HOULIHAN CAPITAL

Value. Added.



Industry Observations – March 31, 2020

Oil and Gas Industry

Select Oil and Gas Public Company Industry Data
As of March 31, 2020

(USD in millions, except per share data)

		Market Data					LTM Operating Data			Forward Estimates	
Company Name	Ticker	Price at 03/31/20	% of 52 Week High	Equity Value	Enterprise Value	Debt / Total Capital	Total Assets	LTM Revenue	LTM EBITDA	CY 2020 Revenue Estimate	CY 2020 EBITDA Estimate
Integrated											
Chevron Corporation	CVX	$72.46	56.9%	$136,176	$188,849	$0.18	$237,428	$139,865	$29,024	$110,928	$19,753
ConocoPhillips	COP	$30.80	45.1%	$33,167	$43,639	$0.31	$70,514	$33,346	$13,746	$20,861	$5,895
Exxon Mobil Corporation	XOM	$37.97	45.5%	$160,696	$239,805	$0.21	$362,597	$255,583	$30,529	$206,325	$20,189
Hess Corporation	HES	$33.30	44.9%	$10,164	$18,761	$0.45	$21,782	$6,311	$2,715	$5,760	$2,425
Murphy Oil Corporation	MUR	$6.13	20.4%	$941	$4,667	$0.37	$11,719	$2,830	$1,683	$2,075	$975
Occidental Petroleum Corporation	OXY	$11.58	16.8%	$10,367	$60,426	$0.55	$109,330	$20,393	$8,845	$19,618	$6,404
Refining and Marketing											
PBF Energy Inc	PBF	$7.08	20.1%	$848	$3,039	$0.40	$9,132	$24,508	$569	$20,974	$604
CVR Energy, Inc.	CVI	$16.53	29.8%	$1,662	$2,709	$0.43	$3,905	$6,364	$866	$4,637	$280
Delek US Holdings, Inc.	DK	$15.76	35.8%	$1,159	$2,752	$0.55	$7,016	$9,298	$702	$6,674	$200
HollyFrontier Corporation	HFC	$24.51	41.6%	$3,968	$6,991	$0.31	$12,165	$17,487	$1,825	$12,998	$879
Marathon Petroleum Corporation	MPC	$23.62	33.9%	$15,353	$55,746	$0.42	$98,556	$124,112	$9,707	$99,810	$5,791
Phillips 66	PSX	$53.65	44.7%	$23,490	$39,733	$0.32	$58,720	$107,293	$4,610	$76,068	$3,444
Valero Energy Corporation	VLO	$45.36	44.5%	$18,532	$30,258	$0.33	$53,864	$102,729	$6,140	$57,786	$2,093

Notes: LTM (latest twelve months); Enterprise Value (market capitalization less total cash and short-term investments plus short-term borrowings and total long-term debt);
EBITDA (earnings before interest, taxes, depreciation and amortization)
Source: Capital IQ

The material contained in this publication is meant to provide general information regarding valuation topics. This publication does not constitute investment advice 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. Professional advice should be obtained before taking any action based on the information contained herein.

Publicly available information utilized in this publication has been obtained from sources deemed to be reliable. Houlihan does not guarantee the accuracy or completeness of the information provided within this publication. The material presented reflects information known to the authors at the time this publication was written and this information is subject to change.

Select Oil and Gas Public Company Industry Data
As of March 31, 2020

(USD in millions, except per share data)

		Market Data					LTM Operating Data			Forward Estimates	
Company Name	Ticker	Price at 03/31/20	% of 52 Week High	Equity Value	Enterprise Value	Debt / Total Capital	Total Assets	LTM Revenue	LTM EBITDA	CY 2020 Revenue Estimate	CY 2020 EBITDA Estimate
Exploration and Production											
Apache Corporation	APA	$4.18	11.0%	$1,577	$13,757	$0.64	$18,107	$6,213	$3,796	$3,891	$1,839
Chesapeake Energy Corporation	CHK	$34.54	4.8%	$335	$11,303	$0.68	$16,193	$8,408	$2,339	$3,706	$1,819
Cimarex Energy Co.	XEC	$16.83	23.2%	$1,680	$4,298	$0.38	$7,140	$2,363	$1,415	$1,546	$828
Denbury Resources Inc.	DNR	$0.18	6.9%	$91	$2,473	$0.63	$4,692	$1,275	$513	$762	$278
Devon Energy Corporation	DVN	$6.91	19.5%	$2,655	$6,752	$0.43	$13,717	$5,969	$1,713	$5,258	$1,395
Concho Resources Inc.	CXO	$42.85	34.4%	$8,365	$14,059	$0.18	$24,732	$4,310	$2,137	$3,666	$2,692
EOG Resources, Inc.	EOG	$35.92	33.3%	$20,907	$28,300	$0.22	$37,125	$17,076	$7,843	$13,550	$4,781
Continental Resources, Inc.	CLR	$7.64	14.7%	$2,812	$9,793	$0.43	$15,728	$4,225	$3,363	$2,402	$1,394
Matador Resources Company	MTDR	$2.48	11.1%	$289	$2,170	$0.46	$4,070	$963	$588	$813	$451
Diamondback Energy, Inc.	FANG	$26.20	23.0%	$4,147	$11,909	$0.27	$23,531	$3,767	$2,831	$3,133	$2,283
Pioneer Natural Resources Company	PXD	$70.15	39.4%	$11,625	$14,982	$0.21	$19,067	$9,676	$3,532	$7,497	$2,540
QEP Resources, Inc.	QEP	$0.33	4.0%	$80	$1,986	$0.44	$5,478	$1,206	$569	$950	$665
Southwestern Energy Company	SWN	$1.69	34.5%	$912	$3,827	$0.42	$6,717	$3,038	$1,044	$2,712	$670

