



Canadian Lumber Producers in the US South

Timberland Investment Group

2018

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Canadian lumber producers move to the US South

Given a depleted Canadian timber resource and low US South sawtimber prices, the US South has become the region of choice for North American lumber production, particularly as the US housing market continues to improve. At the same time that Canadian timber supply has declined due to the Mountain Pine Beetle infestation in British Columbia and a reduced annual allowable cut in Québec, sawtimber prices have declined in the US South driven by a sawtimber inventory overhang. As such, Canadian lumber producers have expanded their operations into the US South as they seek to capitalize on a wide spread between lumber prices and log prices (though this divergence should narrow over time). Other factors encouraging this Canadian move to the US South include diversification of geographies, products, and sawtimber base, and the minimization of foreign exchange volatility, freight costs (e.g., proximity to end markets), and potential future trade issues with the US (e.g., Softwood Lumber Agreement). While initially targeting brownfield acquisitions in the US South, a number of Canadian producers are now evaluating sizeable greenfield opportunities given better economics as brownfield valuations have spiked.

Timber supply

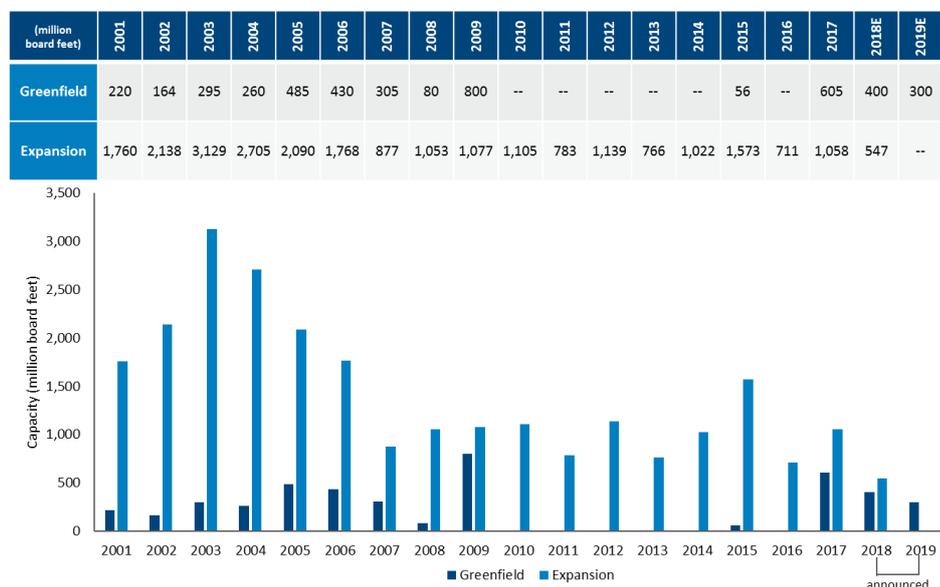
Canada has historically provided around 30-35% of all the lumber used in the US. This share is expected to decline by 10-15% as a result of a reduction in Canadian timber supply due to mortality associated with the Mountain Pine Beetle. Since the early 1990s, the Mountain Pine Beetle has attacked lodgepole pine in British Columbia and killed about 50% of that species in the province, impacting an area of over 43 million acres. British Columbia has increased harvest levels to try and salvage the remaining timber, much of which is then shipped to China to be used for industrial applications. Currently, the Mountain Pine Beetle has expanded beyond its historic range and moved into northern British Columbia and eastward in the boreal forest of north-central Alberta where it is also attacking jack pine. Separately, in Eastern Canada, timber supply has declined as the government of Québec reduced the annual allowable cut by 20% in the mid-2000s to address historic overharvesting.

At the same time, the US has witnessed a decline in lumber capacity as mills either permanently closed or were indefinitely idled due to the Great Recession. In total, US lumber capacity declined from a peak of around 44 billion board feet (“bbf”) in 2006 to around 39.5bbf in 2012 before rebounding to 42bbf in 2016. Consequently, sawtimber demand declined with some timberland owners proactively curtailing harvests with the expectation that demand would improve in the subsequent 5-10 years. That said, as the US housing market only slowly improved, these owners continued to defer harvests. As sawtimber harvests were continually deferred and inventories on the stump accumulated, sawtimber prices declined and still remain depressed at present.

