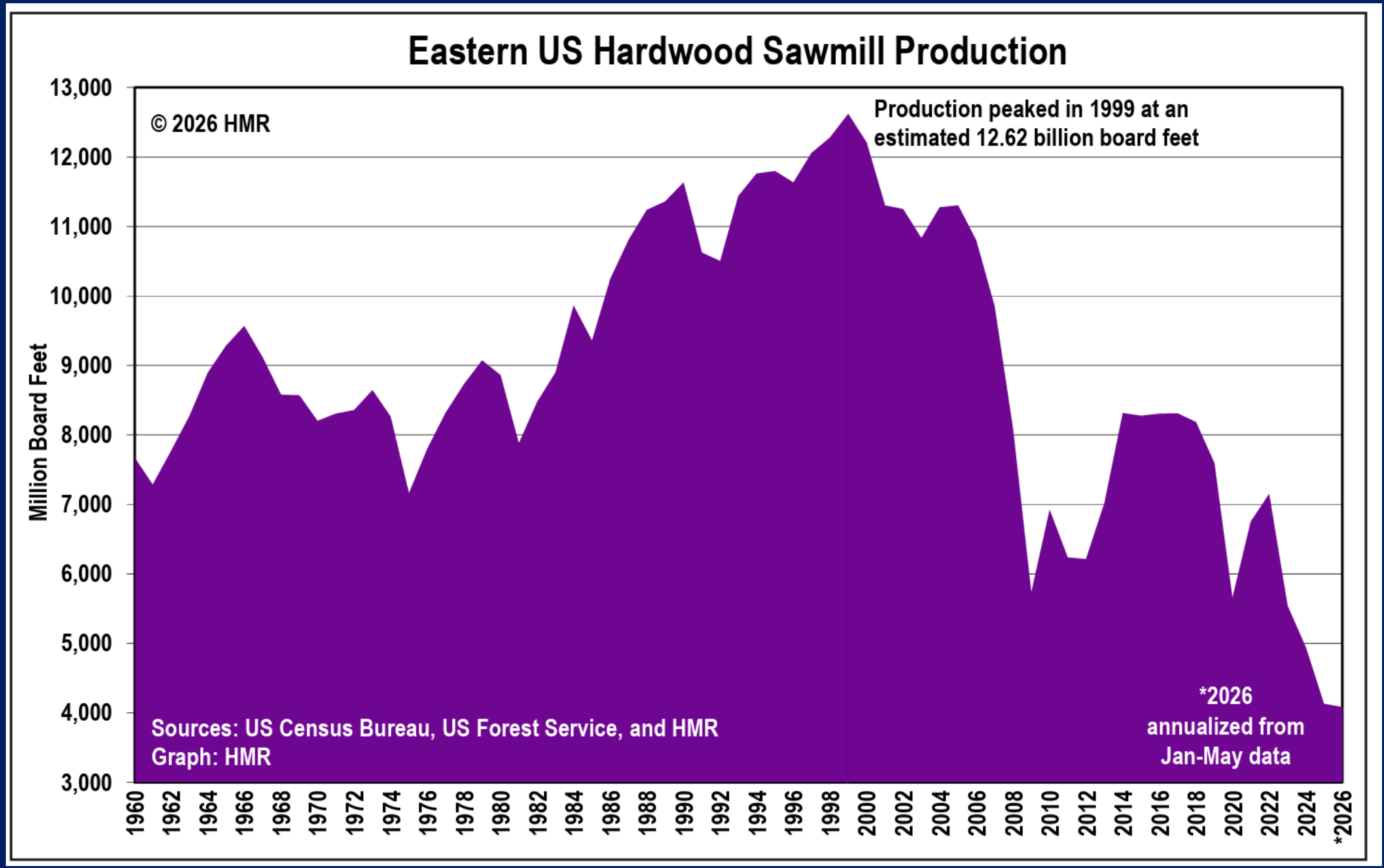
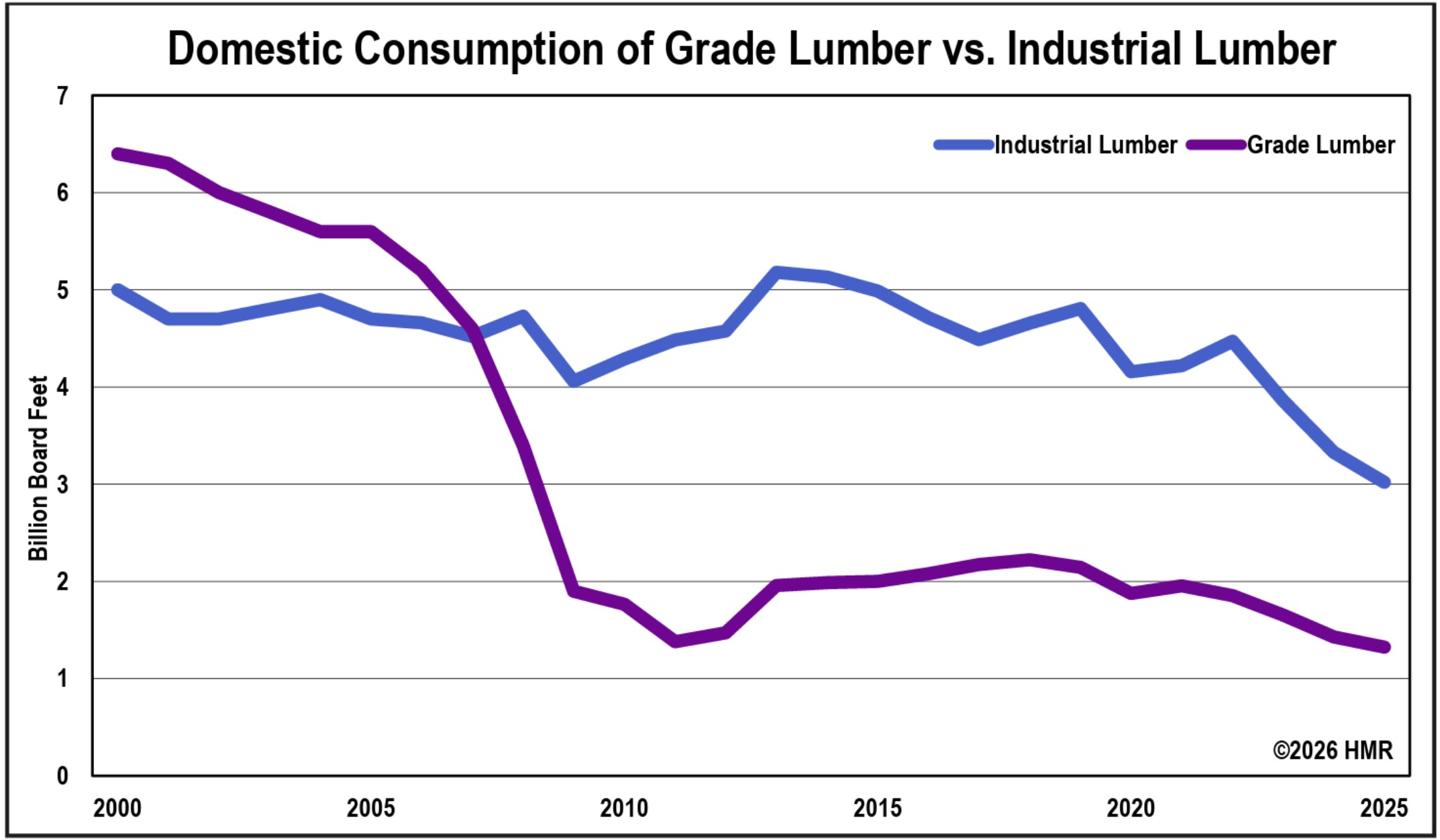
Uncharted Territory: American Hardwoods in a Chaotic World

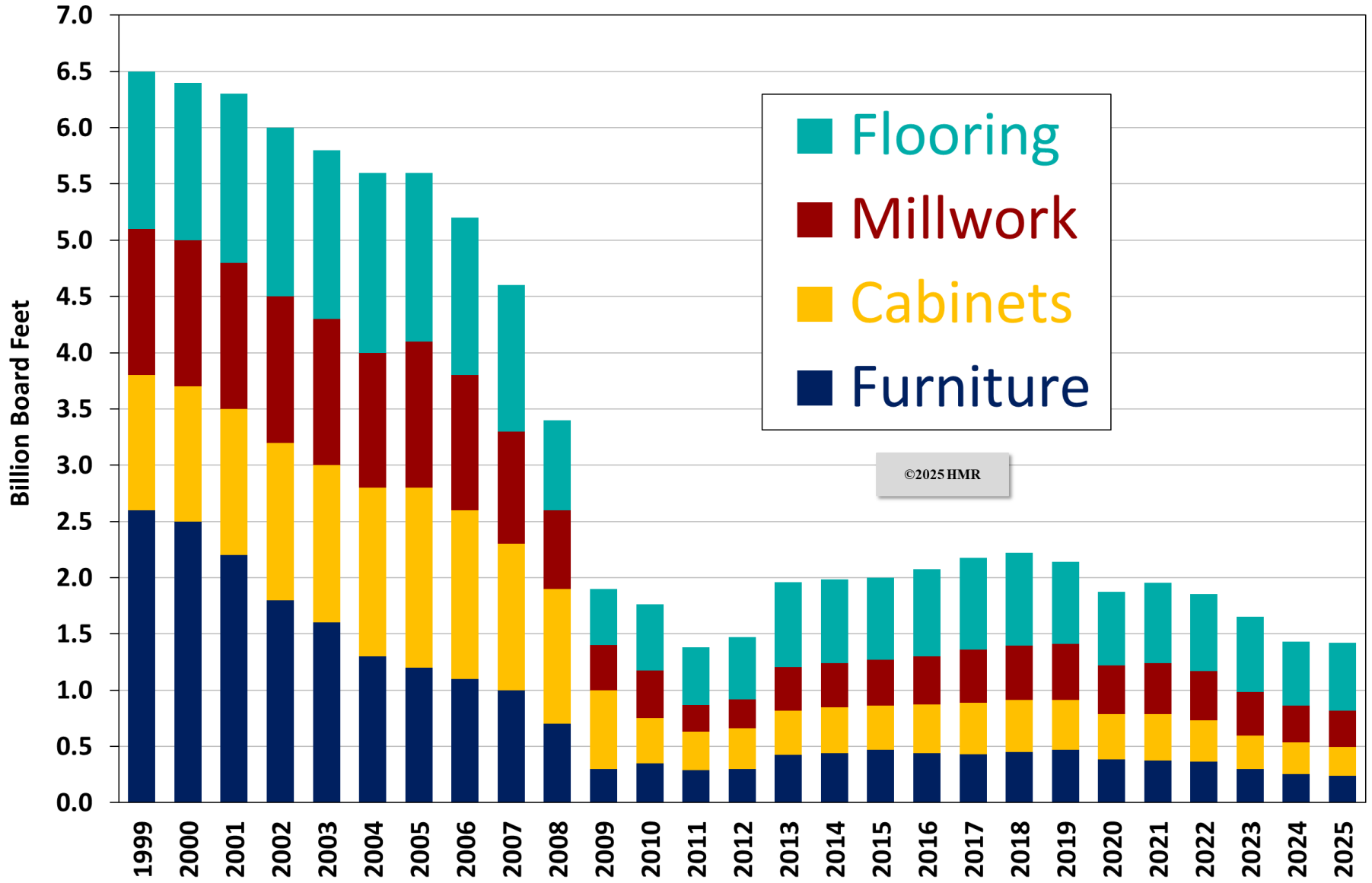


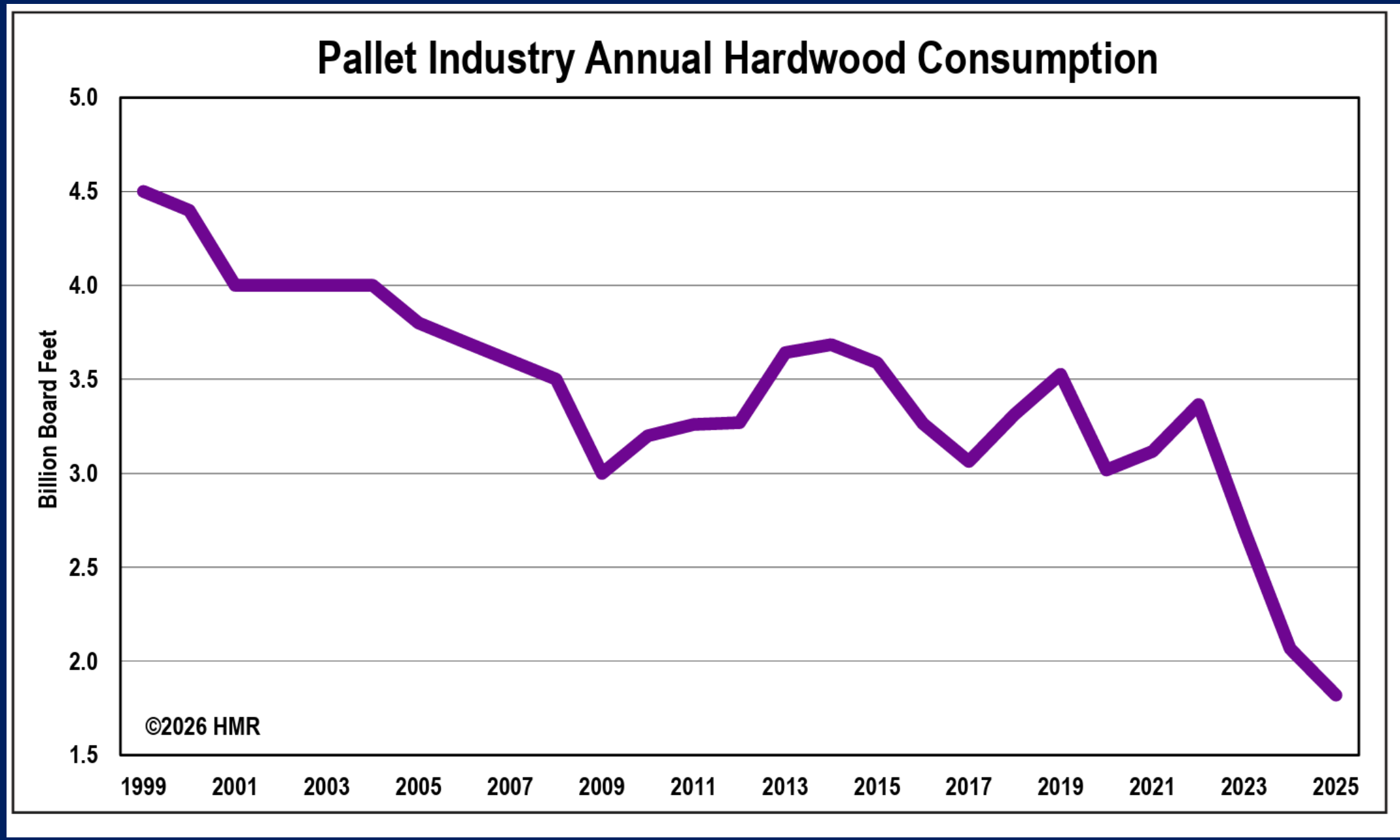
Michael Snow, Executive Director
American Hardwood Export Council
November 2026


Eastern US Hardwood Sawmill Production
© 2026 HMR
Production peaked in 1999 at an estimated 12.62 billion board feet
Million Board Feet
13,000
12,000
11,000
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
2024
*2026
Sources: US Census Bureau, US Forest Service, and HMR
Graph: HMR
*2026 annualized from Jan-May data

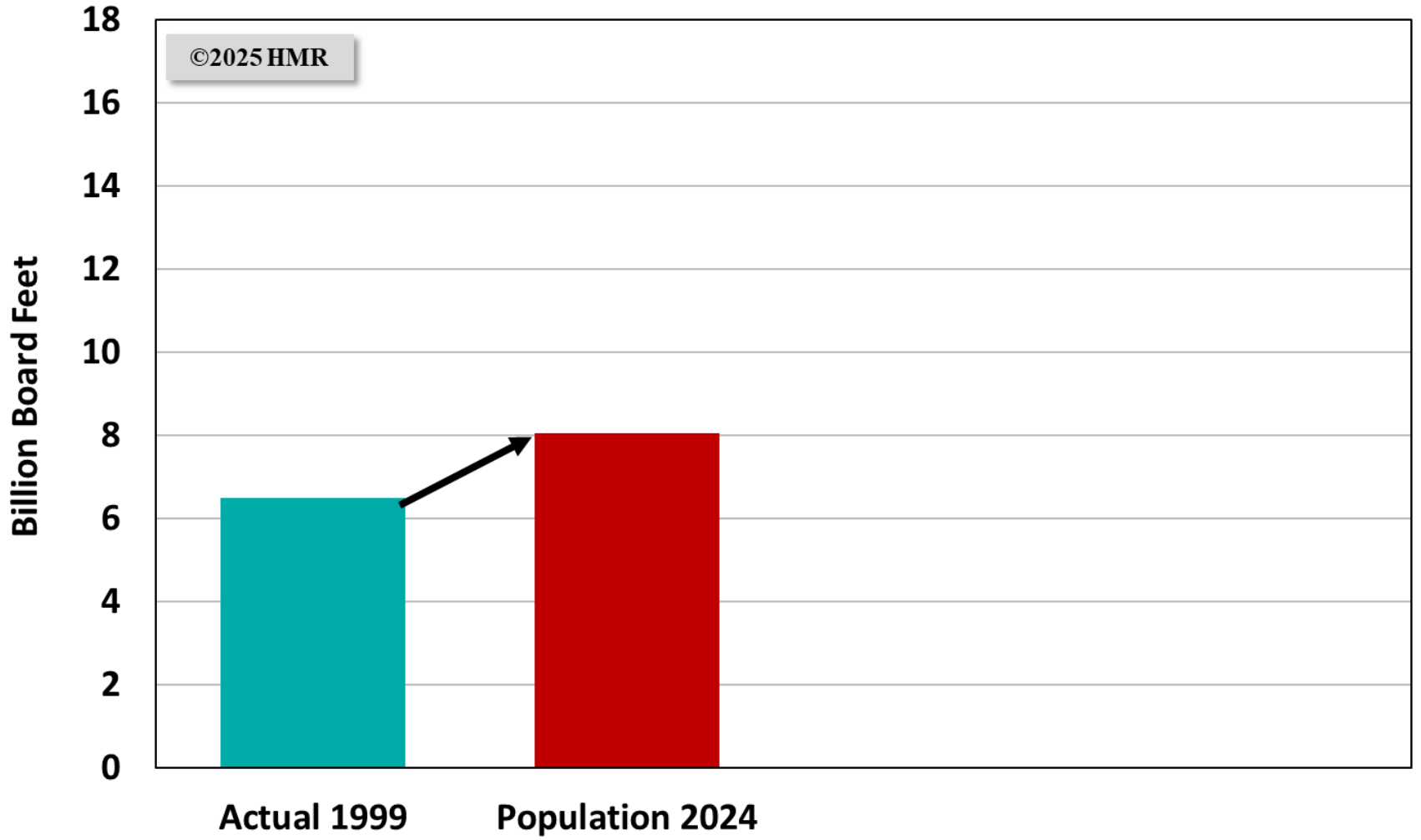

Domestic Consumption of Grade Lumber vs. Industrial Lumber
Billion Board Feet
7
6
5
4
3
2
1
0
2000
2005
2010
2015
2020
2025
Industrial Lumber
Grade Lumber
©2026 HMR