Notes: LTM (latest twelve months); Enterprise Value (market capitalization less total cash and short-term investments plus short-term borrowings and total long-term debt);
EBITDA (earnings before interest, taxes, depreciation and amortization)
Source: Capital IQ

Select Oil and Gas Public Company Valuation Metrics
As of March 31, 2020

(USD in millions, except per share data)

		LTM Operating Statistics						Trading Multiples			
Company Name	Ticker	Return On Assets	Return On Equity	Return On Capital	Revenue Growth	EBITDA Growth	EBITDA Margin	TEV/ LTM Revenue	TEV/ CY 2020 Revenue	TEV/ LTM EBITDA	TEV/ CY 2020 EBITDA
Integrated											
Chevron Corporation	CVX	2.7%	1.9%	3.6%	-12.0%	-13.7%	20.8%	1.4x	1.7x	6.5x	9.6x
ConocoPhillips	COP	6.6%	21.6%	9.5%	-11.1%	-12.4%	41.2%	1.3x	2.1x	3.2x	7.4x
Exxon Mobil Corporation	XOM	2.1%	7.4%	3.0%	-8.5%	-22.9%	11.9%	0.9x	1.2x	7.9x	11.9x
Hess Corporation	HES	1.7%	-2.3%	2.0%	2.6%	1.0%	43.0%	3.0x	3.3x	6.9x	7.7x
Murphy Oil Corporation	MUR	2.5%	3.4%	3.2%	N/A	56.1%	59.5%	1.6x	2.2x	2.8x	4.8x
Occidental Petroleum Corporation	OXY	2.1%	-1.8%	3.0%	14.4%	-2.7%	43.4%	3.0x	3.1x	6.8x	9.4x
	Mean	2.9%	5.0%	4.1%	-2.9%	0.9%	36.6%	1.9x	2.3x	5.7x	8.5x
	Median	2.4%	2.7%	3.1%	-8.5%	-7.6%	42.1%	1.5x	2.2x	6.7x	8.6x
Refining and Marketing											
PBF Energy Inc	PBF	2.8%	11.0%	4.2%	-9.9%	-36.3%	2.3%	0.1x	0.1x	5.3x	5.0x
CVR Energy, Inc.	CVI	9.2%	20.0%	12.0%	-10.7%	6.7%	13.6%	0.4x	0.6x	3.1x	9.7x
Delek US Holdings, Inc.	DK	4.9%	18.2%	8.1%	-9.1%	-15.6%	7.6%	0.3x	0.4x	3.9x	13.8x
HollyFrontier Corporation	HFC	7.9%	13.5%	9.9%	-1.3%	-6.8%	10.4%	0.4x	0.5x	3.8x	8.0x
Marathon Petroleum Corporation	MPC	4.0%	7.4%	5.2%	28.3%	26.7%	7.8%	0.4x	0.6x	5.7x	9.6x
Phillips 66	PSX	3.6%	12.4%	5.2%	-3.7%	-29.2%	4.3%	0.4x	0.5x	8.6x	11.5x
Valero Energy Corporation	VLO	4.7%	12.3%	7.4%	-7.8%	-7.0%	6.0%	0.3x	0.5x	4.9x	14.5x
	Mean	5.3%	13.5%	7.4%	-2.0%	-8.8%	7.4%	0.3x	0.5x	5.1x	10.3x
	Median	4.7%	11.0%	4.2%	-9.9%	-36.3%	2.3%	0.1x	0.5x	4.9x	9.7x

Notes: LTM (latest twelve months); NTM (next twelve months); EBITDA (earnings before interest, taxes, depreciation and amortization); TEV (total enterprise value)
Source: Capital IQ

