



Independent Stock Idea

September 6, 2017

Total S.A. (TOT) Gaining Volume on Competitors

<i>Symbol</i>	TOT	<i>Ebitda Next Twelve Months ending 9/30/18 (US\$mm)</i>	30,100
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	0
<i>Price (US\$/sh)</i>	52.19	<i>Natural Gas and Oil Production/Ebitda (%)</i>	68
<i>Pricing Date</i>	9/5/17	<i>Adjusted Reserves/Production NTM</i>	8.9
<i>Shares (mm)</i>	2583	<i>EV/Ebitda</i>	6.4
<i>Market Capitalization (US\$mm)</i>	135,000	<i>PV/Ebitda</i>	9.6
<i>Debt (US\$mm)</i>	57,000	<i>Undeveloped Reserves (%)</i>	42
<i>Enterprise Value (EV) (US\$mm)</i>	192,000	<i>Natural Gas and Oil Ebitda (US\$/boe)</i>	21.30
<i>Present Value (PV) (US\$mm)</i>	289,000	<i>Present Value Proven Reserves(US\$/boe)</i>	17.23
<i>Net Present Value (US\$/share)</i>	90	<i>Present Value Proven Reserves(US\$/mcfe)</i>	2.87
<i>Debt/Present Value</i>	0.20	<i>Earnings Next Twelve Months (US\$/sh)</i>	4.14
<i>McDep Ratio - EV/PV</i>	0.66	<i>Price/Earnings Next Twelve Months</i>	13
<i>Dividend Yield (%/year)</i>	5.7	<i>Indicated Annual Dividend (US\$/sh)</i>	2.96
Note: Estimated cash flow and earnings tied to one-year futures prices for oil.			
Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.			
Estimated present value presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.00 a million btu.			
For historical analysis of TOT since 2004 see www.mcdep.com/1tot.htm			

Summary and Recommendation

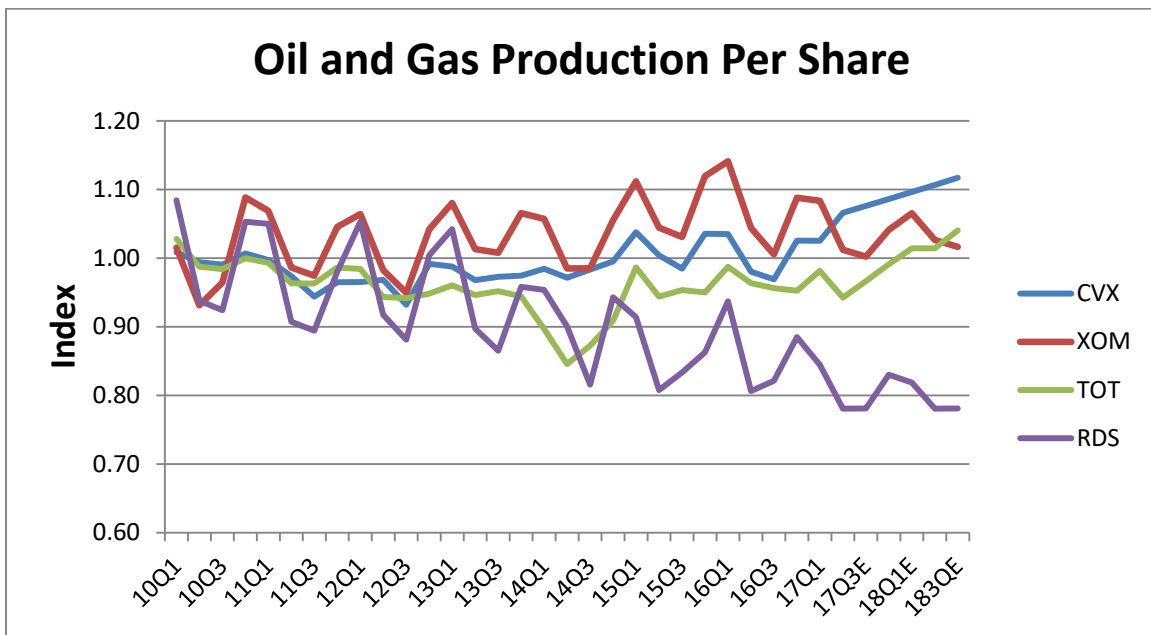
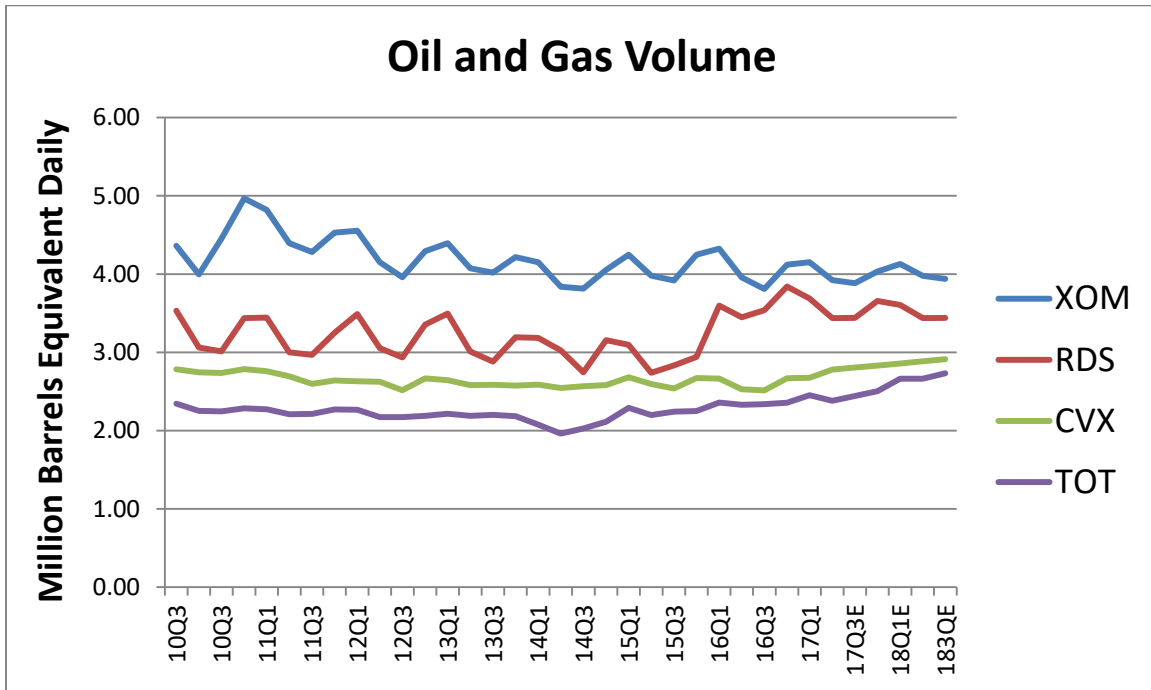
More rapidly growing volume for Buy-recommended **Total S.A.** may catalyze rising stock price for the most undervalued global integrated oil and gas producer in our work. We project that recent higher volume growth can continue over the next twelve months (see chart [Volume](#) on page 2). The relative trend remains strong after adjusting for the new shares to be issued in the acquisition of Maersk Oil announced last month and expected to close in the first quarter of 2018 (see chart [Production per Share](#) on page 2). Meanwhile, with oil and gas price about the same among competitors and operating costs stable, cash flow (Ebitda) ought to be rising in line with production see charts [Operating Cost](#) and [Ebitda-Production](#) on page 3). Of course, these giant global enterprises don't always perform according to our simplified expectations. Because Total already has the lowest McDep Ratio in its group at 0.66, the downside valuation risk from operations surprise may be low. On the upside a McDep Ratio of 1.0 would imply that current stock price of \$52 would rise to Net Present Value (NPV) of \$90 (see [Present Value](#) on page 4). We include the Maersk deal in our estimates for 2018 (see table [Operating and Financial Estimates](#) on page 5). Concentrated in developed countries, the properties to be acquired balance political risk with properties held in emerging countries (see slide [Fit between Assets](#) on page 6). We think the 8.44% interest in Johan Sverdrup, the largest discovery in the North Sea in recent years, may prove to be especially valuable (see slide [North Sea Leader](#) on page 6). Among the valuation features of Total stock, the 5.7% dividend appears attractive (see [Tables 1-4](#) on pages 7-10). There is a caveat on Foreign Tax Withholding. A 15% Foreign Tax on the dividend can be neutralized for U.S. investors in a taxable account. Investors unable or unwilling to neutralize the French tax might be interested in the UK version of Buy-recommended **Royal Dutch Shell (RDSB)**, as an alternative European oil and gas stock with no Foreign Tax withheld.

