

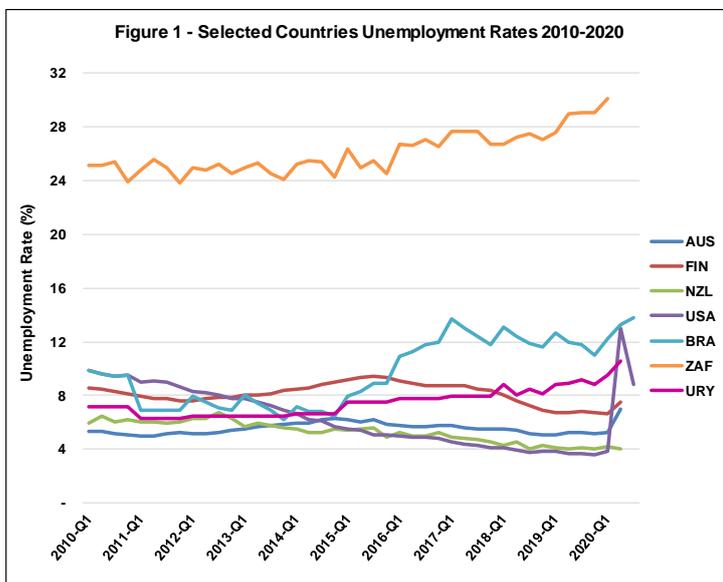
Timberland Market Update

Global Consulting Alliance

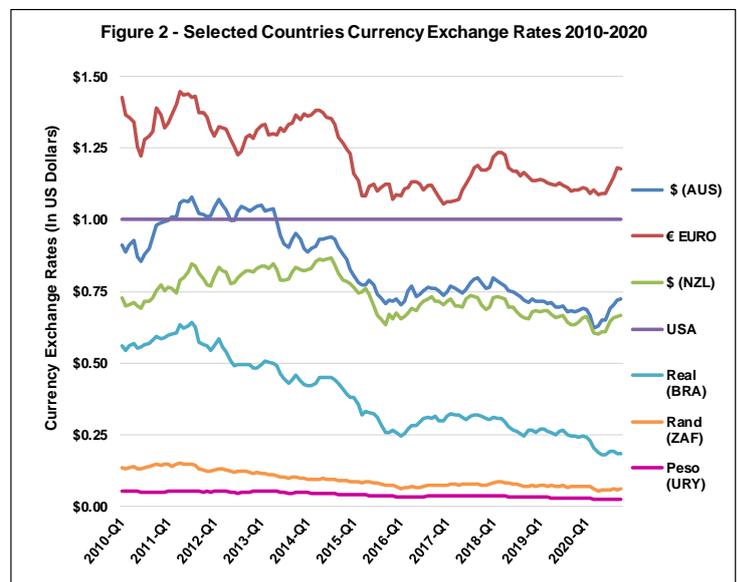
Quarterly Edition - September 2020

Economic Dashboard

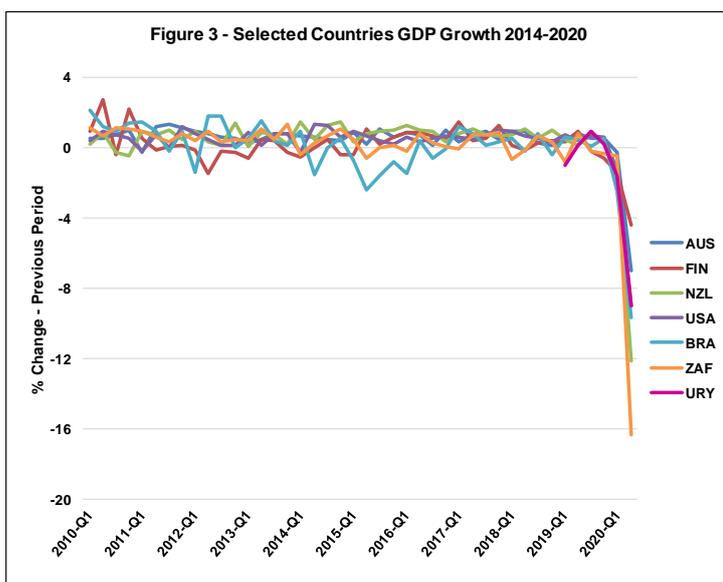
Figures 1-4 illustrate four key macroeconomic indicators as observed over the past decade, on a quarterly basis. These can be useful particularly to monitor the effects of the COVID-19 pandemic.



