How chemical companies can tap into their working capital in the new economy
Note: For this report, peer groups for analyses included 96 companies from US$2b to US$30b+ with a focus on 2019 WC operating metrics.
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The first quarter of 2020 presented an unprecedented shock in the form of COVID-19, falling oil prices and simmering global trade tensions, all putting liquidity to the test. The chemicals sector was no exception. Depressed manufacturing, whether from quarantine-related shutdowns or reduced short-term prospects in oil and gas, pressured revenue.

Significant uncertainty around the timing of COVID-19 subsiding has also increased the difficulty of accessing capital markets.

However, history shows that chemical companies can take several steps to increase liquidity in the crisis, setting themselves up to take advantage of emerging opportunities.

A sector already under liquidity pressure

Liquidity was already under pressure in the chemicals sector. Revenue, which saw strong growth from 2016 to 2018, slowed in 2019. Gross margins started to erode across the sector in 2019, falling to 30.1% in specialty and 20.1% in commodity chemicals on average, after seeing only modest growth in 2017 and 2018. These headwinds occurred simultaneously with a 13.2% compound annual growth rate in capital expenditures from 2016 to 2019.

All of these factors, both pandemic-related and those occurring over the last several years, point to a significant need for greater liquidity. Having a strong buffer of cash, combined with high cash conversion efficiency, will help companies survive the crisis, manage the next 6-18 months and come out in a stronger position.
Learning from history to shape the now, next and beyond

Uncertain economic times can bring enormous opportunities as tectonic changes recreate market landscapes. EY research based on experience from the 2008 financial crisis found that agility and foresight are essential for chemical companies to evolve as winners. Decisive leadership, data-based responsiveness and the ability to reshape quickly are the key characteristics a company needs in this environment.

Figure B: EY methodology for “succeeding” in a recession

<table>
<thead>
<tr>
<th>Now</th>
<th>Next</th>
<th>Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate response</td>
<td>Reboot and react</td>
<td>Adapt to the new world</td>
</tr>
</tbody>
</table>

- **Now**, when a crisis unfolds, the measures are centered around immediate liquidity, selective restructuring and re-evaluation of investments. These are aimed at survival. EY research found that those companies that increased capital and decreased cost of goods sold (COGS) while keeping tight controls on working capital during the last crisis were more likely to be positioned to succeed in the long term.

- **Next**, the focus is on the ability to reboot and react. Free up working capital to realize incremental financing for an agile restart. Companies should reconsider their market strategy, and how to partner with their customers and suppliers through the crisis to increase agility. Reliably working with business partners sets an organization apart from weaker players in the marketplace.

- **Beyond** the post-pandemic crisis, focus on cash conversion efficiency by putting structural improvements in place. This will enable companies to navigate through times of uncertainty and support aggressive growth strategies. In the 2009 post-recession recovery, advanced manufacturing and mobility companies that took these steps saw revenue growth of 15.1% CAGR compared with their competitors at 9% growth, increased EBIT margins and eventually undertook smart M&A activity.
How chemical companies can tap into their working capital in the new economy

In this environment, managing working capital is becoming even more important. Customers will hold payments and suppliers request payment terms adjustments. Production plants have been shut down and operations interrupted, leaving some chemical companies with excess inventory. According to economists, the impacts from COVID-19 peaked in the second quarter of 2020, but structural impacts combined with oil price wars are projected to impact the chemicals industry through the end of 2021. As of Q2 2020, chemicals companies on average have 1.3 months of run-rate in cash, which will only carry them so far without structural changes in managing working capital. Structural improvements in working capital can increase this cushion by 15-35 days in preparation for another economic downturn.

Successful chemicals companies are now looking beyond the top and bottom line to include a focus on the balance sheet and cash conversion efficiency. Driving a cash culture and operating discipline will be critical to delivering future value. Establishing a centralized cash leadership office (CLO) to improve working capital will not only drive cash culture but also enable sustainable and measurable improvements. This will enable companies to do what they do best: invest in production and process efficiencies that will help not only deliver greater value to their shareholders, but also be a critical pillar on the road to economic recovery.

