

Global Chemical Industry M&A and Valuation Insights



Executive Summary

Transaction volumes back to pre-COVID-19 levels by 4Q20

- M&A activity in the Chemicals sector picked up pace in the last couple of quarters of 2020, primarily driven by favorable fiscal and monetary policies that led to stabilized global capital markets.
- In 2021, more mega deals are expected, as company valuations improve and investors would have access to capital.

Commodity and Specialty Chemicals sectors on the forefront

- The Commodity Chemicals sector has consistently registered the highest number of transactions over the past two years. The Specialty Chemicals sector witnessed surge in transaction value in 2020 compared with 2019.

APAC region witnessed highest transaction volumes and value in 2020

- The APAC region led in terms of transaction volumes and value over the past two years, with Europe being a distant second.
- China and Japan are the leading contributors to M&A transaction volumes and value in the APAC region.

Valuation multiples declined in 2020 compared with 2019

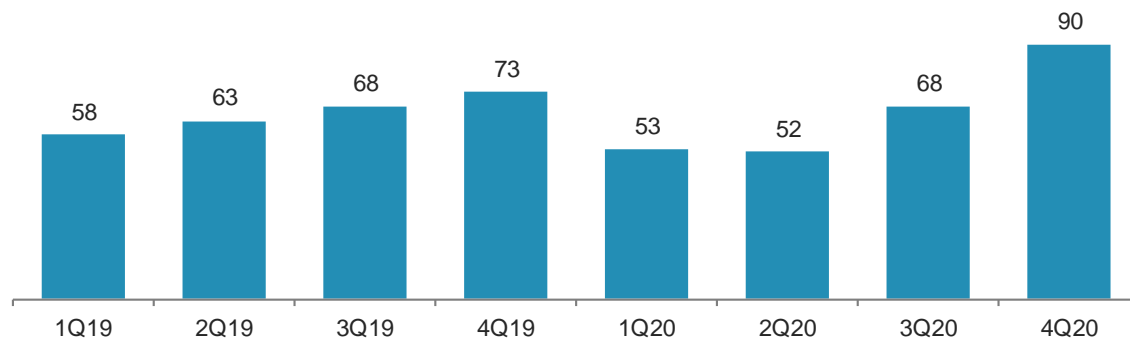
- A downward trend of valuation multiples was observed in 2020 compared with 2019, as companies were negatively impacted by the pandemic, leading to a decline in their revenues and enterprise value.

S&P 500's Chemicals index showed strong recovery after the pandemic

- The S&P 500 Chemicals index posted strong recovery after being hit hard by the pandemic; currently, it is performing at par with S&P 500.
- The performance is expected to improve further in 2021.

Surge in deals in 4Q20 resulting in the recovery of global M&A activity in the Chemicals sector to pre-COVID-19 levels

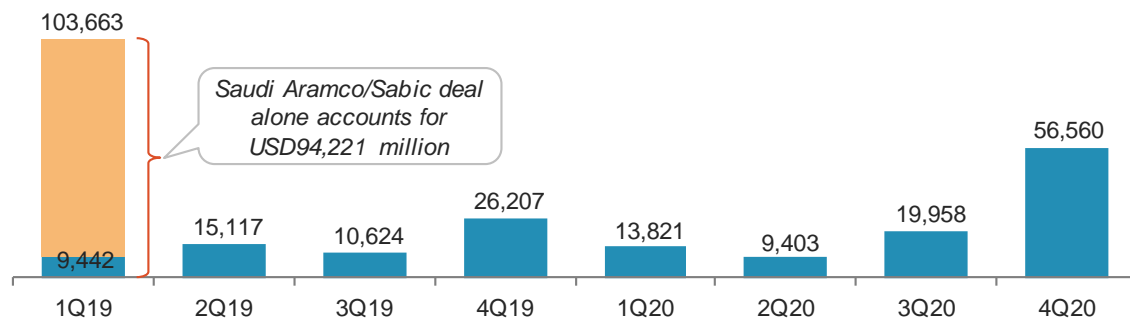
Volume of Transactions by Quarter



- An upward trend was observed in the number of transactions as 2019 progressed.
- This trend was disrupted in 2020 owing to the immediate impact of the COVID-19 pandemic, which was reflected in the next couple of quarters.
- Despite the impact of the pandemic, transactions picked up pace in the last two quarters of 2020, primarily due to favorable fiscal and monetary policies that led to stabilized global capital markets.
- Almost an equal number of transactions were recorded in both 2019 and 2020, with 262 and 263 deals closed, respectively.

