

# Current State of the Hardwood Industry

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*The Future of the Hardwood Lumber Industry Conference*  
Nov. 2, 2016

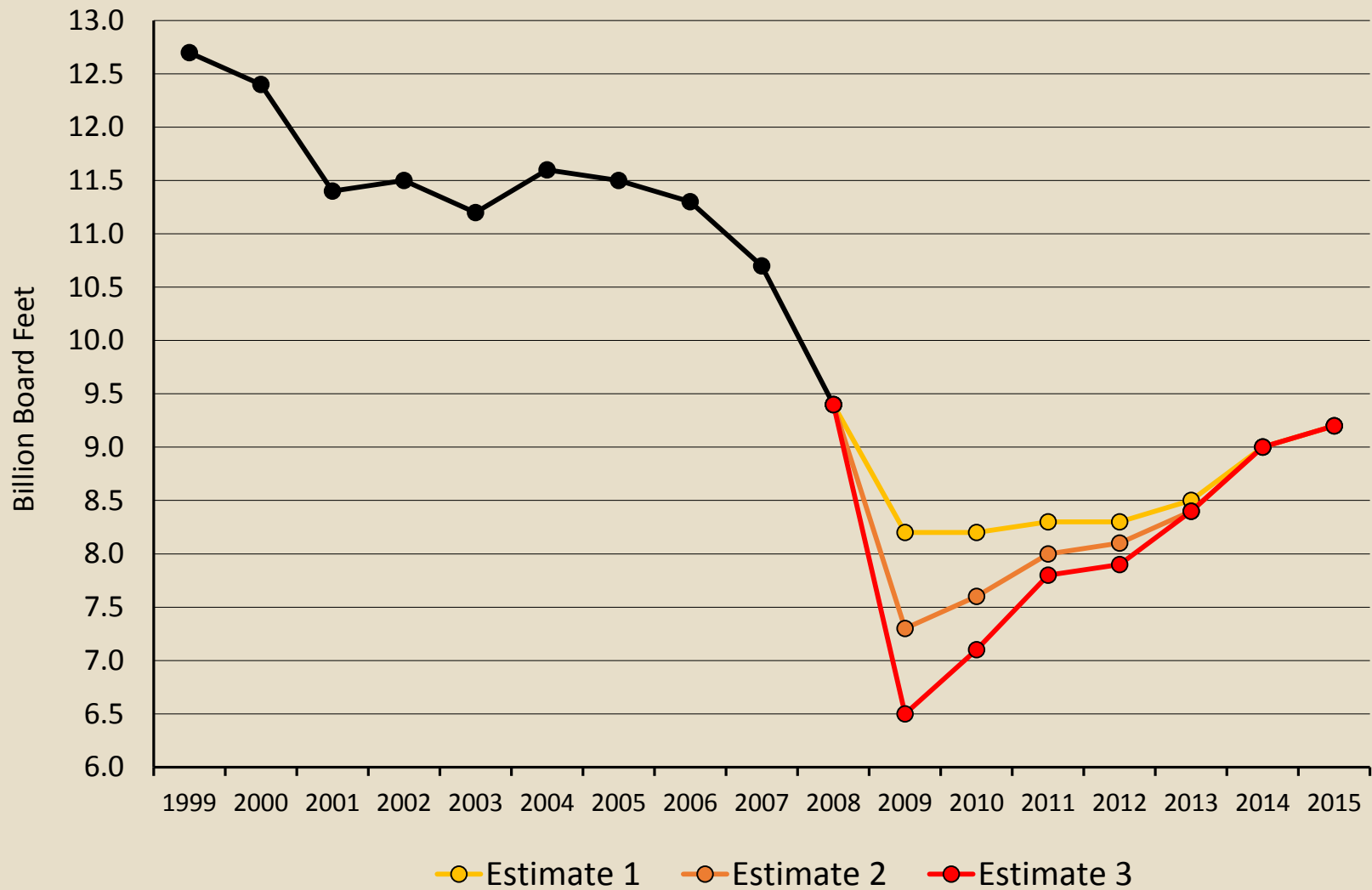


# Outline

- Overview of hardwood industry trends
  - production, employment
- Impacts of secondary woodworking on hardwood demand
  - housing
- Export trends for hardwoods
- Questions/comments



# Eastern U.S. hardwood lumber production





# The major markets for hardwood lumber

- Appearance-based:

- Furniture
- Cabinets
- Flooring
- Millwork
- Exports



Photo: AHMI



Photo: 2010 Ohio Hardwood Furniture Market

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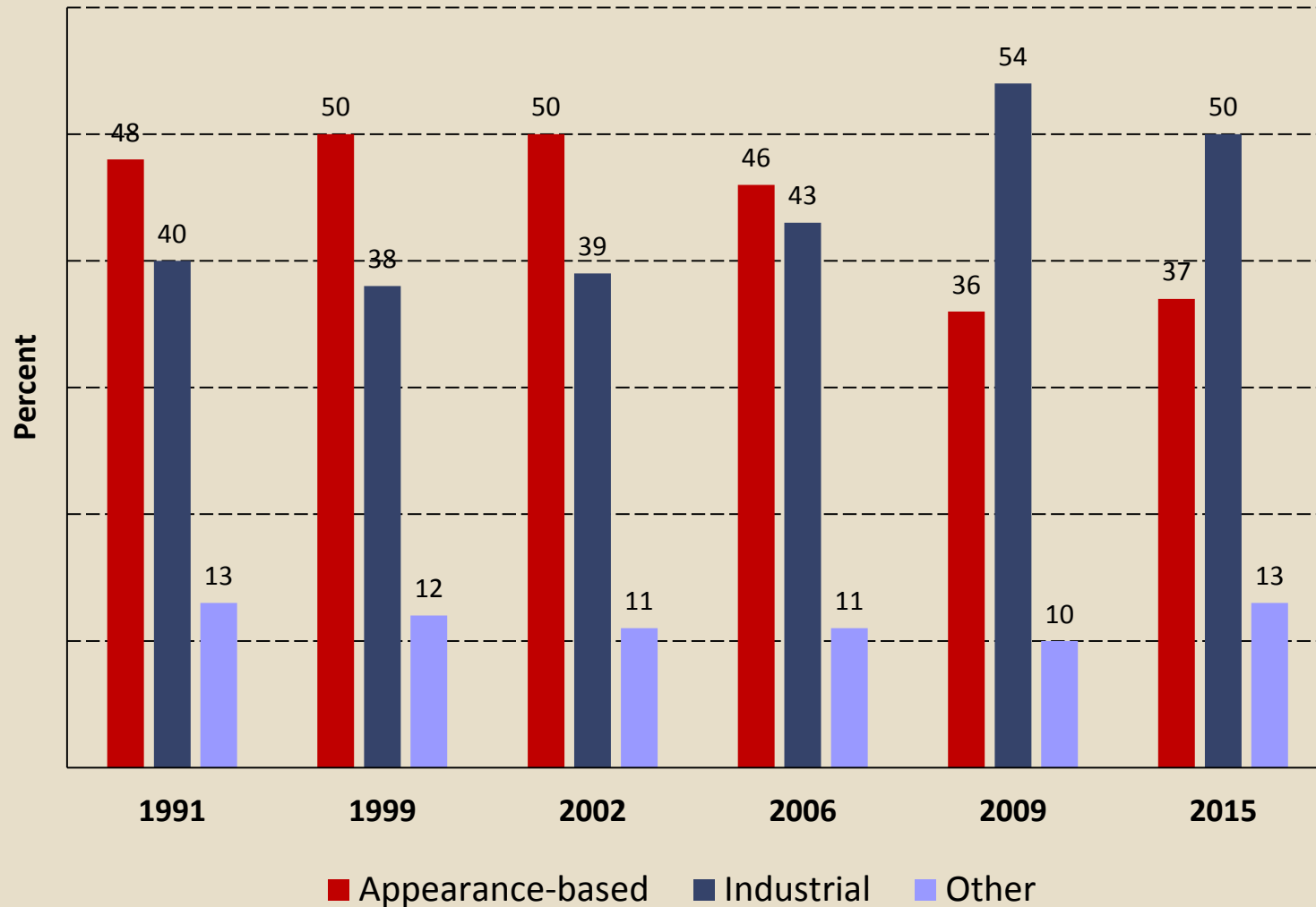
- Industrial:

- Pallets
- Railroad ties



Photo: USDA Forest Service Southern Research Station Archive, USDA Forest Service, SRS, Bugwood.org

## U.S. hardwood lumber consumption by market segment\*



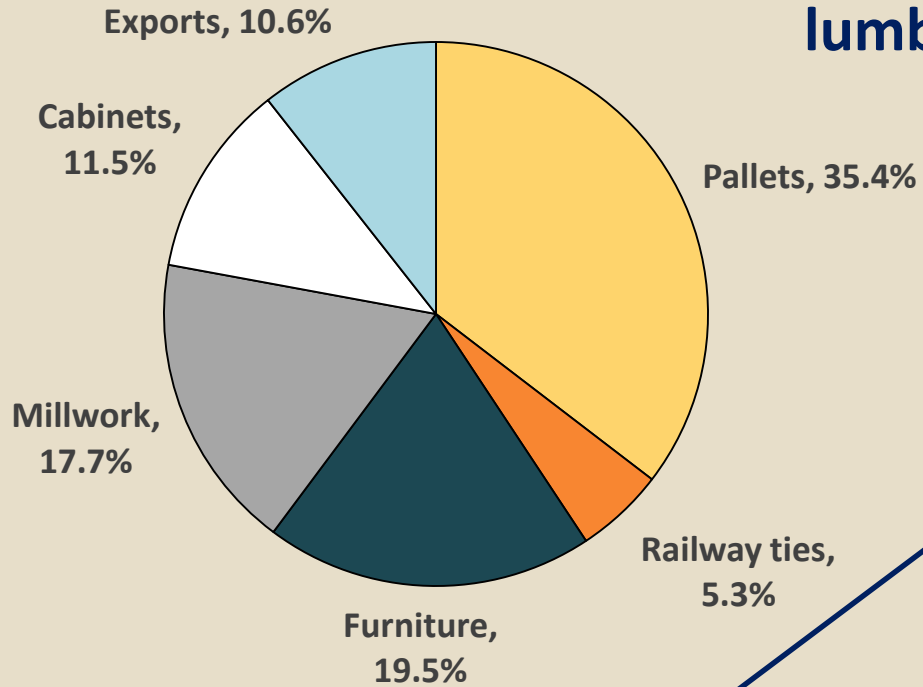
\* Exports excluded

Luppold and Bumgardner. 2016.

