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COVID-19: Impacts Across the Forest Sector

COVID-19: Impacting U.S. Forest Product Markets

With North American markets for forest products and timber rapidly adjusting to the sweeping changes precipitated by the COVID-19 crisis, HNRG and other timberland managers are reviewing and revising short-term return expectations and operational plans. The impact of the COVID-19 crisis on specific properties will vary considerably based on the composition of the markets to which they are delivering timber, as the various segments of the forest product sector are experiencing different degrees of vulnerability to the pandemic. Headwinds are already being felt in the underlying markets for softwood sawtimber, as construction activity is in retreat due to COVID-19 restrictions and falling consumer confidence. Concurrently, segments of the pulp and paper industry such as tissue and packaging are experiencing strong demand as a result of changing consumer behavior. Even with some positive market segments, the scope of the current economic shut-down in the U.S., coupled with the increasing weakness in the construction sector, will represent significant headwinds to timberland investments in 2020.

Solid Wood Product Markets

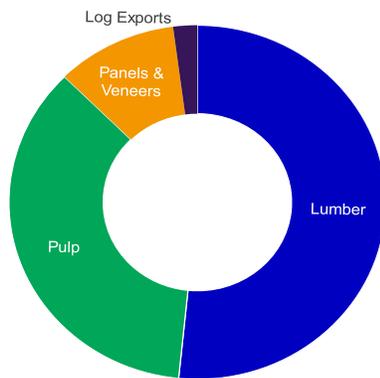
Lumber, plywood, and other structural and non-structural wood panels represent the largest single component of U.S. wood demand by volume, and an even greater proportion of total timber value, due to the higher per unit value of sawlogs (larger, more mature trees) compared to pulpwood (smaller, less mature trees). Consequently, the impacts of the COVID-19 crisis on solid wood product markets will be key in determining potential changes in timberland revenue streams over the next 18 months.

Housing starts and repair and remodeling are the key drivers of solid wood product demand globally (lumber, wood panels, molding and millwork, wood flooring, and cabinetry). Underlying fundamentals in U.S. construction markets were strong heading into 2020, as the U.S. reached a cyclical high in new home construction at 1.63 million units (SAAR) in December 2019.

U.S. residential construction demand in early 2020 drew solid support from

Chart 1. Solid Wood Products Dominate the End Use Markets for Timber in the U.S.

(2019, end use percent by volume)



Source: Fastmarkets RISI, 2020

strong employment and wage growth and improved affordability, as mortgage rates dropped to record low levels.

Based on the robust performance of construction markets in January-February 2020, expectations ran high for timber demand and prices to trend higher, but this optimistic outlook was stopped short by the emergence of the COVID-19 contagion in the U.S. in early March¹. Consumer confidence took a series of blows as the U.S. stock market crashed and job losses surged, crushing the purchasing intentions of potential home buyers. Monthly U.S. housing starts in March turned down, an early indicator of a likely significant correction in the second quarter.

Chart 2. U.S. Housing Starts Reached a Cyclical High in December, and Turned Down in March

Monthly U.S. housing starts, million units, SAAR



Source: U.S. Census Bureau, April 20, 2020

Although forestry and wood products processing has been deemed an essential business by many states, and allowed to continue operations under state stay-at-home orders, some state-mandated construction stoppages are undercutting demand for building products. Several major cities have halted construction projects, such as Boston, MA; Austin, TX; and most of the state of Pennsylvania and Washington². In addition, builders' supply chains were also disrupted by delayed shipments of imported building materials from China, due to COVID-19 shutdowns in China in the first quarter. Responding to the downscaled prospects for U.S. construction, lumber and wood panel prices have dropped sharply over the past month, with the Random Lengths Softwood Lumber (price) Index retreating 21 percent to near a cyclical low³.

