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BRITISH COLUMBIA INTERIOR FOREST SECTOR COMPETITIVENESS STUDY

Prepared by Forest Economic Advisors
for BC Council of Forest Industries



Forest Economic Advisors



HIGHLIGHTS:

- British Columbia's Interior lumber industry is a key driver of the provincial forest sector.
- The health of the industry depends on its ability to access, and compete in, global markets.
- Three important challenges facing the industry are:
 1. Declining timber supply and rising log costs;
 2. US import taxes;
 3. Policy uncertainty.
- Compared to competing regions, average BC sawmill margins are forecast to fall, this will threaten the financial viability of existing operations and lead lumber companies to deploy capital outside of BC.
- Consequently, there will be a reduction in the overall capacity of the Interior lumber industry along with spillover effects on other forest sector participants that rely on the lumber industry (e.g., pulp mills, pellet plants, secondary manufacturers).

INTRODUCTION AND STUDY PURPOSE

The British Columbia (BC) forest sector competes in a global marketplace. In 2018, over 80 per cent of forest products were exported; destined for markets such as the United States (US), China and Japan.

The BC Interior lumber industry has traditionally been a key driver of the forest sector in the province and has been very competitive with modern technology and reliable access to high-quality fibre. Presently, the industry is facing significant headwinds that are eroding its competitiveness now and into the future.

Forest Economic Advisors (FEA) were engaged by the BC Council of Forest Industries (COFI) to provide an independent assessment of the B.C. interior lumber industry, looking at the factors that are driving changes in its competitiveness compared with other major softwood lumber producing regions in Canada and the US.

The study focussed on the following:

- Current and future timber supply;
- Historic, current and forecast future cost structures of the BC Interior sawmill industry in comparison to other applicable jurisdictions; and,
- A forecast of potential margins in the BC Interior sawmilling industry compared to other North American regions.

TIMBER SUPPLY – ALLOWABLE ANNUAL CUT

British Columbia is endowed with a tremendous forest resource, with approximately 60 million hectares of forestland. About 95 per cent of the forest estate is publicly owned, mainly administered by the Ministry of Forests, Lands, and Natural Resource Operations and Rural Development (the “Ministry”). Major timber supply units include 37 Timber Supply Areas (TSAs) and 34 Tree Farm Licenses (TFLs).

An Allowable Annual Cut (AAC) on each unit sets a ceiling on log harvests over a 5-year period. Typically, these are in place for 10 years, unless exigent circumstances require adjustment sooner. There are 28 TSAs and 18 TFLs in the Interior. Beginning in the early 2000s, several TSAs and TFLs in the Interior began to be impacted by the Mountain Pine Beetle.

Table 1 depicts regional AACs in 5-year increments and their near-term projected levels. In the mid-2000s, BC's Chief Forester implemented AAC uplifts to address the need to salvage trees on beetle-impacted lands. The Interior AAC peaked in 2007 at just over 68 million cubic meters. As the amount of salvageable timber waned, the AACs were reset at or below pre-uplift levels. By 2025, the Ministry projects the cut will be reduced by a further 10 million cubic meters, assuming no change in the methodology by which AACs are determined.

TABLE 1 – ALLOWABLE ANNUAL CUTS FOR NORTHERN AND SOUTHERN INTERIOR BC, MILLION CUBIC METERS

	2000	2005	2010	2015	2020
TSA					
North	25.6	32.7	33.0	30.7	26.5
South	19.5	23.4	27.9	23.5	19.2
Total Int	45.1	56.1	60.9	54.2	45.8
TFL					
North	2.2	2.8	3.0	2.0	2.7
South	3.0	2.9	3.5	2.6	2.1
Total Int	5.2	5.7	6.5	4.7	4.8
TOTAL	50.4	61.8	67.4	58.9	50.5

