

April 5, 2016

Total S.A. (TOT) Globally Diversified Income

Symbol	TOT	Ebitda Next Twelve Months ending 3/31/17 (US\$mm)	24,600
Rating	Buy	North American Natural Gas/Ebitda (%)	1
Price (US\$/sh)	44.43	Natural Gas and Oil Production/Ebitda (%)	54
Pricing Date	4/4/16	Adjusted Reserves/Production NTM	10.2
Shares (mm)	2329	EV/Ebitda	6.7
Market Capitalization (US\$mm)	103,000	PV/Ebitda	11.0
Debt (US\$mm)	61,000	Undeveloped Reserves (%)	47
Enterprise Value (EV) (US\$mm)	164,000	Natural Gas and Oil Ebitda (US\$/boe)	16.30
Present Value (PV) (US\$mm)	271,000	Present Value Proven Reserves(US\$/boe)	12.77
Net Present Value (US\$/share)	90	Present Value Proven Reserves(US\$/mcfe)	2.13
Debt/Present Value	0.23	Earnings Next Twelve Months (US\$/sh)	2.75
McDep Ratio - EV/PV	0.61	Price/Earnings Next Twelve Months	16
Dividend Yield (%/year)	6.3	Indicated Annual Dividend (US\$/sh)	2.78
Note: Estimated cash flow and e	arnings tied to one	-year futures prices for oil.	
Reported results may vary	widely from estim	nates. Estimated present value per share revised only infreq	uently.
Estimated present value pr	resumes a long-terr	m price for oil of US\$70 a barrel and natural gas, \$4.00 a m	illion btu.
For historical analysis of	TOT since 2004 se	e www.mcdep.com/1tot.htm	

Summary and Recommendation

Trading near \$44 a share compared to our Net Present Value (NPV) of \$90, the stock of Total S.A. (TOT) offers a solid 6% annual dividend yield from well-managed global integrated oil and gas operations. The dividend draws strength from downstream oil products and chemical businesses (23% of NPV) that have profited from recent price declines in natural gas (22% of NPV and oil production (55% of NPV - see table Present Value on page 2). The French company's production is globally diversified with Asia the leading source for natural gas and Africa the leading source for oil (see table <u>Production and Reserves</u> on page 2). Meanwhile, the price decline may be reversing as signaled by futures contracts which drive our forecast of rising revenue, cash flow and earnings from the first quarter low to be reported on April 24 (see table Operating and Financial Estimates on page 3). In his February 2016 presentation to investors, Chairman and Chief Executive Patrick Pouyanne pointed to the company's outperformance in 2015 and to the projects that would fuel further growth in 2016 (see slides Outperforming and Major Projects on page 4). Our analysis confirms the competitive performance (see chart Volume on page 5). Peers face the same improving price trend (see chart Price on page 5). Cost reductions have helped the Ebitda (cash flow) trend (see charts Production Cost and Ebitda – Production on page 6). Rising cash from Downstream helped to secure the dividend trend (see charts Ebitda – Downstream and Dividends on page 7). The quantitative analysis is summarized in the McDep Ratio of 0.61 which we believe justifies our Buy recommendation (see Tables 1-4 on pages 8-11). Optimistically, TOT stock may soon score the positive sign of the golden cross when the 50 day average crosses the 200-day average at around \$45-46 a share (see chart on page 12).

