



2022 Capital Markets Forecast

Economic Arrhythmia

Business adapts to global resource disorder

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All data as of November 30, 2021, unless otherwise noted.



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Our 2022 outlook

Economic Arrhythmia: Businesses adapt to resource disorder

Theme I: An unprecedented economic cycle

Economic cycles have a familiar cadence but this one is unique due to global resource disorder. Labor markets and inflation are signaling we are near the end of the cycle, but business inventories suggest the opposite.

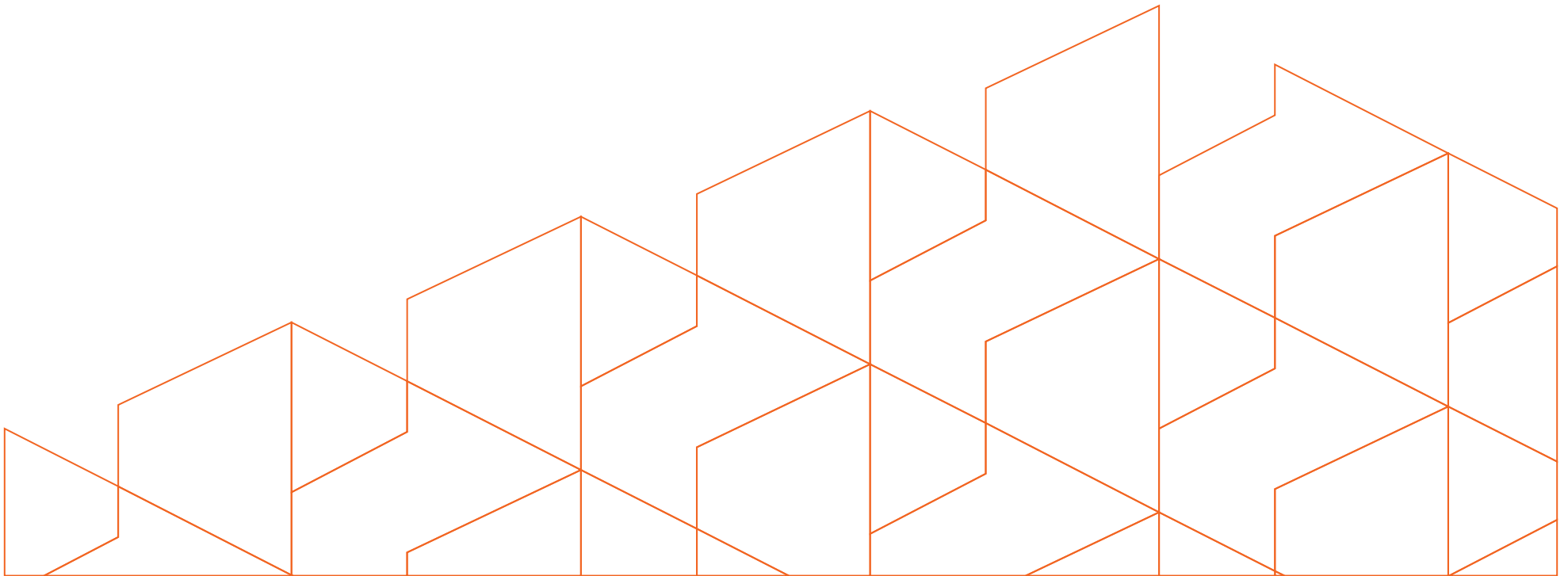
Theme II: The adaptive brilliance of business

The current environment is motivating companies to deploy technology to manage through a “global resource disorder” and extract more productivity from their workforce. We are optimistic on corporate profitability and the equity market broadly.

Theme III: 2022 Investment Playbook

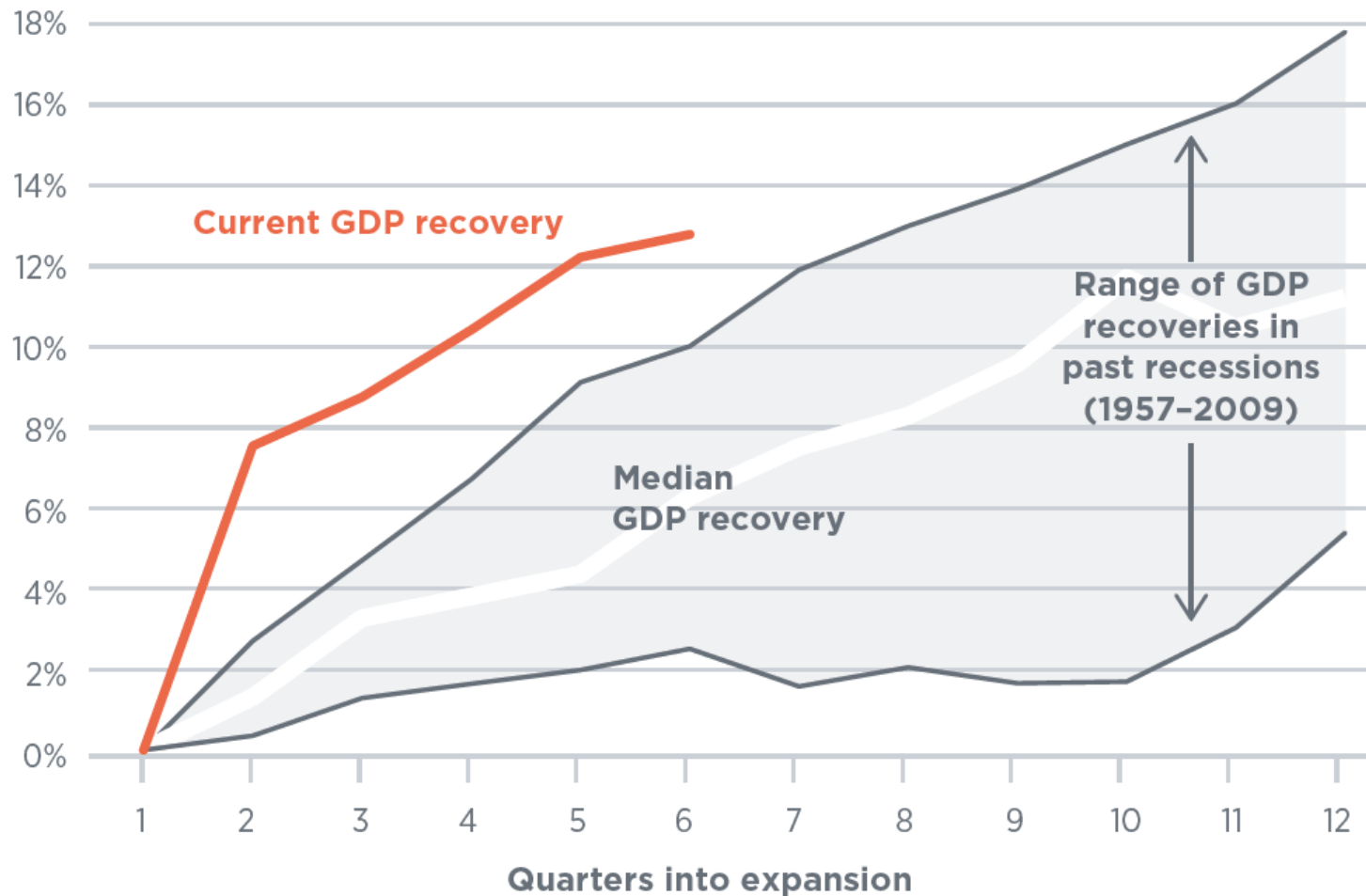
The current cycle is far outside the norm, requiring adaptation to the typical investment playbook. We are positioning portfolios to insulate against inflation risk and remain diversified.

