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Sawmilling: Current Overview & Key Drivers for Growth in Tomorrow's Markets

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Current Overview

The Global Challenge to Remain Profitable

-- or to Survive --

This meltdown has been truly global for almost all forest products

[except China logs from NZ]

Some examples follow
N.Z. log exports to China are getting beyond a joke. June/July annualised = > 6.0 million m3

![Chart showing log exports to China, India, Japan, Korea over time]

Total export rate 10.6 MMCM  -- > 50% of total N.Z. log harvest is being exported as logs

One chart says it all

![Graph showing USA SA Annual Housing Starts from Jan 1959 to June 2009]

Average = 1,526

2.1 mill. in 2005  0.9 mill in 2008  0.53 mill in 2009 (H1 Annual.)
60-70% of USA lumber production is dwelling related --

US West Lumber Prodn.
June 09 vs June 07

– Coast: - 40%
– Inland: - 43%
– Redwood: - 64%

Seldom has such a disproportionate majority of softwood lumber manufacturers been so constrained by economic conditions as devastating and unpredictable as those of the past several years.

WWPA

So, not surprisingly US lumber prices have collapsed

[Graph showing US$ per MBF from Jan 2004 to Sept 2009]

Chicago Mercantile Exchange
But at least very much lower log prices provide some relief – unlike NZ/Aust.

2007 - 2009 in Oregon, D. fir down 40% vs N.Z. S30 logs down 10-15%

US lumber imports continue to drop. In H1 2009 HOH:

- Total - 36%
- Canada (90% of total) - 37%
- N.Z. - 35%
- Latin America - 39%
- Europe - 63%
- Russia - 72%

Source: WWPA
And US wood users are hurting badly

**Jul 21, 2009.** Andersen Corp, the US window maker has slashed more than a quarter of its workforce since the collapse of the construction industry, leaving more than 4,000 people waiting for the federal stimulus to actually stimulate something.

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Thank goodness we managed to sell a new sawmill in WA, USA in January 2007; four months after it was commissioned. Otherwise we would have gone broke.
Canada Forest products industry has been pummelled from all sides

- Canada’s top 15 forestry companies lost:
  - C$ 462 million in Q2 2009
  - C$ 480 million in Q1 2009
  - C$ 660 million in Q2 2009

PWC, Sept 2009

Europe

- Softwood lumber output in the present thirteen member countries of the EOS:
  - 91 MMCM 2007
  - 83 MMCM 2008: - 9 %
  - 70 MMCM 2009: - 23 %
  - Lowest for 10 years

European Organisation of the Sawmill Industry (EOS)
Germany: the world’s # 7 SM company, Klausner is retrenching. Sales down 30% in 2009.

Two huge mills were idled in July 2009

Bank credit lines extended past June 30th

<table>
<thead>
<tr>
<th>Date</th>
<th>Mill</th>
<th>Lumber Capacity 000 CM</th>
<th>Log Usage 000 CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>Thuringen</td>
<td>1,300</td>
<td>2,600</td>
</tr>
<tr>
<td>1998</td>
<td>Wismar</td>
<td>1,000</td>
<td>2,000</td>
</tr>
<tr>
<td>2005</td>
<td>Saxon</td>
<td>1,000</td>
<td>2,000</td>
</tr>
<tr>
<td>2007</td>
<td>Lansburg</td>
<td>1,000</td>
<td>2,000</td>
</tr>
<tr>
<td>2007-08</td>
<td>Hanover</td>
<td>1,000</td>
<td>2,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>5,300</td>
<td>10,600</td>
</tr>
</tbody>
</table>

Finland

- Finnish sawn timber production in Jan – June 2009 was down about 30%
- Q2 2009 production was 35% less than a year ago
- August 20, 2009 Stora Enso to close two and try to sell one sawmill in 2009 – 2010: 680,000 m3/yr capacity
- “As we cannot change this operating environment, we will instead continue to change Stora Enso”
And machinery manufacturers have not been spared; e.g. Finnish manufacturer Raute

- Q2 2009 orders dropped to the lowest level ever in the company’s 100 year history
- Net sales in Q2 2009 were down 62% on Q2 2008

Russia

- Sawn timber production down by 19% in H1 2009 compared with H1 in 2008.
- Plywood production was down 31%
Brazil is not safe

Jul 23, 2009 ---

Brazil's wood exports plummet 43% in first half of year as a result of global financial crisis; worst may be to come

Associated Press

Malaysia

The export value of logs and timber products from Sarawak (East Malaysia) dropped by 27.3 % for the first four months of 2009 YOY.