Value of Transactions by Quarter

(USD million)



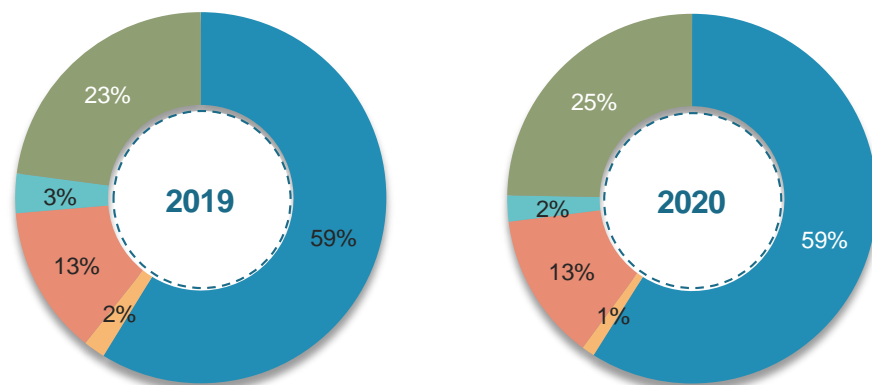
- The value of transactions in the Chemicals sector in 2019 is among the highest historically, mainly driven by mega deals such as the Saudi Aramco/Sabik deal.
- The total transaction value in 2020 was about 2/3rd of that in 2019, with the largest deal being of Soulbrain, worth USD33.9 billion, in 4Q20.
- Transaction values in 1Q20 and 2Q20 were considerably lower compared with those in 1Q19 and 2Q19, respectively. The average transaction size was lower in 2020, standing at USD380 million compared with USD595 million in 2019. The decline was ascribed to the pandemic, geopolitical uncertainties, and increased tariffs.

In 2021, we expect more mega deals, as companies slowly overcome their low pandemic valuations and corporates and private investors would have access to capital.

Source: S&P Capital IQ as of January 31, 2021; Aranca Insights

Commodity Chemicals transaction volumes consistently high in both 2019, 2020, while Specialty Chemicals transaction value expanded in 2020

Share of Sectors in Total Transactions



■ Commodity

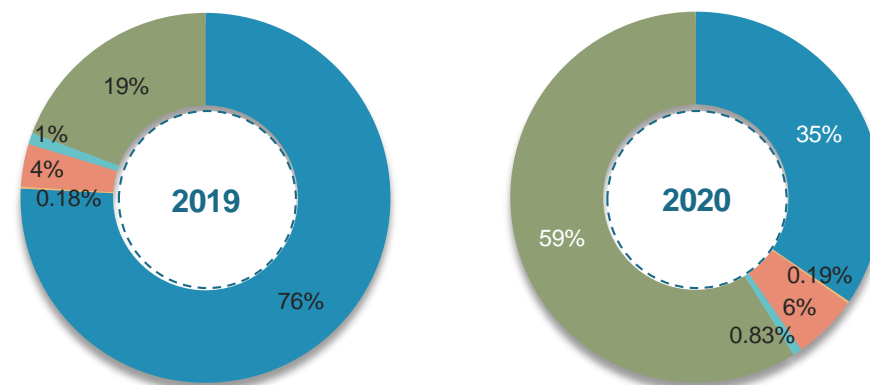
■ Diversified

■ Fertilizers and Agricultural

■ Industrial Gases

■ Specialty Chemicals

Share of Sectors in Total M&A Value

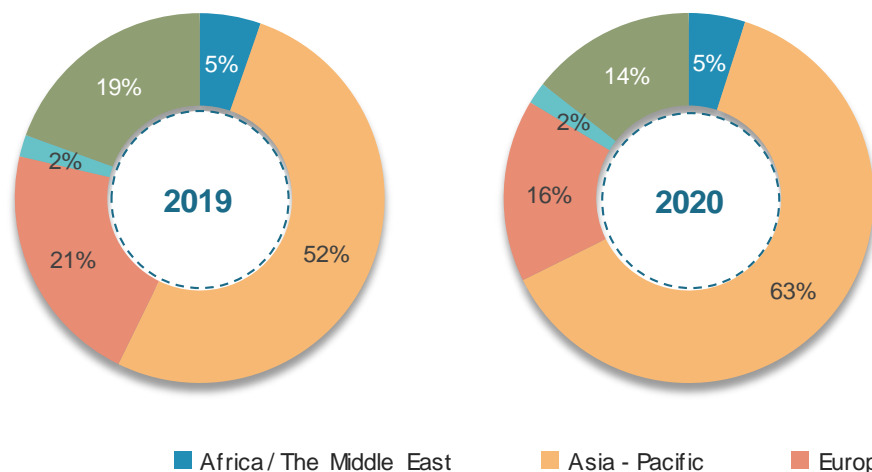


- Share of various sectors in total transactions was similar in both 2019 and 2020, but the share of these sectors in terms of value contribution varied.
- The highest number of deals were closed in the Commodity Chemicals sector, having the same percentage share in 2019 and 2020. However, its value contribution dropped in 2020 due to the Saudi Aramco/Sabik mega deal closed in 2019.
- As a result of the pandemic, Specialty Chemicals companies with end-markets focusing on hygiene, nutrition, and pharma have prospered, and so have their valuations; as a result, the sector's value contribution almost tripled in 2020.
- Diversified Chemicals, Fertilizers & Agricultural Chemicals, and Industrial Gases witnessed an insignificant change in terms of both the number of deals and value contribution in 2020 from 2019.