Kurt H. Wulff, CFA



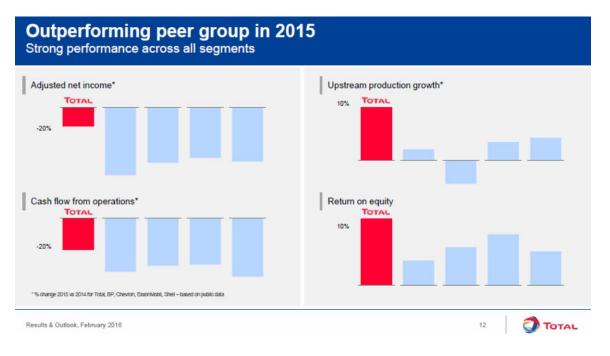
	Total				
Functional Cas	sh Flow and I	Present Val	ue		
				Present	
	NTM Ebitda	Adjusted	<i>PV</i> /	Value	
	<u>(US\$mm)</u>	<u>R/P</u>	<u>Ebitda</u>	<u>(US\$mm)</u>	
Rest of World Natural Gas	5,010	11.6	12.0	60,000	22%
Oil	8,350	9.2	17.8	149,000	55%
Downstream	11,240		5.5	62,000	23%
	24,600	10.2	11.0	271,000	100%
Debt (US\$mm)					61,000
Net Present Value (US\$mm)					210,000
Shares (mm)					2,329
Net Present Value - Standard Estimate (US\$/sh)					90
NPV Approximation by Cash Flow Multiple Depen	nding on Rese	erve Life (US	S\$/sh)		96

			Total S.A	•										
	Production and Reserves, 2015													
							NTM							
			<u>12/31/</u>	2015 Proven R	eserves	Weighted	Adjusted							
	2015 Pro	oduction	Developed	Undeveloped	Weighted	Life Index	R/P							
	<u>(daily)</u>	<u>(annual)</u>	<u>(bcf or mmb)</u>	(bcf or mmb)	(bcf or mmb)	<u>(years)</u>	(years)							
Rest of World Natura	l Gas													
Europe	1,161	424	2,682	1,287	3,326	7.8								
Africa	677	247	1,726	1,503	2,478	10.0								
Americas	896	327	2,153	1,196	2,751	8.4								
Middle East	778	283	5,442	612	5,748	20.3								
Asia	2,542	928	6,607	8,998	11,106	12.0								
Total	6,054	2,209	18,610	13,596	25,408	11.5	11.6							
Oil														
Europe	161	60	262	278	401	6.7								
Africa	542	198	865	628	1,179	6.0								
Americas	95	35	245	1,136	813	23.2								
Middle East	351	128	1,032	250	1,157	9.0								
Asia	88	32	351	558	630	19.7								
Total	1,237	453	2,755	2,850	4,180	9.2	9.2							
Total Oil Equivalent	2,246	821	5,857	5,116	8,415	10.2	10.2							