Kurt H. Wulff, CFA



Independent Stock Idea

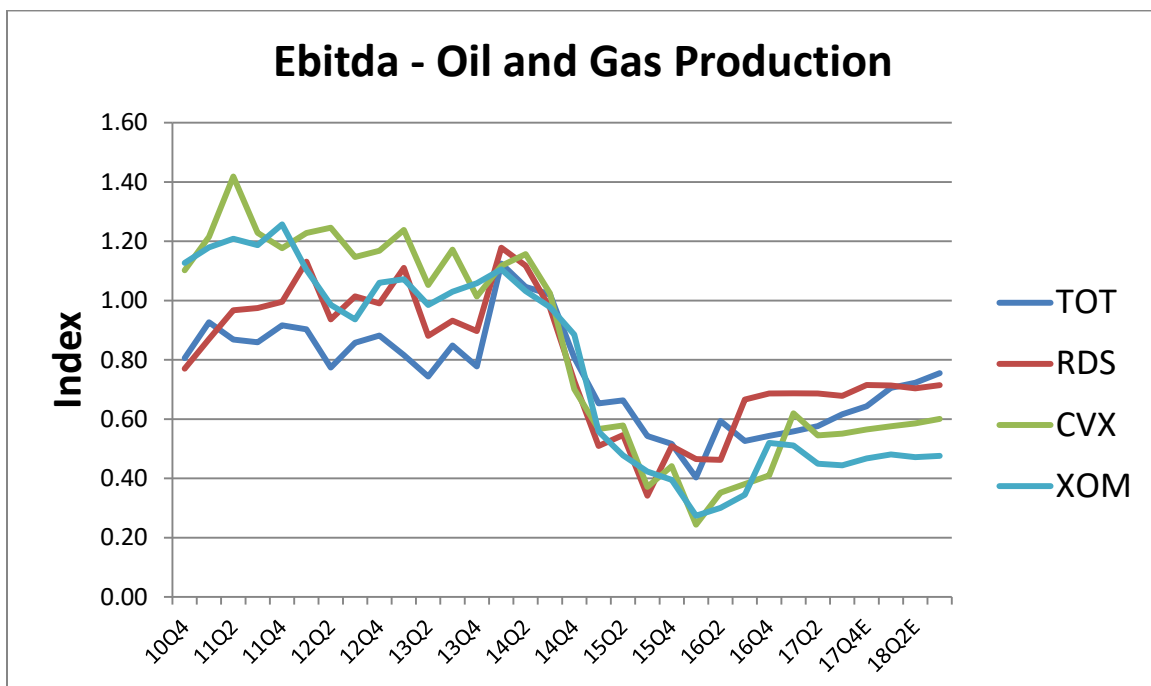
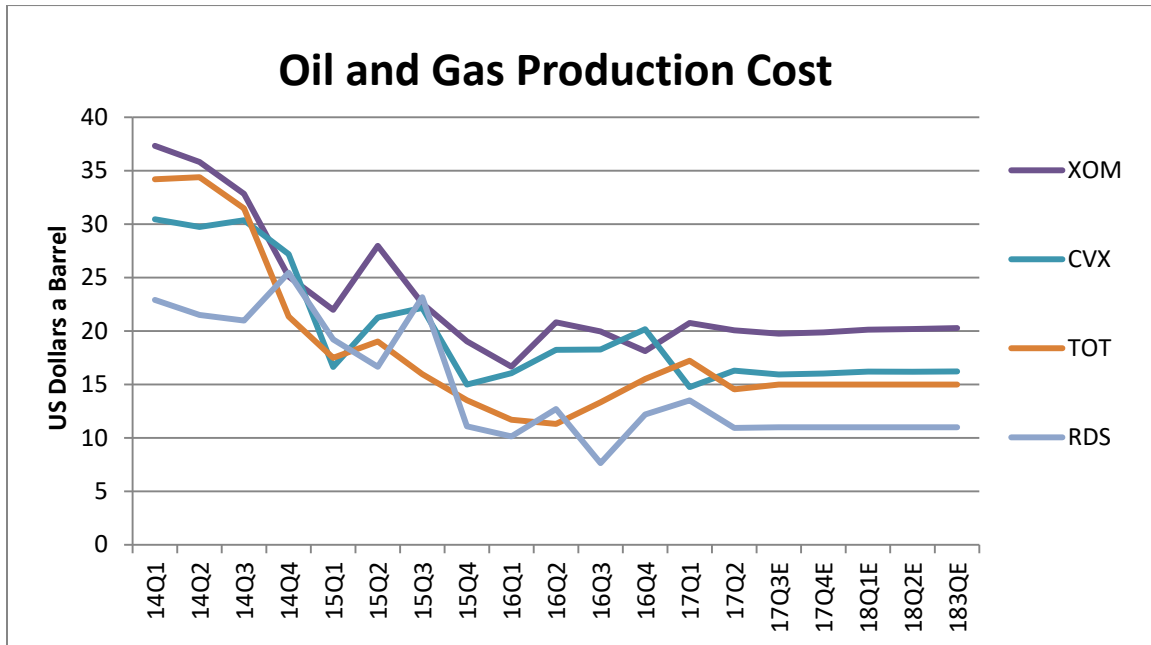
September 6, 2017