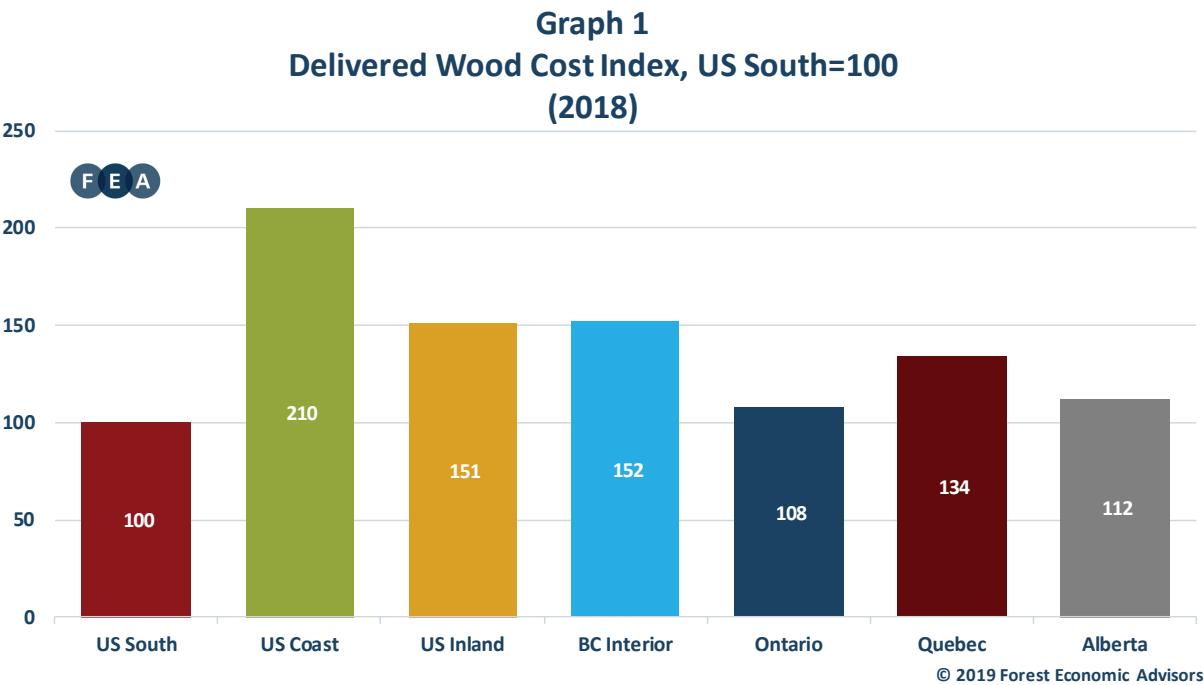
We note that this drastic change in timber supply is reminiscent of what occurred in the US Pacific Northwest nearly three decades ago as controversial land use decisions associated with the spotted owl reduced the expected harvestable timber base by nearly half. There could be opportunities to mitigate timber supply impacts, including moving from a biological to an economic rotation and redefining the timber harvesting land base. Nonetheless, significant reductions are forthcoming, which will have repercussions for the industry.



BC INTERIOR LUMBER COSTS IN A NORTH AMERICAN CONTEXT

The reductions in timber supply that have occurred have had a direct impact on the competitiveness of the BC Interior lumber industry as delivered wood costs are the largest input cost for a sawmill. Wood costs consist of three parts: 1) the price of the standing timber (stumpage), 2) plus the cost of its harvesting and hauling, 3) less any value recouped from residues.

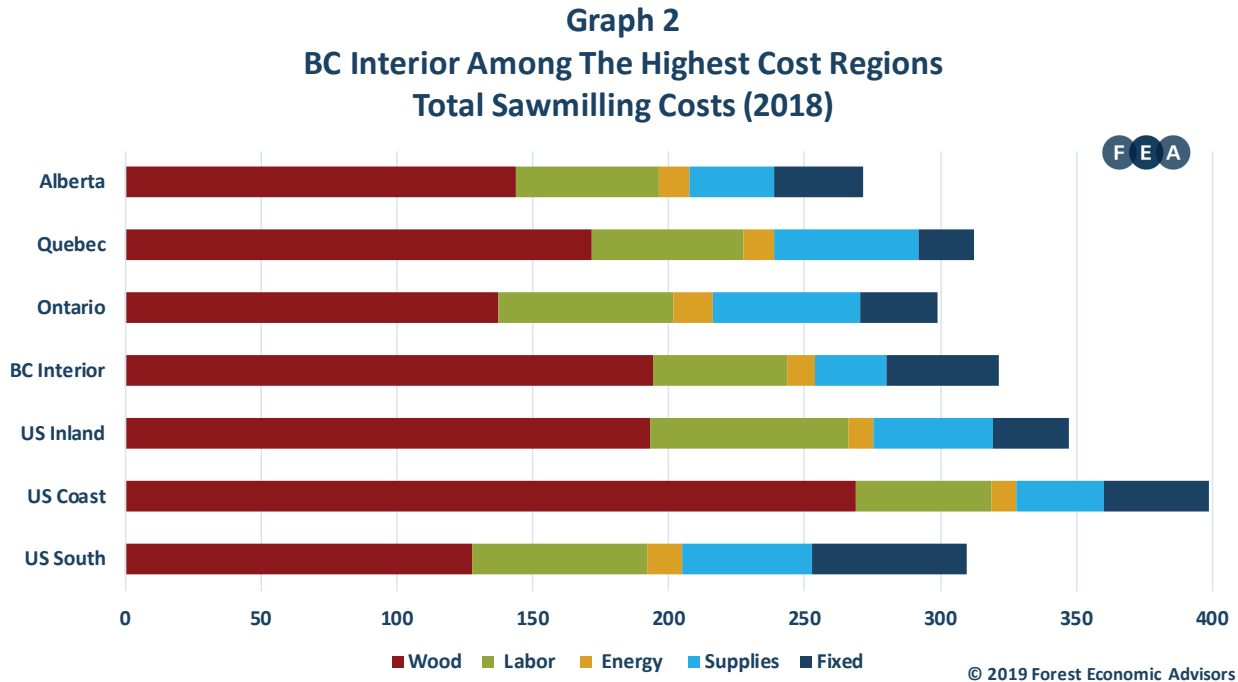
Based on FEA's latest North American sawmill cost survey for 2018, delivered wood is the highest input cost for all regions. The BC Interior had the second highest delivered wood costs in North America, only the US Coast region was higher (**Graph 1**)¹. In contrast, the US South has the lowest wood costs, followed by Ontario and Alberta. In fact, delivered wood costs in the BC Interior were about 50 per cent higher than the US South.



