

VALUE-ADDED WOOD PRODUCTS MARKETS

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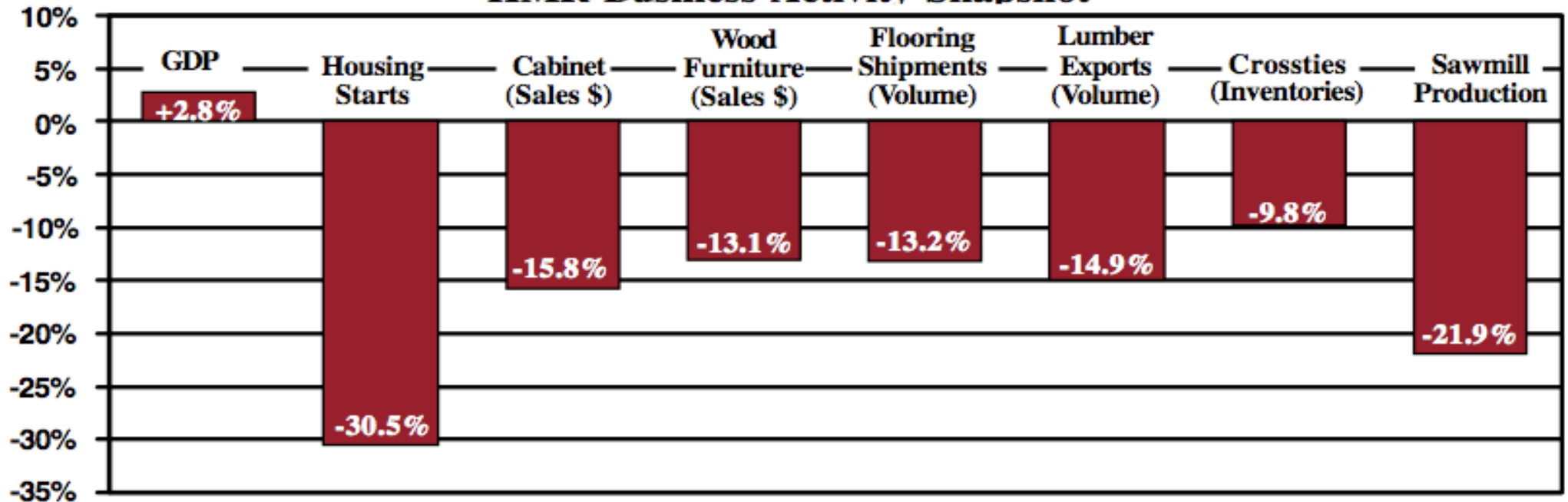
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Princeton, WV

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U.S. Forest Service
Delaware, OH

U.S. Economic Picture as of Sept. '08

Bad as it can get...

HMR Business Activity Snapshot™



Source: HMR Market Report- HMR Executive

Housing Starts & Prices

Price Index :
% Change
One year ago.

Starts off 62% from peak

Single-family
Starts-MM

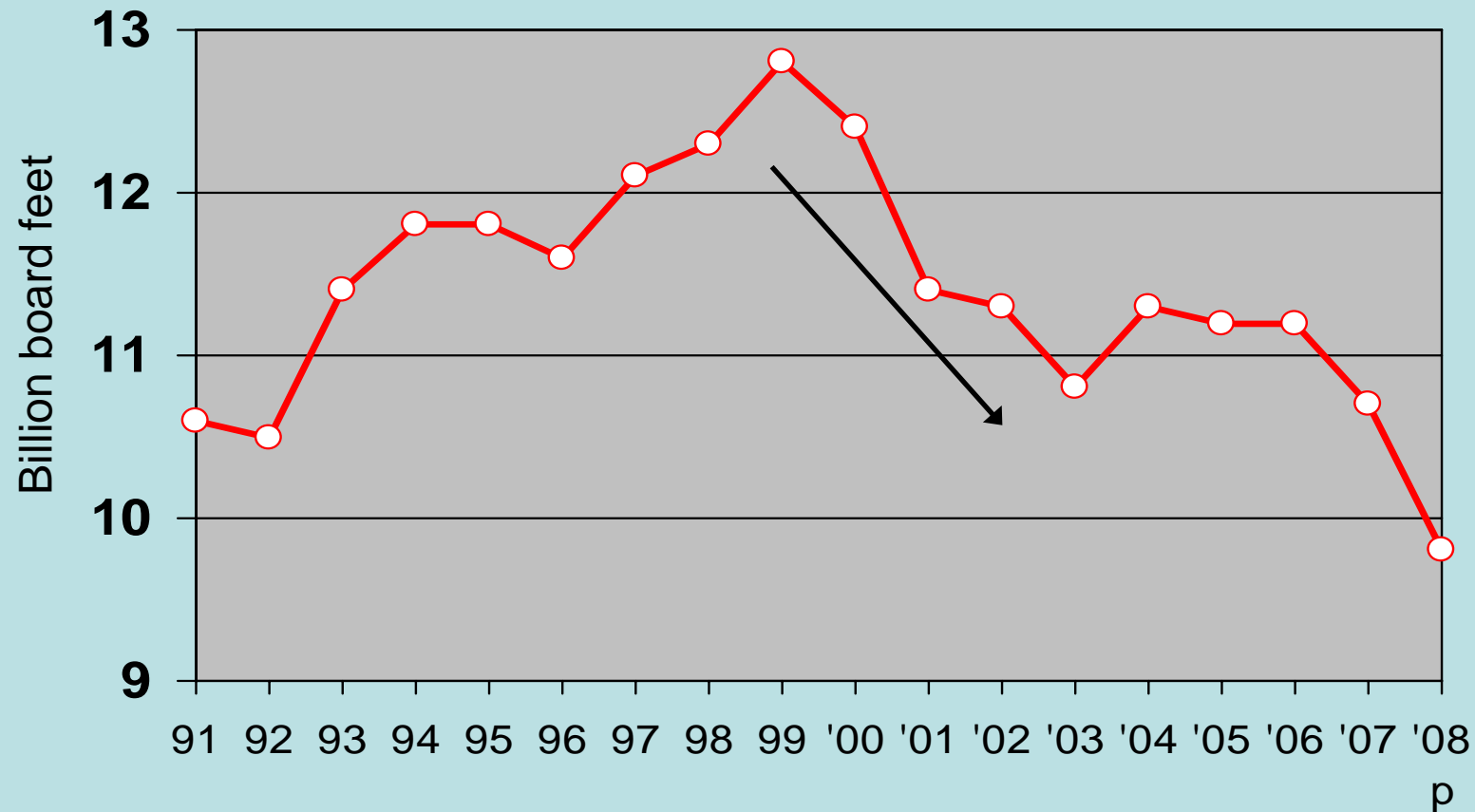
Prices off 19% from
peak



Source: Prices-S&P Case-Shiller – 10 city index. Starts-U.S. Department of Commerce.

