



HOULIHAN LOKEY

CHEMICALS UPDATE

Year End 2019



Introduction

Dear Clients and Friends,

Houlihan Lokey is pleased to present its Chemicals Year End 2019 Industry Update.

In this issue, we have included relevant news stories, recent M&A transaction announcements, a public markets overview, and other industry insights to help you stay ahead in this evolving industry. We hope you find this quarterly update to be informative and that it serves as a valuable resource to you in staying abreast of the market. If there is additional content you would find useful for future updates, please don't hesitate to call or email us with your suggestions. We look forward to staying in touch with you.

Regards,

Chemicals Group Contacts

Financial and Valuation Advisory



Mike Giffin
Managing Director
MGiffin@HL.com
214.220.8485



Christopher Glad
Director
CGlad@HL.com
312.456.4730



Zachary Mueller
Financial Analyst
ZMueller@HL.com
312.456.4763

Corporate Finance



Leland Harrs
Global Head of Chemicals
LHarrs@HL.com
212.497.7842



Martin Bastian
Head of Chemicals, Europe
MBastian@HL.com
+49 (0) 69 256 246 171



Steve Wang
Senior Vice President
SYWang@HL.com
212.497.7807



Harrison Davis
Associate
HDavis@HL.com
646.259.7438



Houlihan Lokey is the trusted advisor to more top decision-makers than any other independent global investment bank.

Corporate Finance

2019 M&A Advisory Rankings All U.S. Transactions		
	Advisor	Deals
1	Houlihan Lokey	184
2	Goldman Sachs & Co	167
3	JP Morgan	141
4	Morgan Stanley	122
5	Evercore Partners	112

Source: Refinitiv (formerly known as Thomson Reuters)

No. 1 U.S. M&A Advisor

Top 10 Global M&A Advisor

Leading Capital Markets Advisor

Financial Restructuring

2019 Global Distressed Debt & Bankruptcy Restructuring Rankings		
	Advisor	Deals
1	Houlihan Lokey	76
2	PJT Partners Inc	43
3	Moelis & Co	36
4	Lazard	29
5	AlixPartners	19

Source: Refinitiv (formerly known as Thomson Reuters)

No. 1 Global Restructuring Advisor

1,000+ Transactions Completed
Valued at More Than \$2.5 Trillion
Collectively

Financial and Valuation Advisory

2000 to 2019 Global M&A Fairness Advisory Rankings		
	Advisor	Deals
1	Houlihan Lokey	1,057
2	JP Morgan	929
3	Duff & Phelps	734
4	Morgan Stanley	621
5	Bank of America Merrill Lynch	612

Refinitiv (formerly known as Thomson Reuters). Announced or completed transactions.

No. 1 Global M&A Fairness Opinion
Advisor Over the Past 20 Years

1,000+ Annual Valuation
Engagements

Selected Transactions

<p>has acquired</p> <p>Buy-side Advisor</p>	<p>a portfolio company of</p> <p>has been acquired by</p> <p>Sell-side Advisor</p>	<p>has completed the spin-off of</p> <p>Financial Opinion</p>	<p>has sold certain assets to</p> <p>Fairness Opinion</p>	<p>Phosgene Chemistry – Custom Chemicals a portfolio company of</p> <p>has been acquired by</p> <p>Sell-side Advisor</p>
<p>has been acquired by</p> <p>Sell-side Advisor</p>	<p>a portfolio company of</p> <p>has been acquired by</p> <p>Sell-side Advisor</p>	<p>has been acquired by</p> <p>Financial Opinion</p>	<p>has acquired</p> <p>from</p> <p>Arsenal Capital Partners</p> <p>Buy-side Advisor</p>	<p>has completed a merger with the chemicals business of PPG in a Reverse Morris Trust transaction</p> <p>Financial Advisor</p>

Tombstones included herein represent transactions closed from 2012 forward.

Houlihan Lokey Media Mentions



Below are excerpts from Leland Harris, Global Head of Chemicals at Houlihan Lokey, from his October interview with *ICIS News* (*ICIS.com*, October 18, 2019)

“Negative sentiment by company managements is weighing on chemical mergers and acquisitions (M&A), an investment banker said on Thursday...”

‘Psychology has gotten ahead of reality in the U.S.—we are sensing CEO confidence is down. Economic indicators are not quite signaling recession but the sentiment is ahead of the market,’ said Leland Harris, Managing Director at investment bank Houlihan Lokey. ‘We see choppiness feeding through to some sale processes, especially those exposed to cyclical end markets, Europe, Asia, or trade. Geographic issues are at the forefront of people’s thinking,’ he added.

There is a dichotomy between macro conditions in Europe and Asia, and those in the U.S., the banker noted.

‘The consumer is still very strong in the U.S., and some sectors such as personal care, home care, and nutrition and health are holding up well,’ said Harris...

The financing market, while still offering liquidity at relatively low rates, is shifting towards caution, he said.

‘On the debt side, there are increasing examples of financings that are backing up, resulting in lower leverage and more equity needed. We see more lender-friendly adjustments,’ said Harris. ‘Financing packages are starting to shift toward more lender protections and leverage levels have had to be dialed back, especially for more cyclical or commodity deals,’ he added.

Transaction multiples are still relatively high because the cost of debt is still cheap but lenders are becoming more selective and multiples for companies facing headwinds are coming down, the banker said.

This makes a challenging market for buyers as they do not want to ‘catch a falling knife.’ Some have stepped back from sale processes because of macro concerns, he noted. ‘Some strategics are doing a read-across. If their business is suffering headwinds and the target is as well, do they want to double down?’ said Harris.

However, corporate carve-outs of non-core businesses are set to continue as companies focus on restructuring. ‘We don’t see this stopping the flow as corporates make long-term strategic decisions. Barring a real deterioration in market conditions, they will press on,’ said Harris. ‘M&A activity is not drying up—it’s not a bunker mentality but just one of caution,’ he added.”

