

SMARTER PERSPECTIVE: CHEMICALS

Expected Implications of U.S. Chemicals Industry Overcapacity in 2025

By Kevin Duffy

January 2025 The U.S. chemical industry, a cornerstone of the national economy and a vital supplier to various sectors, is presently grappling with significant overcapacity. This situation, driven by a confluence of factors, including global supply chain disruptions, fluctuating demand, and geopolitical uncertainties, poses critical implications not only for the chemical sector but also for the broader economy during the remainder of 2024 and throughout the 2025 calendar year.

The State of Overcapacity in the Chemical Industry

In the U.S., the production capacity of the chemical industry now far exceeds demand. This imbalance has been exacerbated by a range of factors that were in large part triggered by the COVID-19 pandemic, which led to unprecedented disruptions in global supply chains. As the world emerged from that difficult period, many chemical producers ramped up production in anticipation of a swift economic recovery. The recovery, however, has been uneven, leading to a state of oversupply.

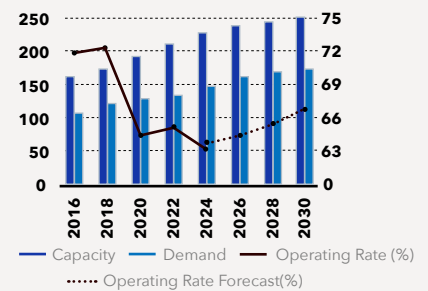
This, in turn, has led to multi-year lows in operating rates across various value chains. This situation is expected to persist for at least the next five years.

Global Supply & Demand

Olefins



Aromatics



Source: ICIS Supply & Demand Database

The petrochemical industry is currently seeing a record period of overcapacity. Operating rates are at multiyear lows across various value chains and are expected to remain depressed over the next five years at least.

The rise of new chemical capacities, especially in China, contrasts sharply with weak demand across downstream sectors. This trend is unlikely to reverse soon. For six key chemicals—benzene, butadiene, ethylene, paraxylene, propylene, and toluene—global capacity exceeding demand reached record levels in 2024 and is projected to increase 24% by 2028. This overcapacity poses a particular challenge for Europe, given its high production costs and numerous plant closures.

China's recent economic data raises fears of deflation, with a sharp decline

in producer prices and a contracting manufacturing sector. Europe's manufacturing has been in recession for over two years, with declining new order volumes signaling a potential demand shrinkage in the US, China, and the eurozone. The post-pandemic cost of living crisis has further dampened demand, as consumers prioritize essentials over durable goods, impacting key end-use markets like automotive, construction, and electronics.

Despite these challenges, some areas of the industry are experiencing shifts. The U.S. housing market, buoyed by

rate cuts lowering mortgage rates, is expected to boost demand for plastics and chemicals used in construction and home goods. Millennials reaching prime home-buying age and lower interest rates are anticipated to drive housing market growth for the remainder of the decade. This growth, however, will not alleviate the need to rationalize polyolefin capacity due to the vast global supply glut. US PE plants will remain competitive due to their feedstock advantage, despite ongoing rationalization of higher-cost PE and PP capacity globally.

The chemicals industry's M&A activity has also been affected by difficult credit conditions, geopolitical factors, high energy costs, and logistics challenges. As a result, ICIS recently reported that chemical M&A activity has dropped significantly, with only 20 deals above \$25 million closed during the first half of 2024 as compared with 75 in 2023 and 86 in 2022. The majority of these deals were in Asia, particularly China, limiting the accessible market for Western players. Europe's high production costs and energy challenges have made it a less attractive investment target for private equity firms. Interestingly, in the midst of these dynamics, Indian Oil Corp (IOC) has announced its plans to significantly

increase its petrochemical production capacity, aiming for 14 million tonnes per year by 2030, nearly triple its current capacity. The company has stated that the move is part of a long-term oil-to-chemical strategy.