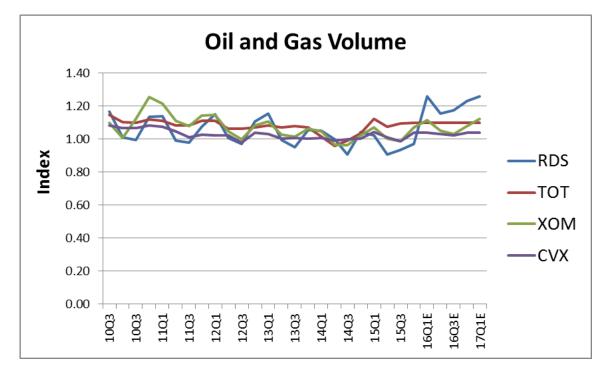
	,	Next Twelv	o Montha (Total S.A		iol Estim	otoc			
	1	Next Twelv	e Months C	operating a	and Finan	ai Estim	ates			Twelve
	Q1	<i>Q</i> 4	Year	Q1E	Q2E	Q3E	Q4E	Year	Q1E	Months
	~	12/31/15	2015	3/31/16	6/30/16	9/30/16	12/31/16	2016	3/31/17	3/31/17
Volume										
Natural Gas (mmcfd)	6,312	5,993	6,053	5,993	5,993	5,993	5,993	5,993	5,993	5,993
Oil (mbd)	1,240	1,251	1,237	1,251	1,251	1,251	1,251	1,251	1,251	1,251
Total gas & oil (mmb)	206	207	820	202	205	207	207	821	202	821
Total gas & oil (mbd)	2,292	2,250	2,246	2,250	2,250	2,250	2,250	2,250	2,250	2,250
Price	2,272	2,200	_,	2,200	2,200	2,200	2,200	_,0	2,200	_,0
Dollar (euro/\$)	1.13	1.10	1.11	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Natural gas (\$/mmbtu)	5.38	4.45	4.75	4.45	4.45	4.45	4.45	4.45	4.45	4.45
Oil (\$/bbl)	5.50	1.15	-1.70	1.15	1.15	1.15	1.15		1.15	
WTI Cushing	48.62	42.21	48.79	33.47	37.26	39.80	41.15	37.92	42.00	40.05
Brent	53.90	43.80	52.53	34.14	38.01	40.59	41.97	38.68	42.84	40.85
Company	49.50	38.10	45.69	29.69	33.06	35.31	36.51	33.64	37.27	35.53
Total gas & oil (\$/bbl)	41.60	33.04	38.87	29.36	30.24	31.49	32.15	30.57	32.58	31.61
Europe (\$/t)	47.10	38.10	48.53	20.50	50.24	51.47	52.15	50.57	52.50	
Revenue (mm)	47.10	36.10	40.55							-
Natural gas	3,056	2,454	10,490	2,400	2,427	2,454	2,454	9,734	2.400	9,734
Oil	5,524	4,385	21,368	3,343	3,764	4,064	4,202	15,372	4,196	16,225
Total production	8,580	6,839	31,858	5,743	6,190	6,517	6,655	25,106	6,596	25,959
Other	33,733	30,910	133,499	30,910	30,910	30,910	30,910	123,642	30,910	123,642
Total	42,313	37,749	165,357	36,654	37,101	37,428	37,566	123,042	37,507	123,042
	42,515	57,749	105,357	30,034	57,101	57,428	37,300	140,/40	37,307	149,001
Expense	2 (00	2 000	12 500	2561	2 1 5 7	2 104	2 1 2 0	12.040	2 100	10 570
Production	3,608	2,800	13,509	3,561	3,157	3,194	3,128	13,040	3,100	12,579
Other	31,082	28,095	121,912	28,095	28,095	28,095	28,095	112,382	28,095	112,382
Ebitda (mm)	4.072	4.020	10 240	2 1 9 2	2.022	2 224	2 5 2 7	12.0/7	2.400	12 200
Production	4,972	4,038	18,349	2,182	3,033	3,324	3,527	12,067	3,496	13,380
Other Total Ebitda	2,651 7,623	2,815	11,587	2,815	2,815	2,815	2,815	11,260	2,815	<u>11,260</u> 24,640
	· ·	6,853	29,936	4,997	5,848	6,139	6,342	23,327	6,311	/
Exploration	637	727	1,991	727	727	727	727	2,908	727	2,908
Deprec., Deplet., & Amort.	2,826	2,732	11,078	2,732	2,732	2,732	2,732	10,928	2,732	10,928
Excess tax and other	351	1,301	3,697							
Operating Income	2 0 2 0	105								
Upstream	2,029	405	5,423							
Downstream	1,780	1,688	7,747							
Marketing and services	445	691	2,098							
Total operating income	3,809	2,093	13,170							
Excess tax and other	(351)	(1,301)	(3,697)					0.40.5		10.05
Ebit	4,160	3,394	16,867	1,538	2,389	2,680	2,883	9,491	2,852	10,804
Interest	188	241	855	241	241	241	241	964	241	964
Ebt	3,972	3,153	16,012	1,297	2,148	2,439	2,642	8,527	2,611	9,840
Income Tax	1,390	1,104	5,604	454	752	854	925	2,984	914	3,444
Net Income (mm)	2,582	2,050	10,408	843	1,396	1,585	1,717	5,543	1,697	6,396
Shares (millions)	2,285	2,329	2,303	2,329	2,329	2,329	2,329	2,329	2,329	2,329
Per share	1.13	0.88	4.52	0.36	0.60	0.68	0.74	2.38	0.73	2.75
Ebitda Margin (E&P)	58%	59%	58%	38%	49%	51%	53%	48%	53%	52%
Tax Rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%

