





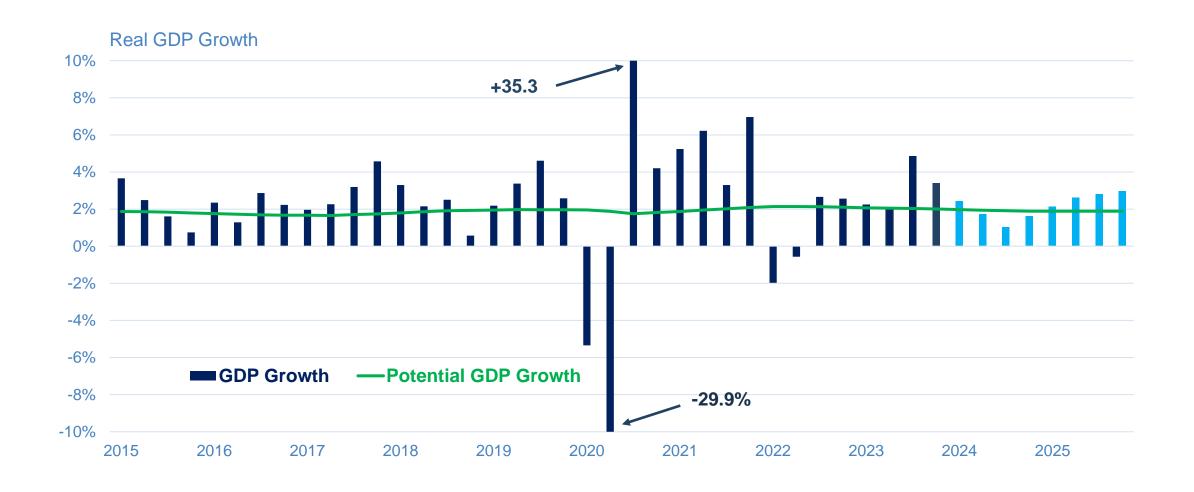
2023 Take Home Points

- 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.

Not Much Has Changed In The Current Outlook



Our Base Case Forecast No Longer Shows a Recession





Inflation Rose To Its Highest Level In Decades

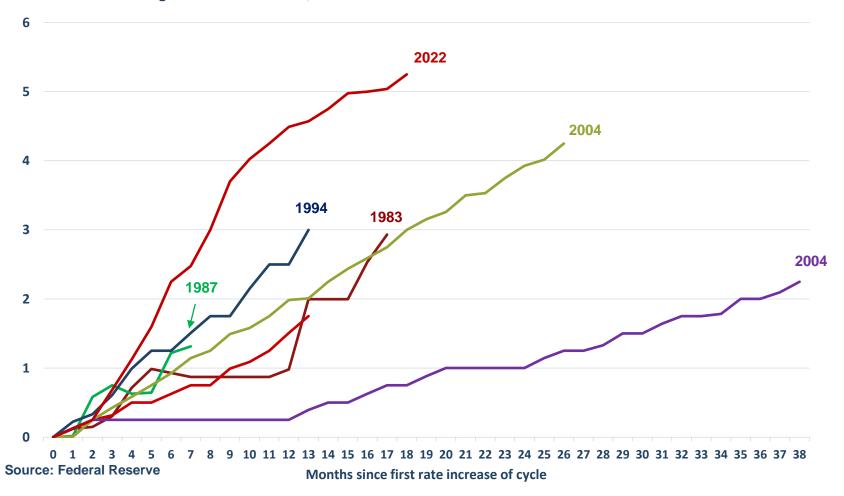
Year-over-Year Change in Consumer Price Index





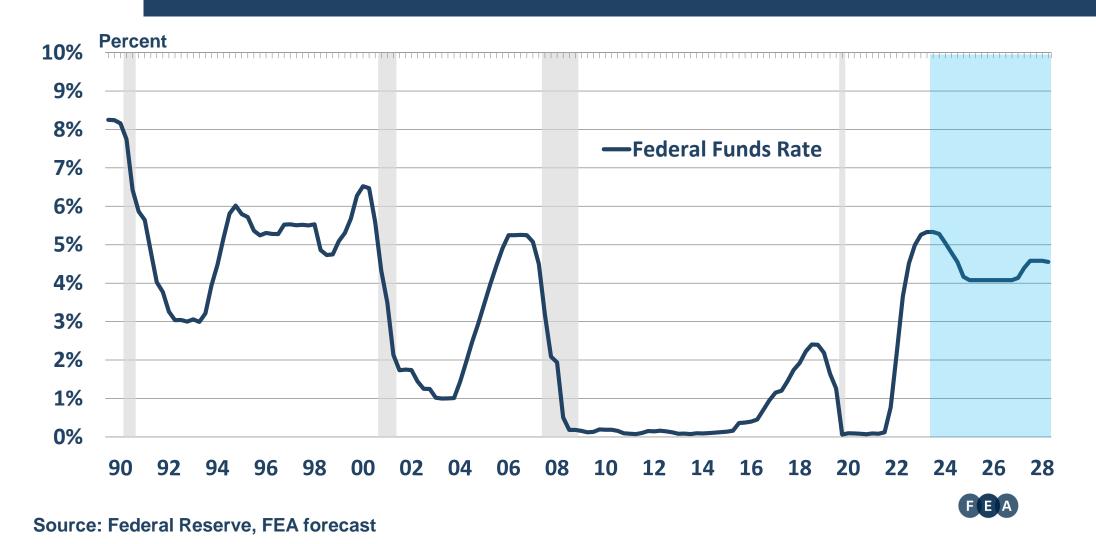
The Latest Fed Rate Increases Were Fast and Furious