Theme 1 An unprecedented economic cycle



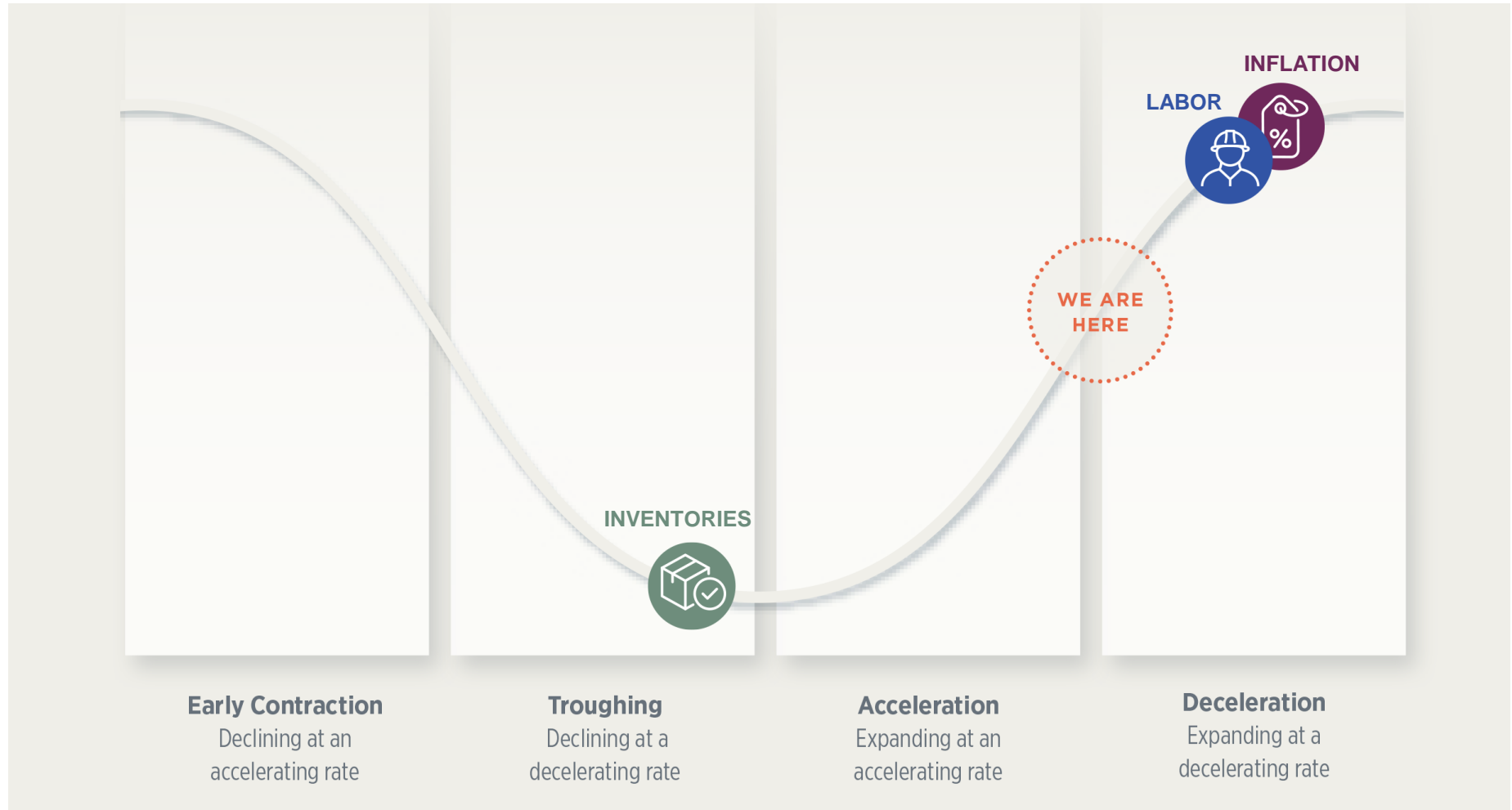
This Recovery is Unlike All Others

Percent change in GDP after start of expansions



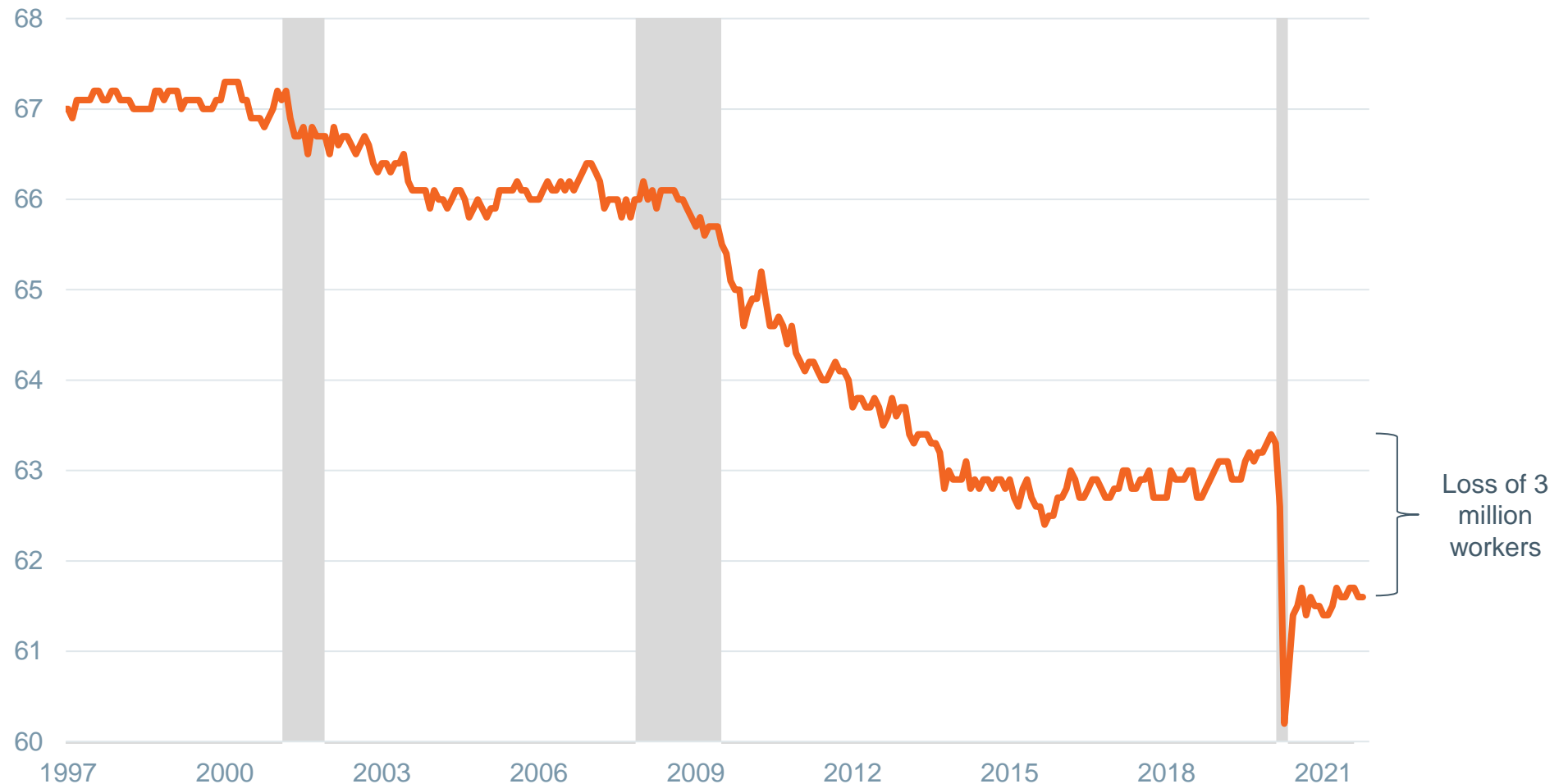
Data as of November 30, 2021. Sources: Bureau of Economic Analysis, WTIA.

An Economic Cycle with Major Components Out of Sync



Strong Demand for Workers, but the Issue is Lack of Supply

Labor Force Participation Rate (%)



Data as of October 31, 2021. Sources: Bureau of Labor Statistics, WTIA.

Disappearance of 3 Million Workers Due to Myriad Factors

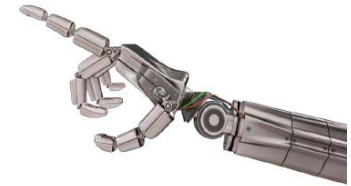
Retirement

Strong financial market performance combined with challenges of Covid pushed retirement in 2021 to 74% above the level seen in 2019 before the pandemic.

Source: Bureau of Labor Statistics.

Skills Mismatch

Firms invested heavily in new technologies over the course of the pandemic requiring workers to develop new skills.



Lifestyle Reassessment

YOLO

55%

of survey respondents said they know someone who quit a job for a lifestyle change.

Source: "The Great Resignation"—Pandemic fuels career shifting motives, study shows 66% of American workers are on the move," PR Newswire, August 10, 2021..