Houlihan Lokey Media Mentions



Below are excerpts from Martin Bastian, Head of Chemicals, Europe at Houlihan Lokey, from his December interview with *ICIS News* (*ICIS.com*, December 27, 2019)

“Early signs in 2019 were for a bumper year for chemicals sector mergers and acquisitions (M&A), but economic weakness and political uncertainty has weighed on dealflow, with few of the big sector consolidations of activist driven spin-offs as seen in recent years...

Price Tag Uncertainty

All this has served to make it more difficult to assign a price tag to potential acquisitions, according to Martin Bastian, Managing Director of the Industrials business at investment bank Houlihan Lokey.

‘You’ve seen multiples in public markets still trading towards high single digits, above the historical average,’ he said. ‘People haven’t fully adjusted how low an EBITDA can go in 2020; what kind of new sustainable level after various/multiple downwards revisions and profit warnings in 2019.’

With more demand than available targets in the higher-margin, technology-driven sectors that companies have been looking to expand into, multiples in the sector had been driven by cheap debt and strong balance sheets to levels where analysts started to question the wisdom of making a purchase...

Modest Transaction Sizes

Despite that, a return to the roaring \$5bn+ acquisition landscape of seen in recent years may not be on the cards for 2020, with bolt-ons and other more modest buys more likely...

Despite the constant grind of political unrest and world leaders speaking of a more insular, regionalised world, the chemicals market remains a global one, but in the short-term uncertainty over issues such as Brexit and the trade war may cause investors to think twice about where and how to spend their cash. ‘People are much more cautious. If you take Brexit for example in Europe, are people investing in the UK right now?,’ said Bastian.

‘Generally I think people are assessing in which geography to deploy, some even holding it back for the time being,’ he added.

Nevertheless, European chemicals firms remain intent on pushing into more specialised sectors and away from commodity chemicals, and that continues to drive M&A appetite, with a flurry of late fourth-quarter activity in the ingredients and cosmetics sectors.”

To read the full article, please click [here](#).

Selected Recent M&A News

PolyOne Signs Definitive Agreement to Acquire Clariant Color and Additive Masterbatch Business (*Polyone.com, December 19, 2019*)

“PolyOne Corporation (NYSE:POL), a leading global provider of specialized polymer materials, services and solutions, today announced that it has entered into an agreement with Clariant to purchase its global color and additive masterbatch business. In addition, PolyOne has entered into an agreement with Clariant Chemicals India Ltd. to purchase its color and additive masterbatch business.

The combined net purchase price is \$1.45 billion, representing an 11.1x multiple of last twelve months adjusted EBITDA, or 7.6x including anticipated synergies.

‘This will be a truly transformational acquisition for both PolyOne and Clariant customers and employees around the world. Together, we will benefit from the combined ingenuity, passion, and expertise of two global leaders in color design, additive technologies, and sustainable solutions,’ said Robert M. Patterson, Chairman, President and Chief Executive Officer, PolyOne Corporation.

Clariant's color and additive masterbatch business, which had sales of \$1.15 billion for the last twelve months, includes specialty technologies and solutions for high-growth global end markets, such as consumer, packaging, and healthcare. The Clariant business includes 46 manufacturing operations and technology centers in 29 countries and approximately 3,600 employees, who will join PolyOne's Color, Additives, and Inks segment.”

IFF to Merge With DuPont’s Nutrition & Biosciences Business (*BusinessWire.com, December 15, 2019*)

“IFF (NYSE:IFF) (Euronext Paris:IFF) (TASE:IFF) and DuPont (NYSE: DD) today announced that they have entered into a definitive agreement for the merger of IFF and DuPont’s Nutrition & Biosciences (N&B) business in a Reverse Morris Trust transaction. The deal values the combined company at \$45.4 billion on an enterprise value basis, reflecting a value of \$26.2 billion for the N&B business based on IFF’s share price as of December 13, 2019. Under the terms of the agreement, which has been unanimously approved by both Boards of Directors, DuPont shareholders will own 55.4% of the shares of the new company and existing IFF shareholders will own 44.6%. Upon completion of the transaction, DuPont will receive a one-time \$7.3 billion special cash payment, subject to certain adjustments.

The combination of IFF and N&B creates a global leader in high-value ingredients and solutions for global Food & Beverage, Home & Personal Care, and Health & Wellness markets, with estimated 2019 pro forma revenue of more than \$11 billion and EBITDA of \$2.6 billion, excluding synergies. The complementary portfolios will give the company leadership positions across key Taste, Texture, Scent, Nutrition, Enzymes, Cultures, Soy Proteins, and Probiotics categories. The combined company’s global reach and enhanced set of capabilities will enable the creation of innovative solutions to respond to customer demands and increasing consumer preferences for natural, healthier, and ‘better for you’ products.”

Selected Recent M&A News (cont.)

Innophos Enters Into Definitive Agreement to be Acquired by One Rock Capital Partners for \$32.00 per Share (*BusinessWire.com, October 21, 2019*)

“Innophos Holdings, Inc. (‘Innophos’ or the ‘Company’) (NASDAQ:IPHS), a leading international producer of essential ingredients, today announced that it has entered into a definitive agreement with an affiliate of One Rock Capital Partners, LLC (‘One Rock’), a leading middle-market private equity firm, whereby One Rock will acquire all of Innophos’ outstanding shares for \$32.00 per share in cash in a transaction valued at approximately \$932 million, including the assumption of debt. The transaction has been unanimously approved by Innophos’ Board of Directors.

The offer price represents an 18% premium to the 30-trading day volume-weighted average closing share price of Innophos’ common stock ended September 9, 2019, the last trading day prior to published market speculation regarding a potential transaction involving the Company...

The definitive agreement includes a 30-day ‘go-shop’ period, commencing immediately, during which Innophos, with the assistance of its legal and financial advisors, will solicit alternative acquisition proposals and potentially enter into negotiations with respect to alternative proposals...

