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Chem Firms Fear Recession

Chemical manufacturers see an economy in turmoil, that could go either up or down as we head to year's end, according to the American Chemistry Council's Mid-Year Situation & Outlook report.

Moving into the end of the second quarter, the United States economy looked either resilient or weak, depending on where you're standing, ACC pointed out, noting that the services sector of the economy is continuing to expand, slowly, while manufacturing still struggles.

"Going into the second half of the year, there is tremendous uncertainty, and the risk of recession remains high," the council predicted. "We expect U.S. GDP to slow to a 1.3% gain in 2023 and slow further to 0.7% in 2024."

As other economic analysts observed, the strong pandemic-driven rebound in goods spending has subsided as consumers have turned their attention to spending on travel, eating out and other services. All of this contributes to the inflationary spiral.

"Fueled by excess savings that accumulated during the pandemic, consumers have been able to continue spending and bear higher prices, driving inflation," the council suggests. "Consumer spending has slowed, however, as the cushion of excess savings is exhausted."

While wage gains are catching up to the rate of inflation, real wages continue to decline, limiting households' purchasing power. As a result, the

council anticipates growth in real consumer spending to slow to 1.8% in 2023 and ease to a 0.6% gain in 2024.



ACC also observed that while the pace inflation has improved from the peak reached in mid-2022, it remains stubbornly high despite aggressive action by the Federal Reserve to raise interest rates. It expects that inflation will average 4.2% in 2023 (following 8.0% in 2022) before it slows to 2.6% in 2024.

Other factors working to curb economic activity are the twin

impacts of recent banking turmoil and tightening lending standards.

Corporate spending has declined as well. Growth in business investment slowed due to higher borrowing costs and substantial economic uncertainty. ACC believes that investment will slow to 2.0% in 2023 and ease slightly by 0.1% in 2024.

At the same time, the labor market has remained surprisingly resilient, although job growth and other measures of labor demand have slowed since the beginning of the year.

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Not surprisingly, the chemical industry has been affected and reshaped by these and other economic events that have impacted end users from one end of the supply chain the other.

More than 85% of basic and specialty chemicals are consumed by the industrial sector and the outlook for industrial production remains weak, ACC says. "We expect overall industrial production to fall 0.6% this year with only four of the 18 key end-use markets we track to expand in 2023. In 2024, production continues to ease by 0.4% before rebounding in 2025."

ACC cited the automotive sector as an example of where it can all go wrong for chemical producers. With more than \$4,000 of chemistry products in every vehicle, motor vehicles are an important enduse market for chemistry.'

Following three years of well below average sales initially due to the pandemic and then semiconductor shortages, assemblies are up, and dealer inventories have been replenished.

"Pent up demand for vehicles will be tempered, however by higher borrowing costs and uncertainty. As a result, we expect vehicle sales to rise to 15.0 million this year and rise to 15.4 million in 2024."

Facing a Housing Crunch

Housing is another important consumer of chemistry products. Following a surge of activity driven by remote work during the pandemic, the housing market was among the first casualties of higher interest rates, the report notes.

Housing starts fell in 2022 for the first time since the housing crisis in 2009. With many existing home mortgages financed with low rates over the past decade, owners of existing homes face disincentives to move to new properties at higher mortgage rates, the council points out.

"As a result, inventories of existing homes are historically lean which may provide some support for new homebuilding," the ACC explains. "We expect housing starts to fall to 1.32 million in 2023 and easing to 1.31 in 2024."

Weakness in U.S. chemicals emerged in Q3 '22 and accelerated into the end of last year, offsetting strong growth earlier in that year.

Inventory destocking and production outages due to weather-related disruptions and refinery maintenance negatively impacted output in Q1.

Going into the second half of this year, inventory destocking has largely been resolved, but signs of customer restocking have yet to materialize. Firms throughout the supply chain are cautiously managing their inventories given the uncertain economic environment.

This is consistent with the findings of ACC's new Economic Sentiment Index that found that chemical firms initiated overall business activity and major customer demand deteriorated in Q1 but are expected to improve over the next six months.

Because of the chemical industry's early position in the supply chain, ACC said it believes that there will be a turnaround in chemicals before improvement in the broader economy.

"We expect chemical output volumes to fall 1.6% in 2023 with lower output in most segments. In 2024, we expect a modest recovery in all segments with overall chemistry output growing by 1.2%."

ACC forecast that output of basic chemicals in the U.S. is expected to fall 3.1% in 2023 with the largest decline in petrochemicals and organic intermediates.

ACC also reported that the production of synthetic materials is expected to fall. Specialty chemical output will be essentially flat in 2023 as a gain in coatings is offset by declines in other specialty chemical categories.

