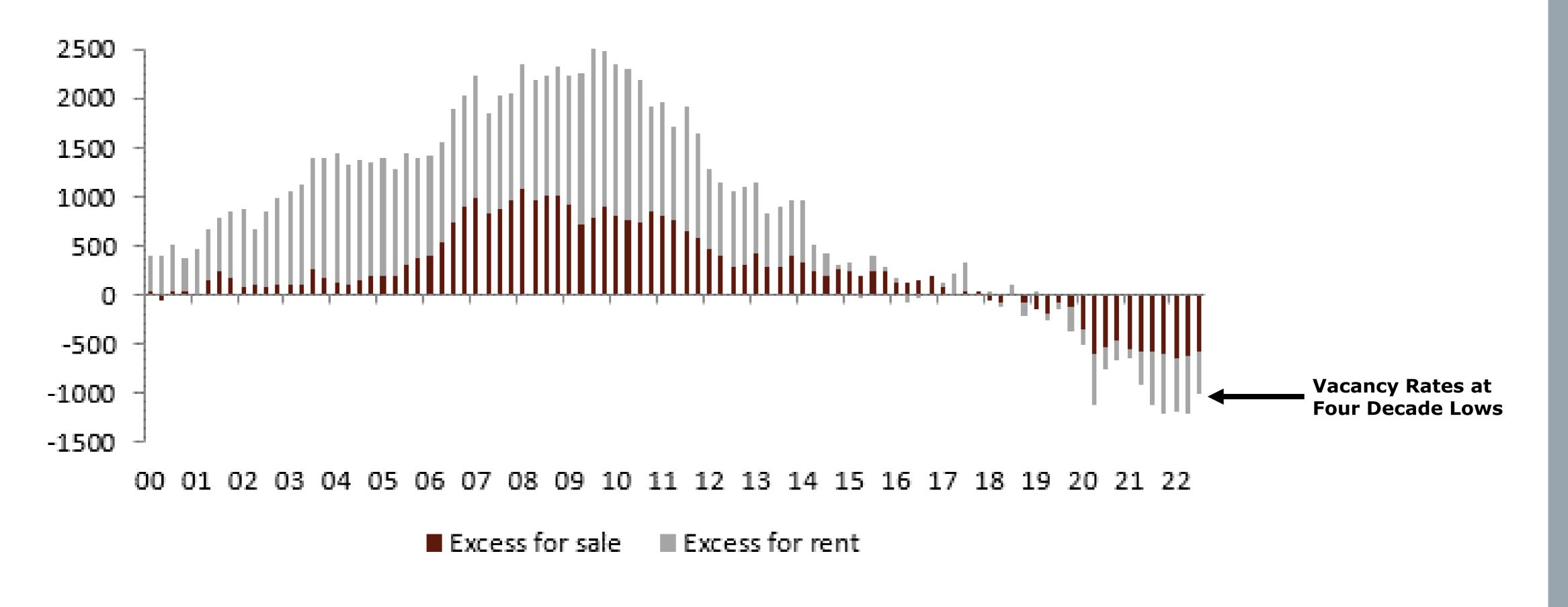
Home Builders Still Working On A Big Backlog

New Privately-Owned Housing Units Under Construction: Total Units*



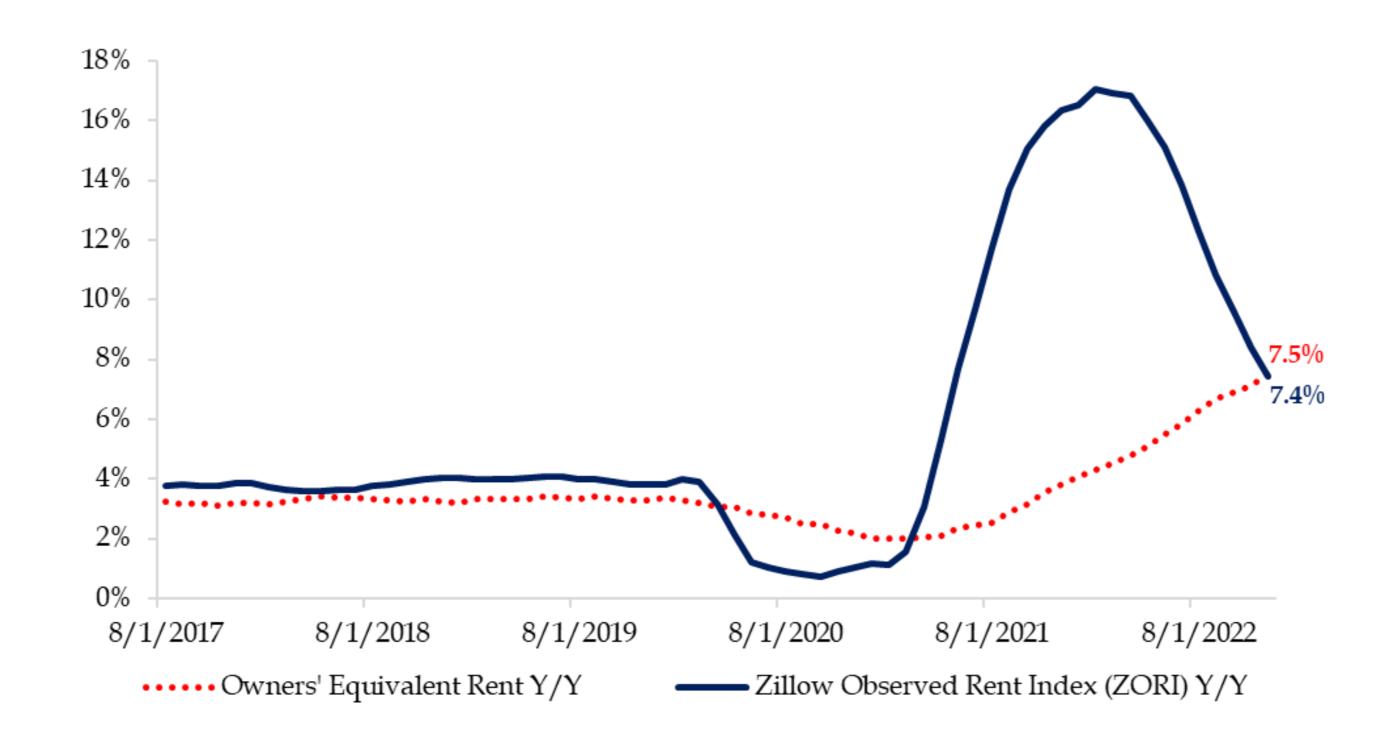
US Housing Remains In An Excess Demand Position

Excess Housing Units (000s)



Housing Is Reflected In CPI With a Lag

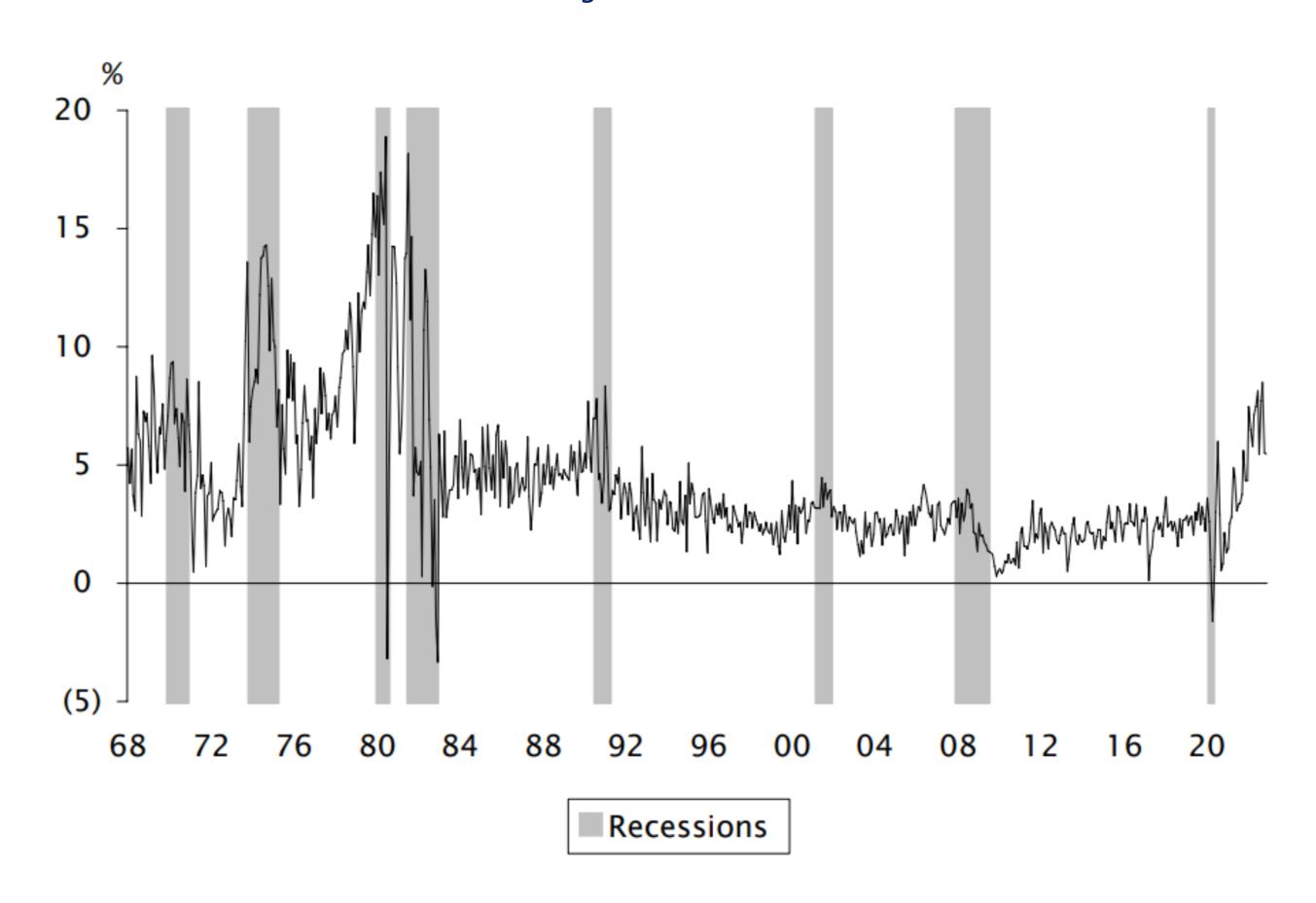
The Zillow Rent Index and the Owner's Equivalent Rent Index* Year over Year Changes 2017 Through December 2022



