

## **XOM, RDS, CVX, TOT** **Real Return Standouts**

	Symbol/Rating	Price (US\$/sh)	EV/ Market Cap	Enterprise Value (\$mm)	Present Value by Segment (%)				Dist. Yield	McDep Ratio
					North Amer.	Rest of World	Oil Prod'n	Down- stream		
<b>Global Integrated</b>										
	XOM	87.12	1.26	458,000	6	16	54	23	3.4	0.89
	CVX	100.95	1.35	254,000	2	14	65	19	4.2	0.80
	RDS-A B	50.23	1.68	338,000	2	21	54	24	7.5	0.74
	TOT B	47.27	1.53	172,000		20	58	22	5.8	0.63
	<i>Total or Median</i>		<i>1.44</i>	<i>1,222,000</i>			<i>56</i>	<i>23</i>	<i>5.0</i>	<i>0.77</i>

### **Summary and Recommendation**

By our analysis, global integrated oil and gas producers **ExxonMobil (XOM)**, **Royal Dutch Shell (RDS)**, **Chevron (CVX)** and **Total (TOT)** are likely to deliver an unlevered real return greater than 7% a year compared to a negative real return on Ten-Year U.S. Treasury Inflation Protected Securities. Considering the median McDep Ratio of 0.77, the target unlevered return would increase to about 9% a year. Considering the median ratio of Debt to Present Value of 0.21 the levered real return would increase to about 11% a year. More tangibly, a median dividend yield of 5.0% points to high immediate cash income. Latest quarterly disclosures on July 28-29 trace a stable trend in oil and gas production (see chart [Volume](#) on page 2). A steep decline in price has turned up again pointing to cash flow gains in the quarters and years ahead (see chart [Ebitda - Production](#) on page 2). Less predictably, we see a flat trend in refining and chemicals (see [Ebitda – Downstream](#) on page 3). On balance upstream gains would prevail (see chart [Ebitda](#) on page 3 and tables [Operating and Financial Estimates](#) on pages 4-7). Estimates of next twelve months cash flow, adjusted reserve life and a long-term oil price of \$70 a barrel feed into Net Present Value (NPV) (see tables [Present Value](#) on pages 8-9). McDep Ratios measure potential unlevered appreciation for the four Global Integrated stocks as well as the other 20 stocks in our coverage (see [Tables 1-4](#) on pages 10-13). Our Global Integrated buys are the two lowest McDep Ratio stocks RDS and TOT. We also think XOM and CVX are attractively priced to be important components of the diversified McDep Portfolio.

Kurt H. Wulff, CFA

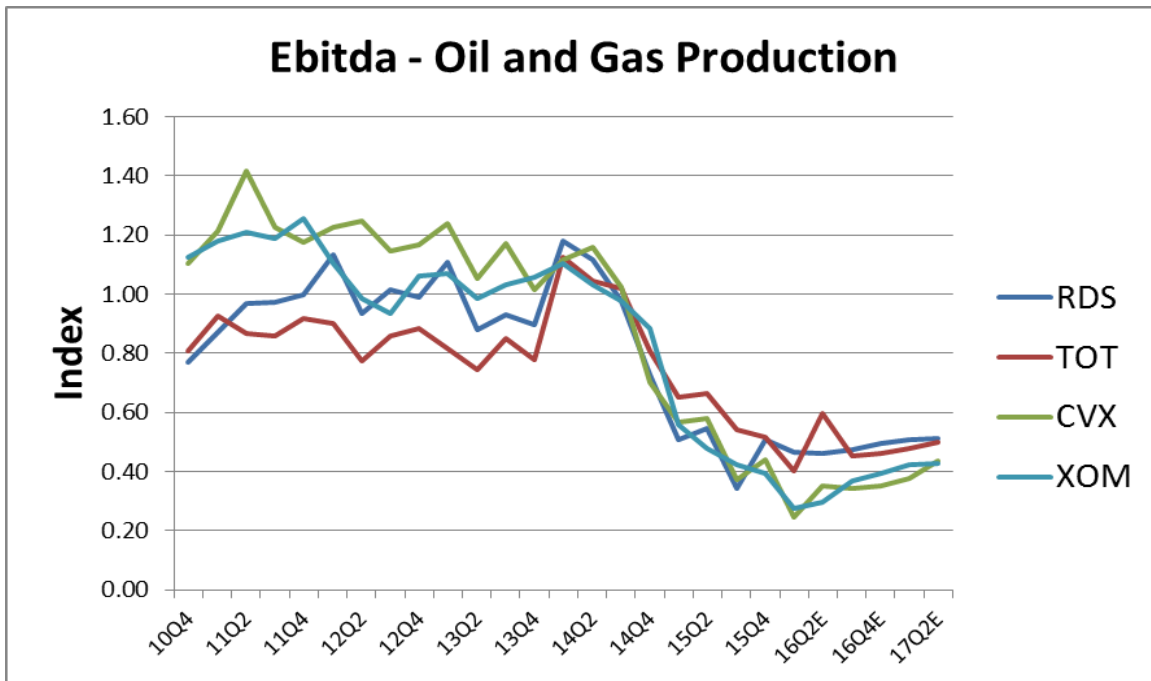
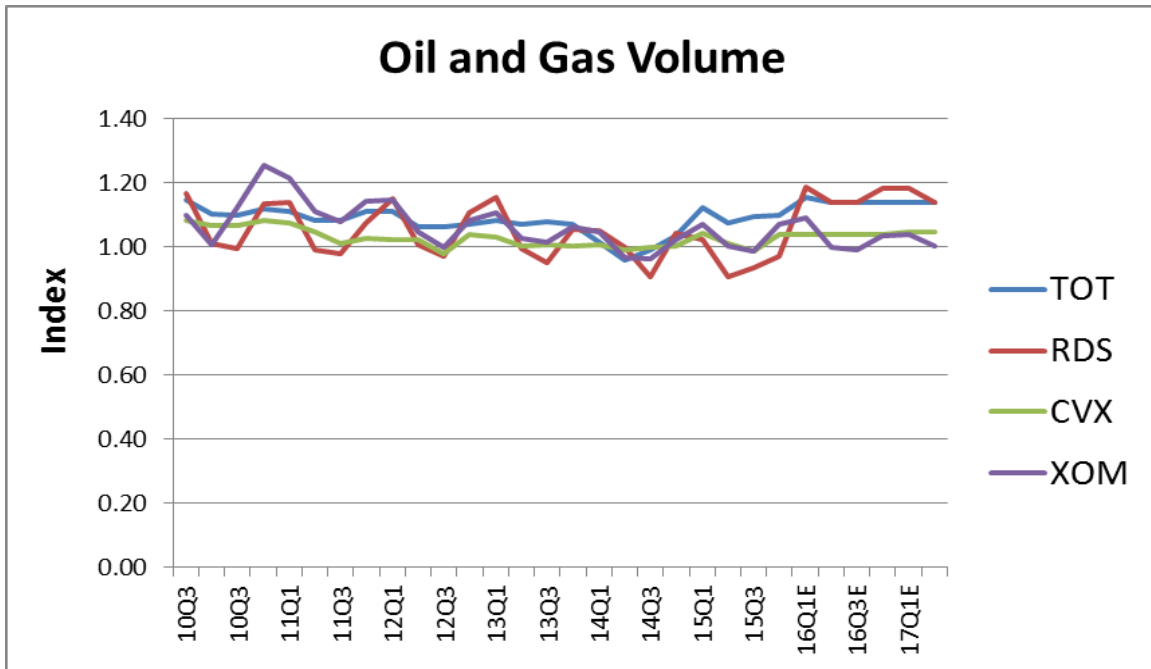