Independent Stock Idea

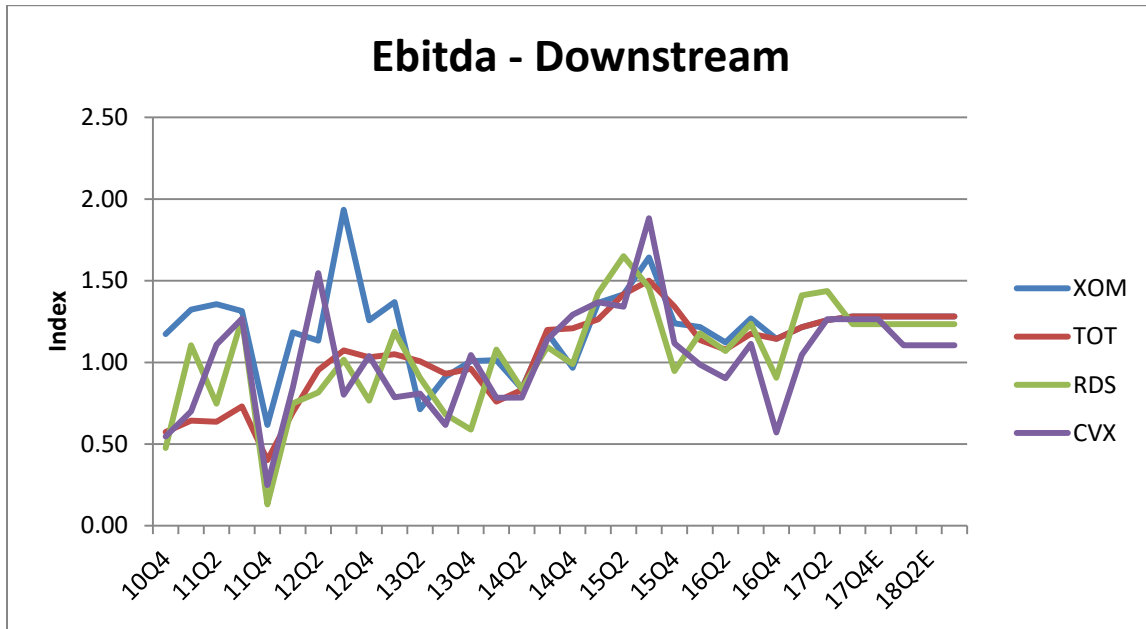
September 6, 2017





Independent Stock Idea

September 6, 2017



Total					
Functional Cash Flow and Present Value					
	<i>NTM Ebitda</i>	<i>Adjusted</i>	<i>PV/</i>	<i>Present</i>	
	<i>(US\$mm)</i>	<i>R/P</i>	<i>Ebitda</i>	<i>Value</i>	
				<i>(US\$mm)</i>	
Rest of World Natural Gas	5,830	10.4	11.5	67,000	23%
Oil	14,670	7.8	10.8	158,000	55%
Downstream	9,600		6.7	64,000	22%
	30,100	8.9	9.6	289,000	100%
Debt (US\$mm)					57,000
Net Present Value (US\$mm)					232,000
Shares (mm)					2,583
Net Present Value - Standard Estimate (US\$/sh)					90
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					92



Independent Stock Idea

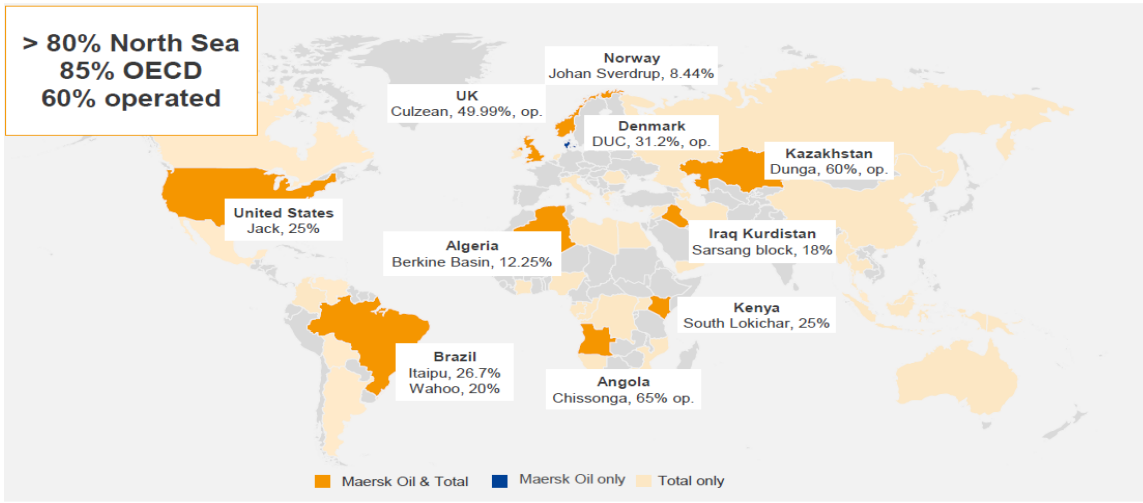
September 6, 2017

Total S.A.										
Next Twelve Months Operating and Financial Estimates										
	Q3	Year	Q2	Q3E	Q4E	Year	Q1E	Q2E	Q3E	Twelve
	9/30/16	2016	6/30/17	9/30/17	12/31/17	2017	3/31/18	6/30/18	9/30/18	Months
										9/30/18
Volume										
Natural Gas (mmcf)	6,286	6,465	6,500	6,630	6,763	6,696	6,943	6,943	7,082	6,933
Days	92	366	91	92	92	365	90	91	92	365
Oil (mmb)	119	465	118	123	127	485	136	137	143	542
Oil (mbd)	1,290	1,272	1,298	1,337	1,377	1,329	1,507	1,507	1,552	1,486
Total gas & oil (mmb)	215	859	217	225	230	892	240	242	251	964
Total gas & oil (mbd)	2,338	2,349	2,381	2,442	2,504	2,445	2,664	2,664	2,733	2,641
Price										
Dollar (euro/\$)	1.12	1.11	1.10	1.19	1.19	1.13	1.19	1.19	1.19	1.19
Natural gas (\$/mmbtu)	3.45	3.56	3.93	3.93	3.93	3.97	3.93	3.93	3.93	3.93
Oil (\$/bbl)										
WTI Cushing	44.91	43.31	48.26	47.33	47.94	48.86	49.29	49.81	50.00	49.26
Brent	45.90	43.68	49.60	48.65	49.27	50.31	50.74	51.28	51.48	50.69
Company	41.40	40.84	45.10	44.24	44.80	45.74	46.14	46.63	46.81	46.13
Total gas & oil (\$/bbl)	32.12	31.65	35.31	34.89	35.25	35.77	36.34	36.62	36.77	36.26
European Refining (\$/t)	25.50	34.15	41.00							-
Revenue (mm)										