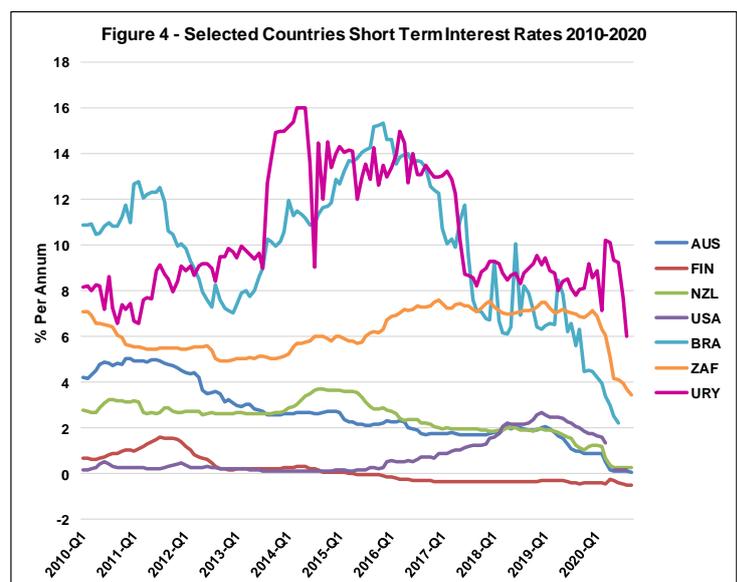
Sources: OECD, Brazilian Institute of Geography and Statistics, macrotrends.net (World Bank), Statistics South Africa