# Industry Idea

Analysis of Oil and Gas Stocks

August 1, 2016

Intraday



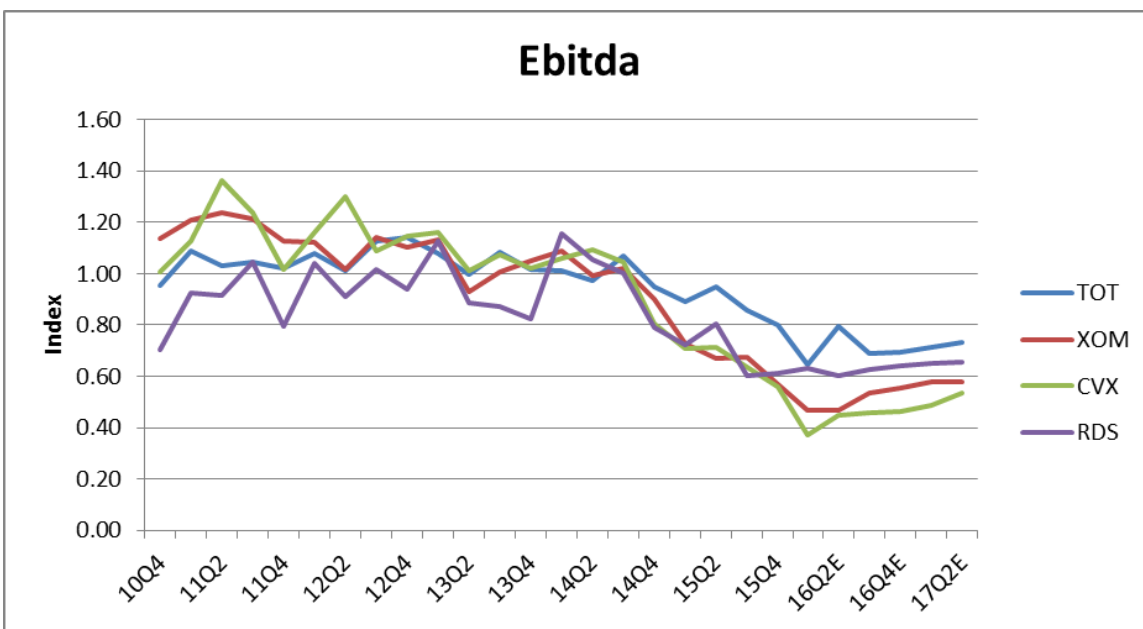
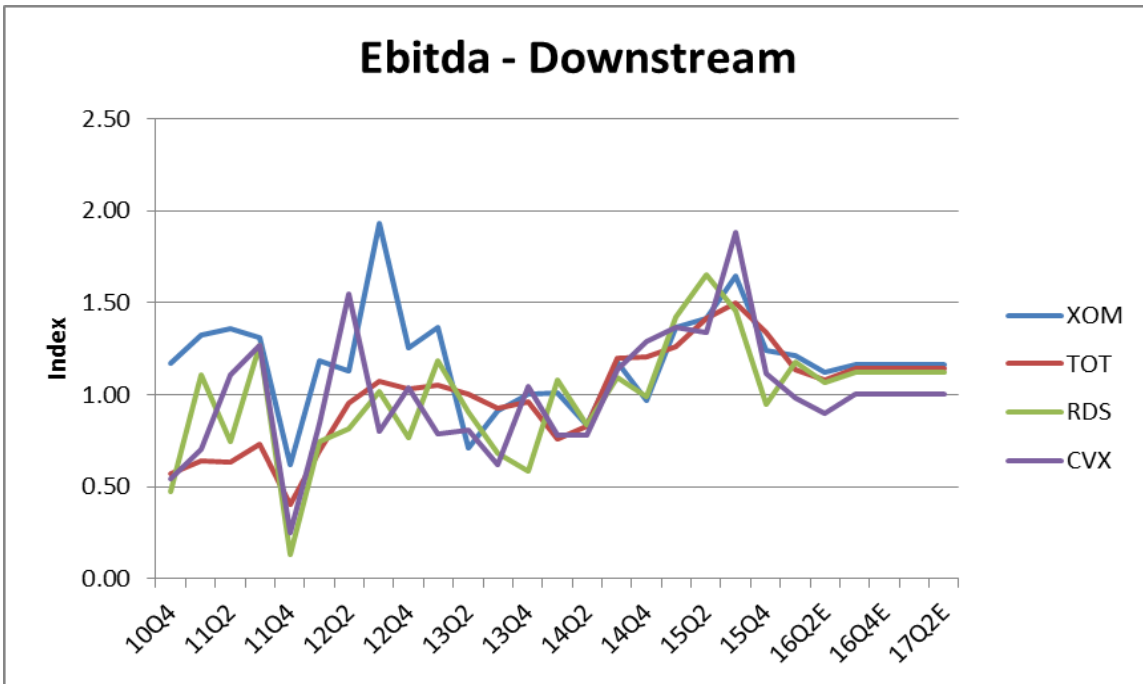