The transaction will be financed through a combination of committed equity financing provided by affiliates of One Rock, as well as committed debt financing from several financial institutions.

The closing of the transaction is expected to occur in the first quarter of 2020, subject to stockholder and regulatory approvals and the satisfaction of customary closing conditions. Upon the completion of the transaction, Innophos will become a privately held company and shares of Innophos’ common stock will no longer be listed on any public market.”

Local Private Equity Fund Buys SKC Kolon PI for 608 bln Won (*en.yna.co.kr, December 24, 2019*)

“A special purpose company set up by Glenwood PE, a local private equity fund, signed a 608 billion won (US\$523 million) deal on Tuesday to acquire a controlling stake in SKC Kolon PI Inc., a maker of polyimide film used in displays, semiconductors, and electric vehicles.

The Korea PI Holdings will buy 54.06-percent stake in SKC Kolon PI—with each buying a 27.03-percent stake—from SKC Co. and Kolon Industries Inc., in the deal that is expected to be completed by February.

SKC Kolon PI—founded in 2008—is a joint venture between SKC, a South Korean maker of chemicals and film products, and Kolon Industries.

Sales of SKC Kolon PI came to 245.5 billion won last year.”

Chemical M&A Activity Continues to Be High

Strategic Buyer

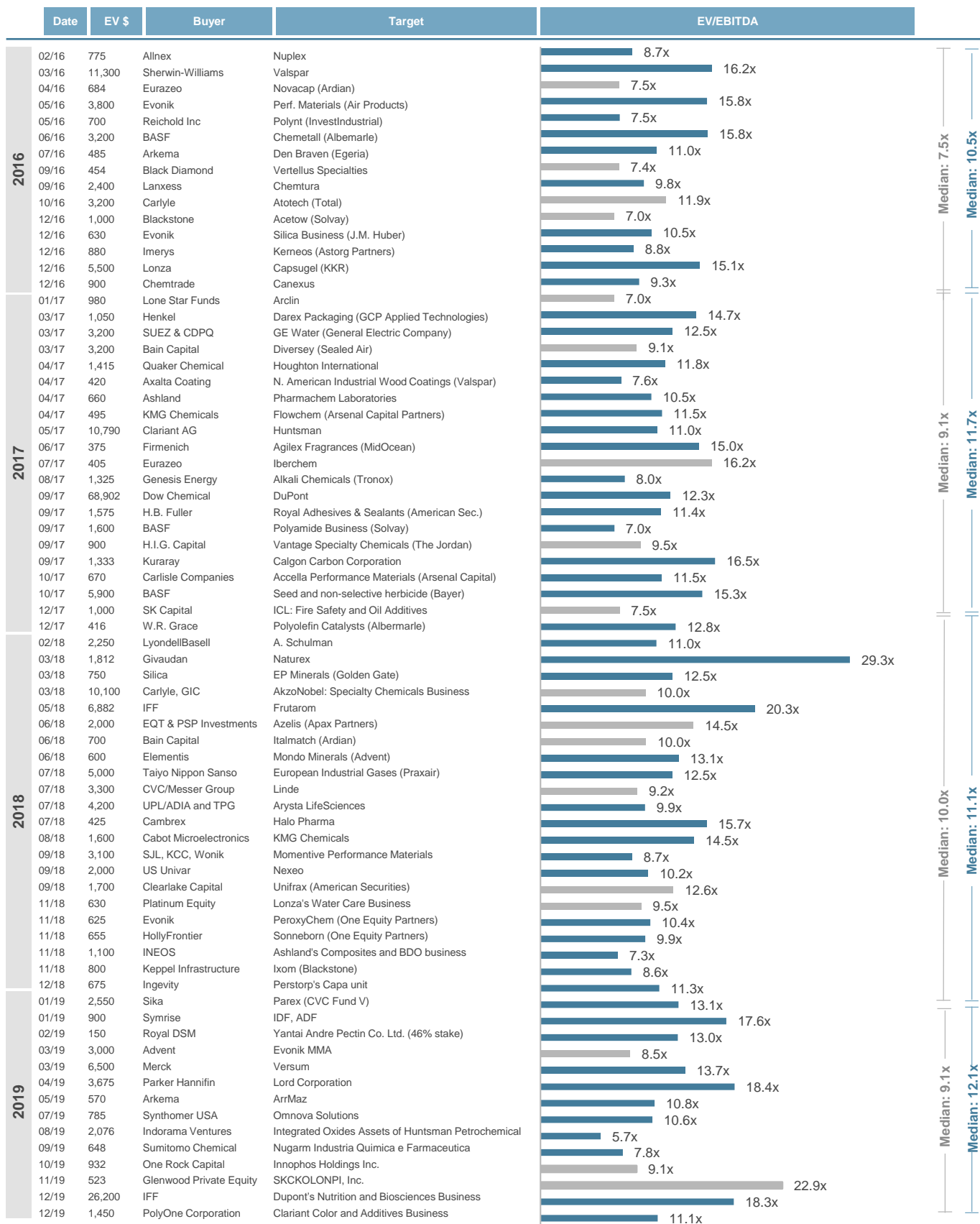
Median Strategic Buyer

11.5x

Financial Buyer

Median Financial Buyer

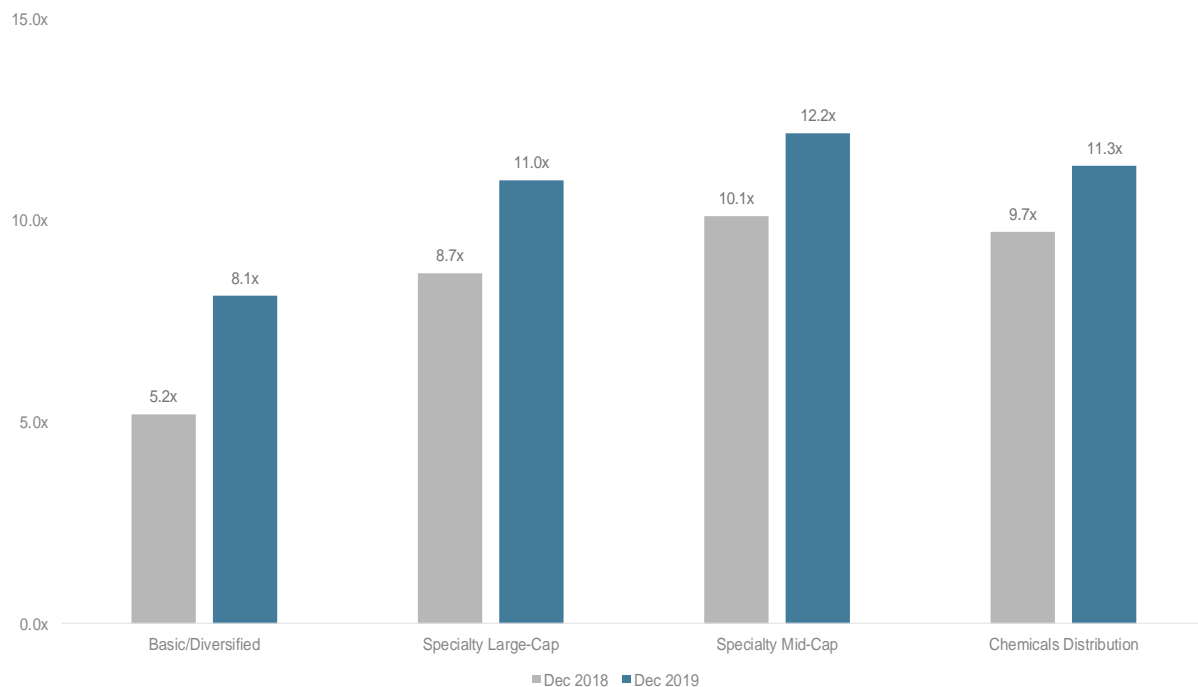
9.3x



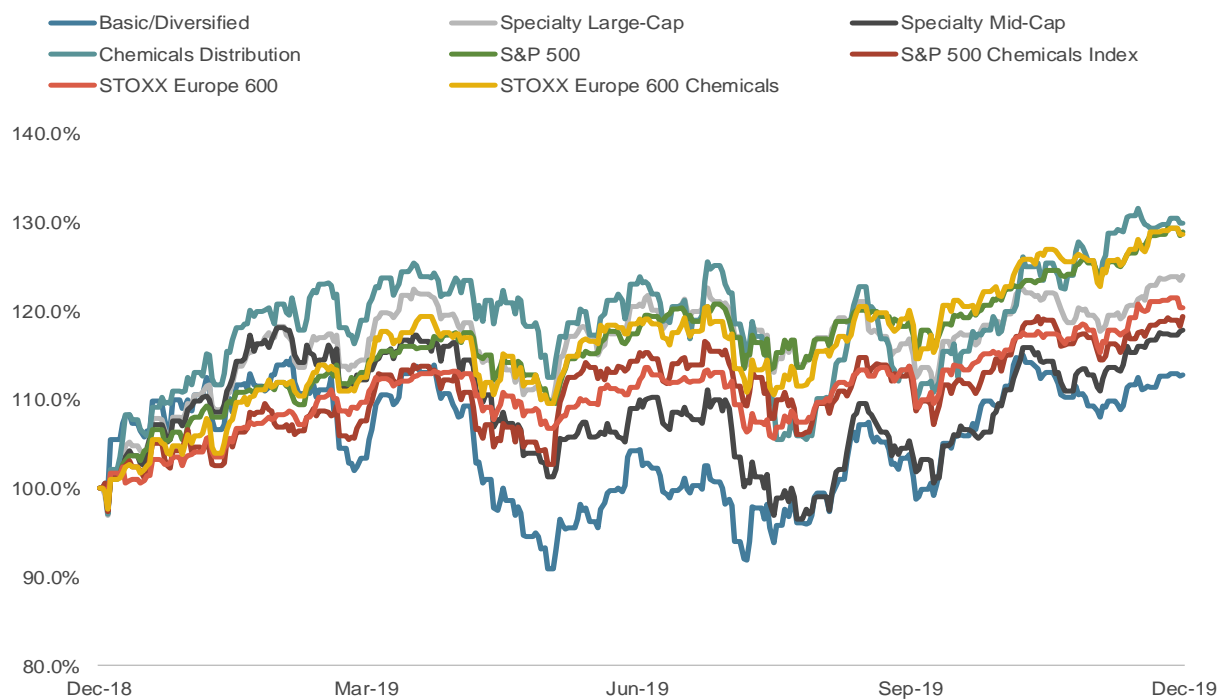
Sources: Company information, MergerMarket

Public Markets Overview

Median TEV/EBITDA Multiples



Stock Price Index



Selected Chemical Inputs (weekly index prices)

Cushing Crude Oil (WTI)

(\$ per barrel)



U.S. Gulf Ethylene (FD)

(\$ per pound)



U.S. Gulf Propylene (FD)

(\$ per pound)



U.S. Gulf Butadiene (CIF)

(\$ per pound)



Selected Chemical Inputs (weekly index prices, cont.)

