

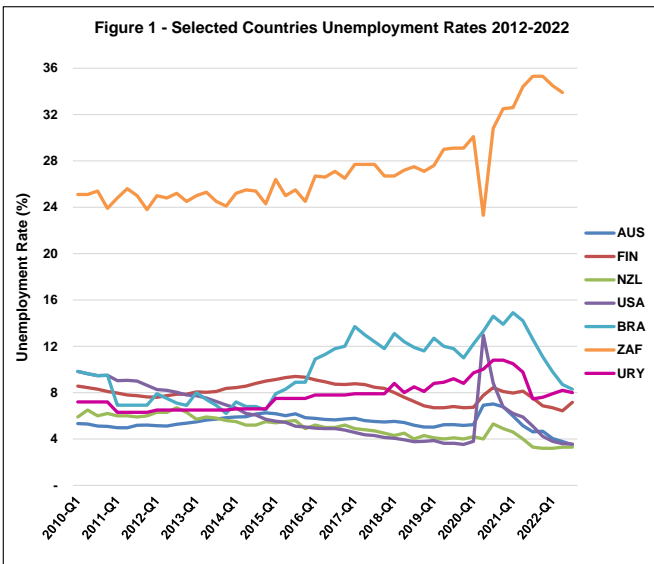
Forest Sector Outlook

Global Consulting Alliance

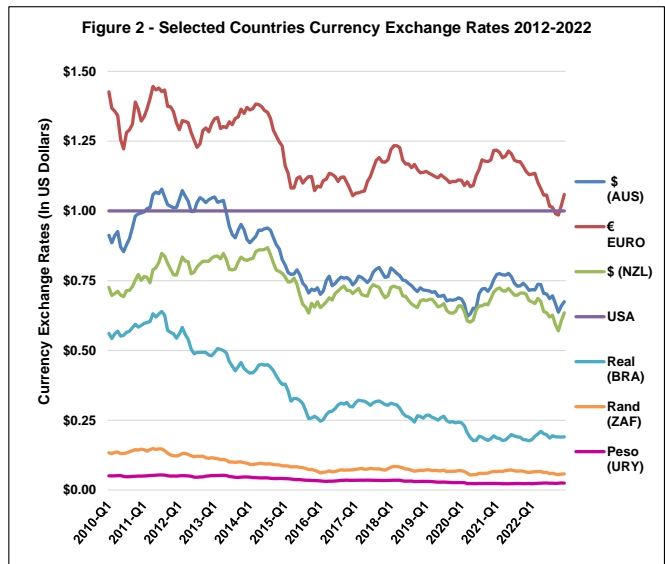
Quarterly Edition 2022-Q4 (January 2023)

ECONOMIC DASHBOARD

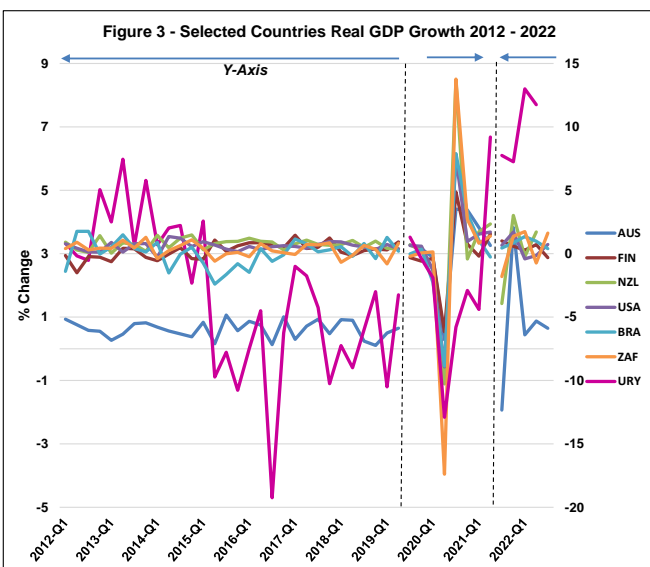
Figures 1 to 4 illustrate four key macroeconomic indicators as observed over the past decade, on a quarterly basis. These can be useful particularly to monitor the aftermath of the COVID-19 pandemic and the market implications of the ongoing Russia-Ukraine war. Figure 4 rates are nominal.



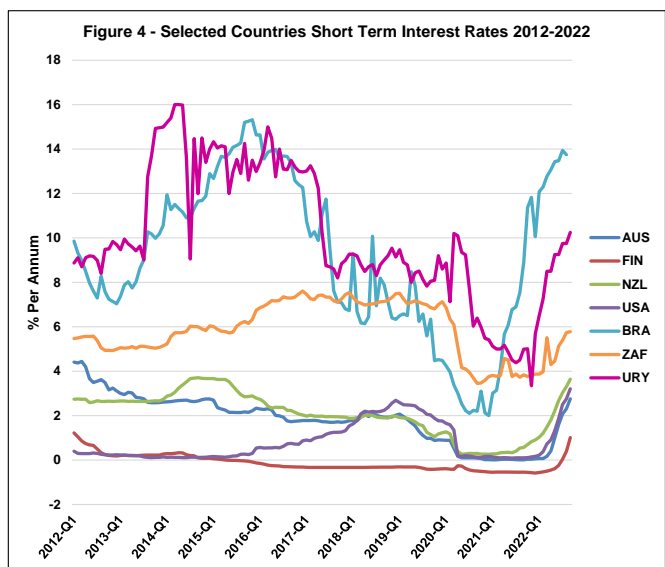
Sources: OEDC, Brazilian Institute of Geography and Statistics, macrorends.net (World Bank), Statistics South Africa



