The Long-Term Energy Squeeze

Summary and Recommendation

In Chapter 24 of *The Age of Turbulence*, Alan Greenspan reinforces our outlook for higher oil price to benefit our buy recommendations, but he recommends a gasoline tax that we despise. First, we like the respect the widely esteemed "Maestro" has for distant futures as an indicator of the direction of price for the world's largest traded commodity after money. The average futures price we calculate for the next six years stands at \$74 a barrel while our oil-oriented buy recommendations seem to be valued as though long-term oil price would be \$58 a barrel (McDep Ratio of 0.89 times \$66 basis for present value). Second, Mr. Greenspan's primary policy recommendation, a \$3 a gallon (\$126 a barrel) gasoline tax, makes today's oil price look cheap, but the tax would be bad policy, we believe. We find it enlightening that the proposer of such a destructive tax seems usually to be a person who identifies with the U.S. Northeast where public transportation is readily available. Our past Fed chairman tells how he grew up within walking distance of the former N.Y. Giants' baseball park and a subway ride from Yankee Stadium. Fortunately, consumers in our country outside the Northeast, and more dependent on the automobile, have rejected the false premise of a gasoline tax.

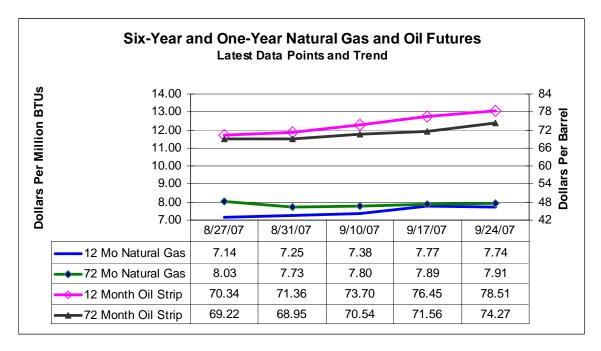
Rebalance McDep Energy Portfolio

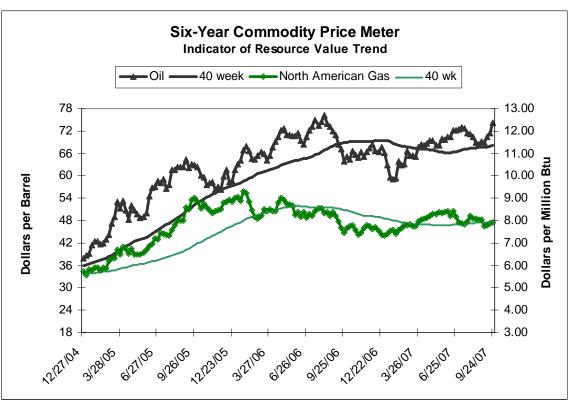
A ten-bagger return on the stock in six years and a double in the past year took the McDep Ratio for CNOOC Limited (CEO) well out of buy range (see *Stock Idea* CNOOC Limited – Revise Rating to Hold from Buy on Price, September 24, 2007). As a result the weighting in the illustrative McDep Energy Portfolio shifts to less emphasis on China and oil production (see table Composite of Buy Recommendations). The multiple holdings in the portfolio give us the confidence to act courageously on bad news as well as to provide more opportunities for good luck to strike sound investments.