Figure C: Global cash conversion cycle (CCC) days by subsector
Areas where a cash management office can improve working capital include the following:

1. **Accounts receivables**, including optimizing collections and dispute processes, aligning customer payment terms, and accelerating billing – helping to enable chemicals companies to thrive in the coming quarters. Segmenting and prioritizing high-value customers with increasing financial risk will be critical to improving cash collection, which will continue to fund future investments and operations. For a global specialty chemicals company, a more effective collections process combined with a strong governance model and supported by tailored metrics and cash targets resulted in a 12% reduction in days to collect as well as a more accurate short-term cash forecast. Combining more efficient efforts for collections with aligning customer payment terms to industry standards will not only mean that cash will be collected on time, but that the sales process and structure is driven with working capital impact in mind. This will help to simplify front-end sales processes and back-end collections and lead to improved customer service. These improvements can improve chemical companies’ days sales outstanding (DSO) by an average of US$506m, or 12.8 days of additional run-rate for operations as cash becomes “king.”

**Figure D: Global DSO improvement gap to upper quartile performance by subsector**

<table>
<thead>
<tr>
<th>Subsector</th>
<th>DSO</th>
<th>DSO median</th>
<th>DSO UQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodity chemicals</td>
<td>48.0</td>
<td>54.4</td>
<td>37.4</td>
</tr>
<tr>
<td>Speciality chemicals</td>
<td>59.2</td>
<td>62.3</td>
<td>46.9</td>
</tr>
<tr>
<td>Diversified chemicals</td>
<td>61.4</td>
<td>51.2</td>
<td>42.3</td>
</tr>
</tbody>
</table>

Source: Capital IQ, accessed 4 September 2020
2. Accounts payable, such as identification of critical categories and aligning payment terms to industry benchmarks, which can enable chemicals companies to manage suppliers based on their business risk. Additionally, improvement in days payable outstanding (DPO) has recently expanded beyond payment terms, trigger and frequency to include policy and process optimization and a move toward consolidation and automation. These structural changes to AP enabled a $50+ billion global chemicals manufacturer to realize in excess of US$700m in payables across a subset of vendors. On average, implementing this management strategy can improve DPO to generate US$790m, or 15.7 days of increased run-rate for operations.

![Figure E: Global DPO improvement gap to upper quartile performance by subsector](source: Capital IQ, accessed 4 September 2020)

3. Managing end-to-end inventory, including MRO, which is critical to helping a chemical company not only meet the customer demand, but also helping to prevent the supply chain from being disrupted. The major pillar for inventory continues to be a focus on managing safety and cycle stocks using a segmented approach by SKU; however, this has recently expanded to improving sales and operations planning processes to better manage inventory. At a private-equity owned chemicals company, inventory was reduced by 15%-18% within six months by establishing asset cycles to determine optimal production frequency and quantity.

In this time of economic uncertainty for many suppliers, chemical companies need to consider the impact of their replenishment strategies to mitigate inventory accumulation weighed against the opportunity to take advantage of strategic buy opportunities and downtime required for maintenance. This material-focused approach to scale up or down purchasing can enable days inventory outstanding (DIO) improvements to support an additional US$820m or 18.9 days of run-rate on average.
Timing is critical

As the sector continues to experience unprecedented uncertainty in the economic downturn through the end of 2021, extending companies’ run-rate and speed to value creation is critical. The immediate need for cash not only requires a focus on current operations but also on maintaining a focus on sustainable results for the future. The preferred approach is to leverage liquidity from working capital as a focal lever to meet debt obligations, fund growth, and pursue new value creation initiatives now and beyond the COVID-19 situation.

No matter the approach taken, current trends suggest chemical companies will continue to require cash – and continue to change how effectively they are able to take advantage of the current environment and ultimately position themselves for success.
How EY teams can help
EY Global Working Capital Advisory Services works with chemical companies to release cash tied up in working capital. Combining proven methodologies with fresh thinking, we give you the advice you need to help release cash in a timely manner providing incremental liquidity available to invest in your business and employees to move forward. With the largest dedicated working capital management team across the globe, EY teams have a track record of providing value to chemical companies across payables, inventory and receivables processes. Through programs aimed at operational improvement, we drive cash flow and improve visibility and execution of processes that underpin working capital performance.

**Averaging**

20%–25% cash flow improvements from working capital, or 5%–7% of revenue

**Advised on projects with**

$75b+ of incremental cash flow to clients every five years

**Private equity experience includes**

100+ projects in 30+ industries

**Dedicated working capital management organization**

**Worked in over 60 countries**

**Deep industry knowledge across processes impacting:**
- Accounts receivable
- Accounts payable
- Inventory
- Non-trade working capital

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