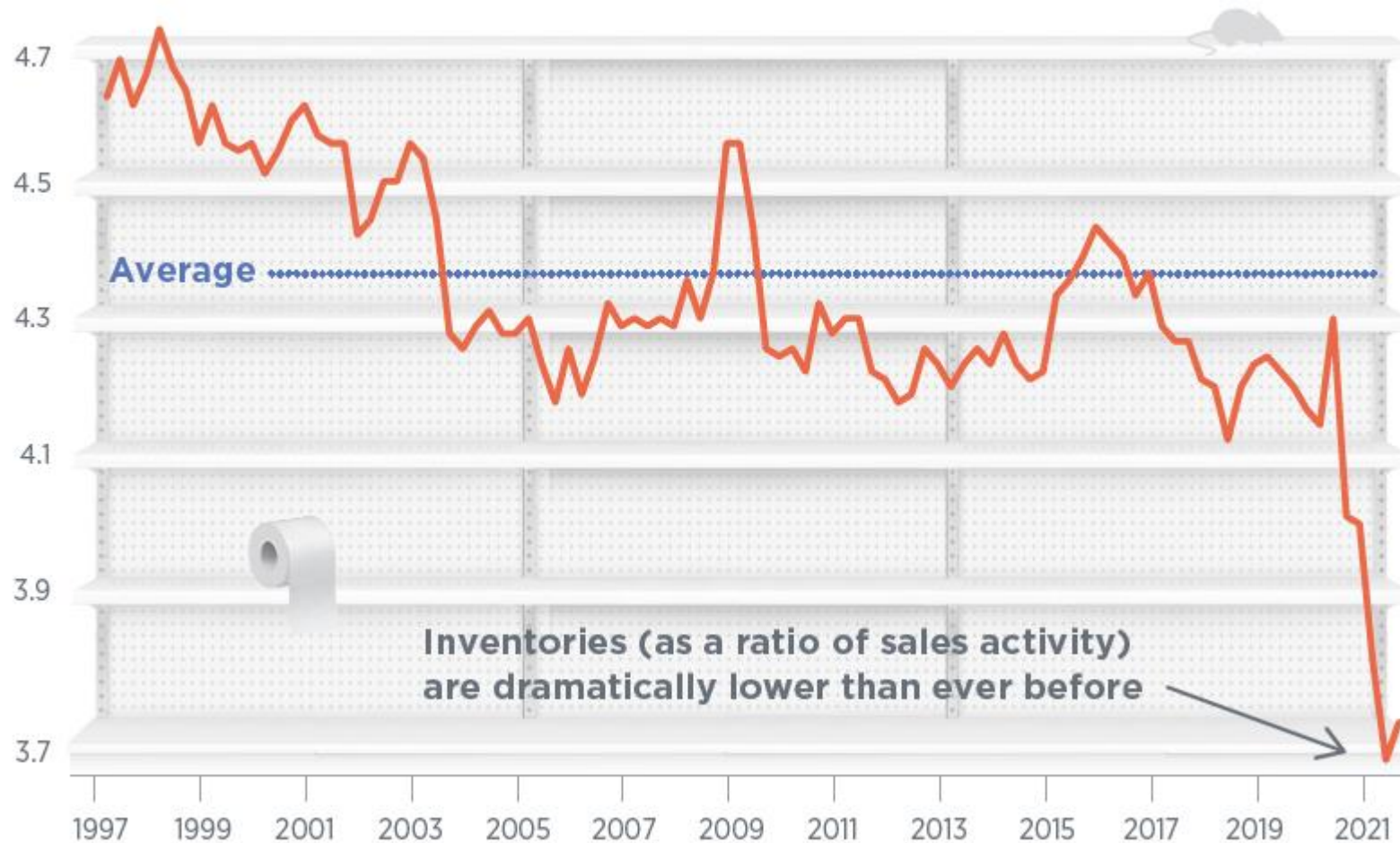
Virus

As of November, 1.2 million people still said they "did not look for work" due to the pandemic.

Source: Bureau of Labor Statistics.

The Shelves Are as Bare as Ever

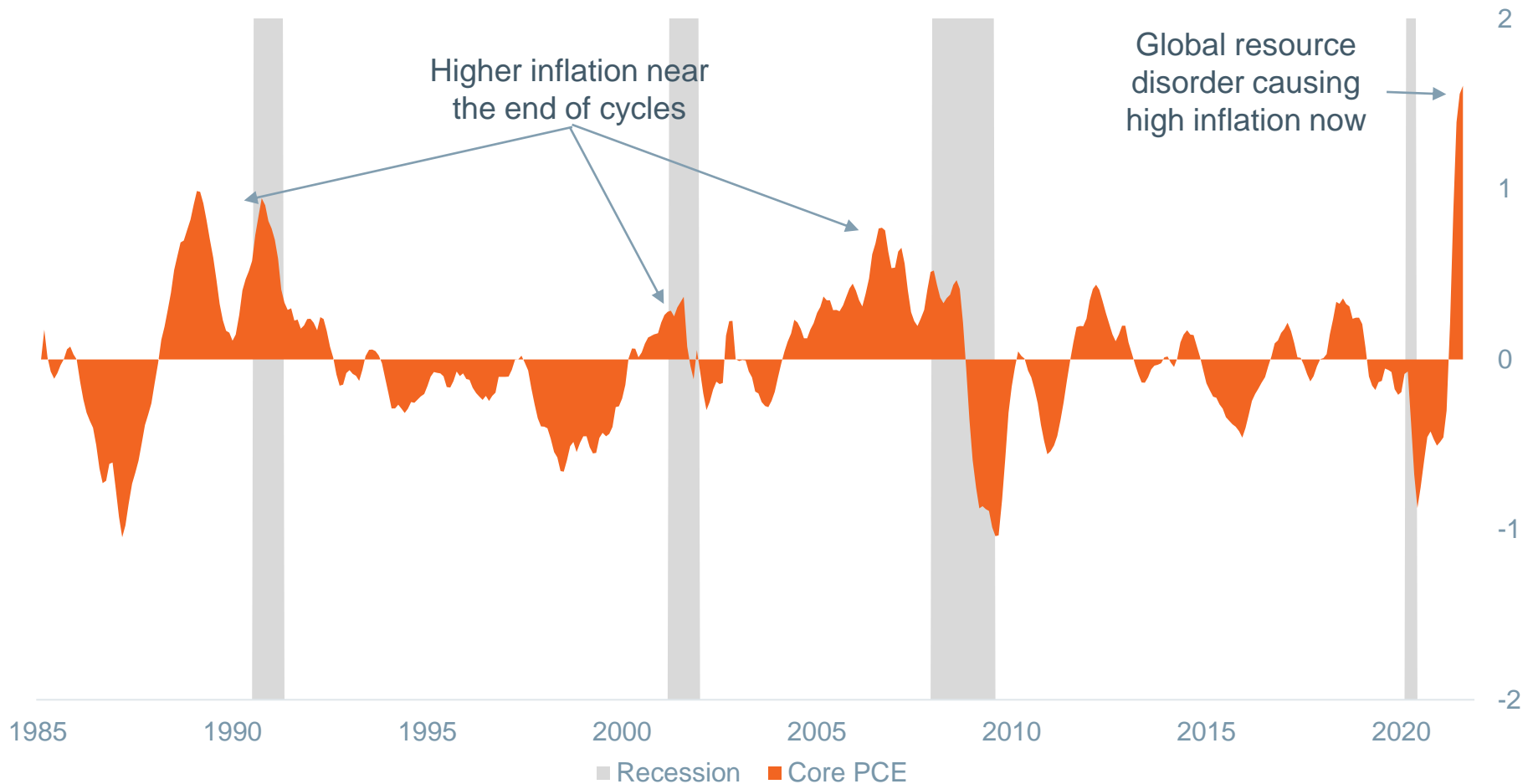
Ratio of Nonfarm Inventories to Final Sales of Goods and Structures



Data as of September 30, 2021. Sources: Bureau of Economic Analysis, WTIA.