# Industry Idea

Analysis of Oil and Gas Stocks

August 1, 2016

Intraday





# Industry Idea

Analysis of Oil and Gas Stocks

August 1, 2016

Intraday

Chevron										
Next Twelve Months Operating and Financial Estimates										
	Q2	Year	Q1	Q2	Q3E	Q4E	Year	Q1E	Q2E	Next
	6/30/15	2015E	3/31/16	6/30/16	9/30/16	12/31/16	2016E	3/31/17	6/30/17	Twelve Months
										6/30/17
<b>Volume</b>										
Natural Gas (mmcf)										
U.S.	1,312	<b>1,310</b>	1,266	1,266	1,266	1,266	<b>1,266</b>	1,279	1,279	<b>1,272</b>
Rest of World	3,931	<b>3,959</b>	4,044	4,044	4,044	4,044	<b>4,044</b>	4,084	4,084	<b>4,064</b>
Total	5,243	<b>5,269</b>	5,310	5,310	5,310	5,310	<b>5,310</b>	5,363	5,363	<b>5,336</b>
Oil (mbd)	1,722	<b>1,744</b>	1,781	1,781	1,781	1,781	<b>1,781</b>	1,799	1,799	<b>1,790</b>
Total gas & oil (mmb)	236	<b>957</b>	240	243	245	245	<b>973</b>	242	245	<b>978</b>
Total gas & oil (mbd)	2,596	<b>2,622</b>	2,666	2,666	2,666	2,666	<b>2,666</b>	2,693	2,693	<b>2,679</b>
<b>Price</b>										
Natural gas (\$/mcf)										
Henry Hub (\$/mmbtu)	2.66	<b>2.67</b>	2.09	1.95	2.82	3.10	<b>2.49</b>	3.40	3.06	<b>3.10</b>
U.S.	1.92	<b>1.92</b>	1.32	1.21	1.75	1.82	<b>1.53</b>	2.00	1.80	<b>1.84</b>
Rest of World	4.48	<b>4.53</b>	3.91	3.93	4.00	4.00	<b>3.96</b>	4.00	4.00	<b>4.00</b>
Total	3.84	<b>3.88</b>	3.29	3.28	3.46	3.48	<b>3.38</b>	3.52	3.47	<b>3.49</b>
Oil (\$/bbl)										
WTI Cushing	57.94	<b>48.79</b>	33.47	45.66	42.65	43.09	<b>41.22</b>	45.03	46.21	<b>44.25</b>
Worldwide	55.17	<b>45.39</b>	28.41	38.93	36.37	36.74	<b>35.14</b>	38.39	41.59	<b>38.27</b>
Total gas & oil (\$/bbl)	44.35	<b>37.99</b>	25.54	32.54	31.19	31.47	<b>30.21</b>	32.66	34.70	<b>32.51</b>
<b>Revenue (\$mm)</b>										
Natural Gas										
U.S.	229	<b>917</b>	150	139	204	212	<b>706</b>	230	209	<b>855</b>
Rest of World	1,603	<b>6,552</b>	1,423	1,446	1,488	1,488	<b>5,846</b>	1,470	1,487	<b>5,934</b>
Total	1,832	<b>7,469</b>	1,573	1,586	1,692	1,701	<b>6,551</b>	1,700	1,696	<b>6,788</b>
Oil	8,645	<b>28,887</b>	4,554	6,309	5,959	6,019	<b>22,841</b>	6,216	6,808	<b>25,001</b>
Other	29,880	<b>102,121</b>	17,426	21,387	21,387	21,387	<b>81,588</b>	21,387	21,387	<b>85,550</b>
Total	40,357	<b>138,477</b>	23,553	29,282	29,038	29,107	<b>110,980</b>	29,303	29,891	<b>117,339</b>
<b>Expense (\$mm)</b>										
Production	5,023	<b>17,903</b>	3,829	4,579	4,415	4,415	<b>17,237</b>	4,362	4,411	<b>17,602</b>
Other	27,210	<b>90,757</b>	15,463	19,590	19,387	19,387	<b>73,828</b>	19,387	19,387	<b>77,550</b>
<b>Ebitda (\$mm)</b>										
Exploration and Production	5,454	<b>18,452</b>	2,299	3,316	3,236	3,305	<b>12,155</b>	3,554	4,093	<b>14,187</b>
Other	2,670	<b>11,365</b>	1,963	1,797	2,000	2,000	<b>7,760</b>	2,000	2,000	<b>8,000</b>
Total Ebitda	8,124	<b>29,817</b>	4,262	5,113	5,236	5,305	<b>19,915</b>	5,554	6,093	<b>22,187</b>
Exploration	1,075	<b>3,340</b>	370	214	214	214	<b>1,012</b>	400	400	<b>1,228</b>
Deprec., Deplet., & Amort.	4,248	<b>16,957</b>	4,208	3,891	4,000	4,000	<b>16,099</b>	4,400	4,400	<b>16,800</b>
<b>Ebit</b>	2,801	<b>9,520</b>	(316)	1,008	1,022	1,091	<b>2,804</b>	754	1,293	<b>4,159</b>
Interest	-	-	-	-	-	-	-	-	-	-
<b>Ebt</b>	2,801	<b>9,520</b>	(316)	1,008	1,022	1,091	<b>2,804</b>	754	1,293	<b>4,159</b>
Income Tax	980	<b>3,332</b>	(111)	353	358	382	<b>981</b>	264	452	<b>1,456</b>
<b>Net Income (\$mm)</b>										
Exploration and Production	637	<b>1,394</b>	(1,076)	109						
Other	1,349	<b>5,844</b>	893	814						
Unallocated	(165)	<b>(1,050)</b>	(23)	(268)						
Total	1,821	<b>6,188</b>	(206)	655	664	709	<b>1,823</b>	490	840	<b>2,703</b>
<b>Shares (millions)</b>	1,877	<b>1,875</b>	1,870	1,872	1,872	1,872	<b>1,872</b>	1,872	1,872	<b>1,872</b>
Per share (\$)	0.97	<b>3.30</b>	(0.11)	0.35	0.35	0.38	<b>0.97</b>	0.26	0.45	<b>1.44</b>
Ebitda Margin (E&P)	52%	<b>51%</b>	38%	42%	42%	43%	<b>41%</b>	45%	48%	<b>45%</b>
Tax Rate	35%	<b>35%</b>	35%	35%	35%	35%	<b>35%</b>	35%	35%	<b>35%</b>