Source: Federal Reserve, Uruguay Statistics National Institute



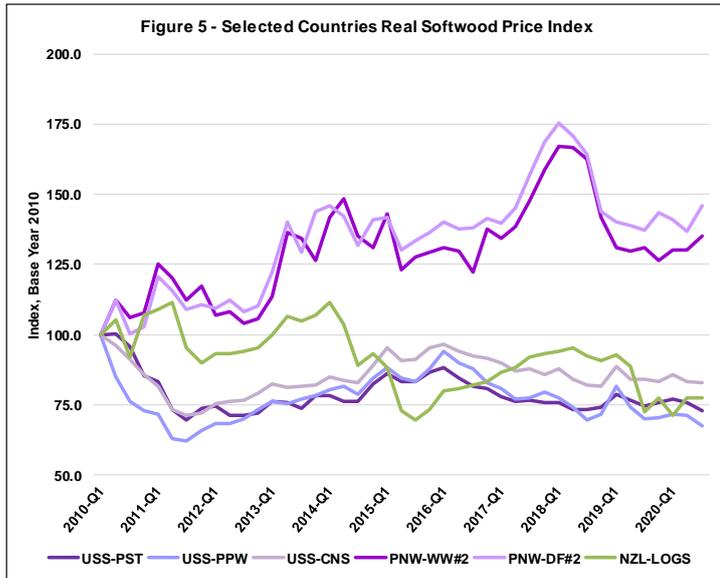
Source: OECD



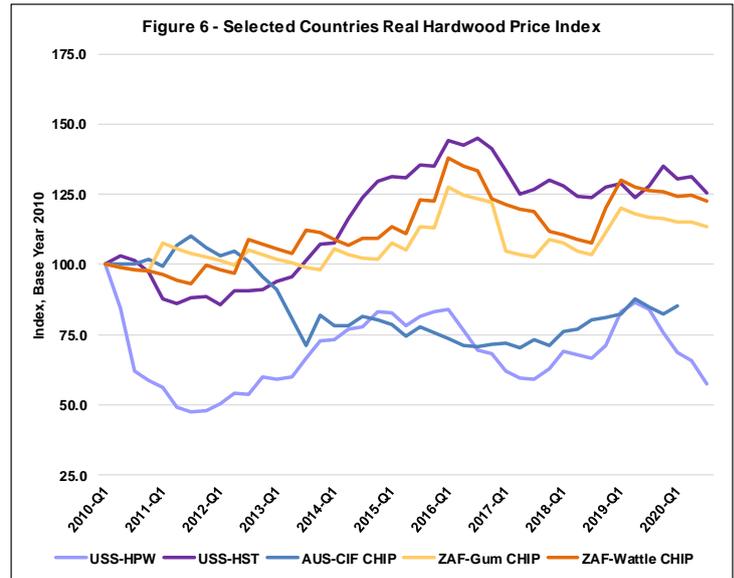
Source: OECD, FRED - St. Louis Fed

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Figures 5-6 introduce an indexed real pricing illustration – with a base quarter-year 1Q-2010.



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.

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.

Economic Highlights

- The global economy is expected to contract by 4.5% this year compared to just 0.1% during the GFC.
- U.S. GDP – Forecasters have been steadily revising forecasts of real GDP growth to account for expected impacts of the pandemic as well as the associated fiscal and monetary policy responses. Prior forecasts projected real GDP growth of 2.0% in 2020, slowing to 0.6% in 2022 and recovering to 3.0% for a three-year period after that. While most are now projecting a contraction in the range of -5.5% to -6.9% for the year 2020, predictions for recovery in 2021 range from 2.8% from the U.S. Congressional Budget Office (CBO), to near 3.5% from two leading industry economic forecasters, and most optimistically, between 4.7% and 6.3% from global economic organizations.
- U.S. Unemployment – The Bureau of Labor Statistics reported that unemployment averaged 7.9% in September 2020. Prior to the economic effects of the pandemic, the U.S. unemployment rate had been hovering around 4% since 2017 and was expected to rise to 6% by 2022 before settling back down to 5% as GDP growth improved. In April 2020, the rate spiked to 14.7% with the loss of 20.5 million jobs due to lockdowns to prevent the spread of the virus. Since lockdowns ended and many restrictions have been lifted, the employment situation has been improving. One recent

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industry analysis estimated that unemployment will average 9.5% in 2020, lower to 7.9% in 2021 and drop to 5.6% in 2022.

- The forecast for Brazil's GDP growth for 2020 changed drastically with the pandemic outbreak. From an estimated 2.5% growth in January to -7% in February, revised to a somewhat less pessimistic view in September (-5%).
- Currently, the Brazilian economy is growing by 3% to 4% on a year-on-year basis because of a slowdown in the spread of the pandemic and government emergency aid of BRL120 billion to 124 million people, which has been decisive in offsetting the 1H restrained demand. However, this recovery is expected to slow down in January 2021 with the end of the aid program. If not extended, and if anticipated reforms (tax, fiscal, and administrative) do not materialise, Brazil economy will slow down markedly in 1Q 2021 and unemployment, currently at ~13.8%, will increase.

Regional Market Updates

Asia Pacific

- Australia's economy contracted by 7% in the June quarter and New Zealand by 12% due to the impact of Covid-19. For calendar year 2020, Australia economy is forecasted to see -3.75% growth, recovering to 4.25% growth in 2021.
- Japanese imports of hardwood chip from Australia in Q2 2020 decreased to 300 246 BDMt from 466 885 BDMt in Q2 2019. i.e. a ~36% decline. Japan's total hardwood chip imports for 2020 is estimated to be 8.7 million BDMt, i.e. a decline of 1.96 million BDMt compared to 2019.
- Chinese import volumes of hardwood chip in 2020 is expected to be on-par with 2019 although its sourcing from lower cost Vietnam increased by 14% and 8% more from Chile at the expense of Australian exports (a 25% decline).
- Australian *E.globulus* hardwood chip prices are USD167/BDMt FOB as at the end of Q3 2020, Vietnam prices are in the USD120-125/BDMt FOB range for Acacia chip.
- Except for Victoria, all other Australian states and territories are practically COVID-19 free as at the end of Q3 2020. The Australian housing construction sector has held up better than initially expected with housing approvals for 2020 expected to be 165 000 units (172 000 in 2019, Consensus Economics). Various ongoing Government economic support measures are staged to progressively unwind between September 2020 and March 2021.
- Some resemblance of stability is returning to China's log imports, expectations are for strong demand as the construction season builds to a peak. A grade log prices have increased to USD117/JAS for September up USD5/JAS from August.
- Sea freight costs are also strengthening (up USD0.6 – USD1.2/JAS depending on destination) driven by demand for other bulk shipping of metal ores as the Chinese economy and building sector accelerate.
- June quarter export log volumes from New Zealand are down 27% due to the New Zealand industry production shut during the level 4 pandemic lockdown in April and the subsequent restrictions during May.
- Under New Zealand's Emission Trading Scheme (ETS) prices increase to nearly NZD35/NZU up NZD1 from August.
- With the country COVID-19 free, M&A activity is increasing in New Zealand with several significant forest sales either in process or about to start.
- New Zealand's first forest fire of the season destroys more than 50 homes and most of the village of Ōhau and extends over some 5 000 ha of forest, bushland and tussock land.