Cumulative Change in Fed Funds Rate, Percent



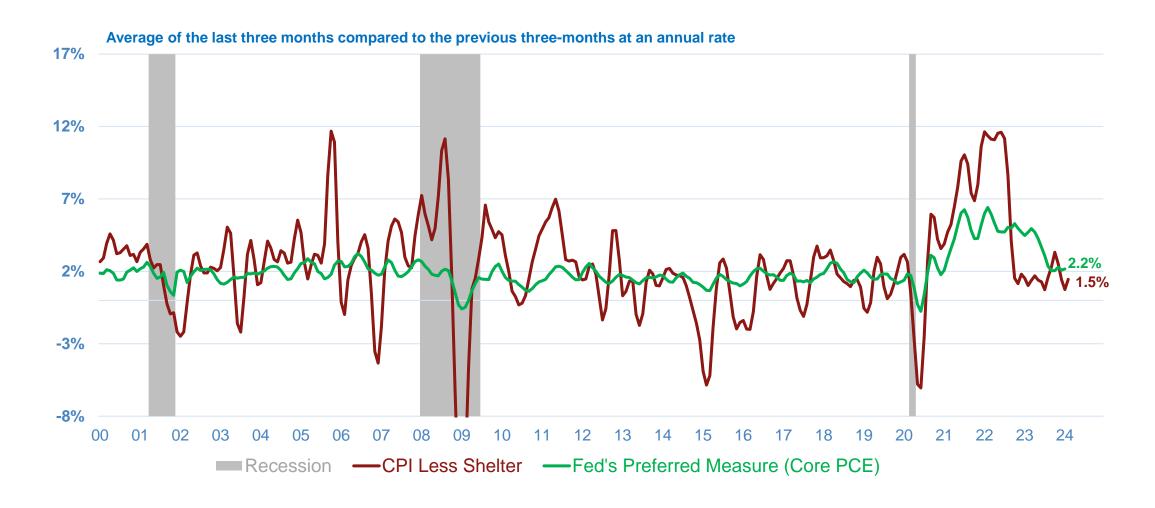


Short-Term Interest Rates Set to Decline in Second Half of 2024



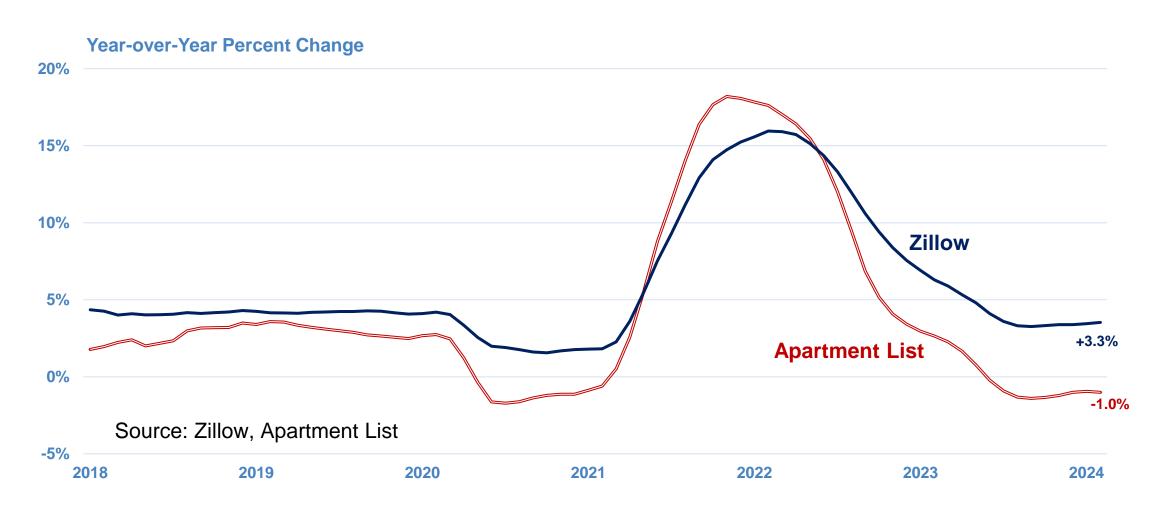


There is a Strong Case that the Inflation Dragon Has Been Slayed



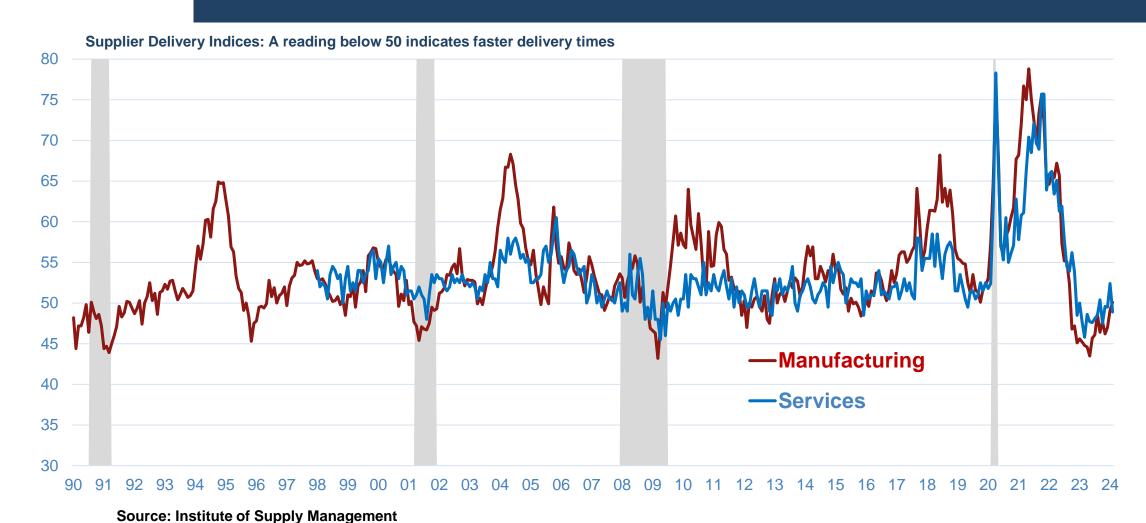


Rent Increases Have Returned to Pre-Pandemic Levels



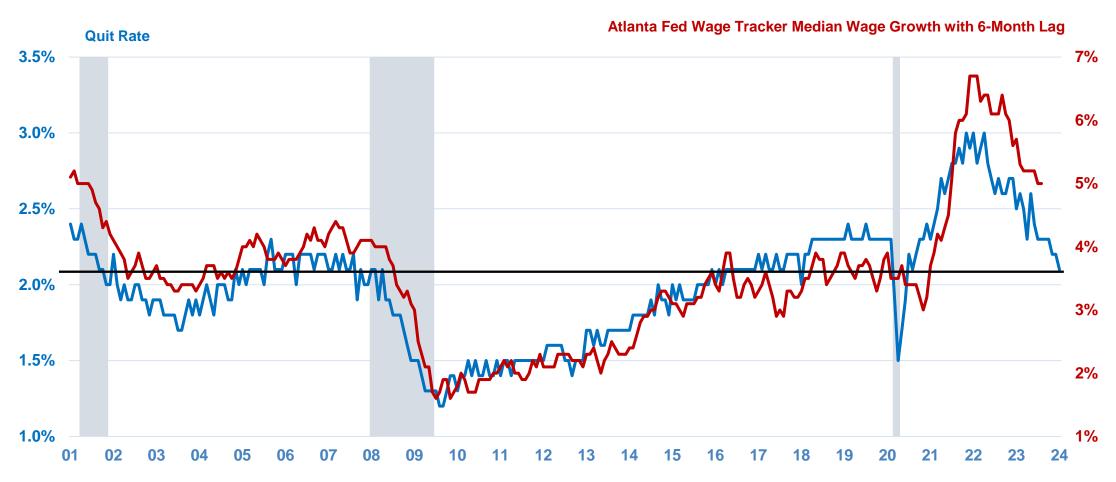


Supplier Delivery Times Are Back to Normal



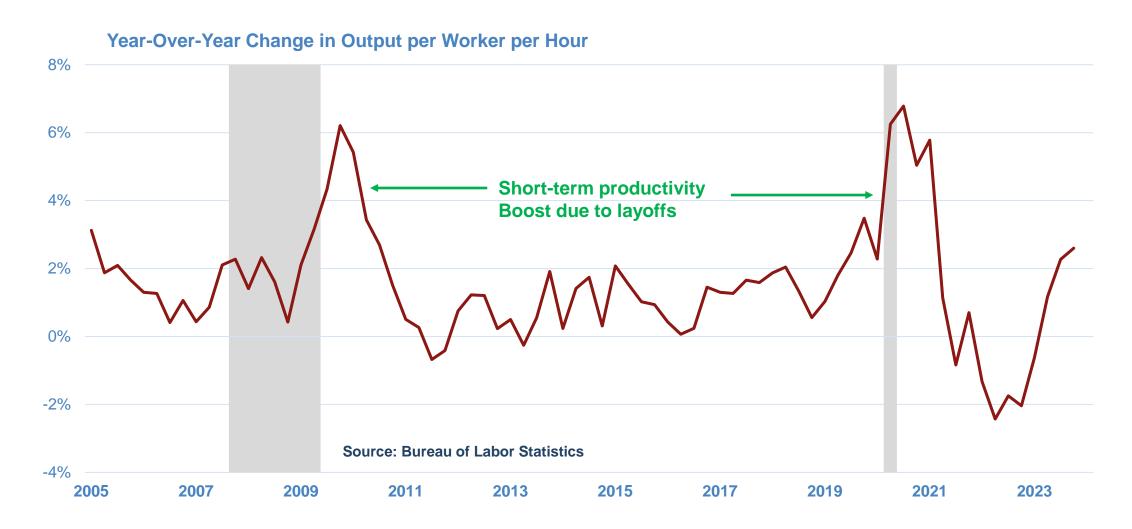


Where the Quit Rate Goes, Wages Follow



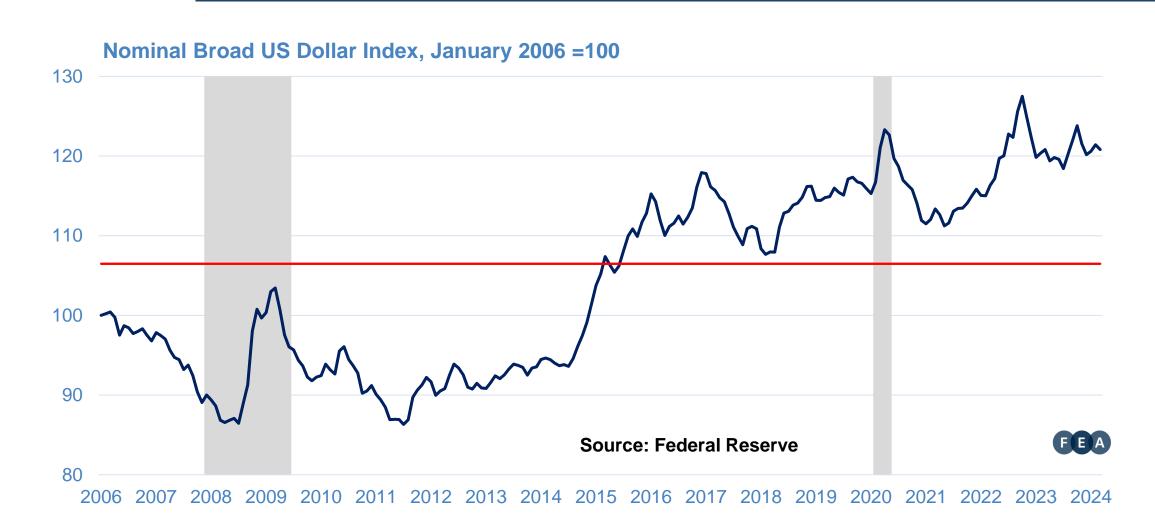


Has Productivity Turned the Corner?



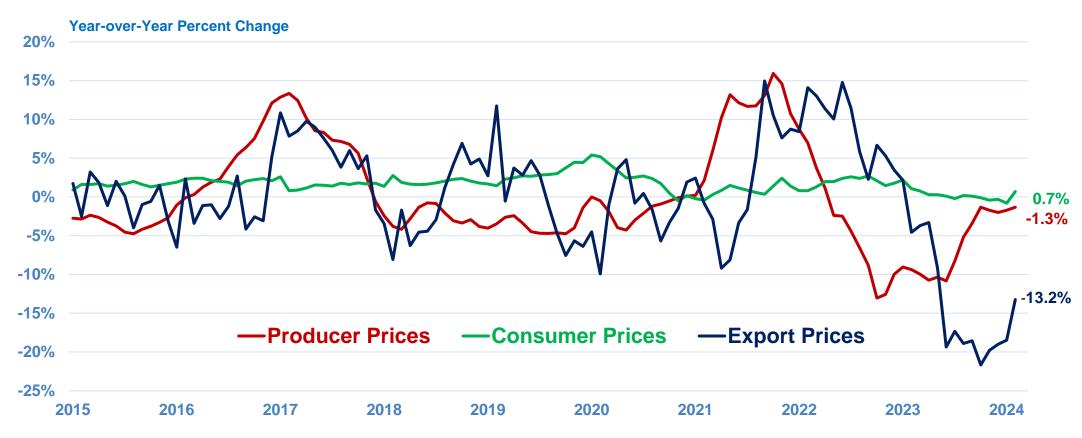


The Trade-Weighted Dollar is 13% Above Its Long-Term Average





China is Exporting Deflation



Source: Chinese National Bureau of Statistics



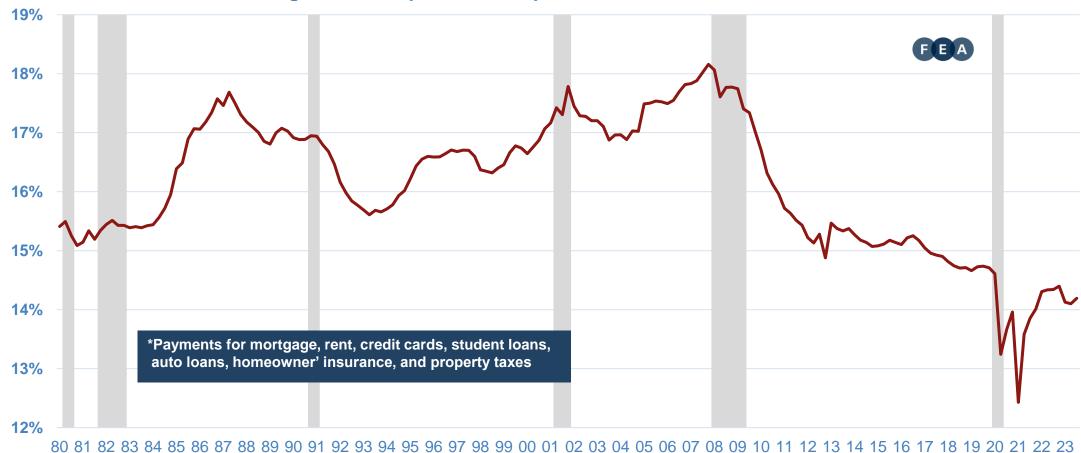
Labor Market Eased, but Remains Strong





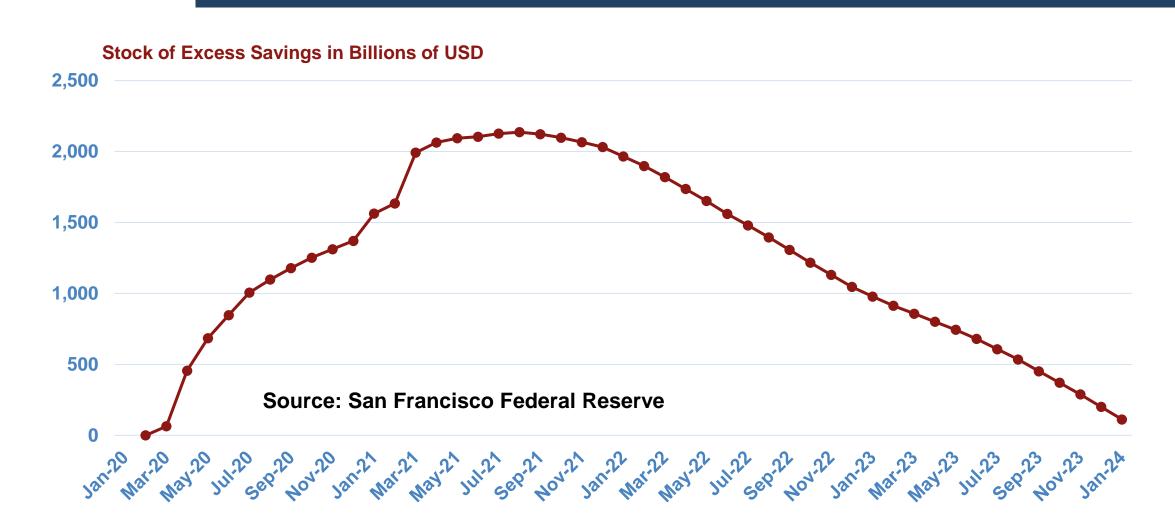
US Household Balance Sheets Are In Great Shape