US Consumption of Hardwood Grade Lumber by Sector

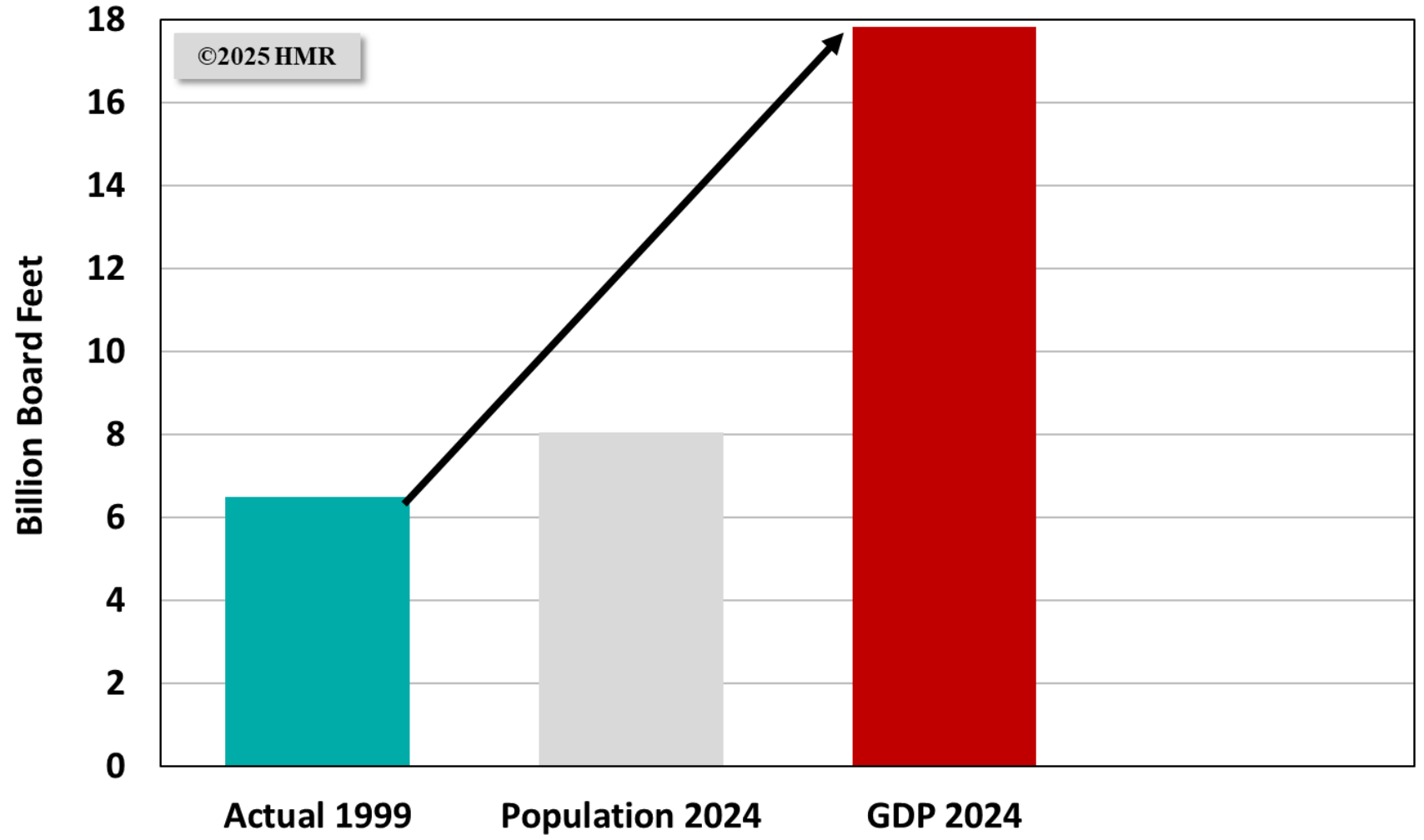



Pallet Industry Annual Hardwood Consumption
Billion Board Feet
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
©2026 HMR
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023
2025

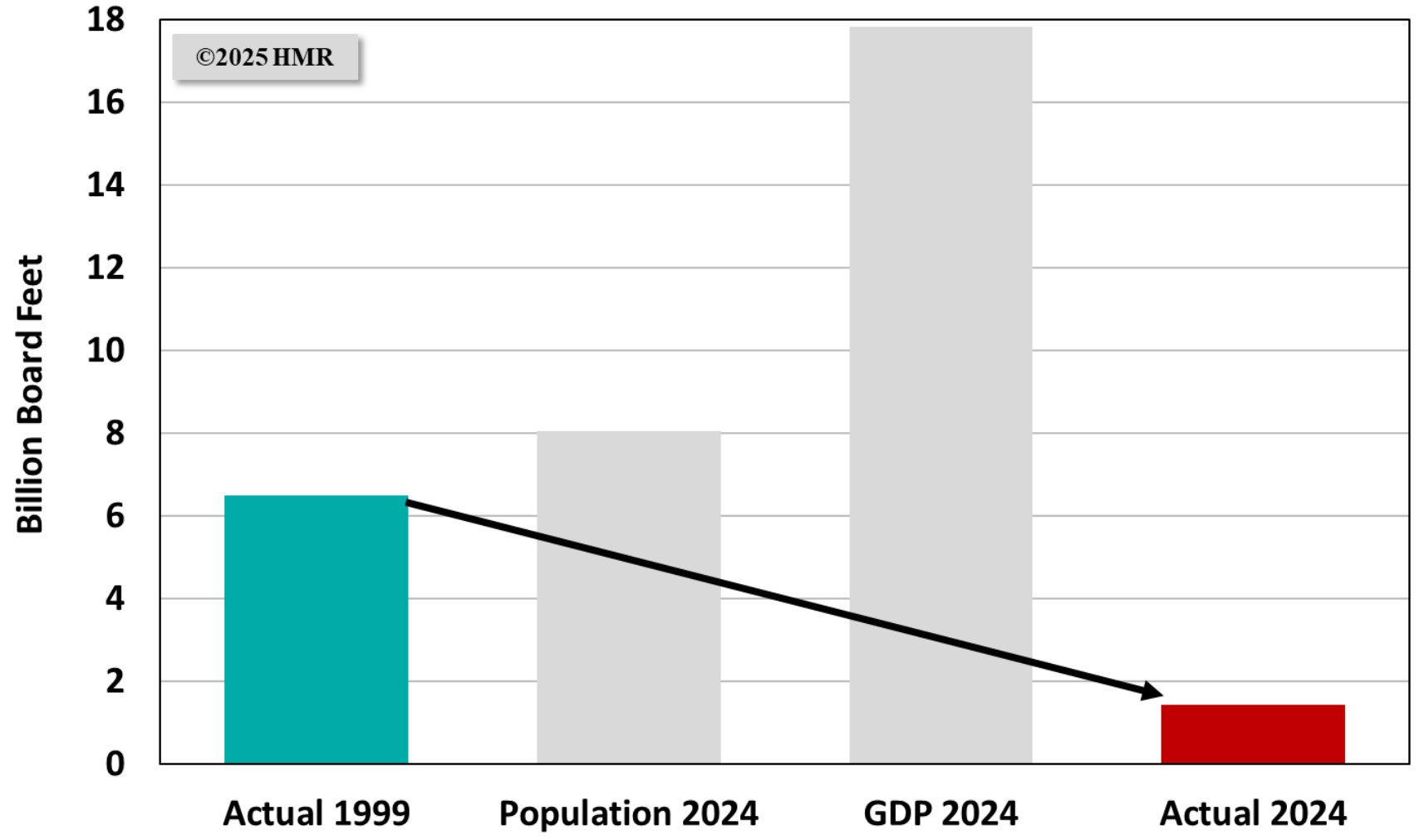
US Consumption of Hardwood Grade Lumber



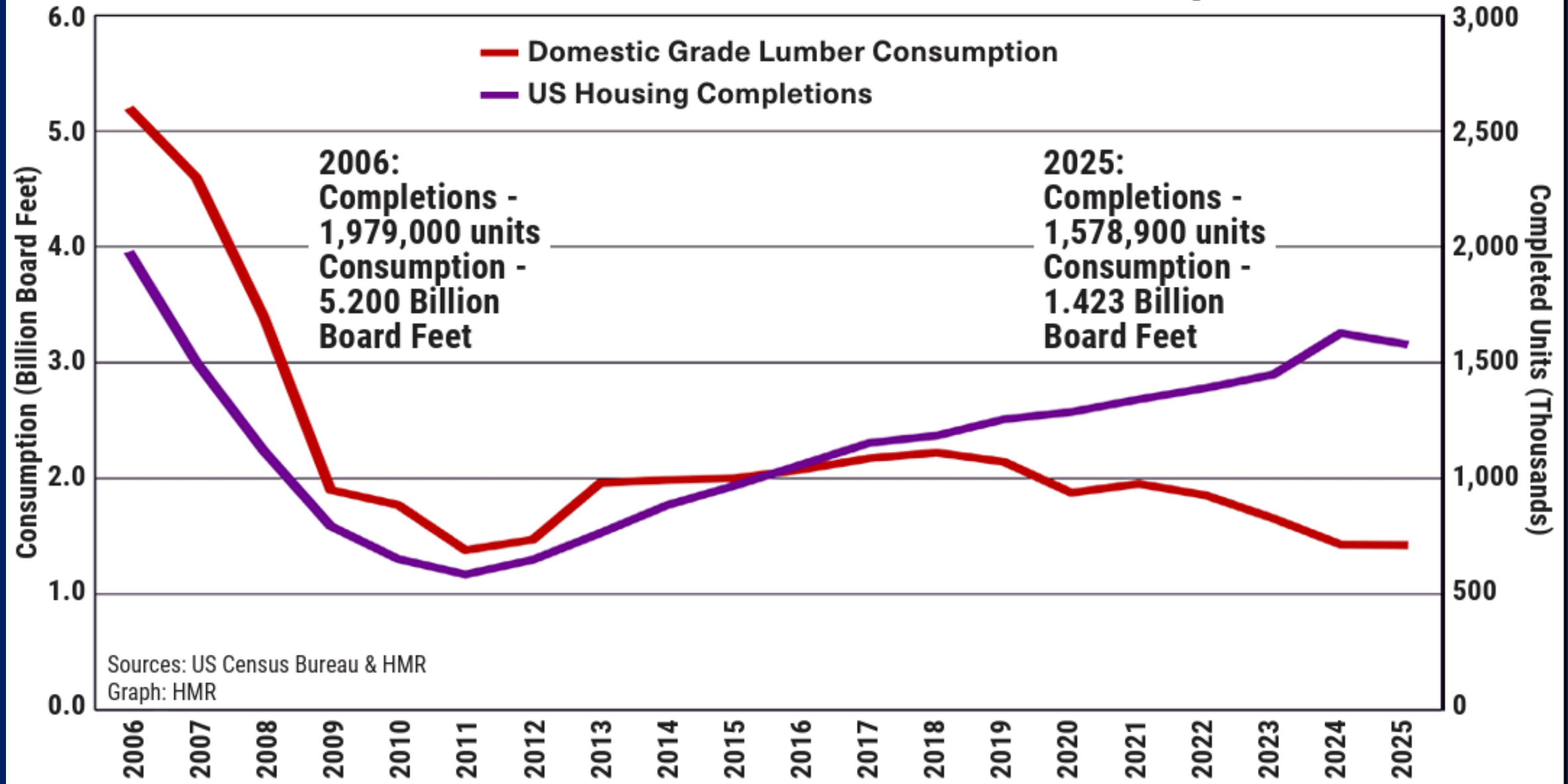
US Consumption of Hardwood Grade Lumber



US Consumption of Hardwood Grade Lumber



Total US Housing Completions and Domestic Grade Hardwood Lumber Consumption



LONG-TERM PRICE TRENDS



However, inflation-adjusted prices are 18% lower than 20 years ago

--and 8% below the 20-year average

Lbr prices up 35% in 20 years
--CPI (Inflation) +64%
--Gas prices +56%
--Electricity +63%
--Unskilled wages +56%

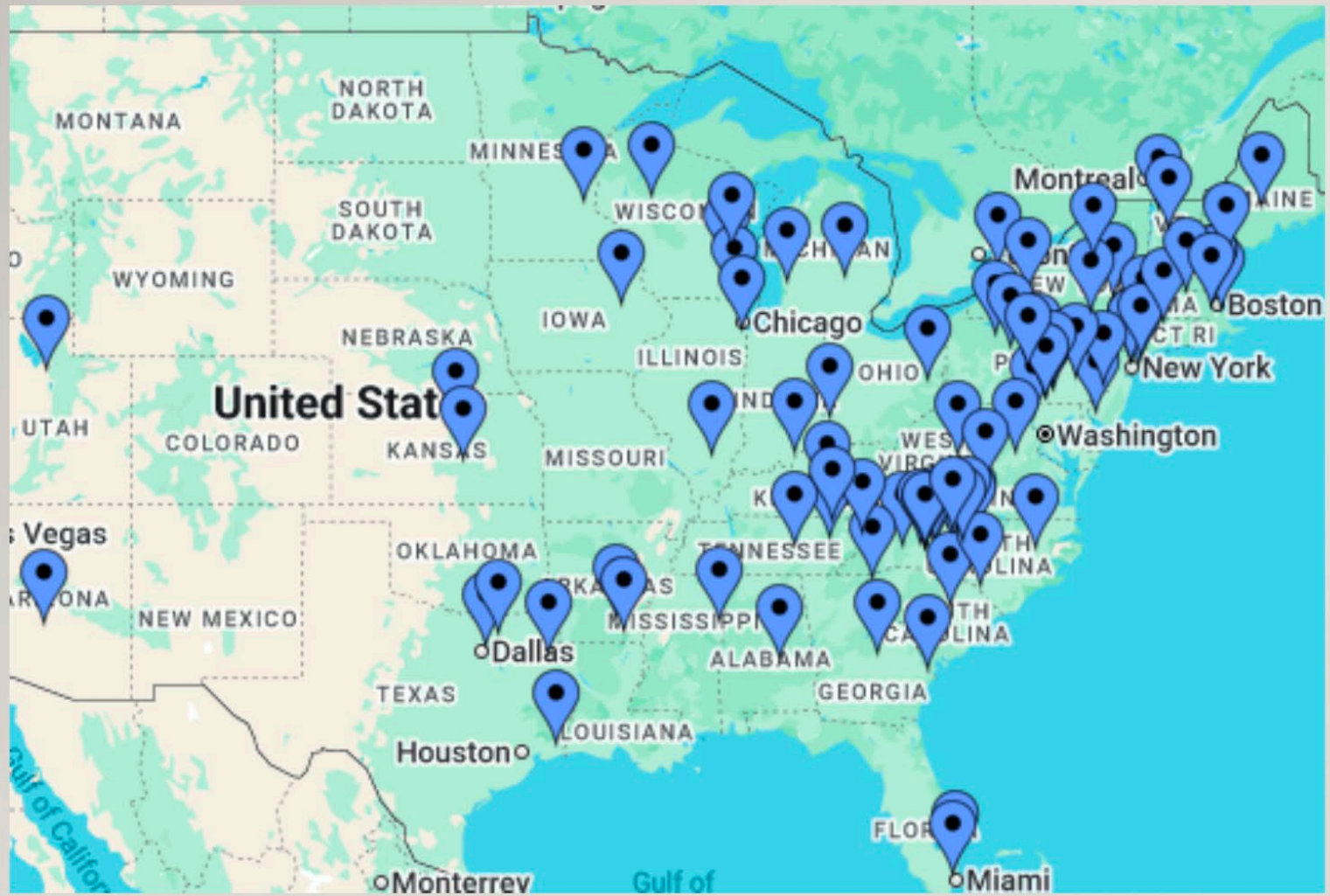
A CONTRACTING INDUSTRY



2023-2016 publicly announced auctions and closures of U.S. primary hardwood producers (sawmills, yards)