Source: Federal Reserve, Uruguay Statistics National Institute



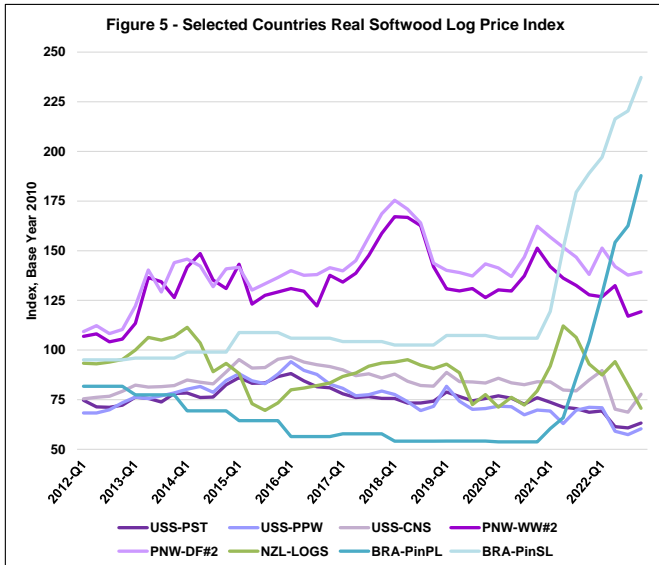
Source: OEDC, Chamber of Commerce and Services of Uruguay



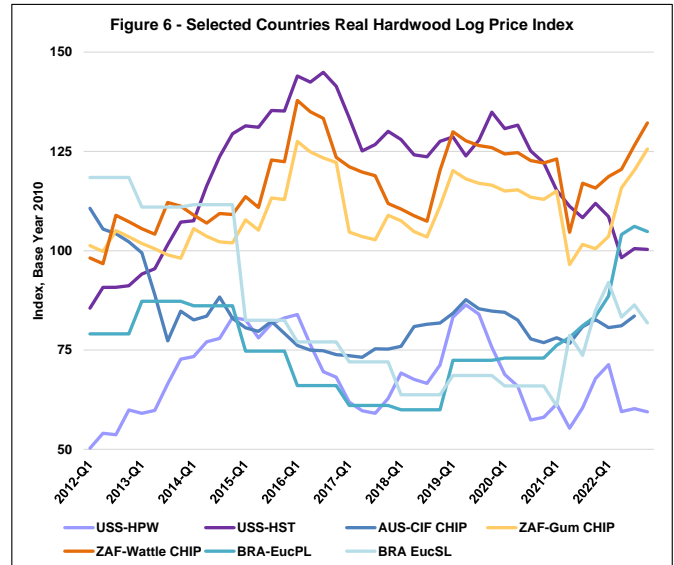
Source: OEDC, FRED - St. Louis Fed, Banco Central Del Uruguay, CEIC Data

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Figures 5 and 6 show indexed real pricing for select softwood and hardwoods – with Q1 2010 the base quarter-year.



Source: Timber-Mart South, RISI Log Lines, AgriHQ; USS = US South, PNW = US Pacific Northwest



Source: Timber-Mart South, RISI Log Lines, NCT; USS = US South

Legend:

USS-PST = US South Pine Sawtimber, USS PPW = US South Pine Pulpwood, USS-CNS = US South Chip n' Saw, PNW-WW#2 = US Pacific Northwest Whitewood #2 Saw Avg. Columbia River, PNW-DF#2 = US Pacific Northwest #2 Saw Avg. Columbia River, NZL-LOGS = New Zealand Softwood Logs Composite, BRA-PinPL = Brazil Pine Pulplogs, BRA-PinSL = Brazil Pine Sawlogs.

USS-HPW = US South Hardwood Pulpwood, USS-HST = US South Hardwood Sawtimber, AUS-CIF CHIP = Australia Hardwood CIF Chip, ZAF Gum CHIP = South Africa Gum CHIP, ZAF Wattle CHIP = South Africa Wattle Chip, BRA-EucPL = Brazil Eucalyptus Pulplogs, BRA-EucSL = Brazil Eucalyptus Sawlogs.

ECONOMIC HIGHLIGHTS

Global

- The World Bank Group in its January 2023 Global Economic Prospects report forecasts global economic growth to slow to 1.7% in CY 2023, down 1.3% from its June 2022 forecast. It forecasts US growth to slow to 0.5%, down from an earlier projection of 2.4%. China is forecast to grow at 4.3% (previously 5.2%), Japan 1% (1.3%) and Europe and Central Asia 0.1% (1.5%). This outlook marks the third weakest pace of growth in nearly three decades, overshadowed only by the global recessions caused by the COVID pandemic and the 2008/9 global financial crisis. World Bank Group warns that any additional adverse shocks could push the global economy into recession and that small states are especially vulnerable.
- US GDP – Forecasters have been revising forecasts of real GDP growth slightly higher to account for better than expected growth in non-residential fixed investment; consumer spending on services; a smaller decrease in private inventory investment; more state, local and federal government spending; an increase in exports and a decrease in imports. The third estimate for Q3 2022 GDP growth from the Bureau of Economic Analysis showed that the US economy increased at an annual rate of 3.2% from the preceding quarter. Increased growth was partially offset by a larger decrease in fixed residential investment. The Federal Reserve Bank of Philadelphia released the Fourth Quarter 2022 Survey of Professional Forecasters on November 14. The panel of 38 forecasters increased the 2022 prediction from 1.6% in the Q3 survey to 1.9% in the Q4 survey. However,

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real GDP growth for 2023 was further reduced from 1.3% to 0.7% as a shallow recession in the first half of 2023 was projected. This is primarily due to monetary policy designed to halt high inflation slowing the economy.

