



Why are lumber prices so high?

CANADIAN FOREST SERVICE SCIENCE-POLICY NOTE

JUNE 2021

Introduction

Lumber prices in Canada and the United States have soared to record highs in 2021. This is putting a strain on Canadians looking for lumber for renovations and other home improvement projects, as well as on suppliers, homebuilders, and contractors who are struggling to find the materials necessary to complete their projects. This note explores lumber price increases since the start of the COVID-19 pandemic and the reasons behind them.

How high are prices?

As of May 2021, the benchmark prices of Eastern and Western Spruce-Pine-Fir (SPF) lumber, the most common types produced in Canada, have increased more than 290% from May 2020. Similarly, the Framing Lumber Composite price (comprised of 15 lumber items and reflecting trends

across key Canadian and U.S. producing regions) was almost 300% higher than in May 2020 (Figure 1).

Why are prices so high?

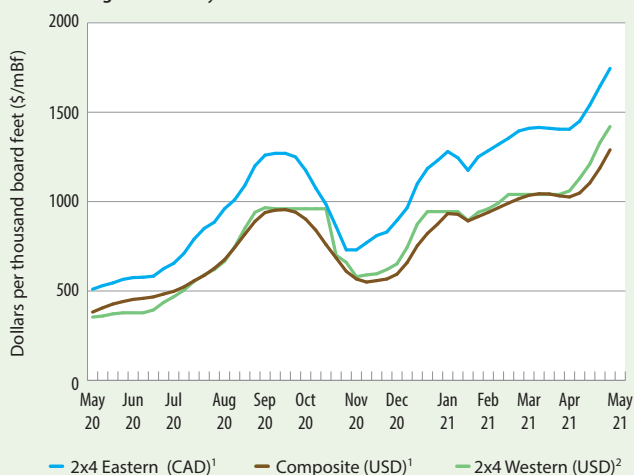
In short, lumber prices are high because demand has increased substantially, while supply remains relatively unchanged from pre-pandemic levels. This imbalance is causing the price of lumber to skyrocket as buyers compete for scarce supplies and is leading to product shortages (i.e., empty shelves) in some areas. Because lumber markets in Canada and the U.S. are highly connected, with Canadian producers shipping their lumber to multiple and variable locations, pressures from growing demand extend broadly across the industry and are driving the general rise in lumber prices now being seen across both countries.

Growth in demand is coming from the two largest end-use markets for lumber: new home construction and residential repair and remodeling. Demand from these segments became particularly strong following the early months of the pandemic and remains strong into the second quarter of 2021.

New home construction in Canada and the U.S. has been soaring to post-recession highs, supported by changing homebuyer preferences towards single-family homes, low mortgage rates, and a low inventory of available homes for sale. Total U.S. housing starts in 2020 were 7% higher than in 2019 and continue to increase in 2021. Similarly, total Canadian housing starts were almost 4% higher in 2020 than the year prior. Comparing starts in the early months of 2021 with those in the same months in 2020 points to even stronger growth (Figure 2).

Repair and remodeling activities have also been surprisingly strong, with pandemic-related stay-at-home orders prompting homeowners to invest in new amenities (home offices, home gyms, improved outdoor spaces) and consider relocating out of urban centres. Total expenditures on residential improvements in Canada and the U.S. increased by an estimated 9% from 2019 to 2020. Demand from new home construction and from repair and remodeling activities is expected to remain strong throughout 2021.

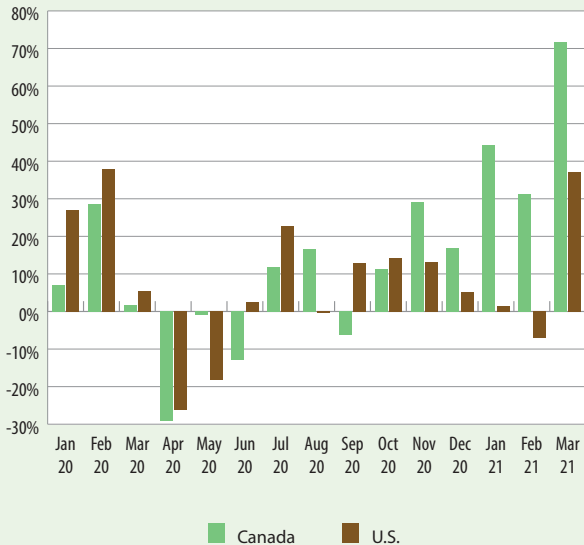
Figure 1. Weekly Lumber Prices in North America



Note: Western SPF kiln dried 2x4 #2 and better (USD)
Eastern SPF kiln dried 2x4 #2 and better (CAD),
Random Lengths framing lumber composite price (USD).
For up-to-date prices, see [NRCan's regularly updated webpage](#).
Source: 1) Random Lengths 2) Madison's Lumber Reporter
Used with publisher's permission.



Figure 2. Percentage Change in Monthly Housing Starts
(year-over-year, 2019/2020)



Source: Statistics Canada. Table 34-10-0158-01
U.S. Census Bureau and U.S. Department of Housing and Urban
Development, New Residential Construction

Why hasn't supply increased?

Despite high prices, lumber production (supply) remains near pre-pandemic levels. In Canada, although sawmills curtailed production at the beginning of the pandemic for safety reasons and because of worries about market collapse, the vast majority are now operating at full capacity. Though there have been some recent re-openings of previously closed facilities, as well as investments to increase capacity, limitations on available fibre make major domestic capacity additions over the near to medium term unlikely. Fibre constraints have been particularly challenging for British Columbia, Canada's largest lumber producing region, with damage from wildfires and the mountain pine beetle reducing the amount of timber available for sustainable harvest by more than 25% since 2007. Transportation issues are exacerbating supply constraints, with multiple Canadian lumber producers reporting difficulties securing the rail cars needed to get their lumber to market in the first quarter of 2021.

In the U.S., 2020 production increased 4.5% from the previous year. While new capacity additions are now underway (primarily in the southern states), major facility construction takes time and new production is not expected to come online until early 2022.

Overall in 2020, the slight increase in U.S. production was offset by the nearly 4% decline in Canadian production, resulting in net combined production across both countries remaining approximately stable (i.e., 1% higher in 2020 than 2019). Overall, lumber supply is not expected to increase substantially in 2021, meaning that high prices will continue for as long as demand remains elevated.

Where do we go from here?

Today's high lumber prices are being driven by extremely strong demand from new home construction and repair and remodeling activities. Underlying factors in these market segments, coupled with pandemic-related impacts, point to demand remaining strong through the remainder of 2021. While high prices are benefitting Canada's lumber producers, helping to support the workers and communities that rely on them, they are also posing significant challenges for consumers, particularly those looking to build or renovate homes. That said, in Canada, market forces determine the price of lumber, which is cyclical by nature. For prices to decline, supply must increase or demand must ease. Natural Resources Canada's Canadian Forest Service monitors the price of lumber and other wood building products as part of ongoing work to advance the competitiveness and overall health of the Canadian forest sector.

Sources: [U.S. Census Bureau](#), [NRCAN](#), [StatsCan](#), [JCHS](#), [Harvard University](#), [Russ Taylor](#), [Forest Economic Advisors](#), [Western Wood Products Association](#).