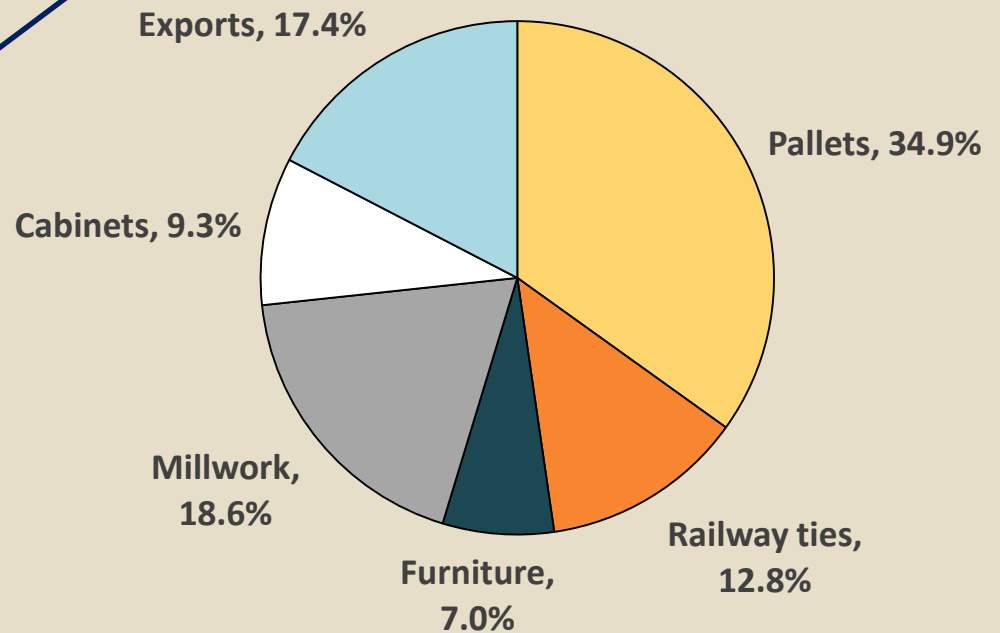
# U.S. hardwood lumber exports

Year	Volume (billion bd. ft.)	Percentage of <b>total</b> consumption plus exports	Percentage of <b>appearance-based</b> consumption plus exports
1991	0.9	8%	16%
1999	1.2	9%	16%
2002	1.2	10%	17%
2006	1.3	11%	21%
2009	0.8	10%	25%
2014	1.7	17%	37%
2015	1.5	16%	34%

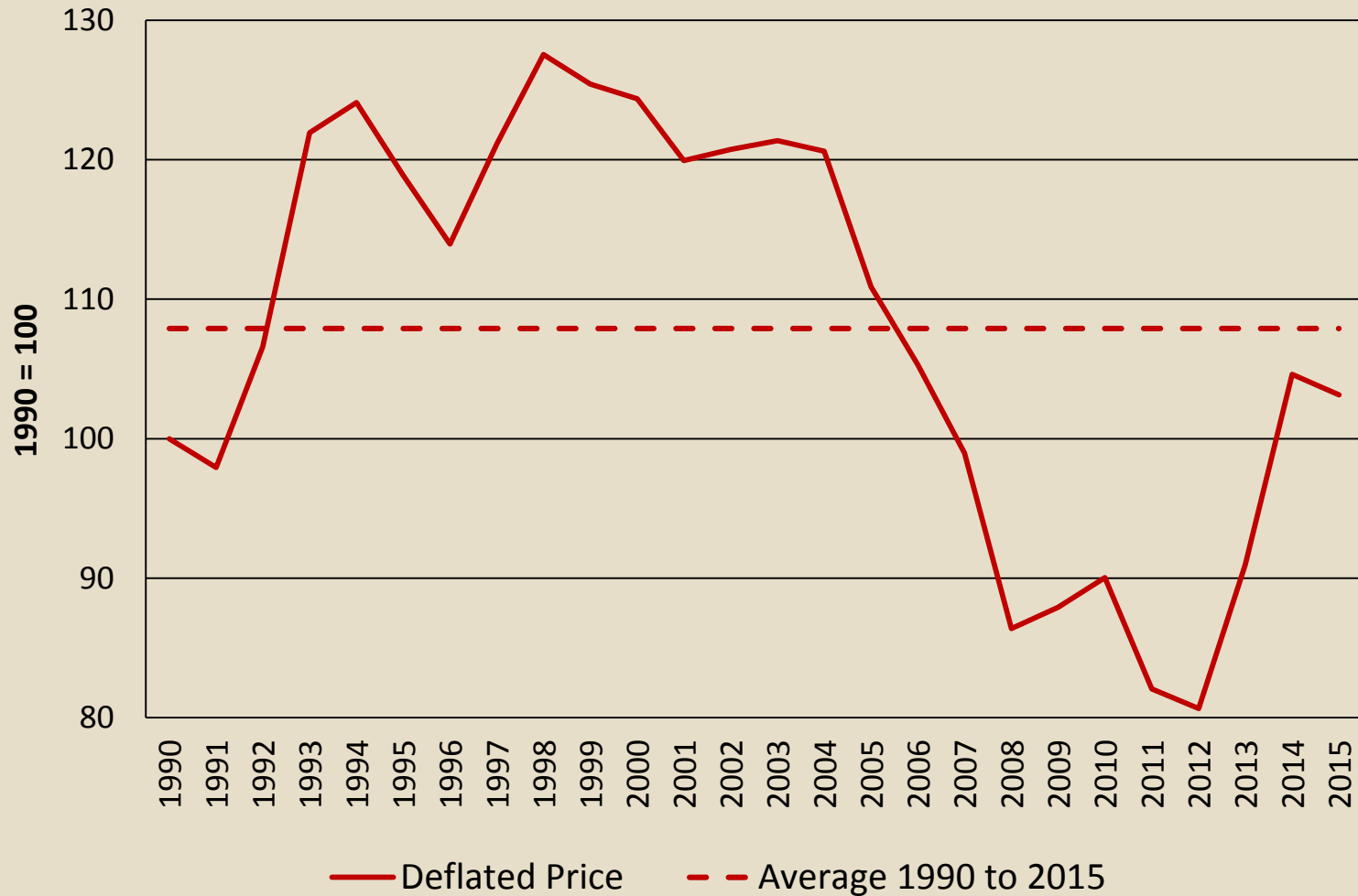
## Where the hardwood lumber volume went, 1999