Eastern hardwood lumber production

- Four years of decline from 1999-2003
- (this last happened in 1966-1970)



Source: W. Luppold, USDA Forest Service

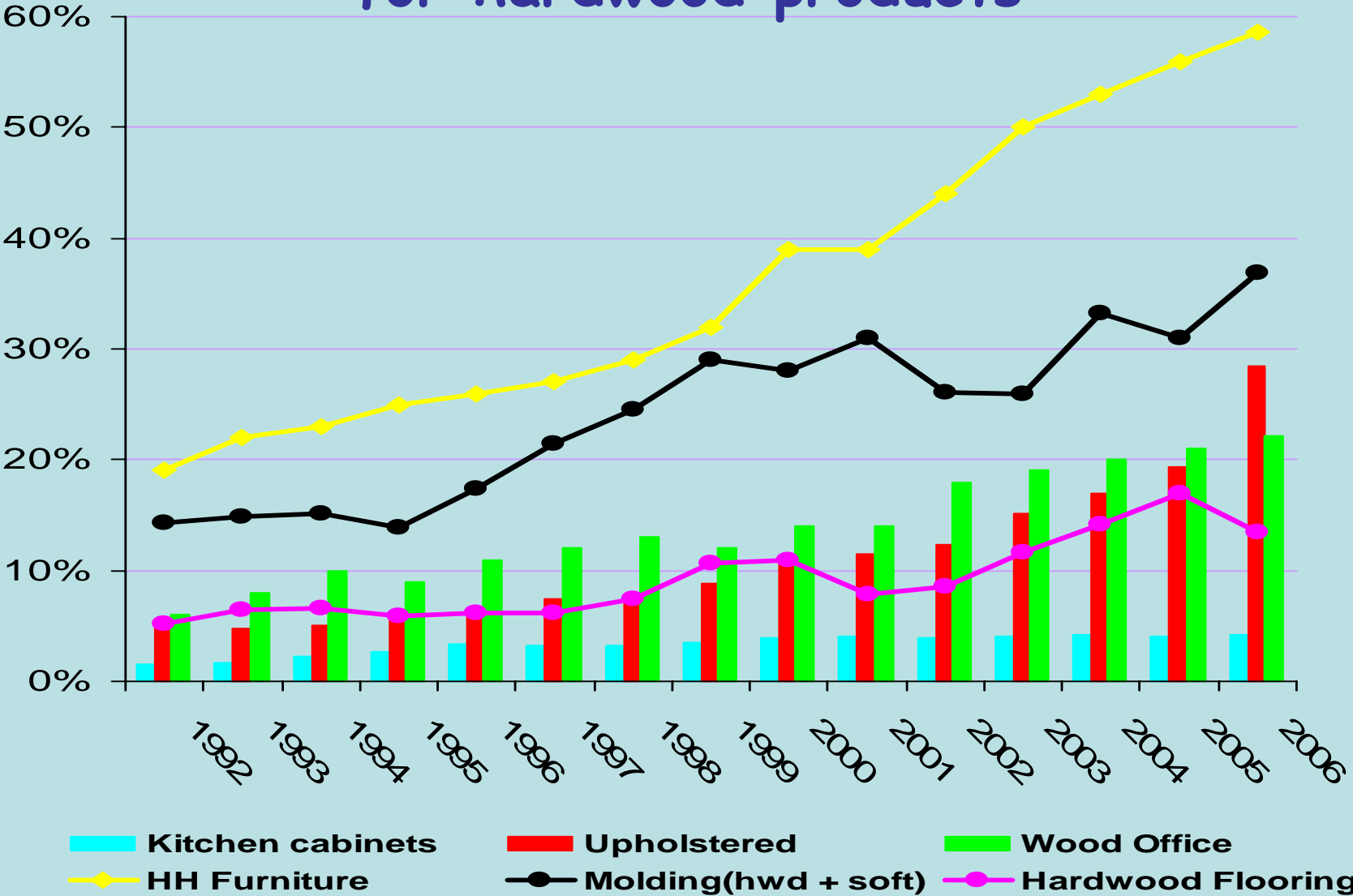
WV Hardwood Stumpage Prices

Qtr, \$/M, International



Source: WVU AHC

U.S. import market shares for hardwood products



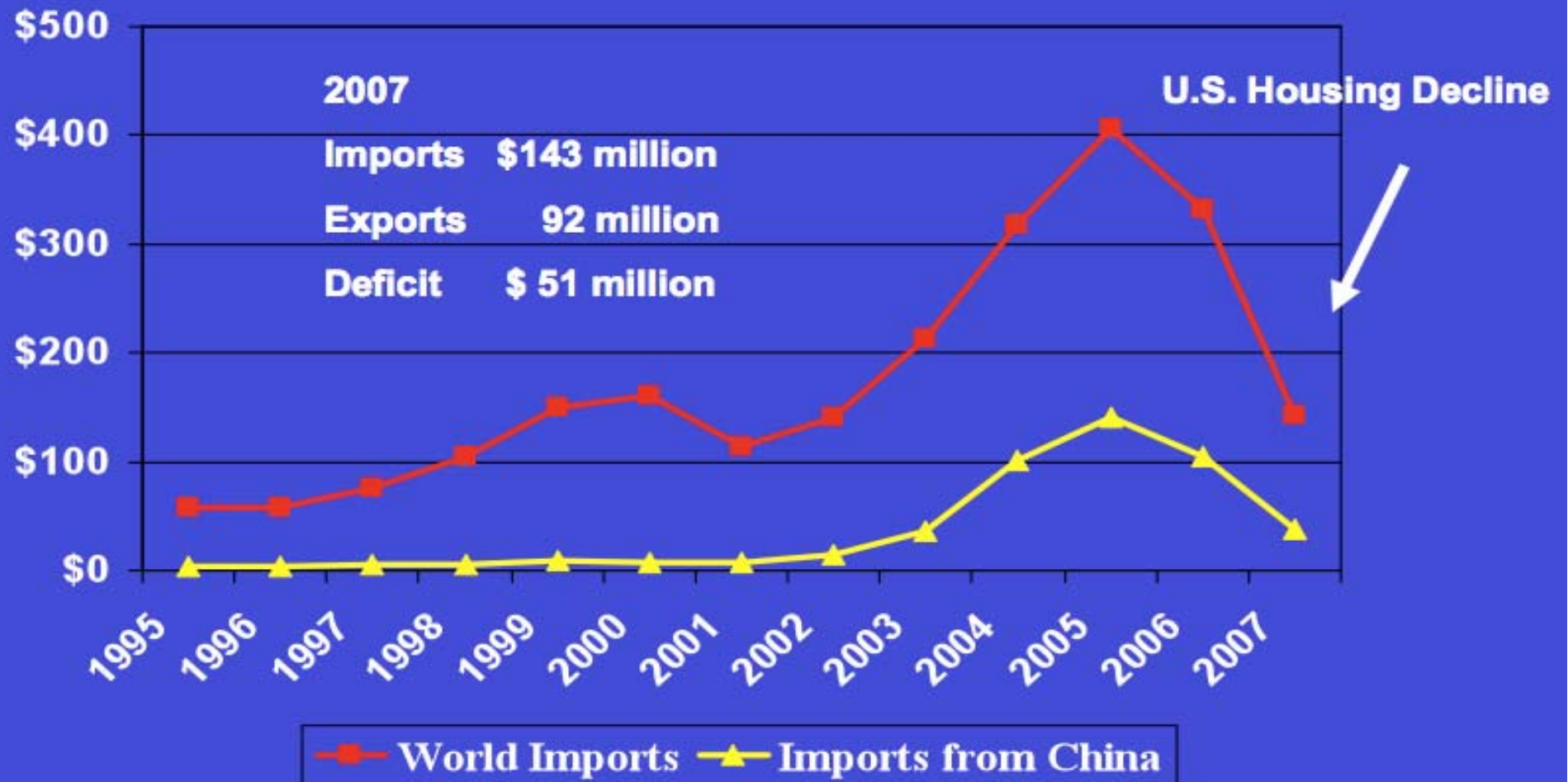
*These market shares are conservative because some imported components and finished furniture is included in the domestic shipments