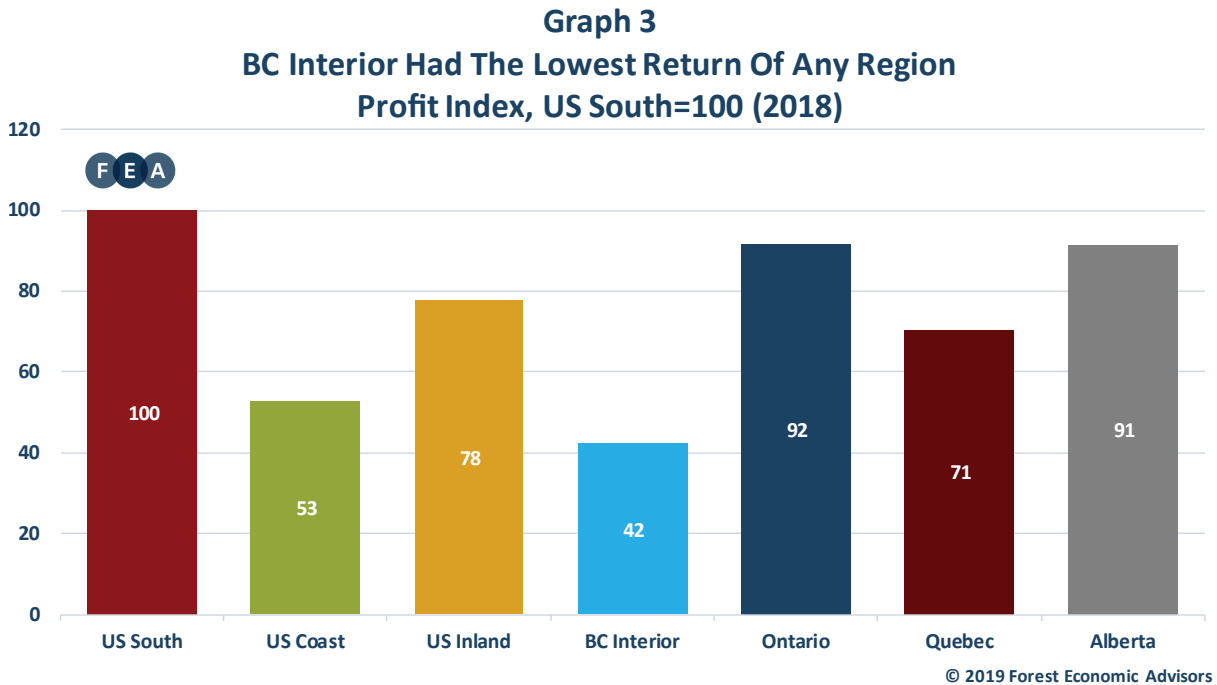
The low log costs in the US South can be attributed to two factors. First the emergence of managed pine plantations has increased the supply of merchantable softwood timber. Between 1952 and 2017, the area of pine plantations in the US South increased from 2 million acres to 40 million acres. The productivity on the managed pine plantations benefit from intensive silvicultural applications and improved genetic stock. Second, the massive decline in US housing starts during and after the 2008-09 financial crisis cut lumber demand and thus the harvesting of logs. Both factors served to create a large build of mature standing sawtimber inventory, which has now depressed log prices. Sawtimber stumpage prices in the US South are among the lowest in North America.

1 The delivered wood cost index = ((wood cost region x)/(wood cost US South))100

Higher wood costs in the BC Interior are partially offset by lower costs on some other line items. As shown in **Graph 2**, the BC Interior is the third highest cost region in terms of total sawmilling costs. However, other high cost regions such as the US Inland region and the US Coast region have been able to offset their cost disadvantages with higher average sales prices, which can be attributed to higher quality wood and the lack of duties. Bringing costs and revenues together, and looking at the overall profits in the industry, the BC Interior region was the least profitable region (**Graph 3**).



