



Gauging the Risks Going Forward 2023 - 2024

**Presented by ITR Economics
Senior Forecaster
Connor Lokar**



ITR ECONOMICS
First In Forecasts Worldwide

2022 Global Forecast Results



	Duration	Accuracy
World Industrial Production	13	99.6%
Western Europe Industrial Production	23	99.5%
Eastern Europe Industrial Production	15	96.7%
Canada Industrial Production	24	99.7%
China Industrial Production	16	98.5%
Mexico Industrial Production	13	98.4%
Japan Industrial Production	13	98.7%
India Industrial Production	26	98.7%
Germany Industrial Production	13	99.2%
Brazil Industrial Production	13	98.9%

ITR Economics provides the best economic intelligence to reduce risk and drive practical and profitable business decisions.

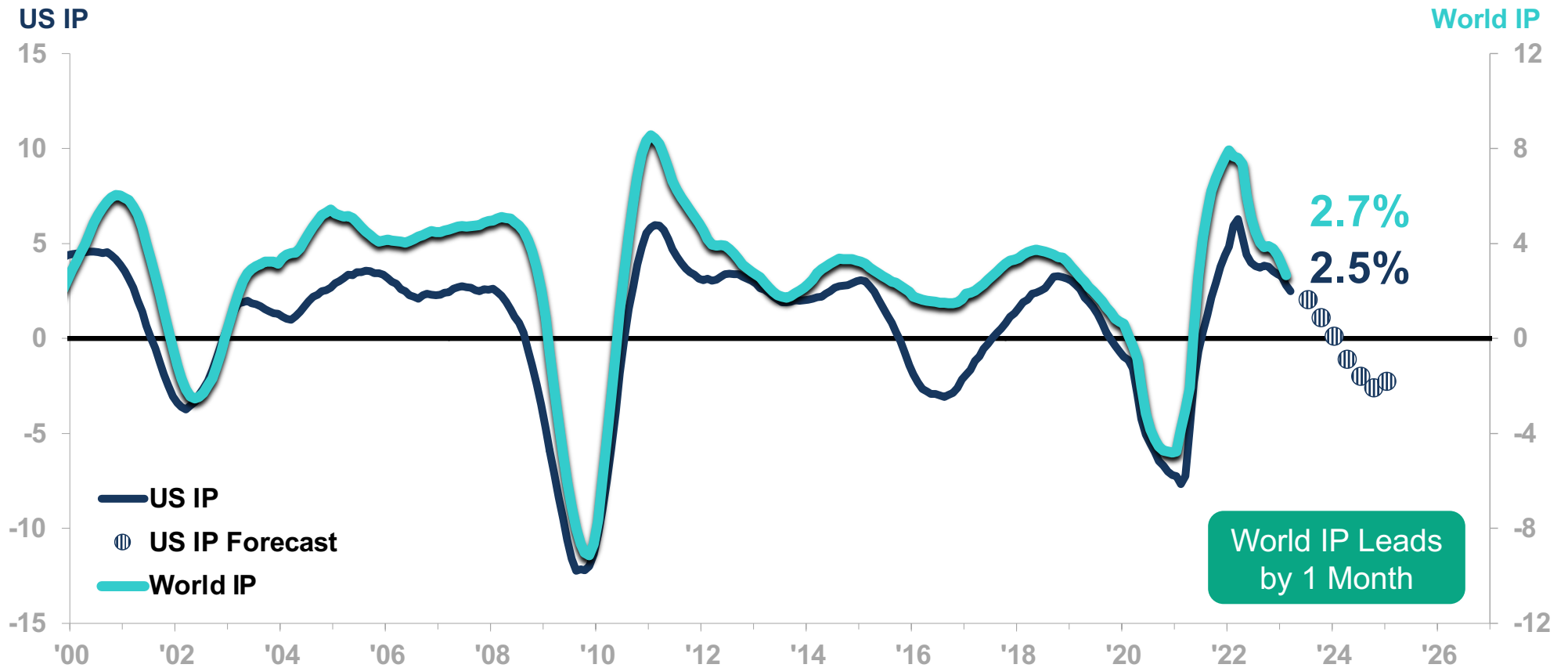
The Cyclical View

Sources: FRB, CPB Netherlands Bureau For Economic Policy Analysis



US Industrial Production Index to World Industrial Production Index

12/12 Rates-of-Change



A Powerful Management Tool • Rates-of-Change

	Raw	3MMT	3/12	12MMT	12/12
Apr-21	5.971				
May-21	5.781				
Jun-21	5.681	17.4			
Jul-21	6.121	17.6			
Aug-21	5.872	17.7			
Sep-21	5.965	18.0			
Oct-21	6.089	17.9			
Nov-21	6.164	18.2			
Dec-21	6.253	18.5			
Jan-22	6.399	18.8			
Feb-22	5.917	18.6			
Mar-22	5.864	18.2		72.1	
Apr-22	7.240	19.0		73.3	
May-22	6.711	19.8		74.3	
Jun-22	6.958	20.9	19.9%	75.6	
Jul-22	7.274	20.9	19.1%	76.7	
Aug-22	6.473	20.7	17.2%	77.3	
Sep-22	7.013	20.8	15.6%	78.4	19.1%
Oct-22	6.839	20.3	13.4%	79.1	18.4%
Nov-22	6.787	20.6	13.3%	79.7	17.8%
Dec-22	6.635	20.3	9.5%	80.1	16.2%
Jan-23	6.601	20.0	6.4%	80.3	14.8%
Feb-23	6.230	19.5	4.8%	80.6	13.6%
Mar-23	5.940	18.8	3.8%	80.7	12.0%

3/12

Based on data from a consecutive 3-month period compared to one year earlier.

Anticipates shifts in business cycle trends.

12/12

Based on data from a consecutive 12-month period compared to one year earlier.

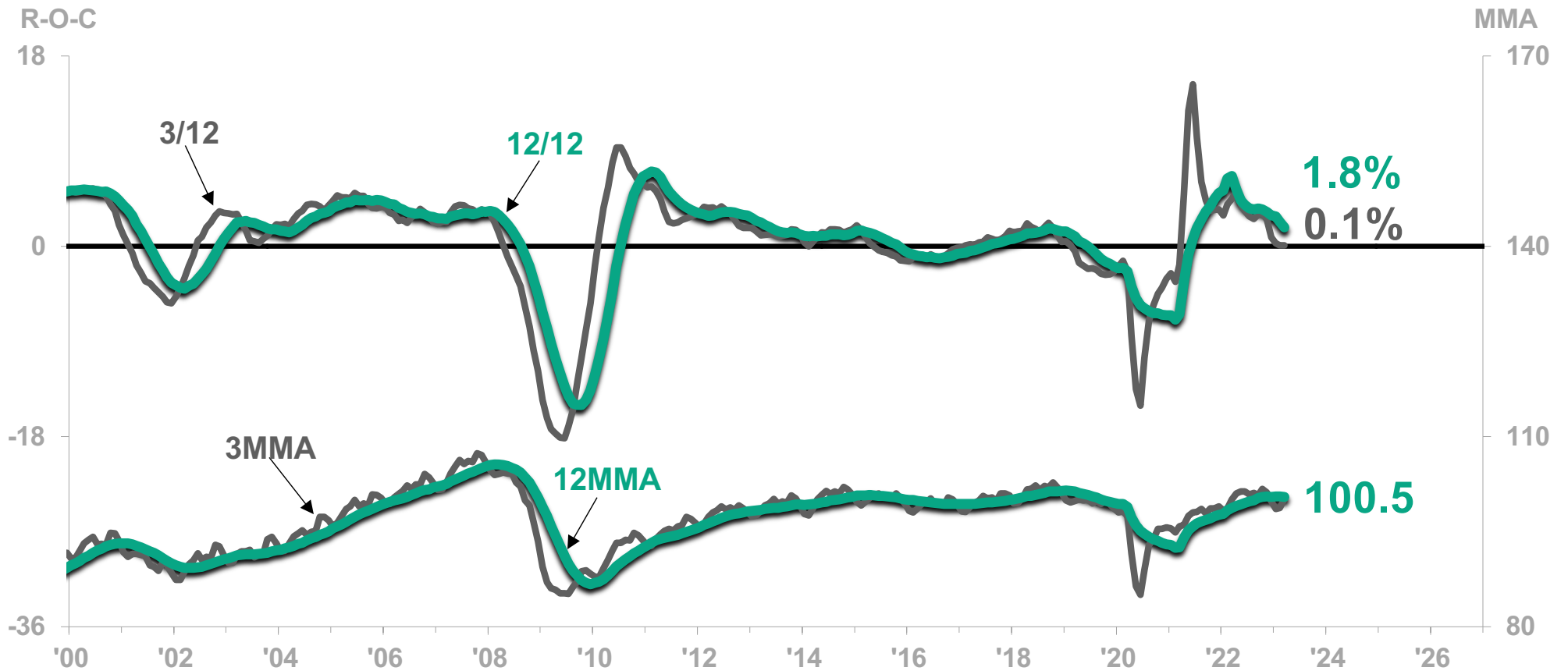
Defines the business cycle.

Expect Mild Decline to Extend Well Into 2024

Source: FRB

US Total Manufacturing Production Index

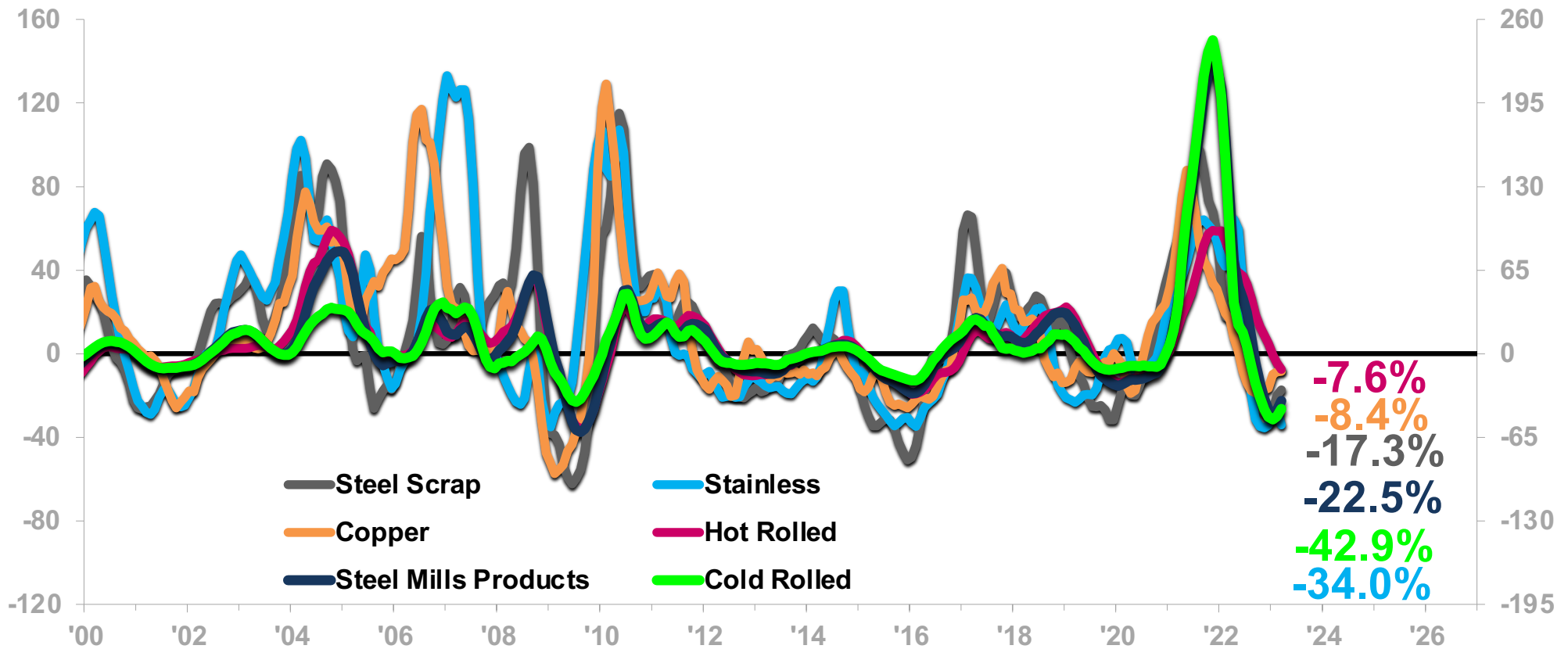
2017 = 100



Deflationary Metals Trends

Sources: WSJ, BLS

Commodity Prices Copper to US Producer Price Indexes for Steel Scrap, Stainless, Hot Rolled Steel, Cold Rolled Steel and Steel Mills Products
3/12 Rates-of-Change