Overall output of agricultural chemicals will decline slightly with falling output of crop protection chemicals only partially offset by a gain in fertilizer production, led by higher exports of nitrogenous fertilizers. Production of consumer products is expected to grow by 1.8%.

"The longer-term outlook for U.S. chemistry is positive with the natural gas liquids feedstock advantage continuing to favor U.S. production for the foreseeable future." ACC says.

In addition, capacity expansions in customer industries motivated by recent legislation (IRA, IIJA, CHIPS) and re- and near-shoring of manufacturing to North America will support U.S. chemistry industry growth going forward.

Cracking Down on Child Labor

Disturbing reports have been circulating in the news media about the problem of child labor, mostly being exploited in operations overseas, but also surfacing in the United States.



Some of this coverage has arisen from the U.S. Department of Labor's recent initiative targeting underage workers. This has resulted in the proliferation of prominent news stories throughout the country.

At the same time, legislation has been introduced and in some cases been passed in 10 states, primarily dealing with teenagers of 15 and 16.

Employers can engage in certain best practices to help avoid child labor law violations, according to attorney Ryan Krone of the Akerman law firm.

One way to show a company's commitment is through strong policies. Employers must have zero tolerance policies for violations of child labor laws.

Employers who legally hire employees under the age of 18 should post warnings prominently throughout the workplace identifying equipment or areas off-limits to minors. Also, provide different nametags and mark dangerous equipment.

Vendors and contractors must meet comparable standards, Krone says. Include detailed disclosure requirements, such as stating the contractor has no right to subcontract without authorization and validation by the client's leadership team. Contracts should include a strong indemnification provision in the event child labor occurs.

It is important to train your managers and supervisors about child labor requirements. They must know what to look for and how to enforce the company's policies and comply with the law.

While E-Verify is not a perfect solution, employers should make sure they use E-Verify to confirm employment authorization, Krone stresses.

Rap Music Can Spark Trouble

An employer could be found liable for condoning sexual harassment by allowing the playing of sexually explicit rap music in the workplace, even if it offends men as well as women.

The situation developed at a700,000 square foot warehouse in Reno, NV, operated by S&S Activewear. A lawsuit by seven women and one man charged that a hostile work environment was created because supervisors were allowed to blast loud rap music throughout the workspace containing violent and obscene lyrics.

Male employees were said to have shared sexually pornographic videos and made sexual hand gestures, body movements and made sexual comments. This went on almost daily for two years, continuing after numerous employee complaints.

The employer tried to defend the music as "a motivational tool." A lower court judge allowed some of the charges, but she dismissed the claim that the music created a sexually hostile workplace because both men and women had complained.

A federal appeals court disagreed and reinstated the charge, concluding that "repeated and prolonged exposure to sexually foul and abusive music falls within a broader category of actionable auditory harassment that can pollute a workplace."

They also scorned the district court judge's dismissal of the music claim by noting that men were offended by the lyrics, termed by the appeals court as an "equal opportunity harasser defense."

The federal judges said, "music with sexually derogatory and violent content, played constantly and publicly throughout the workplace, can foster a hostile or abusive environment and thus constitute discrimination because of sex."

Attorney Frank Shuster of the Constangy Brooks Smith & Prophete law firm, said "The lessons to be learned are that the content of such media can be offensive to some, it does not matter whether the content is targeted at anyone, and the fact that it may offend men and women alike is not a defense."

Calls Renewed for Hair Tests

A group of commercial motor carriers called The Trucking Alliance advocates for the adoption of hair drug testing for truck drivers issued the results of a new study showing that urinalysis is missing up to 90% of drug users.

This is the conclusion of a study by researchers at the University of Central Arkansas of nearly one million truck driver drug test results for both hair and urine tests conducted between 2017 and 2022 for drivers employed by alliance member carriers.

It turned out that hair drug tests uncovered 25x more opioids; 23x more cocaine; 13x more amphetamines/methamphetamines; 5x more marijuana; 65x more ecstasy; and 3x more PCP.

"I don't see how anyone can reasonably argue with these drug test results, given the large disparity in positivity rates between hair and urine testing for every drug, and a sample of almost one million drug tests," said UCA researcher Dr. Doug Voss. "At some point it's like arguing whether the sun will rise tomorrow."

The White House currently is reviewing hair testing guidelines being proposed by the U.S. Department of Health and Human Services.

In 2015, Congress directed the Secretary of Transportation to approve hair drug tests as an option for employers of commercial truck drivers. Positive hair test results could be submitted to the Department of Transportation's Drug and Alcohol Clearinghouse, which fleet managers are required to consult before hiring a driver.

