



Forest Economic Advisors

South's Role in Meeting the Global Demand for Forest Products

Southern Forest Products Exports 2016

October 17, 2016

Dr. Lynn O. Michaelis

Partner, FEA



One Key Message for Today

"No other North American forest products geography has more growth options than the U.S. South."

—Lynn Michaelis

Partner, Forest Economic Advisors, LLC

More to My Vita: Some Projects with International Scope

- Particleboard exports to Japan
- Uruguay: Plantations and market analysis for Pine and Eucalyptus
- New Zealand and Russia: timberland purchases
- Scenario planning effort on global demand for containerboard and recycled fiber

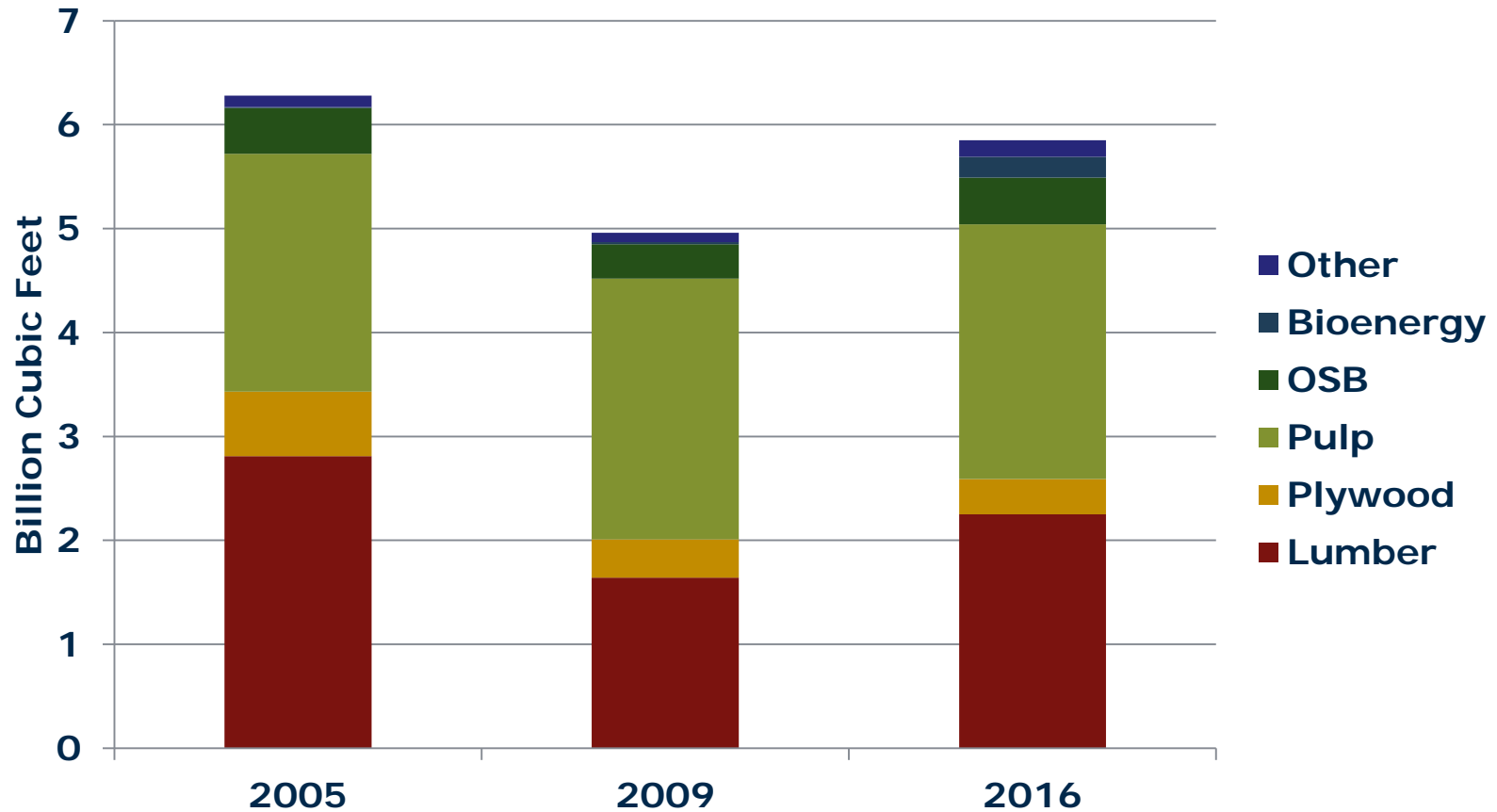
Purpose of Today's Presentation

- 
1. Set stage for global forest products markets
 2. Current challenges in international trade for U.S. Industry
 3. Competitive position of U.S. South in select product lines
 4. Strategic posture for longer term planning: N.A. vs. International options

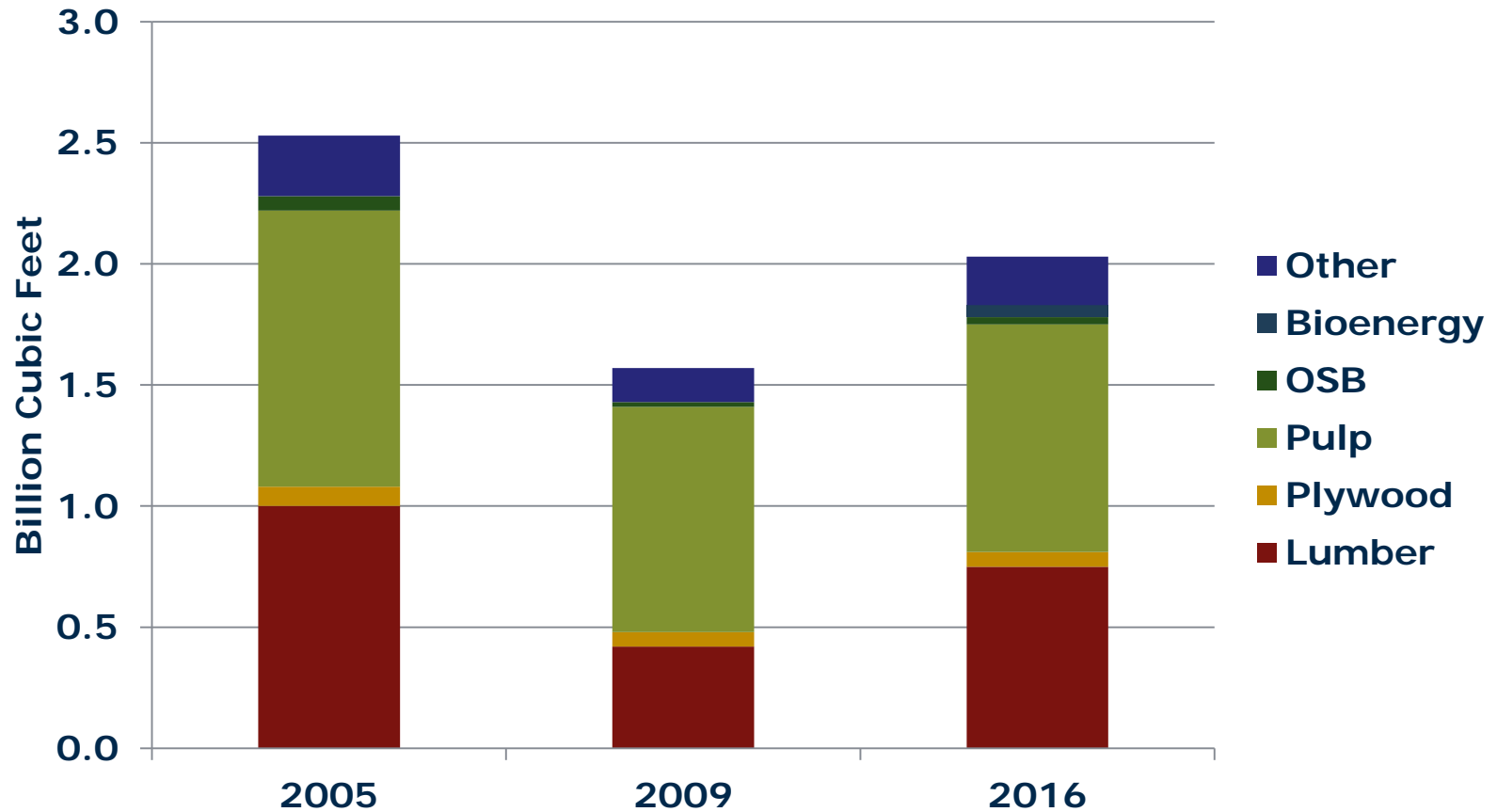
Global Growth in Forest Products Expected to Rebound

- FAO estimates sustained growth in demand over next 15 years
- Most of the growth is seen in Asia
- Applies to the three major categories: sawnwood, panels and paper/paperboard consumption
- Requires growth in both softwood and hardwood timber supplies

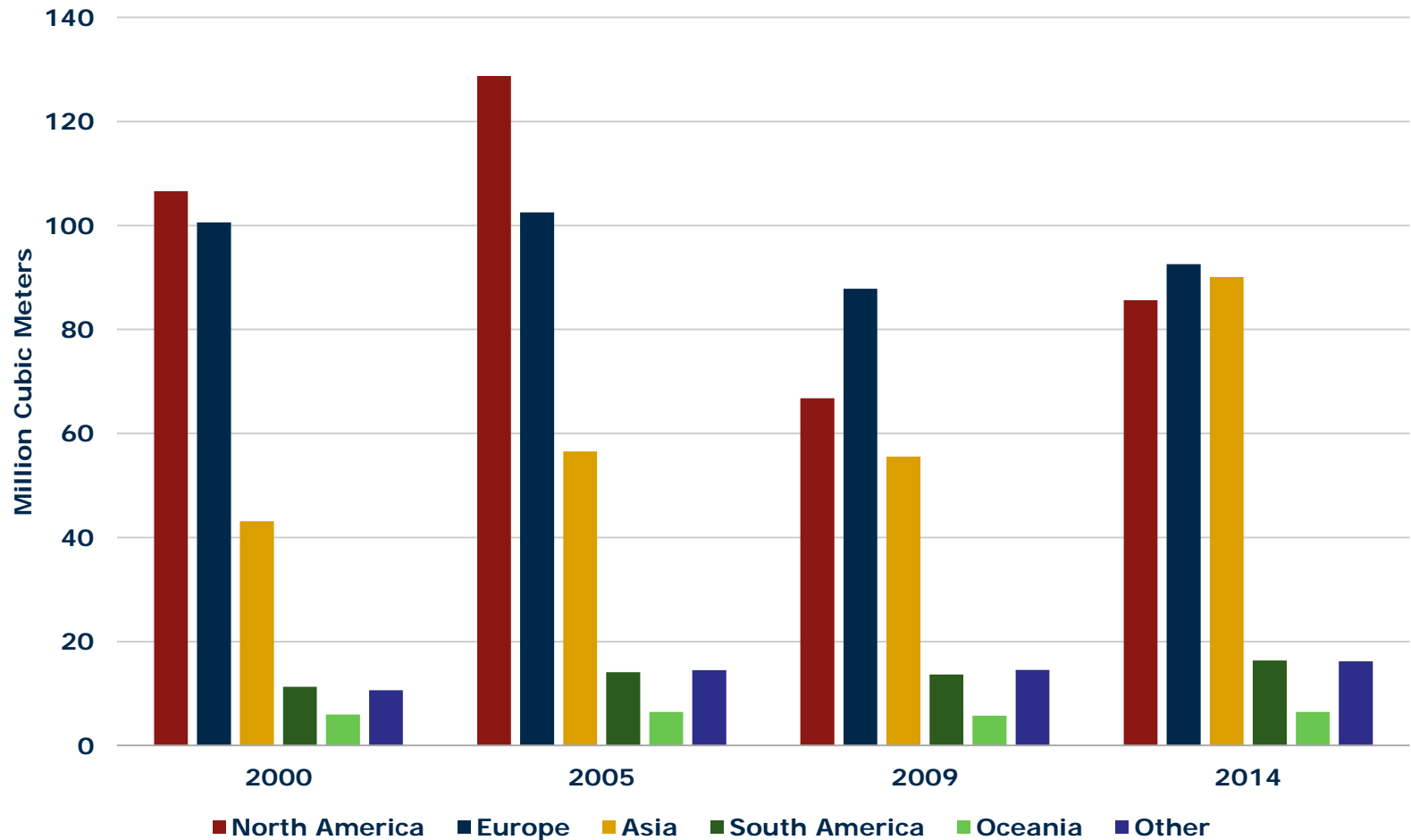
Demand on U.S. South Softwood Growing Stock



Demand on Southern Hardwoods



Global Softwood Lumber Consumption: Dramatic Shift in Major Markets



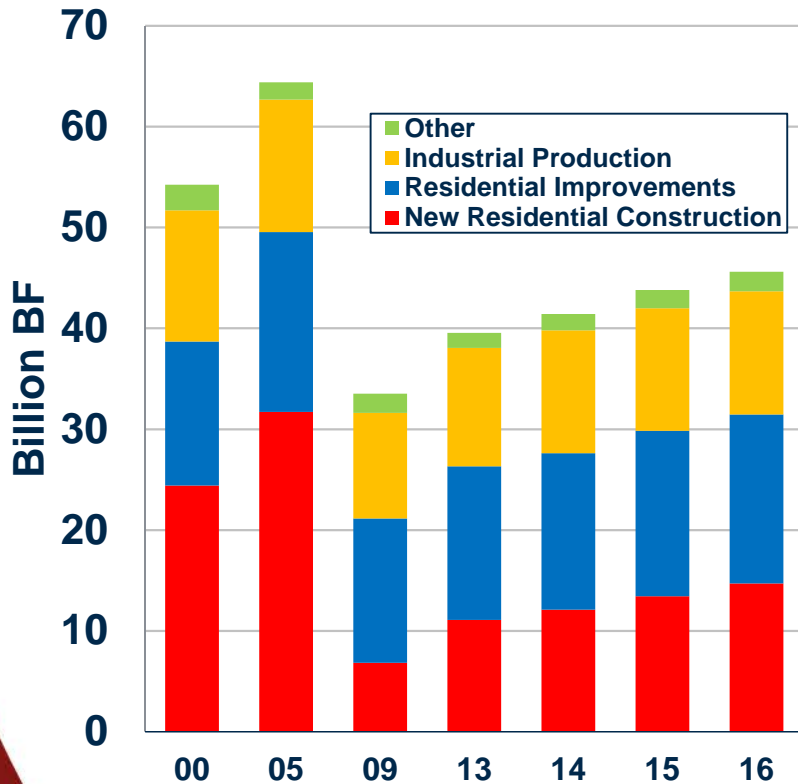
Source: FAO Data

www.getfea.com

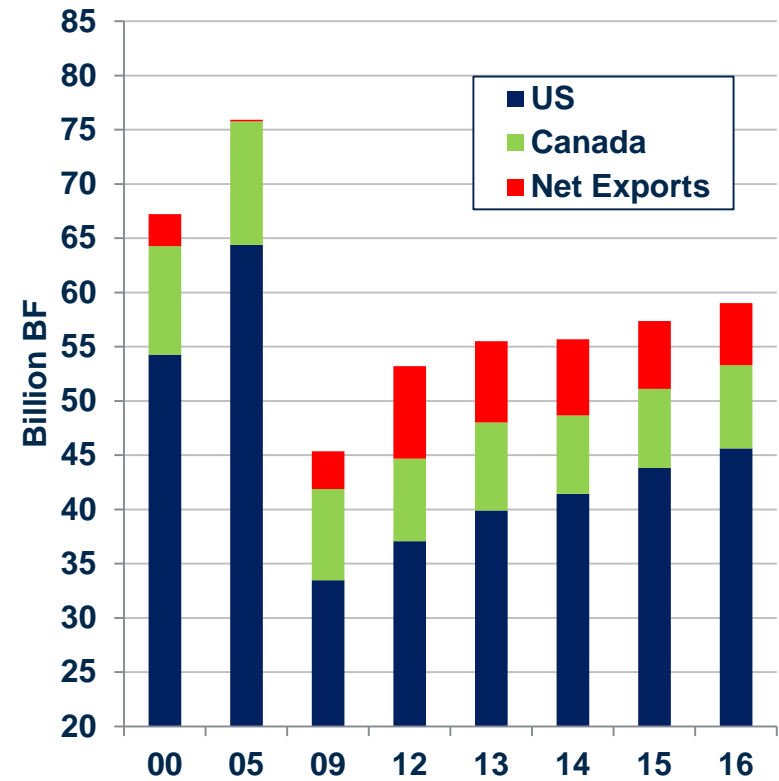


After 2009, Net Exports Boosted N.A. Lumber Demand

U.S. Lumber Demand



N.A. Lumber Demand

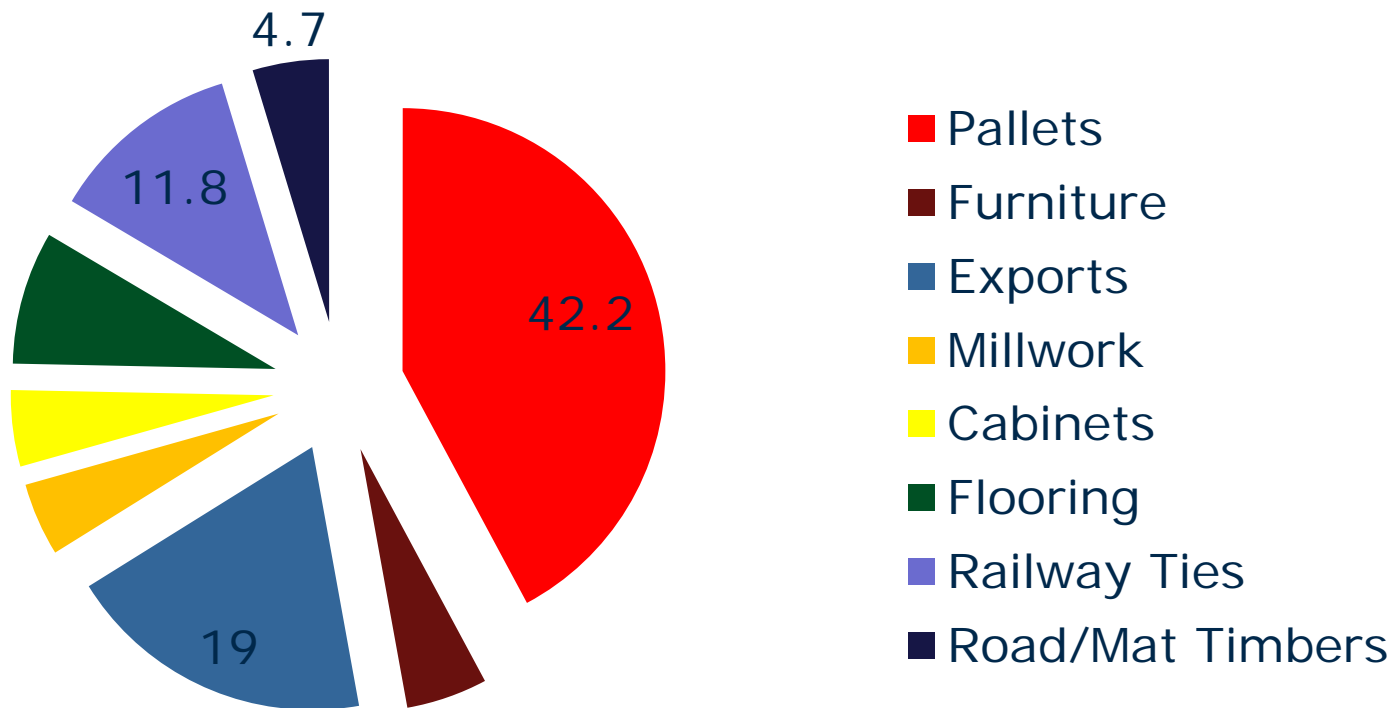


Hardwood Lumber: Exports and.....