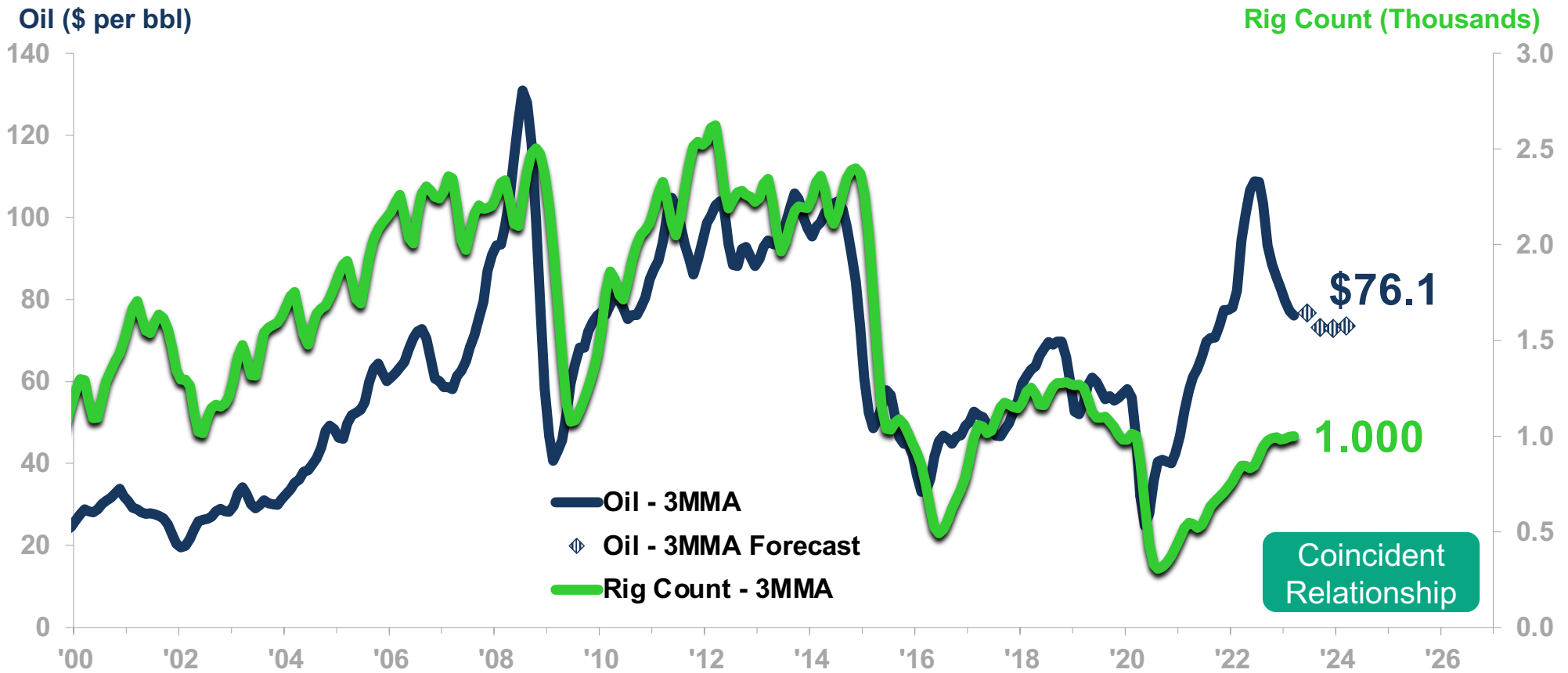


Oil Prices Moderating Off 2022 Highs

Sources: EIA, Baker Hughes

Crude Oil Spot Prices to North America Rotary Rig Count

Quarterly Data Trends

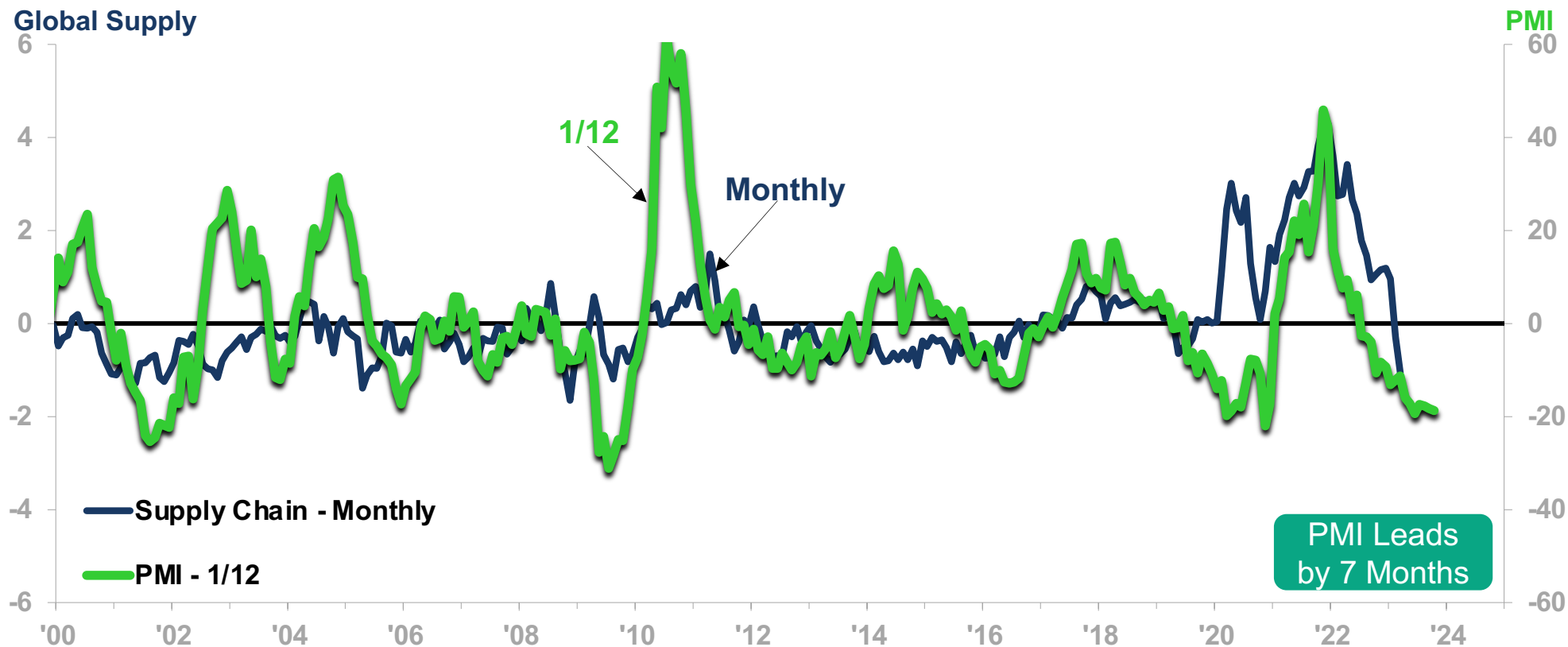


Slowing Economic Growth Means Less Supply Chain Pressure

Sources:
FRBNY, ISM

Global Supply Chain Pressure Index to US Purchasing Managers Index

Pressure Index, Raw to PMI 1/12 Rate-of-Change

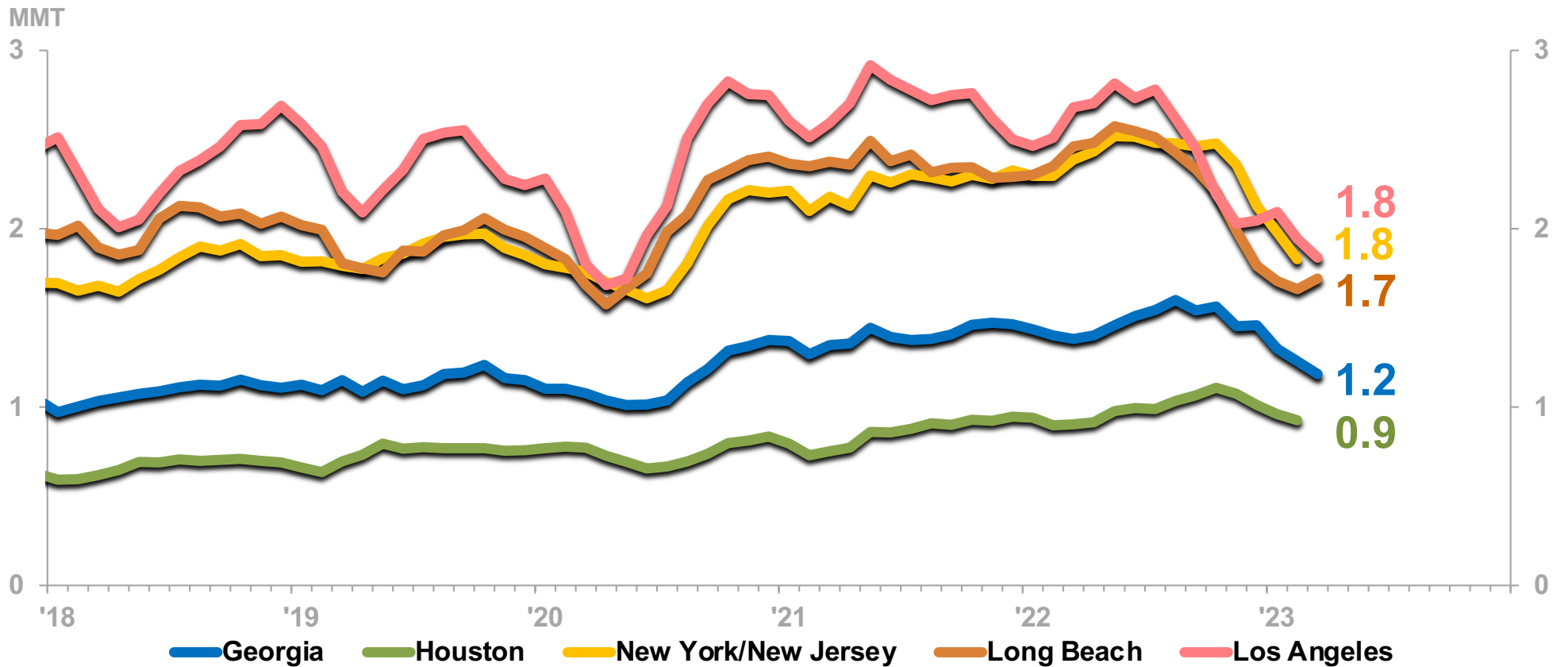


Freight Volumes Tell the Story

Sources: Port of Authority Statistics NY & NJ, GA, Los Angeles, CA, Long Beach, CA, Houston, TX

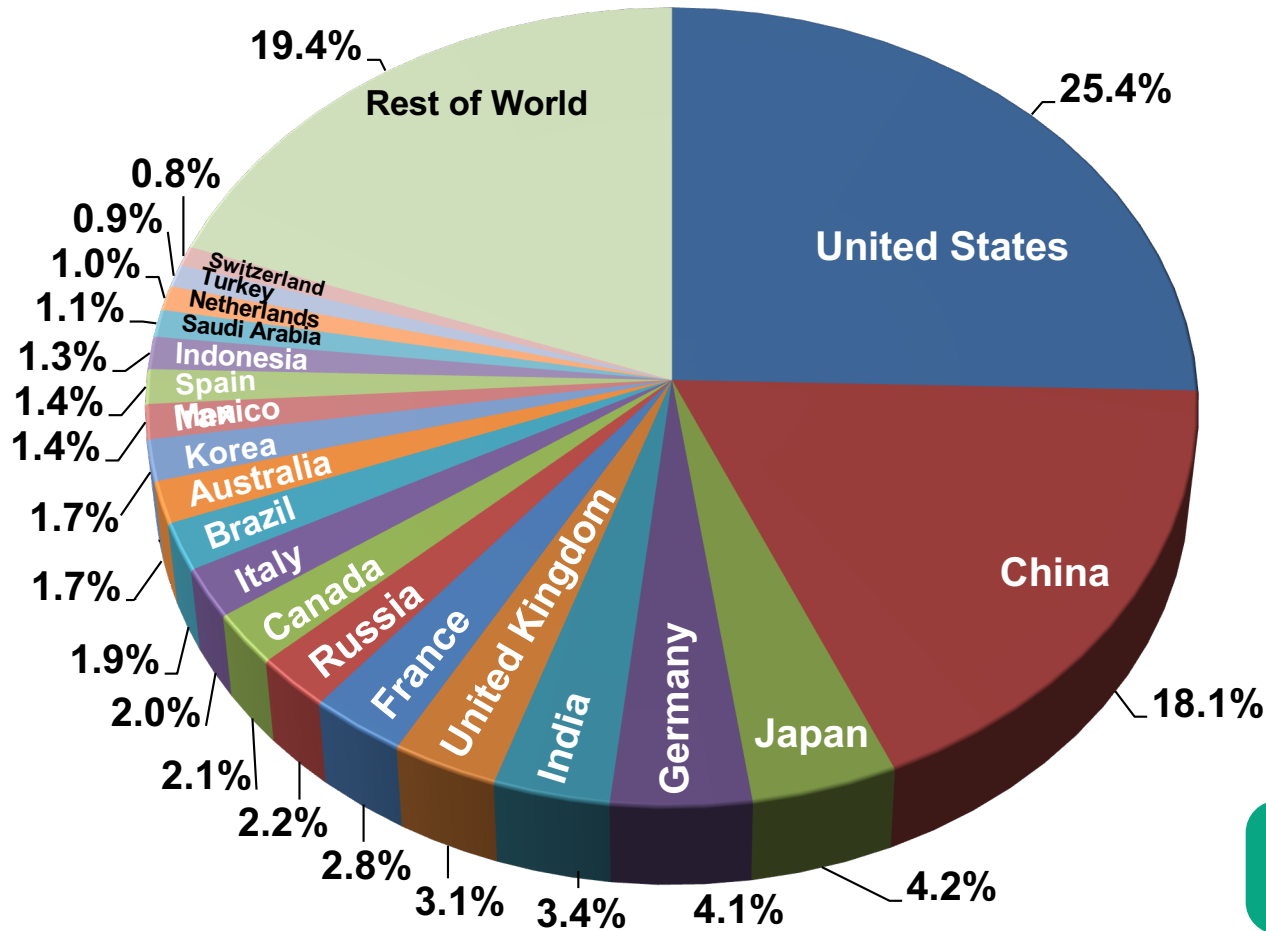
Total Intermodal Container Traffic | Top Five US Ports

