



Western Timber Prices—Update

Constant Volatility

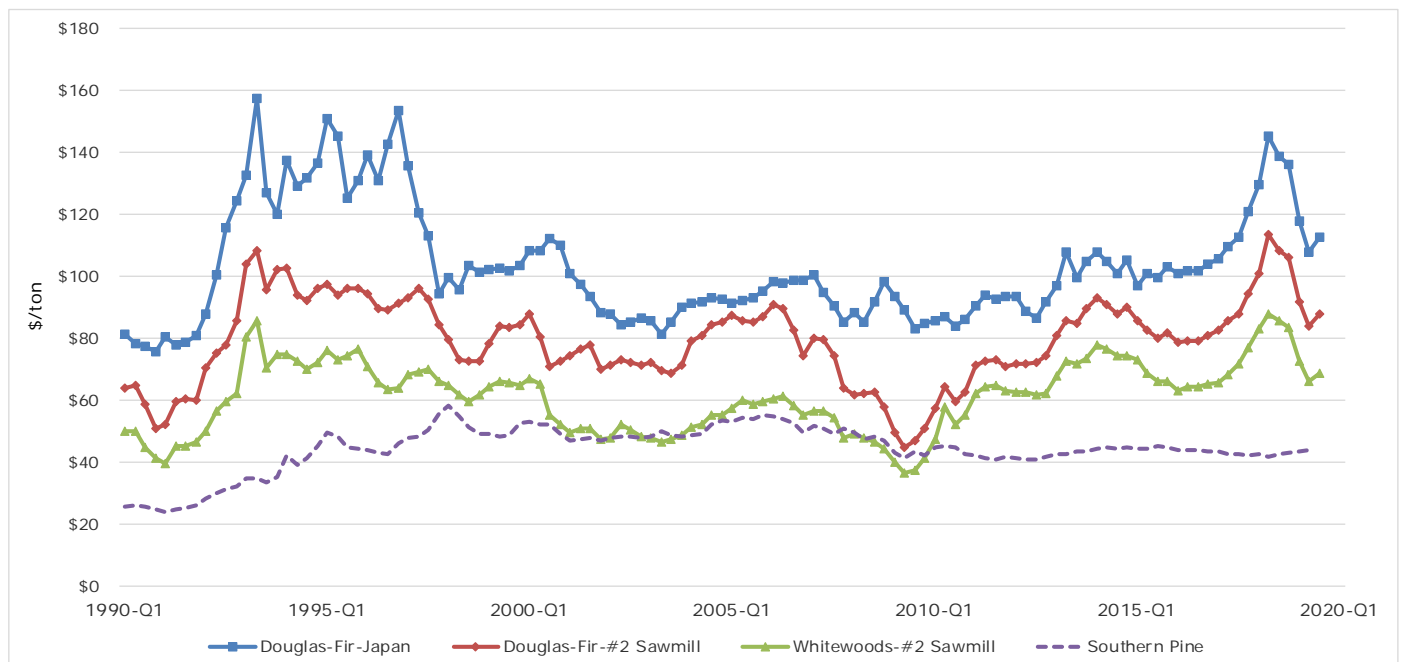
We have not specifically addressed western timber prices since Vol 2 No 2 *Western Timber Prices* in 2005. Back then, prices had been subjected to a supply shock in the early 1990s when timber harvesting was halted on National Forests and a demand shock in 1997 when several Southeast Asian economies collapsed.

Timberland owners have continued to experience more price volatility in the Pacific Northwest than in the South (Figure 1). Timber prices have reflected the Great Recession, the tremendous increase in demand from China and the tariff war between the US and China.

Prices for domestic grades fell sharply starting in the first half of 2006 as housing starts began the free-fall that contributed to the onset of the Great Recession (Figure 2). Log prices and housing starts continued to fall into 2009. (In contrast to housing starts and timber prices, the S&P 500 didn't peak until October of 2007, then crashed in October of 2008.)

Table 1 shows that western domestic log prices fell about twice as much as southern log prices between 2006 and 2009.

Figure 1. Log Prices for the Pacific Northwest and South Prices (nominal \$/ton)



Sources: OR WA Log Market Report, Pacific Rim Wood Market Report, Log Lines, Oregon Department of Forestry, Timber Mart-South

Figure 2. Housing Starts and Log Prices (nominal \$/ton)



Sources: OR WA Log Market Report, Pacific Rim Wood Market Report, Log Lines, Oregon Department of Forestry, Timber Mart-South, US Census Bureau

Table 1. Nominal Log Price Changes Since 2006

	Douglas-Fir-Japan	Douglas-Fir-#2 Sawmill	Whitewoods-#2 Sawmill	Southern Pine
2006-Q2 (the pre-recession peak)	\$98	\$90	\$61	\$54
2009-Q2	\$89	\$45	\$36	\$41
% Change	-8.9%	-49.9%	-40.5%	-23.0%
2018-Q1 (the pre-tariff peak)	\$129	\$101	\$83	\$43
% Change from 2009-Q2	45.3%	125.0%	127.3%	3.0%
2019-Q2	\$108	\$84	\$66	\$44
% Change from 2009-Q2	20.8%	87.1%	80.9%	6.5%
% Change from 2018-Q1	-16.8%	-16.8%	-20.4%	3.4%

A fairly steady increase in US housing starts, increasing demand from China and less lumber available from British Columbia—largely the result of years of losses to the mountain pine beetle with some Canadian softwood lumber tariffs thrown in—all helped push western log prices to (nominal) levels not seen since 1997. Domestic prices were 125 percent higher in the first quarter of 2018 than they were in the second quarter of 2009.