Bernama Agency
**Global Average Sawmill Margins - 2008**

![Global Sawmilling Costs & Margins - Average Mill 2008](chart)

Source: IWMG, PwC, Beck Group

**The Japanese pulp industry is having a bad year**

- **Jan - July 2009:**
  - **SW Chip Imports**
    - Aust. down 48%
    - N.Z. down 51%
    - USA down 49%
    - World down 48%

Aust. US$ FOB prices down from $160 to $140 to $132
N.Z. new housing consents have more than halved since 2004

NZ Sawmilling

- The NZ industry seems to be in a period of "consolidation" -- forever?
  - CHH Rainbow Mountain (2005) CLOSED
  - CHH LakeSawn Taupo (2007) CLOSED
  - CHH Putaruru (2008) CLOSED
  - CHH Kopu (2008) CLOSED
  - Taranaki Sawmills Tongariro (2009) CLOSED
  - Blue Mountain Lumber [3 shifts to just 1 shift D-fir]
  - Brightwood (2007 two shift to one shift) and then CLOSED
  - WPI Gisborne - July from 65 to 20 staff
  - Richardssons Gisborne - August from 17 to 6 staff
  - Others in strife ?? --

- > 800,000 m3 sawn timber pa -- 20% NZ production
Australia has felt the pinch of the recession

But are green shoots emerging?

-- a lot of confusing data --
Cash splash feeds seeds of revival?

- Figures showed the Rudd Government stimulus intended to **stop house prices crashing**, has **sent them soaring** at their fastest pace in six years — August 4, 2009 Tim Colebatch

Or

- Australian house prices were overvalued by between 5 and 15 per cent even before prices surged another 4 to 5 per cent in the June quarter — IMF 10 August

- NIMBY syndrome in many areas – so land supply remains restricted

We had a stock market "**Melt Down**" in 2008 - early 09. Are we now witnessing a "**Melt Up**"?

- The **Dow Jones Index** finished last six months up more than any year since 1933

  - Dow from 7,500 in March to 9,500 end August --- to 12,000 in mid- 2010?

- The S&P 500 ended its best five-month streak since 1938
For instance players in the Small Cap/Resource company space, will be saying, "What is the fuss all about?"

- Bioneutral (USA) 808%
- MEO Australia 721%
- Pac Mag 500%
- Eastern Corp 320%
- Lynas 268%
- Carbon Energy 245%

Will US housing starts do their traditional "near vertical bounce back"? -- Madison Report July 2009: back to 2.5 million by 2011?

USA SA Annual Housing Starts Jan 1959 - June 2009

Average = 1,526

205 Million 304 million
Since hitting their lows in late May,

USA lumber prices are up 23%

Although they may not return to trend until 2011

TD Economics, September 8 2009
Strategic Risk Analysis and others are predicting a major rebound in NZ housing consents

FCNZ says 18,000 in 2009 and 23,000 in 2010

Australia too – needs 185,000 dwellings per year

BIS Shrapnel say 160,000 in 2009-10  Another source says closer to 125,000?
A challenge to Australian housing growth

• “The concern is that the recovery is getting bogged down in the approvals process. Between November 2008 and July this year the number of loans for construction has jumped by 61 per cent but detached house approvals are only up by 20 per cent. This suggests that a decent pace of recovery in new home starts may be slow to materialise,”

• HIA, August 2009

Key Drivers for Growth
Or – should that be: how to limit negative growth?

GDP Growth

- Global sawn timber demand is about
  - 60-65% structural
  - 15-20% appearance and finishing
  - 15-20% packaging
- Housing and GDP are very closely correlated
- So sawn timber demand is very captive to regional - global GDP
The daily grind of reducing costs and increasing efficiency. It happens in all industries nowadays

- **3 yr Eucalyptus urophylla**
- Target market = furniture.
- There are 6 of these side by side working 12 hrs a day 7 days –
- ~ 110,000 m³/yr output on a conversion factor of 55%.
- All sawdust & bark goes to onsite energy plant –
- Excess power sold to grid.