## Where the hardwood lumber volume went, 2015

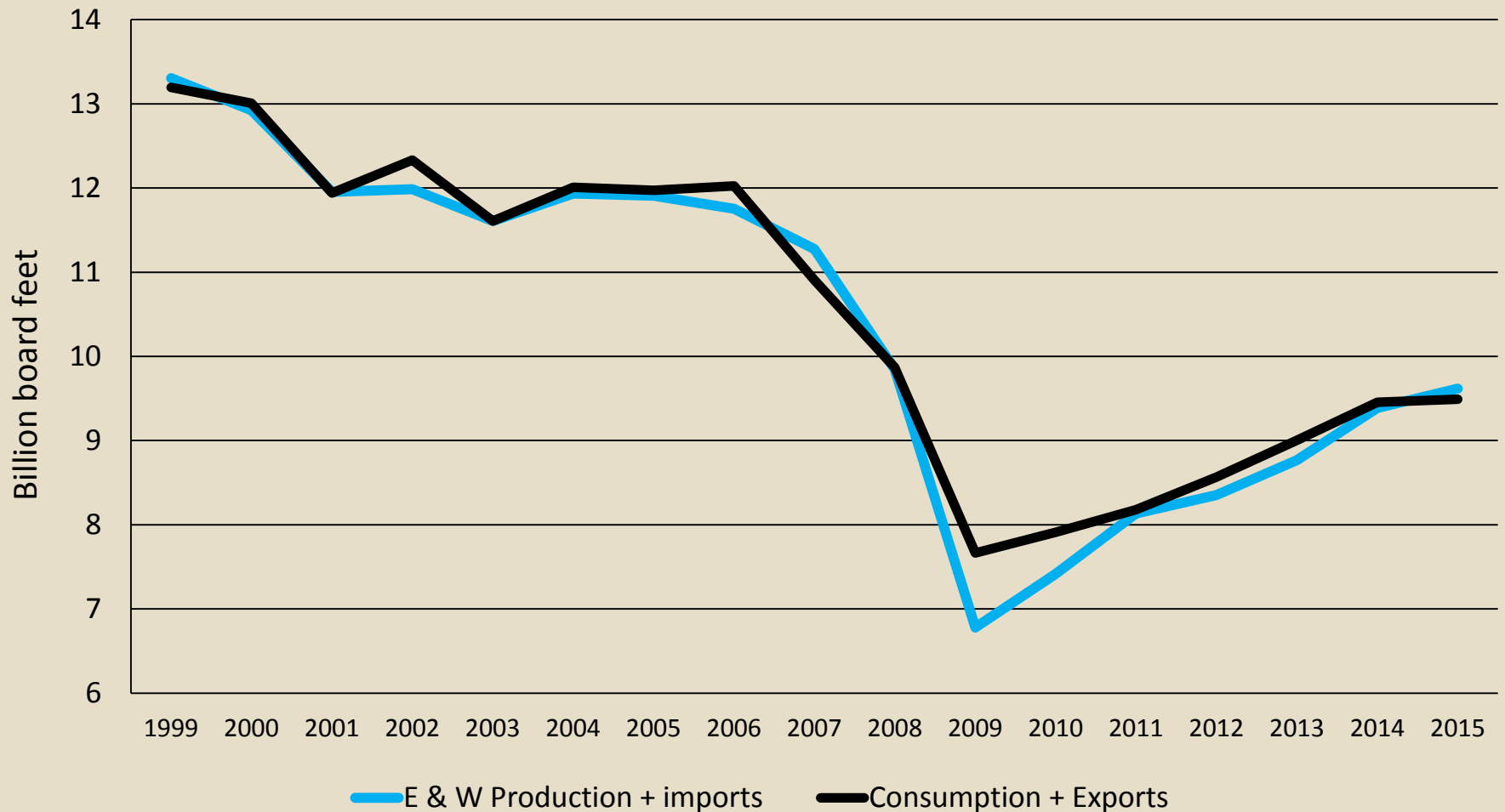


# Hardwood lumber price index

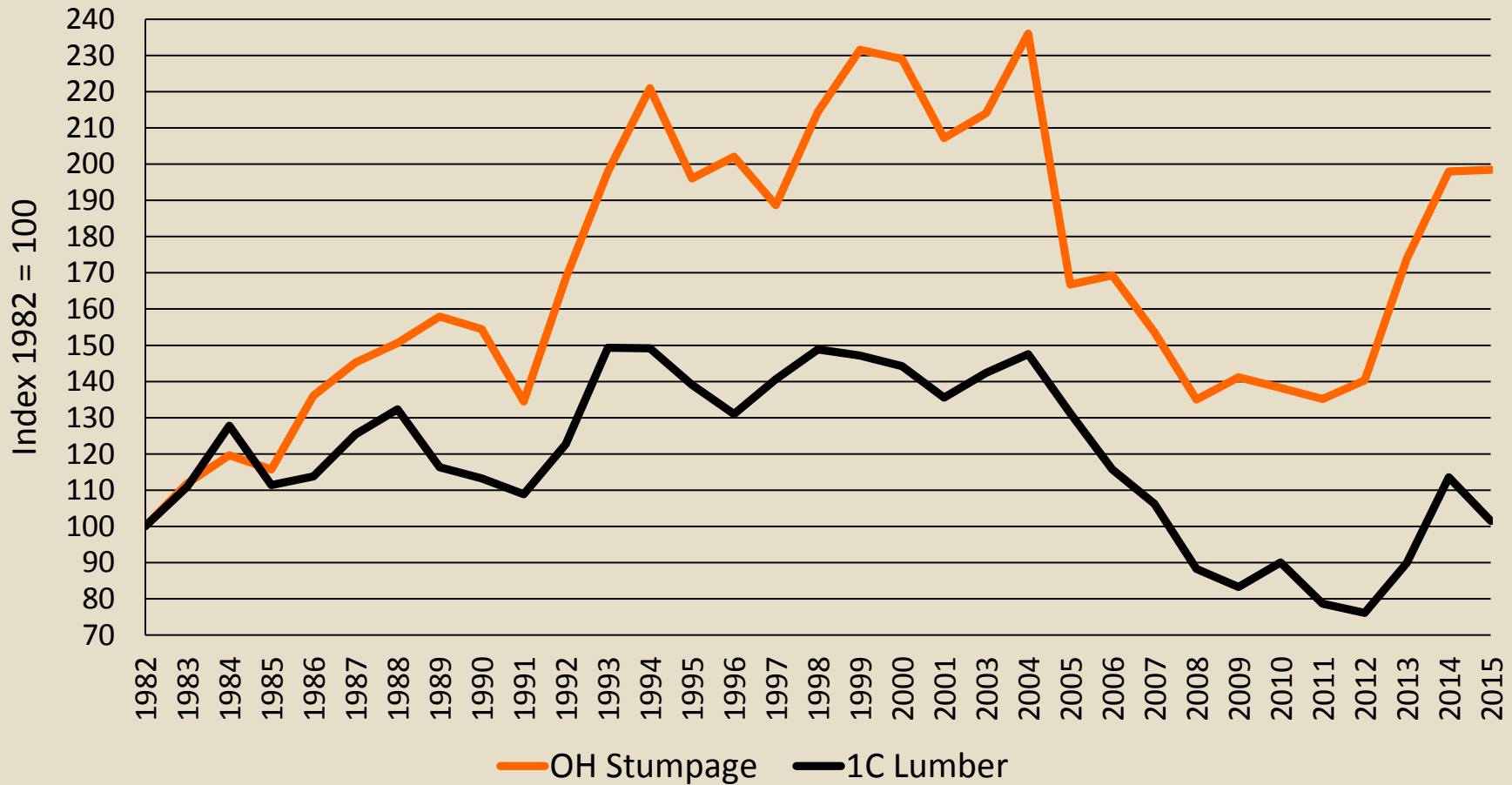




# Preliminary comparison of production plus imports and consumption plus exports 1999 to 2000

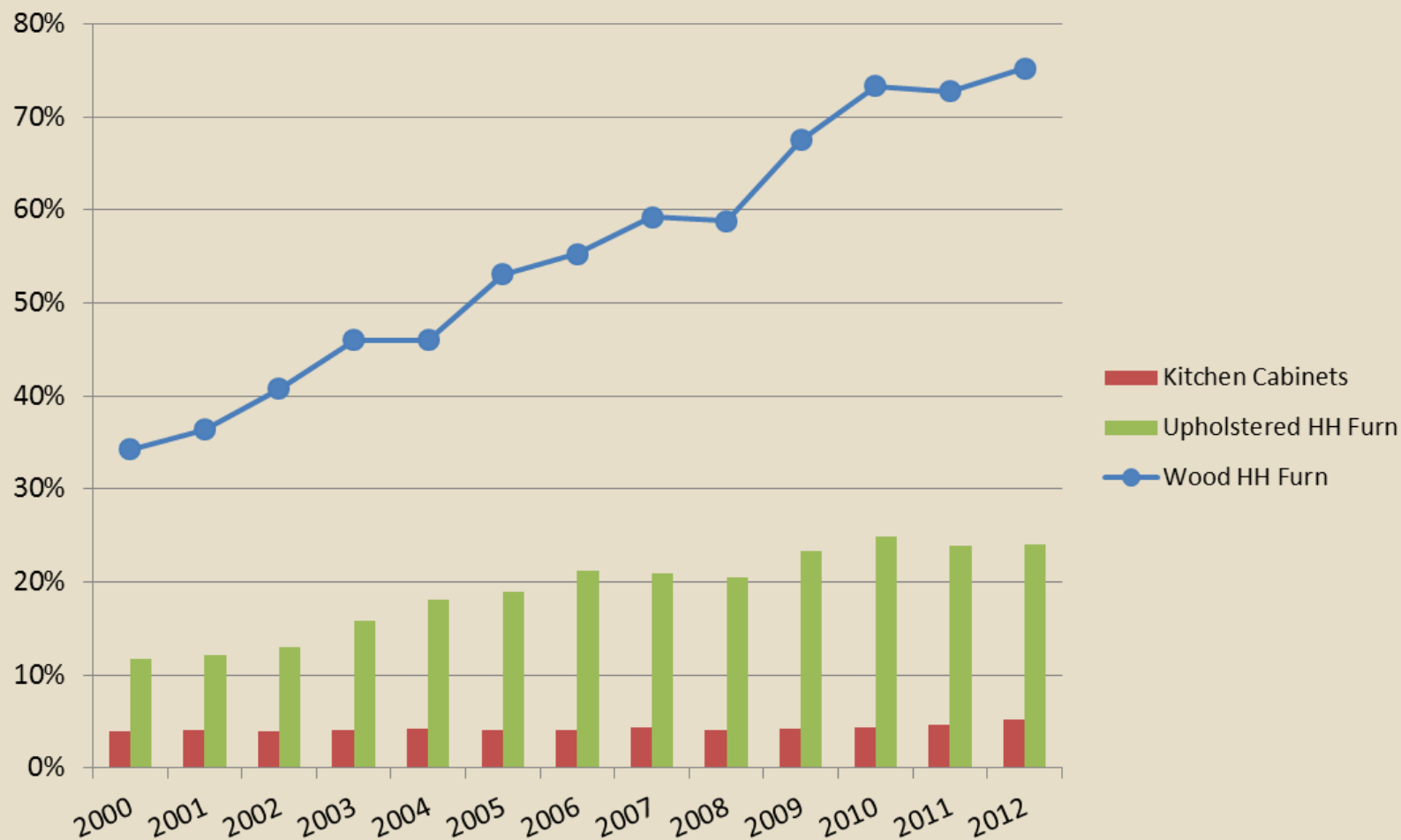


# Price of 1C lumber versus the price of stumpage in Ohio



# **Impacts of secondary hardwood markets and housing**

# Market share estimates of imports in the U.S.



Consumption = value of shipments + imports – exports

Import share = imports/consumption

Data sources: U.S. Census Bureau; International Trade Admin.

# Why makes the Holmes County furniture cluster a viable model?

## Customer driven . . .

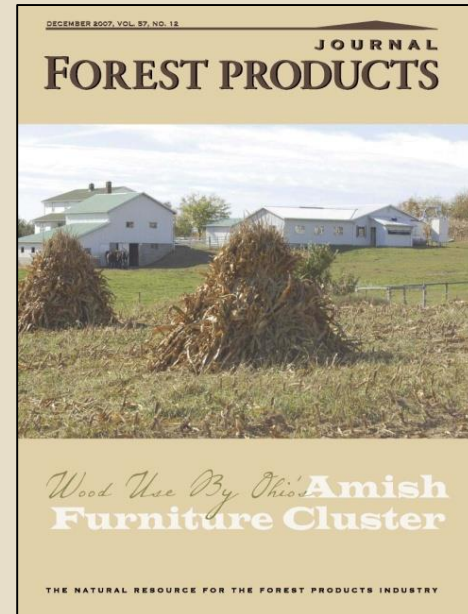
- Customers select style, stain, and species, making each order unique
  - - **customization**
- Like the U.S. cabinet industry!

## Extremely fluid production process . . .

- Production of specific products (e.g., tables, chairs). A dining room group could be constructed by multiple producers
  - - **specialization**

## Supply chains . . .

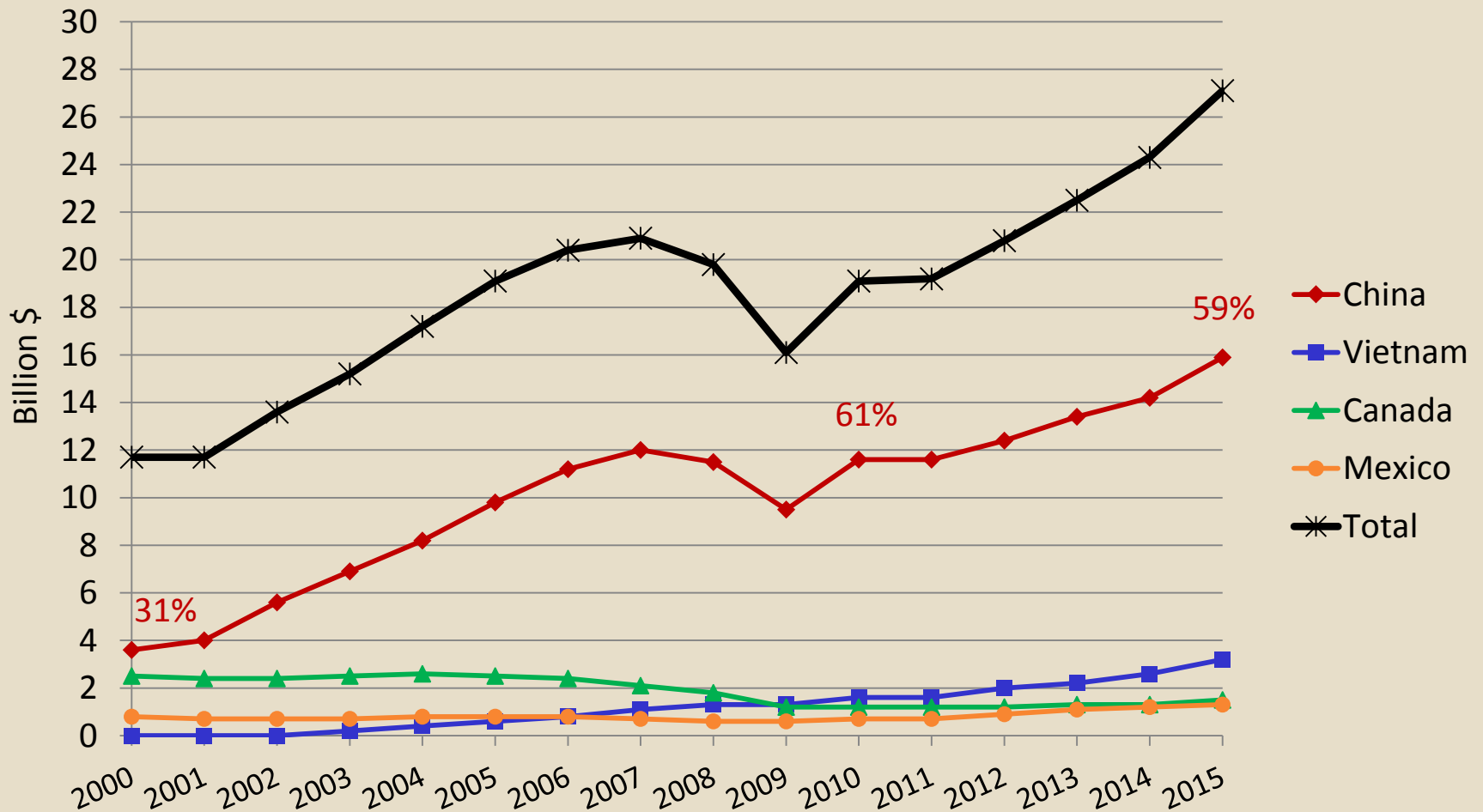
- Finishers receive pieces from multiple shops
- Many operations use the same set of 15+ stains
- **Outsourcing** components locally = aggregate productivity