Natural gas	1,995	8,402	2,325	2,397	2,445	9,711	2,456	2,483	2,561	9,944
Oil	4,913	18,775	5,327	5,441	5,676	22,214	6,258	6,395	6,684	25,013
Total production	6,909	27,178	7,652	7,838	8,121	31,925	8,714	8,878	9,245	34,957
Other	30,503	122,565	32,263	32,263	32,263	129,659	32,263	32,263	32,263	129,053
Total	37,412	149,743	39,915	40,102	40,385	161,584	40,977	41,141	41,508	164,010
Expense										
Production	2,867	11,143	3,153	3,370	3,456	13,782	3,597	3,637	3,771	14,460
Other	28,037	112,799	29,810	29,863	29,863	119,994	29,863	29,863	29,863	119,453
Ebitda (mm)										
Production	4,042	16,035	4,498	4,468	4,666	18,143	5,117	5,241	5,474	20,497
Other	2,466	9,766	2,453	2,400	2,400	9,665	2,400	2,400	2,400	9,600
Total Ebitda	6,508	25,801	6,951	6,868	7,066	27,808	7,517	7,641	7,874	30,097
Exploration	274	1,264	199	199	199	794	199	199	199	796
Deprec., Deplet., & Amort.	2,925	11,257	2,784	2,784	2,784	11,001	3,050	3,050	3,050	11,934
Excess tax and other	1,072	4,352	1,212			2,148				
Operating Income										
Upstream	781	2,737	1,427			3,177				
Downstream	1,456	6,191	1,470			2,986				
Marketing and services	565	1,818	539			1,008				
Total operating income	2,237	8,928	2,756			5,897				
Excess tax and other	(1,072)	(4,352)	(1,212)			(2,148)				
Ebit										
Production	3,309	13,280	3,968	3,885	4,083	16,013	4,268	4,392	4,625	17,367
Interest	202	827	260	260	260	1,039	270	270	270	1,070
Ebt										
Income Tax	1,087	4,358	1,298	1,269	1,338	5,241	1,399	1,443	1,524	5,704
Net Income (mm)										
Net Income	2,019	8,094	2,410	2,356	2,485	9,733	2,599	2,679	2,831	10,593
Shares (millions)										
Shares	2,404	2,395	2,485	2,485	2,485	2,478	2,583	2,583	2,583	2,583
Per share										
Per share	0.84	3.38	0.97	0.95	1.00	3.93	1.01	1.04	1.10	4.14
Ebitda Margin (E&P)										
Ebitda Margin (E&P)	59%	59%	59%	57%	57%	57%	59%	59%	59%	59%
Tax Rate										
Tax Rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%