Household Financial Obligations* as a percent of Disposable Personal Income



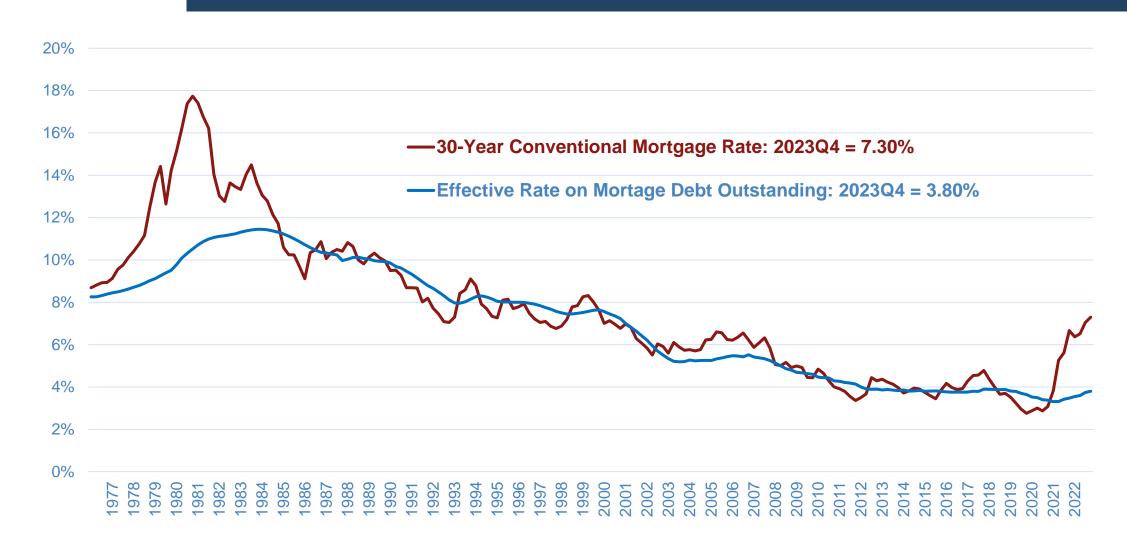


Excess Saving of US Households Dave Declined to \$112B



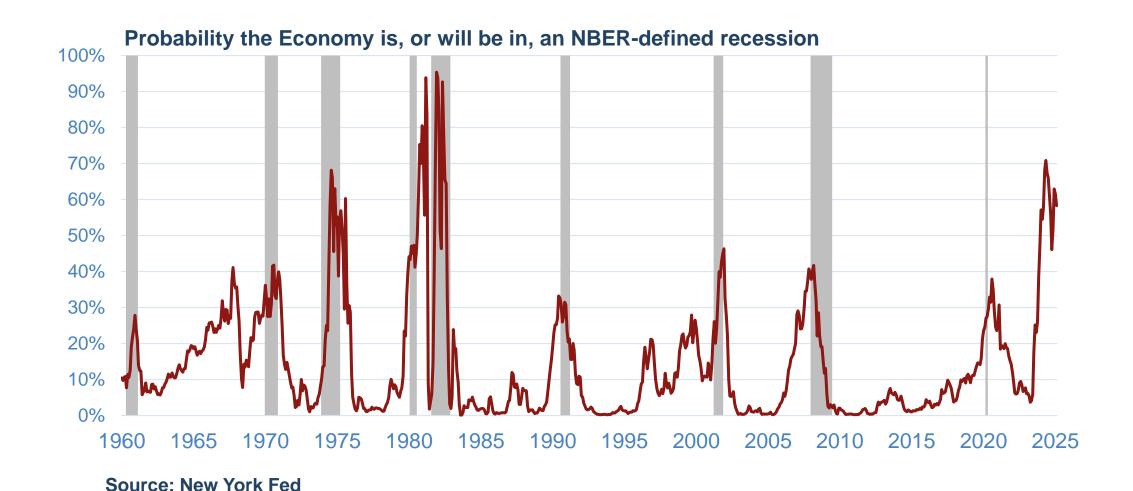


Higher Mortgage Rates Are Not Affecting Most Households





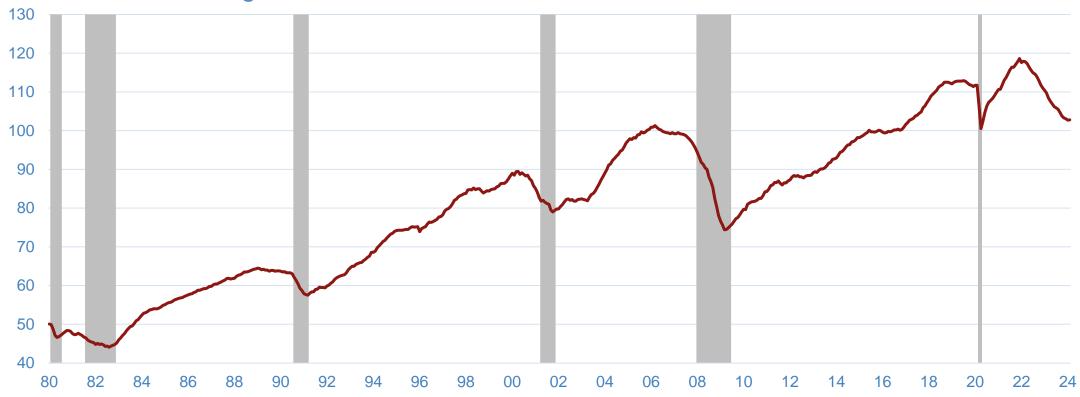
New York Fed Indicator Shows a 58% Chance of Recession Within Next Year





The Index of Leading Indicators Recorded First Positive Reading in 24 Months in February

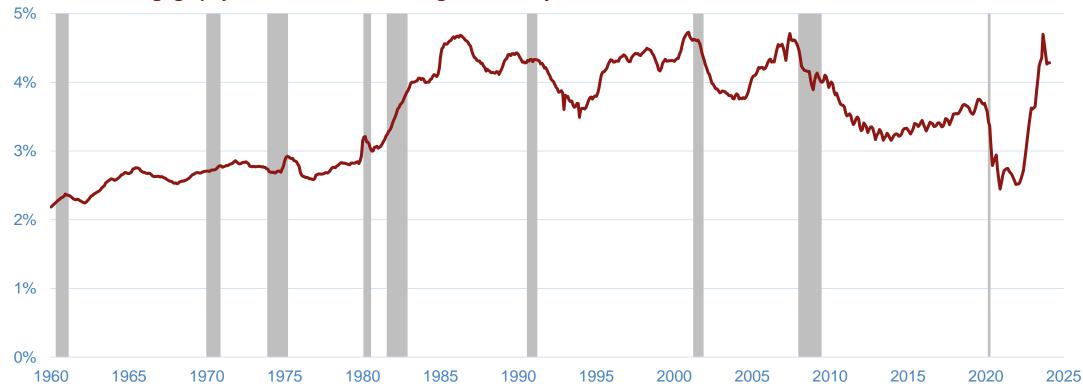






Household Interest Payments on Non-Mortgage Debt Have Surged

Non-mortgage payments as a share of wage and salary income



Source: Bureau of Economic Analysis



The 10-Year/3 Month Yield Curve Has Been Inverted

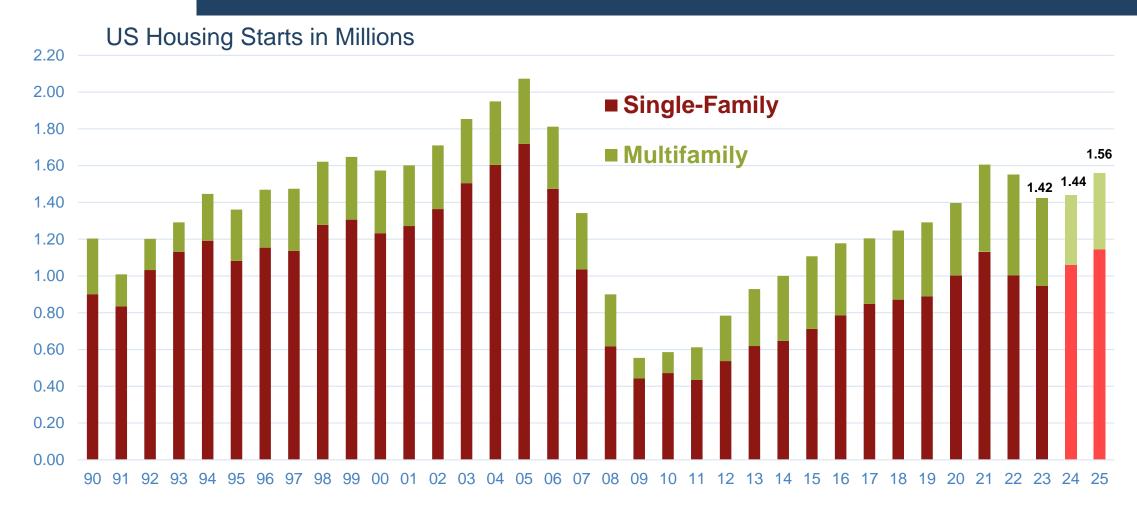
Yield Spread: Ten-Year Treasury minus Three-Month Treasury Bill



Source: Federal Reserve



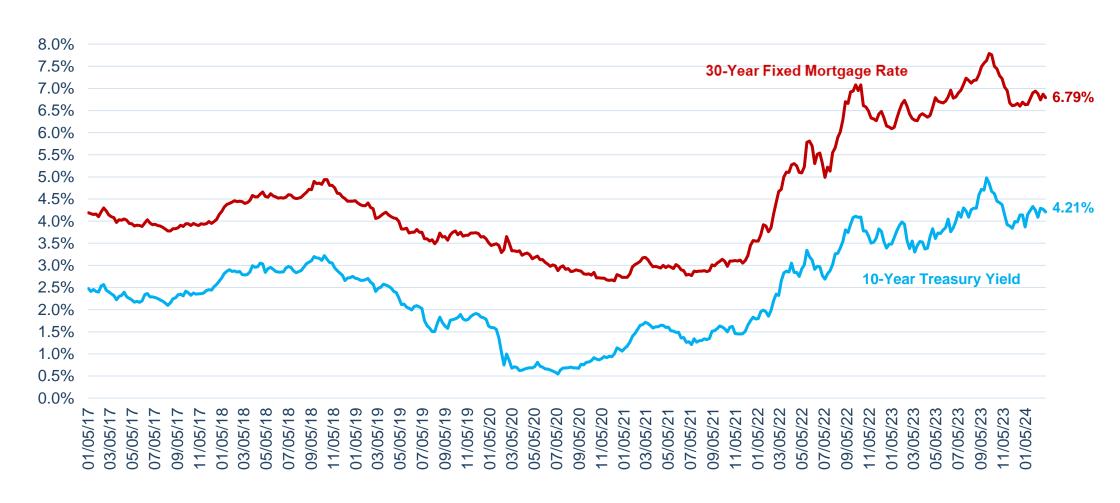
Housing Starts Declined by 9% in 2023 and Tick Up Slightly in 2024