- US Unemployment – In December 2022, the Bureau of Labor Statistics reported that nonfarm payroll increased by 263 000, unemployment dropped to 3.5%, and the number of unemployed persons was 5.7 million, matching the pre-pandemic rates. The workforce participation rate rose slightly to 62.3%. The Philadelphia Federal Reserve Bank Fourth Quarter 2022 Survey of Professional Forecasters projected that unemployment will average 3.7% in 2022. For 2023-2025, the projection is 4.2%, which is 0.3% to 0.4% higher than in the third quarter.
- Brazil – The year 2022 began with the market predicting an end-year interest base rate of 11.5%, the exchange rate at 5.6 USD/BRL, inflation at 5.0% p.a., and GDP growth of 0.4%. The Q4 2022 ended with the central bank's interest rate at 13.8% (+ 225 points), the FX at 5.24 USD/BRL (-6.2%), inflation at 5.8% (+61 points), and GDP at 3.0% (+2.7%). Initial forecasts for 2023 are for a 12.25% base rate, 5.27 USD/BRL FX, 0.8% GDP growth, and a 5.31% consumer inflation index.

REGIONAL MARKET UPDATES

Asia Pacific

Australia

- Consensus Economics' December 2022 edition estimates growth expectations for the Australian economy to slow from 3.9% in CY 2022 to 1.8% in CY 2023. It also forecasts growth to remain at the 1.4% to 1.6% level during the first half of CY 2024.
- Australia's unemployment rate is expected to remain low, estimated at 3.9% for CY 2023, up 0.2% compared to CY 2022 (3.7%).
- Australia's inflation rate is forecasted to slightly moderate from 6.6% in CY 2022 to 5.2% in CY 2023, still well above the Reserve Bank of Australia's (RBA) average target rate of 2-3%.
- Housing approvals are expected to remain at current levels, 184 000 units in CY 2022 versus a forecast for 186 000 units in CY 2023. The housing market softened from its peak of 229 000 units in CY 2021 on the back of the Federal Government's pandemic induced market stimulus. It remains to be seen if higher interest rates will have a further impact on new construction starts.
- The Reserve Bank of Australia (RBA) implemented a series of eight interest rate hikes in CY 2022, lifting the target cash rate from 0.1% at the start of the year to 3.1% by December 2022. The next RBA Board meeting will take place on 7 February 2023.
- The spot price for Australian Carbon Credit Units (ACCUs) dropped by ~37% in Q1 2022, following the Federal Government's announcement to allow project owners to exit their "fixed delivery" carbon abatement contracts under the Emissions Reduction Fund (ERF). Q4 prices now appear to have stabilized around AUD 34/ACCU. An independent review "Chubb Report" on Australia's Carbon Credit Units was released in January 2023, recommending sweeping changes to improve transparency and the robustness of assessments.
- Trading conditions for Australian hardwood and softwood woodchip exports remain strong in 2022-Q4 but Chinese BHKP and BSKP market prices started to soften with reports of BHKP prices falling below USD 800/ADT by year-end. Trade Tree Online and Brian McClay Associates (TTO/BMA) report that global pulp producers saw a large run-up in input costs during CY 2022 (energy, logistics, chemicals and labor) due to inflation. This resulted in significantly increased production costs in CY 2022, as well as higher CAPEX costs leading to some mill curtailments and closures. Inflation also caused pulp prices to reach their highest level ever in nominal terms but not unusually high in inflation adjusted terms. TTO/BMA indicated that one of the main reasons for high pulp prices in CY 2022 was supply side issues, including UPM's labor strike in Finland in early 2022 and unusually high mill maintenance shutdowns (highest in last 5 years, about 10% of installed capacity) that were

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previously postponed during the COVID pandemic. The Russia-Ukraine war, logistics, and weather related issues also impacted pulp production and in some instances resulted in an increase in softwood pulp production. The situation looks set to change as new capacities will come online in CY 2023 and there is an expectation for market pulp prices to continue to decline.

- Chinese trade restrictions on Australia continue to affect the export of roundwood but not woodchip. A recent meeting of Australia and China's foreign ministers have raised hopes for trade restrictions to be eased as the meeting ended a four-year period of diplomatic deep freeze.