Demand for chemicals is closely tied to various industries such as automotive, construction, electronics, and agriculture. While some sectors have rebounded strongly, others, particularly automotive and construction, have experienced slower recoveries. This uneven demand has contributed to continued overcapacity in specific chemical segments. Additionally, trade tensions, particularly between the U.S. and China, have disrupted traditional trade flows and market access. Geopolitical events such as the Russia-Ukraine conflict have also led to shifts in energy markets, impacting the cost and availability of raw materials for the chemical industry. Innovations in chemical manufacturing and the establishment of new, more efficient production facilities have also increased not only capacity potential but actual production output. While these advancements are beneficial in the long run, they have further contributed to the already mounting short-term

overcapacity issues.

Potential Implications for the Chemical Industry in 2025 and Beyond

As we look ahead into 2025, several trends and developments can be expected to shape the trajectory of the U.S. chemical industry. To start, the pace and pattern of economic recovery will be crucial as the impacts of interest rate reduction and other efforts take hold. A broad-based and sustained recovery across key end-use industries would help to absorb excess capacity. We are continuing to monitor demand trends in sectors like automotive, construction, and electronics to gain insights into potential rebalancing.

The resolution or escalation of trade tensions, particularly between major economies of the world, will significantly impact the chemical industry. Policies that promote free trade and reduce barriers will be beneficial in addressing overcapacity issues. And because the chemical industry is highly sensitive to energy prices and the availability of raw materials, developments in energy markets, such as the adoption rate of renewable energy sources and changes in fossil fuel dynamics, will influence production costs and capacity utilization. Continued advancements in chemical manufacturing technologies and shifts in regulatory landscapes, especially those related to environmental sustainability, will drive industry transformation. Companies that proactively adapt to these changes will be better positioned to navigate overcapacity challenges.

Continued overcapacity in the chemical industry has several implications for the year ahead. Prices for many chemical products have declined and this downward pressure, combined with rising costs for energy and raw materials is squeezing profit margins for chemical companies. Overcapacity often leads to intensified competition among producers as they strive to maintain market share. This can result in





price wars, further eroding profitability. To mitigate the effects of overcapacity, we may see increased consolidation as companies merge or acquire other competitors in an effort to reduce exposure. Additionally, we expect that more chemical manufacturers may likely rationalize their operations by shutting down less efficient plants or divesting non-core assets in the year ahead.

While Industries that rely heavily on chemicals, such as manufacturing, agriculture, and construction may benefit from lower input costs due to oversupply, chemical sector instability can also lead to supply chain uncertainties, which affect planning and operations in these same industries. As significant employers and investors in the U.S. economy, overcapacity-induced financial strain among chemical industry businesses could lead to further job losses, reduced capital expenditures, and deferred investments in new technologies and facilities. And because the U.S. chemical industry is also a major exporter, there is potential for export

levels to increase further as companies seek to offload excess production in international markets. While this might improve the trade balance, it can also lead to trade disputes and increased scrutiny from trade partners. Pending tariff implementation by the incoming administration on imports from China will most certainly factor into this equation.

On the positive side, overcapacity also holds the potential to spur innovation as companies seek to differentiate themselves through new products, improved processes, and diversification into higher-value segments such as specialty chemicals and sustainable solutions.