Source: Census Bureau, FEA Forecasts

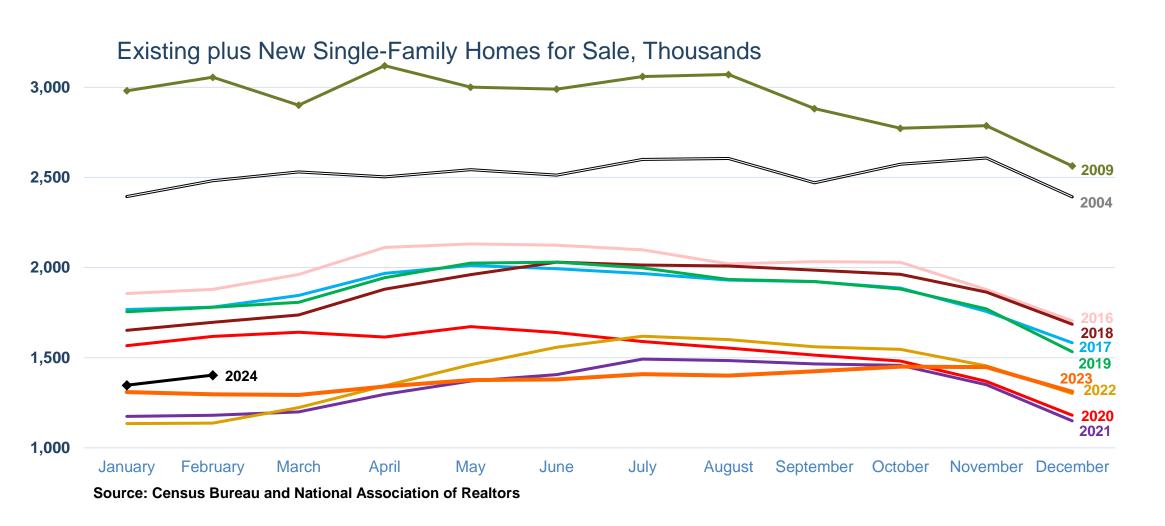


Mortgage Rates Have Come Off Their Peak



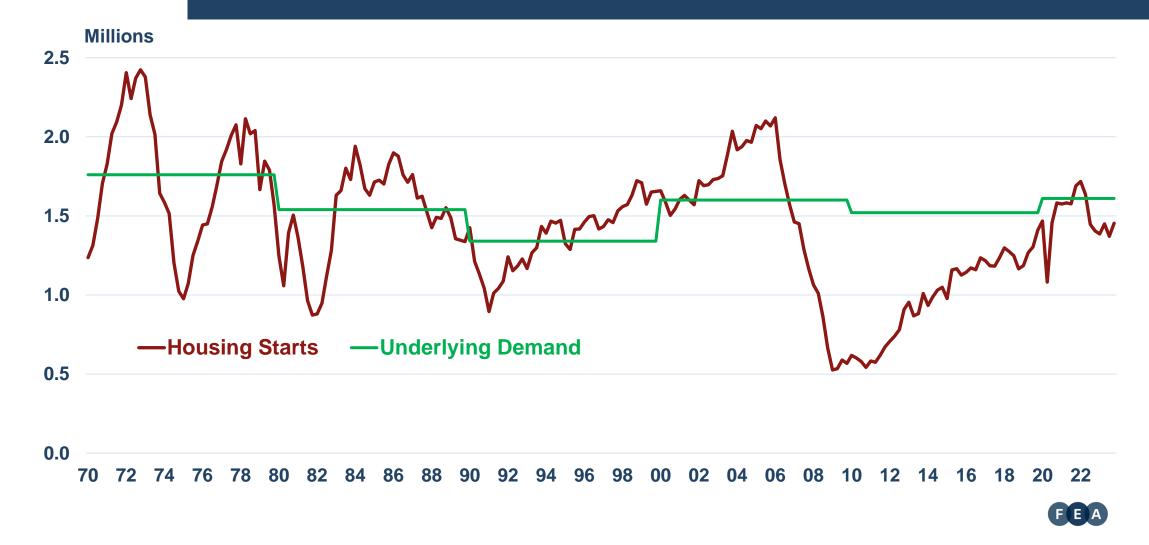


Home Inventories Rising from Rock Bottom Level



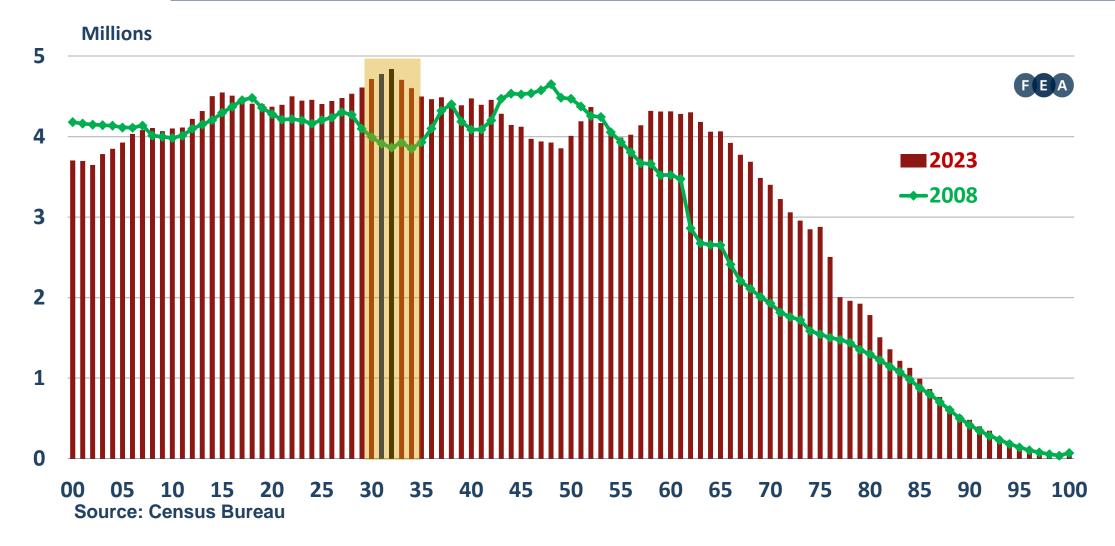


US Housing Starts Have Been Well Below Underlying Demand For More Than A Decade





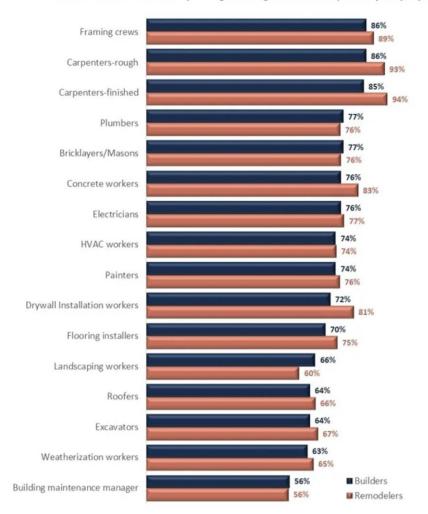
2008 – Strong Demographic HEADWIND 2023 – Strong Demographic TAILWIND



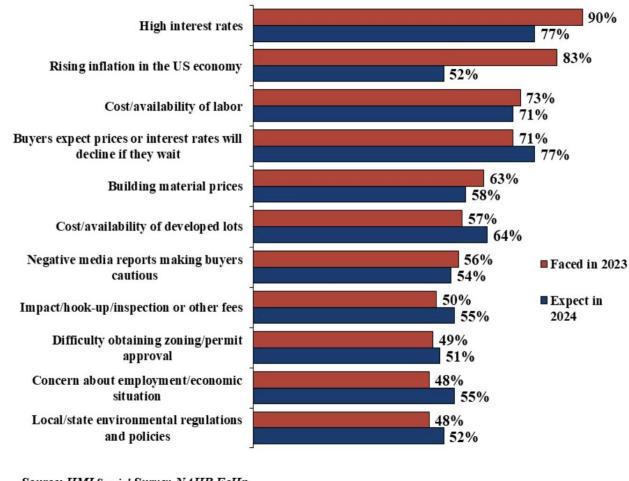


Supply Side Constraints Will Prevent Housing Starts From Rising More

Percent of Builders & Remodelers Reporting Shortages of LABOR (Directly employed)

