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OREGON DEPARTMENT OF FORESTRY

Oregon Log Exports

Situation and Solutions

Gary J. Lettman

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Abstract: Oregon log exports were near their lowest levels in almost 50 years before they began to climb in 2010. In 2010 low domestic demand for logs combined with increased international demand drove log exports higher. Log exports, although still well below historic highs reached in the 1980s, were a key driver in Oregon's 2011 log market, but they subsequently declined in 2012. Increased overseas demand for Oregon's wood products could provide an opportunity to revitalize and grow the State's forest products industry and thereby increase the forest sector's contribution to State and local economies.

Oregon Log Exports: Situation and Solutions

Summary

While domestic housing demand has traditionally fueled Oregon's forest products industry, in recent years exports of logs and manufactured wood products have been key drivers for the industry. This increased overseas demand for Oregon's wood products could provide an opportunity to revitalize and grow the State's forest products industry and thereby increase the forest sector's contribution to State and local economies. British Columbia, as an example, has been very successful in pursuing overseas markets for their manufactured wood products.

With an improving U.S. economy and recovering housing markets, the future looks bright for Oregon's wood products industry. Continued overseas demand for Oregon wood combined with a possible shortfall in worldwide timber availability could enhance those already bright prospects.

Oregon log exports were near their lowest levels in almost 50 years before they began to climb in 2010. In 2010 low domestic demand for logs combined with increased international demand drove log exports higher. Log exports, although still well below historic highs reached in the 1980s, were a key driver in Oregon's 2011 log market, but they subsequently declined in 2012. In 2010, log exports comprised 9-12% of Oregon timber harvests, increasing to an estimated 16-21% in 2011. With weakening Chinese demand for Oregon logs and improving domestic lumber and plywood markets, the percent of Oregon's timber harvest exported in 2012 declined. Regardless of the decline, log exports will likely remain a significant part of Oregon's forest economy for the foreseeable future, likely less so than in 2011, but more so than in the decade prior to 2010.

It has been argued that regulation or taxation targeted toward diverting logs from export markets to Oregon mills would retain wood raw material in domestic markets and thereby help maintain processing facilities and mill jobs. This proposition is debatable. Markets are complicated, and simplistic solutions can have unintended consequences. Exporting logs from public lands is already banned and there are numerous issues with regulating log flows from private lands. A key question is, would restricting exports of Oregon-grown logs actually result in that timber still being harvested for domestic processing in times of weak domestic demand for Oregon's lumber and plywood?

Instead of restricting private log exports, a better approach to improving State and local economies would be to increase sustainable timber supply, to strengthen utilization of timber harvested sustainably from Oregon's forests, and to expand existing and to develop new markets for value-added forested products manufactured from Oregon-grown timber. This approach's foundation would be to develop a broad forest cluster strategy. This strategy could include new and innovative ways of sustainably managing Oregon's forests, well-conceived and well-executed log and value-added forest product export policies, and development of investment tactics for revitalizing manufacturing and marketing of Oregon's processed wood products. Such an approach would recognize the dynamic nature of markets while permitting separate yet connected policy initiatives to best meet needs to grow

State and local economies. Key to this process would be to foster cooperative marketing initiatives and to improve the efficiency and marketing prowess of Oregon's mills so that they can outcompete log exporters and Washington mills for Oregon-grown logs.

Introduction

With the increase in exports of Oregon-grown logs to China since 2009 has come considerable discussion about the impact of these exports on Oregon's economy and on the vitality of western Oregon's rural communities. Some have opined that a large percentage of Oregon's timber harvest is being exported and that these exports hurt State and local economies, but Oregon log exports and the economic impacts of these exports have not been credibly quantified. To help address current log export issues, this assessment chapter provides information about:

1. The volume and value of Oregon's log exports and the percent of Oregon's timber harvest that is exported from the U.S. as logs,
2. The economic, legal, policy, and political issues related to Oregon log exports,
3. Alternatives for addressing log export issues, and
4. Recommendations for addressing log export issues.

Currently there is a growing understanding and consensus among Oregonians and a broad array of stakeholders about the need to restore both Oregon's federal forests and Oregon's forest economy. This development provides a great opportunity to improve the environmental, economic, and social contributions of Oregon's forests to the State's residents. This new consensus, in addition to ongoing work to enhance Oregon's forest cluster and to restore Oregon's federal forests to health, could provide an opportunity to stabilize and enhance contributions of log and finished wood products exports to Oregon's State and local economies.

History of Oregon log exports

The genesis of Oregon's log export issues goes back half a century to the 1962 Columbus Day windstorm. Also known as the "Big Blow," the storm originated as Typhoon Freda, the most intense extra tropical cyclone to strike the United States Pacific Northwest since 1880. On October 12, 1962 strong winds leveled billions of board feet of timber in Washington and Oregon. Foreign markets were pursued in order to fully utilize the downed wood, igniting a new demand for Oregon and Washington softwood logs, which continues today (Figure 1).

Initially, the new demand for Oregon's logs came from Japanese buyers who valued the large, high-quality softwood logs—Douglas-fir, western hemlock, and incense cedar—available at reasonable prices. Buyers from Korea and China later entered the market in the early 1980s. Japan, China, and Korea continue to be the primary buyers of Oregon log exports—mostly Douglas-fir and western hemlock—and are likely to remain so into the future.

Increasing foreign log demand, higher log prices, projections of timber supply shortages, and perceptions of the loss of mill jobs in rural Oregon communities soon created controversy about log exports.

By the late 1960s many Oregonians were calling for restrictions on log exports; others were strongly defending the benefits of this new log market. The log export conflict has been a running skirmish over the political landscape ever since (Cleaves, 1991).

Although most log exports in Oregon had been from timber harvested on private forest land, pressure to limit log exports resulted in laws prohibiting log exports from timber harvested from public land in Oregon. Log exports from federal lands have been prohibited since 1968; log exports from state and other public lands were completely banned in 1990. Rules were also enacted preventing substitution, exporting timber grown on a company's own land while processing timber purchased from public lands into wood products.

At the zenith of log exports in 1988, about 11 percent of Oregon's timber harvest was exported. Thereafter log exports steadily declined (Figure 1) until they were about one percent of Oregon's timber harvest by the late 1990s. As log exports declined, controversy about exporting logs diminished, replaced by concerns about declining timber availability from public lands.

The recent surge in Oregon log exports was driven by a combination of weak domestic markets and strong Chinese demand for wood, caused by their rapidly expanding economy. Following the disintegration of the housing market in the 2007-2009 "Great Recession," demand for Oregon's wood products and consequently demand for Oregon logs from local mills collapsed. This resulted in lower log prices in western Oregon (Figure 2). Lower log prices, lower timber availability from Russia resulting from stiff export duties, and a rapidly growing Chinese economy and housing market set the stage for a dramatic spike in Oregon log exports to China.

As shown in Figure 1, Oregon log exports again began to climb in 2010 and were a key factor in Oregon's 2011 log market. However, with subsequent weakening Chinese demand coupled with improving domestic lumber and plywood markets, the percent of Oregon's timber harvest that was exported in 2012 declined significantly from 2011. Increasing demand for manufactured wood products should keep timber prices relatively strong, which will have the dual effect of discouraging log exports and increasing returns to landowners, thereby helping keep forest land in forest uses.

Current and projected Oregon log exports

Having driven Oregon's log exports levels much higher in 2010 and 2011, China's sharp upward trend in log imports came to a halt in late 2011. With a slowing economy and prospects of relatively sluggish economic growth, Chinese construction activity slowed and inventories of logs and lumber at many Chinese ports reached high levels. Lower Chinese demand for wood products resulted in a decline in softwood log import volumes from 2011 to 2012. Figure 3 shows the decline in value of Oregon log exports from 2011 levels, and values remaining at a lower level than in 2011, but still at levels higher than seen prior to 2010.