Source: U.S. Census; ITA

U.S. Hardwood Flooring Imports

Housing's Impact is Huge

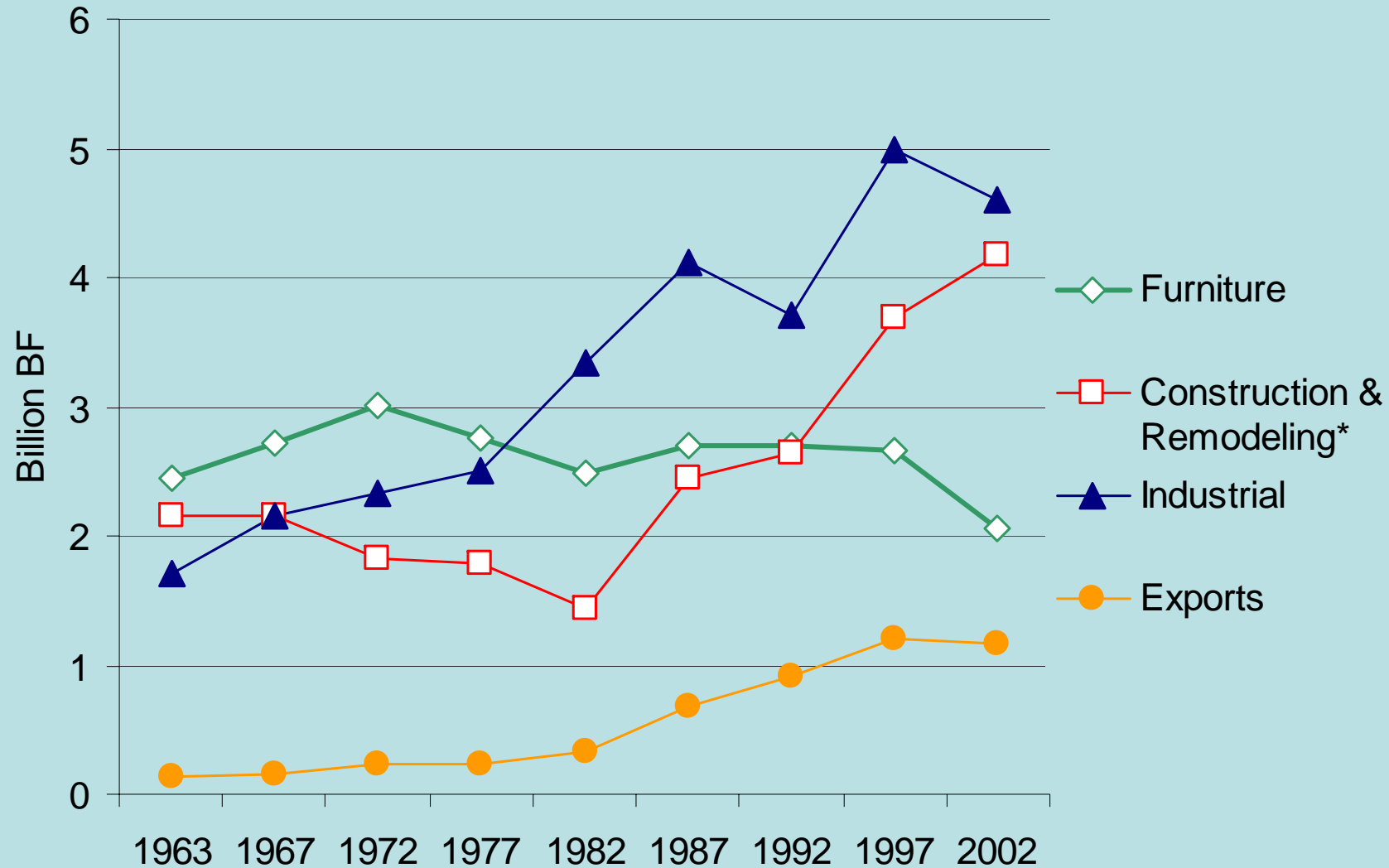
Customs value (million \$)



Source: USDA, FAS

Hardwood lumber consumption trends

Construction and remodeling now about 2X as large as furniture



Changing markets for hardwood components

	1984 (%)	2008 (%)
Furniture	65	22
Cabinetry	16	27
Building Products*	10	42
Decorative/Specialty	4	7
Industrial Products	5	3