Then the US and China began lobbying tariffs at each other. While prices for the domestic grades are twice as high as they were in 2009, they are down 15-20 percent from the 2018 peak (with a slight improvement in Q3 2019). This time, export prices fell as well.

In contrast, southern pine sawlog prices have been much calmer since 2009. They “peaked” in 2015, but are currently only 6-7 percent higher than they were in 2009.

Table 2. Correlation Coefficients for Nominal Log Prices

	Douglas-Fir-Japan	Douglas-Fir-#2 Sawmill	Whitewoods-#2 Sawmill	Southern Pine
Douglas-Fir-Japan	1.0000	0.8096	0.7657	0.0466
Douglas-Fir-#2 Sawmill		1.0000	0.9013	0.2077
Whitewoods-#2 Sawmill			1.0000	0.0916
Southern Pine				1.0000

Not surprisingly, southern pine sawlog prices are not correlated with western log prices (Table 2). The table also shows that the western domestic log grades are very strongly correlated with each other and slightly less so with export grades.

Note that, in spite of all the volatility in the West, the price spread across species and grades is similar to what it was 30 years ago (Table 3 and Figure 1). For example, domestic Douglas-fir logs sold for \$38/ton more than southern pine logs in 1990 and they were selling for \$40/ton more than southern pine in the second quarter of 2019.

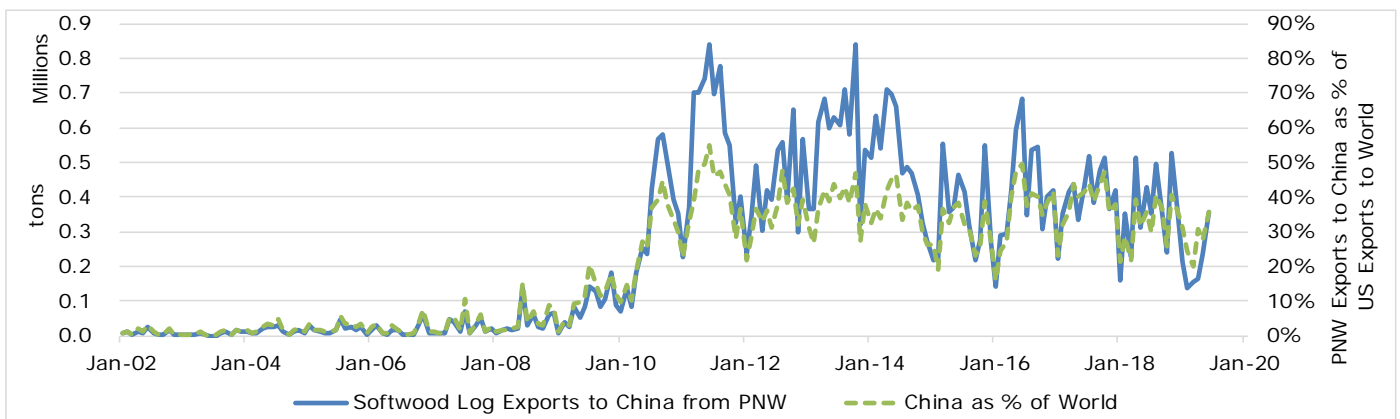
Exports

We’ve attributed the recent drop in western prices *in part* to the tariff war between the US and China. Is there data that supports that view? Well, yes, but...it may not be obvious from the chart that log exports are down (Figure 3). However, the numbers tell us that logs exports to China were 36 percent lower in the first half of 2019 than they were in the first half of 2018. June 2019 showed a big increase over previous months in 2019, but shipments were still down 17 percent from the previous June.