Canadian expansion in the US South

The Canadian lumber producer move to the US began in the early 2000s with brownfield acquisitions by West Fraser and Interfor (Figure 1). This move south was predicated on the desire to diversify their geographies, products, and sawtimber base while minimizing foreign exchange volatility, freight costs, and potential future trade issues with the US.

Figure 1. US lumber mill expansions. Source: TIG Analysis; FEA



In early 2007, West Fraser made the first sizeable Canadian foray into the US South by purchasing 13 sawmills from International Paper with total capacity of around 1.8bbf (Table 1).¹

Table 1: Lumber mill acquisitions in the US South. Sources: RISI; Company Reports; TIG Analysis

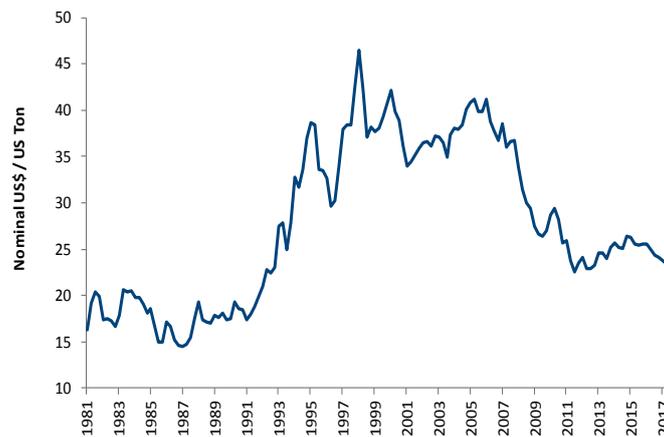
Year	Buyer	Seller	Location	Capacity (mmbf)	Cost (\$mm)	Cost/mbf
2000	West Fraser	Plum Creek	Huttig, AR; Joyce, LA	300	\$60	\$200
2004	Interfor	Crown Pacific	Port Angeles, WA; Marysville, WA; Gilchrist, OR	295	\$74	\$251
2005	Interfor	Floragon Forest Products Mollalla Inc.	Mollalla, OR	220	\$50	\$227
2007	West Fraser	International Paper	13 mills in US South	1,800	\$325	\$181
2013	Interfor	Keadle Lumber Enterprises	Thomaston, GA	80	\$32	\$402
2013	Interfor	Rayonier's lumber business	GA (3 mills)	360	\$80	\$222
2014	Interfor	Tolleson Ilim Lumber	Perry, GA	375	\$185	\$492
2014	West Fraser	Bibler Brothers	Russellville, AR	136	\$71	\$524
2014	West Fraser	Travis Lumber	Mansfield, AR	100	\$55	\$553
2015	Interfor	The Price Companies	Monticello, AR	75	\$29	\$390
2015	Interfor	Simpson Lumber	WA, SC, & GA (4 mills)	555	\$125	\$225
2015	Interfor	Price Companies	Monticello, AR	100	\$44	\$437
2015	Canfor	Anthony Forest Products	El Dorado, AR	250	\$94	\$374
2015	Canfor	Southern Lumber Co	Hermanville, MS	90	\$49	\$541
2017	West Fraser	Gilman Companies	GA & FL (6 mills)	695	\$430	\$619
Average (2000-2007)						\$215
Average (since 2000)						\$376
Average (since 2013)						\$434

¹ International Paper sold the following mills to West Fraser: Citronelle, Maplesville and Opelika, AL; Leola, AR.; McDavid and Whitehouse, FL.; Augusta and Folkston, GA; Armour and Seaboard, NC; Newberry, SC; and New Boston and Henderson, TX

Following the Great Recession, Canadian lumber producers tactically sought to expand their lumber operations into the US South by acquiring independent sawmills, some of which were poorly capitalized. Specifically, Canadian producers were keen on taking advantage of low sawtimber prices. Between the beginning of 2006 and mid-2012, southern mixed pine sawtimber prices declined 44% to around US\$ 23/ton. Although the housing market and broader economy have recovered, sawtimber prices have stagnated primarily due to elevated sawtimber inventories (please refer to **Elevated inventories to keep sawtimber prices depressed** section on page 7). Since mid-2012, southern mixed pine sawtimber prices have only increased 2.8% to US\$ 23.59/ton (Figure 2). This compares with the recessions of 1990-1991 and 1981-1982 in which sawtimber prices increased 20.2% and 22.4%, respectively, over the 12 months following the end of the recession.