At least 151

A CONTRACTING INDUSTRY

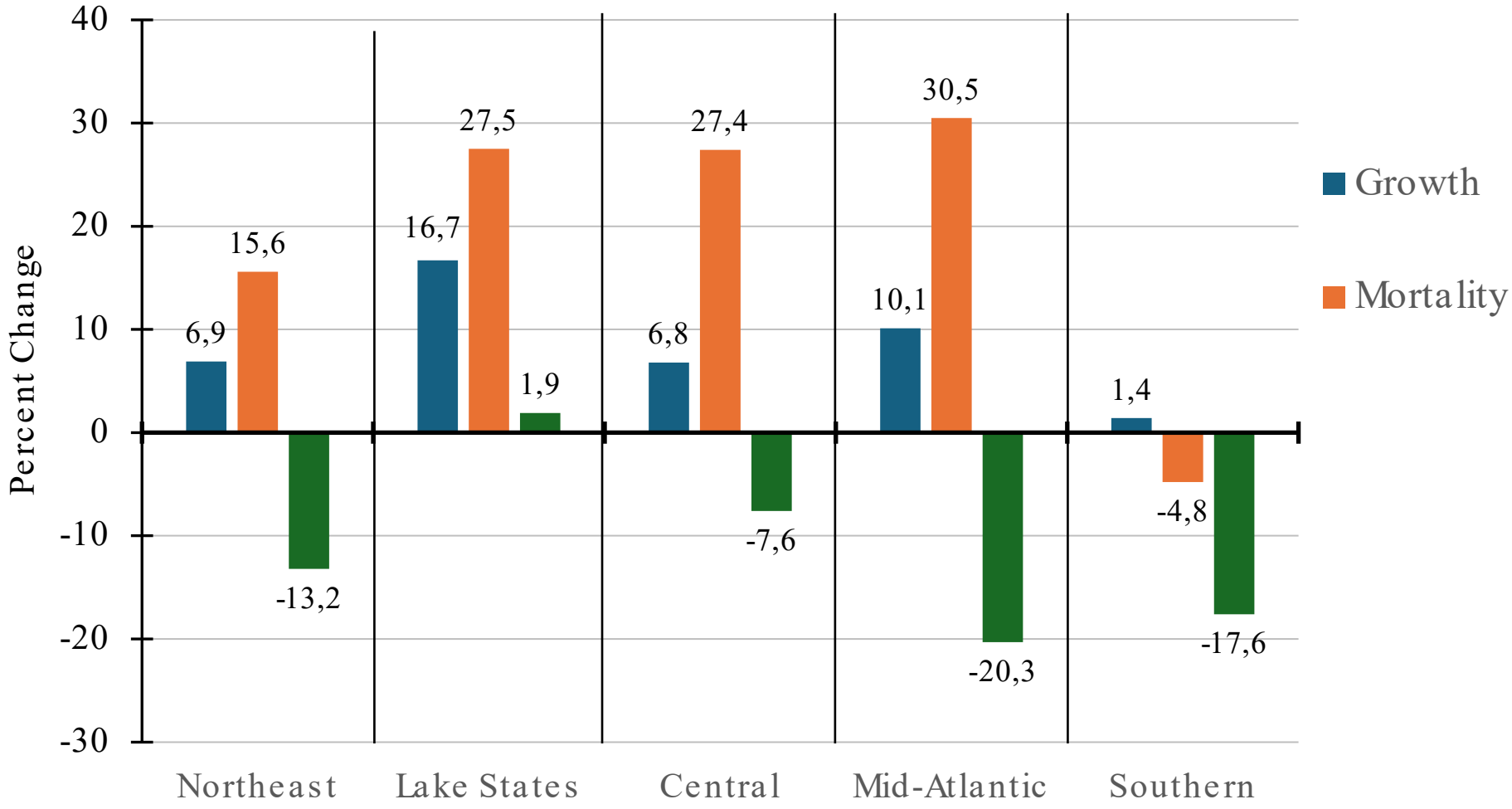


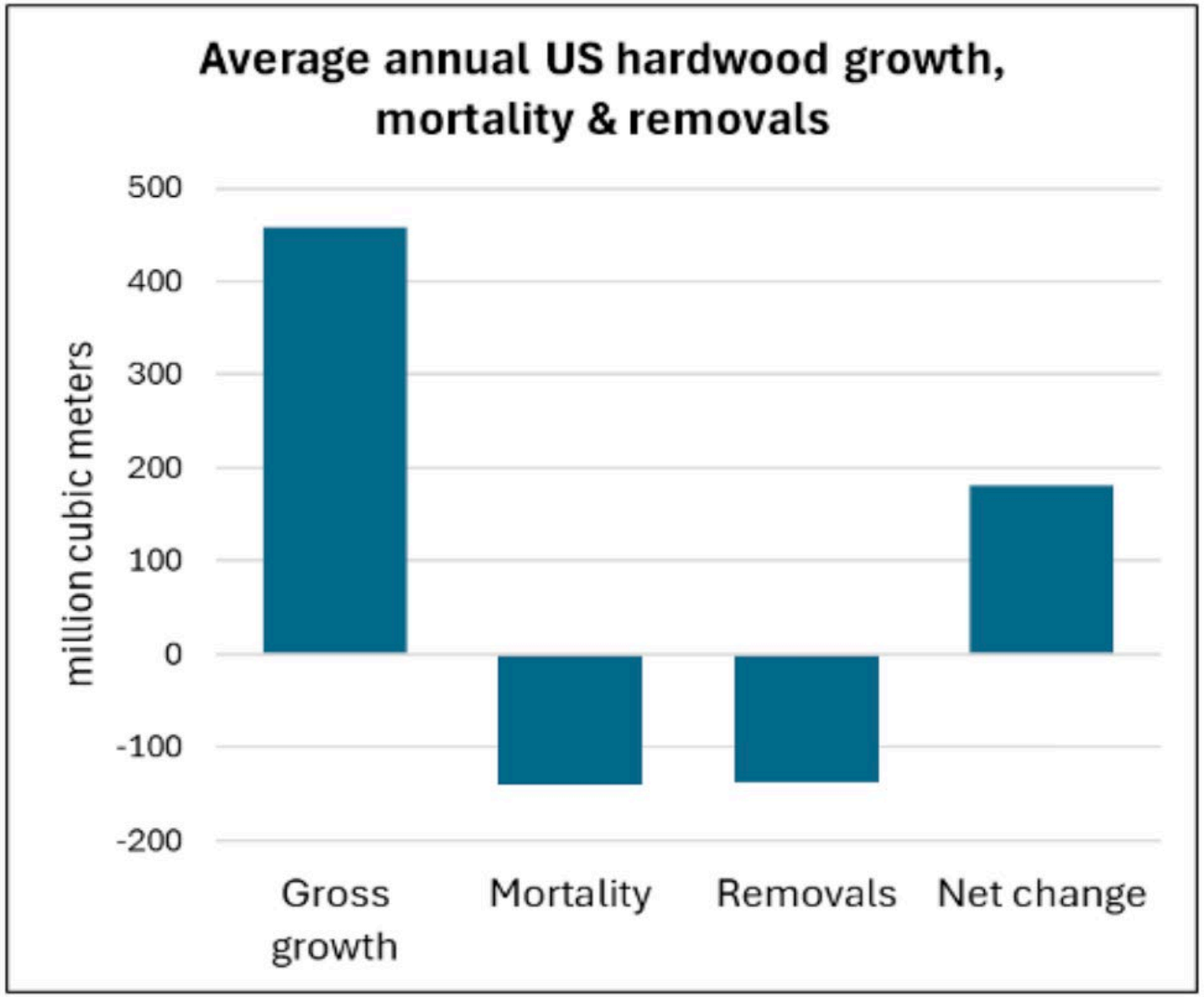
2023-2016 publicly announced auctions and closures of U.S. secondary hardwood producers (cabinets, flooring, furniture, etc.)

At least 95

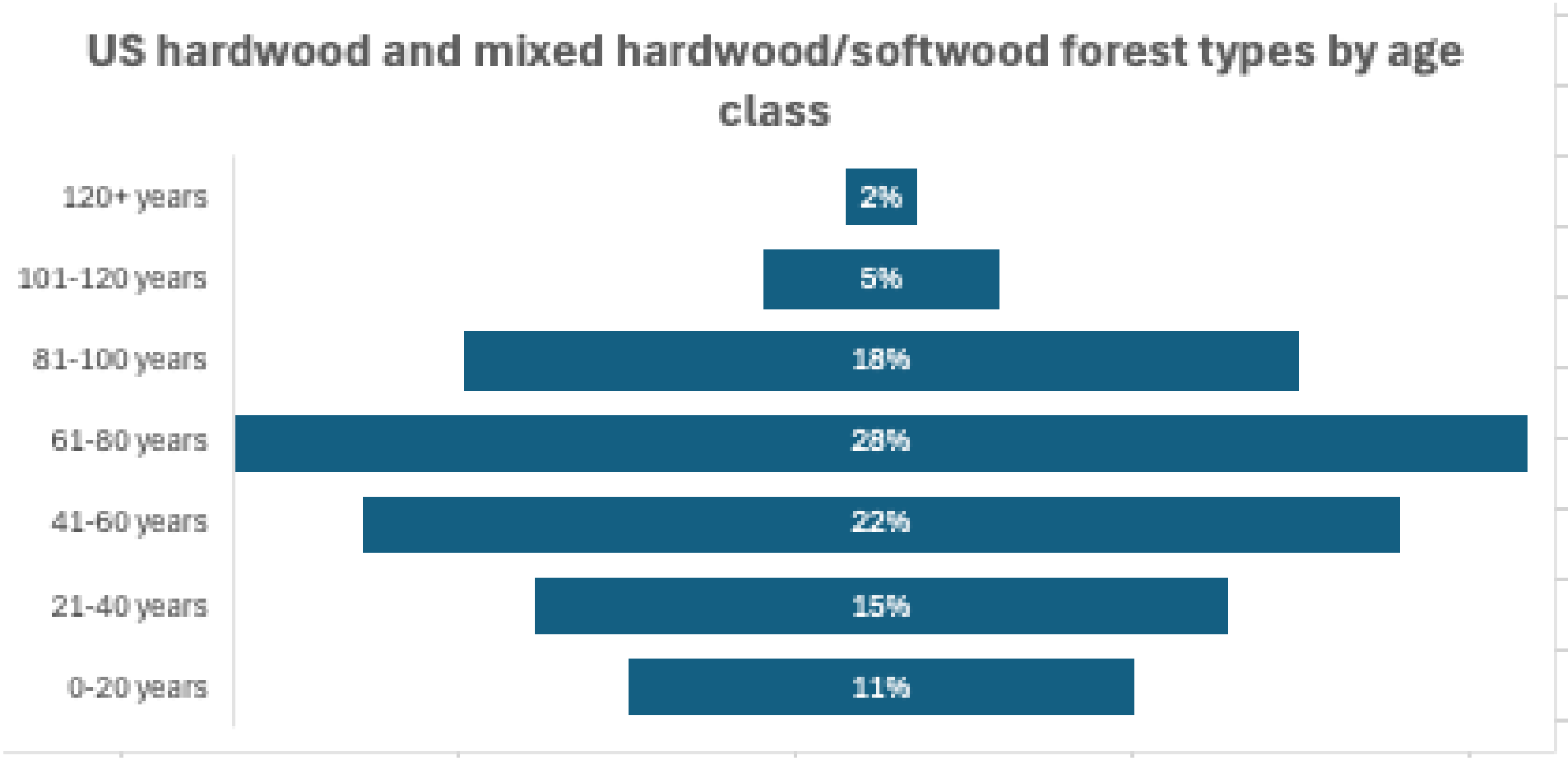
Percent Changes in Growth, Removals, and Mortality

Hardwood Sawtimber





Fuente: US Forest Service, FIA, latest inventory, 2020-23 depending on state



Source: US Forest Service, 2020 RPA

Source: US Forest Service, FIA, latest inventory, 2020-23 depending on state

Forest Threats

Pennsylvania
Department of Agriculture

- **Invasive Plants**
  - Increased competition
  - Knotweed, Stilt grass, mile a minute
- **Invasive Insects**
  - Stress/mortality
  - EAB, ALB, WTB, SLF
- **Tree Diseases**
  - Thousand Canker Disease
  - Oak Wilt
- **Land Use Change**
  - Parcelization
  - Fragmentation
- **Regeneration Challenged**
  - Deer
- **Underutilization**
  - Market challenges
- **Changes in Climate**
  - Species shift
  - Hydrological changes
  - Loss of desirable species
  - Weather/wind events





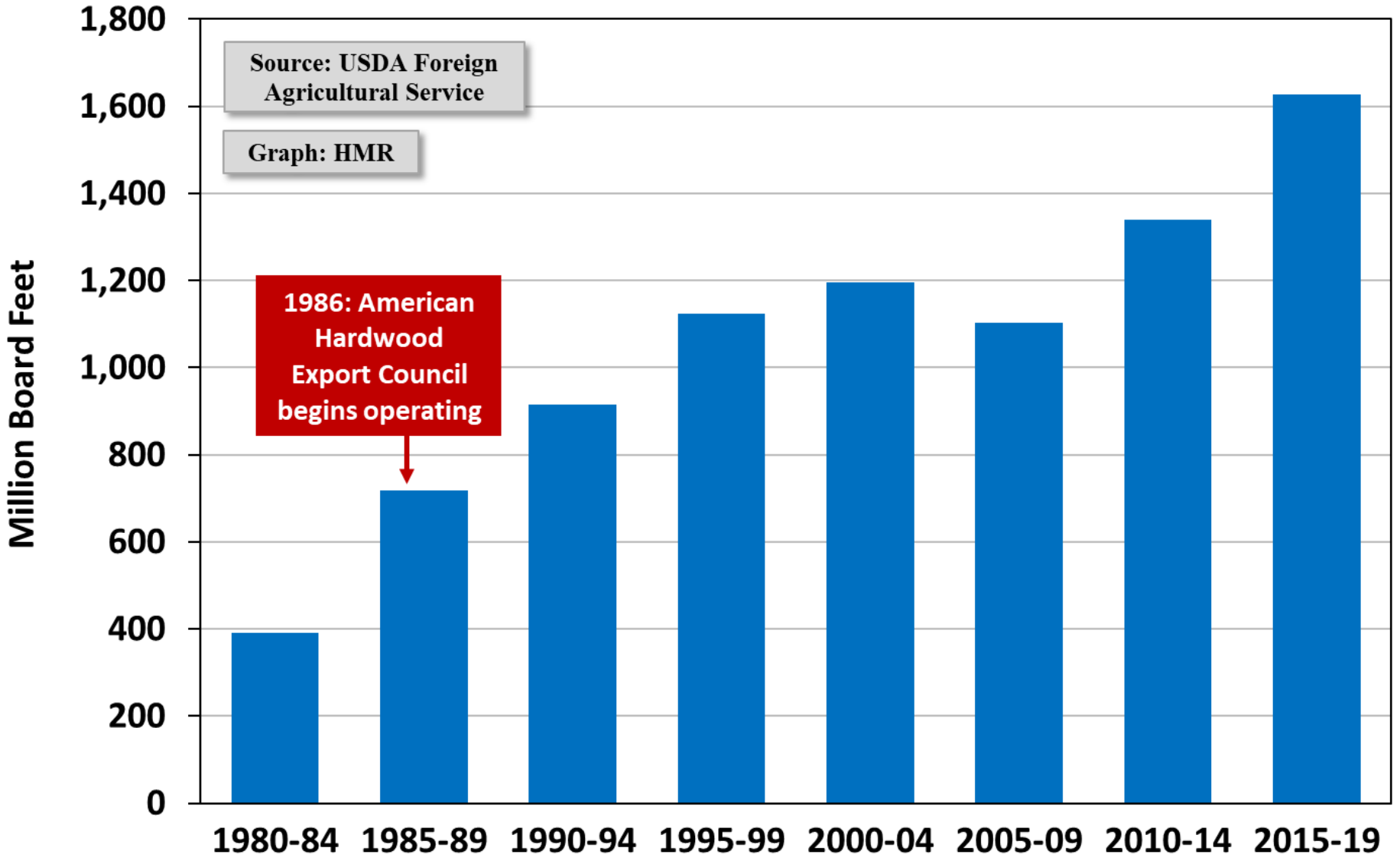
Stressors compound with age

Trees do not live forever

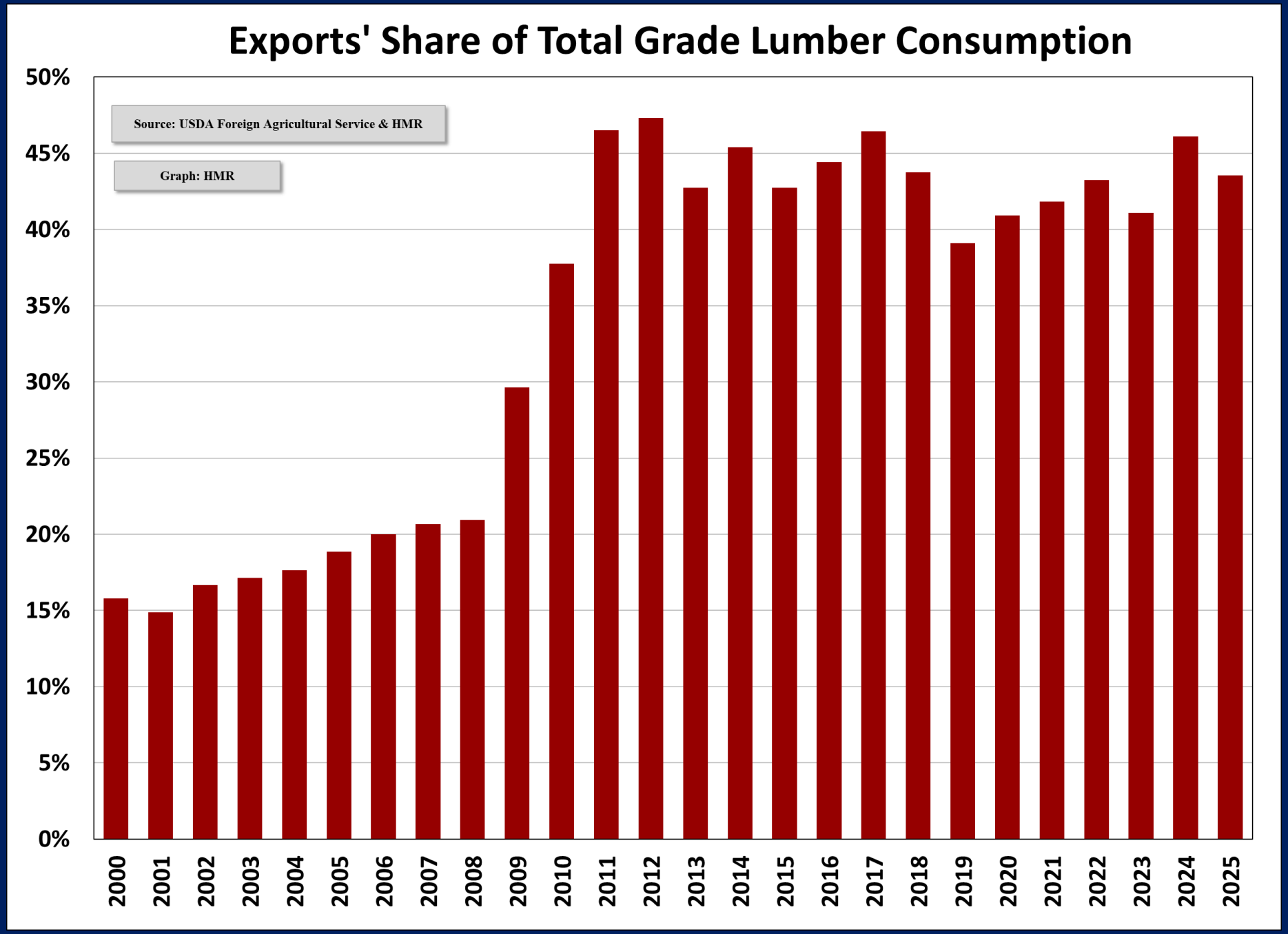


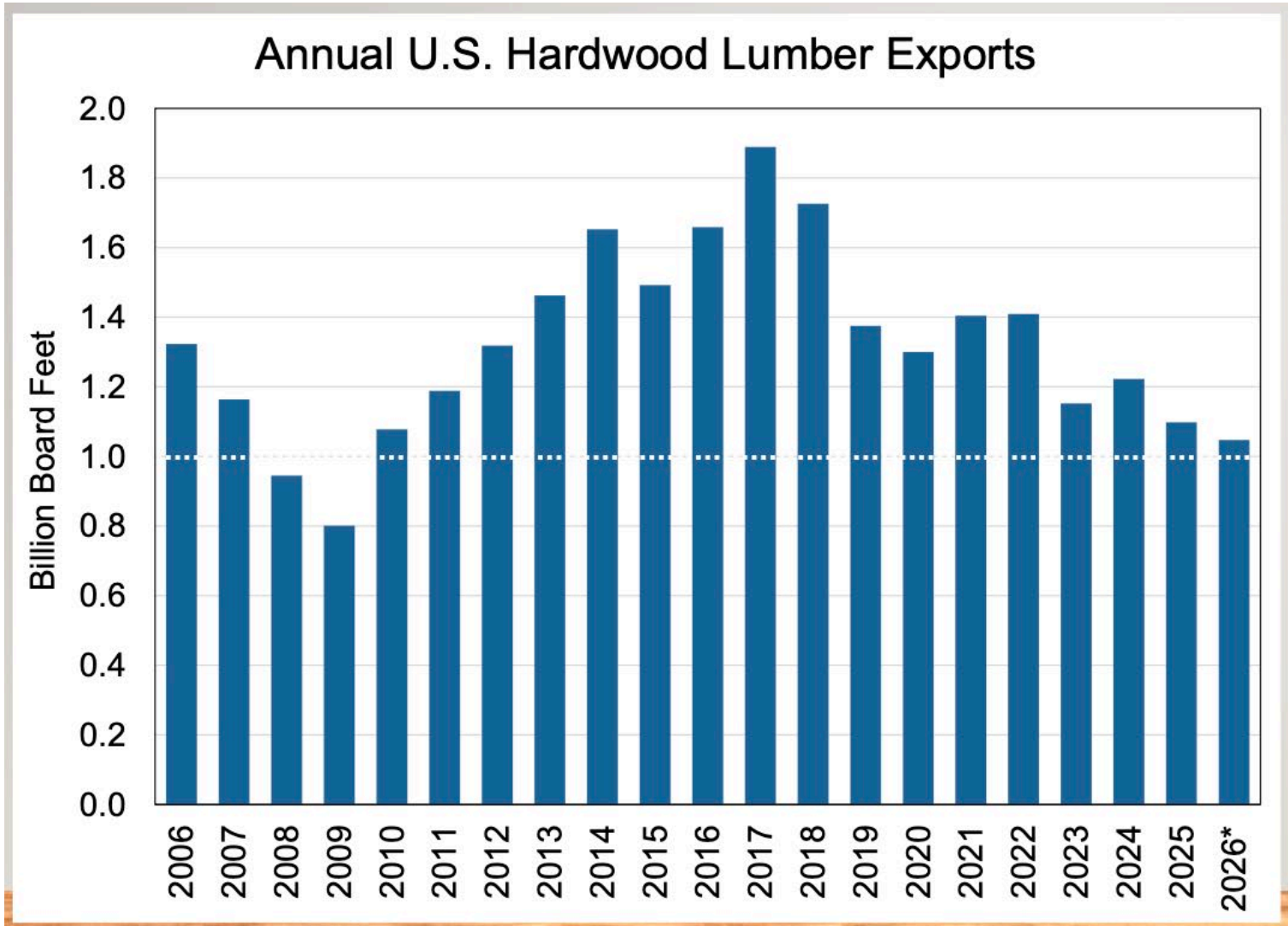
AMERICAN HARDWOOD EXPORT COUNCIL

US Exports of Hardwood Lumber (annual average per 5-year period)



