



Forest Economic Advisors

North American Lumber Markets

With A US Recession Likely, How Will Lumber Markets Fare?

Paul Jannke

Northeast Forest Products Industry Outlook

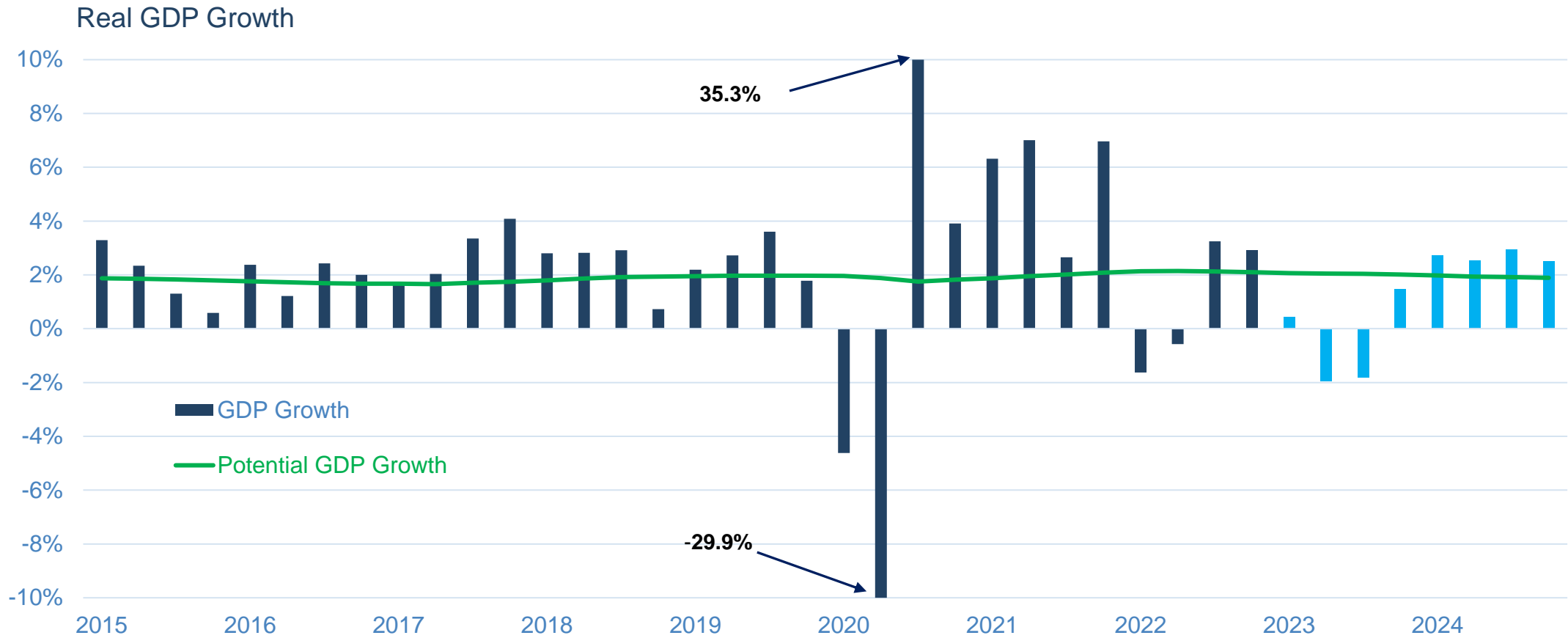
March 2nd, 2023

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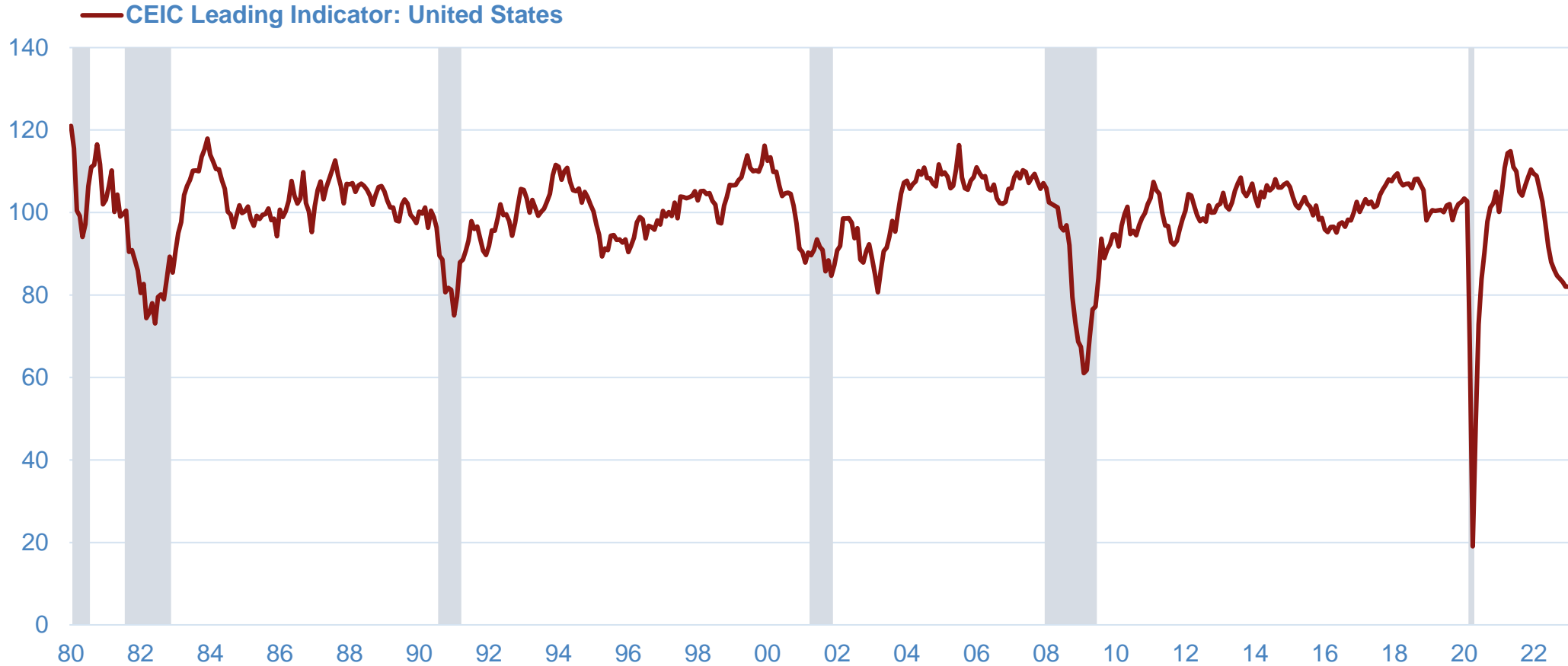
Presentation Outline

- Economic Outlook
- End Use Markets
- Implications for demand
- Cost projections
- Capacity outlook
- Trade

We Expect a Mid-Year Recession

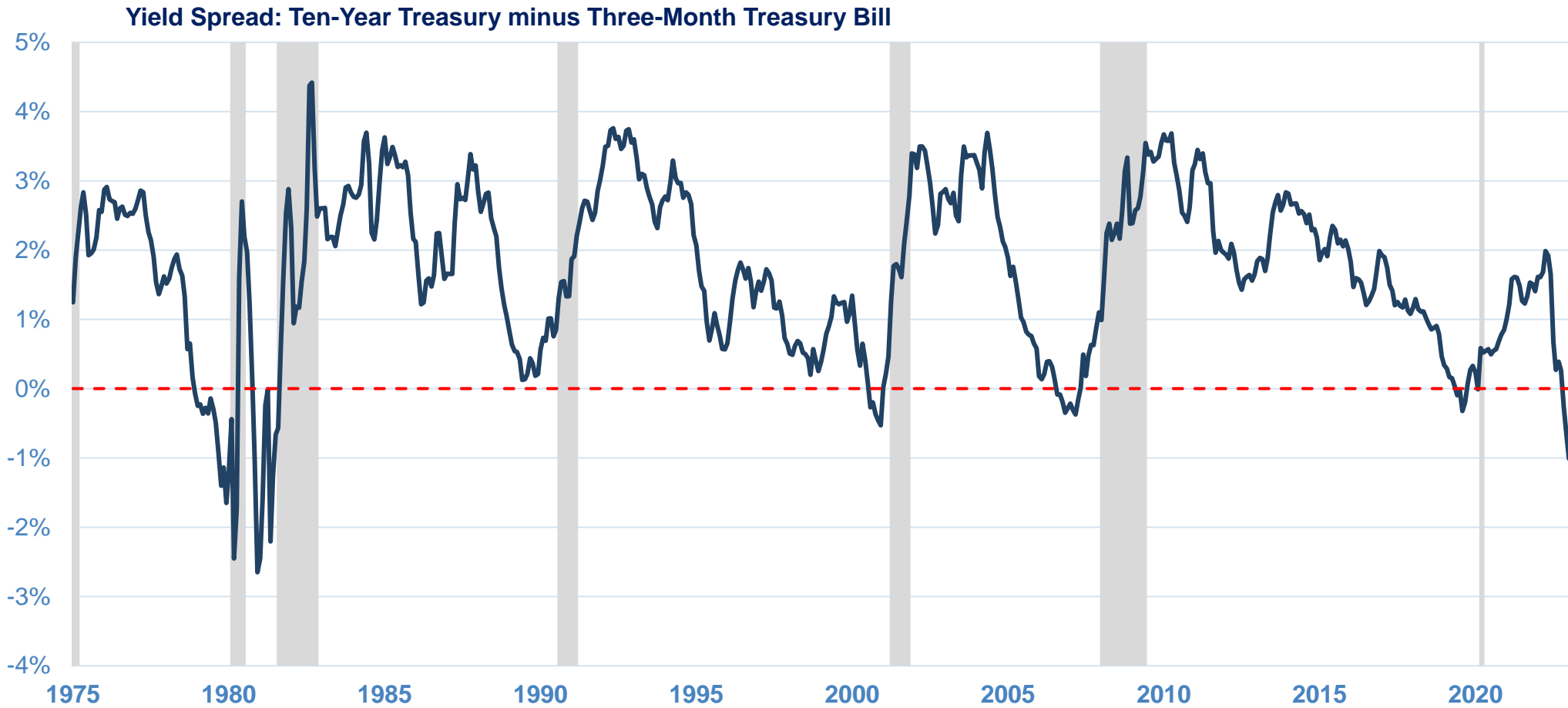


After Declining for Twelve Straight Months, The CEIC Leading Indicator Stabilized In January



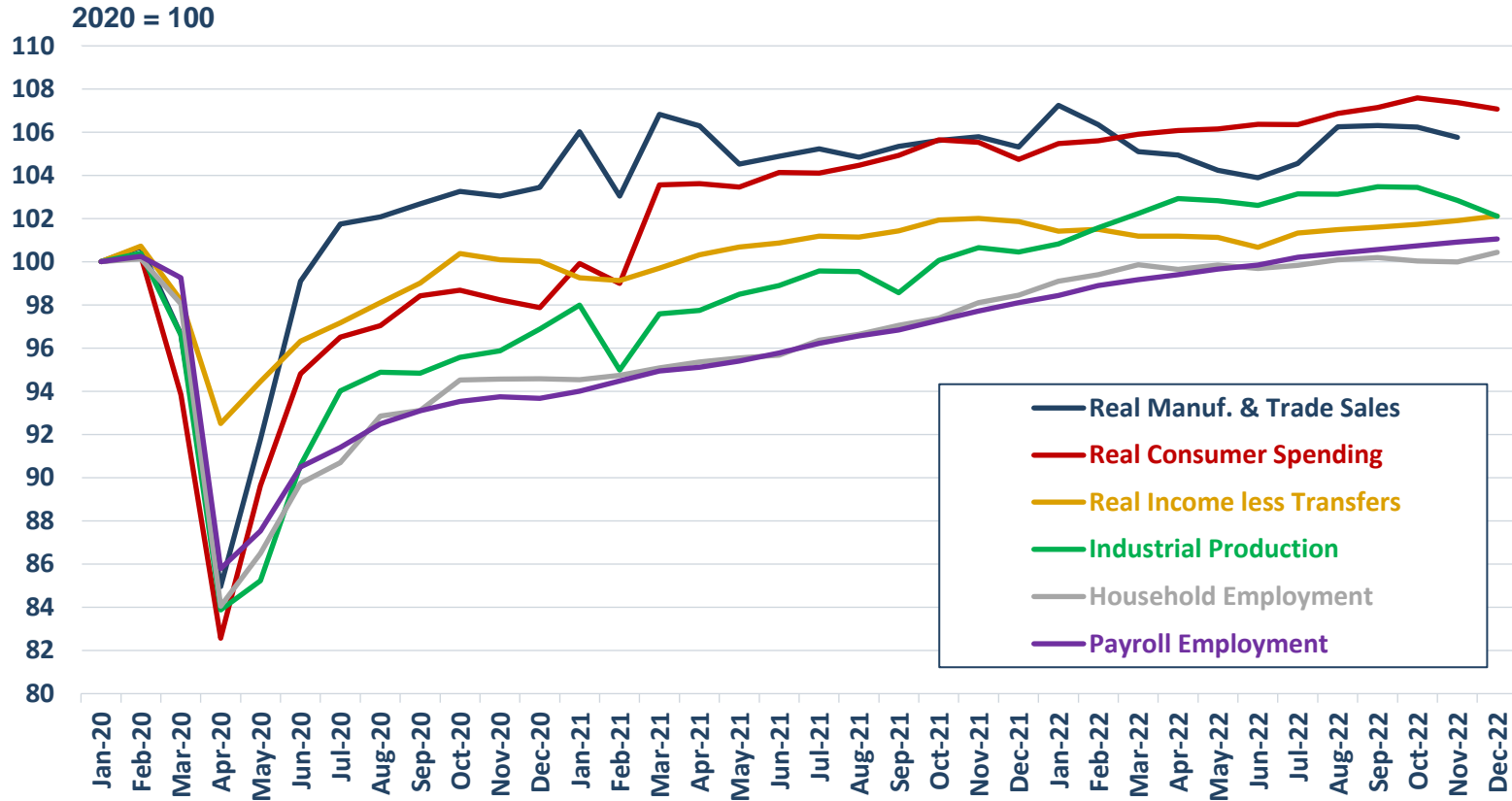
Source: CEIC

The 10-Year/3 Month Yield Curve Looking Ominous



Source: Federal Reserve

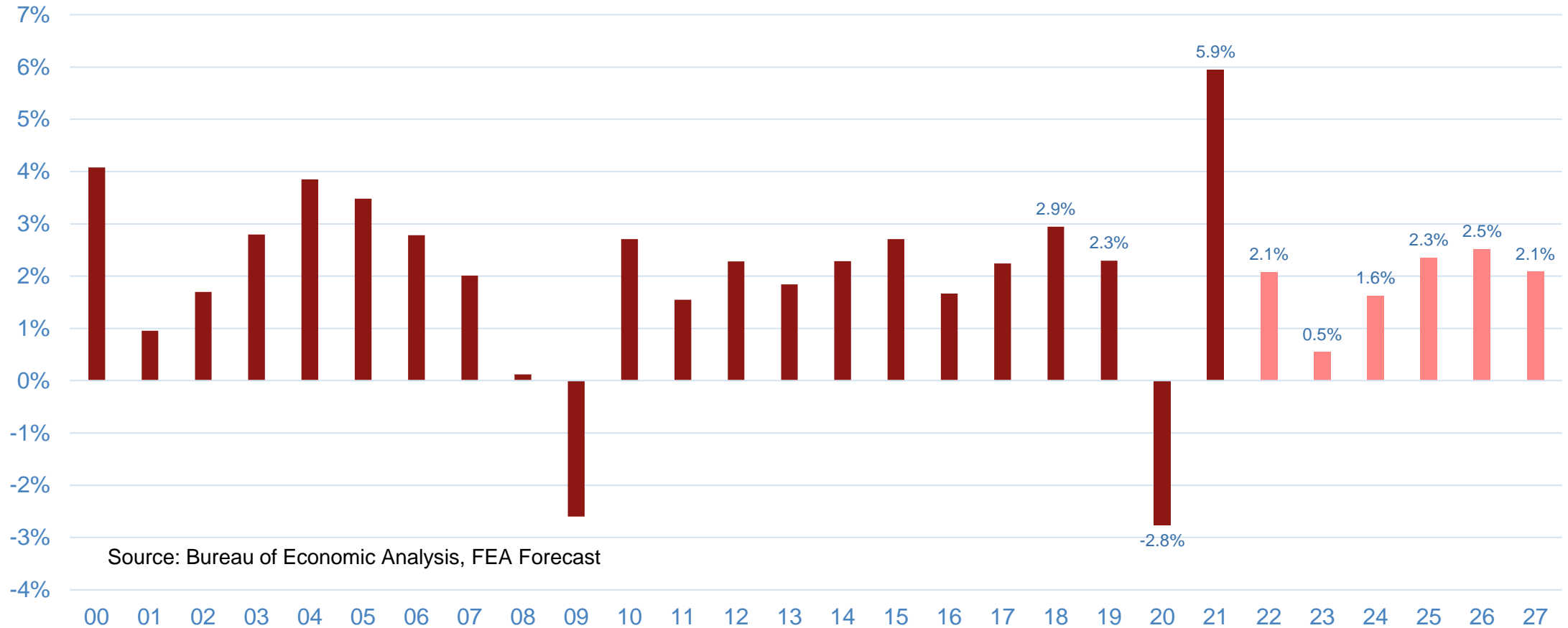
Three of Six NBER Recession Indicators Are Trending Down