High Inflation Usually Comes Late in the Cycle, But It's Already Here

Core Inflation Divergence from Trend* (%)

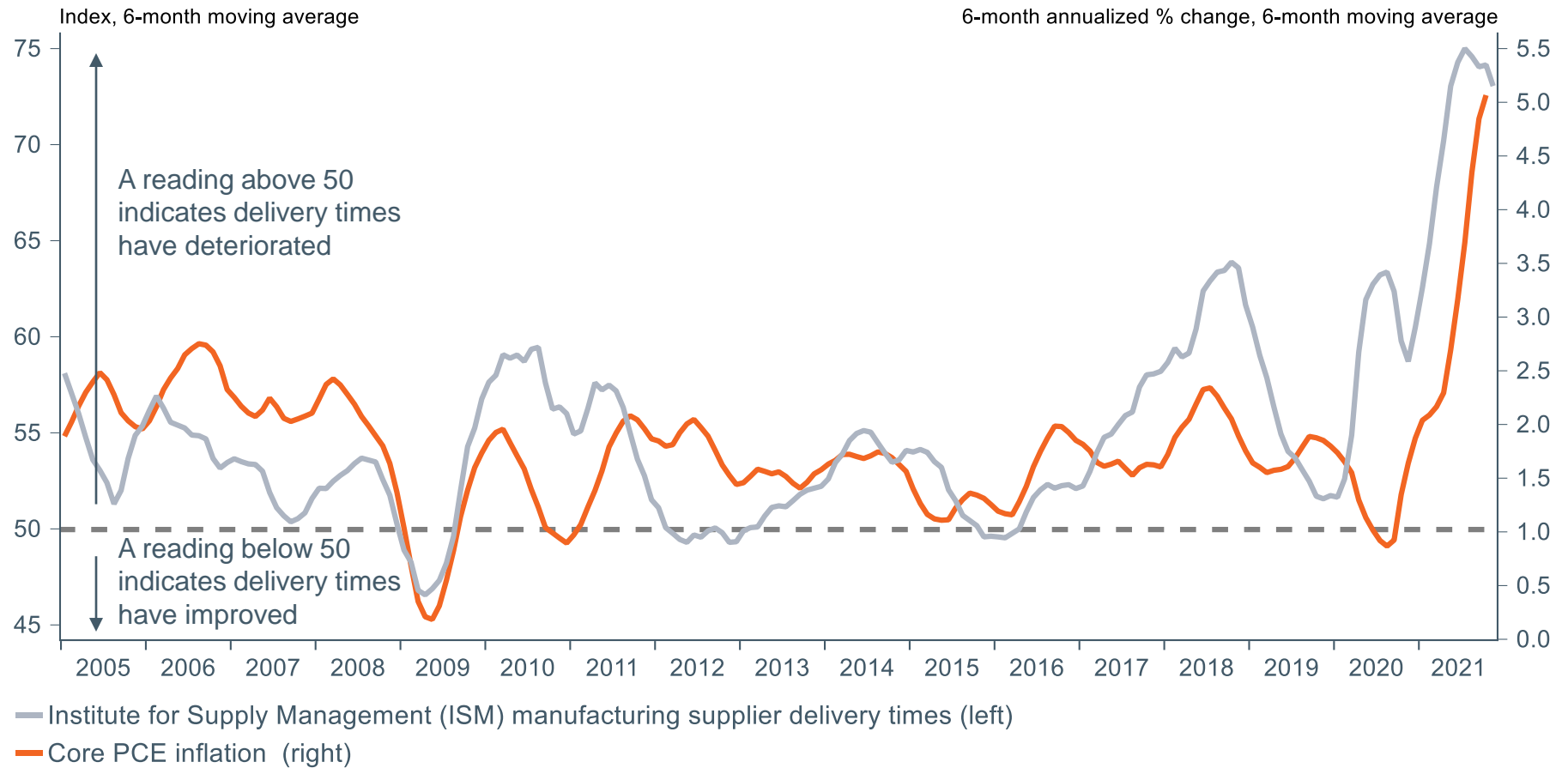


Data as of November 30, 2021. Sources: Bureau of Economic Analysis, WTIA.
Shading represents recession periods.

*Personal consumption expenditures (PCE) data are 3-month moving average divergence from trend. Trend is calculated using a Hodrick-Prescott (HP) filter.

Supply Chain Disruptions Driving Inflation Higher

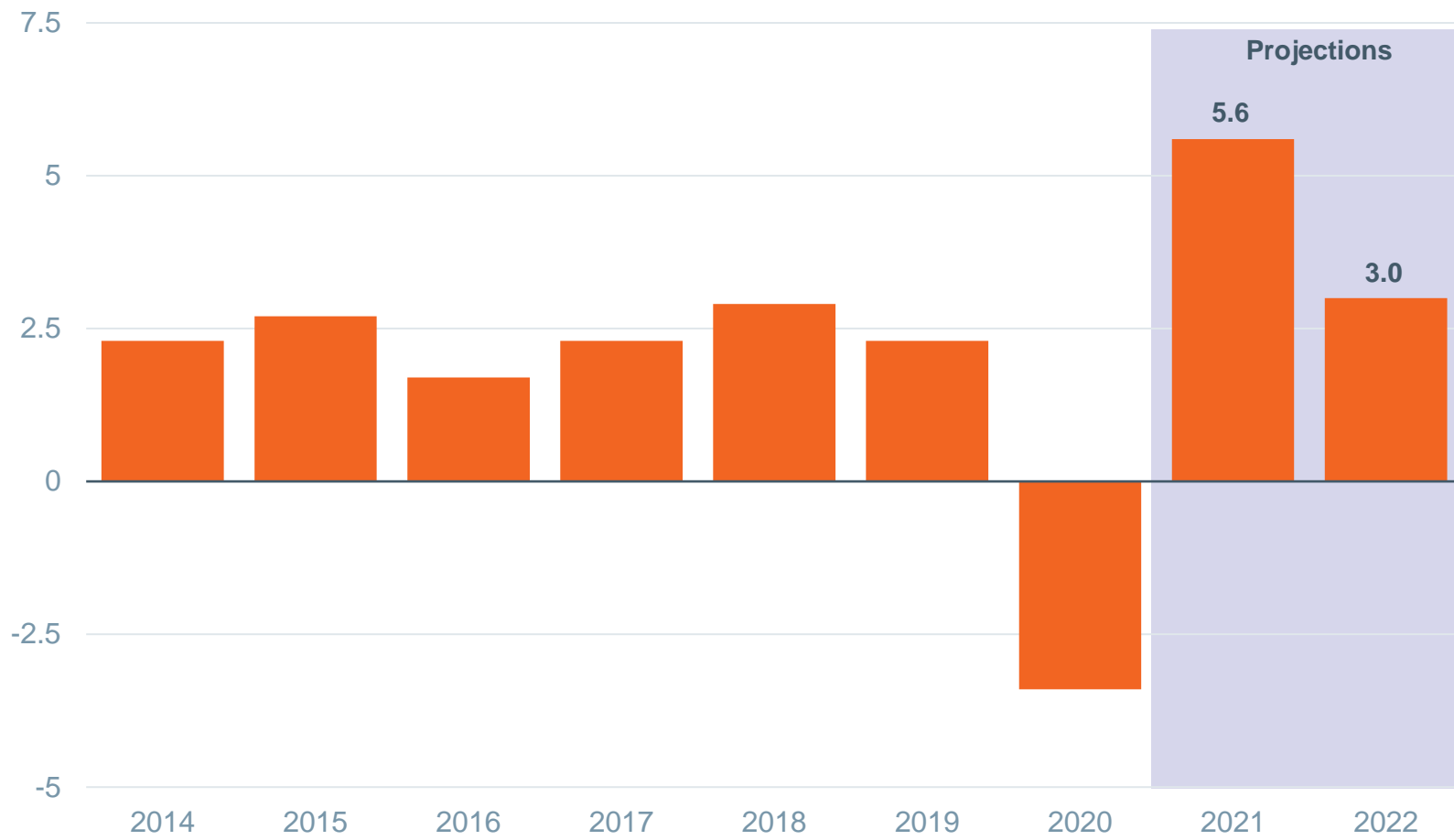
Manufacturing supplier delivery times (index) and Core Personal Consumption Expenditures (PCE) Inflation (%)



Data as of November 30, 2021 for ISM manufacturing supplier delivery times, October 30, 2021 for Core PCE inflation. Sources: ISM, Bureau of Economic Analysis, WTIA.

