AN ACTIVE MARKET
The housing market continues its high level of activity, despite numerous headwinds.

SOFTWARE VOLATILITY
After a record decline in softwood pricing in June, the market has shown signs of stabilization, but new Canadian tariffs could pose a risk in 2022.

STABILITY IN HARDWOODS
After skyrocketing hardwood prices in the first half of 2021, more ample supplies and consistent demand have led to a more stable market.
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Deals are a moving target. A constantly shifting mix of people, numbers and timing. We’re here to simplify this process for you. Our experts are dedicated to tracking down and flushing out the values you need even on the most complex deals, so you can leverage our hard-won knowledge to close the deal.
Trend Tracker - Inventory

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### NOLVs

- **Lumber:** Although lumber prices have declined since hitting record highs during the first half of 2021, NOLVs for lumber have continued to benefit from strong sales and healthy gross margins.

- **Building materials:** While there has been strong demand for other building materials, NOLV results have been mixed as supply chain disruptions have created bottlenecks and contributed to rising costs that have resulted in margin compression in some instances.

### Sales Trends

Sales trends continue to be positive due to a strong construction market and elevated prices, particularly for commodity items. However, as high production has led to more supplies on the market, pricing has shown signs of leveling off more recently.

### Gross Margin

- **Lumber:** Despite market price declines at the midway point of the year after reaching record highs, prices remain elevated and have been stable to slightly increasing since the summer. Mills have been able to take advantage of higher throughput, while distributors have been able to offset elevated costs with price increases to customers.

- **Building materials:** Gross margins for other building products have been mixed, as supply chain disruptions have led to rising costs and lower operating efficiencies. In some cases, this has been offset by a continued ability to implement price increases to customers.

### Inventory

- **Lumber:** Lumber prices remain elevated, mill production has increased, and downstream demand at the distributor level has remained strong, leading to higher inventory levels.

- **Building materials:** While some operators have had issues maintaining steady supply amid supply chain disruptions, others have managed to increase purchasing ahead of constricted supplies.

### Pricing

- **Lumber:** In June, lumber prices plummeted after reaching record highs. However, since then, prices have remained stable or increased in many cases, and lumber prices are generally elevated versus historical levels. Despite increases in production, rising labor and freight costs have kept prices buoyant during the second half of 2021.

- **Building materials:** Supply shortages have plagued the markets for many building materials and have led to skyrocketing prices. Like lumber, market prices for other building materials have been kept elevated by labor shortages and rising freight costs.
**Trend Tracker - M&E**

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- **Used Pricing**: After initial slowing due to the COVID-19 pandemic, rebounds in construction activity and record prices for lumber caused prices for related used machinery to increase in 2020 and remain stable in 2021, especially for smaller and lower-capacity mill equipment as new players emerge in the market. Long lead times are also contributing to higher prices. In the used woodworking machinery market, many businesses are considering bringing purchases back on shore due to the COVID-19 pandemic, which could support higher prices.

- **Used Trade Movement**: Used trade movement has remained fairly steady, although at reduced rates from prior years.

- **OEM Pricing**: Rising raw material and labor costs have spurred increases in OEM pricing, especially for machinery produced in the U.S. and Europe. However, Asian machinery, particularly from Taiwan, continues to put pressure on OEM pricing, especially with regard to European manufacturers.

- **Technology Advancement**: Consistent with recent trends, many companies continue to spend investment dollars to automate with upgraded CNC controls and software, as well as more affordable 3D prototyping, to maximize efficiency returns.
Overview

According to the U.S. Census Bureau, the seasonally-adjusted annual rate for housing starts reached 1.52 million units, 0.7% below the revised estimate of 1.53 million units in September but 0.4% above October 2020. Single-family housing starts reached 1.04 million units in October, 3.9% below the revised September estimate of 1.08 million.

Despite the decrease in housing starts, single-family building permits reached 1.069 million, 2.7% above the revised September estimate of 1.04 million. New home sales reached a seasonally adjusted annual rate of 745,000 units in October 2021, 0.4% above the revised September rate of 742,000 units but 23.1% below October 2020.