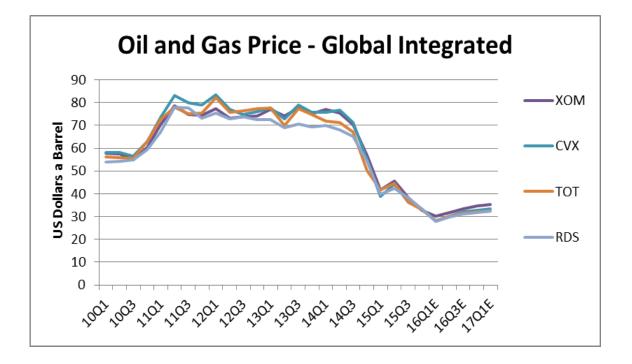




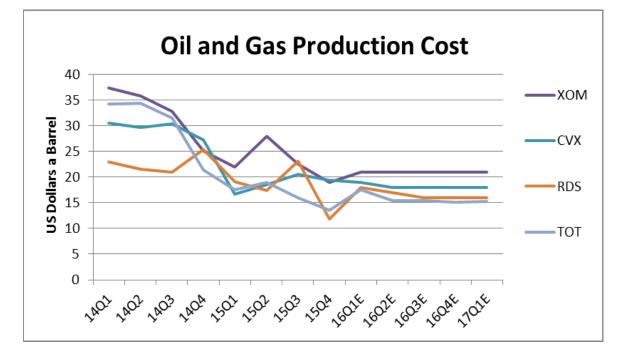


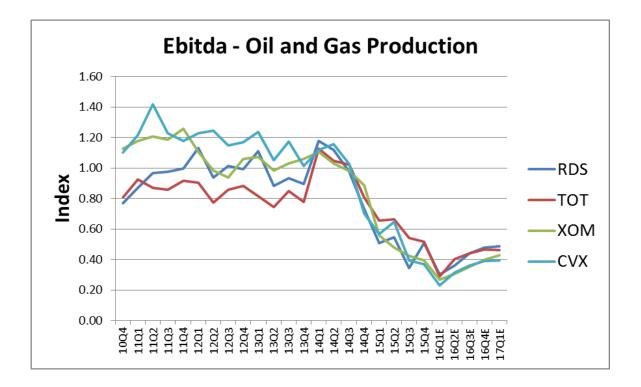




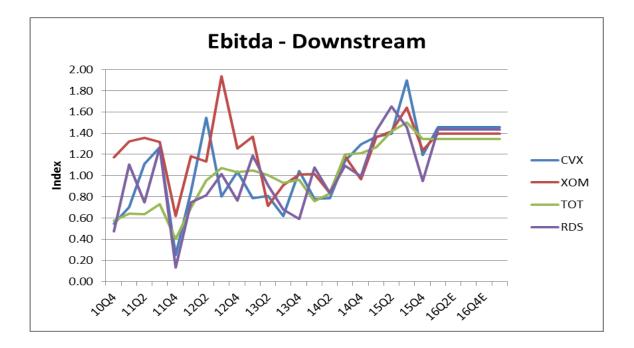


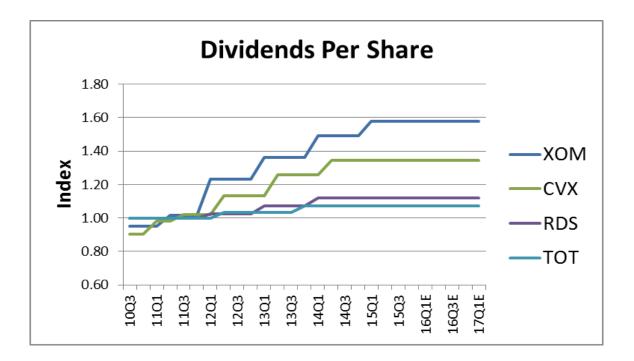














				Ta	ble 1						
			Mcl	Dep En	ergy Stoc	eks					
En	terpris	e V	Value, S	Segmen	ts, Yield a	and Mo	Dep R	atio			
						Prosor	ıt Value b	Segmen	1t (%)		
			Price			North	Rest of	y Segmer	(70)	Dist.	
			(US\$/sh)	EV/	Enterprise	Amer.	World			Yield	
S	mbol/Rati	na	$\frac{(0.5\phi/3n)}{4-Apr}$	Market	Value	Natural		Oil	Down-	NTM	McDep
3y	mboi/Kan	ng	2016	Сар	(\$mm)	Gas		Prod'n		(%)	Ratio
Global Integrated			2010	Cap	(\$mm)	Gas	Gus	Froan	stream	(70)	Кано
Exxon Mobil Corporation	XOM		83.16	1.26	439,000	5	17	58	20	3.5	0.86
Chevron Corporation	CVX		93.43	1.20	237,000	2	11	68	19	4.6	0.30
Royal Dutch Shell (BG pro forma	RDS-A	В		1.55	314,000	1	17	57	26	7.9	0.73
	TOT	B			/	1	22	55	20	6.3	0.71
Total S.A.	101	D	44.48	1.59	165,000		22				
Total or Median				1.47	1,155,000			57	21	5.4	0.73
Large Independent	FOC		70.01	1 10	45 400	C	1	00		1.0	0.05
EOG Resources, Inc.	EOG		70.26	1.18	45,400	9	1	90		1.0	0.95
Occidental Petroleum Corp.	OXY		68.20	1.18	61,900	3	1	87	9	4.4	0.92
Devon Energy Corporation	DVN	_	26.05	1.75	21,700	24		66	10	0.9	0.87
Marathon Oil Corporation	MRO	В		1.84	16,400	6	1	93		1.9	0.67
ConocoPhillips	COP	В	39.10	1.78	86,000	11	12	77		2.6	0.63
Total or Median				1.75	231,000	9		87		1.9	0.87
