DUFF&PHELPS

Protect, Restore and Maximize Value

Oil and Gas Sector Update–Americas

2nd Quarter 2019

INDUSTRY INSIGHT

Oil and Gas Sector Update 2Q-19 in Review

WTI decreased 4.7% over 2Q-19, negatively impacting the overall sector.

The sector (down 8.9%, vs. up 23.3% for 1Q-19) saw an overall decrease in 2Q-19. Except for Offshore Transportation, NOCs and Retail Marketing, all subsectors were in the red:

Worst performers

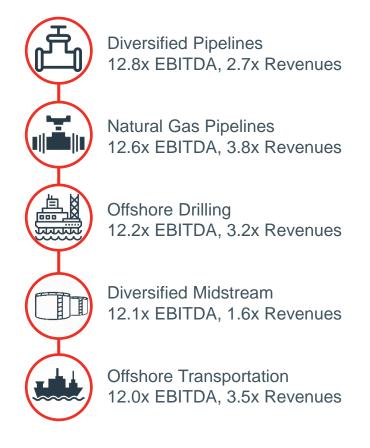
Equipment-focused OFS (down 18.6%) Drilling (down 18.4%)

Best performers

Offshore Transportation (up 18.8%) National Oil Companies (up 3.3%)

Positive 1Q-19 market sentiment did not translate into increased deal-making, resulting in almost no deal activity during 2Q-19. 2 transactions were closed, the more prominent being the TAG Pipelines acquisition by Engie and CDPQ in Brazil.

THE OIL AND GAS SECTORS WITH THE **HIGHEST** VALUATION MULTIPLES



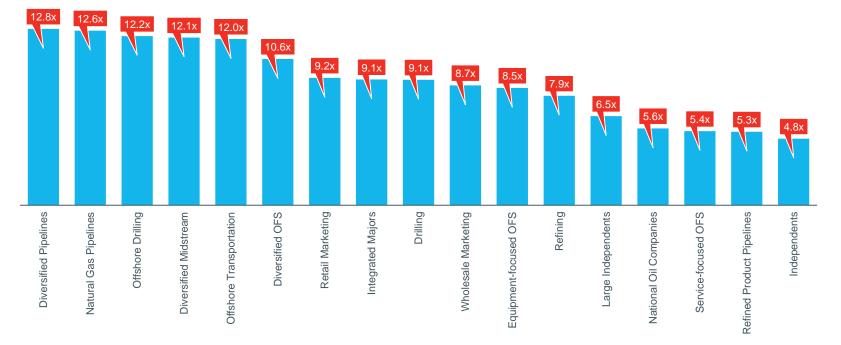
Oil and Gas Sector Update Valuation Multiples

Market Sector	# of	Avg. Mkt. Cap	Average % Change			LTM Multiples		
	Co's	as of 06-30-19	1 mo	3 mo	12 mo	Rev	EBITDA	1P
Upstream								
Integrated Majors	2	280,638	8.8%	(3.2%)	(4.7%)	1.5x	9.1x	17.7x
National Oil Companies	3	47,728	15.0%	3.3%	27.9%	2.1x	5.6x	19.1x
Large Independents	20	23,758	6.1%	(5.3%)	(20.0%)	2.5x	6.5x	13.9x
Independents	73	1,522	1.1%	(16.4%)	(31.0%)	2.5x	4.8x	7.5x
Total/Average	98	353,646	7.7%	(5.4%)	(7.0%)	2.1x	6.5x	14.5x
Midstream								
Natural Gas Pipelines	18	13,623	3.2%	(1.3%)	13.4%	3.8x	12.6x	n.d.
Diversified Pipelines	16	16,420	3.3%	(1.5%)	19.5%	2.7x	12.8x	n.d.
Refined Product Pipelines	3	1,205	2.5%	(9.9%)	(36.0%)	0.7x	5.3x	n.d.
Offshore Transportation	7	756	7.2%	18.9%	4.7%	3.5x	12.0x	n.d.
Diversified Midstream	13	6,090	3.0%	(3.4%)	15.3%	1.6x	12.1x	n.d.
Total/Average	57	38,093	3.9%	0.5%	3.4%	2.5x	11.1x	n.d.
Refining	9	15,137	17.9%	(0.3%)	0.8%	0.5x	7.9x	n.d.
Marketing								
Retail Marketing	4	4,547	2.3%	2.4%	31.4%	0.7x	9.2x	n.d.
Wholesale Marketing	5	1,027	2.3%	(1.8%)	(2.5%)	0.5x	8.7x	n.d.
Total/Average	9	5,574	2.3%	0.3%	14.5%	0.6x	9.0x	n.d.
OFS								
Diversified OFS	3	29,206	12.1%	(15.7%)	(32.3%)	1.8x	10.6x	n.d.
Equipment-focused OFS	11	1,197	1.7%	(18.6%)	(21.8%)	1.4x	8.5x	n.d.
Service-focused OFS	13	906	6.4%	(13.9%)	(12.9%)	1.1x	5.4x	n.d.
Drilling	6	2,798	6.2%	(18.4%)	(39.5%)	1.6x	9.1x	n.d.
Offshore Drilling	5	1,122	8.1%	(10.0%)	(23.0%)	3.2x	12.2x	n.d.
Total/Average	38	35,229	6.9%	(15.3%)	(25.9%)	1.8x	9.2x	n.d.
Total/Average	211					1.7x	8.1x	n.d.