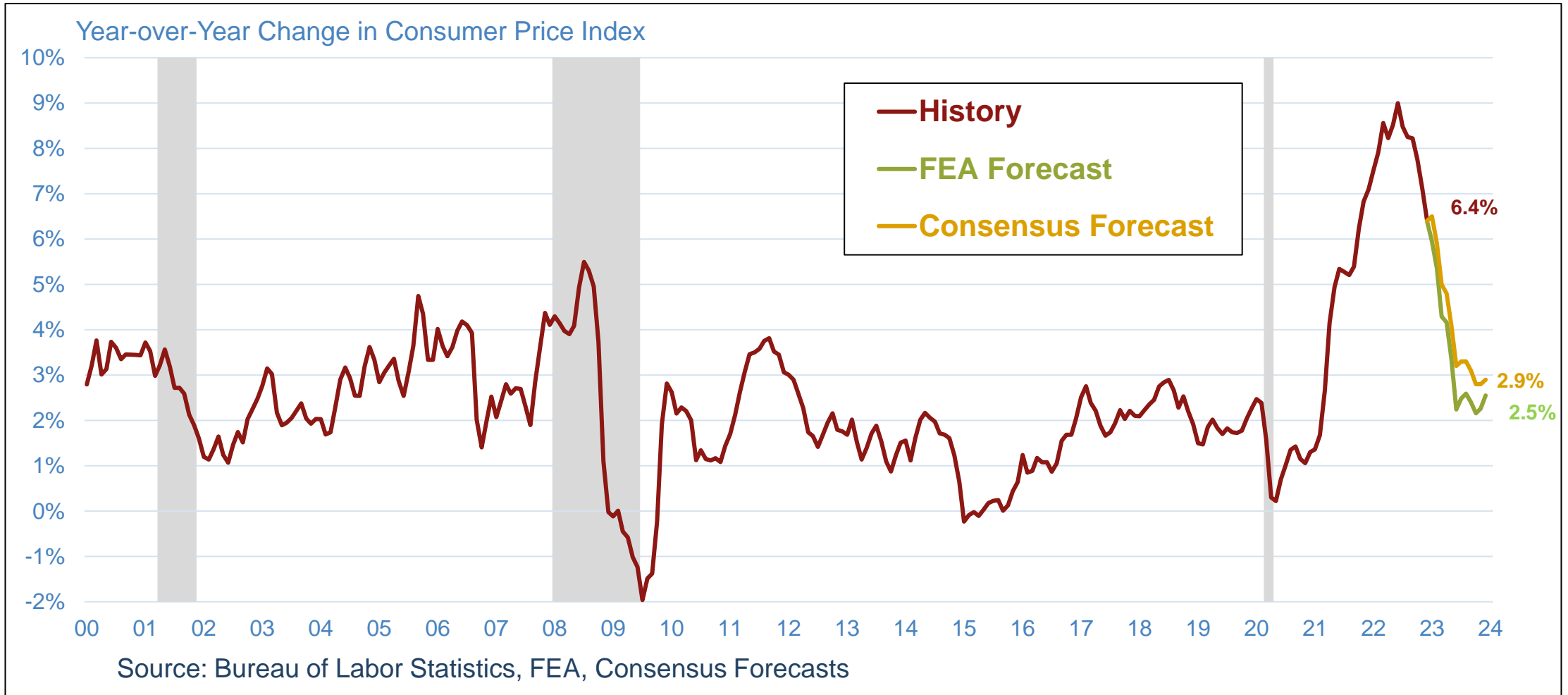
Source: FRED Database

The Recession Is Likely To Be Mild

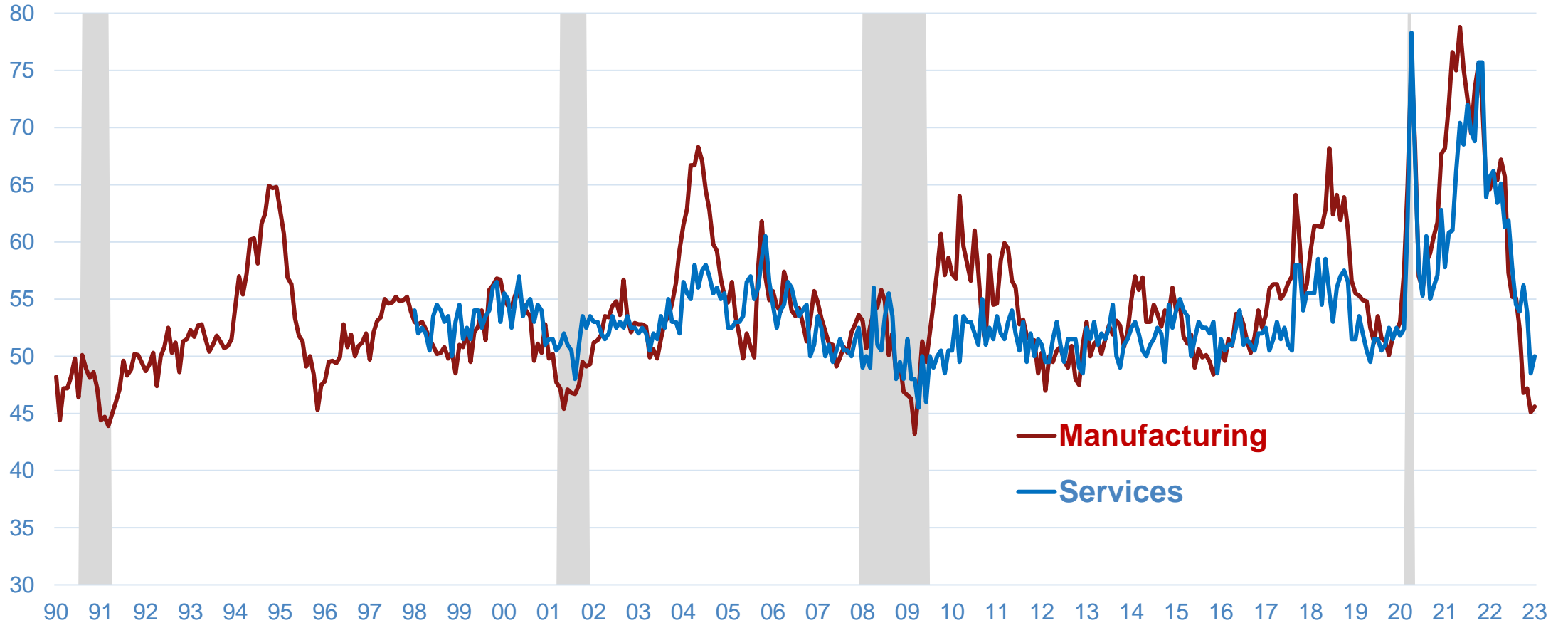
Real GDP Growth



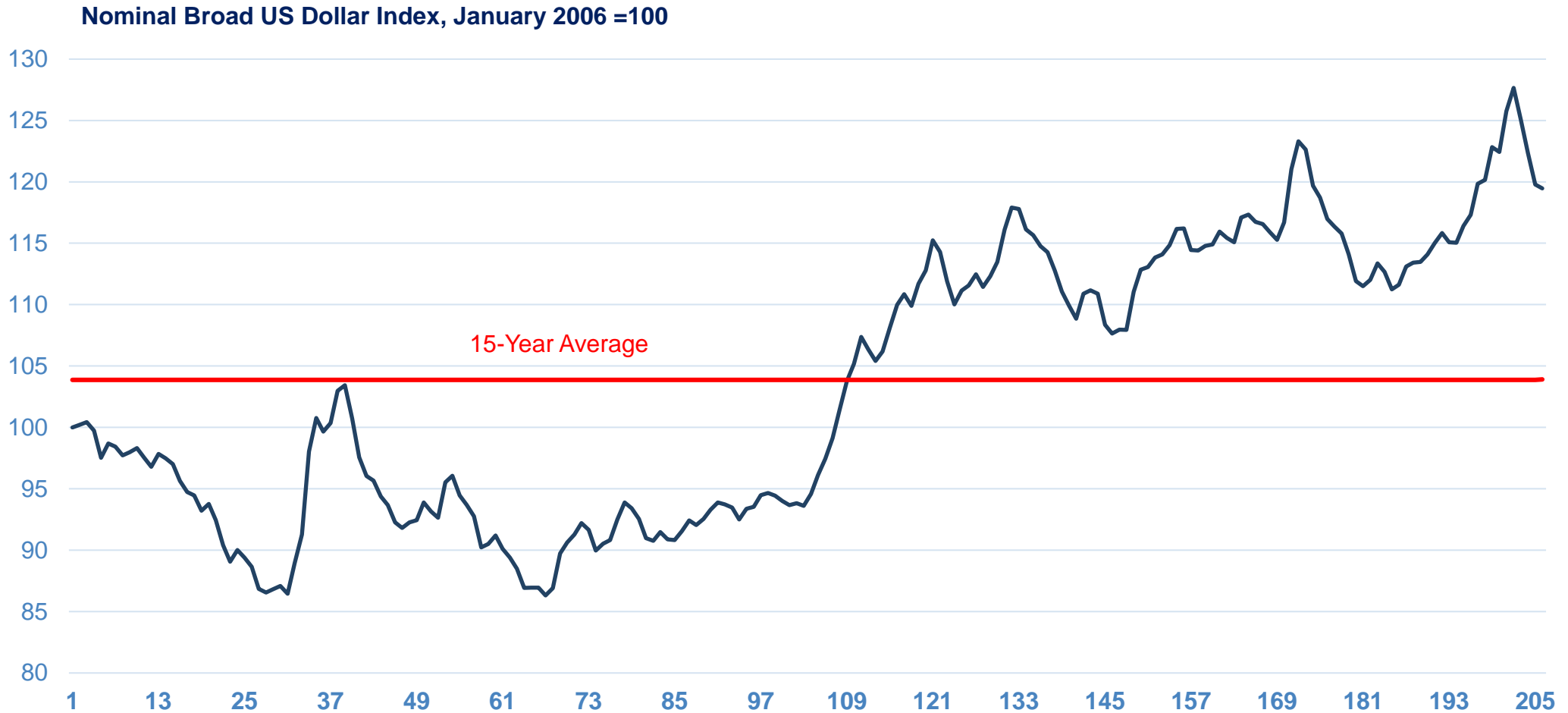
Inflation Has Likely Peaked and Should Decline Sharply



Supplier Delivery Times Have Improved Markedly



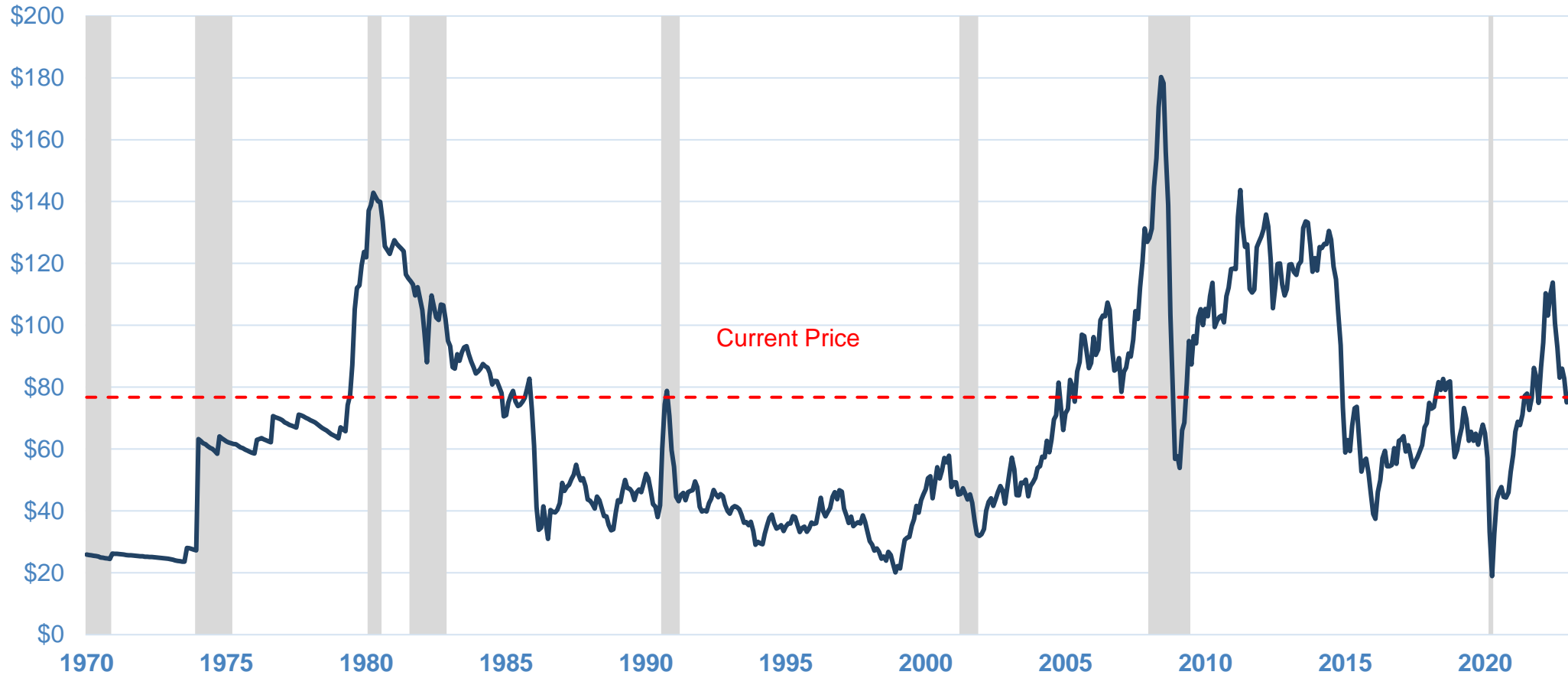
The US Dollar is Still 15% Above its Long-Term Average



Source: Federal Reserve, Bureau of Labor Statistics

Real Oil Prices Have Receded From Recent Peak

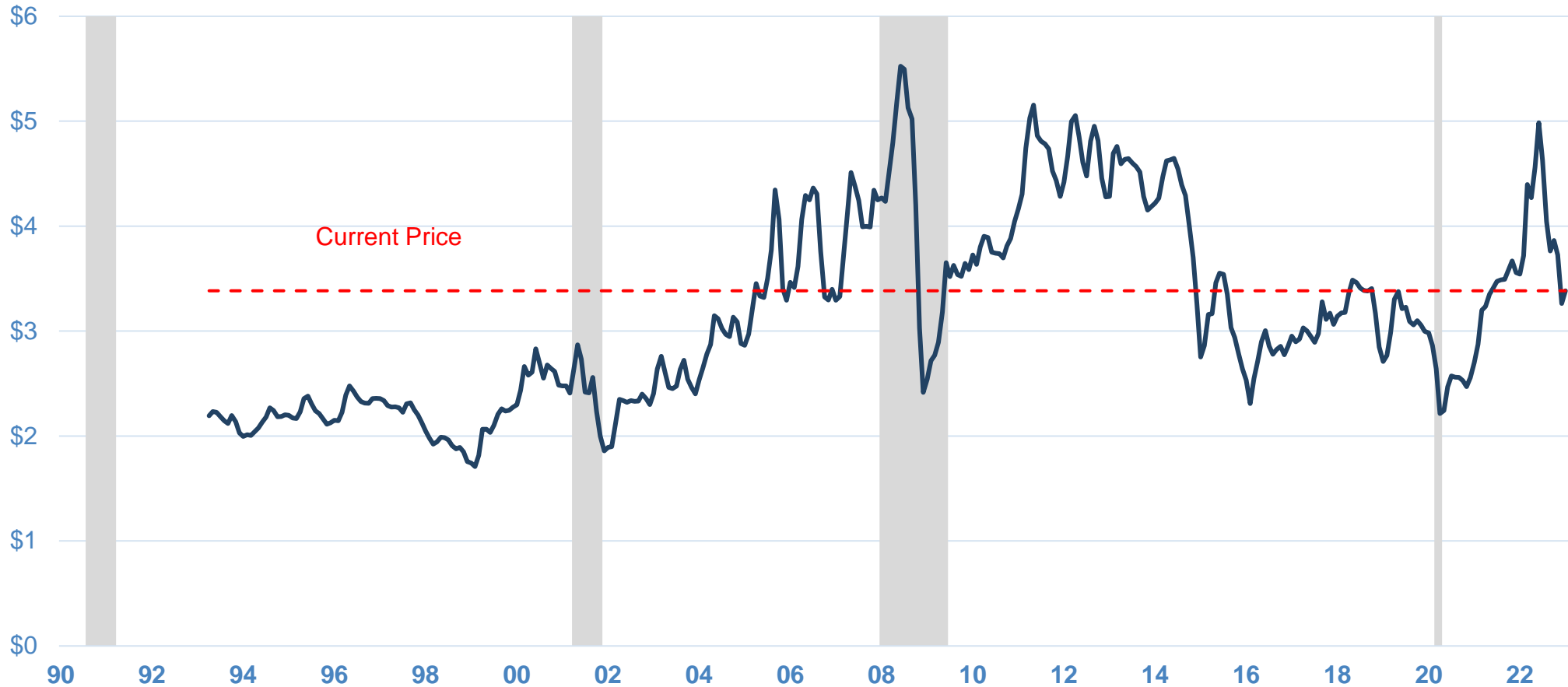
WTI Per Barrel Oil Price in 2021 USD



Source: Federal Reserve, Bureau of Labor Statistics

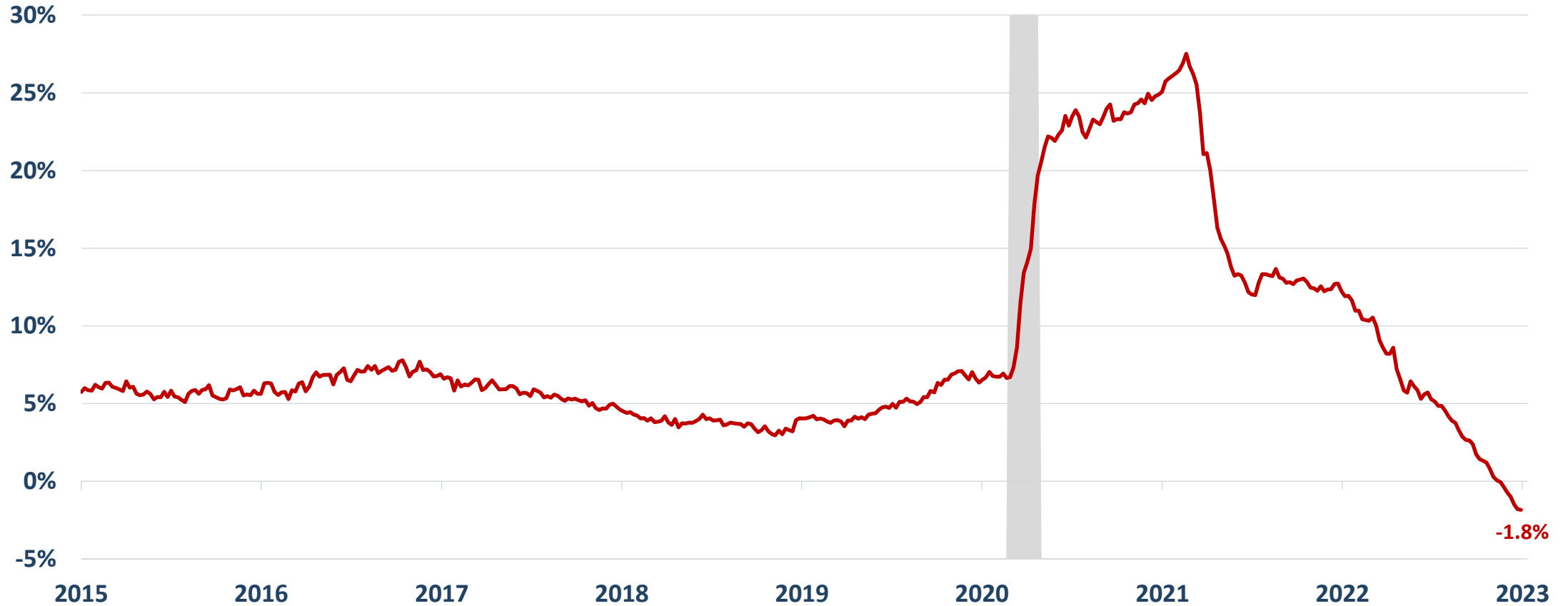
Real Oil Gasoline Prices Have Turned Over