Accurately projecting future Oregon log export volumes is difficult because many factors affect Oregon's log and value-added wood product exports. These factors include U.S. and global economies, national and international log and product supplies and demands, rebuilding from natural disasters (such as the post-tsunami reconstruction in Japan), currency exchange rates, Russian log export duties, interest rates, levels of U.S. housing starts, nonresidential construction, remodeling and manufacturing, and government programs and policies. Sometimes important factors affecting log exports can change rapidly. For example, recent changes in raw log and manufactured wood product demand from China have had significant impacts on Oregon's forest cluster over the last several years.

Log exports will likely remain a significant part of Oregon's forest economy for the foreseeable future, perhaps less so than in 2011, but more so than in the decade prior to 2010. China, Japan and Korea will likely continue to import Oregon logs, but improving U.S. demand for wood products will support higher log prices which will tend to limit log exports. Increasing domestic demand for Oregon's wood products and increasing exports of lumber have already caused log prices to increase, helping to lower log exports. A larger part of the overseas demand for Oregon wood could be met by increased exports of lumber and plywood, which increased from 2010 through September, 2012 (Figure 4) and should remain at relatively high levels for the foreseeable future.

Key to limiting log exports and processing more Oregon-grown wood in Oregon's mills is improving markets for lumber and plywood. These markets are rebounding from "Great Recession" lows, and Oregon lumber and plywood prices and exports of value-added wood products have been increasing (Figures 5 & 4). Indications are encouraging that domestic and international demand for Oregon's manufactured wood products could strengthen over the next several years in spite of the 2012 construction slowdown in China.

Fundamental to Oregon mills successfully competing for Oregon-grown logs is a healthy demand for housing in the U.S. The U.S. housing market is forecasted to continue to gradually improve (Figure 6), making a modest but steady recovery as the U.S. economy recovers. With stronger growth in employment and income, the demand for housing grows. In addition, there is a pent-up demand for housing due to low housing start levels since 2007. Home builders' and buyers' confidence is improving, financing is available, and homes are more affordable. Mortgage rates have fallen to near-record lows, and housing prices are about one-third lower than at the peak of the housing bubble in 2006. As the housing market has improved, demand for Oregon's logs by local mills has been increasing, which by driving up the price of logs could slow log exports.

Current Issues

The rise in exports of Oregon logs to China in recent years has generated considerable controversy, including questions as to the impacts on Oregon employment and the effects of log exports on rural communities and economies. Many of these communities are already reeling from mill curtailments and closures and other economic blows resulting from federal forest policies, environmental issues, and technological change. Arguments to rectify perceived problems run from completely banning log exports to provide more raw materials for Oregon mills to letting the marketplace allocate Oregon's

timber harvests. Currently, problems perceived as resulting from exporting Oregon logs appear to be moderating thanks to an improving U.S. economy and housing market.

While accurately projecting the impacts of changes in laws and policies related to log exports is difficult, it is clear that any proposed changes would be controversial. Different stakeholders—landowners, mill owners, State and local governments and people living in rural communities—would be differently affected by changes in laws and policies regulating the export of Oregon logs. There would be winners and losers and the political, environmental, economic, and social consequences of these changes could be large.

The issue most commonly brought up is jobs: exporting timber is equated to exporting jobs. Growing, harvesting, transporting and processing Oregon-grown timber creates many jobs in Oregon's rural communities, and processing logs locally could provide more jobs than exporting the same logs. The underlying assumption that the logs exported in times of weak domestic demand for wood products would still be harvested and would be processed in Oregon mills is questionable.

Growing and harvesting timber, transporting and sorting logs and manufacturing forest products all provide jobs, but fewer Oregon jobs if the logs are processed out-of-state. In addition to 2 logging jobs, 1 transportation job, and 3 jobs in forestry support and management, lumber and plywood manufacturing translates into about 3 mill jobs per million board feet (mmbf) of timber processed (OFRI 2012). Additional indirect and induced jobs result as these businesses purchase services and supplies and as employees spend their incomes. In comparison, relatively few additional Oregon jobs are created after logs are delivered to exporters. Less than 1 port job is supported per MMBF of logs exported (Holland 2012). In addition, most Oregon logs exported and most of the recent surge in Oregon log exports went through the Washington Port of Longview, resulting in some, but relatively few, Oregon port jobs being created or maintained. The relatively small number of Oregon port jobs created by log exports heightens concerns about losses of Oregon jobs from exporting Oregon-grown logs.

So how much Oregon-grown timber is exported? In 2010, 9-12% of Oregon's timber harvest was exported. With increased demand for Oregon's logs from China, approximately 16-21% of the 2011 timber harvest was exported. With weakening Chinese demand for Oregon logs and improving U.S. lumber and plywood markets, the percent of Oregon's timber harvest that was exported in 2012 declined. Log exports will likely remain a significant part of Oregon's forest economy for the foreseeable future, less so than in 2011, but more so than in the decade prior to 2010.

One key question is that, if exports of Oregon-grown logs were restricted, would the timber still be harvested? The answer is, yes at some point in time the timber would still be harvested. However, if domestic final product markets were weak at a time when log exports were restricted, some of the timber would not be harvested until final product markets improved. Exactly how much of the timber exported since 2009 would have been harvested without the higher log prices created by the log export market is unknown. As weak as lumber and plywood markets were after 2007, much of the Oregon timber harvested for export may not have been harvested until final product markets improved.

Conversely, if final product markets were strong, mills would be able to successfully compete for the logs and log exports would not be a significant issue. Lumber and plywood markets have improved dramatically over the last year, with prices rebounding more than 50% from the lows resulting from the “Great Recession” (Figure 5), and exports of Oregon-grown logs declined in 2011.

It is axiomatic that it would be better to export processed wood products—lumber, plywood, or pulp—than logs, thereby creating more domestic jobs and improving State and local economies. The problem is that Oregon wood products compete in a global market for both logs and wood products, and Canada has done a better job of selling lumber in that global marketplace. As a result, it is highly uncertain whether overseas importers of U.S. logs would switch from log imports to imports of Oregon-produced lumber, plywood and other value-added products and to what degree marketing initiatives could shift wood demand from log exports to finished products exports. Additional research is needed here. It is also unclear how much timber will be available for log and lumber exports once the housing sector fully recovers. With an improving economy and ongoing efforts to better market Oregon-made wood products, it is likely that more Oregon logs will be processed in Oregon mills than has been the case over the last several years.

Another consideration is that it may be desirable to keep markets for Oregon wood as diversified as possible, which includes having some level of log exports. To keep private forest land in forest uses, a minimum financial return to forest landowners is necessary. Otherwise there will be pressure to convert the forest land to nonforest uses. Log exports can play an important role in maintaining diversity in log markets, helping keep timber prices more stable and at levels high enough for private landowners to profitably manage forest land. In the long-run, it benefits mill owners as well as landowners to keep forest land in forest uses and thereby sustainable timber harvests at higher levels.

Also, if timber prices fall below a minimum threshold, timber owners will postpone planting trees, timber harvesting and other timber management activities. And forest management, logging, and transporting jobs will be lost. This minimum threshold price was reached in the depths of the Great Recession and timber harvests fell to their lowest levels since the Great Depression in the 1930s. Figure 7 shows western Oregon log prices over the last several decades and levels at which nonindustrial forest land owners ceased harvesting. During the Great Recession, log exports helped raise timber prices, which helped landowner’s profitably manage and harvest timber, providing incentives to keep forest land in forest uses. Log exports also supported retention of important forest management, logging, and transportation jobs and infrastructure which would have otherwise been at risk.