Production curtailments, temporary closures, and quotas on log deliveries are widespread at lumber and wood-panel mills across North America. North America lumber output currently is estimated to be down 30 percent compared to pre-COVID-19, and OSB and plywood production each have reduced production close to 15 percent⁴. Regionally, these reductions have differing impacts on timber markets. In the West, lumber is a larger component of total solid wood timber demand than it is in the South, and therefore these production curtailments result in greater disruption to planned harvest volumes and timber revenues (*See Chart 3 on page 3*). Since the U.S. South is the lowest cost producing region for softwood lumber in North America, its competitive position has moderated the impact COVID-19 has had on timber demand compared to other supply regions. In addition, timber used in the manufacture of OSB and plywood garners a larger share of total wood demand in the U.S. South, further cushioning the impact of the current set-back on regional timber demand.

Another moderating force to deteriorating demand conditions for timber managers can be wood supply agreements with local mills. These agreements can include specified schedules of delivered timber volumes. Likewise, wood supply agreements might also include a known price for the timber harvested, typically indexed through a backward-looking average of prices of logs or backward-looking calculations of the final product price.

The exact timing of a bounce back in housing remains highly uncertain and will depend on consumer confidence and when businesses can resume operations and workers can return to their jobs.

¹ https://www.whitehouse.gov/wp-content/uploads/2020/03/03.16.20_coronavirus-guidance_8.5x11_315PM.pdf

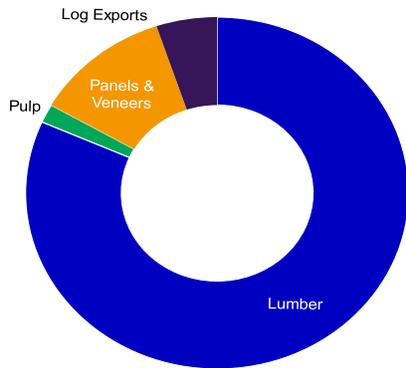
² R <https://www.electricalmarketing.com/covid-19/article/21127857/city-state-covid19-construction-bans-different-strokes-for-different-folks>

³ Random Lengths Weekly, April 21, 2020

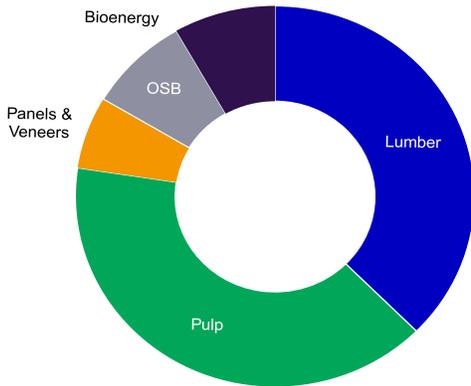
⁴ RBC Capital Markets, April 12, 2020; Random Lengths Weekly, April 21, 2020, HNRG April 12, 2020

Chart 3. Lumber Production is a Larger Share of Western U.S. Timber Demand. Panels and Pulp are a Larger Share of Southern U.S. Timber Demand
(2019, timber end use percent by volume)

US West Timber Production by End Use



U.S. South Timber Production by End Use



Source: Fashtarkets RISI, 2020

Monetary and fiscal policy responses have been significant and will be a huge plus in supporting a recovery in construction activity, particularly historically low interest rates and the potential for further rounds of fiscal packages targeting infrastructure construction.

Yet, risk-aversion moves by financial institutions could curb some of the potential boost of the Federal Reserve’s aggressive actions. Recently, JP Morgan in the face of a developing major recession implemented new home lending policy changes requiring borrowers to have a credit score above 700 and 20 percent down in response to COVID-19⁵.

A current bright spot for solid wood product demand has been home improvement activity, indicated by strong sales at big box home-improvement stores. Repair and alterations of existing homes has over the past decade accounted for approximately one half of U.S.