Credit: Hardwood Market Report /Fastmarkets





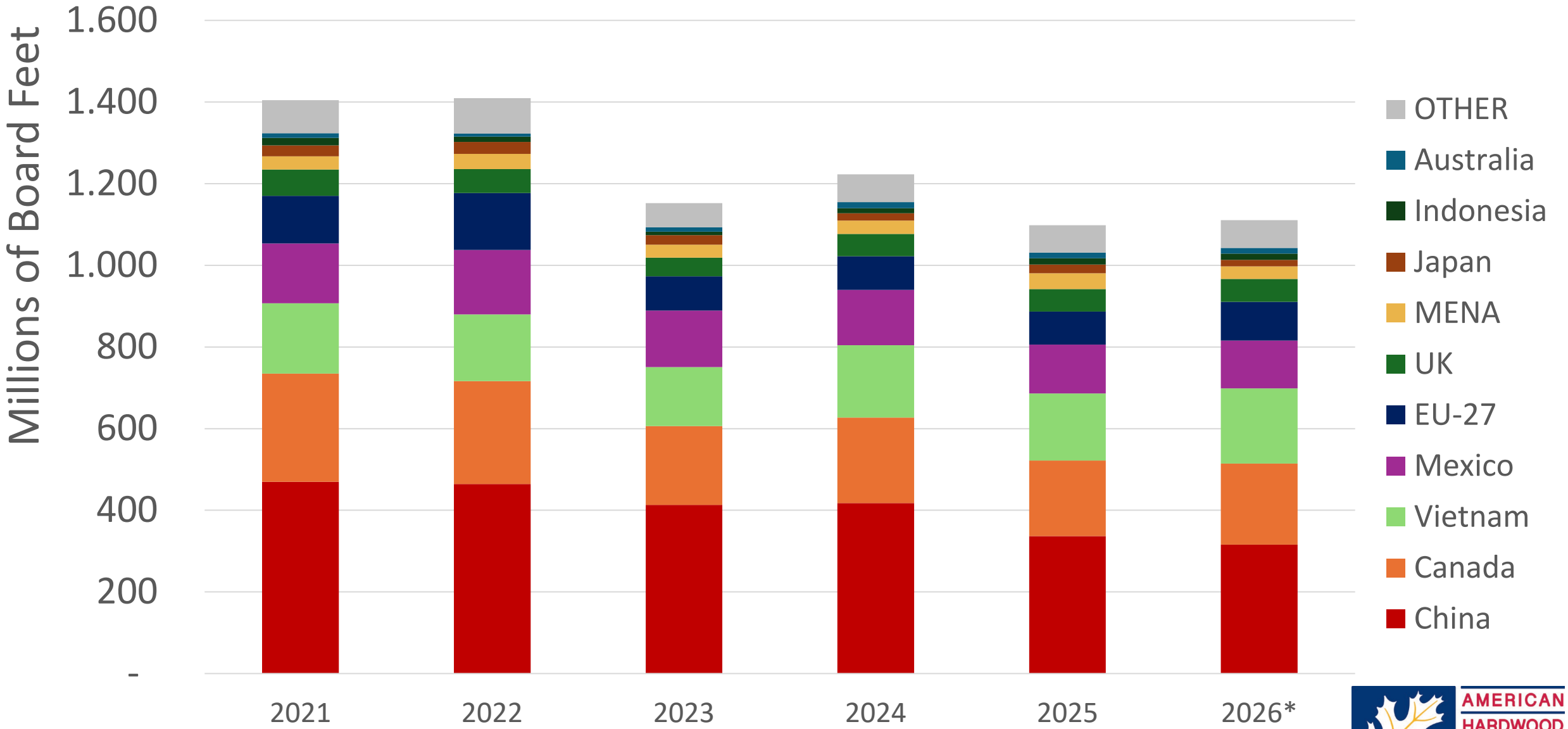
Export totals through July were on track to make 2026 the slowest in 17 years

Volumes down 44% from 2017 peak

2027 total could easily drop below 1 BBF given U.S.-Canadian tariffs, potential EUDR disruptions and economic weakness in China

GATS (USDA FAS)

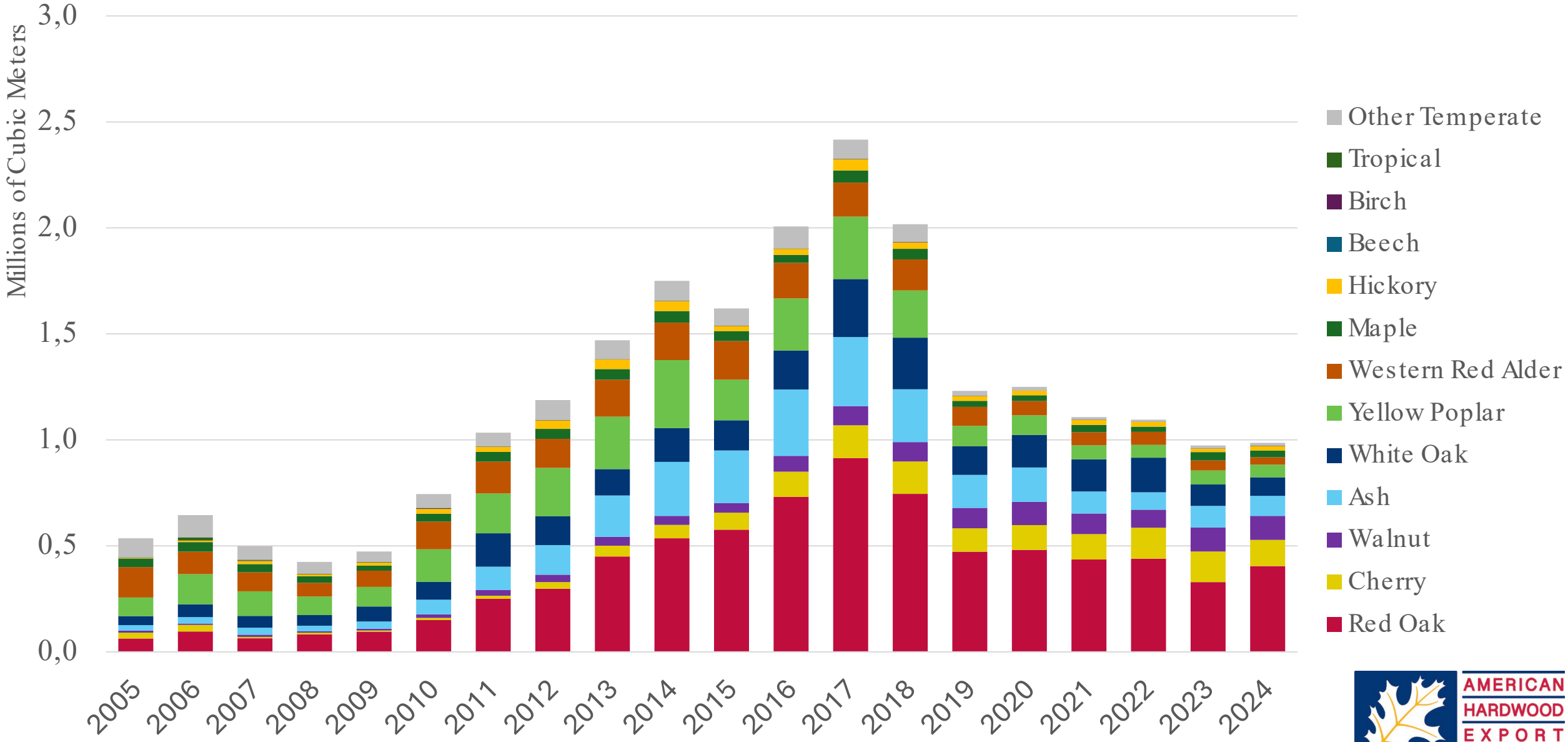
US Hardwood Lumber Exports



Source: U.S. Census Bureau Trade Data, 2026 Annualized from Jan-June Data

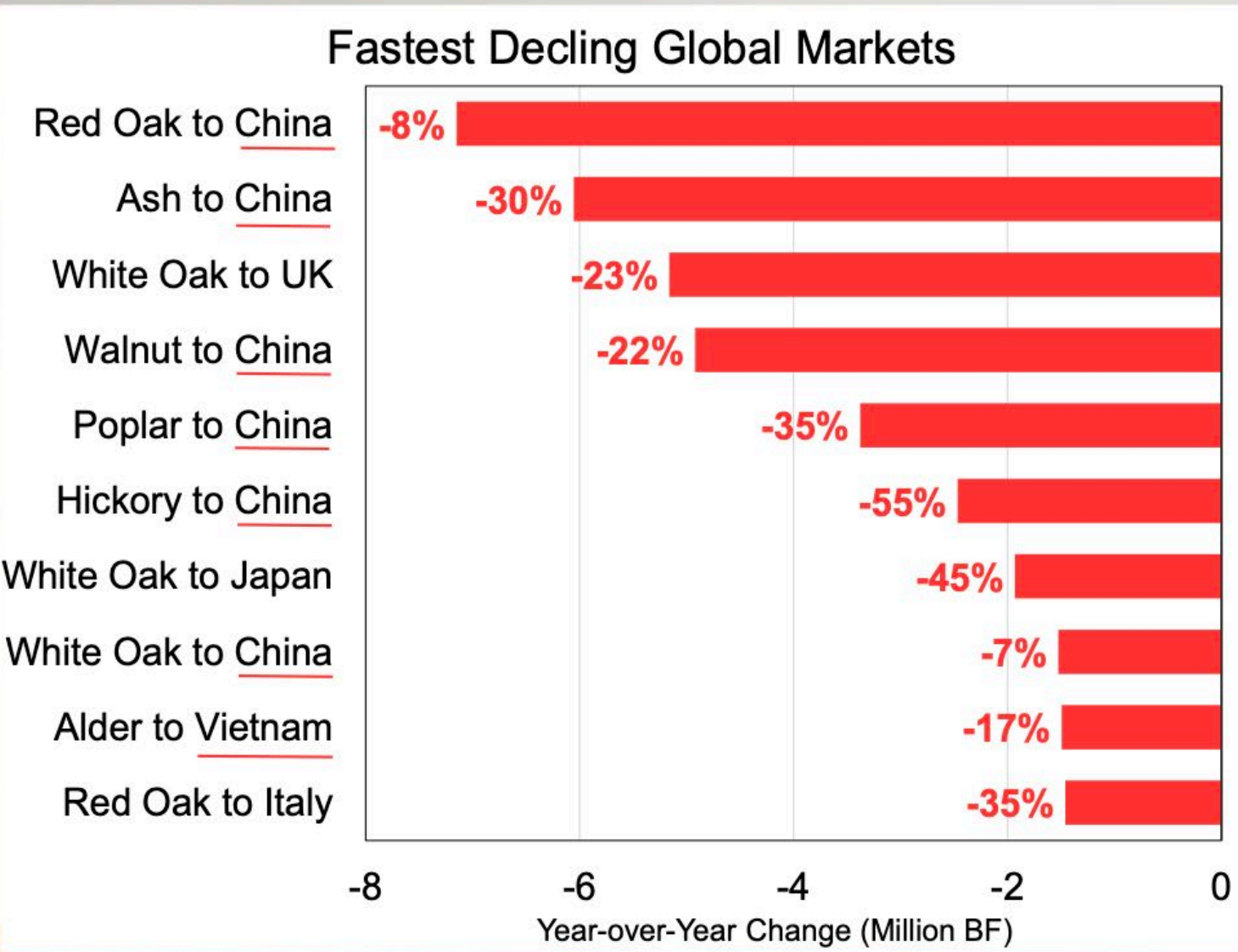
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US Hardwood Lumber to China



Source: U.S. Census Bureau Trade Data

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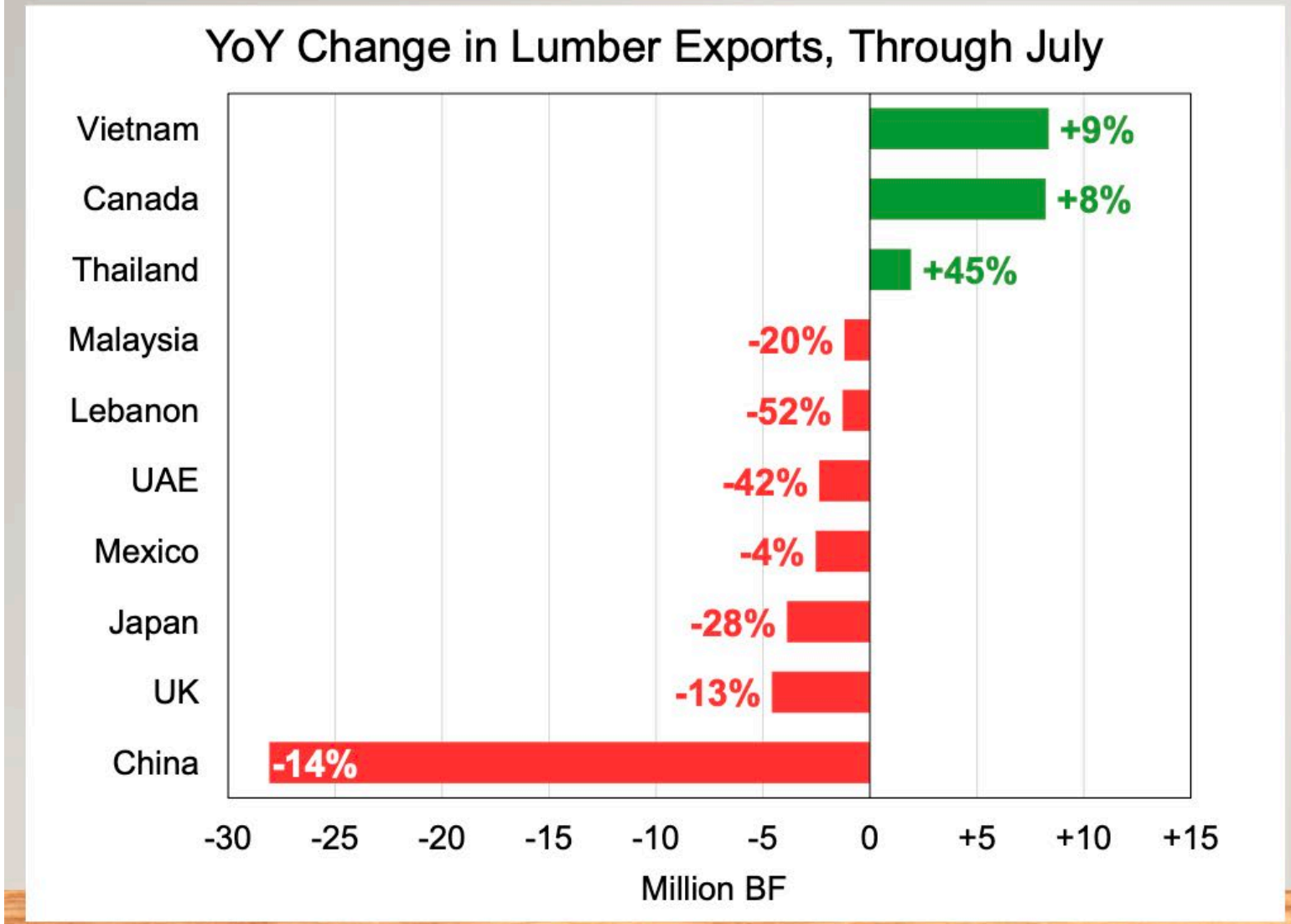


China dominated declines through July

Other Big 4 markets (Canada, Vietnam, Mexico) didn't do so bad

UK fastest declining WO mkt
--15% of global demand in '25
--38% of net YTD drop in U.S. exports through Jul '26

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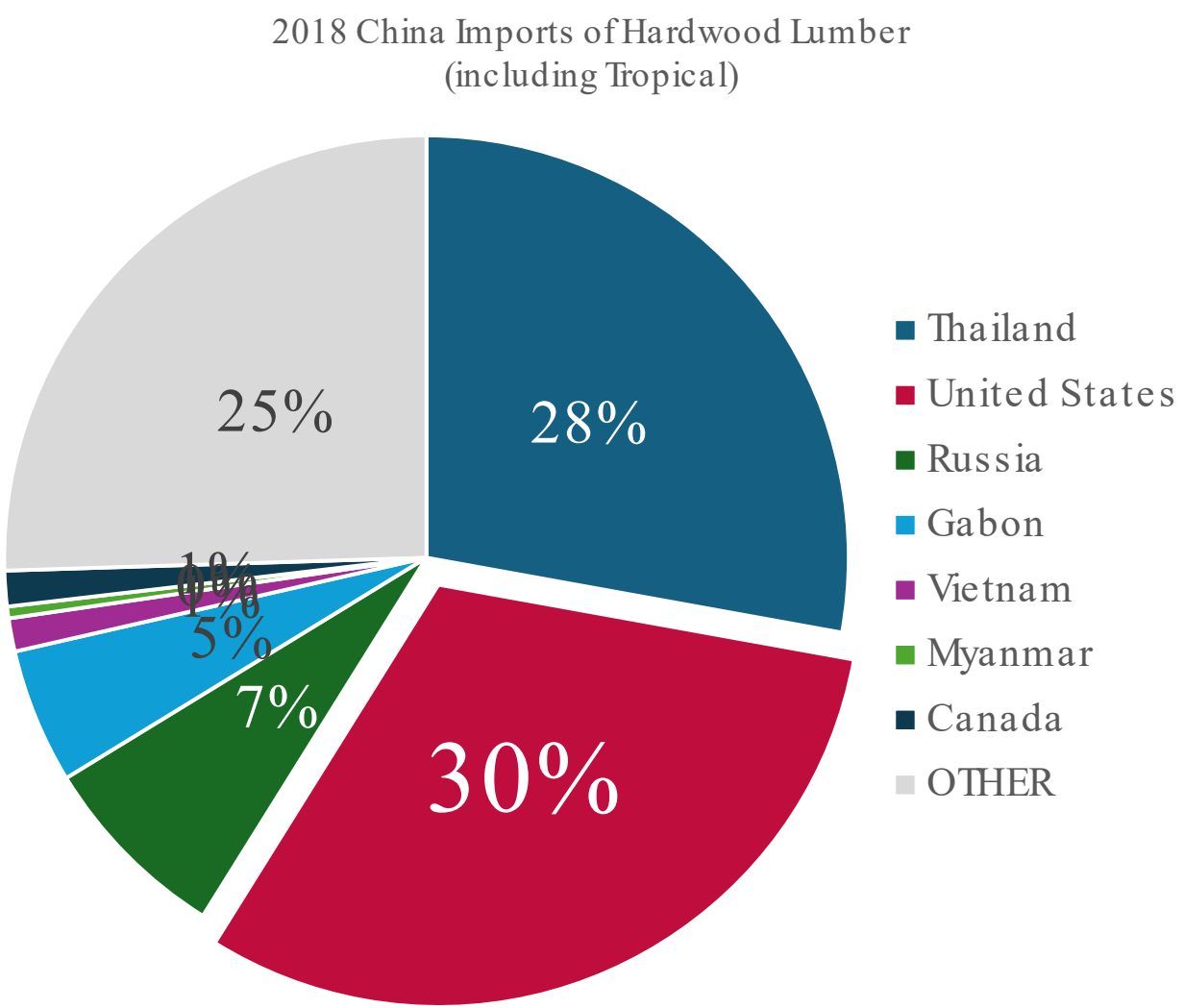
China accounted for 54% of the net decline in U.S. exports through July