Although exports of Oregon’s logs have recently declined, current log export demand still provides an alternative market for landowner’s logs, helping to diversify their markets and continuing to provide an outlet for forest landowners to sell their timber when domestic markets weaken. At the same time log export demand supports long-term retention of much-needed forest management, logging, and transportation jobs. This helps retain infrastructure and keeps long-term timber supply at healthy sustainable levels. Resulting higher log prices helps make timber management profitable, and helps keep land in forest uses.

Oregon lumber and plywood mill owners have a different short-term perspective than forest landowners. In 2010 and 2011 depressed product prices and rising timber prices, driven by the overheated log export market, put pressure on Oregon's forest products manufacturing industry. Even though over the last decade mills have become more efficient, mills were losing money. Capacity usage dropped to 57% in 2010 (Gale, et al. 2012). More recently, profitability and capacity utilization of the industry has improved as lumber and plywood prices have increased (Figure 5). Later in 2011 and through the first three quarters of 2012, exports of Oregon-grown logs decreased, as higher finished product demand has allowed Oregon mills to better compete in log markets.

Although there have been few recent mill closures, many mills were having trouble making a profit and are still not currently operating at full capacity. However, the long-delayed recovery of the U.S. housing market finally appears to be happening, which is expected to drive wood product demand back to higher levels over time. If value-added forest product exports also increase and log exports decrease, profitability of Oregon's wood product manufacturers and mill utilization could return to levels not seen since the beginning of the Great Recession.

Another issue often raised is the log export premium. Log prices may be higher for logs exported than for logs available for domestic processing; this differential is sometimes called the export premium. Although an export premium is commonly discussed, it is unlikely that foreign buyers would offer more than necessary to purchase logs. After accounting for differences in log grades and transportation and handling costs, in a free market prices should be the same for logs in domestic and export markets. It is therefore likely that most of any export premium is caused by differences in the quality of logs being purchased and higher transportation and other handling costs. This is more complicated than it may first appear because logs may differ in quality within grades, with the higher quality logs within a grade being exported and thereby commanding a higher price.

Other minor factors that could add to an export premium include market imperfections resulting from banning log exports from public lands, exported logs being purchased in shorter-term markets rather than in long-term purchase agreements, landowners selling to traditional customers at lower prices to keep longer-term log markets diverse and viable, and just the inconveniences of having to deal with customs, insect and disease rules, long-distance customers, and other impediments that are not part of the domestic log market.

Future Demand for Oregon Wood Products

Important background information to inform the discussion about private log exports includes a review of potential opportunities for improving the economic health of Oregon's forest cluster. Signs look good for demand for Oregon wood over the next decade. Prices for logs and processed wood products should continue to increase unless worldwide economic growth is short-circuited by another global recession. Even with falling global demand for logs over the last year, Oregon's log and lumber prices have held up well.

Over the next decade there will likely be market-based opportunities to shift some of Oregon's log exports to exports of manufactured wood products. For the first three quarters of 2012, U.S. exports of

logs and lumber to China have fallen compared to the same period in 2011, consistent with an excess inventory of wood at mills and docks and a slowing economy. However, as China's economy continues to grow, both softwood log and lumber markets should improve. And there should be numerous opportunities to encourage the export of Oregon lumber to China.

Some analysts foresee a "super cycle" of dramatic log and wood product price increases, which could further limit the prospects for log exports. This "super cycle" could result from:

1. Evidence is encouraging that the U.S. economic recovery will continue, which will fuel demand for Oregon's wood products. According to the November 2012 IHS Global Insight U.S. economic forecast (2012), U.S. real gross domestic product should increase by about 3% annually over the next 5 years. With an improving economy will come increased demand for nonresidential construction and industrial wood use and remodeling. Along with an improving economy is coming an increase in the primary traditional end-use for Oregon's wood products, housing.

The U.S. Housing market is forecasted to slowly improve (Figure 6). Pent-up demand for housing by young adults, improving job growth, increased rental prices, and continued low interest rates will fuel increased home building. The housing market improved in 2012 and is expected to continue trending upward. Also, remodeling spending will increase as the nation's housing stock ages.

2. Overseas demand for Oregon wood could dramatically increase. Chinese demand for U.S. west coast lumber and logs has been significant over the last 3 years and demand from India and other developing countries could strengthen. The continued growth in those economies will require access to international log and lumber markets to meet their needs for wood. Moreover, given Russian instability, China will continue to be a major market for North American log and lumber producers.

Chinese demand for lumber stalled in the short-term, but an aggressive housing policy and continued economic growth should present market growth opportunities for Oregon's lumber and plywood mills. A "soft landing" is being achieved in China's construction industry as the nation's economy slows. China's wood product sector should expand after hitting bottom in the first quarter of 2012. There will also likely be a blip in demand for wood in Japan as it rebuilds after the 2011 tsunami.

3. Log supplies will tighten over the next several years, leading to higher lumber and plywood prices. There are major problems with competitive suppliers in interior British Columbia and Russia. Competition from Canada will moderate as harvests in the interior west and eastern Canadian region decline. British Columbia – one of Oregon's principal competitors for domestic and foreign markets – is facing a timber supply crisis related to beetle-killed timber in the province. Exact timing of the fall-down in harvests will depend on lumber prices; high lumber prices would offset timber grade deterioration and delay the falldown in lumber production. In any case, the severity of the timber shortfall will begin to be felt more severely by 2015 or 2016. Eventually, the B.C. annual allowable cut will fall by 1/3. Interior British Columbia supplies about 16% of U.S. lumber demand (B.C. 2007) and has been an important source of lumber exports to China. Allowable cuts of timber will decline by over 50% by 2018 (OFRI 2012).
4. Log exports from Russia have plummeted since implementation of a 25% log export duty in 2008.

This situation has changed with Russia's acceptance into the World Trade Organization (WTO). WTO required lowering of the log export duty, although how lowering the export duty will affect log export levels is currently unclear. However, even with lower export duty levels it is unlikely that Russian log exports will climb back to previous levels because of corruption, political instability, and lack of infrastructure. Another major problem is the lack of access to large capital investments that would be necessary to access remote forests. Given the structural problems in eastern Russia, it is doubtful that accessing remote forests will happen quickly. In addition, proposed export quotas exempted from high log duties to non-European Union countries are extremely low, essentially resulting in effective duties around the current 25%.

Alternatives for Reducing Log Exports

Log exports from public lands in Oregon are prohibited by federal and state legislation. Future debate and changes in laws regulating log exports are likely to focus on limiting exports from private lands or ameliorating negative impacts of private log exports. This section looks at alternatives for retaining logs grown on private lands in Oregon in the domestic market.

Local processing of Oregon-grown logs could be encouraged in several ways (see Table 1): 1) banning or putting a quota on log exports; 2) putting a duty, tariff, or export tax on exported timber; 3) providing subsidies for domestic processing of timber; 4) developing policies to increase the competitiveness of domestic industries; 5) increasing timber supply; and 6) developing markets for value-added wood products. These could be combined, for example using proceeds of a tax on log exports to subsidize domestic processors (Kerr 2011). The British Columbia model is often cited as a possible way for Oregon to encourage domestic processing of Oregon-grown logs. To export logs in British Columbia, exporters must prove that logs are surplus to the needs of domestic manufacturers. Unlike the U.S. however, B.C. log exports are allowed from provincial and federal as well as private forestlands. In the most recent information readily available, 65% of logs exported from British Columbia came from their federal forestlands (Dumont and Wright, 2006).

