WANING DEMAND
Rising mortgage rates have begun to put downward pressure on building activity.

SOFTWOOD VOLATILITY
After skyrocketing in late 2021 and early 2022, demand has waned and supplies have increased, resulting in downward pricing pressures in the second quarter.

A MIXED BAG FOR HARDWOODS
Despite troubles in the residential construction industry, export demand for hardwoods remains healthy.
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

<table>
<thead>
<tr>
<th>NOLVs</th>
<th>Lumber</th>
<th>Building Materials</th>
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**Market Prices**

<table>
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<th>Softwood</th>
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**NOLVs**
- **Lumber**: Despite recent declines in building activity and lumber prices, demand remained high for much of the first half of 2022, supported by port buildups and relatively healthy construction activity, before declining more recently. Mills ran at high capacity, contributing to higher gross margins and stronger NOLVs.

- **Building materials**: High costs for labor, freight, and material that were unable to be immediately passed through to customers resulted in gross margin compression, negatively impacting NOLVs in many cases. However, strong demand improved NOLVs in other cases.

**SALES TRENDS**
Sales trends continue to be positive due to a strong construction market in early 2022 and relatively high prices, particularly for commodity items. However, construction activity and lumber prices have leveled off more recently, which will negatively impact sales dollars in the coming months.

**GROSS MARGIN**
With prices remaining elevated for most building materials throughout the first half of the year, gross margins were mixed among companies, largely dependent on their ability to pass through price increases to customers. This is especially true for materials such as gypsum, which was subject to multiple vendor price increases. In accordance with lumber pricing trends, margins were strong in the first part of the year but have since declined in many cases as companies sell through higher-cost inventory at lower prices.

**INVENTORY**
Inventory levels remain elevated in most cases. Supply chain disruptions have led to higher freight costs and lower supplies in the market for certain items, leading to price hikes on most materials. Further, many companies increased purchasing volumes in anticipation of future supply chain issues.

**PRICING**
- **Lumber**: While prices remained relatively elevated early in 2022 amid supply chain issues and the spring building season, higher mortgage rates have led to a slowdown in residential construction activity, which has led to a buildup of lumber supplies and downward pricing pressure in recent months. Prices are relatively consistent versus a year ago, when market prices plummeted from record highs in May 2021.

- **Building materials**: Supply shortages have plagued the markets for many building materials and have led to skyrocketing prices. Like lumber, cautious buying trends have begun to take shape, but prices have not exhibited the same downward trajectory exhibited by lumber as of yet.
Trend Tracker - M&E

<table>
<thead>
<tr>
<th>Used Pricing</th>
<th>Woodworking/Sawmills/Furniture</th>
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- **Used Pricing**: Rebounds in construction activity, record prices for lumber, and long OEM lead times caused prices for related used machinery to increase in 2020 and remain stable in 2021 and the first half of 2022. Lower market prices for lumber in 2022 have not yet had a significant impact on used equipment pricing. 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 in 2022. Though demand for used equipment has risen, supplies have been limited in the market, with any equipment that did hit the market being sold quickly.

- **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 1.55 million units in May 2022, 14.4% below the revised April estimate of 1.81 million units and 3.5% below the May 2021 rate of 1.61 million.

Rising mortgage rates have begun to weigh heavily on builder and buyer sentiment amid the threat of an impending recession. The Federal Reserve raised its policy interest rate three-quarters of a percentage point on June 15, 2022, the largest such increase since 1994, as a means of combating soaring inflation. According to data from the Mortgage Bankers Association, the 30-year fixed-rate mortgage jumped 25 basis points for the week ended June 12, 2022, to an average of 5.65%, the highest level since November 2008.

Single-family housing starts reached 1.1 million units in May 2022, 9.2% below the revised April figure of 1.2 million. New home sales reached a seasonally adjusted annual rate of 696,000 units in May 2022, 10.7% above the revised April rate of 629,000 units but 5.9% below the May 2021 estimate of 740,000 units.

As the residential housing market struggles against the headwinds of rising mortgage rates, lumber supplies have begun to pile up both at sawmills and home improvement stores. Lumber prices are down nearly 50% through the first half of 2022, marking a sea change from last May, when lumber prices hovered near all-time highs. While the construction market was mired with extended lead times over the past two years, lead times have begun to normalize amid more abundant supplies, particularly for softwoods.