Millions of TEU



Percent of World GDP by Country

Source: IMF, *ROW: 70% are IMF Estimated Figures



*Total World GDP: \$100.2 Trillion US \$

-  Expect inflation to diminish over the course of 2023 as global growth slows
-  Supply chain stress will generally diminish through 2023 barring disruptors
-  Follow the leading indicators to determine if they are sustained and becoming more widespread

Next Steps

- Nationalism is providing opportunities in the US market
- On-shoring is real as supply chains must be made more secure

Expect an Essentially Flat/Mildly Positive 2024

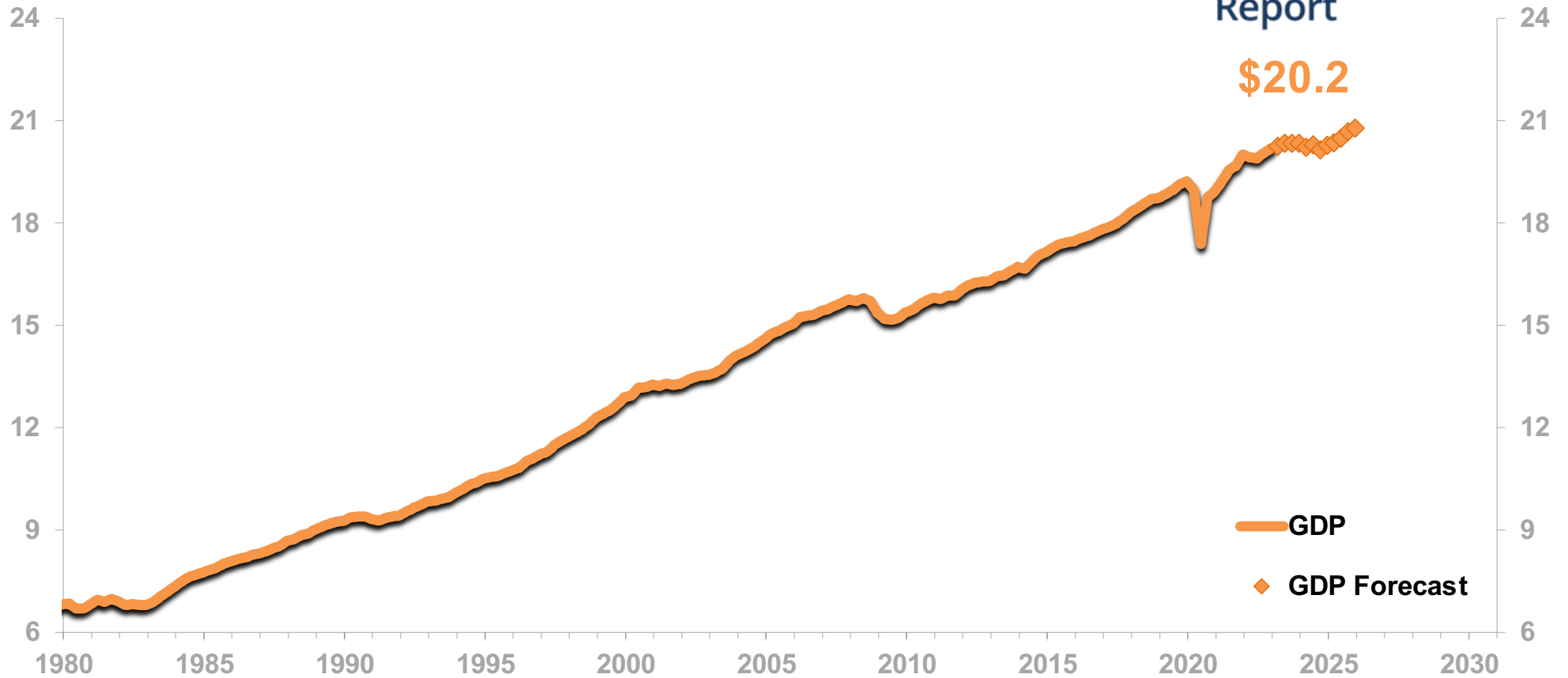
Source: BEA

US Real Gross Domestic Product

Quarterly Data Trends: Trillions of Chained 2012 Dollars

as seen in
ITR Economics'
**Trends
Report**


ITR ECONOMICS



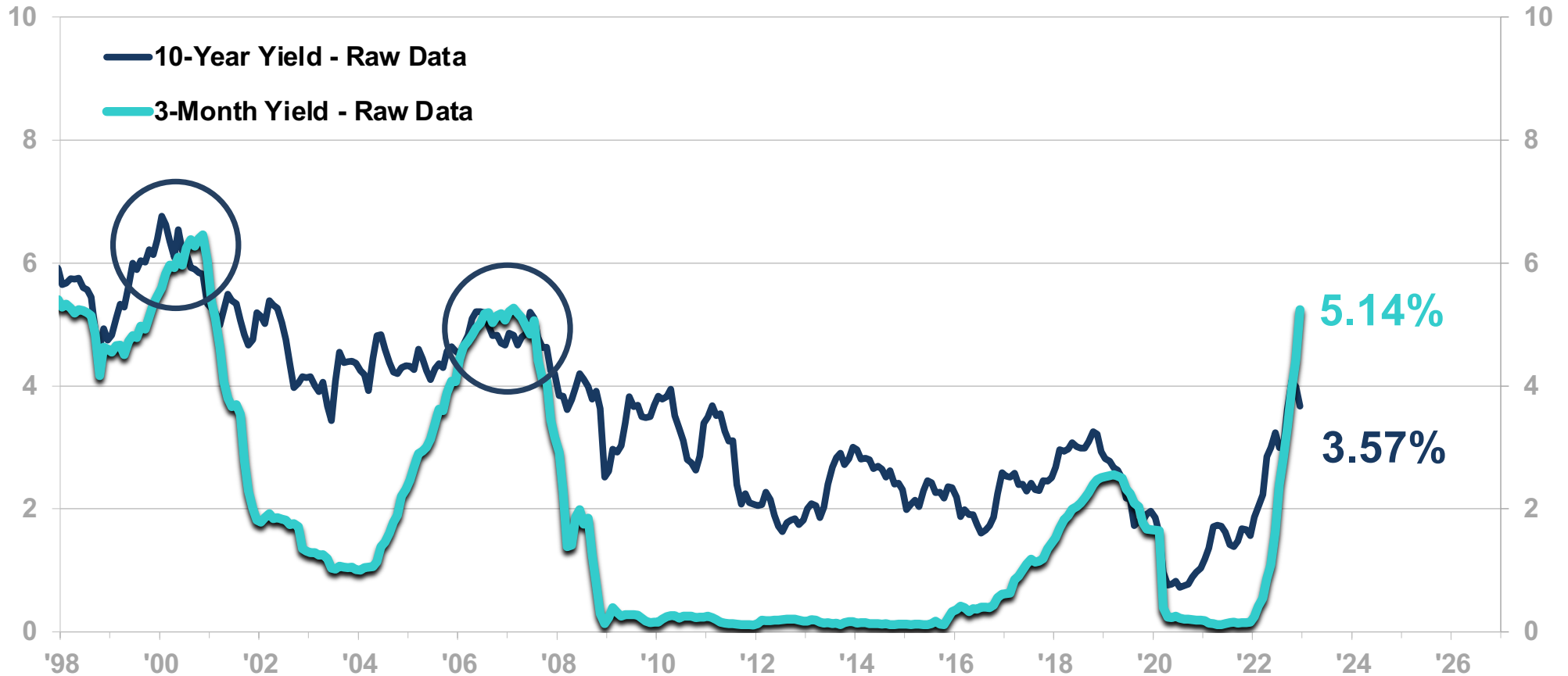
Inverse Yield Curve in Place: Business Cycle Decline Ahead

Source: US Treasury
Dept.

US Government Long-Term Bond Yields to US 3-Month Treasury Bond Yield



Raw Data: Percent



Rate Hikes Have Already Broken Housing

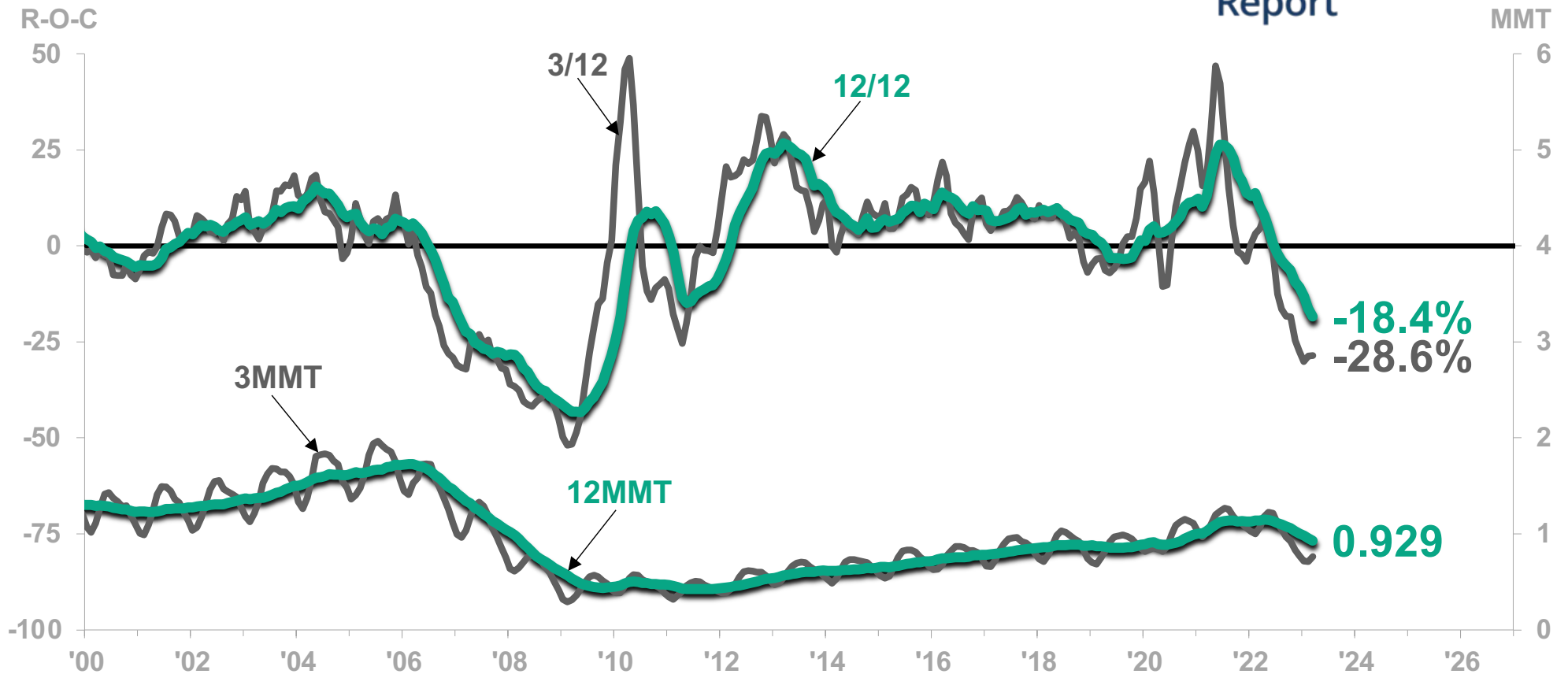
Source: US Census Bureau

US Single Unit Housing Starts

Millions of Units

as seen in
ITR Economics'
**Trends
Report**


ITR ECONOMICS



US Regional Single-Family Housing Unit Building Permits

Source: US Census Bureau



ITR ECONOMICS

Region	12/12	Phase	3/12	Annual Trend	Direction
Northeast ME, NH, VT, MA, CT, RI, NY, NJ, PA	-16.4%	D	-28.2%	56.7	Down
Southeast DC, DE, MD, VA, WV, NC, SC, GA, FL, AL, MS, TN, KY	-15.2%	D	-28.9%	364.6	Down
Great Lakes OH, MI, WI, IN, IL	-16.7%	D	-35.2%	68.3	Down
Plains KS, IA, MN, MO, NE, ND, SD	-21.6%	D	-39.8%	46.9	Down
Southwest AR, LA, OK, TX	-20.5%	D	-40.1%	174.3	Down
Mountains AZ, CO, ID, MT, NV, NM, UT, WY	-29.9%	D	-52.9%	104.0	Down
Pacific AK, CA, HI, OR, WA	-16.9%	D	-33.6%	88.3	Down

