

# IMPACT OF THE GREAT RECESSION ON THE FOREST PRODUCTS INDUSTRY IN THE WESTERN UNITED STATES

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**Abstract.**—Wood product prices and production fell dramatically in 2009 as a severe recession and massive decline in U.S. housing led to a global financial crisis. In 2009 and 2010, virtually every major western mill suffered curtailments and 30 large mills closed permanently. Sales value of wood and paper products in the West dropped from \$49 billion in 2005 to \$34 billion in 2009. Employment declined by 71,000 workers and lumber production fell by almost 50 percent from 2005 to 2009. Capacity utilization at sawmills and other timber-using facilities in the West fell from more than 80 percent in 2005 to just over 50 percent in 2009 and 2010. With the exception of exports and some paper markets, U.S. wood products markets have improved little since the recession officially ended in 2009. Modest improvements are expected in domestic markets in the short term, but substantial improvements are unlikely until 2014 or later, as U.S. home building recovers and global demand increases. Much of the West retains the bulk of its pre-recession (2006) capacity and mills could respond quickly to increased demand spurred by economic recovery.

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## INTRODUCTION

The first decade of the 21st century proved tumultuous for the global and U.S. economies and the western forest products industry. Following a relatively mild recession in 2001, a booming economy, low interest rates, easy access to credit, and real estate speculation fostered more than 2 million U.S. housing starts in 2005 and record lumber consumption from 2003 to 2005 (Western Wood Products Association 2010).

The falloff in U.S. housing markets beginning in 2006 abruptly ended the credit-fueled growth that had been based on the rapid increase in home prices up to that point. This period was followed by an official recession from December 2007 through June 2009 (National Bureau of Economic Research 2010), a massive decline in home values and housing-related financial instruments, and ultimately a global financial crisis in the last quarter of 2008. Tightening credit, an oversupply of foreclosed homes, and a collapse in speculative housing investment made 2009 through 2011 the worst years for home building and wood products markets since the Great Depression. Housing starts hit a 50-year record low of 554,000 in 2009, with only slight increases during 2010 and 2011. Wood product prices and production fell dramatically during the recession and have remained quite low throughout the post-recession “recovery.”

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## IMPACTS ON THE FOREST PRODUCTS INDUSTRY IN THE WEST

The Great Recession and housing collapse had large-scale impacts on the western forest products industry. Value of industry outputs fell 31 percent from \$49 billion in 2006 to \$34 billion (fob the producing mill) in 2009 (U.S. Census Bureau 2010). Employment dropped 29 percent from 249,000 workers in 2005 to 177,000 in 2009 (Table 1) and further to 170,000 in 2010, while earnings of workers fell almost 22 percent from \$12.9 billion in 2005 to \$10.1 in 2009 and 2010 (Fig. 1).

Every sector of the western forest products industry was negatively impacted by the economic downturn. The wood products sectors, which are more heavily dependent on housing and construction than paper products, experienced the largest impacts. Sales value of wood products fell from \$28 billion in 2005 to \$14 billion in 2009, while the primary and secondary pulp and paper industry was virtually unchanged at \$21 billion (in current year dollars) over the same period.

## LUMBER PRODUCTION AND TIMBER HARVEST

For at least 50 years before the recent housing collapse, the West was the major softwood lumber producing region in the country. Softwood lumber was the largest single component of the industry in the West, accounting for approximately \$8 billion per year or almost 40 percent of total value from the primary industry in 2004 and 2005. As U.S. housing starts fell by 75 percent and the U.S. consumption of softwood lumber dropped by half, lumber production in the West fell from more than 19 billion board feet (BBF) lumber tally (48 percent of U.S. production) in 2005 to an estimated 10.4 and 11.1 BBF in 2009 and 2010, respectively (less than 45 percent of U.S. production). In 2007, output of softwood lumber from the South exceeded output from the West for the first time since at least 1955. In 2009, lumber production in the West was at its lowest level in more than 50 years (Fig. 2). Because of the substantial decline in both prices and production, the value of lumber produced by western sawmills fell by more than 60 percent (in current year dollars) from nearly \$8 billion in 2004 and 2005 to less than \$3 billion in 2009 and 2010 (U.S. Census Bureau 2010).

