



Log Prices, Log Exports and Timberland Returns

Log Prices

Figure 1 shows log prices for the Westside region (west of the Cascades Range) of the Pacific Northwest. (Note: the “Japan” in *Douglas-fir Japan* is a log grade, not (necessarily) the destination of the log.)

Westside timberland owners have had a wild ride over the past 30 years. The sharp jump in log prices in the early 1990s came when the US shut down harvesting on all National Forests in the West to protect habitat for the northern spotted owl. This instantly removed about half of the region’s timber supply from the market and led to the closure of many sawmills. The crash in log prices five years later was due to the collapse of the economies of

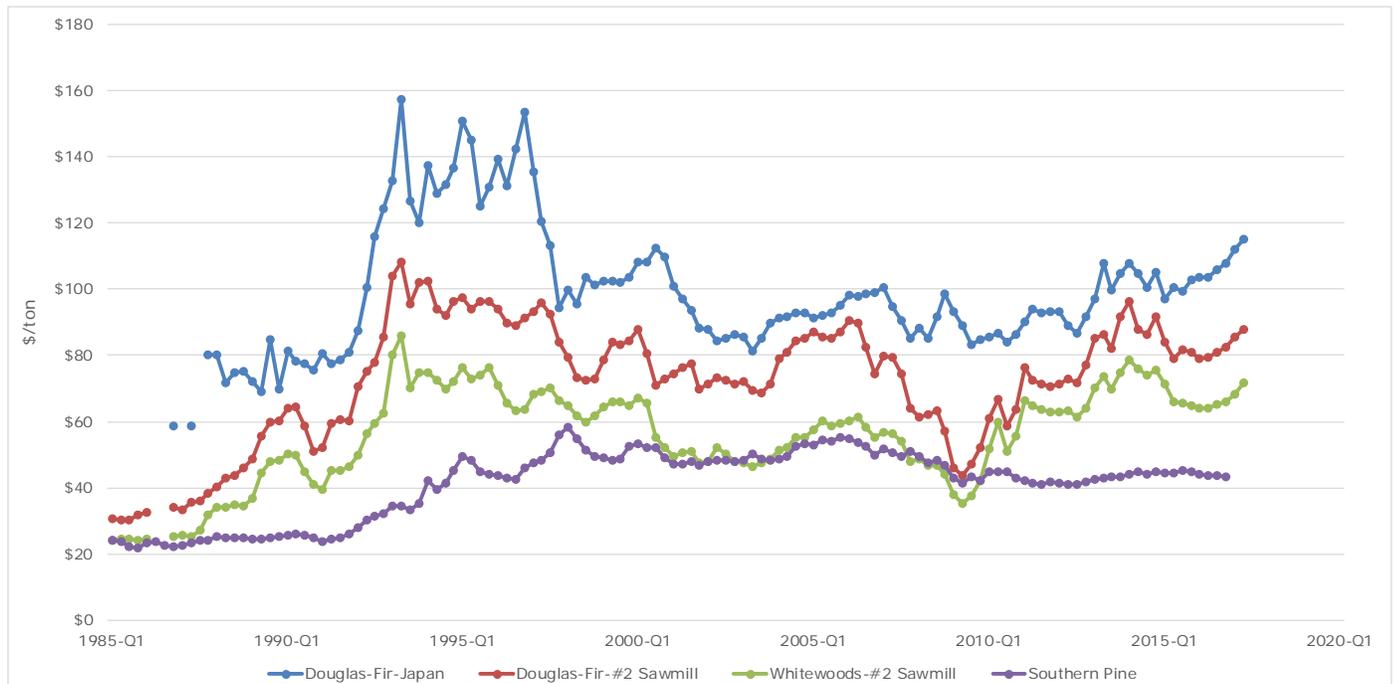
several southeast Asian countries. The prices for the domestic grades (#2 sawmill) dropped again when US housing starts collapsed.

Compare this history to the that of southern softwood log prices in Figure 2. It took some time build new sawmills in the South to replace those that closed in the West in the early 90s, so southern log prices rose gradually rather than spiking. Southern prices leveled off after the 1997 crisis in Asia rather than crashing as the export grades did in the West. And they did not drop as sharply during the housing crash.

