



**The Anatomy of a Recession:
What to Look for and Where
We're Headed**

First Quarter 2021

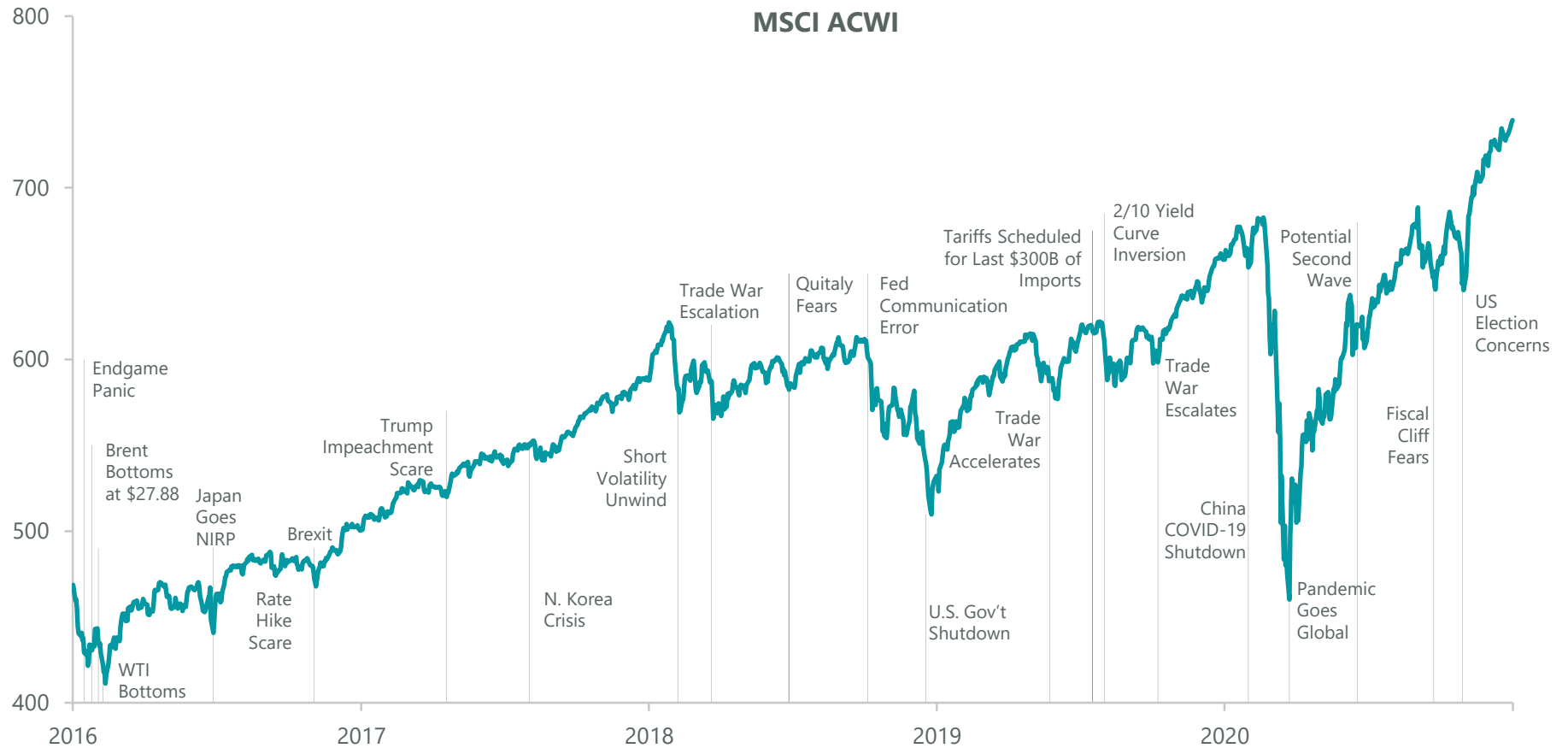
Past performance is no guarantee of future results. Financial term and index definitions are available in the appendix.

Probabilities vs. Possibilities

The Wall of Worry



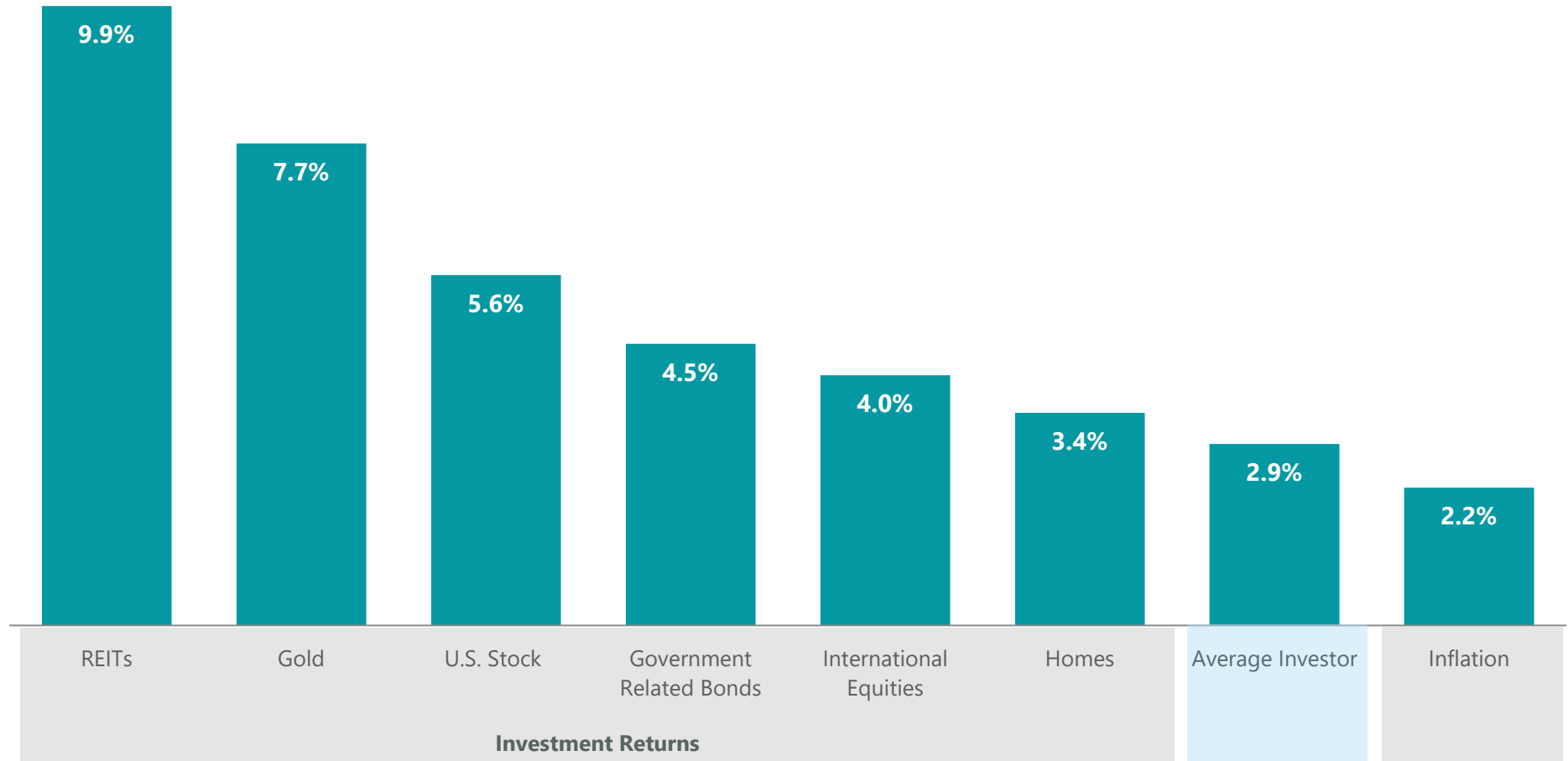
Panic Attacks



“The definition of insanity is doing the same thing over and over again and expecting a different result.”
 - Attributed to Albert Einstein

Effects of Panic Attacks on Average Investors

20 Years Annualized Returns (1999-2019)



Source: Bloomberg, June 30, 2019. Average asset allocation investor return is based on an analysis by DALBAR, Inc., which utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior. Indices shown are as follows: REITs are represented by the NAREIT Equity REIT Index, U.S. Stocks are represented by the S&P 500 Index, International Equities are represented by the MSCI EAFE Index, Government-Related Bonds are represented by the Bloomberg Barclays U.S. Aggregate Bond Index, Homes are represented by U.S. existing home sales median price, Gold is represented by the U.S. dollar spot price of one troy ounce, Inflation is represented by the Consumer Price Index. Indices are unmanaged and cannot be purchased directly by investors. Index performance is shown for illustrative purposes only and does not predict or depict the performance of any investment. **Past performance is no guarantee of future results.**

U.S. Recession Recovery Dashboard

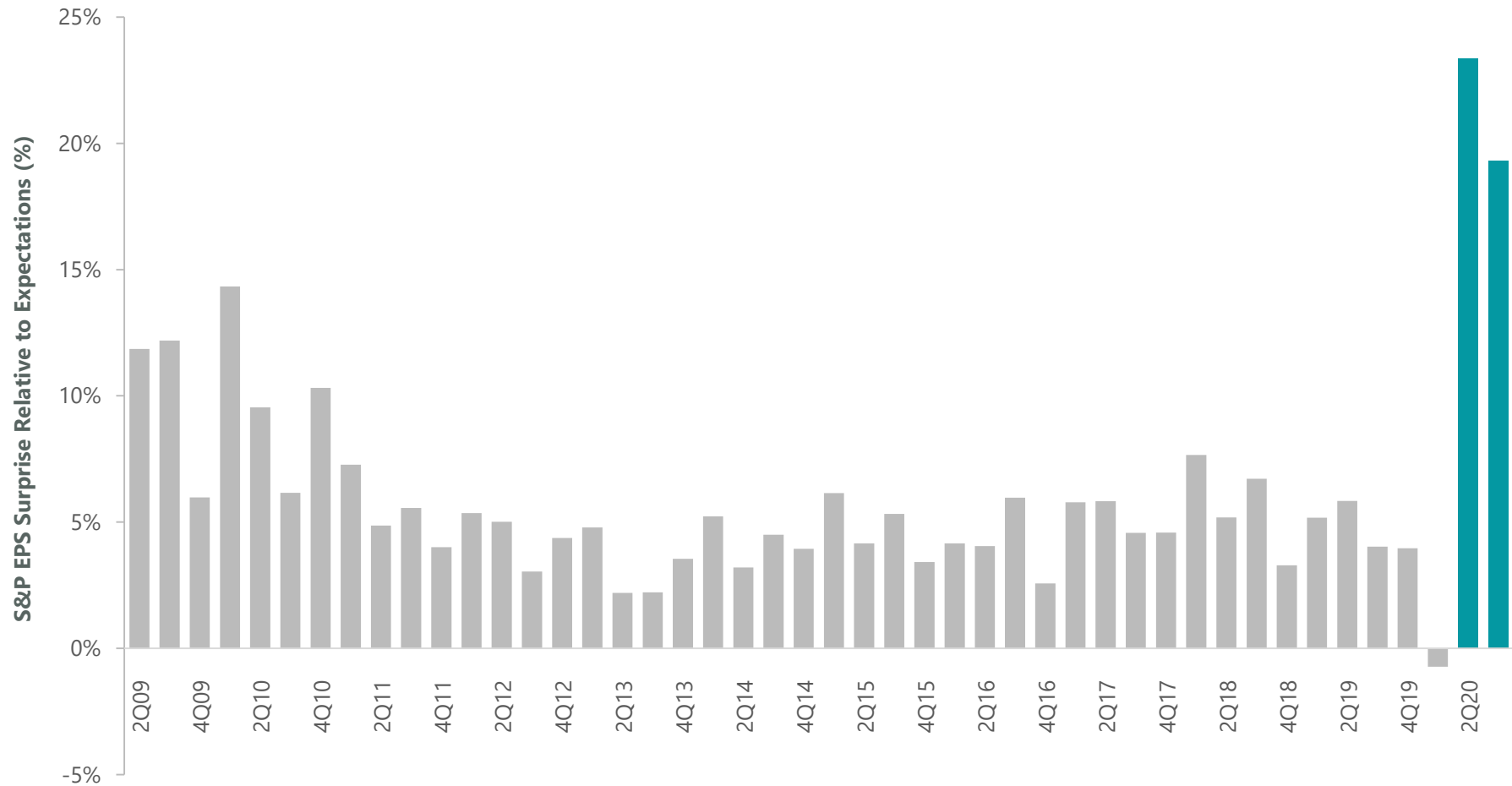
- 9 variables have historically foreshadowed a durable recovery
- The overall signal suggests the economy has started a new economic expansion

	Dec. 2020	Sept. 2020	June 2020	March 2020	
Confidence	Consumer Confidence	↑	↑	↑	×
	Business Confidence (ISM)	↑	↑	↑	×
	Investor Sentiment	×	×	×	●
Economics	Housing Starts	↑	↑	×	×
	Initial Jobless Claims	●	●	●	×
	Philly Fed	↑	↑	↑	●
Financial	Credit Spreads	↑	↑	●	×
	Fed Policy	↑	↑	↑	↑
	Financial Conditions	↑	↑	●	×
Overall Signal		↑	↑	↑	×

↑ Expansion ● Improvement × Recession

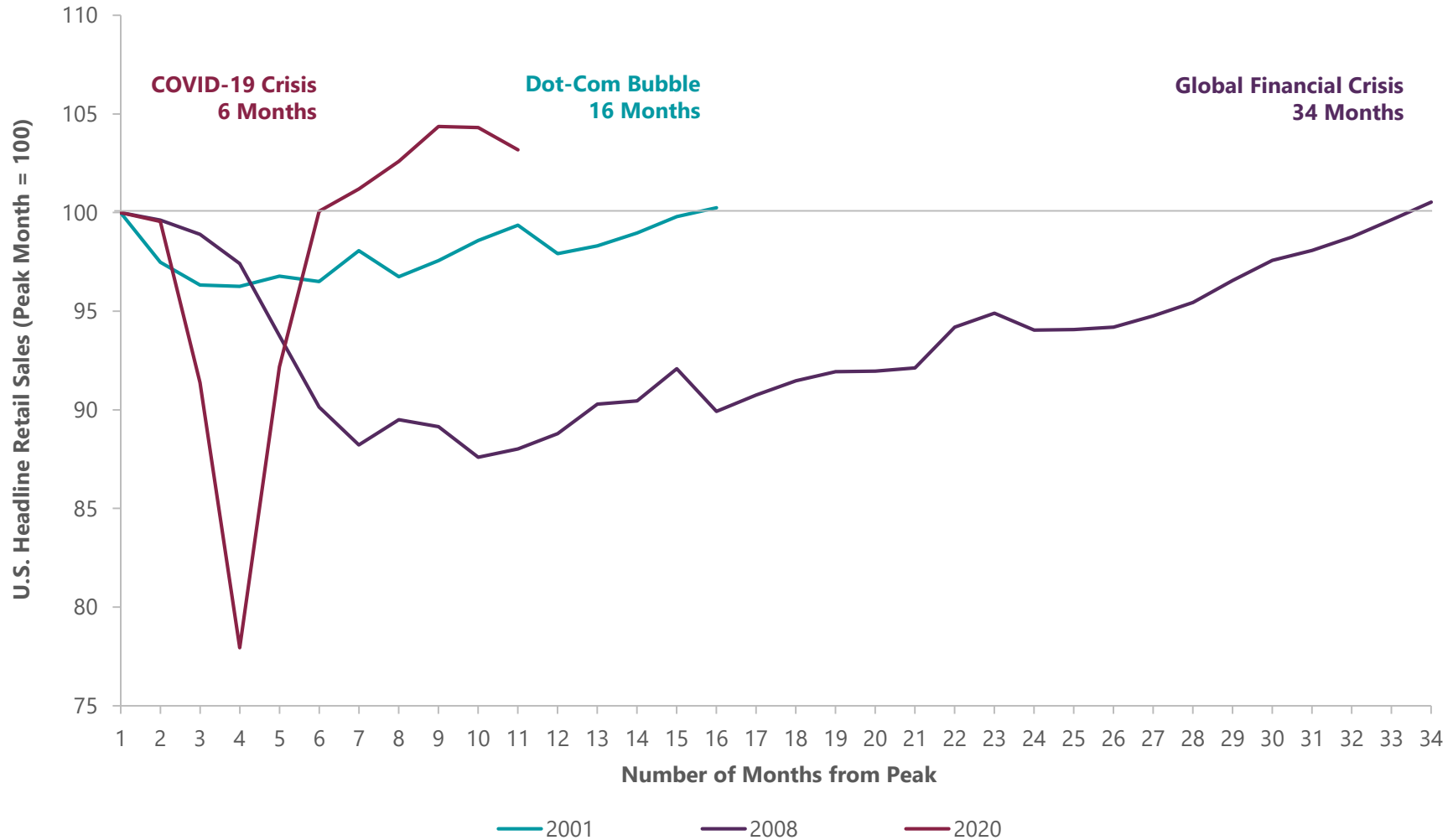
Historic Earnings Surprise

Earnings Beats in 2Q20 & 3Q20 Were Much Stronger than the Last Recovery



► Earnings have handily beat expectations and helped power the market's rally.

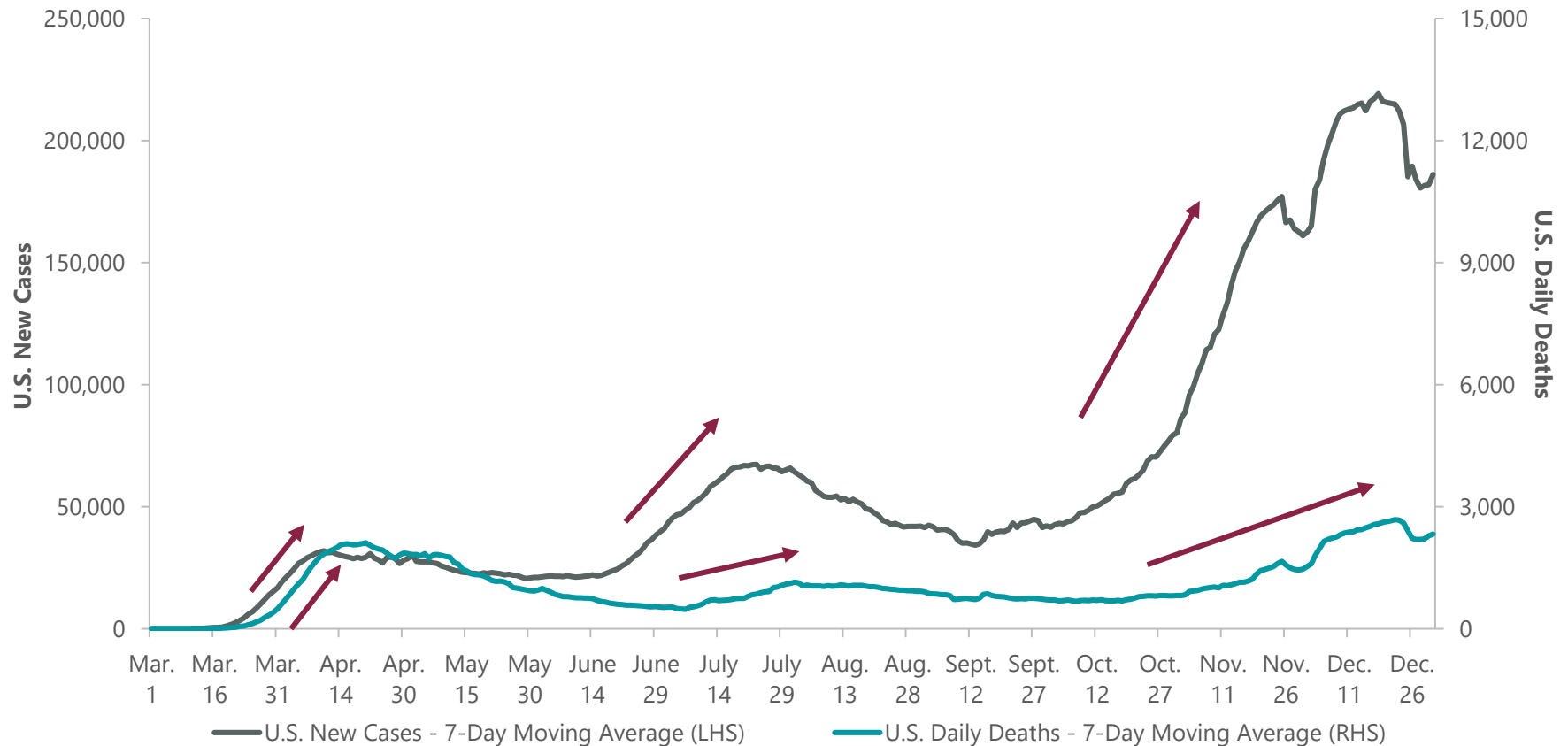
Retail Sales Suggest V-Shaped Recovery



► **Strong stimulus measures have supported a robust recovery in consumer spending.**

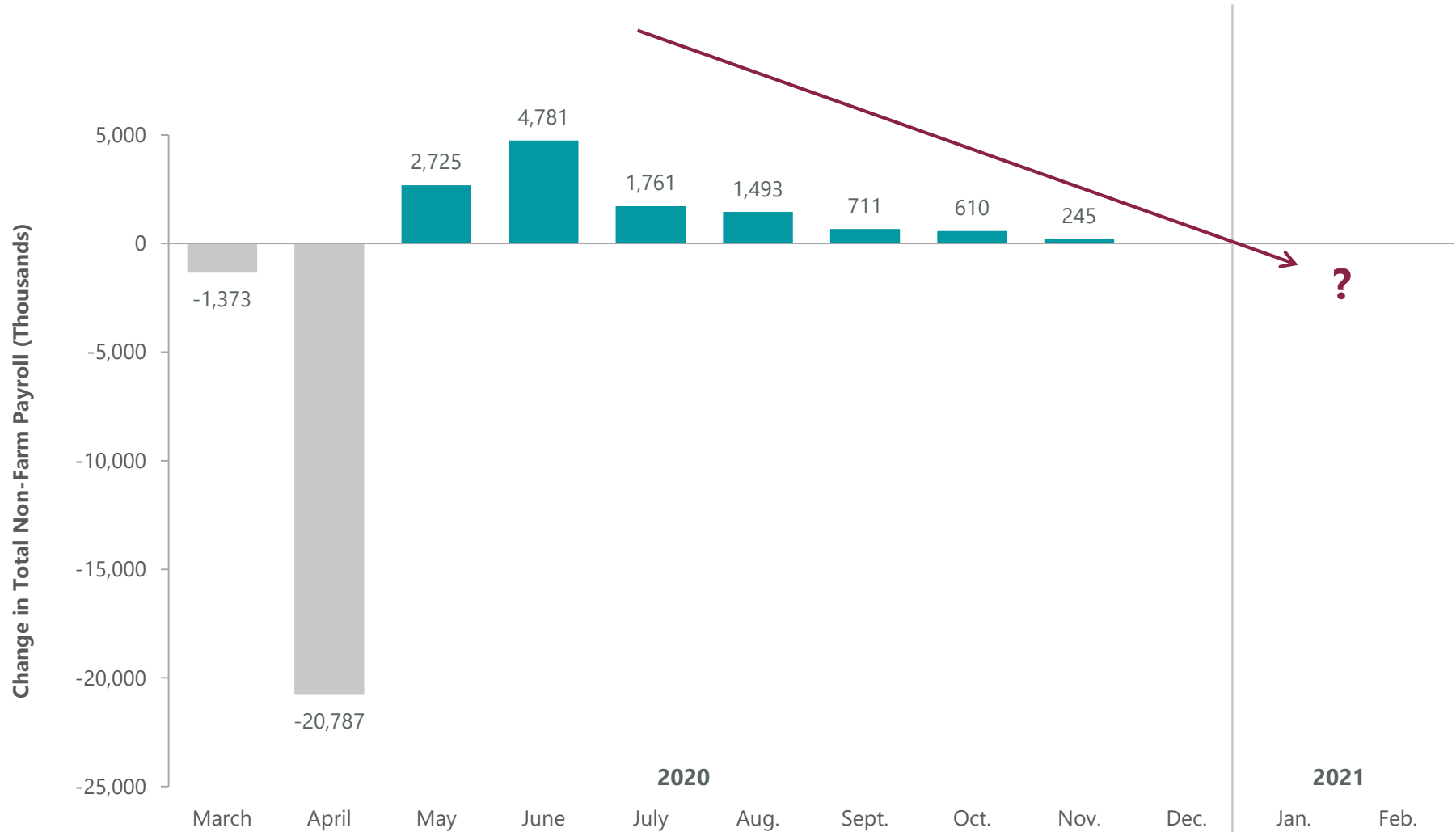
Winter is Coming

U.S. COVID-19 Cases and Deaths



- ▶ **The virus remains a key concern for investors, particularly as the Northern Hemisphere enters colder months.**
- ▶ **Better awareness and protocols have significantly reduced mortality rates, making full lockdowns less likely.**

Labor Market Losing Steam



▶ **The pace of the labor recovery has recently cooled as the U.S. economy combats the fall/winter surge of COVID-19.**

U.S. Recession Risk Indicators

- 12 variables have historically foreshadowed a looming recession
- Job sentiment, jobless claims, wage growth, profit margins and truck shipments signal risk right now

	December 31, 2020	November 30, 2020	October 30, 2020	
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

U.S. Recession Risk Indicators

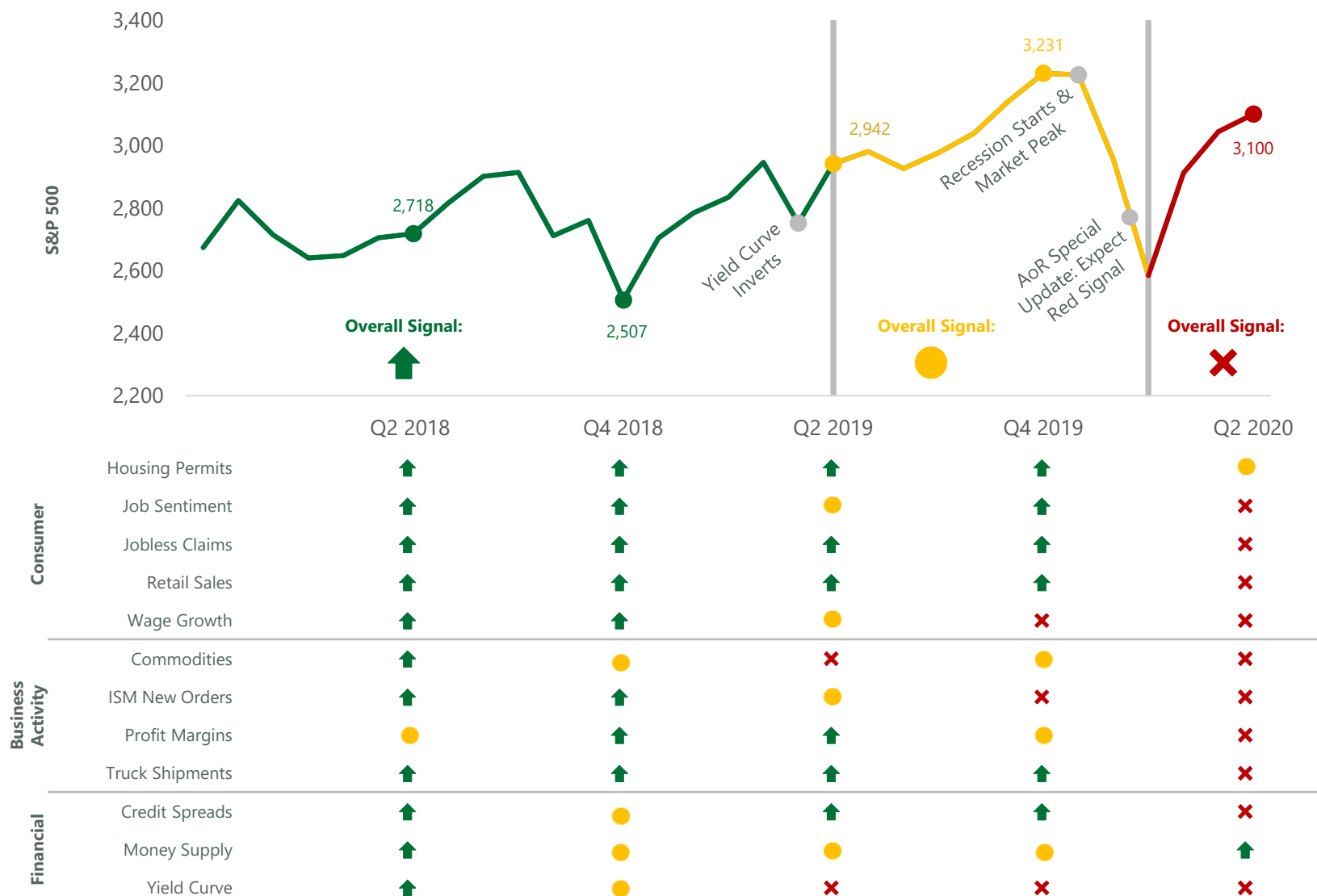
- 12 variables have historically foreshadowed a looming recession
- Job sentiment, jobless claims, wage growth, profit margins and truck shipments signal risk right now