Select Oil and Gas Public Company Valuation Metrics
As of March 31, 2020

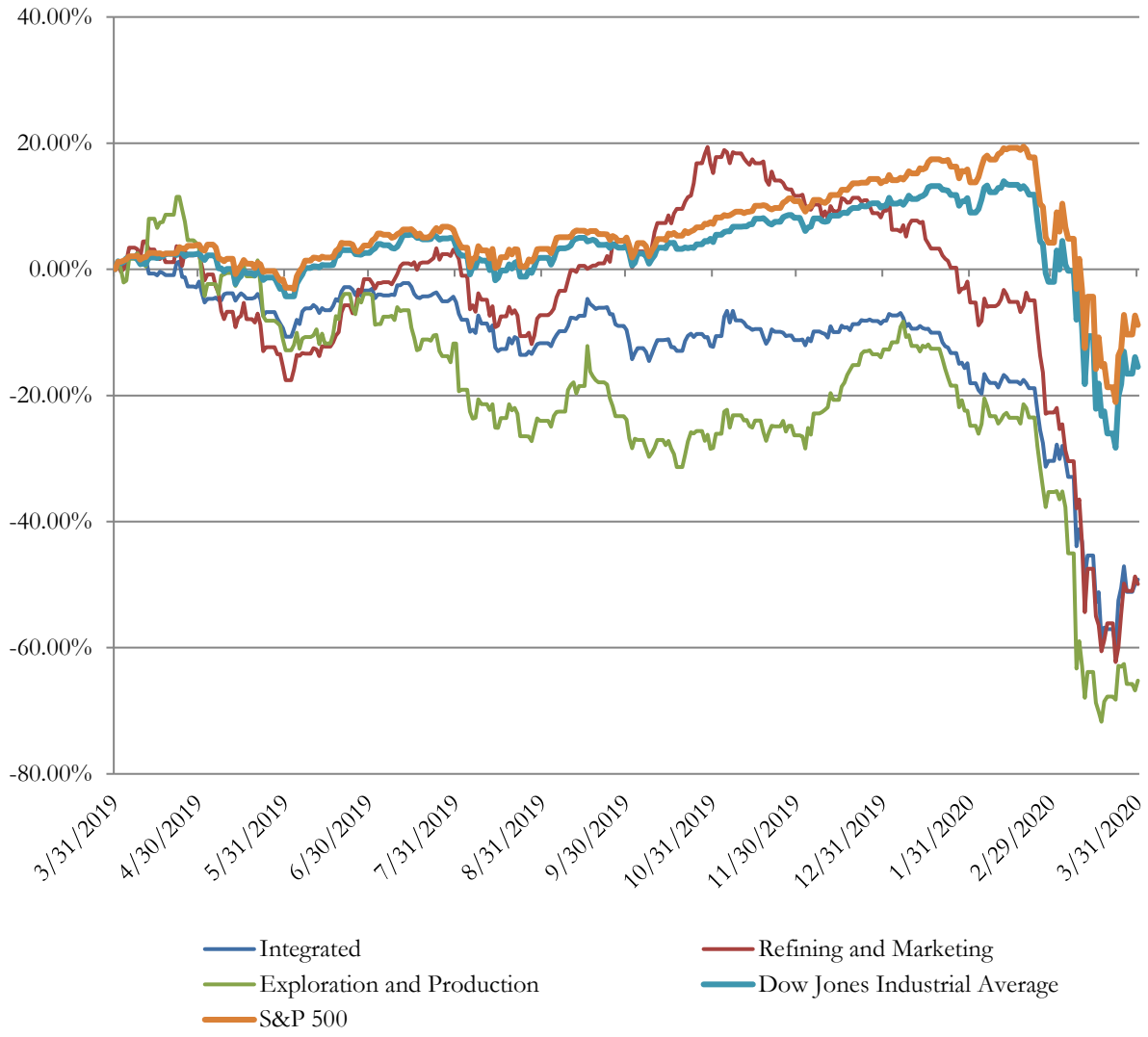
(USD in millions, except per share data)

		LTM Operating Statistics						Trading Multiples			
Company Name	Ticker	Return On Assets	Return On Equity	Return On Capital	Revenue Growth	EBITDA Growth	EBITDA Margin	TEV/ LTM Revenue	TEV/ CY 2020 Revenue	TEV/ LTM EBITDA	TEV/ CY 2020 EBITDA
Exploration and Production											
Apache Corporation	APA	-3.9%	-52.8%	-5.0%	-13.9%	-18.8%	61.1%	2.2x	3.5x	3.6x	7.5x
Chesapeake Energy Corporation	CHK	0.2%	-9.4%	0.2%	-17.3%	-13.8%	27.8%	1.3x	3.0x	4.8x	6.2x
Cimarex Energy Co.	XEC	5.0%	-3.6%	6.1%	1.0%	-14.7%	59.9%	1.8x	2.8x	3.0x	5.2x
Denbury Resources Inc.	DNR	3.7%	17.0%	4.5%	-13.5%	-34.5%	40.2%	1.9x	3.2x	4.8x	8.9x
Devon Energy Corporation	DVN	0.7%	-1.0%	0.9%	-31.0%	-39.9%	28.7%	1.1x	1.3x	3.9x	4.8x
Concho Resources Inc.	ECA	-2.1%	-3.9%	-2.4%	11.1%	-42.1%	49.6%	3.3x	3.8x	6.6x	5.2x
EOG Resources, Inc.	EOG	6.4%	13.3%	8.6%	-1.1%	-2.9%	45.9%	1.7x	2.1x	3.6x	5.9x
Continental Resources, Inc.	LPI	5.1%	11.4%	6.4%	-3.6%	-5.6%	79.6%	2.3x	4.1x	2.9x	7.0x
Matador Resources Company	MTDR	3.9%	6.6%	4.4%	24.8%	-6.7%	61.0%	2.3x	2.7x	3.7x	4.8x
Diamondback Energy, Inc.	FANG	3.8%	2.2%	4.4%	82.9%	59.7%	75.2%	3.2x	3.8x	4.2x	5.2x
Pioneer Natural Resources Company	PXD	6.1%	6.2%	7.6%	3.1%	6.7%	36.5%	1.5x	2.0x	4.2x	5.9x
QEP Resources, Inc.	QEP	0.3%	-3.6%	0.4%	-37.6%	-55.5%	47.2%	1.6x	2.1x	3.5x	3.0x
Southwestern Energy Company	SWN	5.7%	31.8%	6.9%	-21.3%	-27.6%	34.4%	1.3x	1.4x	3.7x	5.7x
	Mean	2.7%	1.1%	3.3%	-1.3%	-15.0%	49.8%	2.0x	2.8x	4.1x	5.8x
	Median	3.8%	2.2%	4.4%	-3.6%	-14.7%	47.2%	1.8x	2.8x	0.0x	5.7x