Supply chain constraints, labor shortages, and high building material prices, particularly for lumber and copper, stifled building activity. Residential construction building material prices increased 12.2% for the 10 months ended October 2021 per the Bureau of Labor Statistics Producer Price Index.

Lumber prices increased from 2020 into 2021, reaching historical levels in May before suddenly dropping in June. Prices declined throughout the summer as demand remained low amid cautious purchasing patterns but increased in the early fall as production curtailments and a bad wildfire season in the Pacific Northwest and Canada led to limited supply on the market.

In late November, the U.S. Department of Commerce confirmed it will be increasing tariff rates on Canadian softwood lumber to 17.99%, twice the current rate, based on its findings that Canadian lumber subsidies create an unfair marketplace. Lumber prices are expected to remain elevated into 2022 as demand remains strong and costs remain high.

In November 2021, the Infrastructure Investment and Jobs Act was passed, providing $1.2 trillion to rebuild the nation’s roadways and bridges and funding for new climate resistance and broadband initiatives. The Better Build Act was also passed and includes $150 billion in new funding for the creation and renovation of affordable housing across the country. These acts should buoy non-residential construction activity in 2022.

While demand for building materials remains healthy from both the residential and non-residential segments, it remains to be seen the extent to which persistently high costs for labor, materials, and transportation will curtail activity.

KEY FACTORS

While historically high lumber prices began to normalize in June, lumber prices remain elevated, and costs for other building materials, as well as labor and freight costs, remain prohibitively high.

Despite facing numerous headwinds, construction activity has remained resilient throughout the pandemic. Demand is poised to remain strong into 2022 on the heels of government-funded projects and a healthy residential market.
Softwood Lumber and Panels

Softwood lumber and panels are produced from gymnosperm trees, such as Pine and Spruce, and are typically used for structural building purposes, as well as millwork. Since hitting record high pricing in May and most of June 2021, the softwood market has settled in the second half of the year.

The declines in market pricing can be attributed to a number of factors, including more cautious buying after companies maxed out their inventories earlier in the year, companies and DIY customers delaying projects due to sticker shock from high costs of material, the economy reopening with disposable income being used towards dining out and vacations rather than home renovations, and a looming seasonal slowdown in construction.

Despite lumber prices settling compared to earlier in the year, prices recently started to tick up again in October and November after downward pricing trends from July through September. Recent floods in British Columbia have left mills scrambling for timber and have resulted in issues shipping into the US, putting upward pressure on prices.

The U.S.-Canada trade relationship will continue to pose its own set of complications to the softwood industry. The U.S. government recently decided to double duties on imports of Canadian lumber into the U.S., setting the stage for upward pricing momentum. Conversely, this could lead to large influxes of shipments into the U.S. before duties go into effect, potentially resulting in a temporary oversupply environment, which could place downward pressure on prices in the short term.

While some signs of home prices leveling off have become evident in recent months, the housing market remains strong, with healthy residential construction activity, a shortage of available homes on the market, and the threat of rising mortgage rates in 2022 keeping prices buoyant amid a generally positive overall economic environment.

Appraisal trends have generally been positive in the second half of 2021 in the softwood lumber and paneling sector. Despite recent gross margins showing signs of decline from companies selling high-priced inventory into a falling price environment, some operators are still benefitting from high price points that were previously locked in with certain customers. Mills have continued to benefit from manufacturing efficiencies and strong output, keeping costs in check relative to prices. In addition, the overseas market has presented opportunities for mills to take advantage of high prices that still exist there, despite relatively lower domestic prices.
Hardwood Lumber

Hardwoods, such as Oak, Poplar, Hickory, Maple, Cherry, and Ash, are most commonly found in interior building products and in the manufacture of consumer and industrial products. Although the market for hardwoods is tied to domestic housing demand and remodel activity, hardwood lumber’s more diverse uses in other industries, as well as its export outlets, have historically made hardwoods less susceptible to market price volatility compared to softwoods.