Conclusion

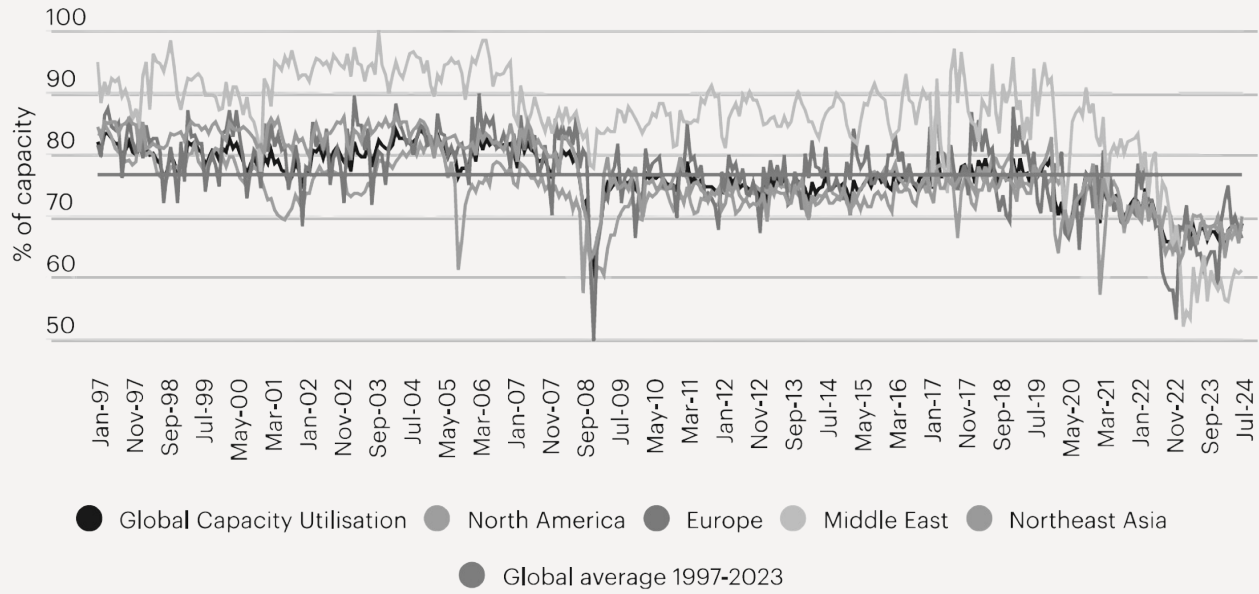
The overcapacity in the U.S. chemical industry presents significant challenges but also creates opportunities. While it most certainly exerts pressure on margins and increases competition, it also holds the potential to drive innovation and strategic consolidation.

The broader economic implications are complex to say the least, affecting not only related industries, but employment, trade balances, and regulatory landscapes as well.

As the industry navigates through the 2025 calendar year, the interplay between economic recovery, global trade dynamics, energy markets, and technological advancements will be pivotal. Chemical companies that adopt proactive and adaptive strategies will be better equipped to turn overcapacity challenges into opportunities for growth and resilience. The ability to innovate, diversify, and operate efficiently will be key to sustaining competitiveness and contributing positively to the broader economy.

Our team has performed diligence and valuations on behalf of a number of these business during 2024, providing us with unique and highly up-to-date insights into this complex market. We welcome the opportunity to share our perspective and assist you in leveraging the power of

Global Chemicals Capacity Utilization



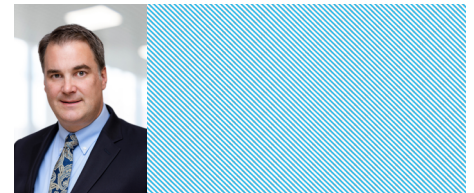
Source: ICIS Clarity

The rise of new chemical capacities around the world, particularly in China, is in stark contrast to general weak demand conditions across downstream sectors, and it shows no sign of slowing down in the coming years.

our proprietary industry data to benefit your business or a business in your portfolio. We are here to help.

Hilco Valuation Services is the leader in valuation for the chemical industry with hundreds of highly accurate appraisals delivered on asset values ranging from \$10 million to over \$1 billion. Hilco Valuation frequently works hand-in-hand with other Hilco operating companies including Hilco Performance

Solutions (HPS) to provide cross-functional Manufacturing Operations, Supply Chain, People, Mergers & Acquisitions, and Commercial expertise to the chemical and other industries. By teaming highly regarded industry veterans with advisory experts, we are uniquely positioned to deliver optimal solutions that assist businesses in achieving favorable outcomes under a wide range of market conditions and circumstances.



KEVIN DUFFY IS A SENIOR VALUATION DIRECTOR AT HILCO GLOBAL

Kevin specializes in the chemicals industries and has valued numerous chemical-related companies in North America that are involved in distributing, compounding, and manufacturing chemicals, resins, films, sheets, and molds. Kevin received his B.A. in finance from Illinois State University and passed the CPA Exam in Illinois. He has diverse business experience in accounting, manufacturing, distribution, and retail. For further information, please contact Kevin at 847.849.2989 or kduffy@hilcoglobal.com.