	Current	2020	2007-2009	2001	1990-1991	1981-1982	1980	1973-1975	1969-1970
Consumer	Housing Permits	↑	↑	×	●	×	×	×	×
	Job Sentiment	×	●	×	×	×	●	●	●
	Jobless Claims	●	↑	●	×	×	×	↑	×
	Retail Sales	↑	↑	×	×	×	×	●	×
	Wage Growth	×	×	×	×	×	×	×	×
Business Activity	Commodities	↑	↑	×	×	×	●	●	●
	ISM New Orders	↑	●	×	×	×	×	×	×
	Profit Margins	●	×	×	×	×	×	●	×
	Truck Shipments	●	↑	●	×	×	×	n/a	n/a
Financial	Credit Spreads	↑	↑	×	×	×	×	↑	●
	Money Supply	↑	↑	×	×	×	×	×	×
	Yield Curve	↑	×	×	×	×	×	×	×
Overall Signal	↑	●	×	×	×	×	×	●	×

↑ Expansion ● Caution × Recession

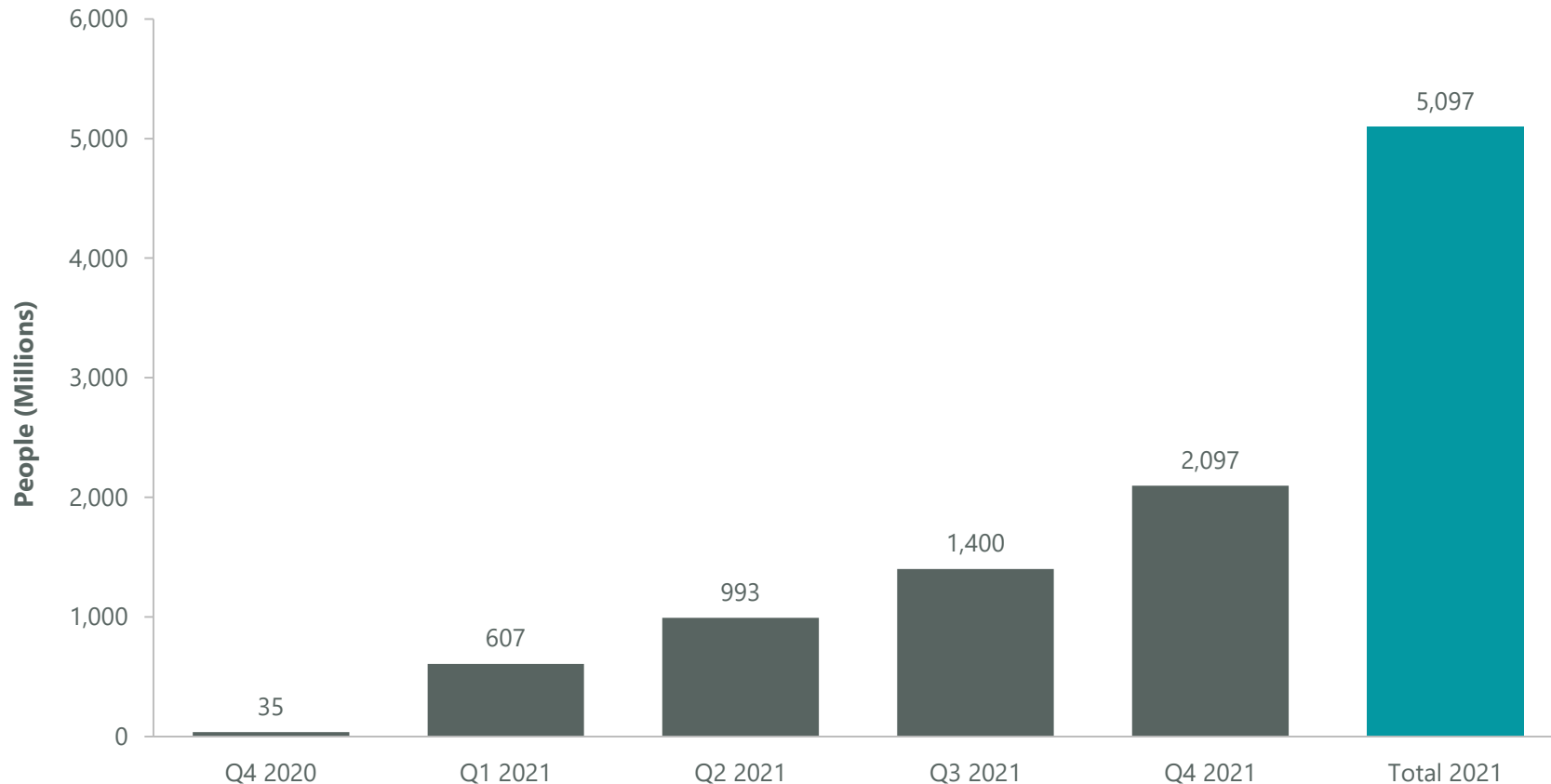
U.S. Recession Risk Dashboard

Case Study: 2018-2020



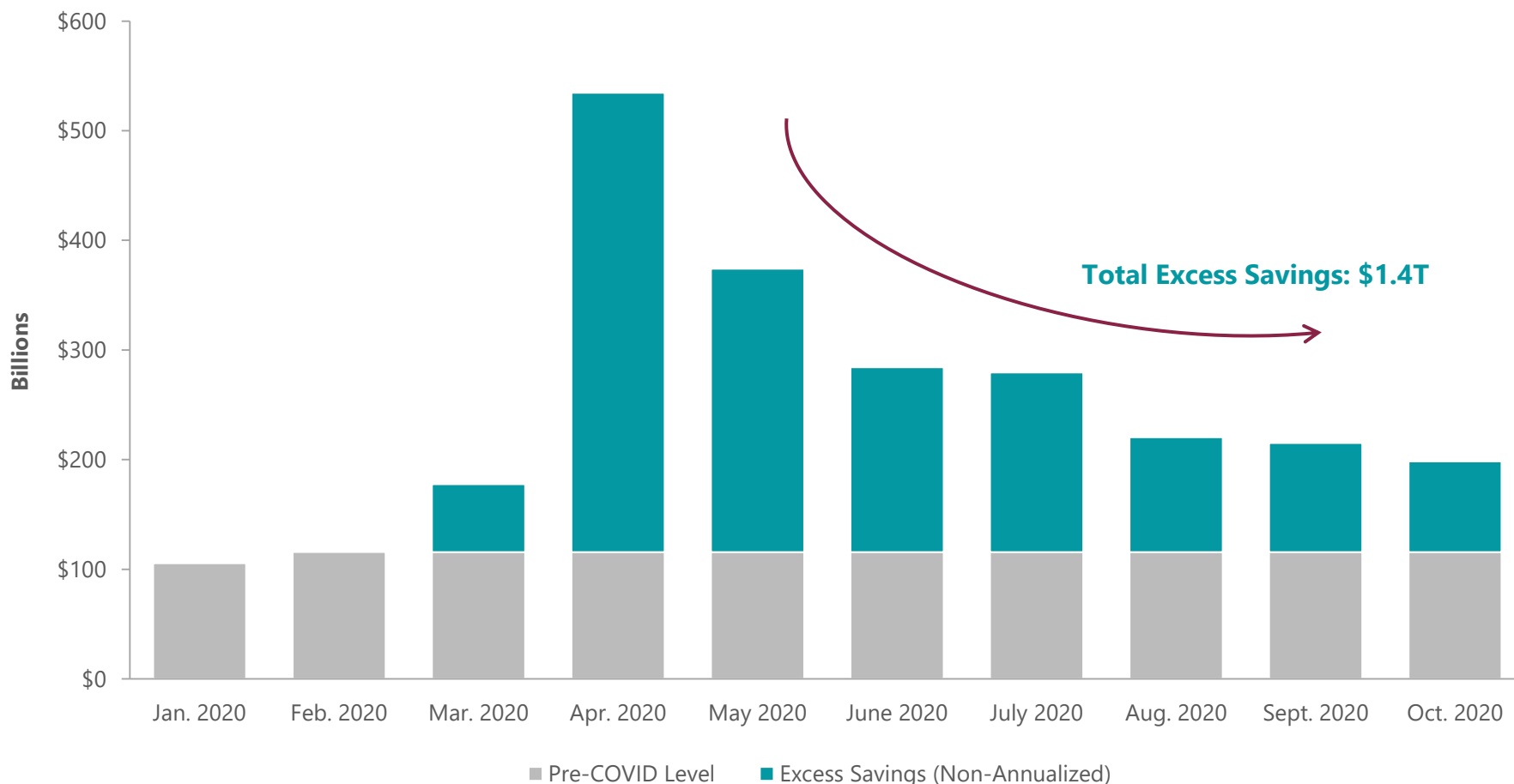
Vaccines to Accelerate Herd Immunity

Estimated Major Biopharma Vaccine Supply (Persons)



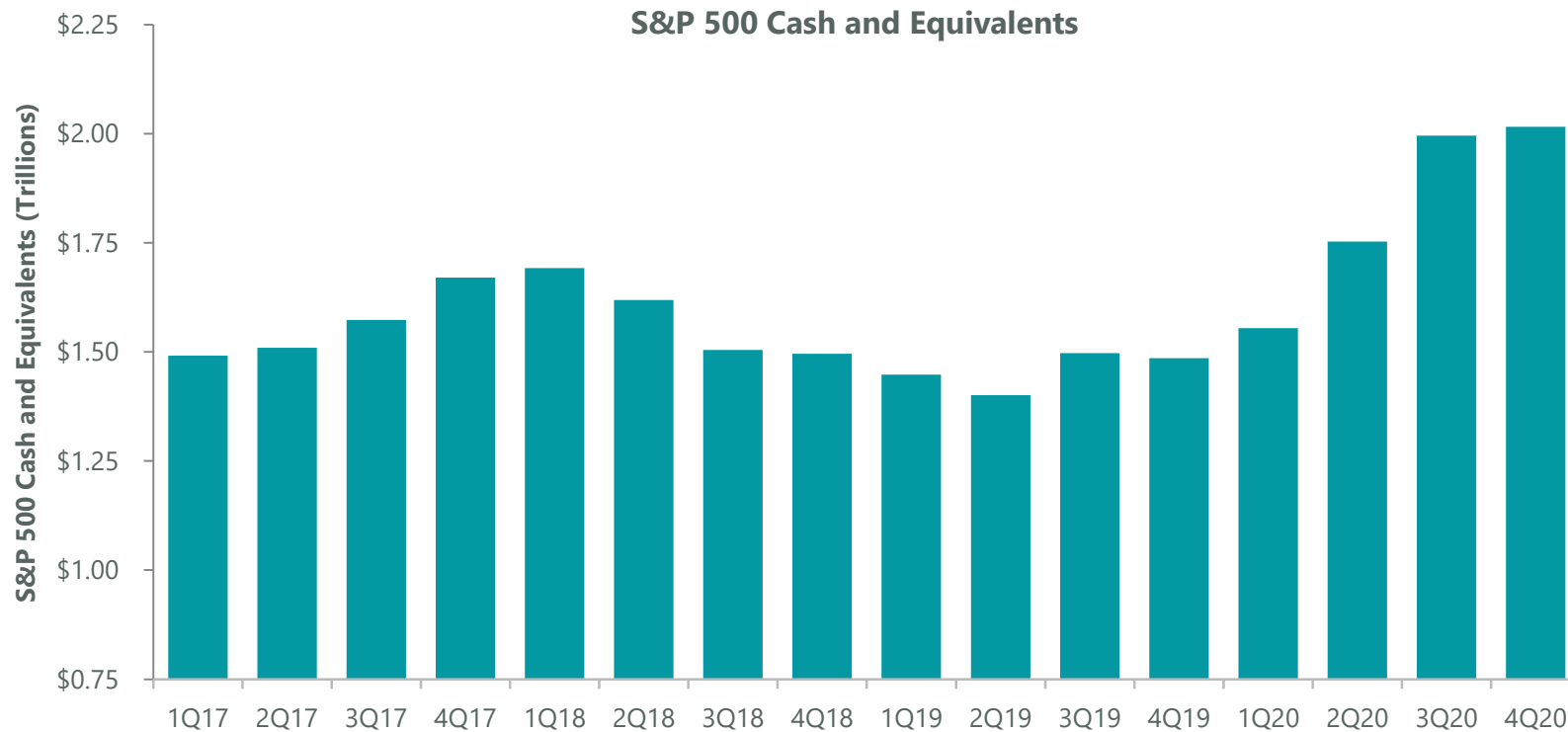
- ▶ **Herd immunity could be reached by late 2Q or early 3Q in the U.S. with several vaccines already approved and more coming in 2021.**
- ▶ **By focusing on the most vulnerable, economic activity could begin to improve well ahead of herd immunity being achieved.**

Consumer Balance Sheets Flush



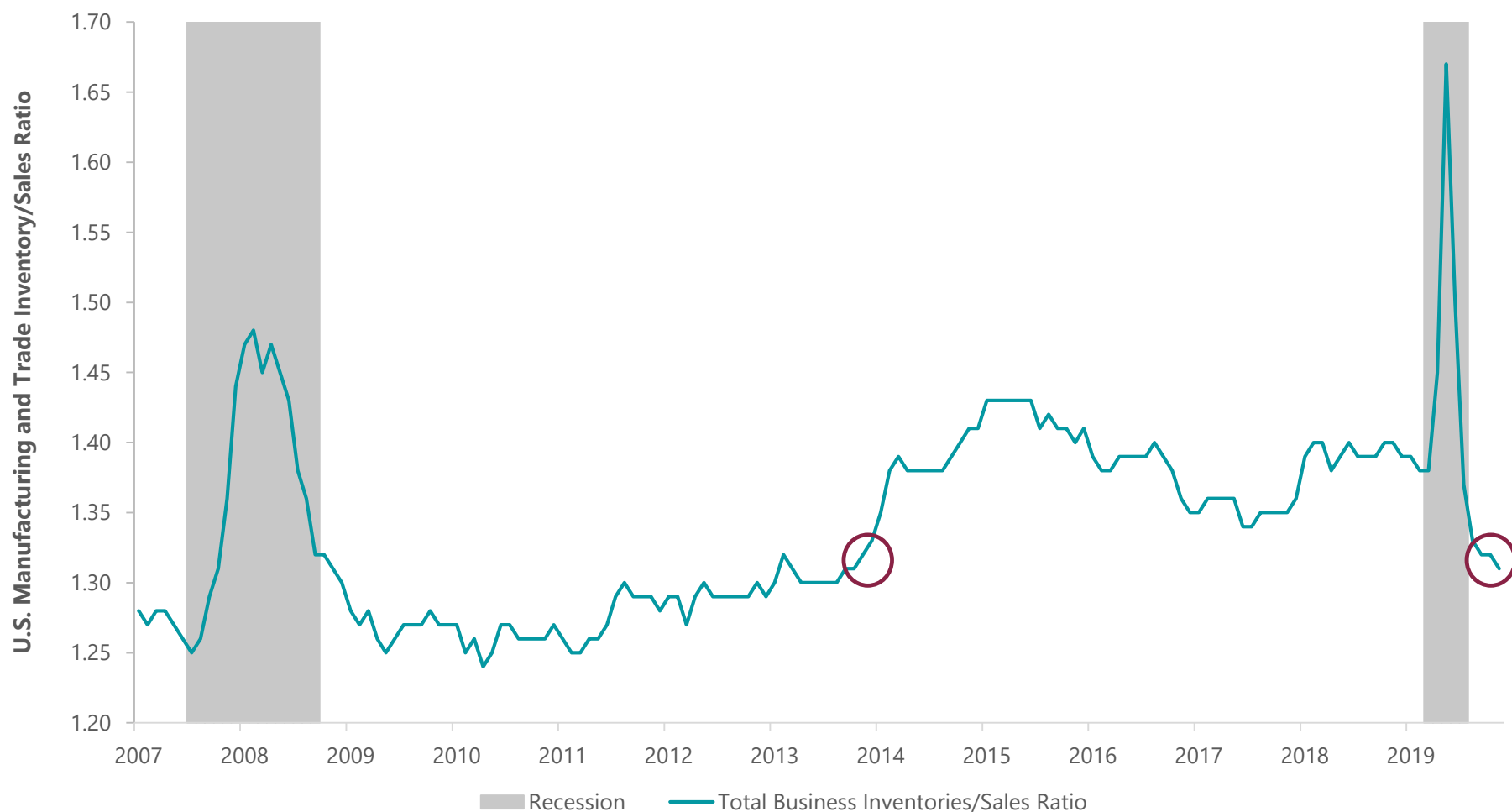
- ▶ **The inability to spend and government transfer payments have resulted in an abundance of consumer savings.**
- ▶ **As the economy renormalizes, some of these reserves will be drawn which should further fuel the recovery.**

Corporate Balance Sheets Flush



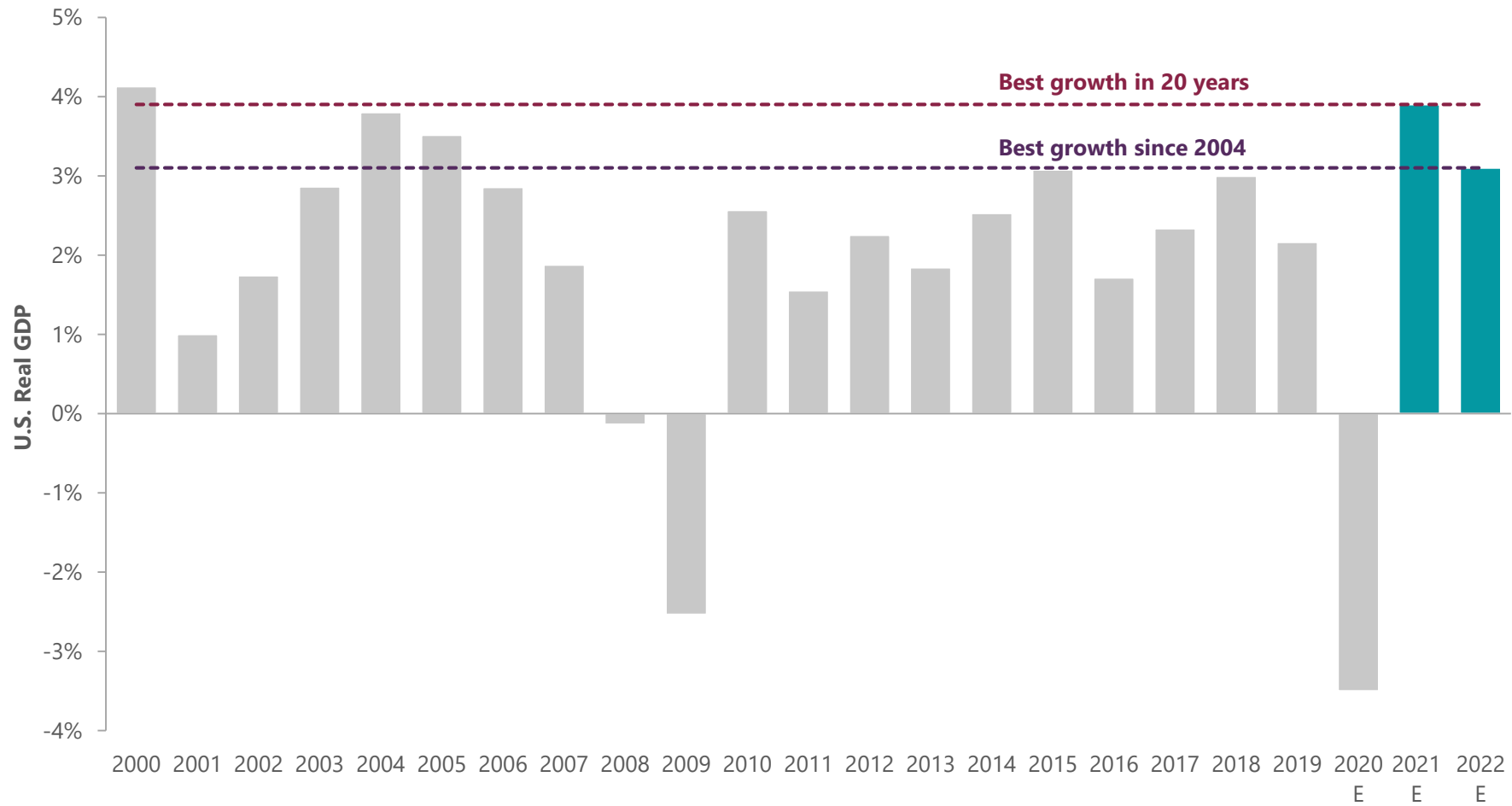
- ▶ **Corporations have accumulated approximately \$500 billion in additional cash since the onset of the pandemic.**
- ▶ **As the economy renormalizes, these funds could be redeployed into capex, dividends, and share repurchases.**

Inventory Rebuild, Economic Tailwind?



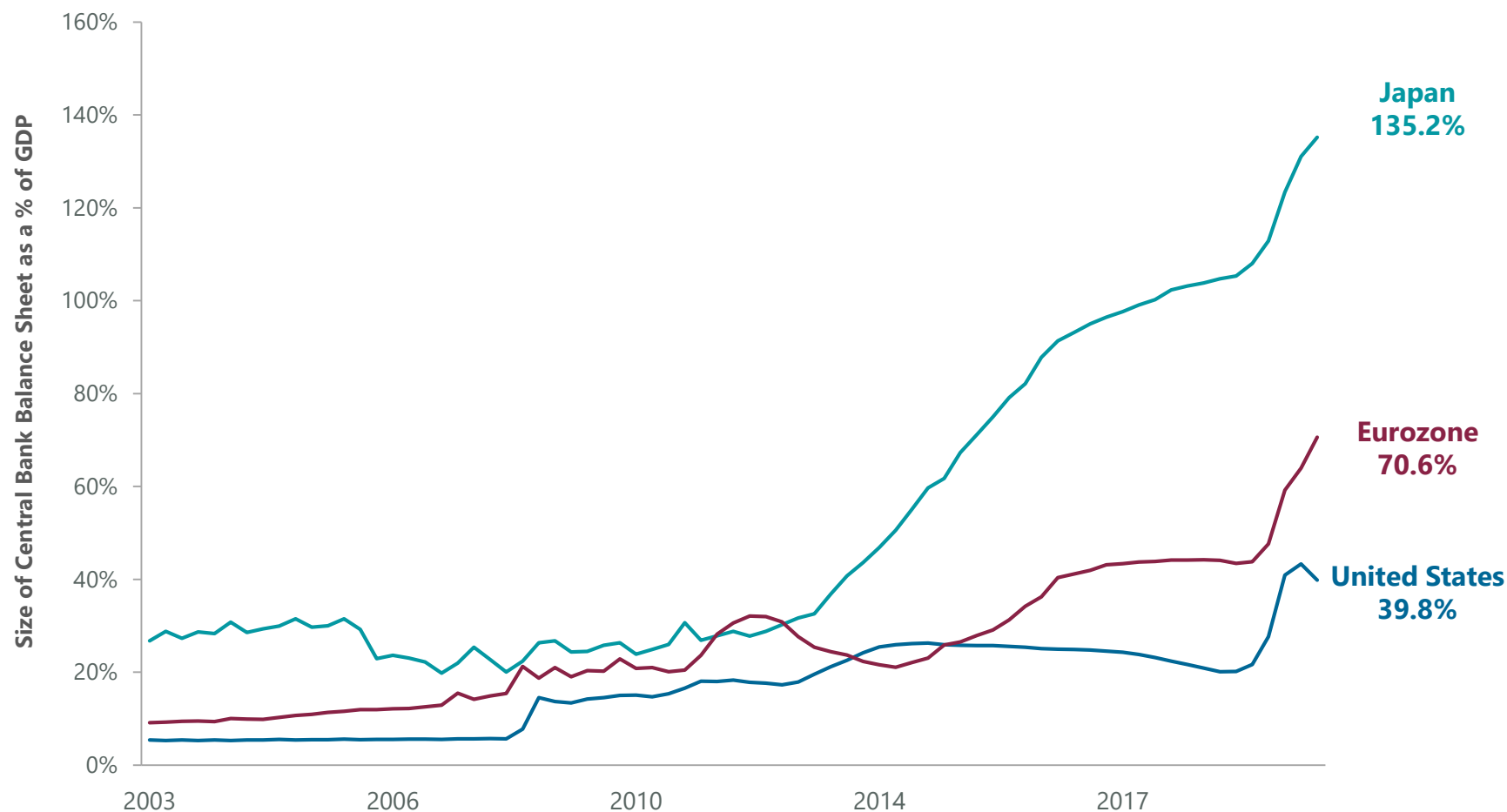
- ▶ **Inventory levels relative to sales have not been this depleted since 2014.**
- ▶ **Businesses will likely re-stock inventories in anticipation of growing demand, providing further economic upside in 2021.**

The New (Old) Normal?



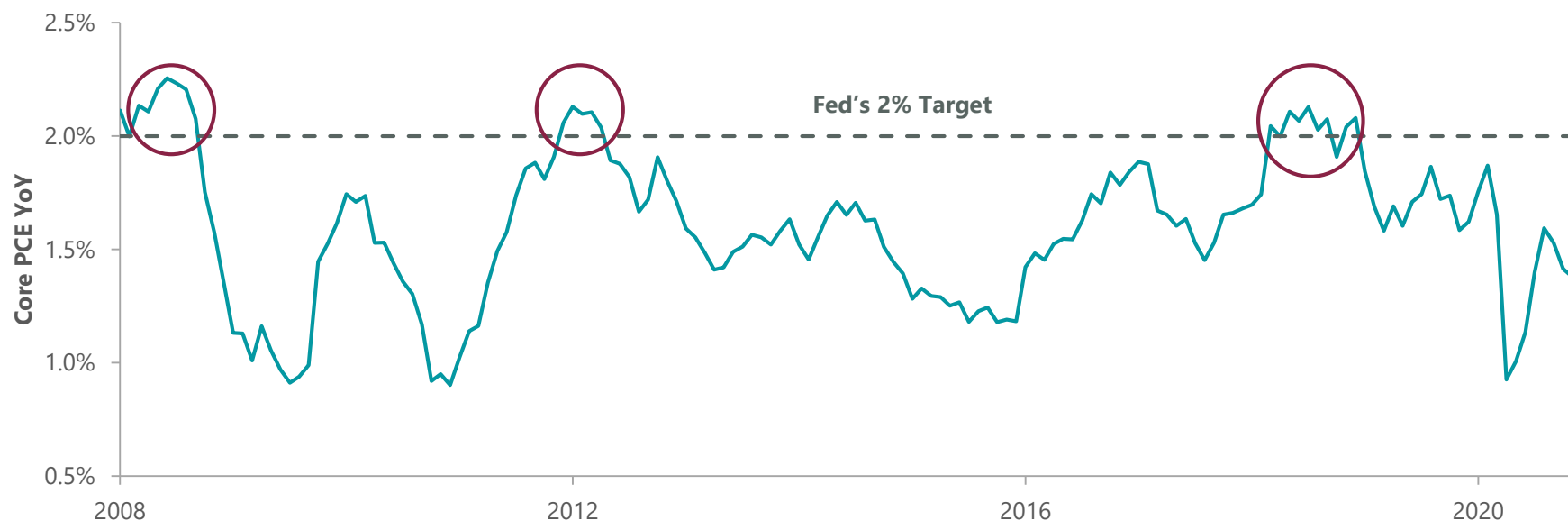
- ▶ **Following the COVID-19 GDP collapse, 2021 is expected to see the strongest growth in 20 years.**
- ▶ **This strength is currently expected to persist into 2022 with the best GDP growth since 2004.**

QE Forever?