	Change	
	BF	%
China	-28,082,258	-14%
ROW	+4,927,959	+1%

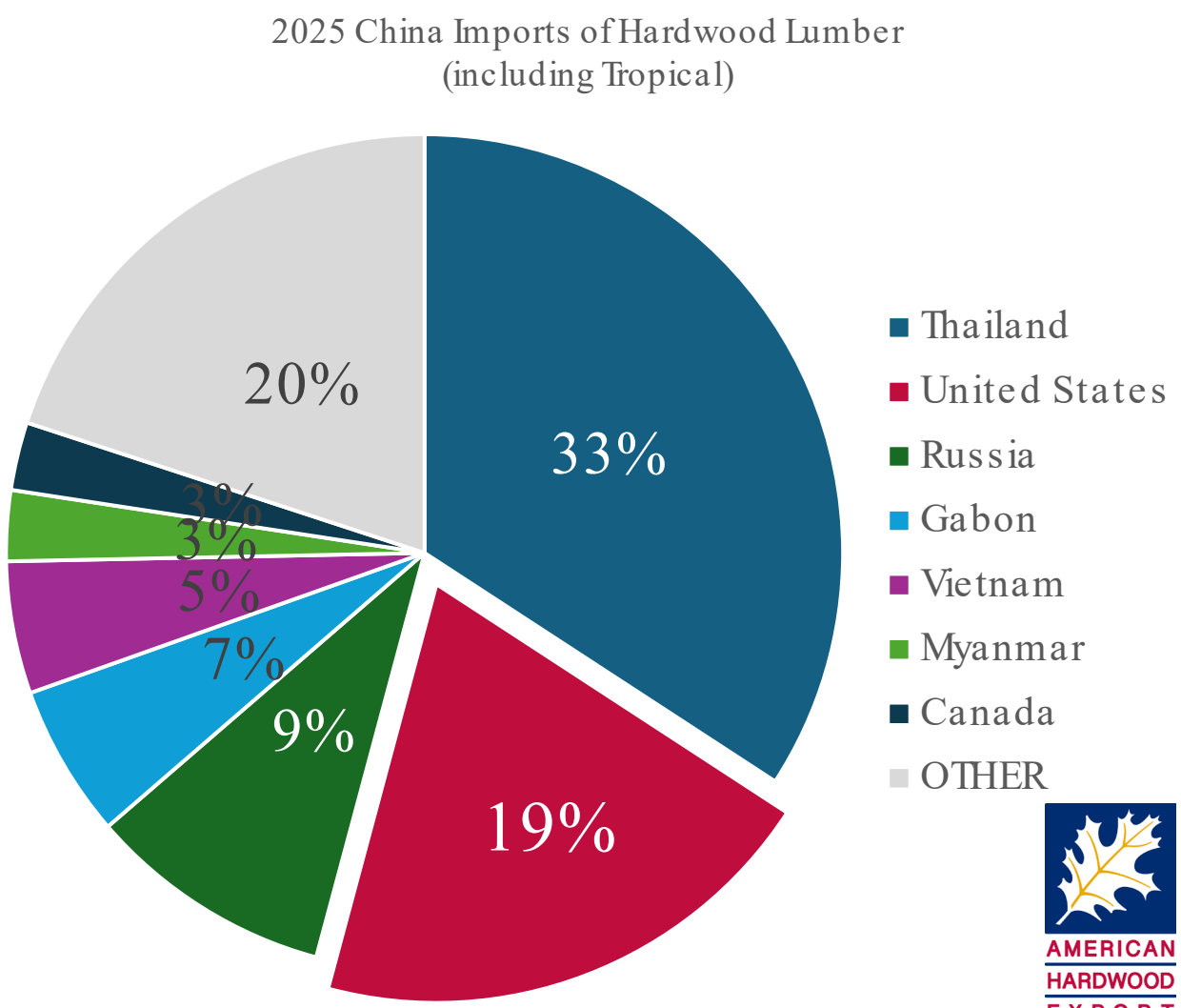
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Chinese Imports of Hardwood Lumber (Including Tropical)

2018 Total Chinese Imports Jan-Oct: $4.39 Billion

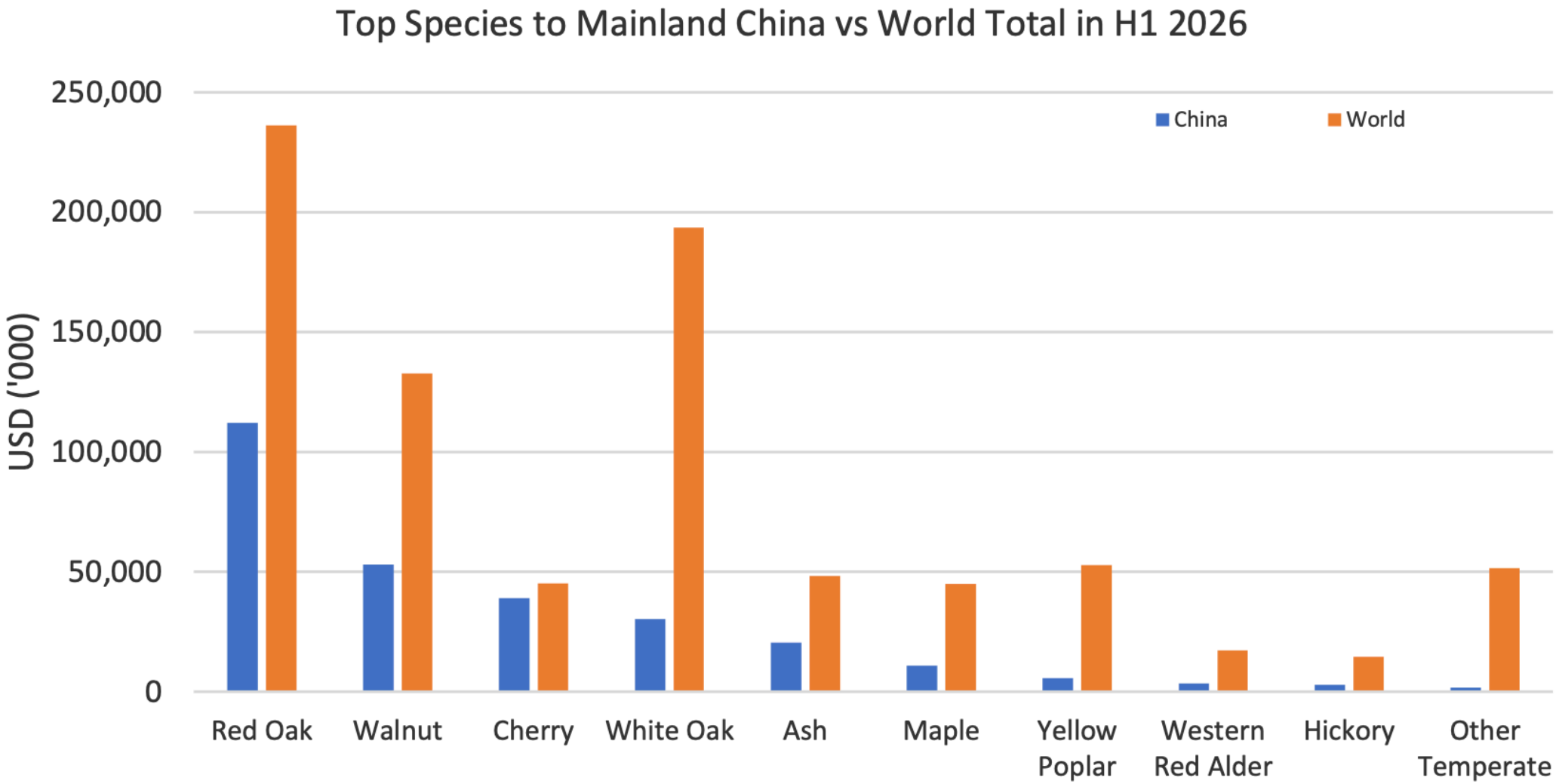


2025 Total Chinese Imports Jan-Oct: $2.79 Billion



Source: Trade Data Monitor – Data Jan-October imports of all hardwood lumber HS Codes including tropical

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China's property market is (somehow) worsening

Government remedies are not up to the job



Flat broke IMAGE: GETTY IMAGES

Nov 27th 2025 (updated Nov 28th 2025) · 5 min read · HONG KONG

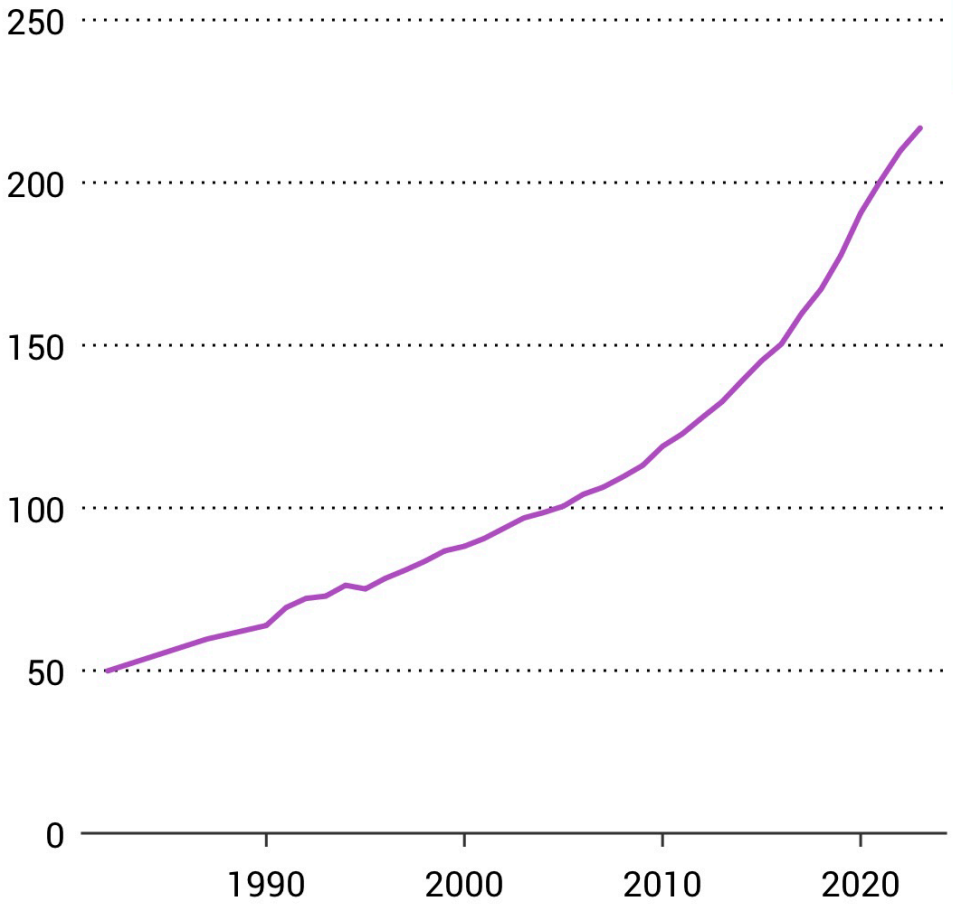
China Real Estate Investment	YOY Change Through July
Total Investment in Real Estate Development	-18.0% ▼
Investment in Residential Buildings	-17.8% ▼
Investment in Office Buildings	-20.4% ▼
Investment in Commercial Buildings	-23.1% ▼
Floor Space Under Construction	-12.5% ▼
Floor Space Under Construction - Residential	-12.9% ▼
Floor Space Under Construction - Commercial	-10.6% ▼

Table: HMR/Fastmarkets
Source: National Bureau of Statistics of China

AMERICAN HARDWOOD EXPORT COUNCIL

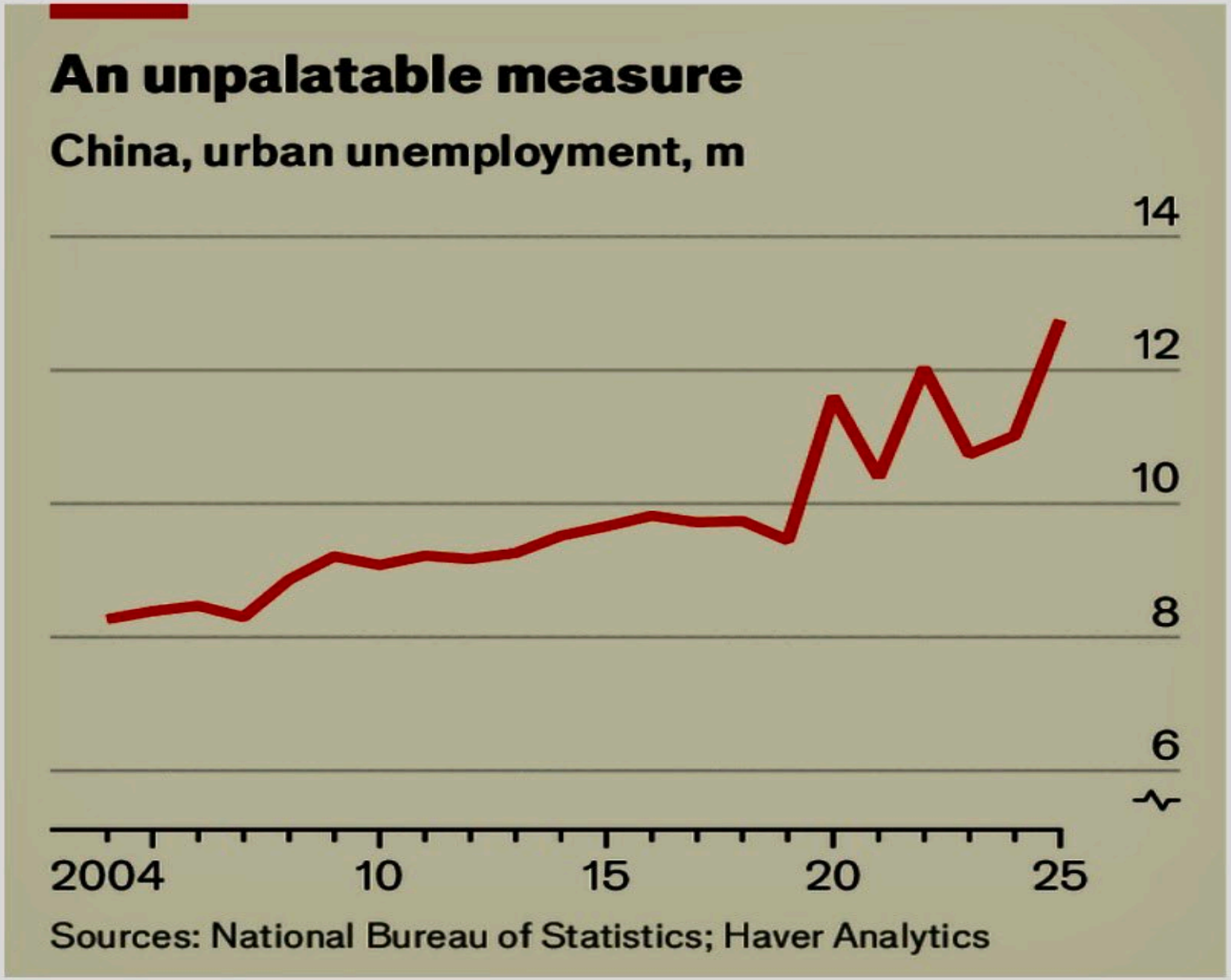
China's population aged over 65

In millions



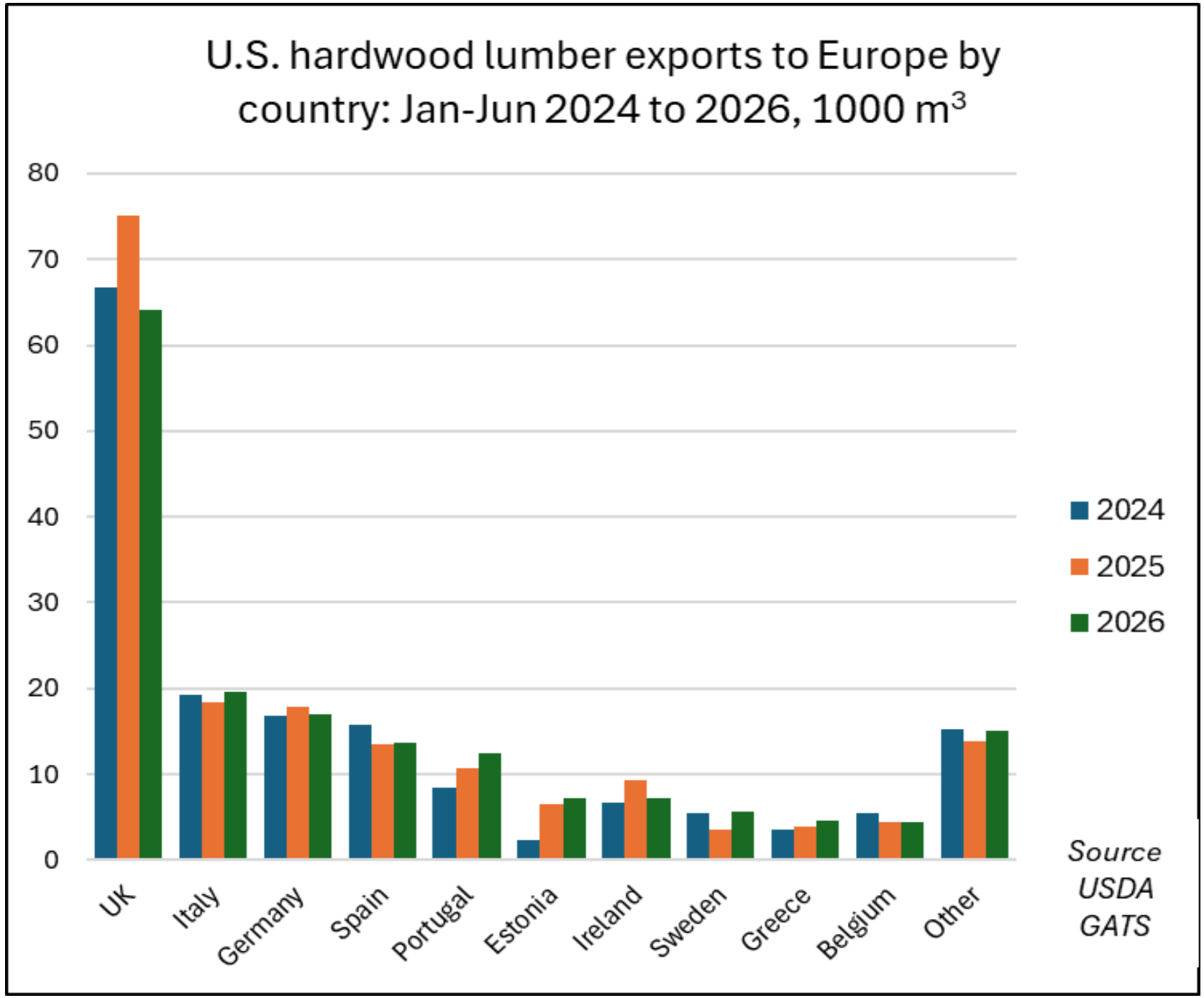
Source: National Bureau of Statistics • **Get the data** • **Download image** • Created with **Datawrapper**