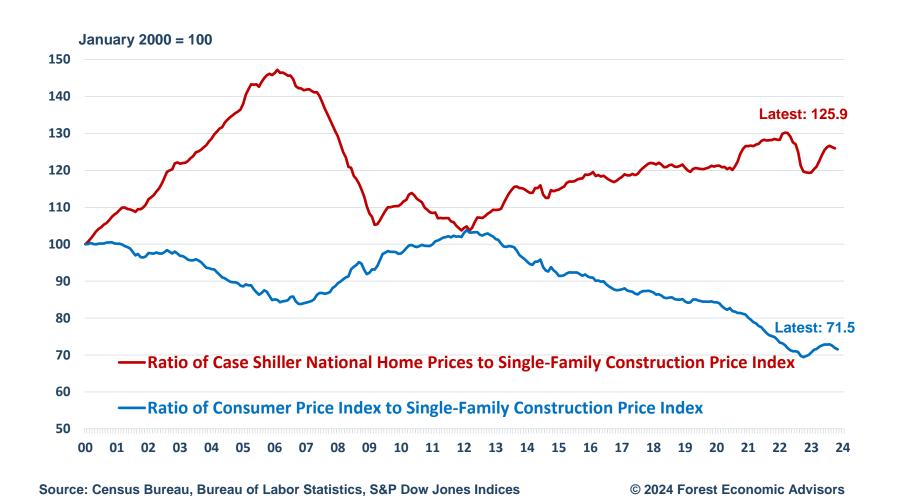


Key Problems of 2023 and Expected Issues for 2024



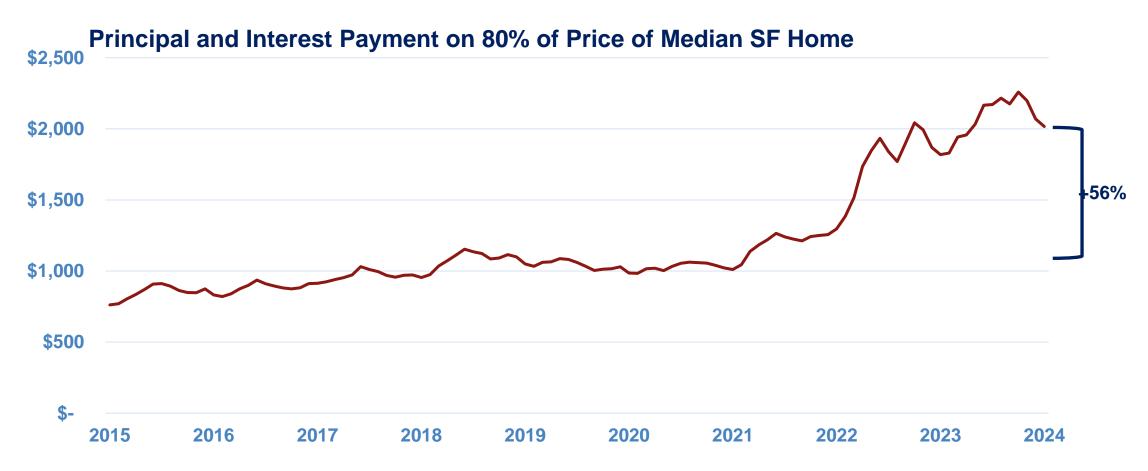


Single Family Construction Costs Have Beat Inflation But Not Home Prices





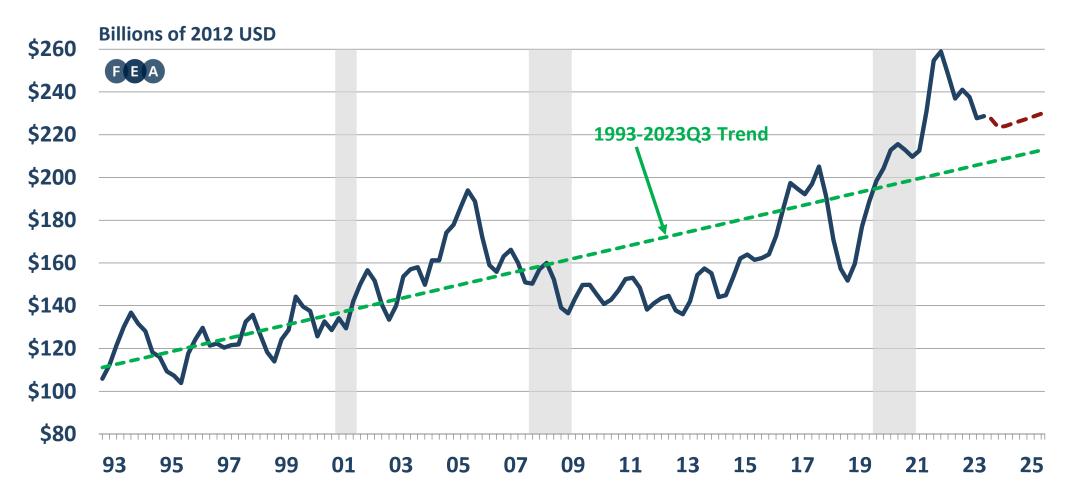
Homes Are Still Not Affordable



Source: National Association of Realtors, FEA estimates and calculations



Improvement Expenditures Will Remain Elevated

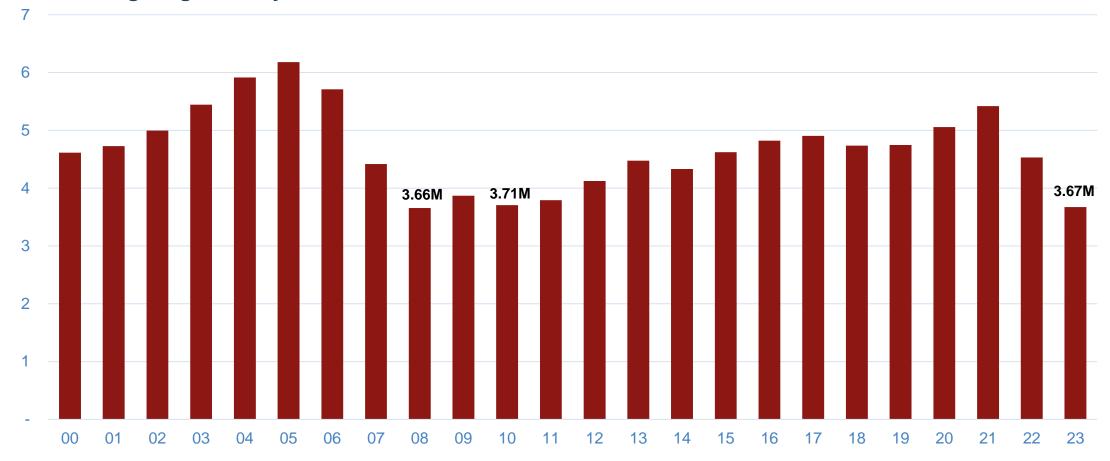


Source: Census Bureau, Bureau of Economic Analysis, FEA calculations



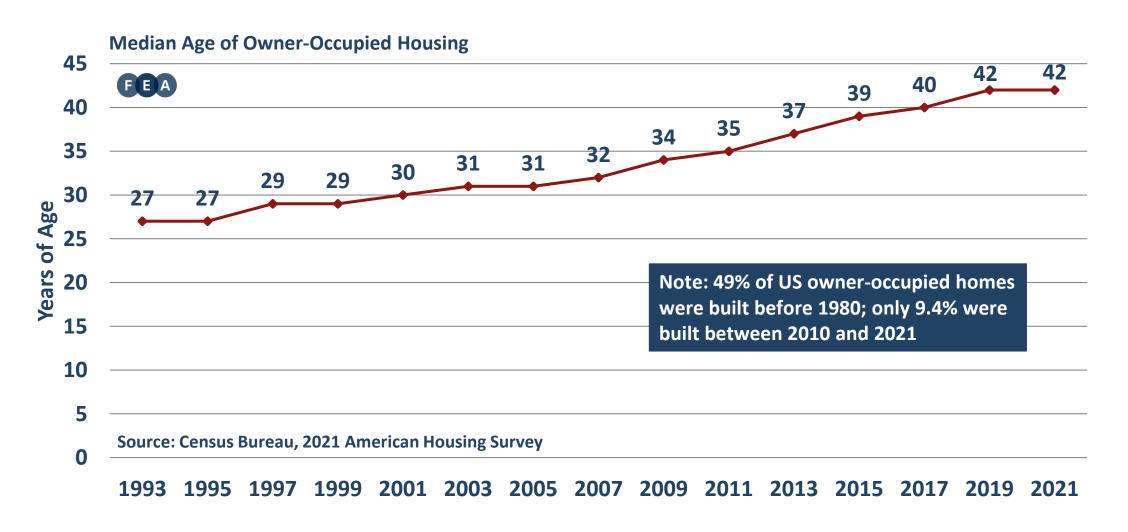
Existing Single-Family Home Sales Were Close to Great Recession Levels in 2023

Existing Single-Family Home Sales in Millions



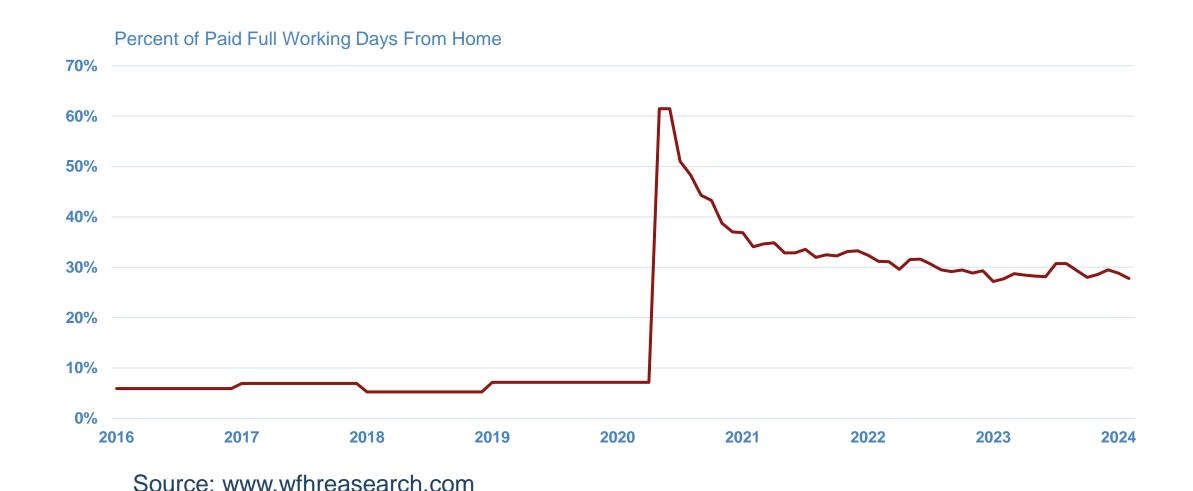


The US Housing Stock Has Aged Considerably



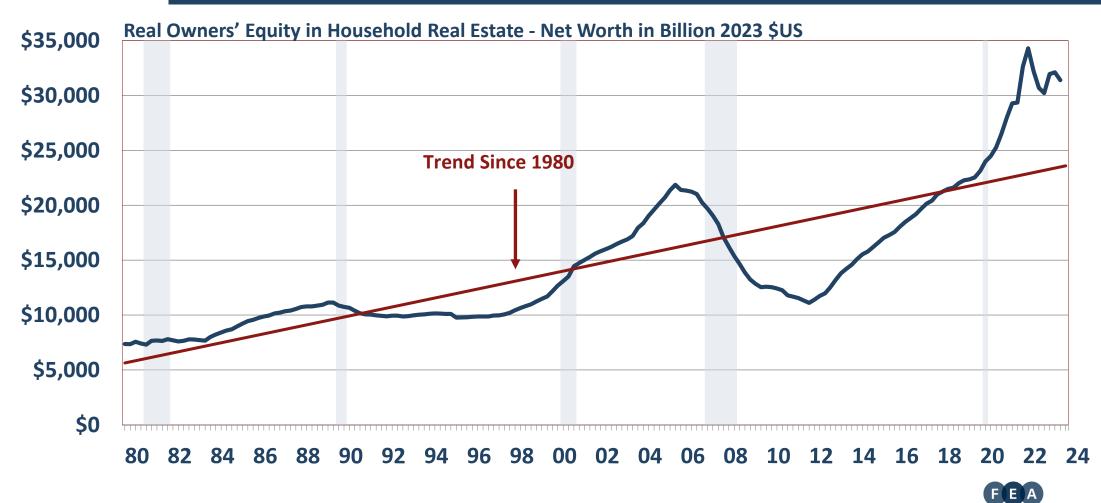


Elevated Work From Home Will Increase Demand For Residential Space





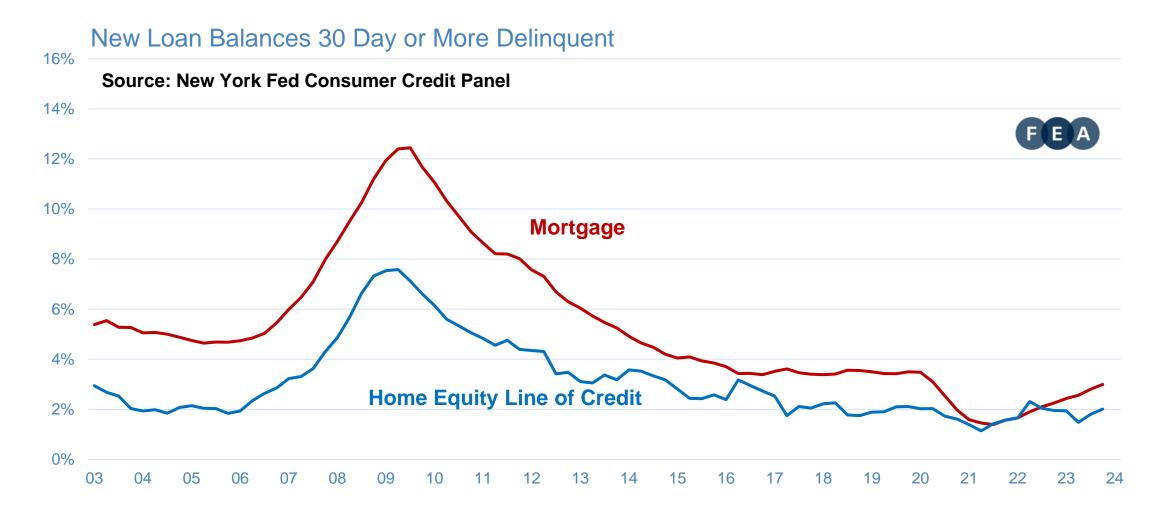
Huge Increase in Home Equity Should Support Improvements