- ▶ **The Fed's smaller balance sheet as a % of GDP affords policymakers greater flexibility to continue to support the recovery.**
- ▶ **The Fed's current QE program (\$120B/month) is much greater than any post-GFC QE program.**

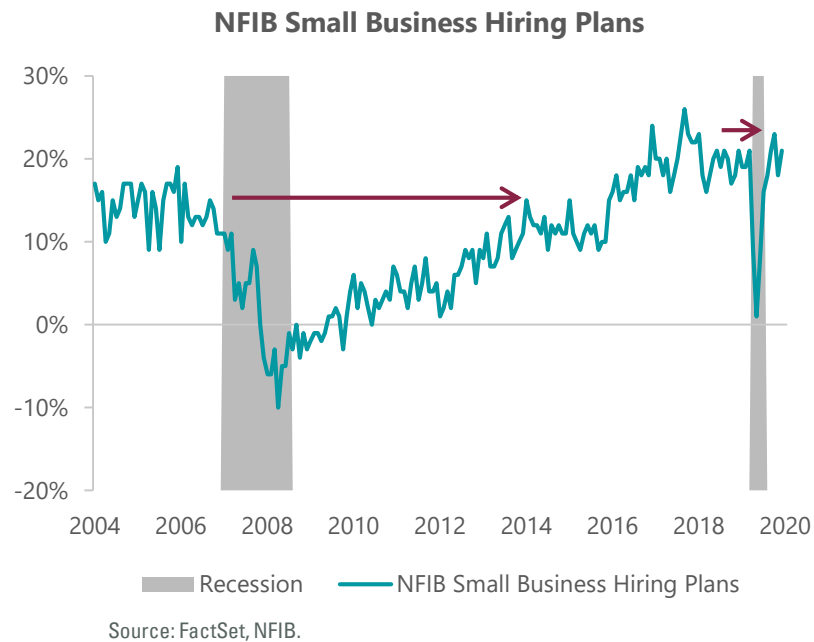
The Fed's New Framework



	Avg. Inflation Target		
	2008	2012	2016
Fed's Starting Point			
Cumulative Shortfall	6.9%	4.1%	1.6%
3-Year Horizon	4.3%	3.4%	2.5%
5-Year Horizon	3.4%	2.8%	2.3%
10-Year Horizon	2.7%	2.4%	2.2%

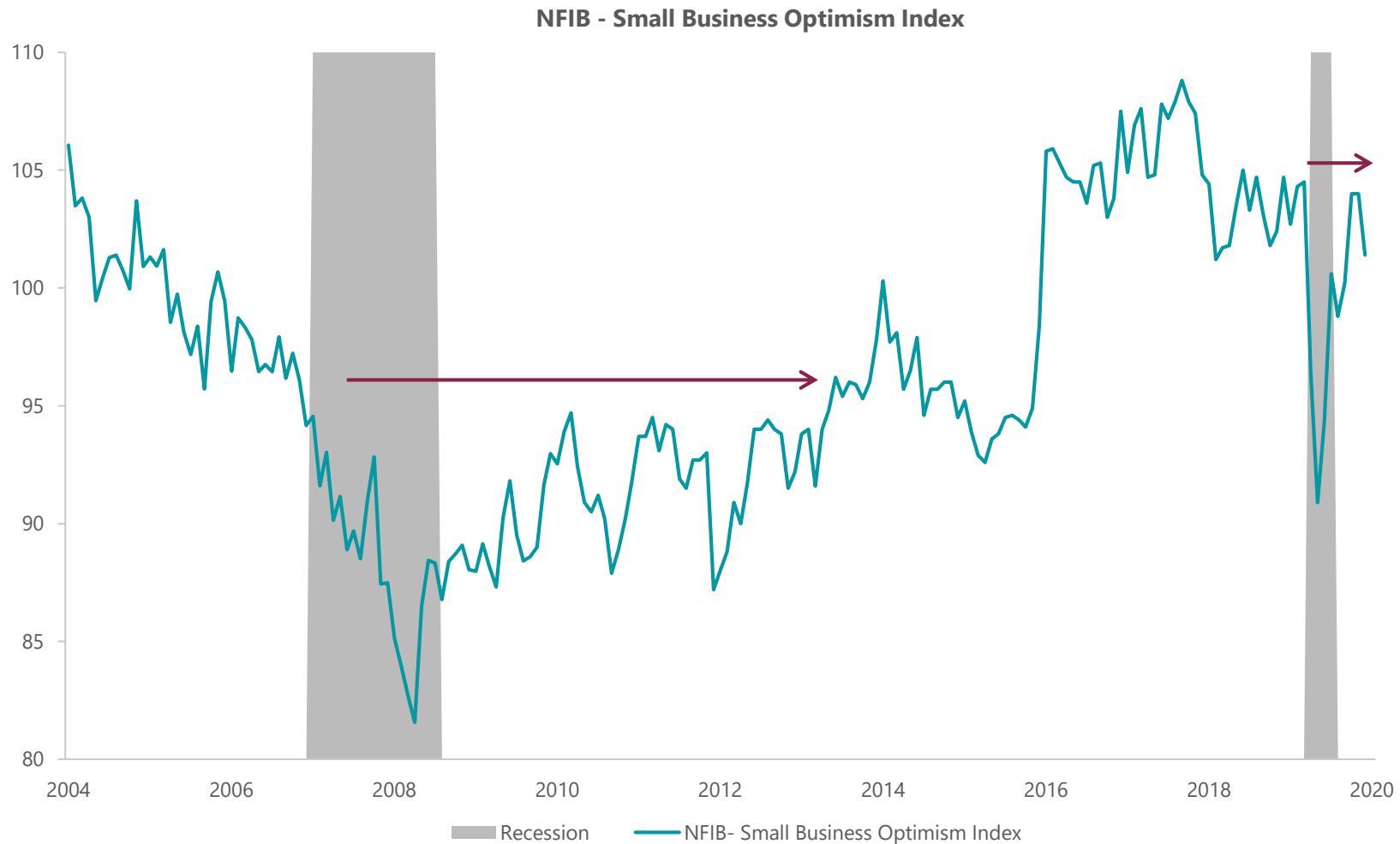
- ▶ **Inflation has consistently undershot the Fed's 2% target, prompting a change of their framework to average 2% inflation over the medium term.**
- ▶ **Should the economy normalize faster than anticipated, the Fed could find itself behind the curve.**

Not The Global Financial Crisis: Labor



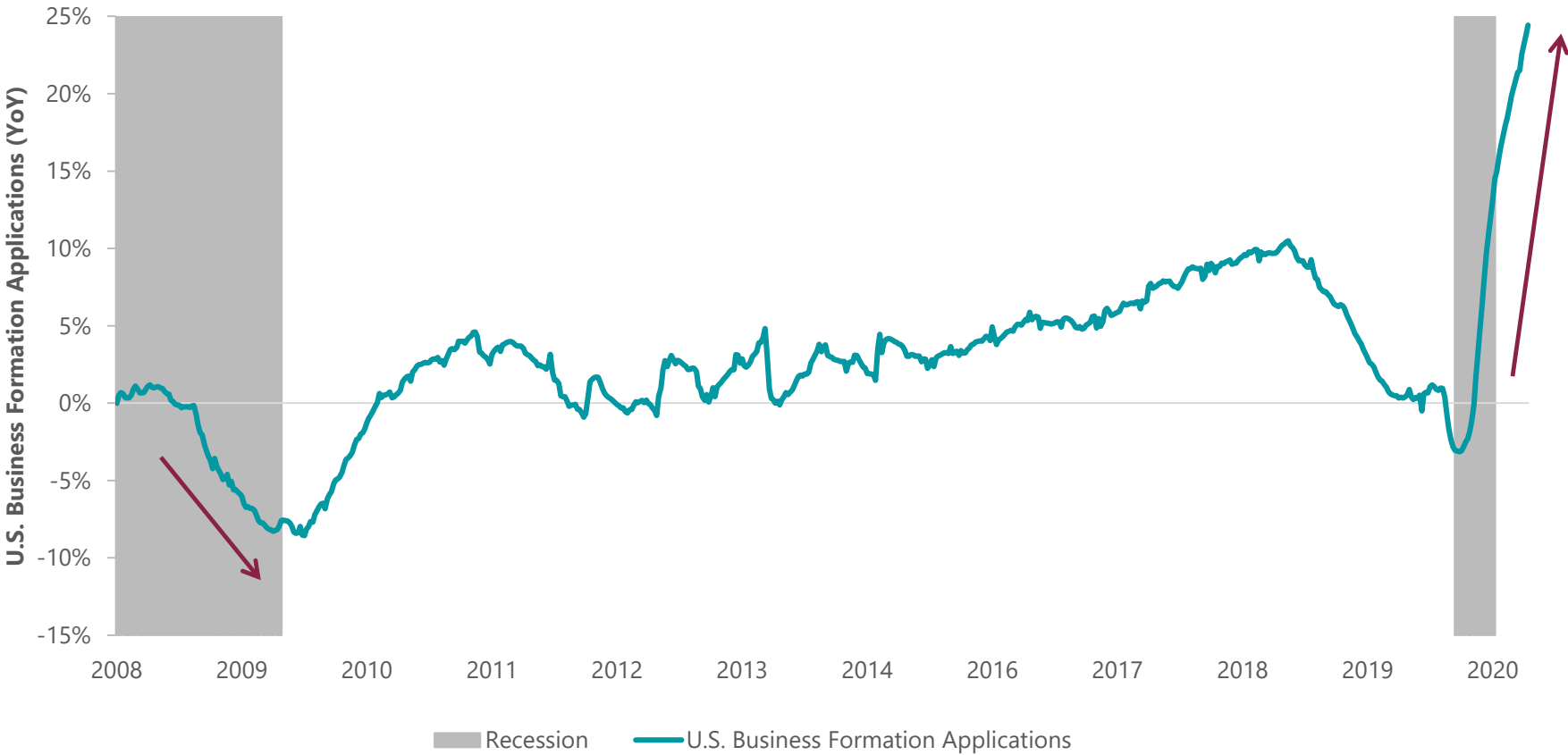
- ▶ **Post-GFC, it took until 2014 for the labor market to recover to pre-crisis levels.**
- ▶ **The recovery from the COVID-19 recession has been much quicker.**

Not The Global Financial Crisis: Confidence



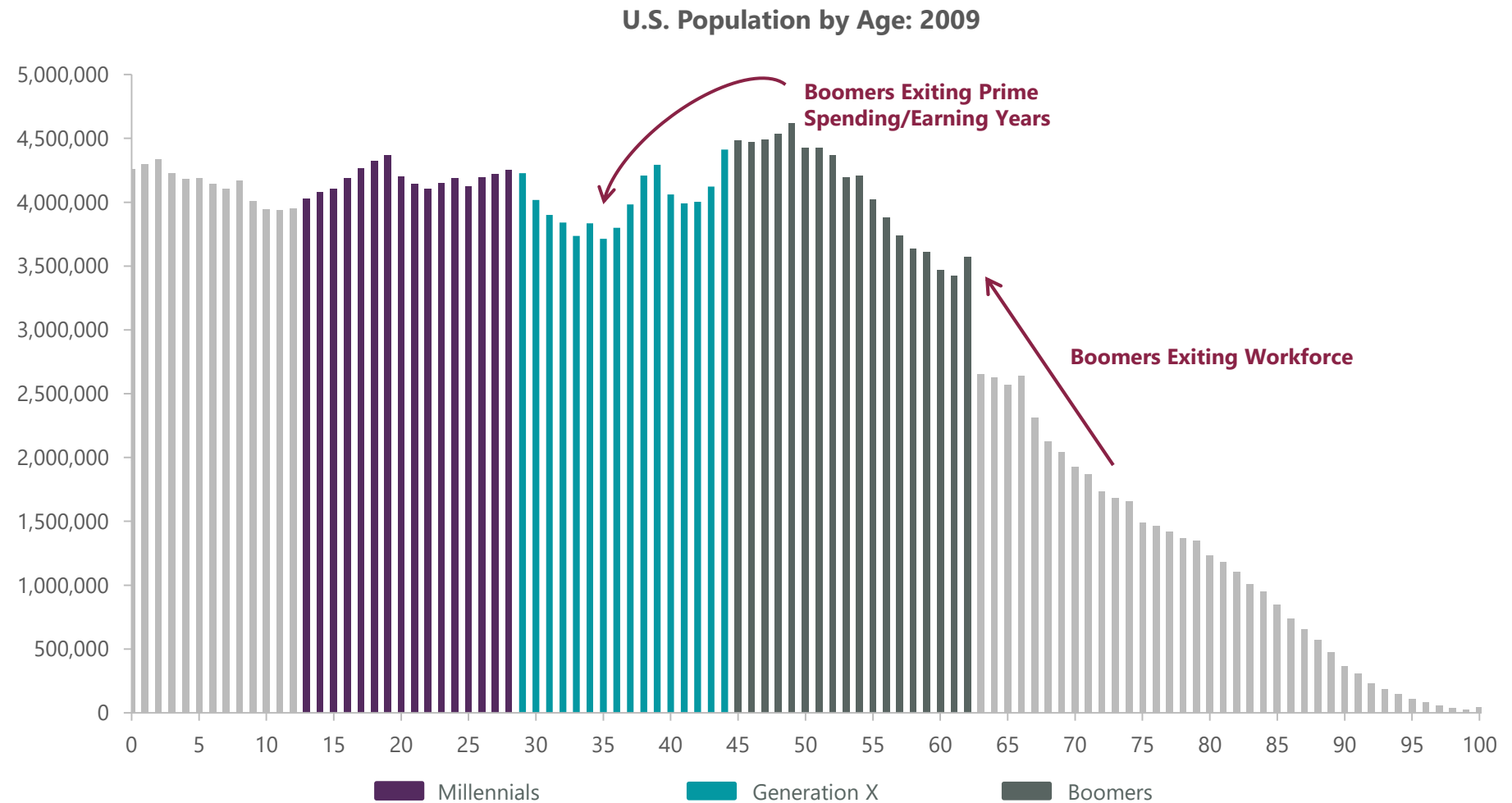
- ▶ **Similar to the labor market, small business optimism has recovered much quicker relative to the post-GFC recovery.**

Business Formation Anomaly



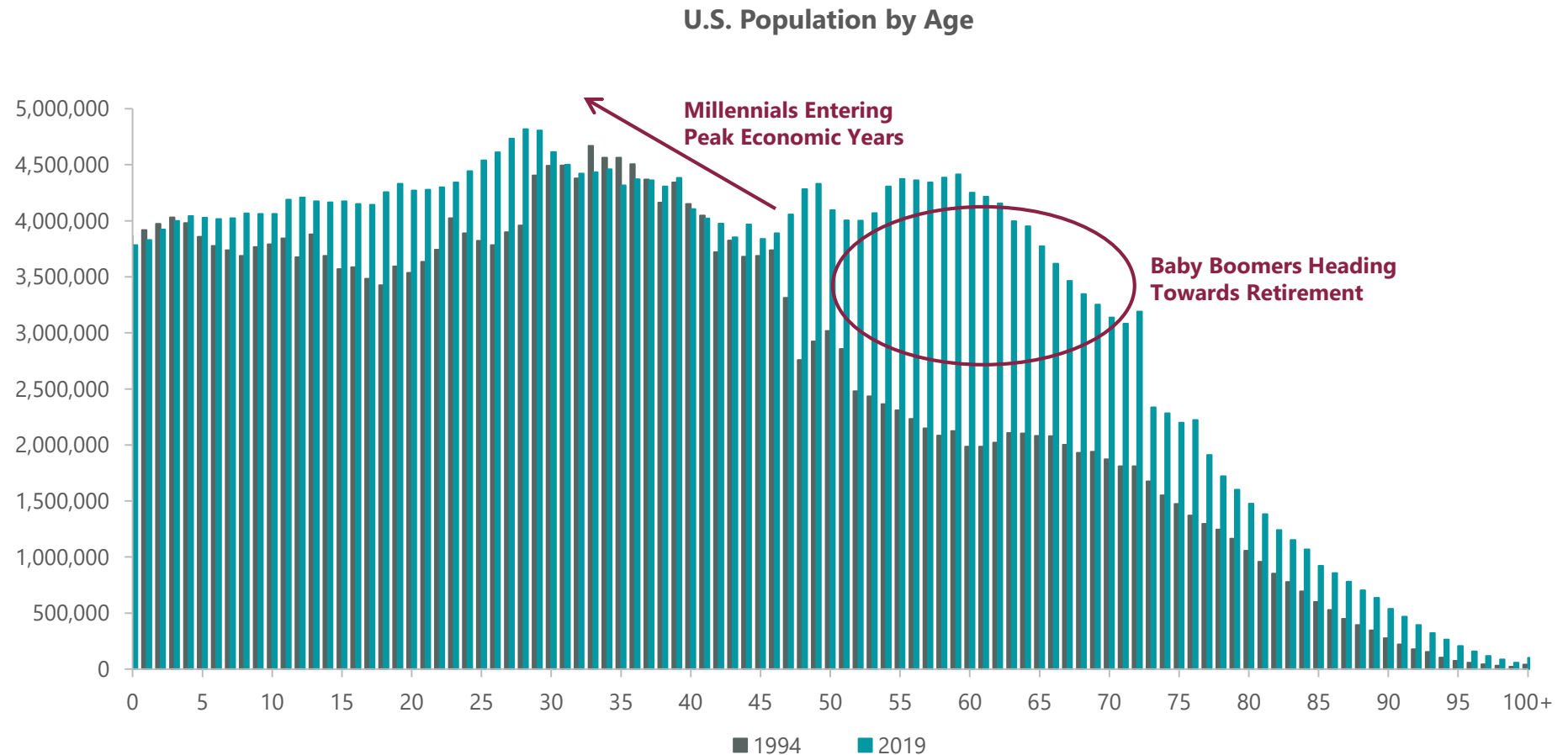
- ▶ **The number of applications to form new businesses has skyrocketed despite the recession.**
- ▶ **This could be an important driver of job creation and GDP growth as the expansion unfolds.**

2009 Demographic Headwind



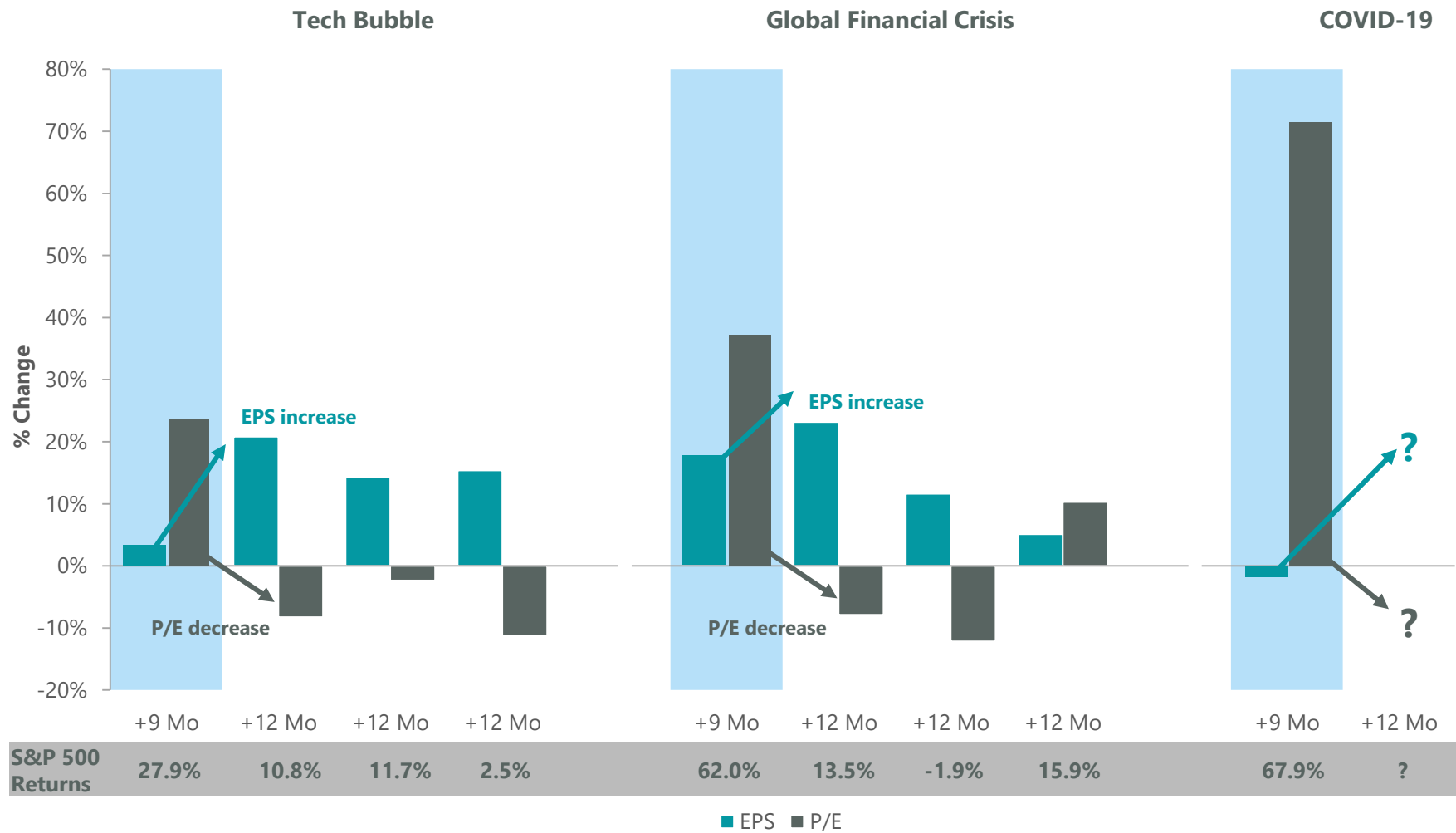
- ▶ **In the wake of the GFC, poor demographic trends were a headwind to economic growth as the Baby Boomers aged out of the workforce.**
- ▶ **The smaller size of Gen X meant fewer individuals in their prime spending and earning years.**

2019 Demographic Tailwind Similar to 1994



- ▶ **Similar to the mid-1990s, demographics should be a tailwind for economic growth as the Millennials enter their prime earning and spending years.**
- ▶ **This impulse should be somewhat dampened compared to 1994 due to the larger cohort of retirees today.**

Earnings to Take the Baton



- ▶ **In the nine months following recessionary troughs, multiple expansion has been an outsized contributor to returns.**
- ▶ **As the recovery matures, earnings typically drive stock upside as multiples contract.**

Can Year-End 2020 Strength Continue?

Date	S&P 500 Price Return			
	S&P 500 November-December Price Return	3 Month	6 Month	12 Month
1954	13.6%	1.7%	14.0%	26.4%
1962	11.6%	5.5%	9.9%	18.9%
1970	10.5%	9.0%	8.4%	10.8%
1985	11.3%	13.1%	18.7%	14.6%
1998	11.9%	4.6%	11.7%	19.5%
2020	14.9%	?	?	?
	Average	6.8%	12.5%	18.1%
	% Positive	100%	100%	100%

- ▶ **Following 10%+ rallies in November and December, stocks have typically continued to deliver strong gains in the subsequent year.**

Market Returns During Economic Expansions

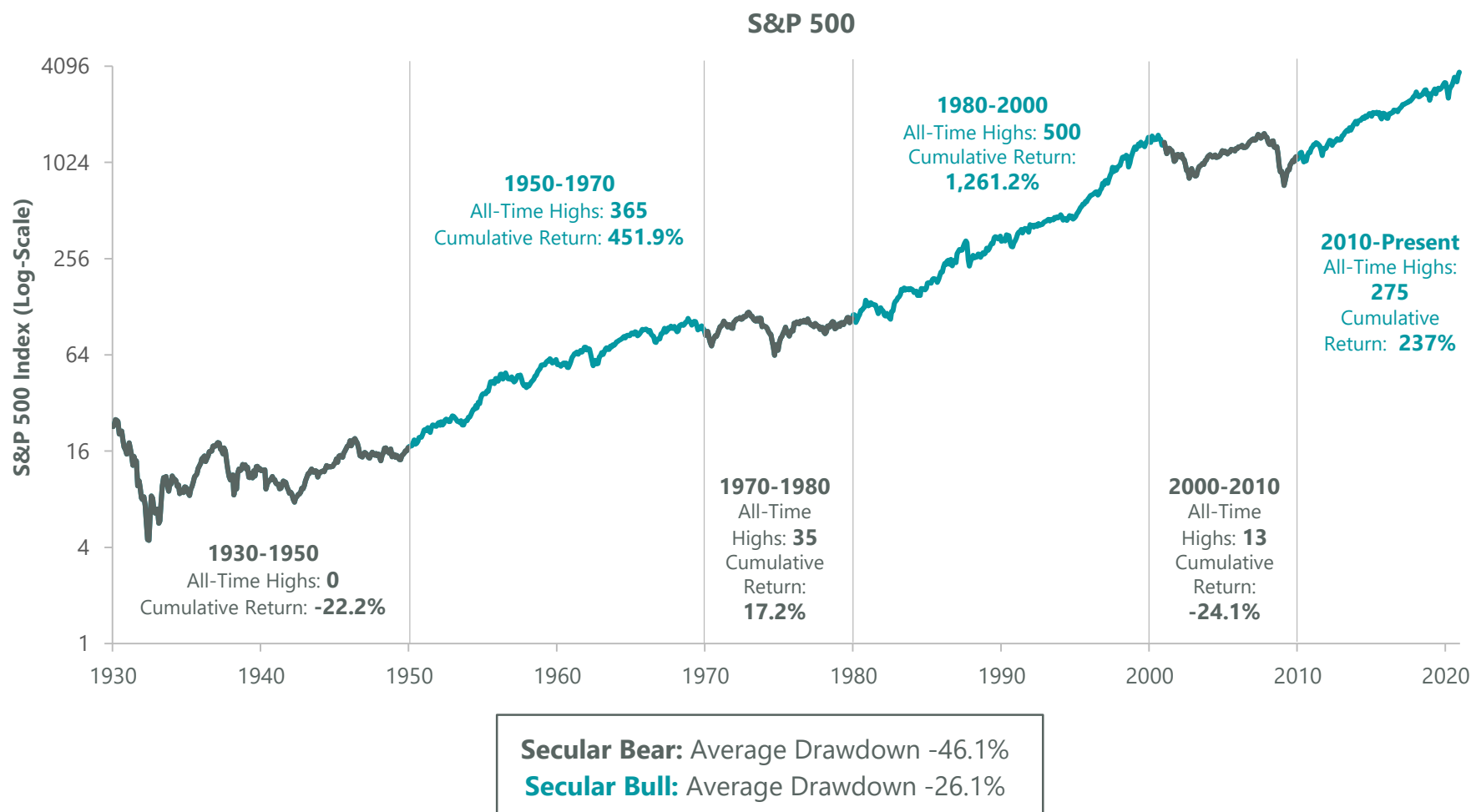
Following the End of Recessions, Equities Typically Do Quite Well

S&P 500 Returns During Economic Expansions

Trough Month	S&P 500 Level	Peak Month	S&P 500 Level	Duration (Months)	Change	Secular Trend
Nov. 30, 1970	87.2	Nov. 30, 1973	95.9	36	10.0%	Secular Bear
Mar. 31, 1975	83.4	Jan. 31, 1980	115.1	58	38.1%	Secular Bear
July 31, 1980	121.7	Jul. 31, 1981	130.9	12	7.6%	Secular Bull
Nov. 30, 1982	138.5	Jul. 31, 1990	356.2	92	157.1%	Secular Bull
Mar. 28, 1991	375.2	Mar. 30, 2001	1160.3	120	209.2%	Secular Bull
Nov. 30, 2001	1139.5	Dec. 31, 2007	1468.4	73	28.9%	Secular Bear
Jun. 30, 2009	919.3	Feb. 28, 2020	2954.2	128	221.3%	Secular Bull
Average:				74	96.0%	
Secular Bull Average:				88	148.8%	
Secular Bear Average:				56	25.7%	

- ▶ **We continue to believe stocks are in the midst of a secular bull market. If correct, this would bode well for equity investors in the coming years.**

New Secular Bull Market?