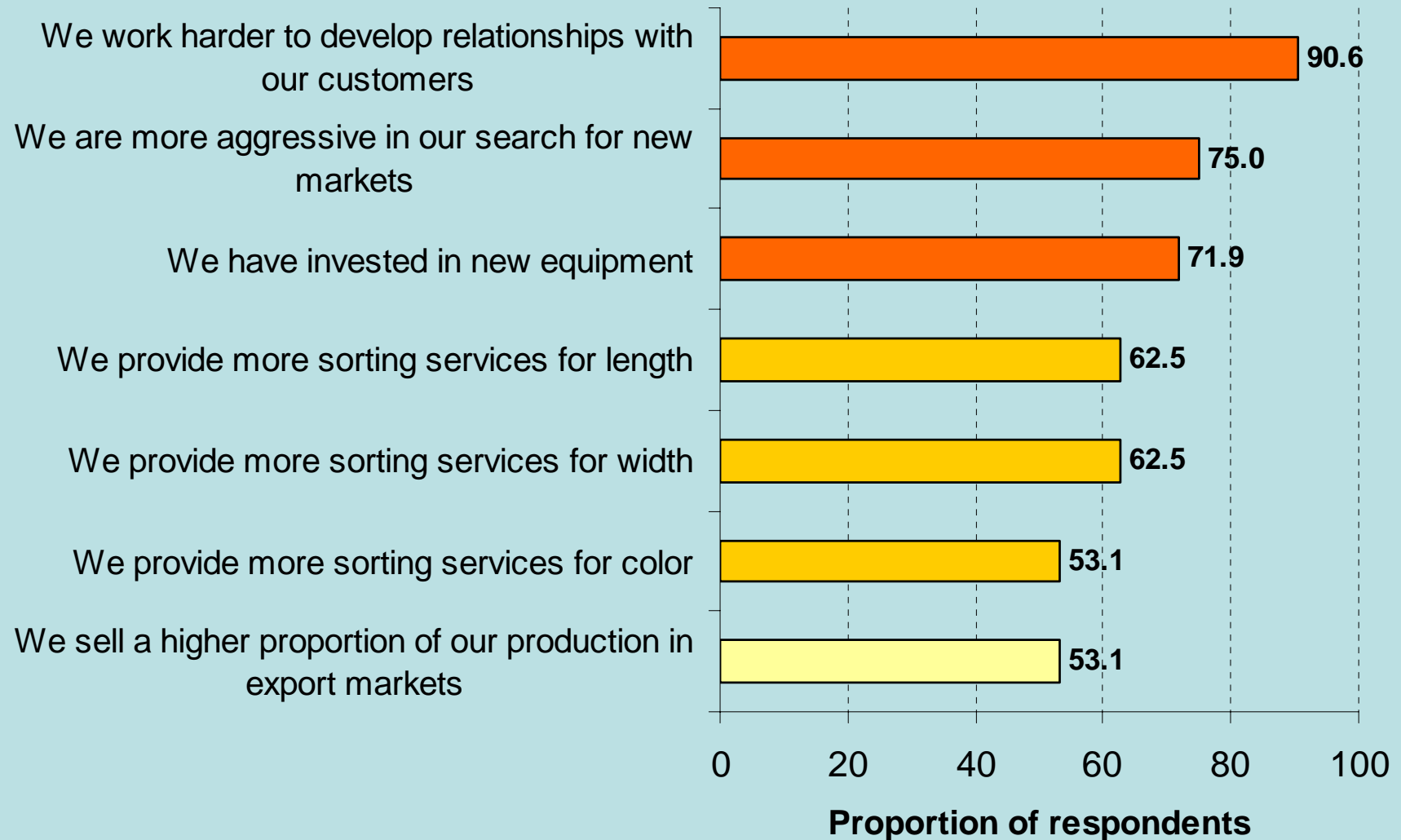
* residential and commercial, both new construction and remodeling

What large hardwood sawmills are doing

- **2005 survey of the Appalachian Hardwood Manufacturers, Inc. (High Point, NC)**
 - **32 responses (60%)**
 - **owners/upper management**
 - **85% of mills with production \geq 6 MMBF**
 - **41% of mills with production $>$ 15 MMBF**
 - **Responses from 9 states (WV, NC, VA, KY, NY, PA, OH, TN, GA)**

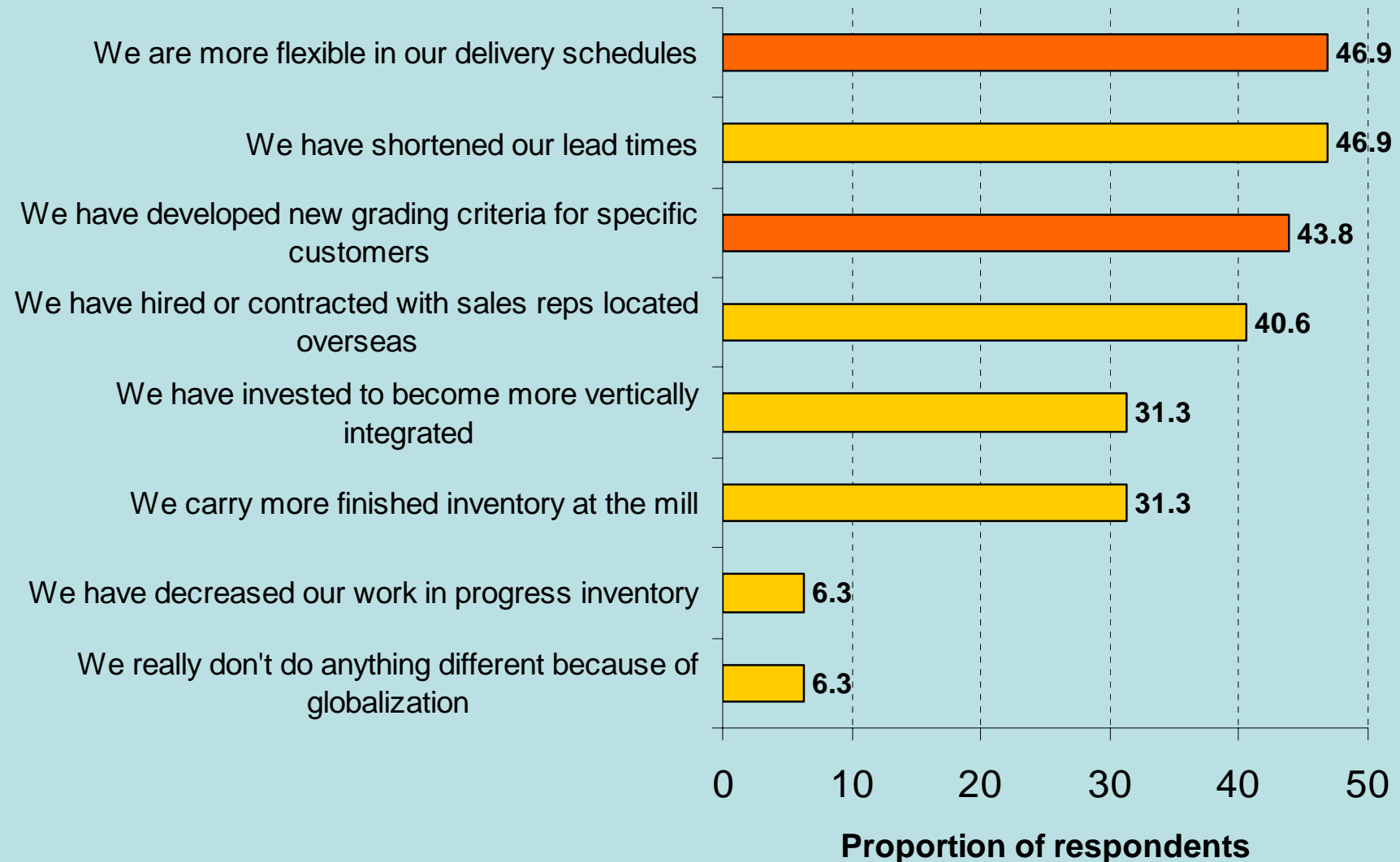
What large hardwood sawmills are doing

Actions cited by a majority of AHMI members . . .



What large hardwood sawmills are doing

Other actions cited by AHMI members . . .



A “new” and growing market - smaller customers?

- “my Christmas card list has expanded”
- “Yesterday, it was five loads to one customer; today, it is one load to five customers”
 - and all five want something a little different!
- Efficiency in distribution becomes a competitive advantage

Modern Woodworking Housing Study

[FEATURE STORY]

MANAGING THE DOWNTURN

As the housing construction market faces tough times, successful woodworking companies find new opportunities for profits and growth. What are woodworking firms doing to remain profitable? An exclusive study by Virginia Tech, the U.S. Forest Service and *Modern Woodworking* looks into the situation.