Federated Hermes

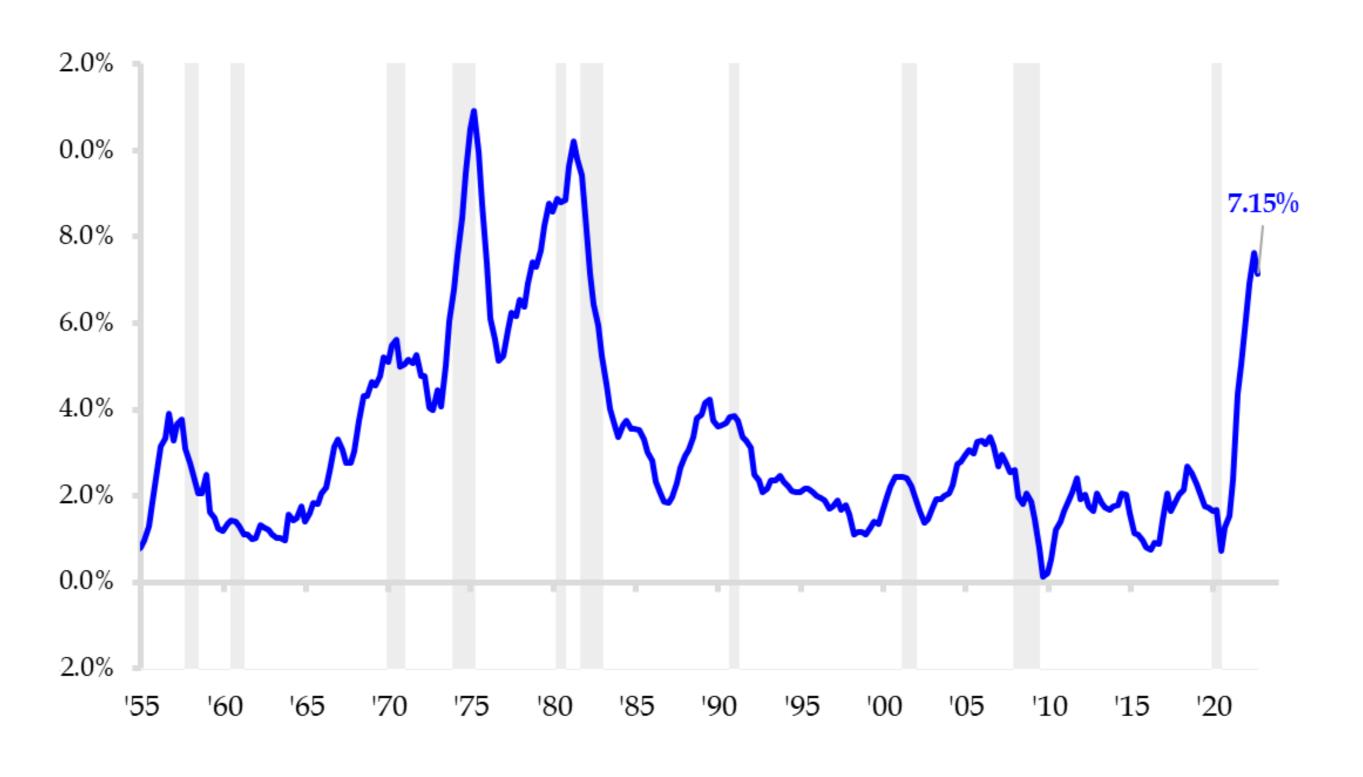
1970's Redux? Inflation Not "Transitory"

Sticky-Price CPI
Month over Month Annualized Changes
1968 Through November 2022



1970s Redux? Inflation "Peaked" Three Times In The '70s



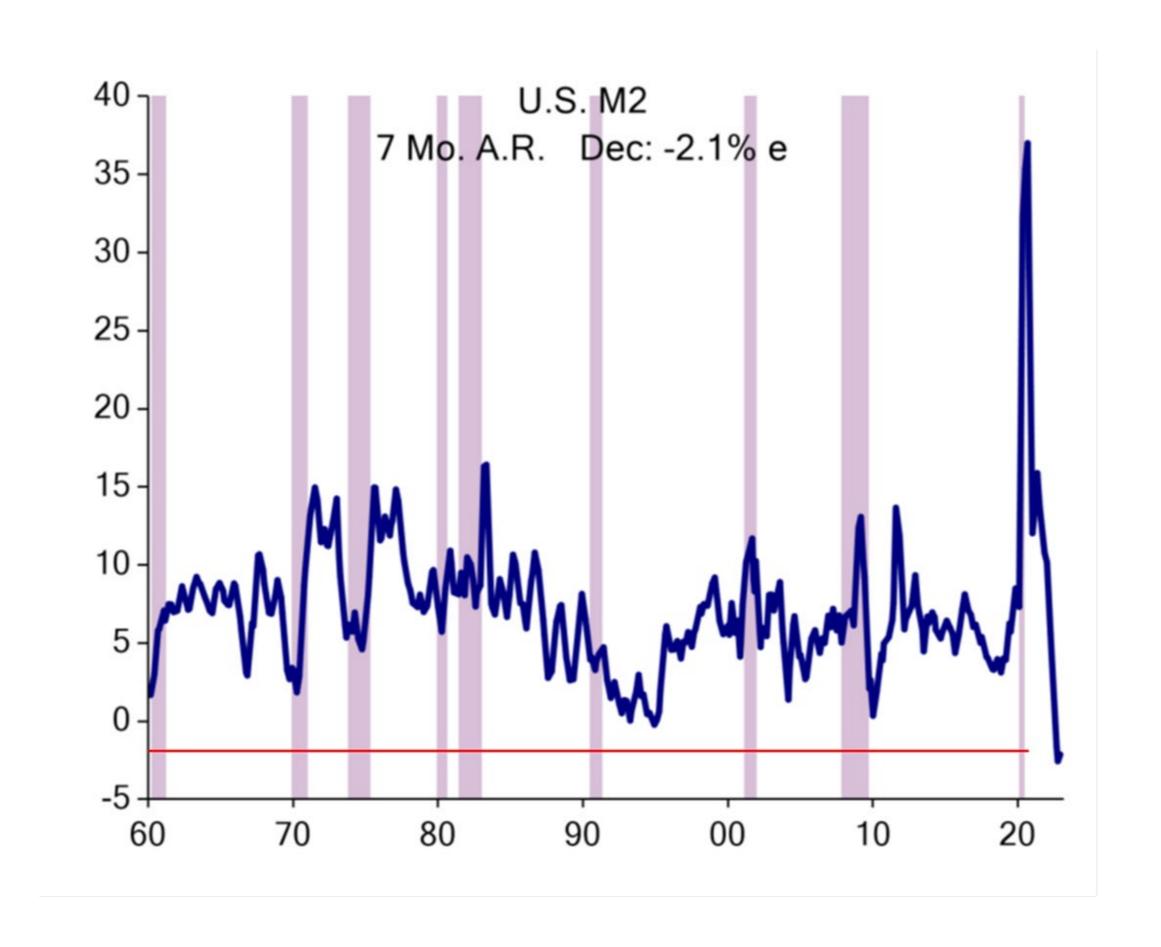


— Implicit Price Deflator, GDP, SA, Index [c.o.p. 1 year]

Source: Strategas, BEA, Macrobond. Data as of December 31, 2022 Note: Shaded bars indicate recessions 20

Negative Money Growth Is Rare, And QT* Is A Mystery

Annual M2 Money-Supply Growth



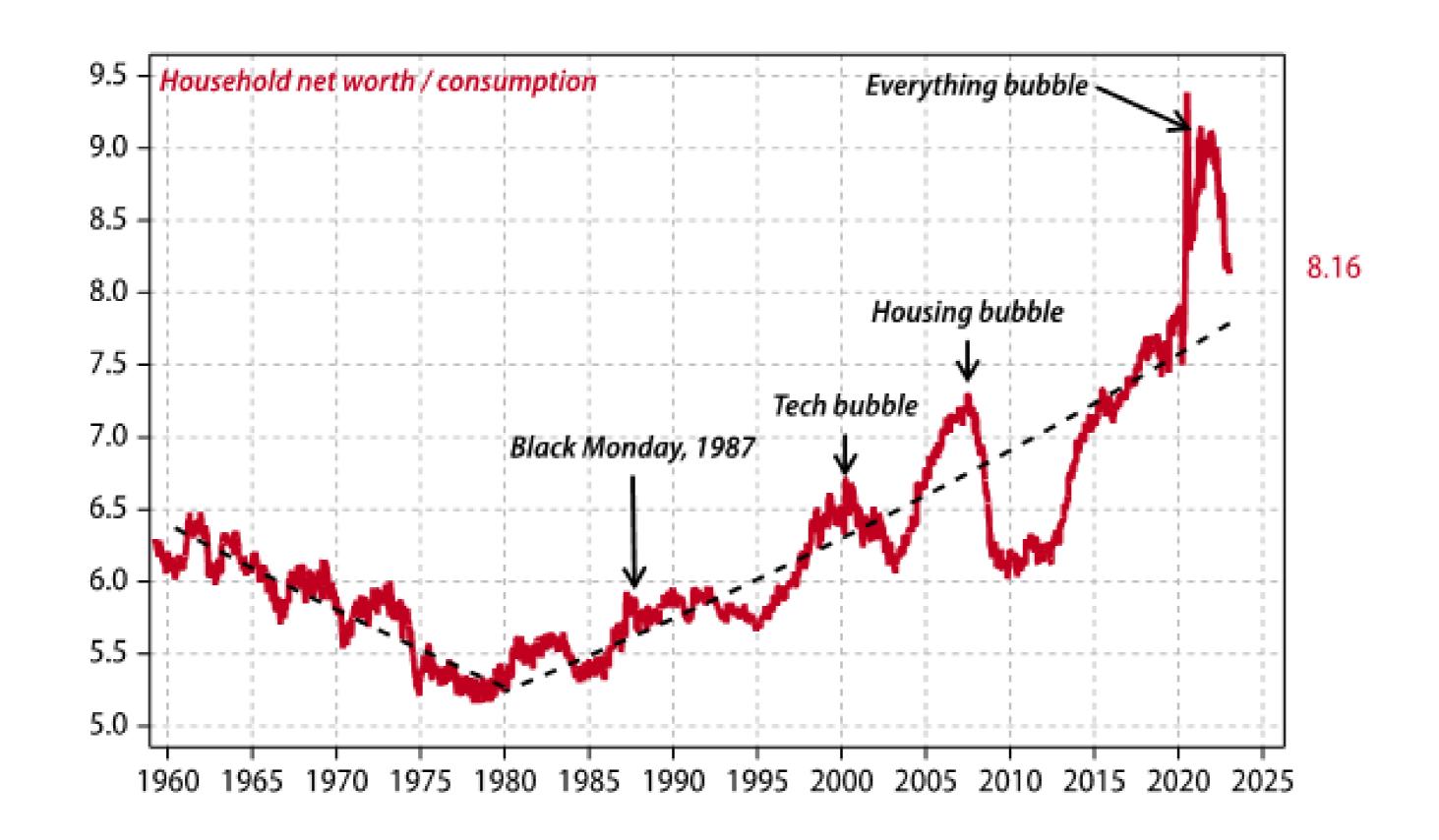
Source: Evercore ISI Research. Data as of December 31, 2022

