# Chemicals, Materials, and Ag Inputs snapshot: Recession, reaction—rebound

For nearly two years, economists have been predicting the U.S. economy would slip into recession —yet overall GDP has continued to grow. But for the chemicals industry, recession has arrived. Sales growth has been negative for three consecutive quarters. Earnings have evaporated and companies are warning of more difficulty ahead. In this briefing paper we look at the reasons why revenues and prices are down. We also discuss the implications for operations and M&A and identify solutions for an eventual rebound.

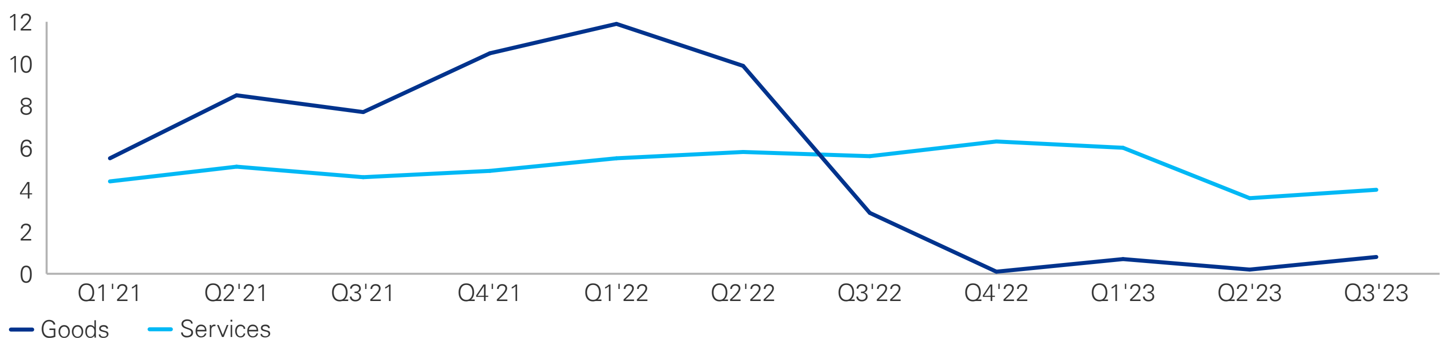
## 1. Recession: Why it's appearing in chemicals

U.S. GDP rose 4.9 percent year-on-year in the third quarter,[1] surprising many economists who have been predicting a slowdown and possible recession.[2] But that sizzling growth was not happening in chemicals, where earnings were down —again. In our meetings with senior executives in the sector, the common theme we hear is declining activity across most segments, and an increasing focus on significant cost reduction activity.

The reasons chemicals, materials, and ag input companies are feeling the pinch is clear: demand has softened across major customer groups in the U.S. and in key global markets —particularly Europe and China. Entering 2023, there were expectations of a strong Chinese recovery as the giant economic engine came back to life following the end of the zero-Covid policy. This did not happen due to massive local debt, a housing construction crisis, weak consumer spending, and reduced direct foreign investment among other factors.

The downturn in demand should not have been a surprise. There was significant destocking at the end of 2022 and only a limited uptick since. The chemical industry, it appears, was not well prepared and now is experiencing extreme stress.

**Exhibit 1. The goods economy is weak**




U.S. Bureau of Economic Analysis. Seasonally adjusted rates

[1] "Retail therapy: The outlook for the U.S. consumer," KPMG Economics, November 8, 2023

[2] Reed Pickert and Kyungjin Yoo, " Economy Headed for Downturn in Second Half of 2023," Forecasters Say, Bloomberg, May 19, 2023

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## U.S. Demand: Manufacturing wilts

Behind the topline U.S. GDP number is a growing disparity between performance in services and goods production. (Exhibit 1). The Institute for Supply Management (ISM)'s manufacturing index has been below 50 (indicating contraction) for 12 months and fell sharply in October due to the United Auto Workers strike.[3]

**Automotive**

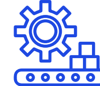
Car sales fell by 2.7 percent from August to September due to the strike against the three largest US-based manufacturers.[4]

**Aerospace**

Commercial aircraft deliveries declined by more than 20 percent year-on-year, primarily due to a 737 MAX production issue, as well as supply chain and labor shortages.[5]