By Urs Buehlmann, Matt Bumgardner, Al Schuler & Jeff Crissey



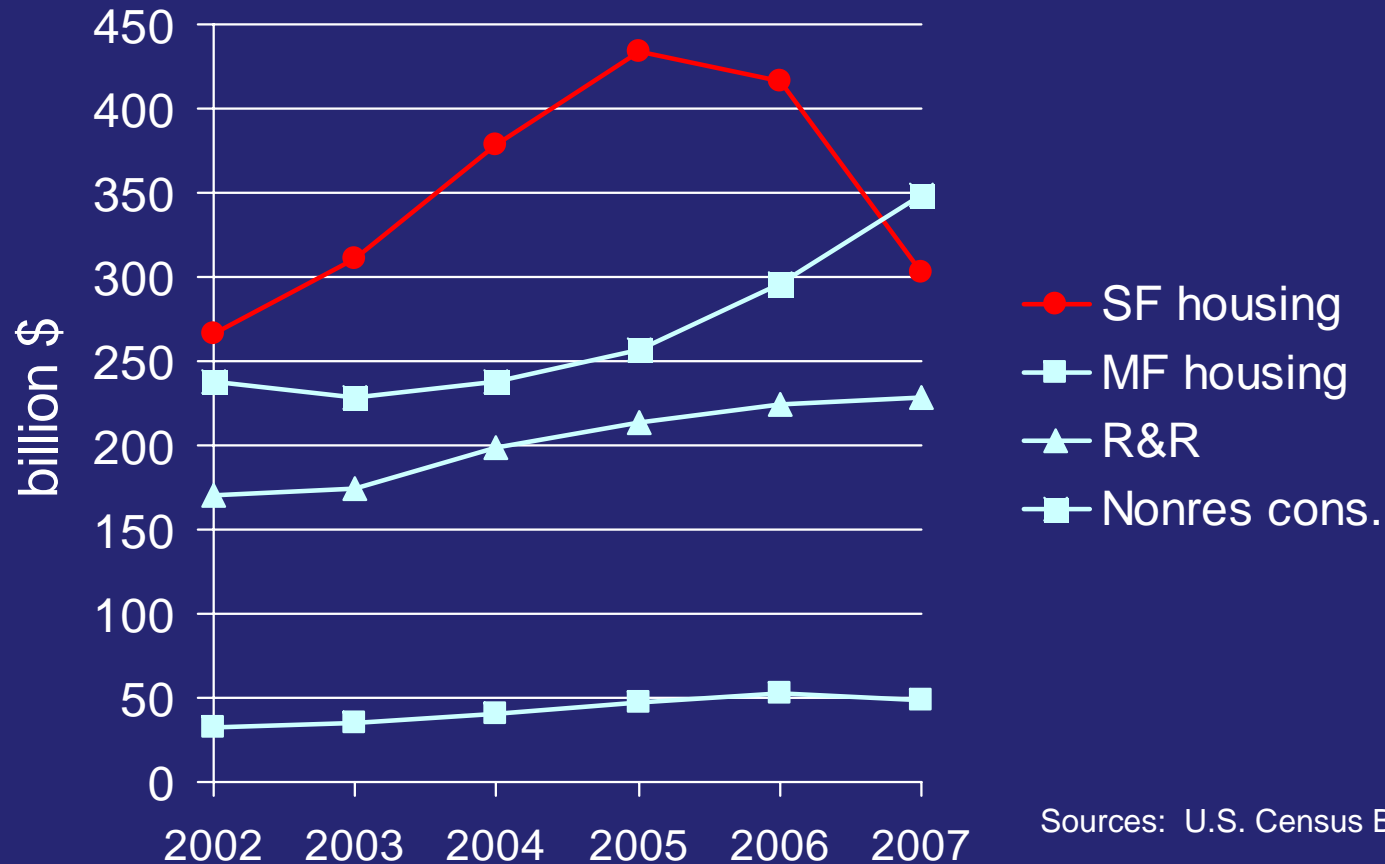
- Survey February 2008
- email to 17,658 subscribers
- reminder after 2 weeks
- 496 responses
- 430 usable responses

Pretty Optimistic Response...

Much worse (off by 20% or more)	15.8%	Worse	37.4%
Somewhat worse (off by 10%)	11.1%		
Slightly worse (off by 5%)	10.5%		
Unchanged	17.8		
Slightly better (up by 5%)	12.8%	Better	44.6%
Somewhat better (up by 10%)	18.0%		
Much better (up by 20% or more)	13.8%		

- by February 2008, only a third of the industry seems affected
- today, one would assume a bleaker picture
- responses obtained, however, are interesting...