Figure 2. US southern mixed pine sawtimber prices. Source:

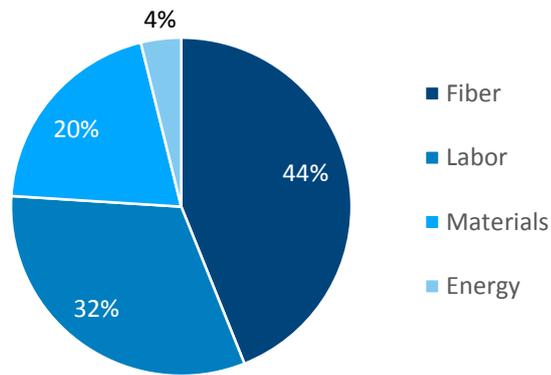
TimberMart-South



Low sawtimber prices have been a primary driver for further Canadian investment in the US South as fiber (sawtimber) accounts for 44% of the cash cost of a standard US South sawmill (Figure 3).

Figure 3. Cash cost breakdown of sawmills in US South.

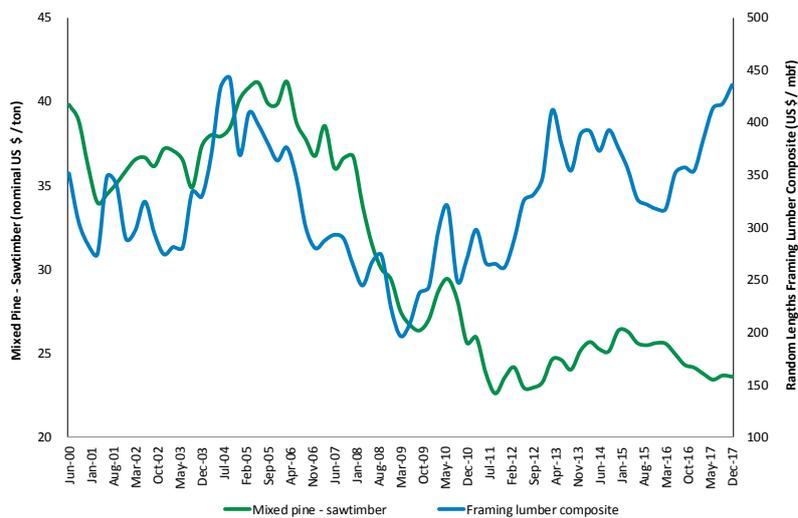
Source: RISI



Should sawtimber prices remain depressed, that could translate into continued favorable cash costs and strong profitability for Canadian lumber producers. Ultimately, though, there should be a convergence of the spread between lumber prices and sawtimber prices either due to lumber price declines (e.g., too much supply) or sawtimber price increases (e.g., improving demand, lower inventory) (Figure 4).

Figure 4. Spread between lumber prices and sawtimber prices.

Source: Random Lengths; TimberMart-South



Elevated inventories to keep sawtimber prices depressed

While the US housing market has improved, driving increased timber consumption, wood continues to grow on the stump. This growth adds to the already elevated volume of accumulated standing inventory (Figures 5 & 6). We estimate that net sawtimber inventories (after annual removals/drain) in the US South have increased by 15% or 37bbf since 2007. Importantly, gross existing sawtimber inventory (before annual removals/drain) continues to grow by around 18bbf annually, outpacing the annual drain and contributing to further inventory accumulation. Based on our US housing forecast, we expect that it will take until mid-next decade for US South sawtimber inventories to come into balance with demand (Figure 7).