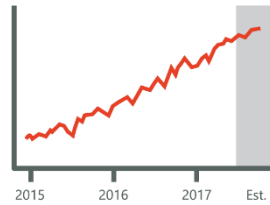
► **In the 12 months following an all-time high, stocks have historically been up 8.6% on average with positive returns 71% of the time.**

One Year Outlook

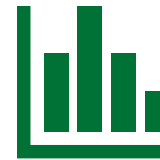
Themes That Will Drive the Market Over the Next 12 Months



Recovery Risks



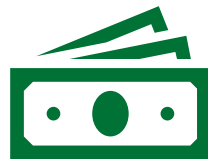
Valuations



Market Concentration



International



Currency



Demographics



Volatility

Recovery Risks



Could Rising Rates Be a Black Swan?



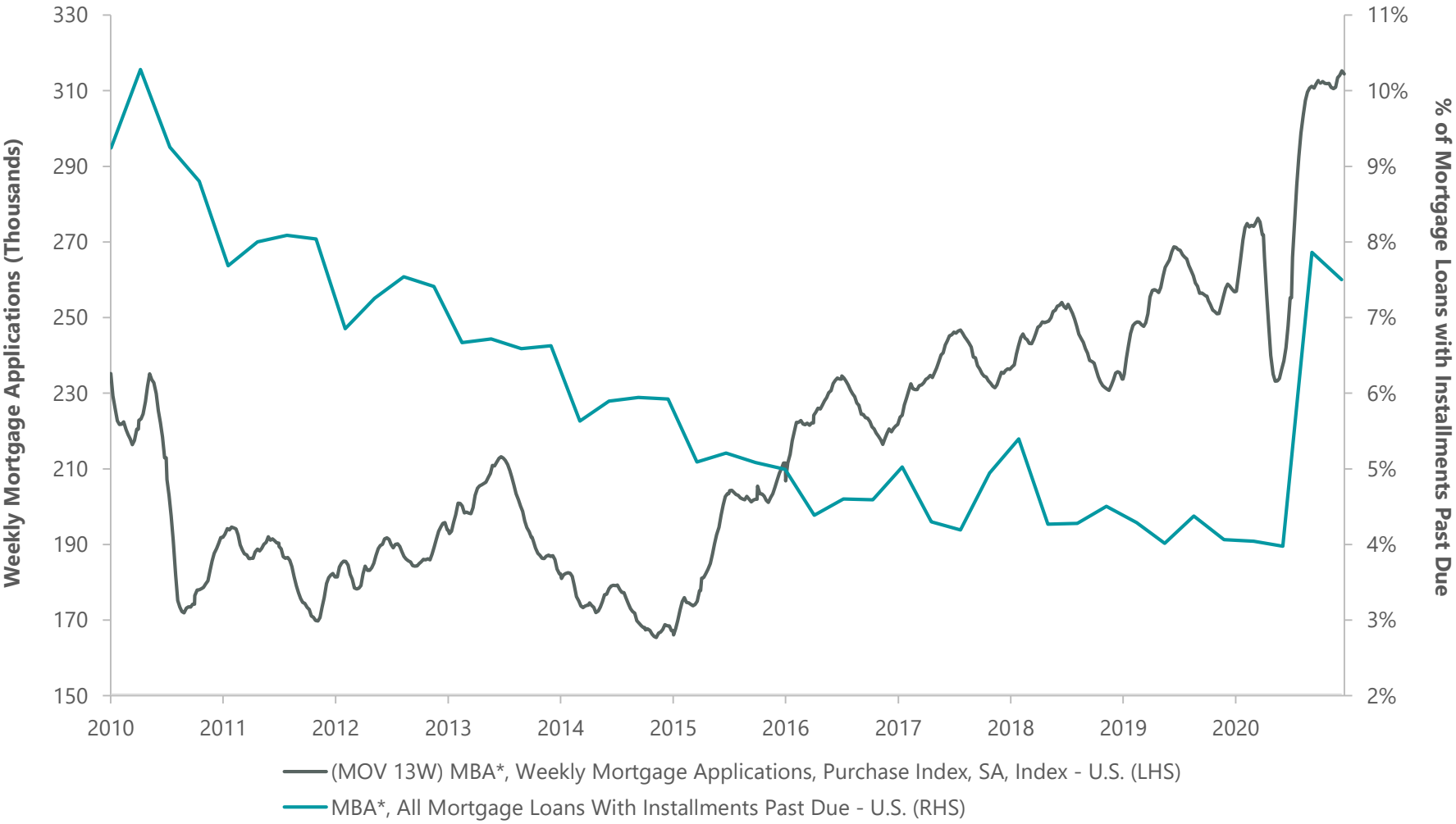
- ▶ **Consensus expectations for 2021 are skewed towards a modest pickup in Treasury rates.**
- ▶ **If economic growth surprises to the upside, long rates could follow which would likely require a recalibration of equity market leadership.**

Trade Détente May Fall Flat



► **Multilateral trade negotiations with China could prove tricky given China's role as a key partner for many countries outside of North America.**

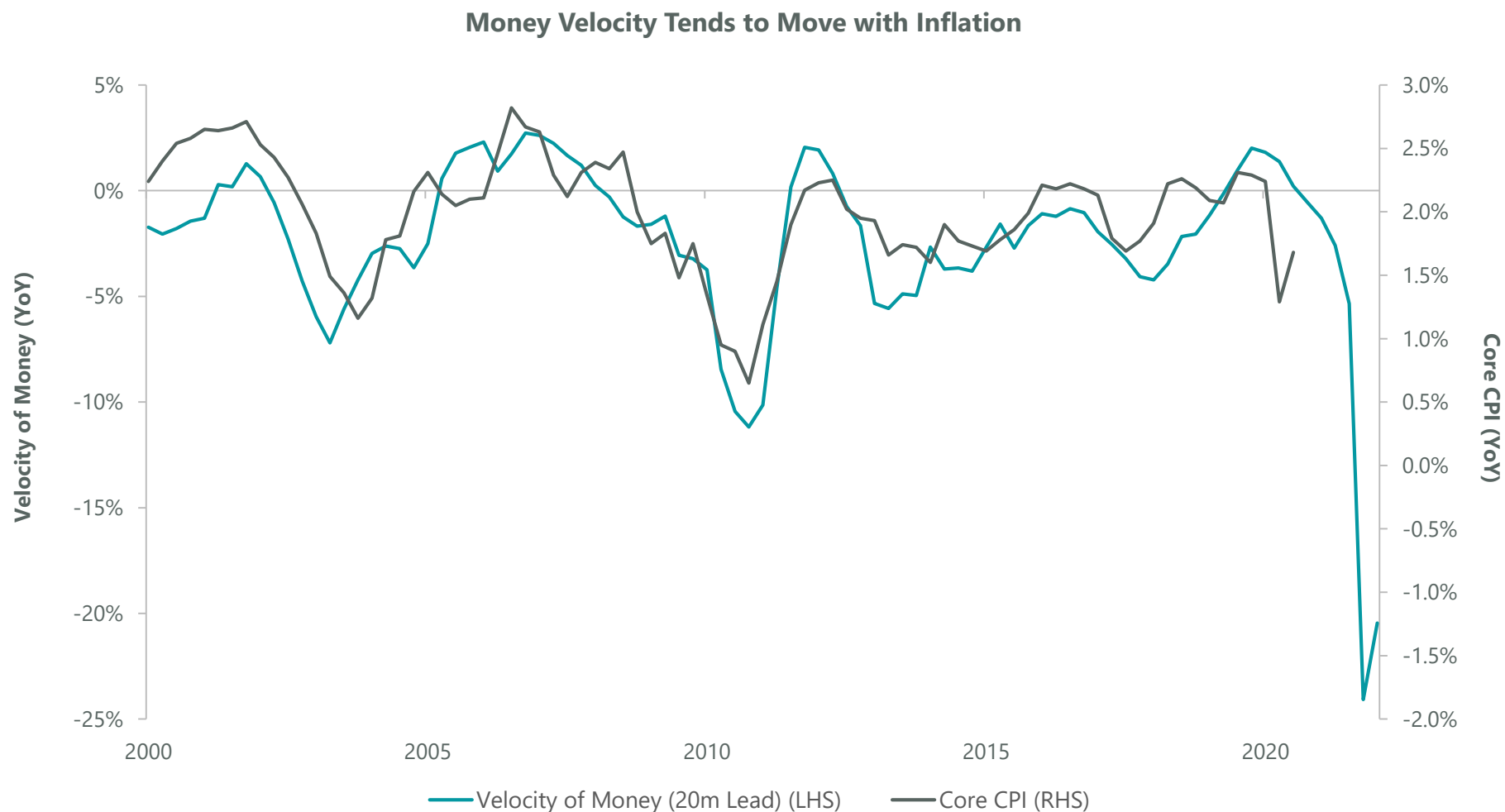
Dichotomy in the Housing Market



► While lower rates have fueled new mortgage applications, delinquencies have also risen to levels last seen in the wake of the housing bubble.

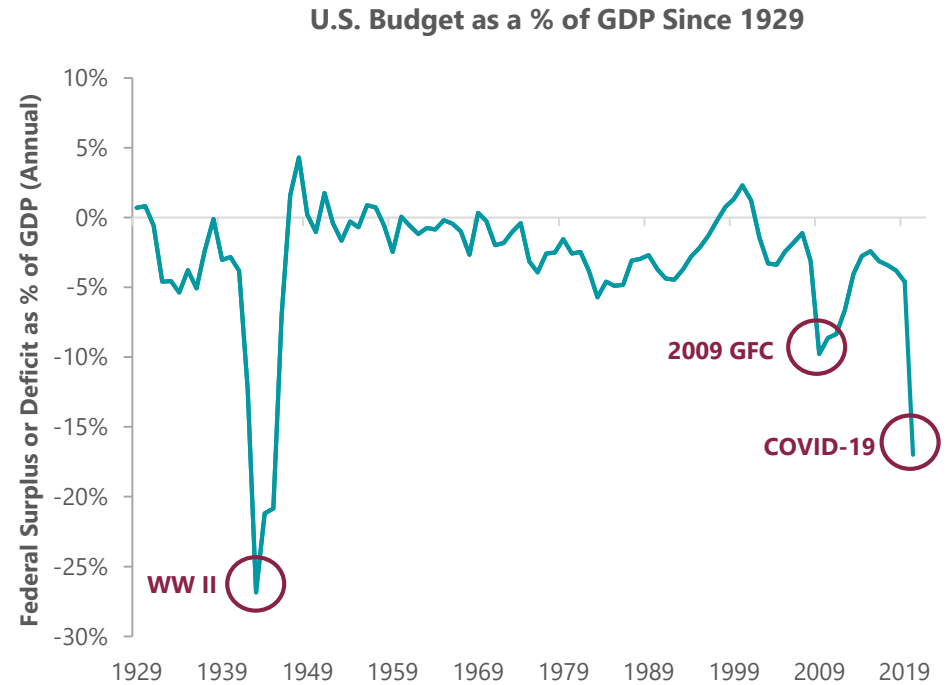
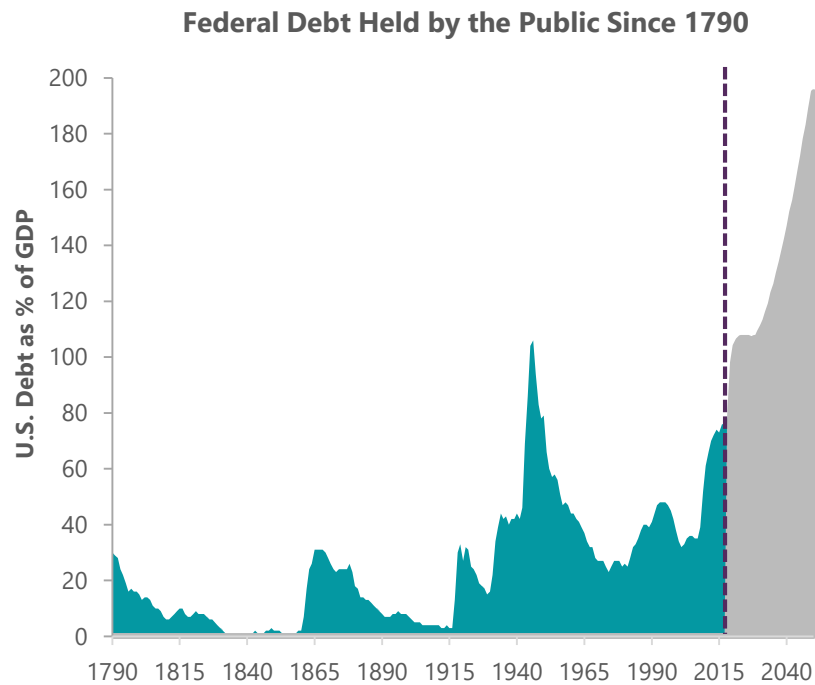
*MBA = Mortgage Bankers Association. Data as of Dec. 18, 2020. Source: FactSet. Past performance is not a guarantee of future results. Investors cannot invest directly in an index, and unmanaged index returns do not reflect any fees, expenses or sales charges.

Inflation Unlikely Near Term



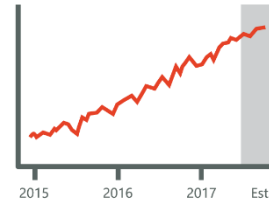
- ▶ **Although Fed actions have substantially increased the supply of money, the velocity of money has collapsed.**
- ▶ **This suggests inflation will remain muted in the near term.**

U.S. Debt Levels Set to Rise Higher



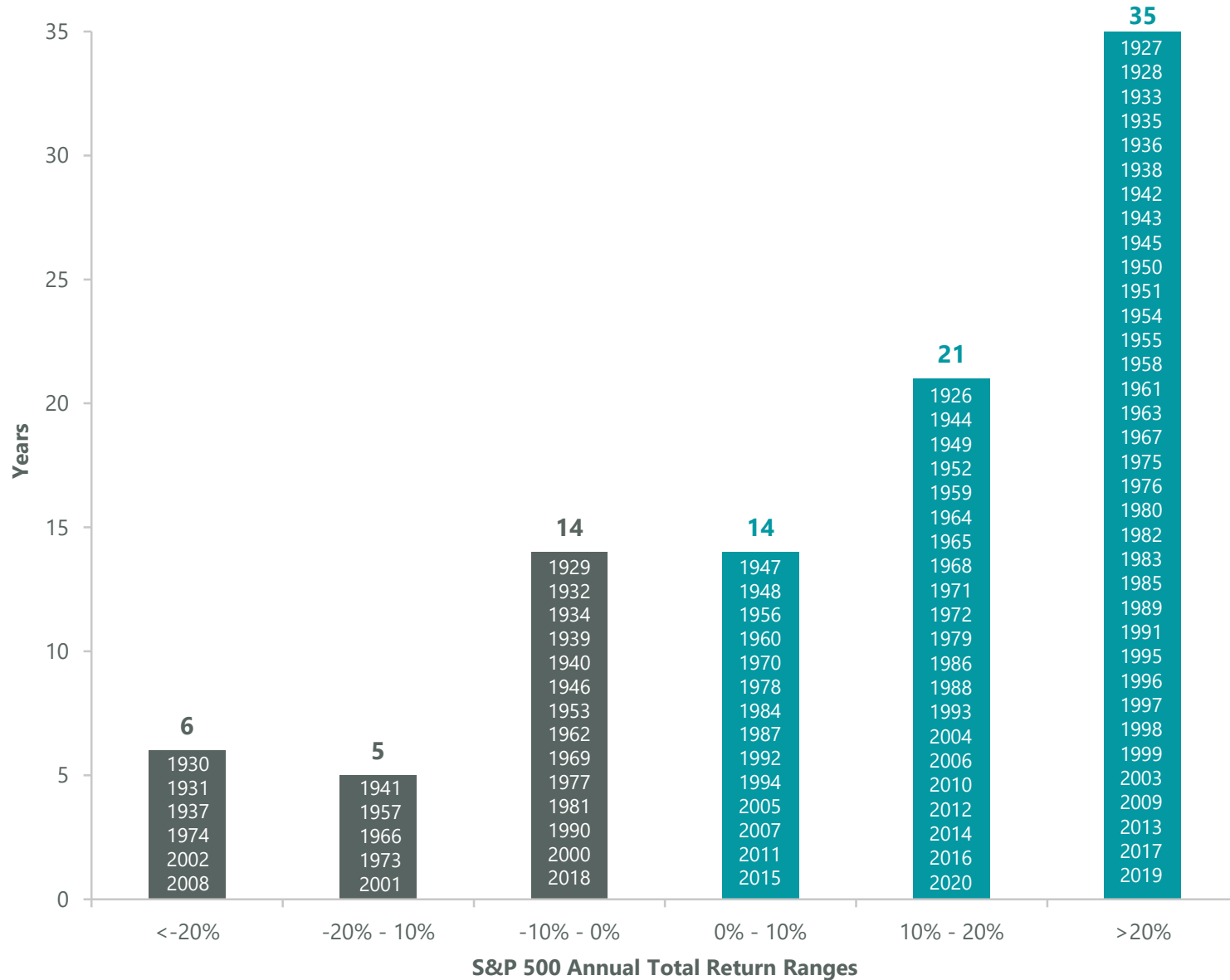
▶ **Barring a change in spending, U.S. debt levels will grow substantially in the coming decades.**