Restricting log exports from Oregon would have significant economic, policy, and legal implications. Table 2 shows a summary of arguments for banning or limiting log exports and for continuing log exports. Some possible consequences of different alternatives for limiting log exports are listed in Table 3. More research is needed into the costs, benefits, and legalities of restricting log exports to encourage domestic processing, but previous studies have shown significant downsides to proposals for restricting log exports. Alternatively, there are ongoing efforts to enhance the competitiveness of Oregon's forest cluster which would improve the ability of Oregon's mills to compete for Oregon-grown logs. Although much needs to be done, work-to-date to encourage competitiveness in Oregon's forest products industry seems promising.

Restricting private log exports and diverting those logs to domestic markets might, in the short-term, lower log prices and keep logs in domestic market. And processing Oregon-grown logs locally could better maintain mill jobs and processing facilities. However, the underlying assumption—that the timber would still be harvested in times of weak domestic demand for lumber and plywood, given the

resulting lower log prices—is questionable. There are also numerous problems with regulating log flows from private lands.

Most Oregonians would prefer that logs be processed locally, adding family-wage jobs and revenues to local and State economies. Since processing timber locally would add jobs and improve State and local economies, why not just ban all log exports. The obvious question that comes up is: “If we restricted log exports today, who would buy the logs?” The problem is that trade in wood products is global and Oregon does not control wood markets or trade regulations. Some of the logs diverted from export to domestic markets might be manufactured by Oregon mills into finished products which then might be exported, but it is unclear how much overseas demand there is for more value-added wood products manufactured in Oregon.

It is clear that during weak market periods there is not enough demand to process all the timber that could be available for harvest. Resulting from the Great Recession and consequent housing bust, Oregon mills were running at an estimated 57 percent capacity in 2010 (Gale et al., 2012). Consequently, with demand for Oregon’s lumber and plywood weak, timber harvests fell to lows last seen in the Great Depression years of the early 1930s. An upturn in demand for Oregon logs overseas helped see landowners, loggers, and log truckers through this lean period.

So banning log exports in times of weak domestic demand for Oregon wood products and without a substantial increase in overseas demand for Oregon lumber and plywood might result in few additional mill jobs being created. Instead, forest management, logging, transportation, and port worker’s jobs would be lost and timber income to family forestland owners would be postponed until markets improved, or lost completely if landowners exited the tree growing business because of poor demand for their timber. This has implications for the sustainability of Oregon’s private forests and forest industry.

Furthermore, previous research shows numerous additional economic downsides to banning or restricting log exports. While mills could gain because of lower log costs, global consumers would lose because, with lower market efficiency, they would pay more for wood products. Landowners would lose because timber prices would be lower. More work is needed to specifically understand the social and economic effects of various proposals that have been put forward, but key issues that would need to be addressed before banning or limiting log exports include that:

1. Trade barriers are inefficient in allocating logs (Perez-Garcia 2001)
2. Trade barriers produce economic losses that exceed benefits to processors (Perez-Garcia 2001)
3. Processors benefit under log export bans in the short-term but lose competitiveness in the long run (Cleaves 1991)
4. With lower log prices, timber harvests could be lower

Trade theory suggests that trade barriers are inefficient in allocating resources, such as logs, and that the loss of the free movement of goods would result in total losses being greater than total benefits. Garcia’s work (2001) confirms this, showing that losses to timber owners and global consumers are

larger than the gains to processors. Even at the regional level—in western Washington and western Oregon—losses to timber owners would likely be larger than gains to processors.

Banning or limiting log exports in Oregon may have another unintended consequence. Increased domestic wood processing and associated jobs may be located in Washington, reducing the benefits to Oregon. Discouraging exports of Oregon-grown wood may result in increased flow of timber to Washington mills. So Oregon landowners and consumers could lose and Washington mills could gain.

It may be possible to create a system, similar to that used in British Columbia, where log exports are limited to species and grades not in demand by Oregon mills. However, with improving domestic markets for Oregon's wood products, most logs that would pay their way overseas could also be utilized domestically. Also, the "surplus test" used in British Columbia has been harshly criticized. According to Dumont and Wright (2006), "It creates uncertainty for both buyers and sellers and imposes non-productive costs on sellers. . . Ideally, it will be gone 5 years from now."

In addition, competitiveness of Oregon mills may be lowered. And keeping less productive mills operating will not be in the best long-term interests of Oregon's forest products industry. Subsidizing the prices of logs harvested from private lands may keep a few mills operating for a short time, but may inhibit long run market-based competitiveness of Oregon mills. A better process would be to improve the efficiency and marketing prowess of Oregon's mills so that they can outcompete exporters and Washington mills for Oregon-grown logs.

There may also be legal, private property rights, trade relations and other related issues with limiting or banning log exports, but addressing these issues is beyond the scope of this chapter. Specific proposals put forward to limit private log exports could be further researched to better understand these issues. For example, some literature states that log export duties levied by the federal government may be unconstitutional, but would be allowed by individual states (Thomas 1989). However, it is possible that limiting or banning log exports could damage trade relations with China, Japan, and Korea, with little or no gain to Oregon's mills. Given that wood markets are international, rapidly switching Oregon wood exports from logs to lumber exports is unlikely but an attempt to do so could generate ill-will from Oregon's overseas trading partners. It is unknown how damaging relationships with Oregon's Asian trading partners over log export issues would impact agricultural and other nonwood trade.

Alternatives to limiting or banning log exports could help ensure that adequate timber supply is available to domestic processors. One approach would be to develop an economic and marketing strategy for the best and complete utilization of sustainable timber harvests from Oregon's forests. This could include development of a forest cluster plan, including log export policies and timber management and manufacturing investment strategies. As part of this strategy, adoption of aggressive marketing thrusts targeting exporting value-added wood products to China, Japan, Korea, India, and other world markets could be helpful to Oregon wood products companies trying to sell into international markets.

Although the U.S. market for lumber, plywood, and other wood products is rebounding, part of an overall strategy to ensure that adequate private timber is always available to Oregon mills could be to improve marketing of Oregon's processed wood products. Improving domestic wood product markets

will help ensure that adequate timber will be available to domestic processors by allowing them to pay more for logs, thereby limiting timber available for log exports. Although aggressively developing new markets for higher value manufactured wood products is not something that can be mandated and requires a long-term commitment and steady investment, it could provide long-term benefits far greater than pursuing a log export ban.

Up to now, there have been no successful comprehensive efforts to expand markets for Oregon's wood products. Previous work has had limited scope, short duration, and has had no measurable success. A broader more focused and committed partnership, perhaps state-led from the Governor's office might help develop higher-end U.S. markets and crack tough overseas markets.

For example, while wood has long been the dominant structural building material in residential construction, promising areas for expanding markets for the use of Oregon wood products are in green building and nonresidential construction. Extensive research has shown that wood is environmentally preferable to alternatives such as concrete and steel. Advances in construction and wood manufacturing technology are pushing back limitations on using wood as a structural building material, providing new opportunities for expanded use of wood as a green building material in both traditional and non-traditional applications.

In October of 2012, Governor Kitzhaber signed Executive Order No. 12-16, "Promoting wood products in commerce as a green building material, encouraging innovative uses of wood products and increasing markets for Oregon wood products." The executive order directs the Department of Administrative Services to identify two state building projects that would feature the use of wood in structural and aesthetic applications, and to investigate and make recommendations to the Governor on the utility of using wood in construction and remodeling of state buildings. It also directs the Department of Forestry to report to the Governor on whether leading green building rating systems adequately recognize the benefits of Oregon wood. In addition, it has provisions relating to promoting research and marketing of Oregon wood products in national and international markets, which will be discussed in more detail below.

