



US Housing Starts and Softwood Lumber Availability

Housing Starts

US housing starts have been gradually increasing since the great crash that began in 2006. Figure 1 shows total starts in terms of the seasonally-adjusted annual rate (SAAR) and not seasonally adjusted (NSA). By the time the crash bottomed out in January 2009, starts were less than 0.5 mm units/year, which was a little better than half the previous worst-ever numbers.

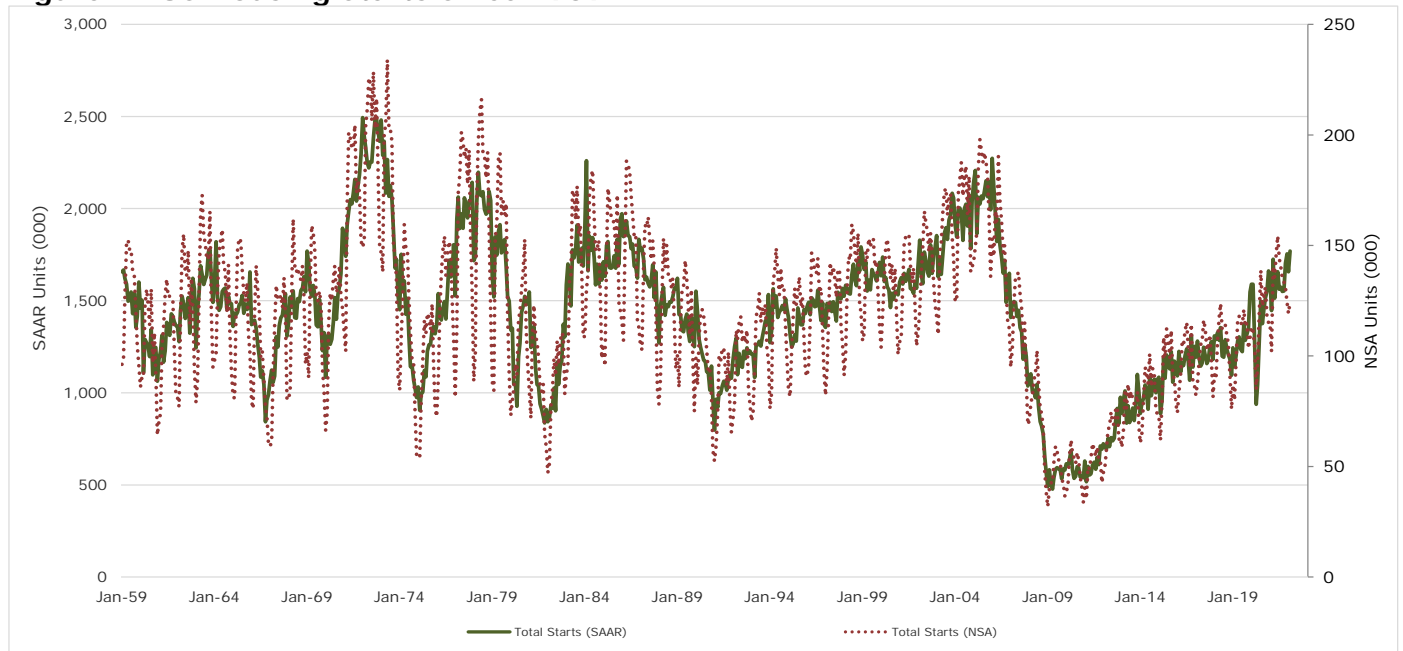
The last 13 years have been bad enough to lower the average for the entire series. Between 1959 and 2005, housing starts averaged 1.55 mm units per year. The average for 1959 to 2022 is 1.43 mm units.

It is also clear that the actual number of starts (NSA) is strongly seasonal.