U.S. Gulf Benzene (FOB)

(\$ per gallon)



U.S. Mixed Xylene (FOB)

(\$ per gallon)



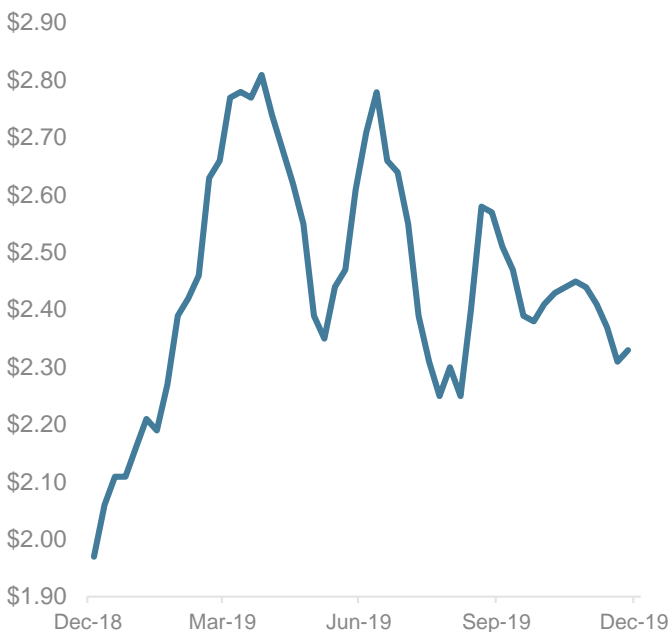
Natural Gas (Henry Hub)

(\$ per million BTU)



U.S. Toluene

(\$ per gallon)



Selected Macroeconomic Data

U.S. Total Monthly Automotive Sales

(millions)



U.S. Privately Owned Housing Units Started

(thousands)



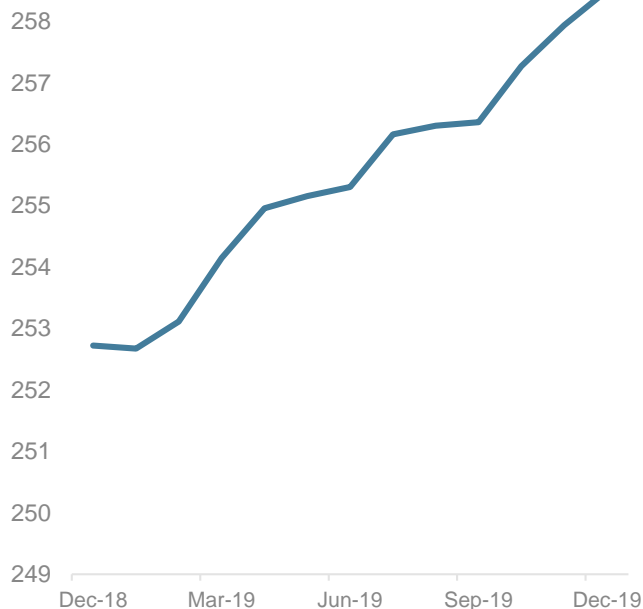
U.S. QoQ Real GDP Growth

(% Change From Preceding Period)



U.S. Consumer Price Index

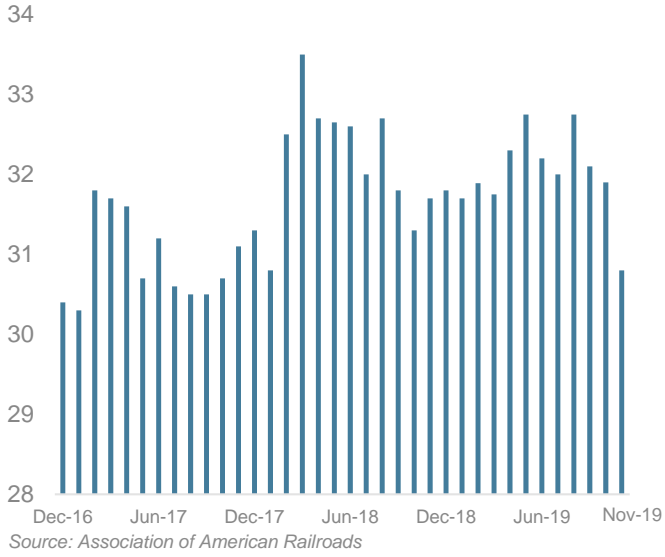
(Index)



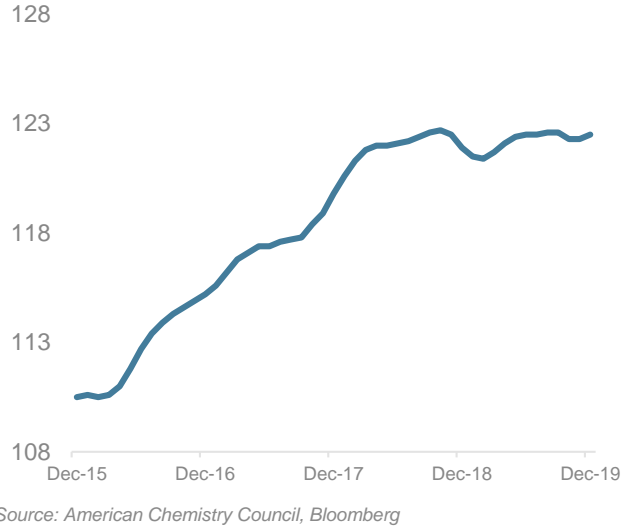
Selected Macroeconomic Data (cont.)

U.S. Average Weekly Chemical Railcar Loadings

(thousands)



U.S. Chemicals Activity Barometer Index



Selected Public Comparables

Basic/Diversified

(as of 12/31/2019, \$ in millions, except per-share prices)