# Industry Idea

Analysis of Oil and Gas Stocks

August 1, 2016

Intraday

Exxon Mobil Corporation										
Next Twelve Months Operating and Financial Estimates										
	Q2	Year	Q1	Q2	Q3E	Q4E	Year	Q1E	Q2E	Next Twelve Months
	6/30/15	2015	3/31/16	6/30/16	9/30/16	12/31/16	2016E	3/31/17	6/30/17	6/30/17
<b>Volume</b>										
Natural Gas (mmcf)										
North America	3,415	<b>3,407</b>	3,418	3,354	3,320	3,287	<b>3,345</b>	3,254	3,222	<b>3,304</b>
Overseas	6,713	<b>7,107</b>	7,306	6,408	6,139	7,167	<b>6,753</b>	7,233	6,344	<b>6,735</b>
Total	10,128	<b>10,515</b>	10,724	9,762	9,459	10,454	<b>10,097</b>	10,487	9,566	<b>10,039</b>
Oil (mbd)	2,291	<b>2,346</b>	2,538	2,330	2,344	2,358	<b>2,392</b>	2,372	2,386	<b>2,351</b>
Total gas & oil (mmb)	362	<b>1,496</b>	389	360	361	377	<b>1,487</b>	371	362	<b>1,469</b>
Total gas & oil (mbd)	3,979	<b>4,098</b>	4,325	3,957	3,921	4,100	<b>4,075</b>	4,120	3,981	<b>4,024</b>
<b>Price</b>										
Natural gas (\$/mcf)										
Henry Hub (\$/mmbtu)	2.66	<b>2.67</b>	2.09	1.95	2.82	3.10	<b>2.49</b>	3.40	3.06	<b>2.82</b>
U.S.	2.31	<b>2.26</b>	1.60	1.74	2.51	2.77	<b>2.15</b>	3.40	3.06	<b>2.60</b>
International	6.49	<b>6.57</b>	4.80	4.06	5.00	5.00	<b>4.72</b>	5.00	5.00	<b>4.78</b>
Total	5.08	<b>5.17</b>	3.78	3.26	4.13	4.30	<b>3.87</b>	4.50	4.35	<b>4.06</b>
Oil (\$/bbl)										
WTI Cushing	57.94	<b>48.79</b>	33.47	45.66	42.65	43.09	<b>41.22</b>	45.03	46.21	<b>44.11</b>
Worldwide	56.90	<b>45.75</b>	28.36	40.72	38.04	38.43	<b>36.25</b>	39.61	40.65	<b>39.19</b>
Total gas & oil (\$/bbl)	45.69	<b>39.46</b>	26.01	32.03	32.70	33.05	<b>30.88</b>	34.27	34.81	<b>33.02</b>
<b>Revenue (\$mm)</b>										
Natural Gas										
U.S.	718	<b>2,812</b>	492	531	768	836	<b>2,627</b>	997	896	<b>3,133</b>
International	3,965	<b>17,039</b>	3,156	2,367	2,824	3,297	<b>11,644</b>	3,255	2,886	<b>11,743</b>
Total	4,682	<b>19,852</b>	3,648	2,899	3,592	4,133	<b>14,272</b>	4,252	3,783	<b>14,875</b>
Oil	11,863	<b>39,166</b>	6,479	8,634	8,203	8,336	<b>31,652</b>	8,457	8,827	<b>33,630</b>
Other	57,568	<b>209,864</b>	38,580	46,162	46,162	46,162	<b>177,066</b>	46,162	46,162	<b>184,647</b>
Total	74,113	<b>268,882</b>	48,707	57,694	57,957	58,631	<b>222,989</b>	58,870	58,772	<b>233,152</b>
<b>Expense (\$mm)</b>										
Production	10,131	<b>34,118</b>	6,450	7,541	6,853	7,167	<b>28,012</b>	7,045	6,883	<b>28,607</b>
Other	52,592	<b>189,971</b>	34,307	42,226	42,062	42,062	<b>160,657</b>	42,062	42,062	<b>168,412</b>
<b>Ebitda (\$mm)</b>										
Exploration and Production	6,414	<b>24,900</b>	3,677	3,991	4,942	5,302	<b>17,912</b>	5,663	5,727	<b>19,898</b>
Other	4,976	<b>19,893</b>	4,273	3,936	4,100	4,100	<b>16,408</b>	4,100	4,100	<b>16,236</b>
Total Ebitda	11,390	<b>44,793</b>	7,950	7,926	9,042	9,402	<b>34,320</b>	9,763	9,827	<b>36,133</b>
Exploration	392	<b>1,570</b>	344	449	449	449	<b>1,691</b>	449	449	<b>1,796</b>
Deprec., Deplet., & Amort.	4,451	<b>18,048</b>	4,765	4,765	4,765	4,765	<b>19,060</b>	4,765	4,765	<b>19,060</b>
<b>Ebit</b>	6,547	<b>25,175</b>	2,841	2,712	3,828	4,188	<b>13,569</b>	4,549	4,613	<b>15,277</b>
Interest	85	<b>311</b>	77	77	77	77	<b>308</b>	77	77	<b>308</b>
<b>Ebt</b>	6,462	<b>24,864</b>	2,764	2,635	3,751	4,111	<b>13,261</b>	4,472	4,536	<b>14,969</b>
Income Tax	2,262	<b>8,702</b>	967	922	1,313	1,439	<b>4,641</b>	1,565	1,588	<b>5,239</b>
<b>Net Income (\$mm)</b>										
Exploration and Production	2,031	<b>7,101</b>	(76)	294						
Other	2,752	<b>10,975</b>	2,261	2,042						
Unallocated	(583)	<b>(1,915)</b>	(388)	(623)						
Total	4,200	<b>16,161</b>	1,797	1,713	2,438	2,672	<b>8,620</b>	2,907	2,949	<b>9,730</b>
<b>Shares (millions)</b>	4,200	<b>4,198</b>	4,178	4,178	4,178	4,178	<b>4,178</b>	4,178	4,178	<b>4,178</b>
Per share (\$)	1.00	<b>3.85</b>	0.43	0.41	0.58	0.64	<b>2.06</b>	0.70	0.71	<b>2.33</b>
Ebitda Margin (E&P)	39%	<b>42%</b>	36%	35%	42%	43%	<b>39%</b>	45%	45%	<b>41%</b>
Tax Rate	35%	<b>35%</b>	35%	35%	35%	35%	<b>35%</b>	35%	35%	<b>35%</b>