**Construction**

Although new residential sales rose 5.8 percent in September, existing home sales were down 15.3 percent year-on-year. In-progress multi-family permits also declined by 15.3 percent. Commercial construction indices have gone nearly flat.[6]



**Manufacturing**

The Industrial Production index has been essentially flat for six months. The ISM purchasing managers index has been declining almost all year, hitting 46.7 percent in October.[7]

**Agriculture**

The Purdue Ag Barometer dropped from 123 in July to 106 in September. The Mainstream Economy Farm Equipment index fell further in 3Q to an almost two-year low of 44.[8]

## Global demand: China struggles

**China**

The IMF has cut estimates of China's GDP growth to 5 percent for 2023 and 4.2 percent in 2024 and warns of negative impacts on global suppliers to Chinese industry.[9]

**Europe**

The IMF expects GDP growth in Europe to decline from 2.7 percent in 2022 to 1.3 percent in 2023 and is projecting growth of just 1.3 percent for 2024.[10]

**Latin America**

The IMF expects growth in Latin America and the Caribbean to slow to 2.3 percent in 2023, down from a buoyant 4.1 percent in 2022, and to stay at this year's levels in 2024.[11]

[3] Lucia Mutikani, "U.S. manufacturing slumps in October—ISM," Reuters, November 1, 2023
[4] "Retail therapy: The outlook for the U.S. consumer," KPMG Economics, November 8, 2023
[5] KPMG US Aerospace and Defense Health Monitor, October 2023
[6] "Uneven construction in September," KPMG Economics, November 1, 2023, Dodge Construction Network
[7] St. Louis Federal Reserve, Institute of Supply Management
[8] Oppenheimer Ag Industry Preview, October 20, 2023
[9] Jack Stone Truitt, "China growth forecasts downgraded by IMF as world economies diverge," Nikkei Asia, October 10, 2023
[10] "The European Outlook and Policymaking: Seeing Off Inflation and Pivoting to Longer-Term Reforms." IMF, October 18, 2023
[11] "Western Hemisphere Regional Economic Outlook: Securing Low Inflation and Nurturing Potential Growth". IMF, October 13, 2023

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# 2. Reaction: Slower organic growth, shrinking returns

