3rd Quarter 2021 Industry Review
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Summary

The mobile construction and agriculture machine industries once again showed remarkable performance in Q3 2021. Despite logistics, materials and labor challenges all companies followed reported growing revenues. Price realization has offset most of the cost increases for large OEMs. However, some of the companies followed have scaled back their guidance for the full year, indicating that Q4 will be weaker than expected. Weakness is due to inefficiencies in component availability as well as the aforementioned logistics and labor issues. All economic indicators are very bullish and all regions of the globe except China are demonstrating strength. Used equipment prices remain firm due to supply constraints, causing rental houses to hold equipment longer. Backlogs have increased in most companies.

US GDP increased 2.0% in the third quarter. The re-opening of service industries like travel, lodging, and food service contributed to the increase while the lack of auto sales held back some gains. Total US construction reached an all-time peak in August, after reaching earlier records in June and January. Housing is softening as high production costs, higher interest rates, and appliance shortages are holding back production. Auto production has continued to decrease based on microchip supplies, and now sales to users are suffering All commodity prices are at or near record levels, from oil to metals to agriculture goods. Across the globe all regions except China are strong despite on-going challenges associated with resurgence of Covid cases in certain corners of the globe.

Firms are continuing to showcase sustainability in their quarterly reports. Volvo has launched three fully-electric machines. SDLG has electric-hybrid machines on the market as well. JCB has reiterated a commitment to testing a hydrogen fueled commercial excavator. Cummins has made a significant commitment to hydrogen with engine testing and an MOU with Chevron. For electric machines, JLG will have all-electric scissor lifts which reduce cost of ownership by 40%. And, JLG introduced an all electric, hydraulic free scissor lift last year.

OEMs have been increasing prices on new equipment as much as 5.5% to offset manufacturing cost increases (labor, materials, and logistics, primarily). Price increases have generally offset the increased production costs, with an exception of small ag tractors at Deere. Rental houses are holding equipment longer than usual since new equipment is in short supply. Backlogs across the industry are growing, which bodes well for continued expansion despite the tempering of full-year sales and earning guidance some firms have provided. It seems this is an effort to tamp down expectations and “surprise” on the upside.

Overview

The October Manufacturing PMI registered 60.8, a decrease of 0.3 points from the September reading of 61.1. This figure indicates expansion in the overall economy for the 17th month in a row after a contraction in April 2020. The New Orders Index registered 59.8, down 6.9 points compared to September. The Production Index registered 59.3, a decrease of 0.1 point. The Prices Index registered 85.7, up 4.5 points compared to the September figure of 81.2 percent. The Backlog of Orders Index registered 63.6, 1.2 points lower than the September reading of 64.8. The Employment Index registered 52, 1.8 points higher compared to the September reading of 50.2. The Supplier Deliveries Index registered 75.6, up 2.2 points from the September figure of 73.4 percent. The Inventories Index registered 57, 1.4 points higher than the September reading of 55.6. The New Export Orders Index registered 54.6, an increase of 1.2 points compared to the September reading of 53.4. The Imports Index registered 49.1, a 5.8 point decrease from the September reading of 54.9.

US construction spending remained robust in Q3 along with the rebound in economic activity. Overall spending in August reached an all time high of $1.58T, and finished September at $1.57T (seasonally adjusted annual rate). Good weather across the nation, higher raw material costs, higher commodity prices and opening of the post-Covid economy pushed the gains. The gains could have been even larger if not for worker shortages and in some cases, difficulty obtaining raw materials.

Housing starts rebounded in August, thanks to a surge in multifamily construction. Total housing starts rose 3.9% to 1.615 million annualized units. Multifamily starts soared 20.6%. Demand for apartments has been unexpectedly strong and rents have risen, giving builders confidence to move forward with more projects. Conversely, single-family starts were down 2.8%. The single-family market is experiencing shortages in essential building materials and skilled construction workers. Shortages of lumber, appliances and other building materials have led many builders to limit the number of homes they start. Even with these headwinds, single-family construction is maintaining a fairly strong pace this year.

United States Agriculture tractor sales showed continued strength and remain on track to have a great year. During the third quarter, leadership remained shifted from small tractors to large tractors. YTD thru Sept., large tractors are +30% and small tractors are just +12%. Combines are +17% thru 9/30. Replacement cycles, the desire for new technologies, and higher farm commodity prices are driving the shift from small to large Ag. This naturally benefits the large players in the industry; Deere, AGCO, and CNH. However, supply constraints are beginning to affect these businesses and full-year forecasts are being tempered.