Source: Federal Reserve, FEA calculations

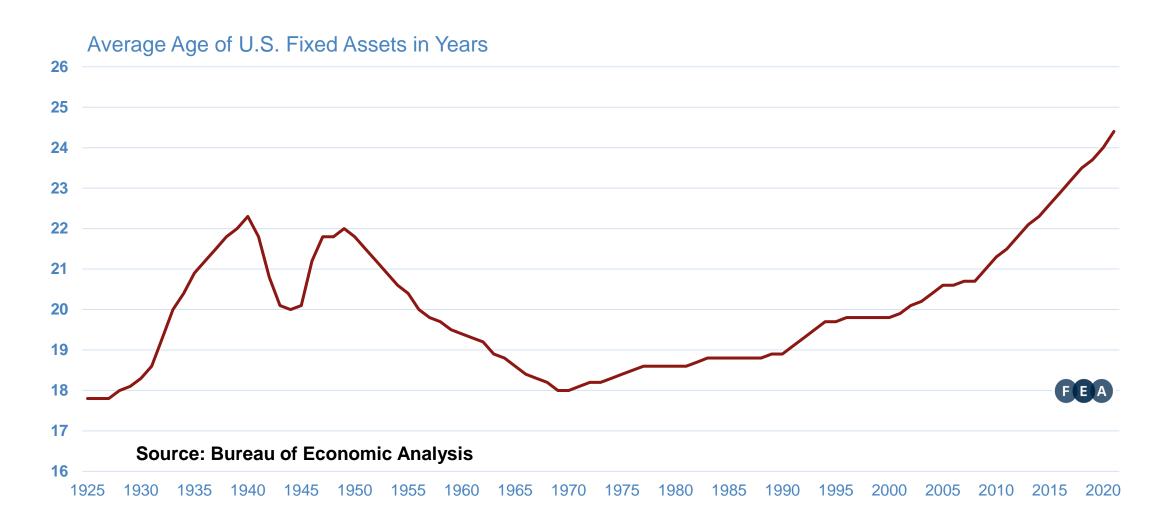


Home Loan Credit Quality is Excellent



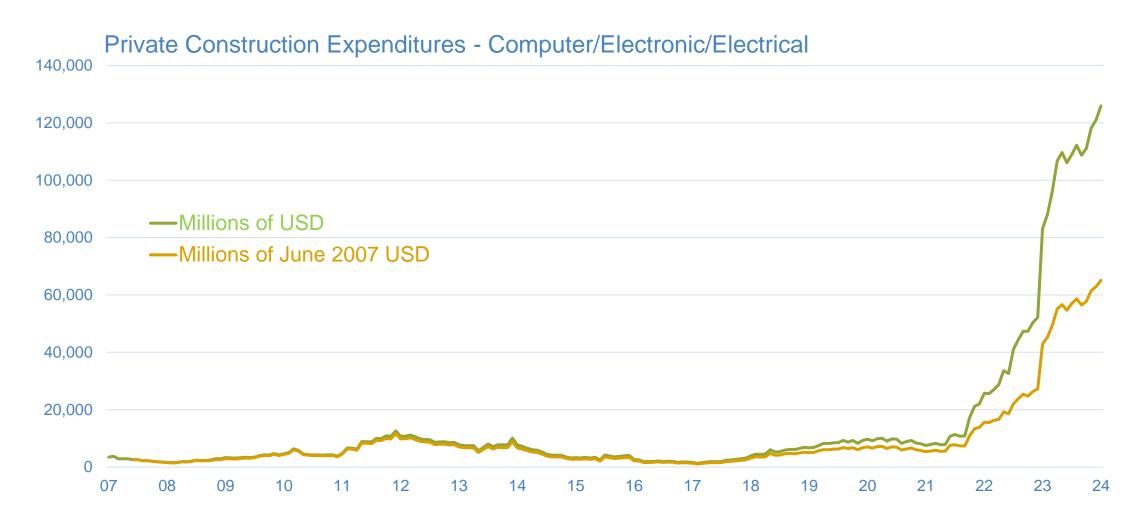


The US Capital Stock is Old



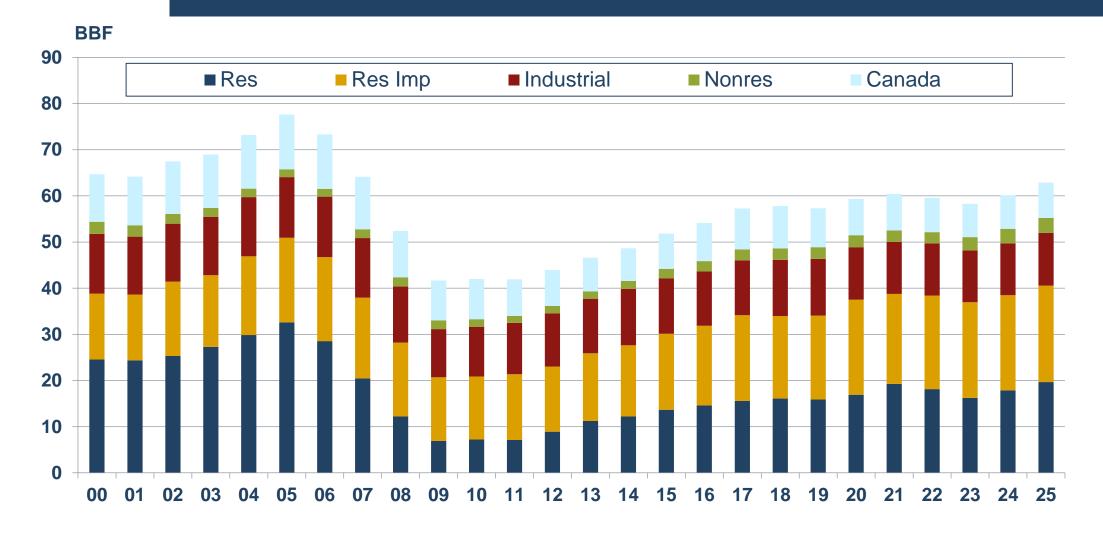


Tech Industry is Aggresively Re-Shoring Back to US



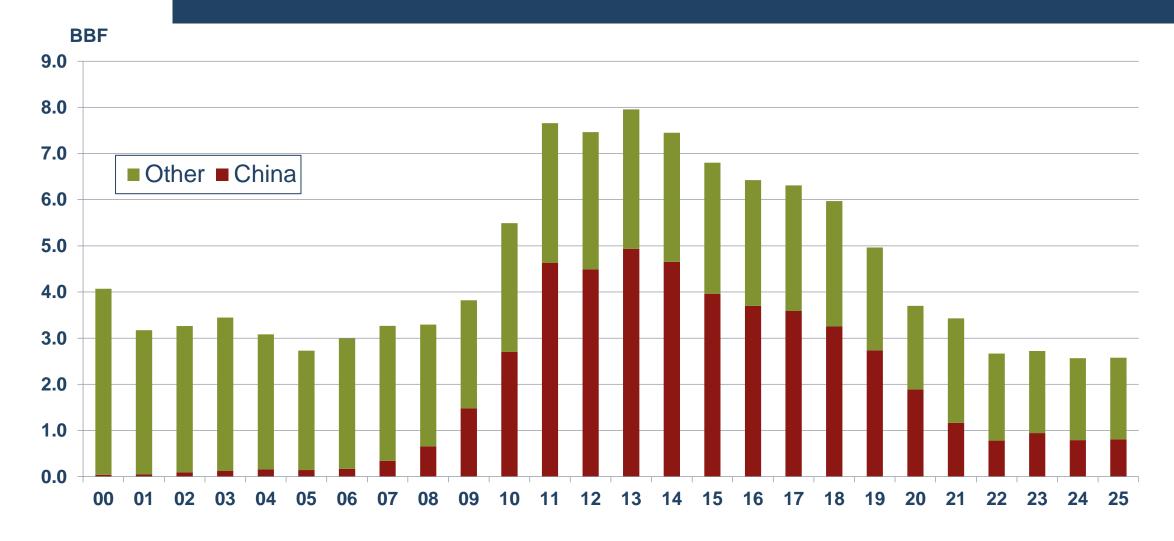


Lumber Consumption Will See Moderate Growth In 2024 And More Robust Growth In 2025



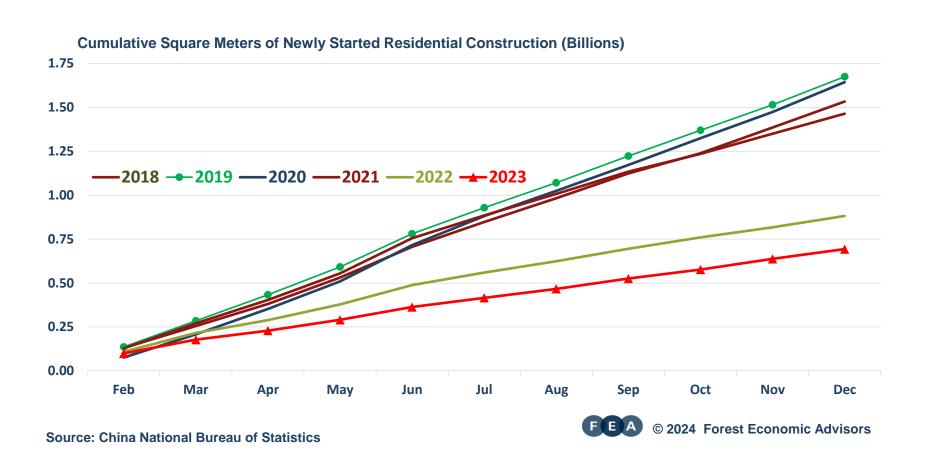


North American Lumber Exports Will Remain Weak



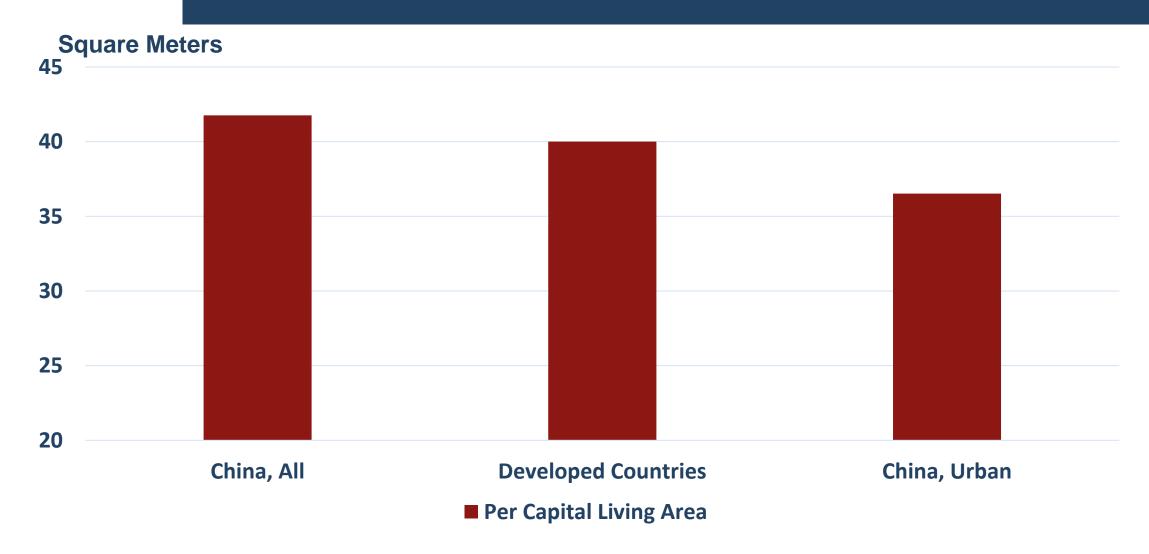


Chinese Residential Construction is About Half of Pre-Pandemic Level



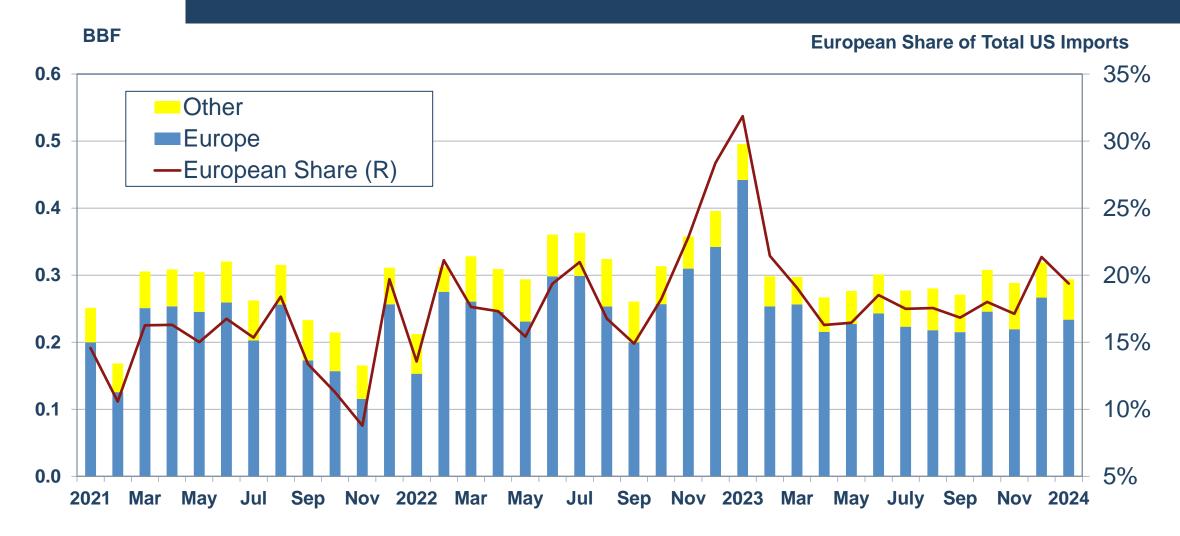


China Has Already Reached Developed Country Levels of Per Capita Floor Space





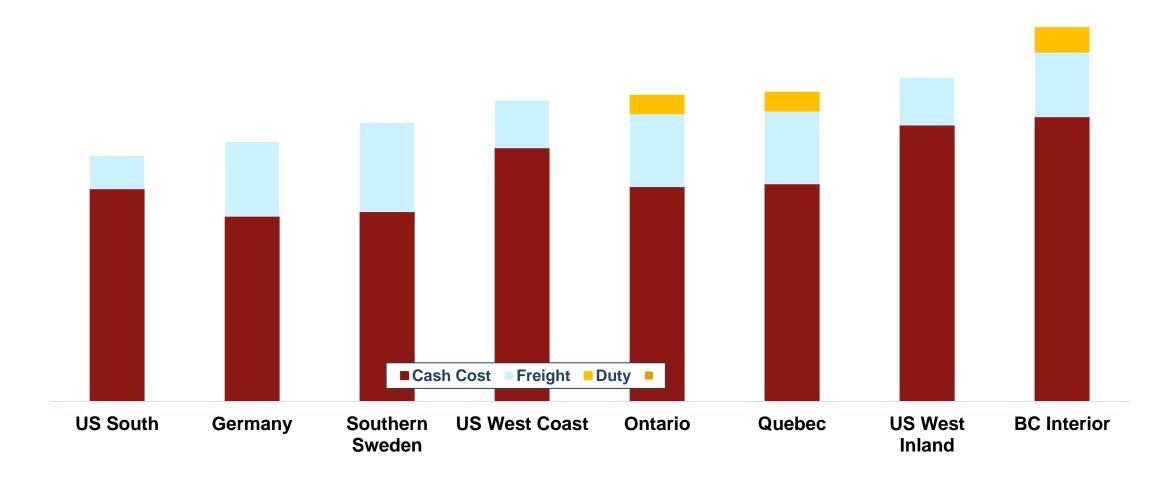
European Imports Have Fallen, But Will Remain Elevated