- China has emerged as major market for grade hardwood lumber
- Exports boost production to meet other market needs for hardwoods
- Plus for South: limitations on NW hardwood harvests prospectively—a big unknown!!!


Key Hardwood Lumber Segments: High Grade vs. Low Grade

Market Share* (%)

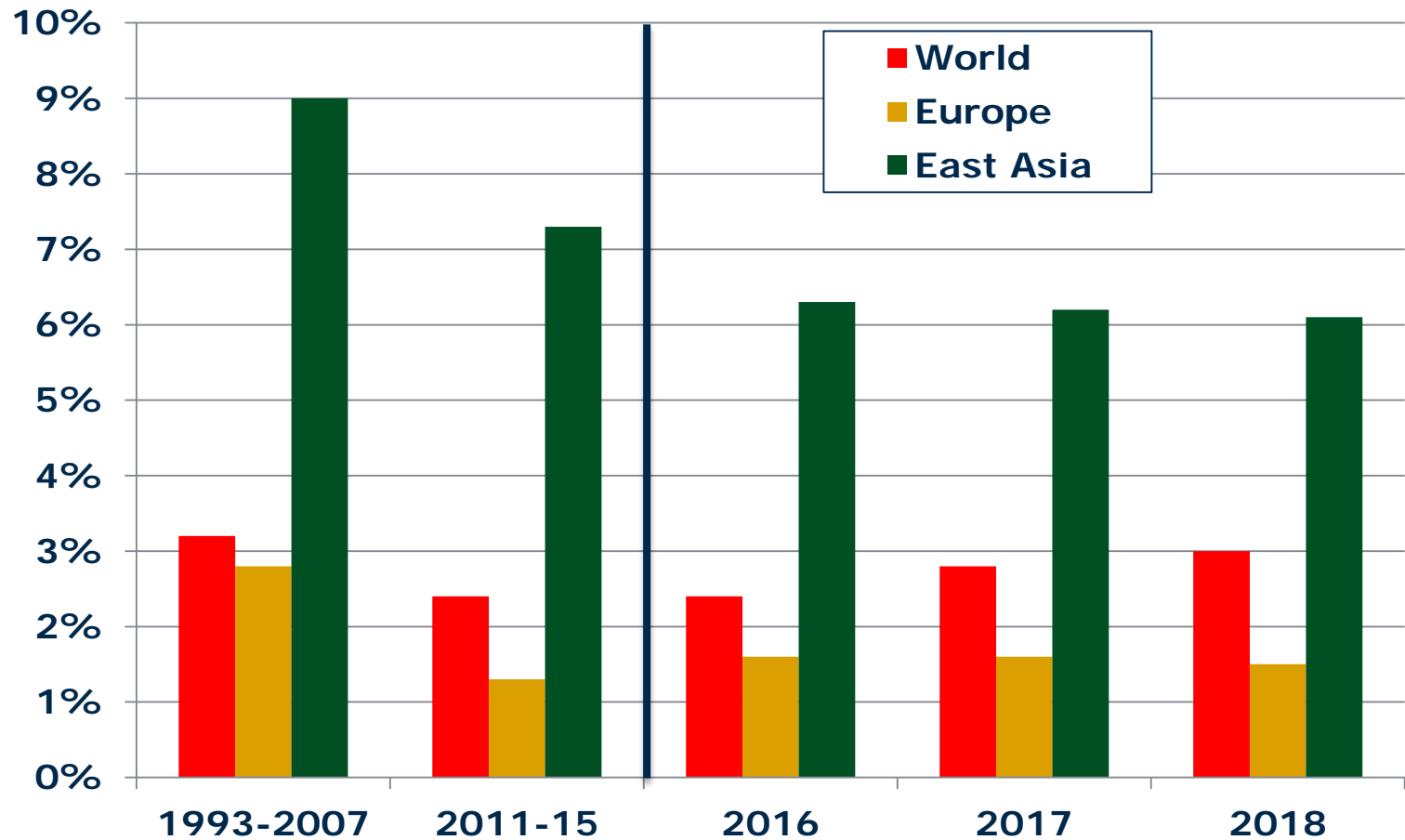


Exports are 45.9% of grade lumber

Purpose of Today's Presentation

1. Set stage for global forest products markets
- 2. Current challenges in international trade for U.S. Industry
3. Competitive position of U.S. South in select product lines
4. Strategic posture for longer term planning: N.A. vs. International options

Global Economic Growth Remains VERY LOW

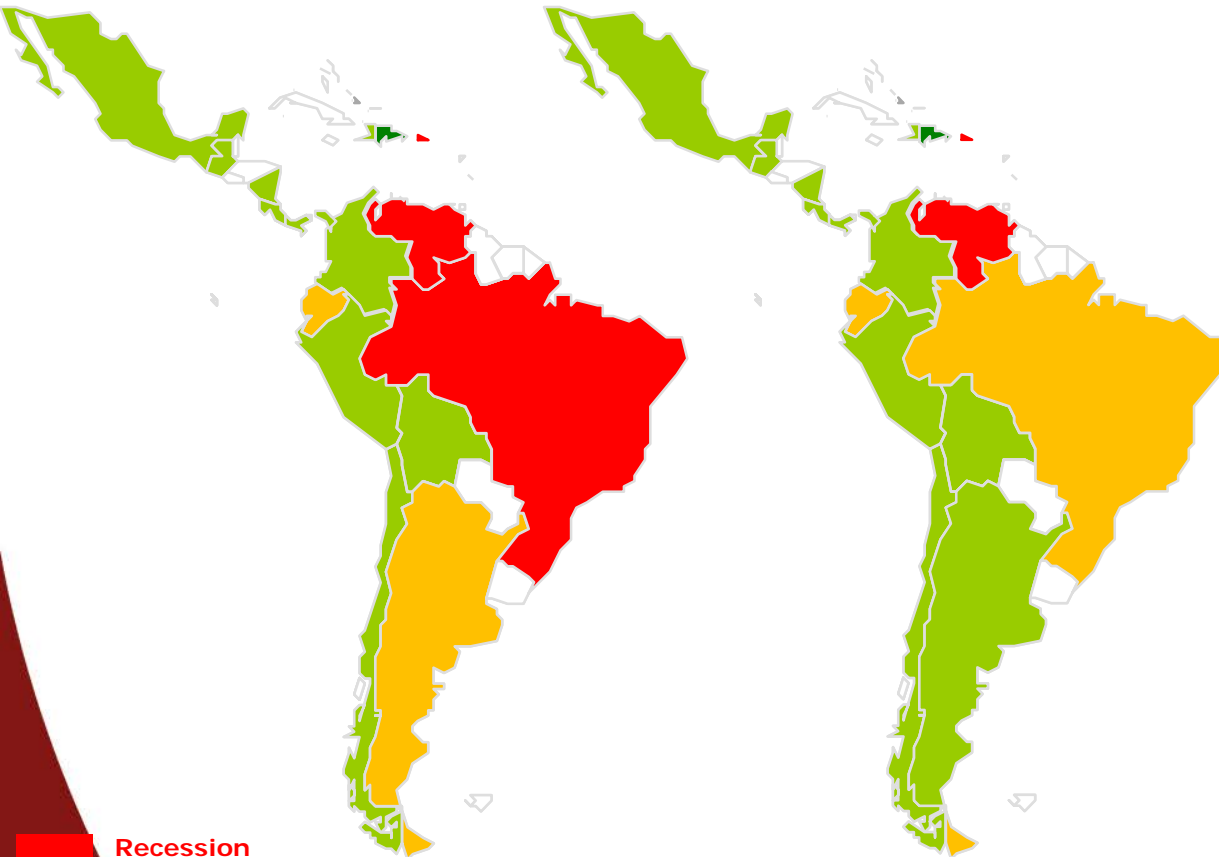


Outlook:World Bank

Latin America Struggles: Global Slowdown and Domestic Problems

GDP Growth

2016 (%) (%) 2017 (%)



- Commodity-exporting countries hit by low international prices and China's slowdown (almost all)
- Budget imbalances limit leeway for fiscal stimulus
- Strong inflationary pressures in most countries. Risk of exchange rate pass-through reduces the autonomy of monetary policy
- Political instability in Venezuela and Brazil

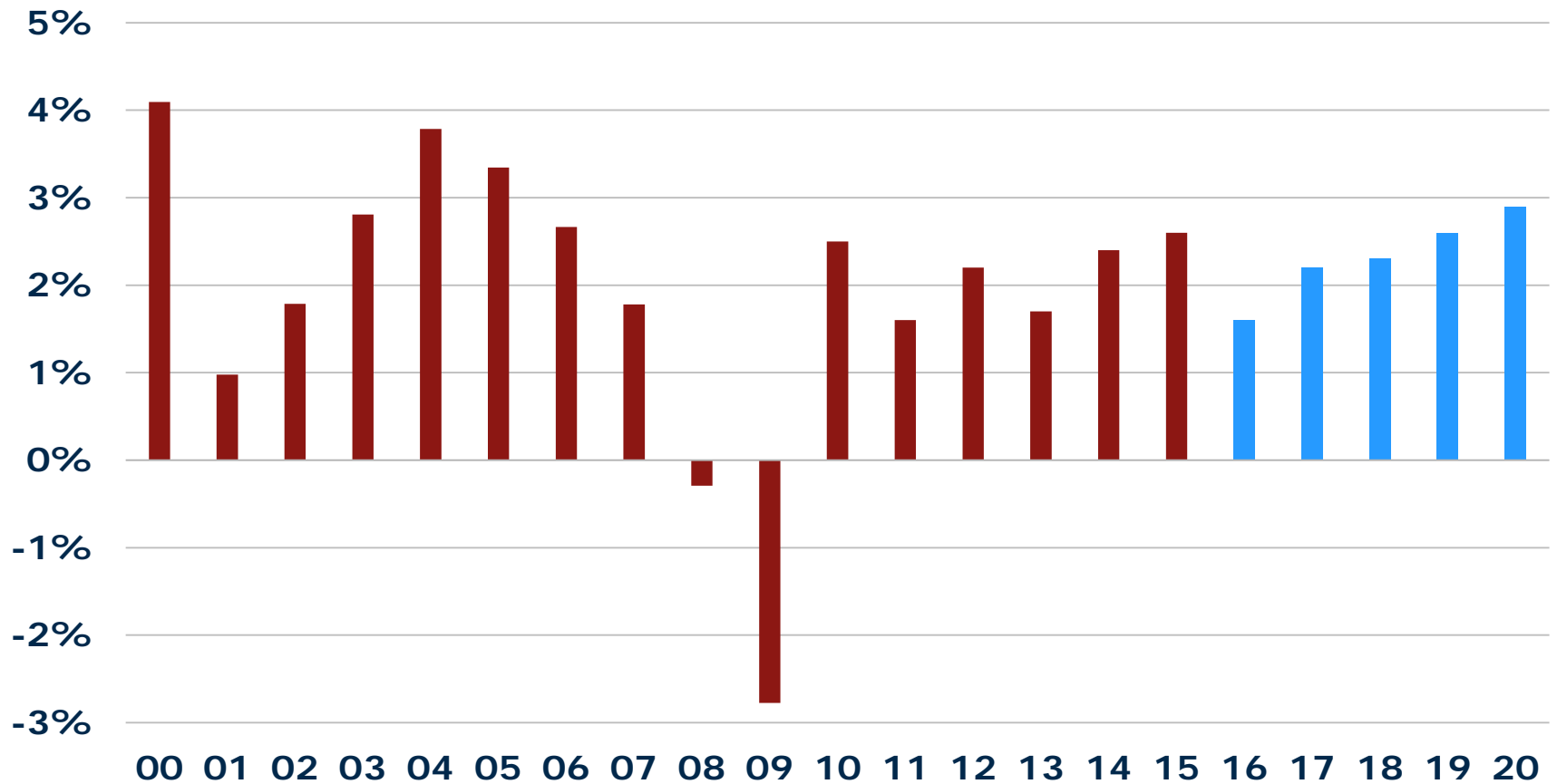
Red: Recession
Orange: Stagnant
Light Green: Mild growth
Dark Green: Strong growth

Source: Economics, Consensus Forecast.