Notes: LTM (latest twelve months); NTM (next twelve months); EBITDA (earnings before interest, taxes, depreciation and amortization); TEV (total enterprise value)

Source: Capital IQ

Oil and Gas Public Company LTM Equity Performance
As of March 31, 2020



Note: The indices are derived from the equity performance of the previously listed companies. Source: Capital IQ

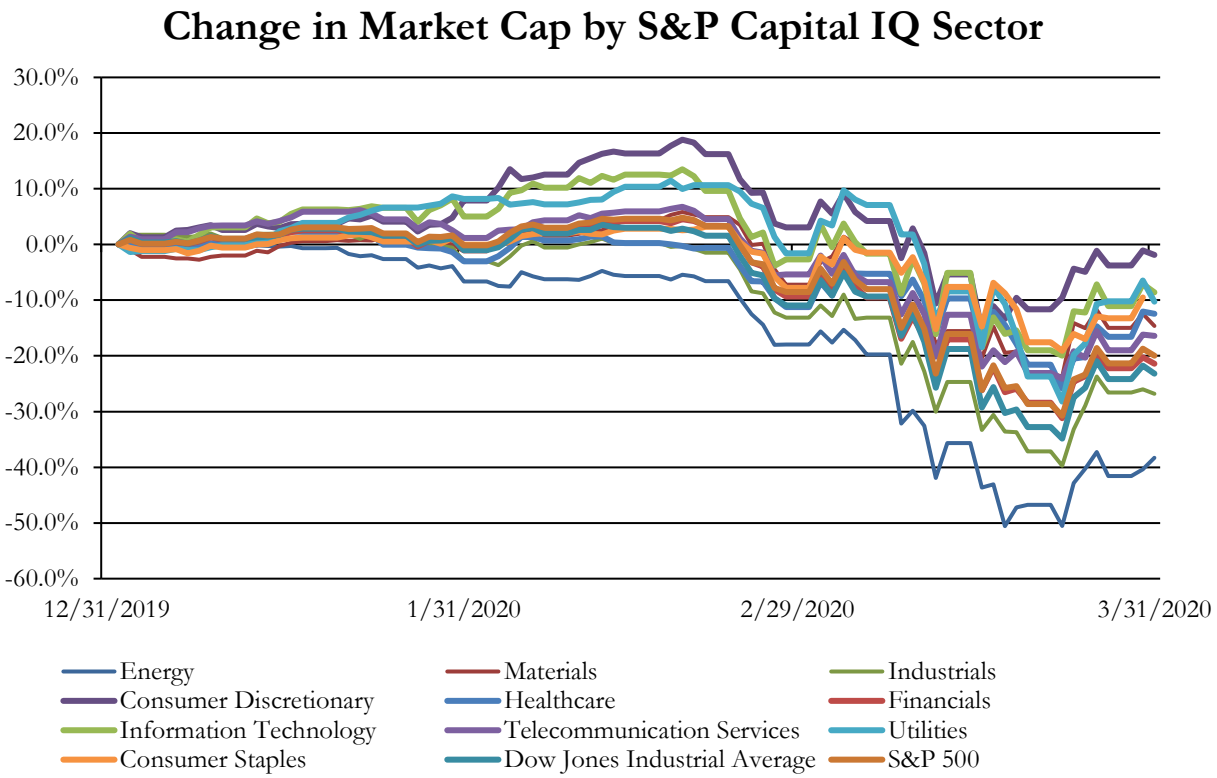
Recent M&A Activity in Oil and Gas Industry YTD as of March 31, 2020

(USD in millions)