Company Name	Ticker	Stock Price	Stock Performance (% Change)			Equity Value	Enterprise Value	LTM 12/31/2019			Enterprise Value /		
			1 Month	3 Month	1 Year			Gross Margin	EBITDA Margin	EBITDA Margin	LTM Revenue	LTM EBITDA	
BASF SE	DB:BAS	\$75.68	0.8%	8.3%	9.5%	\$69,419.3	\$90,394.5	\$67,770.1	27.4%	\$7,475.7	11.0%	1.33x	12.1x
Bayer Aktiengesellschaft	DB:BAYN	\$81.93	8.3%	15.3%	17.8%	\$80,271.9	\$123,379.3	\$50,151.6	60.4%	\$5,221.9	10.4%	2.46x	NMF
Celanese Corporation	NYSE:CE	\$123.12	-2.0%	0.7%	36.8%	\$14,882.0	\$18,792.0	\$6,554.0	26.1%	\$1,361.0	20.8%	2.87x	13.8x
Covestro AG	DB:1COV	\$46.38	-1.4%	-6.5%	-6.1%	\$8,498.6	\$10,103.4	\$13,978.8	22.7%	\$1,718.5	12.3%	0.72x	5.9x
[1] Dow Inc.	NYSE:DOW	\$54.73	2.5%	14.9%	NA	\$40,582.1	\$58,909.1	\$44,691.0	14.8%	\$6,705.0	15.0%	1.32x	8.8x
Huntsman Corporation	NYSE:HUN	\$24.16	6.8%	3.9%	25.2%	\$5,447.2	\$7,908.2	\$8,736.0	19.3%	\$1,048.0	12.0%	0.91x	7.5x
LANXESS Aktiengesellschaft	XTRA:LXS	\$67.13	0.7%	9.9%	45.9%	\$5,870.4	\$7,816.3	\$7,827.9	25.3%	\$1,059.9	13.5%	1.00x	7.4x
LyondellBasell Industries N.V.	NYSE:LYB	\$94.48	2.1%	5.6%	13.6%	\$31,500.7	\$45,028.7	\$35,424.0	15.4%	\$5,542.0	15.6%	1.27x	8.1x
Methanex Corporation	TSX:MX	\$38.67	4.0%	8.9%	-19.6%	\$2,946.1	\$5,210.4	\$3,102.4	21.1%	\$582.8	18.8%	1.68x	8.9x
Olin Corporation	NYSE:OLN	\$17.25	-1.5%	-7.9%	-14.2%	\$2,754.3	\$6,236.4	\$6,357.9	12.5%	\$1,002.5	15.8%	0.98x	6.2x
The Chemours Company	NYSE:CC	\$18.09	14.6%	21.1%	-35.9%	\$2,957.7	\$6,752.7	\$5,637.0	23.3%	\$916.0	16.2%	1.20x	7.4x
Westlake Chemical Corporation	NYSE:WLK	\$70.15	2.1%	7.1%	6.0%	\$9,003.1	\$11,967.1	\$8,230.0	16.6%	\$1,462.0	17.8%	1.45x	8.2x
Median			2.1%	7.7%	9.5%			\$8,483.0	21.9%	\$1,411.5	15.3%	1.3x	8.1x
Mean			3.1%	6.8%	7.2%			\$21,538.4	23.7%	\$2,841.3	14.9%	1.4x	8.6x

Specialty Large-Cap (Greater Than \$5 Billion EV)

(as of 12/31/2019, \$ in millions, except per-share prices)

Company Name	Ticker	Stock Price	Stock Performance (% Change)			Equity Value	Enterprise Value	LTM 12/31/2019			Enterprise Value /		
			1 Month	3 Month	1 Year			Gross Margin	EBITDA Margin	EBITDA Margin	LTM Revenue	LTM EBITDA	
Albemarle Corporation	NYSE:ALB	\$73.04	11.7%	5.1%	-5.2%	\$7,744.7	\$9,661.7	\$3,518.6	35.5%	\$954.9	27.1%	2.75x	10.1x
Arkema S.A.	ENXTPA:AKE	\$106.27	2.5%	14.0%	23.8%	\$8,068.2	\$10,116.2	\$9,695.8	21.6%	\$1,576.7	16.3%	1.04x	6.4x
Ashland Global Holdings Inc.	NYSE:ASH	\$76.53	6.7%	-0.7%	7.8%	\$4,609.3	\$6,044.3	\$2,450.0	33.3%	\$515.0	21.0%	2.47x	11.7x
Clariant AG	SWX:CLN	\$22.30	7.9%	14.5%	21.3%	\$7,353.0	\$9,348.9	\$6,792.4	29.3%	\$818.8	12.1%	1.38x	11.4x
[1] Corteva, Inc.	NYSE:CTVA	\$29.56	13.6%	5.6%	NA	\$22,122.7	\$24,547.7	\$13,678.0	32.9%	\$2,662.0	19.5%	1.79x	9.2x
[1] DuPont de Nemours, Inc.	NYSE:DD	\$64.20	-0.9%	-10.0%	NMF	\$47,559.8	\$64,198.8	\$21,765.0	32.9%	\$4,894.0	22.5%	2.95x	13.1x
Eastman Chemical Company	NYSE:EMN	\$79.26	1.1%	7.4%	8.4%	\$10,777.7	\$17,053.7	\$9,444.0	23.4%	\$1,899.0	20.1%	1.81x	9.0x
Ecolab Inc.	NYSE:ECL	\$192.99	3.4%	-2.5%	31.0%	\$55,628.3	\$62,853.7	\$14,843.2	41.4%	\$3,276.6	22.1%	4.23x	19.2x
Evonik Industries AG	DB:EVK	\$30.46	5.1%	22.9%	21.2%	\$14,204.2	\$16,166.9	\$16,182.5	29.2%	\$2,545.0	15.7%	1.00x	6.4x
FMC Corporation	NYSE:FMC	\$99.82	1.9%	13.8%	35.0%	\$12,938.2	\$16,332.6	\$4,954.4	44.9%	\$1,352.1	27.3%	3.30x	12.1x
Johnson Matthey Plc	LSE:JMAT	\$39.68	6.8%	5.5%	11.2%	\$7,622.2	\$9,612.8	\$15,492.5	8.2%	\$874.5	5.6%	0.62x	11.0x
Koninklijke DSM N.V.	ENXTAM:DSM	\$130.29	1.7%	8.2%	59.3%	\$21,847.8	\$22,863.4	\$9,885.5	35.3%	\$1,600.7	16.2%	2.31x	14.3x
Solvay S.A.	ENXTBR:SOLB	\$115.92	1.2%	11.9%	16.0%	\$11,958.0	\$16,354.8	\$12,372.7	26.4%	\$2,257.1	18.2%	1.32x	7.2x
W. R. Grace & Co.	NYSE:GRA	\$69.85	4.5%	4.6%	7.6%	\$4,661.5	\$6,466.8	\$1,973.6	40.0%	\$437.8	22.2%	3.28x	14.8x
Wacker Chemie AG	XTRA:WCH	\$75.91	10.1%	15.4%	-16.2%	\$3,770.9	\$4,638.1	\$5,409.1	13.3%	\$608.3	11.2%	0.86x	7.6x
Median			4.5%	7.4%	16.0%			\$9,695.8	32.9%	\$1,576.7	19.5%	1.8x	11.0x
Mean			5.2%	7.7%	17.0%			\$9,897.1	29.8%	\$1,751.5	18.5%	2.0x	10.9x