Valuations

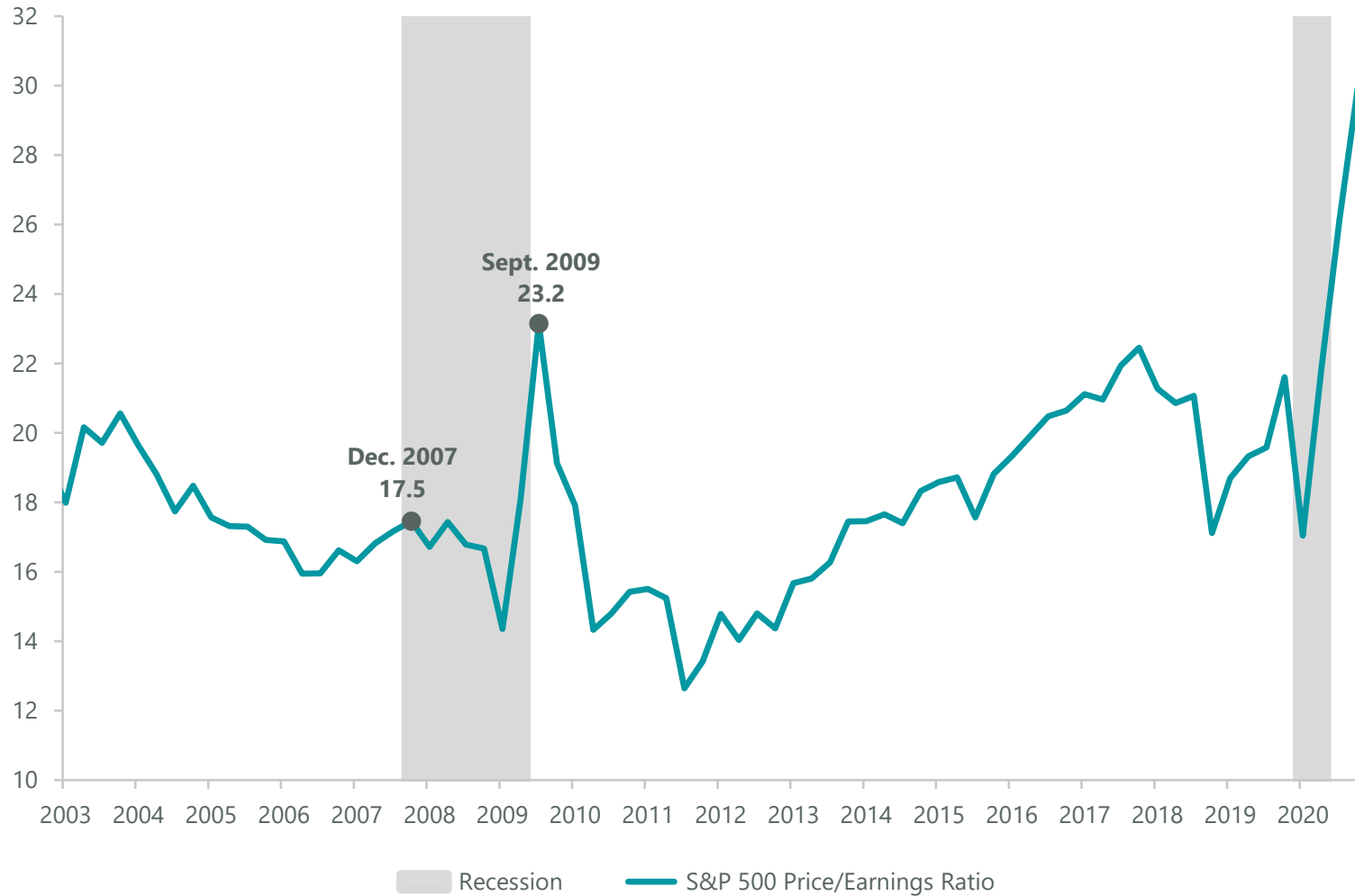


Market Annual Returns

Distribution of S&P 500 Total Returns Since 1926

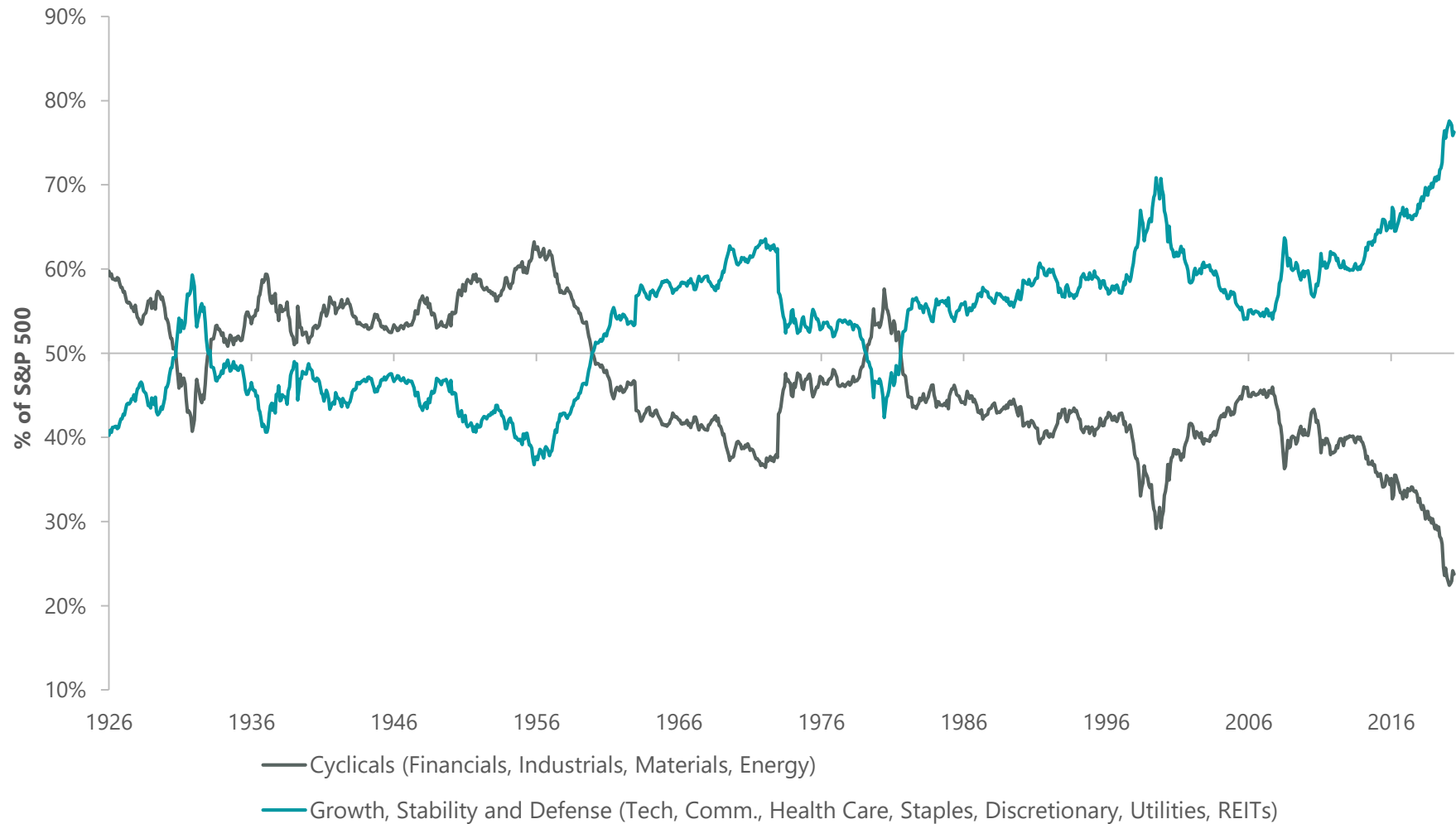


Price/Earnings Is Not The Only Indicator To Watch



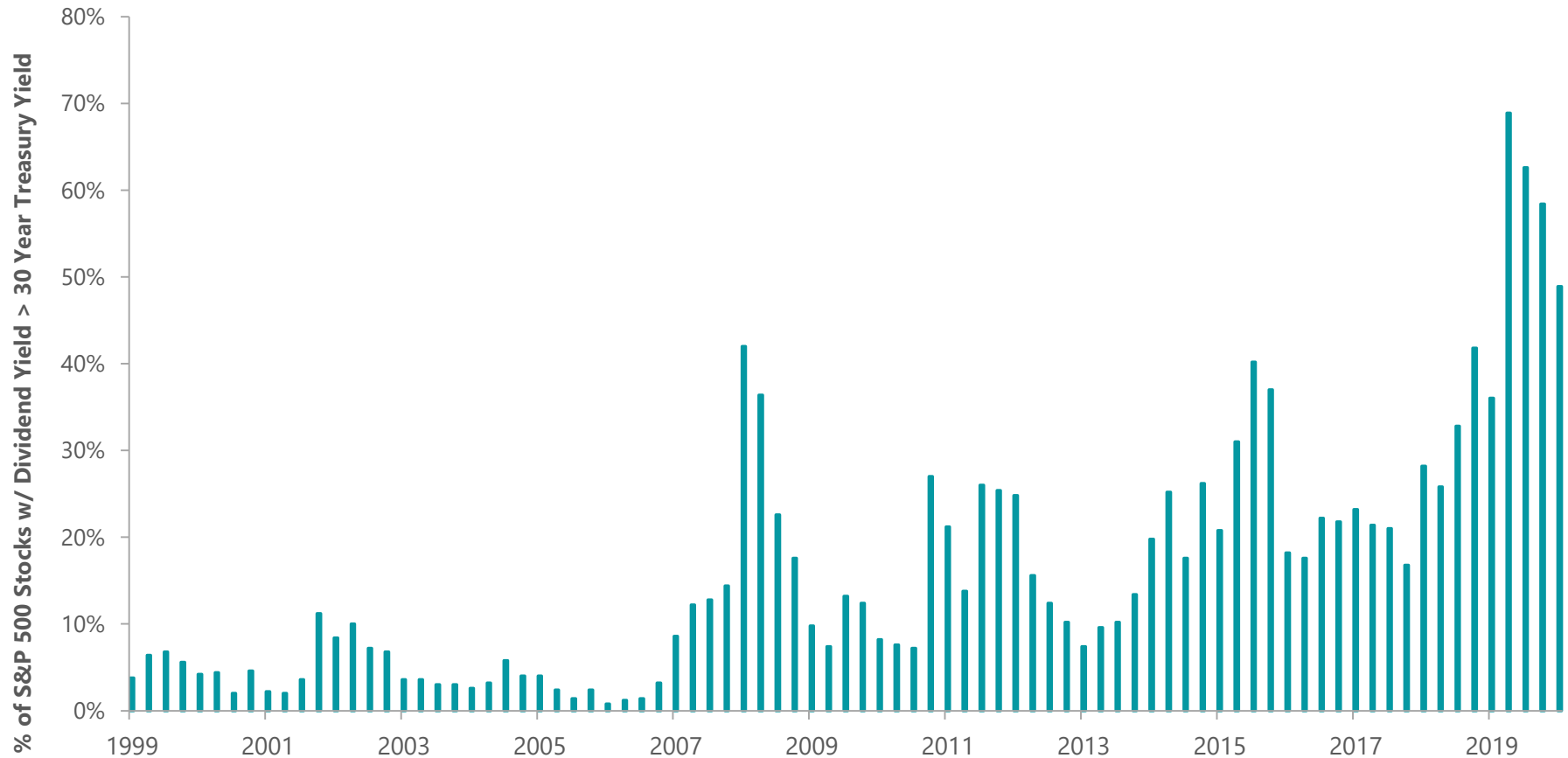
Index Composition Supports Higher P/Es

Cyclical Sector Representation is at 100-Year Low



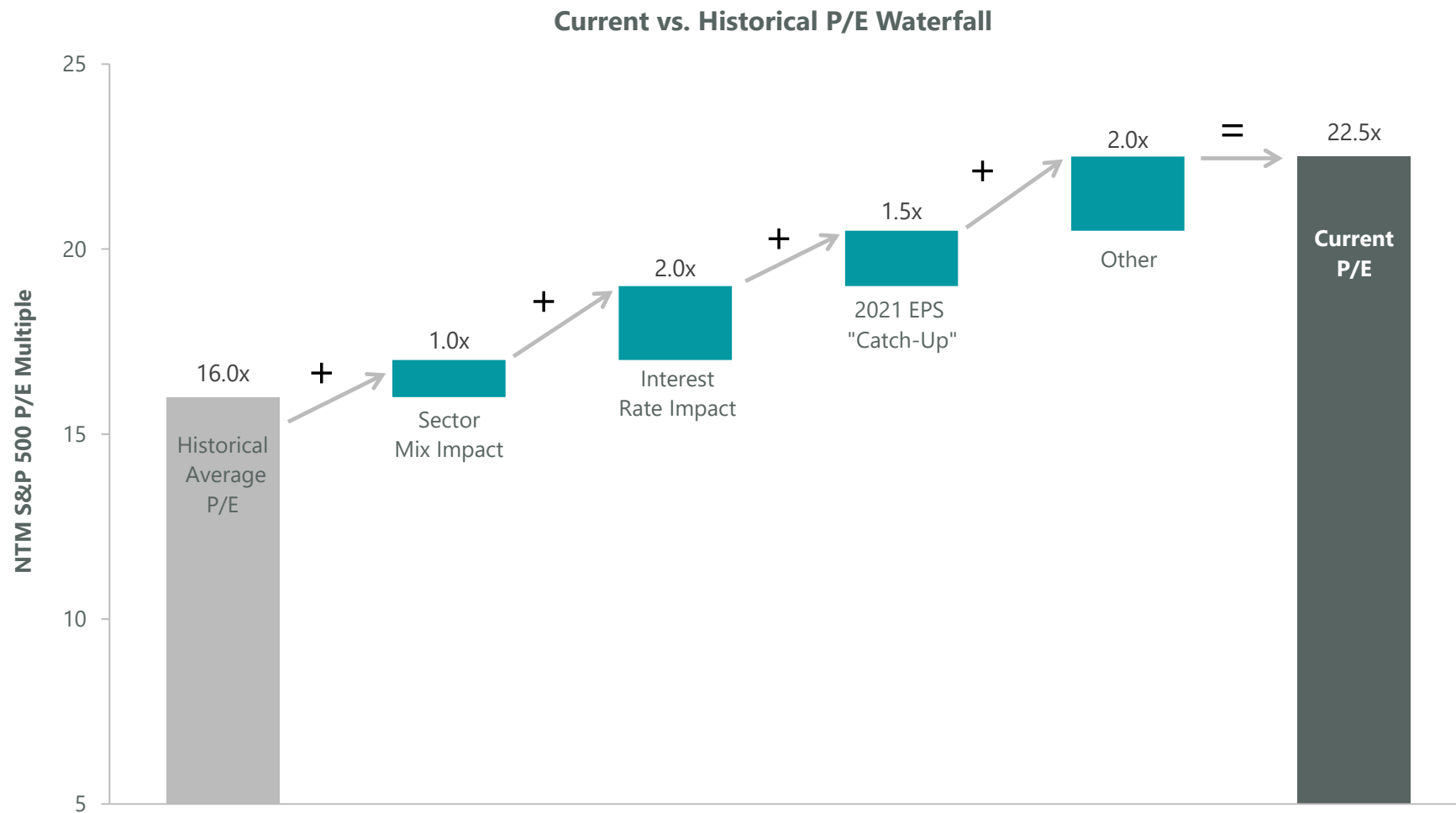
► **Less-volatile sectors are typically rewarded with higher multiples. These groups make up a near-record share of the S&P 500 today.**

Dividend-Paying Equities Attractive



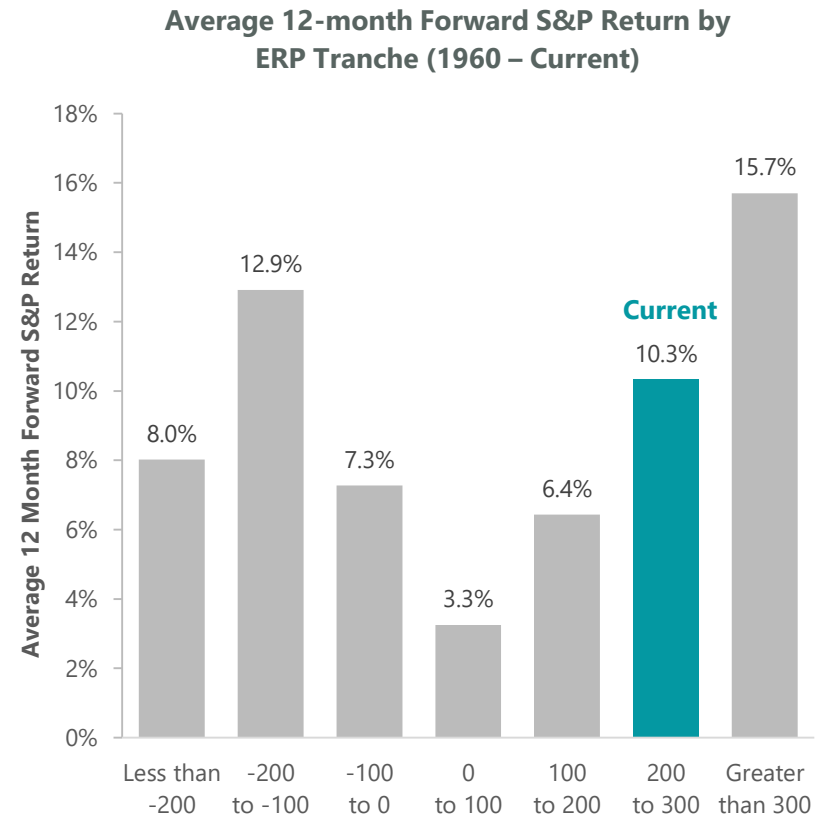
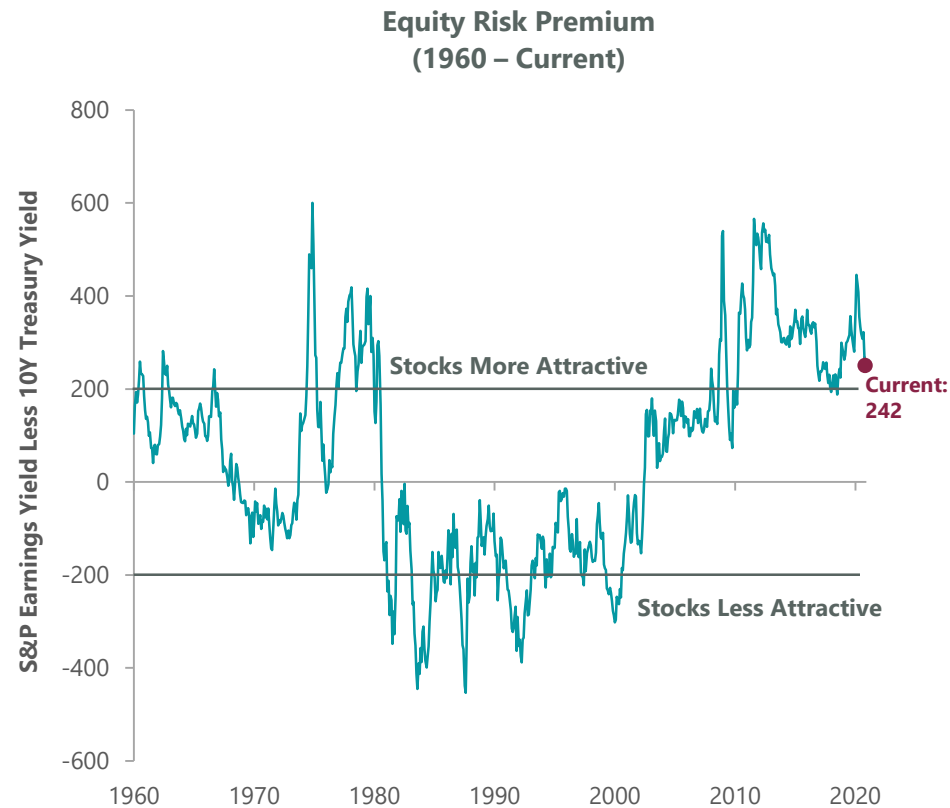
► **49% of S&P 500 stocks now have a dividend yield greater than the 30-year Treasury.**

Just How Stretched are Valuations?



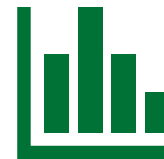
- ▶ **Current valuations appear rich relative to history. Much of this can be explained by sector mix differences, lower interest rates, and an expected earnings "catch-up" in 2021.**

Equities Attractive Relative to Bonds

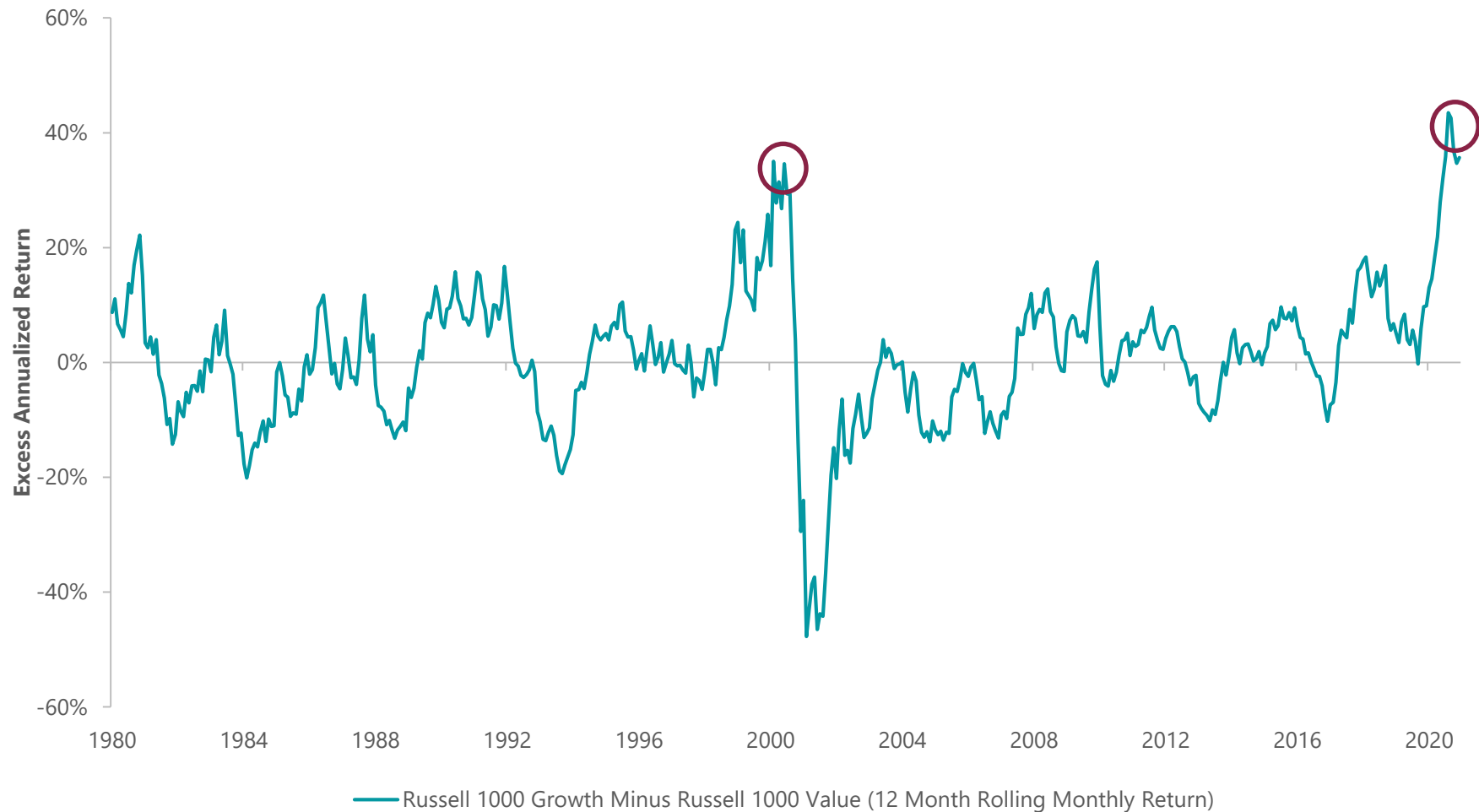


- ▶ **The valuation of stocks (in bond yield terms) relative to Treasuries is attractive.**
- ▶ **Historically, the S&P 500 has delivered above-average returns from current ERP levels.**

Market Concentration

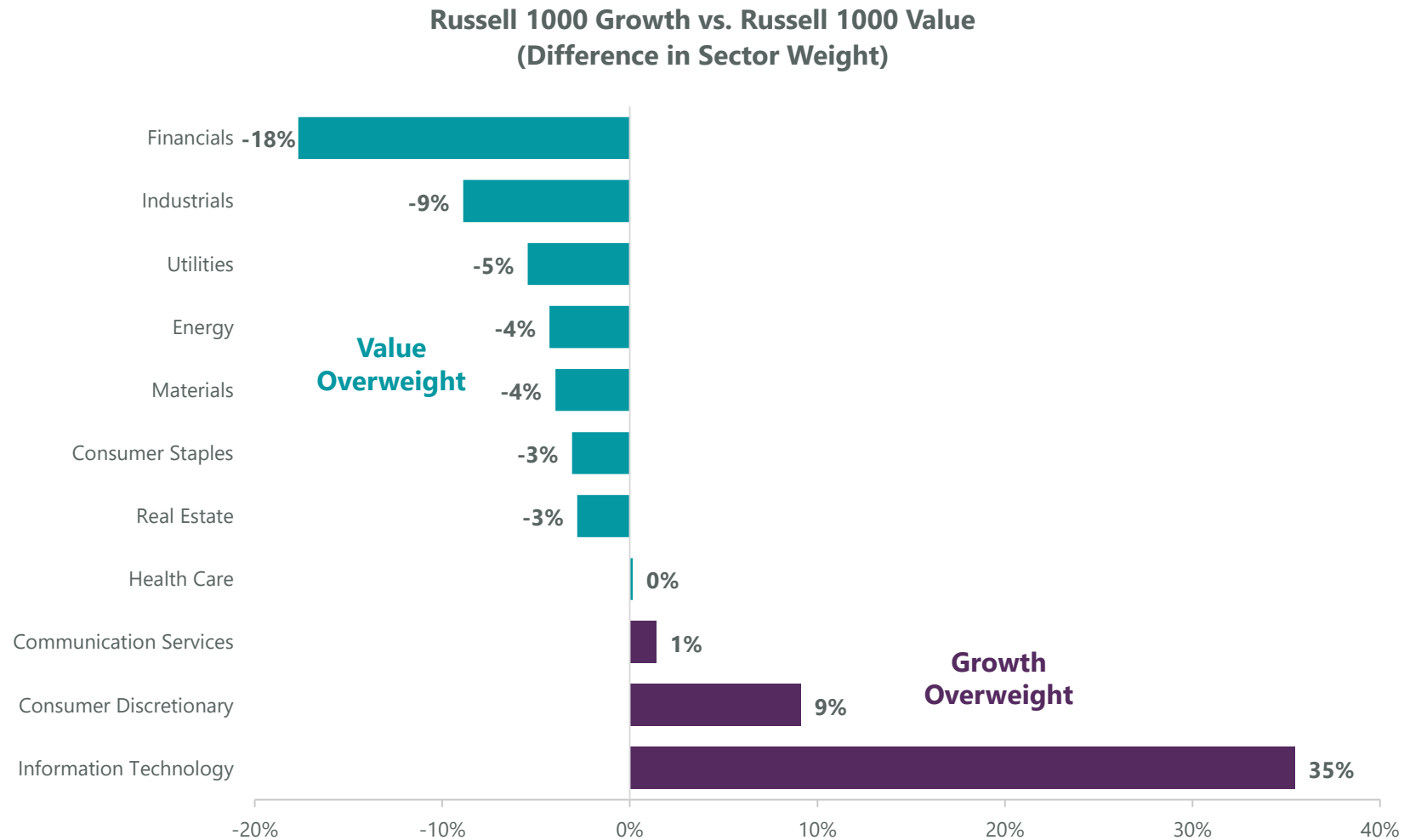


Historic Run for Growth



- ▶ **Growth's relative outperformance over the past year is now even larger than during the peak of the dot-com era.**

Sector Mix Explains Leadership



- ▶ **The performance of Financials and Industrials relative to Technology and Discretionary explains a large share of Growth/Value leadership.**

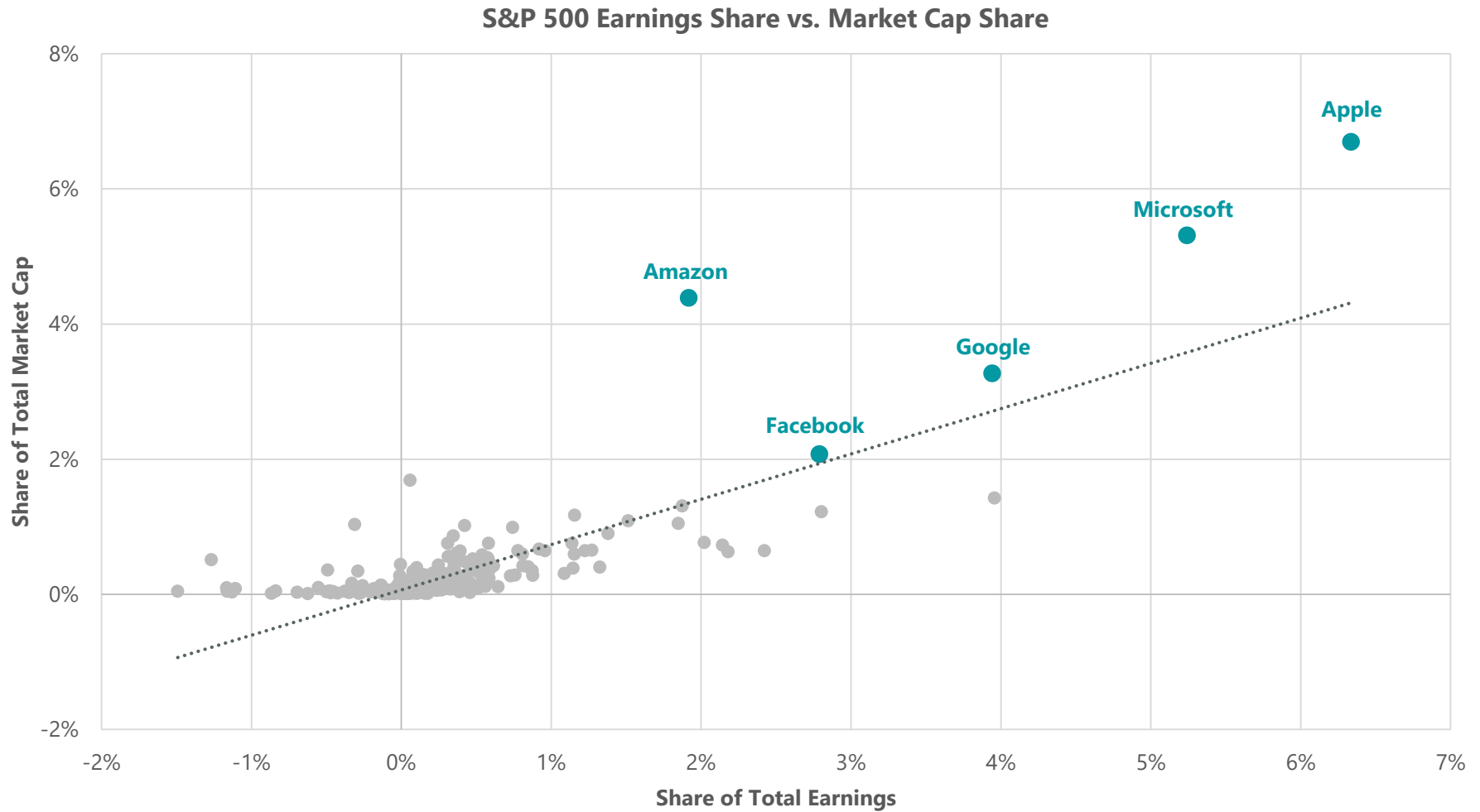
Is FAANGM a Bubble?

Leader Valuations Get Extreme During Manias

December 1972		March 2000		Current	
Nifty Fifty	P/E*	Dot-Com Darlings	NTM P/E	FAANGM	NTM P/E
Coca-Cola	46.4	Intel	44.3	Facebook	26.1
McDonald's	71.0	Cisco	126.3	Amazon	72.6
Texas Instruments	39.5	EMC	80.0	Apple	32.5
IBM	35.5	Microsoft	57.1	Netflix	59.5
Xerox	45.8	Oracle	107.2	Google	28.4
Polaroid	94.8	Nortel	92.0	Microsoft	31.2
Average	55.5	Average	84.5	Average	41.7
S&P 500	18.9	S&P 500	23.8	S&P 500	22.5

- ▶ **Although FAANGM trades at a large premium to the market, past bubbles have seen even more inflated valuations.**

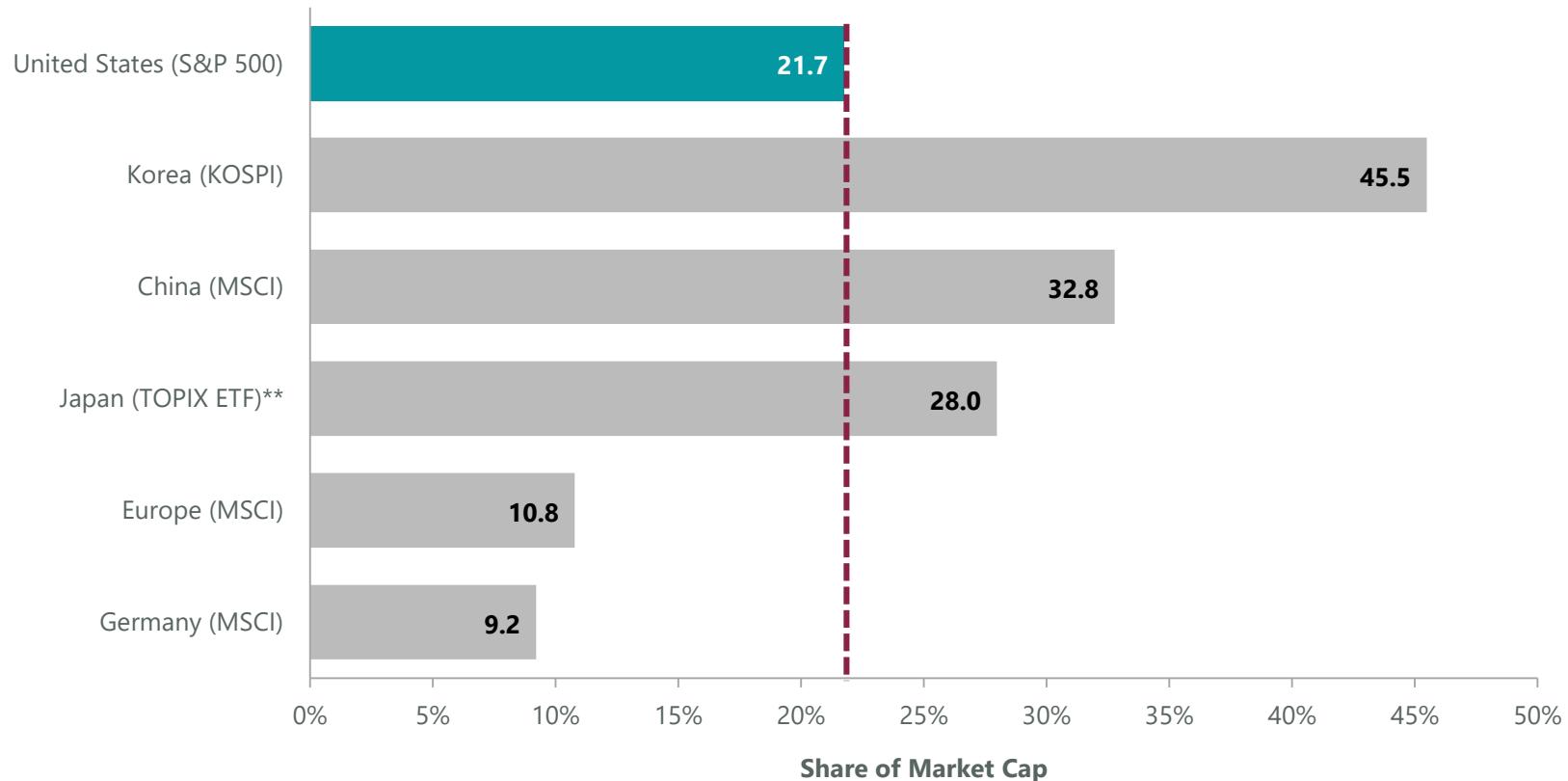
Are Valuations Justified by Earnings?



► The 5 largest stocks are expected to account for 20% of 2021 earnings.