# Industry Idea

Analysis of Oil and Gas Stocks

August 1, 2016

Intraday

Royal Dutch/Shell										
Next Twelve Months Operating and Financial Estimates										
(includes BG Group in 2016)										
	Q2	Year	Q1	Q2	Q3E	Q4E	Year	Q1E	Q2E	Next
	6/30/15	2015	3/31/16	6/30/16	9/30/16	12/31/16	2016E	3/31/17	6/30/17	Twelve Months
										6/30/17
<b>Volume</b>										
Natural Gas (mmcf)										
Americas	1,418	<b>1,400</b>	1,593	1,527	1,527	1,527	<b>1,543</b>	1,527	1,527	<b>1,527</b>
Rest of World	6,116	<b>6,979</b>	9,312	8,699	8,699	9,500	<b>9,052</b>	9,500	8,699	<b>9,098</b>
Total	7,534	<b>8,380</b>	10,905	10,226	10,226	11,027	<b>10,595</b>	11,027	10,226	<b>10,625</b>
Days	91	<b>365</b>	90	91	92	92	<b>365</b>	90	91	<b>365</b>
Oil (mmb)	130	<b>551</b>	160	159	161	161	<b>640</b>	157	159	<b>637</b>
Oil (mmbd)	1,432	<b>1,509</b>	1,781	1,745	1,745	1,745	<b>1,754</b>	1,745	1,745	<b>1,745</b>
Total gas & oil (mmb)	245	<b>1,060</b>	324	314	317	330	<b>1,285</b>	322	314	<b>1,283</b>
Total gas & oil (mbd)	2,688	<b>2,905</b>	3,599	3,449	3,449	3,583	<b>3,520</b>	3,583	3,449	<b>3,516</b>
<b>Price</b>										
Natural gas (\$/mcf)										
Henry Hub (\$/mmbtu)	2.66	<b>2.67</b>	2.09	1.95	2.82	3.10	<b>2.49</b>	3.40	3.06	<b>2.82</b>
Americas	2.25	<b>2.35</b>	1.69	1.59	2.30	2.53	<b>2.03</b>	2.77	2.48	<b>2.29</b>
Rest of World	4.95	<b>5.34</b>	4.27	3.49	4.10	4.10	<b>4.00</b>	4.10	4.10	<b>3.96</b>
Total	4.44	<b>4.84</b>	3.89	3.21	3.83	3.88	<b>3.71</b>	3.92	3.86	<b>3.72</b>
Oil (\$/bbl)										
WTI Cushing	57.94	<b>48.79</b>	33.47	45.66	42.65	43.09	<b>41.22</b>	45.03	46.21	<b>44.11</b>
Worldwide	55.84	<b>46.39</b>	29.49	39.59	36.99	37.36	<b>35.85</b>	39.05	40.07	<b>38.24</b>
Total gas & oil (\$/bbl)	42.20	<b>38.05</b>	26.38	29.54	30.07	30.14	<b>29.03</b>	31.07	31.71	<b>30.21</b>
<b>Revenue (\$mm)</b>										
Natural Gas										
Americas	290	<b>1,200</b>	242	221	323	355	<b>1,141</b>	380	345	<b>1,279</b>
Rest of World	2,754	<b>13,601</b>	3,576	2,766	3,281	3,583	<b>13,206</b>	3,506	3,246	<b>13,136</b>
Total	3,044	<b>14,801</b>	3,818	2,987	3,604	3,938	<b>14,347</b>	3,886	3,591	<b>14,415</b>
Oil	7,277	<b>25,544</b>	4,727	6,287	5,938	5,998	<b>22,949</b>	6,132	6,363	<b>24,355</b>
Other	62,081	<b>224,614</b>	40,009	49,141	49,141	49,141	<b>187,433</b>	51,400	51,400	<b>198,824</b>
Total	72,402	<b>264,960</b>	48,554	58,415	58,683	59,078	<b>224,729</b>	61,418	61,354	<b>237,593</b>
<b>Expense (\$mm)</b>										
Ebitda (\$mm)										
Exploration and Production	6,245	<b>21,798</b>	5,318	5,288	5,416	5,651	<b>21,673</b>	5,826	5,873	<b>22,181</b>
Other	5,751	<b>19,086</b>	4,103	3,725	3,900	3,900	<b>15,628</b>	3,900	3,900	<b>15,425</b>
Total Ebitda	11,996	<b>40,885</b>	9,421	9,013	9,316	9,551	<b>37,301</b>	9,726	9,773	<b>37,606</b>
Exploration	964	<b>3,313</b>	457	535	535	535	<b>2,062</b>	535	535	<b>2,140</b>
Deprec., Deplet., & Amort.	4,673	<b>19,258</b>	6,147	6,097	6,097	6,097	<b>24,438</b>	6,097	6,500	<b>24,388</b>
Other non cash		-					-			-
Ebit	6,359	<b>18,314</b>	2,817	2,381	2,684	2,919	<b>10,801</b>	3,094	2,738	<b>11,078</b>
Interest	466	<b>1,799</b>	370	770	770	770	<b>2,680</b>	600	600	<b>2,910</b>
Ebt	5,893	<b>16,515</b>	2,447	1,611	1,914	2,149	<b>8,121</b>	2,494	2,138	<b>8,168</b>
Income Tax	2,063	<b>5,780</b>	856	564	670	752	<b>2,842</b>	873	748	<b>2,859</b>
<b>Net Income (\$mm)</b>										
Exploration and Production	1,037		(443)	(457)						
Other	2,961		2,010	1,816						
Unallocated	(168)		24	(312)						
Total	3,830	<b>10,734</b>	1,591	1,047	1,244	1,397	<b>5,279</b>	1,621	1,390	<b>5,309</b>
Shares (millions)	3,192	<b>3,195</b>	3,615	4,027	4,027	4,027	<b>3,893</b>	3,965	3,965	<b>4,008</b>
Per share (\$)	1.20	<b>3.36</b>	0.44	0.26	0.31	0.35	<b>1.36</b>	0.41	0.35	<b>1.32</b>
Ebitda Margin (E&P)	61%	<b>54%</b>	62%	57%	57%	57%	<b>58%</b>	58%	59%	<b>57%</b>
Tax Rate	35%	<b>35%</b>	35%	35%	35%	35%	<b>35%</b>	35%	35%	<b>35%</b>