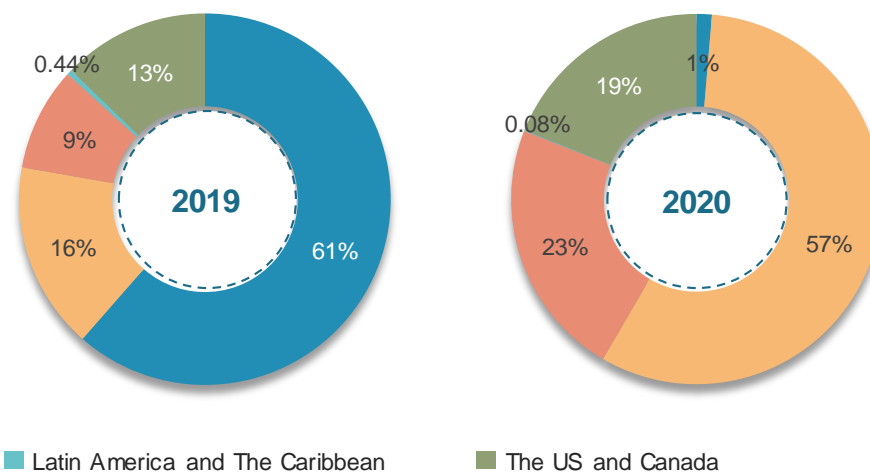
Source: S&P Capital IQ as of January 31, 2021; Aranca Insights

APAC region leading in terms of transaction volume and value over past two years, with Europe being a distant second

Share of Total Transactions: By Geography



Share of Total M&A Value: By Geography

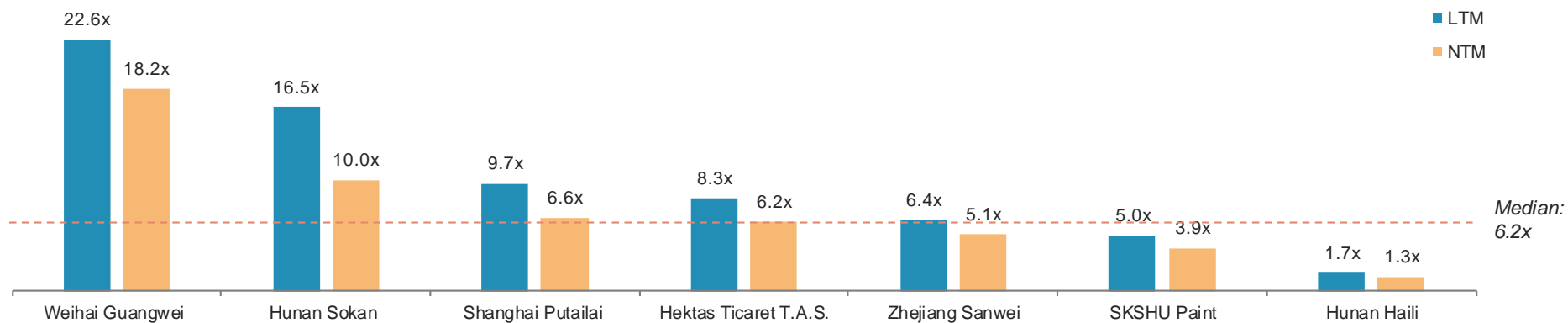


- In both 2019 and 2020, the APAC region witnessed the highest number of deals; also, the highest transaction value was recorded in 2020. Within the APAC region, China is one of the biggest markets, which has lately been through domestic consolidation owing to multiple small-sized deals. The US-China trade war as well as the pandemic reduced interest among overseas investors in acquiring Chinese assets.
- Japan has contributed to M&A activities despite trade war tensions, tightening monetary conditions, and the pandemic by shifting from manufacturing commodity products to value-added specialty chemicals for the pharma sector.
- The Africa & the Middle East region recorded flat growth in deal volume and a significant decline in transaction value due to the mega deal closed in 2019. Latin America and the Caribbean also registered flat growth in deal volume, with minimal change in transaction value in both 2019 and 2020.
- Europe witnessed a decrease in the number of deals in 2020, but the region registered higher transaction value, with the UK and Germany being the most active regions. Transactions were driven by strategic players aiming to improve their portfolios or divest their non-core assets.
- The US is a consistently active market for M&A transactions, with the highest transaction value. The US attracts foreign buyers, with Europeans being the most active acquirers, followed by Asian buyers, with Korea and Japan being the frontrunners.