Kurt H. Wulff, CFA

Page 2

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 25, 2007





McDep Energy Portfolio Composite of Buy Recommendations

		Price (US\$/sh)			Non- U.S.	North Amer. Natural	Rest of World Natural	Oil	Down-	
	Cambal	24-Sep 2007	Equity	EV	HQ	Gas	Gas (%)	Prod'n	stream	McDep Ratio
Mega Cap	Symbol	2007	(%)	(%)	(%)	(%)	(%)	(%)	(%)	кано
Exxon Mobil Corporation	XOM	91.73	1.6	1.5		0.1	0.2	0.8	0.4	1.00
Total S.A.	TOT	81.65	3.0	2.9	2.9		0.8	1.5	0.6	0.93
Chevron Corporation	CVX	94.35	6.3	5.9		0.3	0.3	3.7	1.5	0.91
Royal Dutch Shell plc	RDS-A	83.70	3.1	2.9	2.9	0.1	0.4	1.5	1.0	0.90
BP plc	BP	71.24	2.8	2.9	2.9	0.3	0.3	1.7	0.7	0.85
ConocoPhillips	COP	89.18	5.3	5.9		0.9	0.4	3.2	1.4	0.84
Gazprom	OGZPY	44.20	9.4	8.8	8.8		6.8	2.1		0.73
Producer/Refiners - Larg	е Сар									
Imperial Oil Limited	IMO	49.70	1.6	1.5	1.5	0.1		1.1	0.2	1.17
PetroChina Company Ltd.	PTR	181.12	3.3	2.9	2.9		0.2	2.5	0.2	1.09
Statoil ASA	STO	34.56	1.5	1.5	1.5		0.5	0.9	-	0.99
Suncor Energy	SU	95.49	1.6	1.5	1.5	0.0		1.3	0.1	0.92
Petro-Canada	PCZ	57.95	1.4	1.5	1.5	0.2	0.0	1.0	0.2	0.91
Lukoil Oil Company	LUKOY	81.40	6.6	5.9	5.9			4.2	1.7	0.68
Independent Natural Gas	and Oil	- Large C	ap							
XTO Energy Inc.	XTO		4.3	4.4		3.6		0.9		0.90
Encana Corporation	ECA	62.09	4.1	4.4	4.4	2.9		1.1	0.4	0.89
Occidental Petroleum Corr	OXY	63.69	3.2	2.9		0.4	0.0	2.3	0.3	0.84
Anadarko Petroleum Corp.	APC	53.42	2.0	2.9		1.7		1.2	0.1	0.82
EOG Resources	EOG	73.76	6.4	5.9		4.6	0.2	1.0		0.74
Devon Energy Corporation	DVN	83.20	5.5	5.9		3.3		2.6		0.70
Independent Natural Gas	and Oil	- Small C	ap							
Berry Petroleum Company			-	1.5		0.4		1.1		0.90
Encore Acquisition Compa	EAC	31.21	1.9	2.9		0.5		2.4		0.72
Energy Partners Ltd.	EPL	14.90	1.6	2.9		1.5		1.5		0.58
Cimarex Energy Company	XEC	37.59	2.9	2.9		2.0		0.9		0.54
Income										
Penn West Energy Trust	PWE	30.43	2.7	2.9	2.9	0.9		2.0		0.88
Canadian Oil Sands Trust				5.9	5.9	(0.6)		6.5		0.84
San Juan Basin Royalty Tr				5.9		5.9				0.83
Hugoton Royalty Trust	HGT		3.5	2.9		2.9				0.69
Portfolio Composite			100	100	46	32	10	49	9	0.80
Canada					18					
Russia					15					
Europe					10					
China					3					

Note: Percentages in the Portfolio Weight - EV column correspond to unlevered positions ranging from triple at 8.8% to half at 1.5%.