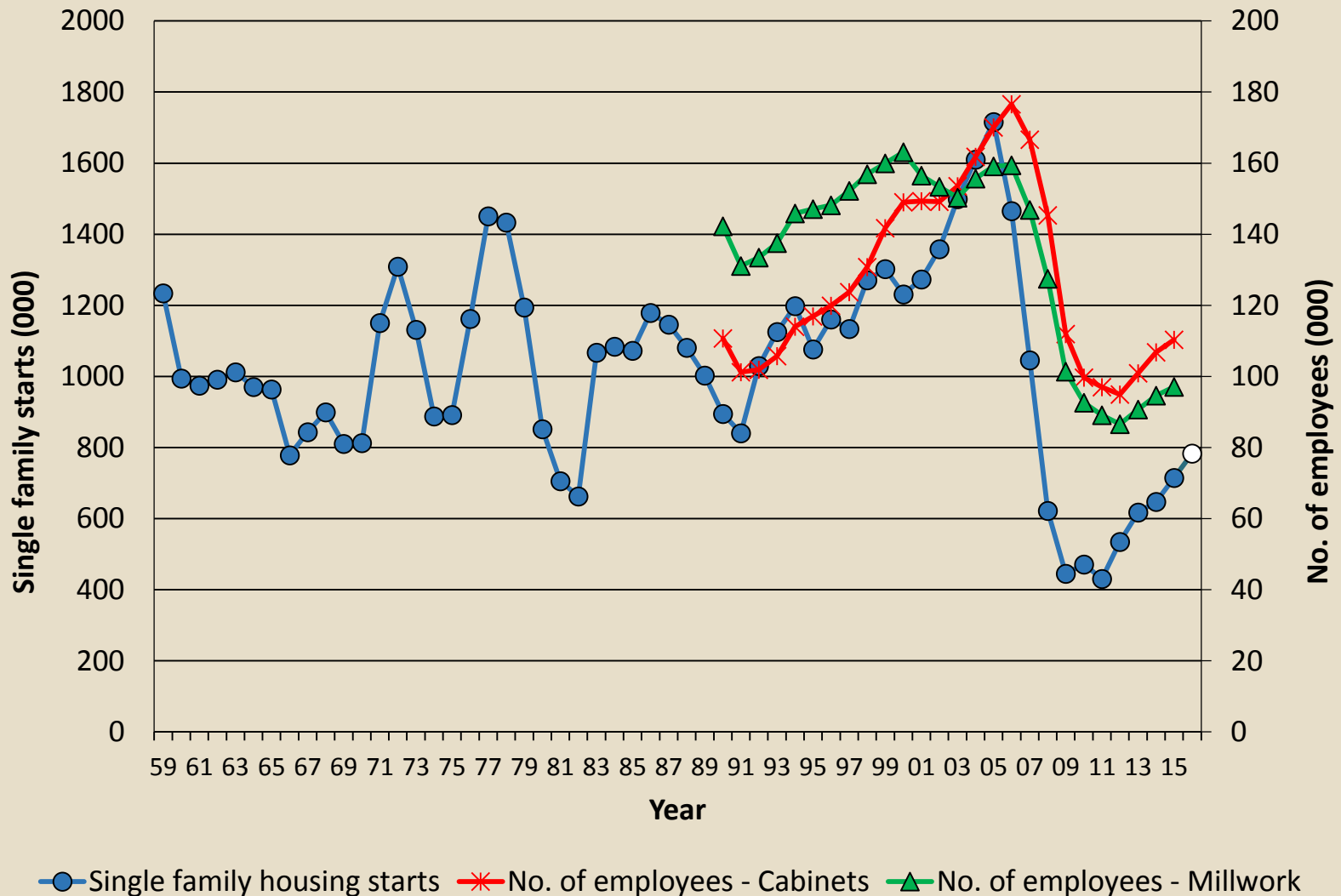


## Major U.S. import sources

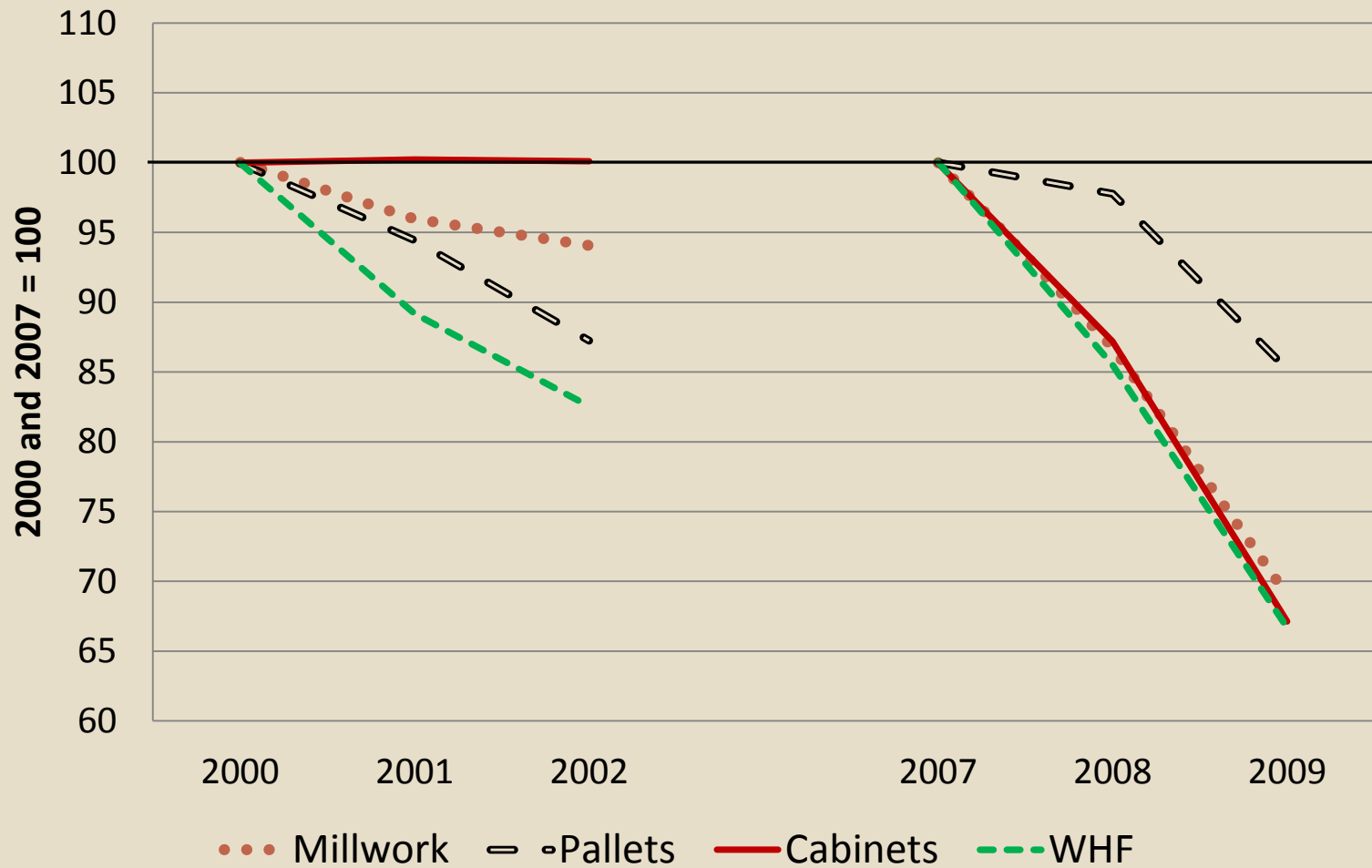
### Household & Institutional Furniture & Cabinets (NAICS 3371)