European Producers Are At The Low End Of The Cost Curve

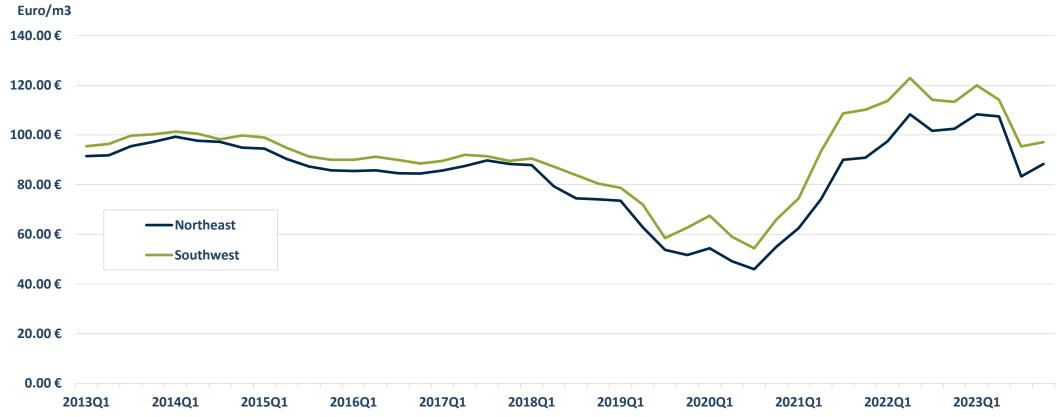
\$/MBF, Delivered Houston





Sawlog Prices in Central European Dropped over most of 2023, but Improved in Recent Months

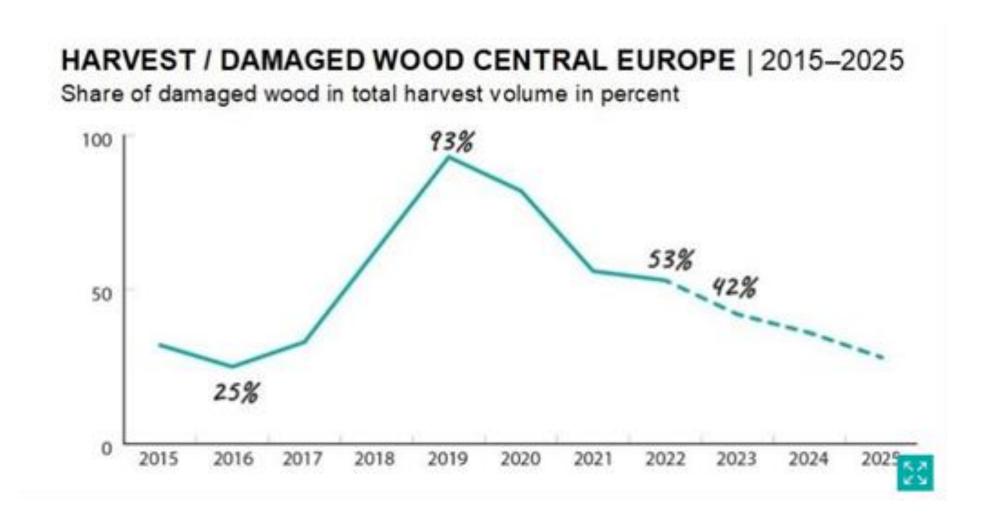




Source: EUWID

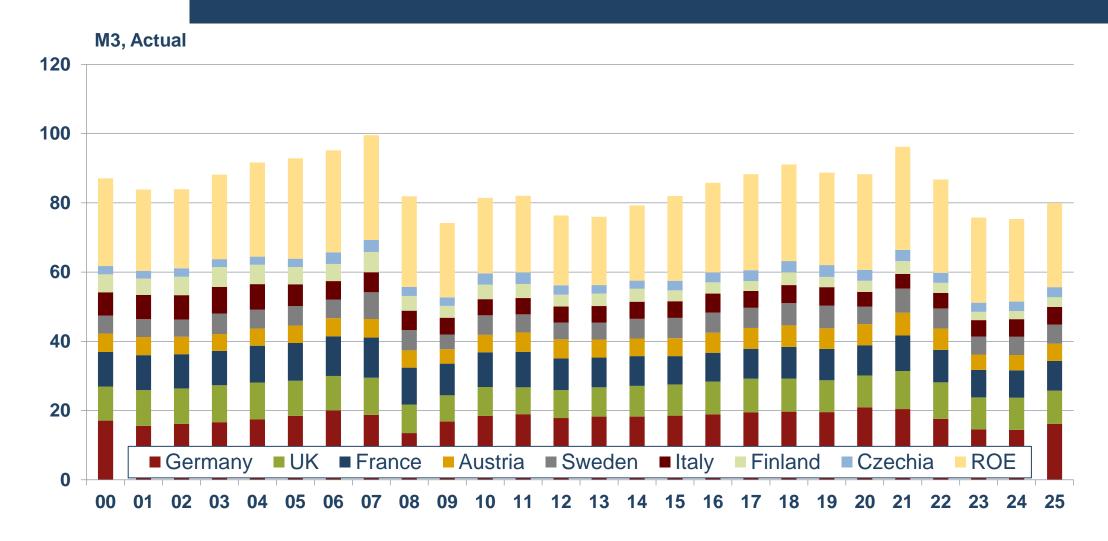


Sawlog Prices in Central European Will Remain Low



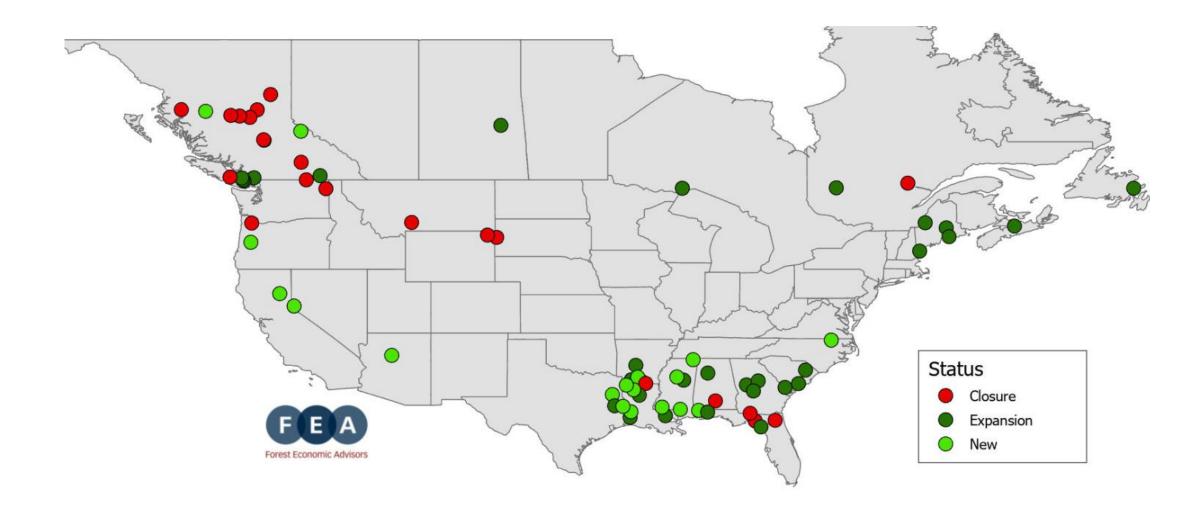


European Consumption Has Plunged



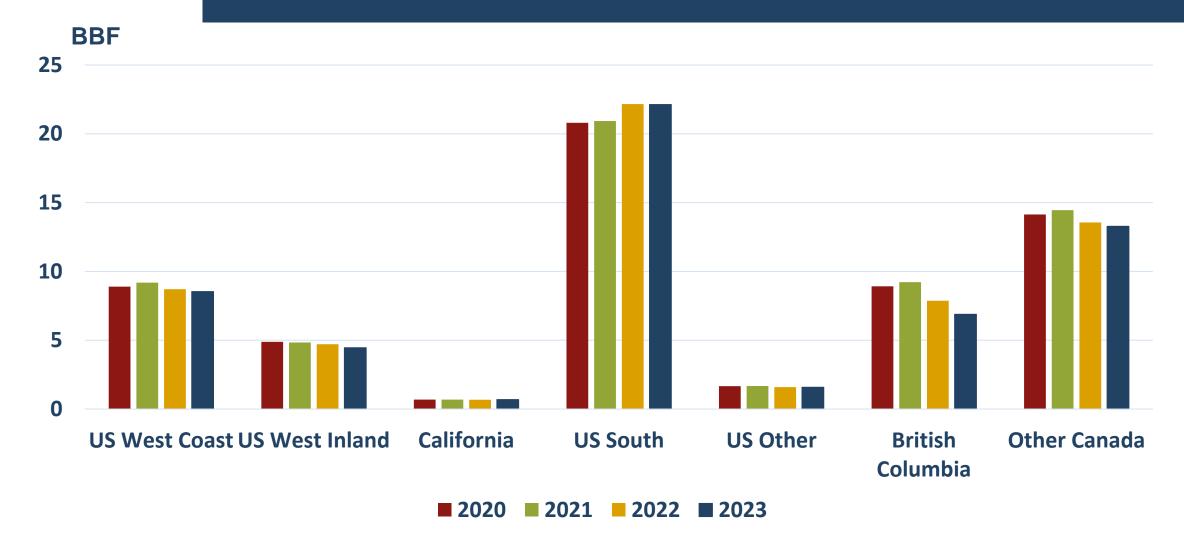


Softwood Lumber Capacity Changes Since 2022



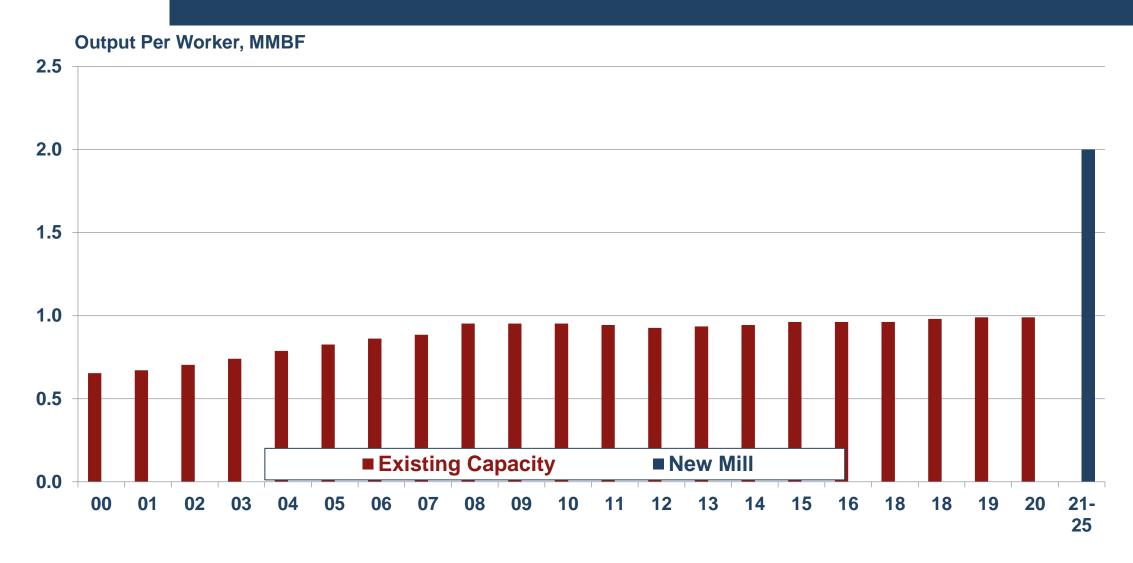


Despite Record High Prices And Heavy Investment In New Capacity, Production In Most Regions Fell