Average US Gasoline Price All Formulations, in 2021 USD, Deflated With CPI

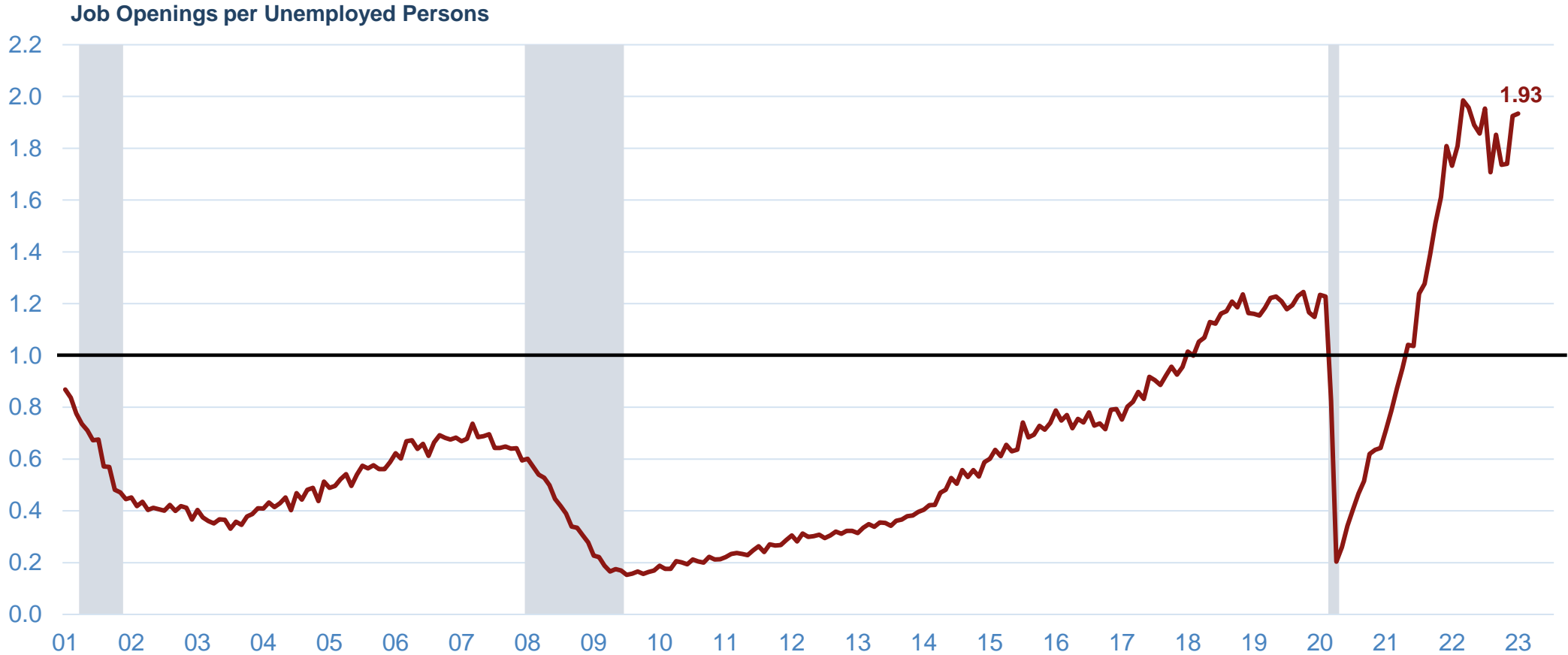


Source: Federal Reserve, Bureau of Labor Statistics

M2 Money Supply Growth is Down Sharply



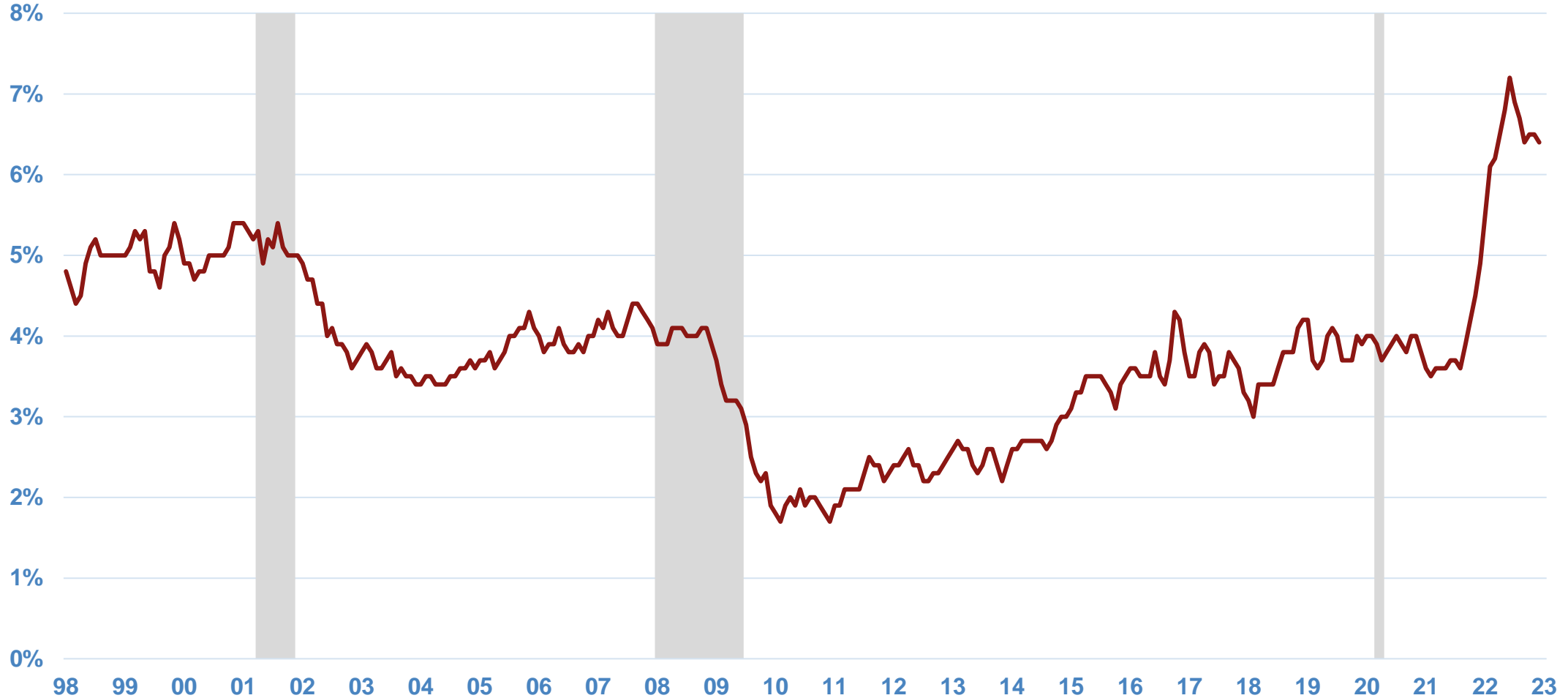
Labor Market Has Remained Tight



Source: Bureau of Labor Statistics

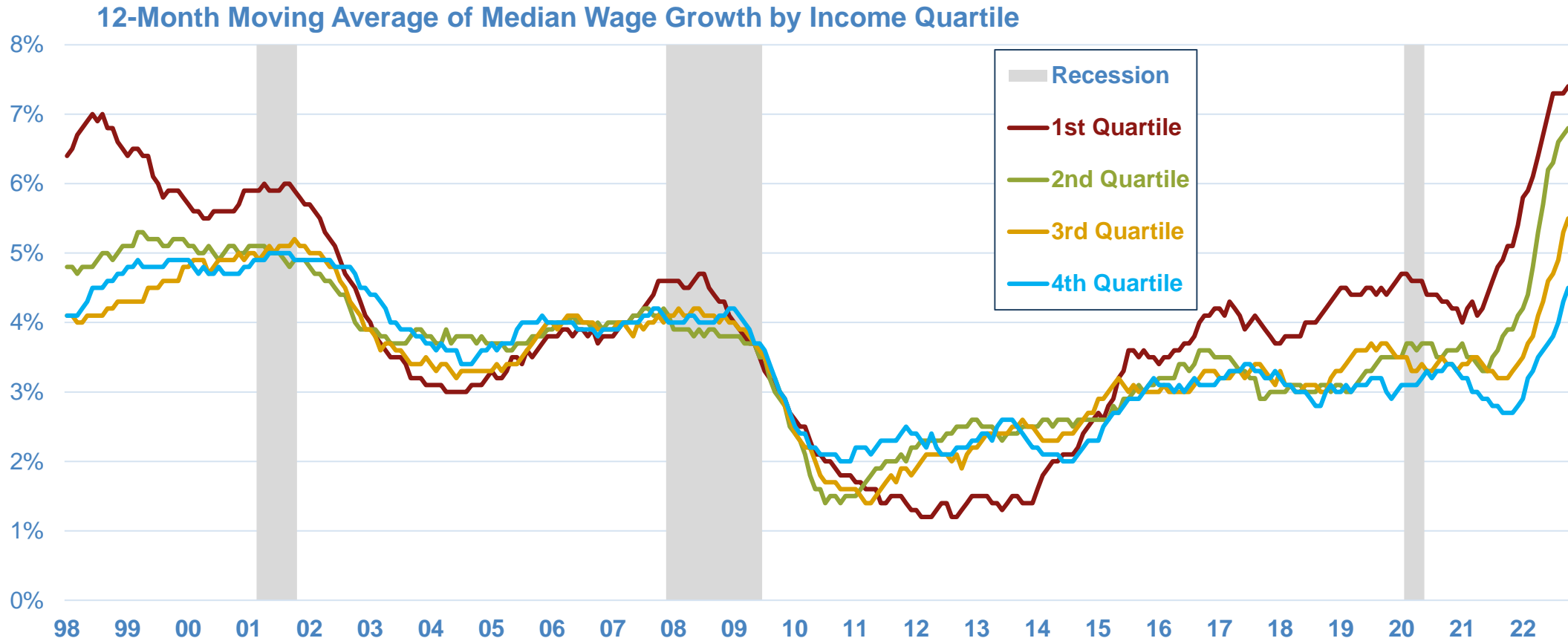
Tight Labor Market Driving Wages Higher

12-Month Moving Average of Median Wage Growth for Prime Age Workers



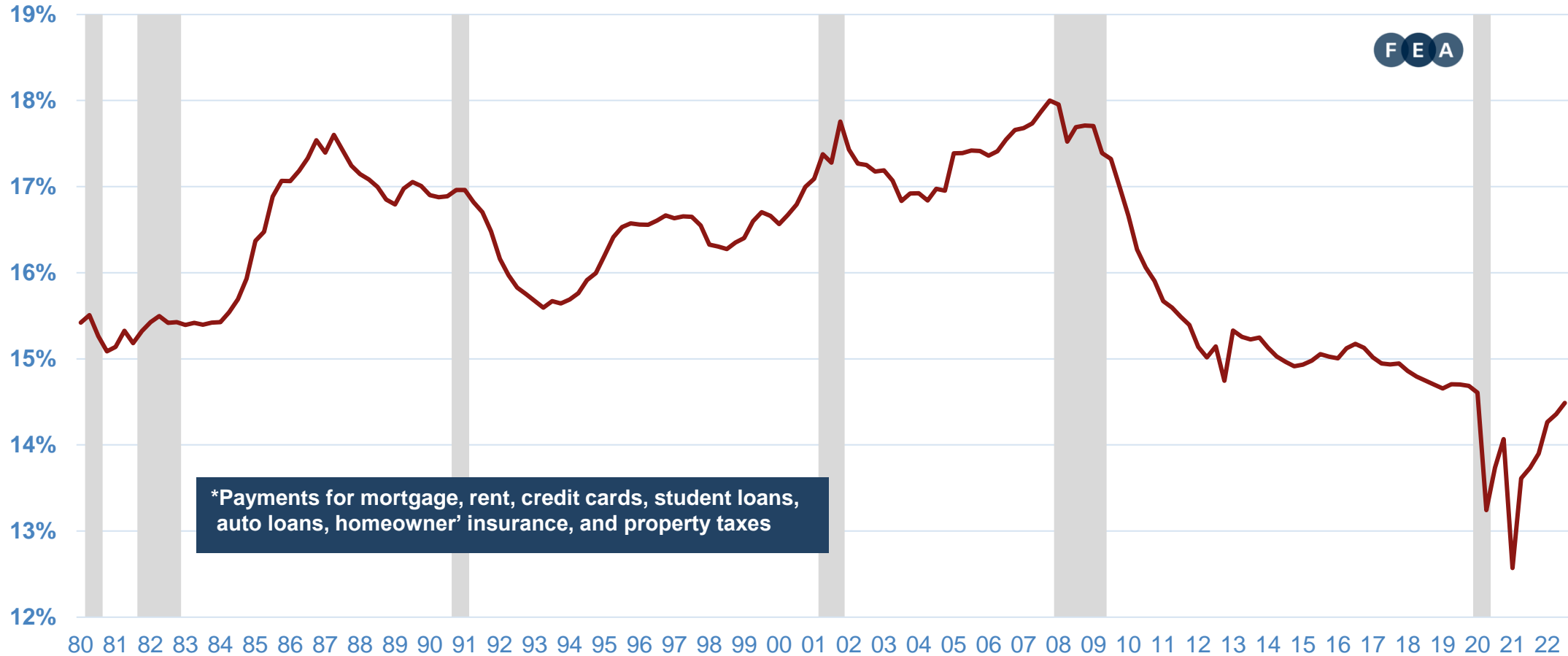
Source: Atlanta Fed

Earnings Are Growing Fastest for Low-Wage Workers

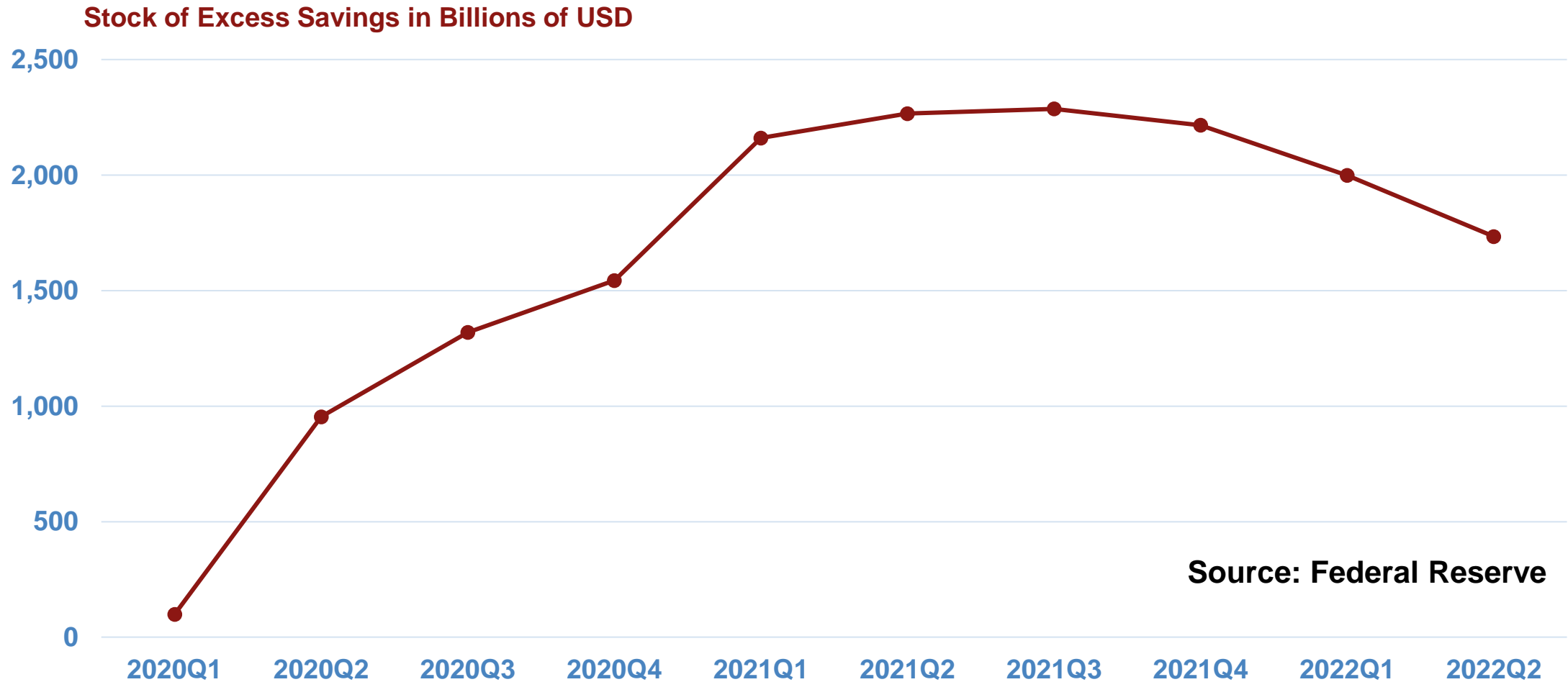


US Household Balance Sheets Are In Great Shape

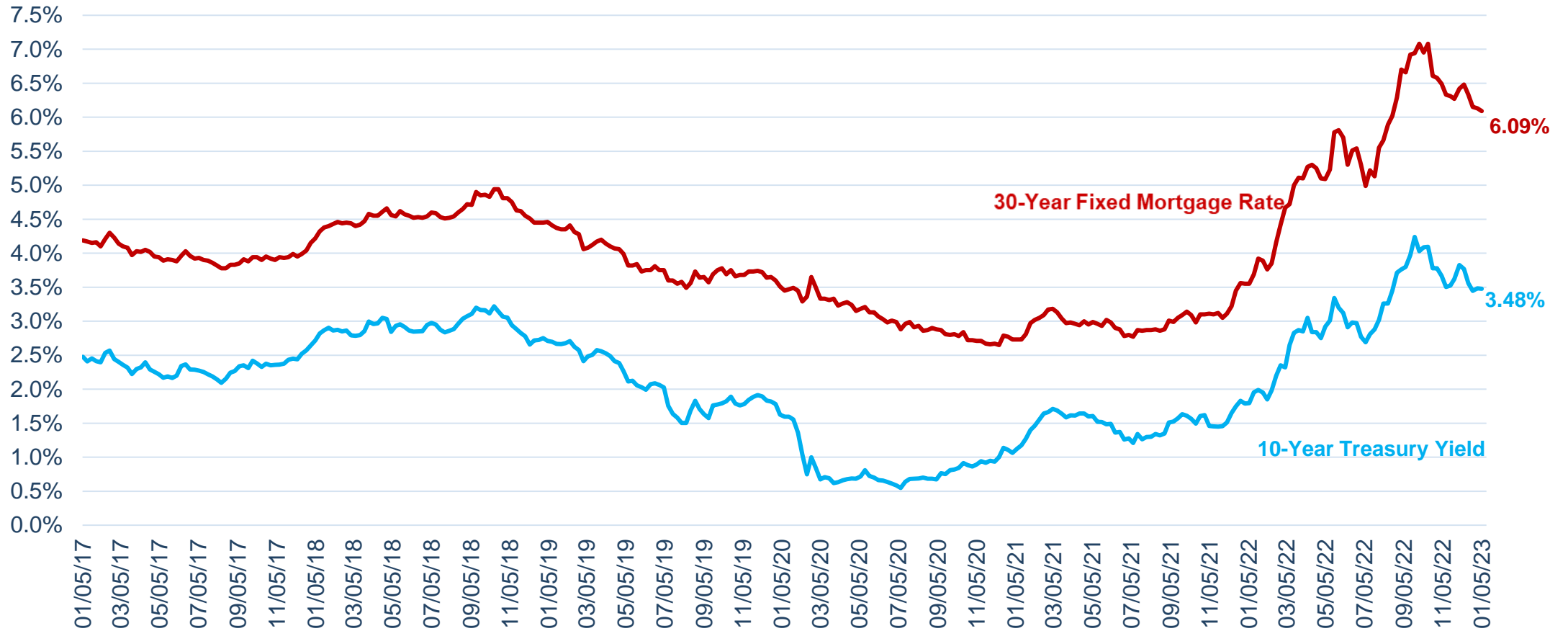
Household Financial Obligations* as a percent of Disposable Personal Income



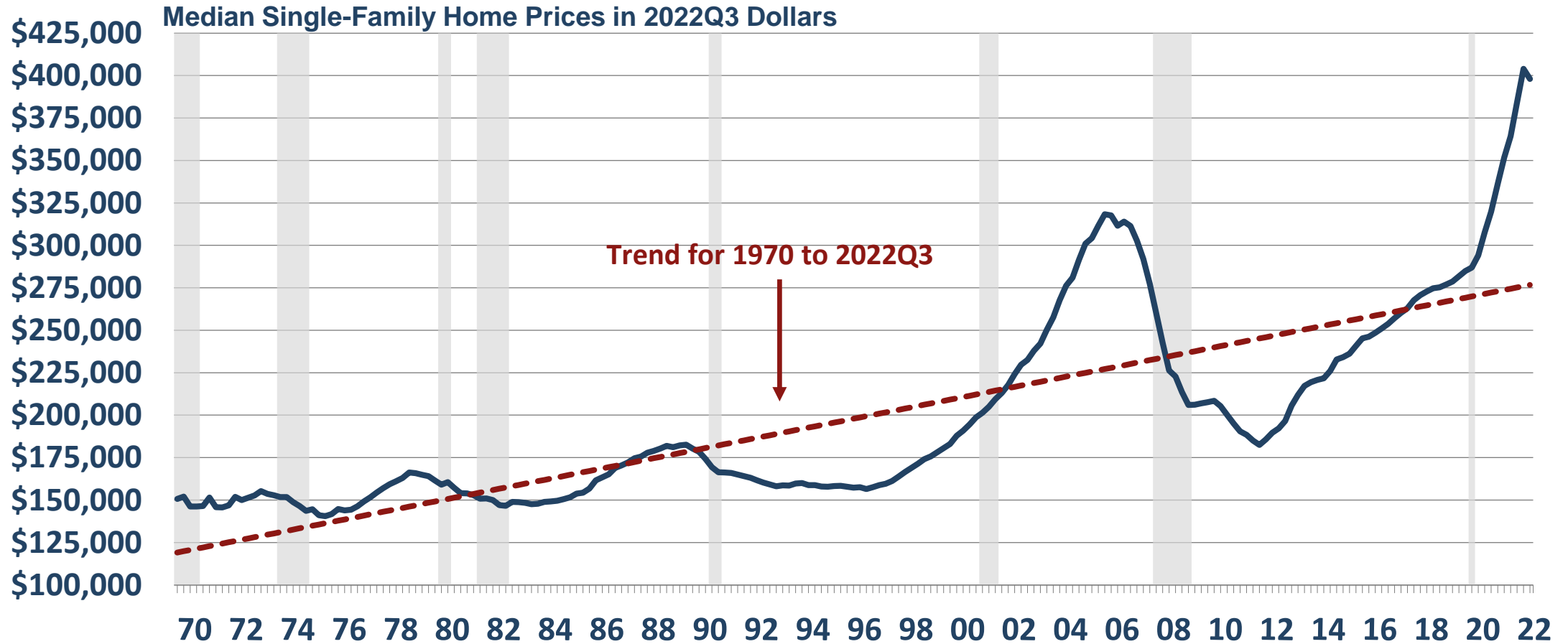
The Fed Estimates That \$1.7 Trillion in Excess Savings Remains from 2020/2021 Stimulus