*QT=Quantitative Tightening

Note: Shaded bars indicate recessions

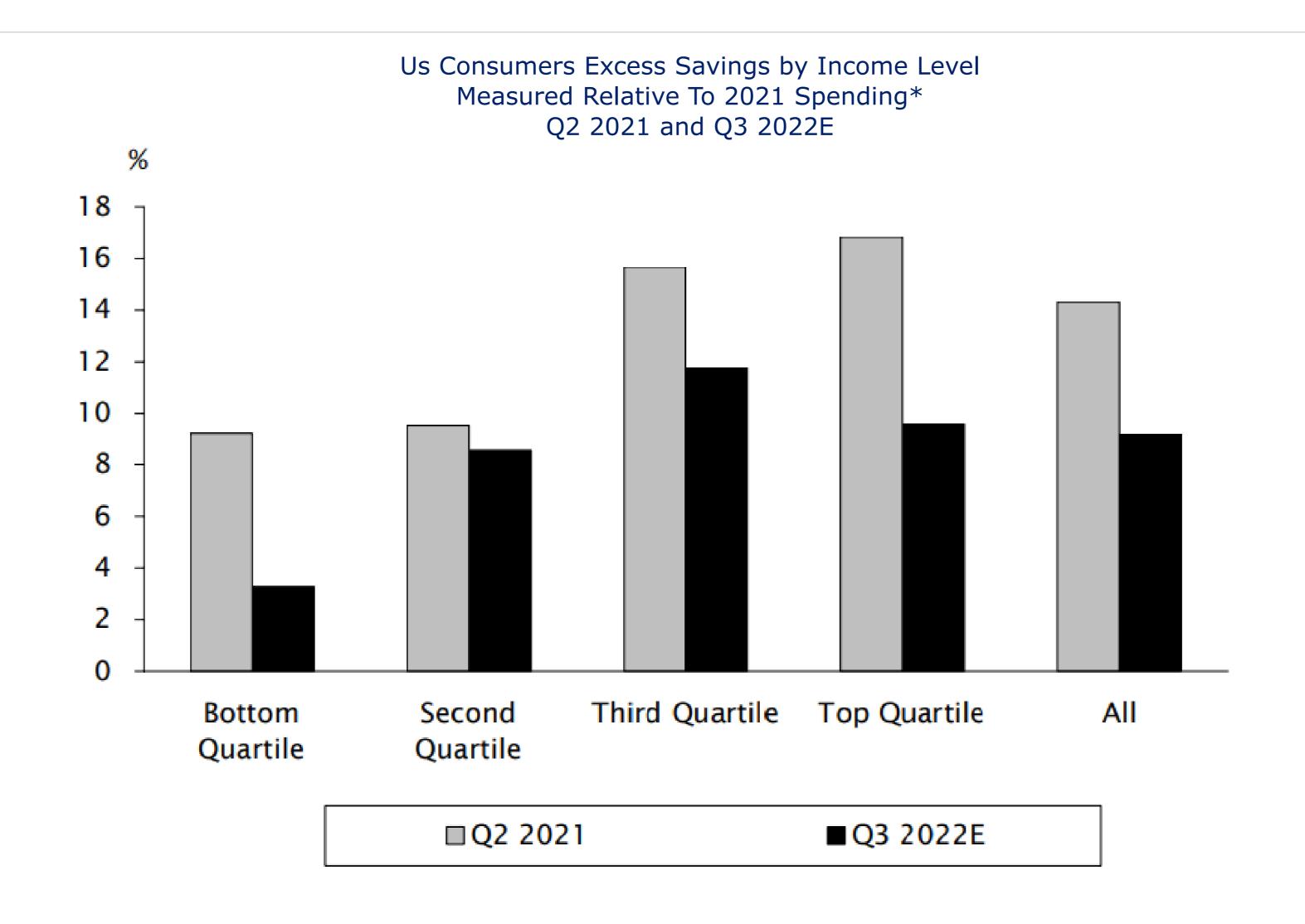
Consumers In Great Shape—Particularly Those Ages 55+

US Household Net Worth, In Years Of Consumption*



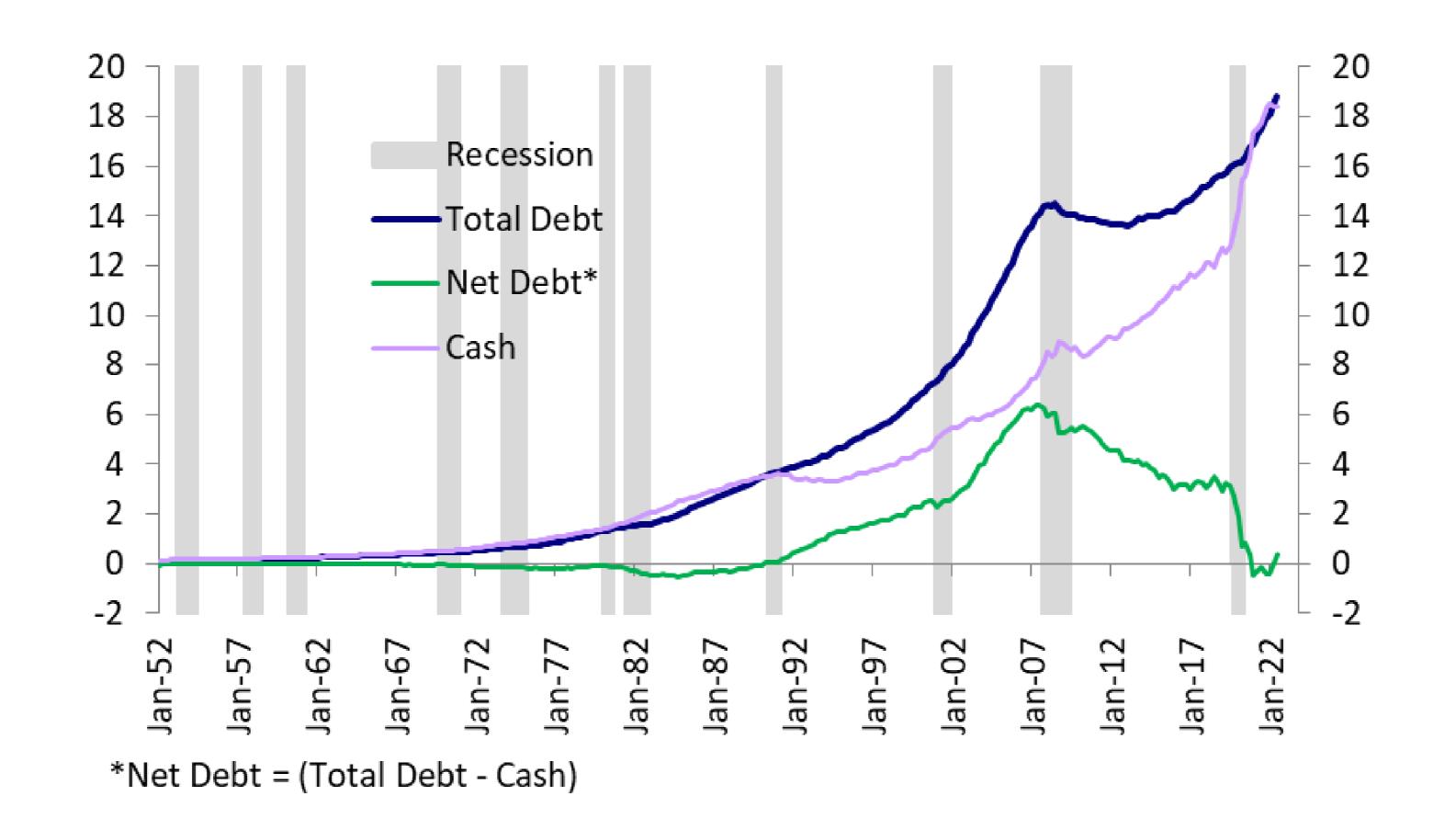
Federated Hermes

Excess Savings Across All Income Cohorts



US Household Cash Exceeds Debt For The First Time In Three Decades

Households Debt And Cash (\$tn)