Europe

- The Euro area, according to the latest Economic Forecast issued by the European Commission, is expected to contract by a record 8.3% in 2020 (from 7.8% in the previous forecast) and grow by 5.8% in 2021 (6.3% in the previous forecast).
- The COVID-19 pandemic led to increased volatility in demand for forest industry products during the first half of the year. The Nordic producers have so far managed to handle shifts in markets quite well but with big differences between product groups. In Finland the pandemic and related mitigation measures last spring drove paper production at domestic mills to its lowest level in decades. The production of sawn timber and plywood also decreased. Production volumes of pulp and packaging grades have though increased, in the second quarter of the year, by 1.4% and 11% compared to the levels one year ago.
- The Finnish wood market is gradually recovering from the large drop at the beginning of 2020. According to the Finnish Forest Industries Association, the volume of wood purchased during the first half of the year was approximately 18% lower compared to the previous year. Since March, the monthly volumes have been similar compared with the corresponding months in 2019.
- M&A activity has been high in the Finnish forest sector, especially in the Northern part of the country where transaction volumes have increased by almost 50% vs. one year ago. This has been driven both by increased supply of private holdings owned by elderly people combined with demand boosted by private and institutional investors. One of the largest transactions in the forestry sector was made by an European insurance group which acquired over 18 000 hectares of forest assets owned by United Bankers Plc's UB Nordic Forest Fund I Ky at a total price of approximately EUR 73 million. About 2 200 forest transactions have been made in Finland during the first half of the year.
- In Sweden, the forest industry has benefitted from the Government's expansive fiscal policy. The export of pulp increased significantly during the second quarter of the year after the dip caused by China's markets closing at the beginning of the year. Compared to 2019, the export of pulp has increased by as much as 10%. Nothing seems to stop the demand increase for packaging materials and the wood products industry has so far done well despite challenges related to bark beetle invasions in Central Europe. The pandemic situation has affected Swedish sawmilling sector to a lesser extent than in other large producer countries in Europe despite restrictions introduced in United Kingdom, one of the largest single export markets for Swedish sawmilling industry. Reduced exports to the UK have successfully been offset by increased domestic demand for building materials and increased sales volumes to China and Japan.
- M&A activity in the Swedish forest industry has been largely restricted to the mechanical wood processing sector, which is still quite fragmented, especially in the southern part of the country. Holmen Timber acquired family owned Martinsons, one of Sweden's leading players in sawn and processed wood products. The announced purchase price was SEK 1.0 billion, including two well-invested sawmills in northern Sweden with extensive processing of wood products, as well as a project operation for construction of complete frames made from CLT and glulam beams. VIDA AB, a 70% owned subsidiary of Canfor Corporation, acquired all of Bergs Timber's sawmilling operations in Sweden. The transaction encompasses Bergs Timber's sawmills in Orrefors, Vimmerby, and Mörlunda, and the assets of discontinued operation at Gransjö. The purchase price is estimated at approximately EUR 38 million, and the transaction is scheduled to be concluded on 1st of September 2020.
- Capacity curtailments and machine conversions from printing and writing papers to packaging dominates the structural changes in Europe. The deep dive in newsprint demand has triggered several conversion projects: Papresa, acquired by Quantun Group, will convert two machines in Spain from newsprint to packaging paper and fluting. UPM is taking downtime at Chapelle Darblay and Norske Skog has revealed plans to convert two machines from newsprint to containerboard, one in Bruck, Austria and the other in Golbey, France. The company also consider converting both of its Norwegian mills to packaging.
- The demand for graphic paper continues to decline in Europe. According to statistics published by the European association of graphic paper producers (EURO-GRAPH) the demand for UWF in Europe dropped in the first half