Oil and Gas Sector Update Market Data

		Value at	52-week	52-week		% Change		
Market Index		06-30-19	high	low	1 mo	3 mo	12 mo	
S&P 500		2,942	2,954	2,351	5.5%	2.6%	7.5%	
MSCI Emerging Markets		1,055	1,106	935	6.0%	(1.4%)	0.0%	
BOVESPA (BR)		100,724	102,062	72,840	3.4%	5.6%	35.1%	
IPC (MX)		43,161	50,416	39,427	(0.4%)	(1.2%)	(11.1%)	
S&P Composite 1500 Oil and Gas Exploration & Production (Sub Ind)		397	552	334	4.6%	(5.0%)	(24.5%)	
S&P Composite 1500 Oil and Gas Storage & Transportation (Sub Ind)		189	191	138	5.0%	(0.9%)	4.7%	
S&P Composite 1500 Oil and Gas Refining & Marketing (Sub Ind)		1,508	2,124	1,264	16.2%	(3.7%)	(18.4%)	
S&P Composite 1500 Oil and Gas Equipment & Services (Sub Ind)		342	583	301	11.5%	(12.6%)	(38.7%)	
	# of	Avg. Mkt. Cap	% Total #	% Avg.	. Average Stock		k Performance	
Peer Group Capitalization Profile	Co's	as of 06-30-19	of Co's	Mkt. Cap	1 mo	3 mo	12 mo	
> \$250 billion	1	324,229	0.5%	48.1%	8.3%	(6.3%)	(7.4%)	
\$100 billion-\$250 billion	1	237,047	0.5%	35.2%	9.3%	(0.1%)	(1.9%)	
\$50 billion-\$100 billion	6	68,827	2.8%	10.2%	6.4%	(4.5%)	(3.9%)	
\$25 billion-\$50 billion	15	36,730	7.1%	5.5%	6.7%	(3.2%)	(7.5%)	
\$1 billion-\$25 billion	112	5,443	53.1%	0.8%	5.5%	(7.6%)	(19.3%)	
\$500 million-\$1 billion	51	719	24.2%	0.1%	1.0%	(15.7%)	(34.3%)	
< \$500 million	25	392	11.8%	0.1%	(0.4%)	(23.8%)	(51.0%)	
Total/Average	211	10,495	100.0%	100.0%	5.3%	(8.7%)	(17.9%)	
		WTI Crude Oil (\$/bbl)			Henry Hub Nat.Gas (\$/MMBtu)			
Commodity Prices		Prev. 2Q-19F	2Q-20F	% Change	Prev. 2Q-19F	2Q-20F	% Change	
ABN AMRO Bank		60.0	63.0	5.0%	3.75	3.75	0.0%	
Banco Santander		57.4	n.a.	n.a.	2.85	n.a.	n.a.	
Barclays		65.0	n.a.	n.a.	2.67	n.a.	n.a.	
DZ Bank		70.0	n.a.	n.a.	3.25	n.a.	n.a.	
Commerzbank		58.0	67.0	15.5%	3.00	3.50	16.7%	
Natixis		58.0	66.0	13.8%	3.15	3.30	4.8%	
Rabobank International		60.8	68.8	13.2%	3.20	3.45	7.9%	
Raymond James Financial		56.0	90.0	60.7%	2.70	2.50	(7.4%)	
Societe Generale		63.0	65.0	3.2%	2.82	n.a.	n.a.	
The Bank of Nova Scotia		60.0	58.0	(3.3%)	3.10	3.10	0.0%	
Average		60.8	68.3	12.2%	3.05	3.27	7.2%	
Median		60.0	66.0	10.0%	3.05	3.38	10.7%	
Upstream Budget Price			55.0 - 60.0			2.50 <mark>–</mark> 2.99		

