Hardwood Markets &
The Issue of Log Exports

Dan Meyer
Outline

• Brief Market Recap
  – To set the stage for…

• Log Export Discussion
  – Industry perception
  – Government stats
  – Question: What can we/should we do about it?
  – What if we don’t?
  – No easy answers
    • I will not be suggesting any
Market Recap
Big Picture

• KD lumber pricing strong
  – Cherry, Walnut at 5-year highs
  – Ash, White Oak approaching
  – Red Oak, Common Poplar have a ways to go

• GN lumber just as strong

• Margins tighter, especially for uppers
KD Margins – ASH

4/4 ASH Margins

KD to Green Price Spread ($/MBF Gross Tally)

$250
$300
$350
$400
$450

FAS/1F

#1 Com

#2 Com

1/2016
1/2017
1/2018
KD Margins – RED OAK

4/4 RED OAK Margins

KD to Green Price Spread ($/MBF Gross Tally)

- FAS/1F
- #1 Com
- #2 Com

Chart shows the price spread of KD to green for 4/4 RED OAK from 1/2016 to 1/2018, with different lines representing FAS/1F, #1 Com, and #2 Com.
Lumber Prices – WHITE OAK

KD 4/4 WHITE OAK

12-Month Change

- $55
- 3%

$105
7%

$77
8%

FAS/1F

#1 Com

#2 Com
Lumber Prices – App. WALNUT

KD 4/4 APPALACHIAN WALNUT

12-Month Change
- $560 16%
- $485 23%
- $370 28%

FAS/1F
#1 Com
#2 Com
KD Margins – App. WALNUT

4/4 App. WALNUT Margins

KD to Green Price Spread ($/MBF Gross Tally)

- FAS/1F
- #1 Com
- #2 Com
Lumber Prices – App. CHERRY

KD 4/4 App. 90/50 Red CHERRY

FAS/1F

#1 Com

#2 Com

12-Month Change

$410 23%

$360 31%

$310 44%
Lumber Prices – POPLAR

KD 4/4 POPLAR

12-Month
Change

$5
1%

$38
6%

$13
3%

FAS/1F

#1 Com

#2 Com

1/2013 1/2014 1/2015 1/2016 1/2017 1/2018
Low-Grade Prices

Low-Grade

Crossties

#2&3A Oak

Pallet Cants

Last 9 Months

$42
7%

$53
10%

$55
16%
Outlook Through Summer

• Lumber prices firm to higher
  – Secondary mfg. ramping up
  – Stronger low-grade markets: cants, ties
  – Very strong log and lumber exports
  – Insignificant sawmill production increases
    • Log availability improved but not great, expensive
    • Labor, trucking issues
Why Are Lumber Prices Stronger?

- Stronger domestic demand
- No lumber overproduction in a year+
- Stronger low-grade markets
- Record lumber exports two years running
- Tight log supplies/higher prices
  - Wet 1st half 2017, fall 2017, spring 2018
  - Log exports
### Why Are Lumber Prices Stronger?

- **Lumber and Log Exports**

#### WORLD

<table>
<thead>
<tr>
<th></th>
<th>Lumber</th>
<th>Logs</th>
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<tbody>
<tr>
<td></td>
<td>2015</td>
<td>2016</td>
</tr>
<tr>
<td>Red Oak</td>
<td>+3%</td>
<td>+18%</td>
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<td>White Oak</td>
<td>-7%</td>
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<td>Ash</td>
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<tr>
<td></td>
<td>+55%</td>
<td>+61%</td>
</tr>
<tr>
<td></td>
<td>+23%</td>
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#### CHINA

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<td>White Oak</td>
<td>-11%</td>
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<tr>
<td></td>
<td>+87%</td>
<td>+83%</td>
</tr>
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<td>-4%</td>
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Log Exports – Industry Perception
The Concern

• U.S. sawmills struggling to afford logs
• Opting to export high-quality RO, WO, ASH, WAL, HIC, CH logs
  – “Get double the return than if I sawed them”
  – “Numbers say I should be exporting 90% of the logs I bring in.”
• Increasing reports of Chinese buyers going direct to log yards and even bidding on timber sales
Sawmill Survey

• Two weeks ago, surveyed almost 800 U.S. hardwood sawmill contacts
• Usable returns from 52 different mills
Sawmill Survey

- What is the average small-end diameter of exported logs?
Sawmill Survey

• On average, what is the grade mix of exported logs?