An excellent fit between Maersk Oil and Total assets

Mainly OECD portfolio & Significant synergies

> 80% North Sea
85% OECD
60% operated

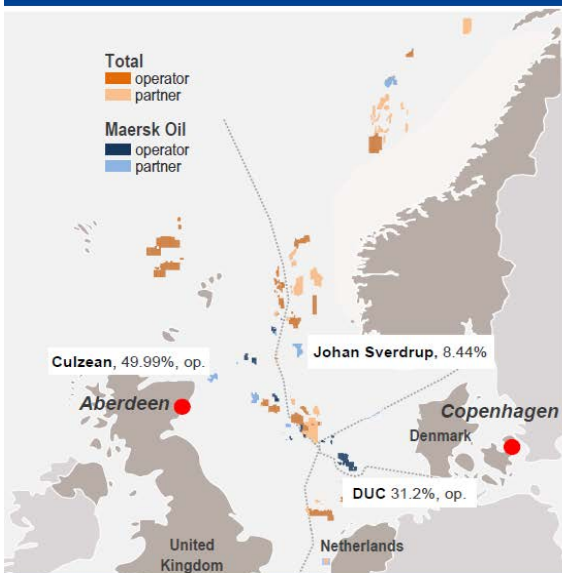


4



Creating a North Sea leader

Combining strong operational skills of Total and Maersk Oil



2nd largest operated production (~500 kboed)