Oil and Gas Producers - Rank by McDep Ratio

			Price			Net		
			(US\$/sh)		Market	Present	Debt/	
	Symbol/		24-Sep	Shares	Cap	Value	Present	McDep
	R	Rating	2007	(mm)	(US\$mm)	(US\$/sh)	Value	Ratio
Mega Cap								
Exxon Mobil Corporation	XOM	В	91.73	5,620	516,000	92.00	0.05	1.00
Total S.A.	TOT	В	81.65	2,278	186,000	89.00	0.13	0.93
Chevron Corporation	CVX	В	94.35	2,206	208,000	105.00	0.08	0.91
Royal Dutch Shell plc	RDS-A	В	83.70	3,152	264,000	94.00	0.10	0.90
BP plc	BP	В	71.24	3,198	228,000	87.00	0.16	0.85
ConocoPhillips	COP	В	89.18	1,658	148,000	112.00	0.19	0.84
Gazprom (50%)	OGZPY	В	44.20	2,855	126,200	62.00	0.07	0.73
Total or Median					1,676,000		0.10	0.90
Producer/Refiners - Large Cap								
Imperial Oil Limited (30%)	IMO	В	49.70	282	14,020	42.00	0.07	1.17
PetroChina Company Ltd (10%)	PTR	В	181.12	178	32,220	166.00	0.06	1.09
Norsk Hydro ASA (post Oct 1)	NHY	Н	13.29	1,241	16,500	13.00	0.12	1.02
StatoilHydro ASA (29%)	STO	В	34.56	928	32,070	35.00	0.14	0.99
Marathon Oil Corporation	MRO	Н	57.77	722	41,710	62.00	0.18	0.94
Suncor Energy	SU	В	95.49	472	45,070	105.00	0.08	0.92
Petro-Canada	PCZ	В	57.95	498	28,860	65.00	0.15	0.91
Lukoil Oil Company	LUKOY	В	81.40	832	68,000	121.00	0.03	0.68
Total or Median					278,000		0.10	0.97
Independent Natural Gas and Oil -	0	•						
CNOOC Limited (34%)	CEO	Н	165.00	149	24,630	108.00	-	1.53
Canadian Natural Resources	CNQ		76.20	539	41,100	87.00	0.21	0.90
XTO Energy Inc.	XTO	В	61.77	390	24,090	70.00	0.15	0.90
Encana Corporation	ECA	В	62.09	765	47,500	72.00	0.18	0.89
Occidental Petroleum Corp.	OXY	В	63.69	842	53,600	77.00	0.07	0.84
Anadarko Petroleum Corp.	APC	В	53.42	467	24,900	74.00	0.35	0.82
EOG Resources	EOG	В	73.76	247	18,200	102.00	0.05	0.74
Devon Energy Corporation	DVN	В	83.20	450	37,400	129.00	0.14	0.70
Total or Median					271,000		0.15	0.86
Independent Natural Gas and Oil -	Small Ca	p						
Berry Petroleum Company	BRY	В	38.32	45	1,720	44.00	0.23	0.90
Encore Acquisition Company	EAC	В	31.21	54	1,690	54.00	0.32	0.72
Energy Partners Ltd.	EPL	В	14.90	35	520	38.00	0.31	0.58
Cimarex Energy Company	XEC	В	37.59	85	3,190	76.00	0.09	0.54
Total or Median					7,100		0.27	0.65
Income								
Kinder Morgan Energy Partners, L.P.		S	50.73	179	9,060	17.00	0.53	1.94
Kinder Morgan Management, LLC	KMR	S	47.85	62	2,950	17.00	0.53	1.86
Pengrowth Energy Trust	PGH		17.90	246	4,400	17.00	0.27	1.04
Enerplus Resources Fund	ERF		45.79	128	5,860	52.00	0.12	0.90
Penn West Energy Trust	PWE	В	30.43	242	7,350	36.00	0.19	0.88
Canadian Oil Sands Trust	COSWF	В	32.43	479	15,530	39.00	0.07	0.84
San Juan Basin Royalty Trust	SJT	В	33.20	47	1,550	40.00	-	0.83
Hugoton Royalty Trust	HGT	В	23.60	40	940	34.00	-	0.69
Total or Median					47,600		0.16	0.89

B = Buy, S = Sell, H = Hold

Present Value = Shares times Net Present Value divided by (1-Debt/Present Value).