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of 2020 almost by 12.5% compared to the corresponding period in 2019. Production curtailments kept prices relatively stable until May, but slowly declined thereafter. The drop in magazine paper demand was even more dramatic, some 30-40% compared to levels one year ago. The pandemic appears to accelerate changes in consumers' behaviour and structural demand decrease, but it is still pre-mature to judge to what extent the corona related market decline will be permanent.

- Despite healthy demand and growth in most packaging segments, prices are starting to erode. Especially kraftliner and WTL prices are under pressure. FBB and WLC markets are also showing signs of slowing down but prices have remained quite stable. Amongst end use segments, food and pharmaceuticals remains still strong but several premium end use areas are still negatively affected by the pandemic.
- The bark beetle has benefited from a hot and dry summer in most of Central Europe and salvage operations will continue to shift the supply balance of logs and lumber within Europe and its trade with the world for some years. FEA analysis predicts that the killed timber volume could eventually exceed that of the mountain pine beetle outbreak in British Columbia, Canada.
- European softwood sawnwood exports to the USA to July 2020 has increased by 64% in value (EUR) even though volumes decreased by 19%. The main exporting countries include the Netherlands, Germany, Austria and the Czech Republic. European producers have been looking for new markets and have strongly increased supply into the US in 2019. A rebound in the US housing market, reduced lumber supply and strong price increases in 2020 has helped to boost European sales.

North America

- American pulpwood demand is projected to decline an average of 10% for 2020 due to mill curtailments in most major roundwood producing regions, with more pronounced decreases of 12% in north-eastern hardwood and 11% in hardwood and softwood roundwood in the north central region. Increased residuals from lumber production and reduced demand for printing and writing paper due to COVID-19 kept downward pressure on pulp and paper markets in Q3.
- Pacific Northwest Douglas-fir log prices have been volatile and have risen sharply after a steep drop in May. Prices are expected to average \$661/MBF for #2 logs in 2020. Demand for logs is being driven by tight log supply and strong lumber prices. The US West region is on track to export 0.65 Bbf in sawtimber logs for 2020, down from 0.76 Bbf in 2019, due to COVID-19 related price and trade disruptions earlier in the year.
- The Framing Lumber Composite Price hit a record high of \$781 in August (Framing Lumber, Southern Pine, OSB, Structural Panels, Studs, Western S-P-F) as demand rose much higher than supply. This signifies a gain of 40% over July and is 38% higher than the former record. Mill curtailments due to COVID-19 reduced production in Q2, then housing starts rebounded more quickly than expected. Total starts slowed only for a few months, then exceeded 1.4 million in July and August. Capacity will be slow to return to the US South, but with timber supply available and housing starts exceeding expectations, demand is expected to push 2020 production up near 2019 levels and then higher each year for the next five years.
- US Hardwood lumber utilization fell from 8.2 Bbf annually in 2019 to 6.3 Bbf annualized through July of 2020 due to the economic effects of COVID-19. Exports to China have been faring better than other export markets, and railway ties have been impacted less than other manufacturing and industrial hardwood utilization sectors. Flooring, cabinets and furniture have been most affected as of Q3 2020.
- 2020 has been a remarkably destructive fire and hurricane season, said to be exacerbated by climate change. Fire damages are still ongoing, and privately owned acreage is roughly in the range of 500K to 1M, with monetary losses estimated at \$1B. Investors and managers are looking more seriously at their risk exposure in the Northwest as high insurance rates have made insuring some fire losses in the region untenable. Meanwhile, the Atlantic hurricane season is the 3rd most active in recorded history, with 25 named storms as of publication. Hurricane Laura destroyed 30 million tons of softwood and 9 million tons of hardwood just in the state of Louisiana. By comparison, this is more wood than the annual consumption of sawmills in the state.