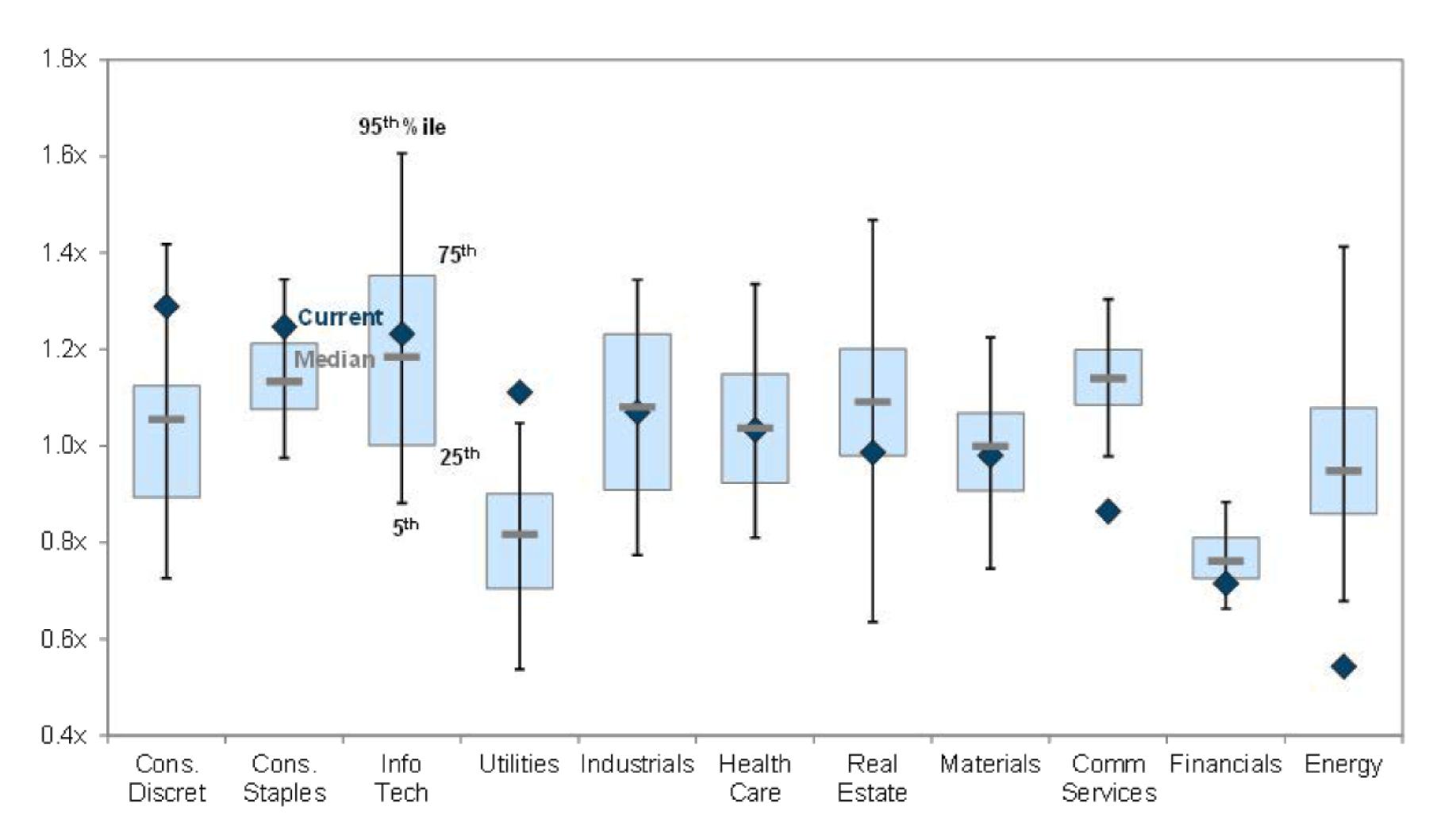
Source: Deutsche Bank Research. January 12, 2023

Data as of September 30, 2022

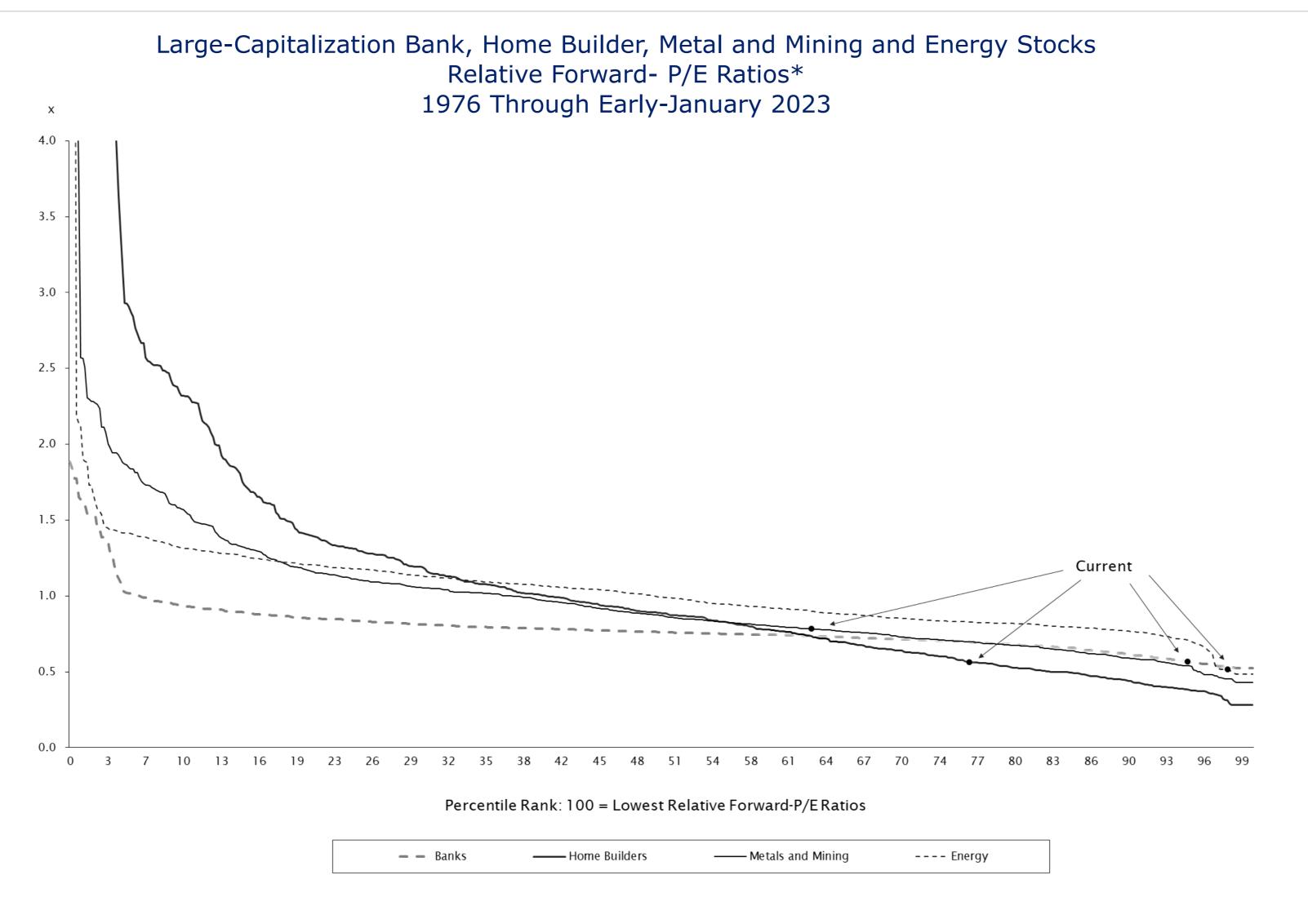
Note: Shaded bars indicate recessions. Net Debt=(Total Debt-Cash)