Close Date	Target	Acquirer	Target Company Primary Industry	Implied Enterprise Value
8/8/2019	Anadarko Petroleum Corporation	Occidental Petroleum Corporation	Oil and Gas Exploration and Production	$57,809.21
11/1/2019	Buckeye Partners, L.P.	IFM Investors Pty Ltd; IFM Global Infrastructure	Oil and Gas Storage and Transportation	$10,500.29
12/5/2019	SemGroup Corporation	Energy Transfer LP	Oil and Gas Storage and Transportation	$5,007.35
12/20/2019	Carrizo Oil & Gas, Inc.	Callon Petroleum Company	Oil and Gas Exploration and Production	$2,745.66
3/6/2020	Felix Energy, LLC	WPX Energy, Inc.	Oil and Gas Exploration and Production	$2,744.83
12/4/2019	Gathering System and Gathering Pipeline in the Haynesville Shale	DTE Michigan Gathering Holding Company	Oil and Gas Storage and Transportation	$2,650.00
1/10/2020	Jagged Peak Energy Inc.	Parsley Energy, Inc.	Oil and Gas Exploration and Production	$2,408.09
1/14/2020	SRC Energy Inc.	PDC Energy, Inc.	Oil and Gas Exploration and Production	$1,674.97
2/1/2020	Shell Martinez Refinery and Shell Martinez Truck Rack of Equilon	PBF Holding Company LLC	Oil and Gas Refining and Marketing	$1,600.00
12/16/2019	Kinder Morgan Cochin LLC	Pembina U.S. Corporation	Oil and Gas Storage and Transportation	$1,546.00
8/1/2019	Columbia Midstream Group, LLC	UGI Energy Services, LLC	Oil and Gas Storage and Transportation	$1,187.00
12/6/2019	Roan Resources, Inc.	Citizen Energy Operating, LLC	Oil and Gas Exploration and Production	$1,017.39
11/1/2019	New Mexico Shelf Assets of Concho Resources Inc.	Kohlberg Kravis Roberts & Co. L.P.; Spur Energy	Oil and Gas Exploration and Production	$925.00
12/2/2019	Sabine Oil & Gas Corporation	Osaka Gas USA Corporation	Oil and Gas Exploration and Production	$610.00
10/18/2019	Uinta Basin Asset of Crescent Point Energy Corp.	N/A	Oil and Gas Exploration and Production	$525.00
12/6/2019	Eagle Ford Shale	Repsol, S.A.	Oil and Gas Exploration and Production	$515.87
10/9/2019	Leaf River Energy Center LLC	NJR Pipeline Company	Oil and Gas Storage and Transportation	$367.50
11/7/2019	Reliance Gathering LLC	OMOG JV LLC	Oil and Gas Exploration and Production	$356.00
8/1/2019	Retail Electricity and Natural Gas Business of Stream Gas &	NRG Retail LLC	Oil and Gas Storage and Transportation	$300.00
11/22/2019	Remaining Hugoton Basin Properties	N/A	Oil and Gas Exploration and Production	$283.00
2/28/2020	All Producing Assets and Certain Primary Term Acreage and	Talos Energy Inc.	Oil and Gas Exploration and Production	$260.50
1/7/2020	Jones Energy II Inc	Revolution Resources, LLC	Oil and Gas Exploration and Production	$201.50
12/31/2019	Approximately 18,000 Contiguous And Largely Undeveloped Net	Marathon Oil Corporation	Oil and Gas Exploration and Production	$191.00
8/30/2019	Oil and Gas Producing Properties in the Eastern Region of Gulf of	W&T Offshore, Inc.	Oil and Gas Exploration and Production	$167.60
8/27/2019	Natural Gas Assets of Arkoma Basin in Oklahoma of Newfield	NextEra Energy, Inc.	Oil and Gas Exploration and Production	$165.00
9/20/2019	Generation Pipeline LLC	NEXUS Gas Transmission, LLC	Oil and Gas Storage and Transportation	$163.00
12/5/2019	Assets of Mission Coal Company, LLC	N/A	Coal and Consumable Fuels	$145.05
8/2/2019	Permian Basin Oil and Gas Mineral Interests of Wing Resources	Alliance Resource Partners, L.P.	Oil and Gas Exploration and Production	$145.00
11/13/2019	Permian Delaware Crude Business of Targa Resources Corp.	Oryx Midstream Services, LLC	Oil and Gas Storage and Transportation	$135.00
12/31/2019	Approximately 40,000 Net Acres in a Texas Delaware Oil Play in	Marathon Oil Corporation	Oil and Gas Exploration and Production	$106.00
1/2/2020	Water Infrastructure Assets of Gulfport Energy Corporation	Bison Oilfield Services LLC	Oil and Gas Exploration and Production	$100.00
11/1/2019	Certain Assets and Liabilities Located in Stack, Anadarko and	Contango Oil & Gas Company	Oil and Gas Exploration and Production	$95.80
2/28/2020	Offshore Gulf Of Mexico Assets	Talos Production Inc.	Oil and Gas Exploration and Production	$80.82