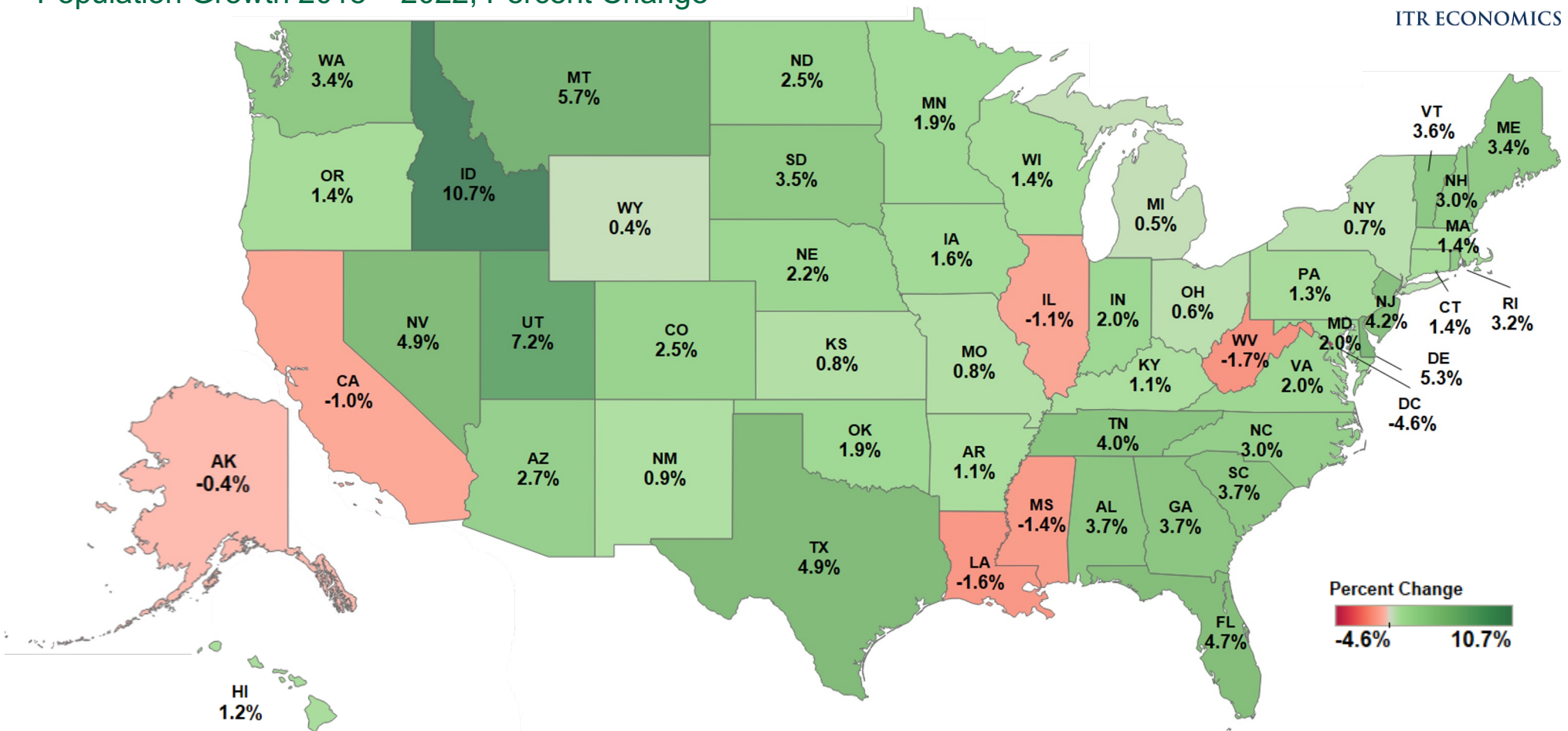
State Population Growth 2018 to 2022

Source: US Census Bureau

Population Growth 2018 – 2022, Percent Change



ITR ECONOMICS

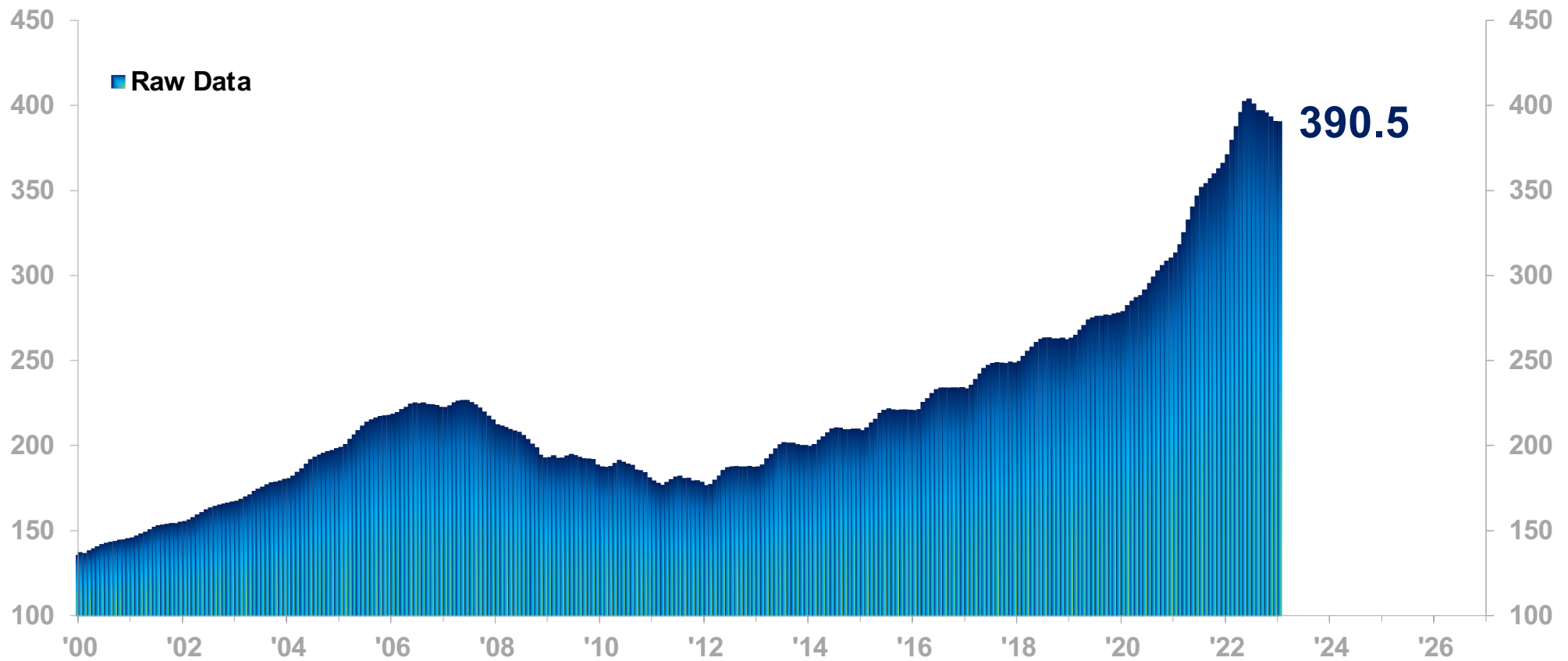


Some Normalization Will Occur, Varied by Market

Source: Federal Housing
Finance Agency


US Housing Price Index

Raw Data (1991 = 100)



US Economic Leading Indicators: Generally Weak Conditions Indicated

Sources: ITR Economics, Institute for Supply Management, OECD, Yahoo Finance, US Census Bureau, FRB, Markit Economics

Indicator	Trend	Macro Indication	 ITR ECONOMICS
ITR Retail Sales Leading Indicator	Decline	Macroeconomic weakness	
ITR Financial Leading Indicator	Decline	Macroeconomic weakness	
JPMorgan Global PMI	Decline	Macroeconomic weakness	
US OECD Leading Indicator	Decline	Macroeconomic weakness	
G7 Leading Indicator	Decline	Macroeconomic weakness	
Purchasing Managers Index (PMI)	Decline	Macroeconomic weakness	
ITR Leading Indicator	Decline	Macroeconomic weakness	
Wilshire Total Market Cap	Decline	Macroeconomic weakness	
US Business Confidence Index	Decline	Macroeconomic weakness	
Single-Family Housing Starts	Decline	Macroeconomic weakness	
Total Industry Capacity Utilization	Decline	Macroeconomic weakness	
US Exports, Goods – World	Decline	Macroeconomic weakness	