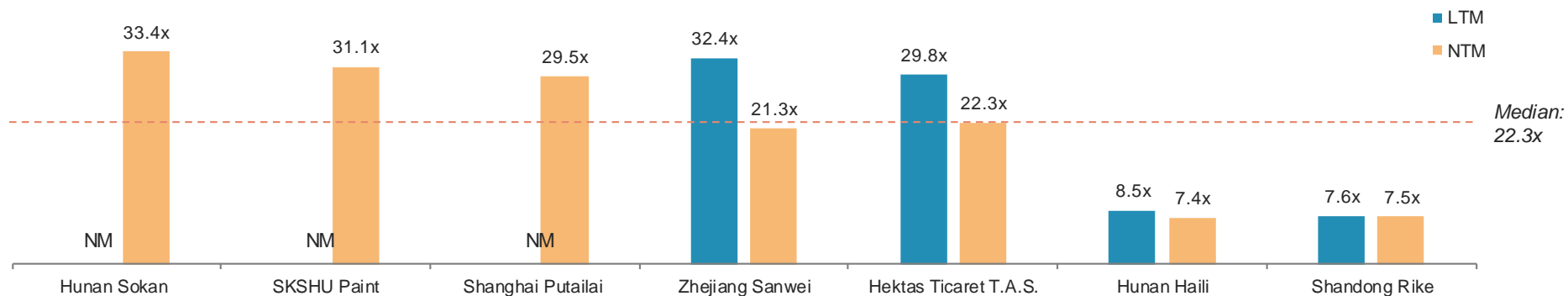
Source: S&P Capital IQ as of January 31, 2021; Aranca Insights

Valuation metrics declined for high-growth companies in 2020 compared with 2019...

High-growth Chemical Companies: TEV / Revenue



High-growth Chemical Companies: TEV / Revenue

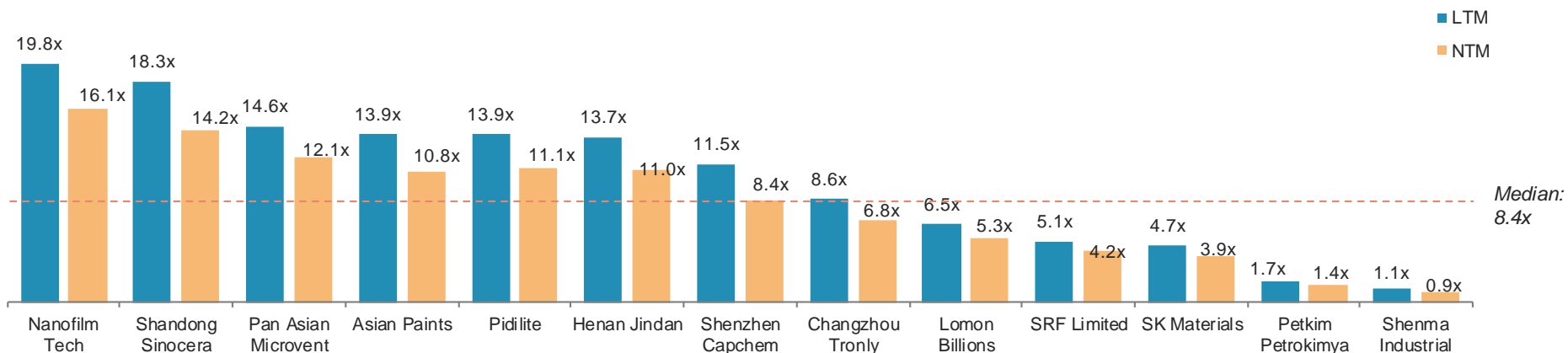


Source: S&P Capital IQ as of January 31, 2021; Aranca Insights

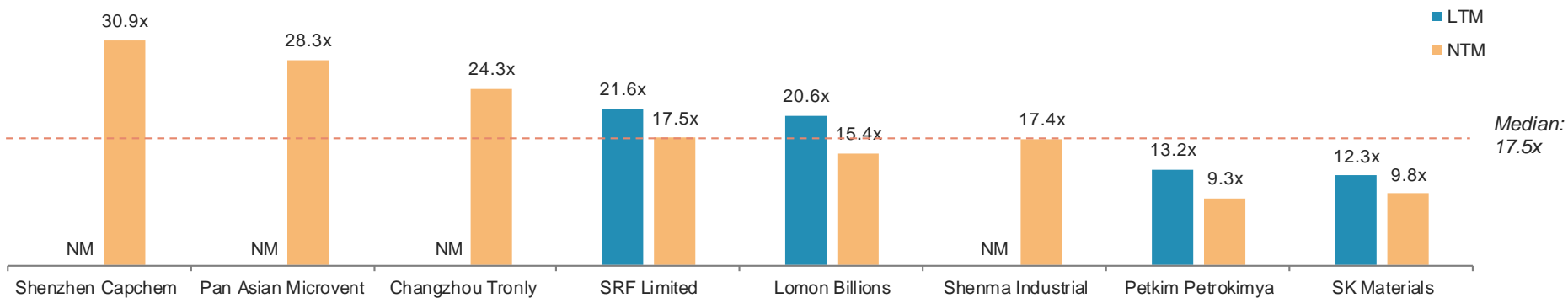
Note: Medium/low-growth companies include those with <20% revenue growth in 2019. High growth companies include those with >20% revenue growth in 2019. Revenue multiples >25.0x and EBITDA multiples <0.0x or >35.0x are considered Not Meaningful (NM).