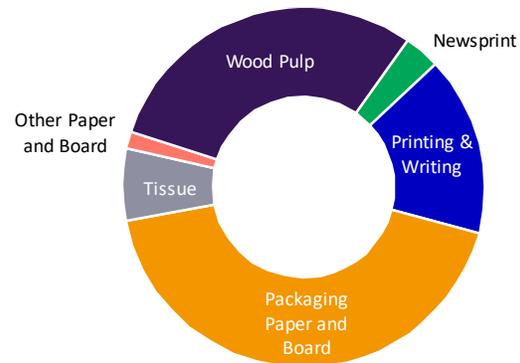
consumption of softwood lumber. Current spending on home improvement may see a benefit from much of the population being bunkered at home with time to initiate deferred home projects. Any bump-up in home improvement activity could be short-lived particularly if business closures persist and uncertainty surrounding household income restrains spending decisions.

Pulp and Paper Markets

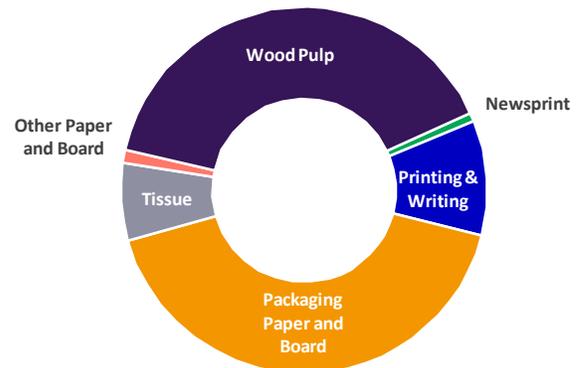
The U.S. pulp and paper sector is a major consumer of wood fiber and is a multi-faceted industry, spanning a range of end-use markets, each with its own dynamics. Key segments include market pulp (not integrated with paper or paperboard capacity); graphic papers which are

Chart 4. Market Pulp and Packaging Paper and Board Account for Two-Thirds of Global Fiber Demand Worldwide
(2018 Shipments, percent of total)

Global Pulp and Paper Production by End Use



U.S. Pulp and Paper Production by End Use



Source: Fastmarkets RISI, December 2019

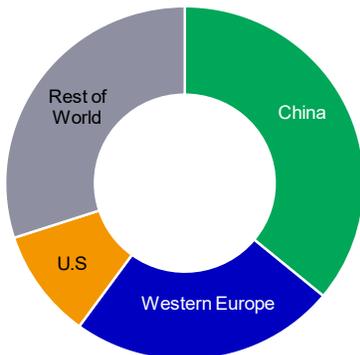
used for printing purposes including newsprint; packaging and board; tissue and hygiene products; and specialty papers. Wood pulp (market pulp) and packaging and board products are globally the largest end uses.

⁵ <https://www.cnbc.com/2020/04/11/coronavirus-live-updates.html>

Chart 5. China Consumes the Largest Share of Market Pulp Globally

(Shipments, percent of total)

Global Pulp Demand



Source: Fastmarkets RISI, Viewpoint, March 19, 2020

Pulp

Market pulp is extensively traded internationally, with China being the largest import destination. China imports pulp to produce downstream products that are used both domestically and exported. In 2018, China accounted for 36 percent (24 million tonnes) of global pulp demand⁶.

Last year, reduced demand and ample pulp supplies pushed up global inventories to record levels, depressing pulp prices. At the start of 2020, pulp markets were beginning to recover from the cyclical downturn and were finding support in significant production curtailments. Suzano, the world's largest hardwood market pulp producer held back about 1 million tonnes in the 2H of 2019, likewise CMPC, another major South American pulp producer, adjusted the timing and extent of their regular 2019 downtime, while APP in Indonesia took close to 100,000 tonnes of capacity off the market to help balance inventories⁷. However, a possible rebound in global pulp demand was cut short by China's rapid and severe response to COVID-19 in late January. Chinese demand was disrupted by the imposition of widespread business shut-downs, quarantines, and travel restrictions resulting in production curtailments at paper and paperboard mills, and supply chain bottlenecks in both delivery of final products to consumers and pulp at ports. Global pulp markets continued to lose ground in February and March as the virus outbreak spread to Europe and the U.S. As global demand retreats with the slow-down in global economic activity, the timeline for a sustainable recovery in market pulp demand and prices is further extended.