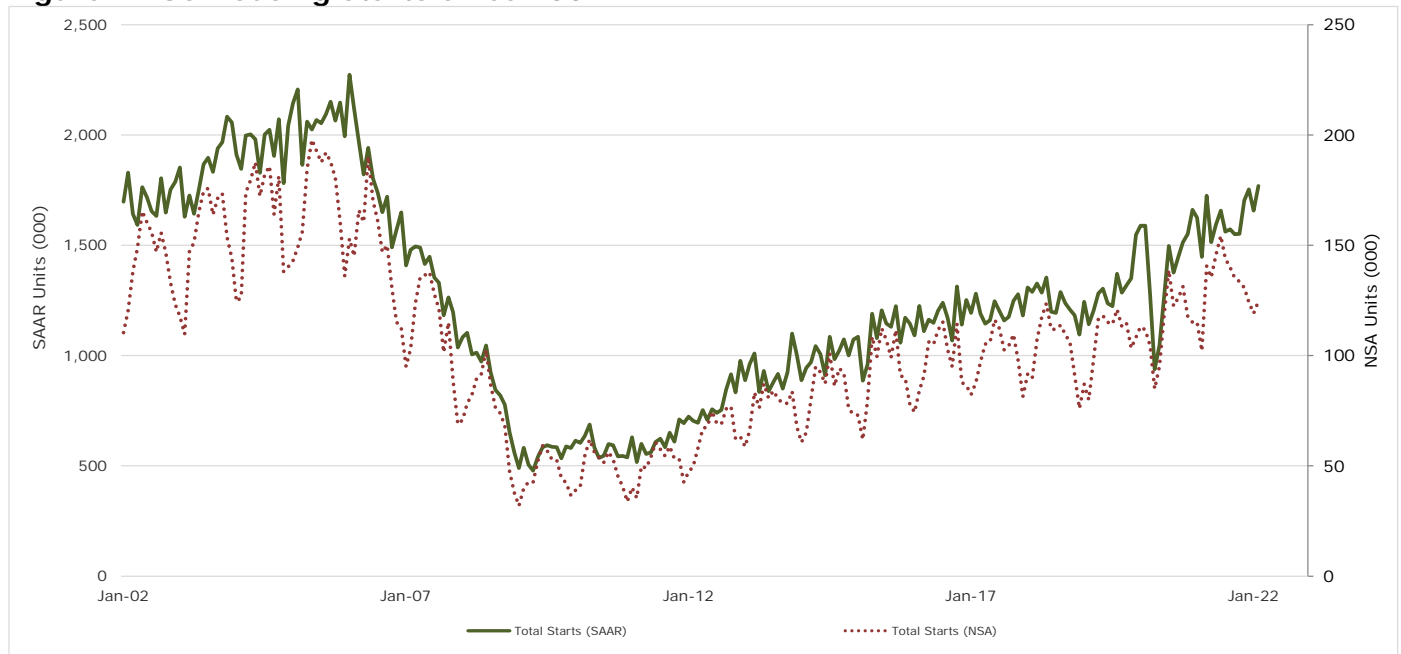
Figure 2 presents the same data, but shortened to a time period that matches our lumber availability data.

Figure 1. US Housing Starts Since 1959



Source: US Census Bureau

Figure 2. US Housing Starts Since 2002



Source: US Census Bureau

Softwood Lumber Availability

Figure 3 shows the available volume of softwood lumber in the US since 2002 by month. It shows US production for domestic markets (lumber produced in the US that is not exported), imports from Canada and import from the rest of the world.

As with housing starts, there is a strong seasonality to lumber availability.

Imports from Canada account for 25-35 percent of the softwood lumber available in the US market depending on the year. They also amount to roughly half of Canada’s production.

Imports from the rest of the world are barely visible in Figure 3. Monthly volumes have ranged from 18 MMBF to 253 MMBF since 2002, with an average of just under 100 MMBF per month.

(US exports to the world (including Canada) averaged about 110 MMBF/month over that period, so when you take imports from Canada out of the analysis, US imports and exports of softwood lumber are about equal and a tiny portion of the lumber available.)

Housing Starts and Lumber

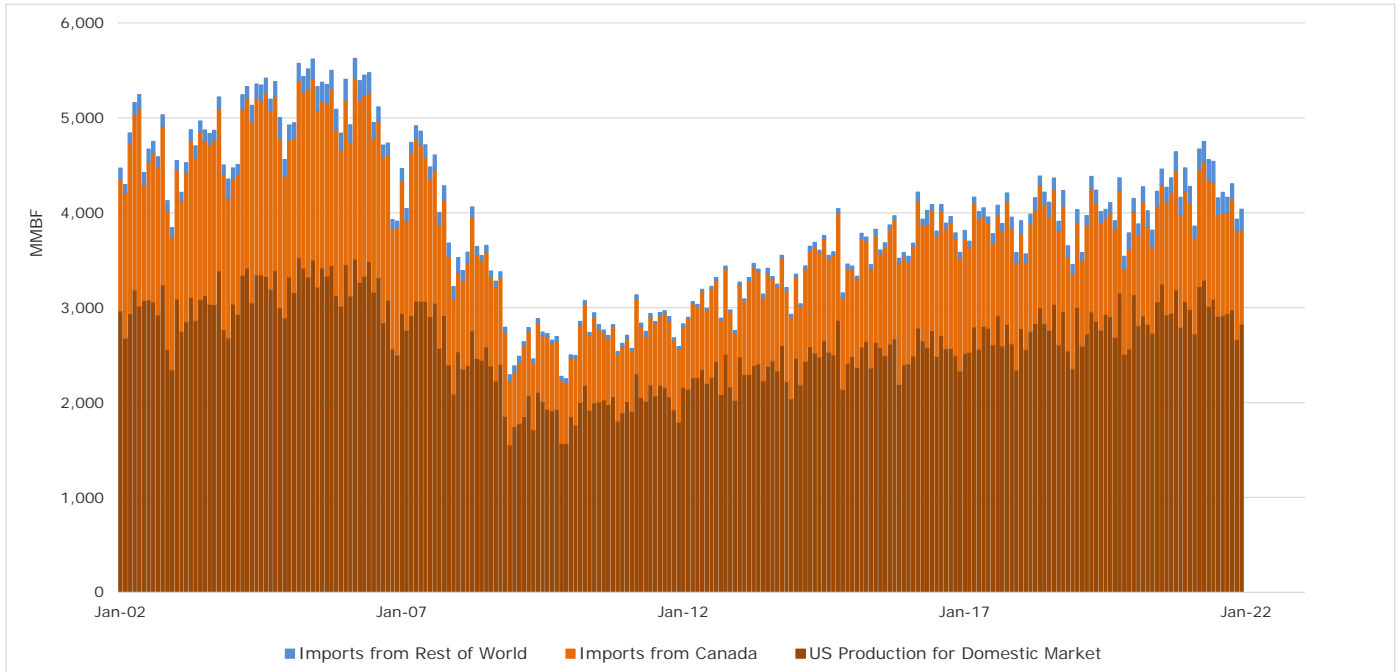
Figure 4 combines housing starts and lumber availability. The two series are very strongly correlated ($R = 0.9575$).