...with similar trends being observed for medium-/low-growth companies

Medium-/Low-growth Chemical Companies: TEV / Revenue



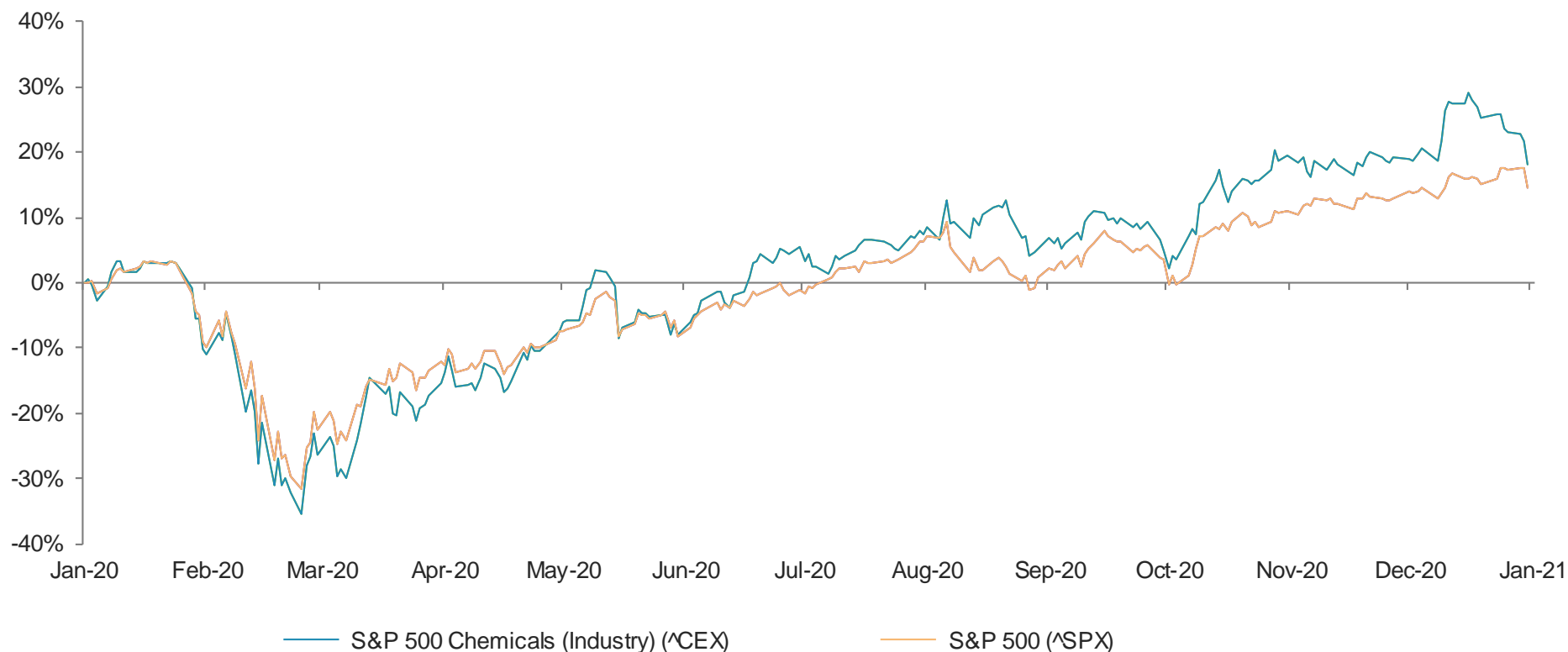
Medium-/Low-growth Chemical Companies: TEV / EBITDA



Source: S&P Capital IQ as of January 31, 2021; Aranca Insights

Note: Medium-/low-growth companies include those with <20% revenue growth in 2019. High growth companies include those with >20% revenue growth in 2019. Revenue multiples >25.0x and EBITDA multiples <0.0x or >35.0x are considered Not Meaningful (NM).