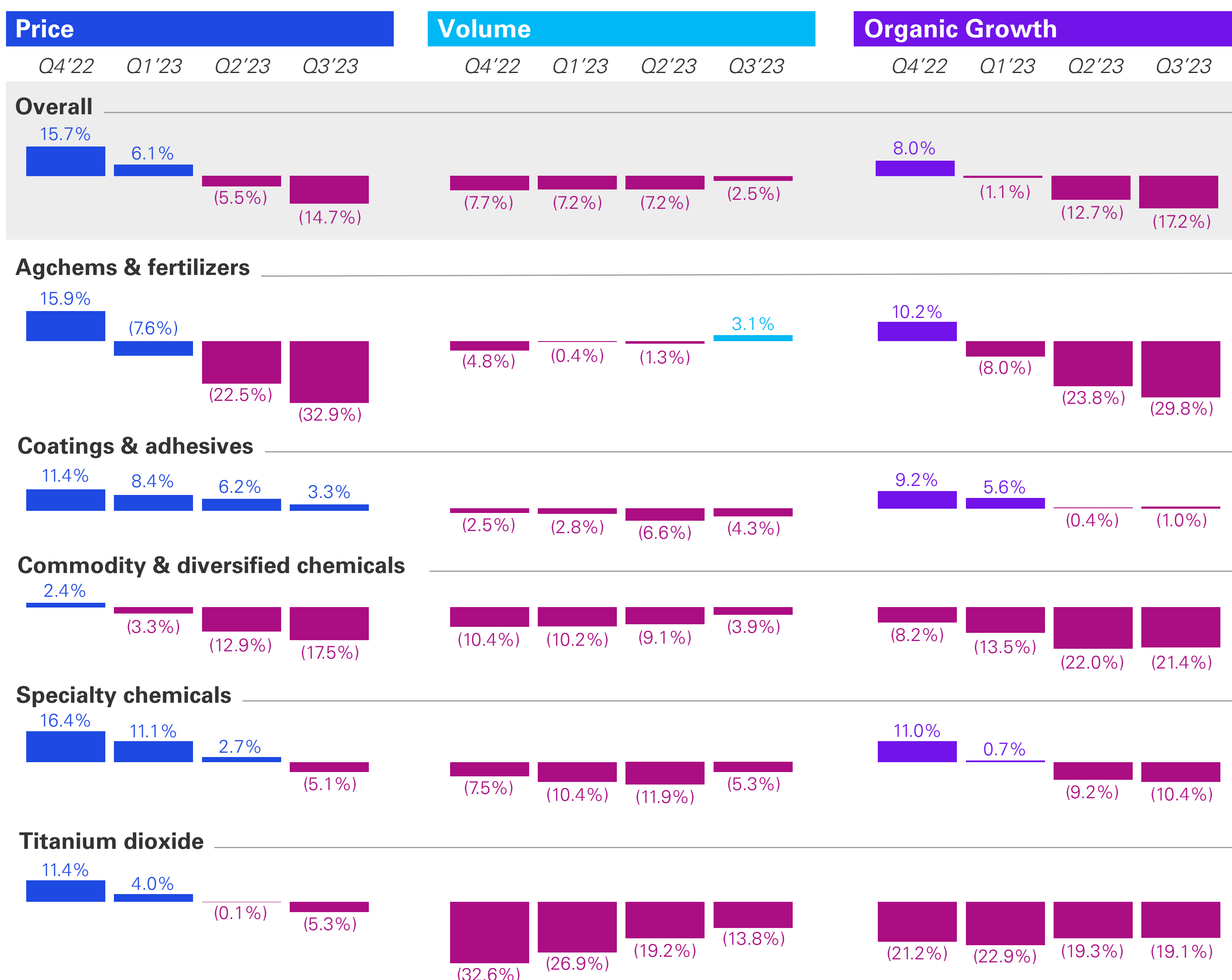
Growth in the U.S. chemicals, materials, and ag input industries has been negative for the past three quarters. By any definition, that means recession, with little prospect for significant improvement before mid-2024. We see continued weakness in overseas markets, including China, Europe, and Latin America. Our price-volume analysis points to slower growth for the next 6 to 12 months.

## Declining price and volume

Negative organic growth in chemicals, materials, and ag inputs, coupled with slow or declining volume demand and decreasing prices over the last three quarters, make for a sobering reality. Overall organic growth across chemicals subsectors declined in Q3'23 by as much as 17.2 percent versus Q3'22.

Both prices and volumes were down in Q3'23; prices by 14.7 percent, on average, and volume by 2.5 percent (Exhibit 2). Some of the biggest price drops occurred in fertilizers and commodities, reflecting falling input costs. Volume fell across most subsectors, but minerals and organics bucked the trend, with a 7.4 percent gain. Agchems and fertilizer also managed a modest volume increase.

**Exhibit 2. A downward march in price and volume (in most subsectors)**




Sources: Capital IQ, Company filings, KPMG analysis

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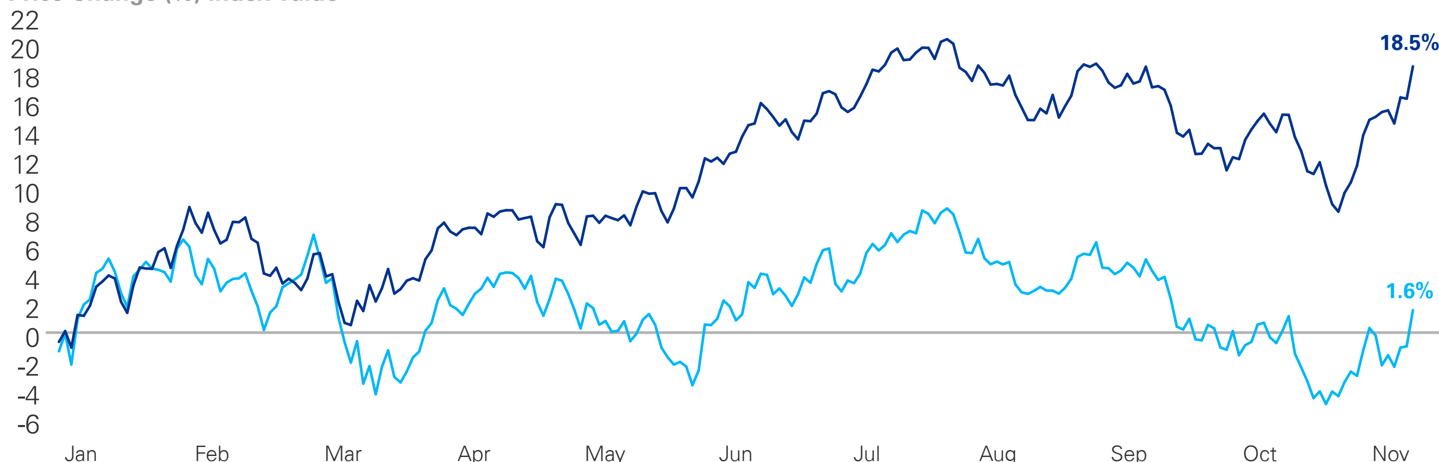
## Earnings and valuations reflect the decline