After Rising Nearly 4% To Their Peak In 2022, Mortgage Rates Have Fallen 100 Basis Points

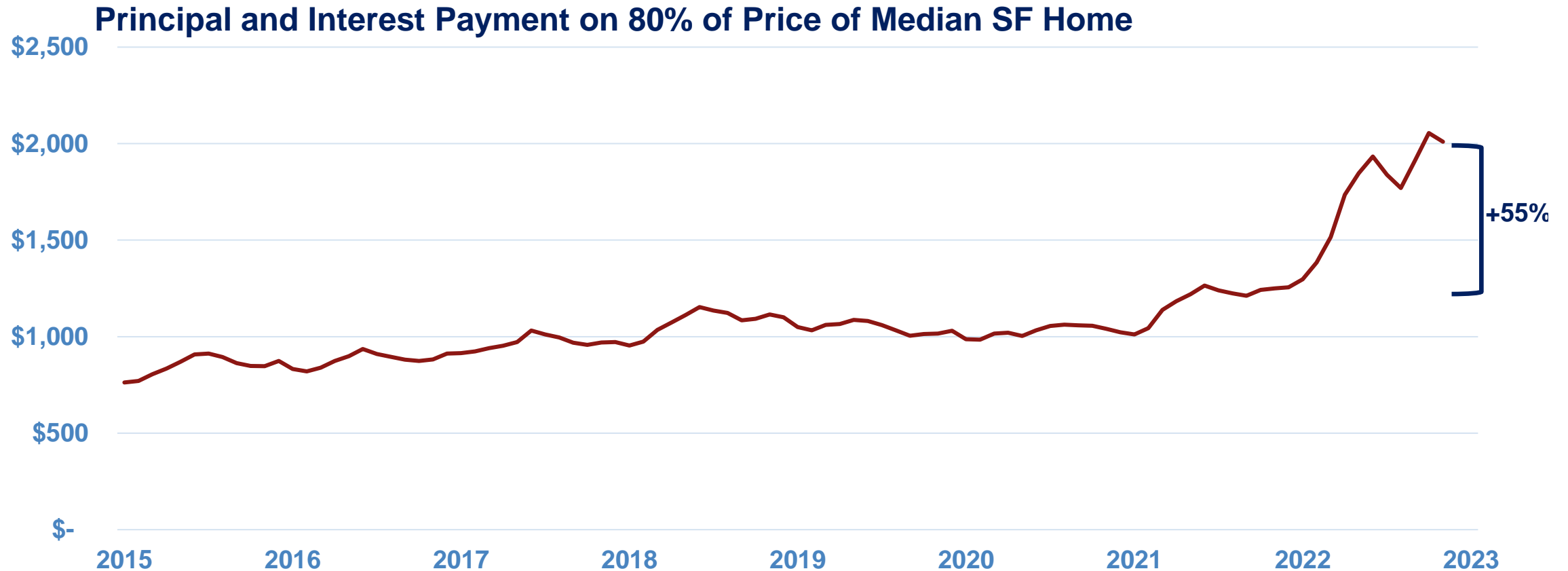


Real Home Prices Were 25% Above 2006 Peak in 2022Q3



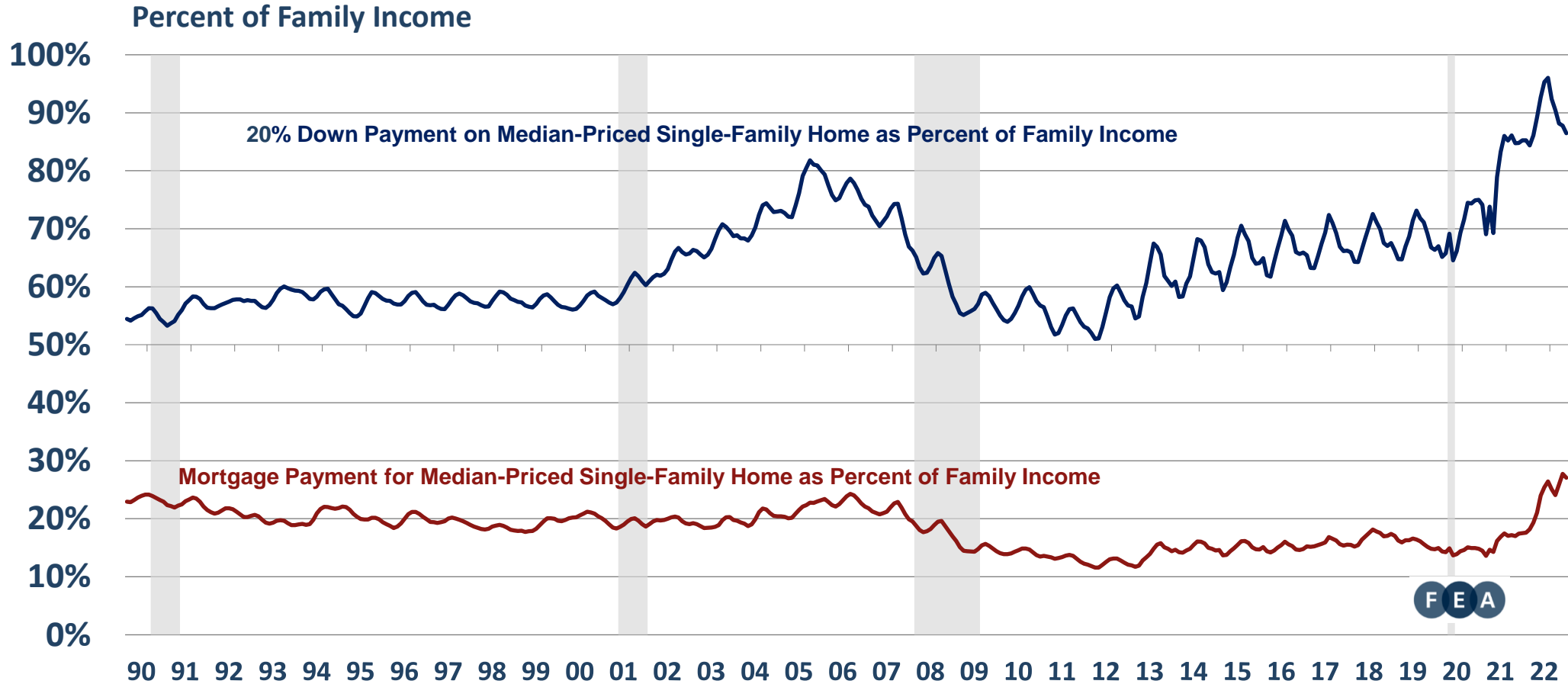
Source: Federal Reserve, FEA calculations

Home Affordability Has Deteriorated Rapidly



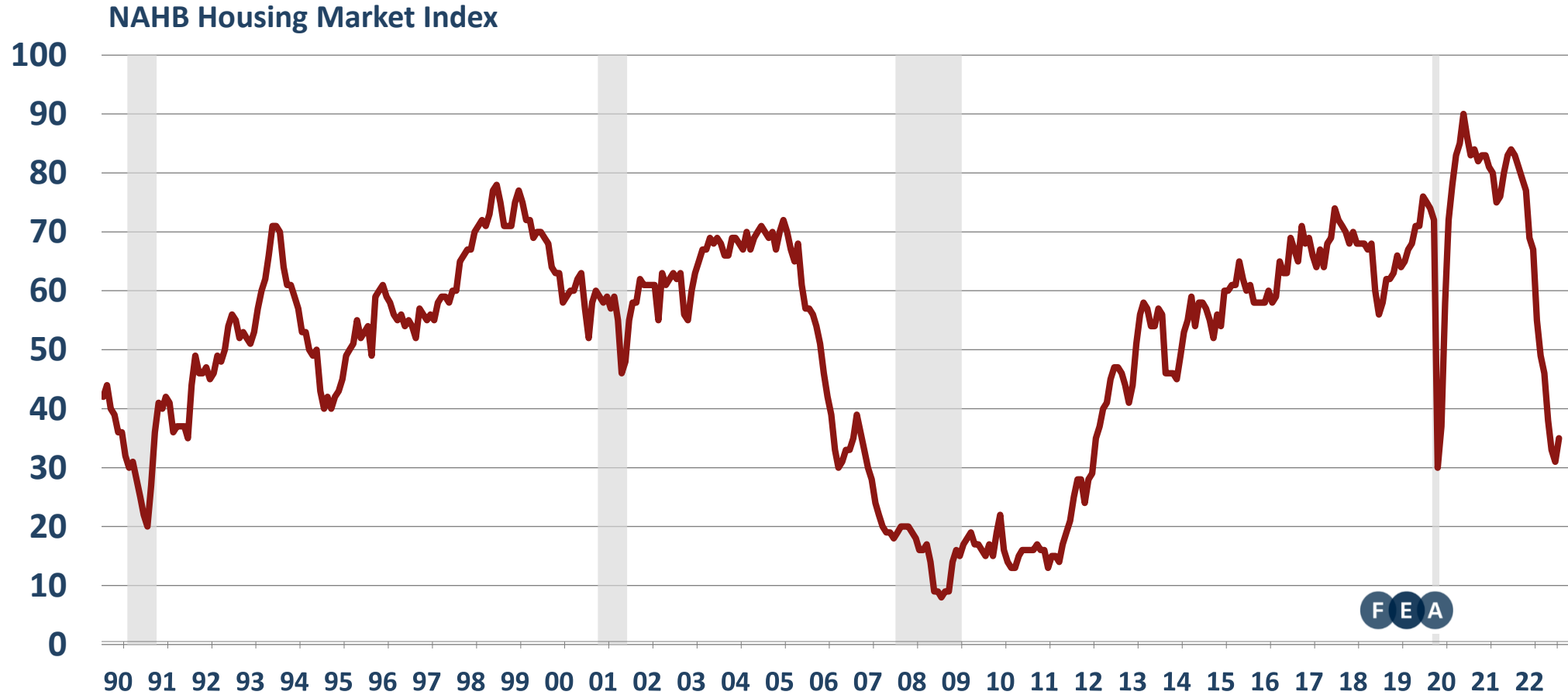
Source: National Association of Realtors, FEA estimates and calculations

Higher Mortgage Rates and Home Prices Have Dented Affordability



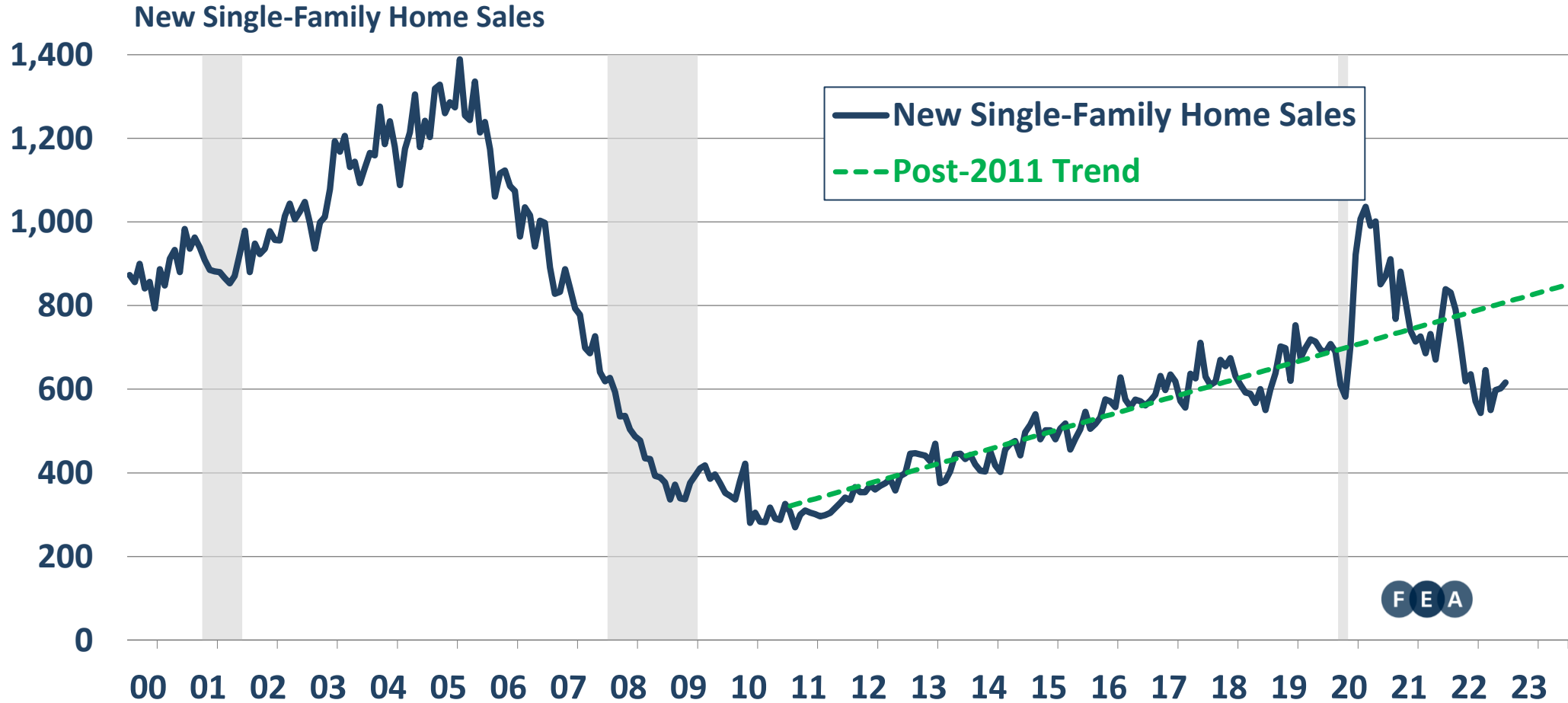
Source: National Association of Realtors, US Census Bureau, FEA Calculations

Homebuilder Confidence Has Plummeted (But Did Rebound a Bit in January)



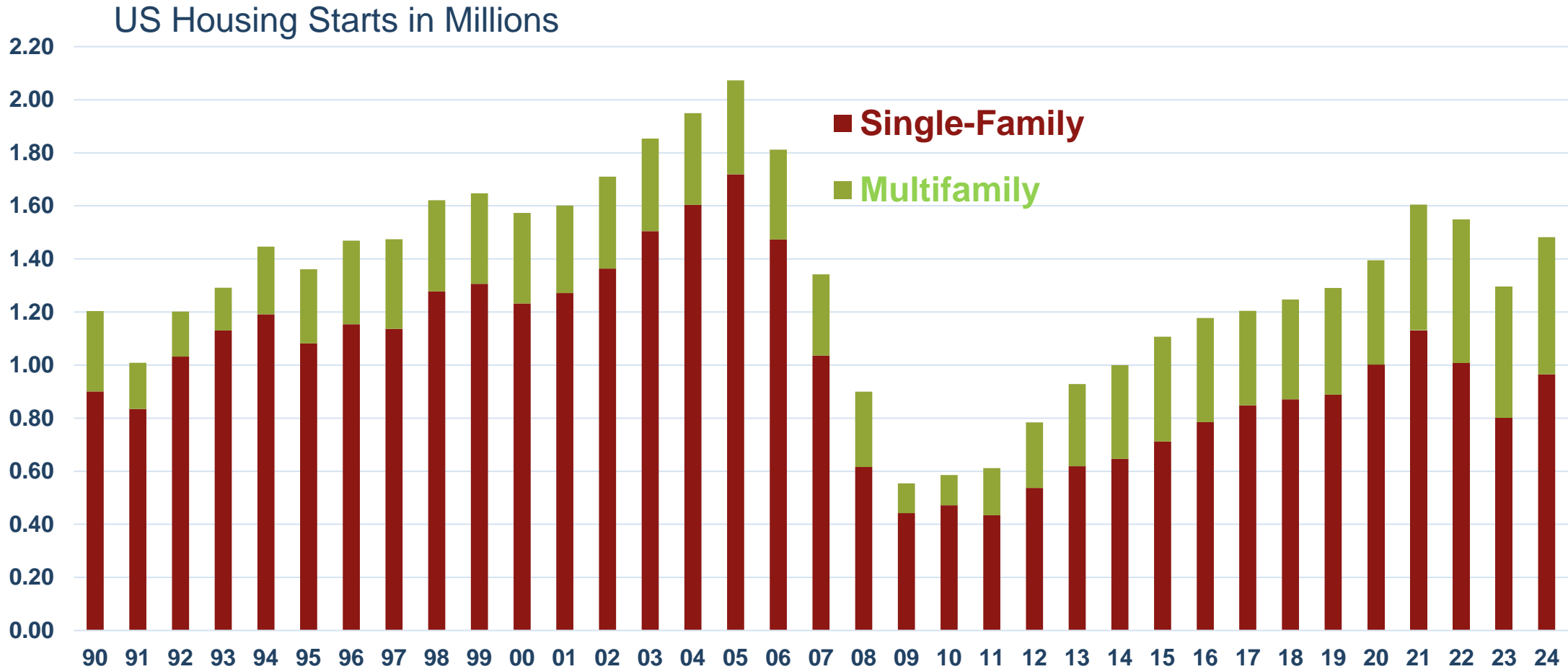
Source: National Association of Realtors