Recommendations

The perfect storm of conditions which drove the recent spike in log exports is abating and may not repeat itself in the near future. Therefore, Oregon policies regarding log exports are best targeted at solving the structural economic problems exposed by the recent spike in log exports rather than reacting to economic anomalies which are already adjusting to historical trends because of market realities. Hasty legislative solutions to address perceived problems with log exports might have political or public relations benefits but could cost State and local economies considerably.

Overseas demand for Oregon's wood products, a slowly improving U.S. economy and housing markets, and a possible shortfall in worldwide timber availability could revitalize and stabilize the State's forest products industry and increase the forest sector's contribution to State and local economies. Housing demand has traditionally fueled Oregon's forest products industry, but recently exports of logs and

manufactured wood products have been significant drivers for the industry. With the health and vitality of the industry already improving there currently exists a unique opportunity to help insulate the industry from future domestic economic downturns as international markets for manufactured wood products are more fully developed.

Log and finished product exports could play an important part in ensuring that Oregon's forest cluster lives up to its potential to enhance State and local economies by providing diverse product markets that could help the industry adapt to rapidly changing economic situations. This does not mean going back to business as usual, dumping export markets when domestic markets improve. Instead, it means fostering stable log and finished product export markets.

A recommended approach would be to coordinate with key players to cooperatively develop balanced but free markets for Oregon's logs and processed wood products. Ideally this would include using national and international markets for Oregon wood to Oregon's best advantage. This starts with encouraging increased wood supply from federal lands followed by market development to encourage the manufacture of more value-added wood products. With more demand for processed wood products, allocation of logs to state, national, and international markets would best be set by private land owners finding the best markets for their logs.

With balanced log markets, a relatively small percentage of private Oregon logs would still be exported, depending on local and overseas markets, but an overwhelming majority would be manufactured into finished wood products for domestic or overseas consumption. Crafting this cooperative and coordinated policy is beyond the scope of this paper, but could include two areas of emphasis: 1) Creating an Oregon-led initiative expanding coordination on wood marketing issues to national, state, and Canadian provincial governments, which would result in cooperatively marketing Oregon's lumber and other wood products domestically and overseas, and 2) continuing work already underway to improve the vitality of Oregon's forest cluster.

Expanding National and International Cooperation

The State should work to integrate State-level wood products marketing with national and Canadian provincial government initiatives, which would result in cooperatively marketing Oregon's lumber and other wood products domestically and overseas. Led by Governor Kitzhaber, this cooperative effort would include working with officials from B.C., the State of Washington, U.S. government industries and Oregon's forest industry.

Oregon Executive Order No. 12-16, signed by Governor Kitzhaber October 8, 2012, provides a starting point for expanding national and international markets for Oregon wood products. Specifically it directs that:

1. The Oregon Business Development Department shall collaborate with other public and private agencies, including the Oregon Department of Forestry and the Oregon Innovation Council, to develop a strategy to accelerate the research and commercialization of innovative wood products, and
2. The Oregon Business Development Department shall collaborate with other public and private agencies to present a work plan to the 2013 Oregon Legislature to increase the market for Oregon wood products, including the promotion and marketing of Oregon wood products to new and existing international and domestic markets.

At the broadest scale, cooperative efforts already exist which could be made more effective for selling Oregon value-added wood products into existing domestic and international markets for wood. These ongoing efforts also reference developing potential overseas markets in developing countries, such as India. These initiatives are not mature and have not yet been successful in developing more robust markets for Oregon's manufactured wood products. Programs with potential to help Oregon sell more value-added wood products include:

1. The Binational Softwood Lumber Council (BSLC) was established by the Canadian and U.S. Federal governments as part of the 2006 Softwood Lumber Agreement. The Council's mandate, as outlined in annex 13 of the agreement, is "to promote increased cooperation between the U.S. and Canadian softwood lumber industries and to strengthen and expand the market for softwood lumber products in both countries." The BSLC focuses on programs that expand the use of wood products through innovation (such as the development of markets for cross laminated timbers) and raising awareness of the economic and environmental benefits of building with wood.
2. The softwood check-off program was established in August 2011 under the auspices of the USDA's Agricultural Marketing Service (AMS) to create a unified softwood lumber promotion program to rebuild lost markets in the U.S. The "check off" program is an industry-funded, generic marketing and research program designed to increase domestic demand for an agricultural commodity, in this case, softwood lumber. Once approved via referendum by the industry, check off programs are directed by industry-governed boards, appointed by the U.S. Secretary of Agriculture.

The initial thrust of the Program is to grow sales of wood products to U.S. markets by pursuing initiatives to increase market share for wood products in light commercial and multi-family construction and to reverse market share erosion in the traditional residential construction market. A key element of the Program's strategy is to increase wood products' share of construction markets as a more economical and environmentally responsible alternative to competing products such as concrete, composites, steel, and vinyl. The Program is well positioned to help U.S. Forest Industry take advantage of opportunities to develop foreign markets, in the same way that sustained investment and effort have resulted in significant growth in Canadian sales to China in recent years. Although it could be controversial, Oregon forest industry leaders should consider

pushing to expand the scope of the softwood check-off program to address existing and potential overseas markets.

3. The Softwood Export Council (SEC) uses funding from a combination of industry sources along with matching funds from the U.S. Department of Agriculture's Foreign Agriculture Service (FAS) to expand export markets for primary and secondary softwood lumber products manufactured in the U.S. SEC cooperates with the Southern Forest Products Association (SFPA) and the Engineered Wood Association (APA) to maintain a multi-national presence, known as American Softwoods, in overseas markets. Under the American Softwoods brand, SEC maintains in-country offices in key export markets and conducts promotional activities in support of its lumber export market expansion mission.

USDA's Foreign Agricultural Service (FAS) market development programs are designed to help U.S. industries enhance promotions and sales of U.S. products in international markets. The programs are intended for the generic promotion of base commodity and value-added products. All activities are conducted outside the U.S. except for Reverse Trade Missions and Editors Tours. Cooperative funding from FAS gives the U.S. softwood products industry a unique opportunity to broaden the scope of its export marketing activities, creating and enhancing market demand for softwood lumber products in ways that would otherwise be virtually impossible.

4. Forestry Innovation Investment is the Government of British Columbia's market development agency for forest products. Their mission is to help keep the B.C. forest sector growing by bringing its products to the world. B.C. clearly promotes developing overseas markets better than the U.S. through a comprehensive policy. Adding in Canada's better incentives for forest industry, their marketing of bug-killed timber, and effective B.C. log export limitations, B.C. clearly has a better climate for doing forest-related business than does Oregon. It would be to Oregon's advantage to partner with B. C. to better develop stable and profitable overseas markets for Oregon logs and manufactured wood products.

Improving Forest Cluster Vitality to Develop More Balanced Log and Product Markets

A requirement for maximizing the contribution of Oregon's forest cluster to State and local economies is to improve the vitality of Oregon's forest industries so that they can better compete for Oregon-grown logs. This includes enhancing manufacturing prowess, expanding domestic markets, and encouraging the export of processed wood products, which would provide the manufacturing jobs and additional shipping jobs if the exported products are shipped through Oregon's ports. Work to revitalize Oregon's forest cluster is already underway at the state level, which could be used as a springboard to foster forest sector economic growth.