The declining fortunes of U.S.-based chemicals companies is reflected in stock market performance. While the S&P 500 is up more than 18.5 percent since Jan. 1, 2023 (as of November 20), the S&P 500 U.S. Chemicals Index is up just 1.6 percent. It was up by more than 8 percent in late July. Chemicals shares fell nearly 5 percent in September and many issues took a drubbing after their third-quarter earnings calls (Exhibit 3).

**Exhibit 3. Chemicals trail the S&P in 2023**

Industry Price Return – Index Value (Daily)[a, b]




| Price Change (%) Index value | High | Low | Average | Change |
|---|---|---|---|---|
| S&P 500 Total | 20.4 | (1.0) | 10.8 | 18.5 |
| S&P 500 Chemicals (Industry) | 8.6 | (4.9) | 2.1 | 1.6 |

Note (a) No data is available for Diversified Chemicals; (b) Based on market data

Source: S&P Capital IQ covering for period between 2 Jan'23 to 14 Nov'23

**Exhibit 4. Selling on the news**

Stocks fell on Q3 earnings news

| Company name | Q3 earnings announced | % Change next day* |
|---|---|---|
| Ashland Inc (ASH) | Nov. 8 | **-5.4%.** |
| The Chemours Company (CC) | Oct. 27 | **-3.2%.** |
| Corteva, Inc (CTVA) | Nov. 9 | **-8.5%.** |
| Dow Inc (DOW) | Oct. 25 | **-3.5%.** |
| DuPont de Nemours, Inc (DD) | Nov. 1 | **-8.2%.** |
| Eastman Chemical Company (EMN) | Oct. 27 | **-1.6%.** |
| FMC Corporation (FMC) | Nov. 8 | **-4.4%.** |
| LyondellBasell Industries N.V (LYB) | Oct. 27 | **0.6%** |
| Trinseo PLC (TSE) | Nov. 6 | **-2.7%.** |
| Tronox Holding Plc (TROX) | Nov. 9 | **-0.4%.** |

Source: Yahoo Finance
*Absolute per yahoo finance

> **"We expect the challenging macroeconomic dynamics to continue through the fourth quarter, including sluggish industrial activity."**
> —Dow Chemical

> **"We expect this to be a tough quarter (Q4) depending on the amount of customer de-inventorying we see and lack of consumer confidence."**
> —Huntsman Corp.

> **"We are lowering our demand expectations as we finish out the year."**
> —Avient Corp

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# 3. Rebound: Getting through 2024 and positioning for recovery

We see three moves that chemicals, materials and ag input companies can make now to protect earnings and prepare for a rebound:

## Double down on performance improvement

While there have been cost take-out programs in the past, these have often been short-term and superficial in nature, such as downsizing on services, and reducing or freezing travel and expenses. Firms now need to take a more rigorous approach and find pockets of value that have been overlooked, including unrealized synergies from completed acquisitions. Some firms have made scores of acquisitions over the past few years but have not yet integrated them completely. Now is the time to do so, to capture synergies and reduce costs.