Inflation Hedge Equities Relatively Inexpensive

Distribution Of Sector FY2 P/E Ratios Relative To S&P 500 During Last 30 Years



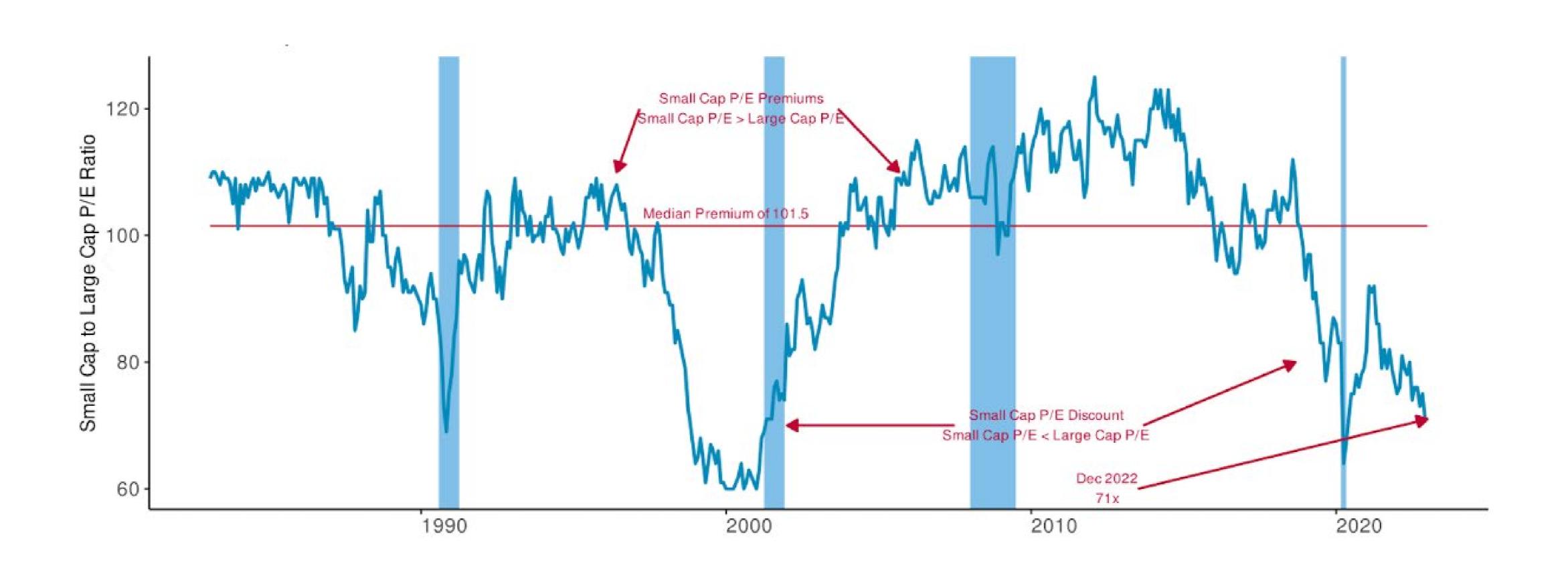
Pockets Of Value Beginning To Emerge



Rederated Hermes

Small Cap Stocks Relatively Inexpensive

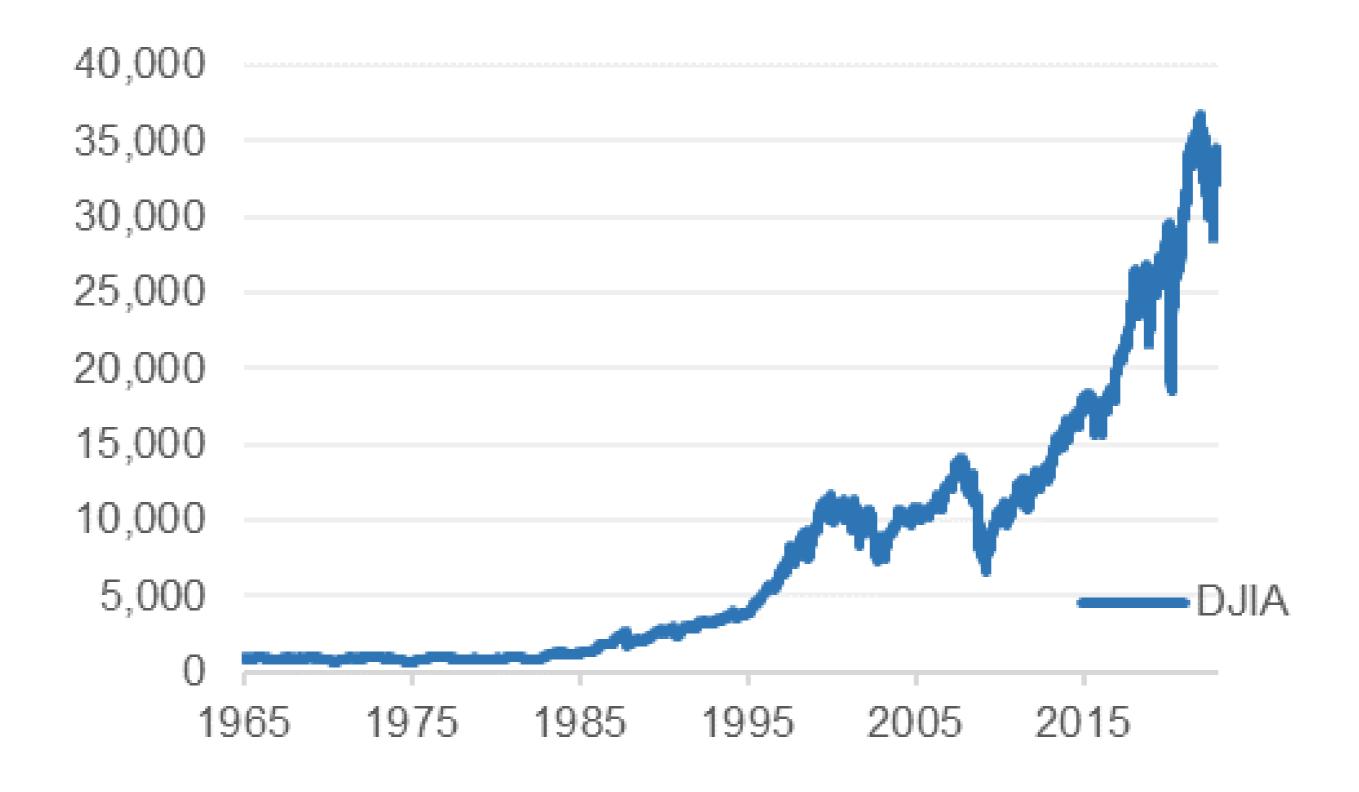
Small Cap to Large Cap Historical P/E Ratio (x100)



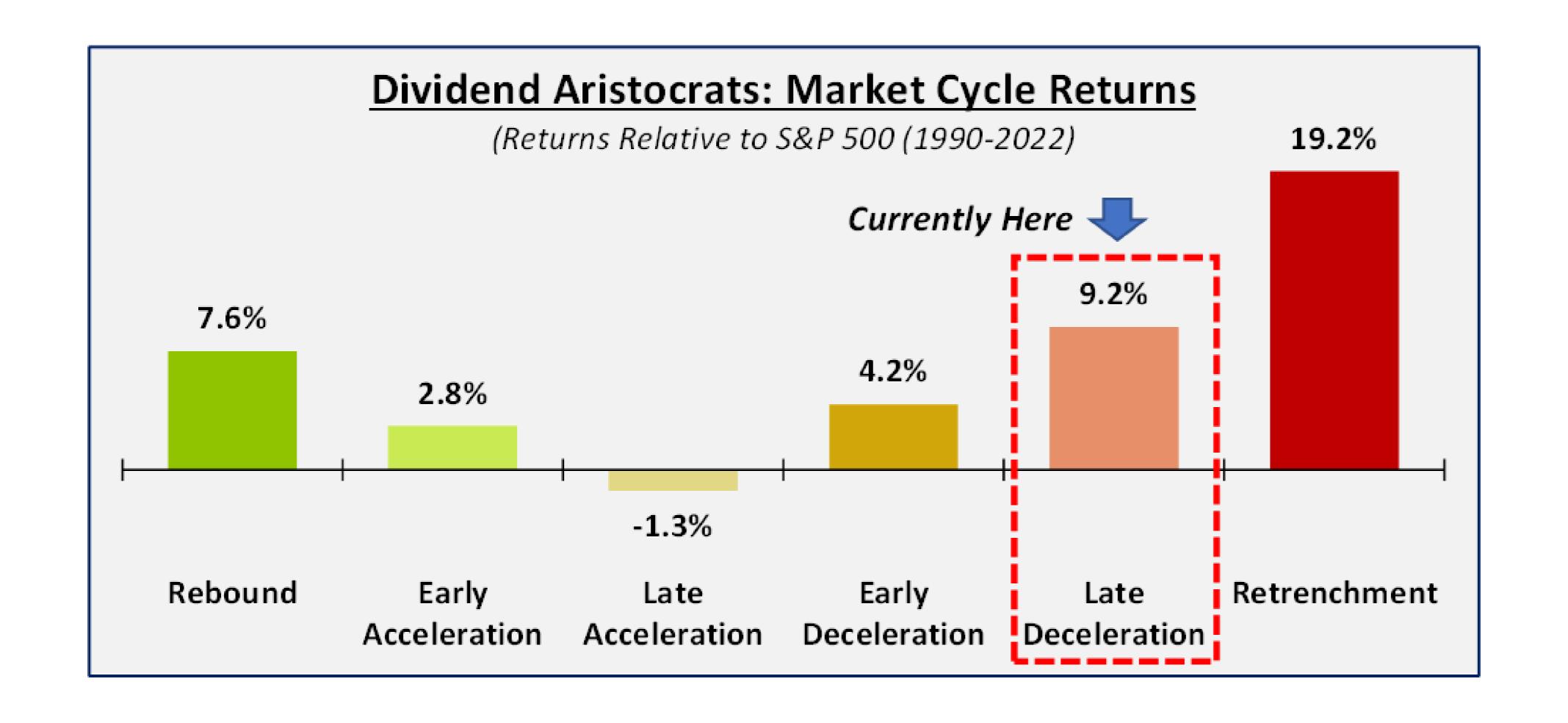
Source: Leuthold Group Research. Data as of January 7, 2023 Note: Shaded Bars Represent Recessions

1970s Redux? "The" Bottom vs "A" Bottom

Numerous Bear Market Rallies In The '70s



Entering Part Of The Cycle When Dividends Typically Shine



Dividends Likely To Play A Larger Role In Returns

Dividend Contribution To Total Return

Decade	Price Pct. Change	Dividend Contribution	Total Return	Dividends Pct of TR	Avg Payout Ratio		
1930s	-41.9%	56.0%	14.1%	100.0	90.1		
1940s	34.5%	100.1%	134.6%	74.4	59.4		
1950s	257.3%	180.3%	437.7%	41.2	54.6		
1960s	53.7%	54.2%	107.9%	50.2	56.0		
1970s	17.2%	59.1%	76.4%	77.4	45.5		
1980s	227.4%	143.1%	370.5%	38.6	48.6		
1990s	315.7%	115.7%	431.5%	26.8	47.6		
2000s	-24.1%	15.0%	-9.1%	100.0	35.3		
2010s	189.7%	66.9%	256.7%	26.1	35.2		
2020s	19.8%	5.6%	25.4%	21.9	36.7		
Average	114.4%	87.8%	202.2%	59.4	52.5		

Diversified Income For A Smoother Ride

Annual Returns Ranked In Order Of Performance (2002-YTD 2022)