Strong recovery posted by S&P 500 Chemicals index after being hit hard by the pandemic; Chemicals index eventually outperformed S&P 500



- The impact of the pandemic was reflected on the performance of the indices in March 2020, following which the index values plummeted as soon as the pandemic-induced lockdowns began. The S&P 500 Chemicals index performed poorly, declining by ~35%, while S&P 500 declined by about ~30% at the same time.
- After the decline, both the indices recorded V-shaped recovery, with the S&P 500 Chemicals index outperforming S&P 500 by a clear margin even after entering 2021.

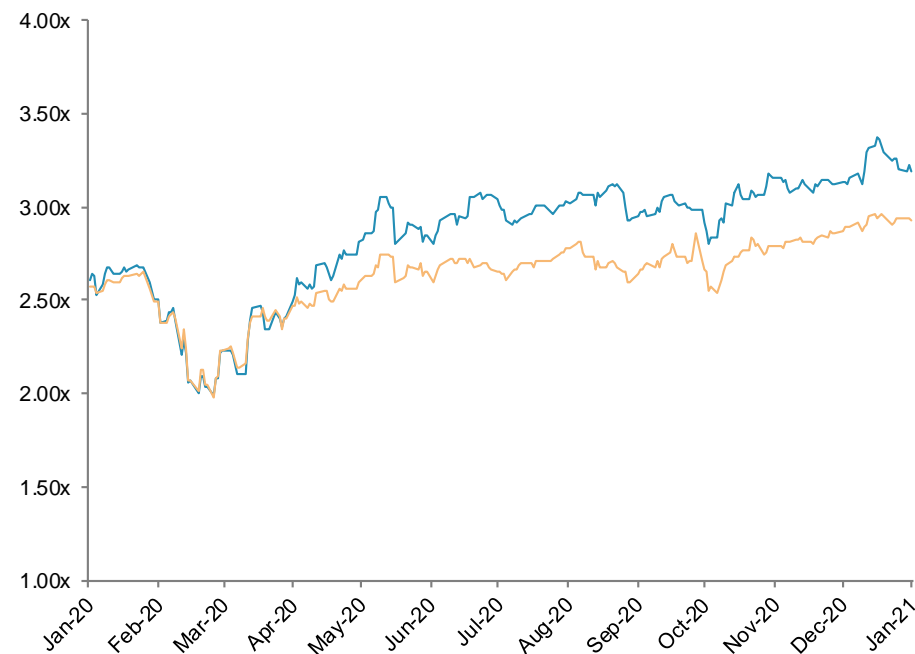
Source: S&P Capital IQ as of January 31, 2021; Aranca Insights

Surge in both LTM, NTM TEV/revenue multiples after pandemic, with value being higher than S&P 500

LTM TEV/Revenue



NTM TEV/Revenue



— S&P 500 Chemicals(Industry) (^CEX) – TEV/Total Revenue

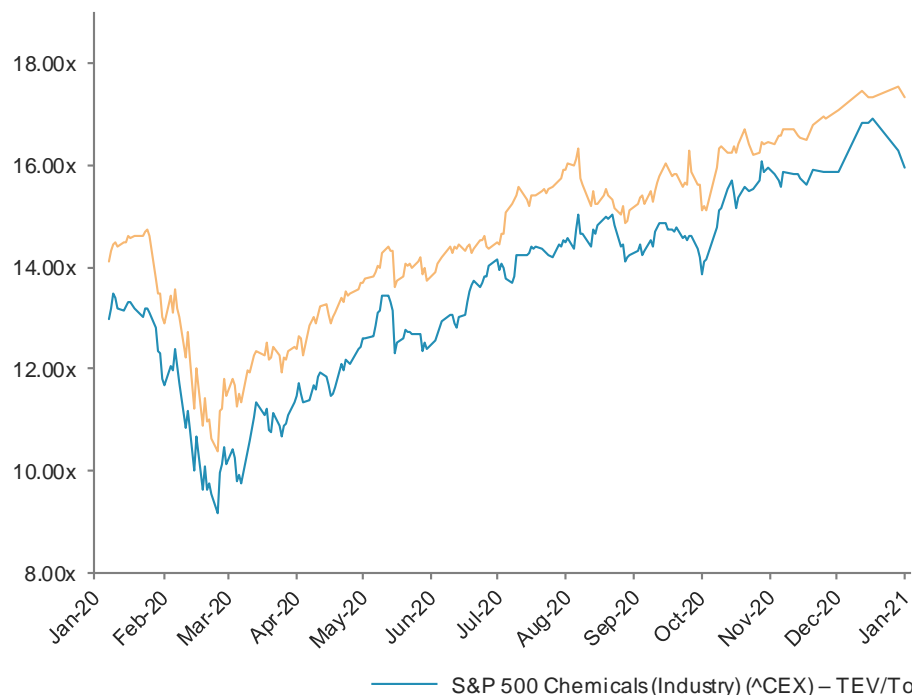
— S&P 500 (^SPX) – TEV/Total Revenues

- Valuations of companies fell by a significant margin due the pandemic, but these have since recovered and even surpassed the pre-pandemic values.
- The S&P 500 Chemicals index initially mirrored and eventually surpassed S&P 500 owing to high fiscal and monetary support provided to brave the pandemic.