**Table 1.—Western states forest products industry employment, 2005 vs. 2009**

	2005	2009	Net change	% Change
<b>Pacific Coast states</b>				
Alaska	1,805	1,465	(340)	-19
California	79,513	56,630	(22,883)	-29
Hawaii	1,091	984	(107)	-10
Oregon	58,858	42,578	(16,280)	-28
Washington	44,416	32,612	(11,803)	-27
Pacific Coast subtotal	185,683	134,269	(51,414)	-28
<b>Interior West states</b>				
Arizona	14,222	7,160	(7,062)	-50
Colorado	9,521	7,293	(2,228)	-23
Idaho	14,116	10,028	(4,088)	-29
Montana	9,783	7,464	(2,319)	-24
Nevada	3,358	2,003	(1,355)	-40
New Mexico	3,715	2,623	(1,092)	-29
Utah	7,282	5,941	(1,341)	-18
Wyoming	1,148	629	(519)	-45
Interior West subtotal	63,145	43,141	(20,004)	-32
<b>Grand Total</b>	<b>248,827</b>	<b>177,410</b>	<b>(71,418)</b>	<b>-29</b>

Sources: U.S. Department of Commerce 2012; U.S. Department of Labor 2012; Forest Industries Data Collection System 2012.

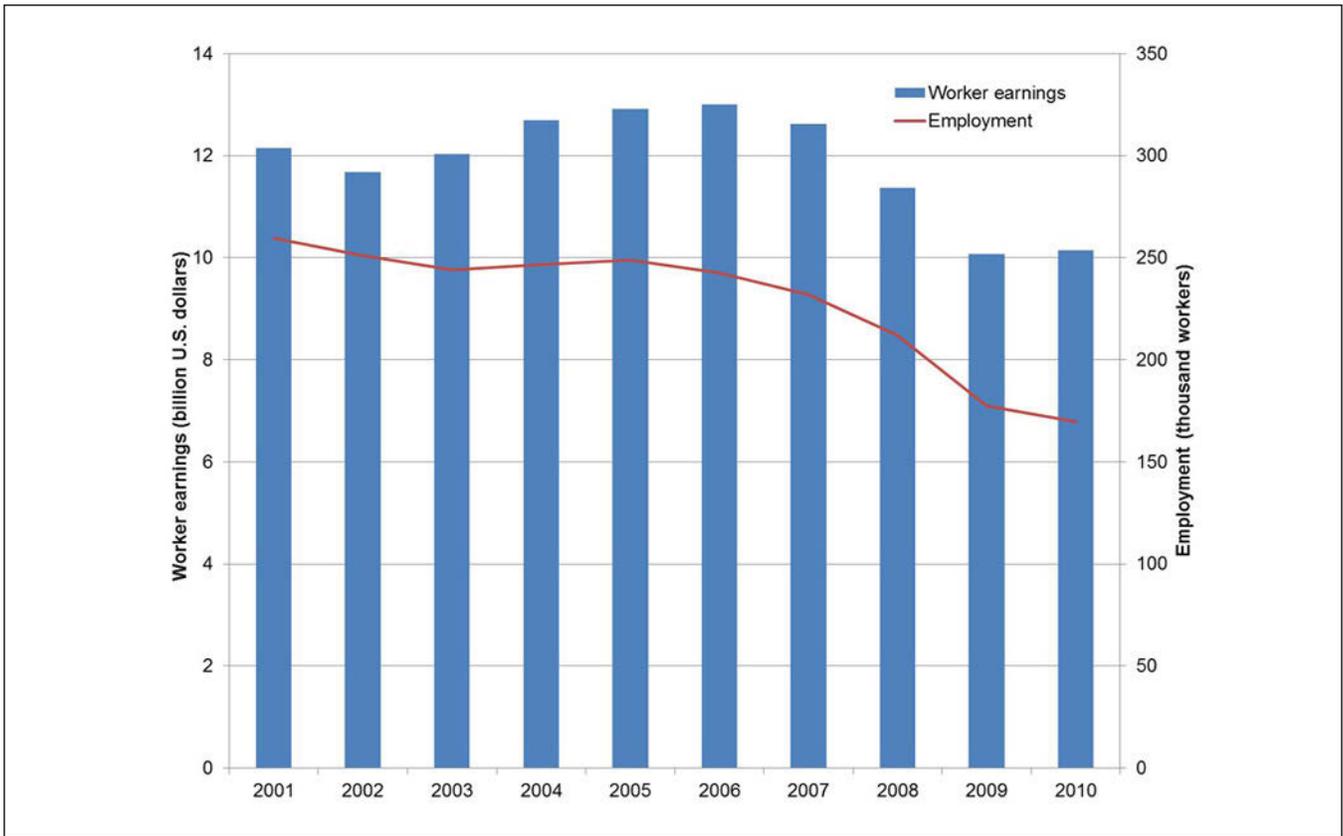


Figure 1.—Forest products industry worker earnings and employment in the West, 2001-2010.