![Graph showing percentage distribution of grades]

- Veneer
- Clear 3-sides
- Clear 2-sides
- Low-grade
Sawmill Survey

- What are foreign buyers paying for logs?

<table>
<thead>
<tr>
<th>Wood</th>
<th>Price (MBF FOB Mill/Yard)</th>
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<tbody>
<tr>
<td>WALNUT</td>
<td>$2,943</td>
</tr>
<tr>
<td>WHITE OAK</td>
<td>$1,446</td>
</tr>
<tr>
<td>HARD MAPLE</td>
<td>$1,175</td>
</tr>
<tr>
<td>ASH</td>
<td>$1,060</td>
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<tr>
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Sawmill Survey

- What are foreign buyers paying for logs?

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<tr>
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<td>$1,443</td>
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*M3 converted to Doyle assuming 14” logs and 37% overrun. Trade stats include all logs, including veneer.

Our survey respondents said most logs were 13-16” and 2- to 3-sides clear.
# Sawmill Survey

- What are foreign buyers paying for logs?

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Our survey respondents said most logs were 13-16” and 2- to 3-sides clear.
How much more are foreign buyers paying than American mills can afford to pay?

Sawmill Survey

- % of Respondents: 5-10% - 15-25% - 30-45% - 50+
- # of Respondents: 0 - 15 - 5 - 5

- 5-10%: 0
- 15-25%: 15
- 30-45%: 5
- 50+: 5
To what extent, if any, are foreign buyers outcompeting American buyers for timber and logs?

- “This happens regularly and with increasing frequency...with all species except Soft Maple...and with all log grades from 0-sides clear to veneer.”
- “Foreign markets are taking at least 30% of the logs that once went through our mill.”
- “Biggest problem is with Walnut and Ash, but it is increasing with Red and White Oak”
Sawmill Survey – Outcompeted

– “We cannot win timber bids because our competitors are buying for export.”
– “The volume accelerated in 2017…and they pay 50% more for 10” pallet-grade logs than we can afford to pay.”
– “Local buyers with strong export markets frequently win the timber sales with good Oak, Ash, Cherry and Walnut.”
– “We’ve been outbid by 20-25% on every large timber sale of good quality Oak and Poplar in the last 2 years.”
– “Not at all” [foreign buyers not outcompeting]
Sawmill Survey – The Impacts

Log Exports Have…

– **Decreased profitability** for 70% of sawmills
  • 30% say log exports have increased profitability

– **Limited log access** to 83% of mills
  • 77% say it is getting worse

– **Raised log prices** for 98% of mills
  • 90% say it is getting worse

– **Reduced sawing volume** for 70% of mills
  • 50% say it is still declining

– **Forced shifts in species** sawn at 62% of mills
  • 50% say it is getting worse
• How (and why) are foreign buyers paying more for logs than they could pay for the equivalent volume of lumber?
  – “Buyers can’t get the thicknesses and widths they want from U.S. mills”
  – “They are trying to control raw material supply; then they will crash log prices”
  – “To control the market and to control the top price on lumber”
  – “Their processing costs are lower”
Sawmill Survey – How and Why?

– “They are doing this to assure the supply and drive out competition, regardless of their sawmill needs or costs”
– “They are being subsidized by their governments to keep their people working”
– “The VAT tax the Chinese pay on imported lumber is 17%; the tax on logs is only 11%”
– “They want to put enough U.S. sawmills out of business that they can control the market”
– “Russia and other suppliers have slowed or stopped log shipments to China, so the Chinese focus has turned to the U.S.”
Log Exports – The Data
Log Exports – What Problem?

U.S. Hardwood Log Exports

What’s the Problem?
Log Exports – What Problem?

U.S. Hardwood Exports to World

What’s the Problem?
Log Exports – What Problem?

U.S. Hardwood Exports to China

What’s the Problem?

Log Exports – What Problem?

U.S. Hardwood Exports to China

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Log Exports – What Problem?