Retail is Slowing Down

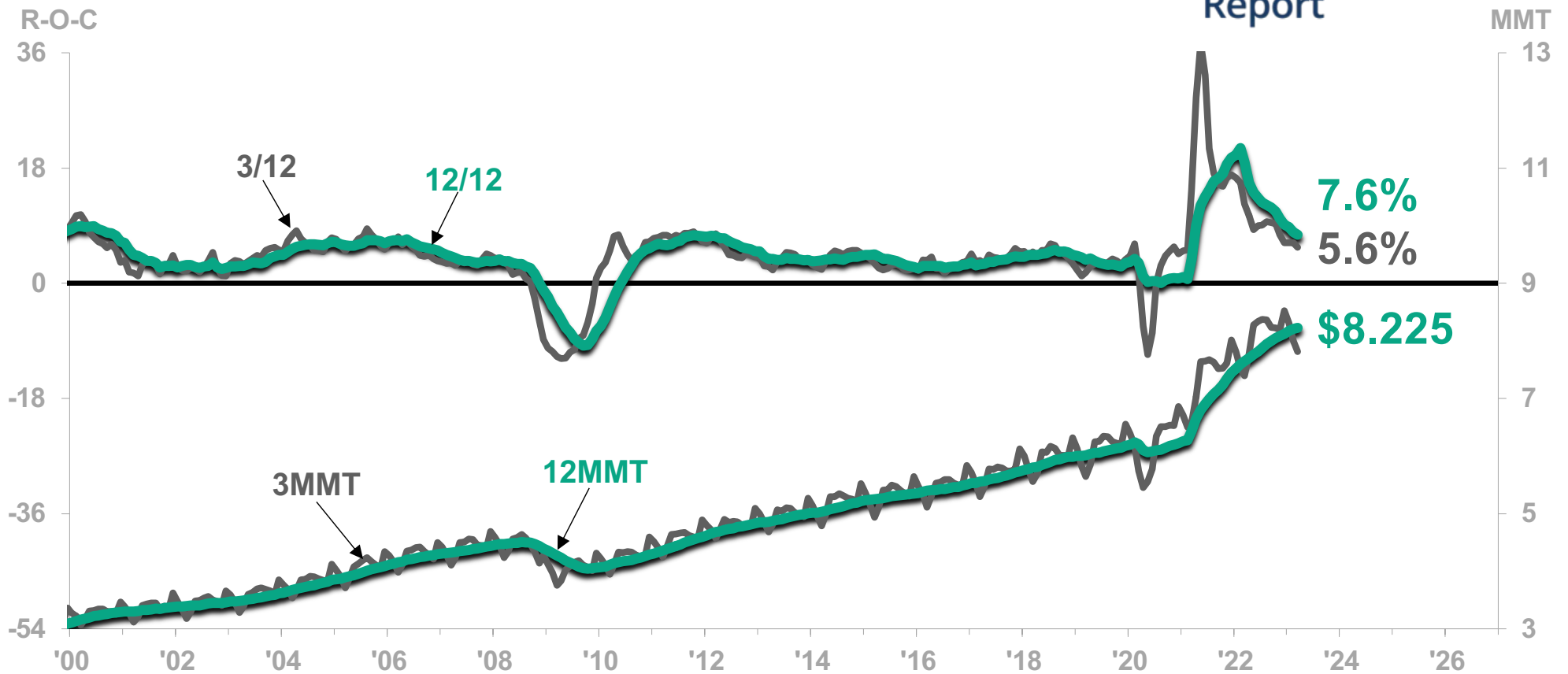
Source: US Census Bureau

US Total Retail Sales

Trillions of Dollars

as seen in
ITR Economics'
**Trends
Report**


ITR ECONOMICS

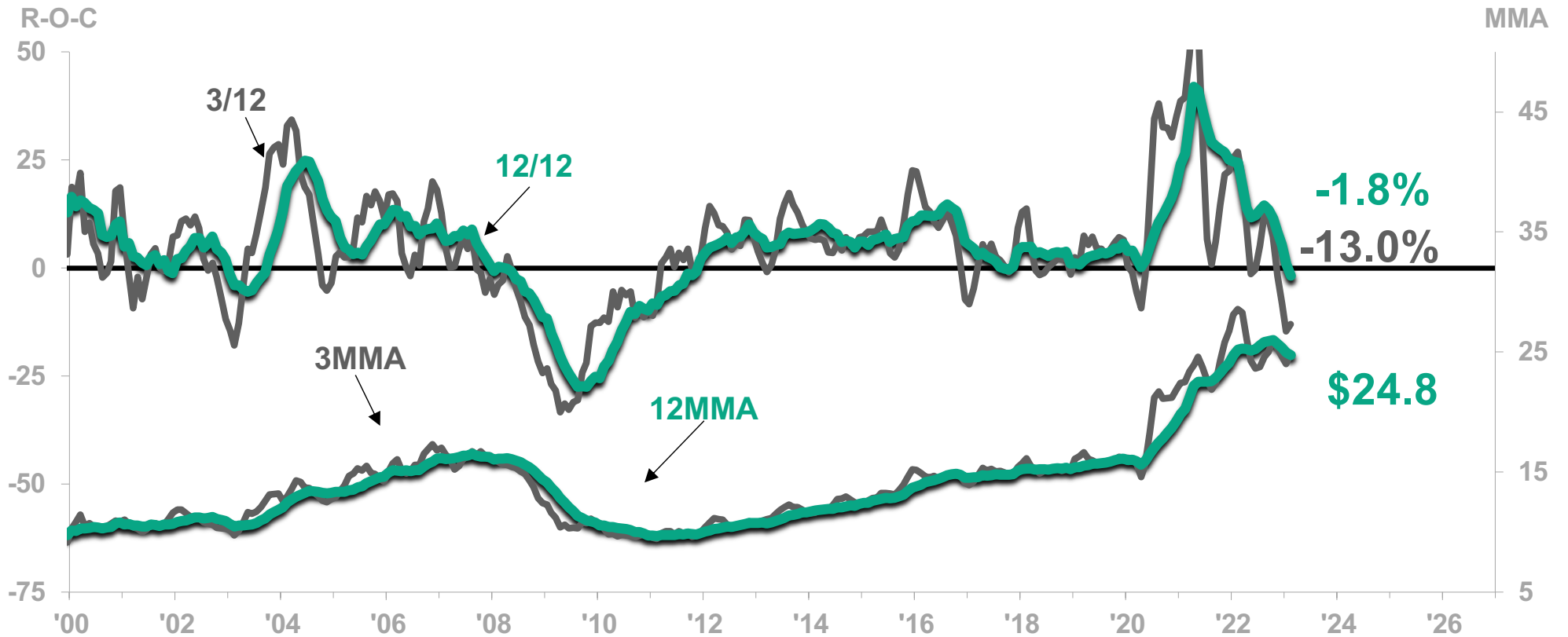


Consumer Spending On Pleasure Boats Is Contracting

Source: BEA

US Personal Consumption Expenditures for Pleasure Boats

Billions of Dollars

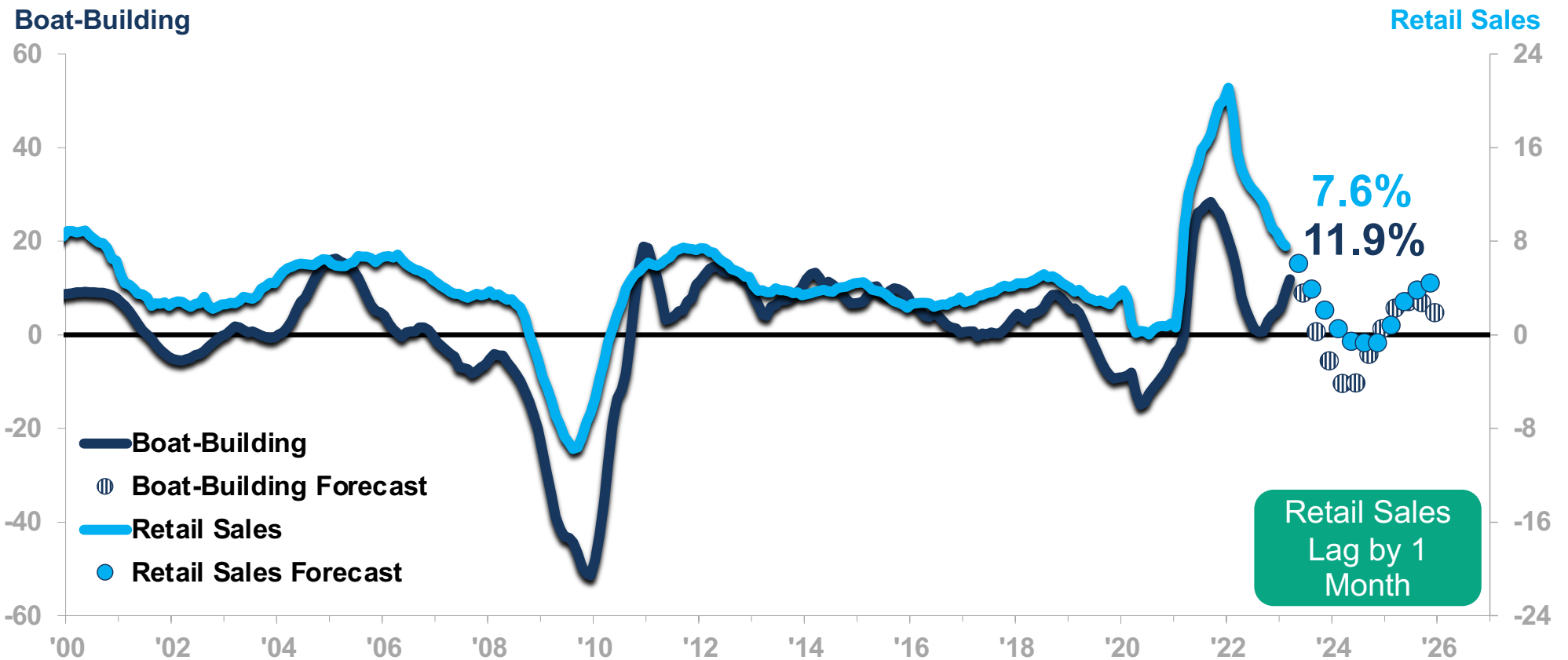


Retail Sales Outlook Reflects Downside Consumer Pressure

Source: FRB,
US Census Bureau

US Boat Building Production Index to US Total Retail Sales

12/12 Rates-of-Change



Inflation Adjusted Wages Rising Trend

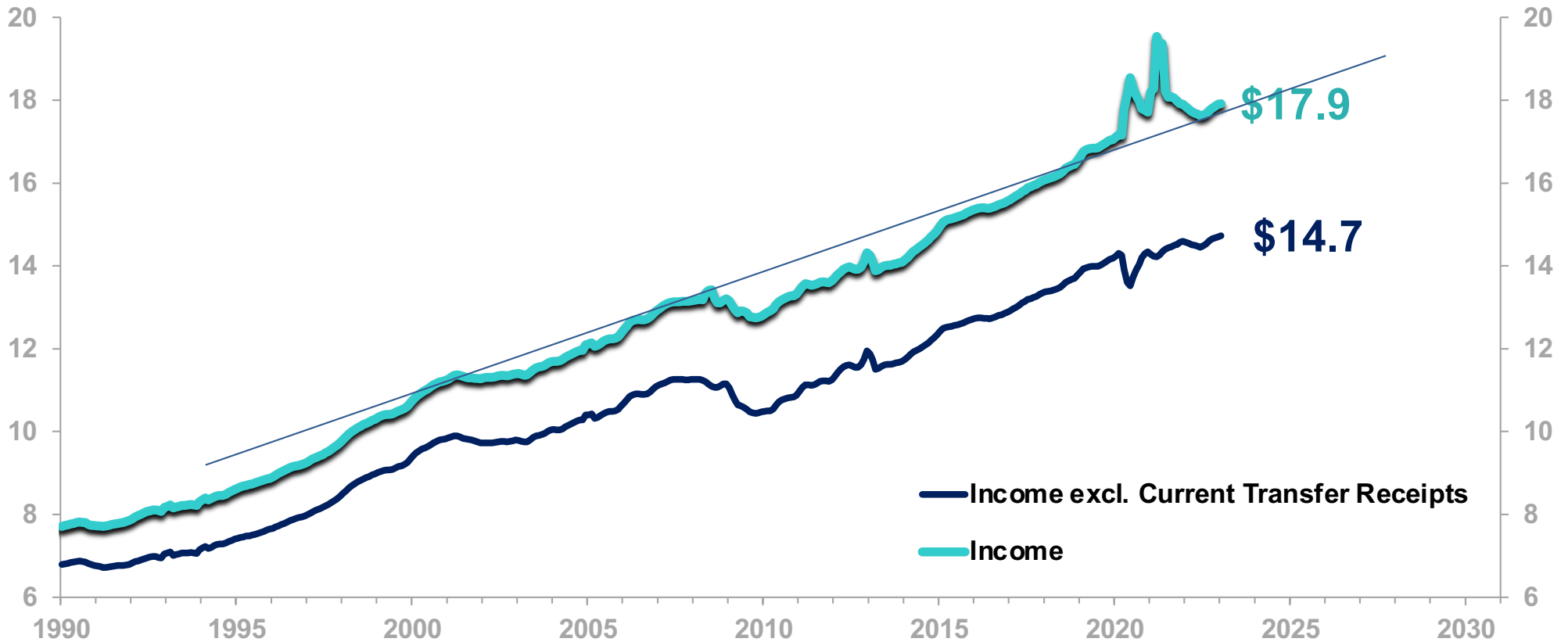
Source: BEA

US Real Personal Income (excluding current transfer receipts) to US Real Personal Income

Quarterly Data Trends in Trillions of Chained 2012 Dollars



Income excl. Transfers



Overall Debt Load is Manageable and Credit Card Debt is Minimal

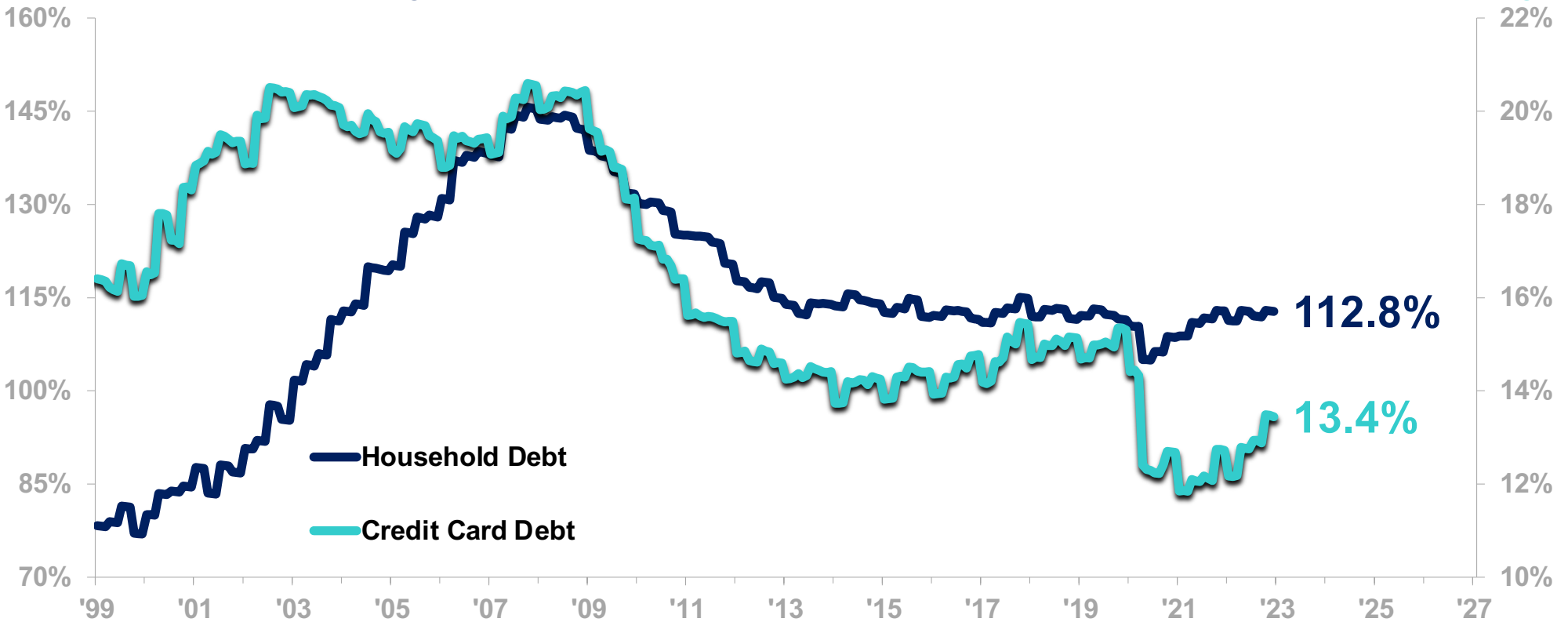
Sources: FRB New York,
US Census Bureau, BLS



**US Household Debt per Capita as a % of US Median Annual Earnings to
US Credit Card Debt per Household as a % of US Median Annual Earnings**
Raw Data, Percent

Household Debt as % of Earnings

Credit Card Debt as % of Earnings



Bankruptcies Still Very Low, But Rising

Sources: FRB, US Courts

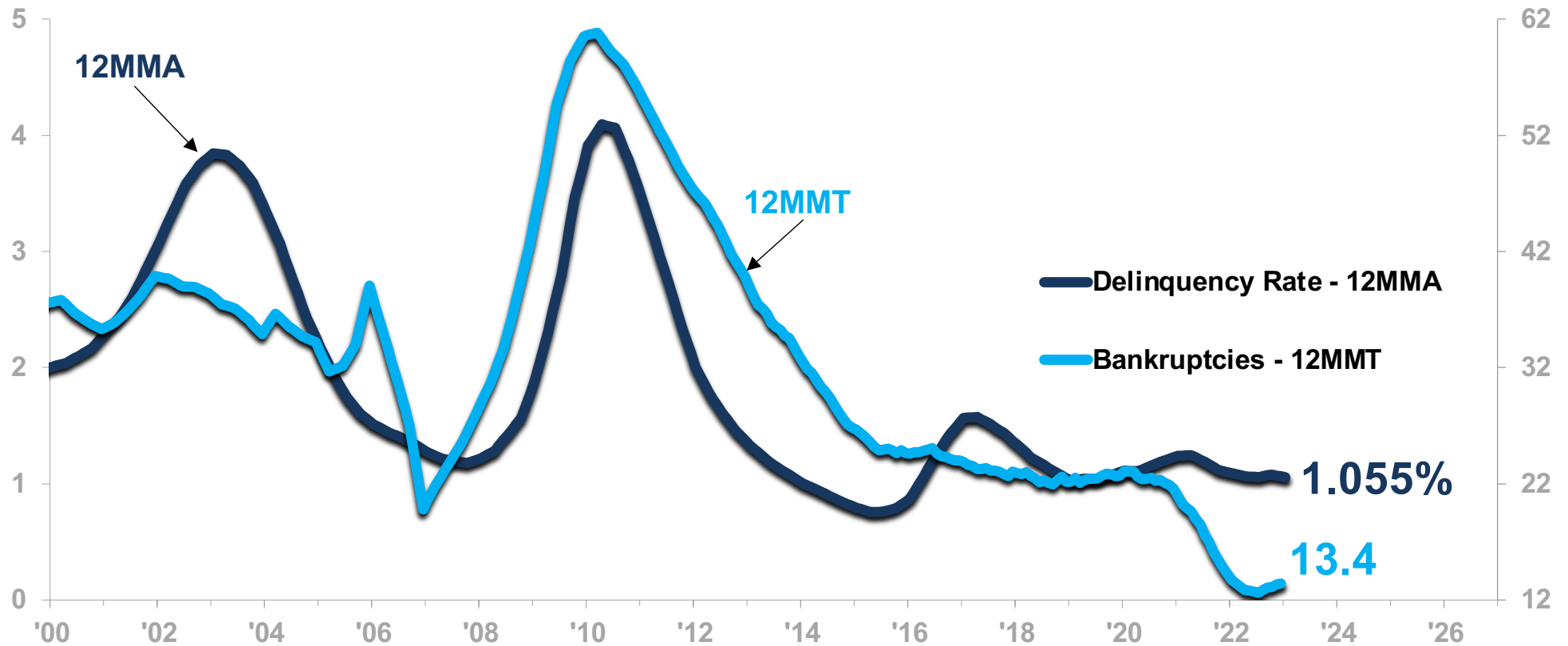
US Commercial and Industrial Loan Delinquency Rate to US Business Bankruptcies

Annual Data Trends



Delinquency Rate (Percent)

Bankruptcies (Thou.)