The peaks and low points do not always occur simultaneously. For example, in the winter of 2002-2003, the low point in lumber availability was in December 2002 and the low point in housing starts was in February 2003. But lumber does not always lead housing because two years later housing starts hit their low in November 2004 and lumber hit its low in December.

When we look at Figure 4, we think we see that the slope of the housing starts line is steeper than the slope of the lumber availability line. This means housing starts have been growing faster than lumber availability.

We turned the monthly data into annual numbers in Figure 5. Table 1 compares the highs and lows of the two series. Housing starts fell by over 55 percent in the big crash, but lumber fell by only 35 percent.

Figure 3. US Softwood Lumber Availability



Sources: US Foret Service, Western Wood Products Association, US Department of Commerce



Figure 4. US Housing Starts (NSA) and Softwood Lumber Availability

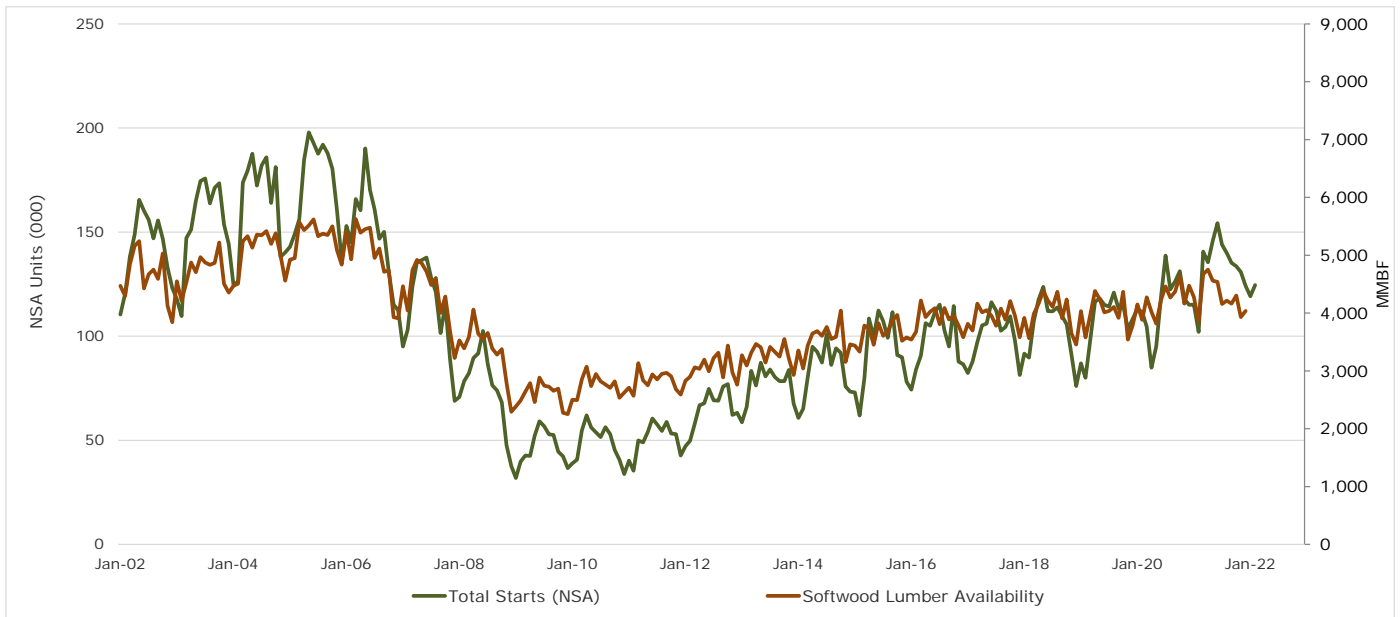


Figure 5. Annual US Housing Starts and Softwood Lumber Availability

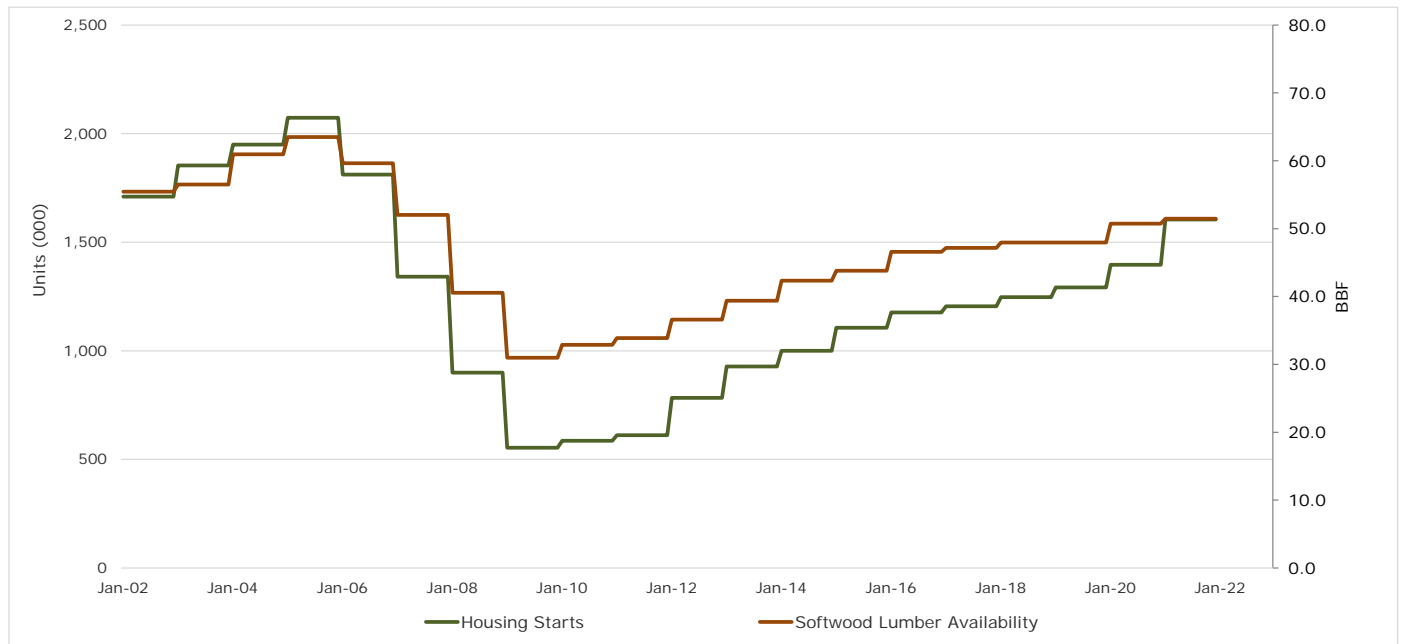


Table 1 Housing and Lumber

	Housing Starts	Softwood Lumber Availability
2005 Peak	2,073	63
2009 Trough	900	41
2021 Peak	1,605	51
2006-2009	-1,173	-23
	-56.6%	-36.2%
2009-2021	705	11
	78.3%	26.9%

Housing starts have since increased by nearly 80-percent, while lumber production is barely 25 percent higher than in 2009.

Additional Thoughts

- Sharply higher lumber prices since 2020 are due in part to housing starts increasing faster than lumber availability.
- While lumber availability did not fall as far as housing starts, many sawmills closed between 2006 and 2009, and many of them were never restarted, so lumber supply has struggled to keep up with demand.
- Softwood lumber production is declining in British Columbia as new mills are coming on line in the US South. This means some of the

new southern capacity will not add to the supply, but replace existing capacity.

- Not all softwood lumber goes into new housing.
 - Some goes into repair and remodeling, but those volumes are challenging to estimate. Repair and remodel activity is reported in dollars because it includes a lot of non-lumber expenditures (new carpet, new kitchens, new roofs, etc.).
 - Softwood lumber is used in non-residential applications as well.



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