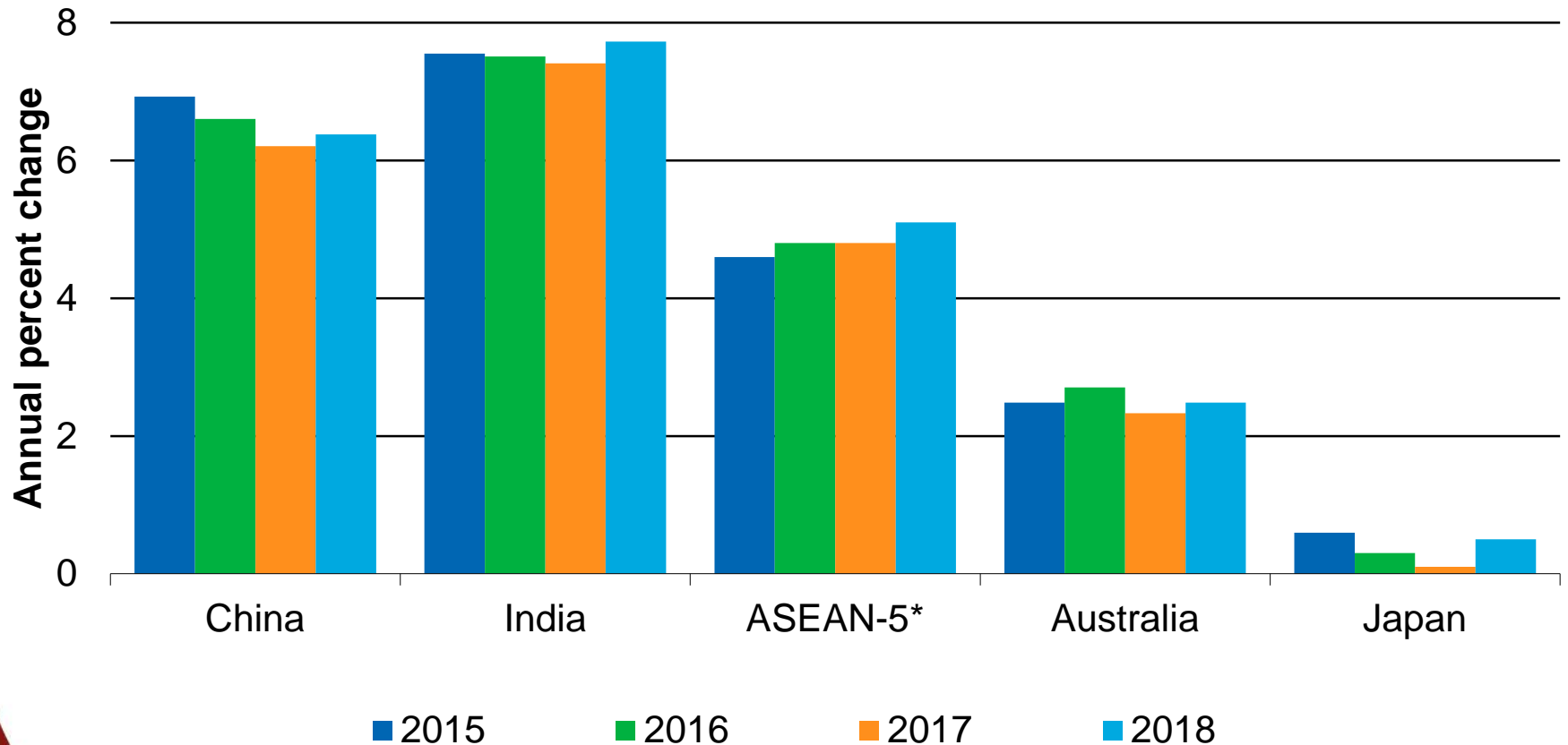
www.getfea.com

Actual U.S. Economic Growth: Slow, but Stable

GDP, % Change



Real GDP growth in Asia-Pacific



Source: IHS IMF and World Bank

www.getfea.com

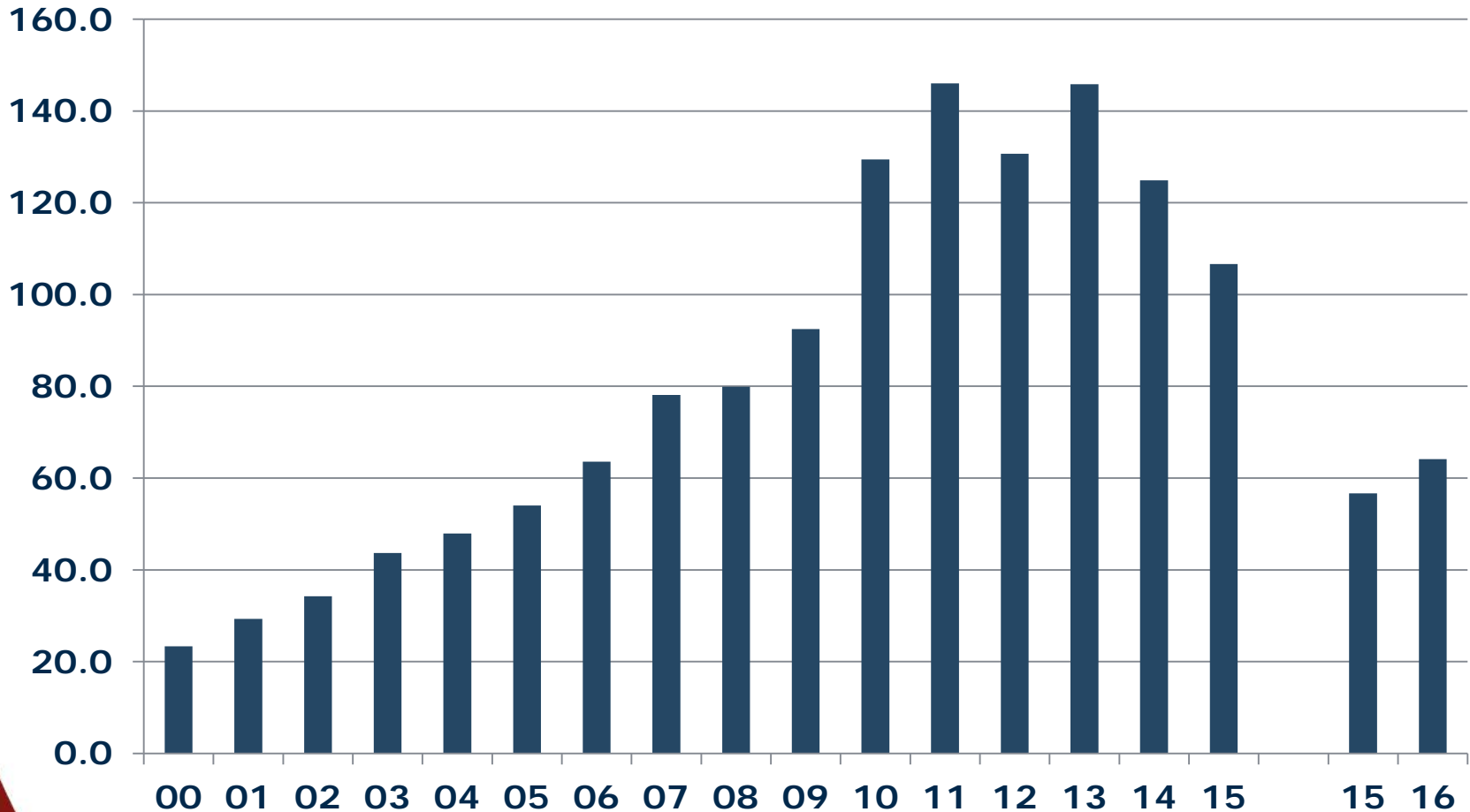
* ASEAN-5: Indonesia, Malaysia, Philippines, Thailand, Vietnam

© 2016 IHS Markit



Chinese Housing Construction Plunged

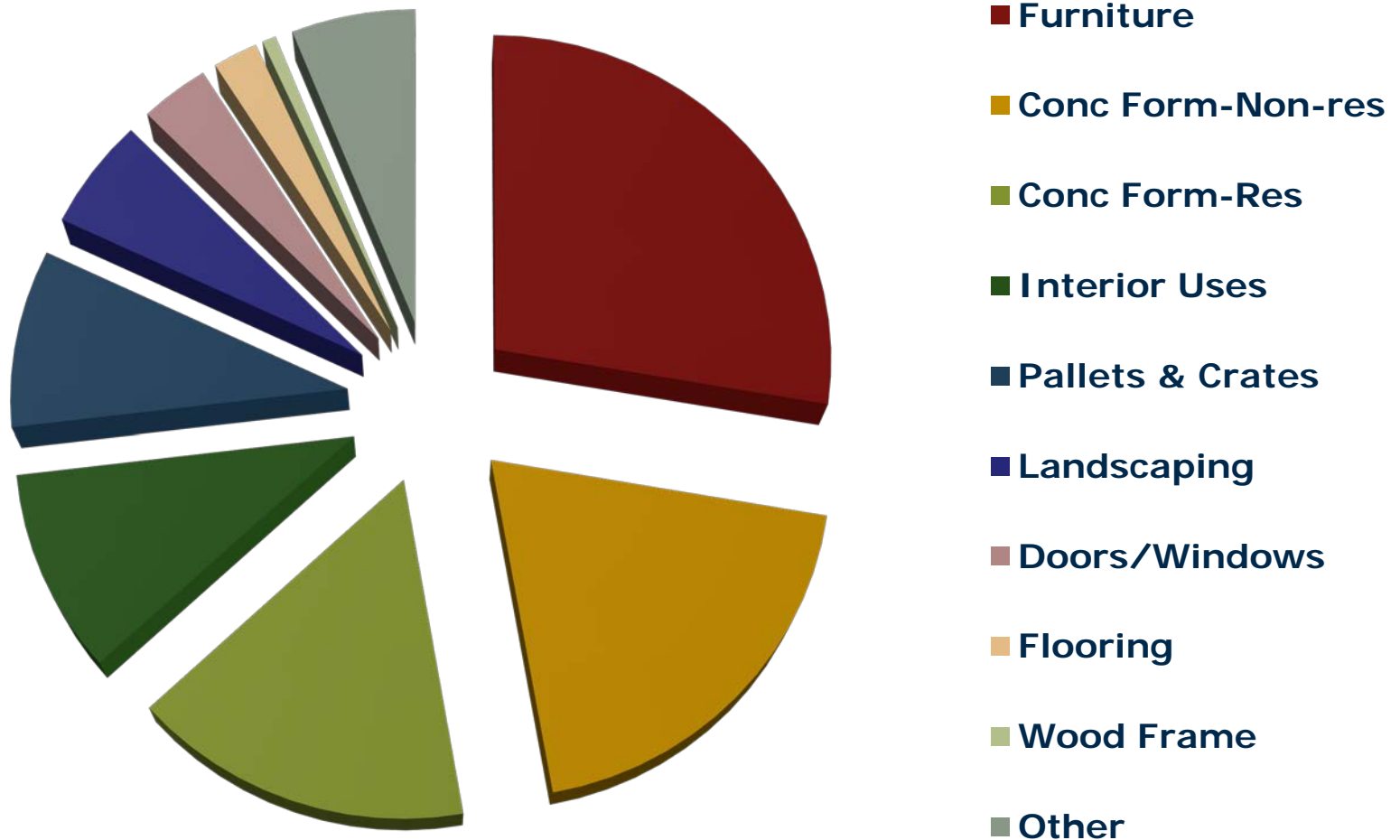
Commercialized Residential Floor Space Started, Mil M2



Src: National Bureau of Statistics of China

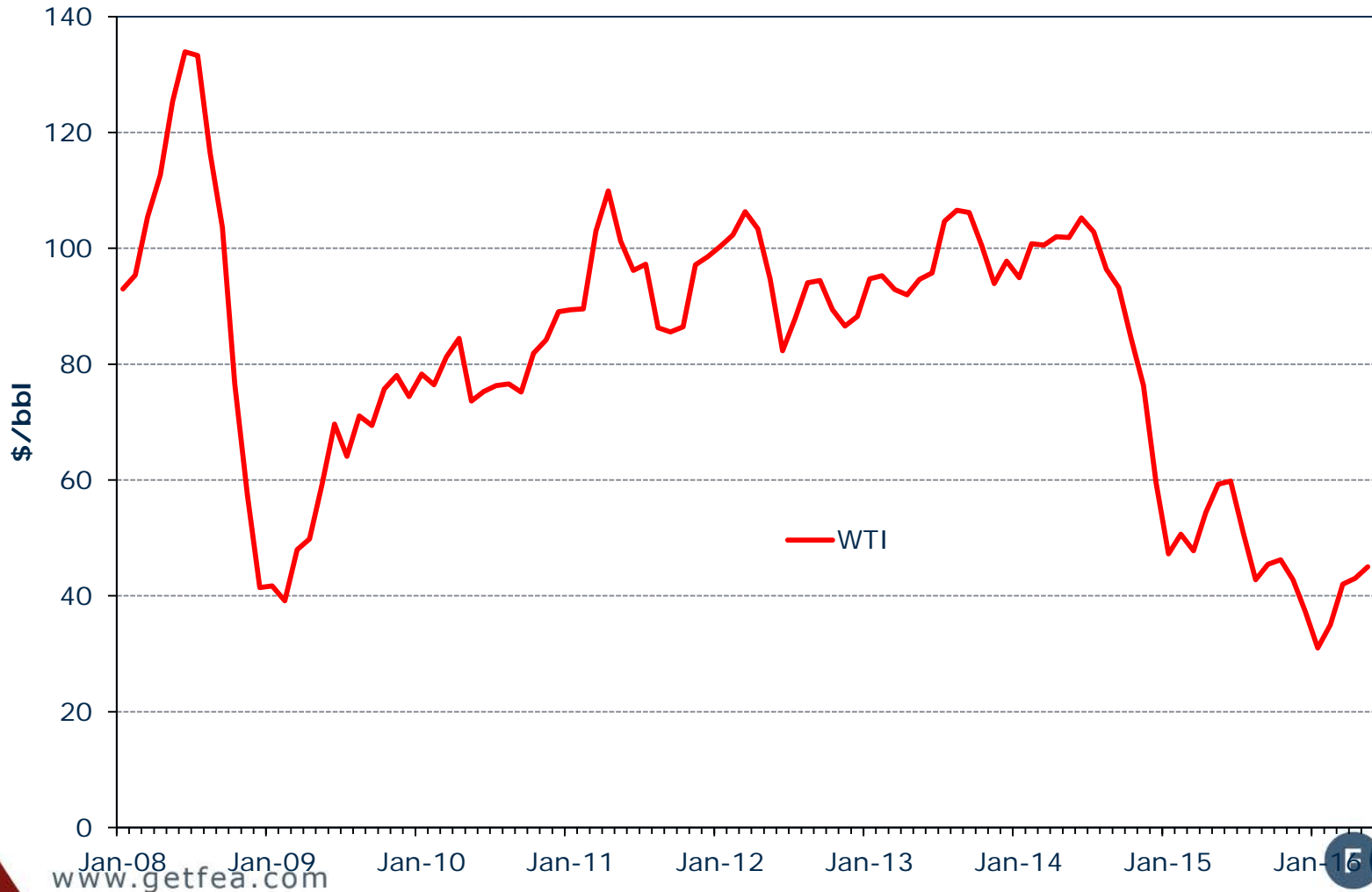
YTD July

Chinese Softwood Consumption: Different End-use Drivers



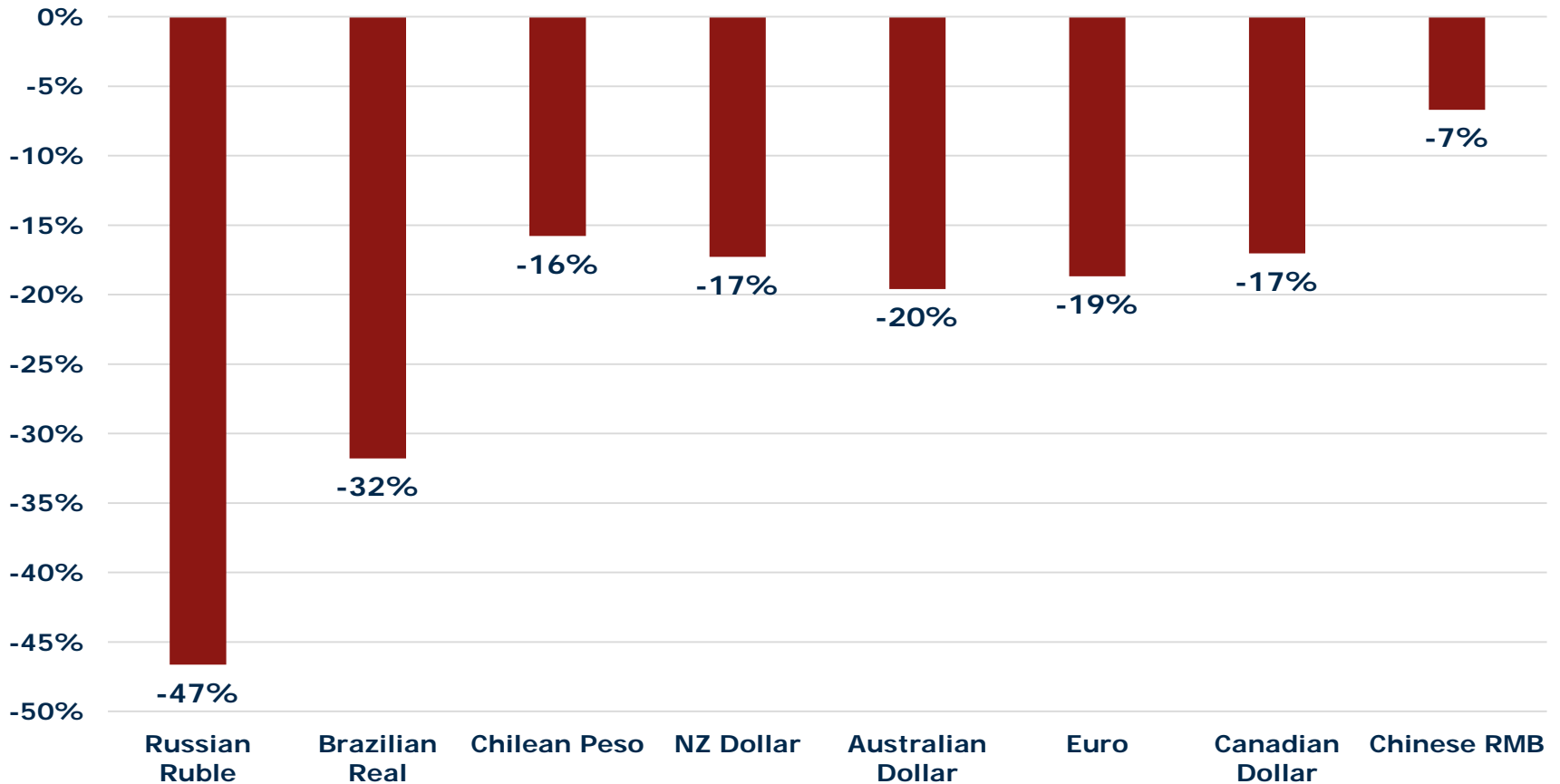
Slower Global Growth and Surge in U.S. Oil Production