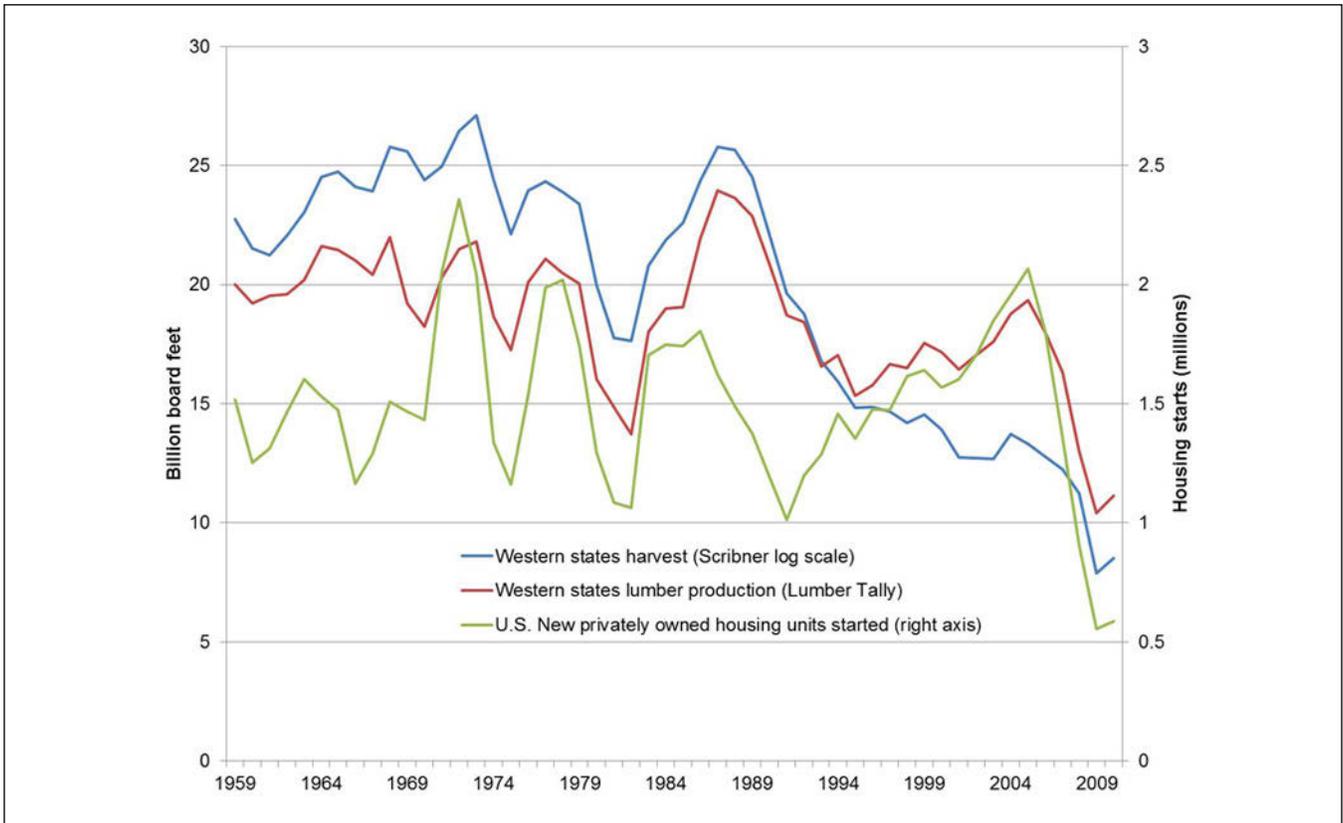


Figure 2.—New U.S. home construction and western states timber harvest and lumber production, 1959-2010.

Timber harvest volume in the West also fell dramatically during the downturn, from more than 13 BBF Scribner in 2004 and 2005, of which more than 70 percent was used to produce lumber, to 7.9 BBF in 2009 (Fig. 2). During 2009 and 2010, West-wide harvest and lumber output were at the lowest levels since the late 1940s. These extremely low timber harvest and lumber production figures are particularly notable when considering U.S. population in the late 1940s was less than half of the 2011 population of 311 million people. Timber harvest fell by just over 40 percent in both the Pacific Coast and Interior West regions from 2005 to 2009, while lumber production fell more than 45 percent.

## LOSSES IN INDUSTRY INFRASTRUCTURE: TIMBER PROCESSING CAPACITY

At the start of the Great Recession in 2007, annual capacity to process timber in the West was an

estimated 14.4 BBF, and by 2010, capacity had declined by 10 percent to an estimated 13 BBF. Capacity utilization, however, declined much more precipitously from around 80 percent during the 2003 to 2006 period to 64 percent in 2008 and 56 percent in 2010 (Forest Industries Data Collection System 2012, Smith and Hiserote 2010).