Consistent with Executive Order No. 12-16, at the State level groundwork for increasing the health and vitality of Oregon's forest cluster has already been completed by the Oregon Board of Forestry's Ad Hoc

Forest Cluster Working Group and in other key State-level forest-related efforts. Economic development work initiated by the Oregon Board of Forestry's Ad Hoc Forest Cluster Working Group could be continued and be focused on improving the health of firms under pressure from log exports. Under the umbrella of the Forest Cluster Working group, previous work that could be continued and made more successful includes:

1. Continuing ongoing work by the Board of Forestry's Federal Forests Advisory Committee to implement forest restoration work on Oregon's federal forest land through collaborative processes. If successful, this work would result in additional wood to Oregon's wood processing facilities and an economic boost to local and State economies through the restoration work itself.
2. Continuing and enhancing work on themes developed by the State's forest cluster working group. Specific areas identified as needing work include:
 - i. Marketing Oregon's forest products, including international, green building, and nonresidential construction markets
 - ii. Developing other forest cluster economic growth opportunities: biomass, hardwoods and other opportunities
 - iii. Improving forest cluster efficiency and profitability
 - iv. Regulatory revision
 - v. Forestry workforce development
 - vi. Oregon forest cluster image
 - vii. Additional long-term state government capacity needed to support forest cluster economic development.
 - viii. Improving timber availability
 - ix. Develop and expand markets for Oregon wood products. Promote products where Oregon has a competitive advantage.

Oregon's forest industry has a long history of adapting to changing economic times and the industry continues to adapt. With an improving U.S. demand for Oregon's wood products and continued overseas demand for Oregon's wood, this particular time in history offers a unique opportunity to revitalize Oregon's forest industry. The pieces to do so are there, the State of Oregon and key players in the State's forest cluster just need to put them together. A first step could be to thoroughly study the successful Canadian model for penetrating overseas markets for forest products. With this knowledge in hand, cooperative efforts could be developed to best utilize opportunities to market overseas value-added wood products produced in Oregon.

Literature Cited

B.C. Ministry of Forests and Range, 2007. "Timber Supply and the Mountain Pine Beetle Infestation in British Columbia: 2007 Update." Victoria, B.C.

Cleaves, D. 1991. "Log Exports from Oregon: Domestic Conflict in an International Context." Oregon State University Extension Service, EM8461. Corvallis OR.

Dumont, B. and D. Wright. 2006. "Generating More Wealth from British Columbia's Timber: A Review of British Columbia's Log Export Policies." A report for the British Columbia Minister of Forests and Range. Victoria, B.C.

Gale, Charles B., et al. 2012. Oregon's Forest Products Industry and Timber Harvest, 2008. Industry Trends and Impacts of the Great Recession through 2010.

Holland, Charles. 2012. Personal Communication September 9, 2012. Seattle, WA.

IHS Global Insight. 2012. "November 2012 U.S. Economic Forecast." Englewood, CO.

Kerr, Andy. 2011. "A National Timber Severance Tax and Wood Manufacturing Tax Credit: Helping to Keep the Nation's Jobs at Home and Paying for County Payments." The Larch Company. Ashland, OR.

Oregon Forest Resources Institute. 2012. "The 2012 Forest Report: An Economic Assessment of Oregon's Forest and Wood Products Manufacturing Sector." Portland, OR.

Perez-Garcia, John. 2001. "Issues and Facts about Log Exports and Log Substitution: Presentation to the Joint Select Legislative Task Force, Timber Substitution Rules.

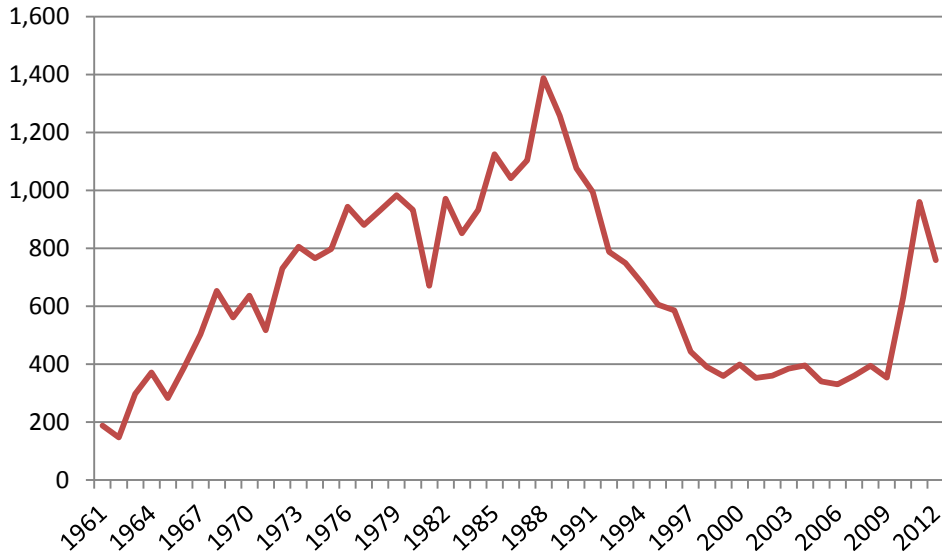
Thomas, Kenneth R. 1989. Regulation of Timber Exports Legislative Options. Congressional Research Service, Library of Congress. Washington, D.C.