New Zealand

- Consensus Economics are forecasting a December 2022 consumer price index (CPI) of 6.8% but despite aggressive moves by the Reserve Bank of New Zealand (RBNZ), predict a slow retreat to target levels (of between 1% and 3%). It is not expected that inflation will fall below 3% until Q2 2024 with a forecast inflation of 2.8% y-o-y.
- The year 2023 is an election year in New Zealand, and as such the Government is unlikely to reduce inflation-sensitive spending. This results in significant uncertainty for any CPI forecasts.
- The RBNZ hiked the cash rate by 75 bps on 23rd November, raising this to 4.25%. This represents the ninth increase in this strengthening cycle and the sixth in 2022. Many industry commentators believe more rate rises are due in February 2023 when the next RBNZ occurs, while the RBNZ forecast a peak of 5.5% by mid 2023.
- The aggressive behavior of the RBNZ has led to a significant increase in interest rates, with fixed mortgage rates in the 6% to 7% range and floating rates over 7% (and in some cases over 8%). This has dampened the housing market with house prices firmly in retreat. It is expected that more than 20% of home loans will be refixed in the first half of 2023 with many of these borrowers expecting a more than 5% increase on their previous fixed rate.
- Core Logic reported a nationwide house price drop of 2.9%/a for the month end of November 2022. With the impact of the interest rate increases delayed (most borrowers are on fixed rates), and the expectation of further rate increases to come, house prices are expected to see further reductions in 2023. However, the market is not expecting the drops to fully reverse the 41% national increase in house prices that has occurred since June 2020.
- For various reasons, mostly underpinned by highly contentious legislation around water management, the incumbent Government's popularity rating continues to fall, with the Taxpayers' Union Curia poll showing a significant drop in support for Labour as at December 2022.
- A consistent story throughout 2022 is that building material shortages remain a concern as does the availability of skilled construction labor. In Auckland, in particular, many builders still have a strong pipeline of construction work, well into 2023. Consequently domestic sawmills still have strong order books and are operating at near capacity.
- The rapid increase in interest rates along with resource constraints and high inflation are restricting economic growth, with these headwinds Consensus Economics' December 2022 forecasts for 2022 GDP growth are 2.3% with a significant reduction in 2023 to 1.2%. With the aggressive rate hike in November 2022 and more on the horizon for 2023, the situation could see New Zealand fall into a recessionary period during 2023 (defined as a GDP drop in two successive quarters).
- New Zealand continues to face severe skilled labor shortages affecting healthcare, education, agriculture, transport and industry. The Government has eased entry restrictions and in December added nurses to the immigration "Green" list which allows certain qualified professionals to gain a quicker and easier entry into New Zealand and a direct pathway to residence. Many say this is too little too late with official statistics suggesting the economy is at or above full employment with the unemployment rate at around 3.3%. The competition for resources is, in turn, pushing up salaries and with it inflation.
- China market log prices have remained stable over the past few months despite having dropped by around 25% in the past six months (to December 2022). At wharf log price (A grade) have remained strong, increasing

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strongly from NZD 98/JAS in June to around NZD 121/JAS in December (albeit with a six-month peak in September driven, in part, by favorable exchange rates). The key drivers of this are reduced shipping costs which have reduced from the very high level of ~USD 76.7/JAS in June to around USD 35.1/JAS in December.

- The New Zealand carbon credit (New Zealand Unit [NZU]) price rose to an average of NZD 88.4/NZU in November before falling to a current price of around NZD 77.5/NZU in December 2022. The current spot price at the time of writing this article is around NZD 73.25/NZU indicating the realization of a significant overhang of supply at present with over 120 million units held in private accounts. This has the potential to weigh on prices as this represents nearly three years demand from the key emitters. Many holders of NZUs don't necessarily intend selling them in the short-term so actual supply is effectively lower. The future path of NZU prices remains uncertain despite the auction floor price ratcheting up sharply for 2023. This overhang is concerning the Government and may need to be addressed. However, the Climate Change Commission's recommendations require an increasing carbon price to bring about the behavioral changes necessary to address climate change.

Asia

- Home prices in China sank for the 13th consecutive month in September, especially after being battered by the "COVID zero" policy and a debt crisis among cash-strapped developers. To improve the situation Chinese authorities have loosened home ownership rules, trimmed interest rates, and urged banks to step up lending in a bid to revive the ailing property market.
- China's softwood lumber imports through November 2022 were 12% lower (to 15.75 million m³) than in the same period of 2021. European supplies were all higher (Finland, Belarus, Sweden, Germany, Ukraine) while the two largest exporters, Russian Federation and Canada, were lower by 9.3% and 18.3%, respectively.
- China's softwood log imports dropped by 38.5% to 28.05 million m³ for the first 11 months of 2022. Nine of the top ten suppliers recorded declines relative to 2021, including all of the top seven: New Zealand, Germany, United States, Japan, Canada, Czech Republic and Uruguay.
- China's softwood log inventories at ocean ports have been declining month-over-month since March 2022 when they peaked at 6.27 million m³. In late November, they were down to 3.60 million m³.

Europe

- In early December 2022, the European Council and the European Parliament reached a provisional agreement regarding the regulation to reduce the risk of deforestation and forest degradation linked with goods imported into or exported from the European Union. The legislation will prohibit the import from any regulated commodity derived from deforested land or forest degradation as defined by FAO in its Global Forest Resource Assessment (FRA). If adopted the text will substitute the EU Forest Law Enforcement Governance and Trade Regulation (FLEGT), which contains the EU Timber Regulation, and enhances the EU's 2030 Forest Strategy, which seeks to boost regional conservation and reforestation initiatives (EUTR). However, the FAO stated that a "widely applied definition of forest degradation is unavailable, and data are scarce". As a result, some people are already pointing out that the definition implies that deforestation refers to a change in land use rather than a change in tree cover.
- A recent study by the European Forest Institute (EFI) found that windthrow was the leading cause of forest damage in Europe between 1950 to 2019. The study estimates that on average 44 million m³ of forest damage occurred each year, with windthrow accounting for 46% of the share and fire for 24% of damaged wood. It also emerged from the study that bark beetle damage in Europe's forests has more than doubled in the last 20 years, making it the third most disruptive cause with around 17% of damage overall.¹