U.S. Market Concentration Not An Outlier

Total Market Cap Share of Top 1% Largest Companies*

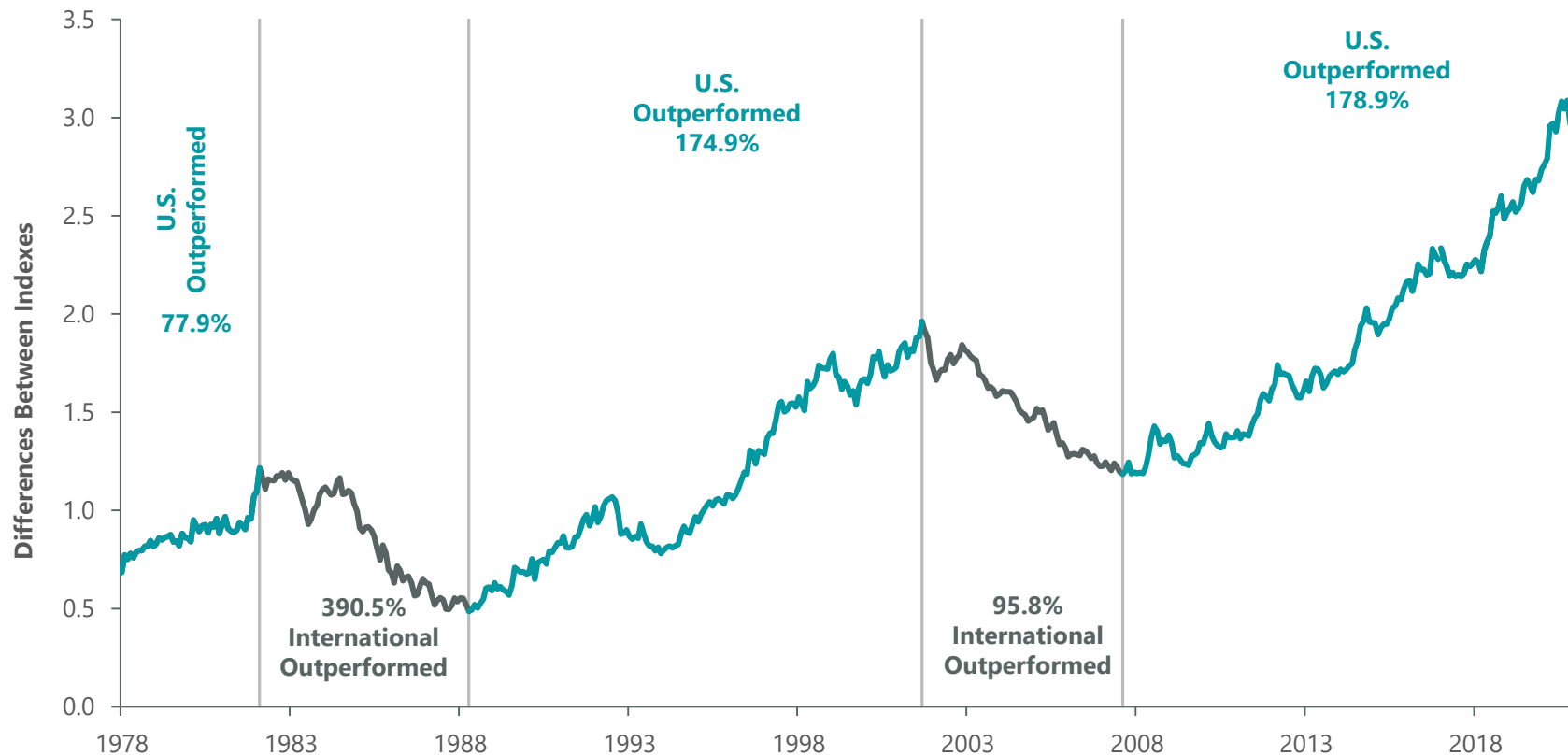


- ▶ **The top 1% of companies often make up a large share of the market cap in global indices.**
- ▶ **Contrary to common wisdom, the concentration of mega-cap Tech in the S&P 500 is not an outlier.**

International

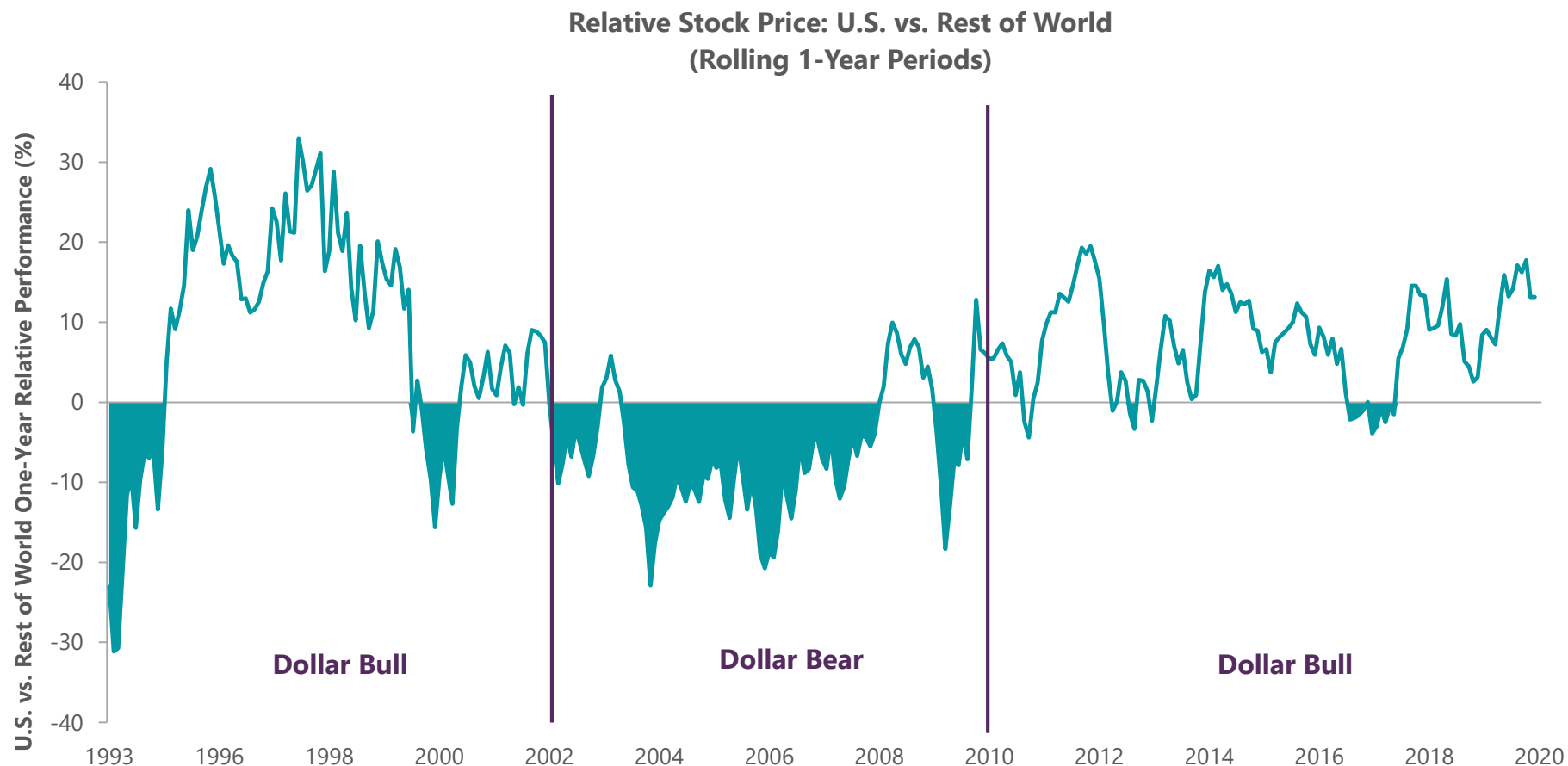


U.S. vs. International Equity Performance



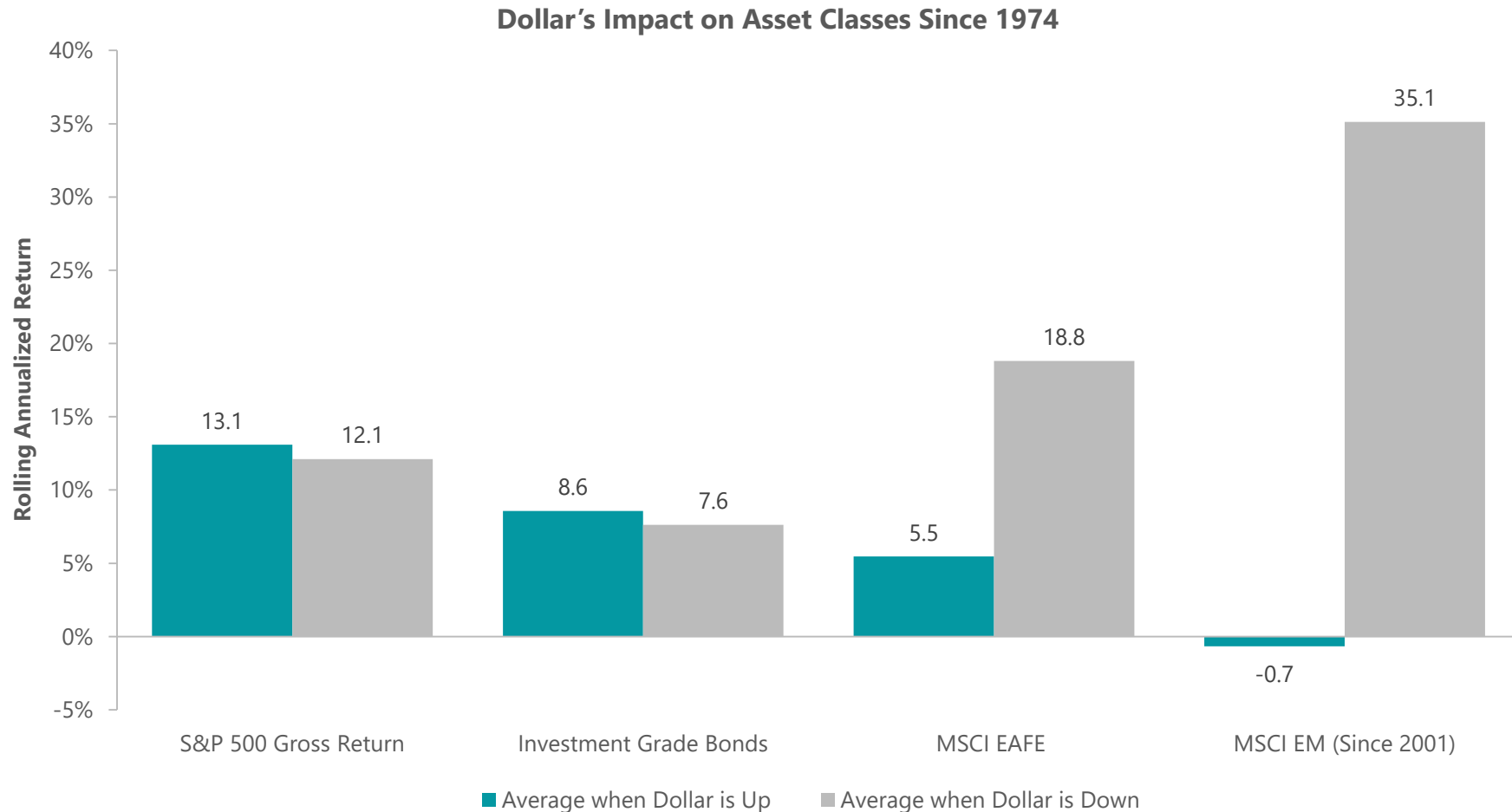
► **Geographic leadership tends to persist for multiple years.**

Dollar Regimes Coincide With Global Equity Leadership



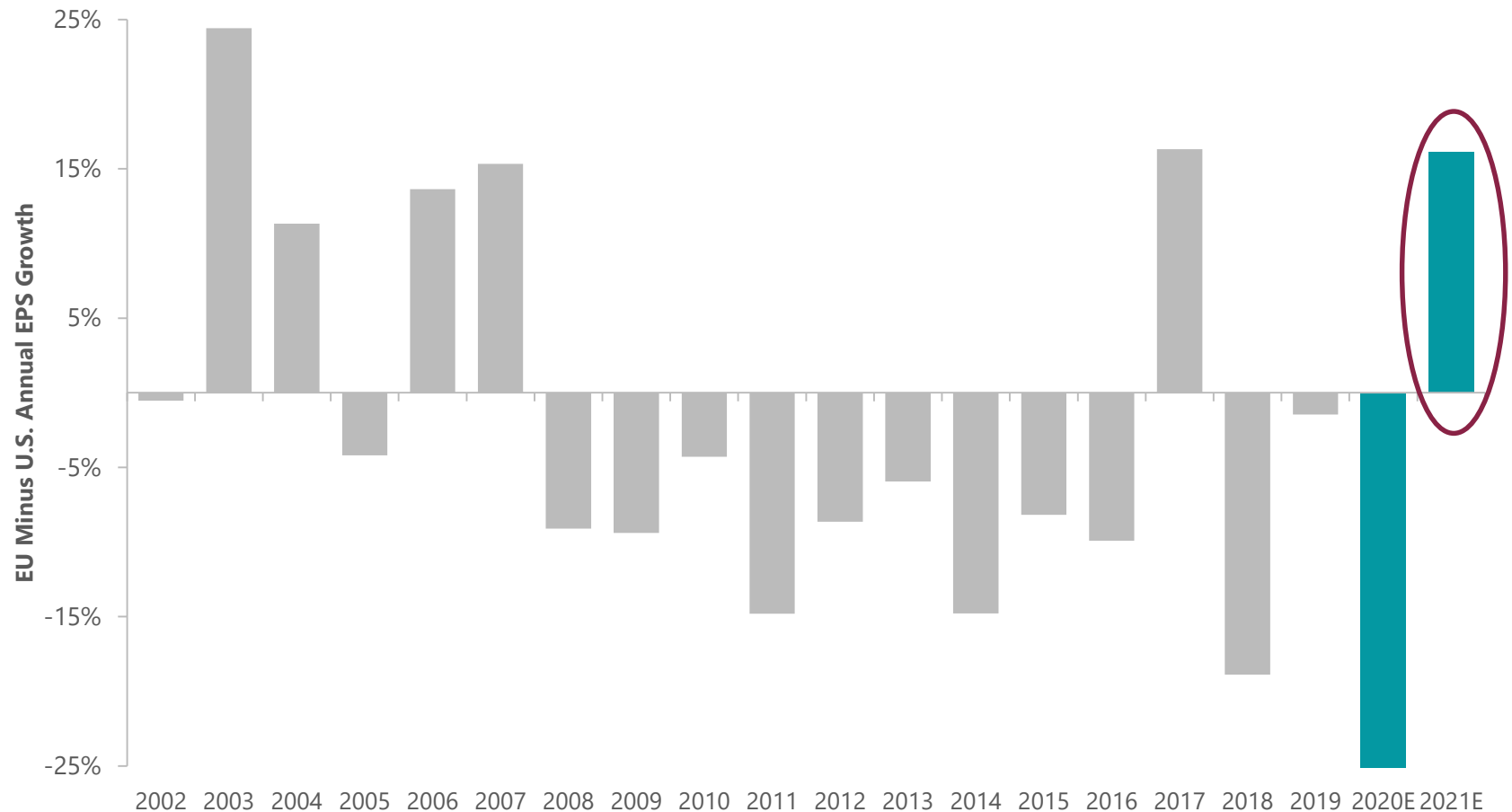
- ▶ **Periods of sustained dollar strength have aligned with U.S. equity outperformance.**
- ▶ **Dollar weakness could lead to a shift in global equity market leadership.**

Weaker Dollar Supercharges Non-U.S. Stocks



▶ **International equities tend to outperform during periods of dollar weakness.**

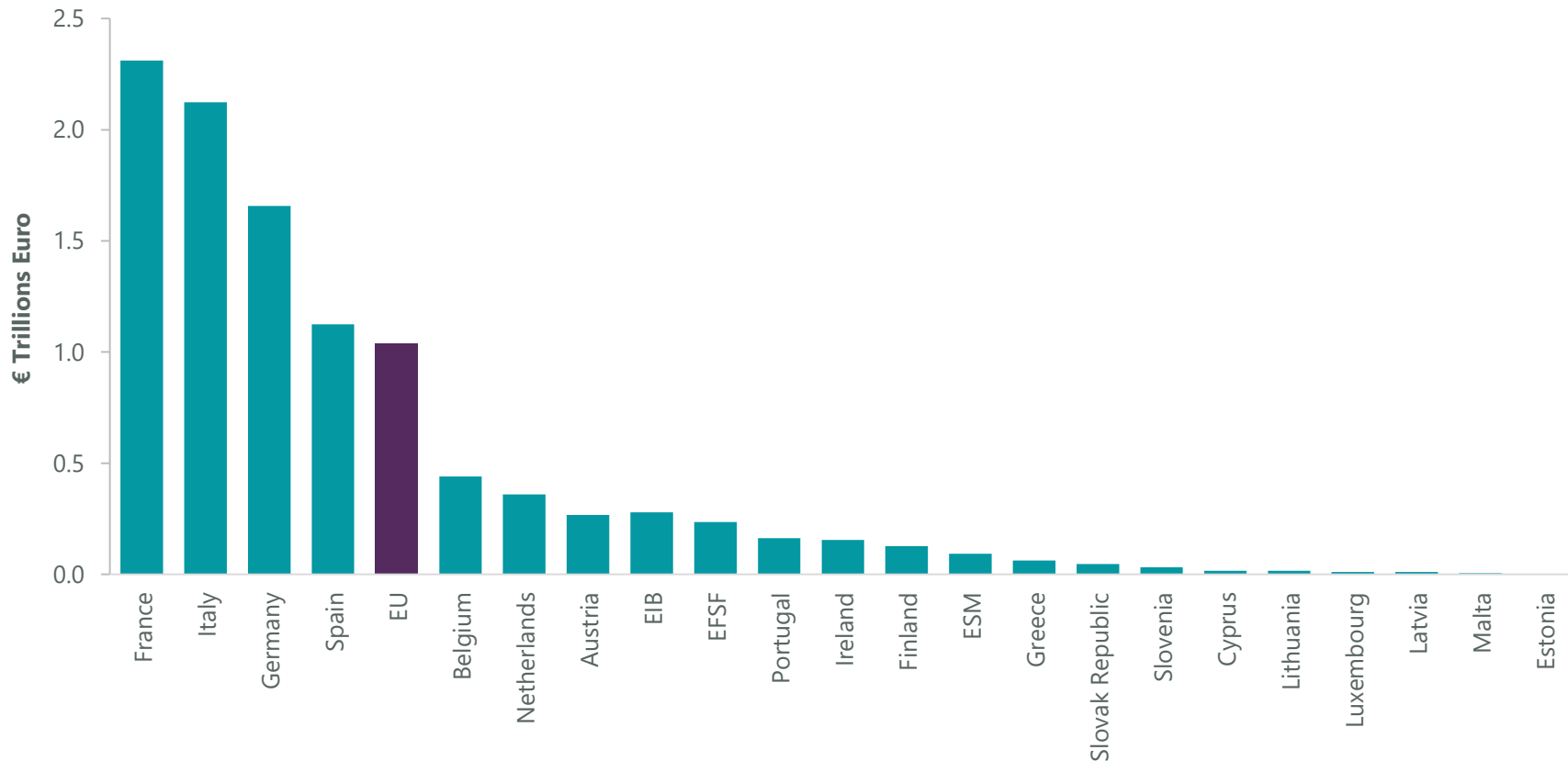
European Earnings Reign Supreme



- ▶ **European EPS growth has only outpaced the U.S. once since 2007.**
- ▶ **2021 is expected to be the second time which could mark a shift in leadership.**

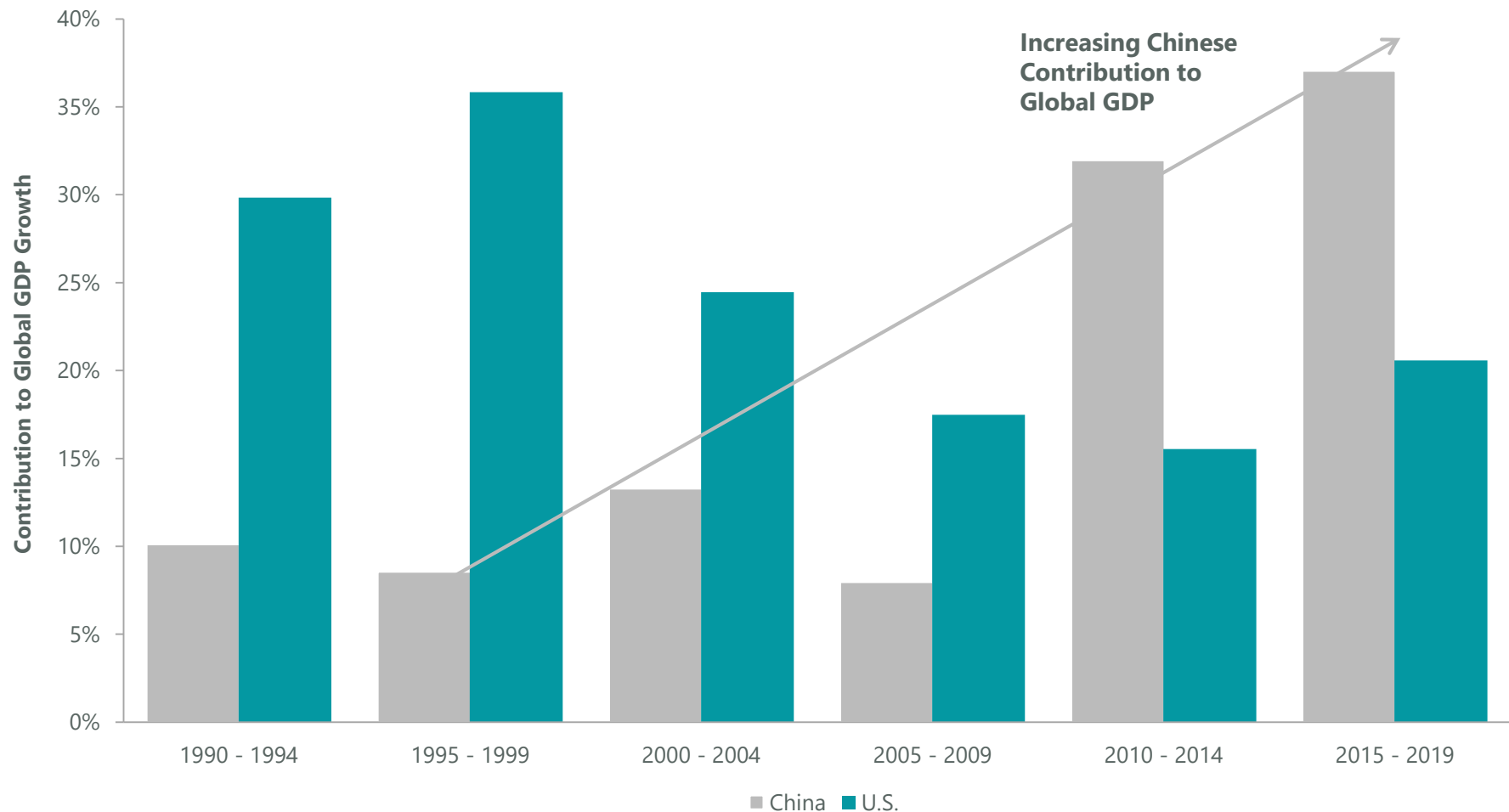
Tighter Fiscal Union, Less Risk

Outstanding Euro-Denominated Bonds



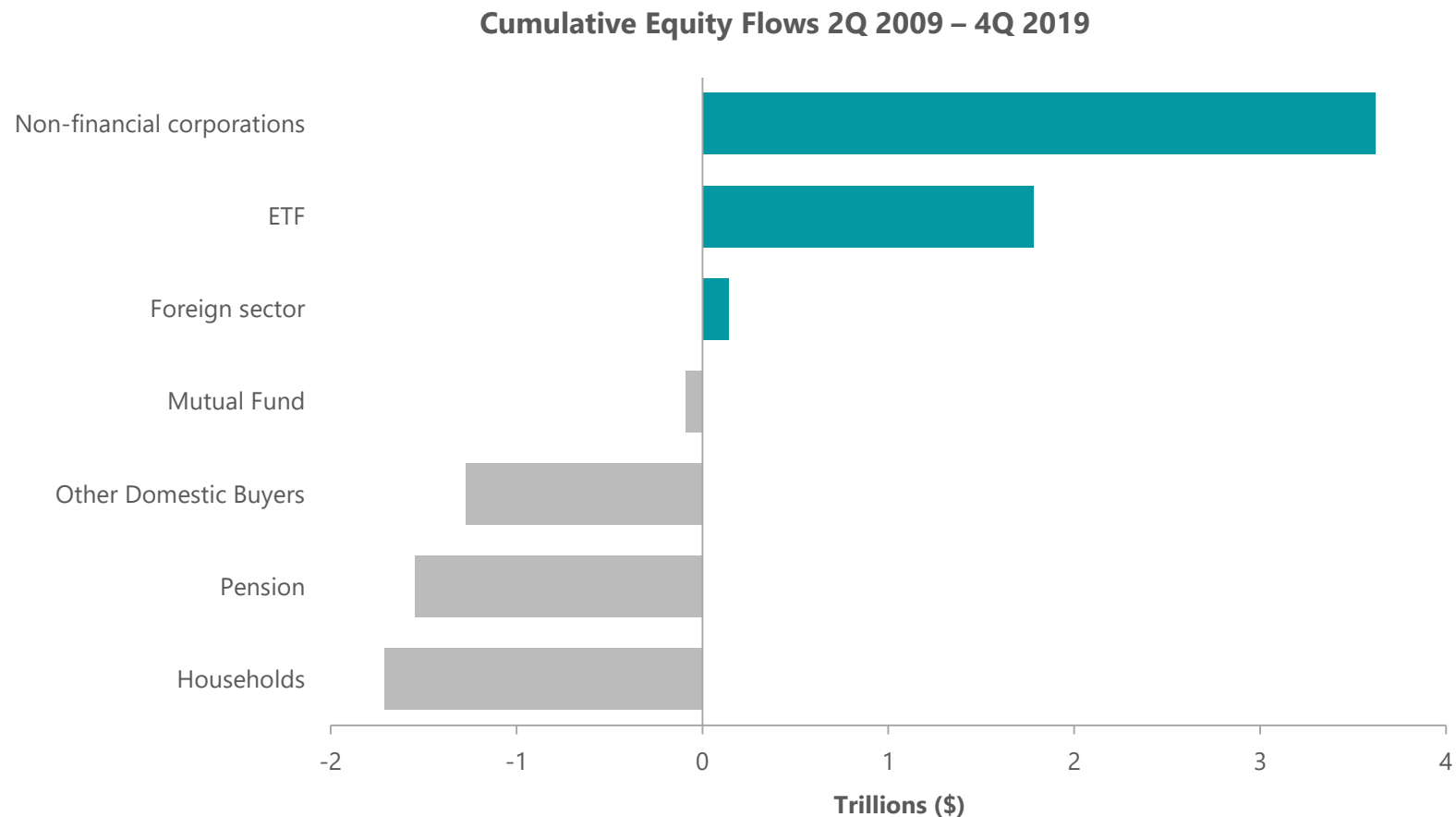
- ▶ **Joint issuance of Eurozone debt creates a more integrated fiscal union which bodes well for the Euro's long-term prospects.**
- ▶ **This milestone could act as a catalyst for European assets to embed lower risk premiums going forward.**

