

News & Updates

Madison's Forest Pulse 4Q 2014 — Out Now!

Important Data:

- US sawmill products exports to China by VALUE are up +20%, to US\$1,199 million, Jan to Nov 2014 compared to US\$959 million the previous year;
- US sawmill products imports from Canada by VALUE are up +9%, to US\$4,939 million, Jan to Nov 2014 over US\$4,498 million in 2013;
- Canadian lumber exports to US by VALUE are up +4%, to C\$397 million, Jan to Nov 2014 compared to C\$379 million the year prior, and;
- US softwood log exports to China by VALUE are up +5.4%, to US\$835,392 million, Jan to Nov 2014, compared to US\$790,687 million in 2013.
 For more information please see Page 6.

Canada and US International Trade: December 2014

Canada's imports increased by 2.3 per cent in December and exports rose 1.5 per cent, according to Statistics Canada Thursday. As a result, Canada's merchandise trade deficit with the world widened from \$335 million in November to \$649 million in December.

Meanwhile, the US goods and services deficit was US\$46.6 billion in December, up from a revised US\$39.8 billion in November, said the US Census Bureau also Thursday.

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Producer Price Index Canada, ISM Index US

Canada's Industrial Product Price Index decreased 1.6 per cent in December, Statistics Canada said Tuesday. The Raw Materials Price Index declined 7.6 per cent in December, mainly due to lower prices for crude energy products.

Meanwhile the US ISM Non-manufacturing index in January was at 56.7 per cent, up from 56.5 per cent in December, according to the Institute for Supply Management Wednesday.

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US Construction Spending, House Prices

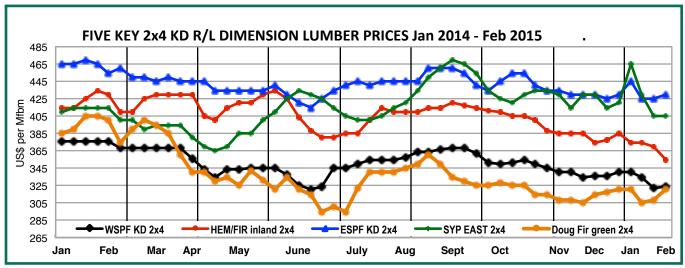
Total private residential spending in the US increased 0.3 per cent from the revised November estimate to a seasonally adjusted annual rate of US\$349.6 billion, said the National Association of Home Builders Monday. The December month-over-month increase was driven by a 1.2 per cent increase in the single-family component of private residential construction.

CoreLogic Tuesday released it's Home Price Index, which shows that US home prices increased 5 per cent in December 2014 compared to December 2013. This change represents 34 months of consecutive year-over-year increases in home prices nationally.

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US Forest Service Wood Pellet Report

In December 2014 the US Forest Service Southern Research Station released A Technical Document Supporting the Forest Service Update of the 2010 RPA Assessment, "Effect of Policies on Pellet Production and Forests in the US South," which examines the most recent "key drivers of US pellet feedstock supply include both the age structure of current timber inventory and the policies that define sustainability." CONT'D PAGE 9



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"I am amazed at the data you've been able to collect in this report and find it all very interesting. I can see this kind of information being especially desired by economists / bankers / the investment community and perhaps Industry CFO's and such for help formulating reports and such.

I like the trend data on capacity / efficiency plus export import ratios."

- Michael Low | Scotiabank | Director & Group Lead, Commercial Banking

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Madison's Weekly Lumber Key Prices Table www.madisonsreport.com

	www.iiiauisoiisreport.coiii						
1	This Week	Last Week Change		Month AgoChange		Year AgoChange	
Prices are in U.S. dollars per 1,000 fbm (net FOB mill)							
WSPF KD R/L 2x4	324	322	+2	340	-16	376	-52
WSPF KD R/L 2x6	334	330	+4	352	-18	358	-24
WSPF KD R/L 2x8	328	324	+4	342	-14	342	-14
WSPF KD R/L 2x10	344	340	+4	350	-6	410	-66
WSPF KD PET 2x4 Stud	330	330	0	345	-15	350	-20
WSPF KD PET 2x6 Stud	340	345	-5	360	-20	310	+30
Douglas Fir Green R/L 2x4	320	308	+12	320	0	400	-80
Douglas Fir Green R/L 2x10	378	380	-2	405	-27	480	-102
ESPF KD 2x4 8ft Stud	400	400	0	410	-10	405	-5
OSB Ontario 7/16" (CDN\$)	240	220	+20	240	0	230	+10
CSPlywood Toronto 3/8" (CI	DN\$) 460	438	+22	457	+3	402	+58