New Single-Family Home Sales are 24% Below Post-2011 Trend



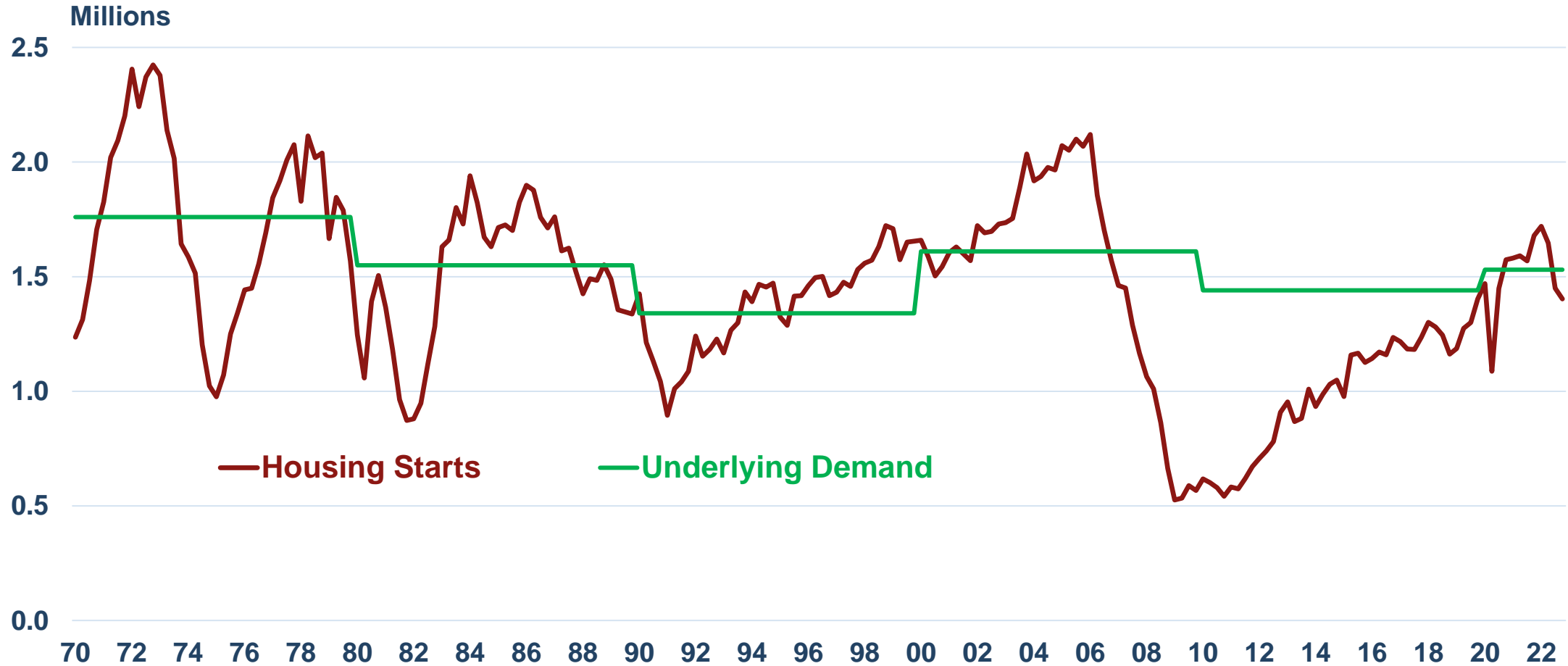
Source: Census Bureau

Housing Starts to Decline by 16% in 2023 Before Bouncing Back 14% in 2024

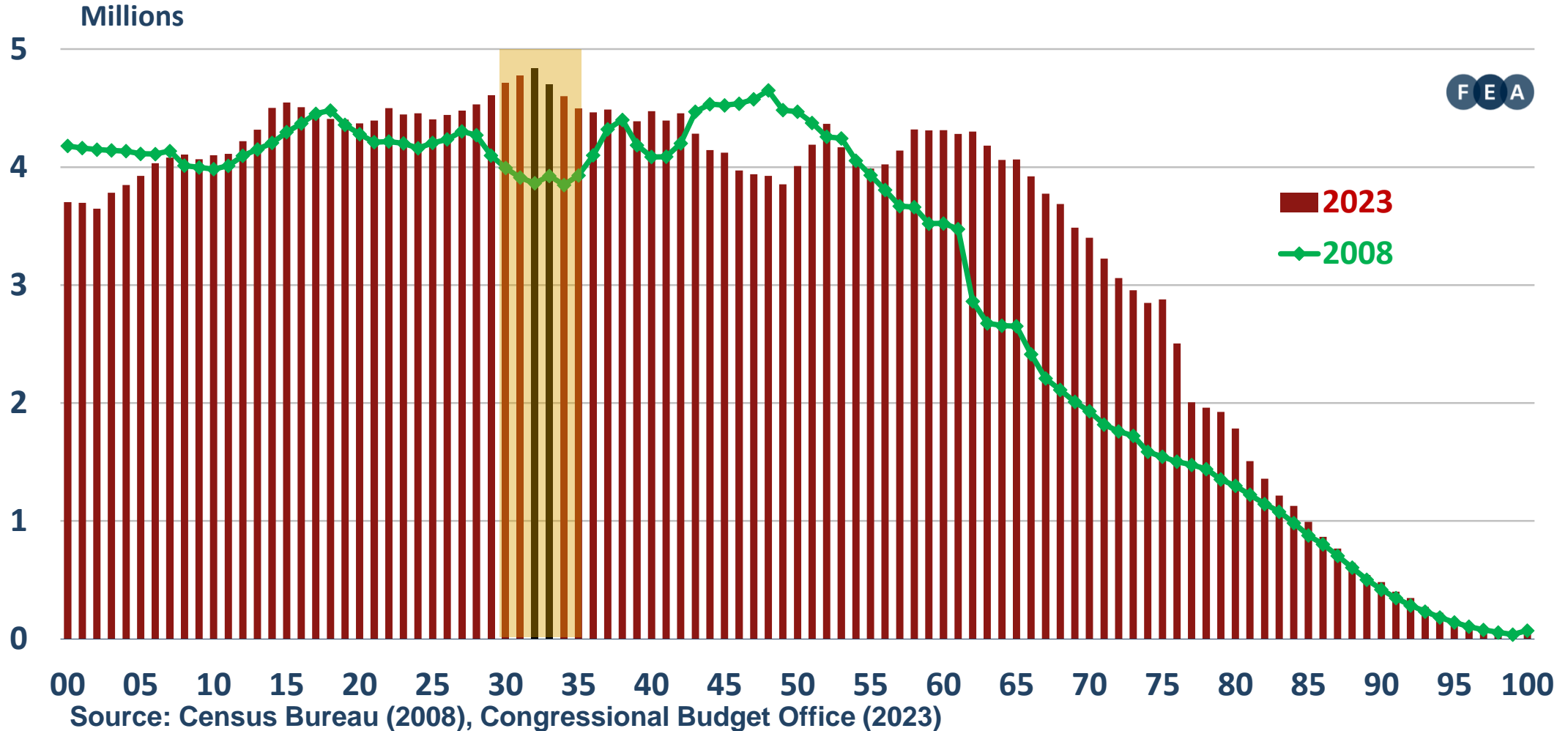


Source: Census Bureau, FEA Forecasts

This Recession Will Be Mild: US Housing Starts Exceeded Underlying Demand for Fleeting Moment

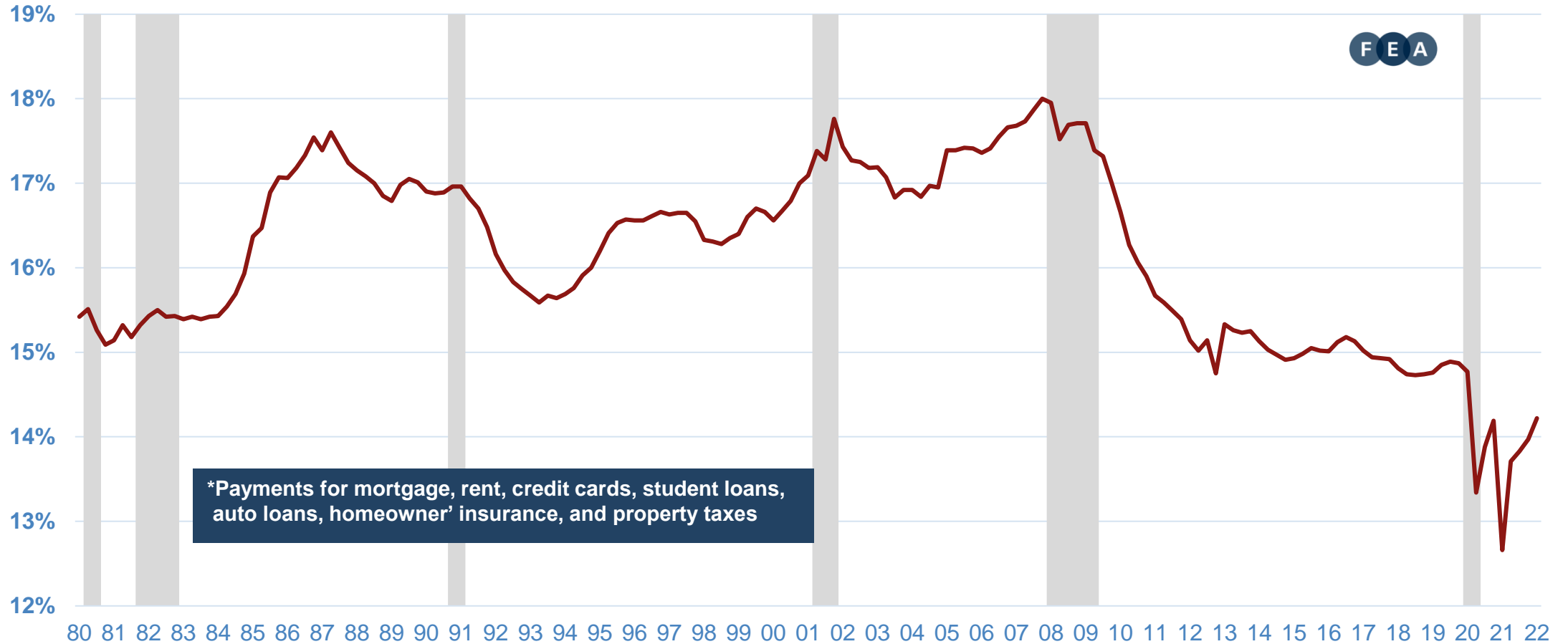


2008 – Strong Demographic HEADWIND 2023 – Strong Demographic TAILWIND

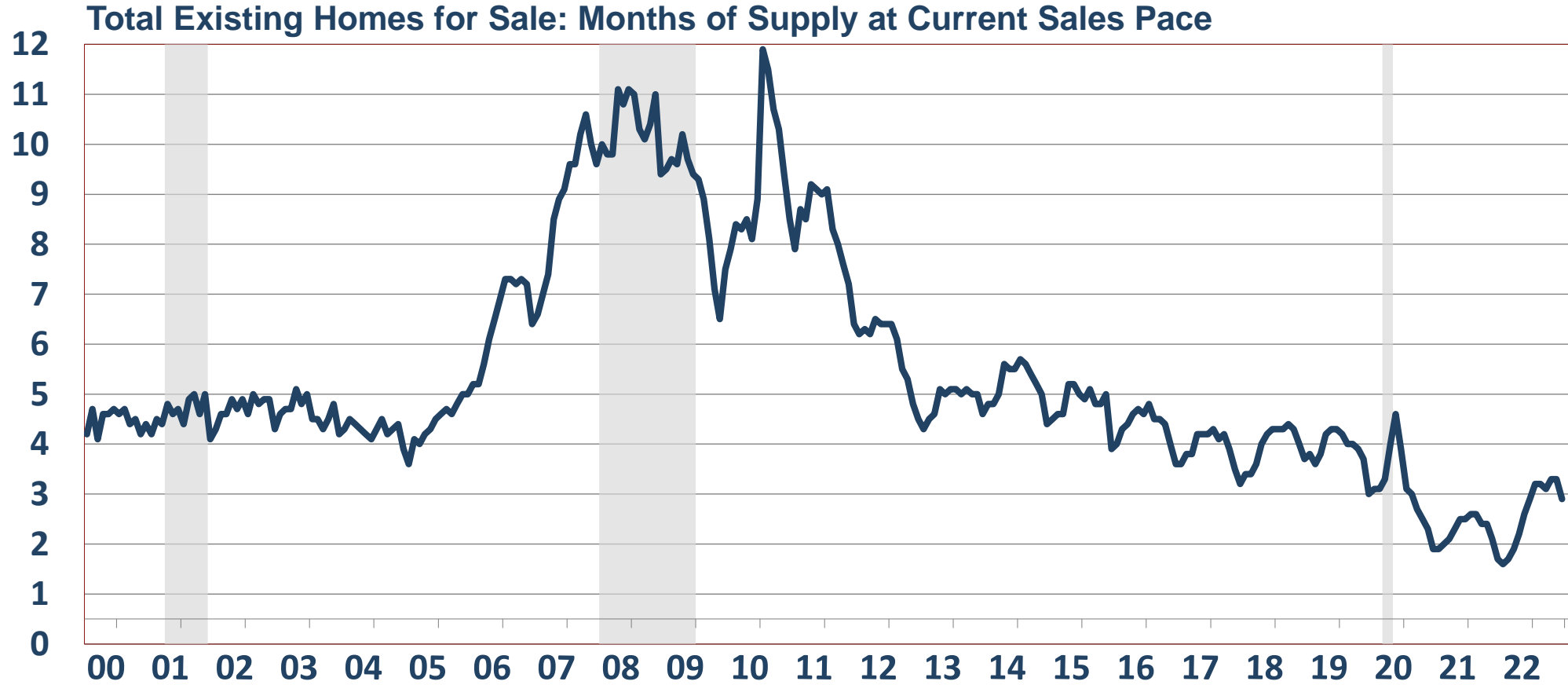


US Household Balance Sheets Are In Great Shape

Household Financial Obligations* as a percent of Disposable Personal Income

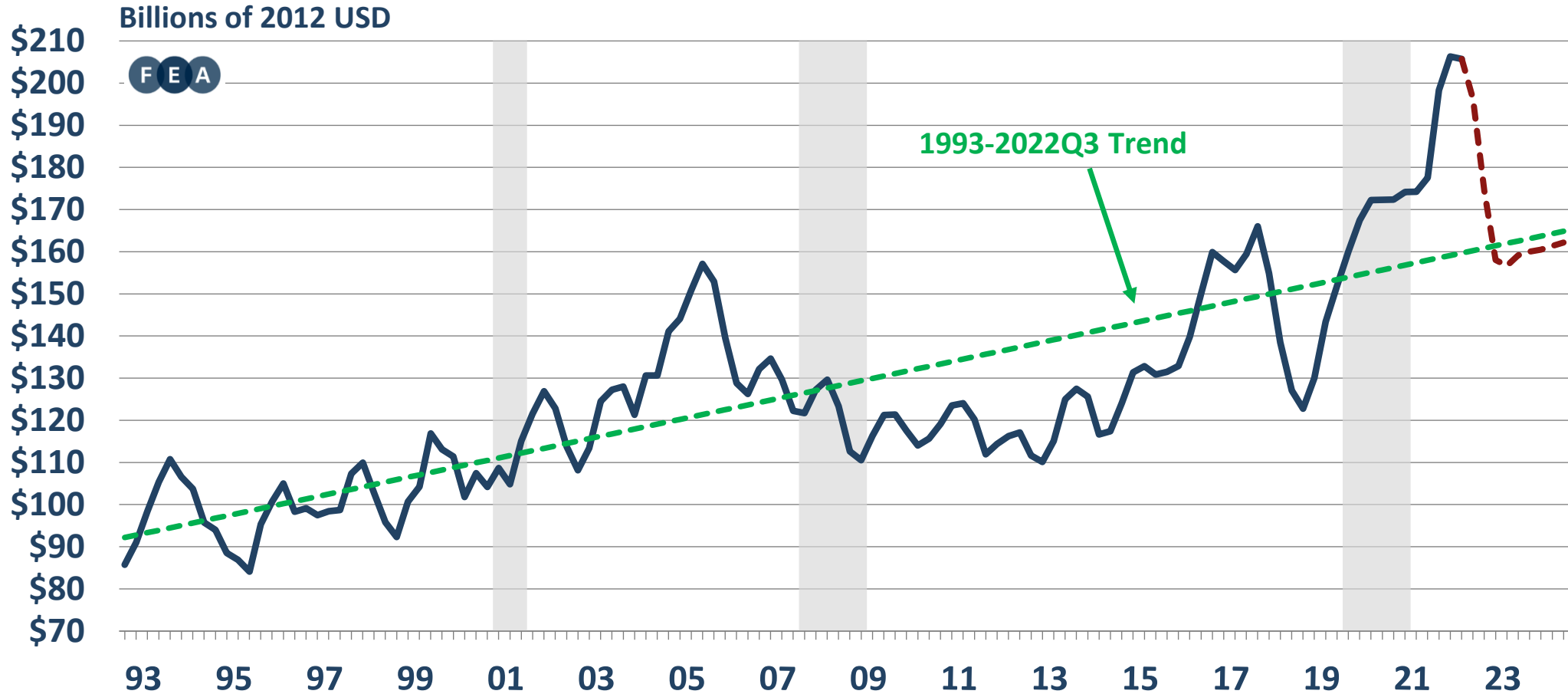


Existing Home Inventories Not Consistent With Housing Recession



Source: National Association of Realtors

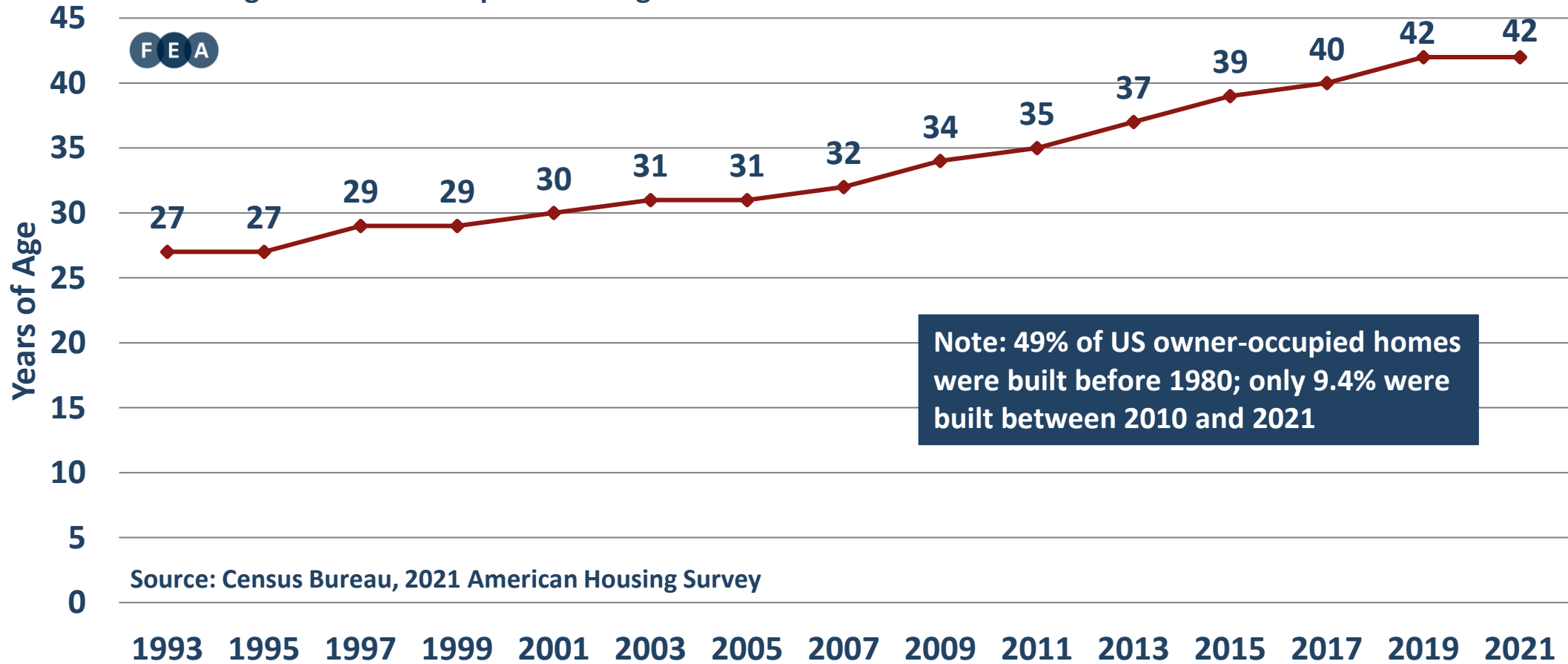
Improvement Expenditures Will Decline from High Level



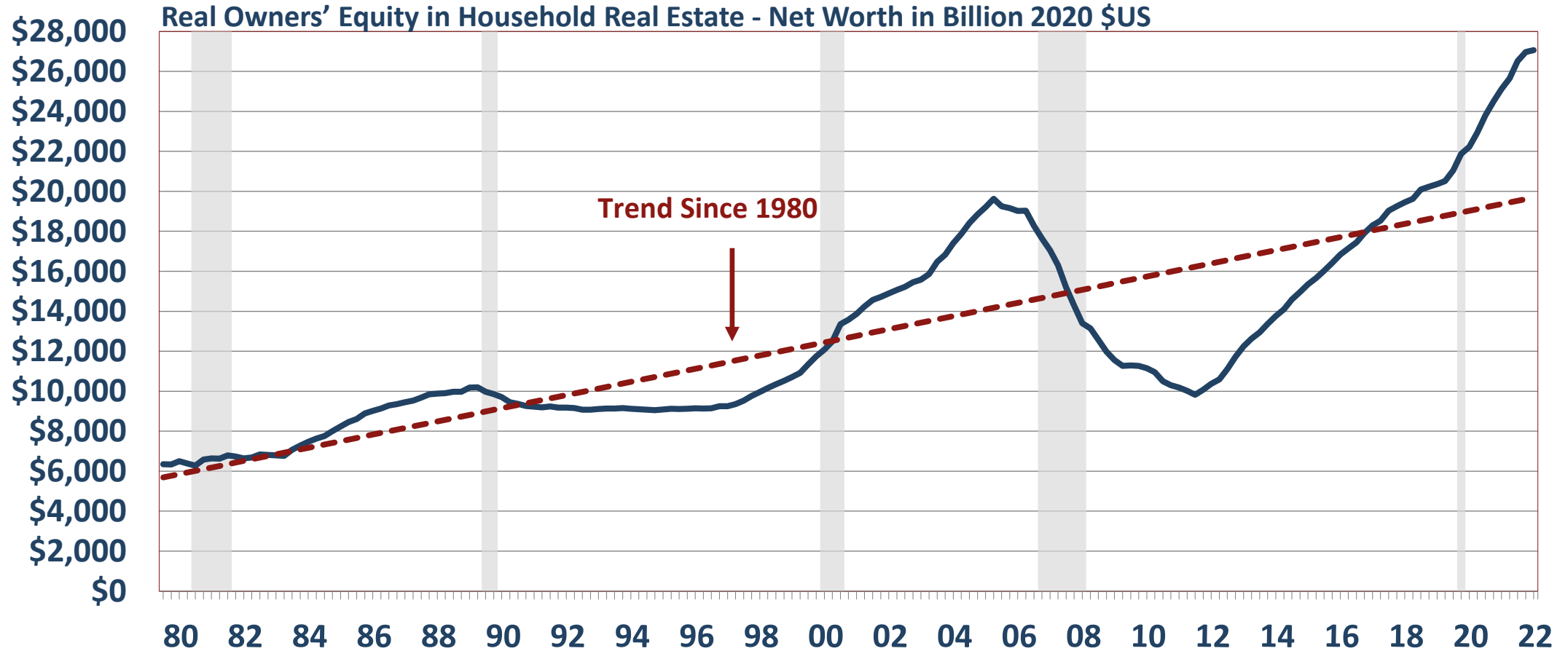
Source: Census Bureau, Bureau of Economic Analysis, FEA calculations