The Rise of China



- ▶ **Over the last 25 years, China has become an increasingly important driver of global growth while the U.S. has become less integral.**
- ▶ **In 1995, China had two Fortune 500 companies compared to the U.S.'s 148. Today, China is home to 124 versus 121 for the U.S.**

Corporations Have Been the Largest Buyers of Equities

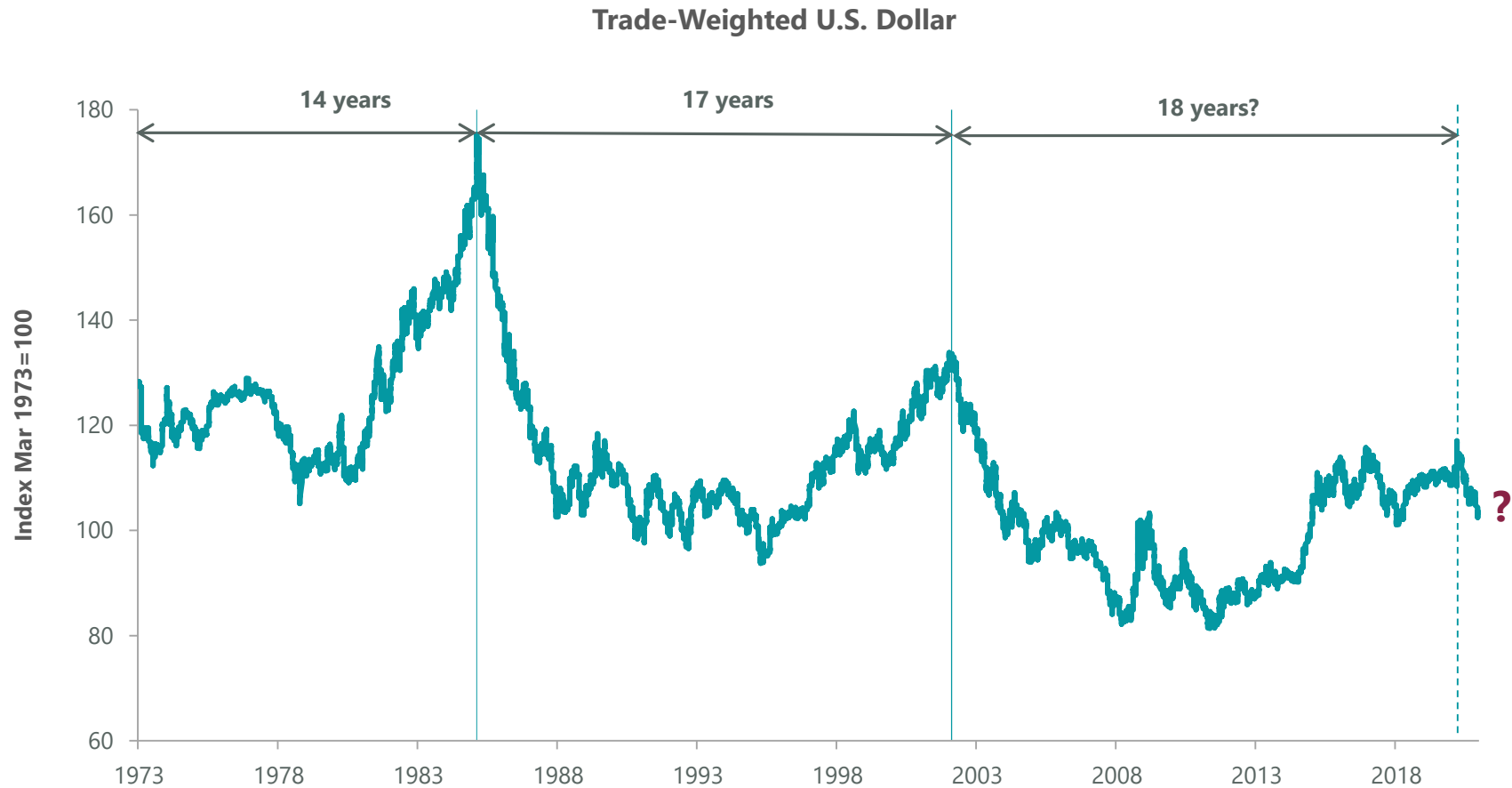


- ▶ **One of the key drivers over the last cycle was corporate buybacks.**
- ▶ **Buybacks could slow as corporations prioritize capex and future growth initiatives over shareholder return of capital early in the new business cycle.**

Currency

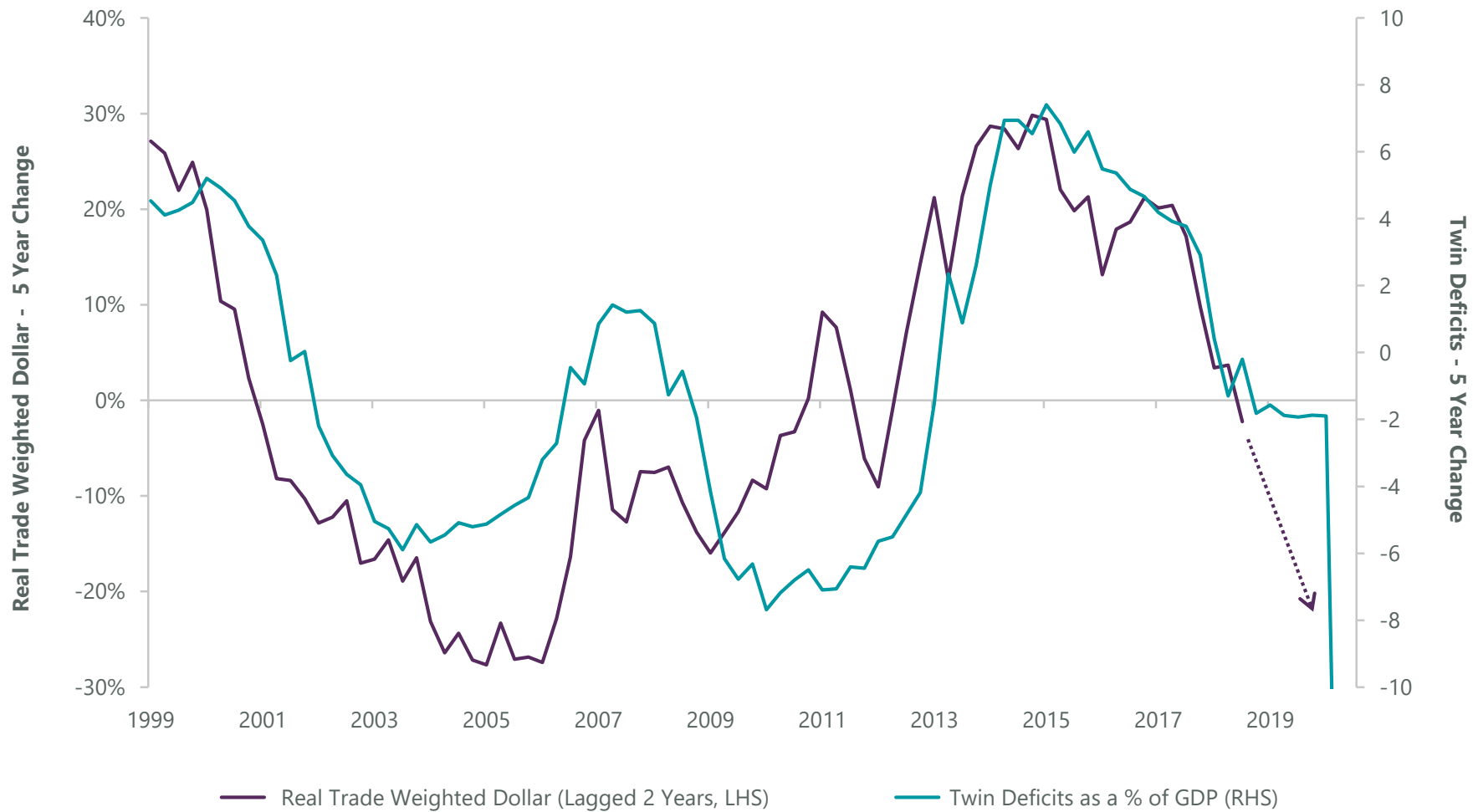


U.S. Dollar Cycle



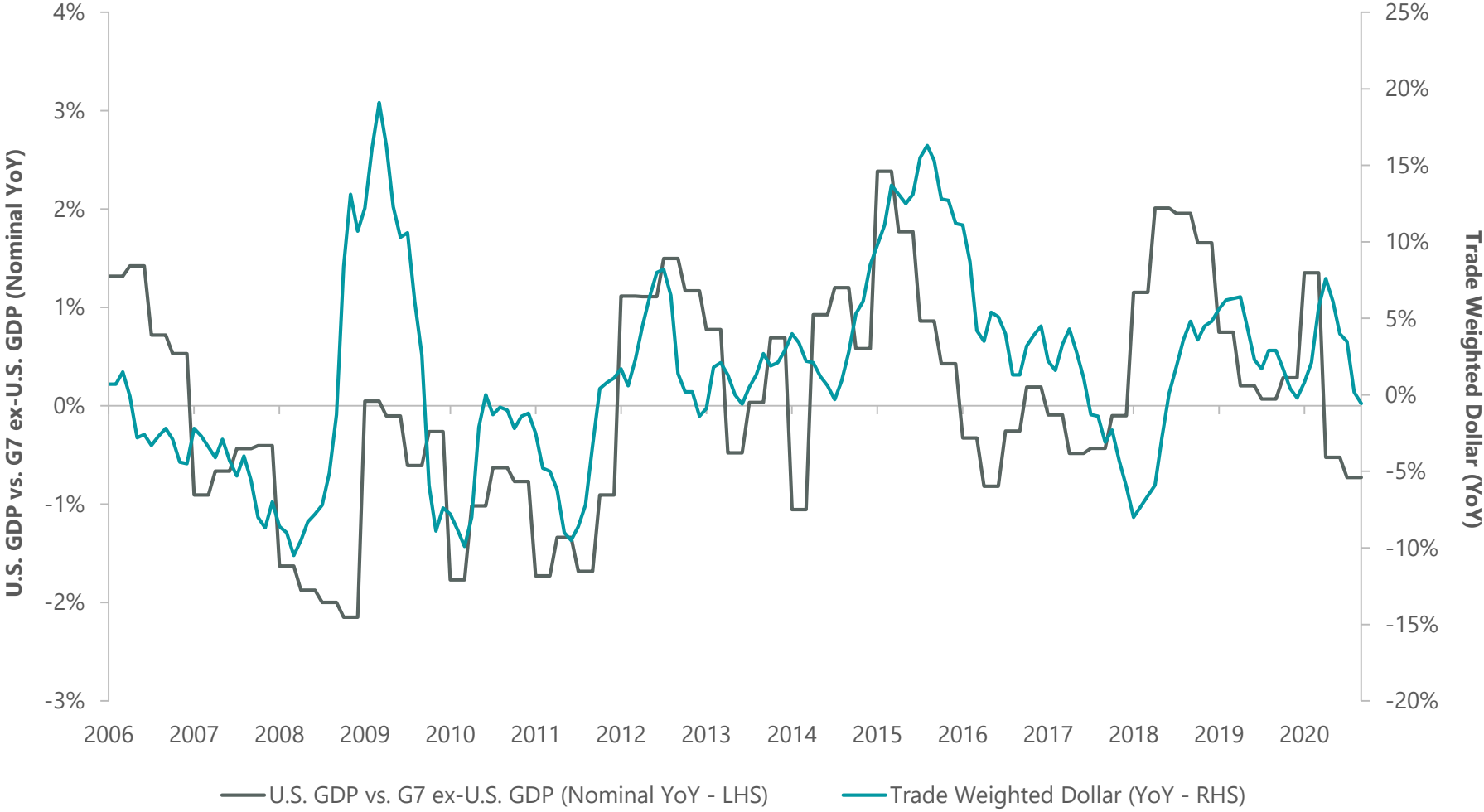
- ▶ **U.S. dollar cycles typically last approximately 16 years.**
- ▶ **History suggests that the dollar may be approaching an inflection point.**

Twin Deficits: Budget and Trade



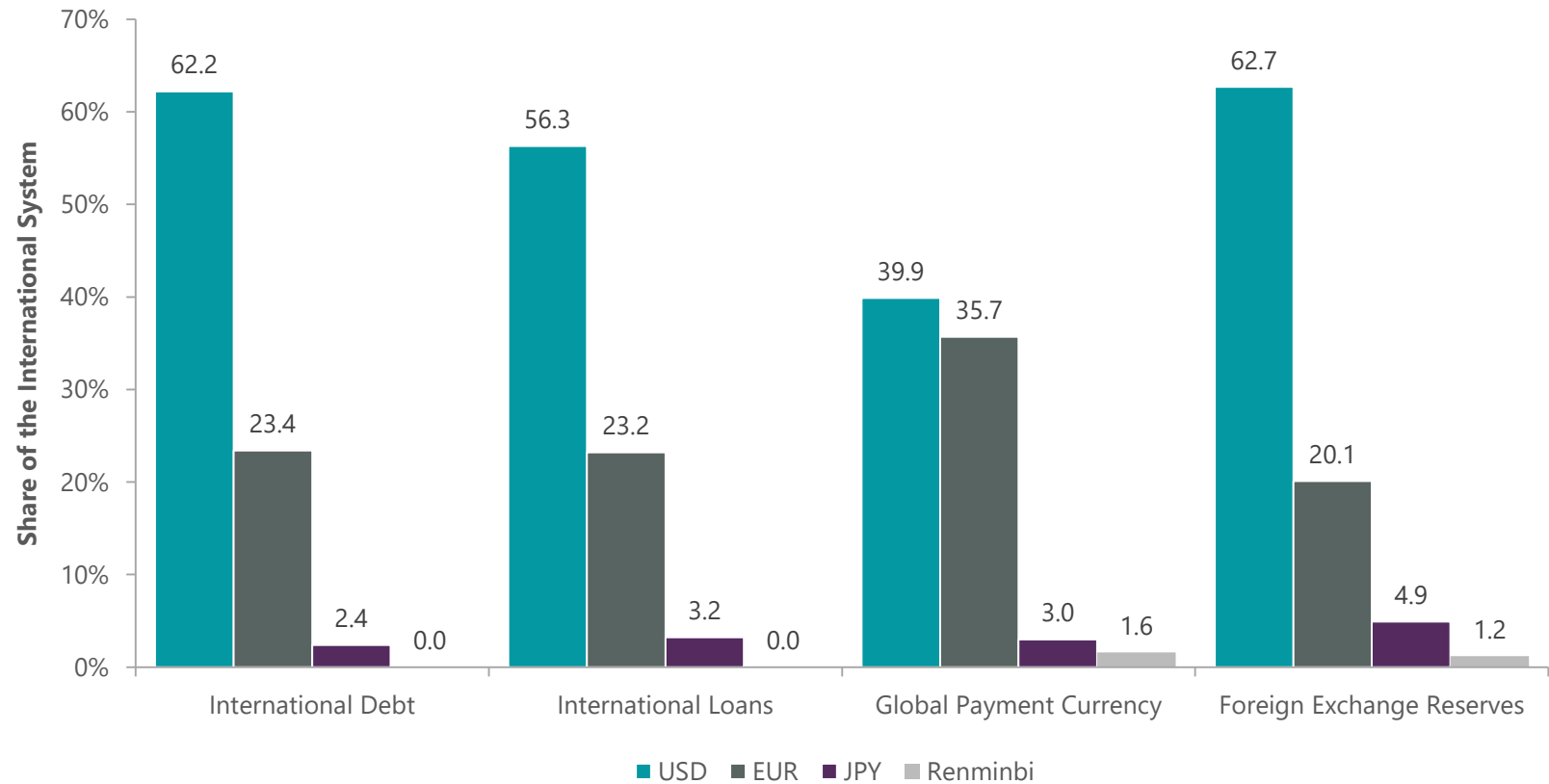
▶ **Twin deficits show the dollar should weaken over the next several years.**

Growth Differentials Drive Greenback



► **The fate of the dollar is influenced by how fast the U.S. is growing vs. other major economies.**

The U.S. Dollar Dominates the International Monetary System



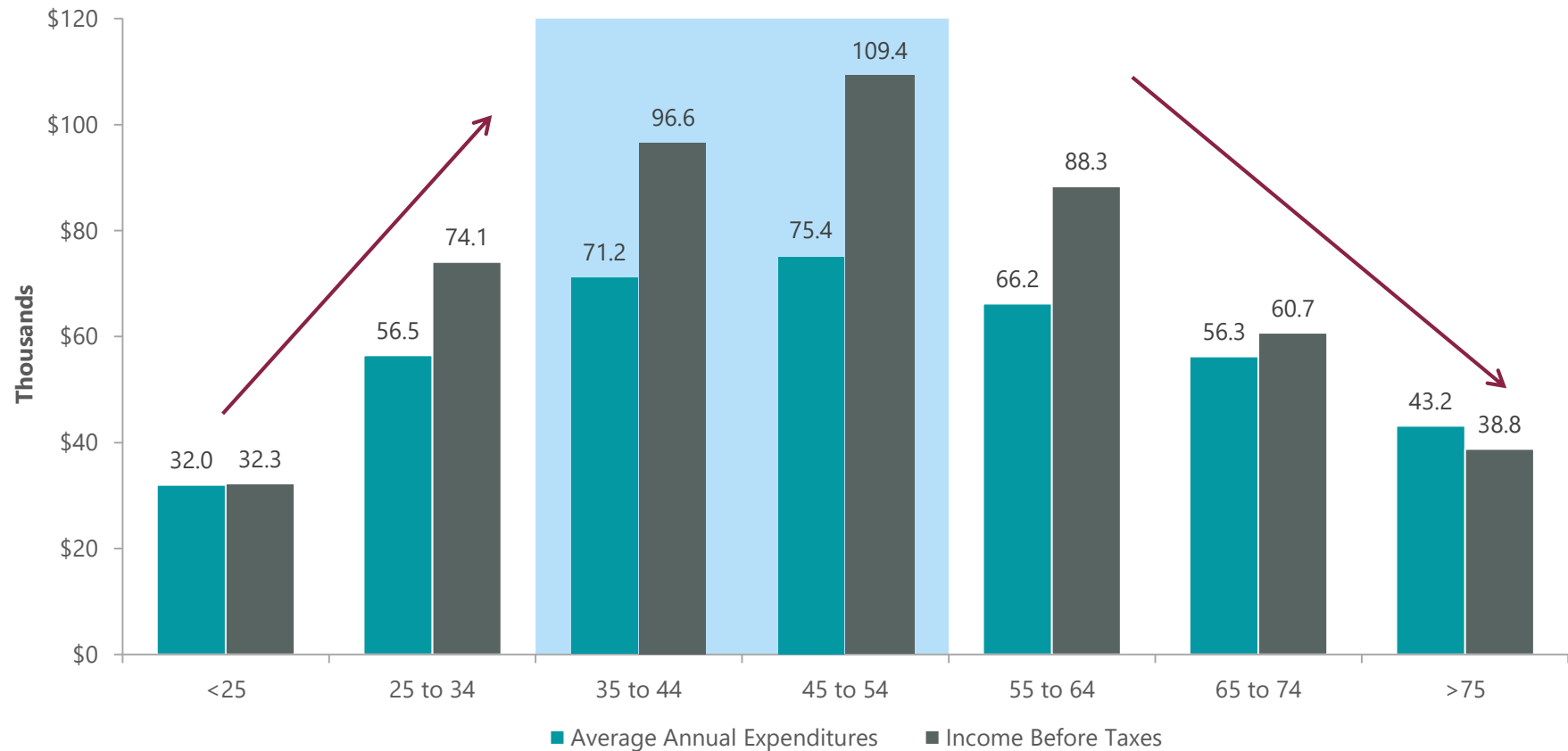
▶ The greenback is firmly entrenched as the world's reserve currency.

Demographics



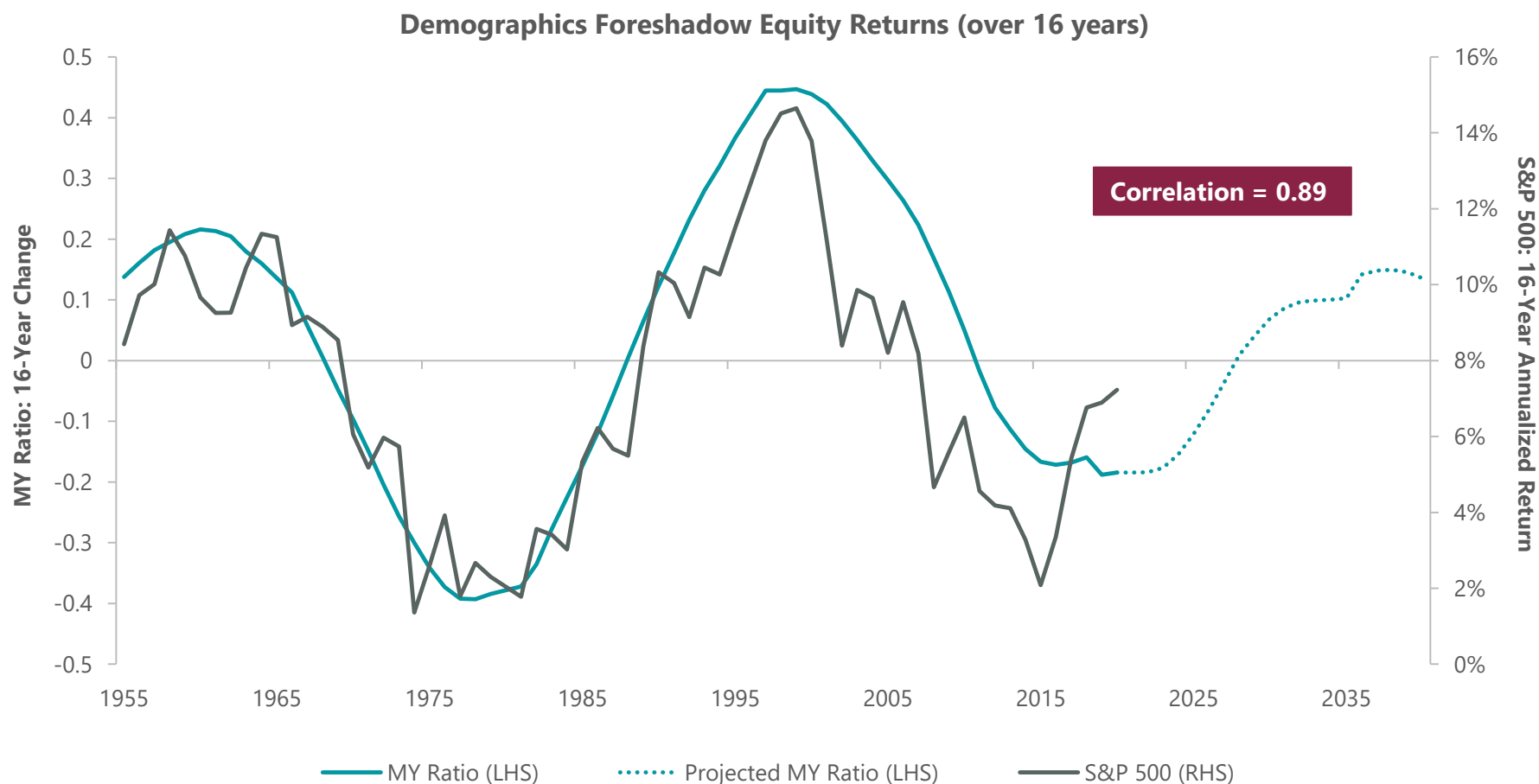
The Earnings and Spending Lifecycle

U.S. Consumption by Age (2018)



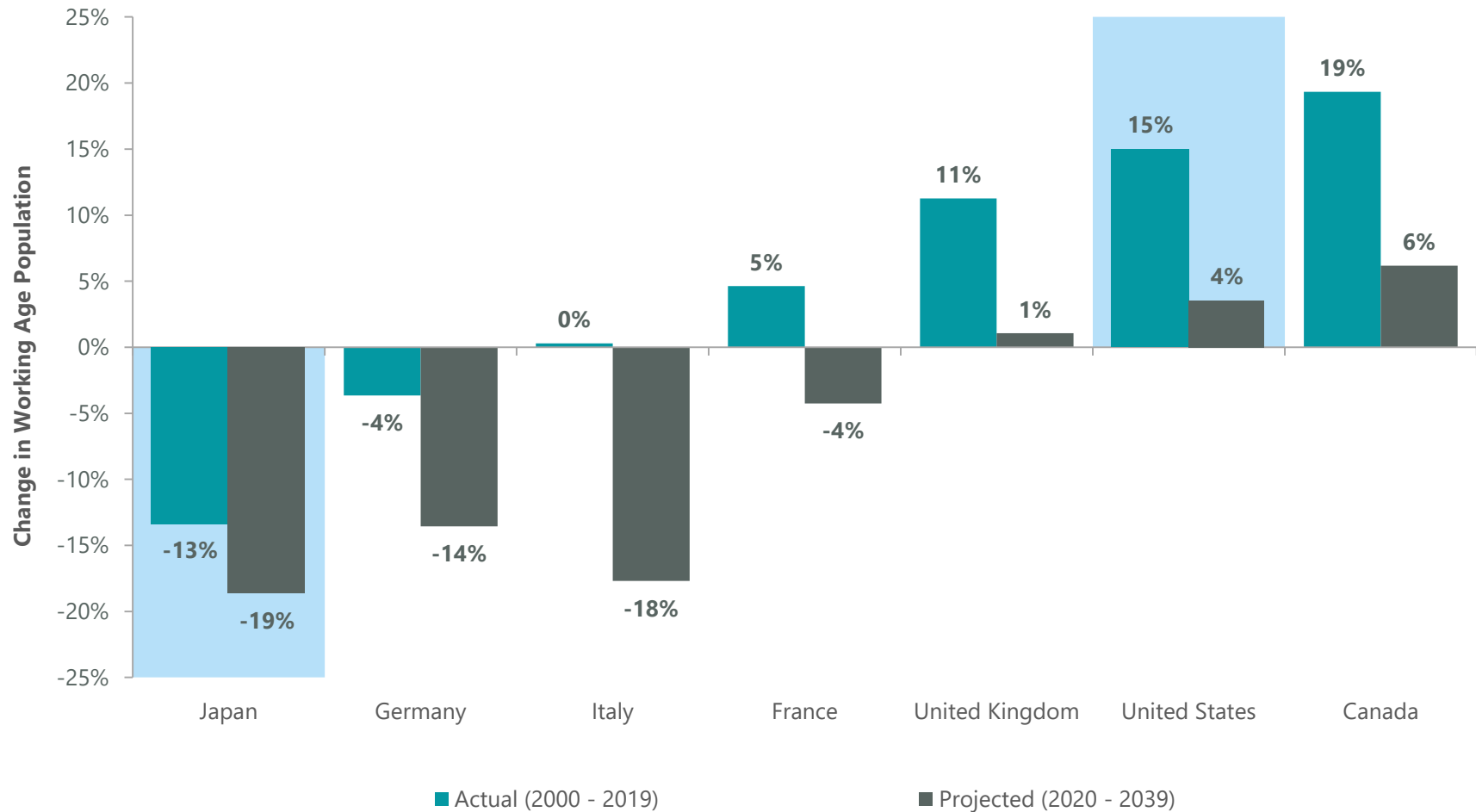
- ▶ **Individuals typically reach their peak earnings and spending years between the ages of 35 and 54.**
- ▶ **As a result, the share of the population in this age range has a strong influence on economic growth and financial markets.**

Middle vs. Young (MY) Ratio



- ▶ **A growing share of middle-age (35-49), relative to younger (20-34), workers has historically coincided with stronger equity market returns.**
- ▶ **The demographic profile of the U.S. suggests a healthy environment for stocks well into the 2030s.**