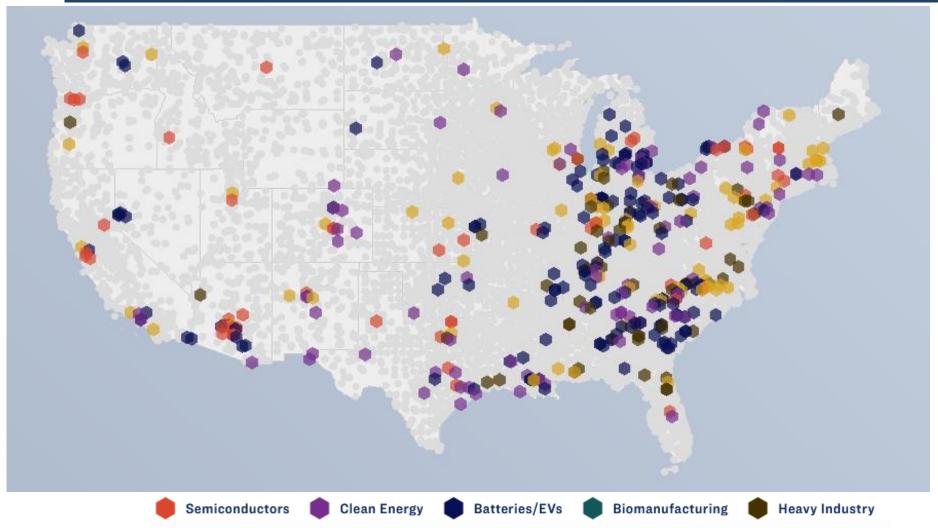


A Modern Sawmill Needs Skilled Labor





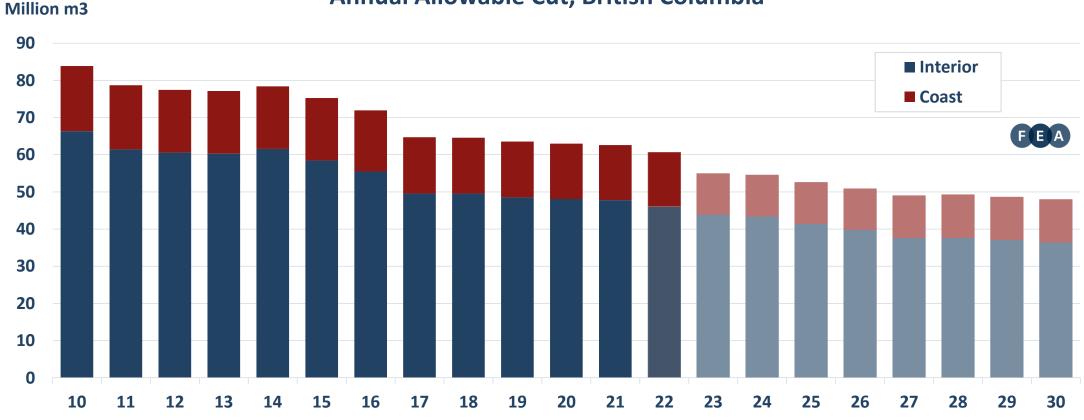
Private Industry Is Investing \$688 Billion In Advanced Manufacturing





Multiple Factors Will Constrain Timber Harvest and Lumber Production in British Columbia

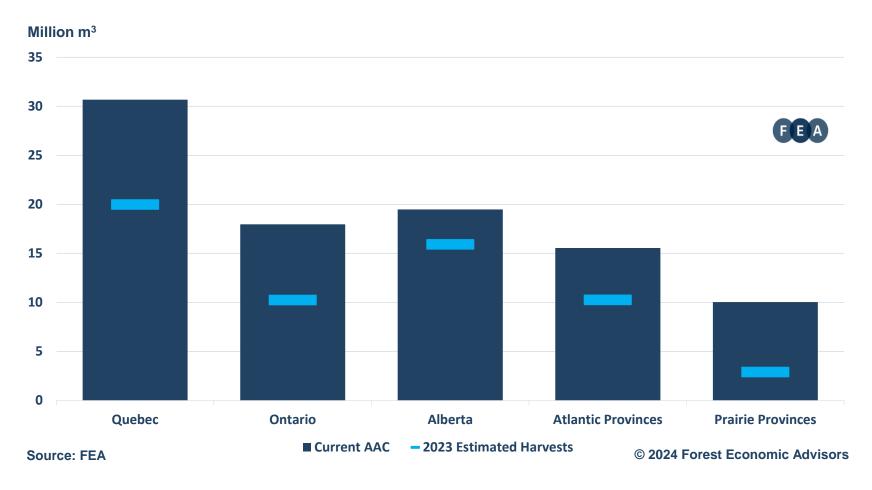




Source: BC Ministry of Forests, Land, Natural Resource Operations and Rural Development, FEA



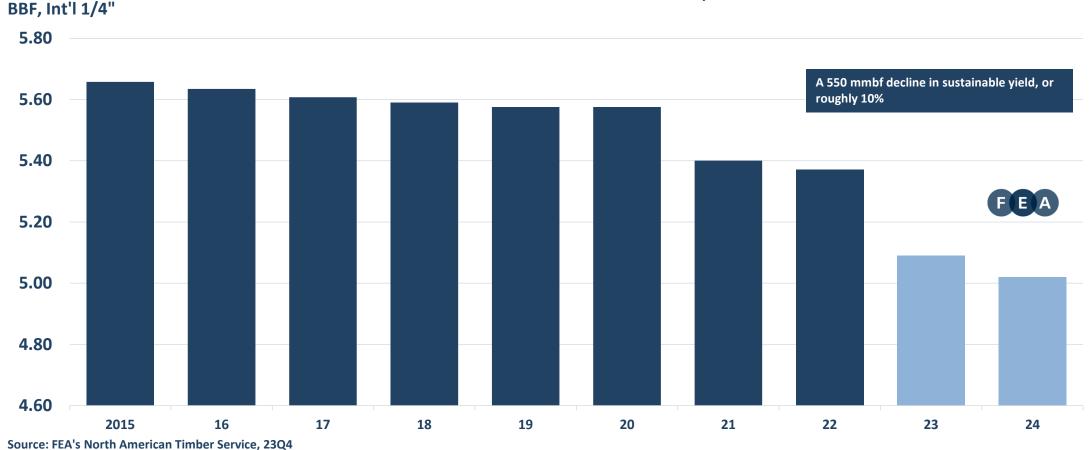
Opportunities to Increase Harvest Levels in Eastern Canada Will Be Increasingly Limited





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

Private Softwood Sawtimber Sustainable Yield, US West Coast





The Softwood Sawtimber Supply Conditions in the US South Is Much Different







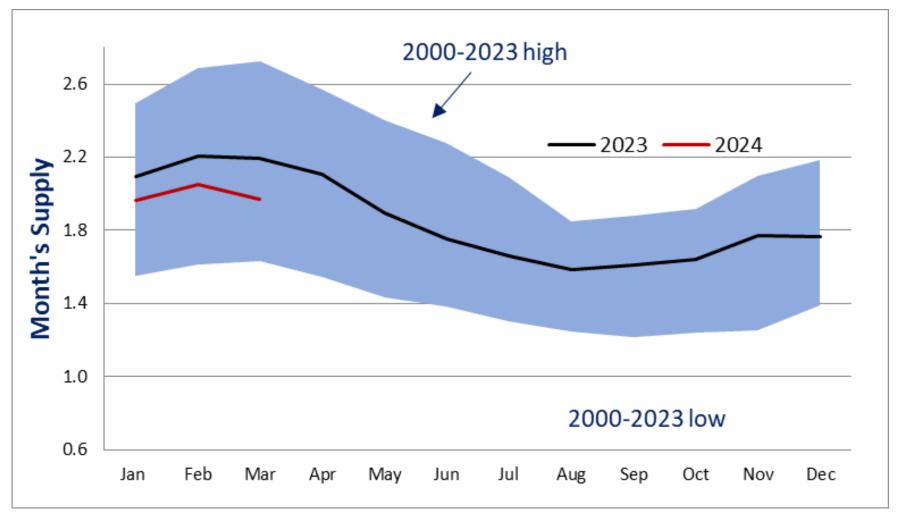
Eastern SPF Prices Will Trend Higher As Supply Contracts





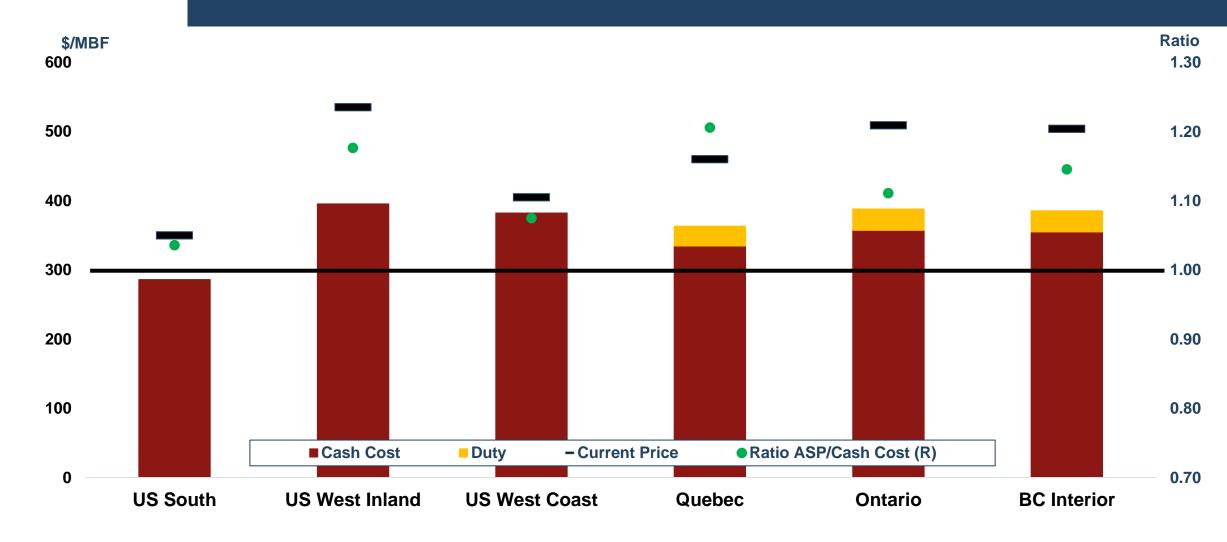


Inventories Remain Are ElevatedNorth American Inventory/Consumption Ratio & Range



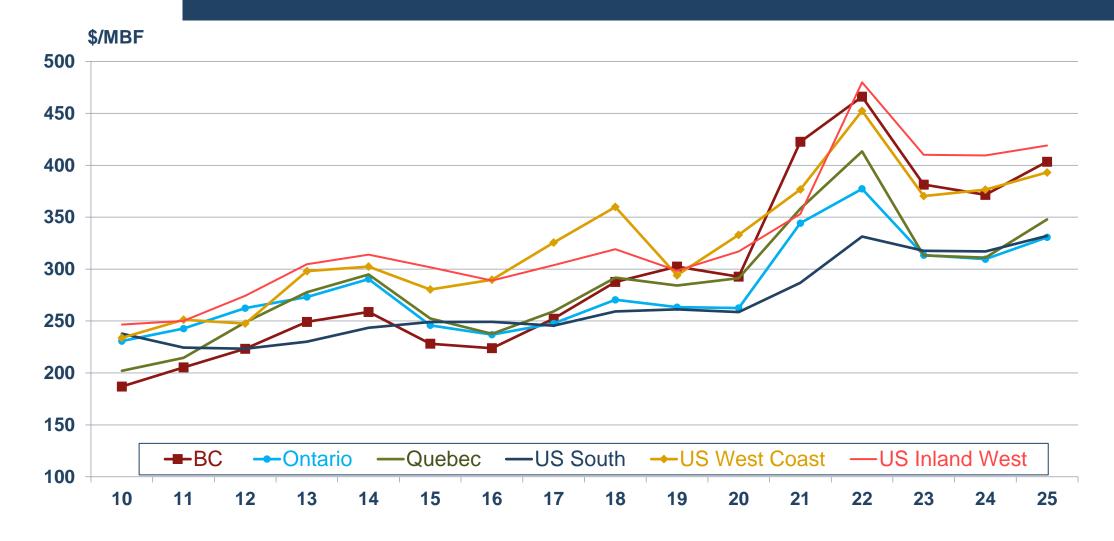


Margins Have Improved With Falling Costs and Rising Prices





Lumber Costs Have Slipped, But Remain Elevated





Take Home Points

- Lumber markets will at most see modest growth over the next 12-15 months.
- Capacity is expanding rapidly, but achieving nameplate output is difficult.
- Exports will remain weak.
- Costs are elevated, and will hold prices higher.



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