Table 3. Nominal Log Price Relationships

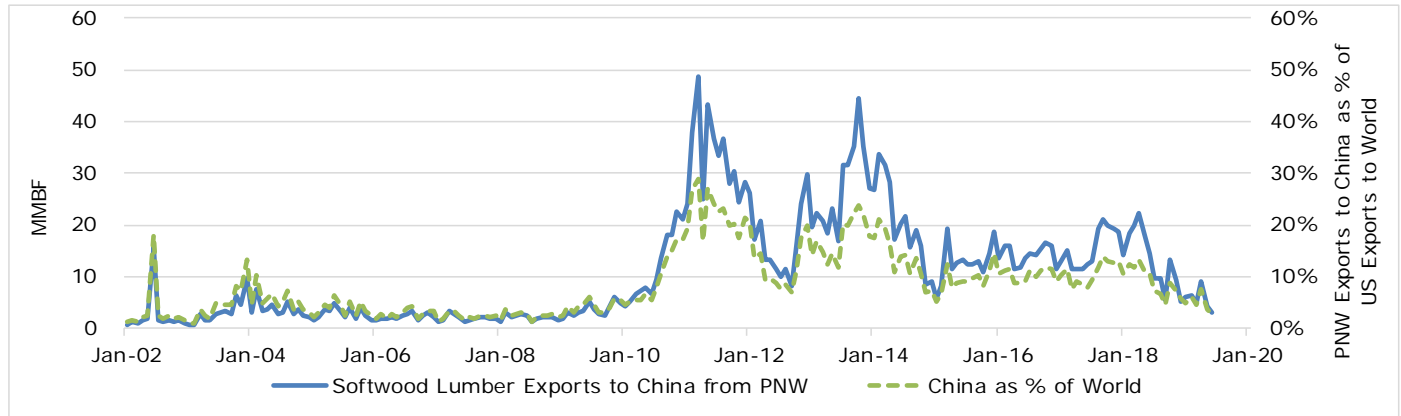
	Douglas-Fir-Japan	Douglas-Fir-#2 Sawmill	Whitewoods-#2 Sawmill	Southern Pine
1990-Q1				
Price	\$81	\$64	\$50	\$26
Price vs. SO Pine Price	\$56	\$38	\$24	\$0
2014-Q3				
Price	\$89	\$45	\$36	\$41
Price vs. SO Pine Price	\$48	\$4	(\$5)	\$0
2019-Q2				
Price	\$108	\$84	\$66	\$44
Price vs. SO Pine Price	\$64	\$40	\$22	\$0

Figure 3. Pacific Northwest Softwood Log Exports



Source: US Department of Commerce

Figure 4. Pacific Northwest Softwood Lumber Exports



Source: US Department of Commerce

The decline in lumber exports to China is much more apparent (Figure 4). Volumes peaked in April 2018 and have been falling ever since. 22 MMBF were exported to China in April 2018 and only 3 MMBF were exported in June 2019.

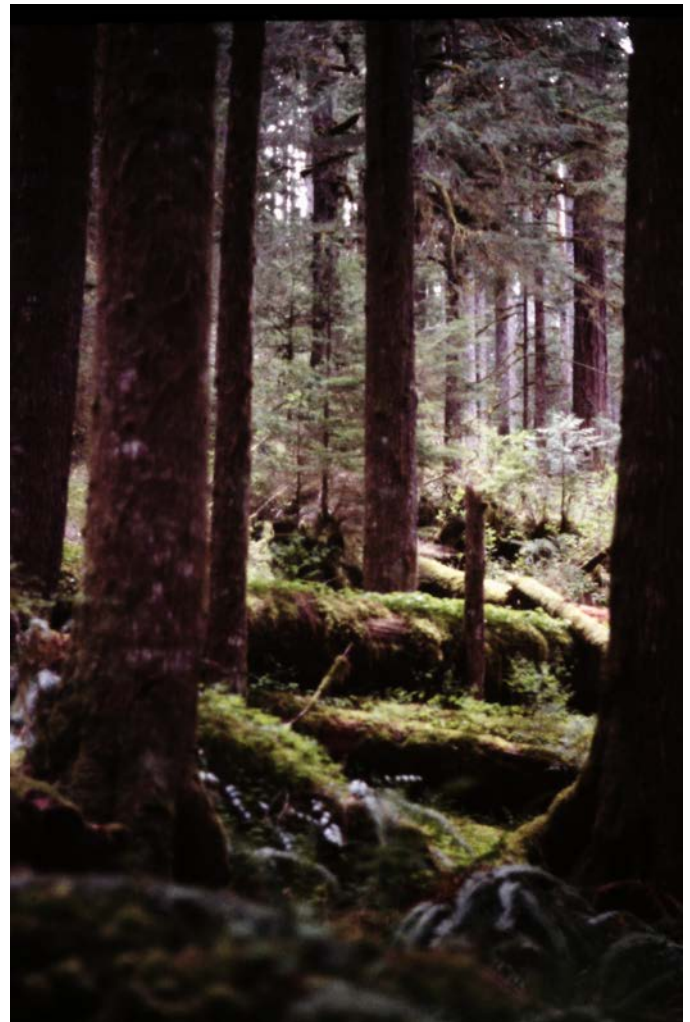
That sharp drop in lumber exports has been accompanied by a decrease in demand for western logs.

Summary

Western log prices have been much more volatile than southern log prices since 1990, but this has often been due to exposure to changes in export markets.

Western domestic grades are strongly correlated with export grades and the three series we’ve shown all started falling as the tariff war with China began. That fight has resulted in fewer western log exports and far fewer western softwood lumber exports.

We note that log prices may have leveled off in 2019 (until the next change in tariffs?).



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