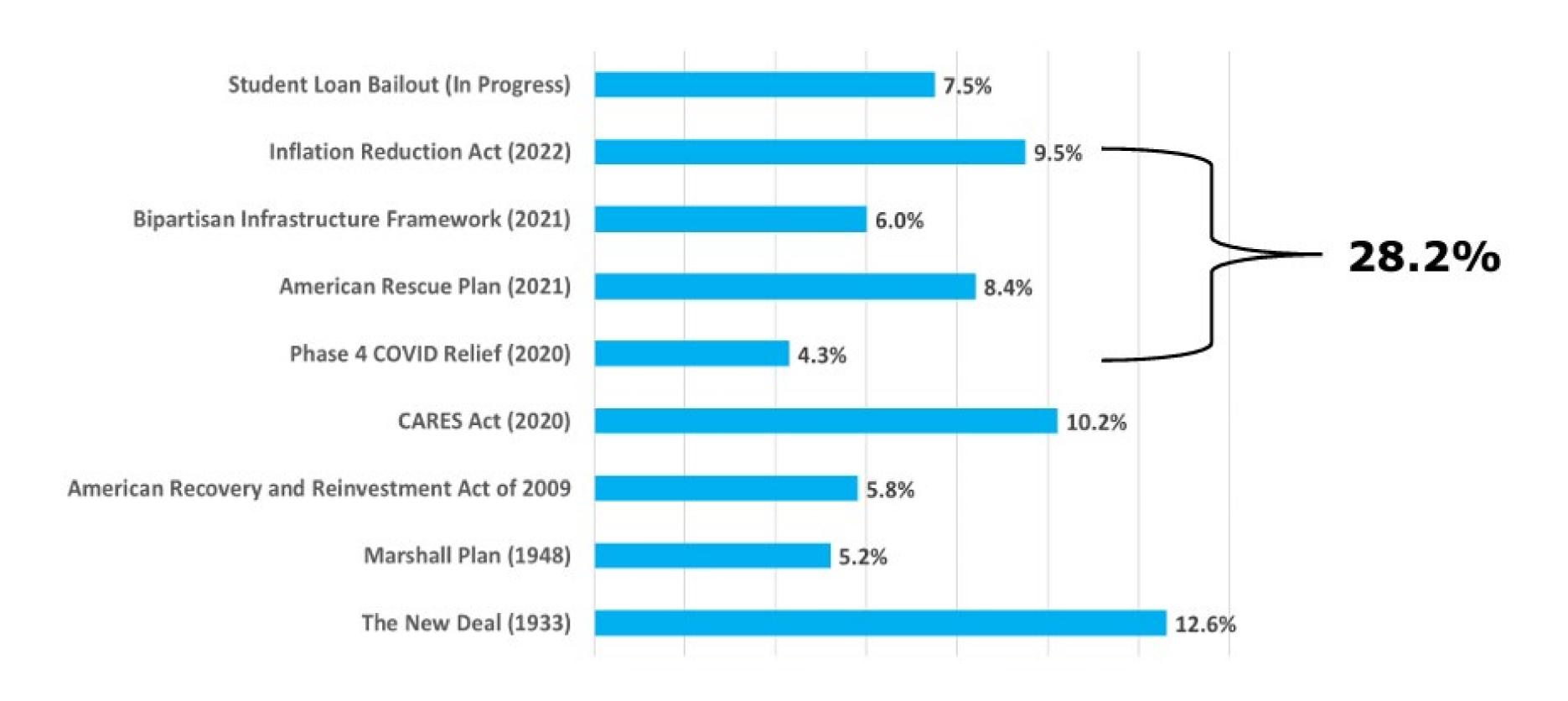
Emerging Mkts Equity 55.8	Emerging Mkts Equity 25.6	Emerging Mkts Equity 34.0	Emerging Mkts Equity 32.1	Emerging Mkts Equity 39.4	Global ex U.S. Fixed Income 11.4	Emerging Mkts Equity 78.5	Small Cap Equity 26.9	U.S. Fixed Income 7.8	Real Estate (REITs) 22.9	Small Cap Equity 38.8	Real Estate (REITs) 23.3	Large Cap Equity 1.4	Small Cap Equity 21.3	Emerging Mkts Equity 37.3	Cash Equiv 1.9	Large Cap Equity 31.5	Small Cap Equity 20.0	Real Estate (REITs) 33.1	Cash Equiv 2.0	Car Eq 2.0
Small Cap Equity 47.3	Devel- oped ex U.S. Equity 20.4	Devel- oped ex U.S. Equity 14.5	Devel- oped ex U.S. Equity 25.7	Devel- oped ex U.S. Equity 12.4	U.S. Fixed Income 5.2	High Yield 58.2	Real Estate (REITs) 22.8	Global ex U.S. Fixed Income 5.9	Emerging Mkts Equity 18.2	Large Cap Equity 32.4	Large Cap Equity 13.7	60 40 Portfolio 1.3	High Yield 17.1	Devel- oped ex U.S. Equity 24.2	U.S. Fixed Income 0.0	Small Cap Equity 25.5	Large Cap Equity 18.4	Large Cap Equity 28.7	High Yield -11.2	Hiç Yie -11
Developed ex U.S. Equity 39.4	Small Cap Equity 18.3	Large Cap Equity 4.9	Small Cap Equity 18.4	Global ex U.S. Fixed Income 11.3	Cash Equiv 1.4	Devel- oped ex U.S. Equity 33.7	Emerging Mkts Equity 18.9	High Yield 5.0	Devel- oped ex U.S. Equity 16 4	Devel- oped ex U.S. Equity 21.0	60 40 Portfolio 10.6	Real Estate (REITs) 1.3	Large Cap Equity 12.0	Large Cap Equity 21.8	Global ex U.S. Fixed Income -1.7	Real Estate (REITs) 24.6	Emerging Mkts Equity 18.3	60 40 Portfolio 15.9	U.S. Fixed Income -13.0	U.S Fix Inc
High Yield 29.0	Global ex U.S. Fixed Income 12 0	Small Cap Equity 4.6	Large Cap Equity 15.8	U.S. Fixed Income 7.0	60 40 Portfolio -22.1	Real Estate (REITs) 32.5	High Yield 15.1	60 40 Portfolio 4.7	Small Cap Equity 16.3	60 40 Portfolio 17.6	U.S. Fixed Income 6.0	U.S. Fixed Income 0.5	Emerging Mkts Equity 11.2	Small Cap Equity 14.6	High Yield -2.1	Devel- oped ex U.S. Equity 22.5	60 40 Portfolio 14.7	Small Cap Equity 14.8	Devel- oped ex U.S. Equity -14.3	De op U.: Eq
Large Cap Equity 28.7	High Yield 11.1	60 40 Portfolio 4.0	High Yield 11.8	60 40 Portfolio 6.2	High Yield -26.2	Small Cap Equity 27.2	Large Cap Equity 15.1	Real Estate (REITs) 2.5	Large Cap Equity 16.0	High Yield 7.4	Small Cap Equity 4.9	Cash Equiv 0.1	60 40 Portfolio 8.3	60 40 Portfolio 14.2	60 40 Portfolio -2.3	60 40 Portfolio 22.2	Global ex U.S. Fixed Income 10.5	Devel- oped ex U.S. Equity 12 6	60 40 Portfolio -15.8	60 Po -1
Global ex U.S. Fixed Income 18.6	Large Cap Equity 10.9	Cash Equiv 3.1	60 40 Portfolio 11.1	Large Cap Equity 5.5	Small Cap Equity -33.8	Large Cap Equity 26.5	60 40 Portfolio 12.1	Large Cap Equity 2.1	High Yield 15.8	Real Estate (REITs) 2.7	High Yield 2.5	Devel- oped ex U.S. Equity	Real Estate (REITs) 6.4	Global ex U.S. Fixed Income 9.9	Large Cap Equity -4.4	Emerging Mkts Equity 18.4	Devel- oped ex U.S. Equity 7.6	High Yield 5.3	Large Cap Equity -18.1	La Ca Ec
60 40 Portfolio 18.5	60 40 Portfolio 8.3	High Yield 2.7	Global ex U.S. Fixed Income 6.8	Cash Equiv 4.4	Large Cap Equity -37.0	60 40 Portfolio 18.4	Devel- oped ex U.S. Equity	Cash Equiv 0.1	60 40 Portfolio 11.3	Cash Equiv 0.1	Cash Equiv 0.0	Small Cap Equity -4.4	Devel- oped ex U.S. Equity 2.7	Real Estate (REITs) 7.7	Real Estate (REITs) -4.5	High Yield 14,3	U.S. Fixed Income 7.5	Cash Equiv 0.0	Emerging Mkts Equity -20.1	Er ing Ec
U.S. Fixed Income 4.1	U.S. Fixed Income 4.3	U.S. Fixed Income 2.4	Cash Equiv 4.7	High Yield 1.9	Devel- oped ex U.S. Equity -43 6	U.S. Fixed Income 5.9	Global ex U.S. Fixed Income 6.8	Small Cap Equity -4.2	U.S. Fixed Income 4.2	U.S. Fixed Income -2.0	Emerging Mkts Equity -2.2	High Yield -4.5	U.S. Fixed Income 2.6	High Yield 7.5	Small Cap Equity -11.0	U.S. Fixed Income 8.7	High Yield 7.1	U.S. Fixed Income -1.5	Small Cap Equity -20.4	Sr Ca Ec
Cash Equiv 1.0	Cash Equiv 1.4	Global ex U.S. Fixed Income -9.2	U.S. Fixed Income 4.3	Small Cap Equity -1.6	Real Estate (REITs) -44.6	Global ex U.S. Fixed Income 3.9	U.S. Fixed Income 6.5	Devel- oped ex U.S. Equity -12.2	Global ex U.S. Fixed Income 0.8	Emerging Mkts Equity -2.6	Global ex U.S. Fixed Income -2.5	Global ex U.S. Fixed Income -4.8	Global ex U.S. Fixed Income 1.9	U.S. Fixed Income 3.5	Devel- oped ex U.S. Equity -14.1	Global ex U.S. Fixed Income 5.2	Cash Equiv 0.4	Emerging Mkts Equity -2.5	Global ex U.S. Fixed Income -21 9	GI ex Fix Inc
				Real Estate (REITs) -12.4	Emerging Mkts Equity -53.3	Cash Equiv 0.1	Cash Equiv 0.1	Emerging Mkts Equity -18.4		Global ex U.S. Fixed Income	Devel- oped ex U.S. Equity	Emerging Mkts Equity -14.9		Cash Equiv 0.9	Emerging Mkts Equity -14.6	Cash Equiv 2.1	Real Estate (REITs) -10.1	Global ex U.S. Fixed Income	Real Estate (REITs) -24.1	Re Es (R
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2



Cash Equiv

Historic Fiscal Policy

Select Stimulus As A Percentage of US GDP



And The Debt Champion Is....