Firms should also ask themselves if they have the right sort and size of support functions across the firm. For example, if you have sold businesses recently, have you resized support functions or reduced legal entities to reflect these changes? If you have acquired firms over the past three years, have you looked for delayed integration opportunities to improve efficiency and costs? Another good question is: do you have the right manufacturing and supply chain infrastructure for reshoring from Asia or Europe?

## Think strategically, not reactively

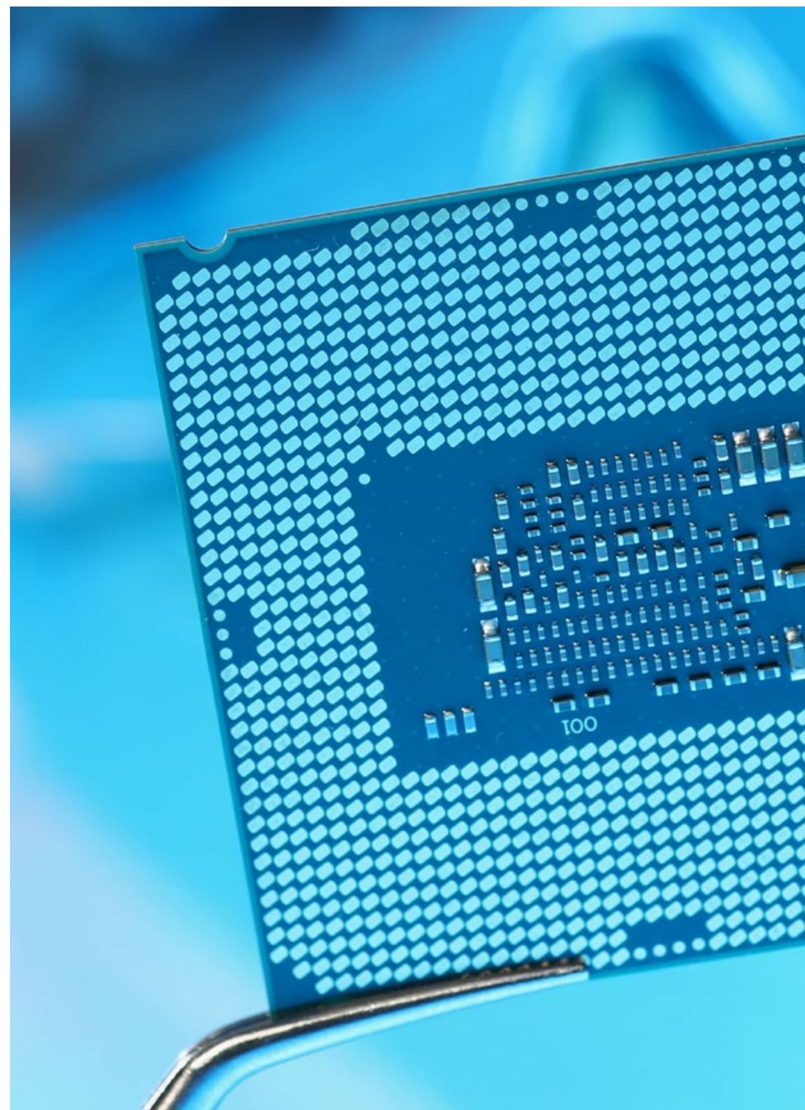
Chemicals, materials, and ag input firms should avoid reactive moves—managing quarter-to-quarter performance, rather than thinking about a cohesive medium- to long-term strategy. In the current context, it's vital to ask:

- Do we need to refresh our strategy?
- In light of current conditions and what we see ahead, are we investing in the right products and businesses?
- Can we achieve our performance goals with the current strategy?

## Prepare organization and assets for M&A

In view of the general economic environment, chemicals, materials, and ag input firms can start preparing now to divest non-core business units when financial markets pick up. Acquirers—particularly private equity (PE) investors—are not likely to bid on any target where the investment thesis has not been well articulated, and the potential value-creation upside has not been demonstrated. For corporates that have been serial divestors over the past five years, it will be important to have experienced acquisition teams—otherwise they may become disadvantaged against financial buyers.