Despite some recent softening in general housing start figures, residential permit and construction-in-place backlog indicators remain strong, as industry participants wrestled with global supply chain delays and rising input prices in 2021. Demand from the cabinet, flooring, and furniture manufacturing industries continues to pull on limited supplies, while demand for industrial categories such as pallet lumber and cants also remains elevated.

The Leading Indicator of Remodeling Activity (LIRA), released at the end of October, projected continued growth of national home improvement and repair spending of up to 12% through Q3 of 2022. This is certainly welcome news to the hardwood market, where interior wood products are typically in high demand within remodel projects.

Overall, the export market continues to reflect a rebound over 2020, although year-over-year increases are specific to certain regions. Exports to UK/Europe and Canada have increased over 50% each, while Mexico has exhibited a 36% increase over 2020, as furniture and cabinet manufacturing activity ramped up over the past year to accommodate U.S. demand. A notable exception to the improved export picture is China, where hardwood lumber exports were down 13% through September versus the prior year, reflecting the sluggish state of its economy.

Like many other industries, labor availability remains a significant challenge to the hardwood lumber industry, impacting every segment of the supply chain and constricting the ability of mills to expand production, a situation that predated the arrival of COVID-19 and has been exacerbated since.

As most domestic mills implemented some measure of shutdown or curtailments during the early stages of the pandemic and others converted some production to softwood lumber to take advantage of escalating market pricing, hardwood lumber production is up over 2020, despite ongoing labor issues. As these mills have come back online toward the second half of 2020 and into 2021, lumber production has increased and eased some of the supply issues. However, in an industry in which domestic demand is expected to remain steady, if not increase, as global supply chain issues begin to ease, the labor bottleneck could continue to constrict production, limit supply, and put upward pressure on pricing.

After significant price increases across most species through the first half of 2021, increased production activity and a temporary plateau of demand eased hardwood pricing pressures; the current pricing environment could be described as stable, with no indication of significant declines on the horizon. However, the potential for rising hardwood prices persists, as domestic demand remains healthy, rebounds among historically strong export markets in China and Vietnam are possible, and COVID-19’s potential impacts continue to loom large.

Appraisal trends have continued to be positive in this industry over the course of 2021, with hardwood mills and lumber product manufacturers benefitting from a strong pricing environment and distributors turning through inventories at a quicker pace due to strong demand. Barring any significant new impacts from COVID-19, appraised inventory values within hardwoods are expected to be stable over the next six months as compared to 2021 results, as domestic demand and market pricing are anticipated to maintain at current levels, if not increase, over that period of time.
Lumber and Woodworking Equipment

The machinery and equipment involved in woodworking can be divided into two main categories: furniture manufacturing and lumber production. While both industries are tangentially related to both the residential and commercial construction industry, both categories respond differently regarding elasticities.

The sawmill and lumber production machinery industry has been relatively stable, seeing a modest increase in new machinery, especially in the southeastern U.S. This investment has bolstered secondary pricing of used machinery as lead times from OEM’s became longer. Activity surrounding closures, consolidations, and restructurings amongst producers and wholesalers appears to be minimal at present. Although less frequent, most of the closures have been single-location operations, which cannot operate with the economies of scale of larger operations and comprise the majority of industry participants. B. Riley continues to monitor liquidations in the sawmill and furniture manufacturing spaces, and this trend does not seem to have changed substantially during, 2021 compared to 2020.

B. Riley saw a reduction in mill auctions throughout 2020, a trend that began in 2019 but intensified due to the COVID-19 pandemic. In 2021, the increase in economic activity, combined with high lumber prices, has caused the demand for good quality used equipment to increase in a market without a corresponding increase in available equipment. This has led to values for used equipment holding steady or in some cases increasing. Softwood mill equipment has fared better than hardwood mill equipment due to its primary use in the building materials market.

The woodworking and furniture manufacturing industries have enjoyed modest growth in recent years due to the improved housing market and an increase in disposable income. During this time, the furniture industry has seen an increasing demand for customized furniture. Woodworking and furniture manufacturers are investing in automated smart woodworking machinery to respond to quick-changing customer demands with shorter product changeovers while maintaining efficiencies. These equipment changes are also needed to remain competitive with foreign import products.