Figure 5. Southern pine sawtimber inventories. Source: US Forest Service Forest Inventory and Analysis; Forisk

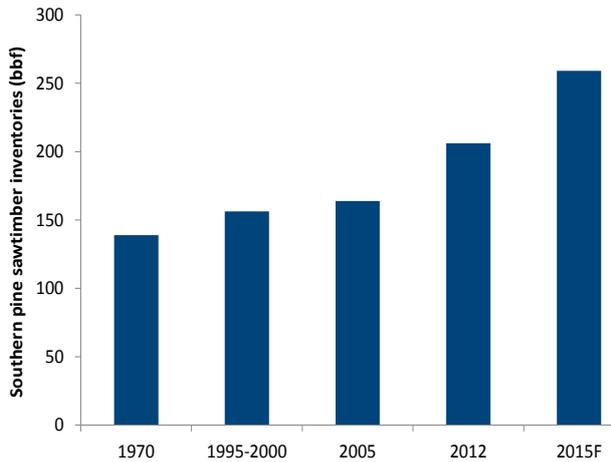


Figure 6. Southern pine sawtimber inventories by state. Source: US Forest Service Forest Inventory and Analysis; Forisk

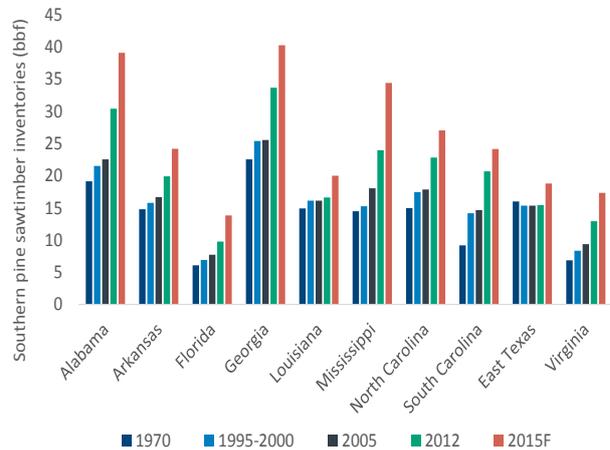
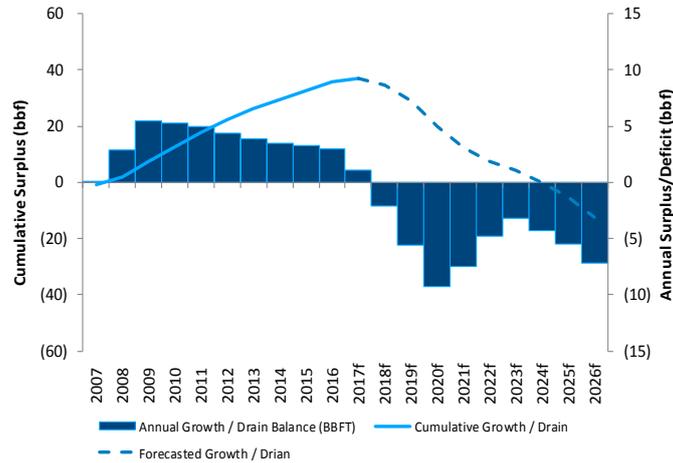


Figure 7. US southern sawtimber surplus/deficit & Forecast.

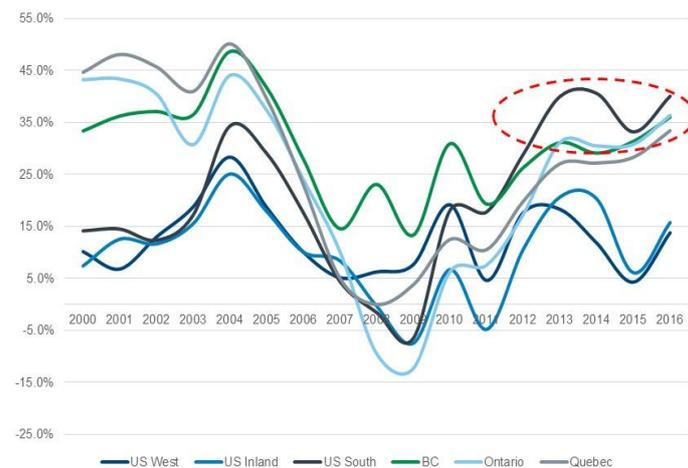
Source: RISI; TIG hypothetical forecasts



Profitability in US South at 20-year high

Given low sawtimber prices, lumber producers in the US South have been generating the highest profit amongst all regions in North America (Figure 8). In 2016, contribution margin (revenues less variable costs) in the US South was 40%, a 20-year high and 370 basis points higher than Ontario, the second most profitable region in North America. Since 2012, the US South has had the highest contribution margin. This level of profitability could be maintained if sawtimber prices in the US South remain depressed.