Value of private U.S. construction

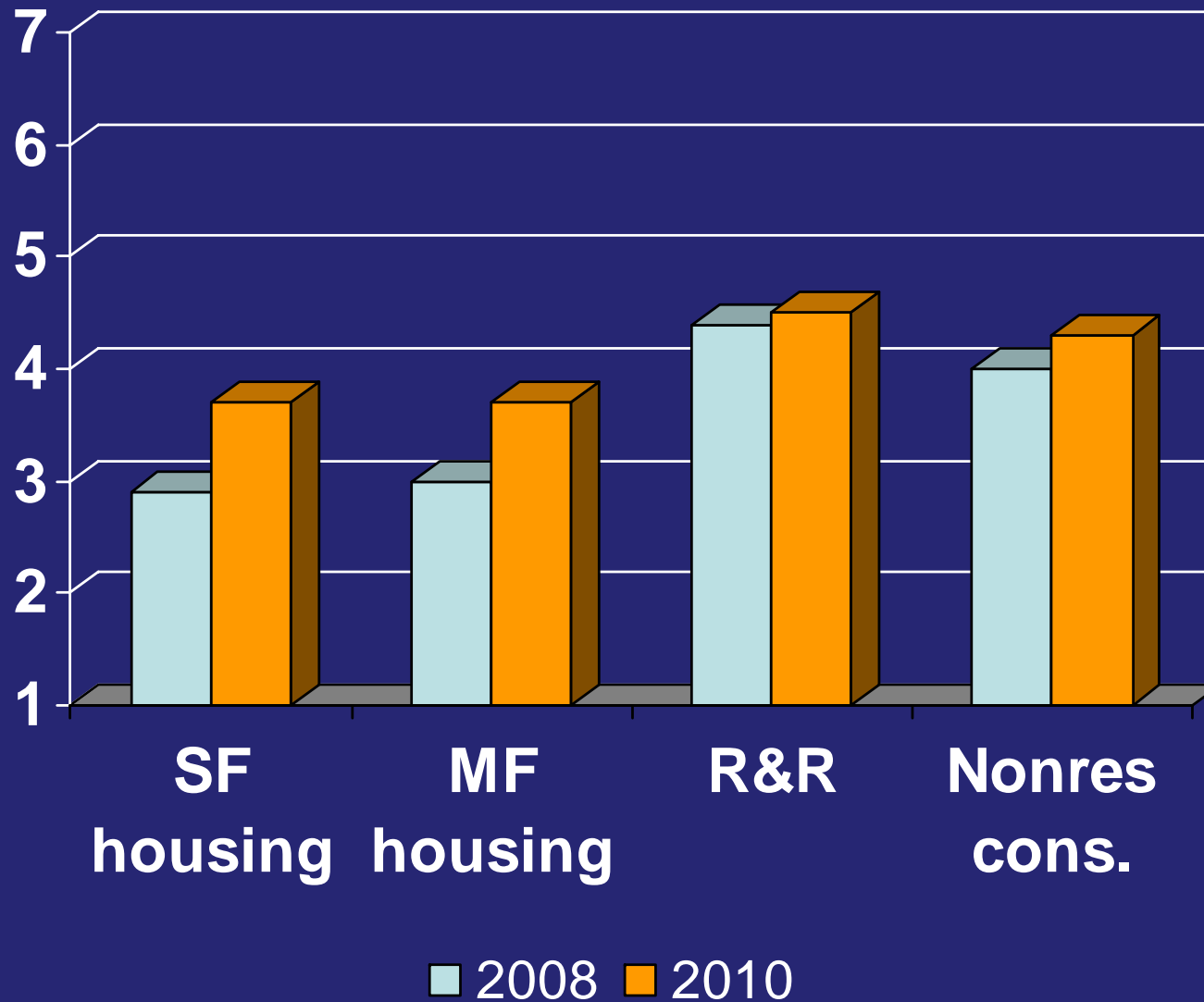


Of those firms with sales growth in 2007
in the single family housing market ...

Firm size by group

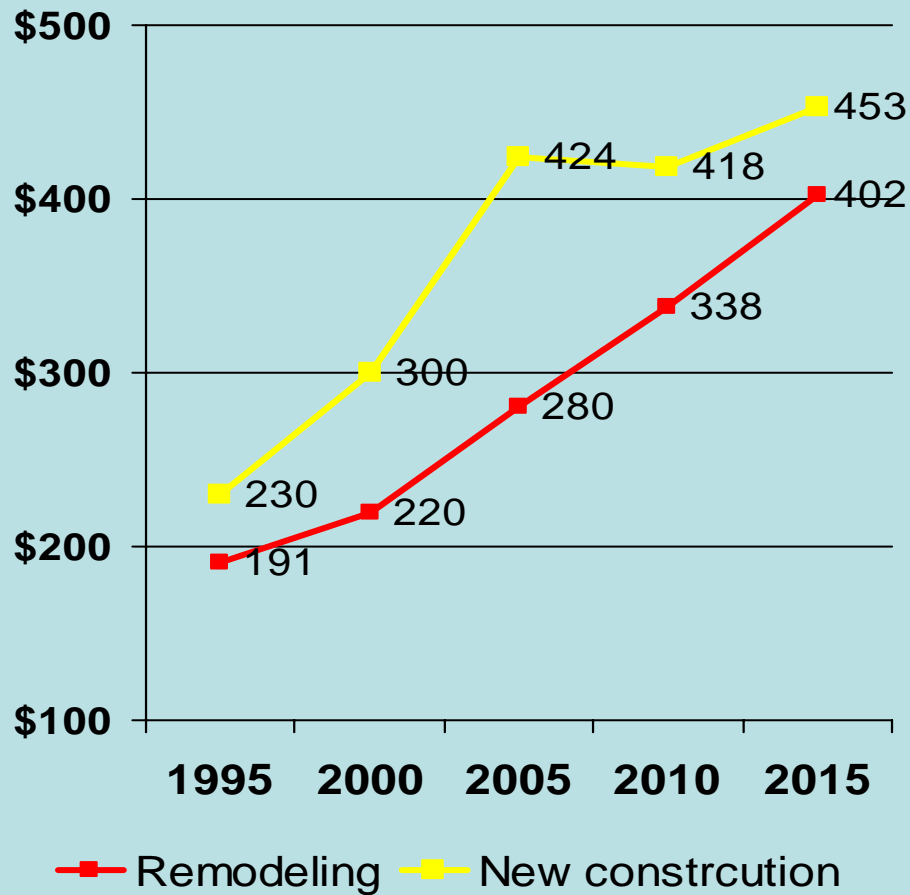
	SFRC≤60%; Sales vol. off (Group 1)	SFRC≤60%; Sales vol. up (Group 2)	SFRC>60%; Sales vol. off (Group 3)	SFRC>60%; Sales vol. up (Group 4)
				----- % -----
1-19 employees	74.6	61.4	72.3	86.3
20 + employees	25.4	38.6	27.7	13.7