On the buy side, it will be important to fully understand early in the process the potential for EBIDTA improvement and quantify this—particularly important for PE funds that may not have synergy opportunities that a corporate buyer has. Corporates also need to validate how M&A will support their business strategies, and for selected potential targets, ensure they have a well-articulated deal value thesis with clear areas to diligence for confirmation of assumptions.



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# Conclusion: The outlook for 2024

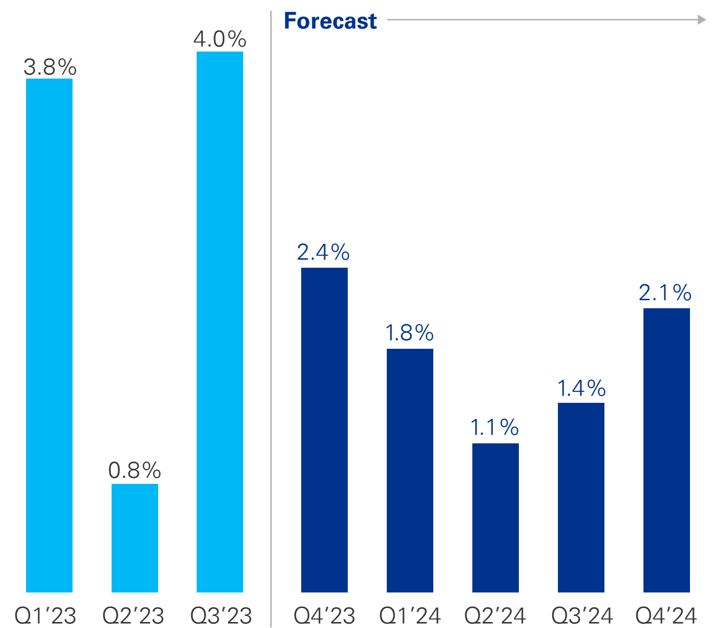
The global economic outlook is not encouraging, with continuing geopolitical tensions, elevated sovereign debt, mass migration, and a lack of skilled workers. Internal forces pushing against the U.S. economy include elevated energy and fuel costs, high borrowing rates (especially mortgage costs), and a cooling labor market.[12]

Some or all of these may have a negative impact on the U.S. chemicals, materials, and ag input industries. There is also likely to be a continued slowdown in growth in important overseas markets such as China and Europe compared with the last decade of rapid development.

KPMG estimates real overall U.S. economic growth to slow to 1.1 percent in Q4 2023, driven by slowing housing activity and declining auto sales—and sub-1 percent growth in the first half of 2024, when consumer spending is expected to moderate (Exhibit 5).[13] Things could improve in the second half, KPMG economists say, especially if the Federal Reserve starts to reduce interest rates, reviving demand in housing and autos.

**Exhibit 5. Growth in consumer spending will moderate**

Consumer spending, % change annualized rate




Sources: KPMG Economics, Bureau of Economic Analysis

[12] "KPMG 2023 CEO Outlook," KPMG LLP, 2023

[13] "Retail therapy: The outlook for the U.S. consumer," KPMG Economics, November 8, 2023

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# How KPMG can help

KPMG serves clients across the global chemicals industry, helping with strategy, M&A planning and execution, and performance improvement.

**Elevate** Is our approach to performance improvement. We help chemicals, materials and ag input companies identify opportunities for increased efficiency and EBITDA improvement across all operations and functions.

### 1. Focus on value

We put value at the center of everything we do, always balancing risk and reward.

We carefully monitor and orchestrate multiple projects to ensure successful execution and value capture.

### 2. Close attention to culture

We help generate employee engagement to create a culture that embraces continuous improvement and innovative thinking.

### 3. Smart application of technology

We use data analytics to develop insights to focus on sources of value, uncover new opportunities, and costs.

### 4. Reimagine experiences

By examining, exploring, and reframing what's possible, we help clients develop processes and ways of working that create better experiences for all stakeholders—employees, customers, partners, and clients.

**M&A** KPMG has a highly experienced, multifunctional, and dedicated chemicals team that supports corporate and private equity clients across all stages of the M&A deal life cycle. We have a mindset focused on value identification and realization. We offer end-to-end, global transactional, operational, and integration and separation capabilities to address today's most complex M&A needs.

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