Able to Service Rising Debt Loads

Source: FRBNY, FRB, BEA

US Profits and Delinquency Rates



	Monthly	Notes
Auto Loan Delinquency	3.73%	Five year low
Credit Card Delinquency	2.34%	Pre-Covid 10yr avg 2.76%
Residential Delinquency (>90 days)	1.85%	Sep 1.80%, lowest in 15.5 years
Domestic Nonfinancial Profits	\$2.07T	Record high



The consumer balance sheet is strong.



Savings are back to normal. Will the trend stop there?



Retail Sales expressed in units will trend lower than nominal \$ retail sales.

Next Steps

- Weakness likely becomes apparent 2H23
- Budget for reduced inventory turns
- Hold on to your A & B level talent



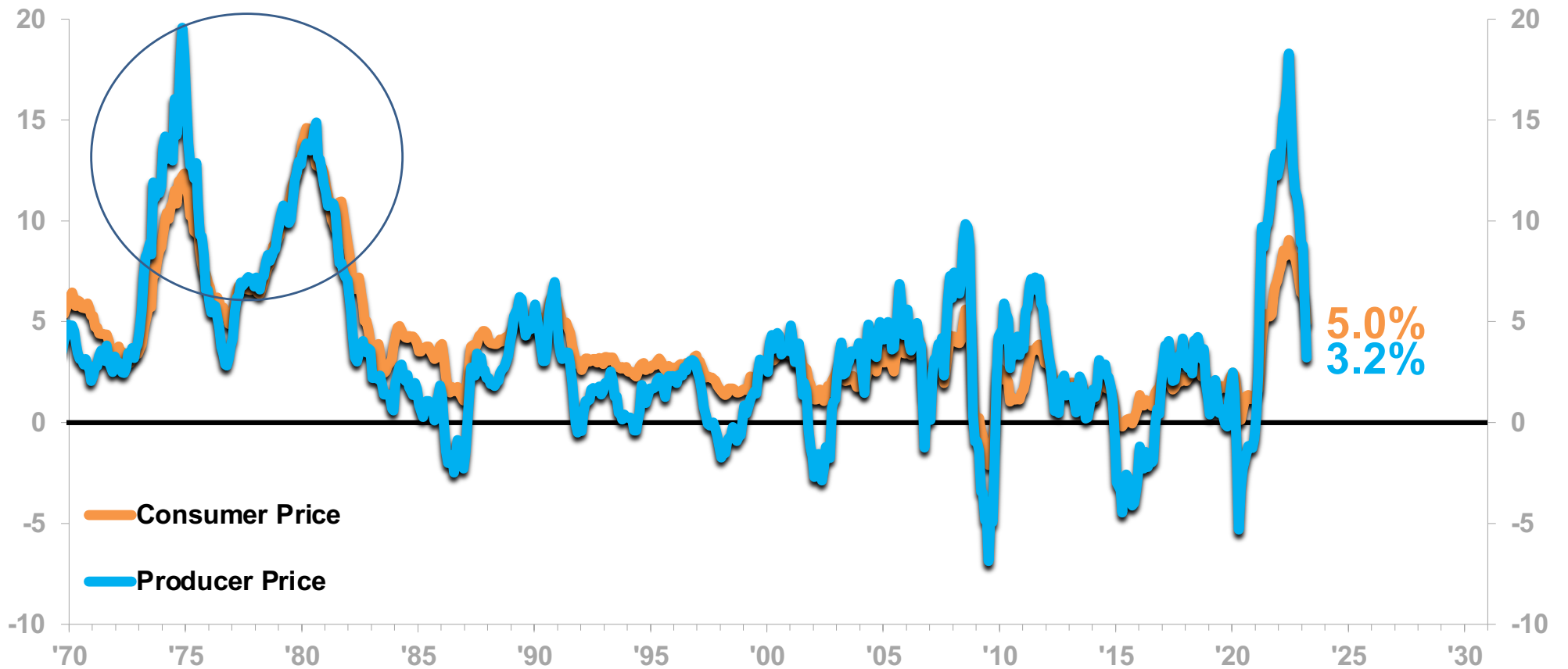
Pricing Pressures

Disinflationary Trend Through 2023

Source: BLS

US Consumer Price Index to US Producer Price Index

1/12 Rates-of-Change



Disinflation Through Most of 2024

Sources: BLS

US Consumer Price Index

3/12 Rates-of-Change





Inflation is decreasing



Fed should stop raising interest rates; will likely stop 2Q23



Banks tightening credit

Next Steps

- **Budget understanding that wage inflation will abate for 2023 & 2024**
- **Tout your competitive advantages to protect margins**