Assessment of construction markets, 2008 & 2010

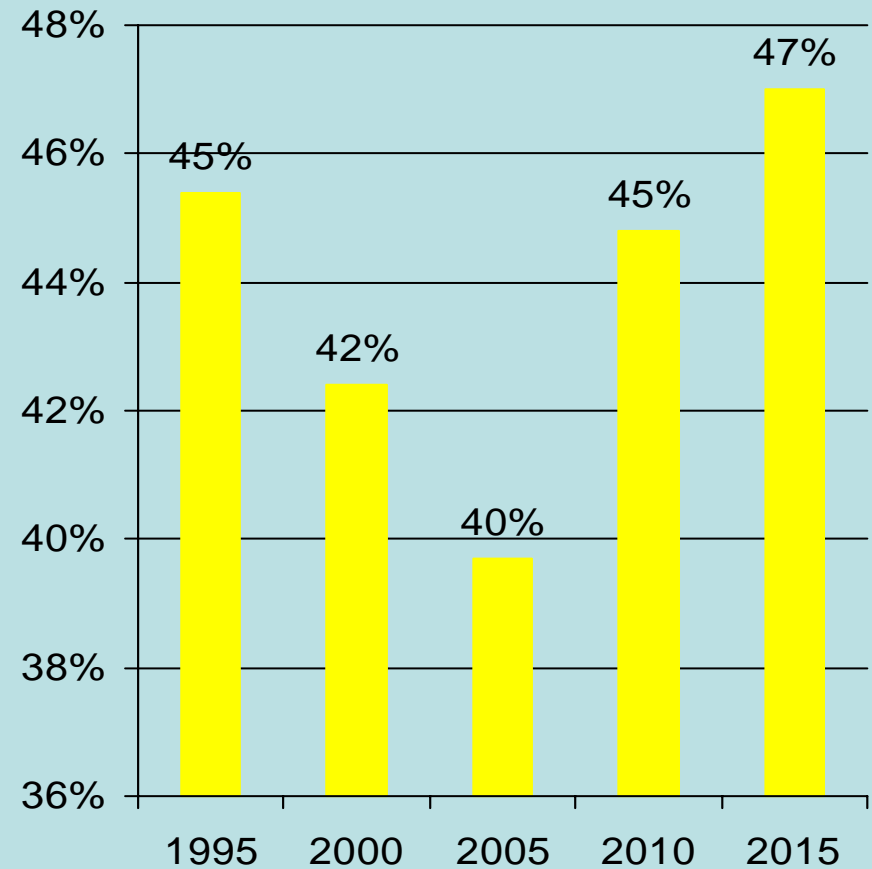


Market size - Remodeling becoming increasingly important

Billions 2005 dollars



Remodeling share of residential investment

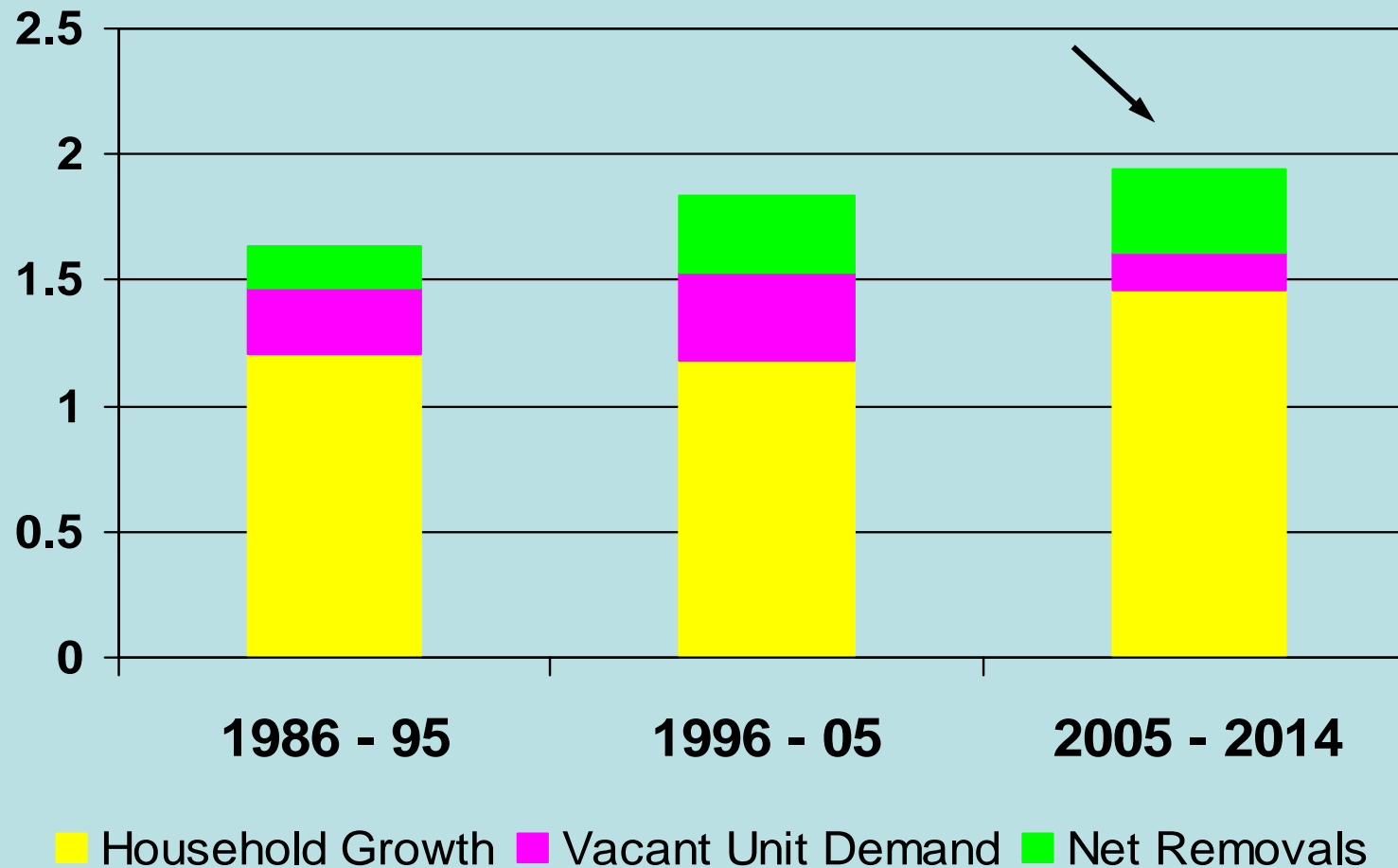


Source: Harvard JCHS 2007

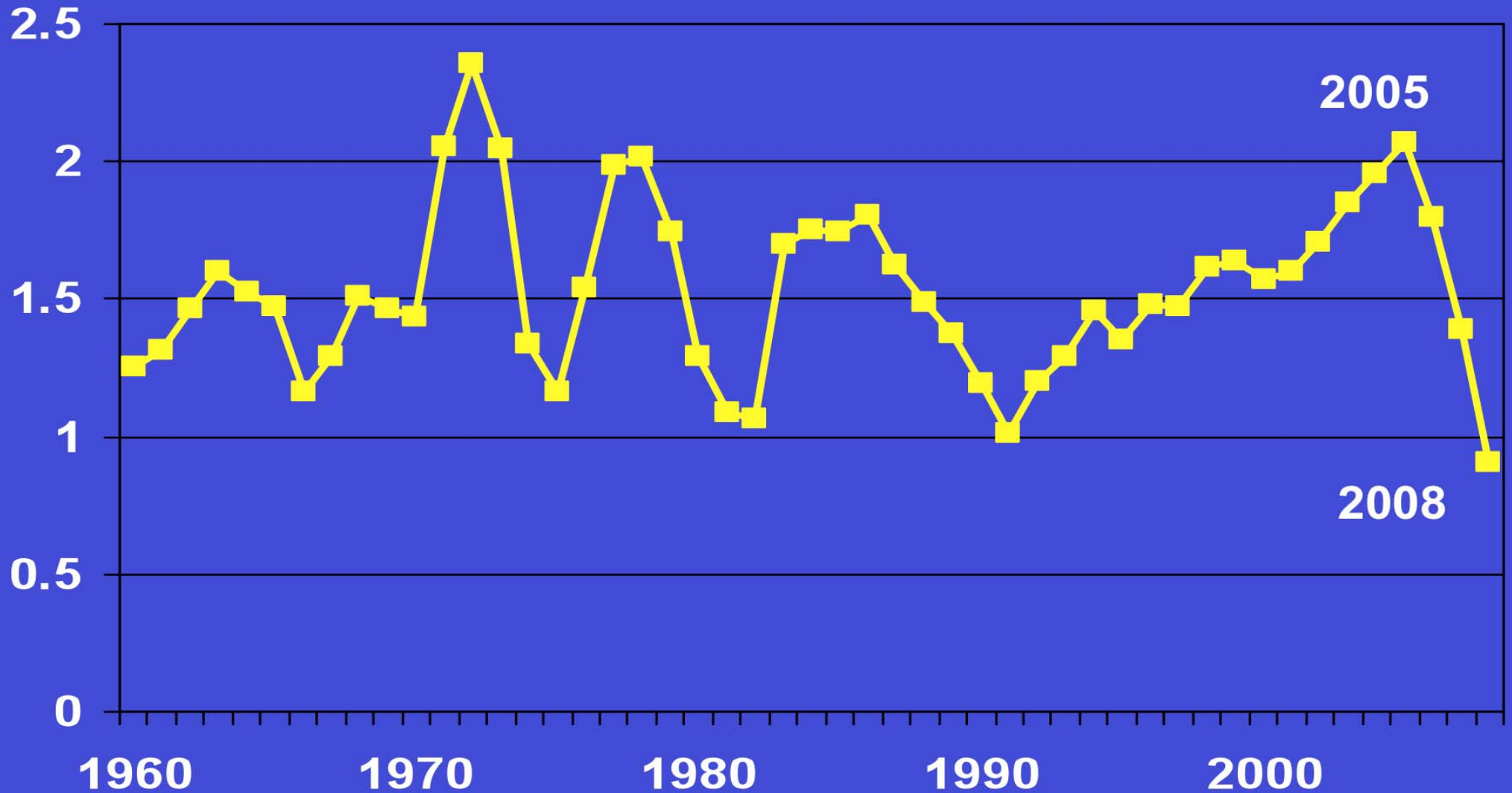
Housing Demand Drivers - this decade could be better than the last