¹ M. Patacca et al. (12 Dec 2022). Significant increase in natural disturbance impacts on European forests since 1950. *Global Change Biology*. Available at: <https://doi.org/10.1111/gcb.16531>

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- The war of aggression by Russia and related sanctions will stop timber flows out of Ukraine, Russia and Belarus. In the short term, this will lead to major fluctuations in wood flows in Europe. We are already seeing significantly higher wood prices in the Baltics and Finland compared with Sweden. In Finland the demand for wood strengthened towards the end of 2022 after a momentary slowdown in the summer. The prolonged strike of UPM gave the industry some time to adapt to the end of Russian wood imports. The industrial wood consumption is expected to reach almost 70 million cubic meters this year according to Natural Resources Institute of Finland (LUKE).
- Norway has increased its wood exports significantly and is now the world's fourth largest exporter of softwood. Germany and Latvia accounted for the increased demand, although Sweden continues to be the largest wood importer from Norway. In Sweden, Sveaskog has announced its intentions to reduce harvesting volumes by one million cubic meters this year. The reductions will take place in central and northern Sweden.
- At the beginning of December, Austria's Minister of Agriculture launched its "European Wood Policy Platform" in order to strengthen cross-border wood policy implementation. It is expected from the platform to confer a framework around wood policy issues, such as timber construction and funding schemes, throughout Europe.
- During the International Hardwood conference held in Lyon, France in October 2022, the European Organization of the Sawmill Industry (EOS) stated that 2022 will likely see a decline of 3% in production despite a good first-half of the year. This is linked to the current shortage of raw material availability which is reportedly due to increased interest for European hardwood logs from Chinese companies, as well as the consequences of the Ukraine war. The European Timber Trade Federation (ETTF) and EOS also stated that the overall scenario is rather challenging, with high energy prices putting a strain on the industry (particularly in the more energy-intensive beech sector). It was concluded that the hardwood industry can benefit from the current upcoming environmental policies from the EU and the sector must seek out new markets and opportunities.
- Consumer demand for products from both the softwood and hardwood sectors has weakened as a result of high inflation and rising mortgage rates. Sawmill stocks are high, and many producers anticipate a difficult few months ahead.
- Moreover, several lines in Finland have taken downtime and export prices for wood products have significantly decreased from the record levels last year. However, despite weaker demand the production volumes will probably remain high with new capacity coming on stream. In Finland, Metsä Group's large new sawmill in Rauma is still in ramp-up mode and several private sawmillers have also expanded their production capacities. These combined with Metsä Group's large bio-refinery project in Kemi will over time significantly increase wood procurement volumes in Northern Finland.
- In Sweden the production of sawn goods has still continued at higher levels and the build-up of stock is considerable. There are sawmills that are already balancing on break-even. Cost pressure is very high especially in southern Sweden. High prices for by-products, especially for energy use, are thus partially compensating the cost increases.
- The continental European sawmills are having even tougher times with high wood and electricity prices. Increasing attention has therefore been drawn to the Nordics for future expansions, as proved by the significant acquisitions made by Austrian producers last year. In Sweden, Mayr-Melnhof Holz acquired Bergkvist Siljan AB. In Finland two major acquisitions were made; HS Timber took over Luvian Saha OY, and Pfeifer Holding recently announced their acquisition of Pölkky Oy.
- Current reports are indicating that imports of wood-based panels and other wood products from Asia and South America have suffered significantly as a result of a sharp decline in container freight rates over the past few months. Resellers and importers are delaying their new orders, and previous stocks (purchased at higher prices) currently being held by merchants and North Sea ports are steadily losing value. EUWID panel price watch is notably reporting a drop in price of nearly 32% for plywood imported from Brazil and a drop of 20% for Asian plywood against June prices.
- The demand for pulp and paper products are more stable. Prices for fiber-based packaging products are expected to decrease but underlying demand is expected to remain at healthy levels in 2023. The pulp sector

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probably reached the peak of profitability last autumn, but the profitability is expected to remain very good in the coming period.

- In general, prices for wood products in Europe appear now to be stabilizing or even slightly declining compared with the start of the year. Moreover, prices for wood-based energy which were still on the rise to September 2022 are now also facing this trend.² This trend is likely due to the EU and its members incorporating shielded prices around the energy sector to temper its rising. The sawmilling sector is now experiencing a gradual decline in prices and facing a wait-and-see market among buyers in all markets. The order situation is weakening, and stocks are increasing.

Russia

- Northwest Russia sawmills have been curtailing production as weaker lumber prices and high logistics costs to Asia and the Black Sea have made operations unprofitable. Mills in Siberia are either at break-even prices or are facing small losses.
- More foreign-owned Russian sawmills are being sold to Russian investors. The latest divestiture was Mayr-Melnhof Holz (Austria) with the sale of its Efimovskij sawmill in Northwest Russia.
- Russian lumber exports were lower by 21% (20.02 million m³) through the first 10 months of 2022. Of Russia's top 20 export markets, volumes were higher only to non-sanctioned markets of Uzbekistan, Azerbaijan, Turkmenistan, Iraq, Turkey and Lebanon. The countries of Central Asia have become target markets for Russian sawnwood, but sales to some countries have been blocked since there are no border checkpoints in some countries to allow for exports. However, at the end of November, Russian Decree No. 521 was amended to allow the export of sawn timber to Kazakhstan and Kyrgyzstan, but Uzbekistan and Turkmenistan still remain inaccessible (source: Russian Timber Journal).