AMERICAN HARDWOOD EXPORT COUNCIL

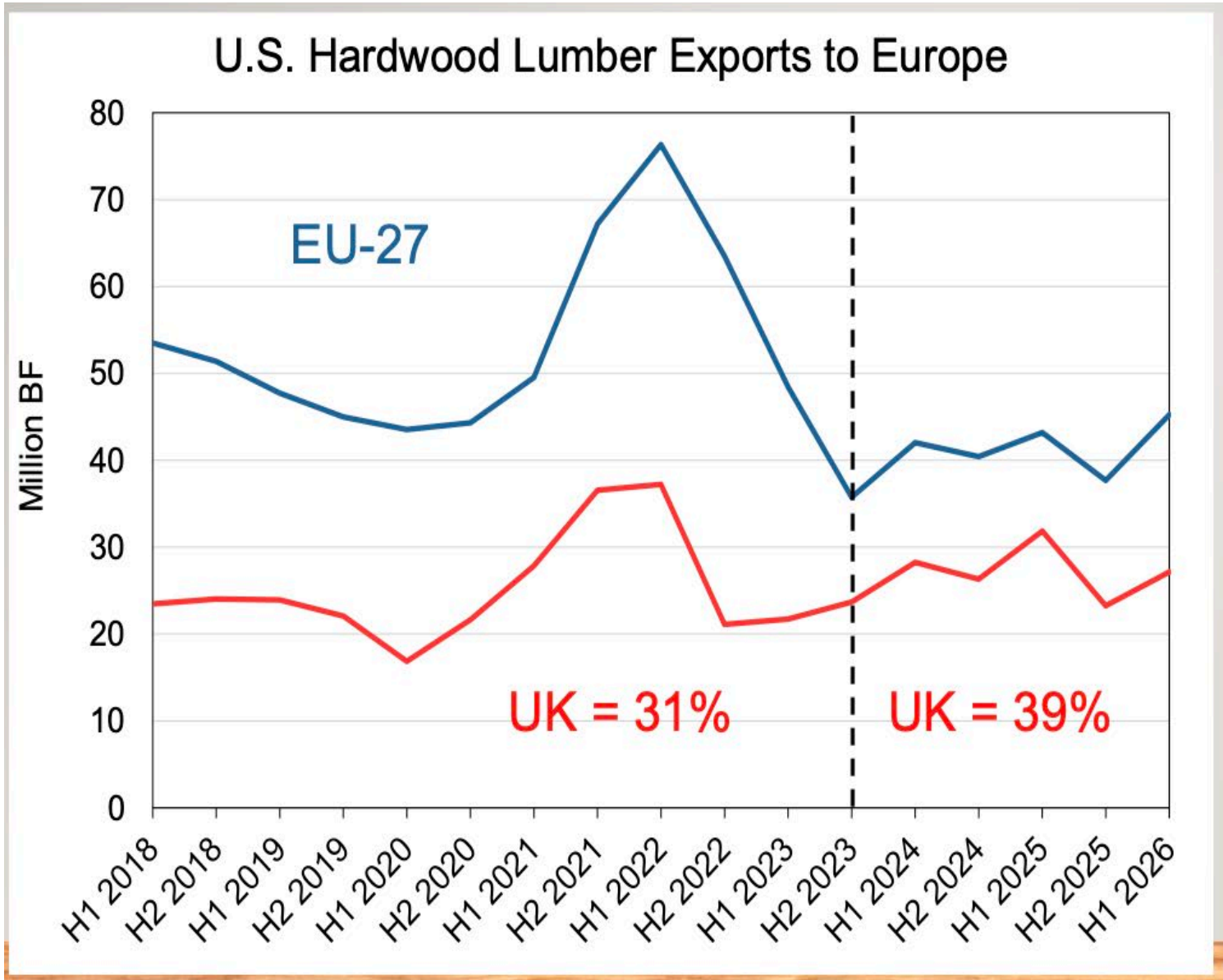


THE ECONOMIST

AMERICAN HARDWOOD EXPORT COUNCIL



AMERICAN HARDWOOD EXPORT COUNCIL



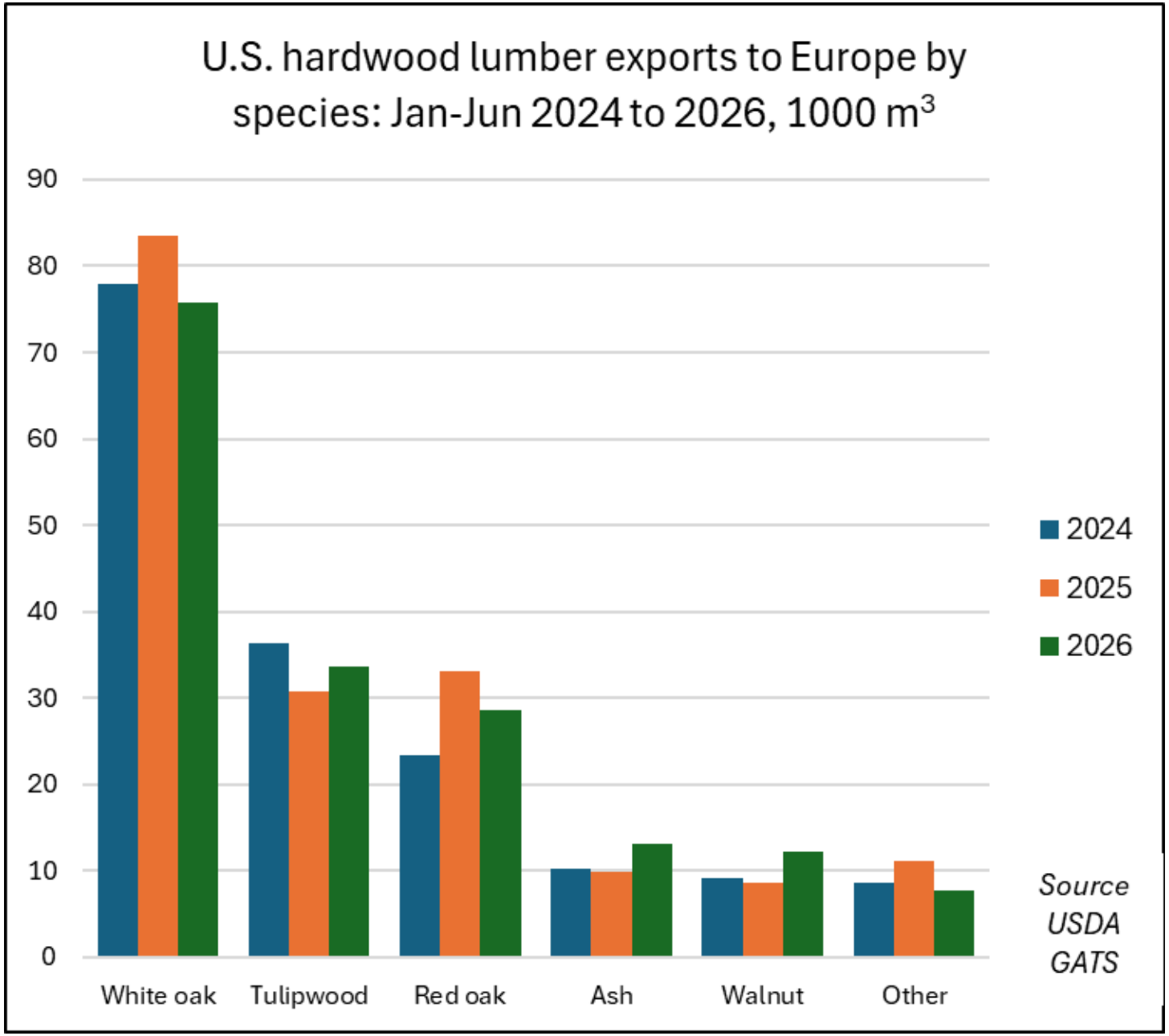
The UK's stability—relative to EU markets—has worked to increase its share of overall European demand

UK accounted 31% of total European demand in the 5 years from 2018 through 2023

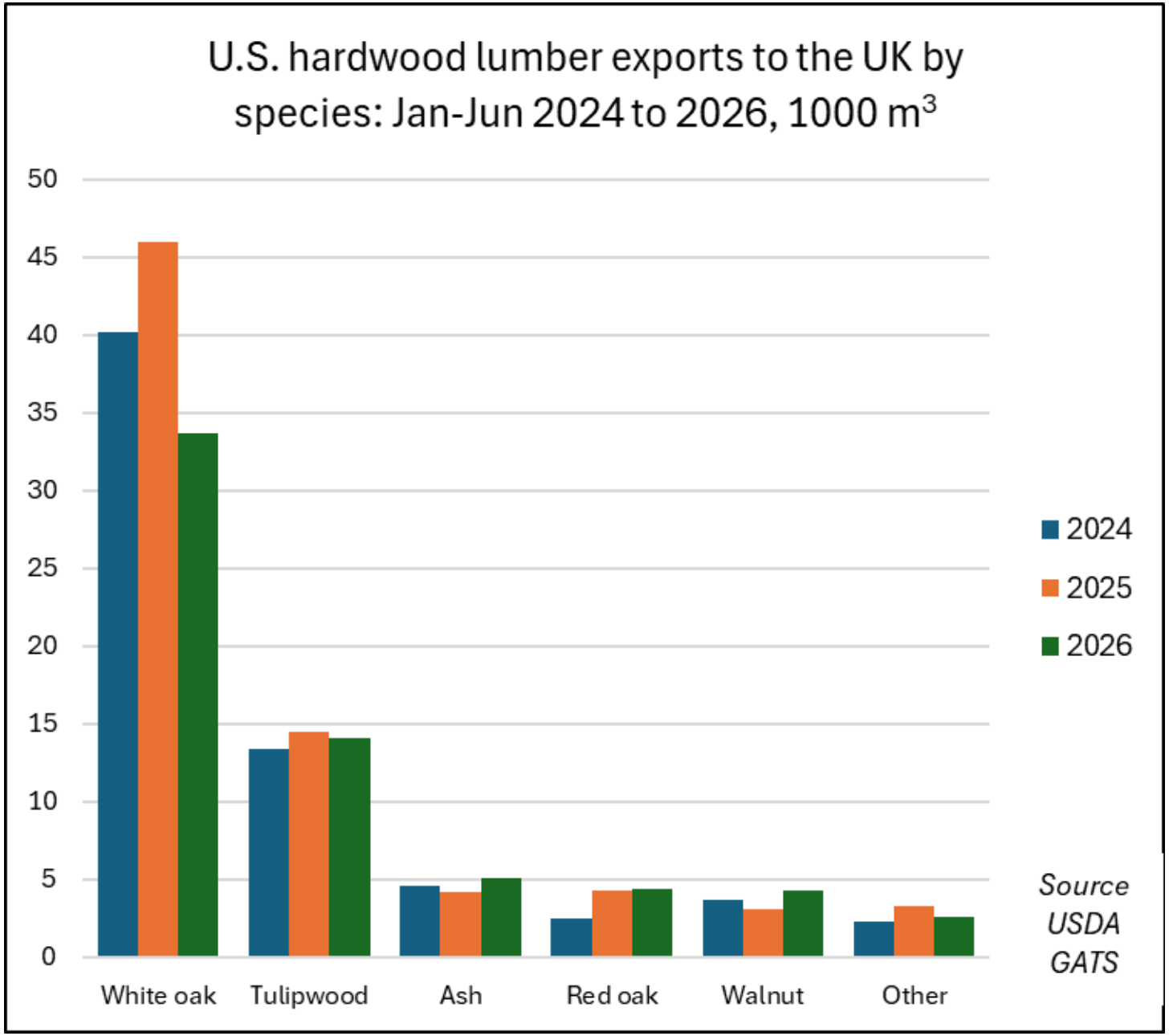
Has averaged 39% since

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GATS (USDA FAS)



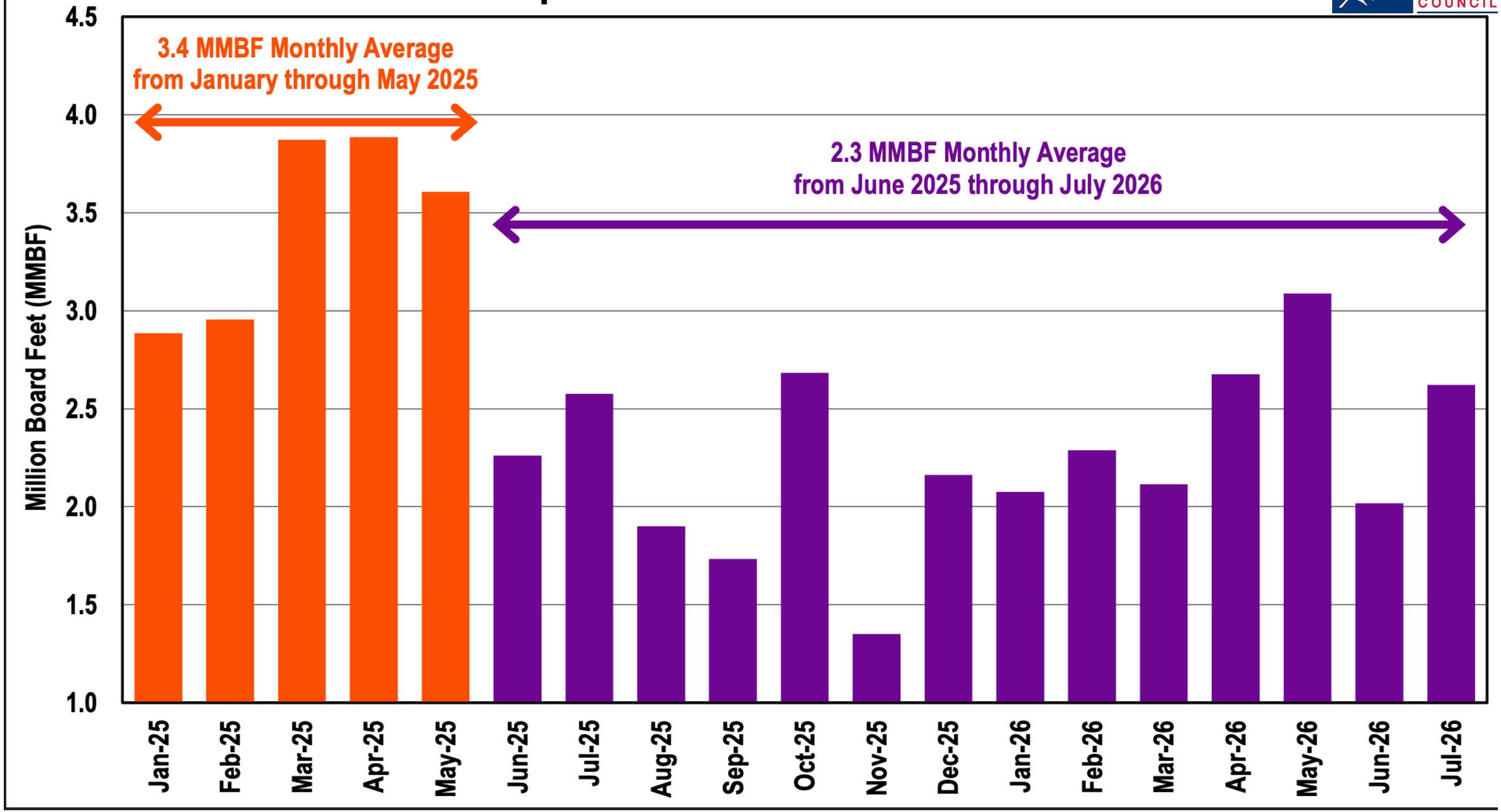
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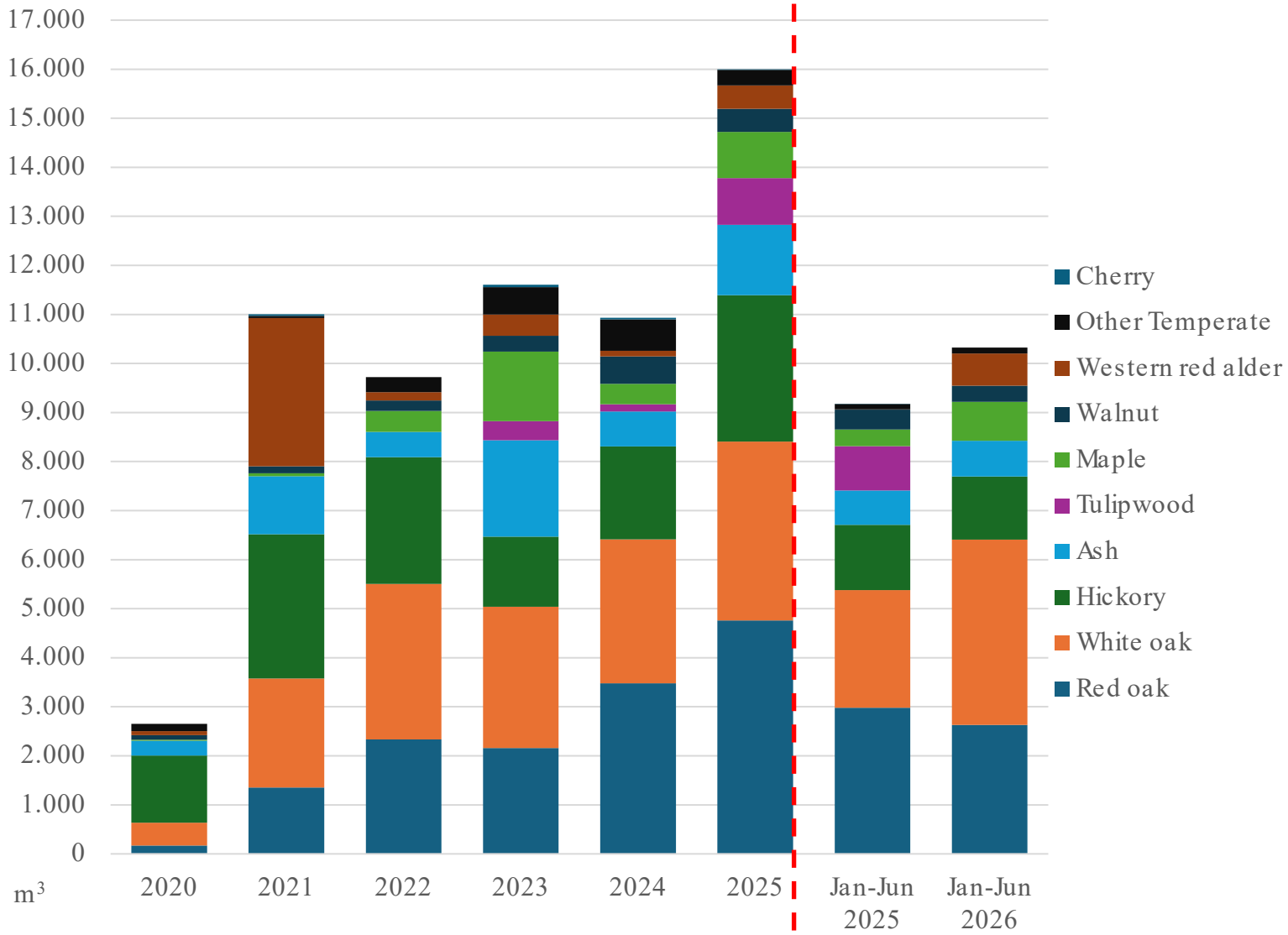
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US Exports of White Oak Lumber to the UK

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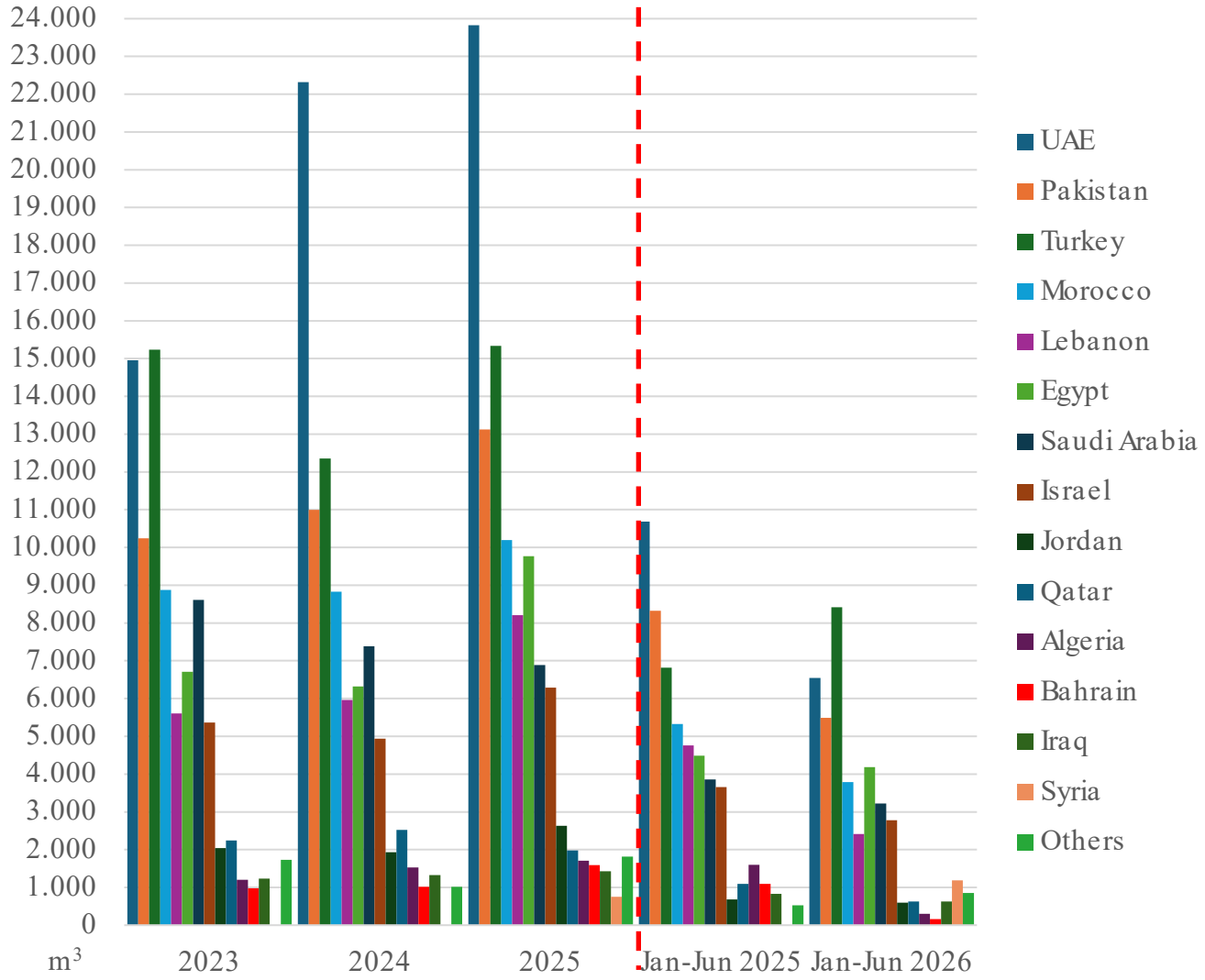
JAN TO JUN 2026 U.S. HARDWOOD LUMBER EXPORTS TO INDIA (m^3)



- Total shipments of U.S. hardwood lumber to India reached 10,362 cubic metres and USD 6.43 during the first six months of 2026, rising year-on-year by 13% and 9% respectively.
- The oaks continued to dominate exported, with white oak accounting for 36% of the total volume shipped and red oak accounting for 25%.