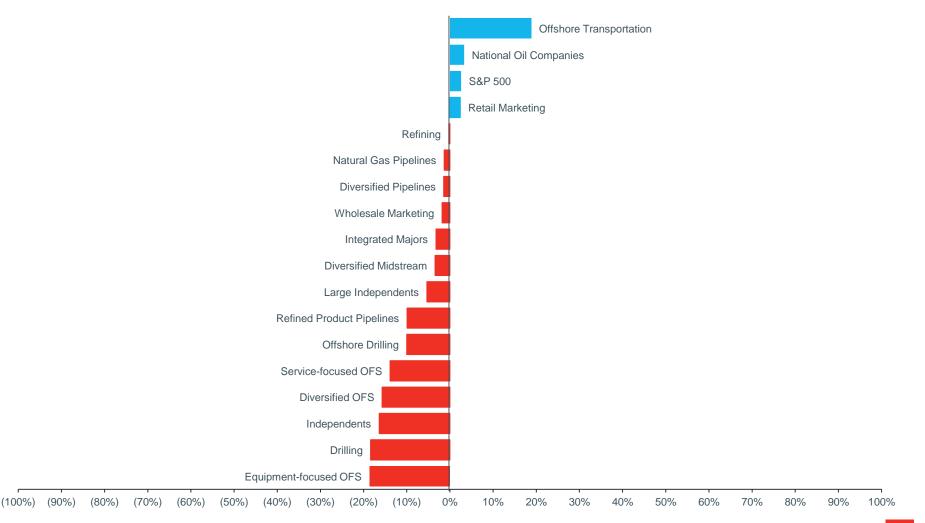
Oil and Gas Sector Update Valuation Multiples



EV/LTM EBITDA by Subsector

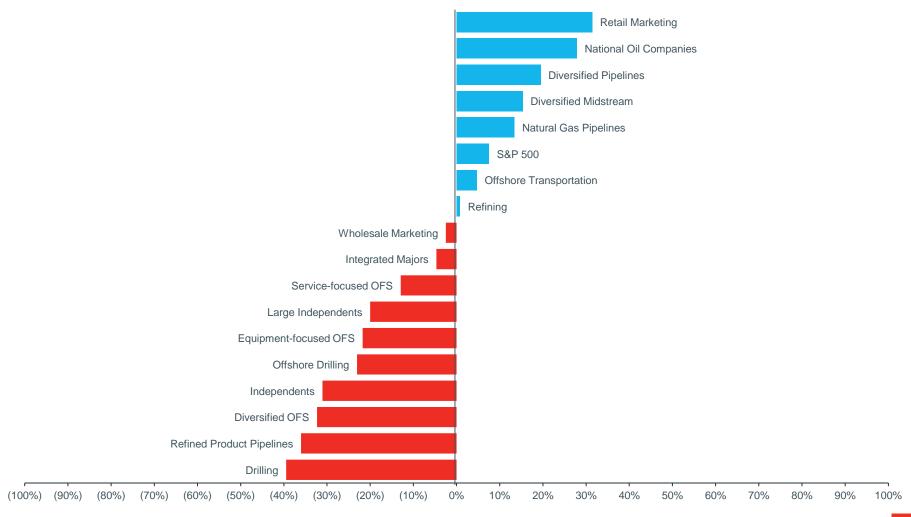
Oil and Gas Sector Update Market Momentum Q2