Small Independent											
Range Resources	RRC		33.05	1.56	8,600	60		40		0.2	1.19
Cimarex Energy Company	XEC		94.77	1.21	10,700	30		70		0.3	1.04
California Resources	CRC		1.16	17.36	7,600	10		90		-	0.84
Continental Resources (32%)	CLR	В	29.18	1.67	5,700	20		80		-	0.64
Whiting Petroleum Corporation	WLL	В	7.80	4.36	6,900	5		95		-	0.60
Total or Median				1.67	40,000	20		80		-	0.84
Income											
San Juan Basin Royalty Trust	SJT		5.04	1.00	240	100		-		4.4	0.63
Permian Basin RT	PBT		6.11	1.00	290	23		77		5.0	0.56
Cross Timbers Royalty Trust	CRT		14.52	1.00	90	52		48		8.1	0.50
Sabine Royalty Trust	SBR	В	29.17	1.00	430	38		62		7.0	0.49
Dorchester Minerals, L.P.	DMLP	В		1.00	340	23		77		7.6	0.46
Total or Median		_		1.00	1,400	38		62		7.0	0.50
Canada					-,						
EnCana Corporation	ECA		5.88	2.56	12,800	50		50		1.0	0.99
Imperial Oil Limited (30%)	IMO		31.47	1.35	10,800	1		73	27	1.4	0.87
Suncor Energy	SU		27.03	1.42	60,600	-		84	16	3.3	0.87
Cenovus Energy Inc.	CVE		12.70	1.42	14,500	7		84	8	1.2	0.33
Birchcliff Energy Ltd.	BIREF	В		2.09	14,500	77		23	0	1.2	0.71
Total or Median	DIKLI	D	5.45	1.42	100,000	11		73		1.2	0.49
10iui 01 Median				1.42	100,000			/3		1.2	0.05
Estimated present value presumes	0		•			l natural ga	as, \$4.00 a	million	otu.		
Estimated present value capped by	r				,						
McDep Ratio = Market cap and D	-		t value of o	oil and gas	and other bus	sinesses					
For historical research see www.r	ncdep.con	1									