North America

- US housing starts decreased to 1.427 million units (Seasonally Adjusted Annual Rate, SAAR) in November, down 0.5% from 1.434 million units in October, and down 16.4% from 1.706 million units year-over-year. Building permits for privately-owned housing units decreased to 1.342 million units (SAAR) in November, down 11.2% from 1.512 million units in October and down 22.4% year-over-year. Housing completions increased to 1.49 million units (SAAR) in November, up 10.8% from 1.345 million units in October and increased 6.0% above last year. The NAHB Builder Confidence Index slid two more points in December to 31 based on high interest rates, building material cost increases that exceed inflation, and high home prices, all of which are affecting affordability. According to Fannie Mae, housing starts will total 1.551 million units for 2022, 1.145 million units in 2023 and 1.185 million units in 2024.
- US housing starts in December 2022 decreased to 1.382 million units (Seasonally Adjusted Annual Rate, SAAR) as compared to revised November starts of 1.401 million units.
- While US housing starts moved steadily higher during the pandemic, mortgage rates rose to near 7% making housing less affordable to many buyers. While it appears that rates are easing at this time, high mortgage rates continue to put pressure on home prices and sales as median home prices initially decreased then began to rise again, although at a more moderate pace. By November 2022, existing median home prices increased 7% year-to-date according to data from the National Association of Realtors (NAR). Market evidence points toward continued slow home sales, a trend that would adversely impact lumber and panel markets in 2023, perhaps into 2024.

² According to reports by proPellets (Austria), the German Energy Wood and Pellet Association (DEPV), PelletPreis.ch (Switzerland), and EUWID.

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- US housing starts reached 1.60 million units in 2021, but will drop to about 1.55 million in 2022. High mortgage rates coupled with a low inventory of homes at expensive prices slowed the housing market in the second half of 2022. The outlook for 2023 is for housing starts to be in the 1.2 million range – a big drop.
- Pulpwood prices vary by region and season. In the Lake States region, Q4 hardwood roundwood prices remained elevated and softwood roundwood increased again due to high diesel fuel costs and low trucking capacity. In the South-Central region, demand fell as mills reduced production in anticipation of an economic recession, sending hardwood roundwood prices lower. South Atlantic region prices remained flat for hardwood and softwood roundwood from last quarter but were down moderately year-over-year. Many mills struggled to accumulate enough wood for winter, so cold and dry weather was beneficial for operability. However, in late December, heavy snows blanketed parts of the Upper Midwest and Interior Northeast.
- Pacific Northwest Douglas-fir log prices remained largely stable since August while whitewood prices have mostly recovered from a sharp dip in August and September. With housing starts showing weakness, some further declines in log prices are expected. However, Douglas-fir supply continues to be tight.
- US lumber production – Western lumber production ended the year down 0.8% from 2021 levels. Modest gains in the Coast region were offset by declines in the Inland (-2.4%) and California Redwoods regions (-6.5%). Southern yellow pine production was up 5.8% from 2021 figures. US West softwood log exports YTD were down 16% and US offshore softwood lumber exports were down 11.1% as compared to 2021.
- North American lumber output in 2022 has not been able to achieve the same pace as 2021. This is a combination of slowing demand, but also the impact from COVID and supply issues that interfered with mills in the first half of the year. Overall North American production was lower by 2.1% at 45.44 billion board feet. However, for the first three quarters, US output increased marginally by 2.0% to 28.92 billion board feet, but only because the US South increased production by 6.4%. All other US regions recorded declines. Canada's output over the same nine-month period was lower by 8.6% (18.07 billion board feet), led by BC's significant drop of 12.6% (almost 1 billion board feet).
- Lumber prices (per the Random Lengths Structural Lumber Composite) at the end of December were at USD 380 per thousand board feet (MBF), off 63% from the year prior, USD 1 038. Prices have been on a downward trend since August. High mortgage interest rates and improved truck and rail transportation availability have prompted buyers to revert to carrying lean inventories.
- Following 20 months of elevated prices, US hardwood lumber prices started falling precipitously from their peak during the summer. Supply abruptly increased as domestic demand fell due to the softening housing market while production remained high. By September, nearly all of the price gains since 2020 had evaporated. US hardwood lumber exports reached a four-year high of 1.45 billion board feet lumber utilization in 2022 (annualized January-October) with steady demand from Asia, Europe, Canada and Mexico. While total estimated consumption for 2022 was up 3%, the trend has been lower since mid-year and increasingly substitutes for American hardwoods continue to erode market share in an economy where housing costs are high and inflation outpaces wage growth.
- 2022 started slow for US Timberland transactions, with most of the activity and big transactions occurring in the 3rd and 4th quarters. The largest transaction in years was the Bluesource USD 1.8 billion acquisition of The Forestland Group's hardwood properties at an average of USD 1 060 per acre. Manulife Investment Management's sale of Dionysus, 129 000 acres of high-grade pine plantations in Texas, Alabama and Georgia, sold for as high as projected with values exceeding USD 4 000 per acre for some portions of this remarkable high planted area and high site index property. The Georgia portion sold for the highest price for the smallest acreage at USD 4 400 per acre, followed by Alabama at USD 3 100, then Texas and Louisiana with the largest acreage at USD 2 875 per acre.
- Europe softwood lumber imports to the US increased by 23% over the first 11 months of 2022 as compared to 2021. This is a result of weak markets in Europe caused by rapid rising inflation and especially higher energy costs.

