Global Forest Product Market Outlook

Southern Forest Products Export Conference
Memphis
October 22nd, 2018
Agenda

- Review of Recent Trends in Global Forest Product Markets
- Update on the Current Events Affecting Trade
- Detail Competitive Headwinds Facing Exports from US South
- Discuss Strategic Considerations between Domestic and Export Markets
Major Regional Shift in Global Forest Product Consumption

Apparent Consumption of Softwood Lumber

Source: FAOSTAT

Million Cubic Meters

<table>
<thead>
<tr>
<th>Year</th>
<th>North America</th>
<th>Europe</th>
<th>Asia</th>
<th>South America</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>100</td>
<td>60</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>2005</td>
<td>120</td>
<td>120</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>2010</td>
<td>100</td>
<td>80</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>2017</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>20</td>
</tr>
</tbody>
</table>
U.S. Housing Starts Remain Near Recession Levels
The Major Cause for the Regional Shift is China

Apparent Consumption of Softwood Lumber in Asia

Source: FAOSTAT

Million Cubic Meters

2000  2005  2010  2017

China  India  Japan  South Korea  Viet Nam  Other Asia

Source: FAOSTAT

www.getfea.com
China’s Urban Population Has Exploded

Million, Source China National Bureau of Statistics

21% of Total

59% of Total
Chinese Construction Boom is Unprecedented

Pudong, Shanghai

1990

2010
China: Softwood Log Imports by Country

Million Cubic Meters

Source: China Customs, China Bulletin

www.getfea.com
China: Softwood Lumber Imports by Country

Million Cubic Meters

Source: China Customs, China Bulletin

www.getfea.com
US South Log Exports to China Rose Sharply through 2018H1

Note: YTD through June
US South Lumber Exports to China Rise at a Record Pace Through 2018H1

Note: YTD through June

www.getfea.com
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US-China Trade Dispute Timeline

- **May 2018**
  - Log shipments from US denied entry due to documentation issues
  - China’s General Administration of Customs published new regulations for inspection and quarantine of log shipments

- **July 6th 2018**
  - 1st phase of US tariffs on Chinese imports worth $34B go into effect. China responds by implementing their first phase (25% on $34B) as well. – No Forest Products

- **August 3rd**
  - China releases list of tariffs on $60B following US’s announcement of $200B tariffs. - Included a number of forest products

- **August 23rd**
  - Both US and China impose 2nd Phase-(25% on $16B). – SYP Logs, Wood Pellets

- **September 17th**
  - US impose tariff of 10% on $200B and announces rate will increase to 25% in 2019.

- **September 24th**
  - China responds with tariffs on $60B of US goods – Resulted in tariffs of 5-10% on many forest products. Many expected to increase to 20% or 25% in 2019.
China’s Tariff on the US Softwood Log and Lumber:

Starting from August 23rd:
• **SYP log**: 25% tariff

Starting from September 24th
• Hemlock log, 15cm+ : 5% tariff
• Douglas fir log, 15cm+ : 5% tariff
• Hemlock log, <15cm : 10% tariff
• Douglas fir log, <15cm : 10% tariff
• Spruce log : 10% tariff
• Douglas fir lumber, **SYP lumber**, Hemlock lumber : **10% tariff**
Chinese Tariffs Also Impacting US Hardwood Log Exports...

Offshore Hardwood Log Exports

- Offshore Hardwood Log Exports
- Destined for China

10% Tariff, Will rise to 25%
10% Tariff, Will rise to 20%

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...and US Hardwood Lumber Exports

**Offshore Hardwood Lumber Exports**

- 10% Tariff, Will Rise to 25%
- 10% Tariff, Will Rise to 20%
- 5% Tariff

**FEA**

www.getfea.com
Southern Yellow Pine Logs Landed in China Compared With Other Supply Regions

Landed Log Costs in China, April 2018

- US W.Coast DF/Hem, $156
- Canadian DF/Hem, $146
- NZ Radiata, $145
- Russian Spruce, $132
- US SYP, $124

Source: China Bulletin

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Southern Yellow Pine Logs Landed in China Compared With Other Supply Regions

Landed Log Costs in China, September 2018 with Tariffs added

- US W.Coast DF/Hem, $154 with 5% tariff
- Canadian DF/Hem, $143
- NZ Radiata, $135
- Russian Spruce, $130
- US SYP, $120 with 25% tariff

Source: China Bulletin

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China Used More Cement in Three Years Than US Did in 20th Century

---|---
4.5 | 6.6

Chinese Growth is Slowing

*FEA forecast after 2023

www.getfea.com
Chinese Steel Production is Rising Again

Source: World Steel Association
Chinese Iron-Ore Import Prices Are Down 64% since Early 2011
Copper Prices Have Declined by 14% Since January 2018