			Table 2					
	Mc	Dep	Energy	Stocks				
Net	Presei	nt Va	lue and	McDep	Ratio			
				A				
			Price			Net		
			(US\$/sh)		Market	Present	Debt/	
	Symbol/F	ating	4-Apr	Shares	Cap	Value	Present	McDe
	B	= Buy	2016	(mm)	(US\$mm)	(US\$/sh)	Value	Rati
Global Integrated								
Exxon Mobil Corporation	XOM		83.16	4,183	348,000	100.00	0.18	0.86
Chevron Corporation	CVX		93.43	1,874	175,000	135.00	0.20	0.75
Royal Dutch Shell (BG pro forma)	RDS-A	В	47.74	3,965	189,000	80.00	0.28	0.71
Total S.A.	TOT	В	44.48	2,329	104,000	90.00	0.23	0.61
Total or Median					816,000		0.21	0.73
Large Independent								
EOG Resources, Inc.	EOG		70.26	546	38,400	75.00	0.15	0.95
Occidental Petroleum Corp.	OXY		68.20	766	52,200	75.00	0.14	0.92
Devon Energy Corporation	DVN		26.05	478	12,400	33.00	0.37	0.87
Marathon Oil Corporation	MRO	В	10.52	845	8,890	20.00	0.31	0.67
ConocoPhillips	COP	В	39.10	1,244	49,000	80.00	0.28	0.63
Total or Median				-,	160,900		0.28	0.87
Small Independent					100,000		0.20	0107
Range Resources	RRC		33.05	167	5,500	25.00	0.42	1.19
Cimarex Energy Company	XEC		94.77	93	8,800	90.00	0.18	1.04
California Resources	CRC		1.16	382	400	5.00	0.79	0.84
Continental Resources (32%)	CLR	В	29.18	118	3,500	56.00	0.26	0.64
Whiting Petroleum Corporation	WLL	B	7.80	204	1,600	30.00	0.47	0.60
Total or Median	TT EE	D	7.00	204	20,000	50.00	0.42	0.84
Income					20,000		0.42	0.04
San Juan Basin Royalty Trust	SJT		5.04	47	240	8.00	-	0.63
Permian Basin RT	PBT		6.11	47	240	11.00	-	0.03
Cross Timbers Royalty Trust	CRT		14.52	47 6	290 90	29.00	-	0.50
Sabine Royalty Trust	SBR	В	29.17	15	430	60.00	-	0.30
Dorchester Minerals, L.P.	DMLP	B	10.96	31	340	24.00	-	0.49
Total or Median	DMLP	D	10.90	51	1,400	24.00	-	0.40
Canada					1,400		-	0.50
	ECA		5 00	016	5 000	6.00	0.61	0.00
EnCana Corporation	ECA		5.88	846 255	5,000	6.00	0.61	0.99
Imperial Oil Limited (30%)	IMO		31.47		8,000	38.00	0.22	0.87
Suncor Energy	SU		27.03	1,583	42,800	35.00	0.24	0.83
Cenovus Energy Inc.	CVE	D	12.70	825	10,500	20.00	0.20	0.71
Birchcliff Energy Ltd.	BIREF	В	3.45	154	500	11.00	0.25	0.49
Total or Median					67,000		0.24	0.83
Estimated present value presumes a long-t					natural gas, \$4	4.00 a millio	on btu.	
Estimated present value capped by unlever	ed cash flo	ow mul	tiple (EV/E	bitda)				
McDep Ratio = Market cap and $Debt$ to pr					naccac			