Debt = Present Value times Debt/Present Value

McDep Ratio = \mathbf{M} arket \mathbf{c} ap and \mathbf{D} ebt to \mathbf{p} resent value of oil and gas and other businesses

Oil and Gas Producers - Rank by EV/Ebitda

			Price (US\$/sh)	Adjustd Resrvs/	PV/	EV/		Divd or Distrib
	Symbol/		24-Sep	Prod	Ebitda	Ebitda	P/E	NTM
	-	ting	2007	NTM	NTM	NTM	NTM	(%)
Mega Cap	110	iiiig	2007	111111	11111	11111	11111	(70)
Gazprom (50%)	OGZPY	В	44.20	24.6	9.4	6.8	10	0.9
Exxon Mobil Corporation	XOM	В	91.73	11.7	6.6	6.6	12	1.5
Total S.A.	TOT	В	81.65	9.7	6.4	6.0	11	3.4
BP plc	BP	В	71.24	9.6	6.9	5.9	10	3.6
Chevron Corporation	CVX	В	94.35	10.1	6.1	5.5	10	2.5
ConocoPhillips	COP	В	89.18	10.3	6.4	5.4	9	1.8
Royal Dutch Shell plc	RDS-A	В	83.70	8.1	5.7	5.1	9	3.4
Median				10.1	6.4	5.9	10	2.5
Producer/Refiners - Large Cap								
Suncor Energy	SU	В	95.49	23.8	10.4	9.6	17	0.4
Imperial Oil Limited (30%)	IMO	В	49.70	13.2	7.7	9.0	15	0.7
PetroChina Company Ltd (10%)	PTR	В	181.12	15.0	7.5	8.1	16	2.6
Norsk Hydro ASA (post Oct 1)	NHY	Н	13.29	-	6.5	6.6	11	1.3
StatoilHydro ASA (29%)	STO	В	34.56	7.7	6.0	5.9	13	4.6
Marathon Oil Corporation	MRO	Η	57.77	8.6	5.4	5.1	9	1.7
Petro-Canada	PCZ	В	57.95	6.5	5.7	5.1	10	0.9
Lukoil Oil Company	LUKOY	В	81.40	17.8	7.2	4.9	8	1.8
Median				10.9	6.9	6.3	12	1.5
Independent Natural Gas and Oil - La	rge Cap							
CNOOC Limited (34%)	CEO	Н	165.00	10.7	6.4	9.8	18	2.1
Canadian Natural Resources	CNQ		76.20	8.1	8.9	8.0	17	0.4
XTO Energy Inc.	XTO	В	61.77	11.3	8.3	7.5	14	0.8
Anadarko Petroleum Corp.	APC	В	53.42	11.2	8.1	6.7	13	1.3
Encana Corporation	ECA	В	62.09	9.2	7.5	6.7	13	1.3
EOG Resources	EOG	В	73.76	9.3	8.4	6.2	16	0.5
Occidental Petroleum Corp.	OXY	В	63.69	11.5	6.9	5.8	11	1.6
Devon Energy Corporation	DVN	В	83.20	9.0	8.2	5.7	12	0.7
Median				10.0	8.2	6.7	13	1.0
Independent Natural Gas and Oil - Sm	all Cap							
Berry Petroleum Company	BRY	В	38.32	10.2	8.7	7.8	16	0.8
Encore Acquisition Company	EAC	В	31.21	15.5	8.7	6.3	16	-
Cimarex Energy Company	XEC	В	37.59	8.0	7.3	3.9	10	0.4
Energy Partners Ltd.	EPL	В	14.90	5.9	6.1	3.5		-
Median				9.1	8.0	5.1	16	0.2
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S	50.73		8.0	15.5	35	6.7
Kinder Morgan Management, LLC	KMR	S	47.85		8.0	14.8	33	7.1
San Juan Basin Royalty Trust	SJT	В	33.20	10.0	12.9	10.7	13	7.6
Canadian Oil Sands Trust	COSWF	В	32.43	20.9	10.2	8.6	11	9.4
Hugoton Royalty Trust	HGT	В	23.60	13.9	11.8	8.2	12	8.4
Enerplus Resources Fund	ERF		45.79	9.4	9.0	8.0	16	10.5
Pengrowth Energy Trust	PGH		17.90	7.1	7.4	7.7	43	15.7
Penn West Energy Trust	PWE	В	30.43	7.7	7.9	6.9	14	12.7
Median				9.7	8.5	8.4	15	8.9