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- U.S. Timberland transactions in 3Q 2020 have been scarce due to COVID-19 disruptions. Small retail HBU sales have provided TIMOs with activity since some buyers have been looking for isolation from COVID-19 and interest rates have been historically low. However, TIMOs have been under pressure to find assets for investors to purchase while sellers now expect to receive offers that reflect high lumber prices when those increases have not made their way back to the stump. In addition, there is some sense that appraisal values are unrealistically high. Neither side has given in yet, so it remains to be seen whether investors will pay more, or sellers will relent and sell at lower prices.

South America

Brazil

- General situation
 - Year to date exports relative to 2019 have seen a significant increase in volume. *Eucalyptus* pulp exports increased by 4%, pine lumber by 13%, pine moulding by 7%, and pine plywood by 11%.
 - Export revenues (US\$ FOB) did not keep pace with the increase export volume due to significant international price decreases. On average, -30% for pulp, -12% for lumber, -1% for moulding, and -5% for plywood.
 - However, price decreases and revenue losses in USD were offset or significantly minimised by the sharp depreciation of the BRL currency, around 30% against the USD from January to September 2020.
- **Pulp Industry:** despite the challenging market situation due to low pulp prices, pulp companies performed well due to the significant FX rate drop and production cost reduction. The ongoing pulp projects (UPM in Uruguay, Arauco in Chile, and Bracell in Brazil) suggests continued pulp surpluses and, consequently, continued low prices. Companies may face increasing wood supply risks due to climate change impacting forest productivity.
- **Composite Panel Industry:** market is currently seeing high-demanding because traders are replenishing stocks. Companies are very optimistic in their demand outlook due to positive prospect for the domestic housing industry.
- **Charcoal Industry:** China's substantial pig iron imports have revigorated the charcoal industry and the wood market, but doubts remain if pig iron exports are a sustainable long-term business. Despite the positive charcoal context, wood prices are not expected to increase sufficiently in the short-term to provide a sound return.
- **Lumber Industry:** the segments oriented to the external market to supply pallets, moulding, and housing industries are performing well. They expect a growing demand and an attractive FX rate for 2021. *Eucalyptus* is competing with Pine because of its significantly lower price.
- **Plywood Industry:** is performing very well due to the high demand and attractive prices provided by the external market, mainly by the booming USA housing market. Companies expect a demanding market in 2021, with a devalued BRL.
- **Wood Prices:** *Eucalyptus* wood prices have increased significantly in São Paulo and Parana because of the growing pulp and panel production and use of *Eucalyptus* sawlog to produce lumber and plywood. *Eucalyptus* pulplog price can also increase in Minas Gerais if China remains importing pig iron, and in Bahia if the state continues to face forest productivity setbacks due to droughts. In the other Brazilian forest clusters, the wood balance points to a structural wood surplus and stable prices. Pine sawlog prices increased in step with the growing lumber and plywood exports. Pine pulplog prices have increased slightly in the market regions that supply Klabin (centre-north Parana and Southeast São Paulo) and WestRock (Parana-Santa Catarina border) because of the expected wood deficit.
- **Forestry Investment:** Suzano is bidding new greenfield plantations in Mato Grosso do Sul to sustain its wood supply in the long-term and do feasible its new pulp mill project. In São Paulo, investments in *Eucalyptus* plantations are increasing because of the forecasted wood deficit resulting from Bracell's new pulp mill.