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- Canada softwood lumber exports through November 2022 declined by 8.7% over the same period in 2021. Exports to the US were down by 6.0% and offshore exports were lower by 27%. Exports to China were off by 26%; compared to 2013 volumes, this represents a seven-fold decrease.
- The BC government's temporary – but ongoing – deferral to avoid the harvesting of old growth timber, in combination with other forest policies, has created some serious log shortages for sawmills in various regions.
- BC sawmill curtailments started in 2022-Q3 from weaker lumber prices and tight log supplies. Temporary shutdowns accelerated in Q4 and again in early 2023-Q1 where at least 15 sawmills and four pulp mills were curtailed, and one pulp mill closure was announced (Canfor's Prince George Pulp Mill).
- Current lumber prices of USD 345/MBF (January 13, 2023) are well below the average of 2022 (USD 776/MBF). BC sawmills have the highest log costs in North America and need lumber prices closer to USD 450/MBF to break even.
- The Bank of Canada raised its prime lending rate by 0.5% to 4.25% in December 2022 to combat soaring inflation. Like the US, this has caused mortgage rates to soar, with negative implications to the housing and repair/renovation markets. A further rate hike is expected in the first quarter of 2023.

South America

Brazil

Brazilian Forest Industry – Context and Trends

2022 was challenging for the pine and eucalyptus solid wood industries. Compared to 2021, exports fell 9.1% (QTY) with the first half of the year positive (+4%) but the second half negative (-22%). Concerning 2023, the primary industrial players are pessimistic about demand in the first half of the year and are in the dark regarding the second one.

Unlike the solid products industry, the composite panel, charcoal, and woodchip industries performed positively in 2022 compared to 2021, with exports growing by 14%, 8%, and 22%, respectively.

The pulp industry had a sound performance in 2022. Exports of pine and eucalyptus pulp grew 22% year-on-year, and 28% half year by half year (H2). Suzano's new mill in Mato Grosso do Sul (MS) is developing according to plan, and Arauco is already planting eucalyptus to support its 2027 pulp project in MS.

As for wood prices, since the Q4 2022, a tug of war is underway between the sawlog consumer and their suppliers. As for pulplog consumers, the structural wood deficit has given suppliers significant wood price bargaining power.

In short, the "forest end-market" river is slowly and consistently returning to its 2019 pre-COVID bed.

Eucalypts Exports and Wood Prices

The performance of eucalyptus product exports was positive in Q4 2022 compared to the same period in 2021, except for woodchips.

- Pulp: + 20% QTY and 12% USD
- Chips: -16% QTY and -19% USD
- Logs: +12% QTY and +24% USD
- Charcoal via green pig iron: -19% QTY and +16% USD

Pulplog wood prices practically remained stable against the previous quarter. For 2023, the industry forecasts lower prices if the economic downturn worsens and flat prices if the economic context does not change. However, suppliers believe that even in a deeper economic downturn, pulpwood prices will not retreat due to the structural wood deficit. Time will tell who is right.

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Pine Exports and Wood Prices

As for pine product exports, the Q4 2022 performance against the previous quarter was significantly lower, except for logs and pulp exports:

- Lumber: -38% QTY and -48% USD
- Moulding: -32% QTY and -34% USD
- Plywood: -15% QTY and -32% USD
- Pulp: -1% QTY and +6% USD
- Logs: +26% QTY and +27% USD

According to the industry, the substantial drop in exports is due to the worsening context and economic expectations in Europe and the United States and the abrupt increase of the product inventories resulting from the debottlenecking of the post-pandemic logistics chain.

Pine sawlog wood prices at the Q4 2022 did not reflect the significant downturn in solid product exports. Compared to the previous quarter, prices of small sawlogs increased 5.9% and mid-size sawlogs 6.1%. Large sawlogs were an exception, dropping 1.9%. As already mentioned, if the industrial downturn continues, the short-term trend is price downward, with a slight bias toward stability.

As for pulplow wood, prices increased by 10.2% due to the structural deficit of this assortment, which will probably continue to support the current prices with a bullish bias.