Figure 1

Log Exports from Oregon Ports

and Longview, softwoods, 1961-2012

Million Board Feet

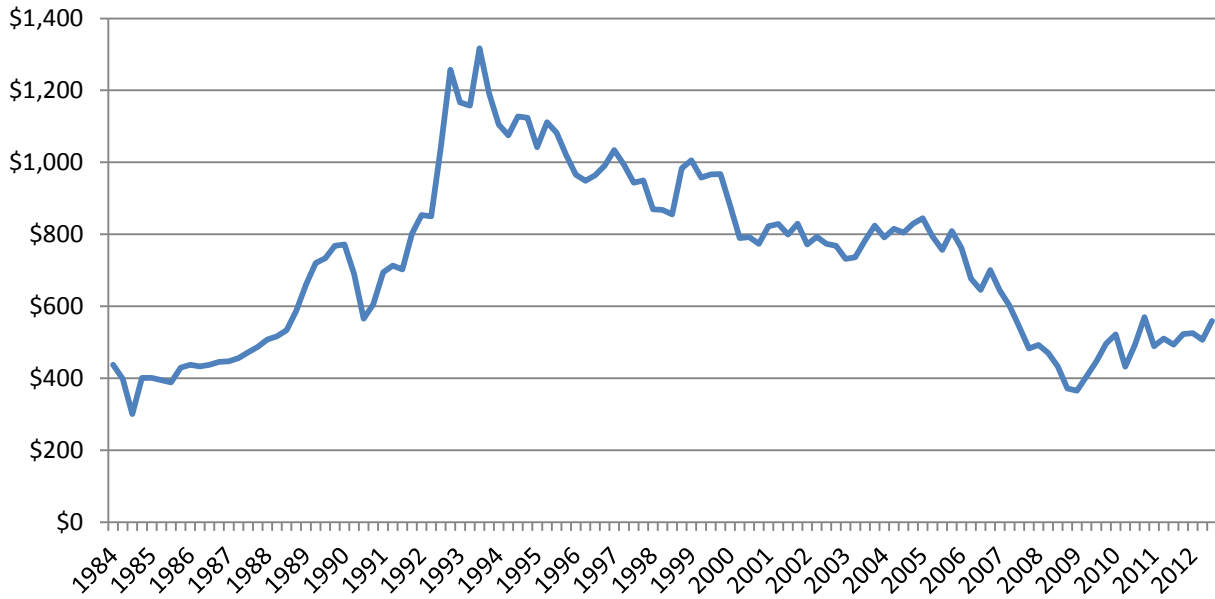


Source: U.S. Forest Service, Pacific Northwest Research Station

Figure 2

Average Western Oregon Log Price Index

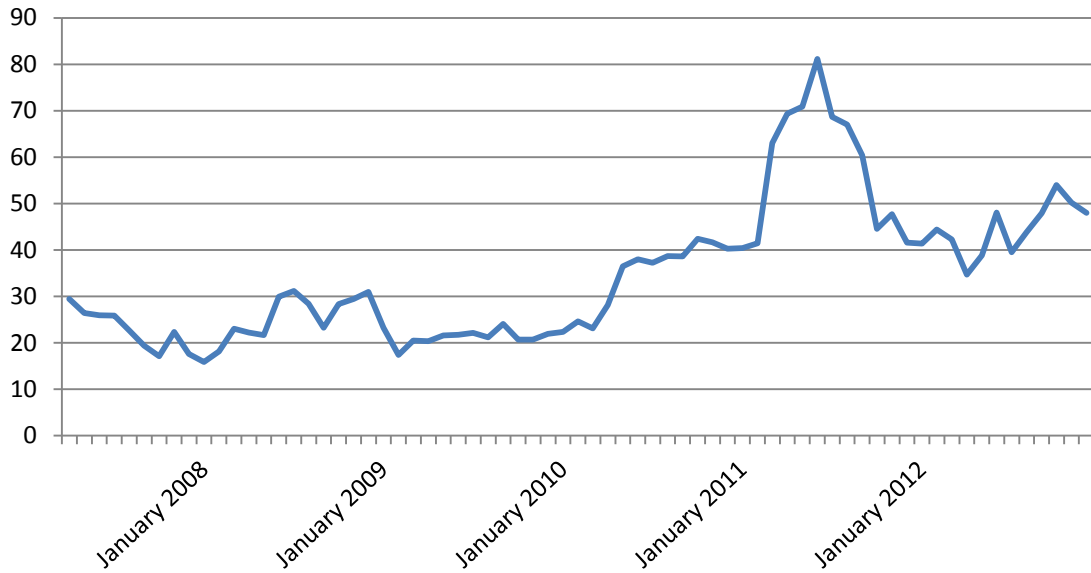
1984-2012, Adjusted for Species, Grade & Inflation; in 2012 Dollars per MBF



Source: Oregon Department of Forestry

Figure 3

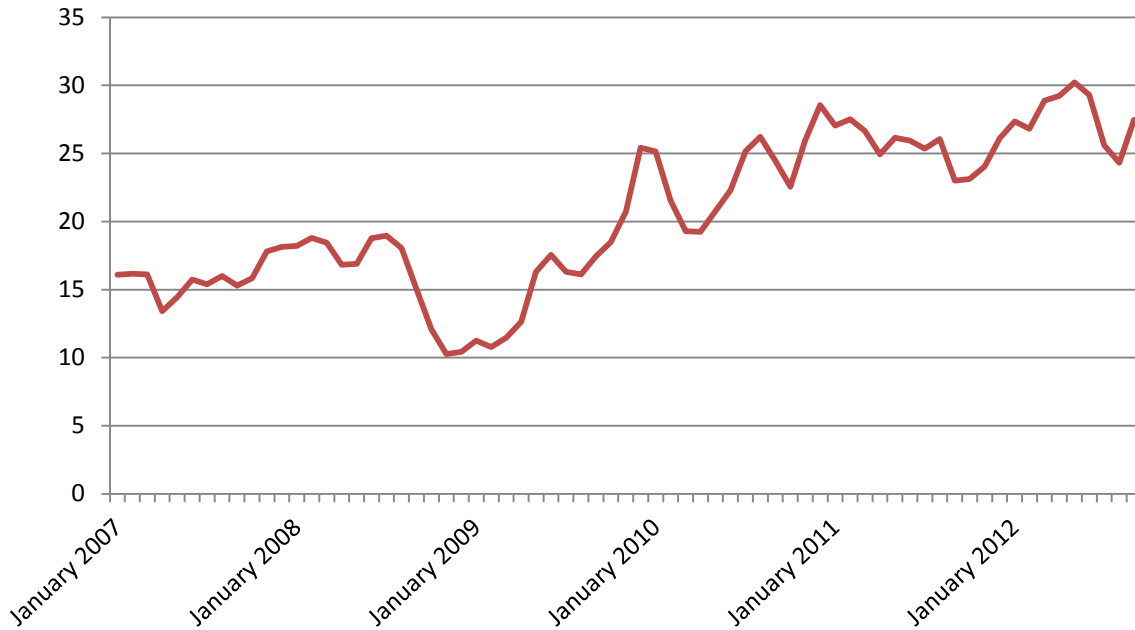
Monthly Log Export Values from Oregon & Longview 2-Month Moving Average, 2007-2012; \$Millions



Source: Wisertrade

Figure 4

Monthly Lumber & Plywood Export Values from Oregon & Longview 2-Month Moving Average, 2007-2012; \$Millions