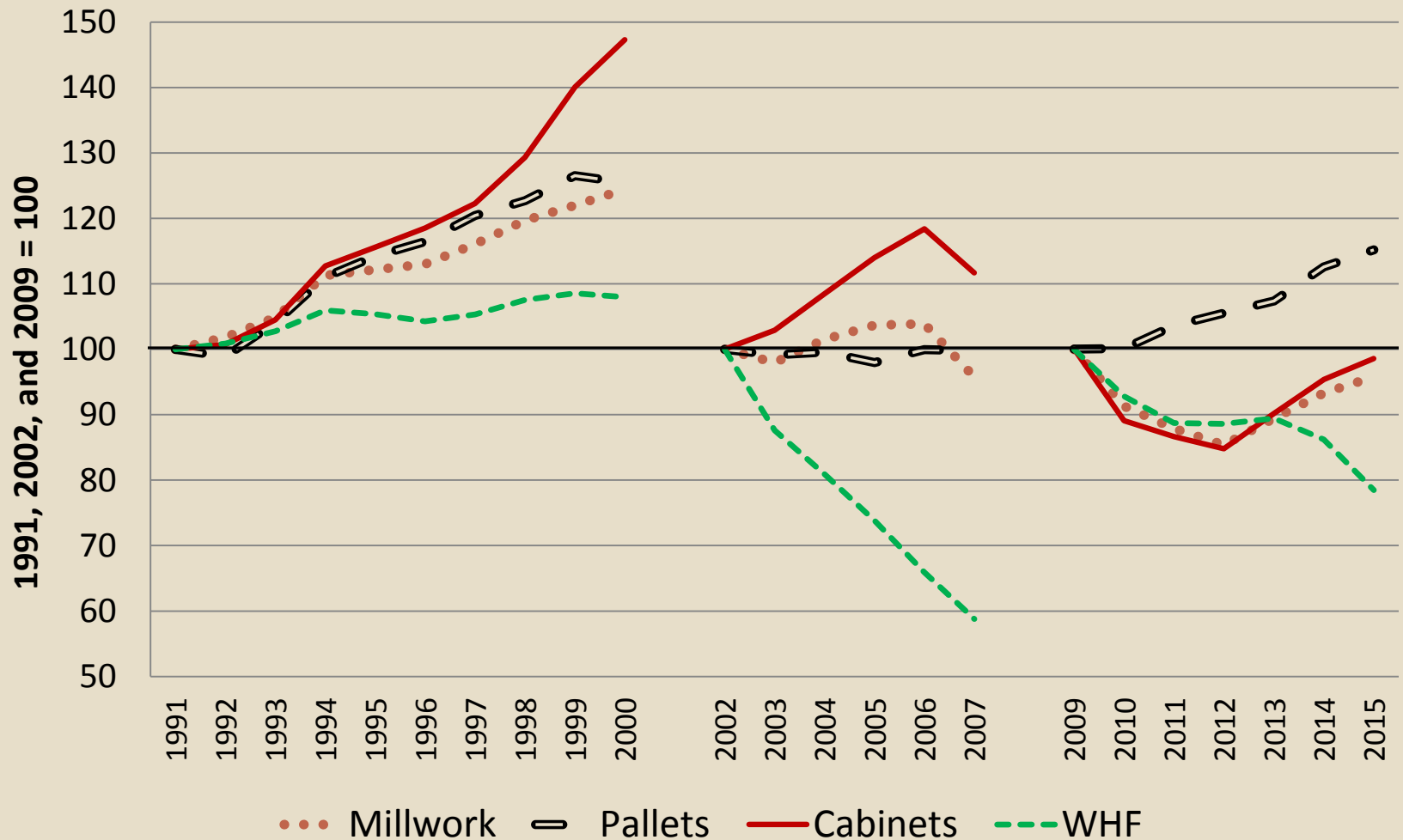
# Housing market's importance to woodworking employment



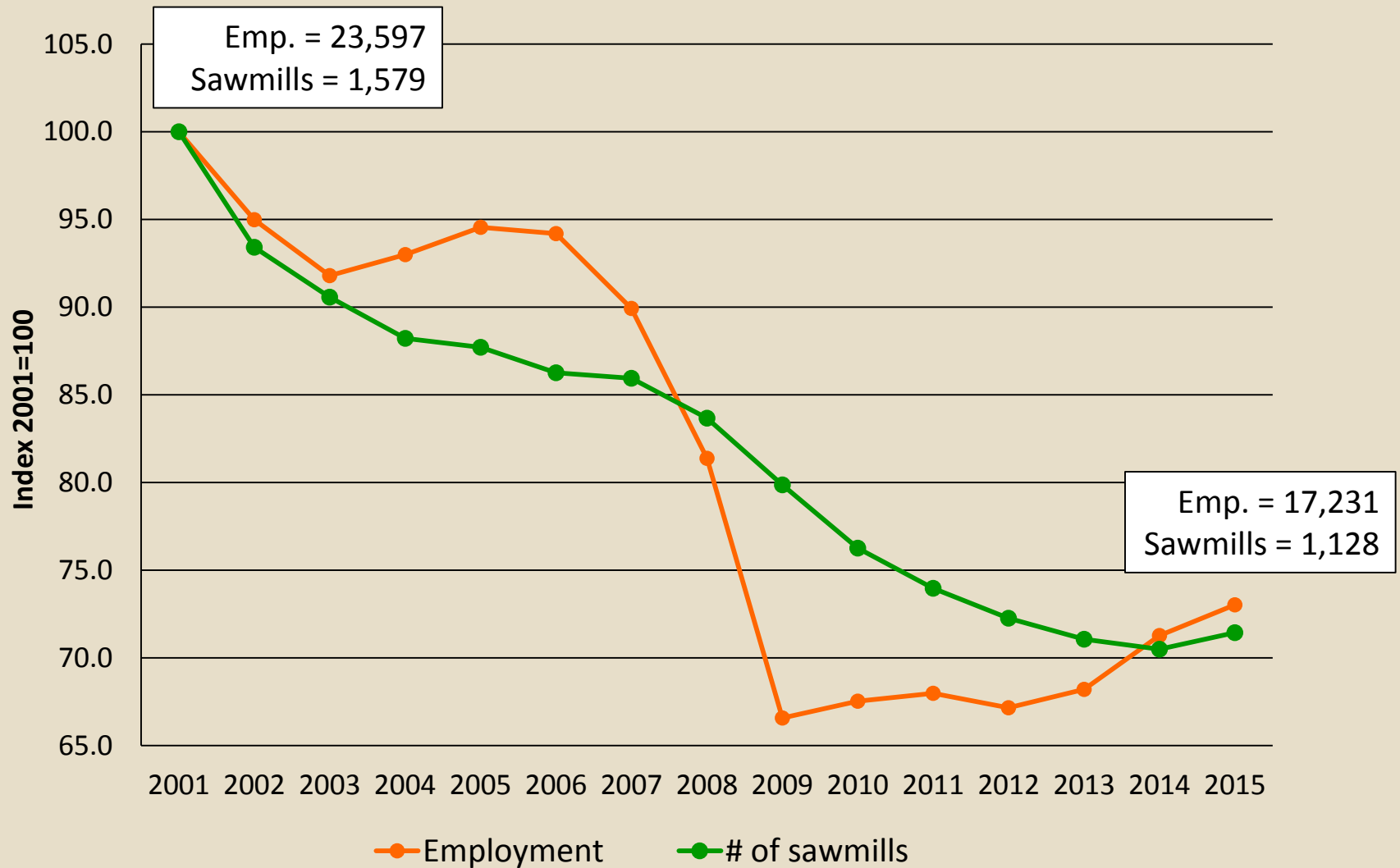
# Employment indexes for last two economic recession periods