3rd largest resource holder

Enhancing key operating position in the UK with strong growth outlook

Entering giant low cost Johan Sverdrup project in Norway

Acquiring a major position in Denmark as operator of DUC

7





Independent Stock Idea

September 6, 2017

Table 1
McDep Energy Stocks
Ranked by McDep Ratio

		<i>Price</i>						<i>Oil</i>	<i>Dist.</i>		
		<i>(US\$/sh)</i>	<i>Market</i>	<i>Enterprise</i>	<i>EV/</i>	<i>EV/</i>	<i>PV/</i>	<i>Prod'n/</i>	<i>Yield</i>	<i>McDep</i>	
	<i>Symbol/Rating</i>	<i>5-Sep</i>	<i>Cap</i>	<i>Value</i>	<i>Market</i>	<i>Ebitda</i>	<i>Ebitda</i>	<i>PV</i>	<i>NTM</i>	<i>Ratio</i>	
		<i>2017</i>	<i>(US\$mm)</i>	<i>(\$mm)</i>	<i>Cap</i>	<i>NTM</i>	<i>NTM</i>	<i>(%)</i>	<i>(%)</i>	<i>(EV/PV)</i>	
Global Integrated											
Chevron Corporation	CVX	109.44	207,000	274,000	1.32	8.8	10.4	60	3.9	0.85	
Exxon Mobil Corporation	XOM	77.18	330,000	421,000	1.28	9.7	11.9	49	4.0	0.81	
Royal Dutch Shell	RDS-A	B 55.70	231,000	358,000	1.55	7.2	9.2	51	6.8	0.78	
Total S.A.	TOT	B 52.19	135,000	192,000	1.42	6.4	9.6	55	5.7	0.66	
	<i>Total or Median</i>		<i>903,000</i>	<i>1,245,000</i>	<i>1.37</i>	<i>8.0</i>	<i>10.0</i>	<i>53</i>	<i>4.8</i>	<i>0.80</i>	
Large Independent											
EOG Resources, Inc.	EOG	85.87	49,700	57,000	1.15	11.1	11.0	86	0.8	1.01	
Pioneer Natural Resources	PXD	131.13	22,300	24,000	1.08	9.6	10.9	87	0.1	0.88	
Occidental Petroleum Corp.	OXY	60.72	46,500	59,300	1.28	10.6	12.6	80	5.0	0.84	
Devon Energy Corporation	DVN	32.13	17,000	25,000	1.47	8.2	10.5	62	0.7	0.79	
ConocoPhillips	COP	B 44.39	55,000	79,000	1.44	8.8	12.1	69	2.4	0.73	
Marathon Oil Corporation	MRO	B 11.29	9,600	16,700	1.74	9.1	12.6	79	1.8	0.72	
	<i>Total or Median</i>		<i>200,100</i>	<i>261,000</i>	<i>1.36</i>	<i>9.3</i>	<i>11.5</i>	<i>80</i>	<i>1.3</i>	<i>0.82</i>	
Small Independent											
Cimarex Energy Company	XEC	101.74	9,700	11,100	1.15	10.2	11.7	63	0.3	0.87	
California Resources	CRC	7.69	300	6,300	19.2	11.4	14.6	89	-	0.78	
Continental Resources (32%)	CLR	B 34.79	4,100	6,300	1.51	8.3	11.7	74	-	0.71	
Whiting Petroleum Corporation	WLL	4.58	1,700	5,200	3.16	6.5	12.5	92	-	0.52	
Range Resources	RRC	B 17.95	4,400	8,800	2.00	8.1	16.8	31	0.4	0.49	
	<i>Total or Median</i>		<i>20,000</i>	<i>38,000</i>	<i>2.00</i>	<i>8.3</i>	<i>12.5</i>	<i>74</i>	<i>-</i>	<i>0.71</i>	
Income											
San Juan Basin Royalty Trust	SJT	6.77	320	320	1.00	12.8	15.1	-	7.8	0.85	
Permian Basin RT	PBT	8.08	380	380	1.00	13.9	19.0	78	6.6	0.74	
Sabine Royalty Trust	SBR	40.90	600	600	1.00	19.3	28.3	59	5.2	0.68	
Dorchester Minerals, L.P.	DMLP	B 14.15	460	460	1.00	10.7	18.1	72	9.0	0.59	
Cross Timbers Royalty Trust	CRT	B 14.62	90	90	1.00	9.9	19.6	28	7.8	0.51	
	<i>Total or Median</i>		<i>1,900</i>	<i>1,900</i>	<i>1.00</i>	<i>12.8</i>	<i>19.0</i>	<i>59</i>	<i>7.8</i>	<i>0.68</i>	
Canada											
EnCana Corporation	ECA	9.33	9,100	15,600	1.71	8.8	10.2	56	0.6	0.86	
Imperial Oil Limited (30%)	IMO	30.14	7,700	9,700	1.27	8.5	10.3	67	1.7	0.83	
Suncor Energy	SU	B 31.83	53,000	71,500	1.35	8.7	11.2	84	3.2	0.78	
Birchcliff Energy Ltd.	BIREF	B 4.76	1,300	1,900	1.47	6.8	11.8	30	1.7	0.57	
Cenovus Energy Inc.	CVE	8.29	10,200	20,500	2.01	6.5	11.9	83	1.9	0.55	
	<i>Total or Median</i>		<i>81,000</i>	<i>119,000</i>	<i>1.47</i>	<i>8.5</i>	<i>11.2</i>	<i>67</i>	<i>1.7</i>	<i>0.78</i>	

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation, amort.
 Estimated Ebitda (cash flow) tied to NTM futures prices for oil and natural gas. NTM = Next Twelve Months ending 9/30/18.
 Estimated Present Value (PV) presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.00 a million btu.
 McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses. For historical research see www.mcdep.com