1. Historical Financial Information presented pro forma to give effect to the 2019 Dow-Dupont-Corteva separation.

LTM refers to last 12 months.

NA refers to not available.

NMF refers to not meaningful figure.

Source: S&P Capital IQ.

Selected Public Comparables (cont.)

Specialty Mid-Cap (Less Than \$5 billion EV)

(as of 12/31/2019, \$ in millions, except per-share prices)

Company Name	Ticker	Stock Price	Stock Performance (% Change)			Equity Value	Enterprise Value	LTM 12/31/2019					Enterprise Value /	
			1 Month	3 Month	1 Year			Revenue	Margin	EBITDA	Margin	Revenue	EBITDA	LTM
Balchem Corporation	NasdaqGS:BCPC	\$101.63	2.0%	2.5%	29.7%	\$3,269.3	\$3,437.5	\$640.7	32.5%	\$153.5	24.0%	5.37x	22.4x	
Elementis plc	LSE:ELM	\$2.37	8.2%	30.3%	2.1%	\$1,374.0	\$1,955.9	\$850.5	36.9%	\$196.6	23.1%	2.30x	9.9x	
Ferro Corporation	NYSE:FOE	\$14.83	2.8%	25.0%	-5.4%	\$1,215.6	\$2,059.7	\$1,542.7	26.9%	\$169.3	11.0%	1.34x	12.2x	
Fuchs Petrolub SE	DB:FPE3	\$49.38	13.7%	31.7%	20.3%	\$6,560.0	\$6,414.1	\$2,798.0	34.2%	\$425.3	15.2%	2.29x	15.1x	
GCP Applied Technologies Inc.	NYSE:GCP	\$22.71	1.5%	18.0%	-7.5%	\$1,650.7	\$1,732.4	\$1,031.3	37.5%	\$132.2	12.8%	1.68x	13.1x	
H.B. Fuller Company	NYSE:FUL	\$51.57	3.4%	10.8%	20.9%	\$2,629.1	\$4,631.8	\$2,897.0	27.9%	\$395.4	13.6%	1.60x	11.7x	
Ingevity Corporation	NYSE:NGVT	\$87.38	-3.2%	3.0%	4.4%	\$3,654.6	\$4,956.8	\$1,268.1	37.6%	\$374.7	29.5%	3.91x	13.2x	
Innophos Holdings, Inc.	NasdaqGS:IPHS	\$31.98	0.3%	-1.5%	30.4%	\$626.3	\$995.4	\$758.5	19.1%	\$109.8	14.5%	1.31x	9.1x	
Innospec Inc.	NasdaqGS:IOSP	\$103.44	5.1%	16.0%	67.5%	\$2,533.9	\$2,590.8	\$1,517.6	31.1%	\$207.0	13.6%	1.71x	12.5x	
Koppers Holdings Inc.	NYSE:KOP	\$38.22	3.2%	30.8%	124.3%	\$791.1	\$1,838.0	\$1,805.0	19.0%	\$188.7	10.5%	1.02x	9.7x	
NewMarket Corporation	NYSE:NEU	\$486.52	-1.5%	3.1%	18.1%	\$5,443.8	\$6,075.5	\$2,194.2	28.6%	\$451.5	20.6%	2.77x	13.5x	
OMNOVA Solutions Inc.	NYSE:OMN	\$10.11	-0.1%	0.4%	37.9%	\$453.5	\$743.8	\$758.3	23.2%	\$67.3	8.9%	0.98x	11.1x	
PQ Group Holdings Inc.	NYSE:PQG	\$17.18	8.3%	7.8%	16.0%	\$2,344.6	\$4,334.9	\$1,594.7	24.9%	\$366.4	23.0%	2.72x	11.8x	
Quaker Chemical Corporation	NYSE:KWR	\$164.52	10.2%	4.0%	-7.4%	\$2,917.3	\$3,686.9	\$953.7	35.8%	\$134.0	14.1%	3.87x	27.5x	
Stepan Company	NYSE:SCL	\$102.44	5.7%	5.5%	38.4%	\$2,305.4	\$2,290.1	\$1,880.4	17.6%	\$216.9	11.5%	1.22x	10.6x	
Median			3.2%	7.8%	20.3%			\$1,517.6	28.6%	\$196.6	14.1%	1.7x	12.2x	
Mean			4.0%	12.5%	26.0%			\$1,499.4	28.9%	\$239.2	16.4%	2.3x	13.6x	

Chemicals Distribution

(as of 12/31/2019, \$ in millions, except per-share prices)