**Can NZ/Australia compete?**

China has to be on everyone's lumber export agenda

![China: Imports of Softwood Logs and Lumber, 1998 - 2009E](chart.png)
China Imports through Suifenhe Inland Port from Russia in H1 2009: rapid growth in the lumber to log ratio (but from a very small base)

<table>
<thead>
<tr>
<th>Logs MMCM</th>
<th>% Change</th>
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<tbody>
<tr>
<td>2.3</td>
<td>-38%</td>
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<table>
<thead>
<tr>
<th>Lumber MMCM</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.23</td>
<td>+71%</td>
</tr>
</tbody>
</table>

And NZ logs to India ~ 600,000 m3 versus lumber of only 6,000 m3

Learning to live with FX movements which probably cannot be predicted, as almost all FX business is "trading speculation" and is not based on "import/export trade"

Source: Gaynor, 2009
Although maybe Aussies can predict their FX rates – at least temporarily

- The “Aussie” dollar is currently the sixth-most-actively traded currency in the world

- 6% of worldwide foreign-exchange transactions, but only 0.3% of the world’s population (20 times its own weight)

- For years [until 2008] AUD dollar displayed an 84% correlation with gold price

- But in 2008 it uncoupled from gold and became wedded to the copper market (82% correlation)

**Note -- this was a couple of months ago when Cu price was around $ 2.40**

Cu price is now $2.85 per lb – so recent lift in AUD is consistent with this linkage –

**Goldman Sachs is predicting a 34% rise in Cu price in 2010**

The A$ should be very strong (Market Street Securities, 8 Sept)
Or, just how closely tied to China's hip are Australian FX fluctuations?

Based on HSBC's projection of China's electricity consumption, the bank is now forecasting the AUD at US86¢ in 2009 and at US95¢ by the end of 2010.

What is the next correlation driver?
For NZ and Australia net long-term migration is a key driver for housing starts

N.Z. Net Migration is up 164% to 12,515 YOY to June 2009 and to annualised rate of 20,400 in June and 30,000 in July (c.f. only 8,400 in July 08)

New Zealand net migration in July 2009 increased to its strongest rate in nearly six years
Australian Immigration is a major housing demand driver (Population is 21.9 million)

- One birth every 1 minute and 47 seconds,

- One death every 3 minutes and 47 seconds,

- A net gain of one international migrant every 2 minutes and 23 seconds leading to --

- An overall total population increase of one person every 1 minute and 24 seconds.

Note: Immigration into Australia started about 50,000 years ago

NZ has been very good for the Australian housing market

- In 2008 net NZ - Aust. migration was 35,000

- In the nine years since November 1999, a gross 306,000 Kiwis moved to Australia

- This is more than the populations of Otago and Southland put together.

- Net migration to Australia in the last nine years was 190,000.

- But across the ditch is less exciting in 2009 -- ?
Marketing Discipline

• Just back from Vietnam, What a bloody bloodbath. Prices tumble. Credit lines smashed. The Culprit: The NZ producer - well done. From one of you.
  – NZ Lumber Exporter

• TIMFED members continue to drop prices in Asia makes no sense in the current market situation. US$ 100 for 100*50 from NZ South Island into Taiwan is just crazy
  – Australian Producer
  TimberFed “Backchat”

• The biggest competitors of N.Z. sawn timber sellers are ---
  N.Z. sawn timber sellers

• Scale or collaboration

Research and Development — a key

[Images of logos for Forest & Wood Products Australia, SWI, STIC, NZ Wood, and WQI]
Example of probable results from NZ Wood promotion effort – still modest but critical to try to reverse the trend

Every % increase in market share is worth an additional $3 million approx (retail) to the industry

Source: NZ Wood

Green Marketing

• Certification
  – Forest Stewardship Council certified timber has been specified for use in the 2014 Winter Olympics in Russia
  – “FSC is only game in town”
    • Major NZ forest owner July 2009
  – Many Plantation owners in Australia are now FSC certified

• Emissions issues – complex
  – Wood is good – but
  – Many sawmills use fossil fuels –
  – Carbon neutral or negative mills likely to have a marketing edge in future
  – Pellet production – a 2009 sizzle industry but not a simple business
Innovative marketing

• This is one of the first Klausner sites in Thurigen. The site has 56 kilns
• Why red?
• Because when a buyer travels around Europe and looks at 27 sawmills in one week he forgets which one is which ....
• But -- Ah the one with the red kilns......

And finally -- innovation remains a key: and the Oceania sawmilling industries need to leg up on this

• [from my old Alma Mata] An Oregon State University (OSU) researcher is using wood fiber to replace some silica in car tires, making the tires more environmentally friendly.

• Chinese farmer Wu Zhongyuan built himself a helicopter using "relevant knowledge" surfing the internet via his mobile phone.
  – Its blades are made from elm wood
Thank you for your attention
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