⁶ Fastmarkets RISI Viewpoint, March 19, 2020

⁷ Fastmarkets RISI PPI, Pulp and Paper Week, August 23, 2019

⁸ RBC Capital Markets, April 12, 2020

⁹ Fastmarkets RISI, April 3, 2020

¹⁰ American Forest and Paper Association, <https://afandpa.org/our-products/paper-based-packaging/containerboard>

¹¹ Fastmarkets RISI, April 3, 2020

Graphic Paper Printing and Writing

The measures that have been generally adopted to contain the spread of COVID-19 have created a dramatic fall-off in graphic paper demand. Closures of schools, offices, retail stores, and cancelled conferences and meetings has resulted in less printing, less dollars spent on advertising by print media, and an acceleration in the on-going shift away from print media to online. The life-style changes necessitated by the COVID-19 crisis such as social distancing are likely to continue to have a moderating influence on graphic paper demand, by boosting the shift to on-line services and shopping which are less dependent on print media and paper than traditional schools and brick and mortar retail commerce. Global demand for graphic paper fell 5 percent (6 million tonnes) last year while capacity only retreated 2.7 million tonnes, resulting in historically low producer operating rates. As COVID-19 has pushed demand even lower in 2020, market imbalances have been exacerbated. In North America, several producers had already implemented extended downtimes. Domtar and PCA, representing about 3 percent of North America graphic paper capacity, have announced additional mill shutdowns for mid-April and May⁸.

Paper Packaging and Board

Although demand for packaging will be moderated by the slowing economy, COVID-19 related quarantines and stay-at-home policies are changing consumer behavior and generating expanded at-home shopping which generates demand for paper boxes for shipping. The surge in consumer buying of products shipped in corrugated packaging both to homes and to grocery stores helped push up U.S. paper and paperboard production 2 percent year-to-date in February (to 12.5 million tons) compared to the same period last year and is expected to show stronger increases for March and April as consumers have dug in at home⁹. Linerboard used in the manufacture of corrugated boxes, led the increase. Linerboard production makes up over half of the paper and board production in the U.S.¹⁰

Tissue and Specialty Pulp

Consumer panic buying of tissue products as cities rolled out stay-at-home orders, and increased use of tissue products for health care at homes, clinics and hospitals resulted in a 6 percent gain in production for the first two months of 2020 (to 1.3 million tons) compared to the same period last year¹¹. Tissue mills - where workers are healthy and allowed to work - are running close to full capacity. Georgia Pacific, one of North America's top three tissue

producers, reported production for the week of March 16th to be at 120 percent of capacity, while smaller independent, America Paper Converting reported to be running around the clock and has increased its work force at its Woodlands, WA and Richmond, VA tissue facilities¹².

The at-home stocking of tissue products and associated panic buying triggered by the COVID-19 outbreak is a temporary phenomenon, and could be followed by a period of de-stocking as the crisis abates.

U.S. timberland investors should expect to see reduced cash flows in 2020 as a result of disruptions in the forest product sector and depressed demand, particularly in the highest-value market segments, solid wood products. Despite a few healthier market segments, the overall forest sector will be contending with a pronounced setback in demand in 2020. These weaker market conditions will translate into increasingly competitive timber markets and downward pressure on sawtimber prices. The ability of individual timberland properties to weather the significant headwinds in 2020 will depend on the composition and depth of their local markets, and the competitive position of their key customers in their respective market segments. A timberland owners' position as preferred supplier based on their scale and track record of dependably delivering quality timber will be key to navigating these unique, challenging, and hopefully temporary market conditions.

¹² Fastmarkets RISI, March 27, 2020

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