11/6/2019	Certain Natural Gas Pipeline Assets	Kinder Morgan Tejas Pipeline LLC	Oil and Gas Storage and Transportation	$76.00
9/30/2019	363 Net Royalty Acres concentrated in Southeast Lea County	Viper Energy Partners LP	Oil and Gas Exploration and Production	$68.00
12/6/2019	4,475 Contiguous Net Acres in Glasscock County	Laredo Petroleum, Inc.	Oil and Gas Exploration and Production	$65.00
9/10/2019	Substantially All Interests in the Barnett Shale Assets	Bedrock Production, LLC	Oil and Gas Exploration and Production	$63.50
11/11/2019	San Antonio, Texas Refinery and Related Assets of Calumet	Starlight Relativity Acquisition Company LLC	Oil and Gas Refining and Marketing	$59.10
12/19/2019	Aberdeen and Huron South Dakota Ethanol Plants	Glacial Lakes Energy, LLC	Oil and Gas Refining and Marketing	$51.40
9/18/2019	Certain Oil & Gas Assets in Ohio of a Group of Sellers	Diversified Gas & Oil PLC	Oil and Gas Exploration and Production	$48.00
9/30/2019	Upstream Assets in The Williston Basin	N/A	Oil and Gas Exploration and Production	$41.00
2/3/2020	Oil And Gas Properties in Texas and Louisiana	Elysium Energy, LLC	Oil and Gas Exploration and Production	$40.00
12/12/2019	Certain Minerals And Royalty Assets of Buckhorn Resources GP,	Kimbell Royalty Operating, LLC	Oil and Gas Exploration and Production	$36.30
2/15/2020	East Texas Personville Properties	N/A	Oil and Gas Exploration and Production	$34.00
1/27/2020	Certain Assets	Magnolia Infrastructure Holdings, LLC	Oil and Gas Storage and Transportation	$31.50
3/12/2020	Alaska Tanker Company, LLC	Overseas Shipholding Group, Inc.	Oil and Gas Storage and Transportation	$30.56
10/1/2019	Assets of Sundance Energy Australia Limited in Dimmit County,	Bayshore Energy TX LLC	Oil and Gas Exploration and Production	$29.50
12/12/2019	Magnolia Field at Garden Banks blocks 783 and 784 in the Gulf of	W&T Offshore, Inc.	Oil and Gas Exploration and Production	$26.67
3/2/2020	Rio Bravo Pipeline Company, LLC	Enbridge Inc.	Oil and Gas Storage and Transportation	$25.00
2/1/2020	1,180 Net Acres In Howard County	Laredo Petroleum, Inc.	Oil and Gas Exploration and Production	$22.50
8/22/2019	Certain Non-Operated Producing Properties of Extraction Oil &	N/A	Oil and Gas Exploration and Production	$22.00
9/30/2019	Kansas Assets of Empire Energy E&P, LLC	Mai Oil Operations, Inc.	Oil and Gas Exploration and Production	$19.25
10/25/2019	Assets Of Will Energy Corporation in Texas, Oklahoma, And	Contango Oil & Gas Company	Oil and Gas Exploration and Production	$18.57
8/12/2019	East Texas Pipeline of Martin Midstream Partners	N/A	Oil and Gas Storage and Transportation	$17.50
8/30/2019	Production Solutions segment of Nine Energy Service, Inc.	Brigade Energy Services, LLC	Oil and Gas Exploration and Production	$16.50
8/30/2019	Toshiba America LNG Corporation	Total Gas & Power Asia Private Limited	Oil and Gas Exploration and Production	$15.00
3/5/2020	Non-Operated Producing Horizontal Wellbores of Extraction Oil	N/A	Oil and Gas Exploration and Production	$14.70
12/31/2019	Natural Gas Gathering and Processing Sub-System of Summit	N/A	Oil and Gas Refining and Marketing	$12.00
2/27/2020	Oil and Gas Non- Operating Assets of Weatherly Oil & Gas, LLC	Ensight IV Energy Partners, LLC	Oil and Gas Exploration and Production	$11.65
11/6/2019	186 Net Royalty Acres In Kingfisher, Blaine And Canadian	Kimbell Royalty Partners, LP	Oil and Gas Exploration and Production	$9.86
9/27/2019	Certain Assets and Operations of Bear Branch Coal, Perry County	American Resources Corporation	Coal and Consumable Fuels	$9.61
9/27/2019	Natural Gas Gathering Systems in Pennsylvania and West Virginia	Diversified Gas & Oil PLC	Oil and Gas Storage and Transportation	$7.70
3/31/2020	Certain Onshore Producing Properties in the Illinois Basin, USA	Maha Energy (US) Inc.	Oil and Gas Exploration and Production	$7.25
1/8/2020	Alternative Fuels Division Of GP Strategies Corporation	Cryogenic Industries, Inc.	Oil and Gas Refining and Marketing	$6.50
7/31/2019	Natural Gas Gathering and Processing Assets in Texas	N/A	Oil and Gas Storage and Transportation	$5.30