Independent Stock Idea

September 6, 2017

McDep Energy Stocks										
Production Operating Leverage										
Ranked by McDep Ratio										
			Price (US\$/sh)		Oil Equiv. Price (\$/boe)	Operating Expense Fixed Var. (\$/boe) (%)	Ebitda NTM (\$/boe)	Ebitda NTM (\$mm)	Oper Lev Ebitda chg/ Price chg	McDep Ratio
	Symbol/Rating	5-Sep 2017	Volume (mmboe)							
	B = Buy									
Global Integrated (excl. Downstream)										
Chevron Corporation	CVX	109.44	888	37.08	11	14	20.90	18,553	1.53	0.85
Exxon Mobil Corporation	XOM	77.18	1,463	37.47	4	43	17.40	25,458	1.23	0.81
Royal Dutch Shell	RDS-A	B 55.70	1,292	36.23	6	14	25.20	32,557	1.24	0.78
Total S.A.	TOT	B 52.19	962	36.26	0	41	21.30	20,497	1.00	0.66
	<i>Total or Median</i>								<i>1.23</i>	<i>0.80</i>
Large Independent (excl. Downstream)										
EOG Resources, Inc.	EOG	85.87	231	34.12	11	3	22.20	5,134	1.50	1.01
Pioneer Natural Resources	PXD	131.13	117	33.32	11	3	21.40	2,506	1.51	0.88
Occidental Petroleum Corp.	OXY	60.72	230	34.83	12	11	19.10	4,395	1.63	0.84
Devon Energy Corporation	DVN	32.13	182	25.80	10	5	14.40	2,622	1.69	0.79
ConocoPhillips	COP	B 44.39	440	34.21	8	17	20.40	8,968	1.39	0.73
Marathon Oil Corporation	MRO	B 11.29	131	27.21	11	8	14.10	1,841	1.78	0.72
	<i>Total or Median</i>								<i>1.57</i>	<i>0.82</i>
Small Independent										
Cimarex Energy Company	XEC	101.74	72	25.28	6	16	15.30	1,095	1.39	0.87
California Resources	CRC	7.69	47	37.93	15	29	11.80	557	2.27	0.78
Continental Resources (32%)	CLR	B 34.79	33	30.41	3	14	23.00	752	1.13	0.71
Whiting Petroleum Corporation	WLL	4.58	47	31.39	9	17	17.10	811	1.53	0.52
Range Resources	RRC	B 17.95	132	17.21	8	6	8.20	1,081	1.98	0.49
	<i>Total or Median</i>								<i>1.53</i>	<i>0.71</i>
Income										
San Juan Basin Royalty Trust	SJT	6.77	3	16.27	5	18	8.28	25	1.60	0.85
Permian Basin RT	PBT	8.08	1	31.14	10	6	19.28	27	1.52	0.74
Sabine Royalty Trust	SBR	40.90	1	27.98	2	11	22.83	31	1.09	0.68
Dorchester Minerals, L.P.	DMLP	B 14.15	2	31.38	7	10	21.32	43	1.33	0.59
Cross Timbers Royalty Trust	CRT	B 14.62	0	33.90	8	10	22.63	9	1.35	0.51
	<i>Total or Median</i>								<i>1.35</i>	<i>0.68</i>
Canada (excl. Downstream)										
EnCana Corporation	ECA	9.33	113	28.69	12	3	15.69	1,773	1.76	0.86
Imperial Oil Limited (30%)	IMO	30.14	70	35.66	17	7	16.30	1,144	2.04	0.83
Suncor Energy	SU	B 31.83	283	45.23	22	5	21.02	5,945	2.05	0.78
Birchcliff Energy Ltd.	BIREF	B 4.76	23	17.54	4	9	11.90	277	1.34	0.57
Cenovus Energy Inc.	CVE	8.29	212	25.39	11	3	13.54	2,869	1.81	0.55
	<i>Total or Median</i>								<i>1.81</i>	<i>0.78</i>
For historical research see www.mcdep.com										



Independent Stock Idea

September 6, 2017

Table 3											
McDep Energy Stocks											
Net Present Value Per Share											
Ranked by Reserve Life (Adjustd Resrvs/Prod NTM)											
			Price (US\$/sh)	Shares	Debt (\$mm)	Dividend NTM	P/E	Down- stream/ PV (%)	Proven Undev. Resrvs (%)	Adjustd Resrvs/ Prod NTM	Net Present Value (US\$/sh)
	Symbol/Rating		5-Sep 2017	(mm)		(\$/sh)					
	B = Buy										
Global Integrated											
	Exxon Mobil Corporation	XOM		4,271	91,152	3.08	23	27	31	11.5	100.00
	Total S.A.	TOT	B	52.19	2,583	57,015	2.96	13	22	42	8.9
	Chevron Corporation	CVX		1,893	66,793	4.32	29	20	32	8.9	135.00
	Royal Dutch Shell	RDS-A	B	55.70	4,146	126,975	3.76	18	24	25	8.8
	<i>Median</i>										8.9
Large Independent											
	ConocoPhillips	COP	B	44.39	1,237	24,405	1.06	-	20	10.3	68.00
	Occidental Petroleum Corp.	OXY		60.72	766	12,800	3.04	61	14	23	9.2
	Devon Energy Corporation	DVN		32.13	529	8,019	0.24	62	9	20	8.8
	Marathon Oil Corporation	MRO	B	11.29	850	7,129	0.20	-	39	8.6	19.00
	EOG Resources, Inc.	EOG		85.87	579	7,250	0.67	-	30	7.0	85.00
	Pioneer Natural Resources	PXD		131.13	170	1,700	0.08	68	-	7	6.0
	<i>Median</i>										8.7
Small Independent											
	Range Resources	RRC	B	17.95	245	4,392	0.08	38	-	44	11.8
	Whiting Petroleum Corporation	WLL		4.58	363	3,589	-	-	53	11.7	18.00
	Continental Resources (32%)	CLR	B	34.79	119	2,124	-	-	59	11.4	56.00
	California Resources	CRC		7.69	42	6,000	-	-	29	10.3	50.00
	Cimarex Energy Company	XEC		101.74	95	1,442	0.32	27	-	21	6.1
	<i>Median</i>										11.4
Income											
	Sabine Royalty Trust	SBR		40.90	15	-	2.12	19	-	4	12.4
	San Juan Basin Royalty Trust	SJT		6.77	47	-	0.53	13	-	-	10.3
	Permian Basin RT	PBT		8.08	47	-	0.53	15	-	12	9.4
	Cross Timbers Royalty Trust	CRT	B	14.62	6	-	1.15	13	-	-	8.7
	Dorchester Minerals, L.P.	DMLP	B	14.15	32	-	1.27	14	-	-	6.9
	<i>Median</i>										9.4
Canada											
	Suncor Energy	SU	B	31.83	1,665	18,543	1.03	22	16	44	13.6
	Cenovus Energy Inc.	CVE		8.29	1,229	10,290	0.16		4	55	12.8
	Birchcliff Energy Ltd.	BIREF	B	4.76	268	605	0.08	26	-	69	12.4
	Imperial Oil Limited (30%)	IMO		30.14	255	2,055	0.52	13	32	23	9.2
	EnCana Corporation	ECA		9.33	973	6,457	0.06		-	43	5.5
	<i>Median</i>										12.4
P/E = Stock Price to Earnings. For historical research see www.mcdep.com .											