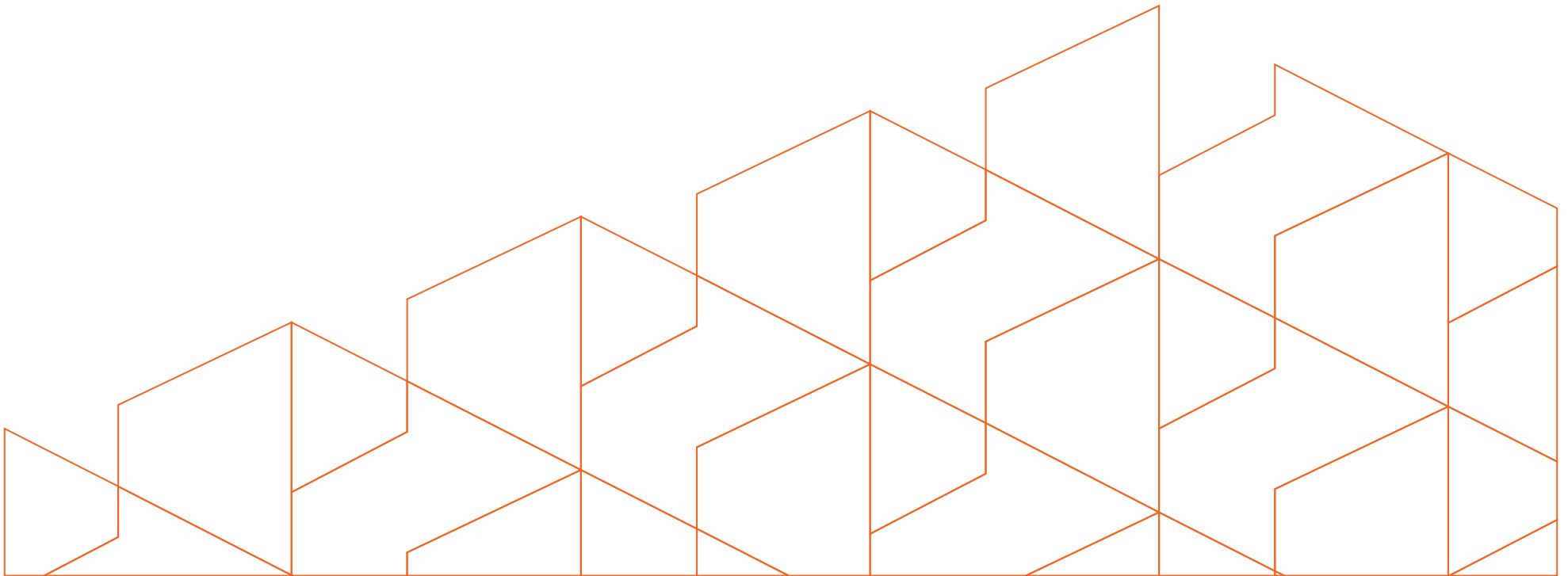
Growth to Slow but Remain Sturdy as Fiscal Impact Fades

Real gross domestic product (GDP, %)



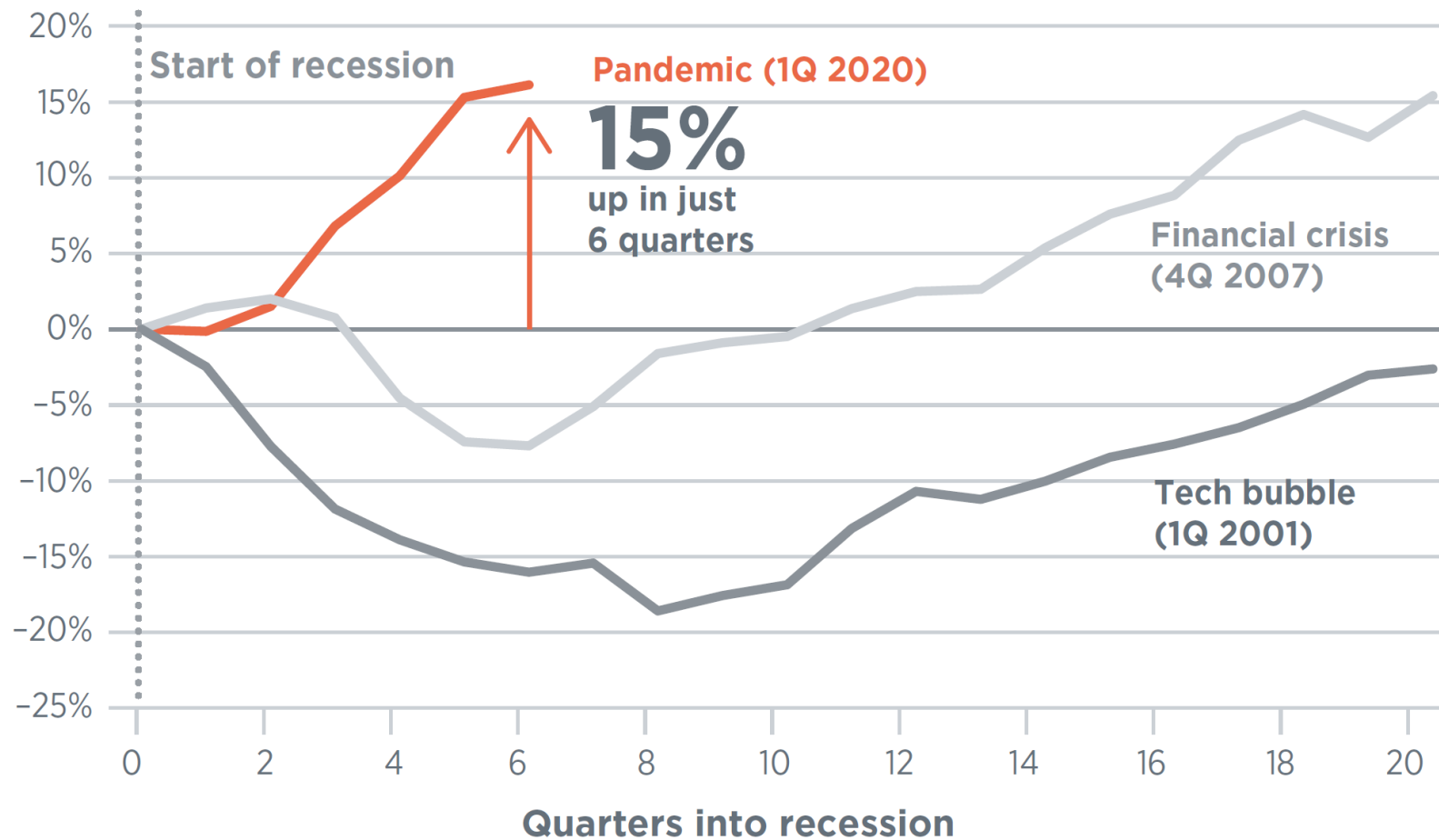
Data as of November 30, 2021. Sources: Bureau of Economic Analysis, WTIA.

Theme 2 The adaptive brilliance of business



This Time Around, Tech Spending Hasn't Missed a Beat

Cumulative % change in tech capital expenditures* during last three recessions



Data as of November 30, 2021. Sources: Bureau of Economic Analysis, WTIA.

*Tech capital expenditures include business capital expenditures on software and information processing equipment

Laboring Over a Labor Shortage

Arming workers with better tools

- Collaboration software (Zoom, Webex, Microsoft Teams, Slack, Skype)
- Task simplification (Target app for workers to view, add, and swap shifts)

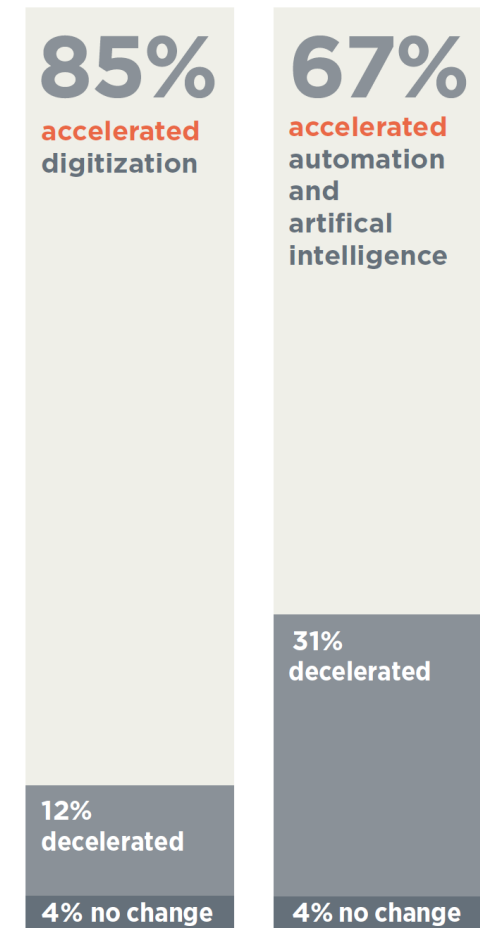
Accessing new workers

- 42% of small businesses raised compensation (highest in 5 decades)
- Signing bonuses and wage increases
- Flexible work arrangements – 82% of firms will permit some remote work
- Nationalized pay scales

Automating key roles

- 67% of firms accelerated automation and artificial intelligence
- Payback for automation cut to 18-24 months

Since the start of the COVID-19 outbreak, how has your company's or business area's adoption of the following technology trends changed?



800 companies were surveyed by McKinsey & Company. Source: McKinsey & Company Global Business Executives Survey, July 2020. Percentage figures may not add up to 100% due to rounding.