Uruguay

- According to the CINVE, the growth of the Uruguayan economy during 2022 was 3.7%. Inflation during 2022 was 8.29%/a.
- Uruguayan exports of goods grew 16.5% in 2022, with a total of USD 13 356 million and once again registering an all-time high. In 2022 there were two clearly differentiated periods in the trajectory of exports of goods: between January and August, year-on-year increases were registered in all months and in the last four-month period of the year there were drops in export requests.
- Beef was the main exported product in 2022 with a value of USD 2 557 million, representing almost 20% of the total exported. Soybean exports (USD 1 922 million) followed in the ranking, which more than doubled the values exported in 2021 (USD 892 million). Pulp ranked third in the product ranking, totaling exports of USD 1 818 million in 2022, representing almost 13% of the total exported.
- China was once again Uruguay's main trading partner in 2022, representing 28% of goods exported valued at USD 3 675 million. In 2022, the European Union replaced Brazil and occupied second place in the ranking, representing 15% of the total (with exports of USD 1.95 billion). Brazil was the third destination for exports with sales of USD 1 873 million (14% of total exports). The fourth destination was Argentina followed by the USA with a participation of 9% and 7% respectively.
- In April 2022, Uruguay and Turkey agreed on the terms of reference for the start of an exploratory dialogue on the FTA negotiations. In turn, in July the joint feasibility study was concluded to advance FTA negotiations with China. In December, Uruguay applied to join the CPTPP bloc. Within Mercosur, in July the members agreed to a reduction in the common external tariff (CET). Negotiations between Singapore and Mercosur were also concluded. Finally, in bilateral matters with Brazil, in June 2022 a new trade agreement for products produced in free zones was signed.
- UPM's second pulp mill project in the central region of Uruguay is proceeding according to plan, and will start pulp production in March 2023.
- Both UPM1 and the Montes del Plata (MdP) pulp mills operated at full capacity during 2022, consuming 4.6 million m³ and 5.1 million m³ of logs respectively. UPM2 is already receiving pulp logs and buying wood from different regions.

Forest Sector Outlook

- The first woodchip vessels exported during 2022, showed an increase in FOB price close to USD 15/BDMt compared with 2021. During 2022, Uruguay exported 26 *Eucalyptus* woodchip vessels to Portugal, Sweden and China, representing around 1.3 million m³ of logs. Also, during 2022, UPM exported three pulp log vessels to Finland.
- Total pine log export volume during 2022 was close to 1.54 million JAS m³, representing 44 vessels, (35% to China and 65% to India). This volume shows an annual decrease of close to 45% compared with 2021. Average FOB price for 2022 was around USD 86/JAS m³. During 2022, Uruguay loaded five Capsize vessels to China, with an average volume of 97 000 JAS m³ of pine logs per vessel.
- Uruguay's eucalypt sawlog exports continued during 2022, with a total volume of 156 000 m³ and average FOB prices of around USD 135/m³ (big variations in FOB prices were detected based on logs quality). Even though eucalyptus saw log exports stopped during Q4 2021, demand started again in 2022 and exports will continue during 2023.
- Only one plywood company in Uruguay is still operational. For 2022, exported volume decreased approximately 8% and average price decreased 9%. As of 2022, average prices were around USD 415/m³.
- Carbon credits from Uruguay's forest projects are still in high demand, with prices higher than USD 8/CCBvcu (CCBvcu= Climate, Community & Biodiversity Verified Carbon Unit).

Africa

- The World Bank in its Global Economic Prospects Outlook (January 2023) indicated that economic growth in Sub-Saharan Africa was only 3.4% in 2022. Economic growth in the region is expected to be 3.6% in 2023 but the larger economies of Nigeria, Angola and South Africa are expected to grow at only 2.8%, 2.9% and 1.4% respectively. This is in stark contrast to countries such as Tanzania, Kenya, Rwanda and Uganda, with projected growth rates above 5%.
- South African economic growth was severely hampered by electricity outages in 2022. Eskom, the government owned electricity utility, implemented power cuts on more than 200 days in 2022 as it tried to balance demand and supply. The utility struggles to manage its aging fleet of power plants that continuously break down, a situation that is not expected to be resolved in the near future. The power crisis, together with a lack of business confidence, policy uncertainties and a lack of new drivers of growth have stalled economic growth in South Africa. The recently released World Economic Forum Global Risk Report indicates that the main fear of South African executives is that of state collapse, a risk mirrored only by executives in Peru and Bosnia and Herzegovina.
- It is however not all doom and gloom in South Africa and Sub Saharan Africa. Sappi Forests announced a record fourth quarter and full year earnings and resumed dividend payments. Border Timbers in Zimbabwe reported a net profit versus a loss in the previous financial year. Woodbois in Gabon saw revenue rise by 32% to USD 23.1 million for the year and SAFCOL, the South African parastatal forestry company, delivered record earnings of ~USD 5 million compared to a loss of USD 2.6 million in the previous financial year. The World Business Council for Sustainable Development ranked Mondi's 2021 Sustainable Development report in the "Top Performer" category for the fourth year in a row.
- Contrary to a decision by the Council of Ministers of the Economic Union of Central Africa (UEAC) to indefinitely postpone the implementation of a regional ban on the export of logs, the Republic of Congo has suspended the export of timber in the form of logs from 1 January 2023. Timber exports from Congo will be restricted to semi-finished or finished products. This is done in an effort to increase the contribution of the forestry and processing industry's contribution to GDP.
- New Forests Asset Management, together with British International Investment, Norfund and Finnfund, officially launched the African Forestry Impact Platform (AFIP), a dedicated African fund to the value of USD 200 million, in October 2022. The launch coincides with an announcement of the acquisition of Green Resources by AFIP.

Forest Sector Outlook

- Gatsby Africa and Swift Geospatial Solutions launched their Geospatial Forestry Platform (GFP) at an event in Nairobi in November 2022. This platform will give small-scale timber growers access to a dashboard of forest management tools, including a Site Species Matching Tool (SSMT).
- Total woodchip exports through the ports of Richards Bay and Durban in South Africa, between January and November 2022, were 2.16 million Mt. Over the same time period in 2021, ~1.9 million Mt were exported. China and Japan remained the main woodchip export destinations. Pulp exports have retracted slightly from ~900 000 ADt in 2021 to 823 000 ADt in 2022 for the January to November time period.

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