U.S. Hardwood Exports to China

What’s the Problem?
The Problems Are…

• Log shipments increasingly **concentrated** in one market
• Log exports of key **species** have exploded in 2017
• Shift in the **quality** and **value** of logs being exported
• **Larger percentage** of resource mix being shipped as logs
Log Exports – 1. Market Concentration

U.S. Hardwood Log Exports to China

- World
- China

- 8% in 1992
- 24% in 2002
- 40% in 2007
- 56% in 2017

Million Cubic Meters
Log Exports – 1. Market Concentration

U.S. Hardwood Log Exports to China

Million Cubic Meters

- WORLD - Canada
- CHINA


- 29%
- 38%
- 66%
- 81%
Log Exports – 2. Species Shift

U.S. Hardwood Log Exports to China

One-third of volume was low-valued Birch and Maple to Canada

CHINA

WORLD

Million Cubic Meters

Log Exports – 2. Species Shift

2005

- MAP: 25%
- RO: 17%
- WO: 7%
- ASH: 3%
- WAL: 5%
- Other: 43%

2017

- MAP: 18%
- RO: 28%
- WO: 10%
- ASH: 13%
- WAL: 8%
- Other: 23%

Vol (M3) 2005: 765,000 2017: 1,295,000
Share 2005: 32% 2017: 60%
Log Exports – 3. Quality and Value

Average Log Export Values

- Higher-valued species
- Higher-valued grades
- Larger logs?

CHINA: $467

CANADA: $166

$0 $100 $200 $300 $400 $500 $600
$/M3

Log Exports – 4. More Logs in Mix

Red Oak

Million Board Feet

2013 2014 2015 2016 2017

Lumber

25%

Logs

20%
Log Exports – 4. More Logs in Mix

![Graph showing the increase in million board feet of Ash, Lumber, and Logs from 2013 to 2017. The percentage values for Lumber and Logs are 30% and 13%, respectively, in 2017.]
Log Exports – 4. More Logs in Mix

Graph showing the increase in Walnut logs and lumber from 2013 to 2017. In 2013, logs accounted for 31% and lumber for 36%. By 2017, logs increased to 36% and lumber to 38%.
Log Exports – 4. More Logs in Mix

White Oak

Million Board Feet

- Lumber
- Logs

2013: 18%  
2017: 17%
Log Exports – 4. More Logs in Mix

Cherry

Million Board Feet

2013 2014 2015 2016 2017

Lumber

Logs

26% 14%
So What?
So What?

- Industry is concerned
- Government stats confirm rapid rise of log export volumes of key hardwood species
- Not far fetched to suggest that—on the current path—this industry will look radically different in 10 years
- What do we do?
Decision Tree

Log exports ARE a concern

Do Something
- Do Something as a Company
  - Renovate (new tech.)
  - Innovate (new ways)
  - Reinvent (new prod/svc)

Do Nothing
- Do Nothing as an Industry
  - Cooperate?
  - Seek protection

Log exports ARE NOT a concern

Do Nothing
- Do Both

More Complex Decision Than You Would Think
Why Might We Do Nothing?

- Don’t see it as a major problem
- Don’t see it as a major problem, yet
- Don’t know what to do
- Don’t think the trend can be stopped
- Don’t think we can stop it
- Don’t think we should stop it
- Too costly to do something
- Don’t agree with “do something” options
- Divided industry can’t/won’t cooperate
“Do Something” Options

• Outright Log Export Ban
  – Most instinctive response
  – Ban would be problematic on many fronts

• Temporary Ban
  – To give U.S. companies time to adapt
  – Would they?

• Selective Ban
  – From public lands
  – To specific countries
“Do Something” Options

• Quotas (Limit allowable export volume)
  – Overall
  – By country
  – Conditional/flexible based on mkt conditions

• Tariffs on exported logs
  – We don’t have to stop log exports, we just have to level the playing field so U.S. mills can compete
Arguments FOR Export Restrictions

• From the sawmill perspective
  – Less competition for logs, lower costs
  – Higher lumber export volumes
  – Increased competitiveness in world markets

• From the secondary mfg. perspective
  – Increased lumber availability
  – Lower lumber prices
  – Increased competitiveness in foreign markets (if lower production costs)
Arguments FOR Export Restrictions

• Govt. already restricts property rights
  – zoning, harvesting/enviro regs., ESA, eminent domain

• Necessary to achieve fair trade
  – If China has unfair or unethical advantages
    • Currency; environmental regs.; working conditions/safety; taxation; VAT taxes designed to favor raw material imports over finished goods

• U.S. restricts softwood log exports to protect Western producers
  – No fed. logs west of 100th merid. since 1974
Arguments FOR Export Restrictions

• Long-term industry survival at stake
  – Is it more important to uphold our “values” or save our businesses?