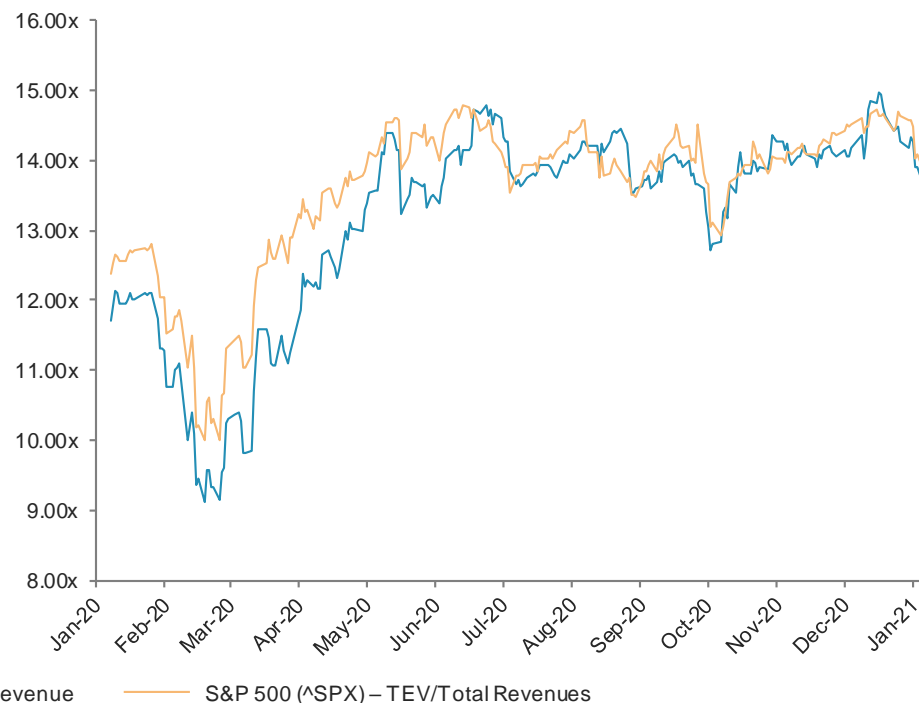
Source: S&P Capital IQ as of January 31, 2021; Aranca Insights

Rise in both LTM, NTM TEV/EBITDA multiples after pandemic, but with value being lower than S&P 500

LTM TEV/EBITDA












NTM TEV/EBITDA



- A similar downtrend, and then a gradual increase in TEV / EBITDA multiples was observed for S&P 500 and S&P 500 Chemicals index.
- Unlike the TEV / Revenue Multiple, TEV / EBITDA multiple of the S&P 500 Chemicals index has consistently been lower value than that of S&P 500.

Source: S&P Capital IQ as of January 31, 2021; Aranca Insights

Top 10 Transactions by Value in 4Q20

Date of Announcement	Target	Target Country	Description	Buyer	Sector	Deal Value (USD million)	EV / Revenue	EV / EBITDA
October 2020	Soulbrain Co., Ltd.		Develops and manufactures various high-tech industry core materials and offers functional chemical materials used in manufacturing LCD and OLED panels	Soulbrain Holdings	Specialty Chemicals	33,912	-	-
November 2020	W. R. Grace & Co.		Produces and sells specialty chemicals and materials worldwide	40 North Management LLC	Specialty Chemicals	5,708	3.5x	15.7x
December 2020	Tikkurila Oyj		Manufactures and sells a range of decorative paints for surface protection and decoration to consumers and professionals internationally	PPG Industries, Inc.	Commodity Chemicals	1,746	2.3x	14.5x
November 2020	Jiangsu Yangnong Chemical		Produces and sells pesticides and provides pyrethroids for use in health and agricultural applications	Syngenta Group	Fertilizers and Agricultural Chemicals	1,546	2.8x	15.8x
November 2020	Ennis-Flint Inc.		Manufactures and supplies pavement marking materials	PPG Industries, Inc.	Specialty Chemicals	1,150	-	-
November 2020	Iberchem S.A.		Manufactures and sells fragrances and flavors	Croda International Plc	Specialty Chemicals	973	4.6x	21.6x
December 2020	FONA International Inc.		Develops and produces flavors for food, beverage, and nutritional companies worldwide	McCormick & Company, Inc.	Specialty Chemicals	710	-	-
December 2020	Misr Fertilizer Production Company		Produces and sells ammonia, urea, and nitrogen fertilizers worldwide	-	Fertilizers and Agricultural Chemicals	540	4.4x	7.8x
November 2020	Gemini HDPE LLC		Manufactures high-density polyethylene chemicals	INEOS Olefins & Polymers USA	Fertilizers and Agricultural Chemicals	404	-	-
October 2020	Nanjing Red Sun		Engages in the research, manufacture, and sale of pesticides and other chemicals	Shandong Kuntai	Commodity Chemicals	298	2.79x	43.1x