Crude Oil Prices



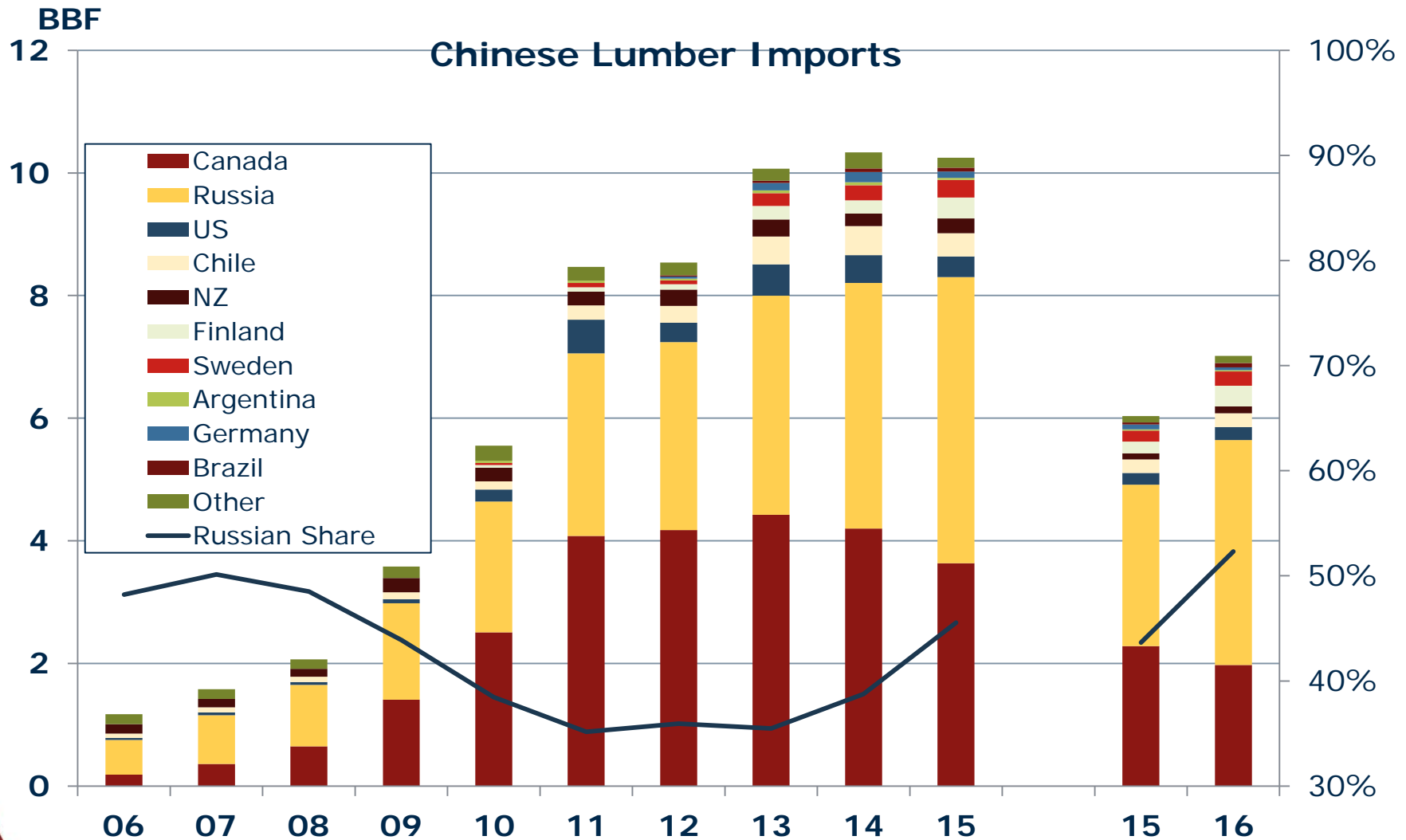
The Key Currencies for Wood Products: Not Likely to Change Course

Loss in Value Against the US Dollar Since June 2014*



*through July 2016
www.getfea.com

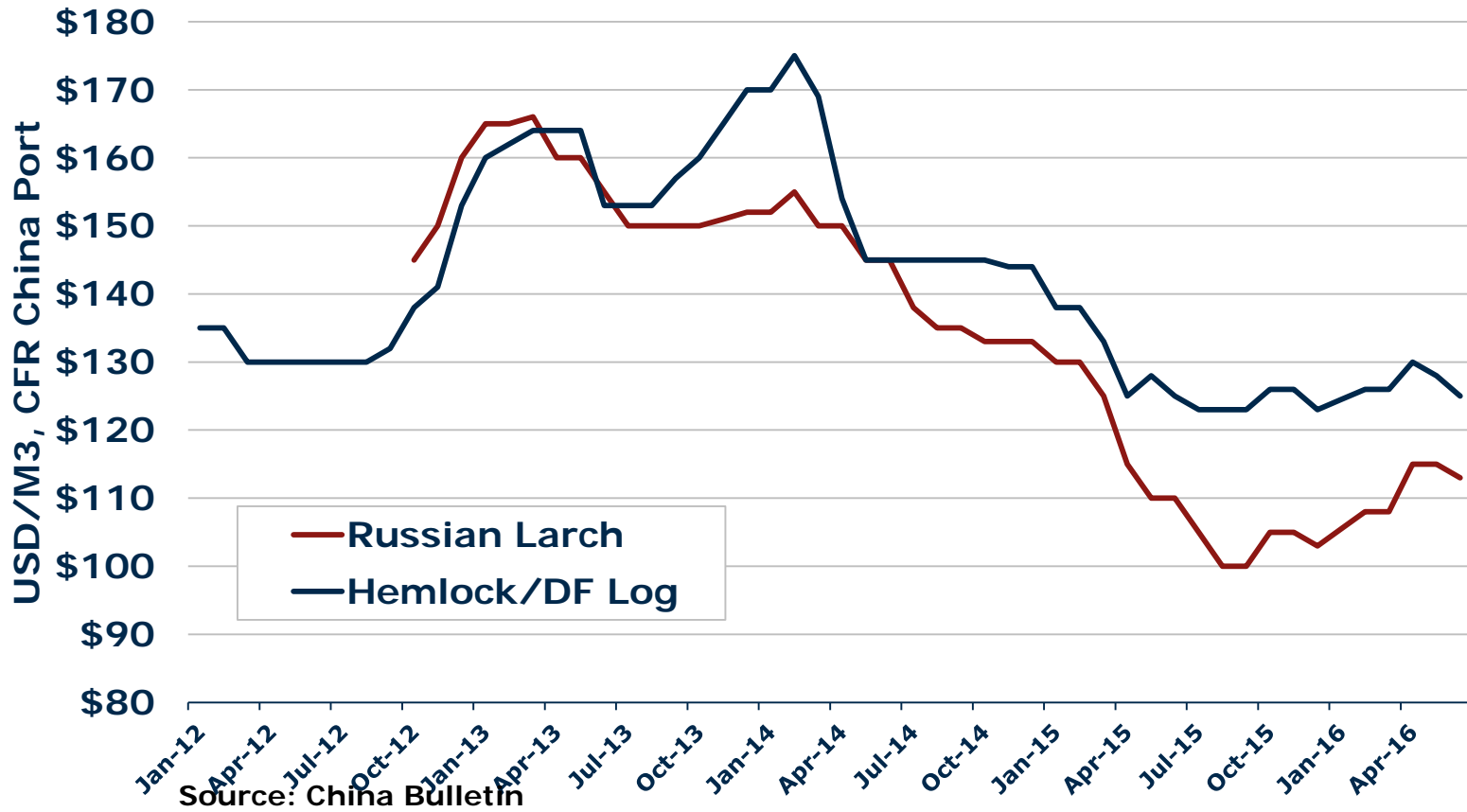
North American Lumber Exports To China Declined



Outlook for Exchange Rates: U.S. Dollar Stays Relatively Strong

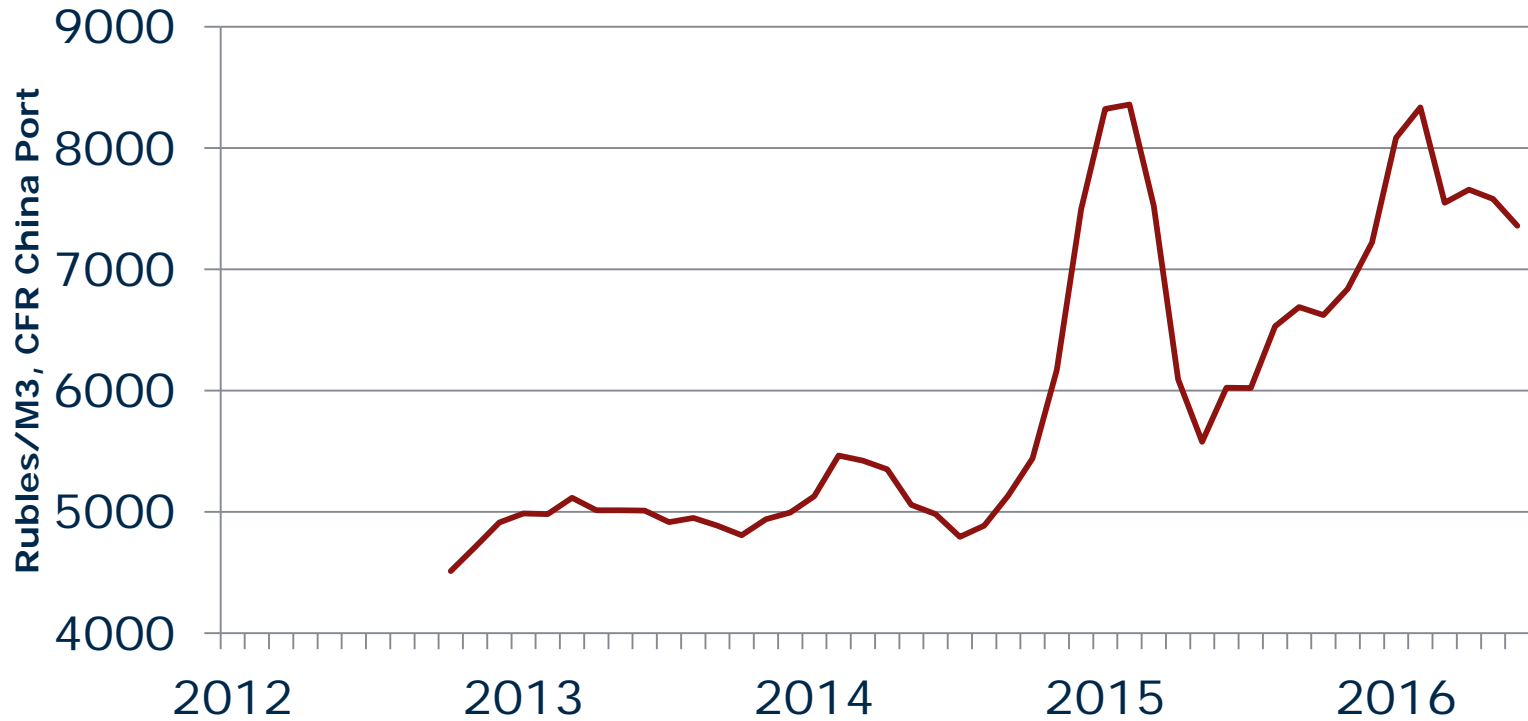
- Slow economic growth keeps oil and commodity prices down
- U.S. growth is bright spot—interest rates going up!
 - Brazil and Russia in recessions
- Other central banks keep interest rates low or negative—Deflation concerns in Europe
- **A weaker currency favors exporters of wood products and helps boost product prices at the mill**

Log Prices as Seen In US\$




Log Prices to a Russian Supplier

Russian Larch log Price (22-30cm)



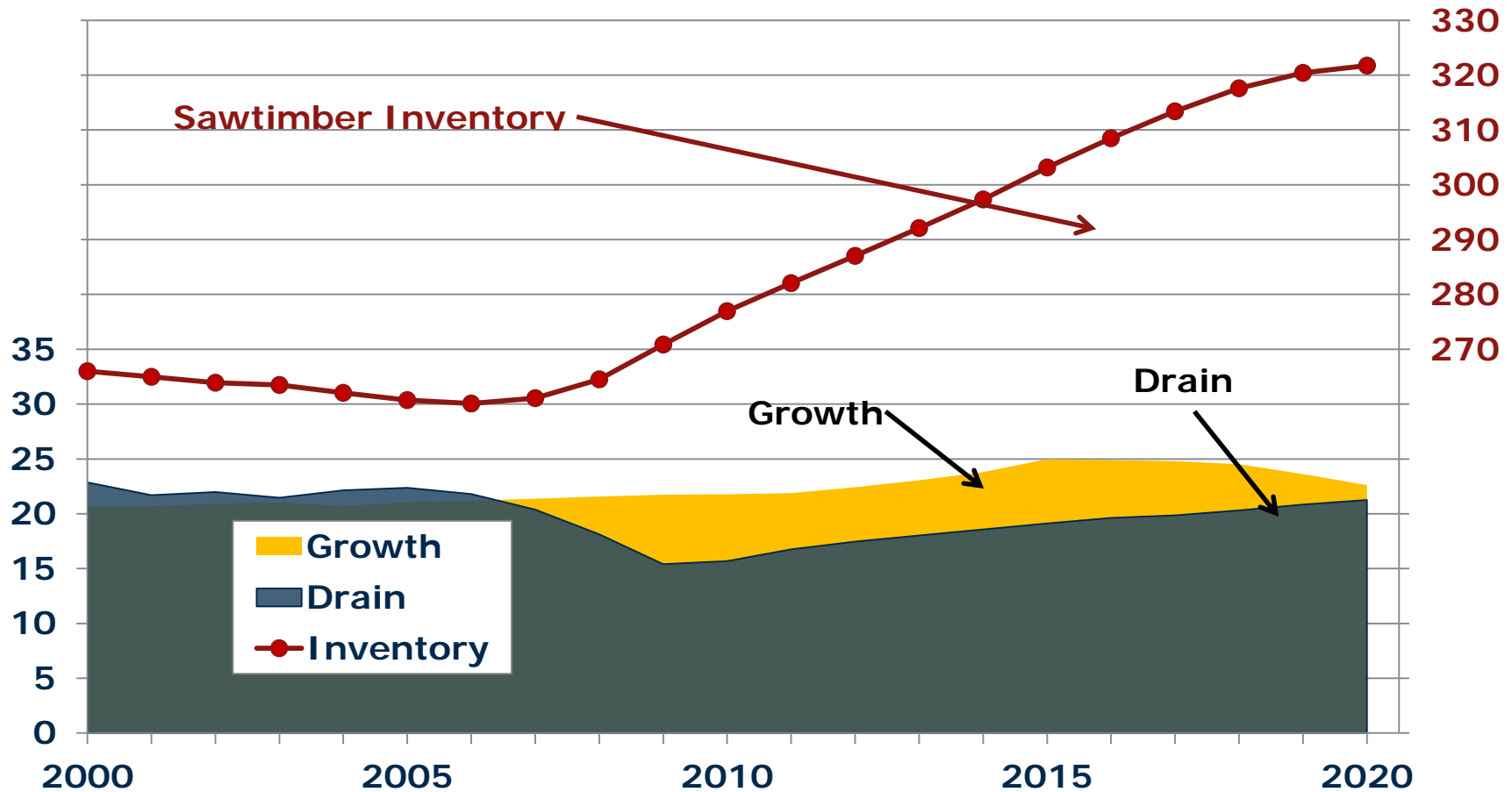
Purpose of Today's Presentation

1. Set stage for global forest products markets
2. Current challenges in international trade for U.S. Industry
- 3. Competitive position of U.S. South in select product lines
4. Strategic posture for longer term planning: N.A. vs. International options

The South's Softwood Sawtimber Inventory is Expanding

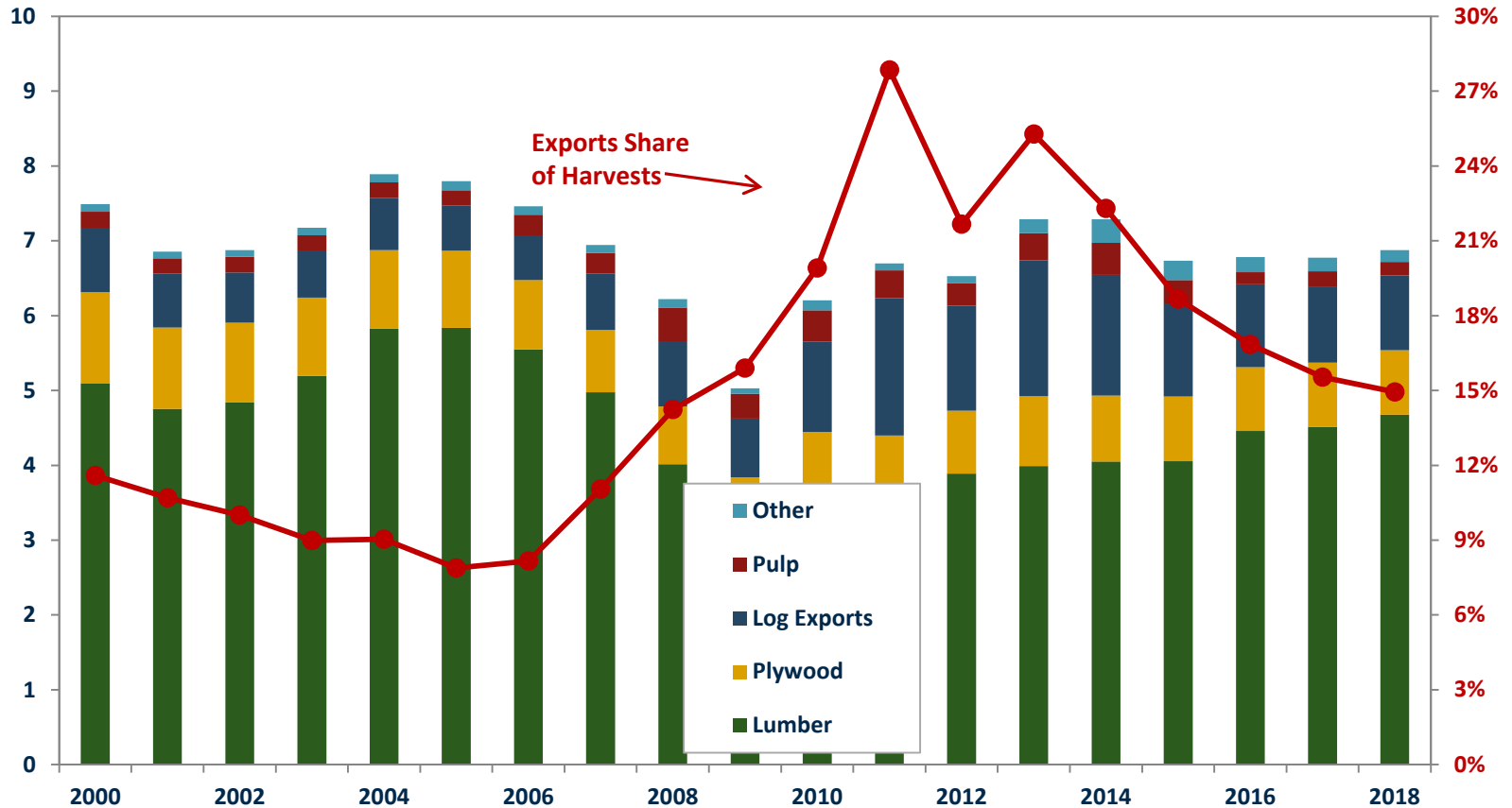
Growth & Drain, BBF Int'l 1/4"