Oil and Gas Sector Update Market Momentum LTM

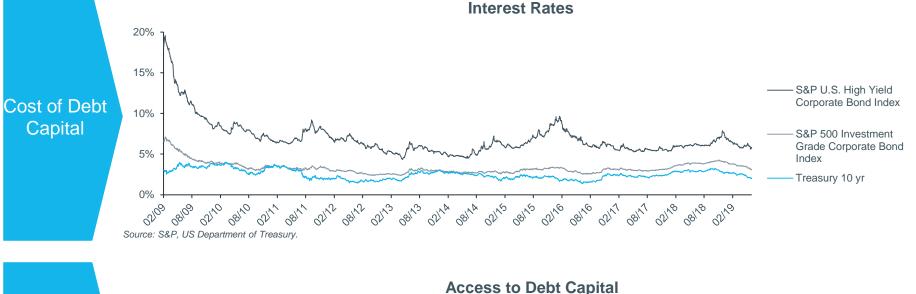
Average %—12 Month Change by Subsector



Oil and Gas Sector Update M&A Market Environment

The Federal Reserve's hints that interest rates are probably going to be cut in the FOMC's July meeting have grown stronger. High-yield and investment-grade corporate bonds indexes decreased by 4% and 14%, respectively, over the past quarter. Corporate leverage ratios decreased for four consecutive quarters, the most since 2013.

A Fed rate cut now seems more likely than not, with analysts debating over whether rates will be cut 25 or 50 basis points.





Total Bank Debt / EBITDA
Total Non-Bank Debt / EBITDA

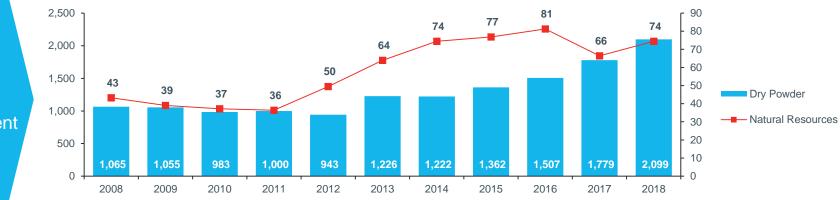
Oil and Gas Sector Update M&A Market Environment 0 • 0

Corporate cash levels decreased 18.6% over the past guarter and 27.1% Yo-Y. After two years of cash reserves in excess of US\$100bn, this quarter saw them drop to US\$85bn, approximately the same level as of 2Q-16. Those levels in combination with a decrease in financing costs will most likely fuel increased takeover activity. Global private capital levels have remained stable and natural resources-focused funds can be expected to be deployed to high growth markets as Brazil and Argentina (Vaca Muerta).

140 120 Strategic 100 Buyer 80 Purchasing 60 Cash & Equivalents 40 Power 20 30174 20115 301,15 ACTES 101/0 40116 40-17 101¹⁸ 201,8 20123 30¹/3 AOTA 10115 10177 2017 3017 30^{1,8} A01,18 101²9 201,09 3 ACT 3 ACT 4 201 A Source: S&P Capital IQ, Duff & Phelps Analysis.

Cash & Equivalents (Bn USD)



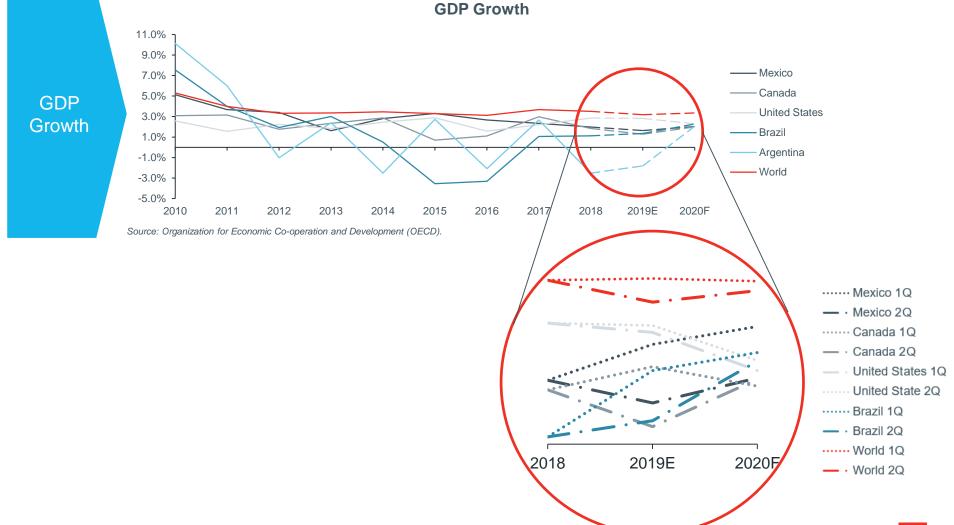


Private Capital Dry Powder (Bn USD)

Source: Prequin, Duff & Phelps Analysis.