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended September 30, 2008; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

Index of Recent Research

Stock Ideas

<u>Date</u>	Symbol	<u>Stock</u>	<u>Theme</u>
12-Sep	LUKOY	Lukoil Oil Company	Emerging Oil Blue Chip
6-Sep	SJT	San Juan Basin Royalty Trust	Mountains and Valleys
5-Sep	COSWF	Canadian Oil Sands Trust	Record 375,000 Barrels Daily for August
29-Aug	CEO	CNOOC Ltd	Making Money Offshore China
23-Aug	* PTR	PetroChina Company Limited	Price Controls Ease in 2007 Half
8-Aug	* EPL	Energy Partners, Ltd.	Oversold
3-Aug	* EOG	EOG Resources Inc.	Natural Gas with North Dakota Oil
3-Aug	* PWE	Penn West Energy Trust	High Return from Distributions
3-Aug	* IMO	Imperial Oil Limited	High Return from Stock Repurchase
2-Aug	* TOT	Total S.A.	Constructive Russo-French Interpendence
2-Aug	* BRY	Berry Petroleum	Rocky Mountain Constraints
1-Aug	* XEC	Cimarex Energy Company	Stable Volume
1-Aug	* DVN	Devon Energy Corporation	Volume Advances
1-Aug	* EAC	Encore Acquisition	Nice to be Oily
31-Jul	* MRO	Marathon Oil Corporation	Oil Sands Acquirer
31-Jul	* APC	Anadarko Petroleum Corporation	Transition Maturing
30-Jul	* STO	Statoil ASA	Norwegian Oil and Gas Champion
27-Jul	* CVX	Chevron Corporation	Oil and Downstream Vigor
26-Jul	* SU	Suncor Energy	Oil Sands Growth Stock
26-Jul	* XOM	Exxon Mobil Corporation	Steady Strength
26-Jul	* PCZ	Petro-Canada	Raise NPV to US\$65 a Share
26-Jul	* RDSA	Royal Dutch Shell plc	Downstream Benefit
25-Jul	* ECA	EnCana Corporation	Downstream Blessing
25-Jul	* COP	ConocoPhillips	Downstream Blessing
25-Jul	* BP	BP p.l.c.	Controversy Diminishing
24-Jul	* XTO	XTO Energy Inc.	Volume Growth in Underpriced Natual Gas
24-Jul	* OXY	Occidental Petroleum Corporation	Ready for Peak Oil Test
24-Jul	* NHY	Norsk Hydro ASA	Confidence in Aluminium
23-Jul	* HGT	Hugoton Royalty Trust	Paying Unitholders to Wait
19-Jul	* KMx	Kinder Morgan	Suggestions for New General Partner Owners
29-Jun	* OGZPY	Gazprom	Raise NPV to \$62 a Share
		-	
Meter 1	Reader - A	Weekly Analysis	
25-Sep			The Long-Term Energy Squeeze
18-Sep			Downstream on Moving Average

25-Sep		The Long-Term Energy Squeeze
18-Sep		Downstream on Moving Average
11-Sep	*	China Natural Gas Price Breakthrough
4-Sep	*	Oil Looking Up

Oil and Gas Income Stocks (previously Natural Gas and Oil Royalty Trusts) - A Weekly Analysis

21-Sep		A Royalty Out for Syncrude
14-Sep		Encore Energy Partners Completes IPO
7-Sep	*	Poised to Win
17-Aug	*	Buy Systematically

Industry Ideas

19-Sep Flash Alberta Royalty Panel Bomb

^{*} Archived on www.mcdep.com