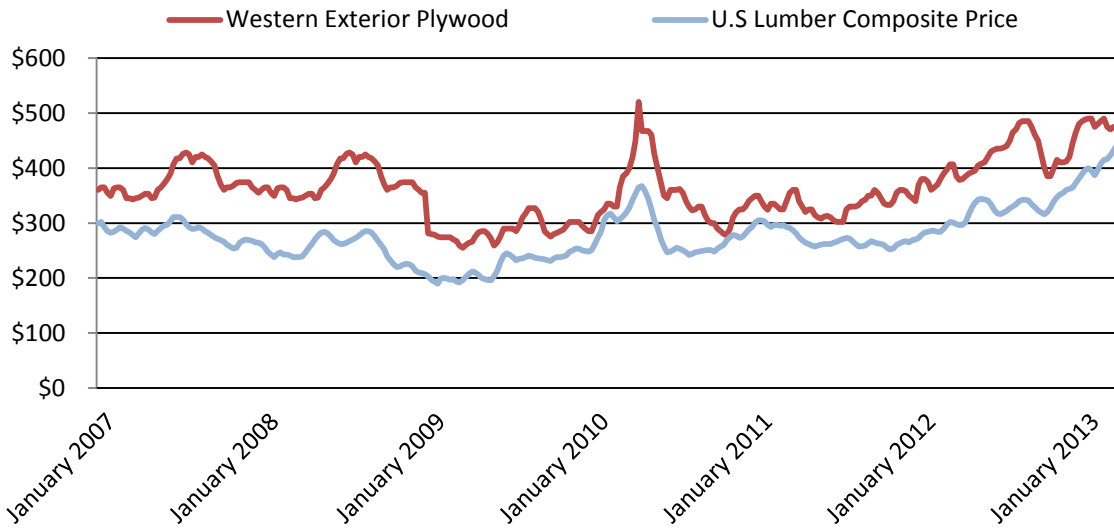


Source: Wisertrade

Figure 5

Western Plywood and U. S. Lumber Prices

2007- March 2013, \$/MSF Plywood or MBF Lumber

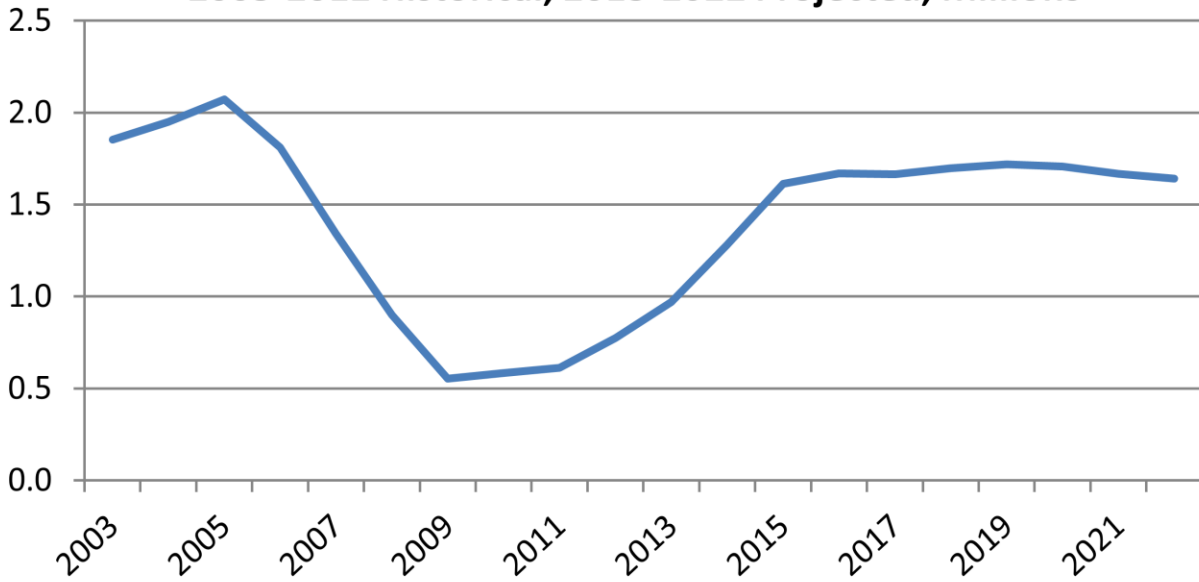


Source: Random Lengths

Figure 6

Historical & Projected U.S. Housing Starts

2003-2012 Historical, 2013-2022 Projected, Millions

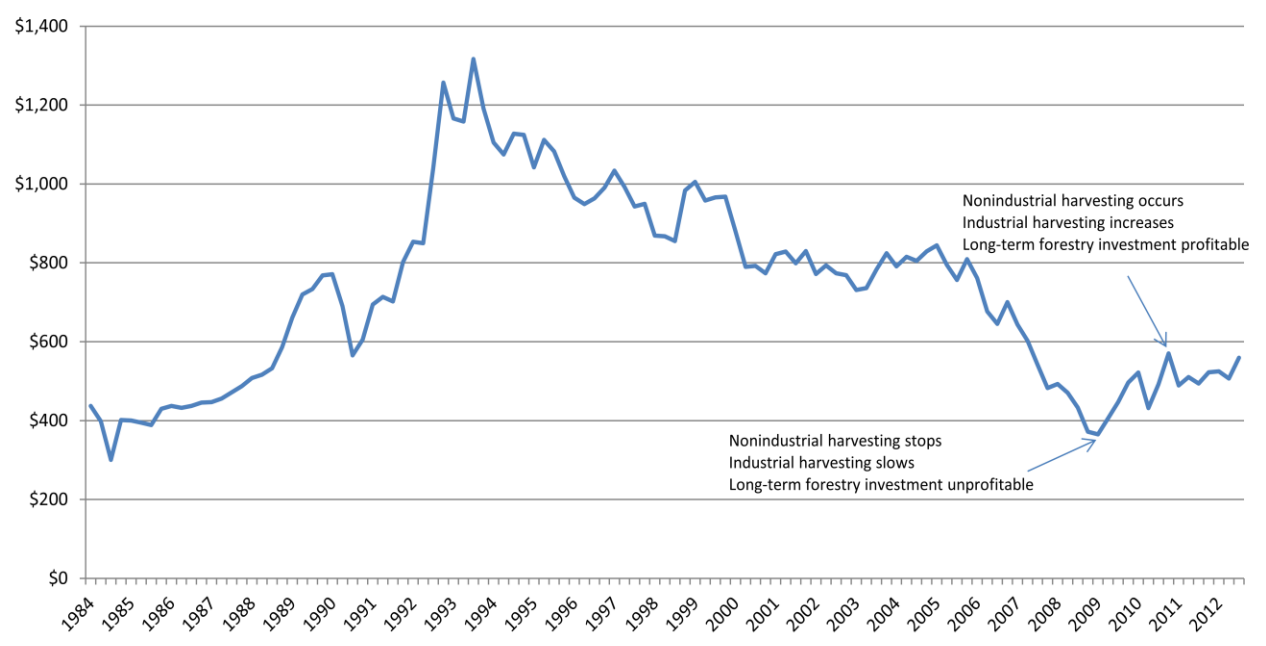


Source: February 2013 IHS Global Insights forecast

Figure 7

Average Western Oregon Log Price Index

1984-2012, Adjusted for Species, Grade & Inflation; in 2012 Dollars per MBF



Source: Oregon Department of Forestry

Table 1. Ways to encourage local processing of Oregon-grown logs

Log export ban or quota
Export duty
Tax incentive or subsidy for local processing
Improve mill competitiveness
Increase timber supply
Expand markets for value-added wood products

Table 2. Summary of private log export issues

	Arguments for Limiting Exports	Arguments for Continuing Exports
TIMBER ISSUES		
Timber supply	Relieve shortages, reduce high prices and premature cutting, and preserve options for periods of high timber demand	Provide incentives for keeping forestland in timber management and ensure long-term availability of timber resource
Jobs	Keep mill jobs in Oregon	Preserve exporting jobs
Environment	Reduce pressure for harvesting on public timberlands	Higher timber prices provide incentives to 1) keep forest land in forest uses, which provides landscape level environmental benefits, and 2) keep logging infrastructure intact for forest restoration work on federal forest lands
Markets	Encourage development of facilities to process species and grades of timber in low demand	Provide outlets for species and grades of timber not currently utilized in Oregon mills
TRADE ISSUES		
Competitive advantage	Keep manufacturing costs competitive and force overseas customers to buy more U.S. lumber	Slowly replace logs with lumber, plywood, as the export market allows, and encourages producers to become more competitive
Trade relations	Force equitable treatment in lumber, plywood markets and force China and Japan to buy more U.S. lumber, plywood	Avoid retaliation in lumber, plywood, markets or other commodity markets
Trade balance	Decrease lumber imports from Canada and export more valuable processed wood products	Exports of logs improves trade balance significantly
Free trade and efficiency	Overseas mills are subsidized	Free trade promotes efficient industries and benefits consumers
LEGAL ISSUES		
State's rights	Remit control of economic and ecological destiny	Reserve federal authority in foreign commerce
Property rights (extension of ban to private lands without compensation)	Strategic importance of issue supersedes property rights	Avoid illegal "taking" of property rights

Adapted from Cleaves, 1991

Table 3. Alternatives and possible consequences for restriction of private log exports (compared with status quo of no private export restrictions)

	Ban¹	Export Duty²	Harvest Tax³	Tax Incentive⁴
Mill jobs	Maintain some	Maintain some	Maintain some	Maintain some
Log export jobs	Eliminate	Reduce	Reduce	Reduce
Timber prices	Large reduction	Medium reduction	Medium reduction	Status quo or small increase
Tax revenues	Lower	Maintain or increase	Maintain or increase	Lower
Landowner incentive to grow timber	Large reduction	Some reduction	Some reduction	Status quo or small increase
Log export volume	Eliminate	Reduce	Reduce	Reduce

¹Complete prohibition of exports from private lands. A quota would have similar but less severe impacts.

²A tax paid by buyers of export logs that attempts to compensate for the negative impacts or lost opportunities for the Oregon economy.

³A tax could be levied on timber harvests, proceeds of which could go to subsidize domestic manufacturers.

⁴A credit or reduction on federal and/or state income and/or timber harvest tax allowed to timber sellers who choose domestic over export buyers.

Adapted from Cleaves, 1991