Mean	3.4x	19.8x
Median	3.2x	15.8x

Source: S&P Capital IQ as of January 31, 2021; Aranca Insights

Top 10 Transactions by Value in 3Q20

Date of Announcement	Target	Target Country	Description	Buyer	Sector	Deal Value (USD million)	EV / Revenue	EV / EBITDA
July 2020	Polyplastics Co., Ltd.		Manufactures and sells various types of engineering plastics and polymers	Daicel Corporation	Commodity Chemicals	1,571	2.8x	-
September 2020	Hexion PSR		Manufactures resins	Invest Industrial; Black Diamond Capital	Commodity Chemicals	425	-	-
September 2020	Hangjin Technology		Manufactures and sells chemicals in China	Wuhan Xinneng Industrial Development	Commodity Chemicals	416	5.1x	37.6x
August 2020	Nolato GW, Inc.		Provides contract manufacturing services for injection-molded thermoplastic and silicone solutions to healthcare, automotive, and filtration industries worldwide	Nolato AB	Commodity Chemicals	230	1.1x	-
July 2020	Avon Polymer Products Limited		Manufactures and markets rubber- and polymer-based products	DeLaval Holding	Commodity Chemicals	225	3.5x	17.1x
August 2020	Porocel Corporation		Manufactures activated alumina, inert bed supports, and specialty adsorbents; provides catalyst regeneration, presulfurizing, and grading services	Evonik Industries	Commodity Chemicals	210	2.1x	9.1x
July 2020	Anhui Jiangnan		Engages in the research, production, and sale of explosives	North Special Energy	Commodity Chemicals	186	3.4x	9.7x
August 2020	Venator Materials		Manufactures and markets titanium dioxide-based products and performance additives worldwide	SK Capital Partners	Specialty Chemicals	100	0.5x	7.3x
July 2020	Chongqing Minfeng		Engages in the production and sale of chromium salts and chemicals	Hubei Zhenhua	Commodity Chemicals	75	0.4x	-
August 2020	MESGO S.p.A.		Produces and distributes compounding solutions and pigment master batches and additives	HEXPOL AB	Commodity Chemicals	47	-	-

Mean	2.3x	16.2x
Median	2.1x	9.7x

Source: S&P Capital IQ as of January 31, 2021; Aranca Insights

The background is a complex collage. It features several stacks of silver coins, some in sharp focus and others blurred. Overlaid on the coins are financial charts: a yellow line graph on the left, a white line graph on the right, and a blue bar chart in the upper right. The overall color palette is dominated by blues and greys, with the metallic tones of the coins providing contrast.

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Research and analytics service support to enable investment bankers focus on client-facing/deal-making activities

I-Banking Verticals

Aranca's Key Research Support Areas

Library Services Publication Support

1

M&A BUY-SIDE

- Target list generation
- Market, fitment, and synergy analysis
- Pitchbook and marketing materials
- Financial modelling and comps analysis
- Due diligence support

2

M&A SELL-SIDE

- Buyer list generation
- Market, fitment, and synergy analysis
- Pitch book and marketing materials
- Performance benchmarking
- Modelling and comps analysis
- Buyout modelling

3

CAPITAL MARKET

- Proposal building for potential clients
- Pre-listing evaluation support
- IPO/FPO – Prospectus
- Roadshow pitchbook and presentation
- Valuation range assessment
- Analytical work to support ESOP

4

DEBT & EQUITY PLACEMENT

- PPM/IM preparation
- Roadshow pitchbook and presentation
- LBO tear sheets and modelling
- Capital structure and covenant analysis
- Tracking deals, pricing, and trends
- Equity/credit comps

5

ADVISORY

- Market and industry landscape analysis
- Valuation reports
- Fairness opinions
- Research support for strategy formulation
- Performance benchmarking

MARKET INTELLIGENCE & LIBRARY

- Sector research
- Industry landscape analysis
- Competitor and pricing trends
- Maintenance of deal database
- Newsletters/periodicals

DTP & PUBLICATION

- Editorial support
- Presentation support
- Templates: Report and presentation layout
- Formatting reports and presentations
- Report publication and workflow management
- Proofreading and print/digital coordination

Connect with our subject matter experts for further assistance

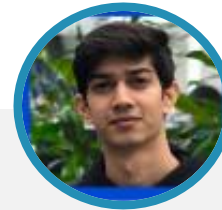


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