Million per year

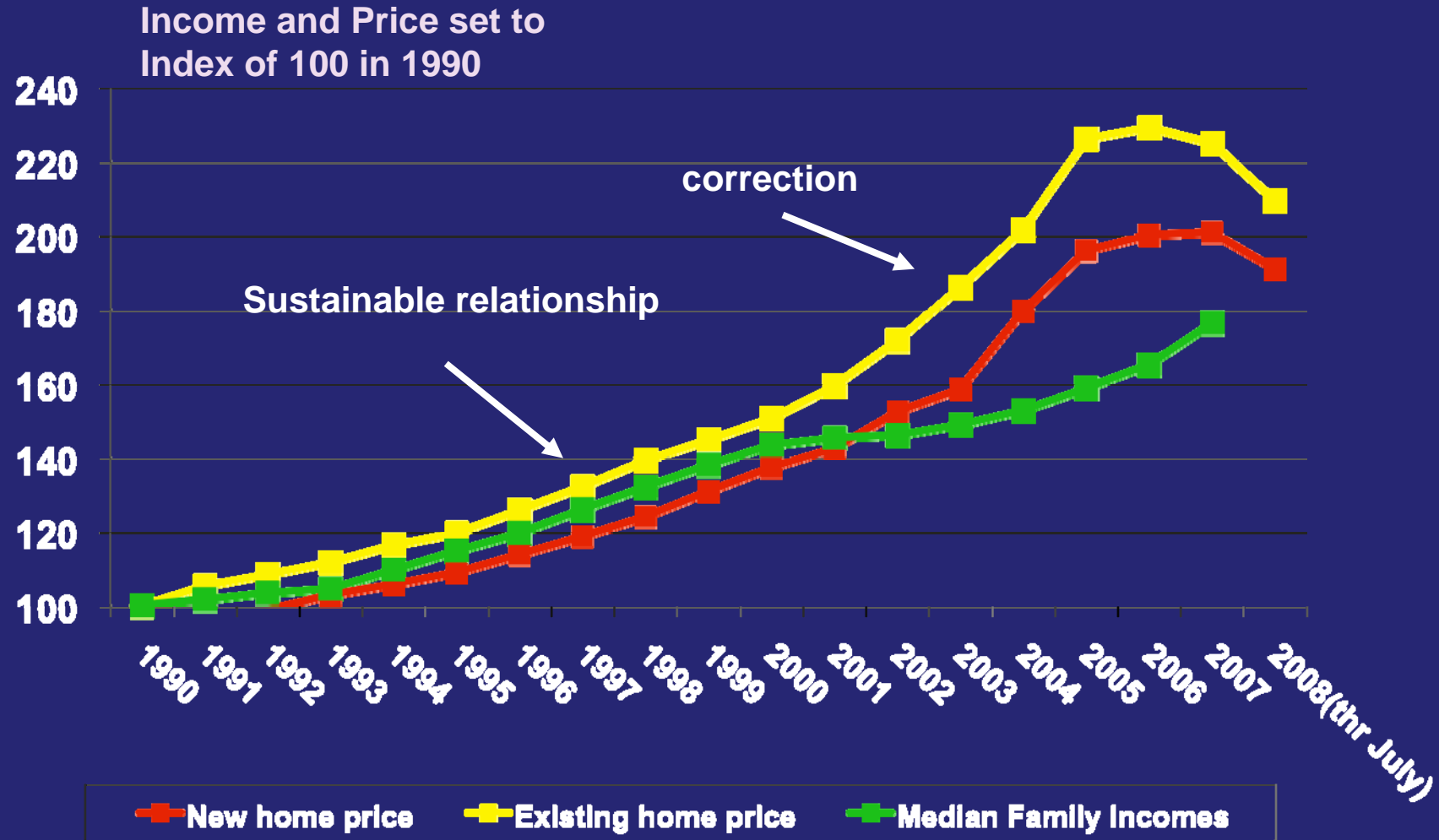
Harvard JCHR outlook (Nov 2007)



Housing Cycles – they have been with us for decades



Home prices and incomes must trend together
- when price exceeds ability to pay (incomes)
house prices must come down



Sources: NAHB & NAR – Home prices; U.S. Census – family income

Summary

- Globalization and housing problems pressures continue in many hardwood and woodworking sectors
- Effects of housing problems ripple through entire wood products value-chain
- For lumber producers, sorting, flexibility becoming necessary actions to supply the hardwood industry
- Smaller woodworking firms producing made-to-order products increasingly important to domestic demand for hardwood lumber
- A focus on adding value!

GREEN BUILDING PROGRAMS IN THE USA

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Green Building Trends

Interest in Green building increases with standard of living – with globalization, incomes in India, China, ... will increase

- Energy efficiency
- Indoor air quality
- Water efficiency
- Resource efficiency
- Site management
- Market for “green homes” is expected to increase from \$2 billion to \$20 billion over the next five years in the USA
- Implications- World Market for green products will grow as world living standards improve – drives demand for wood products

Purpose of study – OSB, LVL, and treated lumber

- Quantify the amount of OSB, LVL, and treated lumber waste generated per house.
- Compare waste generated from “green” construction with that of “non-green” construction.
- Determine potential uses for waste material as an alternative to landfilling.
- Salvage material where possible for reuse and/or recycle into other products.

Inside view of storage trailer with waste OSB, LVL and treated lumber



Any Questions?

MOUNT TABOR MEADOWS

- 1 CHOOSE YOUR LOT**
21 - 25 lots to choose from in Phase I
- 2 CHOOSE YOUR PLAN**
12 plans to choose from - go to www.GREENVALLEYBUILDERSINC.com
- 3 CHOOSE YOUR FEATURES**
Select everything from your interior colors to additional energy saving features using selections online.

LONG & FOSTER REALTORS

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GREEN VALLEY BUILDERS INC

EARTH CRAFT HOUSE Virginia

AHV

MLS

The sign features a map of the development with several lots marked 'SOLD' and one marked 'FOR SALE'. The map shows a winding road and various lot sizes. The background of the sign is green and white with a stylized leaf design.