Madison's Weekly Lumber News

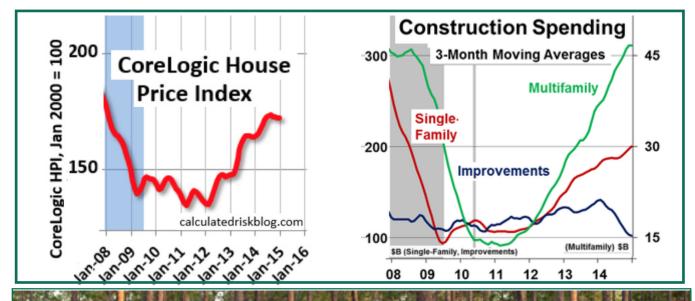
Construction, Home Prices, US

CONT'D FROM PG 2 NAHB analysis of total US private residential found that on a 3-month moving average basis, from December 2013, single-family construction spending increased 12.3 per cent and private construction spending on multifamily construction spending increased 27.6 per cent. Over the same period private construction spending on home improvements decreased 27.5 per cent.

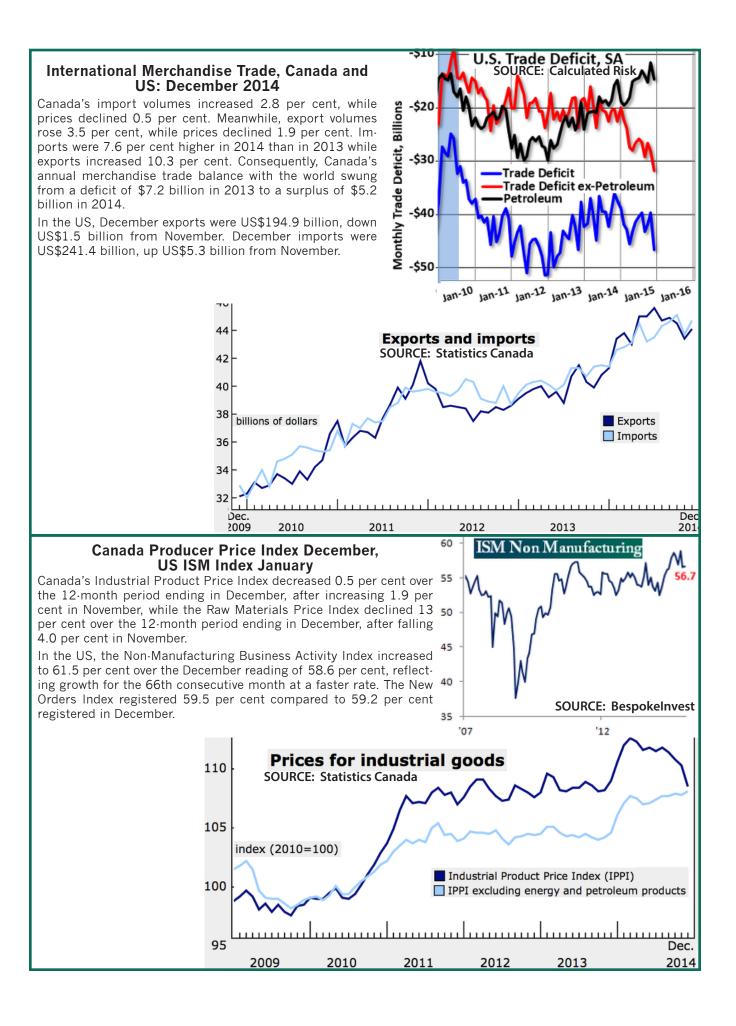
CoreLogic data shows that, excluding distressed sales, US home prices increased 4.9 per cent in December 2014 compared to December 2013

and increased 0.1 per cent month over month compared to November 2014.

"For the full year of 2014, home prices increased 7.4 per cent, down from an 11.1-per cent increase in 2013," said Sam Khater, deputy chief economist at CoreLogic. "Nationally, home price growth moderated and stabilized at 5 per cent the last four months of the year."