Source: USDA Foreign Agricultural Service

JANUARY TO JUNE 2026 U.S. HARDWOOD LUMBER EXPORTS (m^3) – MENA & PAKISTAN



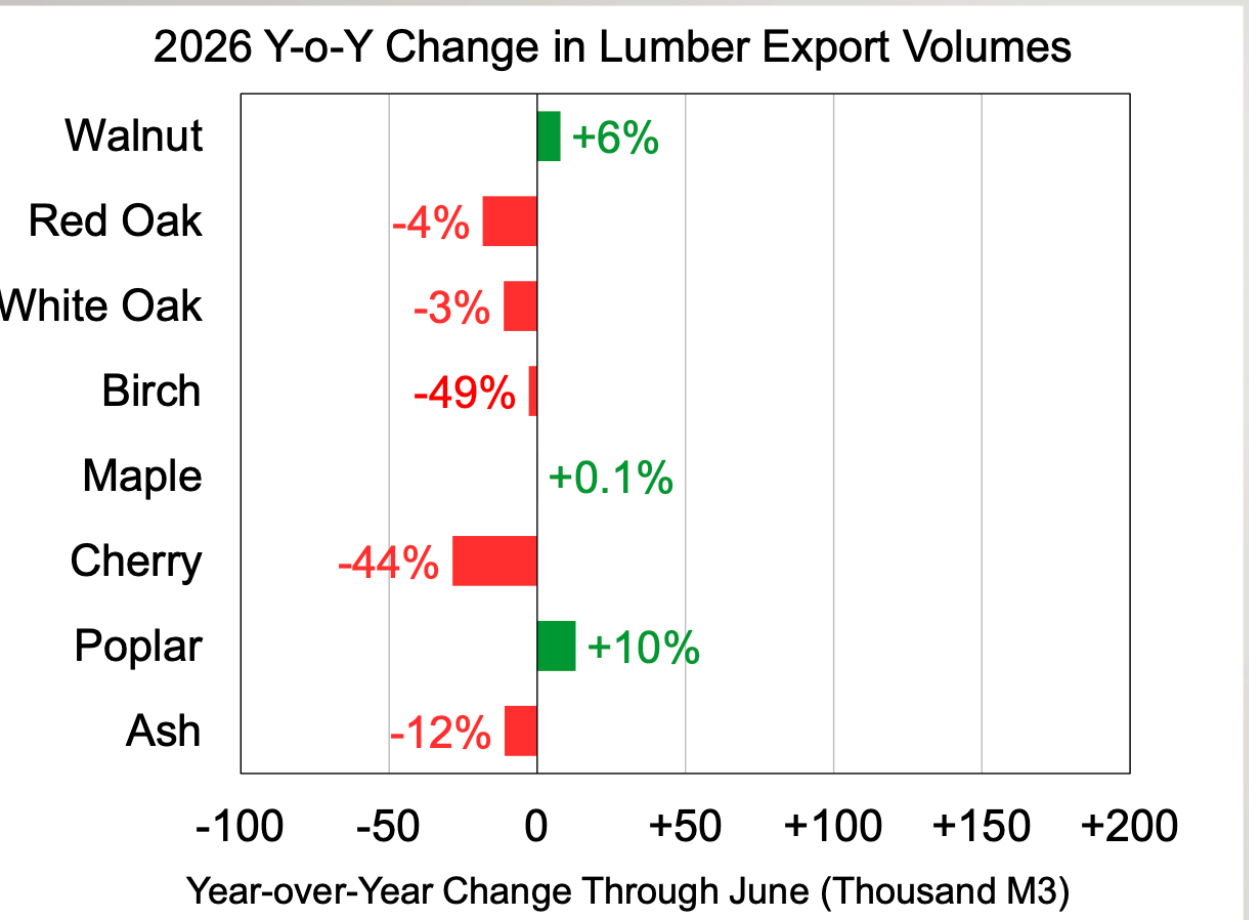
Source: USDA Foreign Agricultural Service

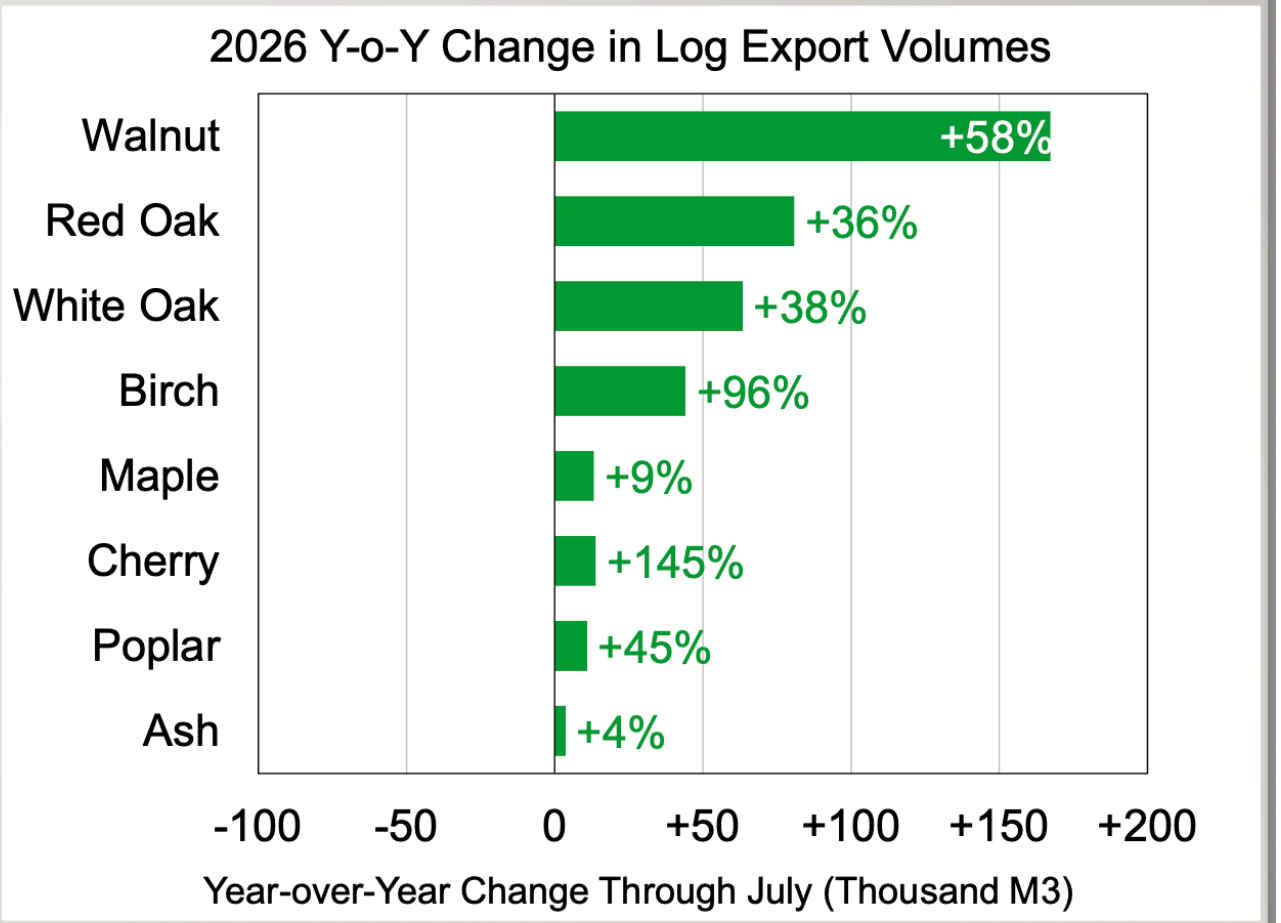
- Total shipments of U.S. hardwood lumber to the MENA region reached 35,693 cubic metres and USD 29.29 during the first six months of 2026, falling year-on-year by 21% and 23% respectively.
- Unsurprisingly due to the war, the biggest drop was seen in shipments to the UAE.
- Exports to Turkey grew during the period, rising by 23% y-o-y in volume to 8,414 cubic metres.
- Shipments to Pakistan during the period also fell by 34% y-o-y in volume to 5,486 cubic metres.

A Word About Log Exports



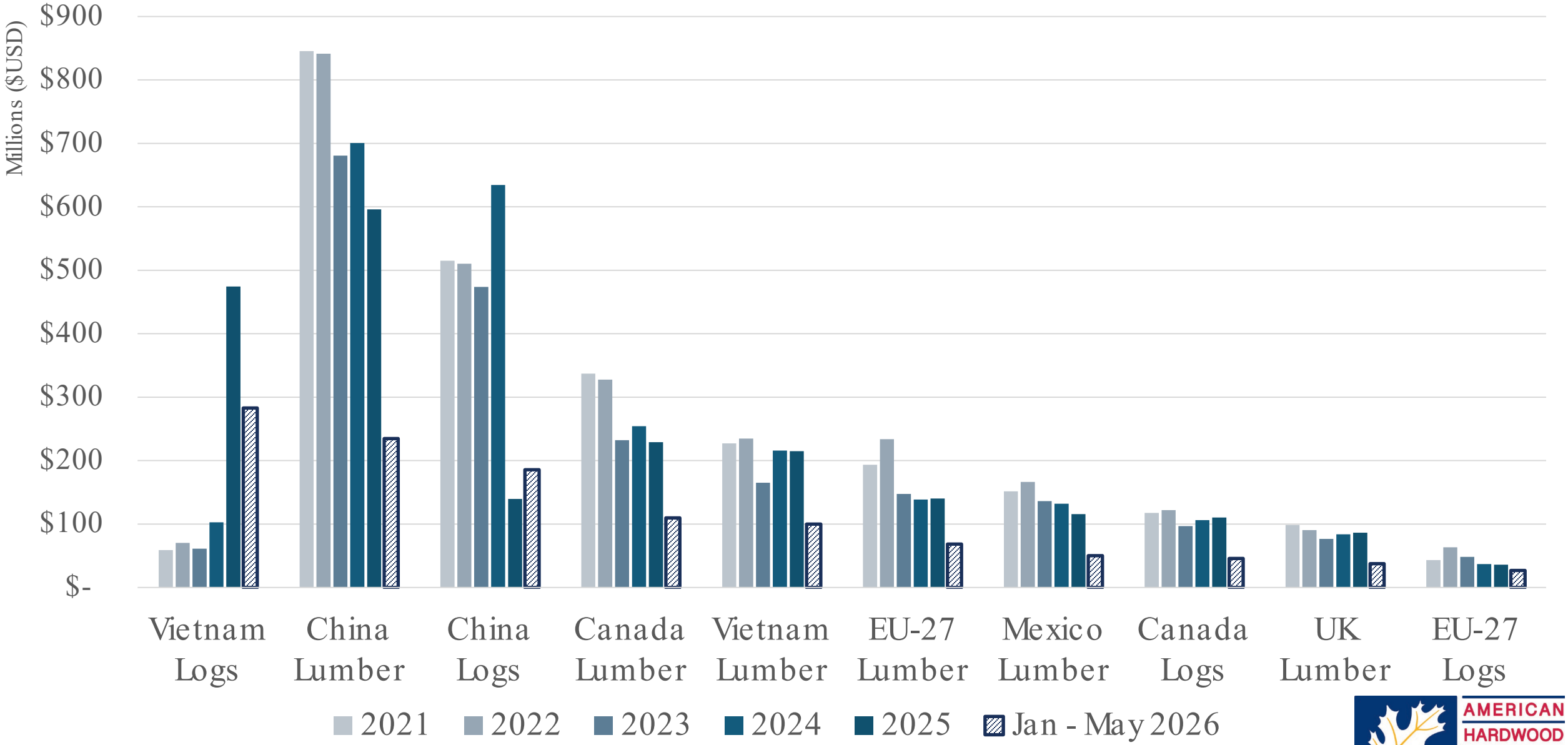
Y-O-Y LUMBER VS LOG EXPORT CHANGE THROUGH JULY





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Top 10 Markets for Hardwood Logs and Lumber

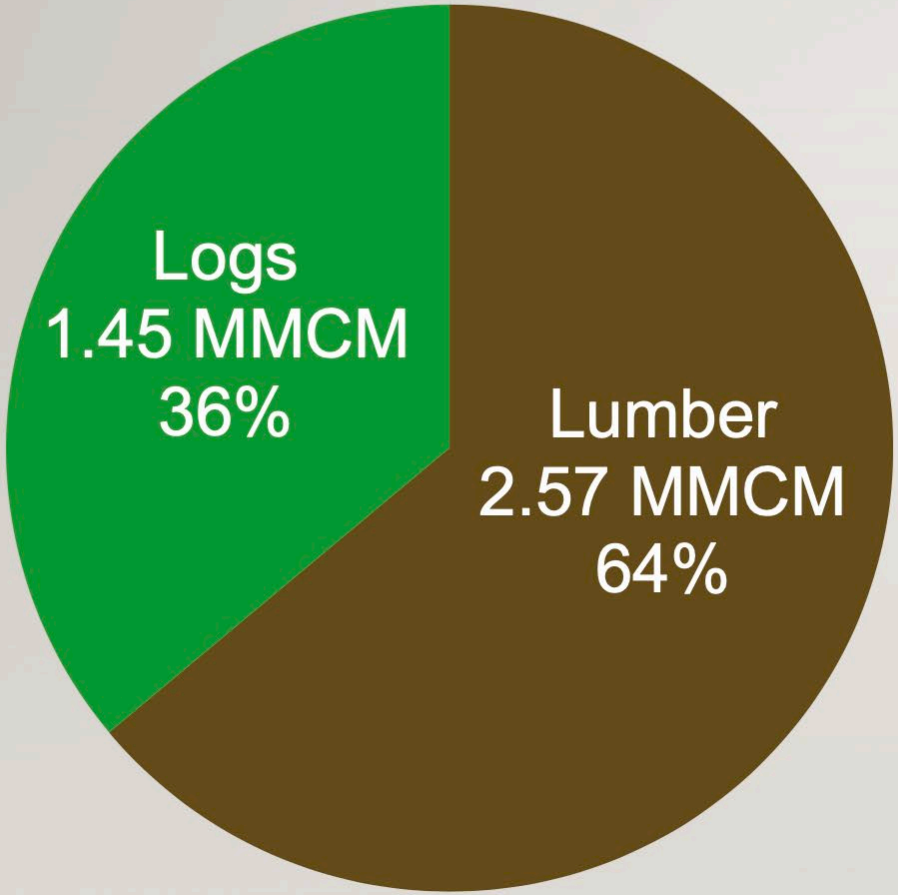


Source: U.S. Census Bureau Trade Data

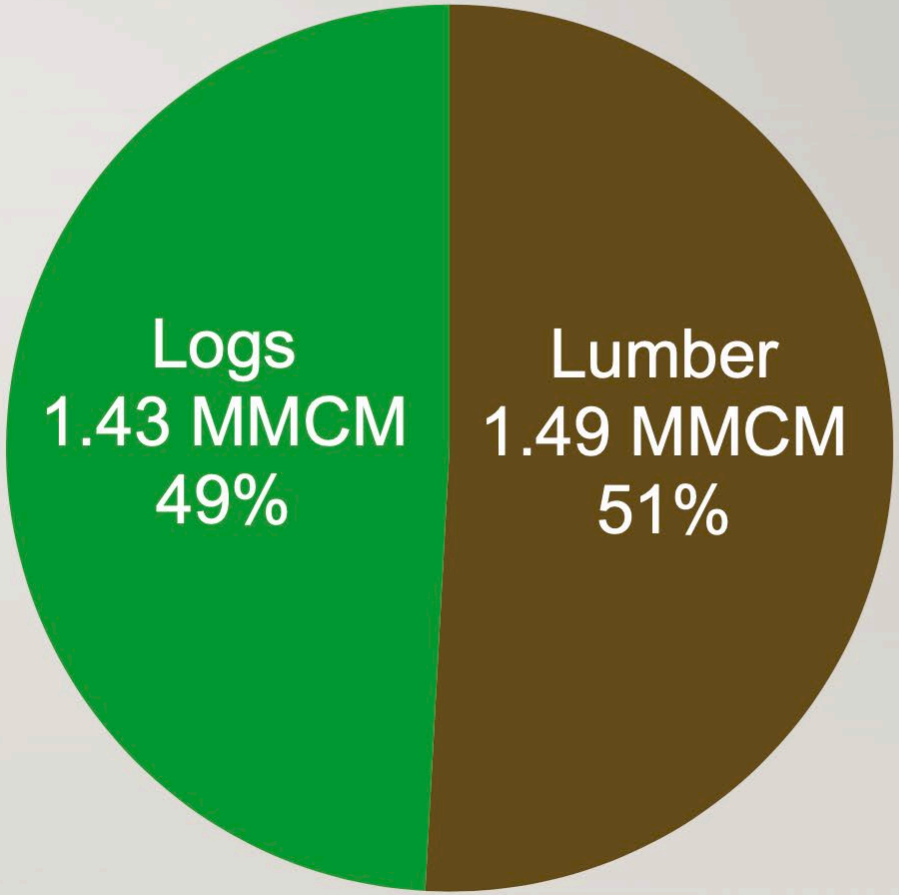
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HARDWOOD EXPORT MIX