April 5, 2016

			Table 3					
	Mc	Dep	Energy	Stocks				
•	Value N	Mult	iples and	Dividen	nd			
	Ra	nked	by EV/I	Ebitda				
			v					
			Price	Adjustd				
			(US\$/sh)	Resrvs/	<i>PV</i> /	<i>EV</i> /		Dividena
S	ymbol/Ra	ting	4-Apr	Prod	Ebitda	Ebitda	P/E	NTM
	B =	Buy	2016	NTM	NTM	NTM	NTM	(\$/sh
Global Integrated								
Exxon Mobil Corporation	XOM		83.16	13.8	12.9	11.1	30	2.92
Chevron Corporation	CVX		93.43	9.3	12.4	9.3	44	4.28
Royal Dutch Shell (BG pro forma)	RDS-A	B	47.74	9.4	11.0	7.8	30	3.76
Total S.A.	TOT	В	44.48	10.2	11.0	6.7	16	2.78
Median				9.8	11.7	8.6	30	
Large Independent								
EOG Resources, Inc.	EOG		70.26	8.3	22.1	20.9		0.67
Devon Energy Corporation	DVN		26.05	9.3	18.2	15.8	65	0.24
Occidental Petroleum Corp.	OXY		68.20	8.1	16.6	15.3		3.00
Marathon Oil Corporation	MRO	В	10.52	13.1	19.9	13.3		0.20
ConocoPhillips	COP	В	39.10	11.3	19.7	12.4		1.00
Median				9.3	19.7	15.3	65	
Small Independent								
Range Resources	RRC		33.05	14.6	25.3	30.0		0.08
Cimarex Energy Company	XEC		94.77	7.8	20.6	21.5		0.32
California Resources	CRC		1.16	11.2	22.4	18.8		-
Continental Resources (32%)	CLR	В	29.18	11.4	23.6	15.2		-
Whiting Petroleum Corporation	WLL	В	7.80	13.2	20.9	12.7		-
Median		-		11.4	22.4	18.8		
Income								
San Juan Basin Royalty Trust	SJT		5.04	10.0	30.6	19.3	22	0.22
Permian Basin RT	PBT		6.11	8.6	27.6	15.3	20	0.30
Cross Timbers Royalty Trust	CRT		14.52	6.0	28.6	14.3	12	1.17
Sabine Royalty Trust	SBR	В	29.17	9.5	29.3	14.2	14	2.05
Dorchester Minerals, L.P.	DMLP	B	10.96	6.9	28.6	13.1	21	0.83
Median	DINE		10000	8.6	28.6	14.3	20	0.00
Canada				010	2010	1.110	20	
EnCana Corporation	ECA		5.88	8.4	19.7	19.6	104	0.06
Cenovus Energy Inc.	CVE	+	12.70	15.0	25.2	17.8	104	0.00
Suncor Energy	SU	+	27.03	17.5	18.5	15.3		0.15
Imperial Oil Limited (30%)	IMO	+	31.47	29.0	15.2	13.1	25	0.89
Birchcliff Energy Ltd.	BIREF	В	3.45	15.6	17.8	8.7	23	0.45
Median	DIKEI	D	5.45	15.6	17.8	15.3	65	-
Median				15.0	10.5	13.3	05	
Grand Median		+		11	21	15		
S. a.iu metuar						10		
EV = Enterprise Value = Market Cap and D	ebt: Ebitd	a = Ea	rnings befor	e interest. ta	ax. depreciat	ion		
and amortization; NTM = Next Twelve Mor								