## EXPORTS

From 2000 to 2009, log exports from the West remained relatively consistent, and Japan was the dominant destination (Fig. 3). This trend began to change in 2009 when the proportion of log exports going to China began to rise. By 2011, the volume of logs shipped to China had jumped by almost 600 percent to reach 1.2 BBF Scribner, equivalent to 14 percent of the West-wide harvest in 2010. This log export trend is likely to persist until domestic demand for wood products returns, Chinese demand decreases, or policy changes impact log exports.

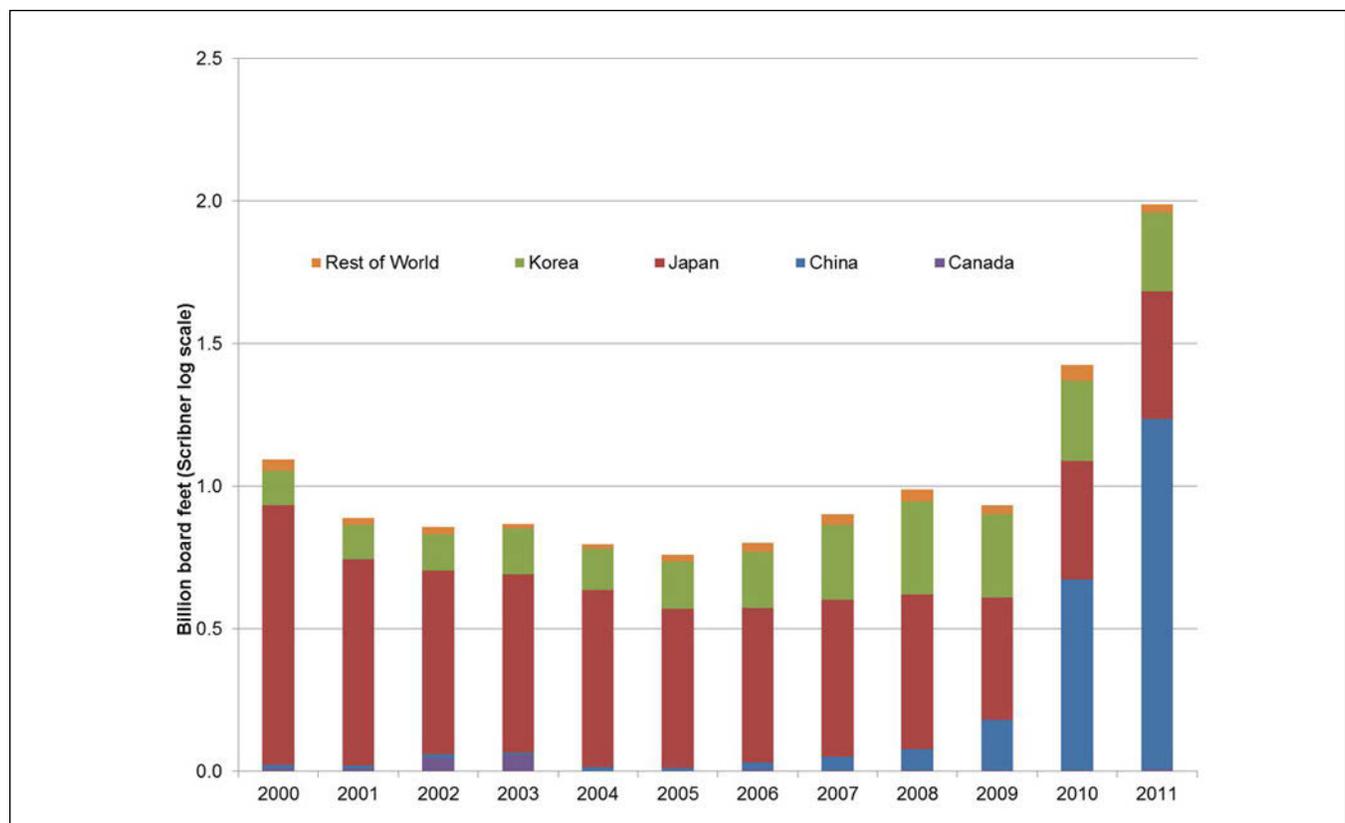


Figure 3.—Volume of softwood logs exported from western customs districts, 2000 to 2011.

## FUTURE OUTLOOK

In 2012, U.S. lumber and wood products markets have shown little improvement. Modest improvements are expected in domestic wood products markets in 2013, with substantial improvements not predicted until 2014 or beyond, contingent upon recovery in U.S. home building and continued increases in global demand.

Low capacity utilization rates in the West suggest the possibility of additional mill closures, but because much of the reduced output is due to curtailments rather than permanent closures, the industry retains the ability to quickly increase production at existing mills when market conditions improve.

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