Monthly US auto production has suffered thru component shortages. As noted last quarter, the lowered production has begun to impact sales to users. New sales are now forecast to only reach 13.0M units in 2021, down from a forecast of 15.2M units in Q2, down significantly from Q1's estimate of 18.1M units. Lack of new cars is driving up used car prices as well as dealer mark-ups on new vehicles.

Gold prices moved up slightly in a tight range in Q3, similar to the last 12 months. Gold traded recently at $1814/troy ounce, remaining above the level needed to profitably extract the shiny metal, continuing to drive some gains in mining machine sales and spare parts for repairs. Other metals reached multi-year highs on re-opening and economic growth. Copper traded above $4.70/lb during the quarter before settling to $4.32 recently. Aluminum recently traded at $1.33/lb, up from last quarter's $1.17. Lead traded up 2%, recently at $1.06/lb. Coal production was 1.7% higher in Q2 2021 compared to Q1 2020. US coal exports increased 6.9% quarter-over-quarter while US coal consumption decreased 10.6% in Q2 vs. Q1.

U.S. oil rigs rose six to 450 most recently, their highest since April 2020, while gas rigs were unchanged at 100. U.S. crude futures were recently trading above $81 a barrel on Nov. 5 after OPEC+ producers rebuffed a U.S. call to pump more oil. Despite oil prices up about 67% so far this year, some energy firms minimally raised spending to increase output in 2021, preferring to focus on boosting cash flow, reducing debt and increasing shareholder returns. U.S. shale producers' decision this year to resist pumping more oil even as prices surge could be nearing an end, according to published reports. This would put more pressure on a stressed machine industry, but be very helpful to rental houses.

<u>OEMs</u>

The mobile equipment industry is showing signs of strain during this on-going post Covid expansion. The third quarter was notable because like Q2, China sales remained soft, but South America continued a strong recovery. The gains were across the board in access equipment, construction, mining, agriculture and power systems. Even aerospace markets showed signs of recovery. All equipment OEMs reported higher sales and profit. Unlike last quarter, about one third of the companies followed offered lower guidance despite increased sales in Q3. Backlogs are increasing as parts and components, logistics and labor issues hold back production. Continued strength in farm commodities as well as replacement demand is continuing to drive agriculture machine sales. Mining showed signs of increased activity in new equipment as well as parts sales. Engine sales continued to show strength but Cummins has indicated difficulty in chassis availability will hurt Q4 results.

Rental companies benefited from the return of business activity. The American Rental Association (ARA) reports that overall rental business will be +3.0% from last year, topping $47B this year. The outlook for 2022 is for business to grow 9.9%.

All of the companies followed reported sales increases in the quarter compared to year-ago results. Changes in the quarterly year-over-year sales for construction and mining companies ranged from +9.5% (Manitou) to +38% (Deere, Construction and Forestry), with a simple average of +22.9%, or 26% worse than in Q2. Agriculture companies performed comparably with sales gains of +9% to +30% being reported. The hydraulic supplier followed in this report showed sales changes of 17%, improving with the OEMs. This quarter's heat map reflects the reports of Q2 and is shown on page 5.

KOMTRAX data reviewed for this report show improving machine utilization in all regions, except China. This trend was also reported by Hitachi. The data comparing North America, China, Japan and Europe machine usage are presented on page 6.

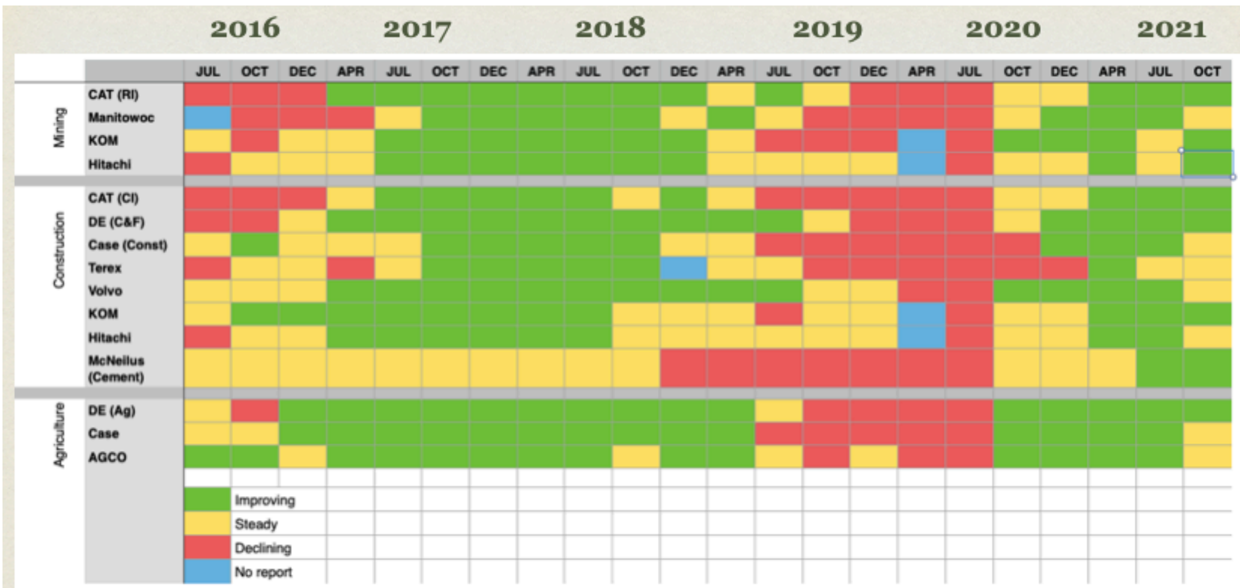
OEM Spotlight:

Volvo enjoyed another sales gain, the fourth in a row after five consecutive quarterly declines. Thanks to continuing high levels of investment in both infrastructure refurbishment and more sustainable products of the future, Volvo CE has increased its net sales by 11%. After several years of high demand for construction equipment in China, orders in the market there have declined by 26% as reduced government investments has led to lower construction activity. This has been more than offset by a good development in Europe, North America and other parts of the world. Order intake remains stable on a high level.

Volvo reported that across both the European and the North American markets, demand has remained high – the latter thanks to high infrastructure investments and housing construction activity. Asia, excluding China, showed good improvements particularly across South Korea and South East Asia. Continuing uncertainty across market forecasts remains significant due to the inability to predict supply chain capacity and the ongoing Covid-19 pandemic.

Volvo is targeting 35% of total 2030 sales will be all electric machines. To this end, the company recently launched three new electric compact machines and reveled the world's first fossil-free steel prototype vehicle this quarter. Volvo CE is now not only the manufacturer with the largest range of commercially available electric machines, but is also taking big strides forward in accelerating more sustainable products, services and processes across the supply chain. In India, the company also launched 16 new machines all of which are engineered to the new CEV 4 emission norms.

Heat Map for the Current Period



KOMTRAX data (as of 09/2021)

hours		[A]19/10-20/09	[B]20/10-21/09	[A] vs.[B]			[A]19/10-20/09	[B]20/10-21/09	[A] vs.[B]
Japan	Oct	54.0	54.7	1.4%	Europe	Oct	86.8	80.7	-7.0%
	Nov	55.6	51.4	-7.6%		Nov	76.9	80.1	4.1%
	Dec	54.1	57.3	5.9%		Dec	56.8	59.2	4.3%
	Jan	52.3	59.3	13.4%		Jan	67.8	59.7	-12.0%
	Feb	58.3	57.2	-2.0%		Feb	70.0	64.8	-7.4%
	Mar	54.0	55.1	2.0%		Mar	73.6	87.0	18.2%
	Apr	50.9	48.8	-4.1%		Apr	66.3	79.1	19.4%
	May	46.9	44.0	-6.0%		May	70.9	74.8	5.4%
	Jun	51.7	51.7	0.1%		Jun	77.0	81.9	6.4%
	Ju l	49.8	51.7	3.8%		Ju l	80.4	77.3	-3.9%
	Aug	50.2	45.8	-8.8%		Aug	70.5	72.6	2.9%
	Sep	51.4	52.2	1.5%		Sep	82.4	84.5	2.5%
North America	Oct	78.4	72.2	-7.9%	China	Oct	128.4	137.3	6.9%
	Nov	67.8	64.3	-5.1%		Nov	135.5	136.3	0.6%
	Dec	59.8	61.2	2.3%		Dec	124.7	128.5	3.1%
	Jan	66.1	61.0	-7.7%		Jan	59.1	109.7	85.7%
	Feb	60.8	55.0	-9.5%		Feb	30.6	43.9	43.5%
	Mar	63.5	68.7	8.2%		Mar	113.4	121.9	7.4%
	Apr	61.3	68.8	12.2%		Apr	144.0	123.2	-14.4%
	May	62.1	64.9	4.6%		May	147.2	125.5	-14.7%
	Jun	71.4	73.0	2.3%		Jun	126.4	109.5	-13.3%
	Ju l	71.8	69.9	-2.7%		Ju l	126.1	105.8	-16.1%
	Aug	71.2	74.2	4.2%		Aug	130.1	106.0	-18.5%
	Sep	68.9	71.6	3.9%		Sep	124.6	102.2	-17.9%