Industry Drivers



Industrial Production Peaks 3Q23

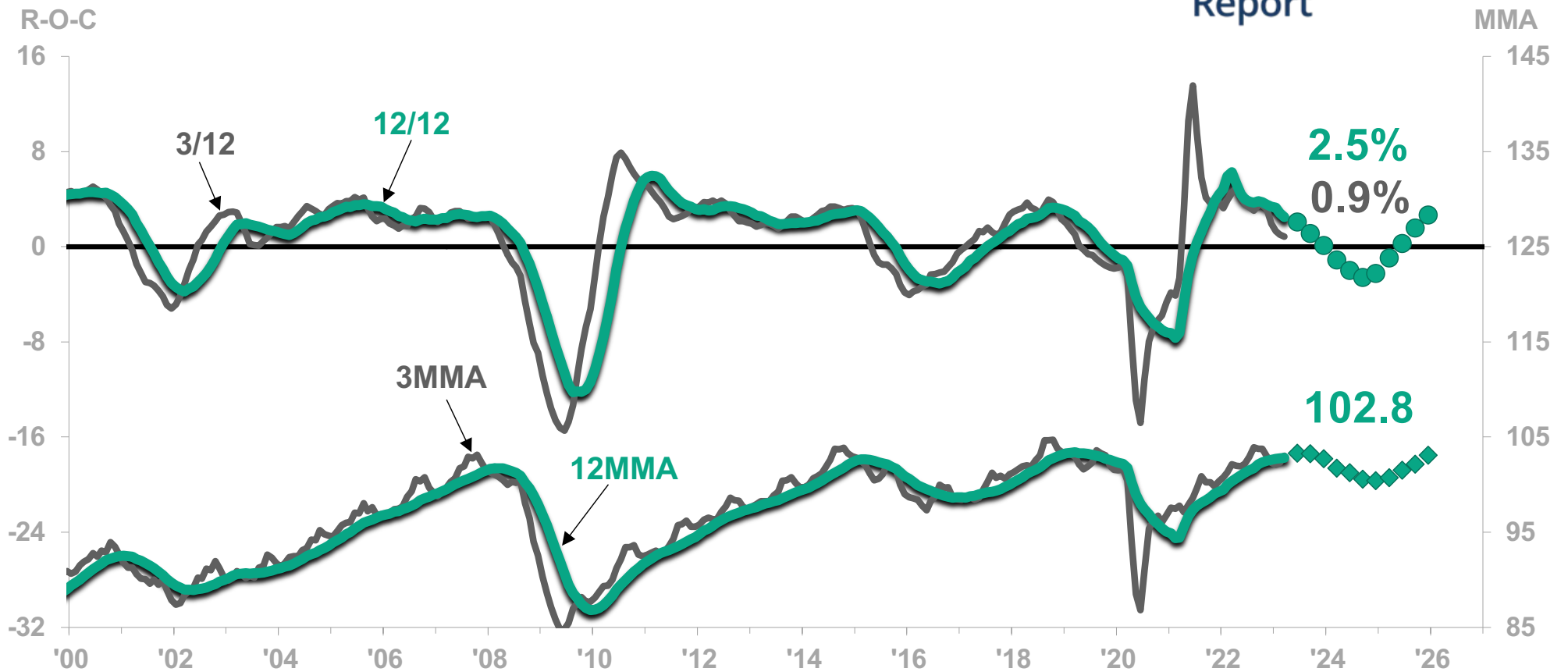
Source: FRB

US Industrial Production Index

2017 = 100

as seen in
ITR Economics'
**Trends
Report**


ITR ECONOMICS

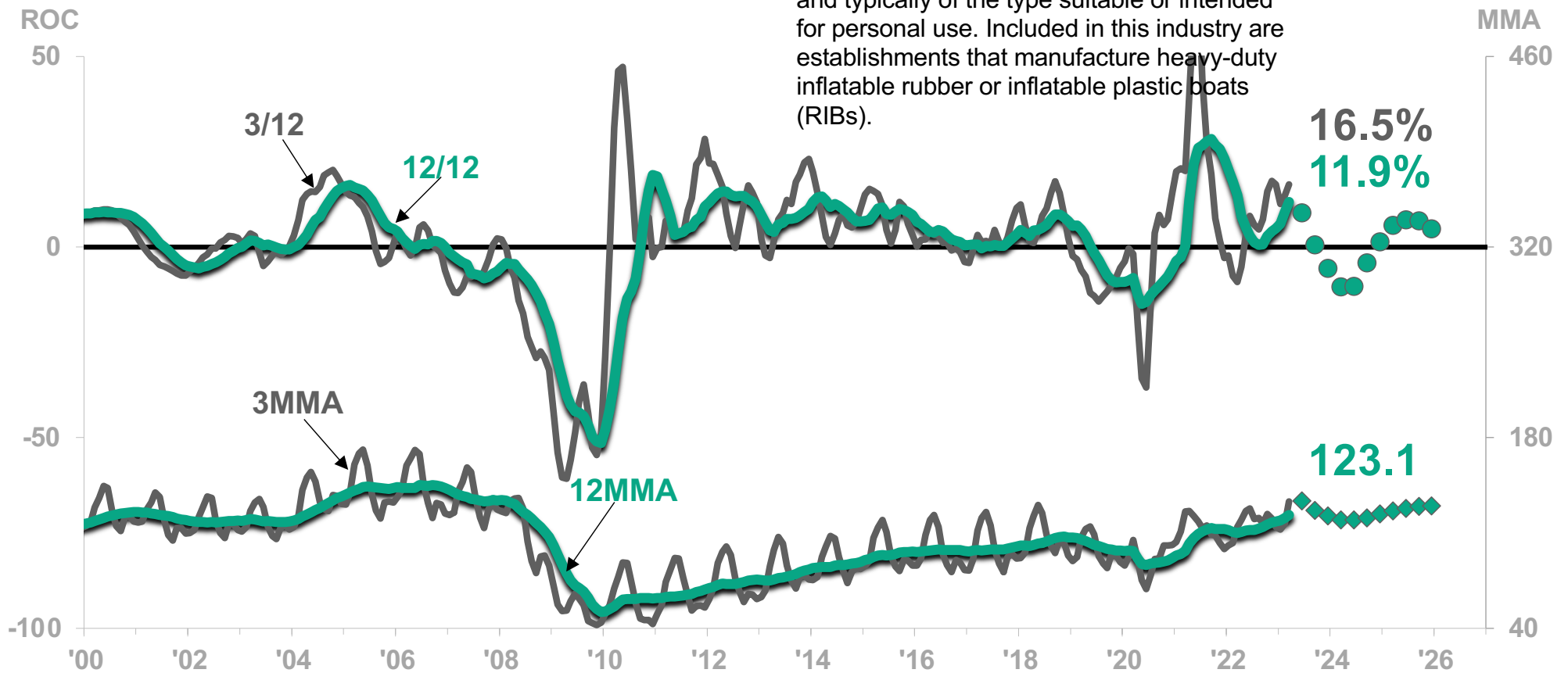


Boat Production Accelerating As Supply Chain Woes Ease

Source: FRB

US Boat Building Production Index

2017 = 100



Boat Building Expected To Realign With Macro Picture In 2024

Source: FRB

US Boat Building Production Index to US Industrial Production Index

12/12 Rates-of-Change



Production Rebounding Into Fading Retail Environment

Sources: FRB, ITR Economics

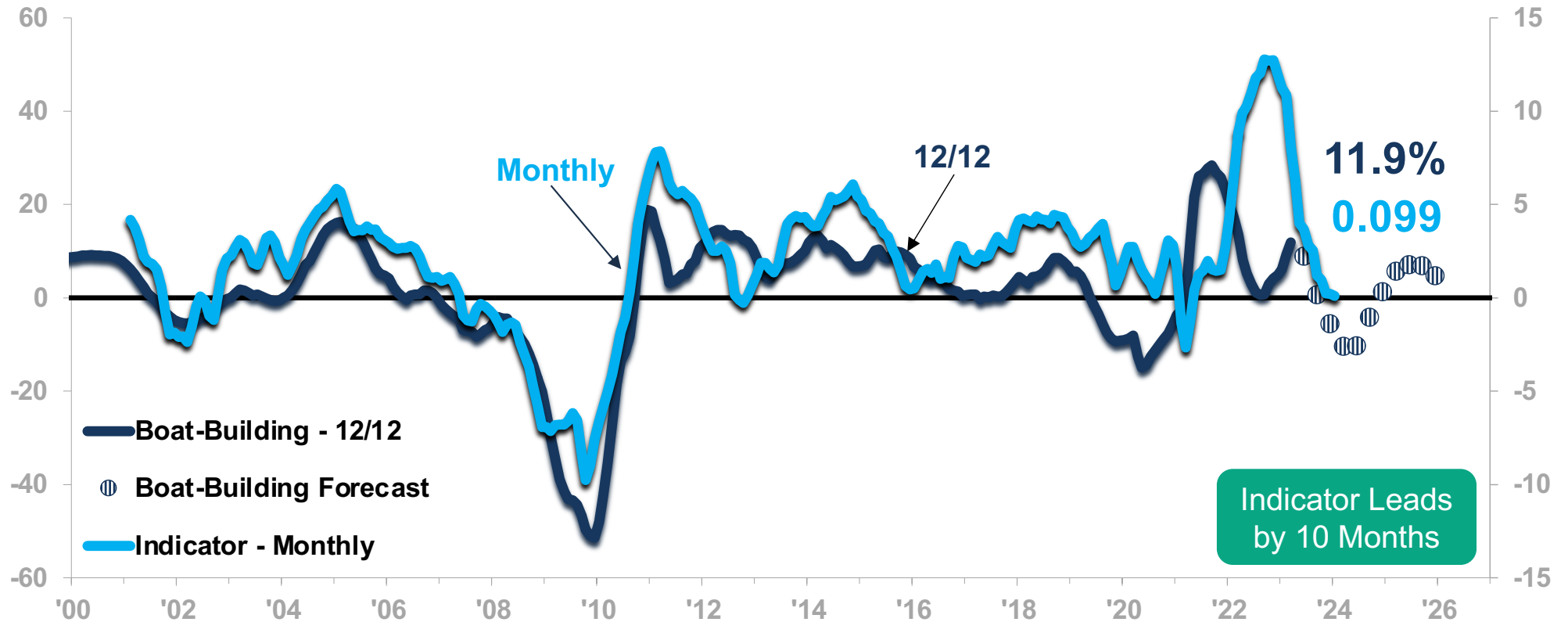
US Boat Building Production Index to ITR Retail Sales Leading Indicator™



Rates-of-Change

Boat-Building

Indicator



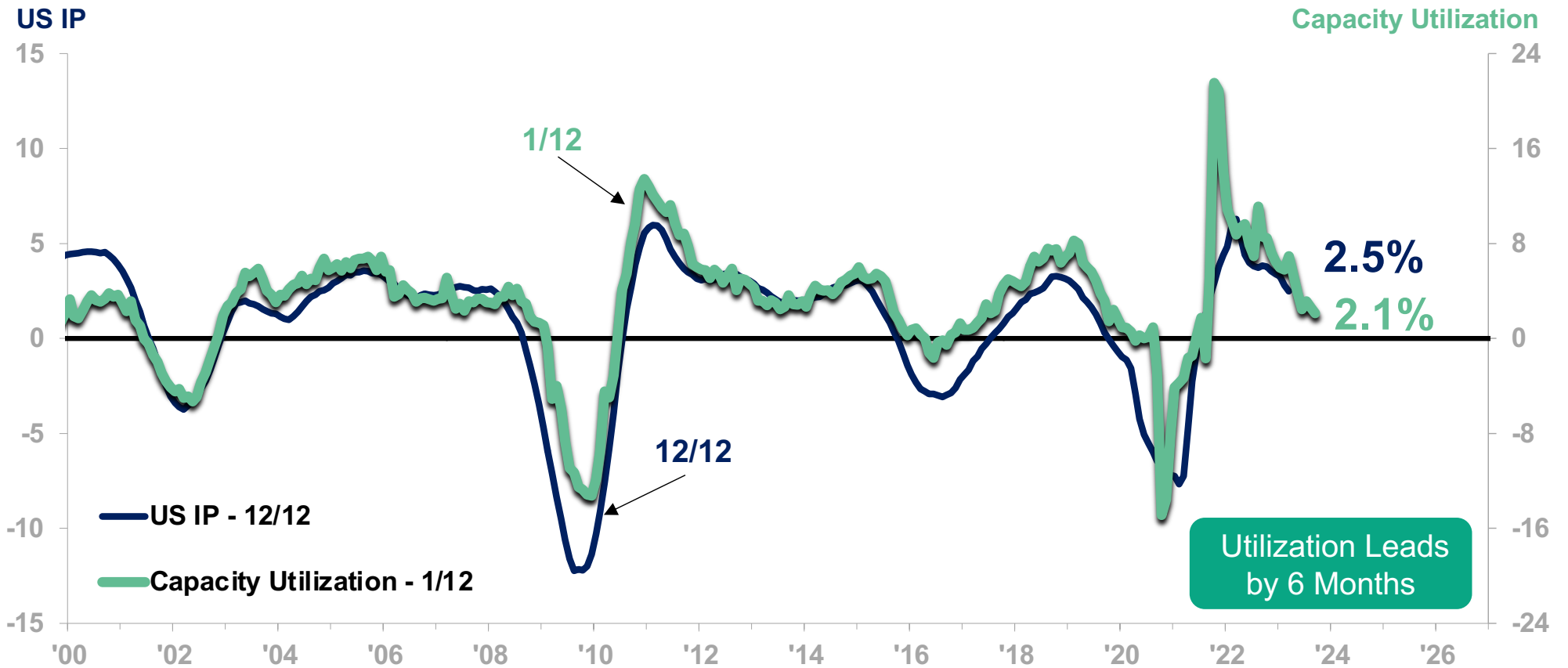
Indicator Leads by 10 Months

Capacity Utilization Indicates Slower Growth Ahead

Source: FRB

US Industrial Production Index to US Total Industry Capacity Utilization Rate

Rates-of-Change



A Clear Signal of Downside Cyclical Pressure

Sources: FRB, ITR Economics

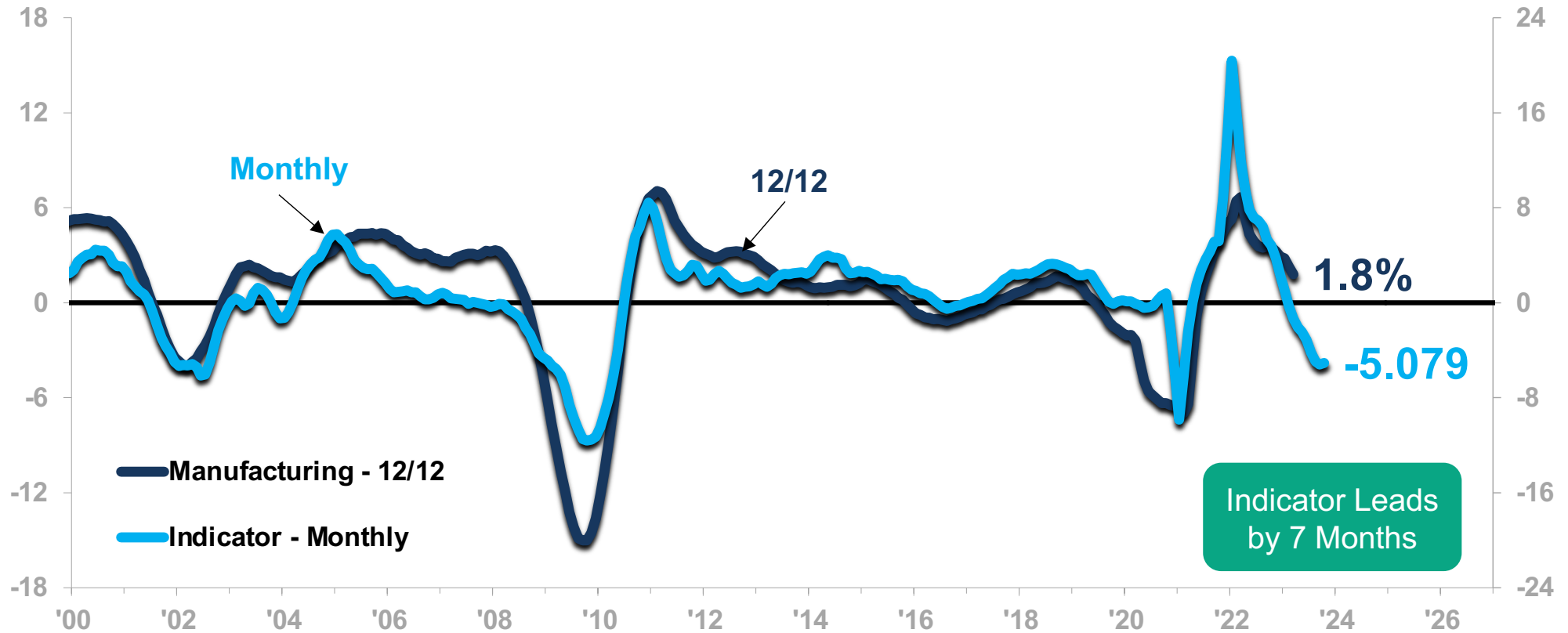
US Total Manufacturing Production Index to ITR Leading Indicator™



Rates-of-Change

Manufacturing

Indicator

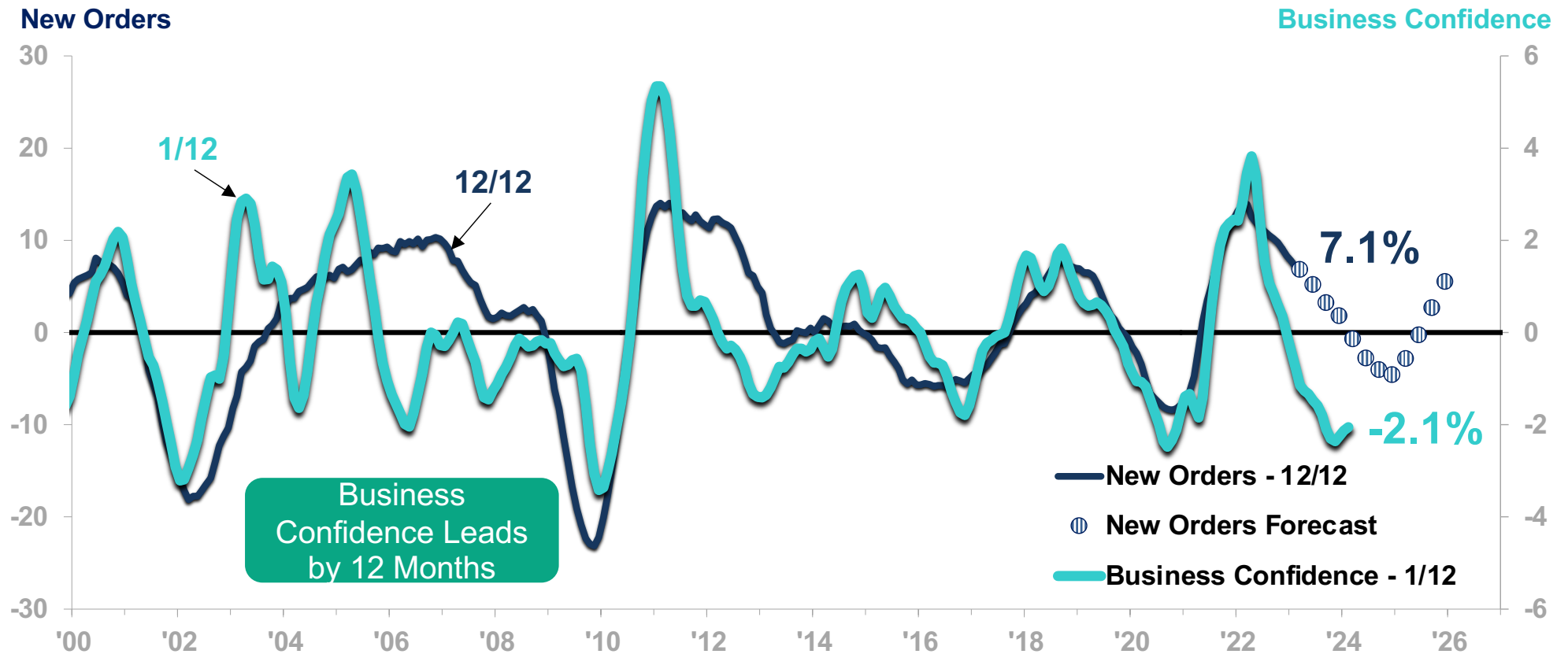


Indicator Leads by 7 Months

Business Confidence Indicates Slower B2B Spend

Sources: US Census Bureau, OECD

US Nondefense Capital Goods New Orders (excluding aircraft) to
US Business Confidence Index
Rates-of-Change