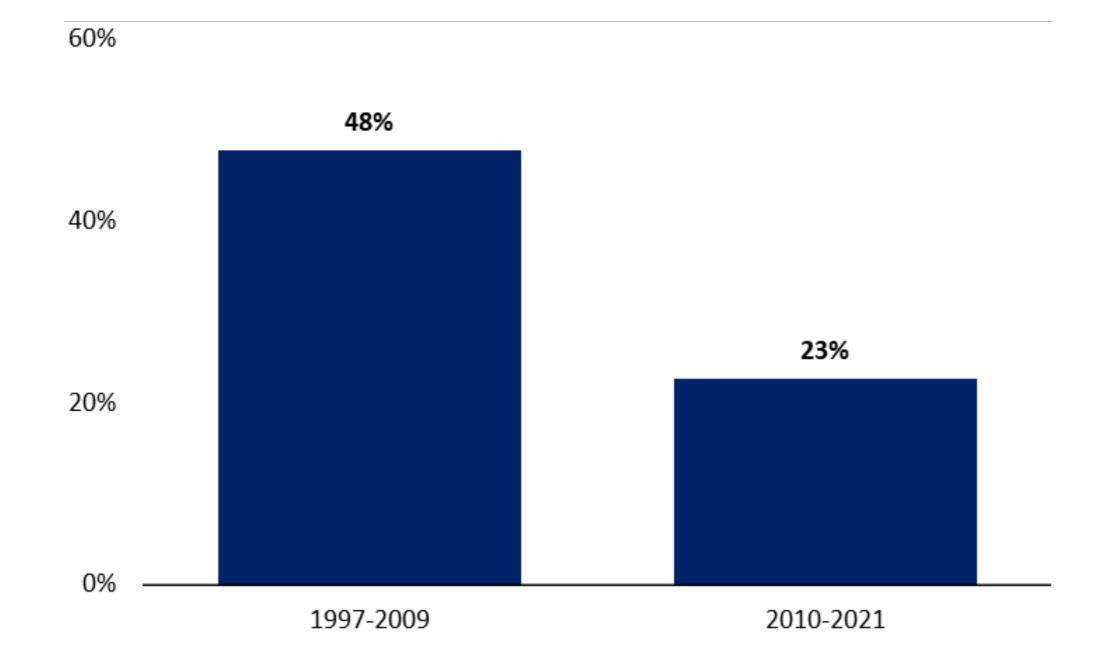
Debt Levels and Increases in Major Economies

	2020 gov't debt (US\$ trn)	2020 rise in gov't debt (US\$trn)	Population (mn)	2020 gov't debt per capita (US\$)	2020 rise in gov't debt per capita (US\$)
USA	22.21	4.20	328.2	67,672	12,797
Canada	0.76	0.31	37.6	20,300	8,202
UK	2.68	0.46	66.6	40,176	6,961
Japan	9.01	0.72	126.5	71,192	5,690
Germany	2.12	0.44	83	25,571	5,286
France	2.92	0.34	66.9	43,552	5,063
Italy	2.85	0.24	60.3	47,157	4,048
China	9.65	1.66	1,393.00	6,931	1,191

Don't Shoot The Messenger: The Market Loves Easy Monetary Policy

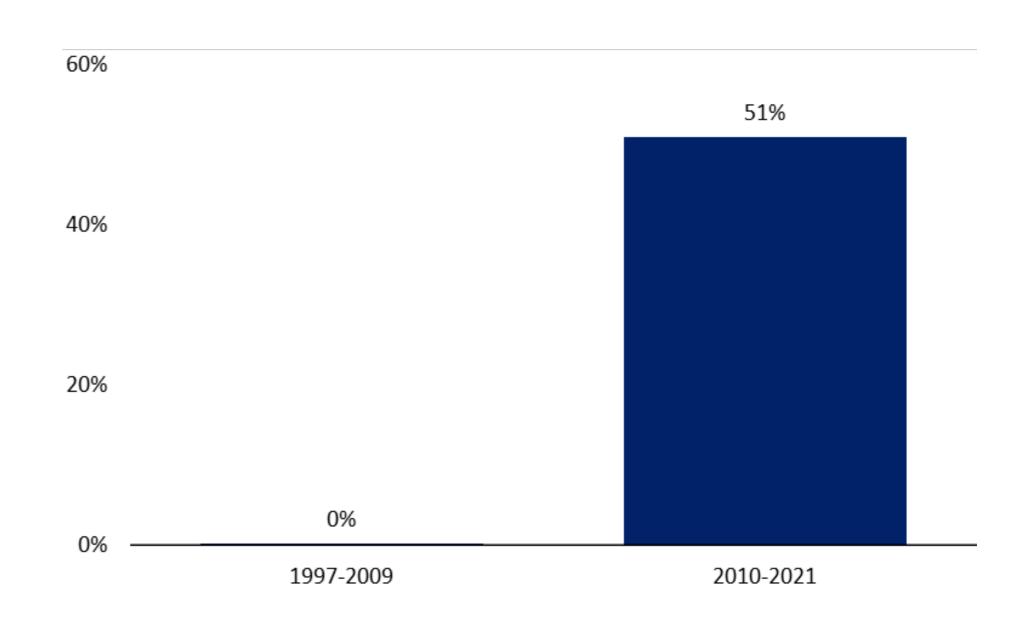
EPS Used to Matter Most

Earnings Explained Nearly 50% of Market Returns Pre-GFC, Only 17% Post-GFC



R-sq of S&P 500 fwd EPS YoY vs. S&P 500 price returns on a monthly basis (May 1997-December 2021)

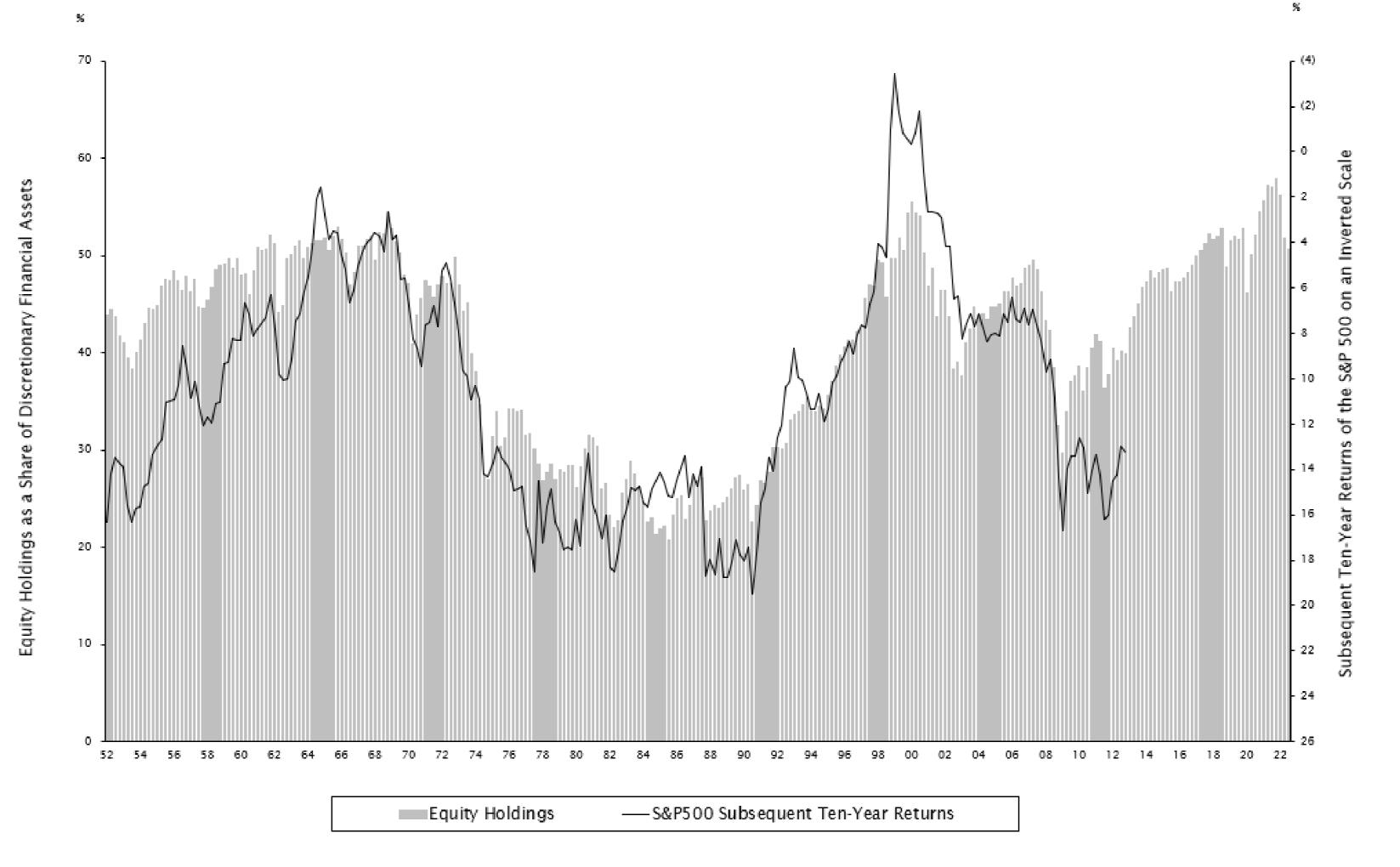
Of The Non-Earnings Portion of S&P 500 Changes, More Than Half Explained By Fed Balance Sheet Changes Post-GFC



R-sq of Fed Balance Sheet YoY vs. YoY change in S&P 500 market cap that is not driven by earnings (May 1997-December 2021)