Uruguay

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- General situation
 - While the COVID-19 situation in Uruguay appears to be reasonably well under control with a total death toll to date below 50, the main concern is the sanitary situation of its neighbour, Argentina and mainly (because of dry borders), Brazil.
 - From early January to October 2020, GDP growth expectations plunged, from 1.7% to -3.5% as a result of the COVID-19 pandemic. The UYU depreciated by 17% during the same period.
- **Pulp Industry:** UPM's second pulp mill project in the Centre region of Uruguay proceeds according to plan. Both UPM1 and Montes del Plata (MdP) pulp mills continue to operate at full capacity despite the downward international pulp price cycle. Both pulp mills continue to drive demand for eucalypt pulp logs from all Uruguayan regions, even though local foresters detected a decrease in stumpage prices.
- **Woodchip Exports:** First vessels exported during 2020, showed a decrease in FOB price close to 10 USD per BDMT. As of October 2020, only 6 vessels were exported from Montevideo port, showing a significant decrease in woodchips exports compared to 2019. Expectations for the last 3 months of 2020 are negative, with no additional vessels to be exported.
- **Saw logs Exports:** Pine logs exports to China increased during the last 3 months. As of the end of September, 34 vessels were exported to India and China. FOB price dropped ~10% between 2019 and 2020. Total pine logs volume, as of the end of September 2020 was 1.100.000 cubic meters (JAS). Uruguay *Eucalyptus* saw logs exports continued during the second quarter of 2020, with similar volumes as 2019 and stable prices.
- **Plywood Industry:** the only company in Uruguay is still working, and as of the end of August 2020, they exported more volume compared with the same period of 2019 (12% more) but facing decline prices (-2.4%).
- **Sawn Timber Industry:** As of the end of August 2020, sawmills in Uruguay exported more volume compared with the same period of 2019 (5% more) but at lower prices (-11%). From the total timber exported in this period, 75% corresponded to Pine sawn timber and 25% to *Eucalyptus grandis*.

Africa

- The International Monetary Fund projected that Sub-Saharan Africa's economic activity will contract by 3.2% in 2020. The IMF has revised growth projections downwards for 37 countries out of 45 (especially those dependent on tourism). In nominal terms, the regional GDP in 2020 will be \$243 billion smaller than projected in October 2019. Growth is projected to recover to 3.4% in 2021 subject to the continual opening of economies and avoidance of the COVID-19 re-infection dynamics observed in other regions.
- Since July, Africa has seen a steady decline in the number of reported COVID-19 cases. Countries with higher infection rates such as Algeria, Cameroon, Cote d'Ivoire, Ethiopia, Ghana, Kenya, Madagascar, Nigeria, Senegal, and South Africa have all seen infections drop over the past two months. The World Health Organisation attributes Africa's general lower infection rates to a mix of socio-ecological factors such as lower population densities and mobility, hot and humid climate and a relatively young population (approximately 42% of Sub-Saharan Africa's population is younger than 14 years according to World Bank estimates) as well as early and strong public health measures taken by governments across the region.
- Borders between Africa countries are opening again, with country specific COVID-19 regulations in place. In general proof of a negative COVID test is a requirement for cross border travels.
- The timber trade in East Africa remains strong, especially driven by robust demand from Kenya, Uganda, and the Sudan. Trade during the early COVID-19 lockdown period was restricted as a result of border closures and screening of truck drivers at border crossings. These problems have mostly been resolved to allow uninterrupted movement of timber between countries.
- At a meeting of the Ministers of Forests, Industries and Environment of the Central Economic and Monetary Community (CEMAC) and the DRC on September 18, 2020 a unanimous decision to end the exportation of timber logs from Congo Basin countries was taken. This decision will come into effect on 1 January 2022. The decision is driven by a bid to stimulate the production of timber to the GDP of Central African States. To realise

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this measure, the Ministers have decided to set up 1st, 2nd and 3rd grade wood processing industries to trigger transformation of local timber; hence contributing to the GDP of their member states.

- The sawmilling sector in South Africa recently reported an upturn in lumber demand. Speculated reasons for this increase relate to the current low South African interest rates and a COVID induced lag in construction activities. Estimates are that this situation will continue into 2021.
- South African hardwood chip export volumes through the ports of Durban and Richards Bay have recovered in August to approximately 120 000 BDMt, similar to volumes reported in January and February 2020. Lowest volumes reported were in April, May and July at approximately 40 000 BDMt per month. Dissolving grades chemical wood pulp volume, exported through Durban and Richards Bay, was 54 000 tonnes in August or approximately 60% of the volumes reported in January and February 2020.

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