People

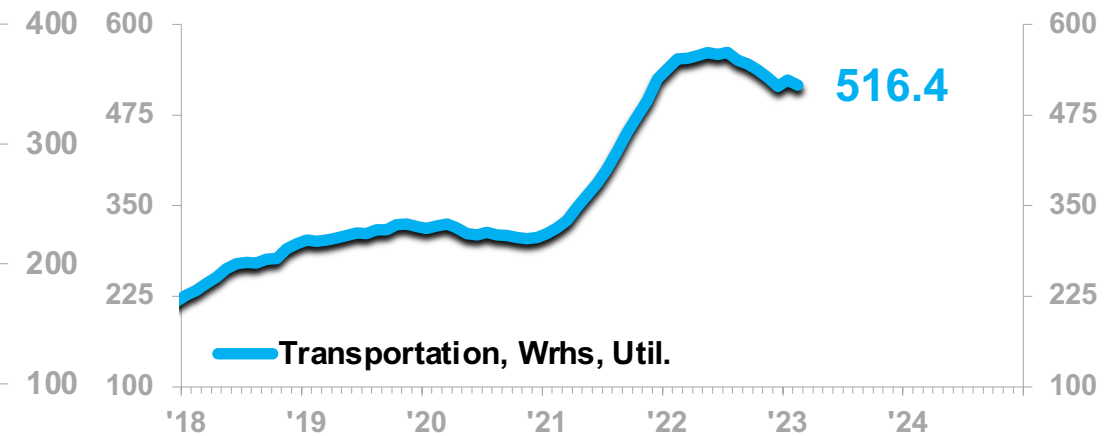
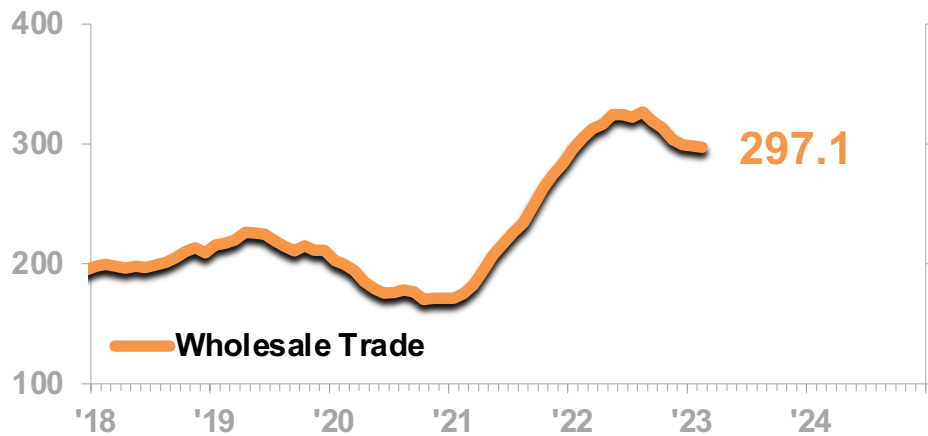
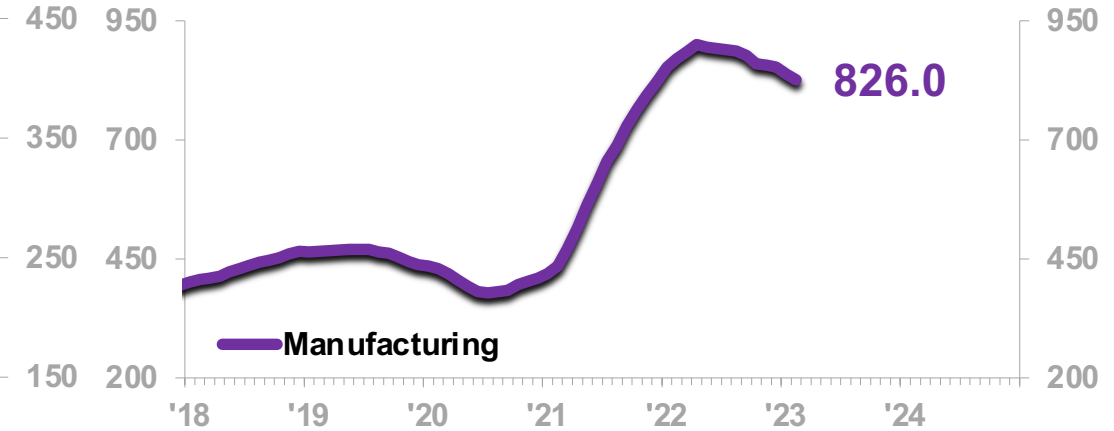
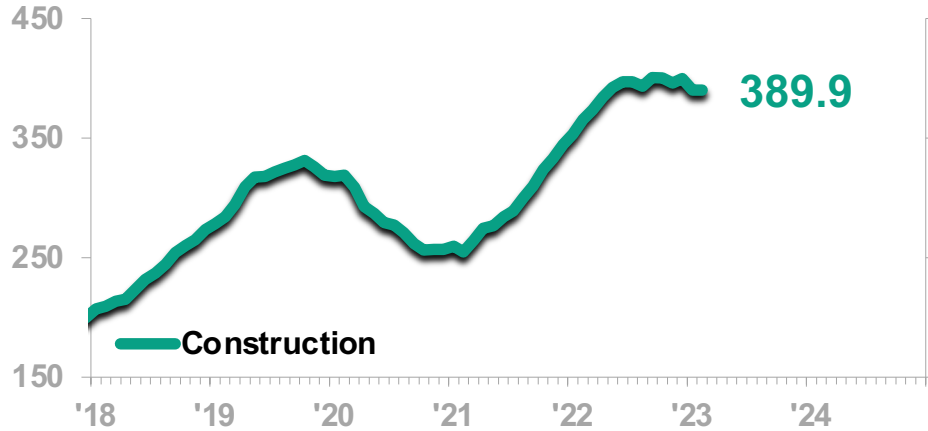


Labor Shortage Will Not End Anytime Soon

Source: BLS

US Job Openings by Industry

12MMA in Thousands



An Easing in the Quit Rate Will Moderate Employment Costs

Source: BLS

US Employment Cost Index to US Quit Rate

Index: 12/12 Rate-of-Change, Quit Rate: Percent



Cost Index

Quit Rate



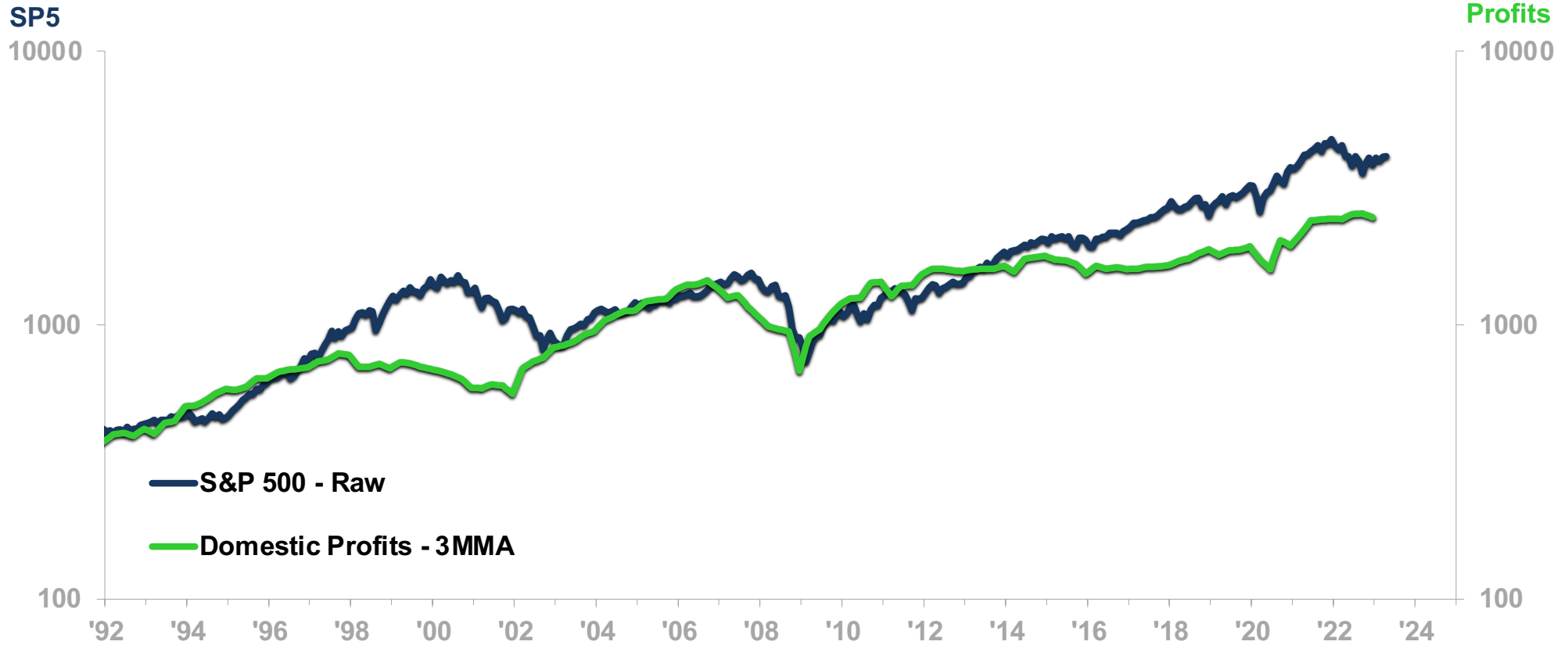


Financial Markets

Increasingly Risk Laden

Sources: WSJ, BEA

US Stock Prices Index to US Domestic Corporate Profits with Capital Consumption Adjustments Data Trends

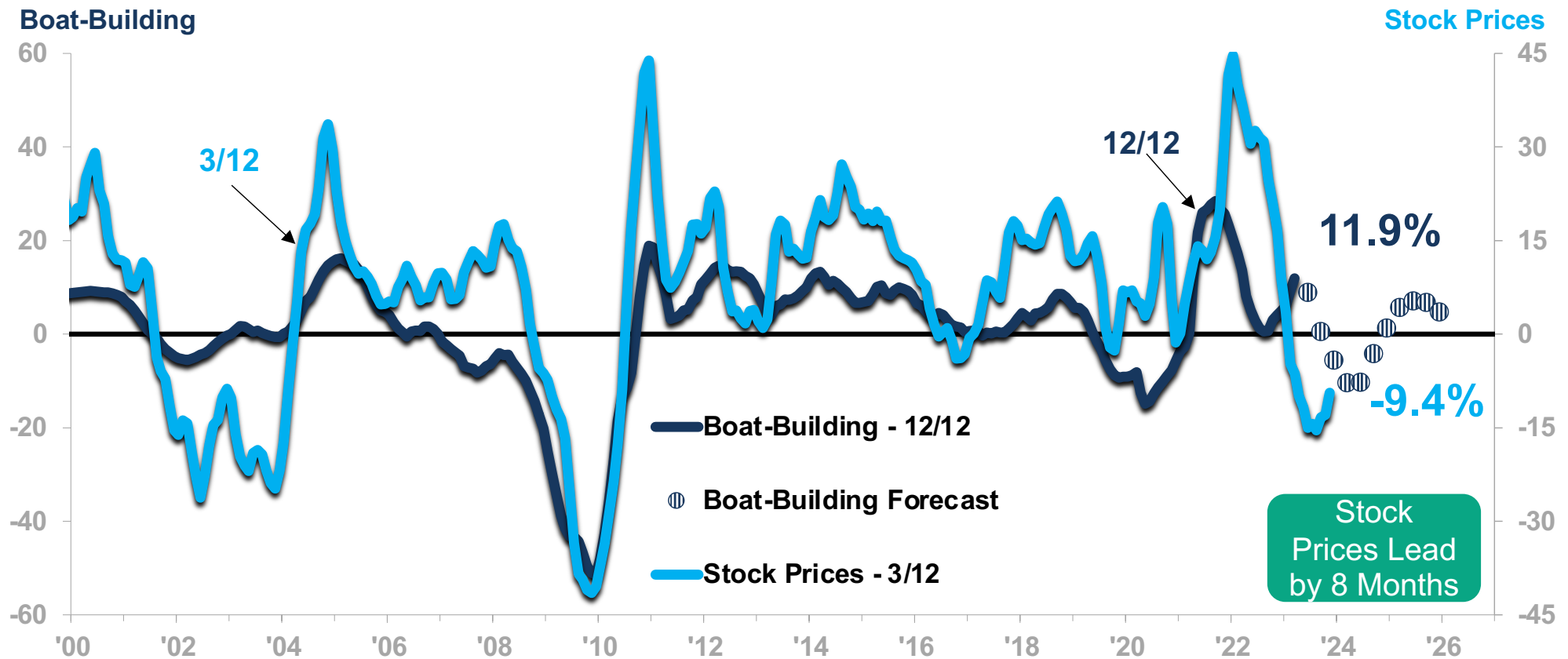


Further Stock Market Shock Is Downside Risk To Luxury Segments

Source: FRB, Wall Street Journal

US Boat Building Production Index to US Stock Prices Index

Rates-of-Change



Stock Prices Lead by 8 Months

50/50 Blend Optimizer (50% A, 50% B) Oct 1, 2020 through March 31, 2023

50/50 Blend Optimizer is made up of 50% Optimizer A, and 50% Optimizer B



-  Higher inflation/interest rates will compress multiples
-  Optimizer Leading Indicator, M2, & Margin Debt signal caution regarding S&P 500
-  Caution does not mean exit the market; continue to build wealth but the strategies will change

Next Steps

Assess exposure to a future bear trend by market.

Today's price correction is different than a bear market. Stay engaged.



ITR ECONOMICS

First In Forecasts Worldwide



Any questions?

*See past the media noise with
an ITR Insider™ membership.*

**LEARN
MORE**
→



Follow us...