# Employment indexes for last three economic expansion periods

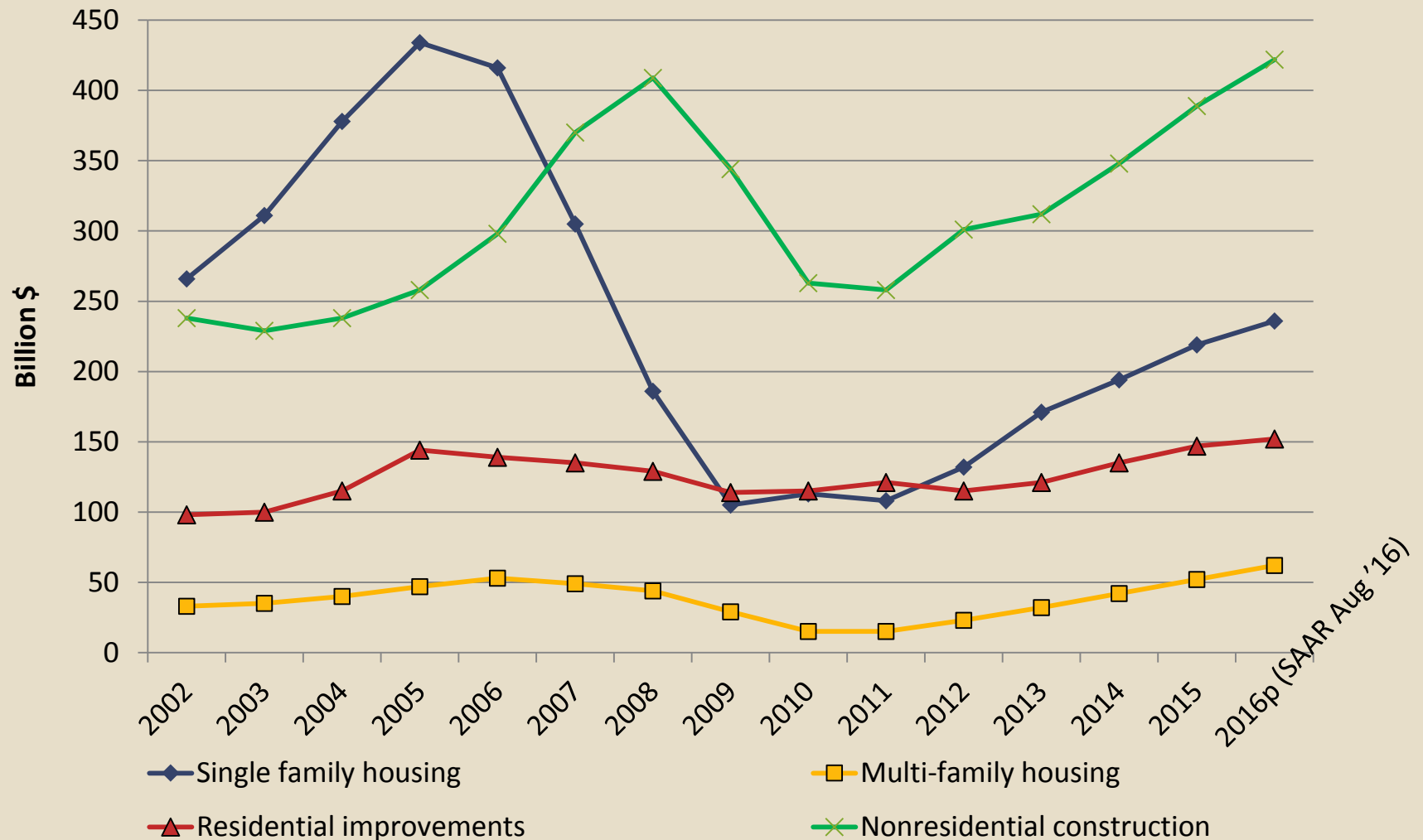


# Index of sawmill employment and number of sawmills in the Appalachian Region

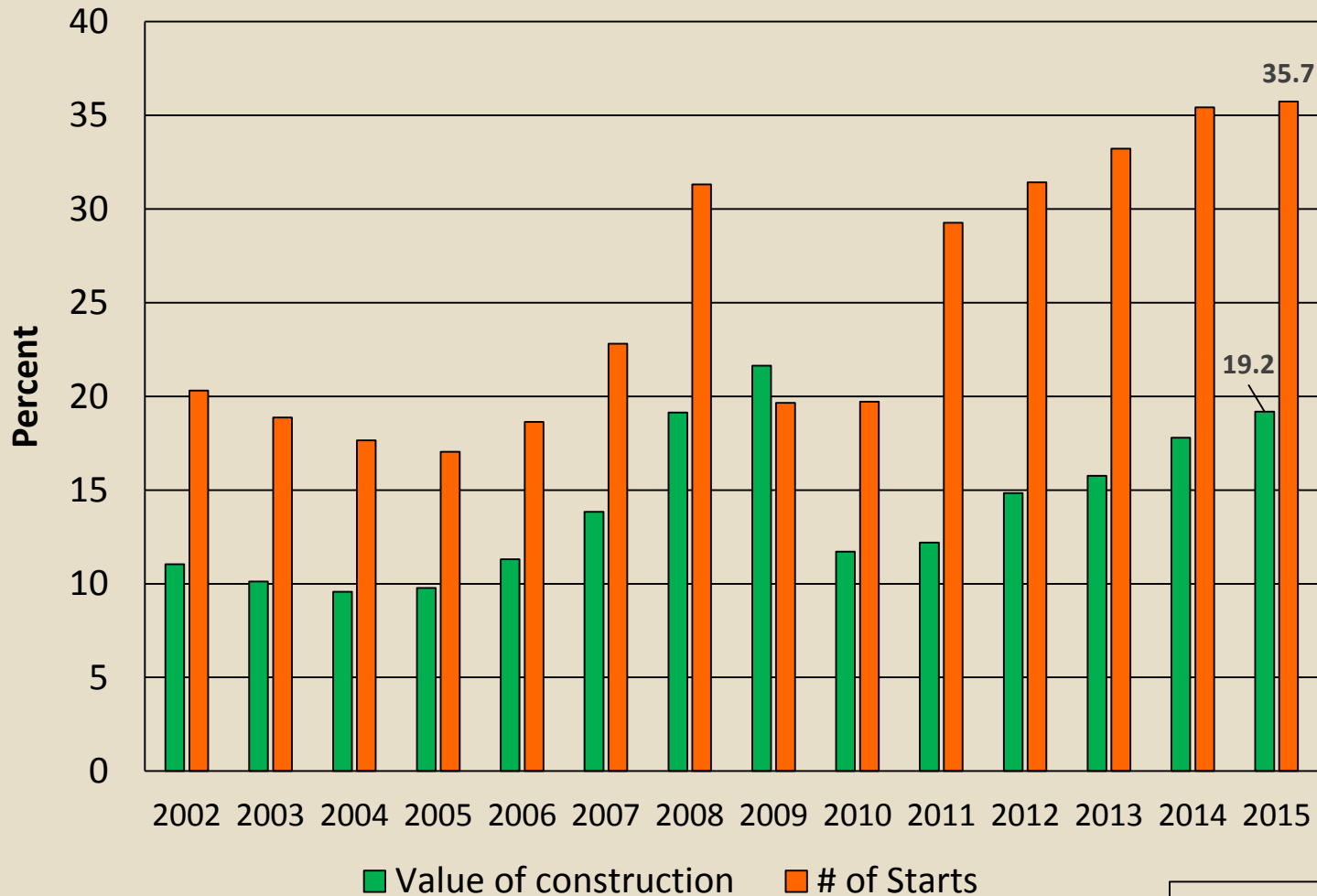




# Value of private U.S. construction, 2002-2015



## Multi-family percentage of total housing market (single family + multi-family)



Value per start in 2015:  
SF = \$306,508  
MF = \$130,883

# Seven years of studies in collaboration with Virginia Tech, the U.S. Forest Service, and Woodworking Network/FD MC

2015

2016

**HOUSING STUDY /** By Matt Bumpgarner, Urs Buehlmann, and Karen Koenig

## WOODWORKING & HOUSING: IMPACTS & ACTIONS



**The woodworking industry** relies heavily on the construction-based markets, particularly those companies involved in building foundations, walls, work and interiors. Market conditions, trends and investments have an impact.

In regard to the building, that the most common housing market study was conducted in early 2015. A joint effort by Virginia Tech, the U.S. Forest Service, and Woodworking Network, the study examined the changes in the market and the outlook for the future. (See "About the Survey" page 72.)

As they have for the past three years, the construction-based markets continued an overall growth trend in 2015. Construction Housing Report (see Page 6) provides an overall look at the housing market, including housing, residential construction, and nonresidential construction. The report also includes information on building trends such as new construction, remodeling, and more.

The larger proportional increase was in multi-family housing, which grew by 20% from 2014 to 2015, with single-family housing increasing by 15%. Increased activity in multi-family housing construction had a significant impact on the market, especially for the potential home buyers.

**Business Performance & Markets**  
An analysis of business performance over the past six years reveals continued gradual improvement in the company's revenue.

In 2009, 80% of respondents reported being satisfied with 2014. The percentage had declined to 70% in 2013. Furthermore, the percentage of respondents in the Southern States (see Page 6) was up by 10% and the Midwest (see Page 6) was up by 20% of most categories have been increasing or holding steady each year with nearly a quarter reporting that their sales rose 20% or more in 2014. This year's results also show an increasing number of firms with sales increased year-over-year, which suggests a building marketplace.


2014 was an important year for the construction-based markets, overall and across the country. The proportion of respondents with no change or more of their production volume in single-family construction declined from 50% in 2013 to 42%. There was no significant change in the construction-based markets (as measured by percentage points) in 2014 to 2015.

Continued the percentage of respondents indicating more than one of their production volume was in the non-residential construction market (as measured by percentage points) in 2014 to 2015.

**Actions to Increase Sales Volume**  
While sales growth was still modest, it was an improvement over the last year.

**WOODWORKING & HOUSING: POSITIVE TRENDS & ACTIONS**

This exclusive study looks at the housing market's impact on woodworking businesses and the actions taken to increase sales volume.



Woodworking businesses are looking for ways to increase sales volume and improve their business. The study found that the most common action taken to increase sales volume was to increase the number of employees. This was followed by increasing the number of projects and increasing the number of clients. The study also found that the most common action taken to improve the business was to increase the number of employees. This was followed by increasing the number of projects and increasing the number of clients.

A majority of respondents (60%) indicated that they were satisfied with their business in 2014. This was an improvement over the last year, when only 50% of respondents were satisfied. The study also found that the most common action taken to increase sales volume was to increase the number of employees. This was followed by increasing the number of projects and increasing the number of clients.

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2010

2011

2012

2013

2014

## HOUSING MARKET'S IMPACT ON THE SECONDARY WOODWORKING INDUSTRY

How we fit the housing bottom? Secondary wood manufacturers say they are holding tight, expecting modest improvements.




The wood products market remains strong, despite the housing market's challenges. Wood manufacturers are holding tight, expecting modest improvements. The study found that the most common action taken to increase sales volume was to increase the number of employees. This was followed by increasing the number of projects and increasing the number of clients.

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## HOUSING AND THE WOOD INDUSTRY TRENDS & MARKET CONDITIONS

How did the woodworking industry fare in 2010 when dealing with volatile housing markets and what actions are being taken to remain profitable? Read the exclusive survey.



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## HOUSING & WOODWORKING: LATEST TRENDS & IMPACTS

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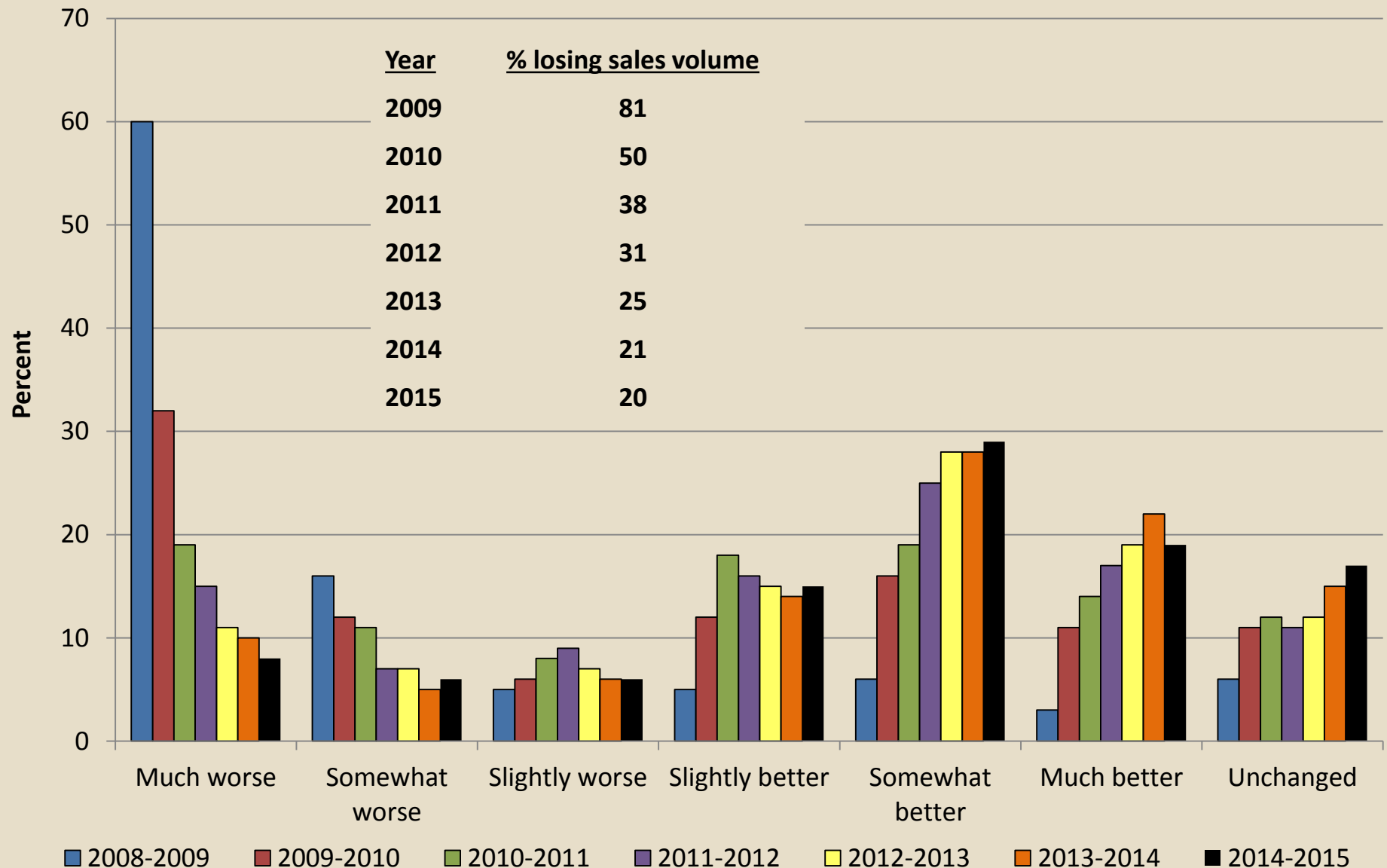