Company Name	Ticker	Stock Price	Stock Performance (% Change)			Equity Value	Enterprise Value	LTM 12/31/2019					Enterprise Value /	
			1 Month	3 Month	1 Year			Revenue	Margin	EBITDA	Margin	Revenue	EBITDA	LTM
Brenntag AG	XTRA:BNR	\$54.40	2.0%	12.4%	26.0%	\$8,405.5	\$10,903.0	\$13,988.6	21.3%	\$956.4	6.8%	0.78x	11.4x	
Hawkins, Inc.	NasdaqGS:HWKN	\$45.81	10.9%	7.8%	11.9%	\$486.9	\$567.0	\$548.6	18.0%	\$61.1	11.1%	1.03x	9.3x	
IMCD N.V.	ENXTAM:IMCD	\$87.31	5.0%	18.0%	36.2%	\$4,578.9	\$5,346.0	\$2,999.9	22.6%	\$254.6	8.5%	1.78x	21.0x	
Univar Solutions Inc.	NYSE:UNVR	\$24.24	3.5%	16.8%	36.6%	\$4,087.3	\$7,147.8	\$9,103.1	22.8%	\$633.0	7.0%	0.79x	11.3x	
Median			4.2%	14.6%	31.1%			\$6,051.5	21.9%	\$443.8	7.7%	0.9x	11.3x	
Mean			5.3%	13.7%	27.7%			\$6,660.0	21.2%	\$476.3	8.4%	1.1x	13.2x	

LTM refers to last 12 months.

Source: S&P Capital IQ

About Houlihan Lokey

Houlihan Lokey (NYSE:HLI) is a global investment bank with expertise in [mergers and acquisitions](#), [capital markets](#), [financial restructuring](#), and [valuation](#). The firm serves corporations, institutions, and governments worldwide with offices in the United States, Europe, the Middle East, and the Asia-Pacific region. Independent advice and intellectual rigor are hallmarks of the firm's commitment to client success across its advisory services. Houlihan Lokey is the No. 1 M&A advisor for the past five consecutive years in the U.S., the No. 1 global restructuring advisor for the past six consecutive years, and the No. 1 global M&A fairness opinion advisor over the past 20 years, all based on number of transactions and according to data provided by Refinitiv (formerly Thomson Reuters).

Locations



Industry Expertise

Product Expertise

- Mergers and Acquisitions
- Capital Markets
- Financial Restructuring
- Financial and Valuation Advisory

Dedicated Industry Groups

- Business Services
- Consumer, Food, and Retail
- Data and Analytics
- Energy
- Financial Institutions
- Healthcare
- Industrials
- Real Estate, Lodging, and Leisure
- Technology, Media, and Telecom

Financial Sponsors

- Active Dialogue With a Diverse Group of 1000+ Sponsors
- Private Equity Firms
- Hedge Funds
- Capital Alliances

Disclaimer

© 2020 Houlihan Lokey. All rights reserved. This material may not be reproduced in any format by any means or redistributed without the prior written consent of Houlihan Lokey.

Houlihan Lokey is a trade name for Houlihan Lokey, Inc., and its subsidiaries and affiliates, which include those in (i) the United States: Houlihan Lokey Capital, Inc., an SEC-registered broker-dealer and member of FINRA (www.finra.org) and SIPC (www.sipc.org) (investment banking services); Houlihan Lokey Financial Advisors, Inc. (financial advisory services); HL Finance, LLC (syndicated leveraged finance platform); and Houlihan Lokey Real Estate Group, Inc. (real estate advisory services); (ii) Europe: Houlihan Lokey EMEA, LLP, and Houlihan Lokey (Corporate Finance) Limited, authorized and regulated by the U.K. Financial Conduct Authority; Houlihan Lokey S.p.A.; Houlihan Lokey GmbH; Houlihan Lokey (Netherlands) B.V.; Houlihan Lokey (España), S.A.; and Houlihan Lokey (Corporate Finance), S.A.; (iii) the United Arab Emirates, Dubai International Financial Centre (Dubai): Houlihan Lokey (MEA Financial Advisory) Limited, regulated by the Dubai Financial Services Authority for the provision of advising on financial products, arranging deals in investments, and arranging credit and advising on credit to professional clients only; (iv) Singapore: Houlihan Lokey (Singapore) Private Limited, an “exempt corporate finance adviser” able to provide exempt corporate finance advisory services to accredited investors only; (v) Hong Kong SAR: Houlihan Lokey (China) Limited, licensed in Hong Kong by the Securities and Futures Commission to conduct Type 1, 4, and 6 regulated activities to professional investors only; (vi) China: Houlihan Lokey Howard & Zukin Investment Consulting (Beijing) Co., Limited (financial advisory services); (vii) Japan: Houlihan Lokey K.K. (financial advisory services); and (viii) Australia: Houlihan Lokey (Australia) Pty Limited (ABN 74 601 825 227), a company incorporated in Australia and licensed by the Australian Securities and Investments Commission (AFSL number 474953) in respect of financial services provided to wholesale clients only. In the European Economic Area (EEA), Dubai, Singapore, Hong Kong, and Australia, this communication is directed to intended recipients, including actual or potential professional clients (EEA and Dubai), accredited investors (Singapore), professional investors (Hong Kong), and wholesale clients (Australia), respectively. Other persons, such as retail clients, are NOT the intended recipients of our communications or services and should not act upon this communication.

Houlihan Lokey gathers its data from sources it considers reliable; however, it does not guarantee the accuracy or completeness of the information provided within this presentation. The material presented reflects information known to the authors at the time this presentation was written, and this information is subject to change. Houlihan Lokey makes no representations or warranties, expressed or implied, regarding the accuracy of this material. The views expressed in this material accurately reflect the personal views of the authors regarding the subject securities and issuers and do not necessarily coincide with those of Houlihan Lokey. Officers, directors, and partners in the Houlihan Lokey group of companies may have positions in the securities of the companies discussed. This presentation does not constitute advice or a recommendation, offer, or solicitation with respect to the securities of any company discussed herein, is not intended to provide information upon which to base an investment decision, and should not be construed as such. Houlihan Lokey or its affiliates may from time to time provide investment banking or related services to these companies. Like all Houlihan Lokey employees, the authors of this presentation receive compensation that is affected by overall firm profitability.



HOULIHAN LOKEY

CORPORATE FINANCE
FINANCIAL RESTRUCTURING
FINANCIAL AND VALUATION ADVISORY

[HL.com](https://www.hl.com)