Inventory, BBF Int'l 1/4"

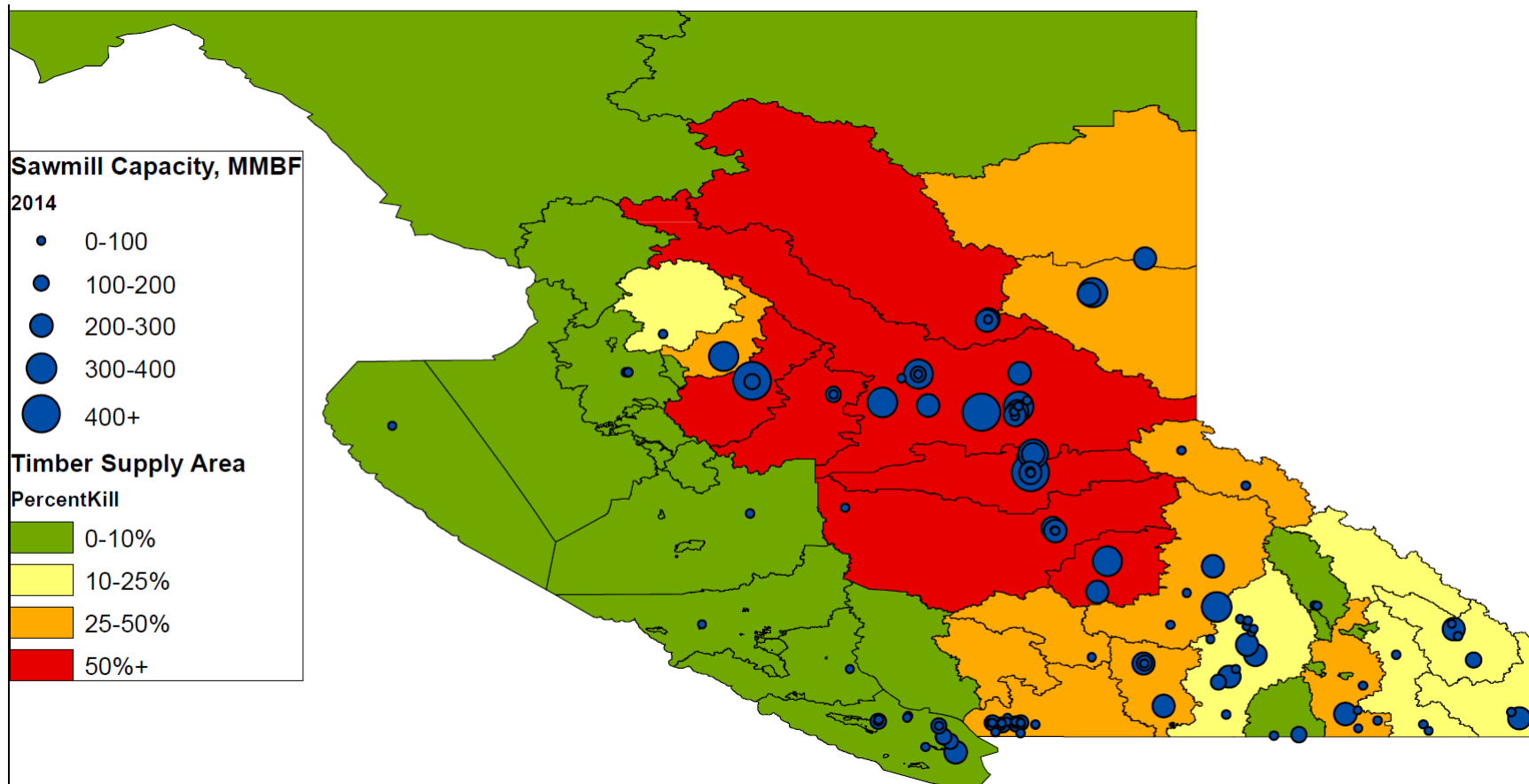


U.S. West Coast Harvest Levels Near Annual Growth: Log Exports Fell

West Coast Softwood Timber Harvests - BBF, Int'l 1/4"



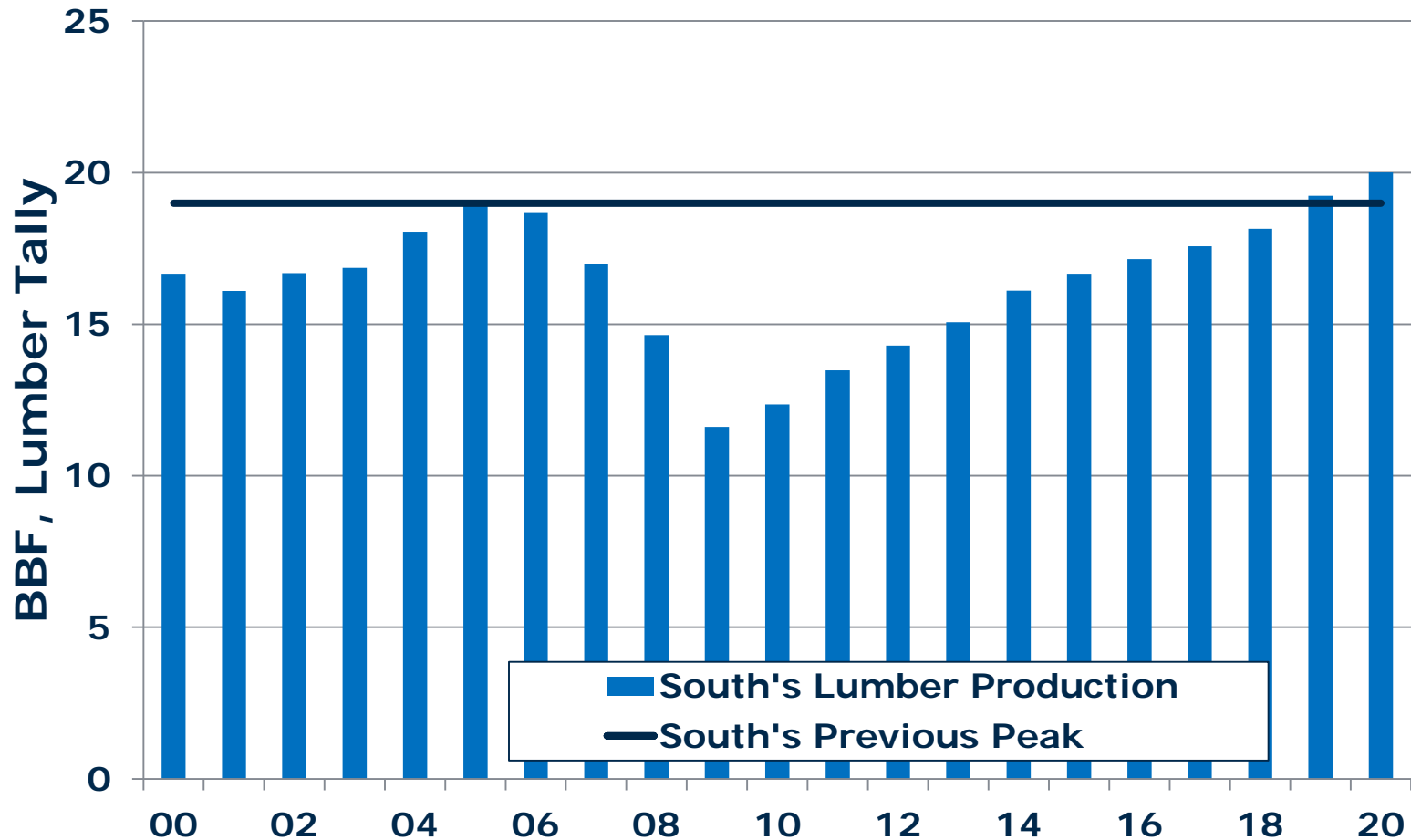
BC's Largest Sawmills are Located in Regions Hardest Hit by the Mountain Pine Beetle Epidemic



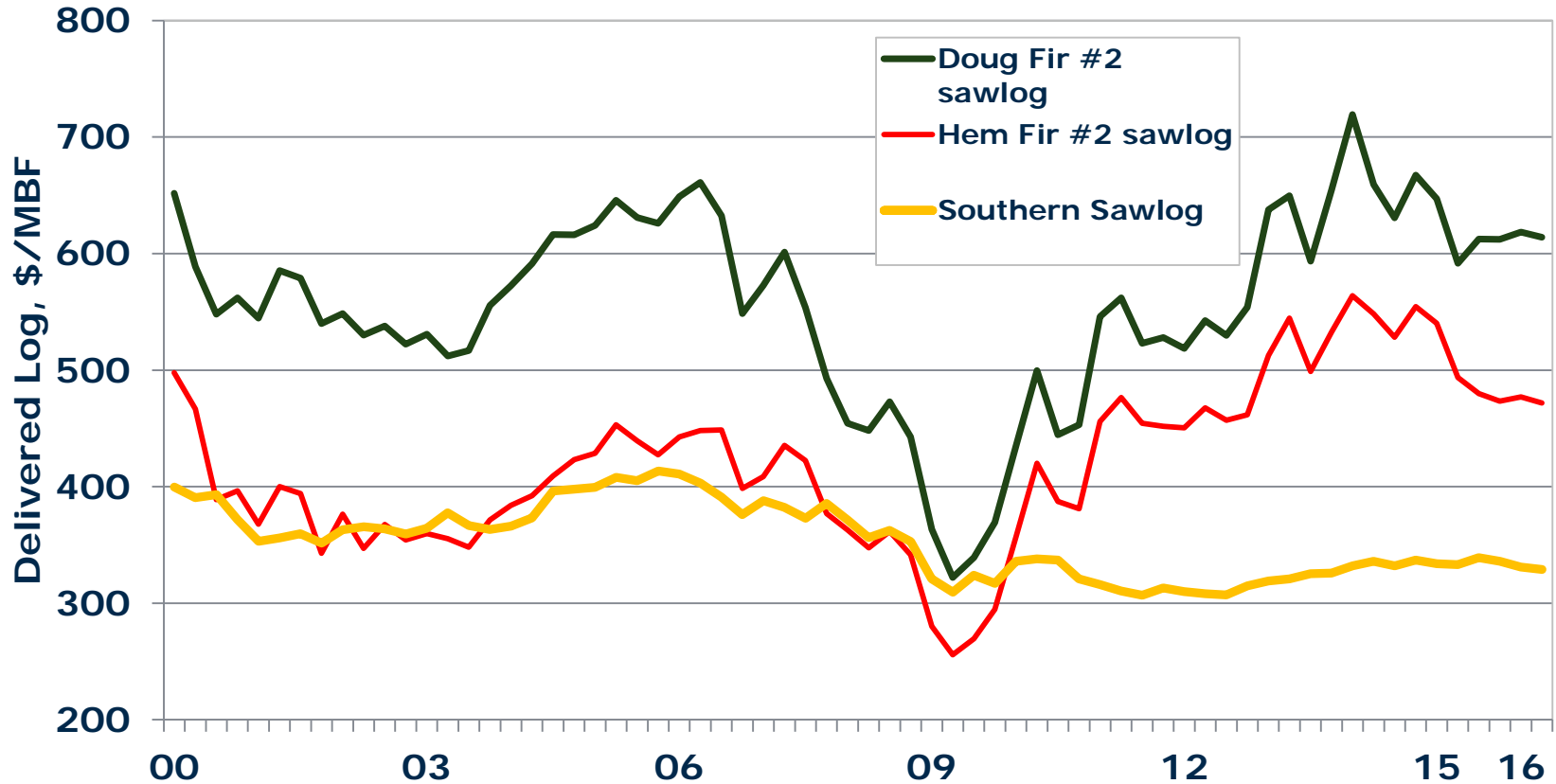
Source: BC Ministry of Forest, FEA estimates

www.getfea.com

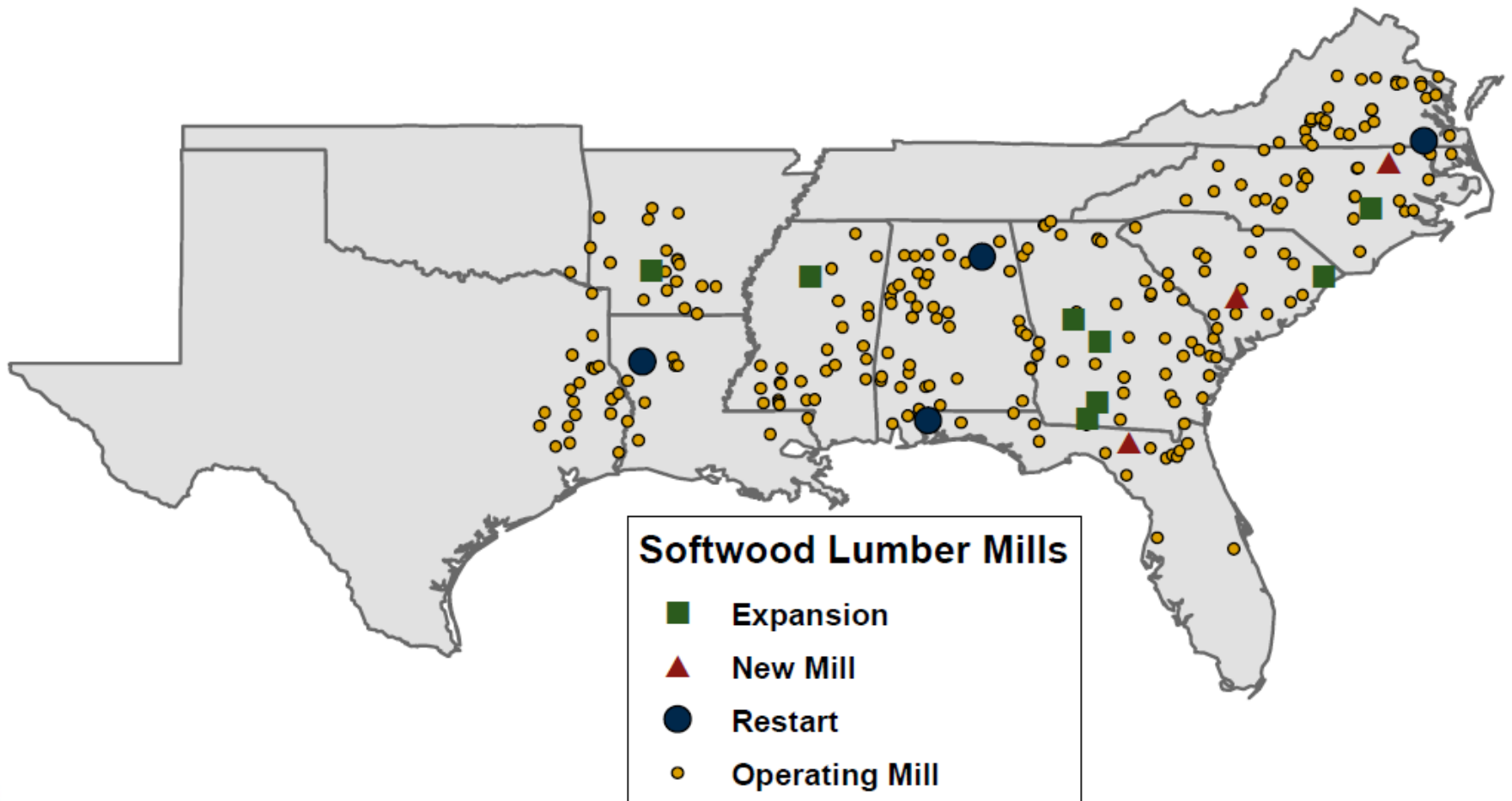
US Southern Lumber Production Expected to Exceed Previous Peak