Bottlenecks, Backlogs and Blockages

Supply-chain challenges

- Port congestion at extreme levels
- Transportation costs exceed product cost
- Likely to persist until at least mid-2022
- Disruptions likely to repeat in the future

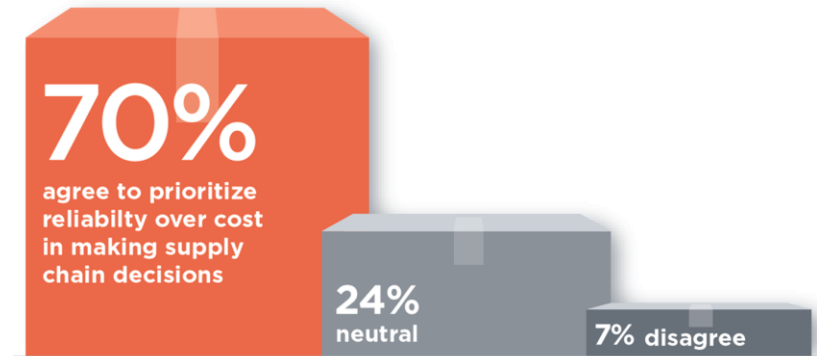
Companies adapt

- Technology and big data improve supply chain efficiency
- Dynamic pricing enable seller to adjust in response to demand
- “Just in time” inventory replaced by “just in case”

Long term supply chain optimization

- Automation
- 5G deployment
- Blockchain

In choosing suppliers, will your company prioritize cost?
Or resiliency and flexibility?



Peloton invested \$100 million to ship by air

Source: “Global Supply Chain Disruption and Future Strategies,” Foley & Lardner LLP blog, September 29, 2020. Figures may not add up to 100% due to rounding.

Diversifying From China

China's Dominance

- Provides 70%-77% of the world's rare earth elements
- Produces 70% of acetaminophen, 80% of blood anticoagulant used in U.S.
- Top trading partner for 60 economies

Going Forward

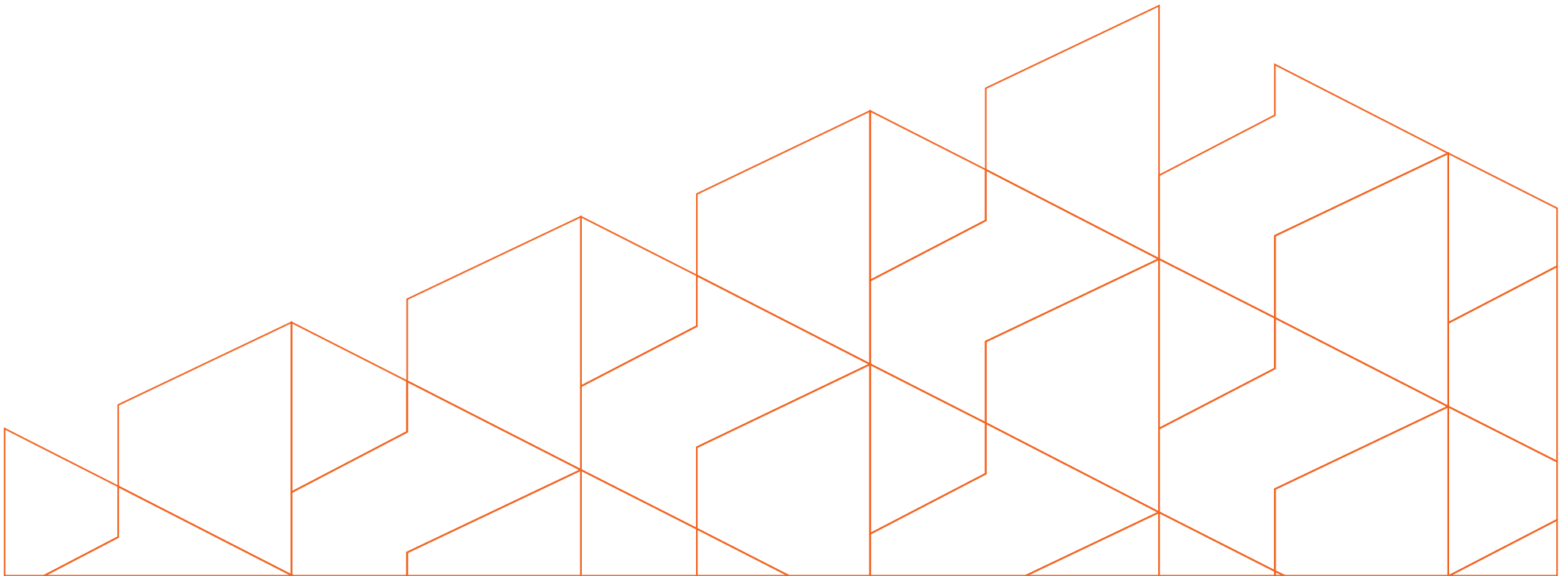
- Expect continued diversification away from China but not a mass exodus; China consumer is too valuable and alternative locations do not have labor capacity
- Firms likely to reduce supply chain concentration risk; some movement to Vietnam, India, Turkey, and others

China will retain a dominant position in supply chains for some time, with other countries gradually taking share

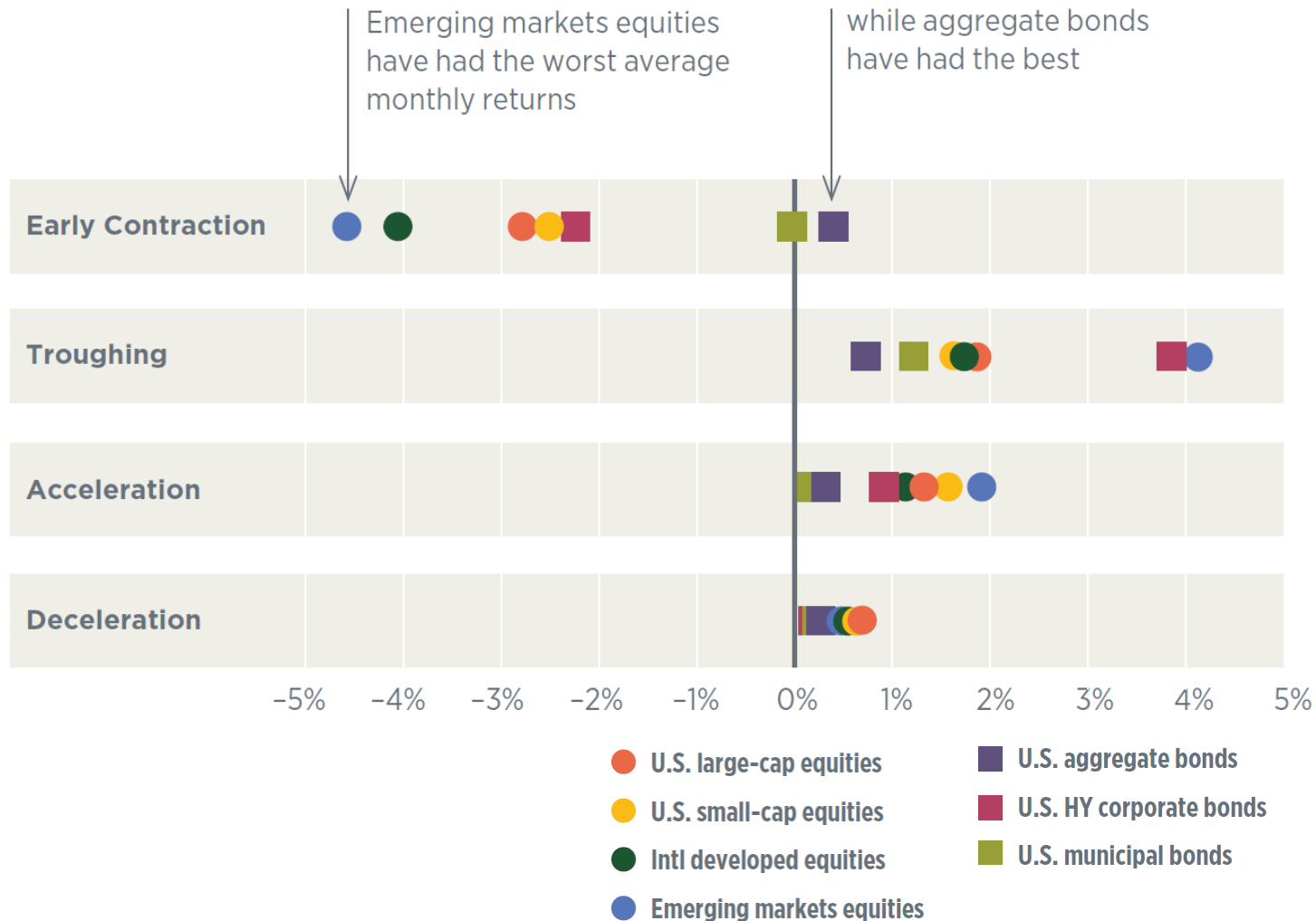


Source: United Nations, and June Teufel Dreyer, "China's Monopoly on Rare Earth Elements—and Why We Should Care," Foreign Policy Research Institute, October 7, 2020..