The US Housing Stock Has Aged Considerably

Median Age of Owner-Occupied Housing

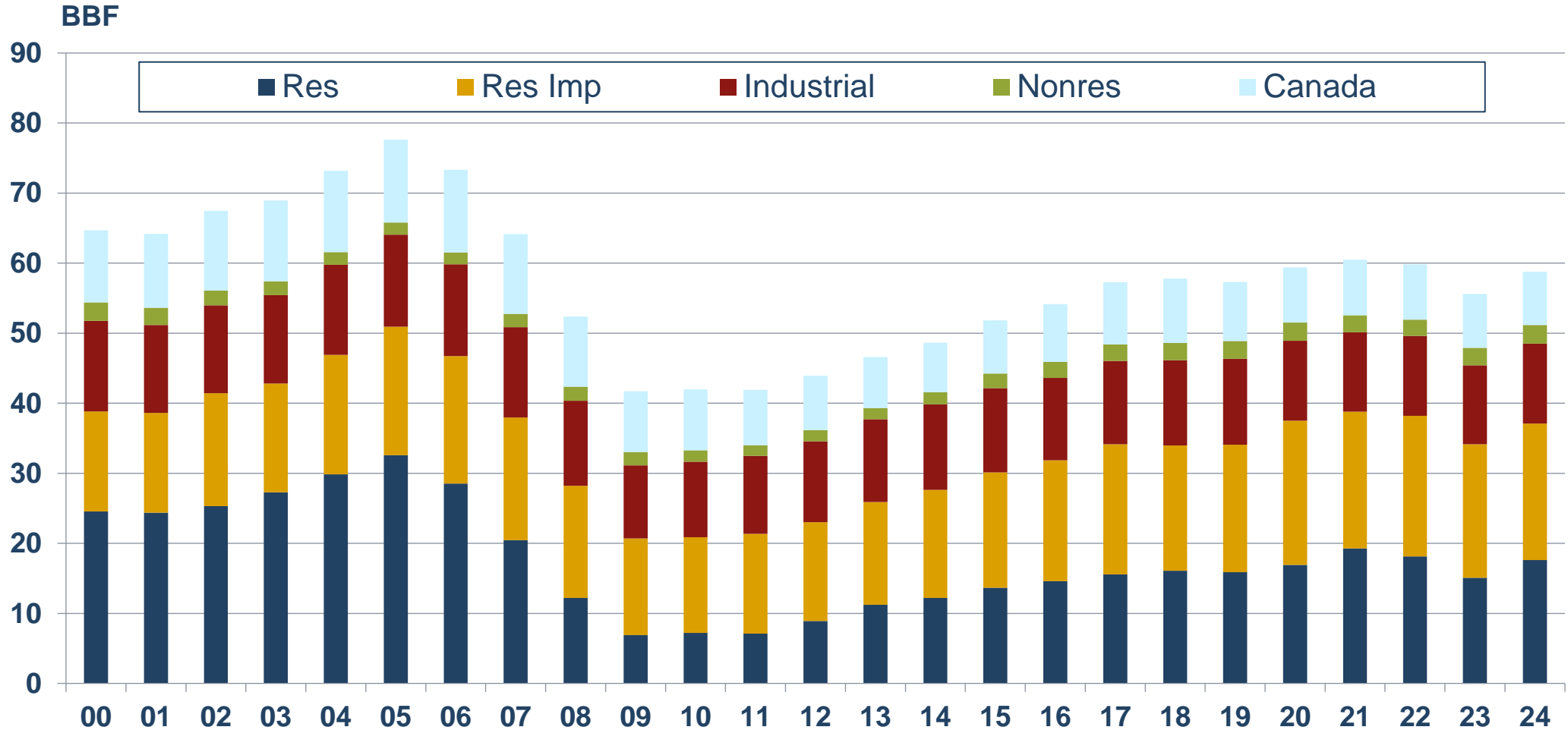


Huge Increase in Home Equity Should Support Improvements



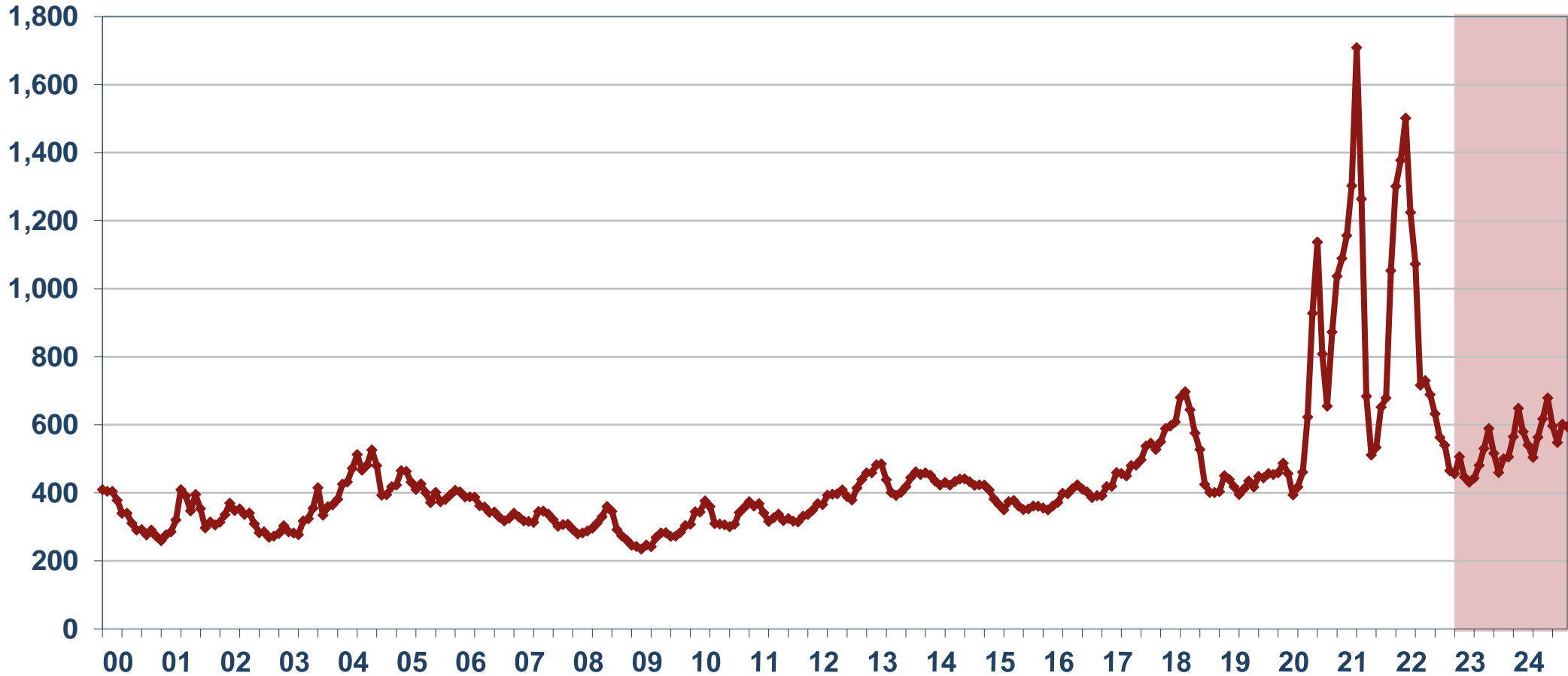
Source: Federal Reserve, FEA calculations

Lumber Consumption Will Decline Modestly



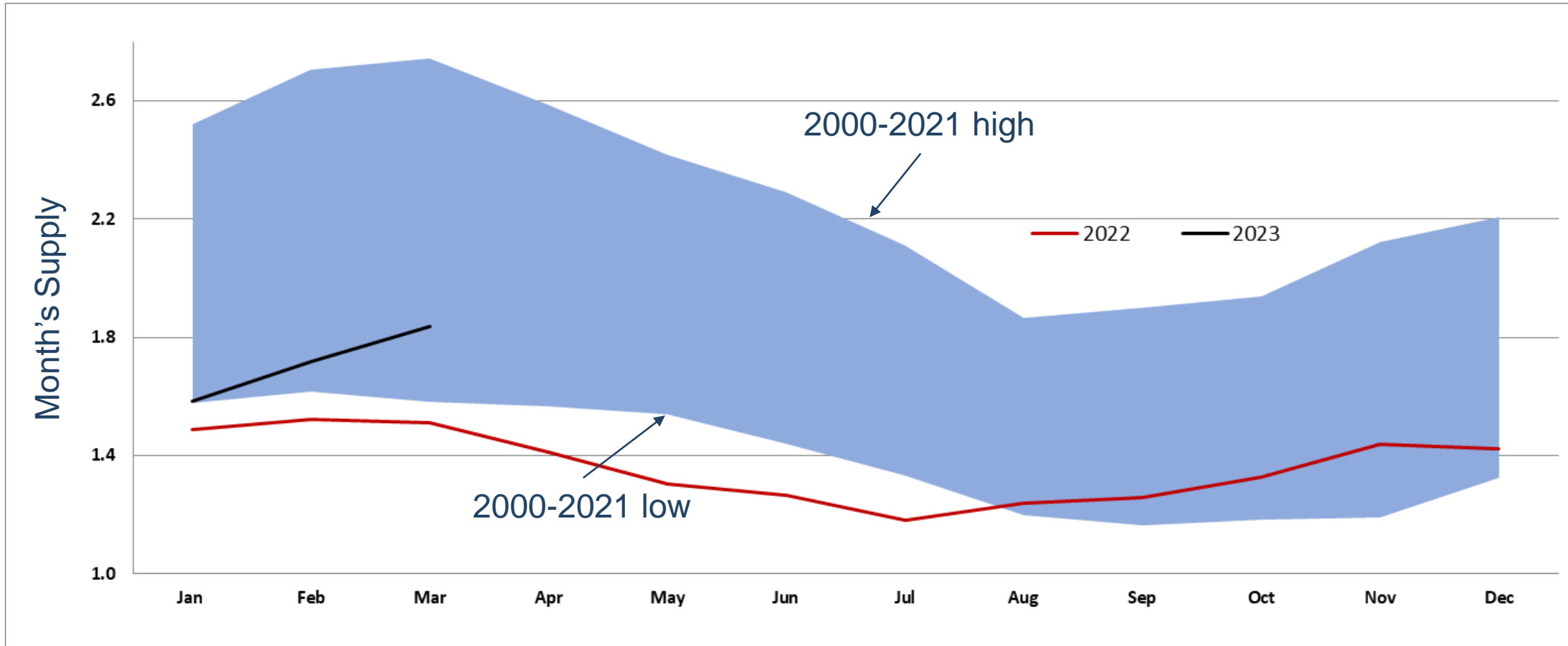
Prices Will Fall, But Remain Elevated Relative To History

E.SPF 2x4 Del. Boston, \$US/MBF



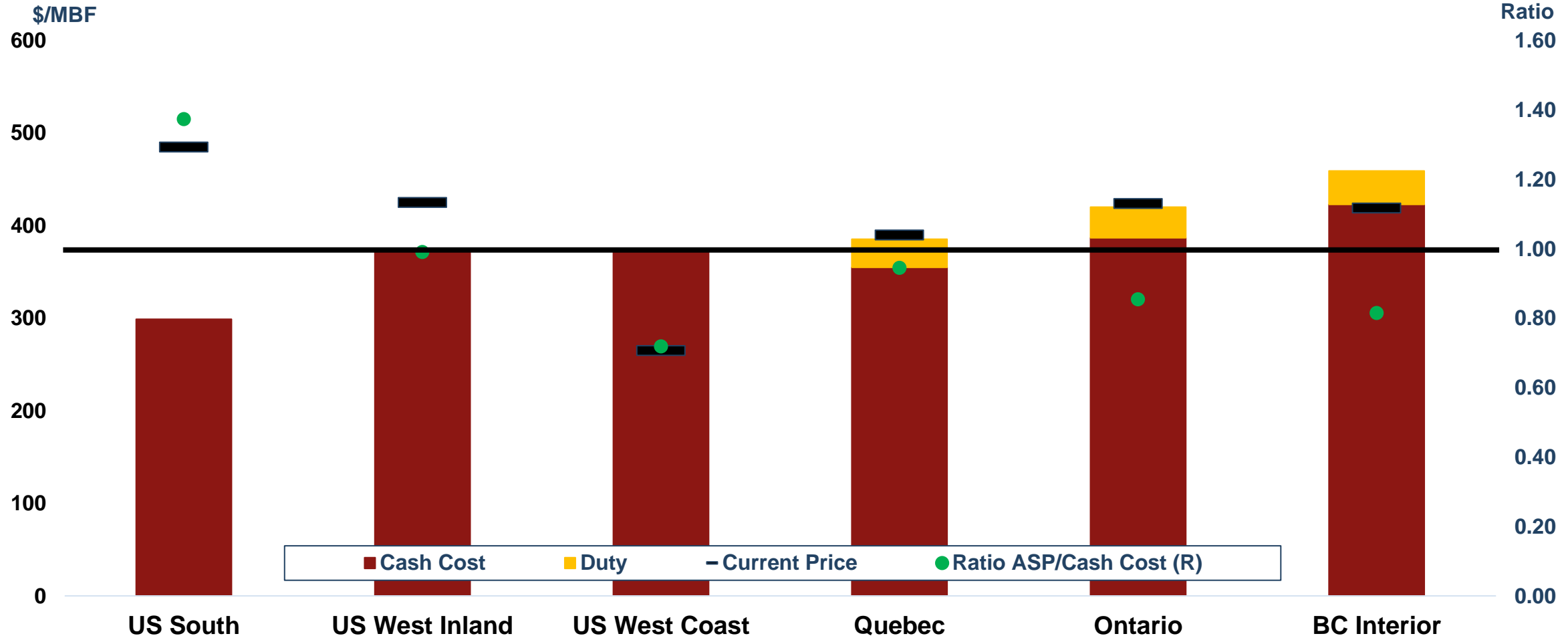
Inventories Remain Are Rising

North American Inventory/Consumption Ratio & Range



Source: FEA

Prices Won't Go Much Lower



Capacity Closures/Shift Reductions

Company	Location	Region	Closure Date	Reduction (MMBF)
West Fraser	Perry, FL	US South	Jan-23	100
Vaagan Brothers	Usk, WA	US West	Jan-23	25
Vaagan Brothers	Midway, BC	BC	Jan-23	75
Western Forest Products	Port Alberni, BC	BC	Jan-23	175
West Fraser	Fraser Lake, BC	BC	22Q4	70
West Fraser	Williams Lake, BC	BC	22Q4	100
Canfor	Houston	BC	23Q2	500
Canfor	Chetwynd, BC	BC	23Q2	250
Skeena	Terrace, BC	BC	23Q1	200

Source: FEA

Capacity Temporary Curtailments

Company	Location	Region	Date	Reduction (MMBF)
Conifex	Mackenzie, BC	BC	10/2022	7
Interfor	All		Q4	200
Canfor		BC and Alberta	12/22-1/23	171
Aspen Planners	Merritt, BC	BC	12/2022	8
Shuqualak Lumber	Shuqualak, MS	US South	12/26/2022	
Tolko		BC	1/2023	35
Anthony Timberlands	Malvern, Arkansas	US South	1/2023	10
Skeena	Terrace, BC	BC	1/2023	12
Interfor		All except US South	23Q1	100
Stimson	Clatskanie, OR	US West	2/2/2023	15.6
Stimson	Forest Grove, OR	US West	2//2/2023	28.8
Sinclar Group	3 Mills	BC	1/30/3023	25

Source: FEA

Industry Was Investing In New Capacity

Company	Location	Region	Date	Capacity (MMBF)
JV: Sierra Institute/J&C Enterprises	Crescent Mills, CA	US West	2022	5
Mission Forest Products	Corinth, MS	US South	2022	250
Idaho Forest Group	Lumberton, MS	US South	Mid 2022	300
Canfor	DeRidder, LA	US South	22Q4	250
Georgia-Pacific	Pineland, TX	US South	Late 2022	215
Tahoe Forest Products	Carson City, NV	Other	2023Q1	50
JV: Hunt/Tolko	Taylor, LA	US South	2023H1	320
Roseburg Forest Products	Weldon, NC	US South	2023	400
Canfor	Axis, AL	US South	24Q3	250
Teal Jones	Bossier Parish, LA	US South	2024	300
CLAW Forestry Services, LLC	Gloster, MS	US South	2024	250

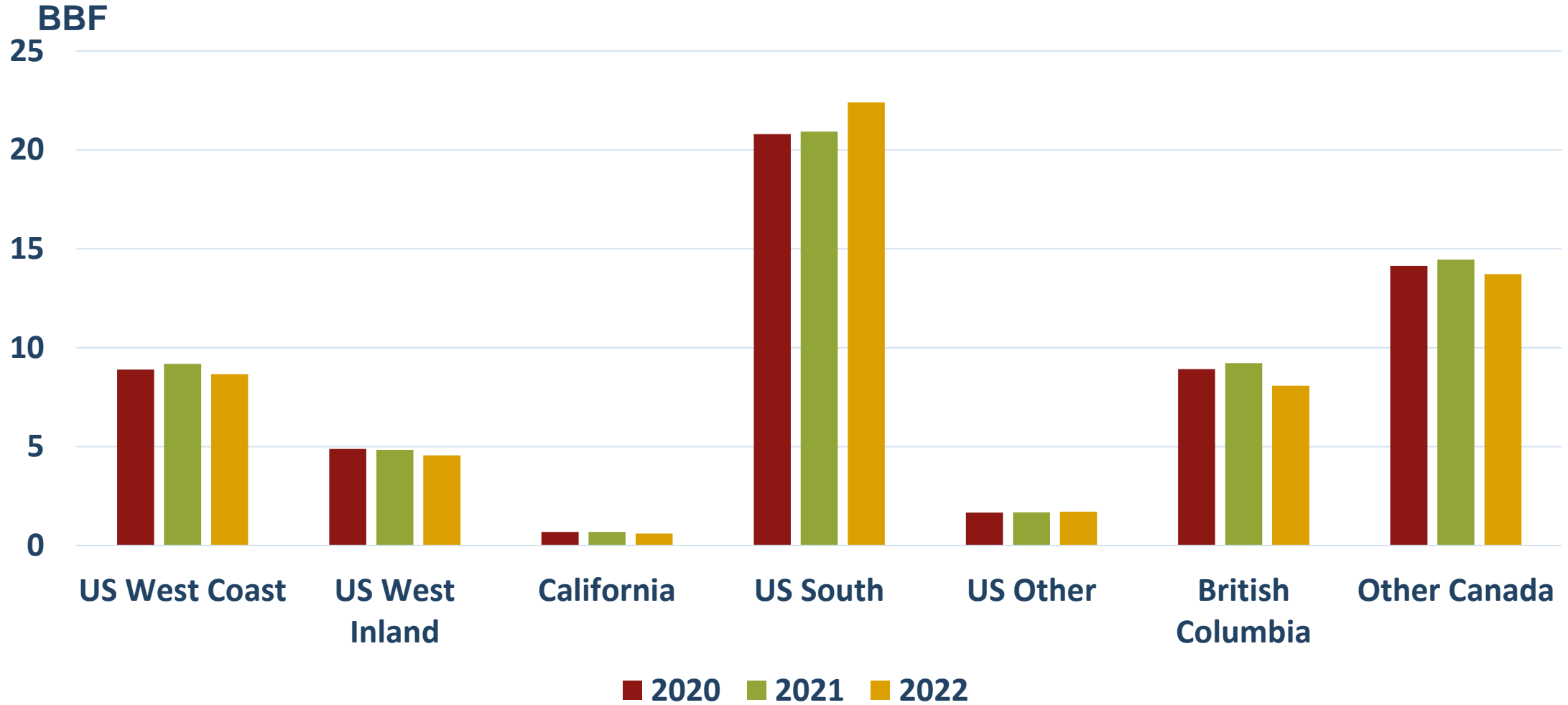
They Were Investing In Existing Facilities