Demand for domestically-produced furniture manufacturing equipment is likely to continue to struggle due in large part to an increase of imported products, which impacts the prices of used machinery in the secondary market. B. Riley has seen a reduction in values and frequency of auction events throughout the year. The desirability window for used machinery has narrowed to the five-year range, with older vintage machinery seeing a more exaggerated decrease in values.
The *Building Materials Monitor* relates information covering most building projects, including industry trends, market pricing, and their relation to our valuation process. B. Riley Advisory Services internally tracks recovery ranges for specialty and exotic hardwoods and softwoods, building product retailers and wholesale distributors, and specialty building products, but we are mindful to adhere to your request for a simple reference document. Should you need any further information or wish to discuss recovery ranges for a particular segment, please feel free to contact your B. Riley Advisory Services Business Development Officer.

The information contained herein is based on a composite of B. Riley Advisory Services’ industry expertise, contact with industry personnel, liquidation and appraisal experience, and data compiled from a variety of well-respected industry publications and sources believed to be reliable. B. Riley Advisory Services does not make any representation or warranty, expressed or implied, as to the accuracy or completeness of the information contained in this issue. Neither B. Riley Advisory Services nor any of its representatives shall be liable for use of any of the information in this issue or any errors therein or omissions therefrom.
LIQUIDATIONS
B. Riley Wholesale & Industrial Solutions has been involved in the liquidation of three National Home Centers building products locations, the liquidation of inventory and fixed assets across eight North Pacific Building Materials distribution centers, and the auctions of various woodworking companies, including Woodworking IVA, The Truss Company, Lux Cabinetry, LLC, and Graeber’s Lumber & Millwork.

APPRAISALS
In addition, B. Riley Advisory Services has worked with and appraised numerous manufacturers and distributors within the building materials, lumber, and woodworking industries. While our clients remain confidential, they range in scale from smaller, more specialized regional businesses to major global and national industry leaders, and include the following sampling of companies:

- The nation’s largest supplier of building materials for home building, as well as professional and contract builders.
- One of the largest roofing products distributors in the U.S., with locations throughout the country and sales exceeding $2 billion annually.
- Global leaders in home fixtures and plumbing products, including faucets, sinks, toilets, and bath tubs, with presence in over 40 countries.
- Leading manufacturers of HVAC systems, serving residential, light commercial, and commercial applications, with annual sales exceeding $1 billion.
- The largest publicly-traded roofing distributor in the U.S.
- One of the nation’s largest producers of OSB, siding, and engineered wood products.
- The largest independent distributor of wallboard, acoustical, and other specialty building materials in the U.S.
- One of the world’s leading manufacturers of windows and doors.
- Regional sawmills, log processors, and producers of green and kiln-dried lumber.
- Manufacturers and distributors of fasteners and bolts used in light and heavy construction.
- Suppliers of iron and wood building components utilized in stair construction.
- Specialty producers of custom interior wood doors for the education, commercial, health care, institutional, and hospitality industries.
- A leading distributor of roofing materials with 60 distribution facilities nationwide.
- A manufacturer and distributor of exterior residential building products, primarily servicing professional contractors.
- Distributors of exotic imported hardwoods utilized in high-end building projects.
- Independent building material and plumbing product retailers and wholesalers, each serving distinct regional customer bases.
- A diversified holding company operating in the building materials supply industry, with a focus on more specialized supply services.
- A manufacturer and distributor of metal roofing and accessories for residential, light commercial, and agricultural applications.
- Various companies’ woodworking machinery and equipment, including producers of dimensional lumber, hardwood lumber, plywood, and fiberboard.

In addition to our vast liquidation and appraisal experience, B. Riley Advisory Services maintains contacts within the building materials and lumber and woodworking equipment industries that we utilize for insight and perspective on recovery values. B. Riley Advisory Services is a subsidiary of B. Riley Financial, Inc., whose affiliate B. Riley Securities, is nationally recognized for its highly ranked proprietary equity research.
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