Lumber prices seem poised to remain relatively flat in the coming months, despite the impending summer building season. The U.S. Department of Commerce issued its third administrative review that reduced duties on Canadian softwood lumber into the United States from 17.99% to 11.64%, effective by August 2022, which could contribute to lower pricing.

Despite softwood lumber being one of the very few commodities not skyrocketing due to inflation, the industry continues to contend with other high costs. Freight costs remain astronomical amid supply chain disruptions, while labor costs and material costs for oil-based goods such as plastic and shingles remain elevated, creating a somewhat bearish outlook heading into the summer.

KEY FACTORS

In response to the Federal Reserve raising its policy interest rate, the 30-year fixed-rate mortgage jumped to its highest level since November 2008, negatively impacting residential activity.

With demand for mortgages declining, lumber demand has fallen precipitously in 2022. Lumber supplies have built up both at producing mills and suppliers, while lumber prices have dropped nearly 50% through the first half of the year.
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. While the softwood lumber market exhibited a downward trend in the second half of 2021 due to more wary buying and DIY customers curtailing spending due to sticker shock, prices began to tick up again in November and December due to companies looking to get ahead of the spring purchase season, floods in British Columbia that left a glut in supply, and uncertainty surrounding the effects of U.S. tariffs on Canadian imports.

The first quarter of 2022 continued the upward pricing trend, with higher purchases in anticipation of the spring building season and persistent demand amid a generally healthy market. Thoughts of a repeat of spring 2021, when prices reached record levels, seemed attainable early in 2022. However, since April, cautious buying has characterized the softwood lumber market. Rising interest rates have made mortgages more expensive, cooling off a hot housing market along with demand for softwood lumber. Additionally, as distributors had built up their inventories in the first quarter, spending has since been curtailed, particularly with fuel prices surging. Lumber futures for July delivery dropped 52% from a high in March 2022, and with mills also cutting back on production, pricing remained low through June 2022.

Appraisal trends have generally been positive in the first half of 2022. With the spring building season underway, combined with sales periods in engagements covering a hot housing market, demand and prices remained high for the majority of the period, contributing to increases in NOLVs. Mills running at high capacity experienced improved efficiencies, contributing to NOLV growth. In addition, persistent labor shortages and port buildups contributed to demand outpacing supply. Distributors experienced margin growth in many cases, as confidence that demand would remain elevated in late 2021 and into 2022 led to companies being proactive in trying to enact price increases in anticipation of costs remaining high, contributing to increased NOLVs for the period.

Softwood panel pricing traditionally follows a similar trajectory to that of framing lumber. At the time of the prior Building Materials Monitor in December 2021, prices were largely depressed from July through September due to increased production activity outpacing demand. Similar to softwood lumber, prices exhibited an upward trajectory in December and through the first quarter of 2022 as the spring building season approached. However, consistent with softwood lumber, second quarter panel pricing has exhibited a downward trajectory, as companies looked to reduce inventory levels after purchasing ahead of the building season in the first quarter. Additionally, as interest rates have risen and markets have cooled, trepidation and cautious buying characterized the second quarter, consistent with trends seen in the softwood lumber markets.
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.

After a sustained run of robust demand for hardwood lumber in the domestic markets that boosted prices, coupled with transportation and labor issues straining supply that further propelled prices upward, there is now concern as to how the rest of 2022 will play out. Rising interest rates, disappointing U.S. housing figures, and an eroding DIY segment are all indicators of a reduction in demand later this year. While logistical issues, transportation costs and labor issues still persist in the industry, and while prices currently remain firm within hardwood lumber, the troubling economic indicators will certainly impact this sector. Whereas manufacturers and distributors purchased opportunistically over the last two years, it is likely that purchasing activity will revert back to replenishing for immediate needs, with a focus on working down higher-priced inventory to leaner levels, which will likely negatively impact pricing across most species.

While short term demand appears buoyant, particularly for cabinet and furniture manufacturers and pallet lumber producers, there are indicators that the demand slide is beginning, at least among certain domestic segments. Specifically, solid wood flooring shipments declined approximately 5% for the first five months of 2022 versus 2021. Whereas home construction and renovation markets were overrun with delays in shipments and an inability to obtain adequate supplies in 2021, this reduction in flooring shipments is an early indication of a market in which the supply and demand relationship may be beginning to shift, with a softening in prices likely to follow. Secondary wood product manufacturers maintained a healthy backlog and kept prices stable through the first half of the year. However, a significant shift in consumer spending will have immediate impacts in the areas of furniture and interior residential products, a trend worth watching heading into the third quarter.