Company	Location	Region	Date	Capacity (MMBF)
Canfor	Estill, SC	US South	2022	20
Interfor	Summerville, SC	US South	2022	75
Charles Ingram Lumber	Effingham SC	US South	2022	120
Jasper Forest Products	W Jasper, AL	US South	2022	130
Resolute	Senneterre, QC	Canada, East of Rockies	22Q3	15
Resolute	Thunder Bay, ON	Canada, East of Rockies	22Q3	40
Resolute	Glenwood, AR	US South	22Q3	10
Resolute	Cross City, FL	US South	22Q3	20
San Group	Port Alberni, BC	BC	2021-2022	30
Interfor	Castlegar, BC	BC	22Q3	25
Interfor	Perry, GA	US South	22Q3	
Sexton Lumber	Bloomfield, NFL	Canada, East of Rockies	2022	25
Interfor	DeQuincy, LA	US South	2022H1	

They Were Investing In Existing Facilities (Cont)

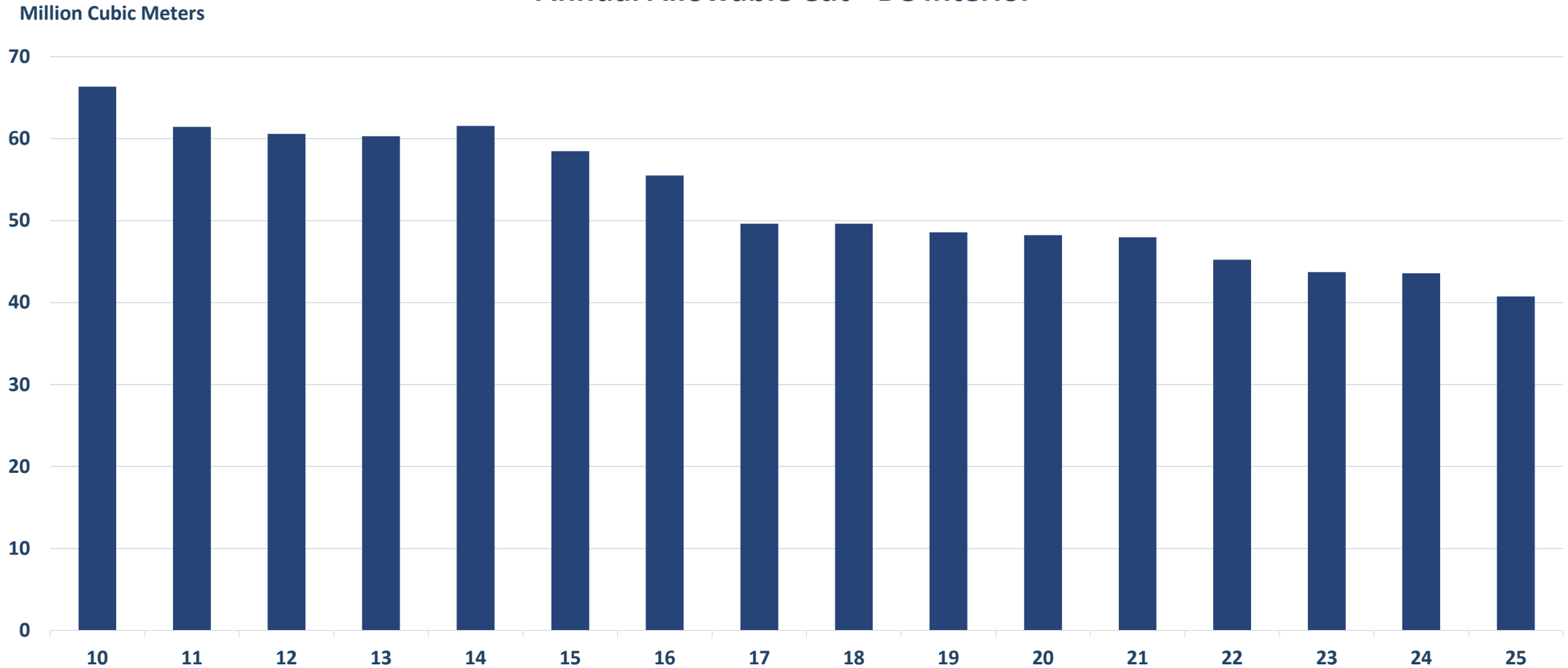
Company	Location	Region	Date	Capacity (MMBF)
West Fraser	Lufkin, TX	US South	2024/2025	85
PotlatchDeltic	Waldo, AR	US South	End 2024	85
Canfor	Urbana, AR	US South	2024	115
JV: Tolko/Southeastern Timber Products	Ackerman, MS	US South	24Q1	130
Weyerhaeuser	Holden, LA	US South	2023	100
Pleasant River Lumber	Moose River/Jackman, ME	Other	2023	20
Pleasant River Lumber	Sanford, ME	Other	2023	3
Pleasant River Lumber	Hancock, ME	Other	2023	2
Western Forest Products	Ladysmith, BC	BC	2023	
Western Forest Products	Nanaimo, BC	BC	2023	
Western Forest Products	Chemainus, BC	BC	2023	
Pleasant River Lumber	West Enfield, ME	Other	Early 2023	70
Dunkley Lumber	Carrot River, SK	Canada, East of Rockies	Early 2023	100
West Fraser	Not Specified	US South	2021-2023	
Interfor	Thomaston, GA	US South	2021-2023	100

Despite Record High Prices And Heavy Investment In New Capacity, Production In Most Regions Fell In 2022



Timber Supply in British Columbia : Good News For People Who Love Bad News

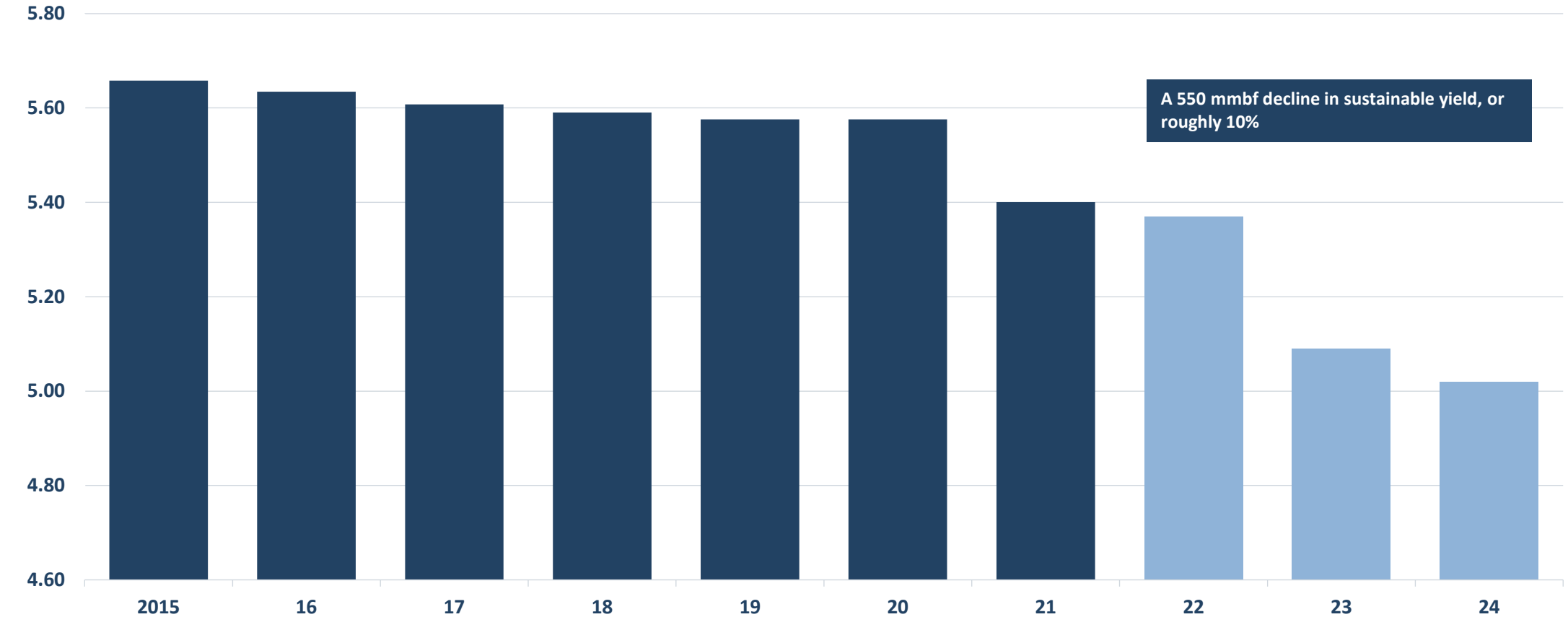
Annual Allowable Cut - BC Interior



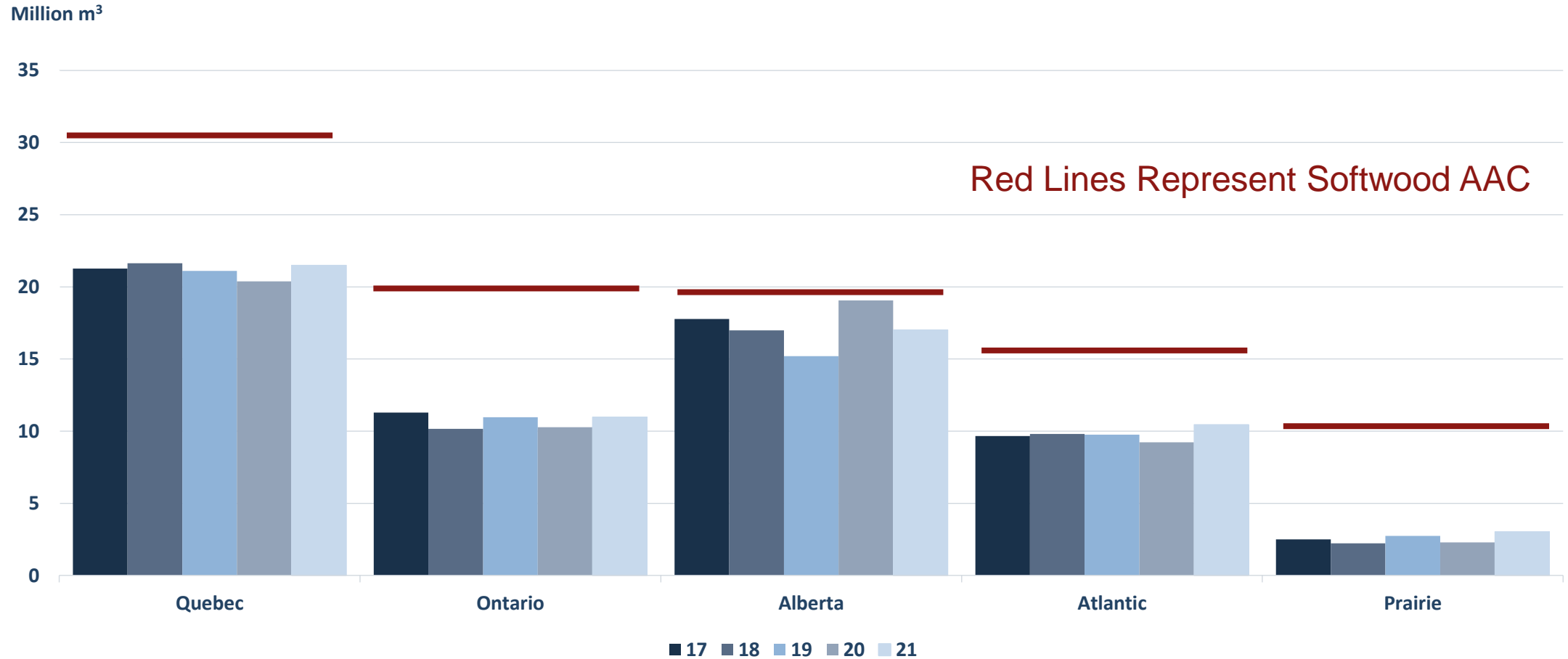
The Outlook for Available Log Supply in the West Coast Continues to Erode

Private Softwood Sawtimber Sustainable Yield

BBF, Int'l 1/4"

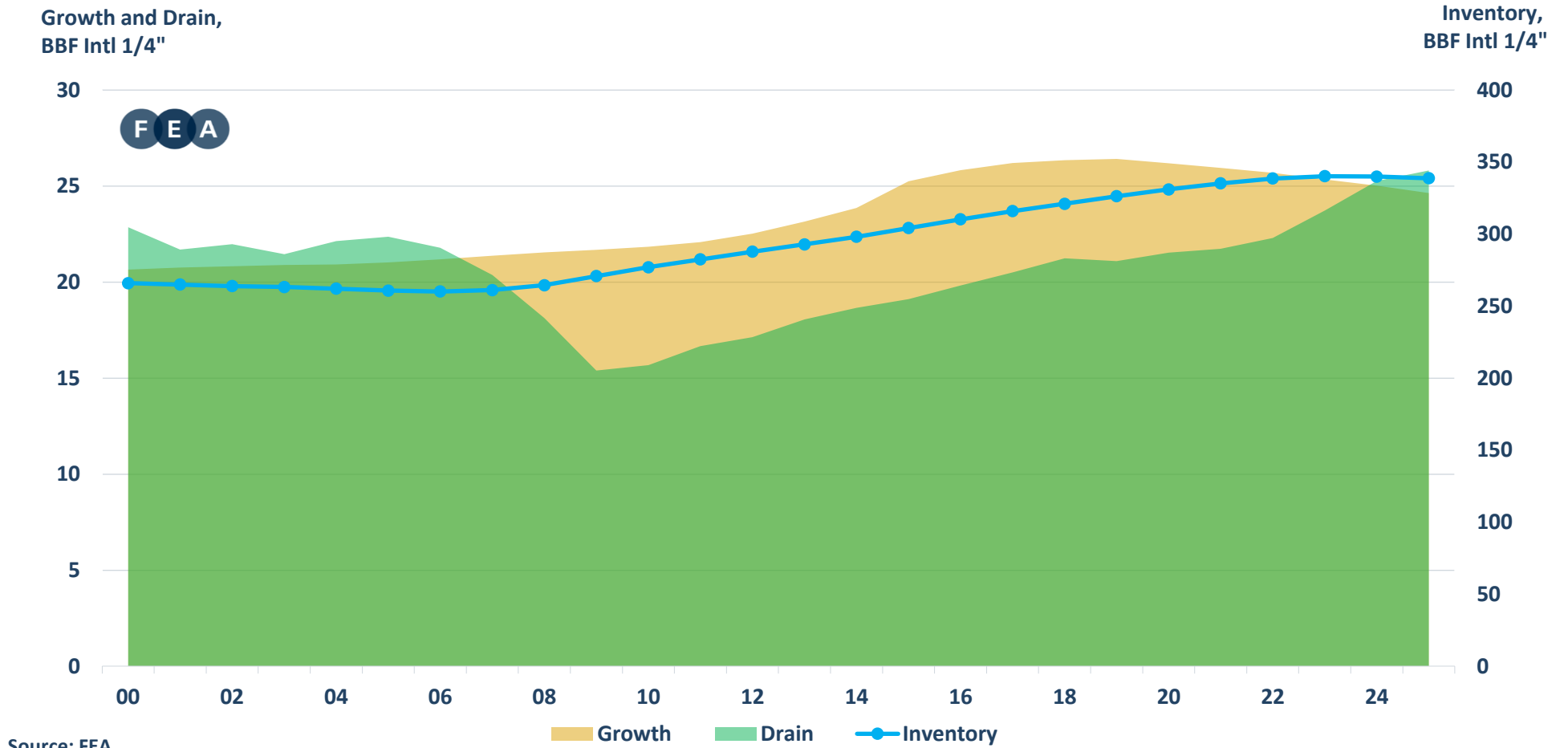


Some Limited Opportunities to Increase Harvest Levels in Other Canadian Provinces

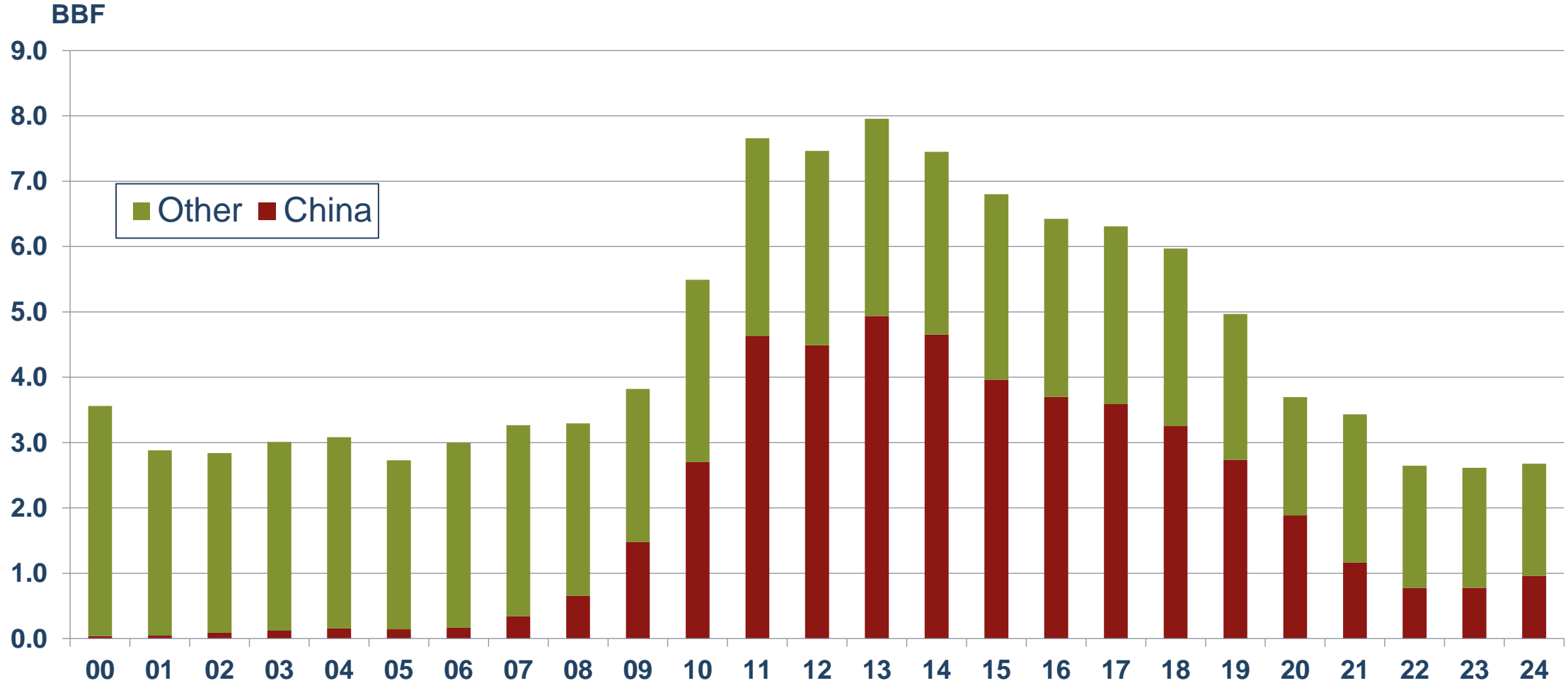


Note: 2021 harvest levels are estimates.