U.S. Demographic Profile Among Developed World's Best

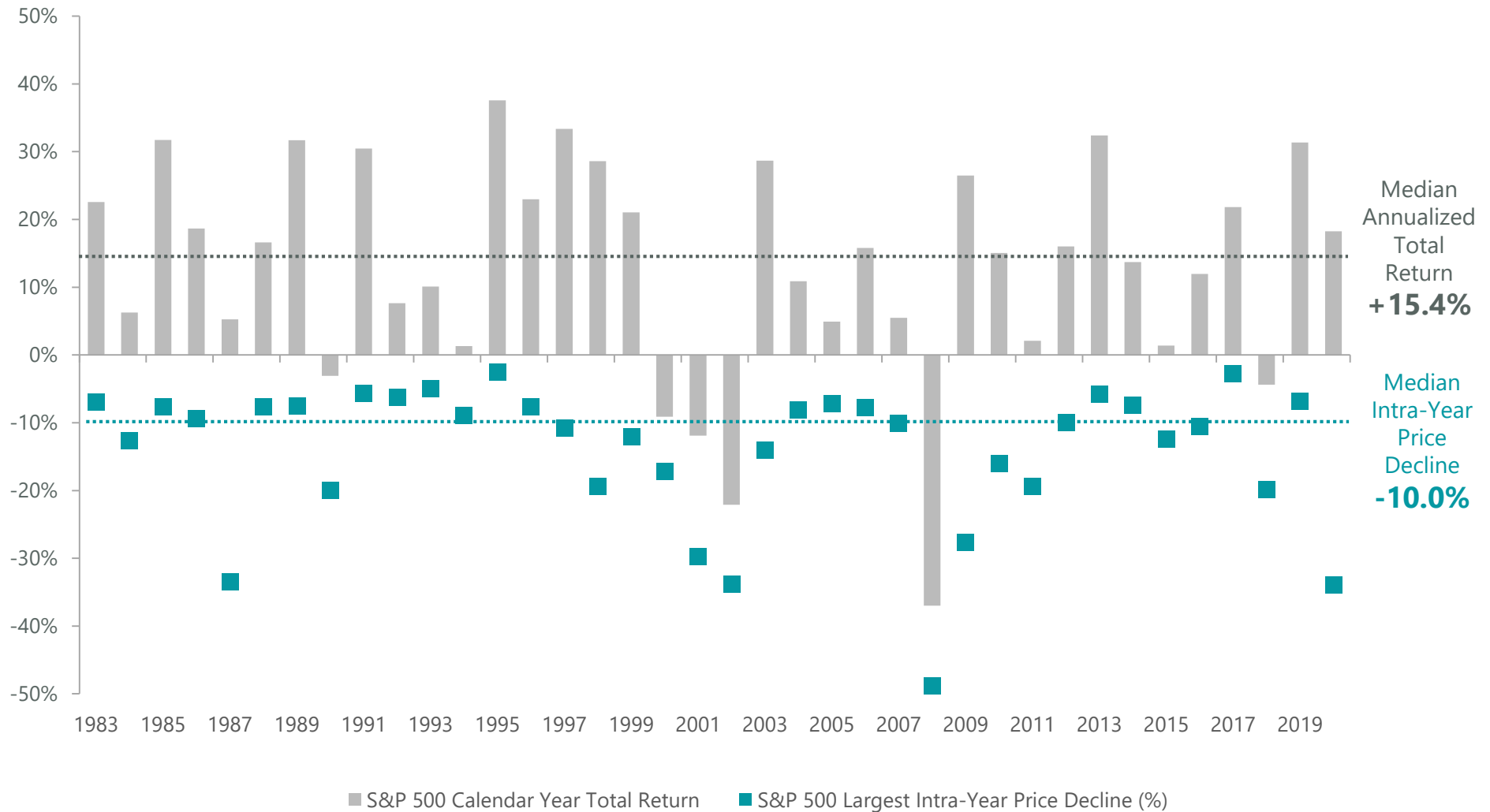


► **Fear of “Japanification” in the U.S. may be overblown due to a more favorable demographic profile.**

Volatility



Volatility Does Not Equal a Financial Loss Unless You Sell



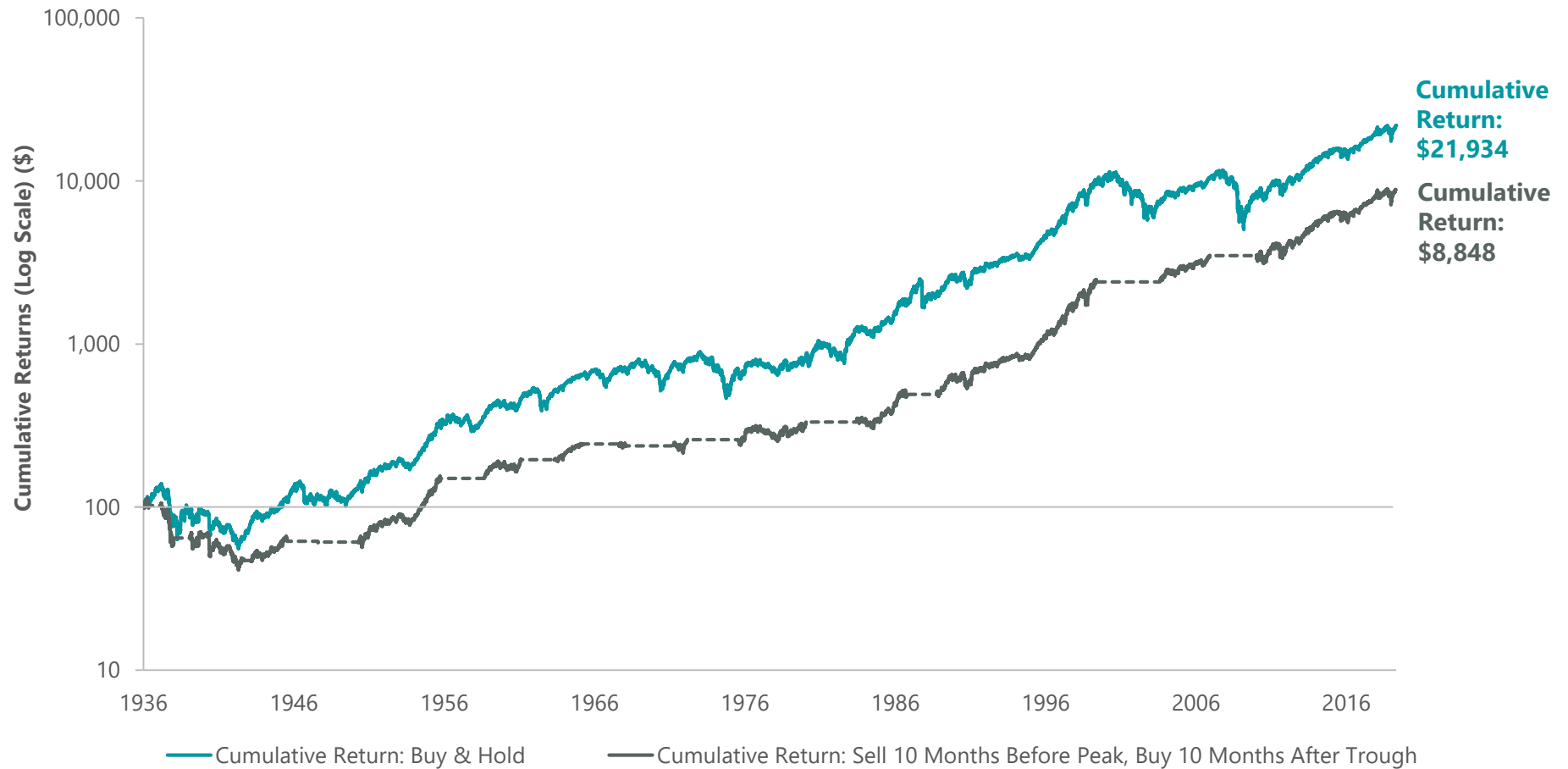
Missing the Best Days Can Drastically Reduce Returns

Decade	Cumulative		Annualized	
	Price Return	Excluding 10 Best Days Per Decade	Price Return	Excluding 10 Best Days Per Decade
1930	-42%	-79%	-5%	-15%
1940	35%	-14%	3%	-2%
1950	257%	167%	14%	11%
1960	54%	14%	4%	1%
1970	17%	-20%	2%	-2%
1980	227%	108%	13%	8%
1990	316%	186%	15%	12%
2000	-24%	-62%	-3%	-10%
2010	190%	95%	11%	7%
Average Since 1930	114%	44%	6%	1%

- ▶ **Investors that missed the 10 best days in a given decade would have seen 70% lower returns over the course of that decade on average.**
- ▶ **28% of the best days (5% or more) took place in the first two months of a bull market.**

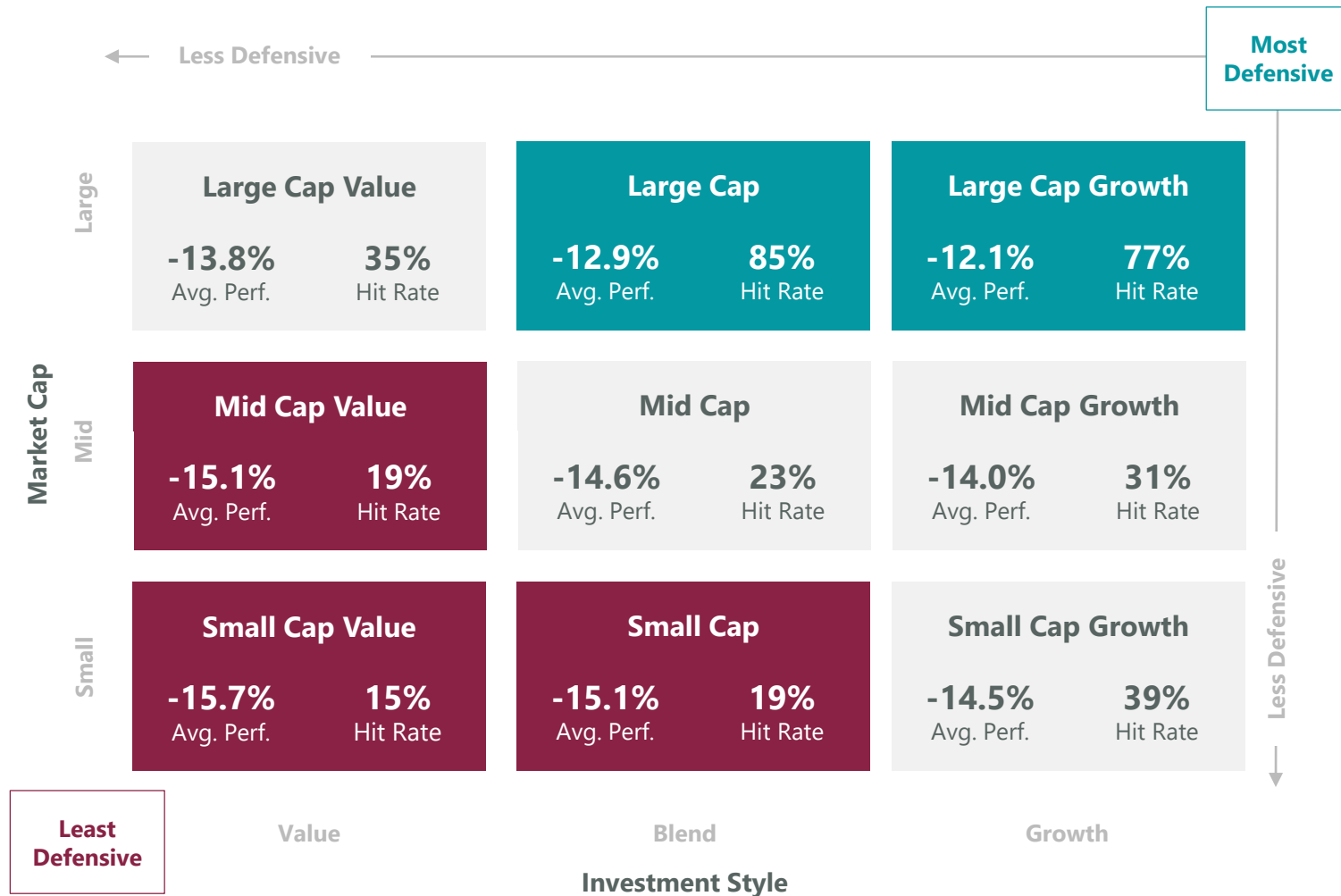
Can You Time the Market?

Buy & Hold vs. Market-Timing Since 1936 (Growth of \$100)



▶ **Since 1936, an investor that consistently sold 10 months prior to a market peak and bought back 10 months after the trough was worse overall than a buy and hold investor.**

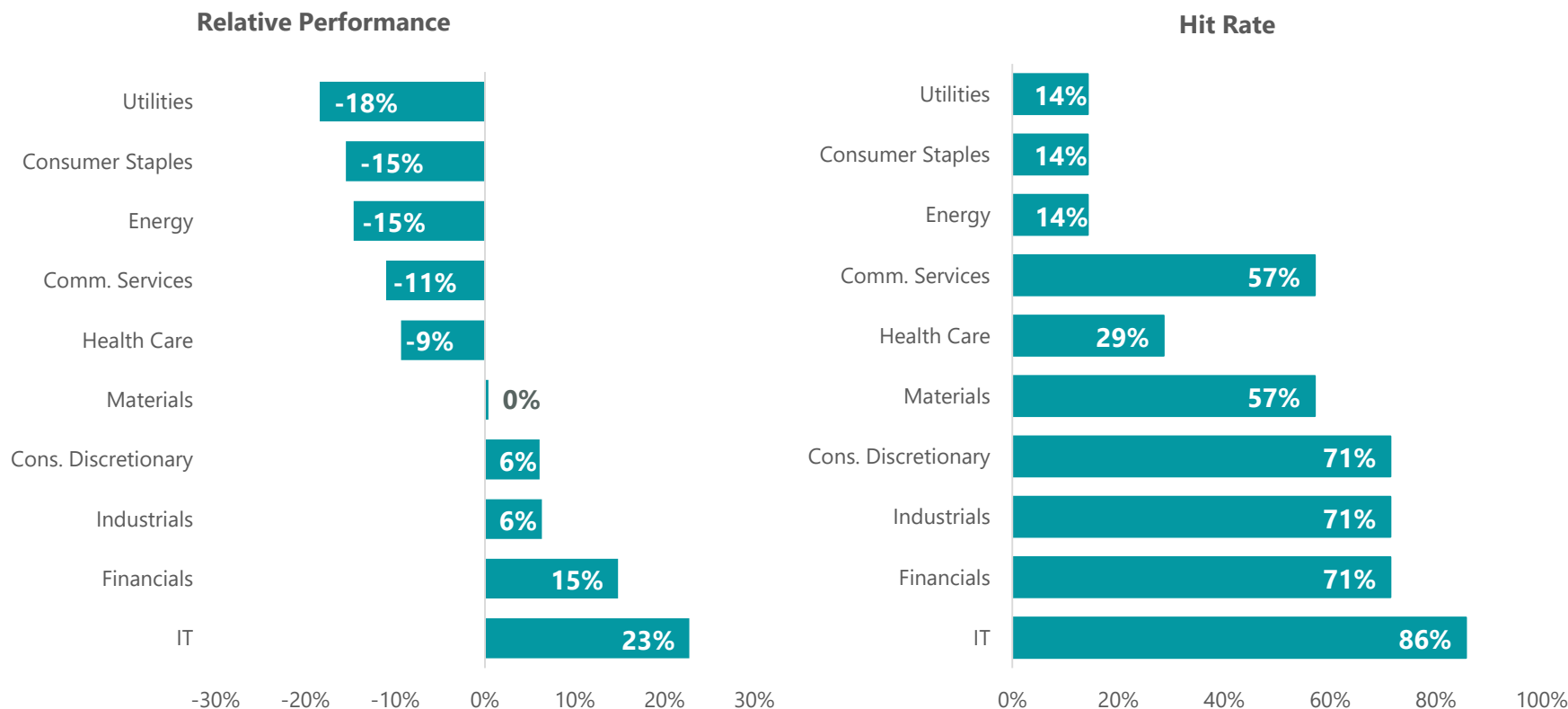
Typical Market Leadership in a Downturn



Note: Average performance: average performance during selloffs of 5% or more, Hit Rate: Hit rate of outperformance during 5%+ selloffs, 2005–present. Benchmarks used: Large Value: S&P 500 Value, Large Blend: S&P 500, Large Growth: S&P 500 Growth; Mid Value: S&P 400 Value, Mid Blend: S&P 400, Mid Growth: S&P 400 Growth; Small Value: S&P 600 Value, Small Blend: S&P 600, Small Growth: S&P 600 Growth. Outperformance frequency calculated relative to S&P 1500 index. Source: S&P, Bloomberg. Past performance is not a guarantee of future results. Investors cannot invest directly in an index, and unmanaged index returns do not reflect any fees, expenses or sales charges.

Which Equities Do Well Following Selloffs?

Following the Last Seven Major Market Drawdowns, Some Sectors Have Rebounded More Strongly



▶ **Following periods of market turmoil, more cyclical sectors such as IT, Financials, Industrials, and Consumer Discretionary have historically tended to deliver better relative performance.**

Glossary of Terms

BEA: Bureau of Economic Analysis

Black Swan: An unlikely and unpredictable event with potentially extreme consequences for markets.

Bloomberg Barclays US Aggregate Bond Index: an unmanaged index of U.S. investment-grade fixed-income securities.

Bloomberg Barclays US Corporate Investment Grade Bond Index: an unmanaged index of U.S. investment-grade corporate bond securities.

Capex (Capital expenditures): corporate spending on productive assets (such as buildings, machinery and equipment, vehicles) intended to increase capacity or efficiency for more than one accounting period.

CPI (Consumer Price Index): measure of the average change in U.S. consumer prices over time in a fixed market basket of goods and services as determined by U.S. Bureau of Labor Statistics.

EPS (Earnings per Share): the portion of a company's profit allocated to each outstanding share of common stock.

ERP (Equity Risk Premium): the excess return that an individual stock or the overall stock market provides over a risk-free rate. **ERP tranche** refers to statistical segments of ERP data used for relative comparison.

FAANGM: Shorthand term for a group of leading technology stocks including Facebook, Apple, Amazon, Netflix, Google/Alphabet, and Microsoft.

GDP: Gross Domestic Product

GFC (Great Financial Crisis): the severe economic and market downturn experienced in 2007-2008.

DAX: Blue chip stock market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange.

Fed (Federal Reserve Board): the U.S. central bank, responsible for policies designed to promote full economic growth, full employment, and price stability.

IFO: The Ifo Institute for Economic Research is a Munich-based research institution.

Mortgage Bankers Association (MBA) Purchase Index: measure of relative change over time in mortgage applications for property purchases

MSCI All Country World Index: unmanaged index of large- and mid-cap stocks in developed and emerging markets.

MSCI EM Index: unmanaged index of large- and mid-cap stocks in 27 emerging market countries.

MSCI EAFE Index: unmanaged index of equity securities from developed countries in Western Europe, the Far East, and Australasia.

MSCI USA Index: unmanaged index of US large- and mid-cap equity securities.

NAREIT All-Equity REITS Total Return Index: free-float-adjusted market capitalization weighted index that includes all tax qualified REITS listed in the NYSE, AMEX and NASDAQ National Markets.

NFIB (National Federation of Independent Business): a U.S. small business advocacy association, representing over 350,000 small and independent business owners.

Glossary of Terms

NFIB Small Business Optimism Index: measure of small business sentiment produced by the National Federation of Independent Business based on its monthly survey of small business owners.

P/E Ratio: Price/Earnings ratio

PMI: Purchasing Manager's Index

Quantitative easing (QE): Monetary policy implemented by a central bank in which it increases the excess reserves of the banking system through the direct purchase of debt securities.

Russell 1000 Growth Index: unmanaged index of large-cap stocks chosen for their growth orientation.

Russell 1000 Value Index: unmanaged index of large-cap stocks chosen for their value orientation.

Shibor: Shanghai Interbank Offered Rate

S&P MidCap 400 Index: unmanaged index of 400 US mid-cap stocks

S&P 400 Growth Index: unmanaged index of mid-cap stocks having higher price-to-book ratios relative to the S&P 400 MidCap as a whole.

S&P 400 Value Index: unmanaged index of mid-cap stocks having lower price-to-book ratios relative to the S&P 400 MidCap as a whole.

S&P 500 Growth Index: unmanaged index of large-cap stocks selected based on sales growth, the ratio of earnings change to price and momentum.

S&P 500 Value Index: unmanaged index of large-cap stocks selected based on the ratios of book value, earnings, and sales to price.

S&P 600 Index: unmanaged index of 600 US small-cap stocks

S&P 600 Growth Index: unmanaged index of US small-cap growth stocks, selected based on sales growth, the ratio of earnings change to price, and momentum.

S&P 600 Value Index: unmanaged index of US small-cap value stocks, selected based on ratios of book value, earnings, and sales to price.

S&P 500 Index: Unmanaged index of 500 stocks that is generally representative of the performance of larger companies in the U.S.



VIX: VIX is the ticker symbol and the popular name for the Chicago Board Options Exchange's CBOE Volatility Index, a popular measure of the stock market's expectation of volatility based on S&P 500 index options.

Yield Curve: Comparison of interest rates at a point in time of bonds with equal credit quality but different maturity dates.

YoY: Year Over Year

U.S. Treasuries: Direct debt obligations issued and backed by the "full faith and credit" of the U.S. government. The U.S. government guarantees the principal and interest payments on U.S. Treasuries when the securities are held to maturity. Unlike U.S. Treasury securities, debt securities issued by the federal agencies and instrumentalities and related investments may or may not be backed by the full faith and credit of the U.S. government. Even when the U.S. government guarantees principal and interest payments on securities, this guarantee does not apply to losses resulting from declines in the market value of these securities.

Biographies

Name and Position	Industry Experience	ClearBridge Tenure	Education, Experience and Professional Designations
 <p>Josh Jamner CFA Vice President, Investment Strategy Analyst</p>	11 years	<ul style="list-style-type: none"> • Joined ClearBridge in 2017 	<ul style="list-style-type: none"> • 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
 <p>Jeffrey Schulze CFA Director, Investment Strategist</p>	15 years	<ul style="list-style-type: none"> • Joined ClearBridge in 2014 	<ul style="list-style-type: none"> • Member of the CFA Institute • Lord Abbett & Co., LLC – Portfolio Specialist • BS in Finance from Rutgers University

Additional Important Information

Past performance is no guarantee of future results.

©2021 Legg Mason Investor Services, LLC, member FINRA, SIPC. "Anatomy of a Recession" is a trademark of ClearBridge Investments, LLC. Legg Mason Investor Services, LLC and ClearBridge Investments, LLC are subsidiaries of Franklin Resources, Inc.

All opinions and data included in this presentation are as of January 2021 unless noted otherwise and are subject to change. The opinions and views expressed herein are of the presenter and may differ from other managers, or the firm as a whole, and are not intended to be a forecast of future events, a guarantee of future results or investment advice. This information should not be used as the sole basis to make any investment decision. The statistics have been obtained from sources believed to be reliable, but the accuracy and completeness of this information cannot be guaranteed. Neither ClearBridge Investments nor its information providers are responsible for any damages or losses arising from any use of this information.

All investments involve risk, including loss of principal. Equity securities are subject to price fluctuation and possible loss of principal. Fixed-income securities involve interest rate, credit, inflation, and reinvestment risks; and possible loss of principal. As interest rates rise, the value of fixed-income securities falls. An investor cannot invest directly in an index. Unmanaged index returns do not reflect any fees, expenses or sales charges.

Any information, statement or opinion set forth herein is general in nature, is not directed to or based on the financial situation or needs of any particular investor, and does not constitute, and should not be construed as, investment advice, forecast of future events, a guarantee of future results, or a recommendation with respect to any particular security or investment strategy or type of retirement account. Investors seeking financial advice regarding the appropriateness of investing in any securities or investment strategies should consult their financial professional.

This material is approved for distribution in those countries and to those recipients listed below. Note: this material may not be available in all regions listed.

All investors and eligible counterparties in Europe, the UK, Switzerland:

In Europe (excluding UK and Switzerland), this financial promotion is issued by Legg Mason Investments (Ireland) Limited, registered office 6th Floor, Building Three, Number One Ballsbridge, 126 Pembroke Road, Ballsbridge, Dublin 4, D04 EP27. Registered in Ireland, Company No. 271887. Authorized and regulated by the Central Bank of Ireland.

All Qualified Investors in Switzerland:

In Switzerland, this financial promotion is issued by Legg Mason Investments (Switzerland) GmbH, authorised by the Swiss Financial Market Supervisory Authority FINMA. Investors in Switzerland: The representative in Switzerland is FIRST INDEPENDENT FUND SERVICES LTD., Klausstrasse 33, 8008 Zurich, Switzerland and the paying agent in Switzerland is NPB Neue Privat Bank AG, Limmatquai 1, 8024 Zurich, Switzerland. Copies of the Articles of Association, the Prospectus, the Key Investor Information documents and the annual and semi-annual reports of the Company may be obtained free of charge from the representative in Switzerland.

All investors in the UK:

In the UK this financial promotion is issued by Legg Mason Investments (Europe) Limited, registered office 201 Bishopsgate, London EC2M 3AB.

Registered in England and Wales, Company No. 1732037. Authorized and regulated by the Financial Conduct Authority. Client Services +44 (0)207 070 7444

All Investors in Hong Kong and Singapore:

This material is provided by Legg Mason Asset Management Hong Kong Limited/ Franklin Templeton Investments (Asia) Limited in Hong Kong and Legg Mason Asset Management Singapore Pte. Limited (Registration Number (UEN): 200007942R)/ Templeton Asset Management Ltd. (Registration No. (UEN) 199205211E) in Singapore.

This material has not been reviewed by any regulatory authority in Hong Kong or Singapore.

All Investors in the People's Republic of China ("PRC"):

This material is provided by Legg Mason Asset Management Hong Kong Limited to intended recipients in the PRC. The content of this document is only for Press or the PRC investors investing in the QDII Product offered by PRC's commercial bank in accordance with the regulation of China Banking Regulatory Commission. Investors should read the offering document prior to any subscription. Please seek advice from PRC's commercial banks and/or other professional advisors, if necessary. Please note that Legg Mason and its affiliates are the Managers of the offshore funds invested by QDII Products only. Legg Mason and its affiliates are not authorized by any regulatory authority to conduct business or investment activities in China.

This material has not been reviewed by any regulatory authority in the PRC.

Distributors and existing investors in Korea and Distributors in Taiwan:

This material is provided by Legg Mason Asset Management Hong Kong Limited to eligible recipients in Korea and by **Legg Mason Investments (Taiwan) Limited (Registration Number: (98) Jin Guan Tou Gu Xin Zi Di 001; Address: Suite E, 55F, Taipei 101 Tower, 7, Xin Yi Road, Section 5, Taipei 110, Taiwan, R.O.C.; Tel: (886) 2-8722 1666) in Taiwan. Legg Mason Investments (Taiwan) Limited operates and manages its business independently.**

This material has not been reviewed by any regulatory authority in Korea or Taiwan.

If the Press would like to re-edit the press release from their own point of view, it should base on the public information provided by the Legg Mason Investments (Taiwan) and the information contained in such press releases shall be not over-promising or exaggerating.

All Investors in the Americas:

This material is provided by Legg Mason Investor Services LLC, a U.S. registered Broker-Dealer, which includes Legg Mason Americas International. Legg Mason Investor Services, LLC, Member FINRA/SIPC, and all entities mentioned are subsidiaries of Legg Mason, Inc.

All Investors in Australia and New Zealand:

This document is issued by Legg Mason Asset Management Australia Limited (ABN 76 004 835 839, AFSL 204827). The information in this document is of a general nature only and is not intended to be, and is not, a complete or definitive statement of matters described in it. It has not been prepared to take into account the investment objectives, financial objectives or particular needs of any particular person.

983020-CBAX539422