# Industry Idea

Analysis of Oil and Gas Stocks

August 1, 2016

Intraday

Total S.A.										
Next Twelve Months Operating and Financial Estimates										
	Q2	Year	Q1	Q2	Q3E	Q4E	Year	Q1E	Q2E	Twelve
	6/30/15	2015	3/31/16	6/30/16	9/30/16	12/31/16	2016	3/31/17	6/30/17	Months
										6/30/17
<b>Volume</b>										
Natural Gas (mmcf)	5,910	<b>6,053</b>	6,441	6,466	6,466	6,466	<b>6,460</b>	6,466	6,466	<b>6,466</b>
Oil (mbd)	1,215	<b>1,237</b>	1,286	1,253	1,253	1,253	<b>1,261</b>	1,253	1,253	<b>1,253</b>
Total gas & oil (mmb)	200	<b>820</b>	212	212	214	214	<b>853</b>	210	212	<b>851</b>
Total gas & oil (mbd)	2,200	<b>2,246</b>	2,360	2,331	2,331	2,331	<b>2,338</b>	2,331	2,331	<b>2,331</b>
<b>Price</b>										
Dollar (euro/\$)	1.11	<b>1.11</b>	1.10	1.13	1.12	1.12	<b>1.12</b>	1.12	1.12	<b>1.12</b>
Natural gas (\$/mmbtu)	4.67	<b>4.75</b>	3.46	3.43	3.50	3.50	<b>3.47</b>	3.50	3.50	<b>3.50</b>
Oil (\$/bbl)										
WTI Cushing	57.94	<b>48.79</b>	33.47	45.66	42.65	43.09	<b>41.22</b>	45.03	46.21	<b>44.25</b>
Brent	61.90	<b>52.53</b>	33.90	45.60	42.60	43.03	<b>41.28</b>	45.10	46.29	<b>44.26</b>
Company	58.20	<b>45.69</b>	31.00	43.00	40.17	40.58	<b>38.93</b>	42.53	43.65	<b>41.72</b>
Total gas & oil (\$/bbl)	44.69	<b>38.87</b>	26.34	32.63	31.31	31.53	<b>30.46</b>	32.58	33.18	<b>32.14</b>
Europe (\$/t)	54.10	<b>48.53</b>	35.10							-
<b>Revenue (mm)</b>										
Natural gas	2,512	<b>10,490</b>	2,006	2,018	2,082	2,082	<b>8,188</b>	2,037	2,059	<b>8,260</b>
Oil	6,435	<b>21,368</b>	3,588	4,903	4,631	4,678	<b>17,800</b>	4,796	4,977	<b>19,082</b>
Total production	8,946	<b>31,858</b>	5,594	6,921	6,713	6,760	<b>25,988</b>	6,833	7,036	<b>27,342</b>
Other	35,769	<b>133,499</b>	27,247	30,294	30,294	30,294	<b>118,129</b>	30,294	30,294	<b>121,175</b>
Total	44,715	<b>165,357</b>	32,841	37,215	37,007	37,054	<b>144,116</b>	37,127	37,330	<b>148,517</b>
<b>Expense</b>										
Production	3,808	<b>13,509</b>	2,449	2,391	3,216	3,216	<b>11,273</b>	3,146	3,181	<b>12,760</b>
Other	32,796	<b>121,912</b>	24,863	28,032	27,894	27,894	<b>108,683</b>	27,894	27,894	<b>111,575</b>
<b>Ebitda (mm)</b>										
Production	5,138	<b>18,349</b>	3,144	4,530	3,497	3,544	<b>14,715</b>	3,687	3,855	<b>14,582</b>
Other	2,973	<b>11,587</b>	2,384	2,262	2,400	2,400	<b>9,446</b>	2,400	2,400	<b>9,600</b>
Total Ebitda	8,111	<b>29,936</b>	5,528	6,792	5,897	5,944	<b>24,161</b>	6,087	6,255	<b>24,182</b>
Exploration	352	<b>1,991</b>	194	536	536	536	<b>1,802</b>	536	536	<b>2,144</b>
Deprec., Deplet., & Amort.	2,831	<b>11,078</b>	2,672	2,768	2,768	2,768	<b>10,976</b>	2,768	2,768	<b>11,072</b>
Excess tax and other	864	<b>3,697</b>	892	1,509						
<b>Operating Income</b>										
Upstream	1,995	<b>5,423</b>	142	580						
Downstream	2,069	<b>7,747</b>	1,628	1,399						
Marketing and services	465	<b>2,098</b>	331	434						
Total operating income	4,064	<b>13,170</b>	1,770	1,979						
Excess tax and other	(864)	<b>(3,697)</b>	(892)	(1,509)						
<b>Ebit</b>										
Ebit	4,928	<b>16,867</b>	2,662	3,488	2,593	2,640	<b>11,383</b>	2,783	2,951	<b>10,966</b>
Interest	203	<b>855</b>	204	194	194	194	<b>786</b>	194	194	<b>776</b>
<b>Ebt</b>										
Ebt	4,725	<b>16,012</b>	2,458	3,294	2,399	2,446	<b>10,597</b>	2,589	2,757	<b>10,190</b>
Income Tax	1,654	<b>5,604</b>	860	1,153	839	856	<b>3,709</b>	906	965	<b>3,566</b>
<b>Net Income (mm)</b>										
Net Income	3,071	<b>10,408</b>	1,598	2,141	1,559	1,590	<b>6,888</b>	1,683	1,792	<b>6,623</b>
<b>Shares (millions)</b>										
Shares	2,292	<b>2,303</b>	2,350	2,379	2,379	2,379	<b>2,372</b>	2,379	2,379	<b>2,379</b>
<b>Per share</b>										
Per share	1.34	<b>4.52</b>	0.68	0.90	0.66	0.67	<b>2.90</b>	0.71	0.75	<b>2.78</b>
Ebitda Margin (E&P)	57%	<b>58%</b>	56%	65%	52%	52%	<b>57%</b>	54%	55%	<b>53%</b>
Tax Rate	35%	<b>35%</b>	35%	35%	35%	35%	<b>35%</b>	35%	35%	<b>35%</b>



# Industry Idea

Analysis of Oil and Gas Stocks

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Intraday

<b>Chevron Corporation</b>					
<b>Functional Cash Flow and Present Value</b>					
	<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>	
North American Natural Gas	380	7.5	18.4	7,000	2%
Rest of World Natural Gas	2,650	12.8	16.2	43,000	14%
Oil	11,160	8.1	18.6	208,000	65%
Downstream	8,000		7.5	60,000	19%
	22,190	9.2	14.3	318,000	100%
Debt (US\$mm)					65,000
Net Present Value (US\$mm)					253,000
Shares (mm)					1,872
Net Present Value - Standard Estimate (US\$/sh)					135
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					123

<b>Exxon Mobil Corporation</b>					
<b>Functional Cash Flow and Present Value</b>					
	<i>NTM</i>	<i>Adjusted</i>	<i>PV/</i>	<i>Present</i>	
	<i>Ebitda</i>	<i>R/P</i>	<i>Ebitda</i>	<i>Value</i>	
North American Natural Gas	1,300	14.4	24.6	32,000	6%
Rest of World Natural Gas	4,800	14.3	16.9	81,000	16%
Oil	13,800	14.7	20.2	279,000	54%
Downstream	16,240		7.4	120,000	23%
	36,140	14.5	14.2	512,000	100%
Debt					94,000
Net Present Value (\$mm)					418,000
Shares					4,178
Net Present Value - Standard Estimate (US\$/sh)					100
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					95



<b>Royal Dutch Shell plc</b>					
<b>Functional Cash Flow and Present Value</b>					
				<i>Present</i>	
	<i>NTM Ebitda</i>	<i>Adjusted</i>	<i>PV/</i>	<i>Value</i>	
	<i>(US\$mm)</i>	<i>R/P</i>	<i>Ebitda</i>	<i>(US\$mm)</i>	
North American Natural Gas	730	2.7	11.0	8,000	2%
Rest of World Natural Gas	7,520	9.4	12.5	94,000	21%
Oil	13,940	8.9	17.6	245,000	54%
Downstream	15,420		7.1	110,000	24%
	37,610	9.8	12.2	457,000	100%
Debt (US\$mm)					136,000
Net Present Value (US\$mm)					321,000
Shares (mm)					4,008
Net Present Value - Standard Estimate (US\$/sh)					80
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					79

<b>Total</b>					
<b>Functional Cash Flow and Present Value</b>					
				<i>Present</i>	
	<i>NTM Ebitda</i>	<i>Adjusted</i>	<i>PV/</i>	<i>Value</i>	
	<i>(US\$mm)</i>	<i>R/P</i>	<i>Ebitda</i>	<i>(US\$mm)</i>	
Rest of World Natural Gas	4,410	10.8	12.2	54,000	20%
Oil	10,180	9.1	15.5	158,000	58%
Downstream	9,610		6.3	61,000	22%
	24,200	9.9	11.3	273,000	100%
Debt (US\$mm)					59,000
Net Present Value (US\$mm)					214,000
Shares (mm)					2,379
Net Present Value - Standard Estimate (US\$/sh)					90
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					104