Figure 1. Western Log Prices



Sources: Oregon Department of Forestry, Log Lines, Pacific Rim Wood Market Report and Oregon/Washington Log Market Reports

Figure 2. Western and Southern Log Prices

Sources: Oregon Department of Forestry, *Log Lines*, *Pacific Rim Wood Market Report*, *Oregon/Washington Log Market Reports* and *Timber Mart-South*

Log Exports

But why have western domestic log prices recovered after the housing crash, while southern prices have not? And why didn't Japan-grade log prices fall during the housing crash? Part of the answer is exports (strong export markets pull domestic log prices up as well).

Figure 3 shows US softwood log exports since 1992. It shows log exports have always been much lower in the South than in the West.

Western log exports dropped from 1992 to 1998¹ and there were at least two factors besides the Asia crisis that contributed to this:

- The loss of public timber caused some mills to divert logs from their timberlands to their mills instead of export markets.

¹ This was not a *direct* result of closing the National Forests to harvesting. Timber harvested on public lands in the West, whether state or federal, cannot be exported. Lumber companies often purchased public timber to run through their mills and exported timber cut from their own lands.

- China nearly disappeared from the market during this period, but not because of the economic crisis in 1997—the US shipped 4 mm tons of logs to the US in 1986 and this dropped steadily to 0.083 mm tons in 1996. (See Forest Research Notes Vol 7, No 3 *China Exports in Perspective*).

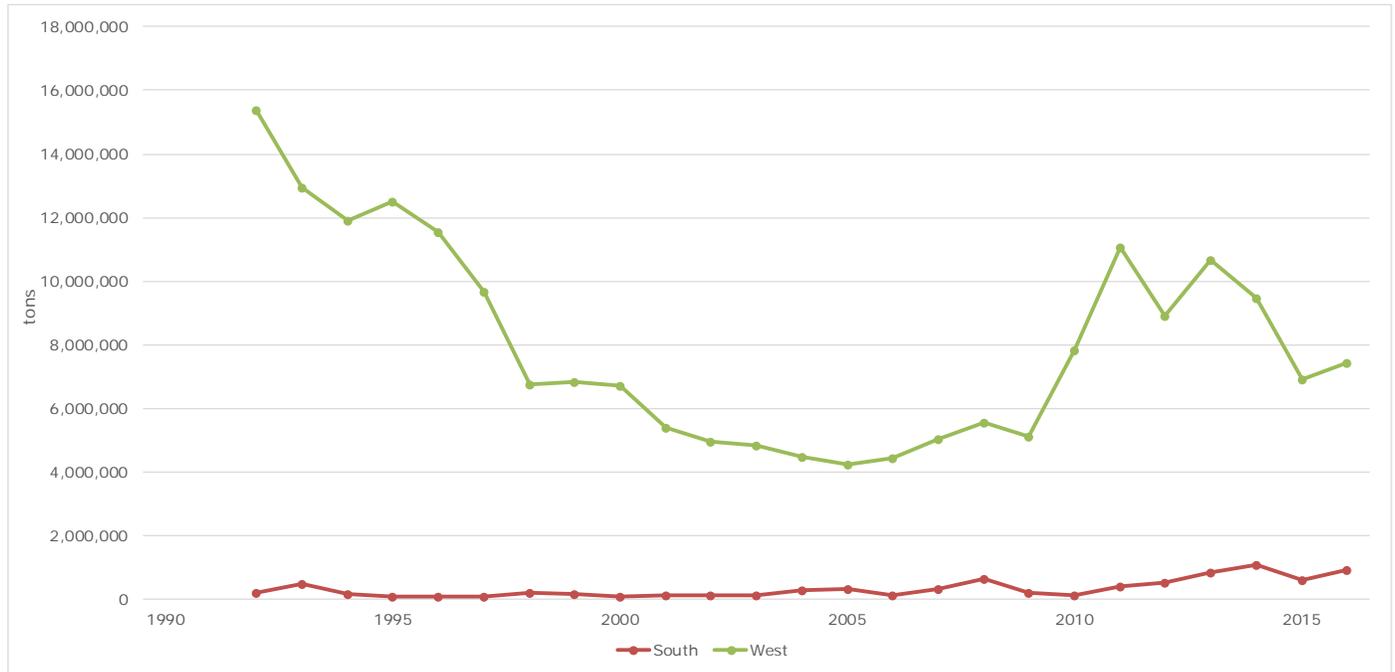
Log exports in the West were then *relatively* stable between 2000 and 2009, before increasing sharply beginning in 2010 as China ramped up its economic stimulus program.

