2nd Quarter 2022 Industry Review
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Summary

Economic activity in the manufacturing sector grew in the second quarter, with the overall economy achieving a 26th consecutive month of growth in July. The mobile construction and agriculture machine industries showed solid sales performance in Q2 2022, but evidence of weakness, which began to appear last quarter, is getting clearer now. Sales gains were reported for most large machine OEMs, while Parker delivered a 6% increase and Cummins added 8% to year-earlier results. Of course, logistics, materials cost, semiconductor chip constraints and labor challenges continue to be cited by all companies followed. Most economic indicators remain bullish in all regions of the world except China, although concerns in Europe over energy availability are prevalent. Used equipment prices remain elevated due to supply constraints, and in the current period rental houses continue to decelerate selling in order to to grow fleets. Backlogs have, for the most part, stagnated at very high levels and order flow is softening at most OEM companies.

US GDP <u>de</u>creased 0.9% in the second quarter. Continued re-opening of service industries like travel, lodging, and food service could not offset weakness in auto sales and residential construction. Total US construction reached an all-time peak in May, but softened in June. Housing starts continued to soften from high levels and new home sales are weakening. Used auto prices are still strong, based on the low supply of new vehicles. Many commodity prices have backed off record levels reached in Q1, but are still at investable levels.

OEMs increased prices on new equipment throughout 2021 and have continued to raise prices in 2022. However, in the current quarter, some OEMs are seeing costs exceed price increases, and are reporting lower margins. This seems to be more in construction, and less so in mining and agriculture.

Many companies anticipate a decidedly less advantageous climate for the next several quarters. The strengthening US dollar is impacting commodity prices, risking further deterioration in farmer sentiment and income, while the likelihood of declining European industrial demand due to the war in Ukraine, energy risk and inflation is real. In the Americas, steady demand from cash crop customers indicates that the market may be more stable. Global mining, and especially coal mining, will be strong. Engines for truck transport, oil/gas infrastructure and aerospace will also be strong.

Overview

According to the Institute for Supply Management, the July Manufacturing PMI registered 52.8, indicating expansion in the overall economy for the 26th month in a row. However, this is the lowest Manufacturing PMI figure since June 2020, when it registered 52.4. Other data points show a softening or slowing of the expansion. For example, the New Orders Index registered 48, lower than the 49.2 recorded in June. The Production Index reading of 53.5 is 1.4 lower compared to June. Prices registered 60, down 18.5 points compared to the June and is the index's lowest reading since August 2020. The Employment Index contracted for a third straight month at 49.9, 2.6 points higher than the 47.3 recorded in June. The Supplier Deliveries Index reading of 55.2 is 2.1 points lower than the June figure. More detailed information is available at the Institute for Supply Management website.

As the PMI report showed, economic activity continued to expand in Q2 2022, but at a much slower pace. This is a reflection of the US gross domestic product (GDP), the sum of all goods and services produced in the economy, <u>de</u>creasing at an annual rate of 1.6% (revised down from -1.4%) in the first quarter of 2022, and <u>de</u>creasing 0.9% in Q2.

US construction spending remained robust in Q2. Overall spending in June reached $1.762T (seasonally adjusted annual rate), dipping slightly from an all time high reached in May.

Housing starts in the US dropped 2% month-over-month to an annualized rate of 1.559 million units in June of 2022, the lowest since September last year. Figures were also lower than forecasts of 1.58 million but follow an upwardly revised 1.591 million rate in May. The housing sector has been cooling amid soaring prices and mortgage rates. Single-family housing starts sank 8.1% to 982,000 while starts for units in buildings with five units or more was 568,000.

Sales of new single-family houses in June 2022 were at a seasonally adjusted annual rate of 590,000, according to estimates released jointly today by the U.S. Census Bureau and the Department of Housing and Urban Development. This is 8.1 percent below the revised May rate of 642,000 and is 17.4 percent below the June 2021 estimate of 714,000. New-home sales are on track to fall 16% in 2022. The median sales price of new houses sold in June 2022 was $402,400. The median price of a new home fell nearly 10% in June to its lowest level this year. The average sales price was $456,800. The seasonally-adjusted estimate of new houses for sale at the end of June was 457,000. This represents a supply of 9.3 months at the current sales rate. New residential sales have been steadily decreasing since July 2020.