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Symbol/Rating	Price (US\$/sh) 1-Aug 2016	EV/ Market Cap	Enterprise Value (\$mm)	Present Value by Segment (%)					Dist. Yield NTM (%)	McDep Ratio	
				North Amer.	Rest of World	Oil Prod'n	Down- stream				
				Natural Gas	Natural Gas						
<b>Global Integrated</b>											
Exxon Mobil Corporation	XOM	87.12	1.26	458,000	6	16	54	23	3.4	0.89	
Chevron Corporation	CVX	100.95	1.35	254,000	2	14	65	19	4.2	0.80	
Royal Dutch Shell	RDS-A B	50.23	1.68	338,000	2	21	54	24	7.5	0.74	
Total S.A.	TOT B	47.27	1.53	172,000			20	58	22	5.8	0.63
<i>Total or Median</i>			<i>1.44</i>	<i>1,222,000</i>			<i>56</i>	<i>23</i>	<i>5.0</i>	<i>0.77</i>	
<b>Large Independent</b>											
Devon Energy Corporation	DVN	36.72	1.63	29,400	25		65	9	0.7	1.07	
EOG Resources, Inc.	EOG	80.06	1.17	51,100	10	2	88		0.8	1.06	
Occidental Petroleum Corp.	OXY	74.09	1.17	66,100	3	2	85	10	4.0	0.99	
Marathon Oil Corporation	MRO B	13.13	1.62	17,900	9	2	89		1.5	0.76	
ConocoPhillips	COP B	39.96	1.80	89,000	13	13	75		2.5	0.71	
<i>Total or Median</i>			<i>1.62</i>	<i>254,000</i>	<i>10</i>		<i>85</i>		<i>1.5</i>	<i>0.99</i>	
<b>Small Independent</b>											
Cimarex Energy Company	XEC	117.28	1.11	12,100	32		68		0.3	1.26	
Range Resources	RRC	39.33	1.46	9,600	70		30		0.2	0.96	
California Resources	CRC	9.71	19.65	7,300	10		90		-	0.83	
Continental Resources (32%)	CLR B	42.42	1.46	7,300	20		80		-	0.82	
Whiting Petroleum Corporation	WLL	6.68	3.52	6,700	10		90		-	0.81	
<i>Total or Median</i>			<i>1.46</i>	<i>43,000</i>	<i>20</i>		<i>80</i>		<i>-</i>	<i>0.83</i>	
<b>Income</b>											
San Juan Basin Royalty Trust	SJT	6.28	1.00	290	100		-		8.4	0.79	
Cross Timbers Royalty Trust	CRT	18.75	1.00	110	57		43		7.4	0.65	
Sabine Royalty Trust	SBR B	36.75	1.00	540	38		62		6.6	0.61	
Dorchester Minerals, L.P.	DMLP B	14.71	1.00	450	28		72		7.4	0.61	
Permian Basin RT	PBT	6.43	1.00	300	23		77		9.1	0.59	
<i>Total or Median</i>			<i>1.00</i>	<i>1,700</i>	<i>38</i>		<i>62</i>		<i>7.4</i>	<i>0.61</i>	
<b>Canada</b>											
EnCana Corporation	ECA	7.75	2.29	15,100	43		57		0.8	1.11	
Imperial Oil Limited (30%)	IMO	30.15	1.37	10,600	0		64	36	1.5	0.84	
Suncor Energy	SU	26.30	1.36	59,800	-		84	16	3.4	0.80	
Cenovus Energy Inc.	CVE	13.89	1.35	15,600	7		76	16	1.1	0.75	
Birchcliff Energy Ltd.	BIREF B	7.21	1.56	1,700	74		26		-	0.75	
<i>Total or Median</i>			<i>1.37</i>	<i>103,000</i>			<i>64</i>		<i>1.1</i>	<i>0.80</i>	

Estimated present value presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.00 a million btu.  
 Estimated present value capped by unlevered cash flow multiple (EV/Ebitda)  
 McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses  
 For historical research see www.mcdep.com