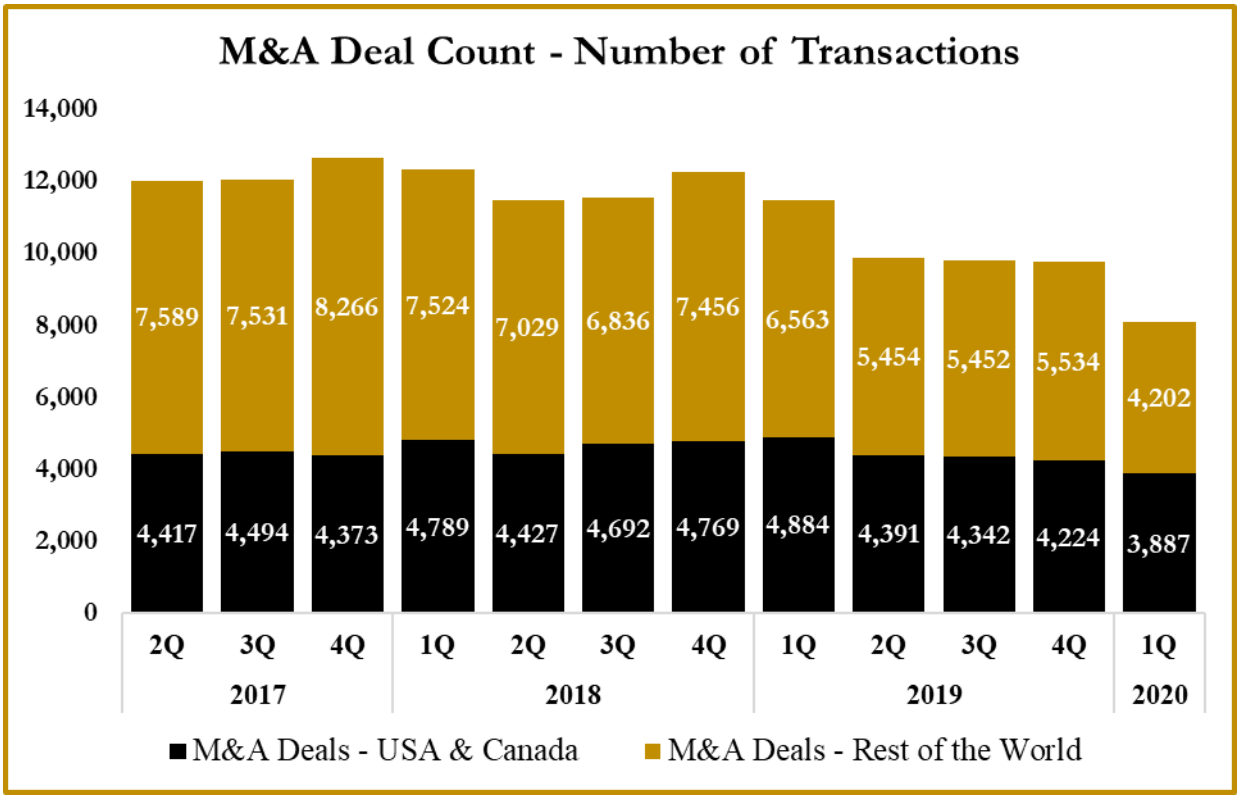
Source: Capital IQ

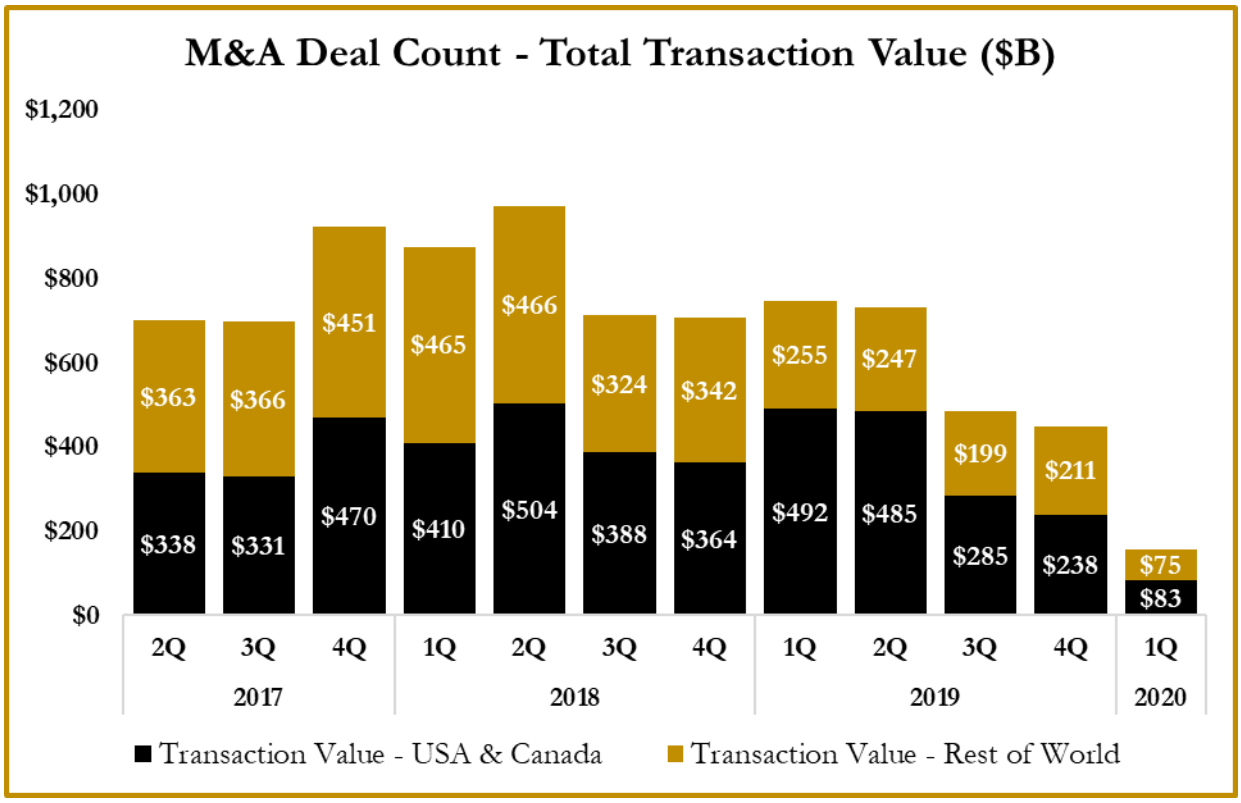
S&P Capital IQ - Sector Last 3 Month Equity Performance
As of March 31, 2020