Independent Stock Idea

September 6, 2017

Table 4										
McDep Energy Stocks										
Total Return Year-to-Date 2017										
Ranked by Unlevered Total Return										
			Price	Price			Equity	Unlevered		
			(\$/sh)	(\$/sh)	Price	Cash	Total	Debt	Total	McDep
	Symbol/Rati.		5-Sep	30-Dec	Change	Distrib.	Return	Return	Return	Ratio
			2017	2016	(%)	(%)	(%)	(\$/sh)	(%)	
Global Integrated										
	Royal Dutch Shell	RDS-A B	55.70	54.38	2	3	6	31	4	0.78
	Total S.A.	TOT B	52.19	50.97	2	3	5	22	3	0.66
	Chevron Corporation	CVX	109.44	117.70	(7)	2	(5)	35	(4)	0.85
	Exxon Mobil Corporation	XOM	77.18	90.26	(14)	2	(13)	21	(10)	0.81
	<i>Median</i>				(2)		(0)		(0)	0.80
Large Independent										
	ConocoPhillips	COP B	44.39	50.14	(11)	1	(10)	20	(7)	0.73
	Occidental Petroleum Corp.	OXY	60.72	71.23	(15)	2	(13)	17	(10)	0.84
	EOG Resources, Inc.	EOG	85.87	101.10	(15)	0	(15)	13	(13)	1.01
	Devon Energy Corporation	DVN	32.13	45.67	(30)	0	(29)	15	(22)	0.79
	Marathon Oil Corporation	MRO B	11.29	17.31	(35)	1	(34)	8	(23)	0.72
	Pioneer Natural Resources	PXD	131.13	180.00	(27)	0	(27)	10	(26)	0.88
	<i>Median</i>				(21)		(21)		(18)	0.82
Small Independent										
	California Resources	CRC	7.69	21.29	(64)	-	(64)	142	(8)	0.78
	Cimarex Energy Company	XEC	101.74	135.90	(25)	0	(25)	15	(23)	0.87
	Continental Resources (32%)	CLR B	34.79	51.54	(32)	-	(32)	18	(24)	0.71
	Range Resources	RRC B	17.95	34.36	(48)	0	(48)	18	(31)	0.49
	Whiting Petroleum Corporation	WLL	4.58	12.02	(62)	-	(62)	10	(34)	0.52
	<i>Median</i>				(48)		(48)		(24)	0.71
Income										
	Sabine Royalty Trust	SBR	40.90	35.15	16	4	20	-	20	0.68
	Permian Basin RT	PBT	8.08	7.71	5	5	10	-	10	0.74
	San Juan Basin Royalty Trust	SJT	6.77	6.62	2	5	8	-	8	0.85
	Dorchester Minerals, L.P.	DMLP B	14.15	17.55	(19)	5	(14)	-	(14)	0.59
	Cross Timbers Royalty Trust	CRT B	14.62	17.97	(19)	3	(15)	-	(15)	0.51
	<i>Median</i>				2		8		8	0.68
Canada										
	Suncor Energy	SU B	31.83	32.69	(3)	1	(1)	11	(1)	0.78
	Imperial Oil Limited (30%)	IMO	30.14	34.76	(13)	1	(13)	8	(10)	0.83
	EnCana Corporation	ECA	9.33	11.74	(21)	0	(20)	7	(13)	0.86
	Birchcliff Energy Ltd.	BIREF B	4.76	7.01	(32)	1	(32)	2	(24)	0.57
	Cenovus Energy Inc.	CVE	8.29	15.13	(45)	1	(45)	8	(29)	0.55
	<i>Median</i>				(21)		(20)		(13)	0.78
	<i>Grand Median</i>				(19)		(15)		(13)	0.78
	Natural Gas (\$/mmbtu)		2.97	3.74	(21)					
	Oil - West Texas Intermediate (\$/bbl)		48.55	53.72	(10)					
	Total Stock Market - U.S.	VTI	126.28	115.32	10					
	Developed Markets - ex US	VEA	42.30	36.54	16					
	Emerging Markets	VWO	44.28	35.78	24					

Source: McDep LLC, Yahoo, CME Group, Bloomberg

For historical research see www.mcdep.com



Independent Stock Idea

September 6, 2017

Disclaimer: This analysis was prepared by Kurt Wulff, Manager of McDep LLC. The firm used sources and data believed to be reliable, but makes no representation as to their accuracy or completeness. This analysis is intended for informational purposes and is not a solicitation to buy or sell a security. Past performance is no guarantee of future results.

McDep or its employees may take positions in stocks the firm covers for research purposes. No trades in a subject stock shall be made within a week before or after a change in recommendation.

Certification: I, Kurt H. Wulff, certify that the views expressed in this research analysis accurately reflect my personal views about the subject securities and issuers. No part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this research analysis.

Research Methodology/Ratings Description: McDep LLC is an independent research originator focused on oil and gas stocks exclusively. The firm applies the forty years of experience of its analyst to estimate a present value of the oil and gas resources and other businesses of covered companies. That value is compared with a company's stock market capitalization and debt. Stocks with low market cap and debt relative to present value tend to outperform stocks with high market cap and debt relative to present value. Buy recommendations are expected to deliver a total return better than 7% per year above inflation. Hold recommendations assume the attributes of the underlying business are reflected in the current price of the stock. Sell recommendations are expected to deliver a total return less than inflation.