# Industry Idea

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			<i>Price</i> <i>(US\$/sh)</i>	<i>Shares</i> <i>(mm)</i>	<i>Market</i> <i>Cap</i> <i>(US\$m)</i>	<i>Net</i> <i>Present</i> <i>Value</i> <i>(US\$/sh)</i>	<i>Debt/</i> <i>Present</i> <i>Value</i>	<i>McDep</i> <i>Ratio</i>
	<i>Symbol/Rating</i>		<i>1-Aug</i> <i>2016</i>					
	<i>B = Buy</i>							
<b>Global Integrated</b>								
Exxon Mobil Corporation	XOM		87.12	4,178	364,000	100.00	0.18	0.89
Chevron Corporation	CVX		100.95	1,872	189,000	135.00	0.21	0.80
Royal Dutch Shell	RDS-A	B	50.23	4,008	201,000	80.00	0.30	0.74
Total S.A.	TOT	B	47.27	2,379	113,000	90.00	0.22	0.63
	<i>Total or Median</i>				<i>867,000</i>		<i>0.21</i>	<i>0.77</i>
<b>Large Independent</b>								
Devon Energy Corporation	DVN		36.72	492	18,100	33.00	0.41	1.07
EOG Resources, Inc.	EOG		80.06	547	43,800	75.00	0.15	1.06
Occidental Petroleum Corp.	OXY		74.09	763	56,500	75.00	0.14	0.99
Marathon Oil Corporation	MRO	B	13.13	845	11,090	20.00	0.29	0.76
ConocoPhillips	COP	B	39.96	1,245	50,000	70.00	0.31	0.71
	<i>Total or Median</i>				<i>179,500</i>		<i>0.29</i>	<i>0.99</i>
<b>Small Independent</b>								
Cimarex Energy Company	XEC		117.28	93	10,900	90.00	0.13	1.26
Range Resources	RRC		39.33	167	6,600	42.00	0.30	0.96
California Resources	CRC		9.71	38	400	50.00	0.78	0.83
Continental Resources (32%)	CLR	B	42.42	118	5,000	56.00	0.26	0.82
Whiting Petroleum Corporation	WLL		6.68	285	1,900	12.00	0.58	0.81
	<i>Total or Median</i>				<i>25,000</i>		<i>0.30</i>	<i>0.83</i>
<b>Income</b>								
San Juan Basin Royalty Trust	SJT		6.28	47	290	8.00	-	0.79
Cross Timbers Royalty Trust	CRT		18.75	6	110	29.00	-	0.65
Sabine Royalty Trust	SBR	B	36.75	15	540	60.00	-	0.61
Dorchester Minerals, L.P.	DMLP	B	14.71	31	450	24.00	-	0.61
Permian Basin RT	PBT		6.43	47	300	11.00	-	0.59
	<i>Total or Median</i>				<i>1,700</i>		<i>-</i>	<i>0.61</i>
<b>Canada</b>								
EnCana Corporation	ECA		7.75	850	6,600	6.00	0.63	1.11
Imperial Oil Limited (30%)	IMO		30.15	255	7,700	38.00	0.23	0.84
Suncor Energy	SU		26.30	1,665	43,800	35.00	0.22	0.80
Cenovus Energy Inc.	CVE		13.89	833	11,600	20.00	0.20	0.75
Birchcliff Energy Ltd.	BIREF	B	7.21	153	1,100	11.00	0.27	0.75
	<i>Total or Median</i>				<i>71,000</i>		<i>0.23</i>	<i>0.80</i>
Estimated present value presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.00 a million btu.								
Estimated present value capped by unlevered cash flow multiple (EV/Ebitda)								
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses								
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			<i>Price (US\$/sh)</i>	<i>Adjustd Resrvs/ Prod</i>	<i>PV/ Ebitda</i>	<i>EV/ Ebitda</i>	<i>P/E</i>	<i>Dividend NTM</i>
	<i>Symbol/Rating</i>		<i>1-Aug 2016</i>	<i>NTM</i>	<i>NTM</i>	<i>NTM</i>	<i>NTM</i>	<i>(\$/sh)</i>
		B = Buy						
<b>Global Integrated</b>								
Exxon Mobil Corporation	XOM		87.12	14.5	14.2	12.7	37	3.00
Chevron Corporation	CVX		100.95	9.2	14.3	11.5	70	4.28
Royal Dutch Shell	RDS-A	B	50.23	9.8	12.1	9.0	38	3.76
Total S.A.	TOT	B	47.27	9.9	11.3	7.1	17	2.73
	<i>Median</i>			<i>9.8</i>	<i>13.2</i>	<i>10.2</i>	<i>38</i>	
<b>Large Independent</b>								
Devon Energy Corporation	DVN		36.72	9.2	18.2	19.4		0.24
EOG Resources, Inc.	EOG		80.06	8.1	15.9	16.8		0.67
Occidental Petroleum Corp.	OXY		74.09	8.2	15.7	15.5		3.00
Marathon Oil Corporation	MRO	B	13.13	13.2	20.0	15.1		0.20
ConocoPhillips	COP	B	39.96	11.2	18.6	13.1		1.00
	<i>Median</i>			<i>9.2</i>	<i>18.2</i>	<i>15.5</i>		
<b>Small Independent</b>								
Range Resources	RRC		39.33	14.4	21.0	20.1		0.08
Cimarex Energy Company	XEC		117.28	7.4	15.0	19.0		0.32
Continental Resources (32%)	CLR	B	42.42	11.4	19.4	15.9		-
California Resources	CRC		9.71	11.4	16.3	13.5		-
Whiting Petroleum Corporation	WLL		6.68	9.4	14.9	12.2		-
	<i>Median</i>			<i>11.4</i>	<i>16.3</i>	<i>15.9</i>		
<b>Income</b>								
Sabine Royalty Trust	SBR	B	36.75	9.5	24.6	15.0	15	2.44
Dorchester Minerals, L.P.	DMLP	B	14.71	6.8	20.1	12.3	18	1.09
Cross Timbers Royalty Trust	CRT		18.75	6.6	18.6	12.1	14	1.38
San Juan Basin Royalty Trust	SJT		6.28	9.9	14.6	11.5	12	0.53
Permian Basin RT	PBT		6.43	8.6	18.8	11.0	11	0.58
	<i>Median</i>			<i>8.6</i>	<i>18.8</i>	<i>12.1</i>	<i>14</i>	
<b>Canada</b>								
EnCana Corporation	ECA		7.75	5.4	12.8	14.2		0.06
Imperial Oil Limited (30%)	IMO		30.15	35.8	15.4	12.9		0.46
Cenovus Energy Inc.	CVE		13.89	16.7	16.0	12.1		0.15
Birchcliff Energy Ltd.	BIREF	B	7.21	15.1	15.3	11.5		-
Suncor Energy	SU		26.30	21.6	13.7	11.0		0.89
	<i>Median</i>			<i>16.7</i>	<i>15.3</i>	<i>12.1</i>		
	<i>Grand Median</i>			<i>10</i>	<i>16</i>	<i>13</i>		

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2017; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses For historical research see [www.mcdep.com](http://www.mcdep.com)



# Industry Idea

Analysis of Oil and Gas Stocks

August 1, 2016

Intraday

<b>Table 4</b>										
<b>McDep Energy Stocks</b>										
<b>Total Return Year-to-Date 2016</b>										
<b>Ranked by Unlevered Total Return</b>										
			Price (\$/sh)	Price (\$/sh)	Price Change (%)	Cash Distrib. (%)	Equity Total Return (%)	Unlevered Debt Return (\$/sh) (%)		McDep Ratio
	Symbol/Rat		1-Aug 2016	31-Dec 2015						
<b>Global Integrated</b>										
	XOM		87.12	77.95	12	2	14	23	11	0.89
	CVX		100.95	89.96	12	2	15	35	11	0.80
	RDS-A	B	50.23	45.79	10	4	14	34	8	0.74
	TOT	B	47.27	44.95	5	3	8	25	5	0.63
	<i>Median</i>				11		14		9	0.77
<b>Large Independent</b>										
	EOG		80.06	70.79	13	1	14	13	12	1.06
	OXY		74.09	67.61	10	2	12	13	10	0.99
	DVN		36.72	32.00	15	1	16	23	9	1.07
	MRO	B	13.13	12.58	4	1	5	8	3	0.76
	COP	B	39.96	46.69	(14)	1	(13)	32	(8)	0.71
	<i>Median</i>				10		12		9	0.99
<b>Small Independent</b>										
	CLR	B	42.42	22.98	85	-	85	19	46	0.82
	RRC		39.33	24.62	60	0	60	18	34	0.96
	XEC		117.28	89.38	31	0	31	13	27	1.26
	CRC		9.71	23.30	(58)	-	(58)	181	(7)	0.83
	WLL		6.68	9.44	(29)	-	(29)	17	(11)	0.81
	<i>Median</i>				31		31		27	0.83
<b>Income</b>										
	DMLP	B	14.71	9.89	49	6	55	-	55	0.61
	SJT		6.28	4.14	52	3	54	-	54	0.79
	CRT		18.75	13.01	44	5	49	-	49	0.65
	SBR	B	36.75	26.26	40	4	44	-	44	0.61
	PBT		6.43	5.06	27	3	30	-	30	0.59
	<i>Median</i>				44		49		49	0.61
<b>Canada</b>										
	BIREF	B	7.21	2.93	146	-	146	4	61	0.75
	ECA		7.75	5.09	52	1	53	10	18	1.11
	CVE		13.89	12.62	10	1	11	5	8	0.75
	SU		26.30	25.80	2	2	4	10	3	0.80
	IMO		30.15	32.52	(7)	1	(7)	11	(5)	0.84
	<i>Median</i>				10		11		8	0.80
	<i>Grand Median</i>				13		14		11	0.80
	<b>Natural Gas (\$/mmbtu)</b>		2.82	2.33	21					
	<b>Oil - West Texas Intermediate (\$/bbl)</b>		40.89	37.06	10					
	<b>S&amp;P 500</b>		2,175	2,044	6					

Source: McDep LLC, Yahoo, CME Group, Bloomberg

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