Western Timber Prices

The forest products industry on the west coast of North America has led an interesting life for the past 15 years. The region suffered a major supply shock in the early 1990s and a major demand shock in 1997, and timber prices moved sharply in the face of both shocks.

US National Forests were shut down in the early 1990s to protect the northern spotted owl. The administrative removal of about half of the nation’s softwood supply from the market caused an abrupt adjustment. US west coast log prices (real prices) doubled between 1991 and 1993 (Figure 1). Prices in British Columbia followed.

This was a great time to be a timberland owner in the Pacific Northwest, but a stressful time to be a sawmill owner. Many sawmills closed in the region, especially those that were entirely or heavily dependent on National Forest timber. The domestic lumber industry adjusted fairly quickly to the shock as shown by the steady decline in domestic grade (#2 sawmill) prices after the peak in 1993. The behavior of export log prices after 1993 is interesting because the supply of export logs was not directly affected by closing the National Forests. Regulations prohibited export of logs from National Forests and most State Forests at the time, so there was no reduction in the supply of export logs.

High prices for export logs reflected the demand for logs in a number of countries in Southeast Asia. This area suffered an economic collapse in 1997. Export log prices were in free-fall during the year and gave back most or all of the gains achieved in 1992 and 1993. This was a great time to be a sawmill owner (well, as great a time as you can have as a sawmill owner) in the Pacific Northwest, but a stressful time to be a timberland owner.

Figure 1. Pacific Northwest Log Prices (2004$)

Source: Log Lines, Oregon Department of Forestry and Pacific Rim Wood Market Report
In real terms, log prices in the Northwest are at about the level they were in 1991. Domestic grades declined steadily off the 1993 peak, while export grades made an abrupt adjustment in 1997.

Figure 2 shows that, in spite of all the turmoil in the log markets, the price difference between Douglas-fir and whitewoods has remained fairly constant at about $200/MBF. (The price gap between Douglas-fir and the whitewoods reflects a quality difference between the species. Douglas-fir has better mechanical properties than western hemlock (which makes up a majority of the whitewoods volume from coastal forests) and southern pine species (see below)).

In contrast to the differences between species, Figure 3 shows that the export premium export price for Douglas-fir has just about disappeared. (The pattern is similar for the China/Coastal 12 sort.)
How have log prices in the Northwest compared to those in the South? Figure 4 shows that the South took a long time to catch up with the Northwest. The late 1990s saw a movement of the lumber industry out of the Northwest and into the South, which contributed to the decline in western prices and in the increase in southern prices. Real (2004$) southern pine prices peaked in 1998 and managed to catch up to (by declining slower than) whitewoods prices in 2000 and have kept pace with them ever since.

**International Competition**

Some (or most) of the price behavior in export markets can be explained by the supply and demand shocks we discussed earlier. However, the decline in PNW export prices is also due to increases in wood supplied by other areas. Figure 5 shows Douglas-fir export volumes from US west coast customs districts. Volumes have been declining since 1990.
Figure 6 shows Douglas-fir log prices declined in 1990 and 1991 in the face of declining export volumes. And they rose sharply in 1992 and 1993 in the face of declining export volumes. And export log prices stayed relatively level (with vigorous volatility) between 1993 and 1997 in the face of declining export volumes. And export log prices declined between 1988 and 2004 in the face of declining export volumes.

The decline in volumes and prices has been caused in part by an increase in shipments of other species to Pacific Rim markets by other timber supplying countries such as Chile, New Zealand and Australia. These other areas have been expanding their exports since the 1980s, as is reflected in the decline of US exports since the 1990s.

**Summary**

Real log prices for western species are about at the same level they were 15 years ago.

Real prices for both domestic and export logs declined slightly in 1990 and 1991, then rose sharply in 1992 and 1993 in response to a supply shock.

Domestic log prices declined steadily for about ten years after the 1993 peak and have risen slightly since late 2003.

Export log prices stayed near the 1993 peak price until 1997 when they fell sharply in response to a demand shock. They declined more slowly after that until the export premium disappeared.

Domestic and export log prices have been rising at a modest rate since late 2003.