Existing-home sales have further to fall and will be down by 11.6% in 2022. Sales of previously owned homes fell 5.4% in June to their slowest pace since June 2020. Existing-home sales have fallen every month since February and are down more than 14% from a year ago. Much of the decline in sales is due to the sharp rise in mortgage rates over the past six months. Reduced affordability is taking a toll on home-buyer sentiment, with the share of households saying that now is a good time to buy falling again in June, per a Fannie Mae survey. Higher mortgage rates are driving a pullback in mortgage demand as applications for purchase have fallen below pre-pandemic levels. There were 1,260,000 homes on the market at the end of June, which is up 9.6% from the prior month and a 2.4% rise from a year ago. Despite elevated prices and lean inventories, demand for homes is still robust. Homes remained on the market for an average of just 14 days in June 2022, and 88% of homes sold in May were on the market for less than a month.

United States agriculture tractor sales showed surprising weakness in the quarter, with the YTD unit sales becoming negative relative to last year for all but the 100+HP 2WD machines. A variety of issues are to blame, including production interruptions at AGCO and supply chain issues resulting in missing components and many partially built machines awaiting final assembly and delivery. Although revenues reported by large OEMs are positive, the negative unit sales reported by AEM indicate both higher retail pricing by OEMs and dealer inventory building.

Monthly US auto sales have continued to suffer thru component shortages. April sales were down 17% vs. year-ago, at 14.7M annual units. Q2 sales were 20% lower than Q2 2021. July sales numbers of 13.8M annual units demonstrates the supply chain is still holding back production. Sales forecasts for the full year have been dropping all year long, and have no possibility of reaching the goal of 16.0M units for 2022 set in December.

Most commodities and metals spiked in early March as Russia invaded Ukraine. Since then prices have continued to decline for many metals. Energy commodities are still elevated but off their peaks. Gold dropped to $1776/troy ounce lately, down from Q1's $1925 level. Copper backed down to $3.56/lb. Aluminum is trading at $1.21/lb while lead is at $1.05/lb. US coal production was 1.7% higher in Q1 2022 compared to Q4 2021, and 6.3% higher vs. year-ago levels. US coal exports decreased 7.2% quarter-over-quarter while US coal consumption increased 17% in Q1 vs. Q1.

U.S. oil rigs rose to 595 most recently, their highest since spring 2020. U.S. crude futures were recently trading about $89 a barrel compared to $70/bbl a year ago. Oil has been on a decline since mid-June but is still elevated.

OEMs

The mobile equipment industry continues to grow revenues despite US GDP decreasing for a second quarter in a row. On-going supply chain and labor challenges do not seem to be abating. Commodity price increases have certainly impacted manufacturing costs, which have been passed on as equipment price increases. Currency exchange rates as a result of the strong dollar have also bolstered the results of some firms. Demand in China remained negative for the fifth quarter in a row. South America continued a strong recovery, and is poised to remain strong with metals and grains at high prices. In the second quarter the industry enjoyed sales gains across the board in access equipment, construction, mining, agriculture and power systems. Even aerospace markets showed signs of recovery. However, sales gains are slowing, margins are coming under pressure, backlogs have stagnated and order flow is slowing. Strength in grain prices and technology upgrades are expected to support growth in the agriculture machinery businesses. Engine sales are looking positive in the upcoming year and aerospace is is expected to benefit from increased passenger air travel. This quarter's heat map reflects the reports of calendar year 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.