Don't Shoot The Messenger: Future Equity Returns May Be Modest

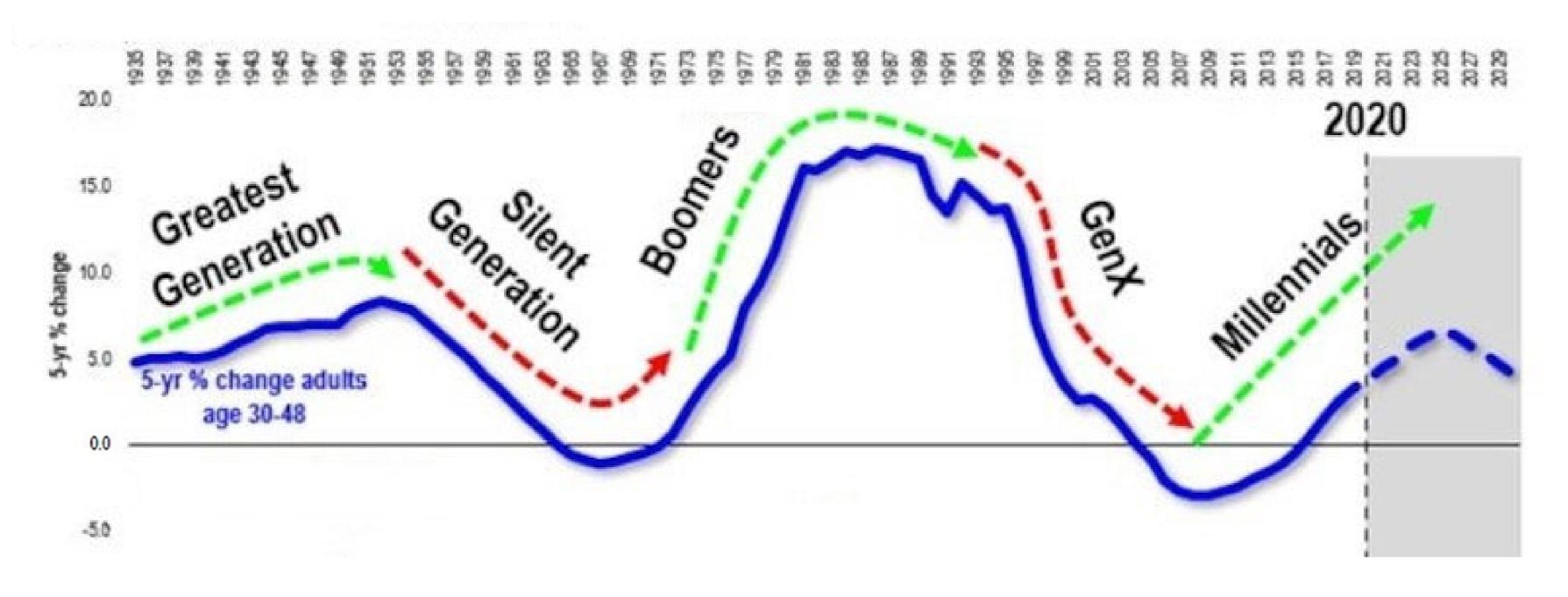
US Households Equity Holdings As a Share of Discretionary Financial Assets and Subsequent Ten-Year Annualized Returns of The S&P 500 On An Inverted Scale 1952 Through Q3 2022



Rederated Hermes

It All Depends On Your Time Horizon: In The Long Term, Prime Skilled Adults Age 30-48 Are Surging

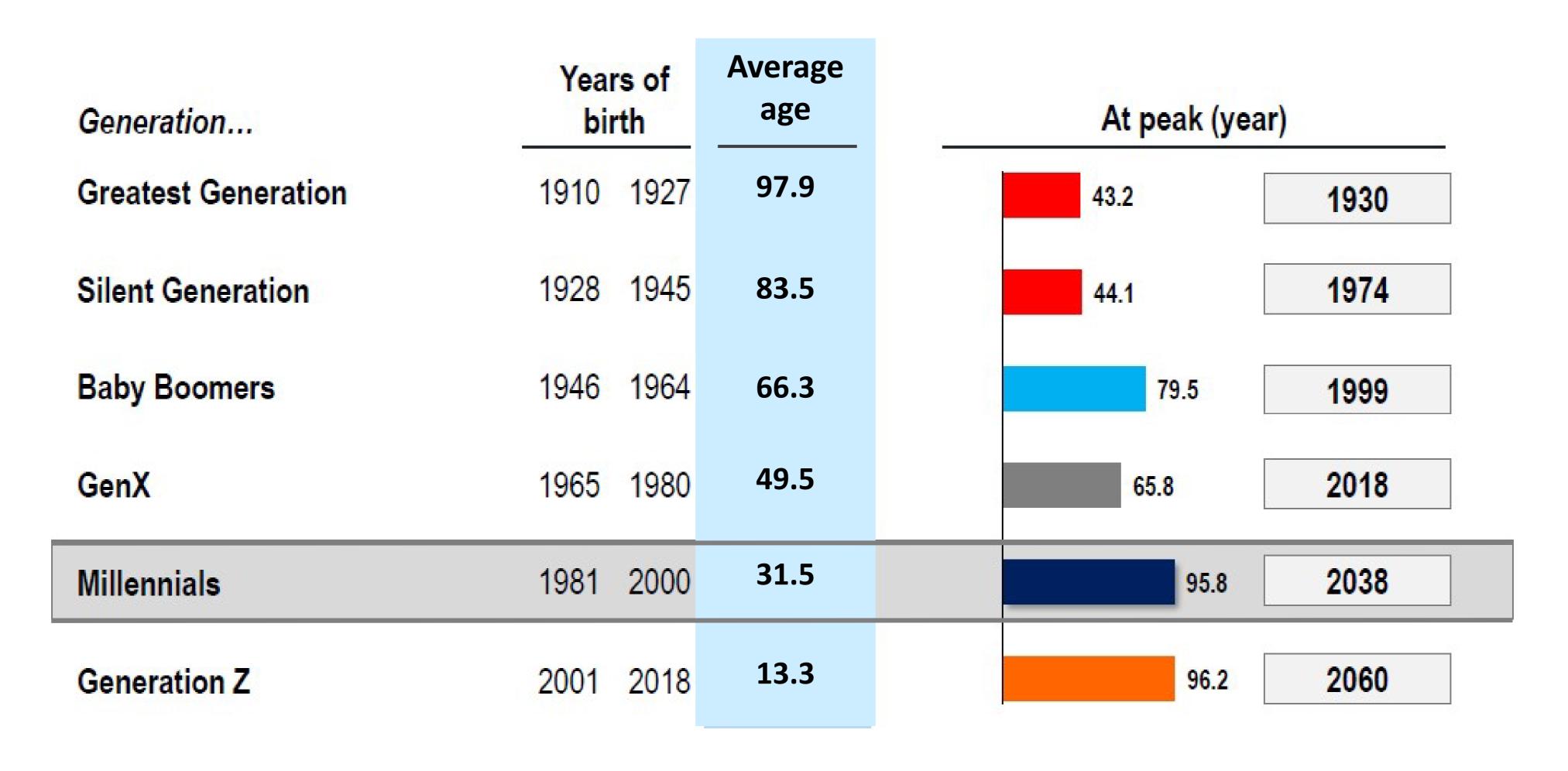
Prime Leverage Years: # Adults Age 30-48 Since 1935 per the US Census Bureau



Generation	Birth years					
Greatest Generation	1910	1927				
Silent Generation	1928	1945				
Baby Boomers	1946	1964				
GenX	1965	1980				
Millennials	1981	2000				
Generation Z	2001	2018				

The Largest Generation Ever, Millennials Are Just Entering Their Prime Income Years

Total US Population Divided by Age Groups



Slide 31 Disclosures and Definitions

Large Cap Equity - S&P 500 Index measures the performance of large capitalization U.S. stocks. It is a market-value-weighted index of 500 stocks that are traded on the NYSE, NYSE MKT, and Nasdaq

Small Cap Equity - Russell 2000 Index measures the performance of small capitalization U.S. stocks. The Russell 2000 is a market value-weighted index of the 2,000 smallest stocks (#1,001-3,000) in the broad-market Russell 3000 Index.

Developed ex U.S. Equity - MSCI ACWI ex USA Index captures large and mid cap representation across 22 of 23 developed market countries (excluding the U.S.) and 26 emerging market countries covering approximately 85% of the global equity opportunity set outside the U.S.

Emerging Markets Equity - MSCI Emerging Markets Index is a free float-adjusted market-capitalization-weighted index that is designed to measure equity market performance of 26 emerging market countries.

U.S. Fixed Income - Bloomberg US Aggregate Bond Index includes U.S. government, corporate, and mortgage-backed securities with maturities of at least one year.

High Yield - Bloomberg Corporate High Yield Index measures the market of USD-denominated, noninvestment grade, fixed-rate, taxable corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt.

Global ex U.S. Fixed Income - The GBI Global Index currently tracks a fixed list of 12 core developed markets, namely Australia, Belgium, Canada, Denmark, France, Germany, Italy, Japan, Netherlands, Spain, Sweden, United Kingdom.

60/40 Portfolio – represents a portfolio consisting of 60% Equities (S&P 500 Index) and 40% Fixed Income (Bloomberg US Aggregate Bond Index)

Real Estate - The FTSE EPRA Nareit Developed Index is designed to measure the stock performance of companies engaged in specific real estate activities of the North American, European, and Asian real estate markets. Relevant real estate activities are defined as the ownership, trading, and development of income producing real estate.

Cash - Cash Equivalent (90-day T-bill) is a short-term debt obligation backed by the Treasury Department of the U.S. government.

Rederated Fermes

Interested In Hearing More?

Visit **federatedinvestors.com/LindaDuessel** to sign up for email updates, watch YouTube videos, connect on LinkedIn and more.

LINDA DUESSEL



Mind on the Market

With more than 30 years of experience, Linda Duessel is nationally recognized for her expertise in analyzing equity market conditions. Linda discusses personal finance with investor groups across the country on topics of interest ranging from the impact of the alternative minimum tax to investing for retirement. Additionally, Linda has been extensively quoted by Associated Press, The Wall Street Journal and Barron's, as well as featured in the annual roundtable for USA Today.

As senior equity market strategist, Linda is part of the equity income team, which is responsible for formulating Federated's views about the market and the firm's positioning strategies within the equity income team. As senior client portfolio manager, she is responsible for articulating the strategy, process, positioning and performance of Federated's equity income products.

Interested in hearing more from Linda? Here are two ways:

- Read her weekly market views
 Look for them on our site and in our weekly email.
- 2. Connect with her on LinkedIn