• Besides, other countries—including developed countries—increasingly restricting log exports to support their industries
Arguments AGAINST Exp. Restrictions

• Tramples private property rights
  – Limits revenue
  – Reduces property values
  – Favors manufacturers over landowners
• “Un-American,” “protectionist”
  – Impinges on free trade
• Disincentivizes investments in forest management; incentivizes development
• Foreign markets may retaliate and restrict lumber shipments
Arguments AGAINST Exp. Restrictions

• Any benefits may be short-lived
  – Logs
    • Short-term: increased availability/price drops
    • Mid-term: landowners pull timber off market
    • Long-term: mills have to pay more to entice landowners to sell
  – Lumber
    • Short-term: increased exports and prices
    • Mid-term: foreign buyers seek substitutes
    • Long-term: lumber prices drop to entice buyers
Would Restrictions Save the Industry?

- Export ban cannot undo global pull of manufacturing to least-cost regions/nations
- Doing so would require ongoing, external market controls
- But, those external tariffs/barriers keep consumer goods prices elevated and encourage substitution, which defeats the purpose of the barrier

Or Just Delay Its Decline?
If We Can’t or Won’t Control Log Exports, What Is the Future for a U.S. Sawmill?
Long-Term Sawmill Outlook?

• IF sawmills can’t buy logs at prices at which they can profitably produce lumber and/or

• IF exporting logs remains more profitable than sawing them…
  – Will we need as many domestic sawmills?
  – Will they look the same in 10 years?
  – What can today’s mills do to continue to thrive? Three potential options…
Long-Term Sawmill Outlook?

1. Renovate/Innovate to survive as one of remaining sawmills
2. Reinvent your company
3. Hang it up
   • Voluntarily, or
   • Because you failed to pick one of the first two
• Upgrade, modernize technology
• **Make the same things** in essentially the same ways, but **more efficiently**
• Can technology overcome advantages of producers in other countries?
  – Chinese sawmills are behind but will catch up
• Technology advances typically provide only incremental improvements
• Nothing radically new on the horizon
Innovate

- Find **new ways** to make lumber; or
- Make **innovative wood products** to better meet global customer needs
  - S4S lumber
  - Components
  - 19 or 20mm thickness (3/4)
  - CLT
  - Thermally modified lumber

- However, these are still “commodities” subject to global competition
Reinvent

• Make or sell something other than lumber and wood products
  – Change industries
  – Change position in industry
• Leverage existing strengths (people, technology, knowledge, capital) into products and services not as easily reproduced elsewhere
Reinvent

• What might those products/services be?
• The furniture industry path?
  – Invest in/contract with Chinese sawmills
  – Retain marketing & distribution functions
• Abandon sawing, transform into
  – Log procurement agency for foreign sawmills
    • Procure, fumigate, phyto, transport
  – Independent distributor of foreign lumber
• ????? Tomorrow’s industry leaders are already working this out
So What Will You Do?

Log exports ARE a concern

Do Something

Do Something as a Company
- Renovate (new tech.)
- Innovate (new ways)
- Reinvent (new prod/svc)

Do Something as an Industry
- Cooperate?
- Seek protection

Do Both

Log exports ARE NOT a concern

Do Nothing

Do Nothing

Do Nothing

Everybody ought to be on this spectrum, somewhere, regardless of your thoughts on log exports. It’s just good business and it may be your only defense against rising log exports.
So What Will You Do?

Log exports ARE a concern

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Do Something as an Industry

-Cooperate?
- Seek protection

Up for debate, certainly. But, it will be a long, tough fight. Either need to get on it soon, or drop it as an option.
So What Will You Do?

- Log exports ARE a concern
  - Do Something
    - Do Something as a Company
      - Renovate (new tech.)
      - Innovate (new ways)
      - Reinvent (new prod/svc)
    - Do Something as an Industry
      - Cooperate?
      - Seek protection
  - Do Nothing

- Log exports ARE NOT a concern
  - Do Nothing

Maybe there is room for both, but I wouldn’t waste the time and energy seeking government protection if you don’t intend to leverage whatever time it buys you to re-tool or reinvent.