Copper, grade A cathode, LME spot price, CIF European ports, US$ per Tonne

$10,000
$9,000
$8,000
$7,000
$6,000
$5,000
$4,000
$3,000
$2,000
$1,000
$0

90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18

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China's Debt Has Soared Since the GFC

Credit to Private Nonfinancial Sector as Percent of GDP

- China
- Japan
- United States
The Key Currencies for Wood Products: Not Likely to Change Course

Loss in Value Against the US Dollar Since June 2014*

<table>
<thead>
<tr>
<th>Currency</th>
<th>Loss in Value (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russian Ruble</td>
<td>-49%</td>
</tr>
<tr>
<td>Brazilian Real</td>
<td>-45%</td>
</tr>
<tr>
<td>Chilean Peso</td>
<td>-19%</td>
</tr>
<tr>
<td>NZ Dollar</td>
<td>-23%</td>
</tr>
<tr>
<td>Australian Dollar</td>
<td>-23%</td>
</tr>
<tr>
<td>Euro</td>
<td>-14%</td>
</tr>
<tr>
<td>Canadian Dollar</td>
<td>-17%</td>
</tr>
<tr>
<td>Chinese RMB</td>
<td>-9%</td>
</tr>
</tbody>
</table>

*through September 2018
Russia’s Role in Supplying China’s Softwood Woodfiber Rapidly Increasing

China’s Softwood Log and Lumber Imports from Russia, Million Cubic Meters

Logs | Lumber (RWE)
---|---
2006 | 18
2007 | 22
2008 | 19
2009 | 17
2010 | 15
2011 | 13
2012 | 11
2013 | 9
2014 | 7
2015 | 5
2016 | 3
2017 | 1

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China’s “One Belt–One Road” (BRI) Initiative

Rail Competitive Advantage: gained by Russia & Europe

www.getfea.com
North American is Only Major Economy With Growing Working-Age Population

Population Aged 15-64, 2015=100

Source: UN Population Division, Estimates and Medium Variant Forecast

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The 2017 Level of Housing Completions Was Typical of a Recessionary Low in Previous Economic Cycles
US Population by Age
(as of July 1, 2018)

Peak Age Groups in 2018: 27- and 28-Year-Olds
US Population by Age
(as of July 1, 2023)

Peak Age Groups in 2023: 32- and 33-Year-Olds
Cumulative Over-/Underbuilding of Conventional US Homes

Millions

95 97 99 01 03 05 07 09 11 13 15 17

Overbuilding

Underbuilding
US Housing Starts Continue Grinding Recovery

Housing Starts in Millions

- US Recession
- Housing Starts
- Trend from 2011 - August 2018

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Increasing Softwood Lumber Supply in North America Difficult

• **British Columbia**
  • Increasing impact from Mountain Pine Beetle epidemic
  • More capacity closures likely

• **Eastern Canada**
  • Annual Allowable Cuts in Quebec
  • Declining market for residuals

• **US West**
  • Weak domestic demand during downturn offset by log exports
  • Ability to increase harvest above current levels limited
Pine Plantations are Boosting Southern Timber Inventory Levels

Historical Privately-Owned, Natural and Planted Pine Inventory

From: Timber Supply Dynamics in the US South, FEA & Timberland Appraisal
No Strong Rebound Expected in Southern Wood Costs

Source: Timber Mart South
Population Dynamics Between Major Economies and Middle East and North Africa Are Striking

Population Change in Millions

- Russia: -4.8
- Europe ex Russia: -28.0
- US: 34.0
- China: 198M
- N. Africa: 58.6
- West Asia: 64.3

Source: UN Population Division
Medium Variant Projections

www.getfea.com
Population Growth in India Will Outpace China

Source: UN Population Division
Medium Variant Projections
US Wood Pellet Export Growth

- Policies aimed at increasing renewable energy/reducing greenhouse gases lead to the increase in demand for industrial wood pellets.
- Wood pellet exports from the US South have expanded rapidly, primarily to Great Britain.
- Growing markets in South Korea and Japan present opportunities for further expansion.
Key Messages

- China, the primary growth driver of global forest products demand over the past decade is slowing.
- Current trade dispute is severely limiting opportunities for Southern exports to China. Past trade dispute, currency and competition from other regions will remain significant challenges in China.
- The South’s competitiveness will remain favorable, benefiting from ample fiber supply from a well-managed resource and investment in the region’s forest product industry.
- US domestic recovery for forest products will remain slow but steady. The South will play a greater role in meeting domestic demand, but offshore trade will be an important component to expanding and diversifying markets. Increasingly producers/exporters will need to look to new markets for future growth.
Thank You

If you have questions or comments please contact me at:

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