Softwood Sawtimber Inventory Continues to Expand in the US South

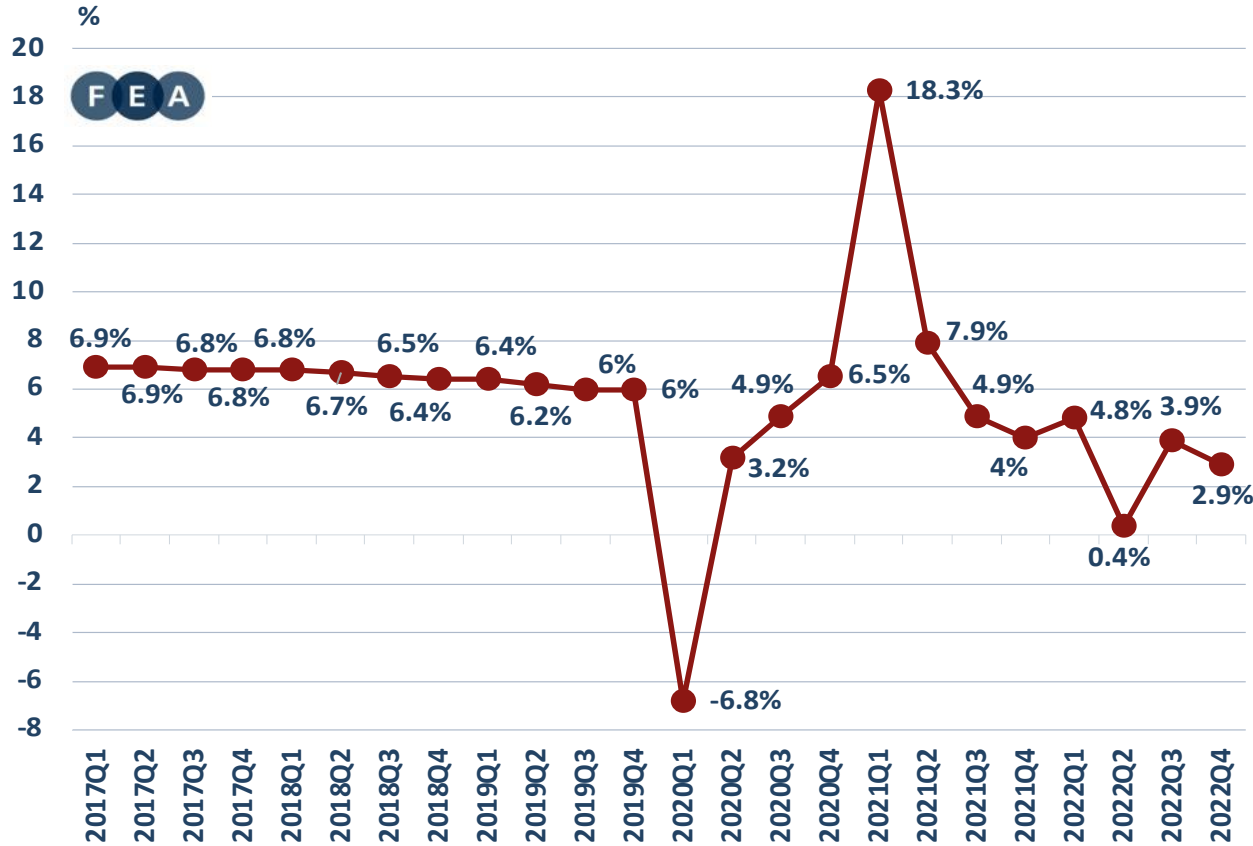


North American Lumber Exports Will Remain Weak



Weak Consumption Demand

China: Quarterly GDP Growth



China's GDP growth:

- 0.4% in 2022Q2
- 2.9% in 2022Q4
- Annual growth grade: 3%

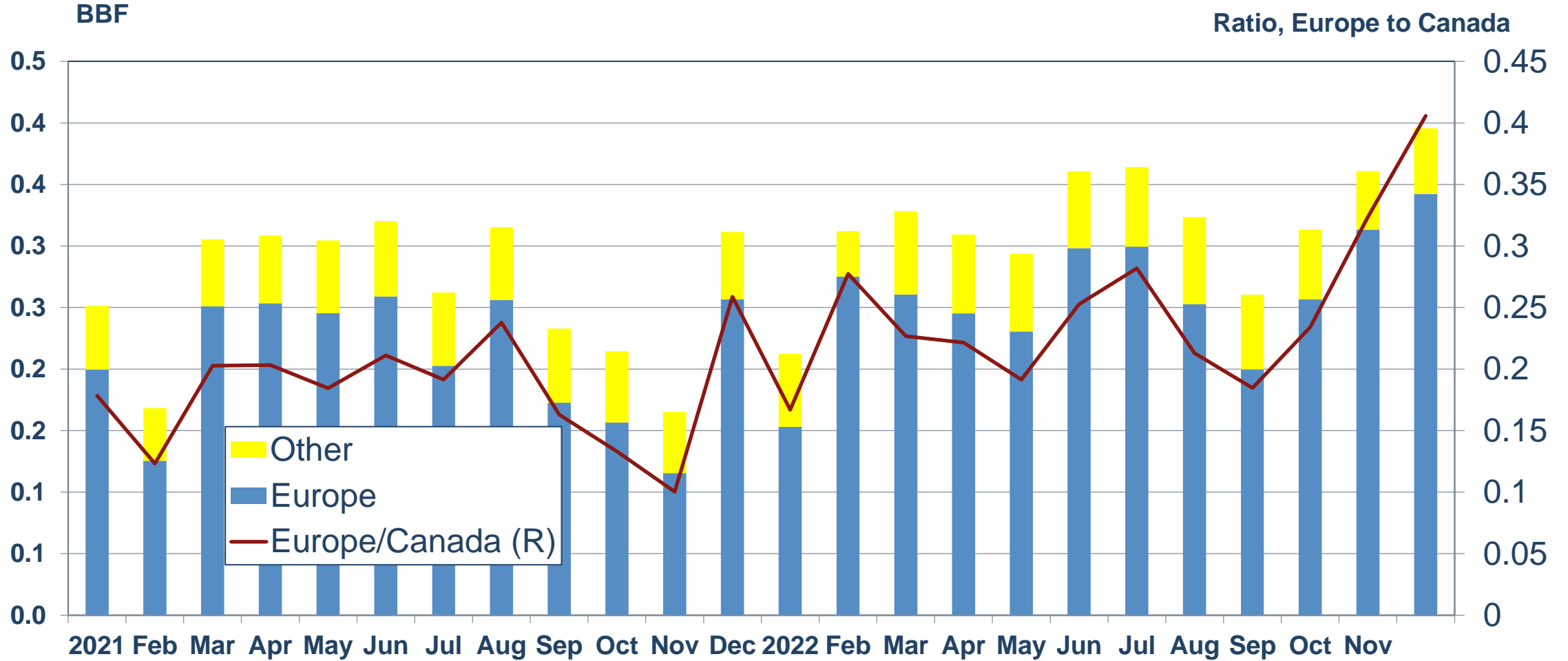
Some indicators in 2022:

- New Housing Starts: -39%
- Land Acquisition Area: -53%
- Furniture Retail Sales value: -7.5%
- New-home Sales: -24%

Source: NBS

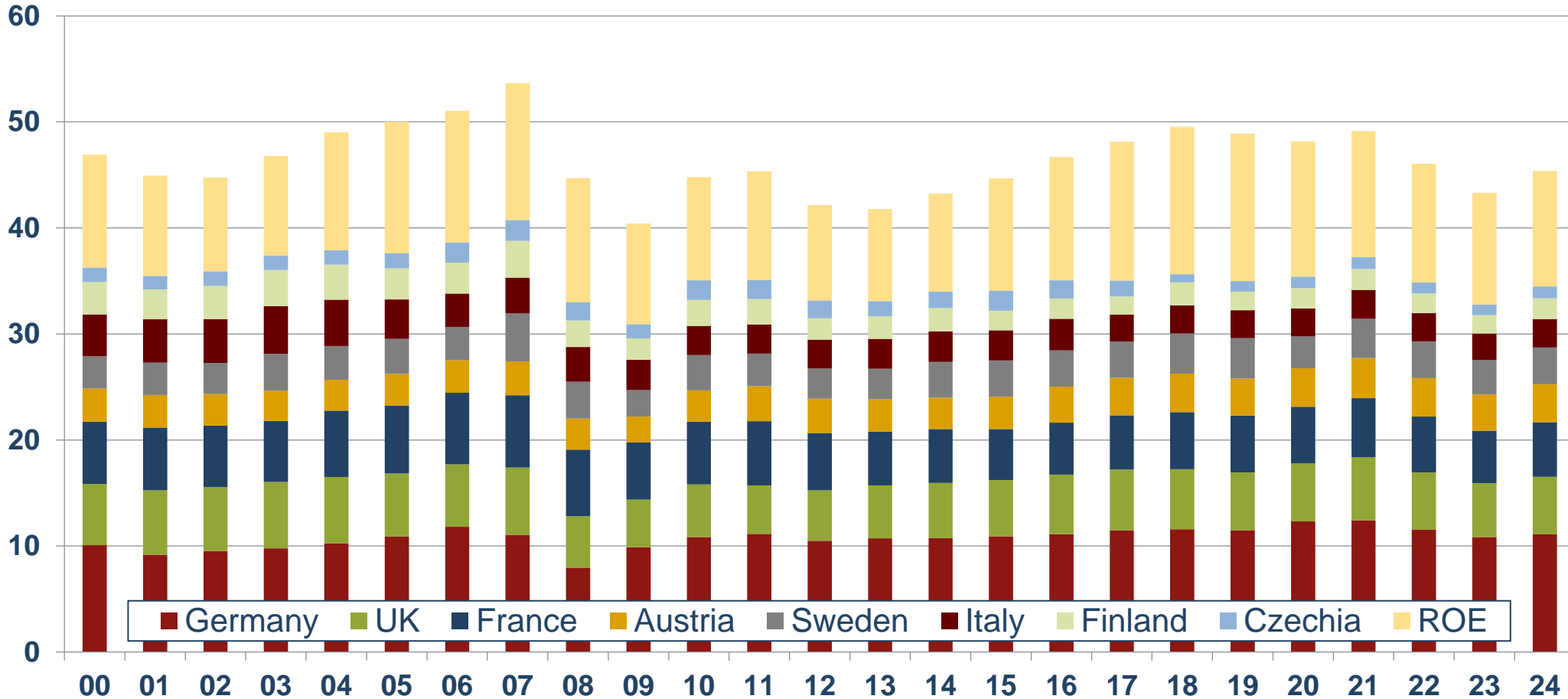
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European Imports Are Surging



European Consumption Has Plunged

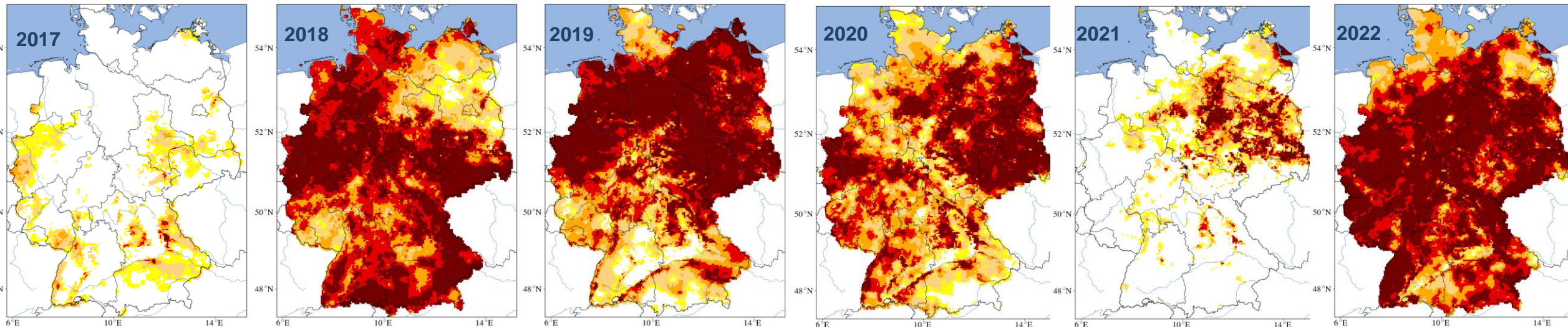
BBF, Nominal



Drought Conditions Have Returned to Europe

Drought Conditions (Total Soil Column) in September 2017-22

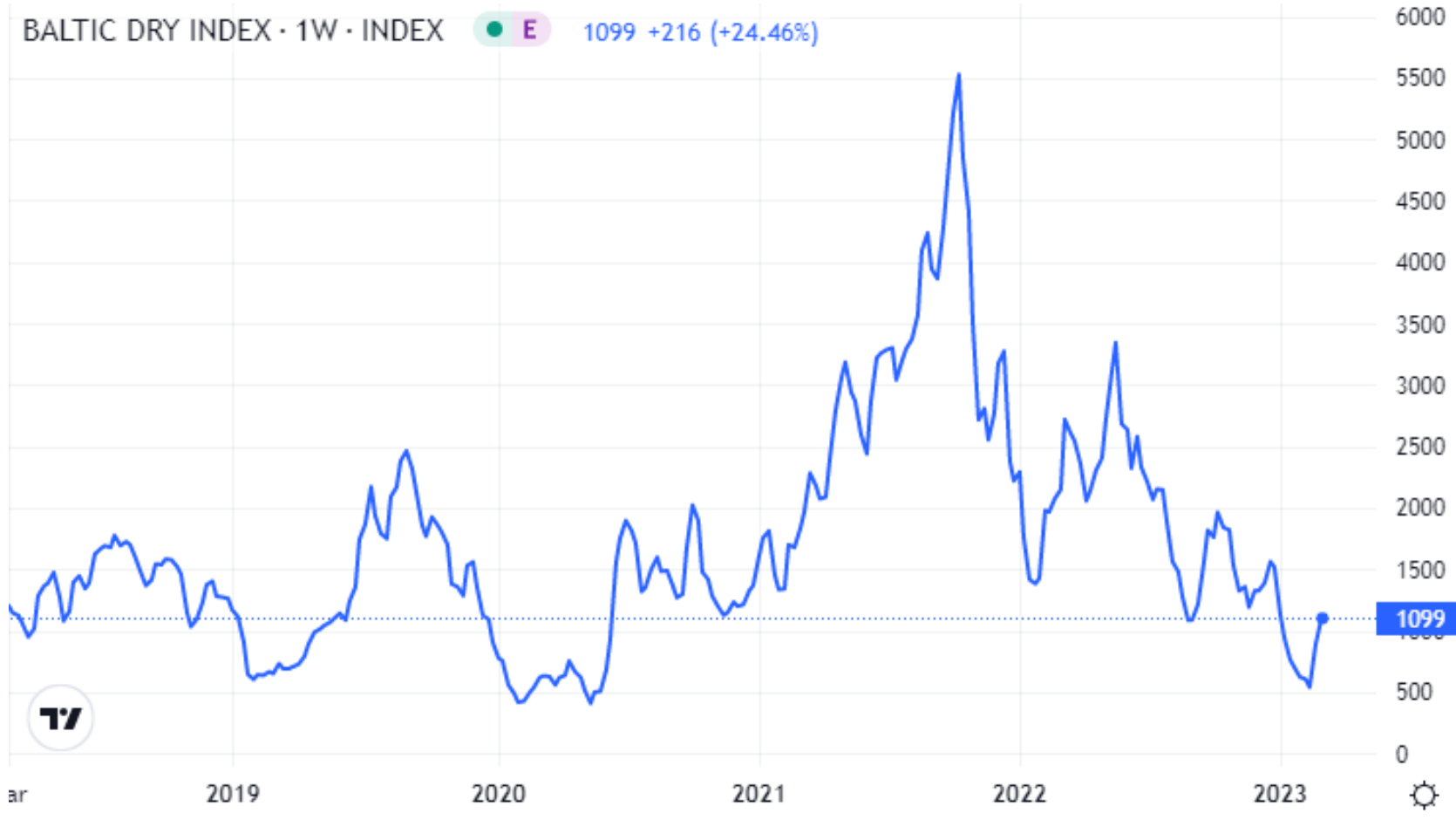
Yellow represents abnormally dry conditions, darkest red indicates exceptional drought conditions.



- Although endemic, the spread of Spruce Bark Beetle has been exacerbated by the trend of hotter, drier summer weather.
- Relative to 2021, drought conditions are more widely reported across in Germany.
- Forecast from German Ministry (BMEL) is for the volume of damaged softwood timber to decline by 50% relative to 2021.

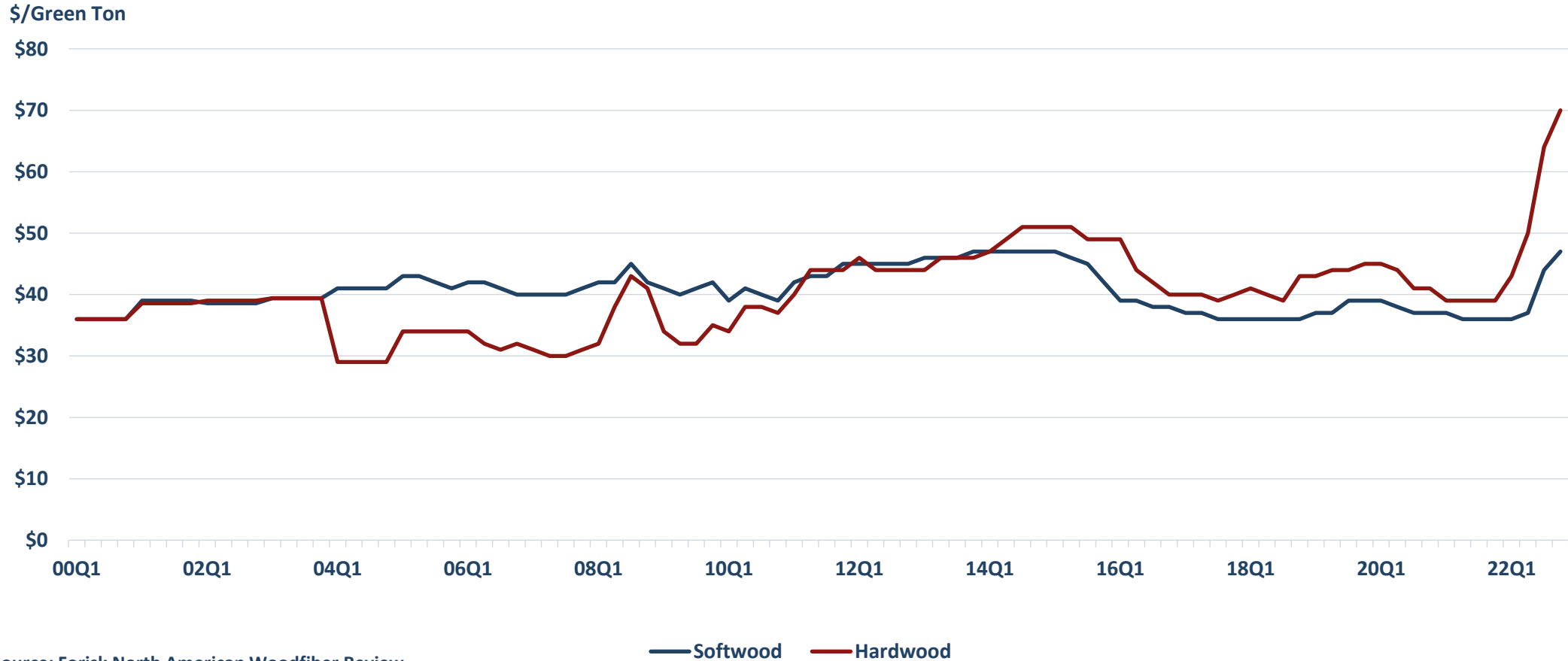
Source: UFZ Drought Monitor / Helmholtz Centre for Environmental Research.

Freight Constraints Have Eased



Pulpwood Prices in the Northeast Rising Sharply

Northeast Pulpwood Prices



Source: Forisk North American Woodfiber Review

Take Home Points

- The probability of a recession is high, but declining.
- Lumber markets will slip in 2023, but the downturn will be more mild than previous recessions.
- Costs are elevated, and will hold prices higher.
- Capacity is expanding rapidly, but achieving nameplate output is difficult.
- Exports will remain weak.
- Imports will not fall as much as many expect.



Questions?

Paul Jannke
Principal, Lumber
Forest Economic Advisors
1-978-496-6336
pjannke@getfea.com
www.getfea.com