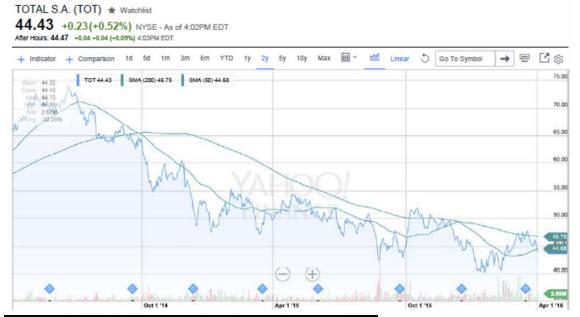
Earnings; PV = Present Value of oil and gas and other businesses For historical research see www.mcdep.com



			Tab							
		Mc	Dep Ene	ergy Sto	ocks					
	Tota	l Re	turn Ye	ar-to-D	ate 201	16				
			y Unleve							
		u D	y Onic ve	icu io		uin				
			Price	Price			Equity	Un	levered	
			(\$/sh)	(\$/sh)	Price	Cash	Total		Total	
	Symbol/	Rat	4-Apr	31-Dec		Distrib.	Return	Debt	Return	McDep
			2016	2015	(%)	(%)	(%)	(\$/sh)	(%)	Ratio
Global Integrated								,	, í	
Exxon Mobil Corporation	XOM		83.16	77.95	7	1	8	22	6	0.86
Royal Dutch Shell (BG pro forma)	RDS-A	В	47.74	45.79	4	2	6	32	4	0.71
Chevron Corporation	CVX		93.43	89.96	4	1	5	33	4	0.75
Total S.A.	TOT	В	44.48	44.95	(1)	1	0	26	0	0.61
Median					4		6		4	0.73
Large Independent										
Occidental Petroleum Corp.	OXY		68.20	67.61	1	1	2	13	2	0.92
EOG Resources, Inc.	EOG		70.26	70.79	(1)	-	(1)	13	(1)	0.95
Marathon Oil Corporation	MRO	В	10.52	12.58	(16)	0	(16)	9	(9)	0.67
ConocoPhillips	COP	В	39.10	46.69	(16)	1	(16)	30	(10)	0.63
Devon Energy Corporation	DVN		26.05	32.00	(19)	0	(19)	19	(12)	0.87
Median					(16)		(16)		(9)	0.87
Small Independent										
Range Resources	RRC		33.05	24.62	34	0	34	18	20	1.19
Continental Resources (32%)	CLR	В	29.18	22.98	27	-	27	19	15	0.64
Cimarex Energy Company	XEC		94.77	89.38	6	0	6	20	5	1.04
Whiting Petroleum Corporation	WLL	В	7.80	9.44	(17)	-	(17)	26	(5)	0.60
California Resources	CRC		1.16	2.33	(50)	-	(50)	19	(6)	0.84
Median					6		6		5	0.84
Income										
San Juan Basin Royalty Trust	SJT		5.04	4.14	22	2	23	-	23	0.63
Permian Basin RT	PBT		6.11	5.06	21	1	22	-	22	0.56
Cross Timbers Royalty Trust	CRT		14.52	13.01	12	3	14	-	14	0.50
Dorchester Minerals, L.P.	DMLP	В	10.96	9.89	11	2	13	-	13	0.46
Sabine Royalty Trust	SBR	В	29.17	26.26	11	2	13	-	13	0.49
Median					12		14		14	0.50
Canada										
Birchcliff Energy Ltd.	BIREF	В	3.45	2.93	18	-	18	4	8	0.49
EnCana Corporation	ECA		5.88	5.09	16	1	17	9	6	0.99
Suncor Energy	SU		27.03	25.80	5	1	6	11	4	0.83
Cenovus Energy Inc.	CVE		12.70	12.62	1	1	2	5	1	0.71
Imperial Oil Limited (30%)	IMO		31.47	32.52	(3)		(3)	11	(2)	0.87
Median					5		6		4	0.83
Grand Median					5		6		4	0.71
Natural Gas (\$/mmbtu)			2.00	2.33	(14)					
Oil -West Texas Intermediate (\$/bbl)			35.82	37.06	(3)					
S&P 500			2,066	2,044	1					



April 5, 2016



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