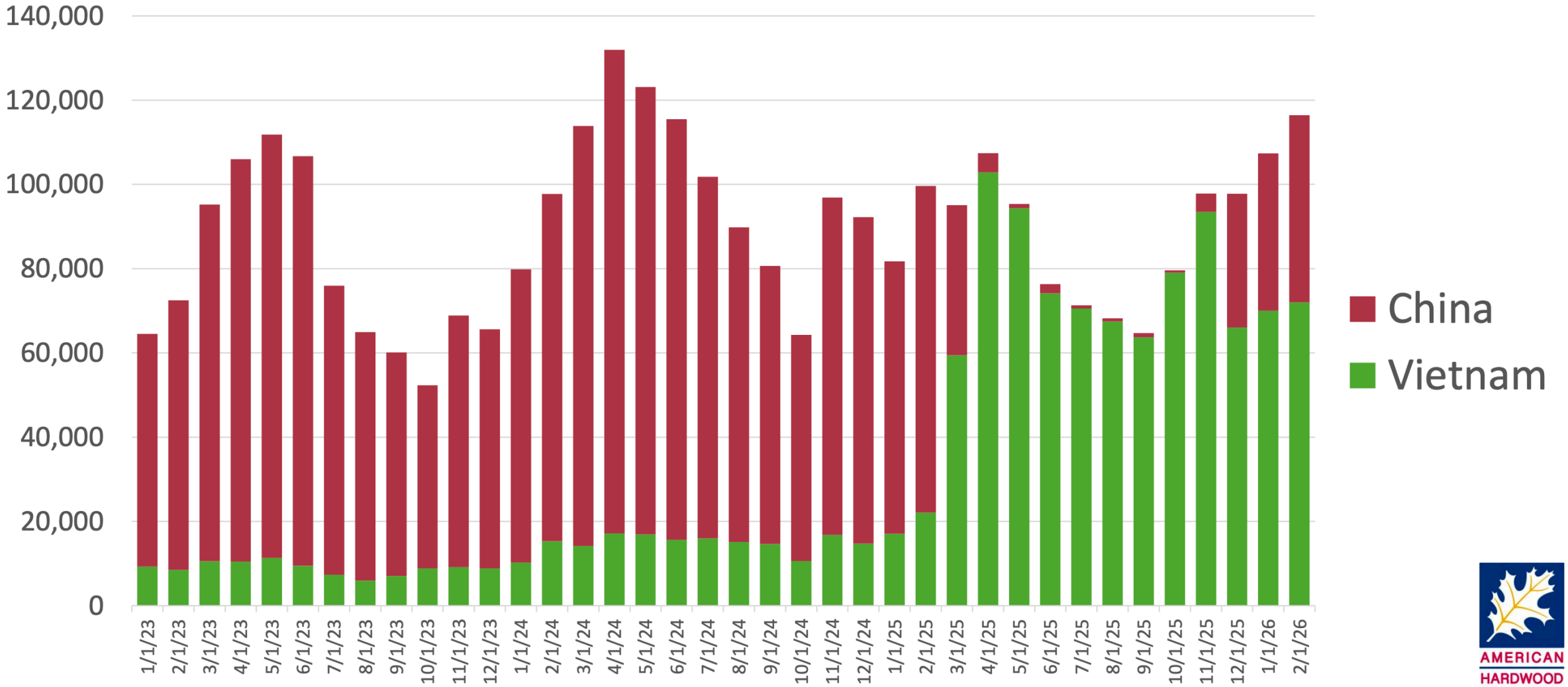
Jan-Jul 2018



Jan-Jul 2026



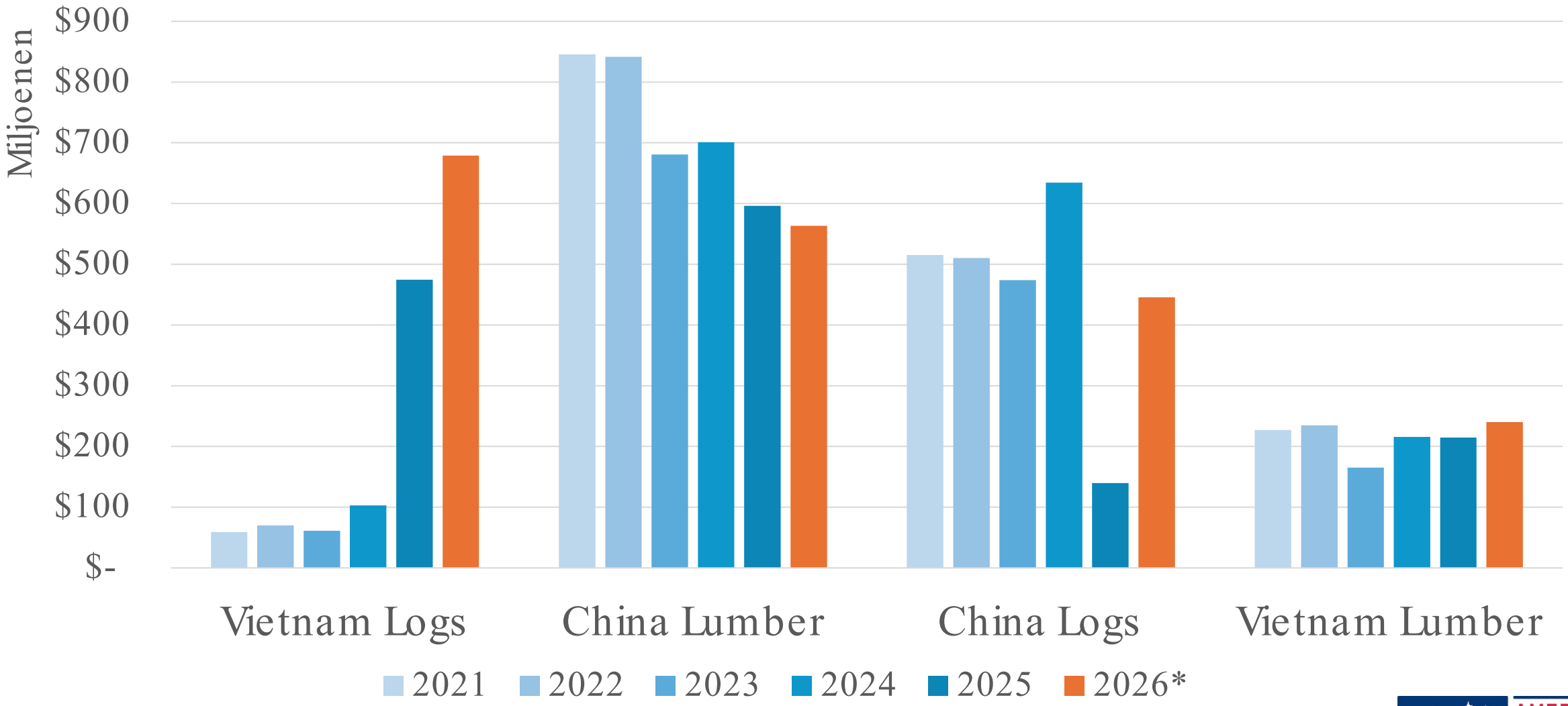
Monthly US Hardwood Log Exports to China and Vietnam (m3)



Source: U.S. Census Bureau Trade Data

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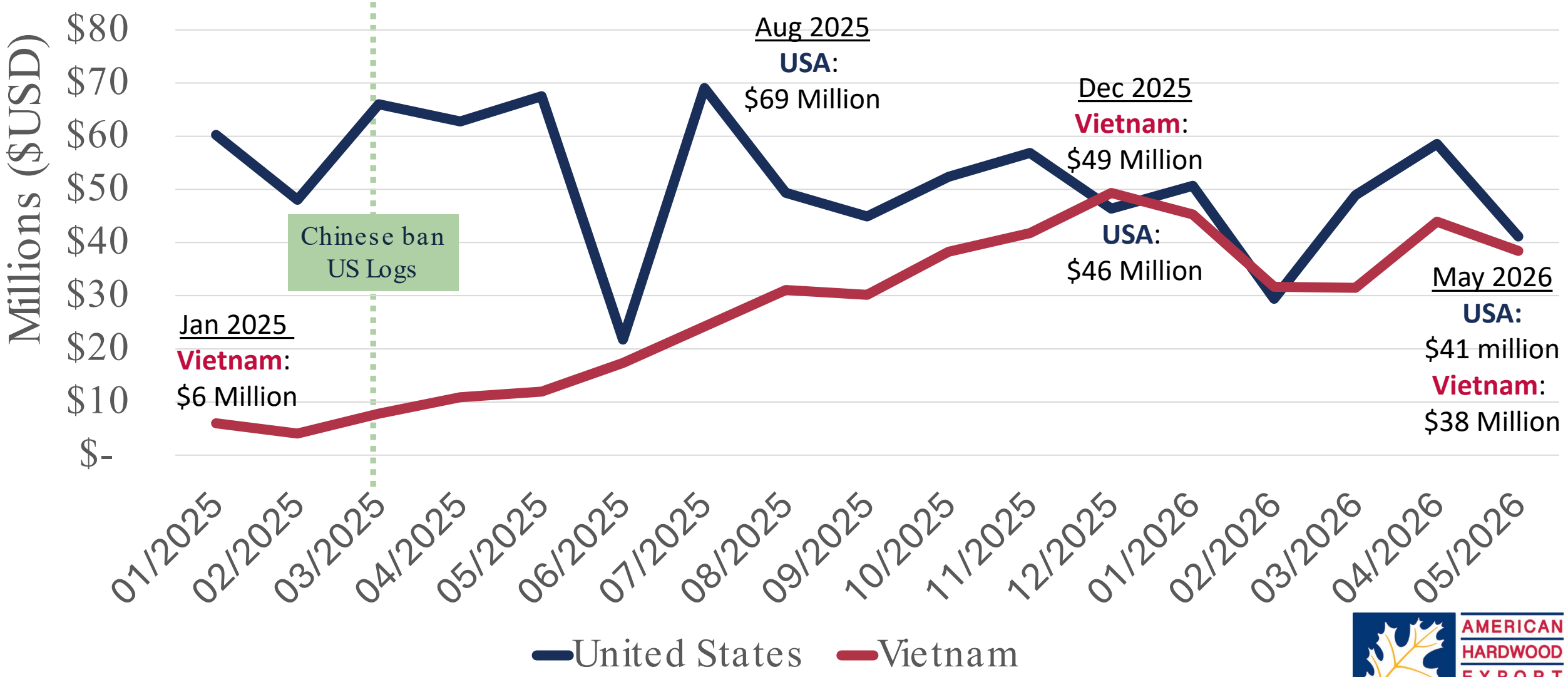
China and Vietnam Logs/Lumber Markets
(2026 Annualized from May Data)



Source: U.S. Census Bureau Trade Data

AMERICAN HARDWOOD EXPORT COUNCIL

China Lumber Imports from USA and Vietnam Since 2025



Source: Trade Data Monitor, China imports of all hardwood lumber by value

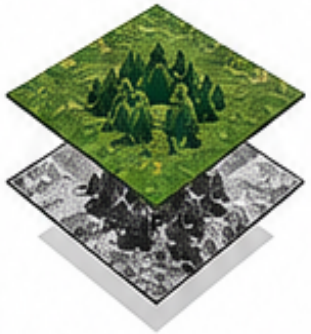
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American Hardwood Assured

HOW THE AHA PLATFORM IDENTIFIES THE GEOLOCATION OF HARDWOOD HARVESTING SITES

The AHA Platform uses multiple sources of earth observation data and advanced analytics to detect and confirm hardwood harvesting activity.

1 DEFINE FOREST BASE LAYER



Start with the revised 2020 JRC forest base layer to identify existing forest areas.

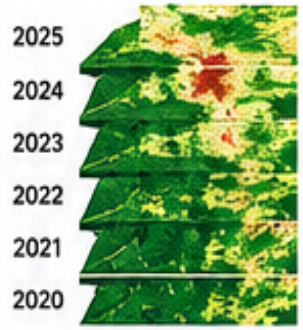
2 MONITOR FOREST HEALTH & CHANGE





Calculate NDVI (Normalized Difference Vegetation Index) from red and near infra-red channels to measure healthy canopy.

3 DETECT CHANGE OVER TIME



Year-on-year NDVI changes identify forest thinning, low intensity harvesting, and clear fell areas.

4 CORROBORATE WITH MULTIPLE DATA SOURCES



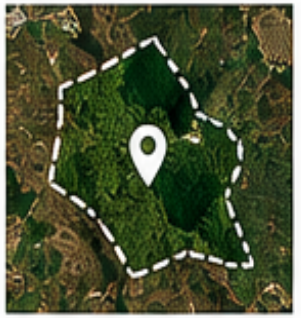
Cross-validate detections using independent earth observation datasets.

5 EXPERT VALIDATION (AHA EXPERT EYE)

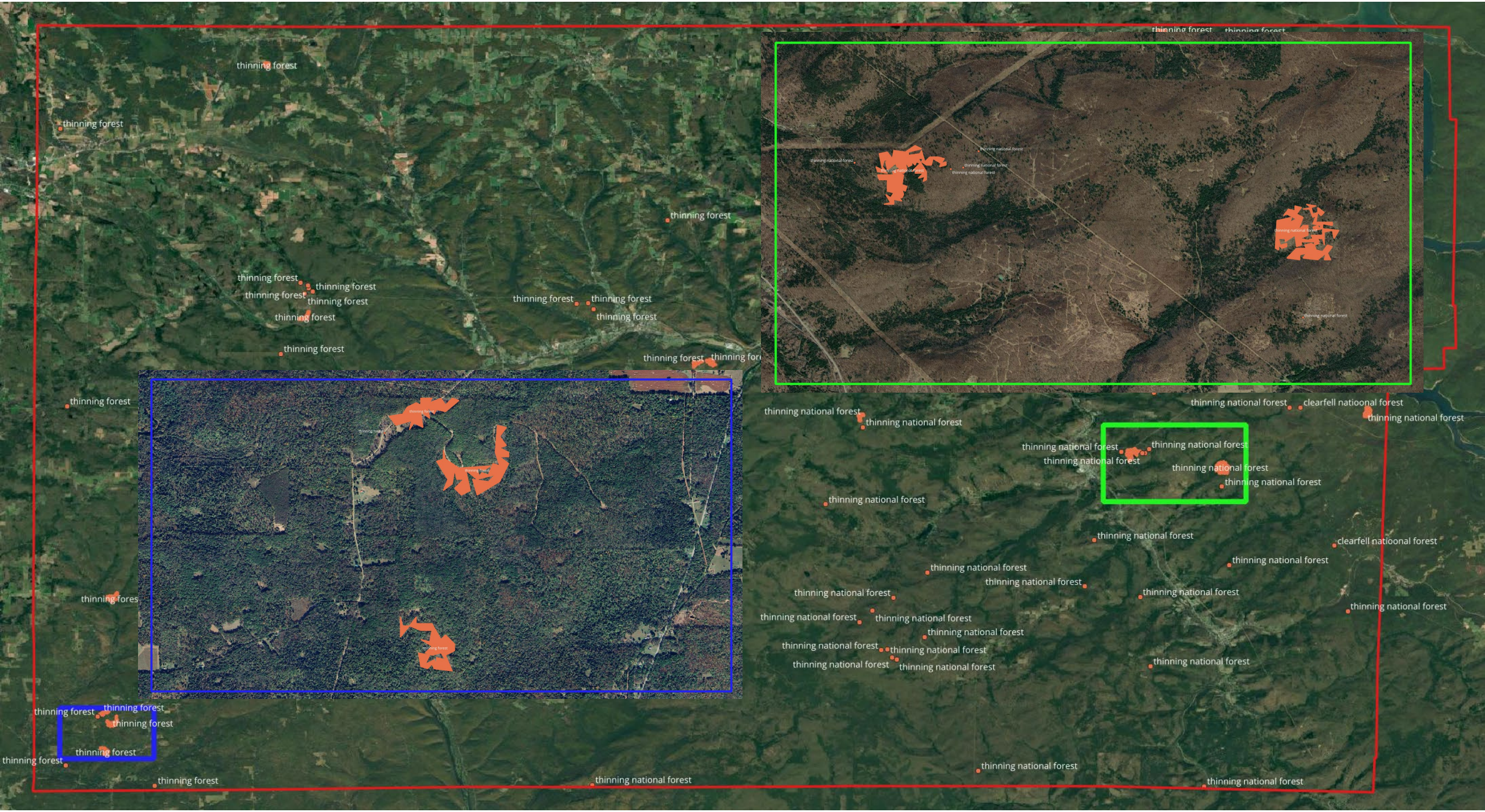


AHA foresters review high-resolution imagery and data to confirm harvest activity and exclude other causes.

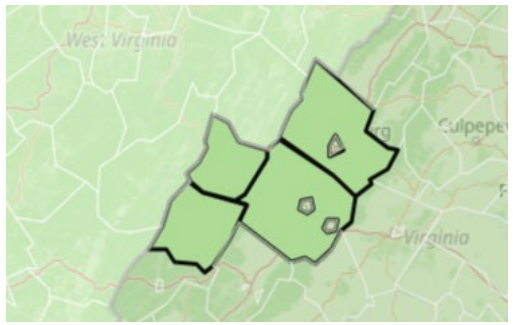
6 HARVEST SITE GEOLOCATION



Confirmed harvest areas are geolocated and made available to AHA Platform users for due diligence and EUDR compliance.


thinning forest
thinning national forest
clearfell natioonal forest

Plans to evolve AHA in 2027: Blockchain proof of provenance



Virginia | Download legality risk assessment summary | Download full legality risk assessment

American Hardwood Assured

Legal & deforestation-free proof of provenance

AHA Statement

Origin Geo Data | Download as GeoJSON file

American White oak Quercus spp. mainly Q. alba. May include Q. prinus, Q. stellata, Q. macrocarpa, Q. lyrata, Q. muehlenbergi, Q. michauxii, Q. bicolor 9228Kg

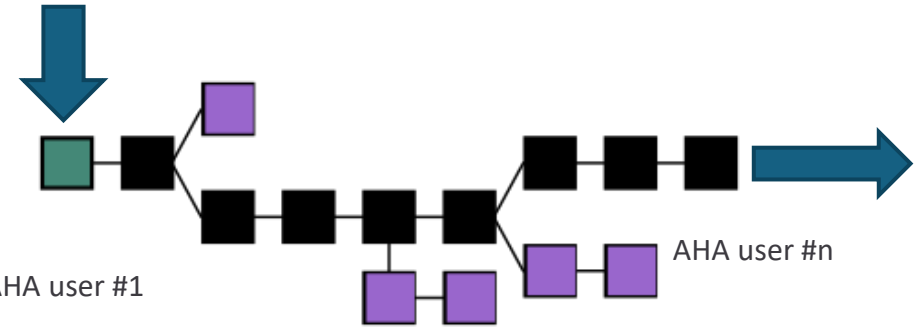
{ "type": "Polygon", "coordinates": [[[-81.343993, 35.82416299104267], [-81.328324, 35.996582999102 5], [-81.263596, 36.025817999102202], [-81.028833, 36.045651999102006], [-81.005541, 35.958286999102889], [-81.041839, 35.857854999103914], [-81.109507, 35.776593999104747], [-81.143053, 35.827886999103423], [-81.248998, 35.815715999104356], [-81.264611, 35.805211999104465], [-81.334272, 35.796280999104553], [-81.343993, 35.824162999104267]]] }

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{ "type": "Polygon", "coordinates": [[[-81.810516, 36.111510999101341], [-81.675149, 36.122529999101225], [-81.545488, 36.117474999101269], [-81.397817, 36.066069999101794], [-81.328324, 35.996582999101025], [-81.343993, 35.824162999104267], [-81.334272, 35.796280999104553], [-81.353514, 35.776267999104753], [-81.363796, 35.767801999104484], [-81.555994, 35.777537999104744], [-81.709749, 35.875032999103728], [-81.807162, 35.961954999102844], [-81.735673, 36.067583999101778], [-81.810516, 36.111510999101341]]] }

The “genesis block” within a private blockchain





AHA surveillance

Random inspections integrated with the latest plant chemistry-based provenance technologies to ensure the accuracy of county origin claims

- US Forest Service WISC
- Using plant chemistry to identify provenance
  - LIBS Handheld technology
  - Stable Isotope Ratio Analysis
  - Trace Element Analysis
- Resolution up to within 40 miles or origin



Thank You

msnow@ahec.org
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