Meanwhile, southern softwood log exports topped off at just over 1 mm tons in 2014 or about 1/10 of the western volumes.

This clearly shows that the West's softwood log export markets have been a big factor in the rise in log prices since 2010. Without the exports markets, southern log prices have not recovered.

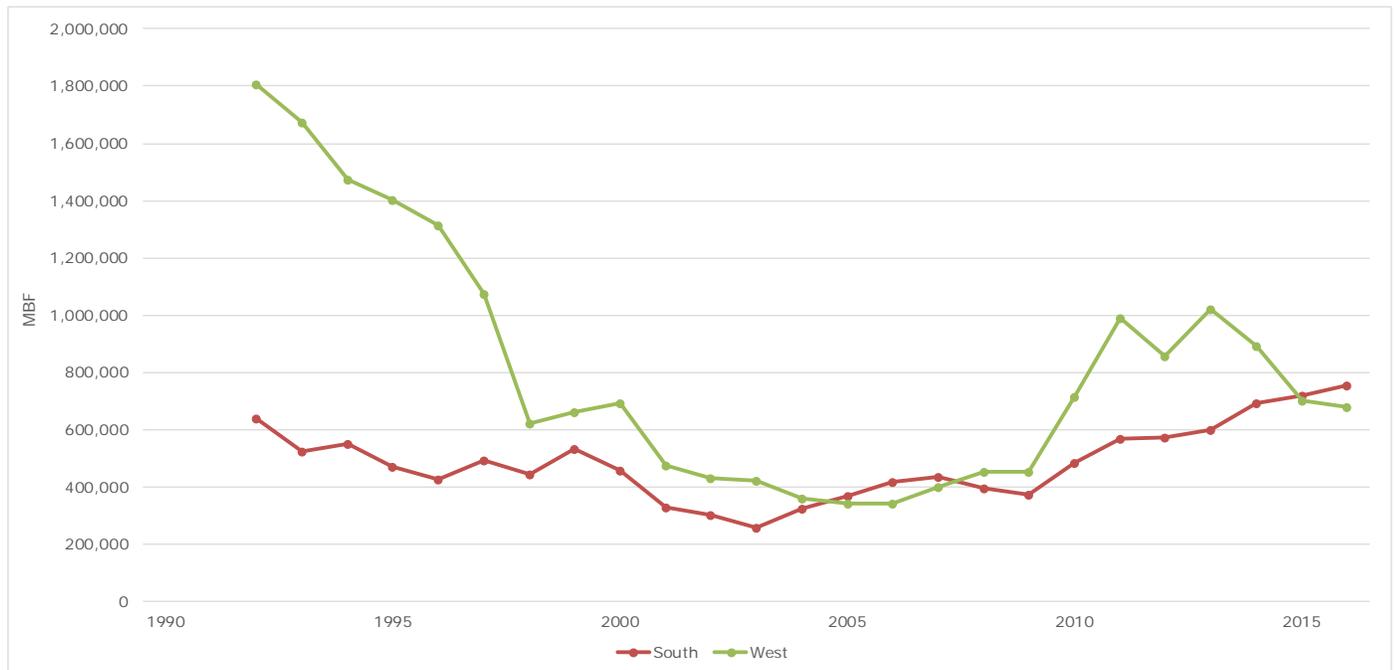
While the South is not a big *log* exporter, it has kept pace with the West on *lumber* exports since 1998 (Figure 4).