Oil and Gas Sector Update

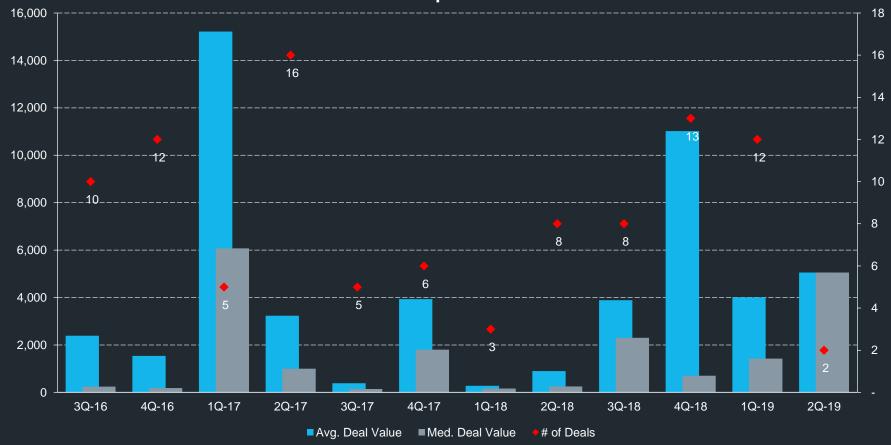
For the past 10 years the average GDP growth of the 5 largest American economies has remained consistently below the world average. This trend is expected to continue at least until 2020. Except for Argentina, these economies are expected to grow around 2.0% for 2019 and 2020. Nonetheless, reviewed growth expectations after a slow 1Q-19 are lower than expected, signaling an overall slowdown in economic growth.



Oil and Gas Sector Update Transaction Overview

Market Sector (Target Companies)	# of Deals	Median Transaction Multiples			Avg. Transaction Multiples		
		Rev	EBITDA	1P	Rev	EBITDA	1P
Upstream							
Integrated Majors	0	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
National Oil Companies	2	1.0x	6.0x	41.6x	1.0x	6.0x	10.7x
Large Independents	2	10.9x	26.0x	130.8x	10.9x	26.0x	20.4x
Independents	41	3.7x	11.0x	11.2x	8.0x	13.8x	18.9x
Total/Average	45	5.2x	14.3x	61.2x	6.6x	15.2x	16.7x
Midstream							
Natural Gas Pipelines	20	6.6x	11.4x	n.d.	6.3x	13.7x	n.d.
Diversified Pipelines	8	6.9x	12.9x	n.d.	25.9x	38.6x	n.d.
Refined Product Pipelines	0	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Offshore Transportation	2	3.8x	15.2x	n.d.	3.8x	15.2x	n.d.
Diversified Midstream	4	4.9x	10.7x	n.d.	5.3x	12.3x	n.d.
Total/Average	34	5.6x	12.6x	n.d.	10.3x	19.9x	n.d.
Refining		0.3x	2.9x	n.d.	0.3x	2.9x	n.d.
Marketing							
Retail Marketing	3	0.9x	5.7x	n.d.	0.9x	6.1x	n.d.
Wholesale Marketing	3	0.4x	10.6x	n.d.	0.4x	11.0x	n.d.
Total/Average	6	0.7x	8.1x	n.d.	0.7x	8.6x	n.d.
OFS							
Diversified OFS	1	3.1x	18.8x	n.d.	3.1x	18.8x	n.d.
Equipment-focused OFS	5	1.5x	8.7x	n.d.	2.4x	7.2x	n.d.
Service-focused OFS	1	n.a.	2.5x	n.d.	n.a.	0.0x	n.d.
Drilling	6	2.1x	14.9x	n.d.	2.1x	41.8x	n.d.
Offshore Drilling	1	3.7x	7.4x	n.d.	3.7x	7.4x	n.d.
Total/Average	14	2.6x	10.5x	n.d.	2.8x	15.0x	n.d.
Total/Average							

Oil and Gas Sector Update Transaction Overview



Peer Group Transactions

For more detailed 2Q-19 trading multiples for individual oil and gas companies or for a more detailed view on potential acquisition targets across the Americas, please contact one of our professionals below.

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