Theme 3 2022 Investment Playbook



Range of Asset Class Returns by Economic Stage

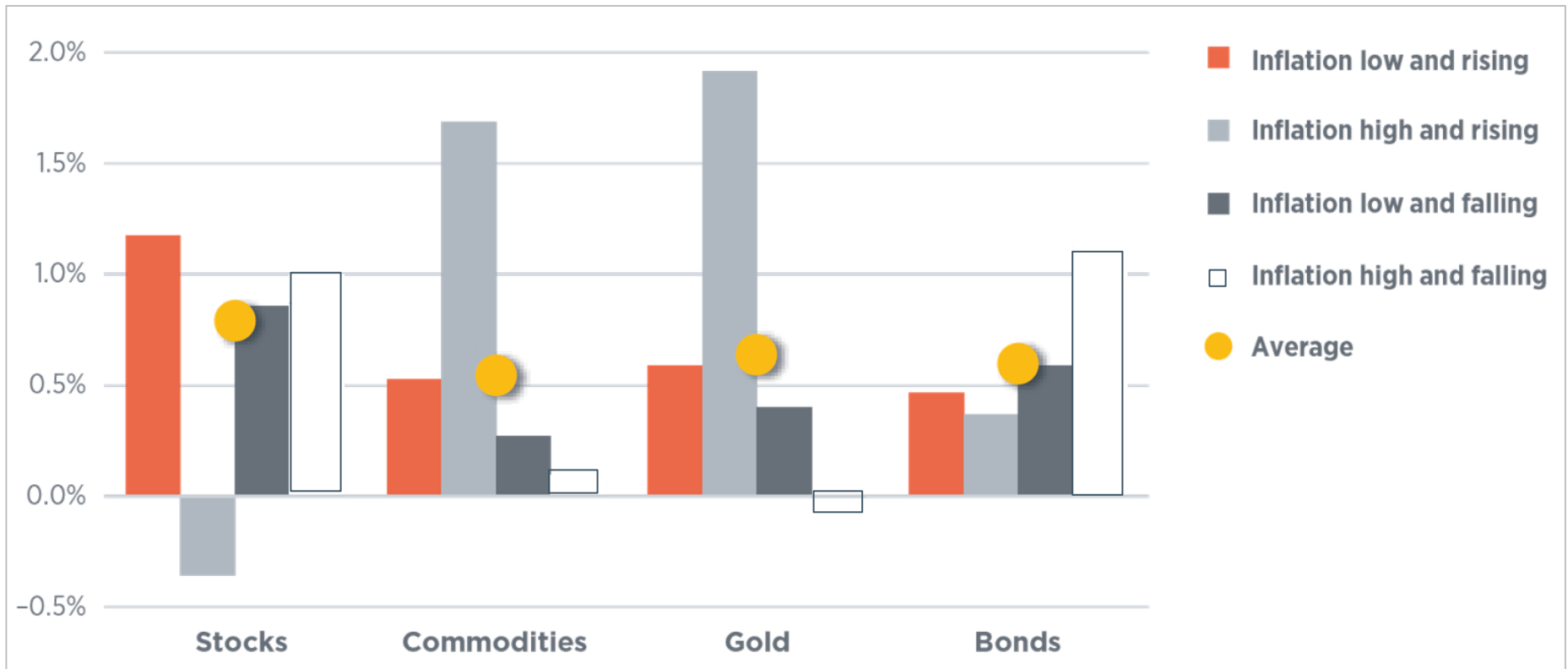


Data as of September 30, 2021

Analysis uses data for asset classes beginning January 1, 1988 and represents average monthly returns for the following indices: Russell 1000, Russell 2000, MSCI EAFE, MSCI Emerging Markets, Bloomberg U.S. Aggregate Bond, Bloomberg U.S. Corporate High Yield, and Bloomberg Municipal Bond, all total returns in U.S. dollars. The economic regimes come from WTIA analysis and are based upon the Brave Butters Kelley Coincident Index from the Federal Reserve Bank of Chicago. Early Contraction represents an economy that is in recession with the pace of activity deteriorating, Troughing represents recession but the pace of Contraction slowing; Accelerating represents an economy expanding at a rapid pace, and Deceleration represents expansion but slowing. Sources: Bloomberg, Federal Reserve Bank of Chicago, WTIA.

Insulating Against Inflation

Monthly returns across inflationary regimes



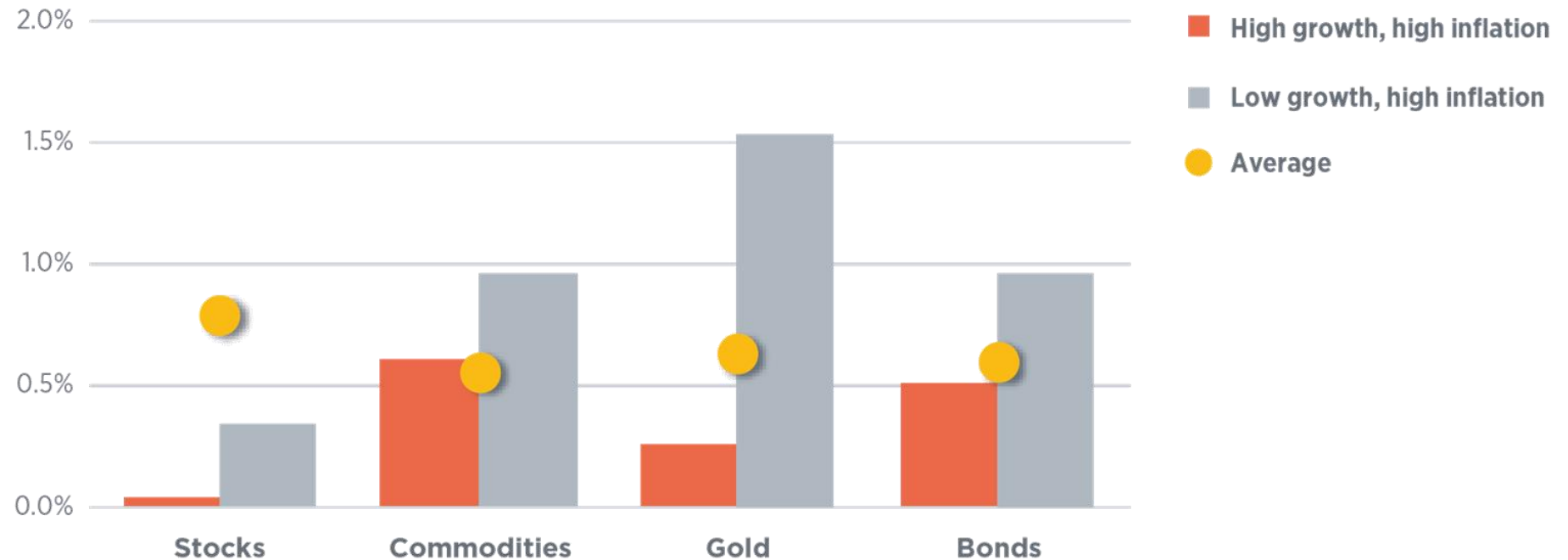
Data beginning January 31, 1976 through August 31, 2021.

Historical average returns not shown here, as index data are more limited for commodities and gold. Bars represent average monthly returns inflation is above (high) or below (low) 3.9%. Receding (rising) inflation indicates the current reading for U.S. CPI y/y is below (above) the 3-month moving average. The average return is over all periods. Assets represented include the S&P 500 index (price return), Bloomberg Commodity Total Return index, Gold spot price, and the Bloomberg U.S. Aggregate Total Return Bond index. Sources: Bloomberg, WTIA.

Past performance cannot guarantee future results. Indexes are not available for direct investment. Investment in a security or strategy designed to replicate the performance of an index will incur expenses such as management fees and transaction costs which will reduce returns. Investing involves risks and you may incur a profit or a loss. There is no assurance that any investment strategy will be successful. The gold industry can be significantly affected by international monetary and political developments as well as supply and demand for gold and operational costs associated with mining.