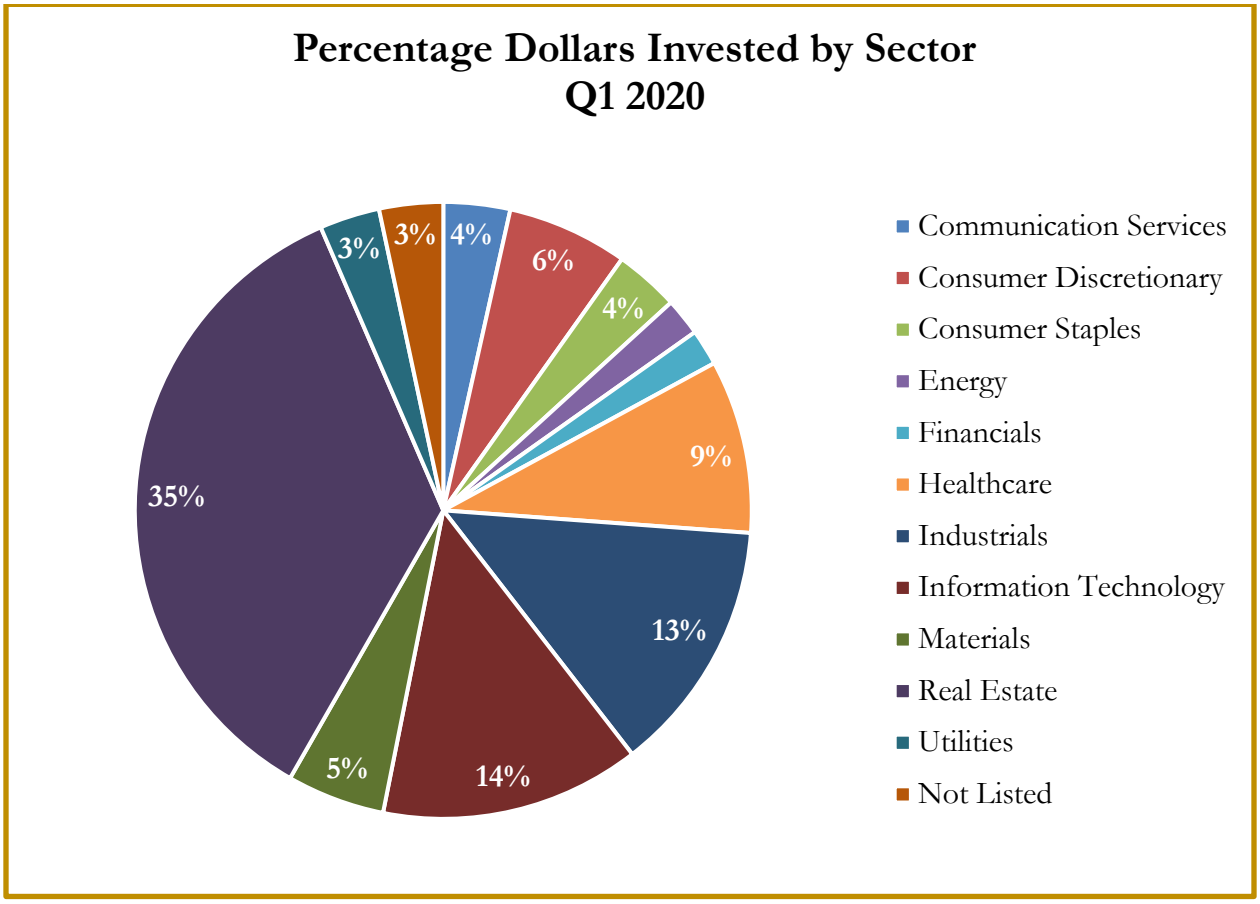
Note: The indices are derived from the equity performance of the S&P Capital IQ Sectors. Source: Capital IQ

M&A Deal Flow Statistics by S&P Capital IQ Sector
As of March 31, 2020





M&A Deal Flow Statistics by S&P Capital IQ Sector
As of March 31, 2020



HOULIHAN CAPITAL *Value. Added.*

About Us

Houlihan Capital is a leading, solutions-driven valuation, financial advisory and boutique investment banking firm. We pride ourselves on being thought leaders in an ever-changing landscape.

Houlihan Capital is SOC-compliant, a FINRA and SIPC member and committed to the highest levels of professional ethics and standards.

Valuation & Financial Advisory

We provide an array of services that include enterprise valuations, portfolio valuation, valuation of carried interest, transaction opinions, tax and financial reporting compliance, purchase price allocations, and a wide variety of consulting services through our Financial Advisory Group.

Investment Banking

Through our Investment Banking Group, we offer sell side/buy side advisory and capital raises. Through our Special Situations desk, we provide services that fit outside the archetypal verticals, including liquidity solutions, transactional advisory, and secondary market advisory and trading.

Litigation Support

Our team provides support for a wide variety of situations including commercial and shareholder disputes, derivatives and structured finance litigation, and fraudulent conveyance.

For additional information about our industry expertise and services, visit:

www.houlihancapital.com

Andrew Smith	Paul Clark	Michael Norton	Monica Blocker
asmith@houlihancapital.com	pclark@houlihancapital.com	mnorton@houlihancapital.com	mblocker@houlihancapital.com
312.450.8610	312.450.8656	312.450.8628	312.450.8699