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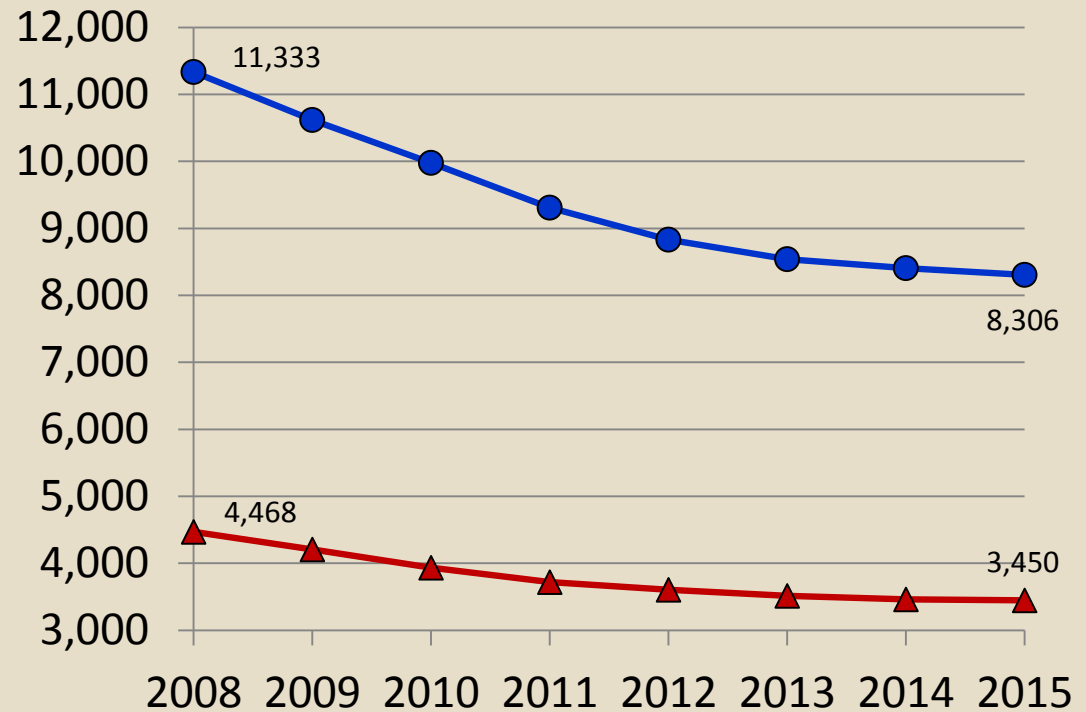
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# Year-over-year changes in sales volume



# Number of firms

- Cabinets  
(NAICS 33711)
- ▲ Millwork  
(NAICS 32191)

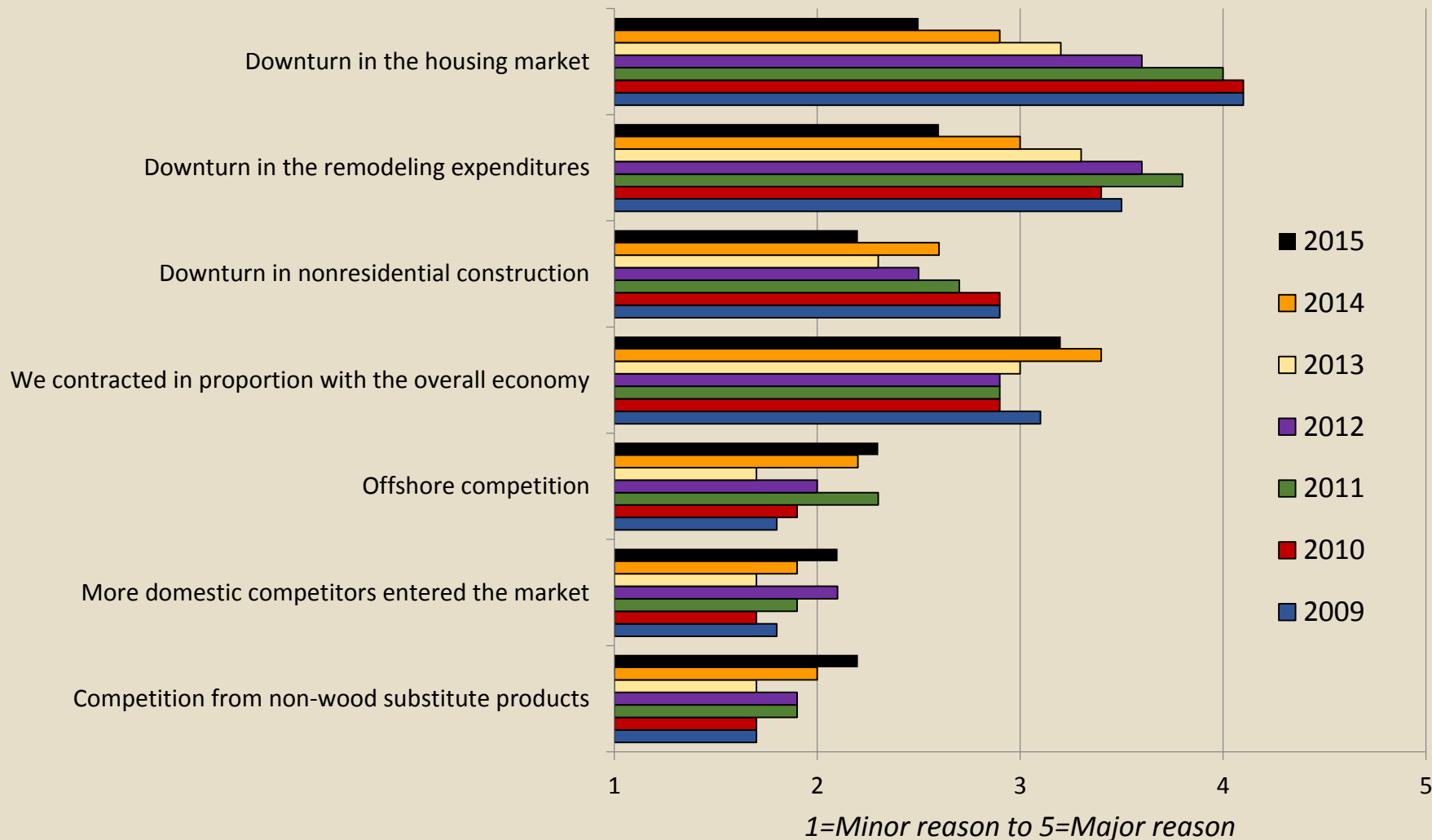


Year-over-Year	Cabinets	Millwork
08-09	-6.3%	-5.8%
09-10	-6.0%	-6.4%
10-11	-6.7%	-5.5%
11-12	-5.1%	-3.1%
12-13	-3.3%	-2.4%
13-14	-1.6%	-1.5%
14-15	-1.2%	-0.3%

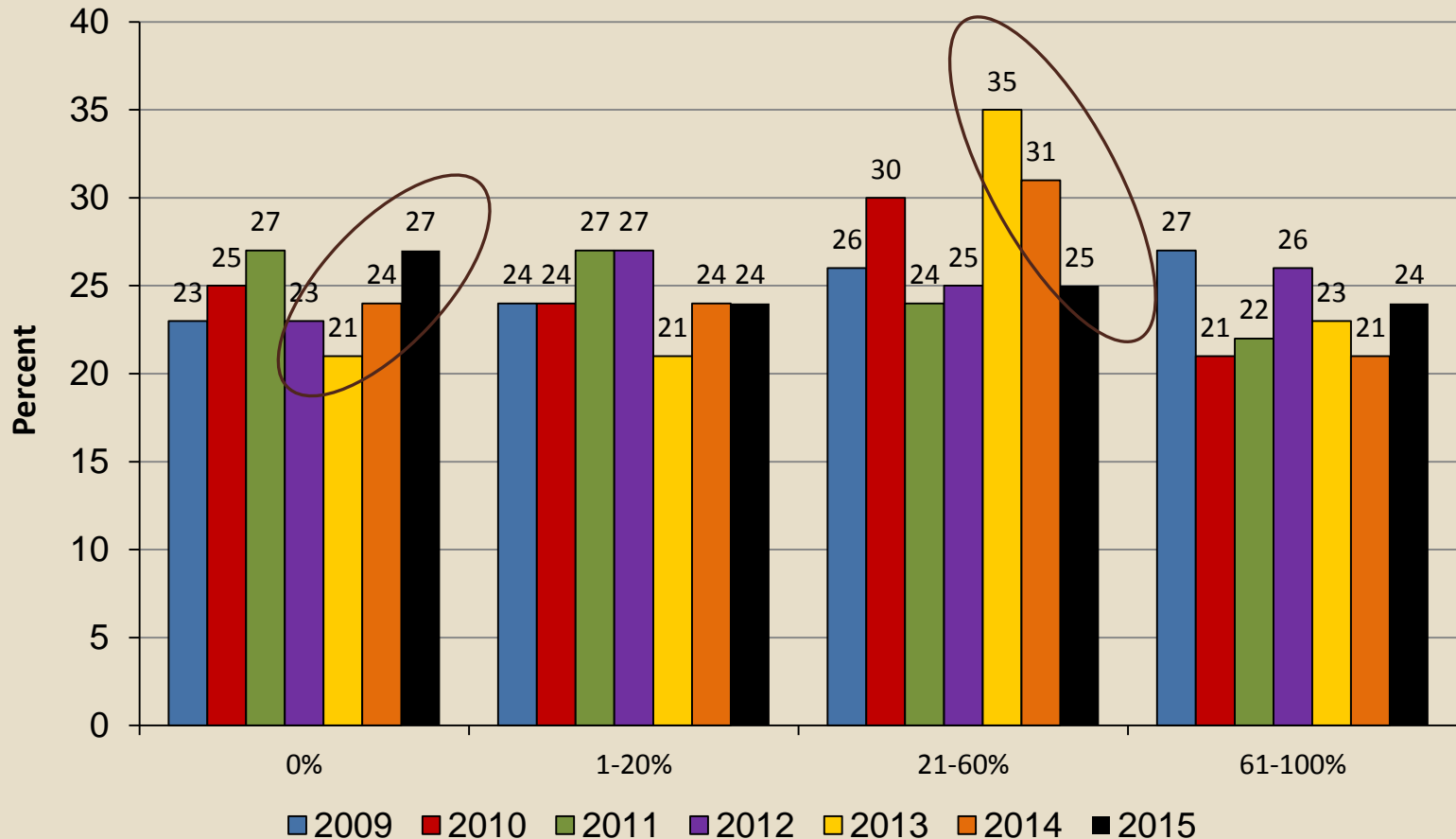
Preliminary data (1<sup>st</sup> qtr.)  
positive for 2016