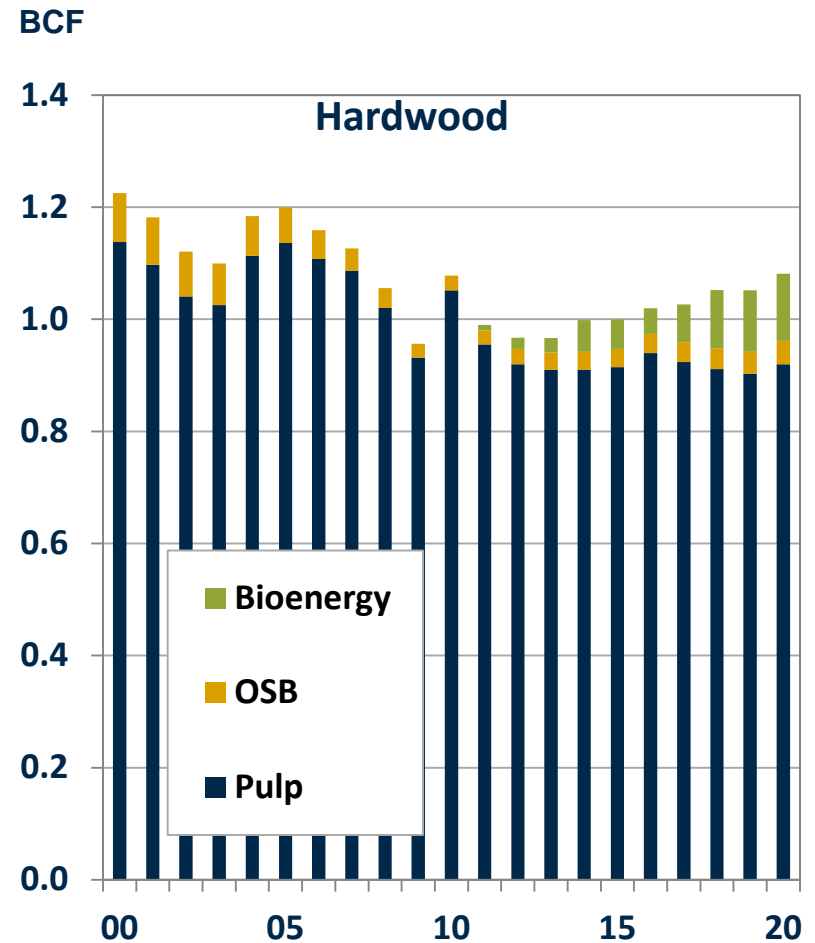
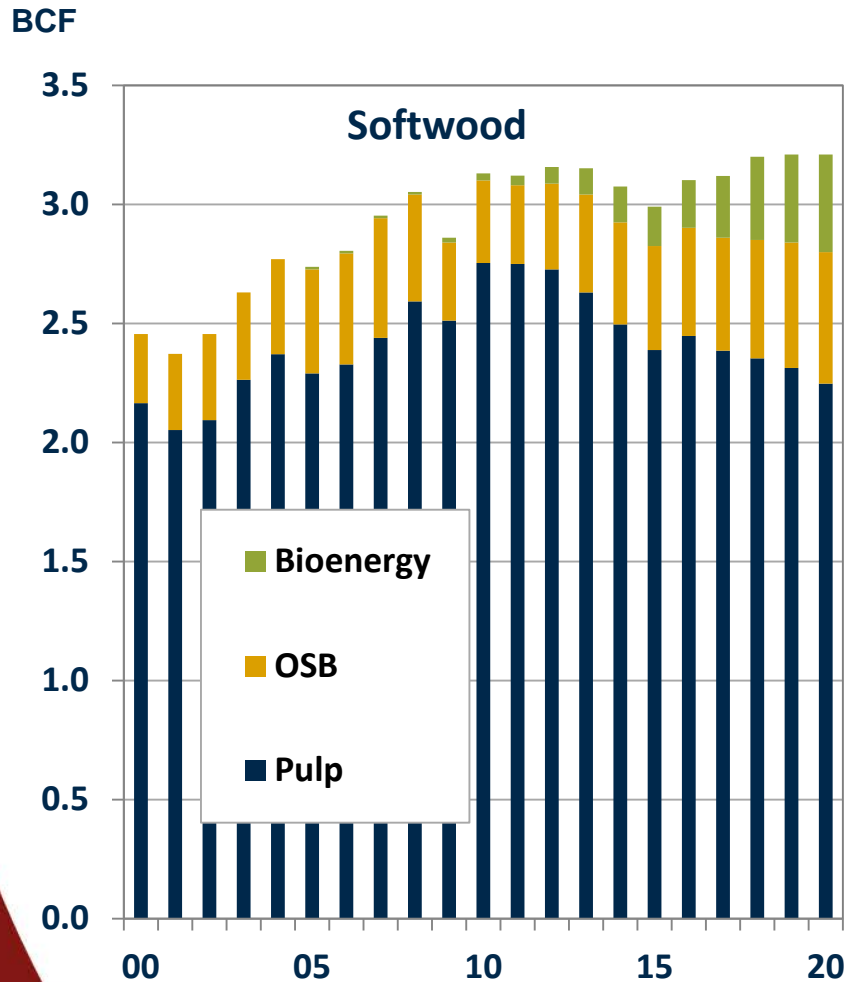
Log Prices Reflect Sawtimber Abundance in the U.S. South



15 Greenfield Mills, Restarts or Expansions Have Already Been Announced In The US South

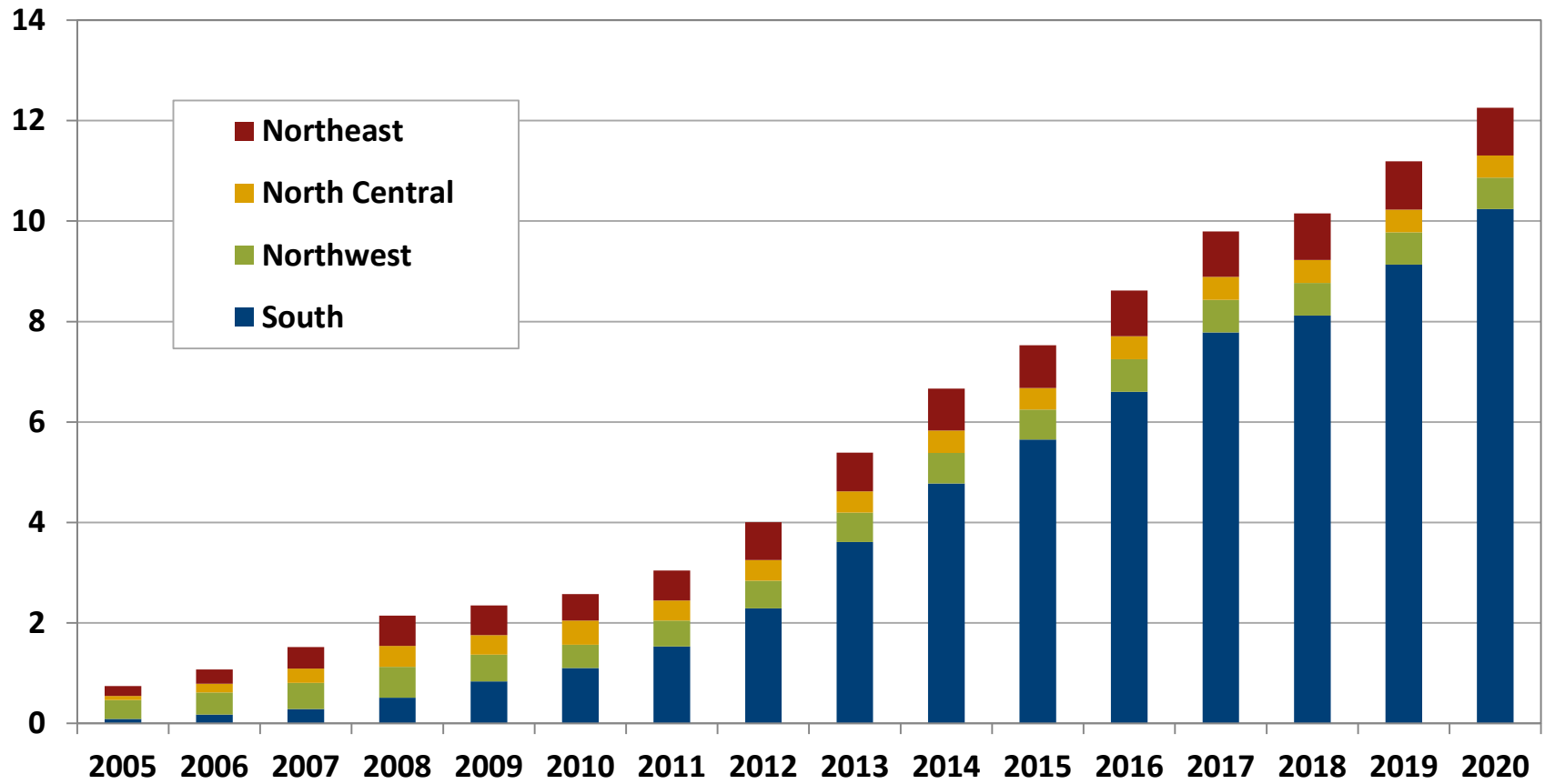


US South's Demand for Pulpwood Will Improve



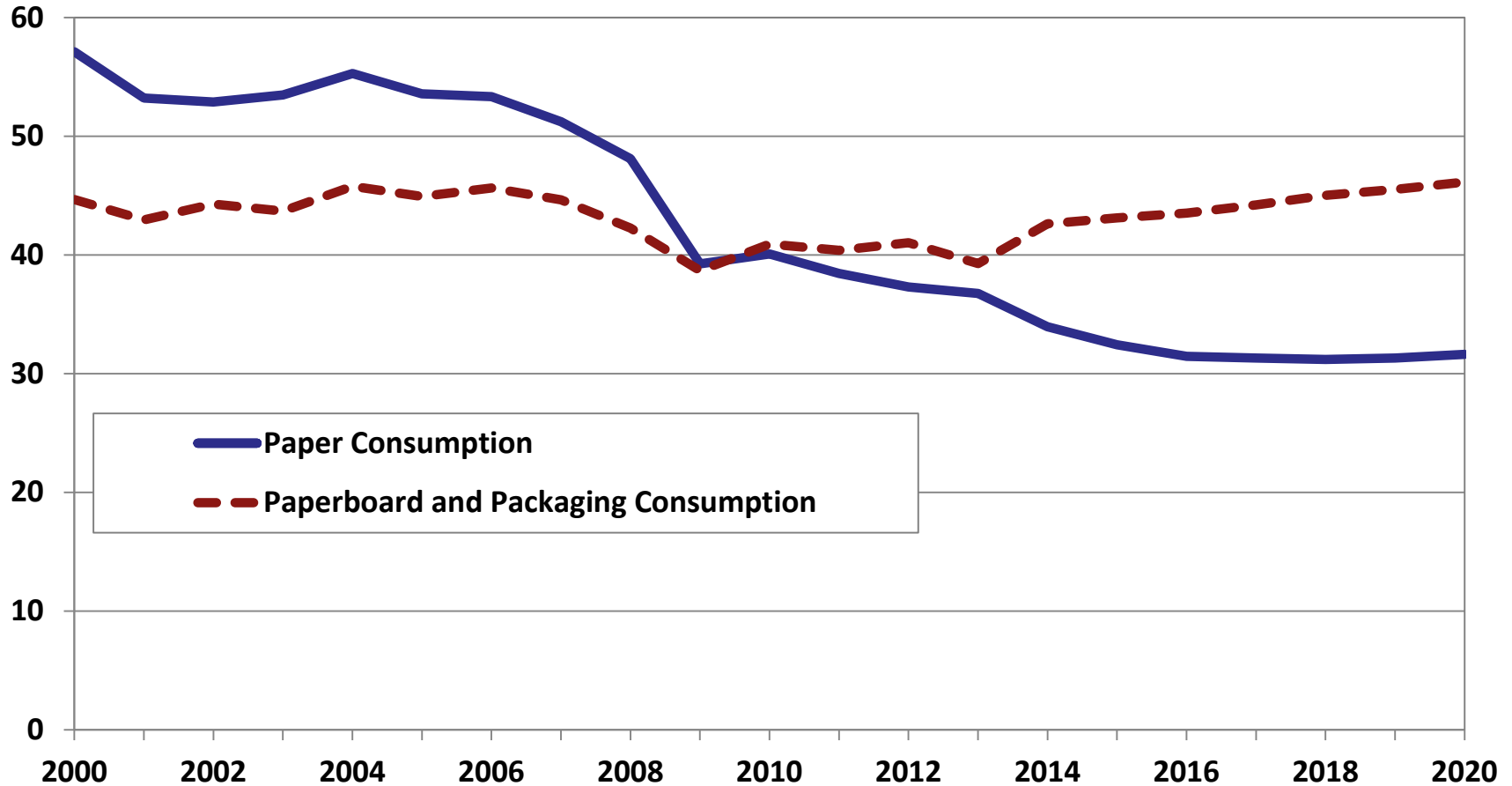
The US Wood Pellet Industry Is Undergoing Dramatic Growth