This competitiveness gap is expected to continue. The over supply of timber in the US South is not expected to dissipate until the early 2020s and not return to a normal level until well into the next decade. Whereas, log prices in the BC Interior are expected to remain elevated, owing to timber supply reductions. This will undoubtedly have implications for potential future returns on investment in the Interior BC lumber sector.



FUTURE FOREST INDUSTRY PROFITABILITY AND CAPITAL INVESTMENT

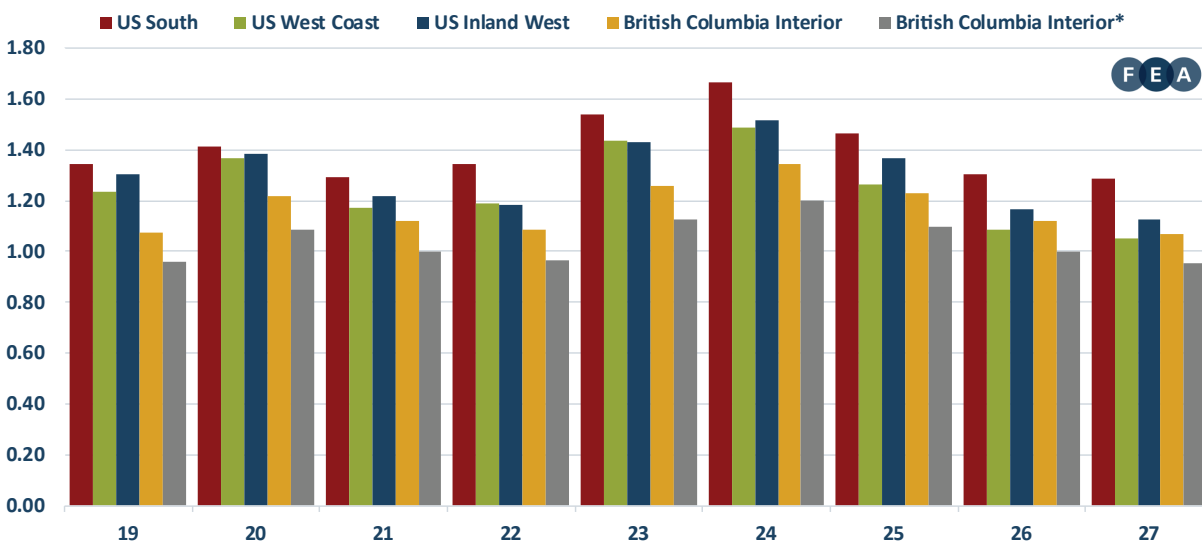
Our forecast out to 2027 shows that margins in the BC Interior are expected to be lower than all major US producing regions, measured by the average sales price to variable cost ratio (**Graph 4**). This holds both with and without duties on Canadian lumber shipments. If the duties remain in place, the US South is expected to have an average price to variable cost ratio that is nearly 40 per cent higher than the BC Interior on average over the forecast horizon.

This is a huge change from the situation of the past two decades when the BC Interior was one of the lowest cost regions in North America. This rapid migration up the industry cost curve can be attributed primarily to escalating delivered wood costs. A secondary factor has been the additional regulatory and environmental costs, including carbon taxes.

BC mills also face political and forest policy uncertainty. There are significant uncertainties with respect to First Nations “Rights and Title”, caribou protected areas, and “public interest” policies surrounding timber tenures². These uncertainties affect investor confidence, having a stifling effect on the injection of new capital within the BC forest sector.

Given potentially low returns and heightened risks, in the absence of change we expect lumber companies will deploy capital to regions outside of BC. Under this scenario, ripple effects throughout the broader provincial forest sector are likely to occur as the interior lumber industry serves as the primary impetus for harvesting and provides key inputs to other parts of the domestic supply chain including pulp mills, pellet plants and secondary manufacturers.

Graph 4
Forecast Average Sales Price to Variable Cost Ratio



* British Columbia Interior* incorporates a 20.23% duty on lumber shipments to the US.

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² This could include restrictions on tenure transfers, tenure “take back” provisions, cut controls and appurtenancy conditions that restrict where and how timber is processed.

CONCLUSION

The BC lumber industry is facing significant challenges that are affecting its competitiveness. Foremost among these challenges is diminishing timber supply, which has contributed to high delivered wood costs. Combining higher costs with factors such as lumber duties to the US and an uncertain domestic policy environment makes BC a less attractive place to invest compared with other regions, particularly the US South.



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