Wood Pellet Production in the US South

USFS Southern Research Station Report

The document finds that "A simulation of the market responses to increases in both pellet and other bioenergy demand in the US South suggests that prices will increase for timber as harvest increases, and will in turn lead to long-term changes in inventory and forest land area."

Key Findings:

- 1. The key driver of US pellet demand, and thus US pellet production and export, is the Renewable Energy Directive of the European Union. This demand is expected to increase over the next 5 to 10 years.
- 2. Key drivers of US pellet feed stock supply from forests include the characteristics of current inventory and the policies that define sustainability.
- 3. Key drivers of competition (price and quantity) include the price inelastic demand for feedstock from both traditional producers and policy-in-

by Kéta Kosman

duced bioenergy producers as well as a price-inelas-

tic supply response for feedstock. Combined, these result in a higher percentage change in price than the associated percentage change in quantity harvested when pellet feedstock demand increases.

- 4. An expected increase in US demand for solid wood products will likely result in increased mill residues. This could reduce demand for smaller-sized timber as feedstock for pellet, pulp, or composite panel production, thus reducing timber feedstock price for pellets.
- 5. The combination of increased pellet feedstock demand, the age class distribution of inventory, and the inelastic supply response of landowners to a change in price have led to increased pellet feedstock prices and increased harvests in the US South.
- 6. In a simulation of timber markets where increases in demand for timber from the US Coastal South derive from both pellet and other bioenergy demand, the Southern Research Station found that:

- (a) Non-sawtimber feedstock prices continue to rise through the end of the projected increase in pellet demand (2020), and then fall as additional timberland is converted from marginal agricultural land, leading to eventual relative increases in inventory.
- (b) Even assuming full utilization of mill residues and increased utilization of logging residues, harvest of pine and hardwood non-sawtimber feedstock increases. Under these assumed demands, increased pine harvest leads to increased investment (planting), which leads to ending inventory levels that are higher than under the baseline.
- (c) There would be shifts in harvest among subregions and shifts in production from traditional wood products to pellet production.
- (d) Timberland area increases with an increase in demand for feedstock for pellets as more plantations are established on marginal agricultural land (assuming that forest land rents increase with increases in non-sawtimber feedstock prices, and that changes in land use are tied to forest land rents).
- (e) If these simulation results are extrapolated to a demand scenario where pellet demand continues to increase beyond 2020, the report writers would expect the simulations to show prices remaining high or continuing to increase, and would show timberland area, harvest, and logging residue use for pellets continuing to increase.

Timber Supply

The supply of timber, whether for use in pellets or traditional products, will increase with the offered price. The level of timber inventory in a region is included in the supply function as a proxy for the timber production base capacity. As inventory increases, the base capacity, at the current marginal cost, is expected to increase, and thus more timber can be supplied at a given price.

Logging residue supply

Regardless of the quality issue, the supply of logging residues at a given time is limited by the amount of total timber removed for other products.

Mill residue supply

Currently, of the total production of 103 million oven dry tons of mill residues produced each year in the United States, only an estimated 7 million tons are unused, with the remainder used for paper products or onsite energy production.

Summary

The demand for timber is relatively price inelastic, indicating that the quantity demanded will not decline proportionately with increases in price.

The supply of timber is also relatively price inelastic in the short run, indicating that the quantity supplied will not increase proportionately with increases in price. This means that the market will

be slow to adjust to rapid increases in the demand for timber used for renewable energy.

Biomass feedstock demand will be affected by the level of renewable energy goals and by the amount of subsidy supplied by individual governments.

The full report can be found here: http://www.srs.fs.usda.gov/pubs/47281

Break-even stumpage price on a dollar per green ton pulpwood basis, where additional profits were allocated to wood procurement proportional to other costs

Type (and size) of power plant facility	2013–14	2014–15	2015–16	2016–17
Co-firing (low-range)	NA	NA	NA	NA
Co-firing (mid-range)	\$11.21	\$11.50	NA	NA
Co-firing (high-range)	\$12.03	\$13.98	\$13.94	\$13.68
Co-firing with CHP (low-range)	\$12.85	\$13.15	\$14.76	\$14.50
Co-firing with CHP (mid-range)	\$15.33	\$15.62	\$15.58	\$15.33
Co-firing with CHP (high-range)	\$16.15	\$18.09	\$18.06	\$17.80

NA indicates that even with the subsidy and penalties, pellets would not be preferred over coal for this size and type of power plant facility. CHP=combined heat and power.