Production, Million Tons

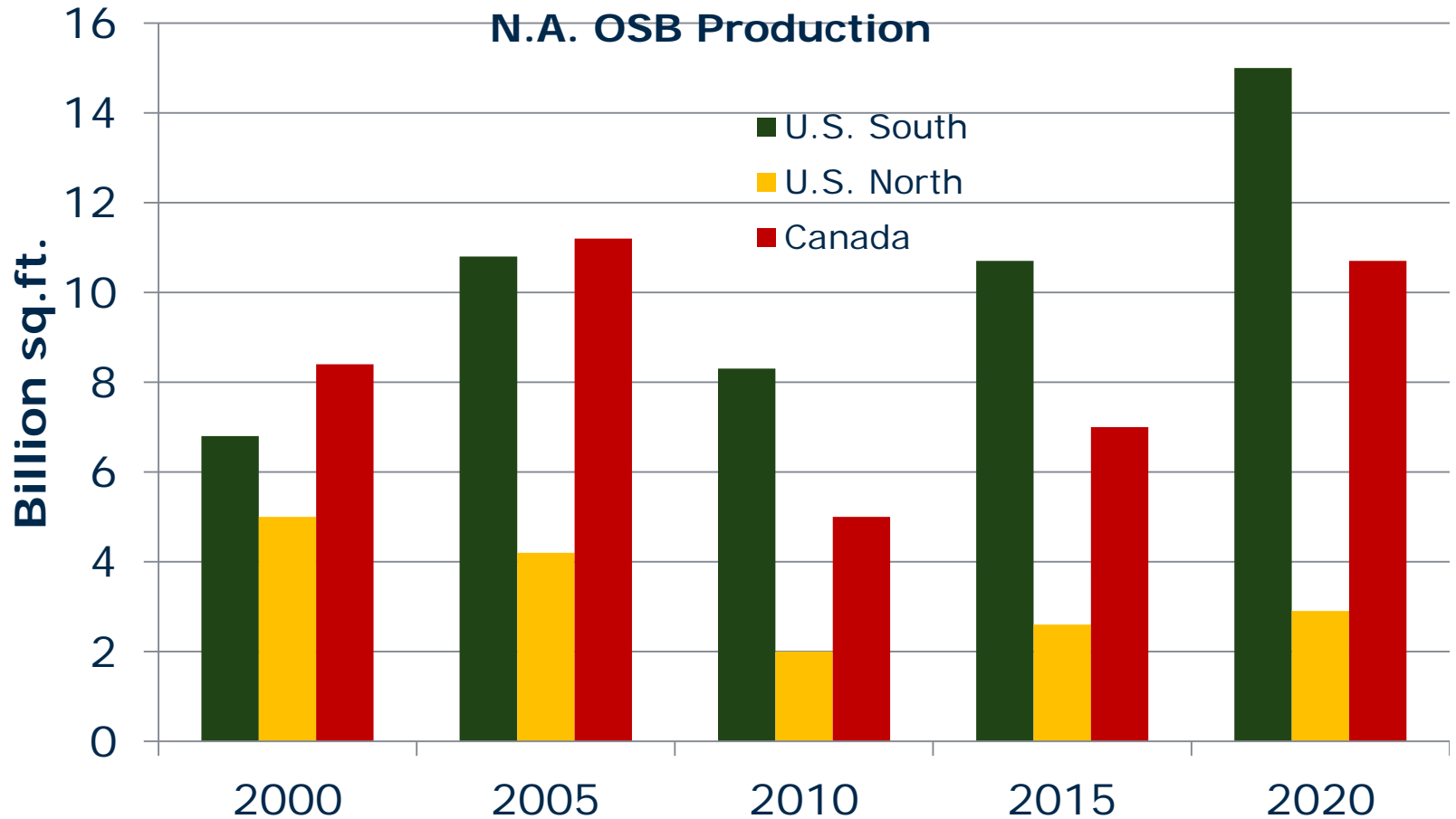


Packaging Demand grows, while Paper (white) demand falls


Million Tons



South Emerged as Dominant OSB Region



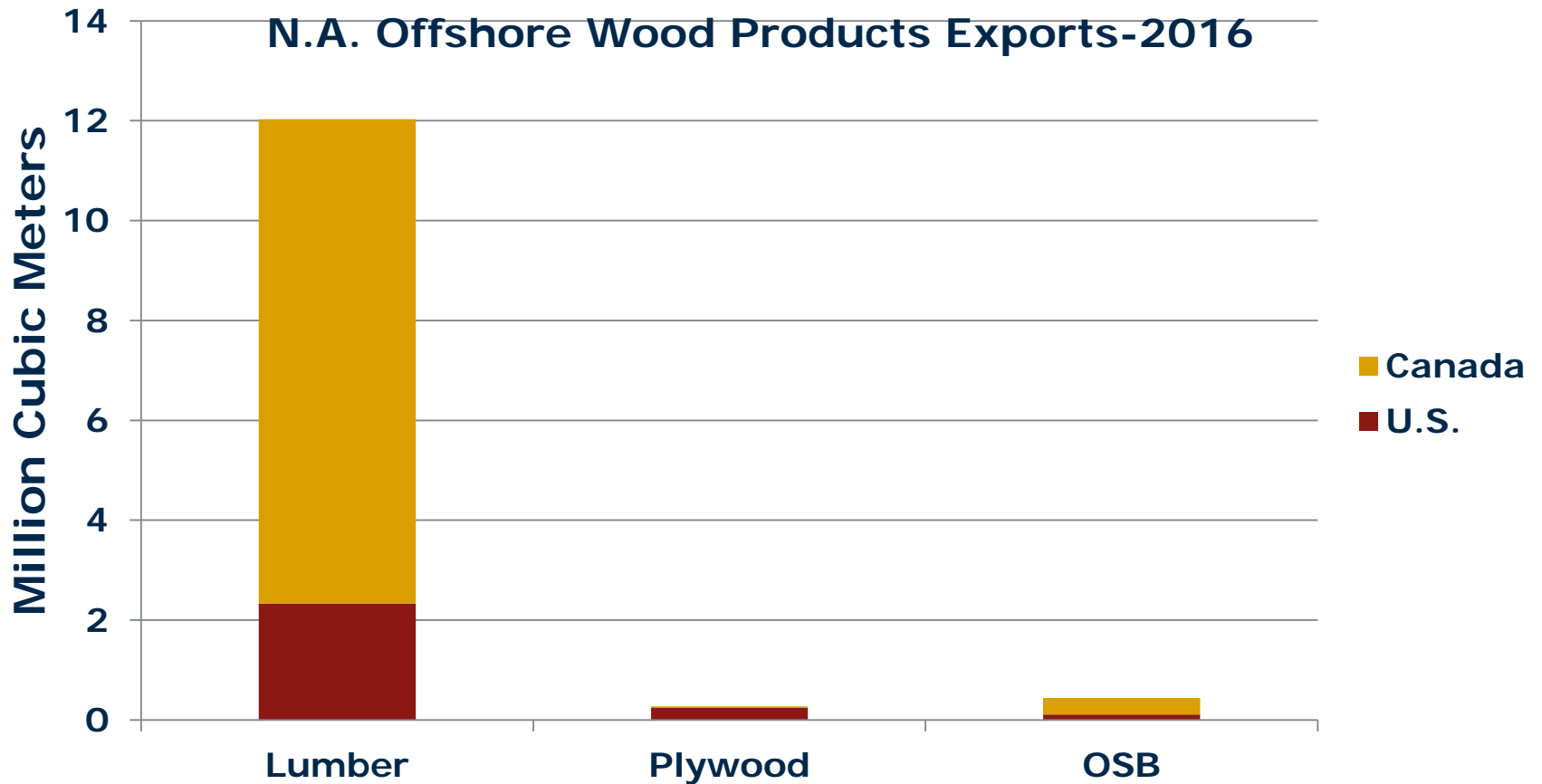
Purpose of Today's Presentation

1. Set stage for global forest products markets
2. Current challenges in international trade for U.S. Industry
3. Competitive position of U.S. South in select product lines
- 4. Strategic posture for longer term planning: N.A. vs. International options

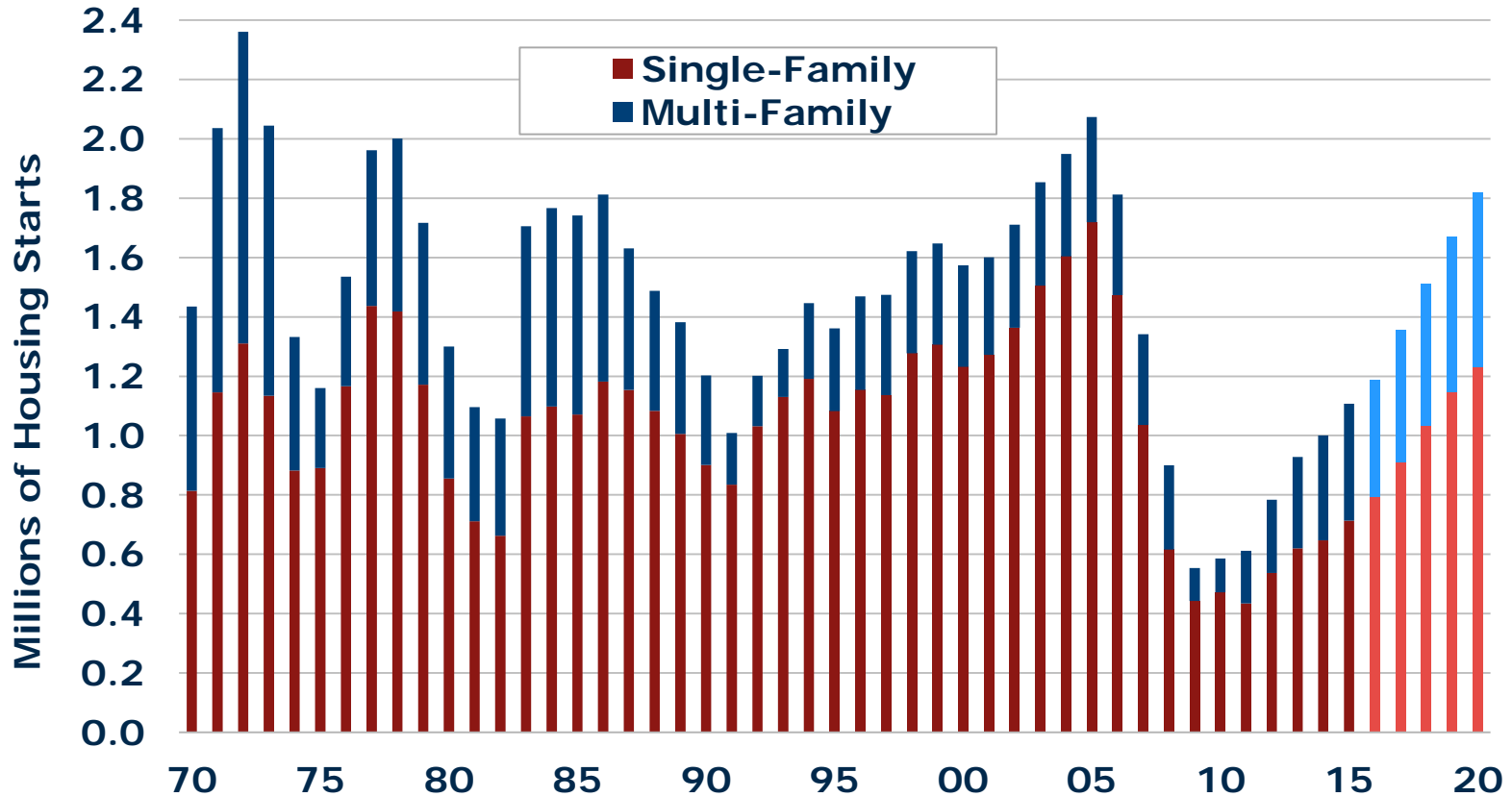
Balance Export Against Domestic Options

- Should be growing opportunities in offshore markets with select grades and products
- However, are two headwinds:
 - Exchange rates
 - Rebounding domestic market
- Even so, should focus on options that:
 - Enhance timber returns or mill margins when possible
 - Ability to broaden market options over the long term

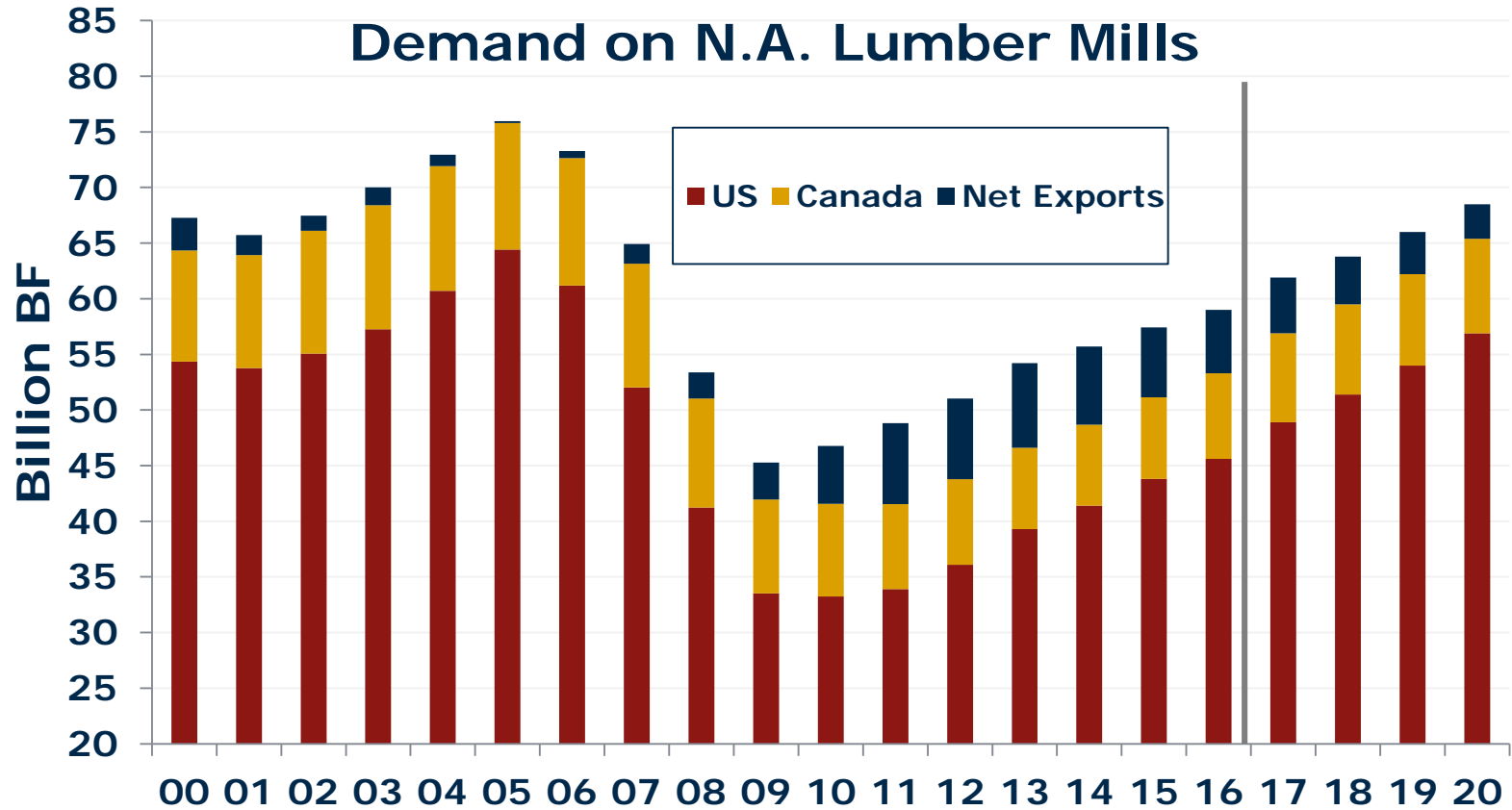
Primary Wood Products Export is Lumber



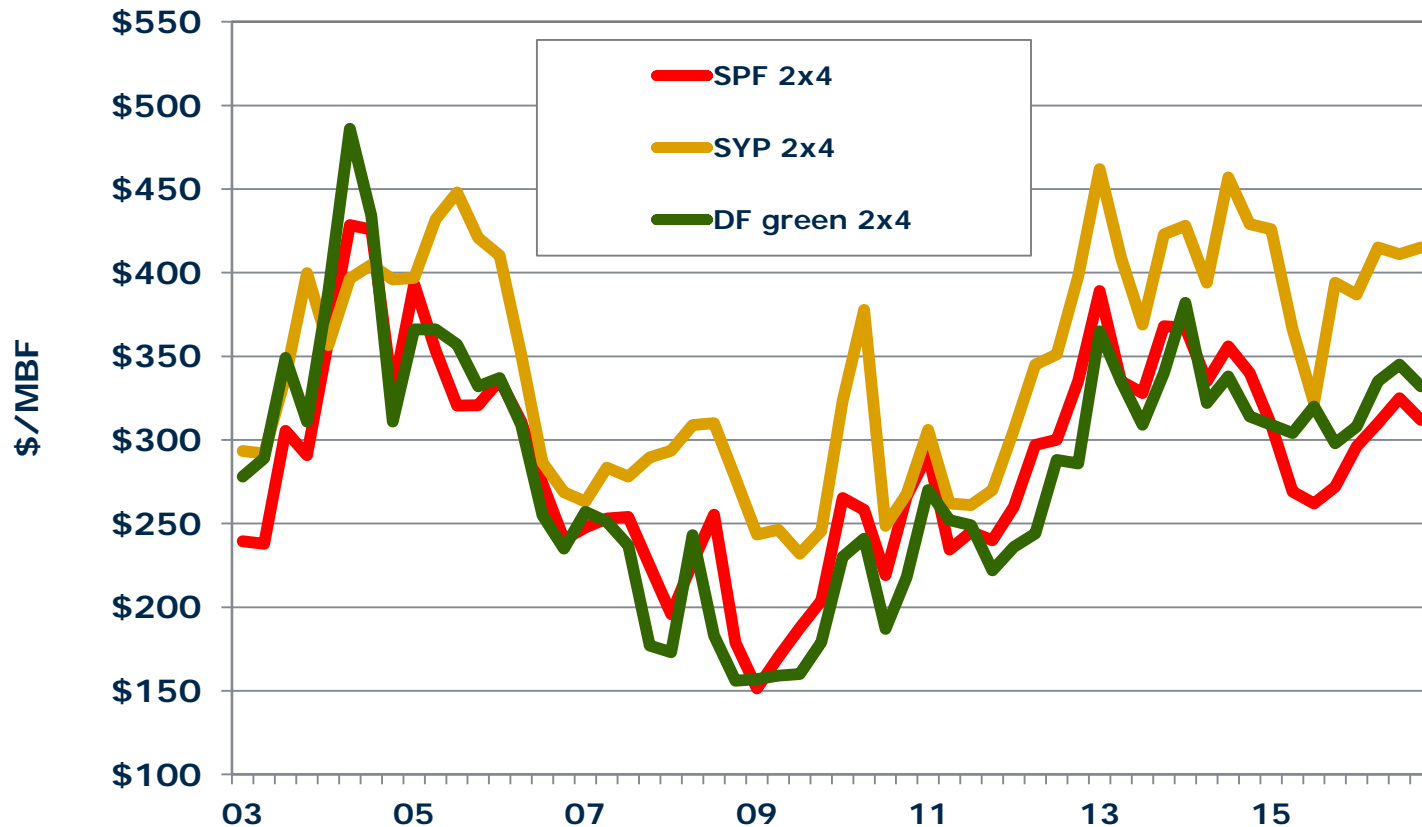
U.S. Housing Starts Continue to Rebound with Household Formations