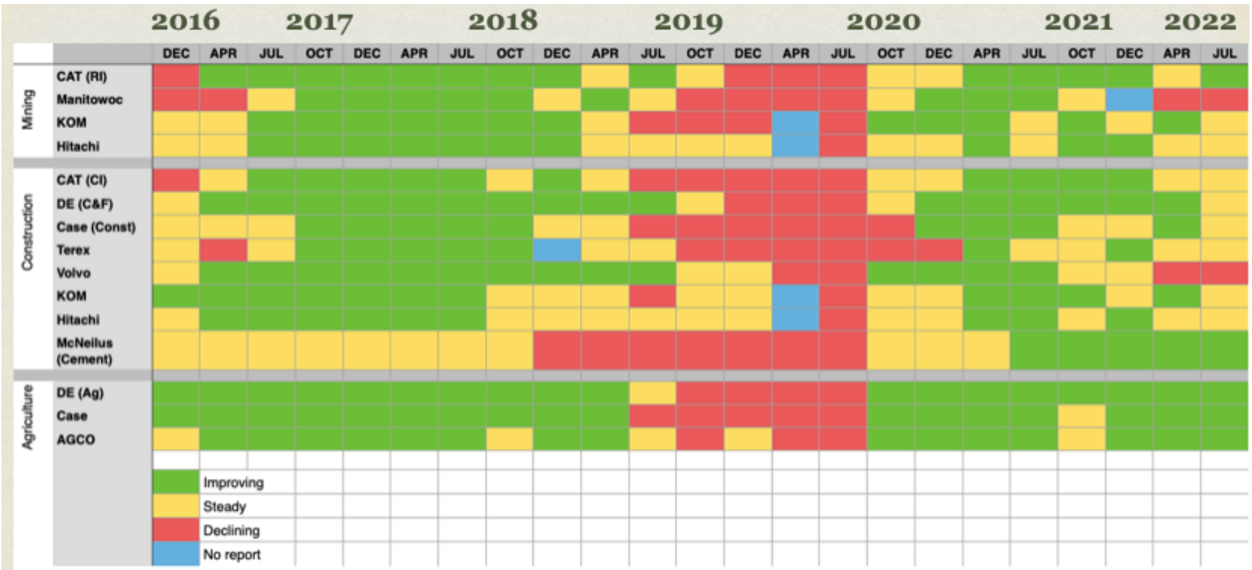
The American Rental Association (ARA) has increased their forecast for the current year for rental business in the US to grow 11% to $56B, up slightly from last quarter. The group forecasts that the underlying US construction market will be relatively soft with both residential and nonresidential structural spending under pressure, although they expect to begin to see the nascent impact of the Infrastructure Investment and Jobs Act. However, they don't expect any retrenchment in construction, while the road building, and especially energy, sectors will offer improvement.

OEM Spotlight

Manitowoc sales for the quarter reached $497M, +7.2% from a year ago. Orders decreased 19% YoY in the quarter (after dropping 21% in Q1), while backlog decreased about 10% QoQ. MTW once again reiterated their lowered outlook at the low end of earlier guidance.

"Our second quarter results reflect our team's solid operational performance and diligent cost management amid challenging macroeconomic conditions. While our backlog remains elevated due to continued supply chain constraints, order intake began to trend down. It is clear that ongoing global economic uncertainty is causing our customers to remain cautious when committing to future orders," said Aaron H. Ravenscroft, President and CEO.

Heat Map for the Current Period



KOMTRAX data (as of 6/2022)

hours		[A]20/07-21/06	[B]21/07-22/06	[A] vs.[B]			[A]20/07-21/06	[B]21/07-22/06	[A] vs.[B]
Japan	Ju l	49.8	51.7	3.8%	Europe	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	50.7	-1.4%		Sep	82.4	82.5	0.1%
	Oct	54.7	51.7	-5.6%		Oct	80.7	79.2	-1.8%
	Nov	51.4	50.9	-0.8%		Nov	80.1	79.0	-1.3%
	Dec	57.3	53.7	-6.3%		Dec	59.2	59.1	-0.2%
	Jan	59.3	58.8	-0.8%		Jan	59.7	63.9	7.0%
	Feb	57.2	57.5	0.5%		Feb	64.8	68.6	5.8%
	Mar	55.1	52.6	-4.6%		Mar	87.0	83.1	-4.4%
	Apr	48.8	45.2	-7.3%		Apr	79.1	68.5	-13.4%
	May	44.0	41.7	-5.3%		May	74.8	75.8	1.4%
	Jun	51.7	49.3	-4.7%		Jun	81.9	75.6	-7.7%
North America	Ju l	71.8	69.9	-2.7%	China	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	70.1	1.8%		Sep	124.6	101.8	-18.3%
	Oct	72.2	69.6	-3.6%		Oct	137.3	109.4	-20.3%
	Nov	64.3	69.7	8.3%		Nov	136.3	110.3	-19.0%
	Dec	61.2	62.7	2.4%		Dec	128.5	109.7	-14.7%
	Jan	61.0	65.2	6.9%		Jan	109.7	70.4	-35.9%
	Feb	55.0	62.1	13.0%		Feb	43.9	46.8	6.7%
	Mar	68.7	72.3	5.2%		Mar	121.9	100.7	-17.3%
	Apr	68.8	66.2	-3.7%		Apr	123.2	102.1	-17.2%
	May	64.9	68.6	5.6%		May	125.5	103.6	-17.5%
	Jun	73.0	77.1	5.6%		Jun	109.5	95.2	-13.1%