# Perceived reasons for sales volume declines (for those firms indicating a decline)

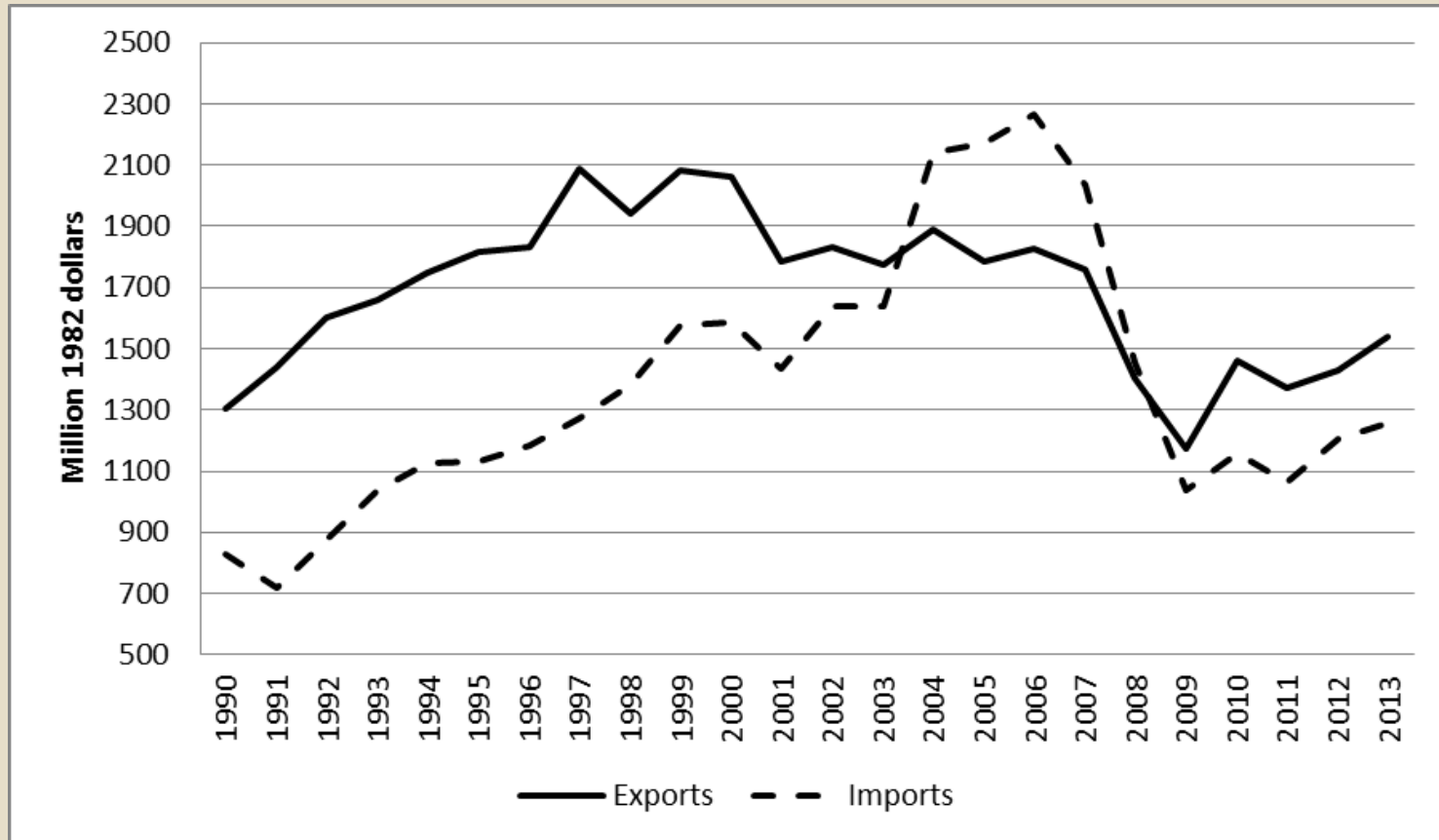


# Proportion of production volume associated with the single family housing construction market



# Hardwood Export Trends

# U.S. hardwood product\* exports and imports, 1990-2013



\* Includes hardwood logs, lumber, veneer, cooperage, molding, siding, plywood, and flooring

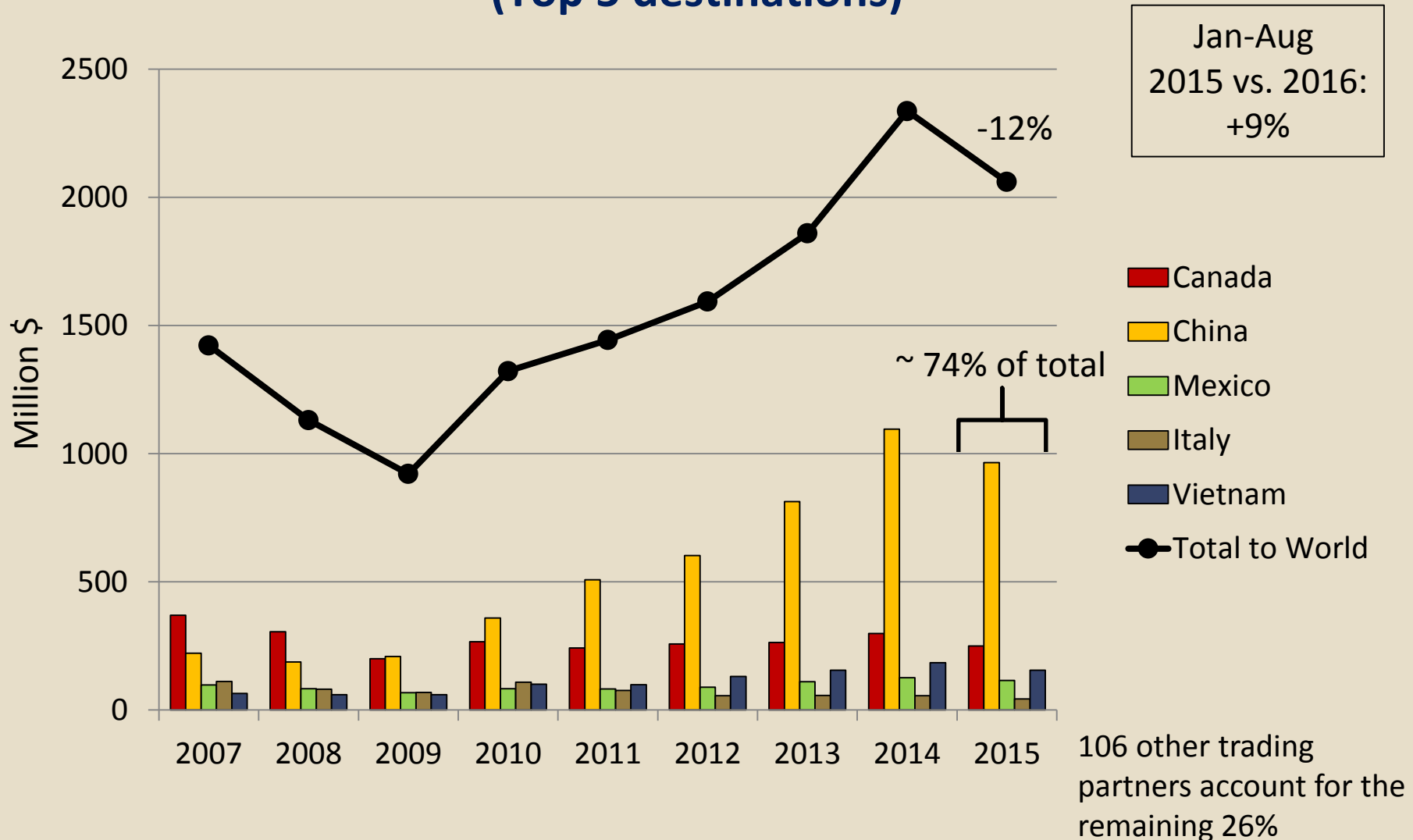
## Top five hardwood lumber-exporting countries\*

1990	%	2000	%	2011	%
United States	34.3	United States	23.6	United States	22.8
France	12.1	China	13.0	Belgium	8.9
Yugoslavia	11.8	Canada	11.5	Russia	7.2
Canada	7.8	France	5.3	Romania	7.1
Germany	5.8	Romania	5.2	Germany	5.9
Top 5	71.8	Top 5	58.5	Top 5	51.9

\* Temperate Region



# U.S. hardwood lumber exports (Top 5 destinations)



- Japan and the UK were slightly higher than Italy starting in 2012, dropping Italy to 7<sup>th</sup>

# Importance of coastal locations to hardwood lumber exporting

Port Regions (incl. all port types – water, land, air)	% of U.S. Hardwood Lumber Exports
East Coast*	63
West Coast	20
Great Lakes	12
Gulf of Mexico	5

\* 70% of hardwood lumber leaving East Coast ports was destined for East Asia and Southeast Asia

# Summary

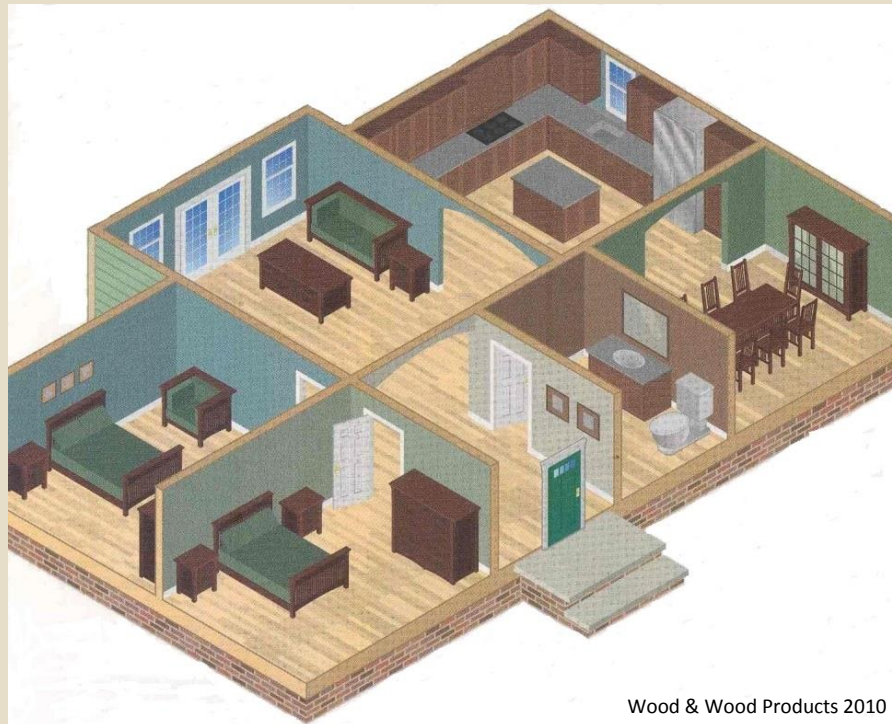
- Industrial markets fared better than appearance-based markets through the recession/housing downturn
- About half of domestic consumption currently in industrial markets
- Importance of exports
- 6 years of increases in hardwood lumber production since 2009 (+41%)
  - But still 27% below peak year of 1999

# Summary

- Secondary employment has improved, but the overall number of firms lagging
  - Similar trend for sawmills
- Surviving companies have seen steady improvements in sales volume since 2009
- Log and stumpage markets returning to a more “normal” pattern; stumpage was affected by housing downturn

# Thank you.

## Questions?



Wood & Wood Products 2010