Figure 3. US Softwood Log Exports



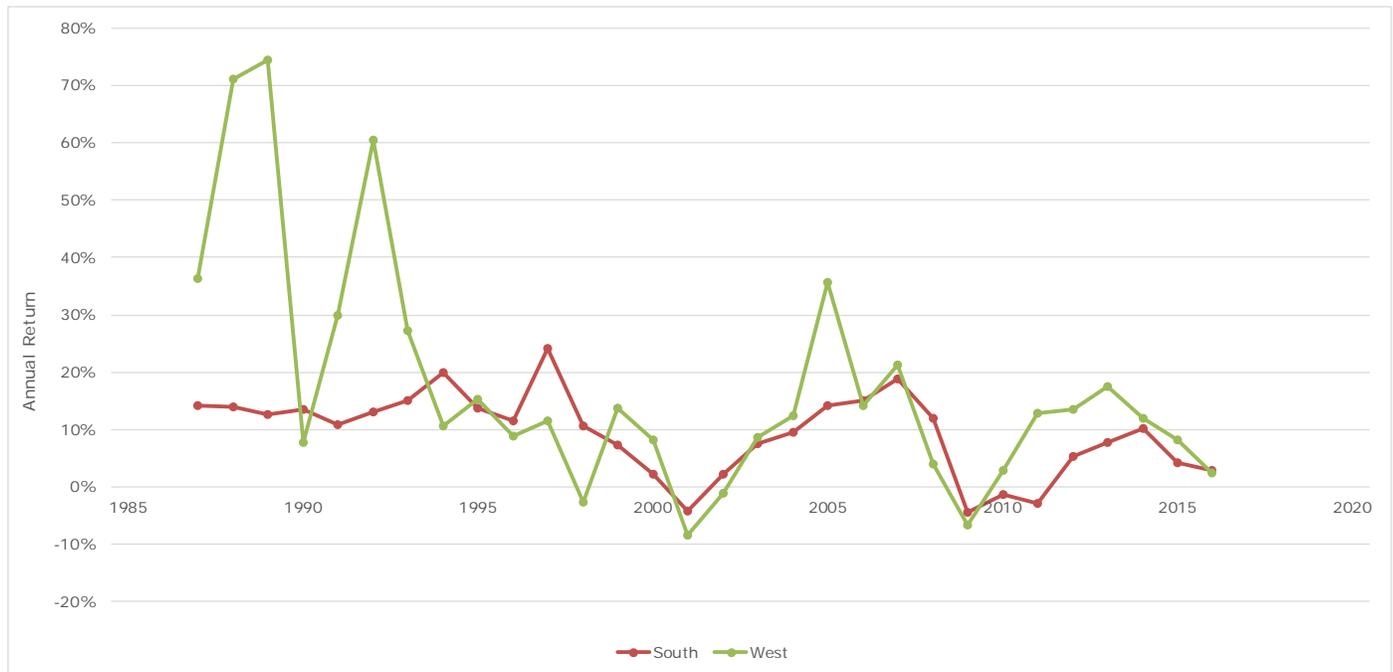
Source: US Department of Commerce

Figure 4. US Softwood Lumber Exports



Source: US Department of Commerce

Figure 5. US Timberland Returns



Source: NCREIF

Timberland Returns

So western log prices have recovered from the Great Recession while southern prices have not, and that is partly due to log exports from the West Coast. How has that benefitted timberland owners?

Figure 5 shows that those higher western log prices have helped to produce higher western timberland returns in most years.² Since 1995 (after the western returns settled down), the annualized returns through 2016 for the West are 8.9%, while those for the South are 7.4%.

Exports vs. Domestic Sawmills

Timberland owners benefit from the higher prices that log exports bring, but domestic sawmills often struggle to get the logs they need to operate when export markets are strong. This is why many countries restrict or prohibit the export of logs from public forests—the thinking is that it is better have more domestic sawmill jobs *here* and export the lumber than to export the logs and have more sawmill jobs *there*.

² Those very high western returns prior to 1990 were driven by a limited number of properties back when there weren't many properties in the western sub-index.

Events

Who Will Own the Forest

World Forestry Center, Portland, Oregon
September 12-14, 2017

Just a couple of weeks away, I will be on a panel discussing the NCREIF Timberland Index and other measures of timberland performance. My presentation, *Timberland Indexes*, will review and compare four different timberland indexes.

Forest Research Notes, Vol. 14, No.2
Copyright © 2017, Jack Lutz

Jack Lutz, PhD
Forest Economist
Forest Research Group
78 Stoneybrook Way
Hermon, ME 04401
207-605-0037

jlutz@forestresearchgroup.com