A current bright spot for the hardwood industry is an improving export market. Despite the continued issues with container availability and rising freight costs, overall hardwood lumber exports were up 10% in the first quarter of 2022, despite exports to China remaining relatively flat compared to 2021. A strong Canadian housing market and vibrant manufacturing activity in Mexico helped boost sales to those regions. Ongoing COVID policy restrictions appear to be the prime reason behind some of the limited activity in lumber shipments to China. There remains optimism that purchasing from China will pick up during the remainder of 2022 as all ports open up more fully to replenish dwindling inventories. In addition to brisk lumber exports, log exports have also remained strong, up 6% over 2021, with China continuing to represent half of that export log market. Export activity will likely increase through 2022; as lumber and log suppliers in the U.S. have been buoyed by strong domestic demand over the past two years, a softening U.S. market will likely open up more supplies for foreign demand.

Appraisal trends have continued to be positive in this industry over the course of 2021 into 2022. Hardwood mills and lumber product manufacturers have benefited from a stable pricing environment, while inventory turns in the distributor space remain elevated. As we move into the second half of 2022, monitoring inventory turns, pricing, and margin activity will be critical. After two years of strong inventory valuation results, NOLVs could begin to plateau or potentially decline by the end of 2022.
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 OEMs 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 2022 compared to prior years.

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, 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 fared better than hardwood mill equipment due to its primary use in the building materials market.

In 2022, lumber prices have declined. Higher mortgage rates have caused new home sales to slow, which has led to increased lumber inventories and decreased prices. This, combined with the ever-increasing potential for an economic recession, has caused uncertainty in the market. Used equipment values must be closely monitored, despite not showing significant fluctuations at the present time.

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.
Meet The Team

APPRAISAL & VALUATION TEAM

BILLION BUILDING MATERIALS

JULY 2022

Meet The Team

APPRAISAL & VALUATION TEAM

BUSINESS DEVELOPMENT TEAM

Bill Soncini
National Marketing Manager
Managing Director
Midwest Region
(773) 495-4534
bsoncini@brileyfin.com

Ryan Mulcunry
Managing Director
Northeast Region
(617) 951-6996
rmulcunry@brileyfin.com

Stephen Shelton
Managing Director
New York Metro/Mid-Atlantic Region
(203) 524-3271
sshelton@brileyfin.com

Nick Disimile
Managing Director
(516) 707-7040
ndisimile@brileyfin.com

Jennie Kim
Managing Director
Western Region
(818) 974-0602
jkim@brileyfin.com

David Seiden
Managing Director
Southeast/Southwest Region
(404) 242-0683
dseiden@brileyfin.com

Akilah Moore
Associate Business Development Officer
Midwest Region
(312) 777-7956
anmoore@brileyfin.com

OPERATIONS

Chad P. Yutka, ASA
Senior Managing Director
National Practice Leader
Corporate Advisory Valuation Services
(312) 909-6078
cyutka@brileyfin.com

Bill O’Brien
Managing Director
(781) 429-4073
bobrien@brileyfin.com

Will Jacoby
Project Manager
(781) 429-4074
wjacoby@brileyfin.com

Tim Pearson
Senior Managing Writer
(781) 429-4081
tpearson@brileyfin.com

ASSET DISPOSITION TEAM

Adam Alexander
CEO
GA Global Partners
(818) 340-3134
aaalexander@brileyfin.com

Scott Carpenter
CEO
B. Riley Retail Solutions
(818) 746-9365
scarpenter@brileyfin.com

Paul Brown
Vice President
GA Global Partners
(203) 292-8111
pbrown@gaglobl.com
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B. Riley recently announced the acquisition of FocalPoint Securities, LLC, a leading middle market M&A advisory investment bank. The combination of B. Riley and FocalPoint significantly enhances B. Riley’s debt capital markets and financial restructuring capabilities.

B. Riley Financial ranked No. 2 on FORTUNE 100 Fastest Growing Companies 2021 list based on revenue growth rate, EPS growth rate, and three-year annualized total return for the period ended June 30, 2021. Fortune. © 2021 Fortune Media IP Limited All rights reserved.

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