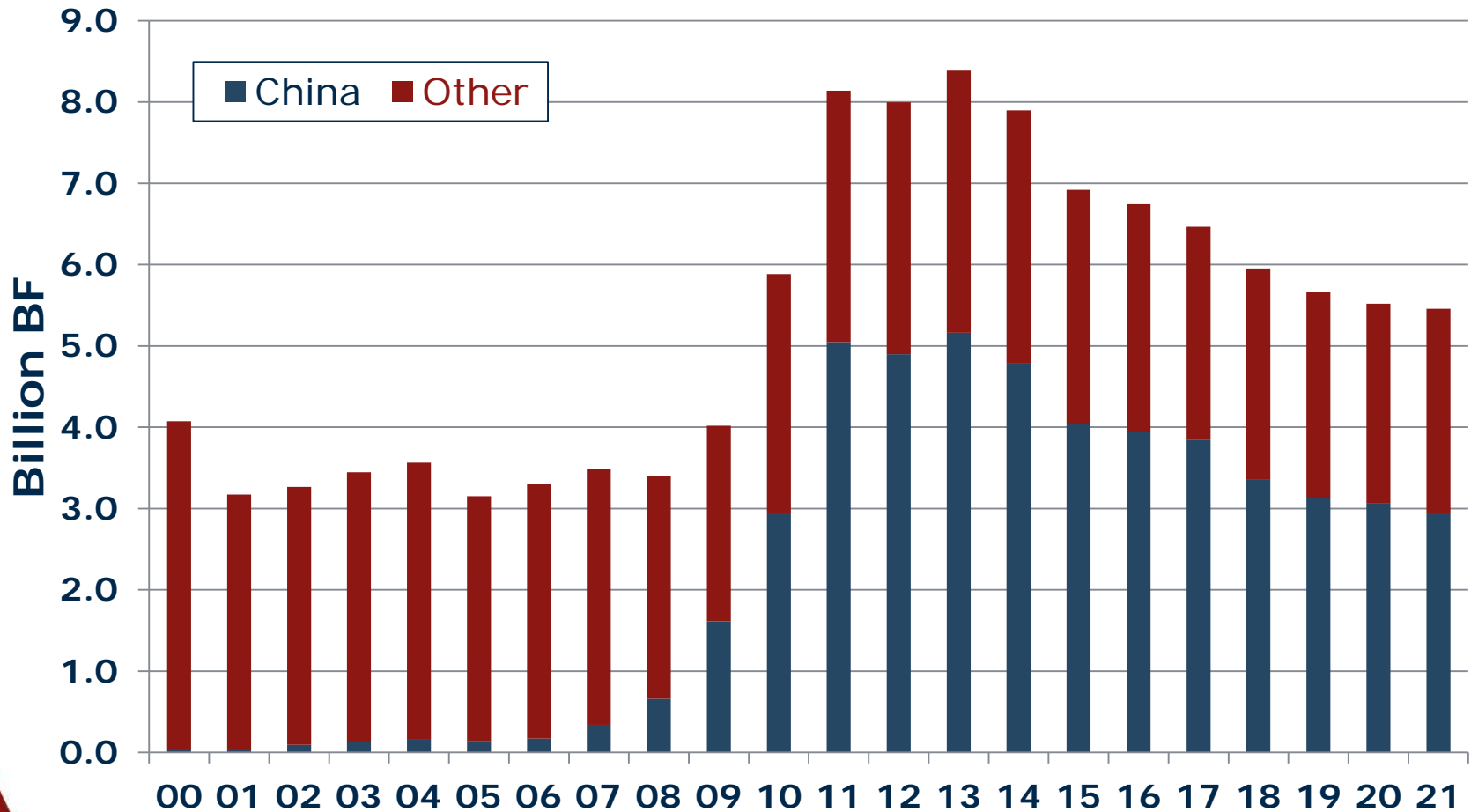
Bottom Line: Demand Approaches 70 BBF



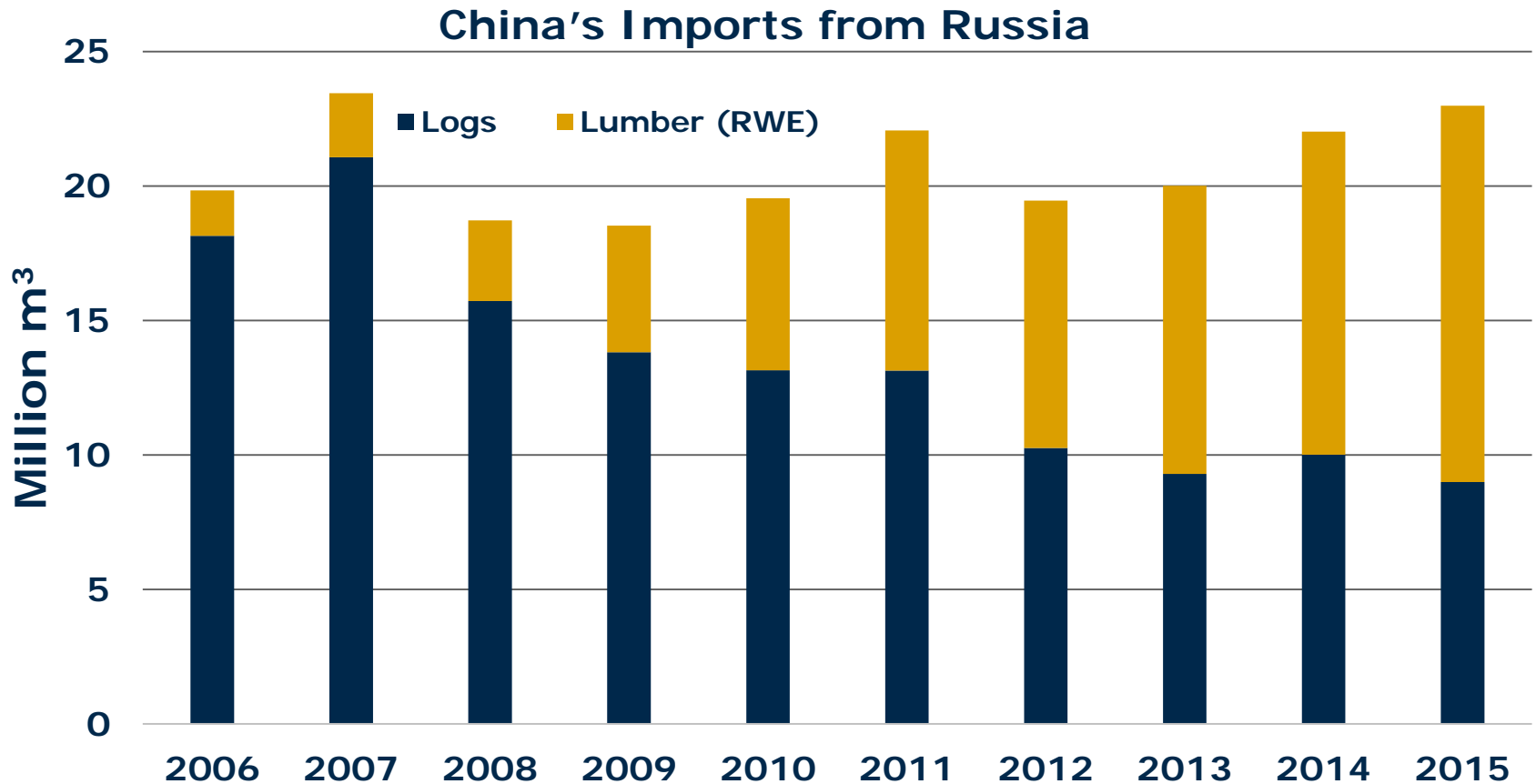
Prices Leveled Out, But Expected to Rebound Again



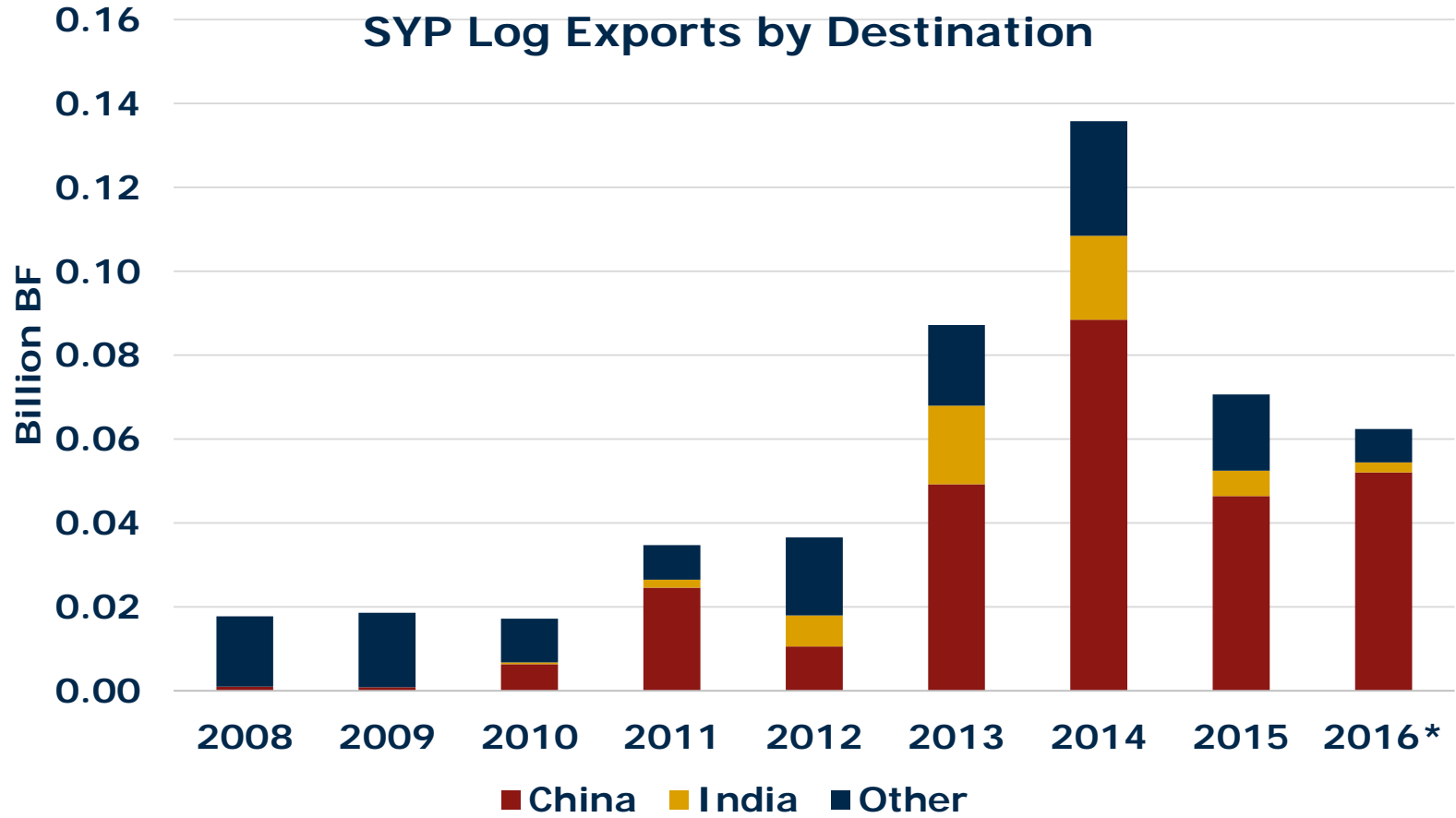
Lumber Exports Will Fall, But Remain Well Above Mid-2000s Levels



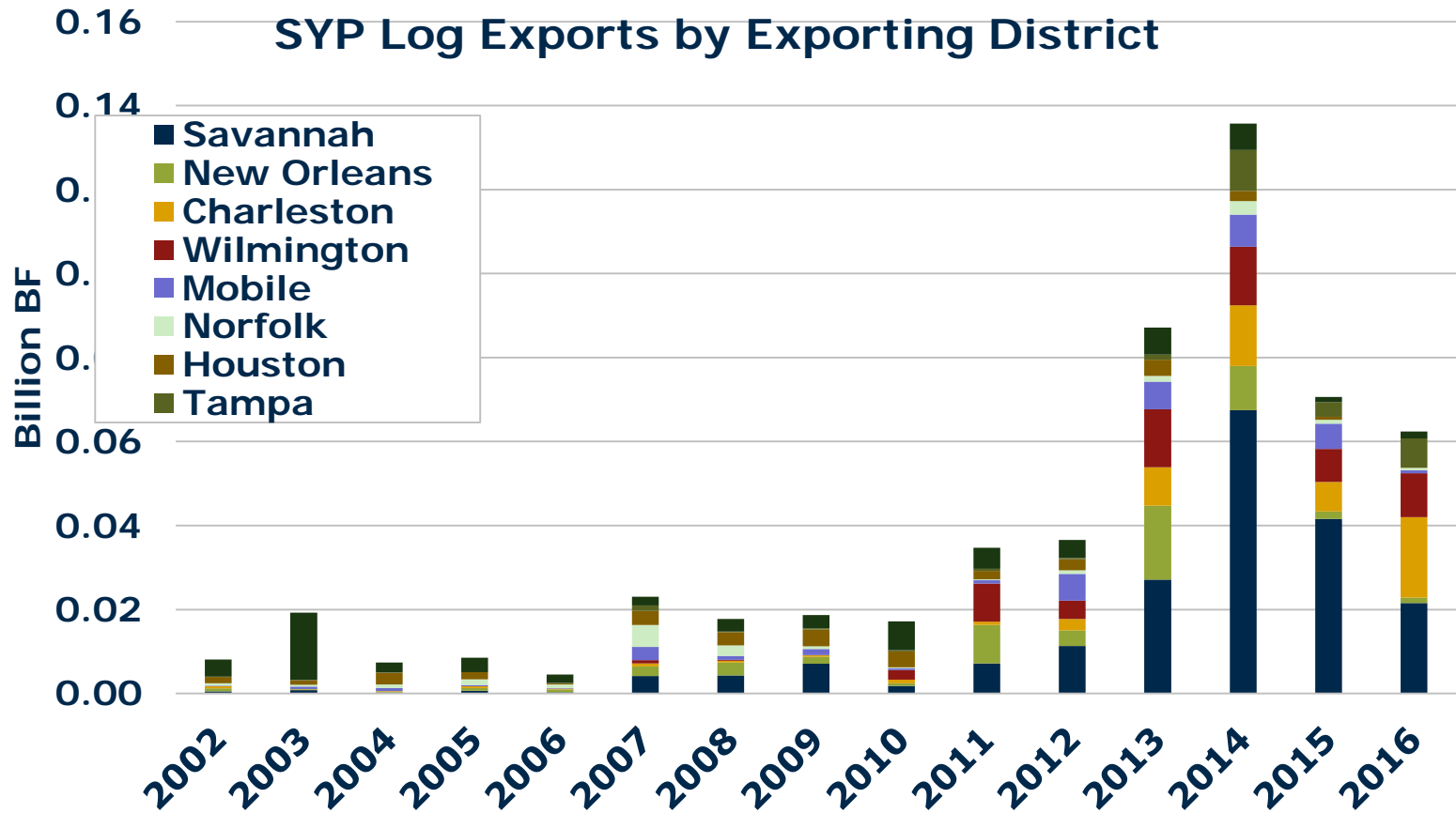
Russia Overall Supply Limited, Until Major Investment in Infrastructure



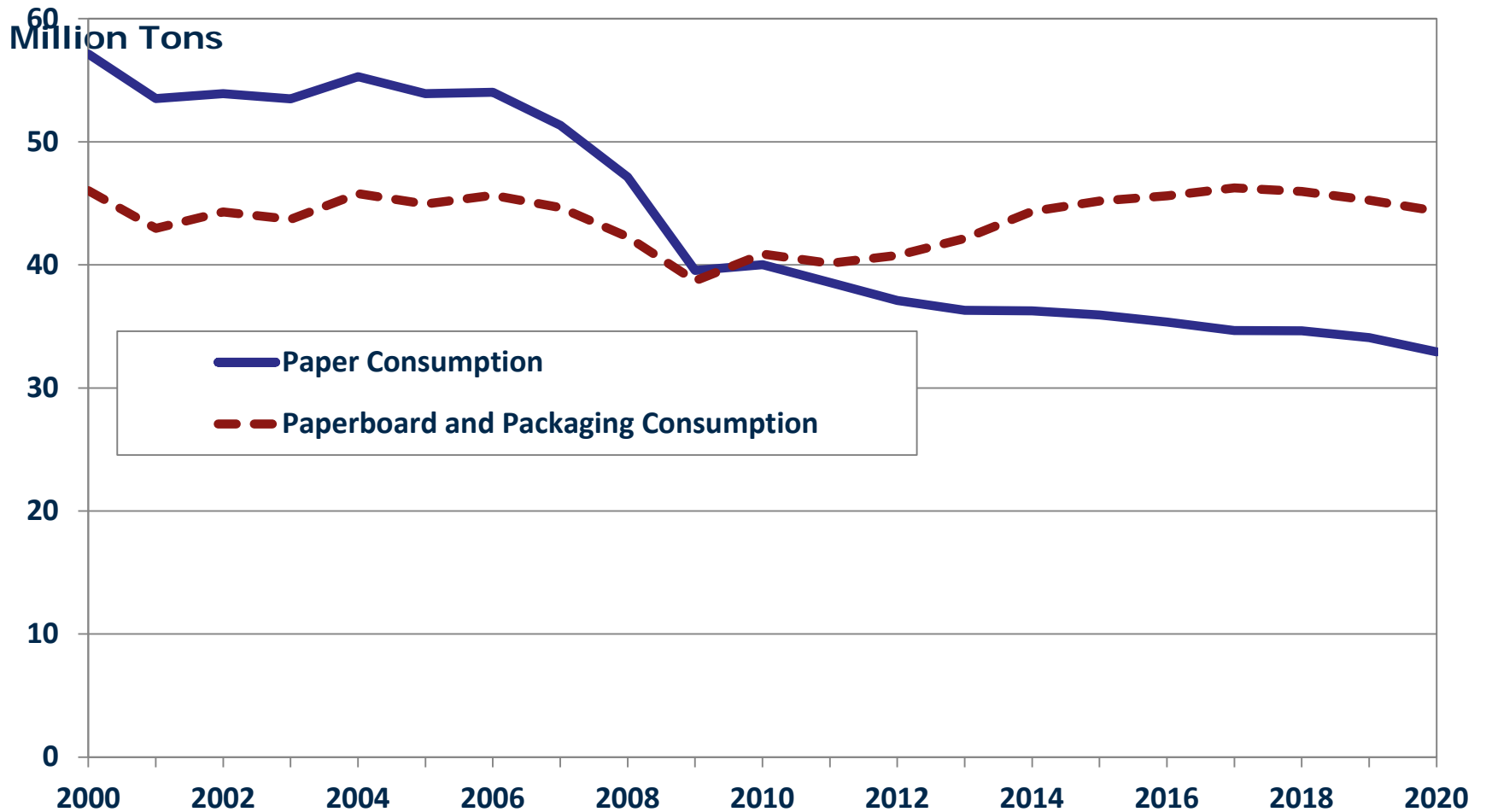
Log Exports Still Small Share of Southern Harvest, but....



Large Number Of Southern Ports to Export



World Needs “virgin” Paperboard: South Has IT!!



Key Messages

- Will be challenges in international markets over the next few years
- World wood fiber need, especially Asia and Africa, will grow over the next decade
- U.S. Southern sawtimber inventory is growing and is THE low cost region for wood costs
- Pulpwood inventory allows for some growth in several areas: Pellet and containerboard

THANKS AGAIN

What questions OR
COMMENTS do you have?