DOT has dragged its feet about mandating hair testing for eight years after Congress told it to do so in one year, notes Lane Kidd, the alliance's head of advocacy and media relations.

"In 2021, almost 5,000 people died in large truck crashes, and nobody knows how many of those. crashes involved truck drivers with an illegal drug habit," said Kidd. "This study concludes that our family and friends are driving alongside thousands of truck drivers who use illegal drugs."

Truck Costing Models Offered

If you manage a truck fleet, or purchase trucking services, you should find useful updated information about costing trends from the American Transportation Research Institute.

The 2023 update to ATRI's annual research publication, titled "An Analysis of the Operational Costs of Trucking," analyzes a wide variety of lineitem costs, operating



efficiencies, and includes revenue benchmarks organized by fleet size and sector.

Total marginal costs climbed to a new high in 2022 for the second year in a row, increasing by 21.3% over 2021 to \$2.251 per mile.

Although fuel was the largest driver of this spike (53.7% higher than in 2021), multiple other lineitems also rose by double digits. The research also found that driver wages increased by 15.5%, to \$0.724 per mile, reflecting the ongoing industry effort to attract and retain drivers. Driver benefits, however, remained stable in 2022.

Atypical market conditions posed unique challenges for acquiring and maintaining equipment in 2022. Truck and trailer payments rose by 18.6% to \$0.331 per mile as carriers paid higher prices, largely due to equipment impediments in the supply chains.

Closely related, parts shortages and rising technician labor rates also pushed repair and maintenance costs up 12% to \$0.196 per mile.

"ATRI's newest Operational Costs report provides the reliable data and analysis we need to better understand our partners' underlying costs in a volatile economy and decelerating rate marketplace," comments Dave Broering, president of NFI Integrated Logistics.

ATRI also notes that a record number of fleets participated in this year's research. A full copy of the report is available through ATRI's website.

JLL Advises Industrial Tenants

In these challenging times, the industrial real estate giant JLL is offering some timely advice to help its warehouse and distribution center rental customers.

Since the advent of the Covid 19 shutdowns, consumers have learned to expect that the near-instant delivery service is a normal thing, along with other services, such as free shipping and returns, it says.

One problem in delivering

value-added services is that logistics-related expenses can account for 80% of operations costs. "It's true in both business-to-consumer and business-to-business markets, and the trend isn't likely to subside anytime soon," JLL states.

It points out that nearly a quarter of companies said that they expect customer service preferences will be the single most important challenge over the next decade, based on a study that JLL cosponsored.

"While it's often difficult for companies to quench consumer demands – and not meeting them would be an unwise business decision – you can take steps to optimize your supply chain network to find relief from rising costs," the company stresses.

A critical lesson arising from the pandemic is, don't put all your eggs in one basket. In hindsight, many logistics professionals understand that overreliance on a single source of trade or point of entry was the wrong approach. "It is essential to use more than one source of supply, more than one trading partner and more than one port system," JLL says.

Transportation and labor costs are among the single largest line items in the distribution business, and solving pain points related to both these functions will reduce costs. Once again, diversification is key.

"Nearly three-quarters of goods are currently moved by truck, but driver shortages, along with many other factors, have increased trucking costs and expanded delivery timelines," JLL notes. "Using an intermodal strategy with both train and truck can. help you reduce costs and offset transportation challenges related to tight trucking capacity." It also reinforces the importance of working closely with supply chain experts to analyze your network, identify your supply and demand points and strategically place distribution facilities.

Warehouse facilities today are struggling to find the labor they need. Automation and robotics can bridge this gap and boost productivity. JLL says, adding that that automation technologies are improving and are getting more affordable, making this

a solid option for offsetting labor shortages.

Learn to look ahead and innovate, JLL urges. "Anticipating obstacles and embracing proactive strategies is critical to network optimization."

It argues that sustainability is at the top of that list. Facility-related sustainability initiatives currently are not driving supply chain decisions, but with transportation accounting for one-third of greenhouse gas emissions, JLL says it is becoming a pillar in a network optimization strategy.

Developers also are getting creative with land purchases for facilities that better serve occupier needs. This extends to retailers transforming big box retail storefronts into fulfillment centers to get closer to population centers.

Don't forget real estate investments. Warehouse and distribution facilities are the last links in the supply chain, and they account for about 5% of logistics expenses, so there isn't much opportunity to impact overall costs. But industrial supply shortages are transforming real estate into a rare commodity.

Companies must include real estate as part of a holistic network optimization strategy to secure the critical space needed to drive efficiency throughout the supply chain, JLL asserts.

"Today, more and more companies are reassessing network strategies to accommodate modern business functions and better serve customers," it concludes. "When companies get supply chain dynamics right, they create tremendous value for their business."