Commodities, Gold May Offer Respite in “Stagflation Lite”

Monthly average asset returns




Data beginning October 31, 1970 through August 31, 2021.

Bars represent average monthly total returns when U.S. quarterly GDP is above 3% (high) or below 2% (low) and inflation is above 3.9% (high). The average return is over all periods. Assets represented include the S&P 500 index (price return), Bloomberg Commodity Total Return index, Gold spot price, and the Bloomberg U.S. Aggregate Total Return Bond index. Sources: Bloomberg, WTIA.

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Range of Factor Returns by Economic Stage

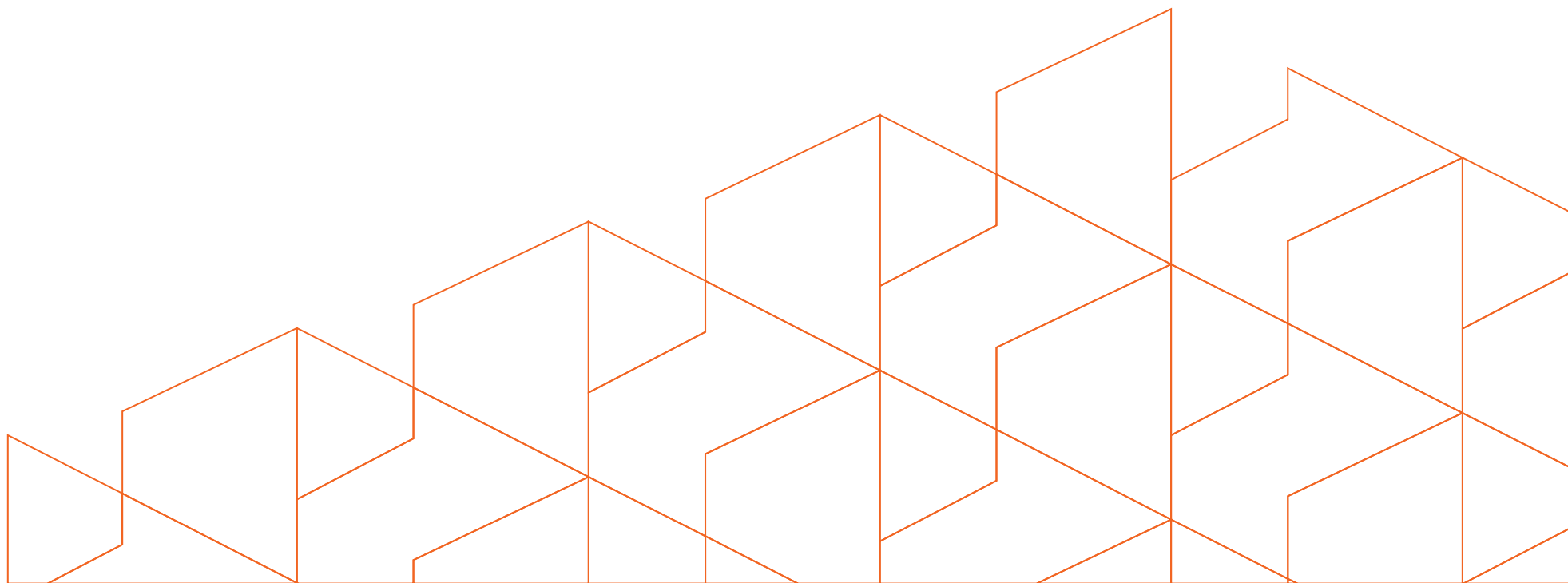
	Early Contraction	Troughing	Acceleration	Deceleration
FACTORS				
Growth	0.05%	-0.17%	0.05%	0.02%
Management quality	-0.06%	-0.23%	0.11%	0.12%
Momentum	0.52%	-2.22%	-0.02%	0.34%
Profitability	0.18%	0.33%	0.12%	0.14%
Small size	0.35%	0.43%	0.19%	0.08%
Value	-0.33%	-0.31%	0.09%	0.04%
Low volatility	0.15%	-0.31%	-0.16%	0.13%



Data as of September 30, 2021

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Appendix



BIOGRAPHY

Luke Tilley

Senior Vice President, Chief Economist and Department Head



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Expertise In

- Economics
- Monetary policy

Luke is Chief Economist and Head of Economics, Asset Allocation & Quantitative Services for Wilmington Trust Investment Advisors (WTIA), a part of the M&T Bank family. Luke is also a member of WTIA's Investment Committee.

Prior to joining Wilmington Trust in 2015, Luke was an officer and economic advisor with the Federal Reserve Bank of Philadelphia. Earlier in his career, Luke worked as a senior economist at IHS Global Insight (now IHS Markit) and as an economist for the U.S. Department of Housing and Urban Development.

Luke holds a Ph.D. in economics from Temple University and a bachelor's degree in economics and history from James Madison University. He is a former adjunct faculty member at Temple University and formerly served on the board of directors of the Pennsylvania Economic Association. In addition, Luke is former president of the Philadelphia Council for Business Economics, a chapter of the National Association for Business Economics.

BIOGRAPHY

Meghan Shue

Group Vice President

Head, Investment Strategy & Portfolio Construction



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Expertise In

- Investment strategy
- Asset allocation
- Portfolio construction

Meghan is responsible for helping manage the end-to-end asset allocation process, developing market research, and communicating the investment team's market outlook and positioning to clients and prospective clients. She is a member of the Investment Committee, which is responsible for deriving the firm's strategic and tactical asset allocation positioning.

Meghan also oversees the firm's portfolio construction process, including implementation of asset class views through a variety of proprietary, non-proprietary, passive, active, and factor-based solutions. She is chair of the Portfolio Management Committee.

Prior to joining Wilmington Trust, Meghan was an investment strategist at Bessemer Trust, where she helped manage the asset allocation decision and implementation process, performed asset allocation and market research, and published pertinent thought leadership.

She holds an MBA with a concentration in finance from the University of Miami, where she was valedictorian of her graduating class. She also holds a bachelor's degree in engineering, with a concentration in operations research and financial engineering, from Princeton University.

Meghan is a regular CNBC contributor, and is frequently quoted in financial media communicating the firm's economic and market views.

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Risk Assumptions

All investments carry some degree of risk. The volatility, or uncertainty, of future returns is a key concept of investment risk. Standard deviation is a measure of volatility and represents the variability of individual returns around the mean, or average annual, return. A higher standard deviation indicates more return volatility. This measure serves as a collective, quantitative estimate of risks present in an asset class or investment (e.g., liquidity, credit, and default risks). Certain types of risk may be underrepresented by this measure. **Investors should develop a thorough understanding of the risks of any investment prior to committing funds.**

Definitions

Bloomberg Commodity Total Return index is composed of futures contracts and reflects the returns on a fully collateralized investment in the Bloomberg Commodity Index (BCOM). This combines the returns of the BCOM with the returns on cash collateral invested in 13-week (3-month) U.S. Treasury bills.

Bloomberg Municipal Bond Index measures the performance of the Bloomberg Barclays U.S. Municipal Bond Index, which cover the four main sectors of the USD denominated long-term tax-exempt bond market: state, and local, general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds.

Bloomberg US Aggregate TR Bond Index is a broad base, market capitalization weighted bond market index representing intermediate-term investment-grade bonds traded in the U.S. It is a common stand-in for measuring the performance of the U.S. bond market.

Bloomberg U.S. High Yield Corporate Index, formerly known as Lehman Brothers U.S. High Yield Corporate Index, measures the performance of taxable, fixed rate bonds issued by industrial, utility, and financial companies and rated below investment grade. Each issue in the index has at least one year left until maturity and an outstanding par value of at least \$150 million.

MSCI EAFE Index is an equity index which captures large and mid-cap representation across 21 Developed Markets countries around the world, excluding the U.S. and Canada. With 902 constituents, the index covers about 85% of the free float-adjusted market capitalization in each country.

MSCI Emerging Markets Index captures large- and mid-cap representation across 27 emerging markets countries. With 1,407 constituents, the index covers about 85% of the free float-adjusted market capitalization in each country.

Russell 1000 Index measures the performance of the largest 1,000 securities by market capitalization listed on U.S. exchanges based on a combination of their market capitalization and current index membership.

Russell 2000 Index measures the performance of approximately 2,000 smallest cap American companies in the Russell 3000 Index, which is made up of 3,000 of the largest U.S. stocks.

The S&P 500, is a stock market index tracking the performance of 500 large companies listed on stock exchanges in the United States. It is one of the most commonly followed equity indices.