Figure 8. Contribution margin by region. Source: RISI



Greenfield is the new brownfield

The rush by Canadian lumber producers to expand into the US South has caused valuations of existing lumber mills to significantly increase. When Canadian lumber producers first started acquiring US sawmills in the early-mid 2000s, the average acquisition cost was around US\$ 215/mbf. Since 2013, the average cost/mbf has doubled, now averaging around US\$ 434/mbf. Given this notable increase in brownfield valuations, Canadian lumber producers are contemplating building greenfield mills (Table 2). Canfor intends to build a 275mmbf greenfield mill in Washington, GA for US\$ 120 million or US\$ 436/mbf, in-line with existing brownfield valuations, while Interfor is exploring a 200mmbf greenfield mill in the central region of the US South. Given the attractiveness of the US South, Canadian wood products companies such as Tolko are making their first forays into the US South. Alongside its joint venture partner Hunt Forest Products, Tolko intends to build a 200mmbf greenfield mill in Urania, LA for US\$ 115 million or US\$ 575/mbf.

Table 2: Greenfield lumber mill valuations. Sources: RISI; Company Reports; TIG Analysis

Year	Company	Location	Total Capacity (mmbf)	Cost (\$mm)	Cost/mbf
2015	Klausner Lumber One	Live Oak, FL	350	\$152	\$434
2017	Conifex	El Dorado, AR	300	\$66	\$220
2017	Caddo River Forest Products	Glenwood, AR	100	\$50	\$500
2017	Biewer Lumber	Newton, MS	250	\$85	\$340
2017	Two Rivers Lumber	Demopolis, AL	200	\$65	\$325
2018	GP	Talladega, AL	300	\$100	\$333
2019	Tolko / Hunt Forest Products	Urania, LA	200	\$115	\$575
2019	GP	Warrenton, GA	350	\$135	\$386
2019	Canfor	Washington, GA	275	\$120	\$436
TBD ⁽¹⁾	Klausner Lumber Two	Enfield, NC	350	\$110	\$314
TBD ⁽¹⁾	Rex Lumber	Troy, AL	240	\$110	\$458
TBD ⁽¹⁾	Interfor	Central Region of the US South	200	\$115	\$575
Average of existing greenfields					\$359
Average of existing & proposed greenfields					\$404

(1) Cost and capacity are latest available and subject to change as new information becomes available

US lumber producers not to be outdone

Not to be outdone by their neighbors to the North, some US lumber producers have recently decided to increase their capacity in the US South as well. Georgia-Pacific has announced two greenfield mills in the US South: a new 350mmbf sawmill in Warrenton, GA for US\$ 135 million or roughly US\$ 386/mbf targeted for start-up in the Spring of 2019 and a new 300mmbf sawmill in Talladega, AL for US\$ 100 million or roughly US\$ 333/mbf targeted for start-up in 2018. Meanwhile, Rex Lumber recently announced a new 240mmbf sawmill in the US Southeast for US\$ 110 million or roughly US\$ 458/mbf. Table 2 above illustrates various other greenfield projects. At the same time, Weyerhaeuser is building a new mill at its Dierks, AR site (and shuttering the old mill) while expanding capacity at its Millport, AL sawmill, both of which are scheduled to be completed in 2018.

Conclusion

Canadian lumber producers should continue to expand their operations into the US South given favorable sawtimber prices, which should remain low in the near future given elevated sawtimber inventories, and improving US housing demand (though this divergence should narrow over time). Moreover, such expansions afford Canadian producers geographic and product diversity while minimizing foreign exchange volatility, freight costs, and potential future trade issues with the US. As brownfield valuations have increased, Canadian lumber producers are more likely to consider and evaluate greenfield opportunities.

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